Section 5.3 Groundwater

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5.3 Groundwater

The following sections describe groundwater quality monitoring results at and near the Silver Bow Plant site (Plant or Site). Section 5.3.1 contains details about the 2006, 2008, 2010 and 2012 groundwater quality investigation activities, Section 5.3.2 describes the results of the groundwater quality investigations, including spatial and temporal trends in water quality, and Section 5.3.3 presents conclusions and recommendations based on the results of the groundwater quality investigations at the Site.

5.3.1 Groundwater Quality Investigation Activities

Analyses of groundwater quality samples collected from 1982 to 2012 are available from the Silver Bow Plant area groundwater wells (locations shown on Figure 5.3-1). The samples were analyzed for many different groundwater constituents, as presented on Table 5.3-1. The most recent comprehensive sampling event took place in 2008, with additional sampling at select locations in 2010 and 2012. The Final Phase 1 RFI Groundwater Work Plan (Appendix 5.3-A) documents the methods and procedures Rhodia used in conducting the groundwater investigations and in sampling and analyzing groundwater recovered from monitoring wells since 2006. Details regarding the specific groundwater quality monitoring activities that took place in 2006, 2008, 2010 and 2012 are discussed below; however, the entire groundwater quality data set is discussed in Section 5.3.2. The 1997 to 2003 groundwater monitoring was presented for the site as a whole in the CCRA (Barr, 2006). Prior to 2006, there were thirty-seven (37) wells at the Silver Bow Plant.

5.3.1.1 2006 Groundwater Investigation

Twenty five additional monitoring wells were installed across the Silver Bow Plant in 2006. Twenty of these wells are screened across the water table and five wells are screened deeper in the groundwater unit. The five deeper wells are nested with wells screened across the water table. Well construction information is summarized in Table 5.3-2. The locations of the wells are shown on Figure 5.3-1.

5.3.1.1.1 General Well Construction Details

During monitoring well installation, soil samples were collected, classified, and logged in accordance with ASTM D-2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) and the Work Plan (Appendix 5.3-A). Soil classifications/descriptions and well construction details are shown on the well logs included in Appendix 3.1-A of Section 3 of this RFI Report.

Water table monitoring wells were generally installed so that the screen intersected the water table with approximately 7 feet above the water table and 13 feet below the water table. Deeper wells in a nest have completely submerged screens. The monitoring wells were installed with 5.25-inch inside diameter hollow stem augers. Monitoring wells were constructed with flush threaded, Schedule 40 polyvinyl chloride (PVC) pipe. Water table monitoring wells were completed with a 20-foot long, 2-inch inner diameter (I.D.), continuous No. 10 slot screen fitted with a flat base plate and threaded female flush coupling and flush threaded 2-inch diameter riser pipe. Nested deep wells were constructed in the same manner as the water table wells but with a 10-foot long screen. MW-06-7 was installed with a 5-foot screen positioned entirely within the tailing in the Tailing Basin. MW-06-8 was installed with a 5-foot screen positioned in the alluvium within the buried Sheep Gulch sediment, which was observed to be approximately 10 feet thick at this location.

Upon completion of a monitoring well borehole, the well screen and riser pipe were installed. No solvent or joint dressing was used to assemble the wells. No drilling fluid other than water was used to complete the wells. In general, the addition of water was not necessary. However, for a few of the deeper well installations, varying amounts of water were used to loosen and bring cuttings up the auger flights. The sand pack was installed to a level no less than two feet above the top of the well screen. Approximately two feet of bentonite chips were added above the sand pack and hydrated. A bentonite slurry was used in lieu of the bentonite chips during installation of monitoring wells MW-06-6, MW-06-12, and MW-06-25. Neat cement grout was placed above the bentonite seal by pumping under pressure through a tremie pipe which was placed so that the discharge was within ten feet of the bentonite seal. Pumping of neat cement grout continued until grout flowed out of the top of the augers.

The proposed monitoring well coordinates were uploaded into a differential global positioning system (GPS) with sub-meter accuracy which was used in the field to navigate to the boring locations. Final well locations were adjusted in the field, as necessary and with approval of EPA's field representative, to accommodate overhead/underground utilities, rig access, or at the specific request of the EPA. The monitoring wells (top of riser, top of casing and ground surface) were surveyed using the same elevation datum as the existing wells at the Site. Survey work was completed by HKM Engineering of Butte, Montana. Monitoring well elevation data are provided in Appendix 3.1-A of Section 3 of this RFI Report, and are summarized in Table 5.3-2.

The monitoring wells were developed in accordance with the RFI Groundwater Work Plan (Appendix 5.3-A). Monitoring wells and piezometers were developed by a combination of air lifting,

surging, bailing, and pumping. The goal of well development was to produce water with turbidity less than 5 nephelometric turbidity unit (NTU). Well development was considered complete when the volume of water removed reached 500 gallons, whether or not turbidity was below 5 NTU, or when stabilization criteria were met. A stabilization test was conducted on each monitoring well and piezometer after the well appeared to be fully developed. Development was considered complete when three successive readings of pH, redox, turbidity, dissolved oxygen, temperature, and specific conductance had met the stabilization criteria outlined in the RFI Groundwater Work Plan (Appendix 5.3-A). Data gathered during well development are presented in Table 5.3-3. Well stabilization was not achieved at MW-06-6 and MW-06-7 due to their slow recharge, and MW-06-17 was inadvertently not developed in 2006. These wells were redeveloped before groundwater samples were collected in 2008.

5.3.1.2 2008 Groundwater Investigation

In cooperation with EPA and to accelerate groundwater investigation while the soil investigation work plan was further developed, Rhodia developed a Comprehensive Groundwater Monitoring Plan (Appendix 5.3-A), which was submitted to EPA on April 24, 2008 and was approved by EPA on May 6, 2008. The Comprehensive Groundwater Monitoring Plan included the concurrent collection of groundwater and surface water samples to provide a more complete picture of water quality across the Silver Bow Plant.

In 2008, groundwater samples were collected during May-June and September-October. Groundwater samples were collected and analyzed as detailed in the Comprehensive Groundwater Monitoring Plan, Final Field Sampling Plan (Appendix 5.3-A), and in accordance with the Quality Assurance Project Plan (Barr, 2009). Deviations from these plans were:

- A flow through cell was used to measure stabilization parameters at monitoring stations, except at the five production wells, where the probe assembly was placed in a sample of the water due to the high flow rates of the production wells.
- The majority of monitoring wells had sufficient recharge capacities to provide the 0.5 l/m maximum purge and sampling flow rates. Several wells were < 0.2 l/m flow rate and one well (MW-06-7) was purged dry and sampled during the required 24 hour period specified in Barr's SOP for low-flow sampling (Barr, 2009).

Samples were analyzed for the general parameters, metals, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and radionuclides. Samples from selected locations were

also analyzed for polychlorinated biphenyls (PCBs). During the preliminary evaluation of the groundwater data from the September 2008 monitoring event, several elemental phosphorus and metals data were identified as likely resulting from sampling equipment cross-contamination. A plan for groundwater resampling (Appendix 5.3-B) was submitted to EPA and approved in a December 4, 2008 email from Sara Sparks (EPA Project Manager).

5.3.1.3 2010 Groundwater Investigation

Additional groundwater samples were collected from select wells in July 2010, per the Notice of Sampling Activities letter which was submitted to EPA on July 7, 2010 (Appendix 5.3-A). Groundwater samples were collected from the monitoring wells located in the northwest portion of the Site: MW-02-3, MW-02-4, MW-06-1, MW-06-2 and MW-06-3 (Figure 5.3-1). Groundwater samples were analyzed for the general and site-specific chemical analytes, total metals, radionuclides and field parameters.

5.3.1.4 2012 Groundwater Investigation

Eight additional monitoring wells (Figure 5.3-1) were installed in October 2012, per the October 2012 RFI Work Plan (Barr, 2012). Well construction details and well development information are summarized on Table 5.3-2 and Table 5.3-3, respectively. Groundwater samples were collected from these new monitoring wells in November 2012 and were analyzed for the general and site-specific chemical analytes, metals, VOCs, SVOCs, radionuclides and field parameters.

5.3.2 Groundwater Quality Investigation Results

The results of groundwater quality sampling at and downgradient of the Site support the general conceptual hydrogeologic model for groundwater flow at the Site, discussed in Section 3.2. Further, the results indicate:

- General areas of impacts to groundwater in the vicinity of the Tailing Basin and Water Recirculation (TBWR) areas. The term "TBWR areas" is used to encompass the primary areas of process water release during operations, which include: the TBRW System which is the water management aspect of Solid Waste Management Unit (SWMU) 1, the Final Pump Station (SWMU 27), the Slag Granulation Water and Temporary Retention Ditch (SWMU 22), and the 100' Clarifier (SWMU 2);
- Migration of mobile dissolved species, such as sulfate and several dissolved metals, toward production well RP-W-6 and in the general direction of groundwater flow;

- Very little migration of dissolved species that tend to rapidly transform or attenuate, such as elemental phosphorus (P4), total phosphorus, fluoride, and several dissolved metals;
- Gross beta radioactivity impacts to groundwater associated with the TBWR areas, but these areas are depleted in gross alpha radiation and uranium;
- Oxygen-depleted groundwater under and adjacent to the Tailing Basin, affecting the solubility of redox-sensitive species such as manganese;
- The presence of low concentrations of chlorinated hydrocarbons in groundwater near the Rhodia shop facilities;
- Detection of ubiquitous organic constituents from sample handling; and
- Detection of constituents present in groundwater upgradient of the Rhodia site, in areas which are downgradient from the REC (Renewable Energy Corporation – former Advanced Silicon Materials) plant and the former County Sewage Land Injection Site (CSLIS)/sod farm. The presence of these constituents may act to mask impacts to groundwater from the Rhodia site.

The following discussion includes a description of groundwater quality data validation, reduction, and presentation, followed by discussion of individual groundwater constituents.

5.3.2.1 Data Validation, Reduction, and Presentation

The results of groundwater sample analyses underwent quality assurance and quality control procedures (QA/QC) as outlined in the Quality Assurance Project Plan (Barr, 2009) and as documented in Appendix 1-A of Section 1 of this RFI Report.

A major outcome of the QA/QC program was the discovery of cross-contamination likely resulting from sampling equipment contamination during the September 2008 groundwater monitoring event. A preliminary review of the results from this event indicated that P4 was detected in twenty-one groundwater samples, including samples from an upgradient well (MW-06-5), its duplicate, and a rinsate blank collected after MW-06-13. Inconsistent metals concentrations compared to the spring 2008 data were also identified in a few samples. Subsequent review of P4 analytical results for the re-collected groundwater samples confirmed that samples collected after the collection of groundwater from MW-01-3 during the September 2008 sampling event were cross-contaminated. P4 was not detected in any re-collected groundwater sample with the exception of MW-01-3. The P4 concentration for the re-collected sample at MW-01-3 was generally consistent with the analytical results from spring 2008 and earlier. Subsequent review of metals analytical results for the re-collected groundwater samples confirmed that the suspect samples were subjected to cross-

contamination. Iron, copper, lead and zinc concentrations in the re-collected groundwater samples were consistent with the analytical results from spring 2008 and earlier. The analytical values associated with cross contamination are flagged as rejected data ("R" qualified) in the data tables. Rejected data and data with blank contamination ("b" qualified) are excluded from data analysis, as they are considered unreliable. Data that are "J" or "*" qualified may have higher associated error, but are included in data analysis.

The results of groundwater sample analyses are presented on Tables 5.3-4a through 5.3-4f. The analytical data for select parameters are also presented in plan view (Figures 5.3-2 thru 5.3-37). Due to the amount of groundwater data portrayed on these figures, they are divided based on the screened interval of the wells. Wells screened across the water table are presented on figures with labels ending in "a" and the term "Water Table Wells" in the title, while wells screened below the water table are presented on figures with labels ending in "b" and the term "Deep Wells" in the figure title. This division is for presentation purposes only, and is not intended to represent an interpretation of water quality distribution nor is it intended to contradict the hydrogeologic conceptual model described in Section 3.2.

For the following discussion, groundwater samples are considered to come from two separate populations:

1. Samples obtained from wells located physically upgradient of the Site (these are discussed extensively in Section 4.3); or
2. Samples obtained from wells located either at the Site or downgradient from the Site. It should be noted that for the purposes of this discussion, "downgradient" is intended to be in reference to the *present configuration* of the site-wide groundwater gradient (i.e. as described in Section 3.2). The past groundwater gradient configuration (e.g. during operation of the production wells on Site) was likely significantly different.

The locations of wells from these two populations are depicted on Figure 5.3-1, and well construction details are summarized in Table 5.3-2. The summary statistics of groundwater quality data (detections only) for these two groups are presented on Table 5.3-5.

The analytical results of groundwater samples obtained from wells located at the Site or downgradient from the Site and Site features may provide an indication of the potential water quality impacts to groundwater occurring as a result of the mobility of hazardous constituents from the

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5.3.1.1.1 General Well Construction Details

During monitoring well installation, soil samples were collected, classified, and logged in accordance with ASTM D-2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) and the Work Plan (Appendix 5.3-A). Soil classifications/descriptions and well construction details are shown on the well logs included in Appendix 3.1-A of Section 3 of this RFI Report.

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Upon completion of a monitoring well borehole, the well screen and riser pipe were installed. No solvent or joint dressing was used to assemble the wells. No drilling fluid other than water was used to complete the wells. In general, the addition of water was not necessary. However, for a few of the deeper well installations, varying amounts of water were used to loosen and bring cuttings up the auger flights. The sand pack was installed to a level no less than two feet above the top of the well screen. Approximately two feet of bentonite chips were added above the sand pack and hydrated. A bentonite slurry was used in lieu of the bentonite chips during installation of monitoring wells MW-06-6, MW-06-12, and MW-06-25. Neat cement grout was placed above the bentonite seal by pumping under pressure through a tremie pipe which was placed so that the discharge was within ten feet of the bentonite seal. Pumping of neat cement grout continued until grout flowed out of the top of the augers.

The proposed monitoring well coordinates were uploaded into a differential global positioning system (GPS) with sub-meter accuracy which was used in the field to navigate to the boring locations. Final well locations were adjusted in the field, as necessary and with approval of EPA's field representative, to accommodate overhead/underground utilities, rig access, or at the specific request of the EPA. The monitoring wells (top of riser, top of casing and ground surface) were surveyed using the same elevation datum as the existing wells at the Site. Survey work was completed by HKM Engineering of Butte, Montana. Monitoring well elevation data are provided in Appendix 3.1-A of Section 3 of this RFI Report, and are summarized in Table 5.3-2.

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surging, bailing, and pumping. The goal of well development was to produce water with turbidity less than 5 nephelometric turbidity unit (NTU). Well development was considered complete when the volume of water removed reached 500 gallons, whether or not turbidity was below 5 NTU, or when stabilization criteria were met. A stabilization test was conducted on each monitoring well and piezometer after the well appeared to be fully developed. Development was considered complete when three successive readings of pH, redox, turbidity, dissolved oxygen, temperature, and specific conductance had met the stabilization criteria outlined in the RFI Groundwater Work Plan (Appendix 5.3-A). Data gathered during well development are presented in Table 5.3-3. Well stabilization was not achieved at MW-06-6 and MW-06-7 due to their slow recharge, and MW-06-17 was inadvertently not developed in 2006. These wells were redeveloped before groundwater samples were collected in 2008.

5.3.1.2 2008 Groundwater Investigation

In cooperation with EPA and to accelerate groundwater investigation while the soil investigation work plan was further developed, Rhodia developed a Comprehensive Groundwater Monitoring Plan (Appendix 5.3-A), which was submitted to EPA on April 24, 2008 and was approved by EPA on May 6, 2008. The Comprehensive Groundwater Monitoring Plan included the concurrent collection of groundwater and surface water samples to provide a more complete picture of water quality across the Silver Bow Plant.

In 2008, groundwater samples were collected during May-June and September-October. Groundwater samples were collected and analyzed as detailed in the Comprehensive Groundwater Monitoring Plan, Final Field Sampling Plan (Appendix 5.3-A), and in accordance with the Quality Assurance Project Plan (Barr, 2009). Deviations from these plans were:

- A flow through cell was used to measure stabilization parameters at monitoring stations, except at the five production wells, where the probe assembly was placed in a sample of the water due to the high flow rates of the production wells.
- The majority of monitoring wells had sufficient recharge capacities to provide the 0.5 l/m maximum purge and sampling flow rates. Several wells were < 0.2 l/m flow rate and one well (MW-06-7) was purged dry and sampled during the required 24 hour period specified in Barr's SOP for low-flow sampling (Barr, 2009).

Samples were analyzed for the general parameters, metals, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and radionuclides. Samples from selected locations were

also analyzed for polychlorinated biphenyls (PCBs). During the preliminary evaluation of the groundwater data from the September 2008 monitoring event, several elemental phosphorus and metals data were identified as likely resulting from sampling equipment cross-contamination. A plan for groundwater resampling (Appendix 5.3-B) was submitted to EPA and approved in a December 4, 2008 email from Sara Sparks (EPA Project Manager).

5.3.1.3 2010 Groundwater Investigation

Additional groundwater samples were collected from select wells in July 2010, per the Notice of Sampling Activities letter which was submitted to EPA on July 7, 2010 (Appendix 5.3-A). Groundwater samples were collected from the monitoring wells located in the northwest portion of the Site: MW-02-3, MW-02-4, MW-06-1, MW-06-2 and MW-06-3 (Figure 5.3-1). Groundwater samples were analyzed for the general and site-specific chemical analytes, total metals, radionuclides and field parameters.

5.3.1.4 2012 Groundwater Investigation

Eight additional monitoring wells (Figure 5.3-1) were installed in October 2012, per the October 2012 RFI Work Plan (Barr, 2012). Well construction details and well development information are summarized on Table 5.3-2 and Table 5.3-3, respectively. Groundwater samples were collected from these new monitoring wells in November 2012 and were analyzed for the general and site-specific chemical analytes, metals, VOCs, SVOCs, radionuclides and field parameters.

5.3.2 Groundwater Quality Investigation Results

The results of groundwater quality sampling at and downgradient of the Site support the general conceptual hydrogeologic model for groundwater flow at the Site, discussed in Section 3.2. Further, the results indicate:

- General areas of impacts to groundwater in the vicinity of the Tailing Basin and Water Recirculation (TBWR) areas. The term “TBWR areas” is used to encompass the primary areas of process water release during operations, which include: the TBRW System which is the water management aspect of Solid Waste Management Unit (SWMU) 1, the Final Pump Station (SWMU 27), the Slag Granulation Water and Temporary Retention Ditch (SWMU 22), and the 100’ Clarifier (SWMU 2);
- Migration of mobile dissolved species, such as sulfate and several dissolved metals, toward production well RP-W-6 and in the general direction of groundwater flow;

- Very little migration of dissolved species that tend to rapidly transform or attenuate, such as elemental phosphorus (P4), total phosphorus, fluoride, and several dissolved metals;
- Gross beta radioactivity impacts to groundwater associated with the TBWR areas, but these areas are depleted in gross alpha radiation and uranium;
- Oxygen-depleted groundwater under and adjacent to the Tailing Basin, affecting the solubility of redox-sensitive species such as manganese;
- The presence of low concentrations of chlorinated hydrocarbons in groundwater near the Rhodia shop facilities;
- Detection of ubiquitous organic constituents from sample handling; and
- Detection of constituents present in groundwater upgradient of the Rhodia site, in areas which are downgradient from the REC (Renewable Energy Corporation – former Advanced Silicon Materials) plant and the former County Sewage Land Injection Site (CSLIS)/sod farm. The presence of these constituents may act to mask impacts to groundwater from the Rhodia site.

The following discussion includes a description of groundwater quality data validation, reduction, and presentation, followed by discussion of individual groundwater constituents.

5.3.2.1 Data Validation, Reduction, and Presentation

The results of groundwater sample analyses underwent quality assurance and quality control procedures (QA/QC) as outlined in the Quality Assurance Project Plan (Barr, 2009) and as documented in Appendix 1-A of Section 1 of this RFI Report.

A major outcome of the QA/QC program was the discovery of cross-contamination likely resulting from sampling equipment contamination during the September 2008 groundwater monitoring event. A preliminary review of the results from this event indicated that P4 was detected in twenty-one groundwater samples, including samples from an upgradient well (MW-06-5), its duplicate, and a rinsate blank collected after MW-06-13. Inconsistent metals concentrations compared to the spring 2008 data were also identified in a few samples. Subsequent review of P4 analytical results for the re-collected groundwater samples confirmed that samples collected after the collection of groundwater from MW-01-3 during the September 2008 sampling event were cross-contaminated. P4 was not detected in any re-collected groundwater sample with the exception of MW-01-3. The P4 concentration for the re-collected sample at MW-01-3 was generally consistent with the analytical results from spring 2008 and earlier. Subsequent review of metals analytical results for the re-collected groundwater samples confirmed that the suspect samples were subjected to cross-

contamination. Iron, copper, lead and zinc concentrations in the re-collected groundwater samples were consistent with the analytical results from spring 2008 and earlier. The analytical values associated with cross contamination are flagged as rejected data ("R" qualified) in the data tables. Rejected data and data with blank contamination ("b" qualified) are excluded from data analysis, as they are considered unreliable. Data that are "J" or "*" qualified may have higher associated error, but are included in data analysis.

The results of groundwater sample analyses are presented on Tables 5.3-4a through 5.3-4f. The analytical data for select parameters are also presented in plan view (Figures 5.3-2 thru 5.3-37). Due to the amount of groundwater data portrayed on these figures, they are divided based on the screened interval of the wells. Wells screened across the water table are presented on figures with labels ending in "a" and the term "Water Table Wells" in the title, while wells screened below the water table are presented on figures with labels ending in "b" and the term "Deep Wells" in the figure title. This division is for presentation purposes only, and is not intended to represent an interpretation of water quality distribution nor is it intended to contradict the hydrogeologic conceptual model described in Section 3.2.

For the following discussion, groundwater samples are considered to come from two separate populations:

1. Samples obtained from wells located physically upgradient of the Site (these are discussed extensively in Section 4.3); or
2. Samples obtained from wells located either at the Site or downgradient from the Site. It should be noted that for the purposes of this discussion, "downgradient" is intended to be in reference to the *present configuration* of the site-wide groundwater gradient (i.e. as described in Section 3.2). The past groundwater gradient configuration (e.g. during operation of the production wells on Site) was likely significantly different.

The locations of wells from these two populations are depicted on Figure 5.3-1, and well construction details are summarized in Table 5.3-2. The summary statistics of groundwater quality data (detections only) for these two groups are presented on Table 5.3-5.

The analytical results of groundwater samples obtained from wells located at the Site or downgradient from the Site and Site features may provide an indication of the potential water quality impacts to groundwater occurring as a result of the mobility of hazardous constituents from the

Rhodia site. These results may also indicate the presence of water quality impacts to groundwater from upgradient groundwater conditions.

Total dissolved solids, pH, and dissolved oxygen for all samples, and major ion concentrations for a subset of groundwater samples are presented on Figure 5.3-38a. In general, groundwater samples from on Site and downgradient of the Site (Figure 5.3-38b) have higher and more variable total dissolved solids than groundwater samples from upgradient of the Site (Figure 5.3-38c), but they have similar pH and dissolved oxygen concentrations. Site and downgradient groundwater samples, and upgradient groundwater samples from wells in Sheep Gulch with total depths less than 70 feet tend to be calcium-sulfate type groundwater, while other upgradient groundwater samples have various dominant ions, but are generally more bicarbonate-rich. The variability of upgradient groundwater water quality is discussed at length in Section 4.3.

Metals concentrations in groundwater were measured as both total metals on unfiltered, acidified samples, and as dissolved metals on field filtered (0.45 um filter), acidified samples. For samples in which both were measured, a comparison of total versus dissolved concentration was made when the concentrations were sufficiently above the laboratory reporting or quantification limits to allow accurate evaluation (Figure 5.3-39). In general, the comparison indicates that:

- Total and dissolved concentrations of arsenic, barium, cadmium, calcium, magnesium, manganese, potassium, selenium, and sodium are equivalent, indicating that these metals or metal complexes are readily soluble and appear to exist almost entirely in the dissolved phase. Cobalt, nickel, iron, and zinc have tenuous correlation;
- Dissolved concentrations of aluminum and lead did not increase as total concentrations increased; indicating the presence of colloidal metals with little or no dissolved metal or metal complexes in solution. Chromium and copper appear to occur in both dissolved and colloidal phases, so that in samples with higher total concentrations, dissolved phase concentrations are also higher, but the two measurements are not equivalent.

Figures 5.3-40a through 5.3-40s present time series of concentrations of select parameters for select locations that have undergone several sampling events since installation (in general, the MW-97-series, PW-99-series, MW-01-series, and MW-02-series wells). In creating these time series, total and dissolved measurements are pooled for parameters where total and dissolved concentrations are at least tenuously correlated, which provides a more robust time series. Additional time series plots are presented in Appendix 5.3-E.

Figures 5.3-41a through 5.3-41p illustrate groundwater quality as a function of depth in nested or adjacent (within several hundred feet of each other) wells. Figures 5.3-41a through 5.3-41d depict groundwater quality upgradient of the Site (and are discussed further in Section 4.3). Groundwater quality for Site and downgradient wells are shown on Figures 5.3-41e through 5.3-41p. Groundwater quality as a function of depth tends to be either uniform, or have variable total dissolved ions, but generally has the same proportions of those ions, suggesting at least some homogeneity in water quality with depth at and downgradient from the Site. This relative homogeneity, in contrast to the variability of upgradient groundwater, is also illustrated on the Piper diagram on Figure 5.3-38a. Two exceptions to this observation are:

- the quality of water from MW-06-19, a water table well located on the east side of the Site, when compared to the quality of water from RP-W-7, located about 400 feet southeast of, and about 200 feet deeper than MW-06-19 (Figure 5.3-41g). Groundwater sampled from RP-W-7 has significantly less total dissolved solids, and is generally calcium bicarbonate type water, while groundwater sampled from MW-06-19 has more dissolved ions and is calcium-chloride type water.
- The quality of water from MW-02-03 in 2008, a water table well located in the northwest corner of the Silver Bow Plant, when compared to the quality of water from MW-12-03 in 2012, which is nested about 100 feet deeper than MW-02-03 (Figure 5.3-41o). Groundwater sampled from MW-12-03 has significantly less total dissolved solids, and is generally calcium bicarbonate type water, while the shallower groundwater sampled from MW-02-03 has more dissolved ions and is calcium sulfate type water.

Isoconcentration contour intervals representing water quality for selected parameters during the 2008 groundwater quality sampling event (along with the 2012 data for the newest wells) are shown on Figures 5.3-42a through 5.3-42w. The isoconcentration contours were interpreted using the maximum concentrations detected in 2008 or 2012 (except in the case of dissolved oxygen, where the minimum value was used). For reference, a box-whisker plot for the entire groundwater quality dataset is also included on these figures. The following simplifying assumptions were used to draw the isocontour intervals:

- The groundwater flow regime has not changed significantly between 2008 and 2012, and groundwater flows slowly enough that mapping groundwater quality data using both 2008 and 2012 data is appropriate.

- At the scale of the Site plan-view map, the cluster of wells surrounding the 100' clarifier are essentially treated as one single "well", from which multiple samples were retrieved;
- Where information is available about the geometry of Site features, the geometry of contour lines reflect that knowledge (i.e. the general shape of the Tailing Basin and Slag Granulation Water and Temporary Retention Ditch, the surface water quality in the Beaver Pond, etc.); and
- Based on the analysis of groundwater quality with depth at the Site (as discussed above and in Section 4.3), several deep wells are not included in isoconcentration contouring, as groundwater samples obtained from these wells indicate distinct and unique water quality that appears to be isolated from overlying groundwater: MW-06-6, MW-MT96-2, MW-BSB-4, MW-12-03, and RP-W-7.

The major ion hydrochemistry for groundwater samples collected in 2008 (and 2012, where applicable) is presented in cross section in Figures 5.3-43a and 5.3-43b (approximate locations of cross sections shown on Figure 5.3-1). The major ion composition (in meq/l) is portrayed as Stiff diagrams on these figures, while the constituent concentrations of several other species are listed in mass or radioactivity units.

5.3.2.2 Discussion of Individual Constituents

Over 200 analytes have been measured in groundwater samples from the Rhodia site area wells. The following discussions of individual constituents are limited to the occurrence and variability of only those hazardous constituents (as listed in 40 CFR 261, Appendix VIII) and site-specific constituents in groundwater associated with the Silver Bow Plant. Further, the constituents discussed below are those that meet at least one of these three criteria:

- The concentration of the constituent in at least one Site or downgradient sample exceeds the maximum detected upgradient concentration,
- The concentrations of the constituent in at least half of all the samples collected from wells on Site or downgradient exceeded the 75th percentile of concentrations detected in upgradient samples, or
- No samples of the constituent were analyzed from upgradient wells, but at least one detection was measured in Site or downgradient samples. In this last case, the parameter is not discussed in comparison to upgradient samples, but rather a discussion is provided for completeness.

For the purpose of the following discussions, these constituents are considered to be "constituents of interest". The groundwater sample data for all measured constituents, within the context of these criteria, are presented in Table 5.3-6.

5.3.2.2.1 General Parameters

The comprehensive data set for the general parameters is presented in Table 5.3-4a, and the constituents of interest are discussed below.

Fluoride

The concentration of fluoride in Site and downgradient groundwater samples never exceeds the maximum upgradient concentration (12.2 mg/l). However, fluoride concentrations in Site and downgradient samples exceeded the 75^{th} percentile of concentrations in upgradient samples 66% of the time (Table 5.3-6). Therefore, fluoride is considered a constituent of interest.

The distribution of fluoride in groundwater is shown in Figure 5.3-42a. Fluoride concentrations in groundwater exceed 4 mg/l in samples from wells underlying and immediately adjacent to the TBWR areas. Fluoride was present in process waters during plant operations. Fluoride is a common component of phosphate rock, was volatilized in the electric arc furnace operations and was likely transferred to process water by the wet-scrubber system.

Fluoride is a trace element that readily dissolves in water, where it occurs dominantly as the F^- ion. It also reacts readily with calcium and other cations to form strong solute complexes (Hem, 1989). Accordingly, fluoride concentrations decrease with distance from the TBWR areas (to generally <1 mg/l by within 1500 feet of the TBWR areas). Based on fluoride concentrations in groundwater sampled from nested wells (i.e. MW-06-7/MW-06-8/MW-06-9 and MW-97-3/MW-97-4/MW-06-12), fluoride appears to decrease with depth in the aquifer (Table 5.3-4a; Figure 5.3-5a and 5.3-5b). It should be noted that fluoride concentrations greater than 10 mg/l occur in samples from the deeper upgradient wells (i.e., MW-MT96-2 and MW-BSB-4; Figure 5.3-5b). This fluoride enrichment in the deep groundwater may be related to local or regional subsurface fluoride deposits; for example, there are fluorine mines located within two miles of the Silver Bow Plant (Barr, 2006).

Production well pumping that took place during operation of the Rhodia facility may have acted to pull fluoride-enriched process water and/or deep groundwater toward the production wells, and influenced the groundwater quality in the vicinity of the monitoring wells.

There are some indications that fluoride concentrations in groundwater in some portions of the TBWR areas may have peaked (i.e. at MW-97-10) or are stable (MW-02-3, MW-02-4). However, fluoride concentrations are increasing in some wells located near and downgradient of the TBWR (MW-97-3, MW-97-8, MW-97-9, and MW-97-11), which is inconsistent with the more common trend of decreasing anion and cation concentrations with time. A possible mechanism for the observed increase of fluoride concentrations present within these wells is the solubility of fluorite, and the fact noted above that fluoride reacts readily with calcium and other cations to form strong solute complexes. During operation, some of the excess fluoride likely deposited as solute complexes such as the mineral fluorite (CaF_2). After the end of operations, a change in groundwater chemistry may have occurred and fresher, less calcium- and fluoride-enriched water, may now be dissolving the previously precipitated solute complexes (such as fluorite), resulting in the local release of fluoride to solution. This would tend to be a localized effect, since as the groundwater moves downgradient, the fluoride will again complex with the calcium and other cations in the aquifer, lowering the fluoride concentration.

The extent to which this proposed mechanism may be influencing the groundwater quality, and a look at reasons why fluoride concentrations are increasing, while calcium concentrations are decreasing, will be included in the Long Term Groundwater Monitoring Plan. It should also be acknowledged that for any specific circumstance, other influences, such as larger-scale hydrogeologic processes or prolonged evaporation under semi-arid conditions, may have a strong effect on concentrations of fluoride and calcium in groundwater, and thus contribute substantially to the explanation of trends at a specific well.

Elemental Phosphorus

The distribution of elemental phosphorus (P4) in groundwater is shown in Figure 5.3-8a and 5.3-8b. P4 was consistently detected only in samples from wells located adjacent to the 100' clarifier (i.e., MW-01-3 and MW-01-6). Concentrations in samples from MW-01-3 ranged from 250 ug/l to 1,610 ug/l. The highest concentration of P4 in samples from MW-01-6 was 4.01 ug/L; however, the most recent sample from this well did not contain detectable concentrations of P4. Other detections of P4 in groundwater have been followed by subsequent sampling and analyses indicating P4 concentrations are below the limits of detection (i.e., MW-97-7, MW-02-1, and MW-02-2).

P4 is generally not stable in groundwater, and tends to undergo rapid oxidation and hydrolysis to create phosphine gas, hydrogen, and various phosphates. P4 is therefore unlikely to migrate appreciable distances in groundwater. A screening level steady-state attenuation model for P4 was

presented in the Final Pre-closure Groundwater Monitoring Report (Barr, 2002). The fate and transport section of this report is reproduced in Appendix 5.3-C. The screening level model demonstrates the rapid reduction in P4 concentration with distance due to the relatively high first-order degradation constant and slow groundwater velocity at the Silver Bow Plant. The steady state equation indicates that an initial P4 concentration of 1,600 µg/L would be reduced to 0.5 µg/L in a short distance (less than 20 feet; assuming first-order degradation constant based on hydrolysis only).

The groundwater monitoring data at MW-01-2 confirm that the P4 concentration approximately 30 feet downgradient of MW-01-3 is not detected at concentrations greater than 0.0234 µg/L. Concentrations of P4 in groundwater from MW-01-3 are variable, but have generally decreased since September 2002 (Figure 5.3-40b).

Total Phosphorus

Fifteen percent of the detected concentrations of total phosphorus in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Phosphorus is also considered a site-specific constituent. Therefore, phosphorus is considered a constituent of interest.

The distribution of total phosphorus in groundwater is shown in Figure 5.3-42b. Phosphorus concentrations in groundwater exceed 1 mg/l in samples from wells underlying and immediately adjacent to the TBWR areas, and exceed 50 mg/l in samples from the well within the tailing basin, wells adjacent to the 100' clarifier, and downgradient of the phosphoric acid plant area at MW-06-18. Phosphorus was present in process waters during plant operations.

Phosphate is a weak acid anion that adsorbs to a variety of surfaces. (Haseman et al., 1950; Tisdale and Nelson, 1975; Chang and Jackson, 1957). These adsorption reactions will limit the mobility of the phosphorus in a groundwater system especially at near neutral to slightly acid conditions (Malotky, 1978). Accordingly, phosphorus concentrations decrease with distance from the 100' clarifier (to generally <50 mg/l within 200 feet of the 100' clarifier). In addition, phosphorus concentrations decrease with distance from the TBWR areas (to generally <1 mg/l by within 400 feet of the Tailing Basin). Based on phosphorus concentrations in groundwater sampled from nested wells (i.e. MW-06-7/MW-06-8/MW-06-9 and MW-97-3/MW-97-4/MW-06-12), phosphorus appears to increase with depth in the aquifer (Figures 5.3-9a and 5.3-9b). However, in general, intra-well phosphorus concentrations have remained steady or decreased with time in wells located downgradient of the TBWR areas, including in wells downgradient of the 100' clarifier (Figure 5.3-40c).

Sulfate

Ninety-three percent of the detected concentrations of sulfate in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Sulfate is also considered a site-specific constituent. Therefore, sulfate is considered a constituent of interest.

The distribution of sulfate in groundwater is shown in Figure 5.3-42c. Sulfate concentrations exceed 50 mg/l site-wide, with concentrations of sulfate greater than 600 mg/l occurring in groundwater from wells underlying and immediately adjacent to the TBWR (MW-06-9, MW-97-11), and even greater concentrations (>1000 mg/l) in groundwater north of the Tailing Basin (MW-06-11, MW-06-12, and RP-W-6), and in the vicinity of the P4 production area (MW-02-1) where process water was regularly released. Sulfate was present in process water.

In general, intra-well sulfate concentrations have decreased with time in wells located downgradient of the TBWR areas. Sulfate concentrations in a number of wells downgradient of the TBWR have decreased by a factor of two or more from 1997 to 2008 (Figure 5.3-40d). This includes the wells most indicative of early changes from the TBWR: MW-97-3/MW-97-4, MW-97-8, MW-97-9, and MW-97-10. Sulfate concentrations in MW-97-7, which is strongly influenced by the adjacent recycle water channel, decreased by more than 40%. Sulfate concentrations in groundwater sampled from MW-02-3 and MW-02-4, northwest of and downgradient of the TBWR have decreased by about 30-50% from 2002 to 2010. A similar, but less pronounced trend occurred in groundwater sampled from RP-W-4 and RP-W-6, north of the TBWR (Figure 5.3-10b). Sulfate concentrations in certain further downgradient wells, such as RP-W-5, have not yet decreased (Figure 5.3-10b). This may indicate that a pulse of upgradient groundwater is passing through the RP-W-5 area.

The concentrations of sulfate in shallower groundwater may be decreasing more rapidly than sulfate concentrations in deeper groundwater. This is consistent with the observation that sulfate concentrations in groundwater sampled from nested wells (i.e. MW-06-7/MW-06-8/MW-06-9 and MW-97-3/MW-97-4/MW-06-12) appear to increase with depth in the aquifer (Table 5.3-4a; Figures 5.3-10a and 5.3-10b). The general decrease in concentrations in shallower groundwater is apparent site-wide in areas near former process water sources, except at MW-02-1, in the process area downgradient of the 100' clarifier, where concentrations have increased with time (Figure 5.3-40d).

Sulfate is common in surface water and groundwater (Hem, 1989). At the Rhodia site, sulfate appears to have migrated further from the TBWR area sources than most other solutes, and as such, may be an approximate indicator of the migration path of impacted water from the Site. However, this may be complicated by the historical presence of sulfur-rich tailing in Silver Bow Creek alluvium

(MDEQ, 1995). As water from the Site nears the Silver Bow Creek alluvium, sulfate-enriched groundwater from the Rhodia site may mix with potentially sulfate-enriched groundwater located within the Silver Bow alluvium. Further, during Rhodia production, it seems likely that water supply wells, especially RP-W-5, located approximately 200 feet from the original Silver Bow Creek channel, drew at least some water from Silver Bow Creek and the adjacent alluvium. The sulfate concentration of groundwater sampled from RP-W-5 in 1998 was about 560 mg/l. If the groundwater within the Silver Bow Creek alluvium was historically sulfate-enriched, the presence of that water could also be a local source of sulfate.

Summary

Sulfate, fluoride and total phosphorus tend to indicate the presence of process water from the TBWR areas in downgradient groundwater. The presence of these constituents in the subsurface is shown in cross section on Figure 5.3-43a and Figure 5.3-43b. To summarize,

- Sulfate has migrated in groundwater in the general direction of groundwater flow, and into deeper groundwater. Sulfate concentrations in groundwater, in general, are decreasing. The possible presence of sulfate in Silver Bow Creek alluvium may complicate the interpretation of groundwater quality samples from this area.
- Fluoride has migrated to a limited extent in the general direction of groundwater flow and into deeper groundwater on Site. Fluoride is still increasing in some wells. The presence of naturally occurring, fluoride-enriched groundwater as seen in some deep upgradient wells may complicate the interpretation of groundwater quality samples if anomalous concentrations or trends are observed.
- Total phosphorus has migrated into deeper groundwater at the Site, but has not migrated laterally very far from the TBWR areas. Total phosphorus concentrations from Site and downgradient wells are stable or decreasing.

P4 in groundwater is localized near the 100' clarifier, and has very low mobility in groundwater. Concentrations of P4 have generally decreased since about 2002.

5.3.2.2.2 Metals

The comprehensive data set for the metals is presented in Table 5.3-4b, and the constituents of interest are discussed below.

Antimony

Twenty-two percent of the detected concentrations of total antimony in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Antimony is also a listed hazardous constituent. Therefore, antimony is considered a constituent of interest.

The distribution of antimony in groundwater is shown in Figure 5.3-42d. Detections of antimony were common in both upgradient, and Site and downgradient samples. However, concentrations greater than 0.5 ug/l were routinely measured in samples from wells near the TBWR. Antimony may have been one of several metals in the process water.

Antimony can exist in a +5 or a +3 oxidation state, hydrolyzes in water, and forms a weak acid anion that can adsorb to solids (Filella et al., 2002). Based on antimony concentrations in groundwater sampled from nested wells (i.e. MW-06-7/MW-06-8/MW-06-9 and MW-97-3/MW-97-4/MW-06-12), antimony appears to decrease with depth in the aquifer near the TBWR (Table 5.3-4b; Figures 5.3-11a and 5.3-11b). In general, intra-well antimony concentrations have decreased over time in wells located downgradient of the TBWR (Figure 5.3-40e).

Arsenic

Twelve percent of the detected concentrations of total arsenic in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Arsenic is also a listed hazardous constituent, and is considered a site-specific constituent.

The distribution of arsenic in groundwater is shown on Figure 5.3-42e. Arsenic concentrations greater than 50 ug/l were routinely measured in groundwater samples from wells near the TBWR areas, and upgradient of the Tailing Basin in Sheep Gulch. Arsenic concentrations near 30 ug/l were also measured in groundwater sampled from MW-06-4, southwest and upgradient of the Site, while arsenic concentrations in groundwater away from Sheep Gulch at MW-06-23, and MW-06-24 (also upgradient of the Site) are less than 5 ug/l. Arsenic at the Rhodia site was present in the wet scrubber water stream, and was likely due to the presence of arsenic as a trace constituent in the ore.

Like phosphorus, arsenic in the environment exists primarily as a weak acid anion. However unlike phosphorus, arsenic can exist as either arsenate (+5), especially at higher pH, or arsenite (+3), at both high and low pH (Fuller, 1977). Both of these forms have been shown to adsorb to hydrous metal oxide surfaces, especially at near neutral pH or lower (Fuller, 1977; Malotky and Anderson, 1976). At these pH values the surface charge of the solid is neutral or positively charged. Previous studies conducted with Site soils have demonstrated the ability of Site soils to adsorb both arsenic species

(Barr, 1999). This adsorption process will significantly retard the mobility of arsenic in a groundwater system. Accordingly, arsenic concentrations in groundwater decrease with distance from the TBWR areas. Several confounding factors related to arsenic in groundwater may complicate attempts to track groundwater impacts from the Rhodia site with distance from the TBWR areas: the median upgradient dissolved arsenic concentrations is 21 ug/l (maximum is 46 ug/l, Table 5.3-5), indicating relatively high arsenic concentrations upgradient of the Site, and potential arsenic in groundwater near the Silverbow Creek channel (MDEQ, 1995).

In general, intra-well arsenic concentrations have generally decreased or remained relatively stable with time in wells located downgradient of the TBWR areas (Figure 5.3-40f). Arsenic concentrations in samples from MW-97-3 and MW-97-4 have remained relatively stable. Arsenic concentrations in MW-97-8 have increased from 1997 to 2008 (where sulfate has decreased in the same well), but arsenic concentrations in MW-97-9 have decreased, and concentrations at MW-97-10 have remained stable. This may indicate that the peak groundwater arsenic concentration has passed those monitoring wells very close to the TBWR (MW-97-9 and -10), but has not yet passed wells further away (MW-97-8) that are downgradient of the predominant process water release zone – the discharge and return water channels. The decreasing sulfate concentration over time in MW-97-8 samples is clear evidence that the TBWR influence will decline in the future.

Arsenic concentrations in groundwater sampled from MW-02-3 and MW-02-4, downgradient of the TBWR has been broadly stable, showing some natural variability over the 8-year period of sampling from 2002-2010. Based on arsenic concentrations in groundwater sampled from nested wells (i.e. MW-06-7/MW-06-8/MW-06-9 and MW-97-3/MW-97-4/MW-06-12), arsenic appears to decrease with depth in the aquifer (Table 5.3-4b; Figures 5.3-12a and 5.3-12b). In contrast to the behavior of sulfate in the aquifer, it appears that 1) arsenic attenuates rapidly with depth, and 2) arsenic concentrations in groundwater are subject to significant retardation, and so appear comparatively stable.

Barium

Thirteen percent of the detected concentrations of total barium in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Barium is also a listed hazardous constituent. Therefore, barium is considered a constituent of interest. It should be noted that both the median and 75th percentile barium concentrations in the upgradient data set are higher than those in the Site and downgradient data set.

The distribution of barium in groundwater is shown on Figure 5.3-42f. Because of the irregular and variable distribution of barium in the groundwater samples, barium concentration isocontours were not interpreted. There is not a strong geographic correlation of barium-enriched groundwater, suggesting that barium sources are localized. The highest concentrations of barium on or downgradient of the Site in 2008 were observed in groundwater samples from wells north and west of the roaster solids area (MW-97-6, MW-01-5, MW-01-4, and MW-01-1), and under the Tailing Basin (MW-06-8). The initial samples collected from these wells contained the highest concentrations of barium, while barium concentrations have generally decreased in subsequent samples (Figure 5.3-40g). The concentration of barium in all of the wells for the most recent sampling event was less than half the concentration that had historically been reported for samples from these wells.

Barium is an alkali earth metal that exists in the environment as the divalent cation Ba^{2+}. It was present in process water, in the granulated slag, and in the wet scrubber blowdown. However, it is also found as a trace constituent in well construction materials, such as bentonite and Portland cement. The observation that samples from wells having significant concentrations of barium tend to have decreasing barium concentrations through time might indicate rapid attenuation of a local barium source (either site-related or well-installation related), and further analysis of intra-well barium concentrations was completed.

The Mann-Kendall Test was performed to determine any underlying trends in barium data over time, using a Microsoft Excel-based macro developed by the EPA (U.S. EPA, 2010). The test statistic requires a minimum of 4 sample results, and is computed by analyzing all possible pairings of data within the data set, and tracking the relative magnitude of values above or below the constant mean level in order to determine a trend (Gilbert, 1987). The Mann-Kendall test analysis was completed on a total of 9 wells (MW-01-1, MW-01-2, MW-01-3, MW-01-4, MW-01-6, MW-02-1, MW-97-6, MW-97-7, and RP-W-6). Test results indicated a statistically significant decreasing trend in barium concentrations for all wells. See Appendix 5.3-D for specific test results. A simpler approach was considered for the remaining locations with only 2 or 3 barium samples (55 well locations qualified). Within this group, 26 sample locations had decreasing barium concentrations, where each subsequent sample concentration was lower than the previous concentration. The remaining 29 samples had increasing and/or variable concentrations.

Because of significant barium concentrations in groundwater samples from wells located near the roaster solids area, it is possible that this area is a localized source of barium in groundwater.

However, it is also possible that the drilling materials used for well installation may also act as a local barium source. It appears that, for most wells that have a significant time series of samples, concentrations of barium are decreasing in those wells (Figure 5.3-40g).

Beryllium

Sixty-three percent of the detected concentrations of total beryllium in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Beryllium is also a listed hazardous constituent. Therefore, beryllium is considered a constituent of interest.

The distribution of beryllium in groundwater is shown in Figure 5.3-42g. Beryllium is found most consistently, and at highest concentrations, in groundwater near the 100' clarifier, and downgradient of the TBWR and the Slag Granulation Water and Temporary Retention Ditch. The source of beryllium in groundwater is not known, however, because of its general spatial correlation with the TBWR areas, beryllium may have been present in process water. Beryllium is a divalent cation (Be^{2+}) in the environment, and is likely to be precipitated or adsorbed to solid phases. It is unclear whether concentrations of beryllium are generally increasing or decreasing, as the reporting limit in early samples is much higher than the detection limit for recent sampling events (Figure 5.3-40h; Appendix 5.3-E).

Cadmium

Fifty-eight percent of the detected concentrations of total cadmium in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Cadmium is also a listed hazardous constituent. Therefore, cadmium is considered a constituent of interest.

The distribution of cadmium in groundwater is shown on Figure 5.3-42h. Cadmium in Site groundwater samples occurs north of the Tailing Basin (i.e., MW-97-9), near the Tailing Basin return channel (i.e., MW-97-7, MW-06-22 and MW-06-25), and at MW-06-18, perhaps due to the underground pipeline that conveyed process water to the final pump station. In these areas, cadmium concentrations exceed 5 ug/l. Cadmium was present in process water that was circulated through the TBWR system; infiltration of process water is the likely source of cadmium in groundwater associated with the TBWR areas.

Cadmium in the environment exists as a divalent cation, and is typically not strongly adsorbed to soils (Fuller, 1977). However, cadmium concentrations in groundwater may be controlled by adsorption onto or co-precipitation with hydrous iron or manganese oxides (Huang et al., 1977).

Accordingly, concentrations of cadmium are less that 0.1 ug/l within about 1,000 feet of the TBWR and the plant process area (Figure 5.3-42h).

Very few wells have a robust time series for cadmium (Appendix 5.3-E); however, for those that do, intra-well cadmium concentrations have decreased or remained stable since about 2002 (Figure 5.3-40i). Cadmium concentrations in groundwater sampled from MW-01-2, at the 100' clarifier have remained stable at about 1 ug/l, while at MW-01-3, downgradient of the 100' clarifier, they have decreased from about 1 ug/l in 2001to less than 0.2 ug/l. Cadmium concentrations in groundwater sampled from MW-97-7 increased from about 35 ug/l in 1998 to more than 80 ug/l in 2002, but have decreased to less than 60 ug/l in 2008. Decreasing intra-well cadmium concentrations are also apparent at MW-97-9 and MW-97-10, immediately downgradient of the tailing basin. It appears that cadmium has not migrated as extensively in groundwater as sulfate or arsenic (Figure 5.3-42h), and there are decreasing cadmium concentrations in the groundwater adjacent to the TBWR system.

Chromium

Thirteen percent of the detected concentrations of total chromium in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Chromium is also a listed hazardous constituent. Therefore, chromium is considered a constituent of interest.

The distribution of chromium in groundwater is shown in Figure 5.3-42i. Chromium concentrations greater than 1 ug/l were measured at least once in groundwater samples from wells in a zone from southwest of the Site (MW-06-23 and MW-97-5) through about half of the TBWR areas, and from wells to the west of the Site. Samples from several wells near the 100' clarifier (MW-01-2, MW-01-3, and MW-02-2) generally have concentrations of chromium less than 0.5 ug/l. The highest consistent concentrations of chromium in groundwater samples were from MW-06-19 (on the east side of the Site downgradient of the CSLIS/sod farm, and from MW-06-3, located on the west side of the Site. Chromium was present in roaster residue, and scrubber blowdown and process water. Process water at the facility contained chromium concentrations on the order of 10-100 ug/l (Barr, 2006). However, the spatial distribution of chromium in groundwater does not match that of other parameters that are indicative of process water such as sulfate, arsenic, or cadmium. Chromium is also commonly found in sewage sludge. It is possible that the chromium present in groundwater is a combination of naturally-occurring and localized influences, off-site sources, and process water.

Chromium can exist in the environment as either an anion or a cation, but the reduced form (Cr^{3+}) is more common in the environment. The effectiveness of soils at attenuating Cr^{3+} was demonstrated by Fuller (1977). However, because of the spatial variability of chromium in groundwater at the Site,

it is difficult to assess whether chromium is being attenuated in the downgradient direction. Chromium concentrations through time appear to be decreasing (i.e. at RP-W-6; Figure 5.3-17b), however, reporting limits for early sampling events are much higher than the detection limits used for the 2008 sampling event, which obscures the time series (Figure 5.3-40j; Appendix 5.3-E).

The highest concentration of chromium reported in the Site groundwater was 30 ug/l in well MW-97-9 in 1997. This value may represent a potential outlier in the data set, and is generally considered an anomalous value. Subsequent samples from MW-97-9 have chromium concentrations less than 0.5 ug/l.

Cobalt

Detectable concentrations of cobalt in groundwater are common in both upgradient (where the median total cobalt concentration is 0.131 ug/l; Table 5.3-5) and Site or downgradient samples (where the median total cobalt concentration is 2.11 ug/l). Eighty-seven percent of the detected concentrations of total cobalt in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Although cobalt is not listed as a hazardous constituent, it is considered to be a site-specific constituent.

The distribution of cobalt in groundwater is shown on Figure 5.3-18a and 5.3-18b. Cobalt concentrations exceed the upgradient concentration at most locations throughout the Site or downgradient of the site. The highest cobalt values were recorded directly north and west of the clarifier and within or near the elemental phosphorus production area and the crude phosphorus burial area (MW-01-3, MW-01-6, and MW-06-22). In these areas, cobalt concentrations exceeded 10 ug/l in 2008. Cobalt may have been sourced to this area from the leaking clarifier or process water. Wells containing at least 3.5 ug/l of total cobalt, an order of magnitude higher than the maximum upgradient concentration, are located north of the coarse slag pile or north northwest of the elemental phosphorus production area.

Cobalt can occur in either 2+ or 3+ oxidation states and, like cadmium, cobalt concentrations in groundwater may also be controlled by adsorption onto or co-precipitation with hydrous iron or manganese oxides (Hem, 1989). Very few wells have a robust time series for cobalt (Appendix 5.3-E); however, for those that do, intra-well cobalt concentrations have decreased or remained stable (Figure 5.3-40k). Cobalt concentrations in groundwater sampled from MW-01-2, at the 100’ clarifier have decreased from 3.4 ug/l in 2003 to 2.7 ug/l in 2008, while at MW-01-3, downgradient of the 100’ clarifier; samples have decreased from about 100 ug/l in 2001 to 15.4 ug/l in 2008. Cobalt concentrations in groundwater sampled from MW-97-7, decreased from 10 ug/l in 2001 to 6.5 ug/l in

2008. Decreasing intra-well cobalt concentrations are also apparent at MW-01-6 and MW-02-1, immediately downgradient of the clarifier and MW-97-10 and MW-97-11, west of the tailing basin. It appears that cobalt has not migrated as extensively in groundwater as sulfate or arsenic (Figure 5.3-42u), and there are decreasing cobalt concentrations in the groundwater adjacent to the clarifier and tailing basin system.

Lead

Eleven percent of the detected concentrations of total lead in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Detectable concentrations of lead in groundwater are common in both upgradient (where the median total lead concentration is 0.16 ug/l; Table 5.3-5) and Site or downgradient samples (where the median total lead concentration is 0.27 ug/l). Lead is also a listed hazardous constituent. Therefore, lead is considered a constituent of interest.

The distribution of total lead in groundwater is shown in Figure 5.3-42j. There is not a strong geographic correlation of lead-enriched groundwater, suggesting localized lead sources. Half of the lead concentrations exceeding 0.8 ug/l in 2008 groundwater samples appear to be associated with Sheep Gulch (up and downgradient of the Site). In groundwater, lead exists predominantly as a divalent cation, and has been demonstrated to be well attenuated in the environment by adsorption and precipitation reactions (Huang et al., 1977). It is unclear whether concentrations of lead are generally increasing or decreasing, as the detected lead concentrations are variable and the reporting limit in early samples is much higher than the detection limit for recent sampling events (Figure 5.3-40l; Appendix 5.3-E).

Manganese

Fifty-three percent of the detected concentrations of total manganese (and ninety percent of dissolved manganese) in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Manganese is considered a site-specific constituent.

The distribution of manganese in groundwater is shown in Figure 5.3-42k. Manganese concentrations exceeding 500 ug/l occur in groundwater from wells underlying and immediately adjacent to the TBWR, and in the vicinity of the P4 production area (MW-02-1) where process water was regularly released. Groundwater samples from upgradient wells have a maximum manganese concentration of 30 ug/l. Manganese may have been present in process water at the Rhodia facility. It is also ubiquitously present in relatively soluble oxide forms in soil and sediment. Manganese mobility is sensitive to the redox conditions of the groundwater environment: manganese concentrations tend to

increase as long as redox conditions are favorable, but manganese tends to rapidly precipitate or form solute complexes once redox conditions deviate from these conditions. In general, at the Rhodia site, the highest concentrations of manganese are associated with the lowest dissolved oxygen concentrations and lowest redox potential measurements (Figure 5.3-44).

The presence of the Tailing Basin may have changed the redox configuration of the ground water such that groundwater below the Tailing Basin is relatively depleted in oxygen (Figure 5.3-42t), thereby mobilizing manganese. The distribution of dissolved oxygen in groundwater is depicted in Figure 5.3-42t. The redox boundary surrounding the Tailing Basin may indicate an area where rapid precipitation of manganese may occur. Co-precipitation of divalent cations, such as barium, cadmium, and nickel, and perhaps of trivalent cations such as arsenic and antimony, likely occurs concurrently.

In general, for wells that have a significant time series of samples, manganese concentrations are relatively stable with time (Figure 5.3-40m). An exception to this is the manganese in groundwater sampled from MW-97-4, which increased from 1997 to 2006, but has remained stable from 2006-2010.

Mercury

There have been 17 detections of mercury in groundwater (13 total and four dissolved). All of the detected concentrations of total mercury in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Mercury is also a listed hazardous constituent. Therefore, mercury is considered a constituent of interest.

The distribution of mercury in groundwater is shown on Figures 5.3-24a and 5.3-24b. There is not a strong geographic correlation of mercury-enriched groundwater. Mercury was generally not detected or detected at concentrations less than 1 ug/l in process waters. Detections of mercury were measured consistently in samples obtained from MW-97-11 (at about 5 ug/l), located to the west of the Tailing Basin, and MW-06-12 and RP-W-4 (at about 0.5 ug/l), located north of the Tailing Basin. Mercury concentrations were highest in samples from MW-97-11, at about 5 ug/L. A time series of mercury concentrations in groundwater at MW-97-11 is shown in Figure 5.3-40n, indicating decreasing intra-well concentrations of mercury.

Nickel

Sixty-eight percent of the detected concentrations of total nickel in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Nickel is also a listed hazardous constituent. Therefore, nickel is considered a constituent of interest.

The distribution of nickel in groundwater is shown in Figure 5.3-42l. Nickel was consistently detected in groundwater samples from most wells on Site. The highest concentrations appear to correspond to the east limit of the TBWR and the plant process areas (Figure 5.3-42l). Nickel may have been one of several metals in the process water.

In the environment, nickel exists as Ni^{+2}, and is attenuated both by cation exchange and adsorption. In general, for wells that have a significant time series of samples, nickel concentrations have decreased over time (Figure 5.3-40o), with the notable exception of nickel concentrations in groundwater sampled from RP-W-6 which have increased from concentrations less than detection limits in 1988 to about 14 ug/l in 2008 (Figure 5.3-25b).

Selenium

Ninety-two percent of the detected concentrations of total selenium in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Selenium is also a listed hazardous constituent. Therefore, selenium is considered a constituent of interest.

The distribution of selenium in groundwater is shown in Figure 5.3-42m. Concentrations of selenium routinely exceeded 20 ug/l in samples from wells near the east limit of the TBWR: MW-06-25, MW-97-7, MW-97-8, MW-06-22; the Slag Granulation Water and Temporary Retention Ditch, MW-97-12; and near the Plant, MW-06-18. In addition selenium concentrations in groundwater exceeding 20 ug/l occur in MW-06-19, downgradient of the CSLIS/sod farm. Groundwater sampled from MW-06-2, located to the west of the Tailing Basin, also contained selenium concentrations at 10-30 ug/l.

Selenium exists in the environment as a weak acid anion, and under the action of soil microorganisms and atmospheric agents, selenium can change from the selenate to the selenite oxidation state and back (Fuller, 1977). It will adsorb to solids and tends to be less mobile than sulfate, but more mobile than arsenate. Selenium was routinely present in process water and scrubber blowdown at the Rhodia facility, which may explain the presence of selenium in groundwater near the TBWR areas. It is unlikely that selenium in groundwater at MW-06-2 is related to process water, as groundwater samples from wells located closer to the Tailing Basin generally have selenium concentrations less than 10 ug/l (MW-97-10, MW-97-3, MW-97-4).

Selenium concentrations are increasing with time on the east side of the Site (i.e. at MW-01-1, MW-01-2, MW-01-4, MW-01-5, MW-02-2) and near and downgradient of the east limit of the TBWR areas (i.e. at MW-97-7, MW-97-8). Intra-well selenium concentrations in groundwater sampled from wells adjacent and downgradient of the Tailing Basin are decreasing (i.e. at MW-97-9 and MW-97-10). To the northwest of the Site, concentrations are relatively steady or decreasing (Figures 5.3-27a and 5.3-27b; Figure 5.3-40p).

Silver

Silver was not observed at detectable concentrations from samples obtained from upgradient wells. Six detections of dissolved silver and 19 detections of total silver were measured in Site or downgradient wells (Table 5.3-6). Silver is also a listed hazardous constituent. Therefore, silver is considered a constituent of interest.

The distribution of silver in groundwater is shown in Figure 5.3-42n. The highest silver concentrations were reported in the 1982, and in one case the 1986, sampling of wells RP-W-6, RP-W-4, and RP-W-7 (Figures 5.3-28a and 5.3-28b). The reported concentrations ranged from 3 to 16 ug/l. Subsequent samples collected from these wells have had no detectable silver concentrations. There is not a strong geographic correlation of silver-enriched groundwater; however, detections of silver in 2008 were more common in wells on the east side of the Site, downgradient of the CSLIS/sod farm. The highest concentrations of silver detected in 2008 sampling were measured in samples obtained from MW-06-7, located in the tailing basin, and MW-02-2, located adjacent to the 100' clarifier. In general, concentrations of silver in groundwater are less than 1 ug/l, with the exception of the older samples discussed above. Trace (< 1 ug/l) amounts of silver were measured in process water during plant operations, and may be the source for localized concentrations of silver in groundwater. Silver is readily attenuated by both adsorption and precipitation and typically not mobile in a ground water system.

Thallium

Forty percent of the detected concentrations of total thallium in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Thallium is also a listed hazardous constituent. Therefore, thallium is considered a constituent of interest.

The distribution of thallium in the Site groundwater is shown in Figure 5.3-42o. Detections of thallium at concentrations ranging between 0.05 and 0.2 ug/l commonly occur in samples in groundwater near the TBWR and plant process areas. Exceptions are groundwater sampled from MW-97-9 (which has thallium concentrations exceeding 0.3 ug/l) and MW-06-7 (which has

concentrations of thallium exceeding 2 ug/l). The thallium likely originated in the ore and is concentrated in the tailing. Thallium exists as a cation with a +1 or +3 oxidation state. It generally has low mobility in the environment. It is unclear whether concentrations of thallium are generally increasing or decreasing, as the detected thallium concentrations are very near the limits of detection, and the reporting limit in early samples is much higher than the detection limit for recent sampling events (Figure 5.3-40r; Appendix 5.3-E). An exception to this is total thallium at MW-97-10, which has decreased from 2002 to 2008.

Uranium

Three percent of the detected concentrations of total uranium in Site and downgradient groundwater samples exceeded the maximum upgradient concentration (Table 5.3-6). Uranium is also considered a site-specific constituent. Therefore, uranium is considered a constituent of interest.

The distribution of total uranium in groundwater is shown on Figure 5.3-42p. Uranium concentrations exceeding 10 ug/l in groundwater samples are generally restricted to samples obtained from wells that are surrounding the Site. Concentrations of uranium less than 10 ug/l were measured in most samples obtained from directly under and adjacent to the Site (Figure 5.3-42p). The highest concentrations were measured in samples from MW-06-19, which is located downgradient of the CSLIS/sod farm, and from MW-01-1, located near the slag pile. Uranium was present in the phosphate ore processed at Rhodia. Because of its relatively high density and low volatility, uranium preferentially reported to the slag during phosphorus production, and is likely not associated with the Tailing Basin. Uranium readily adsorbs to minerals in the subsurface (Giammar, 2001), and because of this, should be well attenuated in a groundwater system.

Uranium concentrations at MW-01-1 have increased from 2001 to 2008. Uranium in Sheep Gulch has increased from 1997 to 2008, as has uranium in groundwater at MW-97-7 (Figure 5.3-40s). In general, for wells located downgradient of the TBWR areas that have a significant time series of samples, uranium concentrations have decreased over time (Figure 5.3-40s).

Summary

Arsenic, cadmium, cobalt, and manganese tend to indicate the presence of process water from the TBWR areas in the downgradient groundwater. In addition, dissolved oxygen is depleted in the area underlying the TBWR and the plant. The distribution of arsenic and dissolved oxygen in the subsurface is shown in cross section on Figure 5.3-43a and Figure 5.3-43b. To summarize:

- Arsenic has migrated in groundwater in the general direction of groundwater flow, and into deeper groundwater on Site. Arsenic is present in groundwater upgradient of the Site. Arsenic concentrations are generally stable to decreasing in Site and downgradient wells.
- Cadmium has migrated to a more limited extent than arsenic in the general direction of groundwater flow, and into deeper groundwater on Site. Cadmium concentrations are generally decreasing in Site and downgradient wells.
- Cobalt has migrated in groundwater in the general direction of groundwater flow and into deeper groundwater at RP-W-6. Cobalt concentrations in groundwater are generally decreasing in Site and downgradient wells.
- Manganese has migrated to a limited extent in the general direction of groundwater flow and into deeper groundwater on Site. It is likely that manganese is (and other constituents that are present as cations may be) controlled by the redox state of groundwater. Manganese concentrations on Site and downgradient are stable or decreasing.

Nickel, uranium, and antimony are tenuous indicators of TBWR-influenced groundwater. To summarize:

- Nickel has migrated in groundwater in the general direction of groundwater flow and into deeper groundwater. Nickel concentrations are generally decreasing with the exception of groundwater at RP-W-6.
- Areas of process water infiltration to groundwater seem to be depleted in uranium as the lowest uranium concentrations are wells within the TBWR area.
- Antimony has migrated to a limited extent in the general direction of groundwater flow and deeper into groundwater on Site. Antimony is of relatively low value in tracing TBWR influence due to analytical detection limits.

Barium, beryllium, chromium, lead, mercury, and silver, are generally not indicators of TBWR-influenced groundwater, and may have localized sources or be present in variable concentrations in upgradient groundwater. Selenium and thallium do not provide a clean enough signature at this Site to be good indicators of TBWR influenced groundwater.

5.3.2.2.3 Semivolatile Organic Compounds

The majority of the SVOCs were not detected in groundwater samples collected across the Silver Bow Plant and many that were detected were qualified as estimated concentrations (i.e. "J" qualified). The comprehensive data set is provided in Table 5.3-4c. SVOCs were rarely detected in

Site or downgradient groundwater samples and there is not a strong geographic correlation of extensive SVOC-enriched groundwater; therefore, spatial plots of SVOCs were not generated. The following table summarizes the detections of SVOCs meeting the criteria listed in Section 5.3.2.2.

Table 5.3-7 Summary of SVOC Detections

Constituent	Number of detections		Concentration ranges (ug/L)		Comments
	Upgradient	Site or Downgradient	Upgradient	Site or Downgradient	
Diethyl phthalate	0	9	<RL	0.031 - 0.2	All detections from May, 2008 sampling event; All but one detection was "J" qualified
Di-n-octyl phthalate (DNOP)	0	2	<RL	<RL – 0.07	Both detections from May, 2008 sampling event; Both detections are "J" qualified
Pentachlorophenol	0	1	<RL	<RL – 0.80	Detection was "J" qualified
Nitrobenzene	0	1	<RL	<RL – 0.10	Detection was "J" qualified
Benzoic acid	0	7	<RL	<RL – 2.2	All detected concentrations were "J" qualified or rejected during data QA/QC; all "J" qualified values were from the September, 2008 sampling event
Naphthalene	0	14	<RL	<RL – 15	See discussion below
Fluoranthene	4	13	<RL - 0.013	<RL – 0.49	See discussion below

Notes: RL Reporting limit; varies for different sampling events.

Phthalates

Diethyl phthalate and Di-n-octyl phthalate (DNOP) are common plasticizers used in the production of various plastics, synthetic resins, and adhesives to affect the product's physical properties. They are ubiquitous in the environment, especially near the places of production and use, and can be transferred from the plastics that contain them. The wells at the Silver Bow Plant are constructed of PVC materials, and groundwater samples were transferred and analyzed using multiple plastic devices. Sample handling is the likely source of these constituents in the groundwater samples.

Pentachlorophenol

A single detection of pentachlorophenol (PCP) was reported in a groundwater sample obtained from MW-02-2, located near the 100' clarifier, in September, 2008. PCP was used as a wood preservative and pesticide prior to about 1984, when its use became restricted except for certain applications. The detection of PCP in the sample was "J" qualified during data QA/QC. There are no known sources of PCP at the Rhodia site.

Nitrobenzene

A single detection of nitrobenzene was reported in a groundwater sample obtained from MW-01-2, located near the 100' clarifier, in September, 2008. Nitrobenzene is used in the manufacture of aniline, and used to produce lubricating oils that are used in motors and machinery. There are also small amounts of nitrobenzene in dyes, drugs, pesticides, and synthetic rubber. The detection of nitrobenzene in the sample was "J" qualified during data QA/QC.

Benzoic Acid

Benzoic acid is used to make other chemicals, and as a fungicide/pesticide. It also has uses as a rubber polymerization activator and retardant, a drilling mud additive, a corrosion inhibitor, and as an engine antifreeze coolant additive. Benzoic esters are used as solvents and penetrating agents. Benzoic acid was reported in groundwater samples obtained from Site or downgradient wells seven times. Of the detected concentrations, all were either "J" qualified or rejected during data QA/QC. The "J" qualified detections of benzoic acids were all from the September, 2008 sampling event. Because of the coincidence of the detections during one sampling event, it is likely that sample handling or sample contamination is the source of benzoic acid in the groundwater samples.

Naphthalene

Naphthalene is a component of fuels, and has major use in the manufacture of PVC plastics and as a fumigant. It is a primary component of coal tar. Naphthalene was reported in groundwater obtained from Site or downgradient wells 14 times. Of the 14 detected concentrations, 11 were "J" qualified during data QA/QC. Detections of naphthalene at most wells were single detections, with subsequent samples indicating that naphthalene concentrations are below the limits of detection. At monitoring wells MW-01-3 and MW-01-6, however, naphthalene was detected in consecutive samples (October, 2001 and May, 2008 for both). MW-01-3 and MW-01-6 are located downgradient of the 100' clarifier. There are no known sources of naphthalene at the Rhodia site; however, the consecutive detections of naphthalene in two wells located near the 100' clarifier indicates that the 100' clarifier may be a potential source for the naphthalene that was detected in adjacent groundwater.

Fluoranthene

Fluoranthene is a polycyclic aromatic hydrocarbon (PAH) found in combustion products, and is an indicator of less efficient or lower-temperature combustion. It is ubiquitously found in coal tar pitch, and other products of incomplete combustion of fossil fuels. Fluoranthene was reported in groundwater samples obtained from Site or downgradient wells 13 times. Many of these values were subsequently "J" qualified during data QA/QC, however, multiple detections occurred in wells near the 100' clarifier (MW-01-3 and MW-01-6), the used brick and furnace liner pile (at MW-01-1 and MW-01-5), and near the former acid plant (at MW-06-18). Groundwater samples obtained from MW-06-11 also had consecutive detections of fluoranthene that were "J" qualified during data QA/QC. There are no known potential sources of fluoranthene in the vicinity of MW-06-11.

Summary

SVOCs in groundwater are not indicative of TBWR-influenced groundwater. It is possible that naphthalene is present in the immediate vicinity of the 100' clarifier. It is possible that fluoranthene

is present in the vicinity of the 100' clarifier, the used brick and furnace liner pile, and/or the former acid plant.

5.3.2.2.4 Volatile Organic Compounds

The majority of the volatile organic compounds (VOCs) were not detected in groundwater samples collected across the Silver Bow Plant and many that were detected were qualified as estimated concentrations (i.e, J-qualified). The comprehensive data set is provided in Table 5.3-4d. VOCs were rarely detected in Site or downgradient groundwater samples and, with the exception of several chlorinated solvents, discussed below, there is not a strong geographic correlation of extensive VOC-enriched groundwater; therefore, spatial plots of the individual VOCs were not generated. The following table summarizes the detections of VOCs meeting the criteria listed in Section 5.3.2.2.

Table 5.3-8 Summary of VOC Detections

Constituent	Number of detections		Concentration ranges (ug/L)		Comments
	Upgradient	Site or Downgradient	Upgradient	Site or Downgradient	
Carbon disulfide	0	10	<RL	<RL – 4.60	All detections from October, 2001 or May, 2008 sampling events; All detections are "J" or "*" qualified, with subsequent sampling indicating concentrations below the limits of detection at all locations
Toluene	1	27	<RL – 0.31	<RL – 0.63	Subsequent sampling indicates toluene is below the limits of detection at all locations
1,2-Dichloroethylene, cis (cis-1,2-DCE)	0	1	<RL	<RL – 0.10	Detection was "J" qualified, see discussion below
1,2-Dichloroethylene, trans (trans-1,2-DCE)	0	2	<RL	<RL – 0.14	Both detections are "J" qualified, see discussion below
Trichloroethylene (TCE)	0	1	<RL	<RL – 0.51	See discussion below
Tetrachloroethylene (PCE)	0	10	<RL	<RL – 1.90	See discussion below
Benzene	0	12	<RL	<RL – 0.70	See discussion below
Chloroform	4	3	<RL – 0.13	<RL – 3.20	See discussion below

Notes: RL Reporting limit; varies for different sampling events.

Carbon disulfide

Carbon disulfide was reported in samples obtained from Site or downgradient samples 10 times. Of the detected concentrations, all were either "J" qualified or "*" qualified during data QA/QC. All detected concentrations were during either the October, 2001 or May, 2008 sampling events. Detections of carbon disulfide at the wells were single detections, with subsequent samples indicating that concentrations are below the limits of detection. Carbon disulfide is an industrial solvent, used in the manufacture of rubber, plywood glues, rayon, cellophane, and electroplating, is used as a pesticide and fumigant, and can be produced naturally in low oxygen conditions. Because of the coincidence of the detections during two sampling events, with subsequent samples below

detection limits, it is likely that sample handling or sample contamination is the source of carbon disulfide in the groundwater samples.

Toluene

Toluene was detected once in an upgradient groundwater sample, and 27 times in samples obtained from Site or downgradient wells. Of those 28 detections, 27 were subsequently "J" qualified during data QA/QC, detected at concentrations that are between the method detection limit and the reporting limit. The majority of these detections are likely to be lab contamination or spurious detections. However, toluene was detected in consecutive samples obtained from MW-01-6 (located immediately adjacent to the 100' clarifier) and also in consecutive samples from MW-97-6 (located sidegradient of theSilver Bow Plant), MW-06-18 (located in the vicinity of the former discharge pipe area - SWMU 24), and MW-EPA-3 (located to the north of the Rhodia site). However, at each of these locations, the most recent samples in September, 2008 indicated that concentrations of toluene are below the limits of detection. Detections of toluene at wells other than these were single detections, with subsequent samples indicating that toluene concentrations are below the limits of detection. Toluene is used as an industrial solvent, occurs naturally at low levels in crude oil, and is usually produced in the processes of making gasoline via a catalytic reformer, in an ethylene cracker or making coke from coal.

Dichloroethylene

Cis- and trans-1,2-DCE are used as a solvent for waxes, resins, polymers, and fats and are used commercially in the manufacture of chlorinated solvents. A single detection of cis-1,2-DCE, and two detections of trans-1,2-DCE were reported in samples obtained from MW-06-17. All detections were "J" qualified during data QA/QC. The coincident detections of cis- and trans-1,2-DCE concentrations within the same well and from consecutive sample events indicates that, although the reported sample results were "J" qualified, the results may be a reliable indicator of the presence of these constituents in groundwater at this location. However, there is no known probable source for cis- and trans-1,2-DCE in groundwater at this location.

Trichloroethylene

TCE is used as an industrial solvent, and also used in various chemical manufacturing processes. A single detection of trichloroethylene was measured from a sample obtained from MW-06-17 in September, 2008. The coincident detectable concentrations of cis- and trans-1,2-DCE and TCE within the same well, indicates that the sampling results may be a reliable indicator of the presence of TCE in groundwater at this location. However, there is no known probable source for TCE in groundwater at this location.

Tetrachloroethylene

Tetrachloroethylene (PCE) was detected in samples obtained from Site or downgradient samples 10 times. Of those detections, 7 were subsequently "J" qualified during data QA/QC. However, PCE was detected in consecutive samples obtained from MW-01-2 (located immediately adjacent to the 100' clarifier) and also in consecutive samples from MW-06-16, MW-06-17, MW-06-18, and MW-06-20, which are located downgradient of the locations of former diesel storage tanks (AOC A), the former sulfuric acid tank (AOC B), and the discharge pipe area (SWMU 24) and the final pump station (SWMU 27). Detections of PCE at wells other than these were single detections, with subsequent samples indicating that PCE concentrations are below the limits of detection. PCE is used as an industrial solvent and used in the manufacture of Freon. It is also used in adhesives, glues, sealants, lubricants and pesticides.

The detection of PCE in consecutive sample events indicates that, although many of the reported sample results were "J" qualified during data QA/QC, the results may be a reliable indicator of the presence of PCE in groundwater at MW-01-2, and at MW-06-16, MW-06-17, MW-06-18, and MW-06-20. A plan view of PCE, TCE, and DCE detections in groundwater in the vicinity of MW-06-17 is shown on Figure 5.3-42q.

Benzene

Benzene is a component of fuels and was used historically as an industrial solvent. Benzene was detected in samples obtained from Site or downgradient samples 12 times. Of those detections, 11 were subsequently "J" qualified during data QA/QC. Benzene was detected in consecutive samples obtained from MW-01-6 (Table 5.3-4d), which is located immediately adjacent to the 100' clarifier. Detections of benzene at other wells were single detections, with subsequent samples indicating that benzene concentrations are below the limits of detection. The detection of benzene in consecutive sample events indicates that, although at least one of the sample results was "J" qualified during data QA/QC, the results may be a reliable indicator of the presence of benzene in groundwater at MW-01-6.

Chloroform

Chloroform was detected 4 times in upgradient groundwater samples, and 3 times in samples obtained from Site or downgradient wells. Of those 7 detections, 5 were subsequently "J" qualified during data QA/QC. Chloroform was detected in consecutive samples obtained from MW-GW-3, located in Sheep Gulch, upgradient from the Rhodia site. It was also detected in groundwater samples obtained from MW-97-1 and MW-97-2 (also located in Sheep Gulch, upgradient of the Rhodia site). Detections of chloroform in groundwater samples from wells located on Site or downgradient from

Site include samples from MW-01-4 and MW-97-7, where detections were single instances, with subsequent samples indicating that chloroform concentrations are below the limits of detection (Table 5.3-4d), and a sample from RP-W-1 (the most recent sample, where previous sampling indicated chloroform concentrations were below the limits of detection). Chloroform is often associated with the use of chlorinated drinking water supplies for irrigation and chlorinated septic system discharges. There are no known probable sources for chloroform in groundwater at MW-97-1, MW-97-2, MW-01-4, MW-97-7, or RP-W-1.

Summary

VOCs in groundwater are not indicative of TBWR-influenced groundwater. It is possible that PCE, DCE, and TCE are present in a localized area near MW-06-17.

5.3.2.2.5 PCBs

Aroclor 1260 was reported at 0.0042 ug/L in one sample from MW-06-13, but this value was "J" qualified during data QA/QC (Table 5.3-4e). Subsequent sampling indicated that concentrations of this constituent did not exceed the limits of detection. The detection is considered spurious.

5.3.2.2.6 Radiochemical Parameters

The following discussion addresses radiochemical parameters (gross beta radiation, gross alpha radiation, and total radium) meeting the criteria listed in Section 5.3.2.2. In general, radioactivity associated with the Rhodia site is a result of naturally-occurring radioactive materials (NORM) in the phosphate ore that was processed on Site. The radioactivity of phosphate ore is almost exclusively due to trace levels of uranium and its decay products (Lloyd, 1983). The comprehensive data set is provided in Table 5.3-4f.

Gross alpha radiation

Nine percent of the detected gross alpha radioactivity in Site and downgradient groundwater samples exceeded the maximum upgradient activity (Table 5.3-6). Gross alpha radioactivity is considered a site-specific constituent. Therefore, gross alpha radioactivity is considered a constituent of interest.

The distribution of gross alpha radioactivity in the Site groundwater is shown in Figure 5.3-42r. The gross alpha activity in groundwater exceeding 40 pCi/l was detected at MW-06-19, which is located downgradient from the CSLIS/sod farm site to the east of the Rhodia property, and downgradient of the railroad ore-offloading system. Gross alpha activity over 10 pCi/l in groundwater samples generally were from the southern, eastern, and far northern areas of the Site, and in the Sheep Gulch area upgradient and downgradient of the Site. Depleted areas of gross alpha activity (less than 5

pCi/l) are present in areas associated with two areas of enhanced infiltration of process water: the 100' clarifier area and near the Slag Granulation Water and Temporary Retention Ditch. A rough association between gross alpha radioactivity in groundwater and slag piles at the surface may indicate leaching of gross alpha radioactivity from slag and rapid attenuation in groundwater, but it appears that the naturally-occurring variability of gross alpha radioactivity may be a primary control of the activity in groundwater.

Gross beta radiation

Twenty-seven percent of the detected gross beta radioactivity in Site and downgradient groundwater samples exceeded the maximum upgradient activity (Table 5.3-6). Gross beta radioactivity is considered a site-specific constituent. Therefore, gross beta radioactivity is considered a constituent of interest.

The distribution of gross beta activity in groundwater is shown in Figure 5.3-42s. The highest gross beta activity is in well MW-06-7, which is screened in the tailing basin. The spatial distribution of gross beta radiation indicates that the TBWR (where activity exceeds 50 pCi/l) is the primary source to groundwater. Gross beta activity in groundwater tends to attenuate to less than 30 pCi/l within about 1000 feet of the tailing basin. Gross beta radioactivity tends to indicate the some influence from process water throughout the TBWR areas. Groundwater in the Sheep Gulch area upgradient of the Rhodia site generally has gross beta radioactivity up to about 30 pCi/l.

Total radium

Total radium activity was detected in two samples obtained from Site wells (MW-01-6 on 9/5/2002, and MW-02-1 on 9/4/2002). No analyses for total radium activity for samples obtained from upgradient wells have been conducted, so comparison to upgradient activity is not possible. Activity of the isotopes of radium (^{226}Ra and ^{228}Ra) are higher in groundwater sampled from upgradient wells than from groundwater samples obtained from Site or downgradient wells (Table 5.3-6).

Summary

Gross beta radioactivity tends to indicate some influence from process water throughout the TBWR areas. Gross beta radioactivity in groundwater has migrated to a limited extent in the general direction of groundwater flow and into deeper groundwater on Site (Figure 5.3-43a and Figure 5.3-43b). Gross alpha radiation is not associated with TBWR-influenced groundwater. However, it may be associated with the surface presence of the slag pile.

5.3.3 Conclusions

Process water infiltrating from the TBWR areas is the predominant source of hazardous constituents to the groundwater at the Site, as illustrated by the geographic distribution of water quality shown on the isoconcentration contour maps (Figure 5.3-42a through 5.3-42w). A smaller amount of process water likely infiltrated locally at the Slag Granulation Water and Temporary Retention Ditch, at the 100' clarifier, at the final pump station, and within the elemental phosphorus production area water where process water was regularly released during operation.

The following conclusions are supported by the existing groundwater quality data set regarding TBWR-sourced constituents:

- Sulfate behaves as a mobile dissolved species, and has migrated toward the production wells and in the general direction of groundwater flow. This constituent is considered a good indicator of process water impacts, except near Silver Bow Creek where SSTOU influences must be accounted for, and has migrated as far as 1500 feet from the TBWR areas or into deeper groundwater (i.e. at RP-W-6, and MW-06-12). Concentrations of this constituent are presently decreasing in groundwater.
- Arsenic, fluoride, cadmium, cobalt, and manganese are moderately mobile and have migrated to a limited extent (generally less than 1000 feet). These constituents can be indicators of process water (though naturally occurring fluoride and arsenic can complicate interpretation) and concentrations are generally stable or decreasing, with the possible exception of fluoride immediately downgradient of the TBWR areas. Oxygen-depleted groundwater exists under and adjacent to the Tailing Basin, and likely affects the solubility of redox-sensitive species such as manganese, and may control the solubility of cations in solution through co-precipitation.
- Nickel, antimony, thallium, and selenium do not appear to be good indicators of process water. If process water was a source for these constituents, the constituents have migrated in groundwater from the Site to a limited extent. In general, concentrations of these constituents are decreasing; except, nickel concentrations, specifically at RP-W-6, and selenium concentrations on the east side of the Site are increasing.
- Total phosphorus is present locally in groundwater, but has demonstrated very little mobility, as it has not migrated from the immediate vicinity of the TBWR source. In addition, local 100' clarifier-sourced constituents, such as elemental phosphorus and trace organic compounds such as naphthalene, fluoranthene, PCE, and benzene have not migrated from the immediate vicinity of the 100' clarifier.

- Gross beta radioactivity is present in groundwater associated with and downgradient from the TBWR areas, while groundwater in the vicinity of the TBWR areas is depleted in gross alpha radiation and uranium.

The following conclusions are supported by the existing groundwater quality data set regarding probable site-sourced constituents (from sources other than the TBWR areas):

- Groundwater in the vicinity of the slag piles and roaster solids area (SWMUs 12, 13 and 14) contains detectable or locally elevated concentrations of barium and fluoranthene, increased gross alpha radioactivity, and possibly total uranium;
- VOCs such as DCE, TCE, and PCE may be present in the vicinity of MW-06-17; the source of these VOCs is not known.

The following conclusions are supported by the existing groundwater quality data set regarding potential confounding sources of constituents:

- Spurious detections of the following constituents: toluene, benzene, chloroform, and Aroclor 1260. In addition, several constituents may be present due to well installation or sample handling: barium, phthalates, pentachlorophenol, nitrobenzene, benzoic acid, and carbon disulfide;
- Fluoride exists in concentrations greater than 10 mg/l in deep, upgradient (unimpacted) groundwater. Such naturally-occurring fluoride concentrations may cause an overprint of fluoride-enriched water in groundwater;
- Detectable concentrations of locally elevated concentrations of the following have been measured at wells in Sheep Gulch, upgradient of the Rhodia site: chloroform, arsenic, cadmium, lead, nickel, and increased gross beta radioactivity and total uranium;
- Detectable concentrations of locally elevated concentrations of chromium, selenium, silver and uranium have been measured at wells on the east side of the Site, downgradient of the CSLIS/sod farm; and
- Groundwater in the Silver Bow Creek channel may have influenced sulfate concentrations at nearby production wells, as operation of the wells may have pulled groundwater toward the Site historically.

In general, the existing groundwater quality data set for the Rhodia Silver Bow Plant is sufficient to demonstrate: 1) localized elevated concentrations of some solutes that have not migrated, and are not

expected to migrate, substantially from their source; and 2) concentrations of most constituents (with the possible exception of fluoride) in downgradient groundwater have decreased with time since the plant has been shut down.

The existing groundwater quality data set is sufficient to initiate the human health and ecological risk assessments to evaluate whether the constituent concentrations identified in samples from wells located downgradient of the Site represent an unacceptable risk to human health or the environment.

However, specific and well-defined continued monitoring is recommended. A Baseline Groundwater Sampling Plan (BGSP) was submitted to EPA on May 1, 2013, which addresses data needs identified in EPA's April 15, 2013 email to Rhodia. The specific objective of this BGSP is to obtain additional groundwater quality data to establish current baseline groundwater quality conditions for the Silver Bow Plant, including potential seasonal effects. The BGSP is part of a Long-term Groundwater Monitoring Plan that is being developed for Silver Bow Plant and will be submitted to EPA after the baseline monitoring and risk assessments are complete.

5.3.4 References

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Tables

Table 5.3 - 1
Groundwater Sample Summary
Rhodia Silver Bow Site

		1982, '83, '86, '87	1988					1992	1997					1998		1999		2000	2001						2002						2003		2004	2005		2006		2007	2008						2009	2010			2012					
	Parameter	M	MI	M	SVOC	VOC	R	M	MI	M	VOC	R		MI	M	MI	M	M	MI	M	SVOC	VOC	R		MI	M	SVOC	VOC	PCB	R	M	R	M	MI	M	MI	M	MI	M	MI	M	SVOC	VOC	PCB	R	M	MI	M	R	MI	M	SVOC	VOC	PCB	R
Well ID	RP-W Series	X	X	X	X	X	X	X	N/A					X	X	--	--	N/A	N/A						N/A						N/A		N/A	N/A		N/A		N/A	X	X	X	X	X	X	N/A	N/A			N/A					
	MW-EPA Series	Well not installed	X	X	X	X	X	N/A	X	X	X	X		X	X	N/A		N/A	N/A						N/A						X	X	N/A	N/A		N/A		N/A	X	X	X	X	X	X	N/A	N/A			N/A					
	MW-97 Series	Well not installed							X	X	X	X		X	X	X	X	N/A	X	X	X	X	X		X	X	--	--	--	X	X	X	N/A	X	X	N/A	N/A	X	X	X	X	X	X	N/A	N/A			N/A					
	MW-GW Series	Well not installed												--	X	--	X	X	--	X	--	--	--		--	X	--	--	--	--	X	--	X	--	X	--	X	--	X	X	X	X	X	X	X	--	X	--	N/A					
	MW-BSB-4	Well not installed														--	X	N/A	N/A						N/A						N/A		N/A	N/A		N/A		N/A	X	X	X	X	X	X	N/A	N/A			N/A					
	MW-MT96-2	Well not installed														--	X	N/A	N/A						N/A						--	X	N/A	N/A		N/A		N/A	X	X	X	X	X	X	N/A	N/A			N/A					
	PW-99 Series	Well not installed														--	X	N/A	N/A						N/A						N/A		N/A	X	X	N/A		N/A	X	X	X	X	X	X	N/A	N/A			N/A					
	MW-01 Series	Well not installed																	X	X	X	X	X		X	X	--	--	--	X	X	X	N/A	N/A		N/A		N/A	X	X	X	X	X	X	N/A	N/A			N/A					
	MW-02 Series	Well not installed																							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	N/A	X	X	X	N/A					
	MW-06 Series	Well not installed																																	--	--	N/A	X	X	X	X	X	X	N/A	X	X	X	N/A					
	MW-12 Series	Well not installed																																														X	X	X	X	X	X

NOTES:

x Sample was analyzed for this parameter
-- Sample not analyzed for this parameter
N/A Sample not collect or analyzed, or no data available
MI Major ions (Alaklinity, Cl, SO_4, Ca, Mg, Na, K)
M Metals
SVOC Semivolatile organic compounds
VOC Volatile organic compounds
PCB Polychlorinated Biphenyls
R Radiochemical parameters

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Table 5.3-2
Groundwater Well Construction Information
Rhodia Silver Bow Plant

	Well ID	Date Installed	Elevations [ft. MSL]			Depth [ft bgs]		Geologic Materials Screened	Number of Monitoring Events
			Ground Surface	Top of Screen	Bottom of Screen	Top of Screen	Bottom of Screen		
Upgradient Monitoring Location	MW-EPA-1	08/05/88	5364.76	5339.56	5319.56	25.2	45.2	Clay and sand w/ some gravel	5
	MW-BSB-4	03/07/96	5351.8	5146.2	5116.2	205.6	235.6	Graben-fill sediment and Lowland Creek Volcanics	3
	MW-97-1	10/18/97	5355.8	5334.1	5324.1	12.7	31.7	Silty lean clay	5
	MW-97-2	10/17/97	5355.7	5305.1	5295.1	50.6	60.6	Silty lean clay	4
	MW-97-5	10/20/97	5400.1	5348.5	5328.5	51.6	71.6	Silt and sand w/ some gravel	6
	MW-GW-1	03/18/98	5410	5361	5351	49	59	--	52
	MW-GW-2	02/23/98	5397	5359.9	5349.9	37.1	47.1	Clayey silt	36
	MW-GW-3	02/28/98	5353	5343.1	5333.1	9.9	19.9	Clayey silt	53
	MW-06-4	09/12/06	5388.22	5315	5295	73	93	Mudstone/Claystone	3
	MW-06-5	09/14/06	5348.19	5344.7	5324.7	3.5	23.5	Clay, sand,and gravel	4
	MW-06-6	09/20/06	5348.33	5194	5174	154	174	Clayey silt	4
	MW-06-23	09/18/06	5426.28	5349.5	5329.5	76.8	96.8	Silt and sand	3
	MW-06-24	09/26/06	5426.08	5279.5	5269.5	146.6	156.6	Silt and sand	3
	MW-MT96-2	--	5348.6	--	5129.3	--	219.3	--	4
Downgradient Monitoring Location	RP-W-1	01/07/54	5352	5332	5130	20	222	Sand and clay	5
	RP-W-4	08/01/54	5355	5309	5060	46	295	Sand, chert and clay	7
	RP-W-5	08/01/54	5326	5246	5036	80	290	Sand and clay	4
	RP-W-6	09/01/54	5336	5246	5136	90	200	Sand, chert and clay	12
	RP-W-7	07/15/71	5365	5165	5085	200	280	Sand and clay	5
	MW-EPA-3	08/06/88	5326.52	5305.0	5295.0	21.5	31.5	Sand	8
	MW-EPA-4	08/06/88	5321.31	5296.11	5276.11	25.2	45.2	Sand	10
	MW-97-3	10/13/97	5335.9	5323.6	5303.6	12.3	32.3	Sandstone	6
	MW-97-4	10/13/97	5336.0	5285.6	5275.6	50.4	60.4	Sandstone	9
	MW-97-6	10/21/97	5364.6	5333.2	5313.2	31.4	51.4	Silt and sand w/ some gravel	7
	MW-97-7	10/23/97	5362.1	5320.1	5300.1	42	62	Silt and sand w/ some gravel	9
	MW-97-8	10/24/97	5377.2	5326.6	5306.6	50.6	70.6	Silt and sand w/ some gravel	4
	MW-97-9	11/01/97	5374.7	5322.6	5302.6	52.1	72.1	Silt and sand w/ some gravel	6
	MW-97-10	10/15/97	5338.9	5321.1	5301.1	17.8	37.8	Silt and sand w/ some gravel	9
	MW-97-11	10/16/97	5348.8	5337.3	5317.3	11.5	31.5	Silt and clay	6
	MW-97-12	10/28/97	5335.8	5323.9	5303.9	12.3	31.9	Sand, silt, clay and gravel	6
	PW-99-1	03/22/99	5312.8	5310.5	5301.3	2.3	11.5	--	7
	P-99-2	03/22/99	5312.5	5307.3	5302.2	5.2	10.2	--	N/A
	PW-99-3	03/22/99	5360.9	5339.6	5319.6	21.3	41.3	--	5
	MW-01-1	09/19/01	5370.7	5330.4	5320.4	40.3	50.3	Sand, silt and clay	5
	MW-01-2	09/18/01	5361.3	5327.9	5317.9	33	43.4	Sand, silt and clay	7
	MW-01-3	09/21/01	5357.0	5326.7	5316.7	30.3	40.3	Sand, silt and clay	6
	MW-01-4	09/20/01	5366.4	5328	5318	38.4	48.4	Sand, silt and clay	5
	MW-01-5	09/20/01	5366.2	5329.9	5319.9	36	46.3	Sand, silt and clay	5
	MW-01-6	09/21/01	5356.0	5325.7	5315.7	30	40.3	Silt and sand w/ some gravel	6
	MW-02-1	01/15/02	5356.54	5327	5317	29.5	40	Sand, silt and clay	6
	MW-02-2	08/20/02	5357.10	5329	5319	28	38	Silt and sand	4
	MW-02-3	08/26/02	5370.16	5301	5281	69	89	Sand, silt and clay	12
	MW-02-4	09/26/02	5322.15	5263	5243	59	79	Sand, silt and clay	12
	MW-06-1	09/28/06	5307.21	5299	5279	8	28	Silt and sand w/ some gravel	4
	MW-06-2	09/14/06	5355.25	5303.5	5283.5	51.8	71.8	Silt w/ some sand	4
	MW-06-3	09/12/06	5374.81	5296.2	5276.2	78.6	98.6	Silt w/ some sand	4
	MW-06-7	10/14/06	5388.22	5343	5338	22	27	Tailings	6

Table 5.3-2
Groundwater Well Construction Information
Rhodia Silver Bow Plant

	Well ID	Date Installed	Elevations [ft. MSL]			Depth [ft bgs]		Geologic Materials Screened	Number of Monitoring Events
			Ground Surface	Top of Screen	Bottom of Screen	Top of Screen	Bottom of Screen		
Downgradient Monitoring Location	MW-06-8	10/27/06	5364.58	5311	5306	54	59	Clay and sand w/ some gravel	3
	MW-06-9	10/24/06	5364.48	5292	5282	72	82	Silt and clay	3
	MW-06-10	09/28/06	5327.20	5310	5290	17	37	Sand, silt and clay	3
	MW-06-11	10/01/06	5328.30	5318.8	5298.8	9.5	29.5	Silt and sand	5
	MW-06-12	10/13/06	5335.44	5168	5148	167	187	Sand, silt and clay	3
	MW-06-13	10/02/06	5327.55	5320	5300	8	28	Silt and sand w/ some gravel	6
	MW-06-14	09/30/06	5334.21	5327	5307	7	27	Silt and sand	5
	MW-06-15	09/29/06	5349.58	5327.1	5307.1	22.5	42.5	Silt	4
	MW-06-16	10/01/06	5343.65	5326.2	5306.2	17.5	37.5	Sand, silt and clay	4
	MW-06-17	09/30/06	5345.92	5326.1	5306.1	19.8	39.8	Silt and sand	5
	MW-06-18	09/29/06	5353.35	5328	5308	25	45	Silt	4
	MW-06-19	09/27/06	5353.31	5331.1	5311.1	22.2	42.2	Silt	3
	MW-06-20	10/03/06	5355.94	5330	5310	26	46	Silt and sand	4
	MW-06-21	10/12/06	5373.99	5322.5	5302.5	51.5	71.5	Sand, silt and clay	3
	MW-06-22	10/04/06	5361.62	5332.4	5312.4	29.2	49.2	Silt and sand	4
	MW-06-25	10/16/06	5362.45	5332.4	5312.4	30.1	50.1	Sand, silt and clay	3
	MW-12-01	10/17/12	5327.6	5133	5123	195	205	Sand and clay	1
	MW-12-02	10/01/12	5321.3	5306	5286	15	35	Sand and clay	1
	MW-12-03	10/02/12	5370.1	5199	5189	171	181	Lean clay	1
	MW-12-04	10/07/12	5315.1	5295.6	5275.6	19.5	39.5	Sand, silt, and clay	1
	MW-12-05	10/06/12	5315.1	5231.6	5221.6	83.5	93.5	Silty sand	1
	MW-12-06	10/04/12	5315.0	5125.5	5115.5	189.5	199.5	Clayey sand	1
	MW-12-07	10/08/12	5344.4	5295	5275	49	69	Sand and silt with some clay	1
	MW-12-08	10/07/12	5344.2	5259	5249	85	95	Silt and mudstone	1

NOTES:

ft MSL - feet above mean sea level

ft bgs - feet, below ground surface

4/25/2013
P:\Mpls\26 MT\46\2646006\WorkFiles\RFI\RFI Final Ph I 2012\Section 5.3-Groundwater\Section 5.3 (Revised 2013)\Tables\Table 5.3-2_Well_Construction_Summary.xlsx

Table 5.3-3
Summary of Well Development Data
Rhodia Silver Bow Plant

Well ID	Development Order	Date Developed	Static Water Level (ft, below TOC)	Standing Water Depth (ft)	Well Volume (gal.)	Purge Method	Total Water Purged (gal.)	Temperature (^{O}C)			Conductivity (uS/cm)			pH			Eh (mV)			Dissolved Oxygen (mg/L)			Turbidity (NTU)			Appearance		Odor	Comments
								Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Begin	End		
MW-06-1	8	10/17/06	16.19	14.3	2.3	Submersible	190	7.17	7.22	7.22	1698	1700	1703	6.91	6.89	6.92	116	115	114	4.42	4.32	4.31	1.2	0.70	0.67	Cloudy Brown	Clear	None Detected	Hard Bottom, 0745 - 0920 surge and bail ~10 gal., surged well @ 1010 - 1020 w/ pump
MW-06-2	1	10/17/06	59.95	12.0	2.0	Submersible	190	7.86	7.84	7.85	1823	1824	1821	7.11	7.11	7.10	93	95	97	3.52	3.38	3.30	2.35	1.98	1.85	Cloudy Brown	Clear	None Detected	Soft Bottom, Hard bottom after development, 1600 - 1700 surged and bailed ~10 gal., 1715 surged w/pump, 1730 surged w/pump
MW-06-3	2	10/19/06	86.74	14.2	2.3	Submersible	57	9.5	9.5	9.5	1074	1077	1078	8.57	8.54	8.53	26	28	29	8.49	8.64	8.63	4.31	3.15	2.97	Very Silty Brown	Clear	None Detected	Soft Bottom, Hard bottom after development, 10/17/06 1240 - 1430 surge and bail ~ 10 gal., 1405 lowered pump too deep stopped w/silt, 1420 able to lower pump to bottom slightly cloudy, 1430 surged w/pump @ bottom
MW-06-4	3	10/19/06	82.54	13.4	2.2	Submersible	168	9.1	9.1	9.1	329	330	330	7.98	7.98	7.99	60	60	60	5.71	5.63	5.67	7.3	4.3	3.1	Very Silty Brown	Clear	None Detected	Soft Bottom, Surged w/pump 1545 med cloudy
MW-06-5	4	10/18/06	8.16	17.4	2.8	Submersible	240	12.6	12.6	12.6	1376	1377	1376	6.95	6.95	6.96	71	71	72	0.81	0.78	0.79	1.92	1.12	0.93	Cloudy Brown	Clear	NA	Hard Bottom, Surged and bailed ~ 4 - 5 gal. by hand 1610 - 1630, surged w/pump @ 1655 - med brown, 1720 surged w/pump - med brown, 1740 surged w/pump - med brown
MW-06-6		10/29/06	9.18	166.2	27	Submersible	NA	10.85	NA	NA	399	NA	NA	7.83	NA	NA	130.0	NA	NA	4.22	NA	NA	NA	NA	NA	Cloudy Brown, Clear w/ bladder pump, clear then brn w/ submersible		None Noted	Soft Bottom, surged and bailed 10/19/06, Removed 15 gallons w/bladder pump over 40 min (10/29/06), well drawn down 150' ws (?), reduce flow rate to 0.35 gpm, stop pump at 17:40
MW-06-7	20	10/29/06	19.62	10.58	1.75	Bailer	4	9.69	9.72	9.79	2117	2126	2304	10.23	10.08	9.78	24.8	1.6	-12.3	8.23	9.94	7.42	95.4	18.6	9.98	Slightly Cloudy Brn	Clear	None Noted	Hard Bottom, 0930 - 1020 Surge and bail - Well bailed dry at ~5 gallons, 1120 - 1' of H2O in well after 1 hour, 10/29/06 Bail well dry - collect stabilization parameters, H2O level = 20.21 Well went dry after 4 gallons
MW-06-8	20	10/31/06	52.10	8.7	1.5	Submersible	44.5	9.39	9.29	9.32	2422	2427	2430	6.82	6.82	6.81	-75.9	-75.6	-75.5	1.45	1.44	1.39	0.85	0.77	0.71	Cloudy gy	Clear	None Detected	Drillers airlift ~3 gallons over 1/2 hour, Surge for 15 min using surge block, 14:20 surge w/pump, 14:35 surge w/pump, 14:45 surge w/ pump, Purge 15 gallons of gy silty water, Pump shut off while surging, Establish sustainable pump rate, Start stabilization at 14:50
MW-06-9	20	10/31/06	50.73	34.67	5.8	Submersible	103	10.49	10.53	10.49	2175	2173	2173	8.71	8.67	8.65	-333.2	-325.1	-322.3	0.08	0.08	0.07	3.45	3.09	3.20	Slightly Opaque/Gray	Clear	None Detected	Drillers airlift and surge for 2 hours on 10/30/06, pump ~30 gallons of silty water after airlift/surge, 0915 surge w/pump, 0925 surge w/pump
MW-06-10	9	10/16/06	26.23	13.8	2.2	Submersible	180	7.48	7.46	7.45	1423	1423	1420	6.95	6.93	6.91	119	118	116	4.17	4.01	3.95	1.91	1.80	1.78	Cloudy Brown	Clear	None Detected	Hard Bottom, 1715 - 1740 surged and bailed 10 gal., 1805 surged w/pump, 1815 surged w/pump, 1845 surged w/pump
MW-06-11	17	10/25/06	18.18	11.72	1.9	Submersible	202	10.22	10.22	10.22	2344	2345	2344	6.82	6.73	6.75	80.7	77.8	77.4	1.49	1.45	1.42	0.86	0.70	0.87	Turbid Brown	Clear	None	Hard Bottom, Rough development = (?) gal., Surge and Bail

Table 5.3-3
Summary of Well Development Data
Rhodia Silver Bow Plant

Well ID	Development Order	Date Developed	Static Water Level (ft, below TOC)	Standing Water Depth (ft)	Well Volume (gal.)	Purge Method	Total Water Purged (gal.)	Temperature (^{O}C)			Conductivity (uS/cm)			pH			Eh (mV)			Dissolved Oxygen (mg/L)			Turbidity (NTU)			Appearance		Odor	Comments
								Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Begin	End		
MW-06-12	18	10/30/06	23.68	166.62	27.2	Submersible	237.5	10.70	10.69	10.62	2471	2474	2476	6.82	6.82	6.82	120.3	116.2	112.6	4.89	4.42	4.14	0.44	0.49	0.58		Clear	None Noted	Soft Bottom, Well airlifted 10/25 ~ 40 gallons, Airlifted/pumped again later in the day (10/25) - Removed ~120 gallons, Well was pumping ~15 gpm while airlifting
MW-06-13	19	10/25/06	16.62	11.58	1.9	Submersible	300	9.90	9.90	9.89	1.333	1.334	1.334	7.07	7.08	7.07	68.2	68.3	68.2	7.85	7.85	7.82	2.83	2.46	2.62	Turbid Brown	Clear	None	Med. (?) Bottom, Rough development = 20 gal., Surge and bail prior to stabil, 1700 Surge with pump, 1715 Surge with pump
MW-06-14	13	10/19/06	16.34	12.96	2.1	Submersible	175	7.9	7.9	7.9	1451	1455	1457	6.79	6.78	6.77	134	133	133	7.95	7.65	7.59	2.68	1.46	1.11	Cloudy Brown	Clear	None Detected	Hard bottom, 0750 - 810 Surged and bailed ~5 gal., 0820 Surged w/ pump, 0830 Surged w/ pump, 0840 Surged w/ pump, 850 Surged w/ pump
MW-06-15	12	10/27/06	30.42	12.48	2.0	Submersible	255	9.28	9.29	9.29	1680	1678	1675	6.96	6.96	6.91	115.1	115.5	118.7	7.23	7.21	7.19	1.18	1.06	1.36	Brown	Clear	None	Hard bottom, Surged and bailed 25 gal. prior to pumping, 1340 Pumped dry - pump off - 90 (?) gal., clogged check valve, 1402 Pump on
MW-06-16	15	10/28/06	26.82	12.68	2.0	Submersible	145	10.13	10.11	10.10	2381	2380	2381	7.06	7.03	7.01	26.4	27.7	27.3	6.14	6.06	6.02	4.11	3.84	4.27	Cloudy Brown	Clear	None	Med soft bottom, Surged and bailed 25 gal. before starting stabilization test; 1155, 1200, 1205 surged with pump
MW-06-17	14	05/15/08	28.93	13.88		Submersible	214	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.9	5.26	4.32	Silty rust	Clear	None	Cleared up after approxiamtely 2 hours
MW-06-18	11	10/27/06	47.4	13.29	2.2	Submersible	165	14.17	14.18	14.18	2234	2235	2235	6.03	5.99	5.98	156.8	151.8	151.0	0.47	0.45	0.45	0.50	0.83	0.45	Brown	Clear	None	Hard Bottom, Surged with pump 13:20, 13:35, Surged and bailed 15 gal. & pumped 30 gal. prior to stabilization test
MW-06-19	10	10/19/06	31.0	13.5	2.2	Submersible	195	10.7	10.6	10.6	1957	2001	2017	7.21	7.21	7.20	43	44	45	5.79	5.77	5.78	8.04	4.73	4.12	Cloudy Brown	Clear	None Detected	Hard bottom, Surge and bail at 1020 - 1040 ~ 5 gal. purged, Surge/pump at 1110 med. (before) to heavy silt after surging, 1130 surge pump - med silty
MW-06-20	16	10/28/06	34.76	13.94	2.3	Submersible	135	15.08	15.10	15.10	1801	1802	1804	5.76	5.78	5.79	122.3	119.9	114.6	0.85	0.86	0.84	0.76	0.58	0.55	Slightly Cloudy Brn	Clear	None Detected	Soft (?) bottom, 11:50 - 12:30 Surge and bail 30 gallons, 13:55 Surge pump, 14:00 Surge pump, 14:10 Surge pump
MW-06-21	22	10/29/06	59.85	14.05	2.3	Submersible	106	11.10	11.10	11.11	1698	1699	1696	7.37	7.37	7.35	-8.9	-9.3	-9.9	7.10	7.09	7.13	3.21	2.97	3.34	Cloudy Brown		None Noted	Hard Bottom, Surged - airlifter - surged 0900 - 1100(?) (airlifted ~ 3 gallons), 11:20 Surged w/ pump, 11:30 Surged w/ pump, 11:40 Surged w/ pump, Well going dry pumping at 1.4 gpm - Adjust flow rate at 11:40 to 0.8
MW-06-22	21	10/28/06	38.07	13.53	2.2	Submersible	125	9.49	9.46	9.43	1784	1783	1782	6.91	6.90	6.90	49.4	48.2	47.0	2.10	2.13	2.09	2.29	2.36	1.78	Cloudy Brown	Clear	None	Hard Bottom, Surged and bailed 25 gal before starting stabilization test; 16:35, 16:45, 16:55 Surge with pump
MW-06-23	6	10/19/06	85.31	12.8	2.1	Submersible	37	11.1	11.0	11.1	317	318	317	9.14	9.14	9.14	11	11	10	7.59	7.51	7.47	12.9	8.5	8.1	Heavy Silt	Clear	None Detected	Soft Bottom, Slow Recharge, 1815 Surged 06-23 w/ pump - cloudy brown, 1845 Surged w/ pump - cloudy brown
MW-06-24	7	10/30/06	85.54	68.96	11.25	Submersible	189	8.97	9.02	9.01	292	291	291	7.22	7.23	7.21	135.2	132.2	130.5	11.36	11.35	11.30	4.15	3.88	3.83	Lt. Brn Opaque first 30 gal.	Clear	None Detected	Soft Bottom, Well airlifted 10/20/06 ~100 gallons, 08:45 Surged w/ pump, ~290 gallons removed

Table 5.3-3
Summary of Well Development Data
Rhodia Silver Bow Plant

Well ID	Development Order	Date Developed	Static Water Level (ft, below TOC)	Standing Water Depth (ft)	Well Volume (gal.)	Purge Method	Total Water Purged (gal.)	Temperature (^{O}C)			Conductivity (uS/cm)			pH			Eh (mV)			Dissolved Oxygen (mg/L)			Turbidity (NTU)			Appearance		Odor	Comments
								Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Final Three Readings			Begin	End		
MW-06-25	20	10/29/06	36.64	14.16	2.3	Submersible	172.5	8.48	8.46	8.45	1153	1154	1154	6.14	6.14	6.15	154.3	155.1	155.9	2.15	2.16	2.14	2.99	3.72	3.26	Cloudy Brown	Clear	Trace metallic odor	Hard Bottom, 15:40 - 17:20 Surge and bail 25 gallons, 07:15 Surge w/ pump, 07:20 Surge w/ pump, 07:30 Surge w/ pump, 07:40 Surge w/ pump, ~200 gallons removed
MW-12-1	8	10/17/2012, 10/18/2012, 11/5/2012, 11/6/2012	37.18	171	28	Submersible	828	10.22	10.21	10.16	852	852	849	7.14	6.94	7.1	-154	-150	-125	2.67	2.19	2.31	27.7	16	8.91	Cloudy	Clear	None Detected	Development started before grouting, 8 gallons bailed 10/17, pump on 15:40-18:25 10/17, ~ 105 gal pumped on 10/17, pump on 8:05-8:40 on 10/18, 30 gal pumped on 10/18 before pump failure, development resumed on 11/5, surge w/pump 15:20 11/5, pumped 15:20-17:40 11/5, surge w/pump 6:50 11/6, generator ran out of gas ~15:00, restarted 16:40 - sampling starts 17:15
MW-12-2	1	10/08/12	27.95	10.05	1.64	Submersible	154	7.46	7.45	7.44	2196	2195	2196	6.99	6.99	6.99	146.5	144.4	142.5	3.3	3.24	3.19	0.45	0.34	0	Cloudy	Clear	None Detected	Bailed 15:25 - 16:07, surge w/pump 16:28, surge w/pump 16:44, surge w/pump 16:58, pump off 17:22
MW-12-3	2	10/9/2012, 10/10/2012	82	102	16.63	Submersible	105	14	14	13.97	567	566	566	7.42	7.42	7.42	19.4	21.3	21.9	1.16	1.16	1.14	0.98	0.12	0	Cloudy	Clear	None Detected	Very slow pumper (0.5 gpm max, 0.25 gpm typical), bailed 5 gal .10:20 - 11:21, surge w/pump 14:38, pump trouble 15:05 - 15:34, resume pumping 15:34, pump off 16:35, stabilization test conducted 10/10, pumping from 12:45 - 16:31
MW-12-4	3	10/09/12	28.59	14.11	2.3	Submersible	70	8.84	8.84	8.83	573	573	573	7.44	7.41	7.39	116.6	111.3	107	6.25	6.25	6.25	2.99	2.22	1.65	Cloudy	Clear	None Detected	10 gal bailed, pump on 16:59 ~ 1 gpm, increase flow rate to 1.25 gpm 17:27, surge w/pump 17:18, surge w/pump 17:36, pump off 18:03
MW-12-5	4	10/10/12	29.17	67.33	11	Submersible	165	10.2	10.21	10.19	508	507	507	7.21	7.2	7.2	-61.5	-61.3	-59.4	2.61	2.62	2.63	7.24	3.83	1.48	Cloudy	Clear	None Detected	10 gal bailed on 10/9, pump on 8:36 ~ 1 gpm, surge w/pump 9:19, surge w/pump 9:54, surge w/pump 10:25, increase flowrate to 1.25 gpm 11:07, pump off 11:48
MW-12-6	5	10/15/12	29	173.5	28.3	Submersible	152.5	12.48	12.51	12.45	383	382	382	7.27	7.28	7.29	-53.8	-55.6	-54.5	1.99	1.97	1.95	1.86	1.25	0.6	Cloudy	Clear	None Detected	~7.5 gal total bailed on 10/9 and 10/10, pump on 9:10 ~0.75 gpm, increase rate to 1.3 gpm 9:30, increase rate to 2 gpm 9:35, surge w/pump 10:00, surge w/pump 10:23, pump off 11:35
MW-12-7	7	10/15/12	58.66	13.29	2.17	Submersible	70	8.73	8.68	8.69	557	557	555	7.13	7.12	7.12	36.1	35.6	35.8	4.84	4.82	4.84	0.73	0.62	0.55	Cloudy	Clear	None Detected	Start development 13:15, bail ~5 gal, surge w/pump 14:50, pump off 15:45
MW-12-8	6	10/15/12	58.34	40.16	6.55	Submersible	127	9.32	9.27	9.28	562	561	561	7.03	7.01	7.01	96.3	98	97.8	3.28	3.23	3.22	2.09	0.09	0.15	Cloudy	Clear	None Detected	Soft bottom, bailed ~ 7 gal 10/10, pump on 13:20 ~1.6 gpm, pump off 15:00

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	Sample Date	Sample Type															
Upgradient Wells																	
MW-06-23	10/19/2006	N	--	--	--	7.47	--	--	--	9.14	--	--	10	317	--	11.1	8.1
MW-06-23	05/13/2008	N	103	< 2	9.4	6.80	0.2	0.68	< 0.05	7.22	< 0.0000234	0.06	129.5	263	15.4	12.12	7.18
MW-06-23	09/16/2008	N	101	< 2	9.4	5.99	0.2	0.74	< 0.05	7.61	< 0.0000234	0.04	27	266	15.4	16.13	5.16
MW-06-24	10/30/2006	N	--	--	--	11.30	--	--	--	7.21	--	--	130.5	291	--	9.01	3.83
MW-06-24	05/13/2008	N	116	< 2	8.1	6.13	0.30	0.61	< 0.05	7.12	< 0.0000234	0.06	79	281	13.6	11.21	0.49
MW-06-24	09/16/2008	N	119	< 2	8.0	4.45	0.30	0.58	< 0.05	7.22	< 0.0000234	0.04	30	287	13.7	15.02	1.44
MW-06-4	11/18/2006	N	--	--	--	5.67	--	--	--	7.99	--	--	60	330	--	9.1	3.1
MW-06-4	05/15/2008	N	138	< 2	20.2	2.99	0.5	0.23	< 0.05	7.94	< 0.0000234	0.04	-4.6	382	26.7	11.31	1.76
MW-06-4	09/18/2008	N	134	< 2	16.6	2.52	0.5	0.24	< 0.05	7.88	< 0.0000234	0.06	29	372	25.6	15.60	--
MW-06-5	10/18/2006	N	--	--	--	0.79	--	--	--	6.96	--	--	72	1376	--	12.6	0.93
MW-06-5	05/14/2008	N	316	< 2	295	0.40	0.30	0.30	< 0.05	7.12	< 0.0000234	0.29	63	1434	53.6	11.22	2.84
MW-06-5	09/19/2008	N	306	< 2	386	1.58	0.30	0.73	< 0.05	6.98	0.00358 R	0.25	27.8	1814	53	11.78	5.38
		FD	304	< 2	391	--	0.30	0.73	< 0.05	--	0.00423 R	0.26	--	--	53	--	--
MW-06-5	12/13/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
		FD	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-6	10/29/2006	N	--	--	--	4.22	--	--	--	7.83	--	--	130	394	--	10.85	--
MW-06-6	05/14/2008	N	152	< 2	16.9	4.67	0.4	0.33	< 0.05	7.58	< 0.0000234	0.05	34.6	384	23.9	12.85	4.21
MW-06-6	05/28/2008	N	154	< 2	13.6	4.78	0.4	0.32	< 0.05	7.45	< 0.0000234	0.05	19.7	372	23.5	10.98	3.03
MW-06-6	09/18/2008	N	145	< 2	12.0	1.59	0.5	0.29	0.05	7.69	< 0.0000234	0.04	27	359	24.0	14.57	1.80
MW-97-1	11/04/1997	N	--	--	10	--	0.28	--	--	7.53	--	0.15	--	250	35	8.3	--
MW-97-1	10/08/1998	N	--	ND	29	6.35	0.31	--	--	7.52	--	0.12	293	463	39	9.0	--
MW-97-1	04/14/1999	N	--	--	--	7.2	0.30	--	--	7.3	< 0.000004	1.0	--	--	--	22	--
MW-97-1	05/13/2008	N	286	< 2	332	0.97	< 0.2	< 0.05	< 0.05	7.07	< 0.0000234	0.15	48	1198	44.9	10.15	1.95
MW-97-1	09/17/2008	N	288	< 2	343	0.26	0.154 J	< 0.05	< 0.05	6.97	< 0.0000234	0.18	101.7	1599	41.2	11.98	1.09
MW-97-2	11/04/1997	N	--	--	11	--	0.29	--	--	8.24	--	0.08	--	240	39	9.4	--
MW-97-2	10/08/1998	N	--	ND	13	5.75	0.38	--	--	7.41	--	0.11	325	413	38	8.7	--
MW-97-2	05/13/2008	N	264	< 2	320	0.60	< 0.2	< 0.05	< 0.05	7.13	< 0.0000234	0.11	25	1151	42.6	9.85	0.39
MW-97-2	09/17/2008	N	260	< 2	336	0.28	0.146 J	< 0.05	< 0.05	7.08	< 0.0000234	0.14	107.4	1554	43.3	10.39	1.57
MW-97-5	11/04/1997	N	--	--	9	--	0.42	--	--	7.6	--	8.68	--	210	22	9.4	--
MW-97-5	10/08/1998	N	--	ND	10	8.33	0.32	--	--	7.45	--	0.07	264	299	16	11.0	--
MW-97-5	04/14/1999	N	--	--	--	8.7	0.30	--	--	7.4	< 0.000004	0.4	--	--	--	23	--
MW-97-5	01/23/2002	N	--	--	--	7.86	--	--	--	7.56	--	--	205	299	--	9.4	3.27
MW-97-5	05/15/2008	N	120	< 2	10.0	7.49	0.30	0.68	< 0.05	7.42	< 0.0000234	0.18	31	307	17.6	13.52	22.7
MW-97-5	09/17/2008	N	118	< 2	9.9	7.63	0.30	0.73	< 0.05	7.44	< 0.0000234	0.09	70	301	17.7	15.59	9.33
MW-97-6	11/04/1997	N	--	--	212	--	0.26	--	--	7.36	--	0.25	--	740	108	9	--
MW-97-6	10/08/1998	N	--	ND	132	7.95	0.20	--	--	7.19	--	0.81	267	789	64	10.0	--
MW-97-6	07/23/2003	N	--	--	--	--	0.75	--	--	--	< 0.0001	0.036	--	--	--	--	--
MW-97-6	05/17/2008	N	140	< 2	172	7.03	< 0.2	0.93	< 0.05	7.15	< 0.0000234	0.04	66	833	86.0	10.75	3.95
MW-97-6	09/16/2008	N	136	< 2	170	6.22	0.160 J	1.04	< 0.05	7.24	< 0.0000234	0.11	119.5	944	87.4	12.31	5.61
MW-EPA-1	10/08/1998	N	--	ND	12	9.19	0.45	--	--	7.87	--	0.06	269	385	27	9.3	--
MW-EPA-1	05/14/2008	N	138	< 2	98.1	8.37	0.30	0.30	< 0.05	7.72	< 0.0000234	0.05	95	633	33.4	9.49	2.21
MW-EPA-1	09/17/2008	N	160	< 2	103	7.70	0.4	0.31	< 0.05	7.71	< 0.0000234	0.05	151.2	665	32.6	12.89	5.66
MW-GW-1	06/30/1998	N	--	--	--	--	--	0.45	--	7.3	--	--	--	441	--	--	--
MW-GW-1	09/30/1998	N	--	--	--	--	--	0.43	--	7.5	--	--	--	436	--	--	--
MW-GW-1	12/31/1998	N	--	--	--	--	--	0.44	--	7.1	--	--	--	437	--	--	--
MW-GW-1	03/31/1999	N	--	--	--	--	--	0.42	--	7.5	--	--	--	446	--	--	--
MW-GW-1	06/30/1999	N	--	--	--	--	--	0.29	--	7.2	--	--	--	432	--	--	--
MW-GW-1	09/30/1999	N	--	--	--	--	--	0.45	--	7.2	--	--	--	450	--	--	--
MW-GW-1	12/31/1999	N	--	--	--	--	--	0.46	--	7.5	--	--	--	430	--	--	--
MW-GW-1	03/31/2000	N	--	--	--	--	--	0.47	--	7.6	--	--	--	447	--	--	--
MW-GW-1	06/30/2000	N	--	--	--	--	--	0.52	--	7.9	--	--	--	274	--	--	--
MW-GW-1	09/30/2000	N	--	--	--	--	--	0.57	--	7.7	--	--	--	424	--	--	--
MW-GW-1	12/31/2000	N	--	--	--	--	--	0.44	--	7.5	--	--	--	406	--	--	--
MW-GW-1	03/31/2001	N	--	--	--	--	--	0.45	--	7.3	--	--	--	438	--	--	--
MW-GW-1	06/30/2001	N	--	--	--	--	--	0.42	--	7.4	--	--	--	418	--	--	--
MW-GW-1	09/30/2001	N	--	--	--	--	--	0.56	--	7.5	--	--	--	416	--	--	--
MW-GW-1	12/31/2001	N	--	--	--	--	--	0.45	--	7.8	--	--	--	425	--	--	--
MW-GW-1	03/31/2002	N	--	--	--	--	--	0.46	--	6.9	--	--	--	432	--	--	--

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	Sample Date	Sample Type															
MW-GW-1	06/30/2002	N	--	--	--	--	--	**0.43**	--	**7.6**	--	--	--	**418**	--	--	--
MW-GW-1	09/30/2002	N	--	--	--	--	--	**0.48**	--	**7.6**	--	--	--	**425**	--	--	--
MW-GW-1	12/31/2002	N	--	--	--	--	--	**0.49**	--	**7.5**	--	--	--	**425**	--	--	--
MW-GW-1	03/31/2003	N	--	--	--	--	--	**0.46**	--	**7.5**	--	--	--	**433**	--	--	--
MW-GW-1	06/30/2003	N	--	--	--	--	--	**0.48**	--	**7.9**	--	--	--	**419**	--	--	--
MW-GW-1	09/30/2003	N	--	--	--	--	--	**0.5**	--	**7**	--	--	--	**416**	--	--	--
MW-GW-1	12/31/2003	N	--	--	--	--	--	**0.52**	--	**7.7**	--	--	--	**421**	--	--	--
MW-GW-1	03/31/2004	N	--	--	--	--	--	**0.48**	--	**7.2**	--	--	--	**420**	--	--	--
MW-GW-1	06/30/2004	N	--	--	--	--	--	**0.49**	--	**6.7**	--	--	--	**458**	--	--	--
MW-GW-1	09/30/2004	N	--	--	--	--	--	**0.51**	--	**7.3**	--	--	--	**426**	--	--	--
MW-GW-1	11/30/2004	N	--	--	--	--	--	**0.48**	--	**7.5**	--	--	--	**425**	--	--	--
MW-GW-1	12/31/2004	N	--	--	--	--	--	**0.48**	--	**7.5**	--	--	--	**425**	--	--	--
MW-GW-1	03/31/2005	N	--	--	--	--	--	**0.44**	--	**7.2**	--	--	--	**413**	--	--	--
MW-GW-1	06/30/2005	N	--	--	--	--	--	**0.49**	--	**7.2**	--	--	--	**409**	--	--	--
MW-GW-1	07/31/2005	N	--	--	--	--	--	**0.48**	--	**6.9**	--	--	--	**399**	--	--	--
MW-GW-1	12/31/2005	N	--	--	--	--	--	**0.5**	--	**7.8**	--	--	--	**497**	--	--	--
MW-GW-1	06/30/2006	N	--	--	--	--	--	**0.48**	--	**6.8**	--	--	--	**432**	--	--	--
MW-GW-1	09/30/2006	N	--	--	--	--	--	**0.45**	--	**6.6**	--	--	--	**385**	--	--	--
MW-GW-1	12/31/2006	N	--	--	--	--	--	**0.47**	--	**6.9**	--	--	--	**419**	--	--	--
MW-GW-1	03/31/2007	N	--	--	--	--	--	**0.48**	--	**6.7**	--	--	--	**410**	--	--	--
MW-GW-1	06/30/2007	N	--	--	--	--	--	**0.48**	--	**6.5**	--	--	--	**407**	--	--	--
MW-GW-1	09/30/2007	N	--	--	--	--	--	**0.5**	--	**6.6**	--	--	--	**412**	--	--	--
MW-GW-1	12/31/2007	N	--	--	--	--	--	**0.48**	--	**6.4**	--	--	--	**417**	--	--	--
MW-GW-1	03/31/2008	N	--	--	--	--	--	**0.47**	--	**6.6**	--	--	--	**428**	--	--	--
MW-GW-1	05/20/2008	N	**156**	< 2	**9.3**	**7.65**	< 0.2	**0.48**	< 0.05	**7.52**	**0.0000716**	**0.11**	**27**	**398**	**32.7**	**11.10**	**0.35**
MW-GW-1	06/30/2008	N	--	--	--	--	--	**0.49**	--	**6.8**	--	--	--	**420**	--	--	--
MW-GW-1	09/17/2008	N	**160**	< 2	**9.4**	**8.61**	**0.188 J**	**0.48**	< 0.05	**7.29**	< 0.0000234	**0.08**	**122**	**405**	**30.1**	**9.31**	**0.66**
MW-GW-1	09/30/2008	N	--	--	--	--	--	**0.49**	--	**6.8**	--	--	--	**437**	--	--	--
MW-GW-1	12/31/2008	N	--	--	--	--	--	**0.48**	--	**6.5**	--	--	--	**396**	--	--	--
MW-GW-1	03/31/2009	N	--	--	--	--	--	**0.48**	--	**6.6**	--	--	--	**415**	--	--	--
MW-GW-1	06/30/2009	N	--	--	--	--	--	**0.54**	--	**6.5**	--	--	--	**382**	--	--	--
MW-GW-1	09/30/2009	N	--	--	--	--	--	**0.51**	--	**7.1**	--	--	--	**390**	--	--	--
MW-GW-1	12/31/2009	N	--	--	--	--	--	**0.49**	--	**7.4**	--	--	--	**393**	--	--	--
MW-GW-1	03/31/2010	N	--	--	--	--	--	**0.51**	--	**7.5**	--	--	--	**399**	--	--	--
MW-GW-1	06/30/2010	N	--	--	--	--	--	**0.47**	--	**7.5**	--	--	--	**398**	--	--	--
MW-GW-1	09/30/2010	N	--	--	--	--	--	**0.52**	--	**7.3**	--	--	--	**404**	--	--	--
MW-GW-2	06/30/1998	N	--	--	--	--	--	**0.49**	--	**7.9**	--	--	--	**597**	--	--	--
MW-GW-2	09/30/1998	N	--	--	--	--	--	**0.07**	--	**7.6**	--	--	--	**1239**	--	--	--
MW-GW-2	12/31/1998	N	--	--	--	--	--	**0.07**	--	**7.3**	--	--	--	**774**	--	--	--
MW-GW-2	03/31/1999	N	--	--	--	--	--	< 0.05	--	**7.7**	--	--	--	**643**	--	--	--
MW-GW-2	06/30/1999	N	--	--	--	--	--	**0.11**	--	**7.5**	--	--	--	**815**	--	--	--
MW-GW-2	09/30/1999	N	--	--	--	--	--	**0.11**	--	**7.2**	--	--	--	**990**	--	--	--
MW-GW-2	12/31/1999	N	--	--	--	--	--	**0.13**	--	**7.5**	--	--	--	**1139**	--	--	--
MW-GW-2	03/31/2000	N	--	--	--	--	--	**0.08**	--	**7.6**	--	--	--	**1382**	--	--	--
MW-GW-2	06/30/2000	N	--	--	--	--	--	< 0.05	--	**7.7**	--	--	--	**1343**	--	--	--
MW-GW-2	09/30/2000	N	--	--	--	--	--	**0.15**	--	**7.3**	--	--	--	**1635**	--	--	--
MW-GW-2	12/31/2000	N	--	--	--	--	--	**0.17**	--	**7.6**	--	--	--	**1324**	--	--	--
MW-GW-2	03/31/2001	N	--	--	--	--	--	**0.26**	--	**7.5**	--	--	--	**1465**	--	--	--
MW-GW-2	06/30/2001	N	--	--	--	--	--	**0.32**	--	**7.4**	--	--	--	**1525**	--	--	--
MW-GW-2	09/30/2001	N	--	--	--	--	--	**0.13**	--	**7.7**	--	--	--	**1370**	--	--	--
MW-GW-2	12/31/2001	N	--	--	--	--	--	**0.21**	--	**7.6**	--	--	--	**1315**	--	--	--
MW-GW-2	03/31/2002	N	--	--	--	--	--	**0.5**	--	**6.7**	--	--	--	**1445**	--	--	--
MW-GW-2	06/30/2002	N	--	--	--	--	--	**0.47**	--	**7.5**	--	--	--	**1436**	--	--	--
MW-GW-2	09/30/2002	N	--	--	--	--	--	**0.63**	--	**7.4**	--	--	--	**1459**	--	--	--
MW-GW-2	12/31/2002	N	--	--	--	--	--	**0.72**	--	**7.2**	--	--	--	**1539**	--	--	--
MW-GW-2	03/31/2003	N	--	--	--	--	--	**0.51**	--	**7.5**	--	--	--	**1428**	--	--	--
MW-GW-2	06/30/2003	N	--	--	--	--	--	**0.62**	--	**7.6**	--	--	--	**1446**	--	--	--
MW-GW-2	09/30/2003	N	--	--	--	--	--	**0.57**	--	**7.1**	--	--	--	**1383**	--	--	--
MW-GW-2	12/31/2003	N	--	--	--	--	--	**0.82**	--	**7.8**	--	--	--	**1498**	--	--	--
MW-GW-2	03/31/2004	N	--	--	--	--	--	**0.47**	--	**7.3**	--	--	--	**1149**	--	--	--

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	Sample Date	Sample Type															
MW-GW-2	06/30/2004	N	--	--	--	--	--	0.44	--	6.9	--	--	--	1123	--	--	--
MW-GW-2	09/30/2004	N	--	--	--	--	--	0.58	--	7.2	--	--	--	1562	--	--	--
MW-GW-2	11/30/2004	N	--	--	--	--	--	0.63	--	7.5	--	--	--	1544	--	--	--
MW-GW-2	12/31/2004	N	--	--	--	--	--	0.63	--	7.5	--	--	--	1544	--	--	--
MW-GW-2	03/31/2005	N	--	--	--	--	--	0.64	--	7.1	--	--	--	1323	--	--	--
MW-GW-2	06/30/2005	N	--	--	--	--	--	0.47	--	7.1	--	--	--	1159	--	--	--
MW-GW-2	07/31/2005	N	--	--	--	--	--	0.52	--	7	--	--	--	1585	--	--	--
MW-GW-2	06/30/2006	N	--	--	--	--	--	0.48	--	7.4	--	--	--	1555	--	--	--
MW-GW-2	09/30/2006	N	--	--	--	--	--	0.36	--	6.8	--	--	--	1627	--	--	--
MW-GW-2	03/31/2007	N	--	--	--	--	--	0.58	--	6.9	--	--	--	1366	--	--	--
MW-GW-2	06/30/2007	N	--	--	--	--	--	0.26	--	6.4	--	--	--	1611	--	--	--
MW-GW-2	06/30/2008	N	--	--	--	--	--	0.4	--	6.7	--	--	--	1667	--	--	--
MW-GW-3	06/30/1998	N	--	--	--	--	--	1.06	--	7.8	--	--	--	525	--	--	--
MW-GW-3	09/30/1998	N	--	--	--	--	--	0.68	--	7.4	--	--	--	1012	--	--	--
MW-GW-3	12/31/1998	N	--	--	--	--	--	0.13	--	7.2	--	--	--	941	--	--	--
MW-GW-3	03/31/1999	N	--	--	--	--	--	0.14	--	7.6	--	--	--	736	--	--	--
MW-GW-3	06/30/1999	N	--	--	--	--	--	0.12	--	7.5	--	--	--	775	--	--	--
MW-GW-3	09/30/1999	N	--	--	--	--	--	0.14	--	7.1	--	--	--	1100	--	--	--
MW-GW-3	12/31/1999	N	--	--	--	--	--	0.13	--	7.4	--	--	--	1480	--	--	--
MW-GW-3	03/31/2000	N	--	--	--	--	--	0.17	--	7.5	--	--	--	1596	--	--	--
MW-GW-3	06/30/2000	N	--	--	--	--	--	0.17	--	7.8	--	--	--	1585	--	--	--
MW-GW-3	09/30/2000	N	--	--	--	--	--	0.17	--	7.4	--	--	--	1520	--	--	--
MW-GW-3	12/31/2000	N	--	--	--	--	--	0.18	--	7.5	--	--	--	1433	--	--	--
MW-GW-3	03/31/2001	N	--	--	--	--	--	0.1	--	7.4	--	--	--	1274	--	--	--
MW-GW-3	06/30/2001	N	--	--	--	--	--	0.17	--	7.3	--	--	--	1474	--	--	--
MW-GW-3	09/30/2001	N	--	--	--	--	--	13	--	7.7	--	--	--	1410	--	--	--
MW-GW-3	12/31/2001	N	--	--	--	--	--	0.53	--	7.7	--	--	--	1463	--	--	--
MW-GW-3	03/31/2002	N	--	--	--	--	--	0.51	--	7	--	--	--	1534	--	--	--
MW-GW-3	06/30/2002	N	--	--	--	--	--	0.26	--	7.7	--	--	--	1329	--	--	--
MW-GW-3	09/30/2002	N	--	--	--	--	--	0.29	--	7.6	--	--	--	1388	--	--	--
MW-GW-3	12/31/2002	N	--	--	--	--	--	0.21	--	7.4	--	--	--	1383	--	--	--
MW-GW-3	03/31/2003	N	--	--	--	--	--	0.25	--	7.6	--	--	--	1370	--	--	--
MW-GW-3	06/30/2003	N	--	--	--	--	--	0.36	--	7.2	--	--	--	1444	--	--	--
MW-GW-3	09/30/2003	N	--	--	--	--	--	0.06	--	7.3	--	--	--	1405	--	--	--
MW-GW-3	12/31/2003	N	--	--	--	--	--	0.09	--	7.3	--	--	--	1596	--	--	--
MW-GW-3	03/31/2004	N	--	--	--	--	--	0.1	--	7.5	--	--	--	1648	--	--	--
MW-GW-3	06/30/2004	N	--	--	--	--	--	0.13	--	7	--	--	--	1687	--	--	--
MW-GW-3	09/30/2004	N	--	--	--	--	--	0.05	--	7.2	--	--	--	1835	--	--	--
MW-GW-3	11/30/2004	N	--	--	--	--	--	0.08	--	7.4	--	--	--	1625	--	--	--
MW-GW-3	12/31/2004	N	--	--	--	--	--	0.08	--	7.4	--	--	--	1625	--	--	--
MW-GW-3	03/31/2005	N	--	--	--	--	--	0.13	--	7.2	--	--	--	1412	--	--	--
MW-GW-3	06/30/2005	N	--	--	--	--	--	0.14	--	7.3	--	--	--	1524	--	--	--
MW-GW-3	07/31/2005	N	--	--	--	--	--	0.14	--	6.8	--	--	--	1629	--	--	--
MW-GW-3	12/31/2005	N	--	--	--	--	--	0.14	--	7.7	--	--	--	1718	--	--	--
MW-GW-3	03/31/2006	N	--	--	--	--	--	0.18	--	7.2	--	--	--	1491	--	--	--
MW-GW-3	06/30/2006	N	--	--	--	--	--	0.17	--	6.7	--	--	--	1500	--	--	--
MW-GW-3	09/30/2006	N	--	--	--	--	--	0.12	--	7	--	--	--	1551	--	--	--
MW-GW-3	12/31/2006	N	--	--	--	--	--	0.12	--	7.3	--	--	--	1558	--	--	--
MW-GW-3	03/31/2007	N	--	--	--	--	--	0.58	--	6.5	--	--	--	1206	--	--	--
MW-GW-3	06/30/2007	N	--	--	--	--	--	0.18	--	6.5	--	--	--	1530	--	--	--
MW-GW-3	09/30/2007	N	--	--	--	--	--	0.19	--	6.5	--	--	--	1604	--	--	--
MW-GW-3	12/31/2007	N	--	--	--	--	--	0.21	--	6.3	--	--	--	1592	--	--	--
MW-GW-3	03/31/2008	N	--	--	--	--	--	0.25	--	6.3	--	--	--	1592	--	--	--
MW-GW-3	05/20/2008	N	322	< 2	326	6.38	0.30	0.30	< 0.05	7.41	< 0.0000234	0.22	53	1487	58	11.02	0.73
MW-GW-3	06/30/2008	N	--	--	--	--	--	0.28	--	6.6	--	--	--	1669	--	--	--
MW-GW-3	09/17/2008	N	284	< 2	326	6.48	0.30	0.26	< 0.05	7.37	< 0.0000234	0.14	54	1583	57.6	11.85	0.35
MW-GW-3	09/30/2008	N	--	--	--	--	--	0.26	--	7.4	--	--	--	1654	--	--	--
MW-GW-3	12/31/2008	N	--	--	--	--	--	0.34	--	6.9	--	--	--	1720	--	--	--
MW-GW-3	03/31/2009	N	--	--	--	--	--	0.49	--	7.3	--	--	--	1654	--	--	--
MW-GW-3	06/30/2009	N	--	--	--	--	--	0.53	--	7.2	--	--	--	1582	--	--	--

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	**Sample Date**	**Sample Type**															
MW-GW-3	09/30/2009	N	--	--	--	--	--	**1.1**	--	**7.3**	--	--	--	**1573**	--	--	--
MW-GW-3	12/31/2009	N	--	--	--	--	--	**0.33**	--	**7.5**	--	--	--	**1543**	--	--	--
MW-GW-3	03/31/2010	N	--	--	--	--	--	**0.29**	--	**7.4**	--	--	--	**1443**	--	--	--
MW-GW-3	06/30/2010	N	--	--	--	--	--	**0.36**	--	**7.5**	--	--	--	**1433**	--	--	--
MW-GW-3	09/30/2010	N	--	--	--	--	--	**0.54**	--	**7.3**	--	--	--	**1466**	--	--	--
MW-MT96-2	03/25/1999	N	--	--	--	--	**0.36**	--	--	--	--	--	--	--	--	--	--
MW-MT96-2	05/29/2008	N	**117**	< 2	**11.1**	**0.40**	**11.6**	< 0.05	< 0.05	**8.34**	< 0.0000234	< 0.02	**-4**	**433**	**70.3**	**11.83**	**2.15**
MW-MT96-2	09/19/2008	N	**112**	< 2	**11.2**	**0.64**	**12.0**	< 0.05	< 0.05	**8.35**	< 0.0000234	**0.01**	**-44**	**444**	**65**	**14.21**	**1.50**
MW-BSB-4	03/25/1999	N	--	--	--	--	**10.9**	--	--	--	--	--	--	--	--	--	--
MW-BSB-4	05/29/2008	N	**112**	**8**	**11.1**	**0.11**	**11.5**	< 0.05	< 0.05	**8.52**	< 0.0000234	< 0.02	**-199**	**435**	**72.6**	**11.12**	**27**
MW-BSB-4	09/19/2008	N	**100**	**4**	**11.4**	**0.34**	**12.2**	< 0.05	< 0.05	**8.58**	< 0.0000234	**0.01**	**-187**	**454**	**66**	**12.98**	**4.78**
Wells Far Downgradient of Tailing Basin (SWMU 1)																	
MW-06-3	10/18/2006	N	--	--	--	**8.63**	--	--	--	**8.53**	--	--	**29**	**1078**	--	**9.5**	**2.97**
MW-06-3	05/14/2008	N	**4**	< 2	**106**	**5.08**	**0.30**	**0.34**	< 0.05	**8.59**	< 0.0000234	**0.11**	**17.1**	**1295**	**445**	**10.44**	**2.56**
MW-06-3	09/19/2008	N	**61**	**23**	**103**	**4.33**	**0.4**	**0.36**	< 0.05	**8.74**	< 0.0000234	**0.07**	**40**	**1254**	**454**	**11.55**	**3.45**
MW-06-3	07/16/2010	N	**86.1**	< 9.0	**108**	**4.75**	< 0.40	**0.348**	< 0.050	**7.82**	< 0.011	**0.084**	**22.9**	**1099**	**468**	**15.87**	**1.20**
MW-02-3	10/09/2002	N	--	--	--	**5.02**	**0.41**	--	--	**7.29**	--	**0.23**	**139**	**2050**	**909**	**12.9**	**2.35**
MW-02-3	10/22/2004	N	--	--	--	**5.58**	**0.53**	--	--	**7.74**	< 0.00005	--	**193**	**1837**	--	**10.3**	**2.86**
MW-02-3	01/10/2005	N	--	< 2	**165**	--	**0.53**	**0.21**	< 0.1	--	--	**0.17**	--	--	**744**	--	--
MW-02-3	04/12/2005	N	--	< 1	**164**	**5.97**	**0.450**	**0.22**	< 0.1	**7.47**	--	**0.19**	**316**	**1898**	**740**	**9.3**	**1.78**
		FD	--	< 1	**161**	--	**0.480**	**0.22**	< 0.1	--	--	**0.19**	--	--	**731**	--	--
MW-02-3	10/31/2005	N	--	< 1	**165**	**5.16**	**0.500**	**0.24**	< 0.1	**7.28**	--	**0.21**	**293**	**1682**	**722**	**7.8**	**1.95**
MW-02-3	04/20/2006	N	--	--	**166**	**5.82**	**0.450**	**0.23**	< 0.1	**7.34**	--	**0.20**	**315**	**1858**	**739**	**9.6**	**0.42**
		FD	--	--	**166**	--	**0.450**	**0.23**	< 0.1	--	--	**0.21**	--	--	**741**	--	--
MW-02-3	10/24/2006	N	--	--	**166**	--	**0.450**	**0.23**	< 0.1	--	--	**0.5**	--	--	**722**	--	--
		FD	--	--	**166**	--	**0.450**	**0.23**	< 0.1	--	--	**0.20**	--	--	**722**	--	--
MW-02-3	04/24/2007	N	**130**	< 2	**165**	**4.97**	**0.5**	**0.25 J**	< 0.05	**7.36**	--	**0.20**	**355**	**1833**	**670**	**10.3**	**0.51**
		FD	**132**	< 2	**163**	--	**0.5**	**9.81 J**	< 0.05	--	--	**0.20**	--	--	**670**	--	--
MW-02-3	11/06/2007	N	**130**	< 2	**161**	--	**0.4**	**0.25**	< 0.05	--	--	**0.17**	--	--	**672**	--	--
		FD	**130**	< 2	**160**	--	**0.4**	**0.25**	< 0.05	--	--	**0.17**	--	--	**673**	--	--
MW-02-3	05/15/2008	N	**132**	< 2	**158**	**5.36**	**0.4**	**0.20**	< 0.05	**7.20**	< 0.0000234	**0.19**	**57.5**	**1865**	**641**	**11.79**	**3.46**
MW-02-3	09/23/2008	N	**135**	< 2	**178**	**4.53**	**0.4**	**0.25**	< 0.05	**7.12**	< 0.0000234	**0.21**	**43**	**1772**	**628**	**12.27**	**2.84**
MW-02-3	07/17/2010	N	**134**	< 2.0	**169**	**5.80**	**0.49**	**0.240**	< 0.050	**7.19**	< 0.011	**0.187**	**69.9**	**1851**	**632**	**15.76**	**0.74**
		FD	**137**	< 9.0	**167**	--	**0.49**	**0.234**	< 0.050	--	< 0.011	**0.187**	--	--	**627**	--	--
MW-12-3	11/07/2012	N	**180**	< 9.0	**18.4**	**1.28**	**0.67**	**0.134**	< 0.050	**7.37**	< 0.000017	**0.107**	**86.9**	**558**	**73.8**	**13.8**	**2.87**
MW-12-7	11/06/2012	N	**163**	< 9.0	**13.4**	**3.69**	< 0.40	**0.390**	< 0.050	**7.13**	< 0.000017	**0.132**	**83**	**513**	**88.8**	**10.10**	**4.80**
MW-12-8	11/06/2012	N	**169**	< 9.0	**10.7**	**2.84**	< 0.40	**0.360**	< 0.050	**7.05**	< 0.000017	**0.107**	**134**	**541**	**97.4**	**8.87**	**3.07**
MW-12-4	11/07/2012	N	**144**	< 9.0	**19.7**	**6.38**	**0.44**	**0.435**	< 0.050	**6.87**	< 0.000017	**0.120**	**124**	**520**	**96.5**	**8.02**	**3.59**
MW-12-5	11/07/2012	N	**146**	< 9.0	**15.5**	**2.03**	< 0.40	**0.359**	< 0.050	**7.04**	< 0.000017	**0.088**	**95**	**475**	**80.4**	**10.52**	**3.85**
		FD	**145**	< 9.0	**15.3**	--	< 0.40	**0.354**	< 0.050	--	< 0.000017	**0.088**	--	--	**82.0**	--	--
MW-12-6	11/07/2012	N	**142**	< 9.0	**10.0**	**1.69**	< 0.40	**0.178**	< 0.050	**7.21**	< 0.000017	**0.124**	**40**	**408**	**35.9**	**11.21**	**3.07**
MW-12-2	11/08/2012	N	**268**	< 9.0	**222**	**3.29**	**0.88**	**0.176**	< 0.050	**6.83**	< 0.000017	**0.800**	**180**	**1907**	**492**	**6.65**	**3.24**
MW-02-4	10/09/2002	N	--	--	--	**1.51**	**0.31**	--	--	**7.04**	--	**0.45**	**79**	**2480**	**1070**	**8.7**	**4.94**
		FD	--	--	--	--	**0.33**	--	--	--	--	**0.41**	--	--	**1060**	--	--
MW-02-4	10/22/2004	N	--	--	--	**2.01**	**0.40**	--	--	**7.62**	< 0.00005	--	**329**	**2050**	--	**7.4**	**0.97**
		FD	--	--	--	--	**0.42**	--	--	--	< 0.00005	--	--	--	--	--	--
MW-02-4	01/10/2005	N	--	< 2	**190**	--	**0.47**	**0.27**	< 0.1	--	--	**0.63**	--	--	**792**	--	--
		FD	--	< 2	**158**	--	**0.50**	**0.28**	< 0.1	--	--	**0.56**	--	--	**759**	--	--
MW-02-4	04/12/2005	N	--	< 1	**187**	**2.20**	**0.390**	**0.28**	< 0.1	**7.18**	--	**0.55**	**303**	**2110**	**768**	**7.5**	**0.77**
MW-02-4	10/31/2005	N	--	< 1	**200**	**1.86**	**0.500**	**0.26**	< 0.1	**6.83**	--	**0.72**	**343**	**1745**	**748**	**7.4**	**0.44**
		FD	--	< 1	**202**	--	**0.490**	**0.27**	< 0.1	--	--	**0.72**	--	--	**753**	--	--
MW-02-4	04/20/2006	N	--	--	**196**	**1.02**	**0.370**	**0.20**	< 0.1	**7.08**	--	**0.56**	**266**	**2120**	**842**	**7.5**	**1.63**
MW-02-4	10/24/2006	N	--	--	**205**	--	**0.340**	**0.20**	< 0.1	--	--	**0.62**	--	--	**752**	--	--

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	**Sample Date**	**Sample Type**															
MW-02-4	04/24/2007	N	**199**	< 2	**178**	**1.39**	**0.4**	**0.25**	< 0.05	**7.07**	--	**0.56**	**91**	**2000**	**649**	**9.5**	**0.55**
MW-02-4	11/06/2007	N	**211**	< 2	**184**	--	**0.30**	**0.30**	< 0.05	--	--	**0.62**	--	--	**615**	--	--
MW-02-4	05/15/2008	N	**200**	< 2	**187**	**1.82**	**0.5**	**0.21**	< 0.05	**6.97**	< 0.0000234	**0.59**	**71**	**1713**	**645**	**8.85**	**5.75**
		FD	**202**	< 2	**166**	--	**0.5**	**0.21**	< 0.05	--	< 0.0000234	**0.58**	--	--	**566**	--	--
MW-02-4	09/23/2008	N	**216**	< 2	**229**	**1.53**	**0.30**	**0.32**	< 0.05	**6.80**	< 0.0000234	**0.58**	**59**	**1938**	**571**	**8.90**	**4.95**
MW-02-4	07/18/2010	N	**499**	< 9.0	**231**	**1.41**	< 1.0	**0.265**	< 0.050	**6.90**	< 0.011	**0.521**	**6.35**	**2025**	**537**	**14.16**	**2.90**
MW-06-1	10/17/2006	N	--	--	--	**4.31**	--	--	--	**6.92**	--	--	**114**	**1703**	--	**7.22**	**0.67**
MW-06-1	05/15/2008	N	**182**	< 2	**191**	**5.65**	**0.30**	**1.04**	< 0.05	**7.09**	< 0.0000234	**0.21**	**96**	**1528**	**591**	**7.75**	**4.70**
MW-06-1	09/18/2008	N	**180**	< 2	**192**	**5.47**	**0.396 J**	**1.17**	< 0.05	**7.05**	< 0.0000234	**0.20**	**118.3**	**1866**	**568**	**9.26**	**3.21**
MW-06-1	07/17/2010	N	**137**	< 9.0	**234**	**5.92**	**0.43**	**1.05**	< 0.050	**7.04**	< 0.011	**0.200**	**78.8**	**1743**	**401**	**11.69**	**1.94**
MW-06-10	10/16/2006	N	--	--	--	**3.95**	--	--	--	**6.91**	--	--	**116**	**1420**	--	**7.45**	**1.78**
MW-06-10	05/14/2008	N	**142**	< 2	**197**	**3.45**	**0.30**	**0.12**	< 0.05	**7.03**	< 0.0000234	**0.23**	**101**	**1409**	**414**	**10.25**	**2.25**
MW-06-10	09/18/2008	N	**145**	< 2	**177**	**3.19**	**0.30**	**0.14**	< 0.05	**7.01**	< 0.0000234	**0.20**	**104.2**	**1619**	**425**	**12.19**	**5.36**
MW-12-1	11/06/2012	N	**116**	< 9.0	**43**	**2.29**	< 0.40	**0.514**	< 0.050	**7.14**	< 0.000017	**0.120**	**-123**	**849**	**270**	**9.98**	**8.87**
MW-EPA-4	11/05/1997	N	--	**73**	**1.40**	--	**0.20**	--	--	**7.14**	--	**0.20**	--	**1020**	**709**	**8.9**	--
MW-EPA-4	10/12/1998	N	--	--	**148**	**5.31**	**0.19**	--	--	**7.16**	--	**1.41**	**230**	**1863**	**746**	**8.4**	--
MW-EPA-4	07/15/2003	N	--	--	--	--	--	--	--	--	--	**0.21**	--	--	--	--	--
MW-EPA-4	07/16/2003	N	--	--	--	--	< 1.0	--	--	--	< 0.0001	--	--	--	--	--	--
MW-EPA-4	07/18/2003	N	--	--	--	--	--	--	--	--	< 0.0001	--	--	--	--	--	--
MW-EPA-4	07/24/2003	N	--	--	--	--	< 0.133	--	--	--	< 0.0001	**0.21**	--	--	--	--	--
MW-EPA-4	05/15/2008	N	**60**	< 2	**187**	**2.25**	**0.30**	**1.25**	< 0.05	**7.04**	< 0.0000234	**0.17**	**104**	**1749**	**811**	**10.10**	**1.89**
MW-EPA-4	09/20/2008	N	**57**	< 2	**206**	**2.13**	< 1.0	**1.31**	< 0.05	**6.95**	< 0.00153 R	**0.17**	**116.5**	**2051**	**805**	**10.07**	**3.71**
MW-EPA-4	12/12/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
Wells Near Slag Water Retention Ditch																	
MW-06-15	10/27/2006	N	--	--	--	**7.19**	--	--	--	**6.91**	--	--	**118.7**	**1675**	--	**9.29**	**1.36**
MW-06-15	05/21/2008	N	**210**	< 2	**197**	**6.51**	< 0.2	**8.19**	< 0.05	**6.88**	< 0.0000234	**0.11**	**108**	**1770**	**429**	**8.83**	**1.12**
MW-06-15	09/17/2008	N	**222**	< 2	**167**	**4.90**	**0.114 J**	**8.25**	< 0.05	**6.77**	< 0.0000234	**0.10**	**177.9**	**1896**	**461**	**11.90**	**5.18**
MW-97-12	11/05/1997	N	--	**56**	**173**	--	**1.47**	--	--	**6.53**	--	**5.89**	--	**380**	**959**	**5.6**	--
MW-97-12	10/12/1998	N	--	ND	**133**	**6.35**	**2.30**	--	--	**6.48**	--	**6.26**	**274**	**1803**	**655**	**10.0**	--
MW-97-12	05/27/2008	N	**116**	< 2	**136**	**6.69**	**7.8**	**7.08**	< 0.05	**6.61**	--	**3.97**	**80**	**1015**	**236**	**9.58**	**4.12**
MW-97-12	06/09/2008	N	--	--	--	**5.70**	--	--	--	**6.48**	< 0.0000234	--	**244**	**1174**	--	**9.21**	**0.60**
MW-97-12	09/23/2008	N	**112**	< 2	**140**	**5.33**	**7.9**	**7.39**	< 0.05	**6.61**	**0.000112 R**	**8.44**	**142.5**	**1168**	**245**	**10.42**	**4.89**
MW-97-12	12/15/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-14	10/19/2006	N	--	--	--	**7.59**	--	--	--	**6.77**	--	--	**133**	**1457**	--	**7.9**	**1.11**
MW-06-14	05/27/2008	N	**102**	< 2	**146**	**9.03**	< 0.2	**5.90**	< 0.05	**6.71**	--	**0.16**	**101**	**1264**	**558**	**9.07**	**2.74**
MW-06-14	06/09/2008	N	--	--	--	**6.62**	--	--	--	**6.66**	< 0.0000234	--	**235**	**1600**	--	**8.69**	**1.36**
MW-06-14	09/18/2008	N	**103**	< 2	**151**	**7.14**	**0.081 J**	**6.66**	< 0.05	**6.67**	< 0.0000234	**0.14**	**198**	**1530**	**487**	**9.01**	**4.16**
MW-EPA-3	11/05/1997	N	--	--	**52**	--	**0.28**	--	--	**7.02**	--	**0.08**	--	**550**	**186**	**9.4**	--
MW-EPA-3	10/12/1998	N	--	ND	**51**	**8.37**	**0.26**	--	--	**7.43**	--	**0.07**	**231**	**836**	**174**	**9.2**	--
MW-EPA-3	07/15/2003	N	--	--	--	--	**0.81**	--	--	--	< 0.0001	< 0.02	--	--	--	--	--
MW-EPA-3	07/24/2003	N	--	--	--	--	**0.78 J**	--	--	--	< 0.0001	**0.043**	--	--	--	--	--
MW-EPA-3	05/15/2008	N	**138**	< 2	**71.7**	**6.68**	**0.2**	**3.68**	< 0.05	**7.18**	< 0.0000234	**0.05**	**86**	**678**	**133**	**9.95**	**0.81**
MW-EPA-3	09/16/2008	N	**138**	< 2	**65.0**	**5.69**	**0.30**	**3.95**	< 0.05	**7.10**	< 0.0000234	**0.05**	**131.7**	**757**	**117**	**13.09**	**3.08**
Wells in Plant Area																	
MW-06-19	10/19/2006	N	--	--	--	**5.78**	--	--	--	**7.20**	--	--	**45**	**2017**	--	**10.6**	**4.12**
MW-06-19	05/20/2008	N	**243**	< 2	**672**	**3.89**	< 1.0	**4.69**	< 0.05	**7.17**	< 0.0000234	**0.13**	**34.4**	**2789**	**525**	**13.59**	**1.65**
MW-06-19	09/18/2008	N	**232**	**232**	**726**	**3.73**	**0.151 J**	**4.89**	< 0.05	**7.11**	< 0.0000234	**0.13**	**141.2**	**3414**	**465**	**13.54**	**5.67**
MW-06-13	10/25/2006	N	--	--	--	**7.82**	--	--	--	**7.07**	--	--	**68.2**	**1334**	--	**9.89**	**2.62**
MW-06-13	05/27/2008	N	**104**	< 2	**168**	**6.81**	**0.30**	**3.62**	< 0.05	**7.07**	--	**0.49**	**56**	**1235**	**471**	**10.15**	**2.97**
		FD	**100**	< 2	**167**	--	**0.2**	**3.62**	< 0.05	--	--	**0.52**	--	--	**472**	--	--
MW-06-13	06/09/2008	N	--	--	--	**5.61**	--	--	--	**6.98**	< 0.0000234	--	**217**	**1560**	--	**9.05**	**2.10**
		FD	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-13	09/19/2008	N	**102**	< 2	**195**	**4.08**	**0.30**	**4.47**	< 0.05	**7.08**	< 0.00168 R	**0.40**	**85.2**	**1596**	**446**	**11.53**	**4.75**
MW-06-13	12/12/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-16	10/28/2006	N	--	--	--	**6.02**	--	--	--	**7.01**	--	--	**27.3**	**2381**	--	**10.10**	**4.27**
MW-06-16	05/21/2008	N	**154**	< 2	**270**	**3.21**	< 1.0	**6.48**	< 0.05	**6.94**	< 0.0000234	**0.28**	**77**	**1770**	**703**	**10.09**	**1.79**
MW-06-16	09/20/2008	N	**157**	< 2	**273**	**2.79**	< 0.2	**6.48**	< 0.05	**6.90**	< 0.00119 R	**0.30**	**72.1**	**2181**	**710**	**12.91**	**5.19**
MW-06-16	12/12/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-17	05/18/2008	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.32**

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	**Sample Date**	**Sample Type**															
MW-06-17	05/27/2008	N	**152**	< 2	**184**	**0.72**	**0.2**	**4.70**	< 0.05	**6.52**	--	**8.07**	**49**	**1561**	**575**	**13.83**	**5.19**
MW-06-17	06/09/2008	N	--	--	--	**0.48**	--	--	--	**6.49**	< 0.0000234	--	**241**	**1800**	--	**13.27**	**0.52**
MW-06-17	09/20/2008	N	**138**	< 2	**201**	**0.47**	**0.30**	**5.08**	< 0.05	**6.51**	< 0.000946 R	**8.64**	**72.4**	**1746**	**489**	**15.35**	**3.79**
MW-06-17	12/13/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-20	10/28/2006	N	--	--	--	**0.84**	--	--	--	**5.79**	--	--	**114.6**	**1804**	--	**15.10**	**0.55**
MW-06-20	05/20/2008	N	**36**	< 2	**173**	**0.25**	< 1.0	**7.99**	**0.69**	**5.86**	< 0.0000234	**41.3**	**128**	**1610**	**557**	**14.22**	**4.54**
MW-06-20	09/20/2008	N	**34**	**34**	**179**	**0.17**	**0.5**	**6.90**	**0.80**	**5.81**	< 0.000805 R	**31.3**	**148.2**	**1741**	**528**	**16.36**	**4.72**
MW-06-20	12/12/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-18	10/27/2006	N	--	--	--	**0.45**	--	--	--	**5.98**	--	--	**151**	**2235**	--	**14.18**	**0.45**
MW-06-18	05/21/2008	N	**26**	< 2	**231**	**0.23**	< 1.0	**14.0**	**0.22**	**5.90**	< 0.0000234	**51.3**	**103**	**1861**	**647**	**14.04**	**1.95**
		FD	**34**	< 2	**222**	--	< 1.0	**14.4**	**0.22**	--	< 0.0000234	**51.3**	--	--	**646**	--	--
MW-06-18	09/25/2008	N	**38**	< 2	**241**	**0.33**	**0.30**	**14.8**	**0.25**	**5.83**	**0.0000562 R**	**49.0**	**121**	**1961**	**601**	**14.40**	**0.79**
MW-06-18	12/14/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
Wells near Tailing Basin (SWMU 1)																	
MW-06-7	10/28/2006	N	--	--	--	**7.42**	--	--	--	**9.78**	--	--	**-12.3**	**2304**	--	**9.79**	**9.98**
MW-06-7	05/28/2008	N	--	--	--	**1.03**	--	--	--	**9.40**	< 0.0000234	--	**-150**	**2269**	--	**10.83**	**5.12**
MW-06-7	05/29/2008	N	**17**	**30**	**170**	--	< 10	< 0.05	**10.5**	--	--	**55.1**	--	--	**813**	--	--
MW-06-7	09/22/2008	N	--	--	--	**2.91**	--	--	--	**9.24**	--	--	**163.7**	**2223**	--	**8.29**	**5.10**
MW-06-7	09/23/2008	N	**5**	< 2	**158**	--	< 4.0	< 0.05	**11.0**	--	**0.000326 R**	**300**	--	--	**732**	--	--
MW-06-7	12/16/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-8	10/31/2006	N	--	--	--	**1.39**	--	--	--	**6.81**	--	--	**-75.5**	**2430**	--	**9.32**	**0.71**
MW-06-8	05/18/2008	N	**146**	< 2	**172**	**0.27**	**3.4**	< 0.05	< 0.05	**6.76**	< 0.0000234	**5.33**	**-66.8**	**2117**	**774**	**18.92**	**11.0**
MW-06-8	09/25/2008	N	**140**	< 2	**179**	**0.35**	**4.1**	< 0.05	< 0.05	**6.59**	< 0.0000234	**4.65**	**-76.6**	**2168**	**790**	**13.40**	**4.71**
MW-06-9	10/31/2006	N	--	--	--	**0.07**	--	--	--	**8.65**	--	--	**-322.3**	**2173**	--	**10.49**	**3.20**
MW-06-9	05/17/2008	N	**105**	< 2	**178**	**0.08**	**2.8**	< 0.05	< 0.05	**7.13**	< 0.0000234	**6.05**	**-135.3**	**2301**	**894**	**14.82**	**6.32**
MW-06-9	09/25/2008	N	**104**	< 2	**175**	**0.37**	**3.0**	< 0.05	< 0.05	**7.09**	< 0.0000234	**5.75**	**-104.2**	**2229**	**860**	**20.30**	**2.96**
PW-99-3	03/22/1999	N	--	--	--	**0.55**	**7.90**	--	--	**7.11**	--	--	**66**	**1430**	--	**8.6**	--
PW-99-3	03/23/1999	N	--	--	--	**1.02**	**6.94**	--	--	**7.11**	--	--	**116**	**1370**	--	**8.4**	--
PW-99-3	05/28/2008	N	**332**	< 2	**281**	**0.31**	**7.1**	< 0.05	**0.27**	**7.30**	< 0.0000234	**0.70**	**-45**	**1245**	**64.4**	**8.23**	**4.85**
PW-99-3	09/22/2008	N	**244**	< 2	**311**	**0.16**	**7.1**	< 0.05	**0.23**	**7.22**	**0.000329 R**	**1.79**	**14.9**	**1510**	**65**	**8.24**	**2.74**
PW-99-3	12/16/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-97-11	11/05/1997	N	--	--	**216**	--	**2.59**	--	--	**7.07**	--	**3.46**	--	**1360**	**1130**	**8.9**	--
MW-97-11	10/08/1998	N	--	ND	**237**	**8.96**	**3.32**	--	--	**7.58**	--	**1.86**	**321**	**2810**	**1220**	**10.5**	--
MW-97-11	07/21/2003	N	--	--	--	--	**3.9**	--	--	--	< 0.0001	**0.75**	--	--	--	--	--
MW-97-11	01/11/2005	N	--	< 2	**245**	--	**3.42**	< 0.05	< 0.1	--	--	**0.69**	--	--	**1070**	--	--
MW-97-11	05/21/2008	N	**86**	< 2	**229**	**6.98**	**3.5**	< 0.05	< 0.05	**7.31**	< 0.0000234	**0.31**	**70.8**	**2379**	**1010**	**7.80**	**11.7**
MW-97-11	09/25/2008	N	**87**	< 2	**239**	**2.98**	**3.6**	< 0.05	< 0.05	**7.34**	< 0.0000234	**0.19**	**95**	**2297**	**1290**	**9.92**	**4.93**
MW-97-10	11/04/1997	N	--	--	**251**	--	**1.26**	--	--	**6.73**	--	**0.69**	--	**1710**	**1290**	**8.9**	--
		FD	--	--	**250**	--	**1.22**	--	--	--	--	**0.63**	--	--	**1290**	--	--
MW-97-10	10/08/1998	N	--	ND	**248**	**3.76**	**1.39**	--	--	**7.10**	--	**0.49**	**201**	**2710**	**1140**	**9.3**	--
MW-97-10	07/15/2003	N	--	--	--	--	--	--	--	--	--	**0.71**	--	--	--	--	--
MW-97-10	07/16/2003	N	--	--	--	--	**2.2**	--	--	--	< 0.0001	--	--	--	--	--	--
MW-97-10	07/23/2003	N	--	--	--	--	**2.1**	--	--	--	< 0.0001	**0.27**	--	--	--	--	--
MW-97-10	01/11/2005	N	--	< 2	**194**	--	**2.04**	**0.15**	< 0.1	--	--	**0.19**	--	--	**555**	--	--
MW-97-10	05/21/2008	N	**108**	< 2	**199**	**0.54**	**1.3**	**0.12**	**0.06**	**6.89**	< 0.0000234	**0.20**	**65.7**	**1848**	**652**	**10.12**	**5.30**
MW-97-10	09/23/2008	N	**108**	< 2	**202**	**0.53**	**1.2**	**0.13**	< 0.05	**6.93**	**0.000115 R**	**0.21**	**117.9**	**1852**	**607**	**10.19**	**4.06**
MW-97-10	12/13/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-2	10/17/2006	N	--	--	--	**3.30**	--	--	--	**7.10**	--	--	**97**	**1821**	--	**7.85**	**1.85**
MW-06-2	05/15/2008	N	**90**	< 2	**194**	**3.78**	**0.5**	**0.39**	< 0.05	**7.12**	< 0.0000234	**0.22**	**47.3**	**2162**	**693**	**15.39**	**10.1**
MW-06-2	09/23/2008	N	**95**	< 2	**198**	**3.35**	< 1.0	**0.45**	< 0.05	**7.04**	< 0.0000234	**0.19**	**45**	**2048**	**835**	**11.41**	**4.32**
MW-06-2	07/18/2010	N	**102**	< 9.0	**178**	**3.38**	< 0.40	**0.423**	< 0.050	**7.13**	< 0.011	**0.224**	**78.8**	**2112**	**796**	**13.34**	**3.41**
PW-99-1	03/24/1999	N	--	--	--	**0.42**	**2.77**	--	--	**6.83**	--	--	**147**	**1240**	--	**3.6**	--
PW-99-1	03/25/1999	N	--	--	--	**0.23**	**3.25**	--	--	**6.57**	--	--	**62**	**1224**	--	**4.5**	--
PW-99-1	04/14/1999	N	--	--	--	**2.6**	**1.5**	--	--	**6.6**	< 0.000004	**2.5**	--	--	--	**23**	--
PW-99-1	01/10/2005	N	--	< 2	**191**	--	**3.24**	< 0.05	< 0.1	--	--	**0.94**	--	--	**587**	--	--
PW-99-1	05/18/2008	N	**156**	< 2	**186**	**0.34**	**2.3**	< 0.05	< 0.05 J	**6.95**	< 0.0000234	**0.81**	**-69**	**1662**	**670**	**8.95**	**0.91**
PW-99-1	05/29/2008	N	**154**	< 2	**192**	**0.63**	**2.6**	< 0.05	< 0.05	**6.92**	< 0.0000234	< 0.82	**46**	**1430**	**660**	**6.77**	**3.63**
PW-99-1	09/25/2008	N	**146**	< 2	**196**	**0.17**	**2.6**	< 0.05	< 0.05	**6.91**	< 0.0000234	**0.75**	**13**	**1852**	**679**	**9.49**	**0.95**
MW-97-3	11/04/1997	N	--	--	**138**	--	**1.42**	--	--	**7.21**	--	**1.19**	--	**210**	**786**	**9.4**	--

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	**Sample Date**	**Sample Type**															
MW-97-3	10/07/1998	N	--	ND	**149**	**2.37**	**2.36**	--	--	**7.29**	--	**0.51**	**218**	**2010**	**802**	**11.4**	--
MW-97-3	01/10/2005	N	--	< 2	**142**	--	**4.18**	< 0.05	< 0.1	--	--	**0.15**	--	--	**324**	--	--
MW-97-3	05/28/2008	N	**148**	< 2	**166**	**0.45**	**3.6**	**0.17**	< 0.05	**7.07**	< 0.0000234	**0.17**	**30**	**1110**	**343**	**10.51**	**0.35**
MW-97-3	09/23/2008	N	**146**	< 2	**167**	**0.38**	**3.4**	**0.25**	< 0.05	**7.06**	**0.000240 R**	**0.15**	**121.6**	**1335**	**344**	**10.43**	**0.37**
MW-97-3	12/14/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-97-4	11/04/1997	N	--	--	**193**	--	**3.91**	--	--	**7.16**	--	**5.46**	--	**1570**	**1100**	**11.1**	--
MW-97-4	10/07/1998	N	--	ND	**201**	**1.91**	**4.01**	--	--	**7.04**	--	**5.73**	**257**	**2510**	**1050**	**12.1**	--
MW-97-4	03/19/1999	N	--	--	--	--	**3.95**	--	--	--	--	--	--	--	--	--	--
MW-97-4	04/14/1999	N	--	--	--	**5.5**	**2.5**	--	--	**6.8**	< 0.000004	**1.4**	--	--	--	**23**	--
MW-97-4	01/10/2005	N	--	< 2	**139**	--	**4.24**	< 0.05	< 0.1	--	--	**0.13**	--	--	**564**	--	--
MW-97-4	05/20/2008	N	**131**	< 2	**148**	**0.14**	**4.0**	**0.16**	< 0.05	**6.99**	< 0.0000234	**0.12**	**0.5**	**1408**	**432**	**14.00**	**3.24**
MW-97-4	09/22/2008	N	**128**	< 2	**158**	**0.17**	**4.0**	**0.23**	< 0.05	**7.01**	**0.000228 R**	**0.13**	**-102.9**	**1427**	**392**	**11.07**	**0.30**
MW-97-4	12/14/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-12	10/30/2006	N	--	--	--	**4.14**	--	--	--	**6.82**	--	--	**112.6**	**2476**	--	**10.62**	**0.58**
MW-06-12	05/20/2008	N	**61**	< 2	**188**	**0.18**	**1.8**	< 0.05	< 0.05	**6.78**	< 0.0000234	**3.86**	**15.6**	**2317**	**1070**	**13.03**	**5.68**
MW-06-12	09/25/2008	N	**65 J**	< 2	**185**	**1.54**	**1.5**	< 0.05	< 0.05	**6.82**	< 0.0000234	**3.10**	**183**	**2139**	**928**	**10.95**	**1.00**
		FD	**103 J**	< 2	**184**	--	**1.4**	< 0.05	< 0.05	--	< 0.0000234	**3.29**	--	--	**875**	--	--
MW-06-11	10/25/2006	N	--	--	--	**1.42**	--	--	--	**6.75**	--	--	**77.4**	**2344**	--	**10.22**	**0.87**
MW-06-11	05/28/2008	N	**51**	< 2	**204**	**0.25**	< 1.0	**0.05**	< 0.05	**6.77**	< 0.0000234	**0.55**	**56**	**1749**	**1130**	**10.19**	**3.95**
MW-06-11	09/23/2008	N	**46**	< 2	**203**	**0.14**	< 1.0	**0.08**	< 0.05	**6.76**	**0.000201 R**	**0.43**	**56.4**	**2184**	**900**	**11.19**	**3.83**
MW-06-11	12/13/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-97-9	11/05/1997	N	--	--	**242**	--	**7.56**	--	--	--	--	**3.53**	--	--	**1020**	--	--
MW-97-9	11/06/1997	N	--	--	--	--	--	--	--	**6.50**	--	--	--	**1700**	--	**11.1**	--
MW-97-9	10/07/1998	N	--	ND	**234**	**1.87**	**9.2**	--	--	**6.28**	--	**10.2**	**275**	**2480**	**938**	**13.3**	--
MW-97-9	04/14/1999	N	--	--	--	**6.5**	**5.8**	--	--	**6.0**	< 0.000004	**4.2**	--	--	--	**22**	--
MW-97-9	05/16/2008	N	**79**	< 2	**141**	**0.60**	**11.3**	**0.93**	**0.26**	**6.43**	< 0.0000234	**5.70**	**98.3**	**1512**	**464**	**13.91**	**2.21**
MW-97-9	09/24/2008	N	**74**	< 2	**144**	**0.36**	**11.1**	**1.25**	**0.49**	**6.33**	< 0.0000234	**7.12**	**120.4**	**1523**	**478**	**15.09**	**2.15**
		FD	**80**	< 2	**144**	--	**11.2**	**1.28**	**0.50**	--	< 0.0000234	**6.86**	--	--	**496**	--	--
MW-97-8	11/05/1997	N	--	--	**262**	--	**1.12**	--	--	**6.49**	--	**0.46**	--	**1730**	**1150**	**11.1**	--
MW-97-8	10/07/1998	N	--	ND	**161**	**6.18**	**1.72**	--	--	**7.09**	--	**3.43**	**260**	**1822**	**691**	**17.8**	--
MW-97-8	05/15/2008	N	**76**	< 2	**122**	**0.06**	**2.7**	**2.60**	**0.40**	**6.54**	--	**0.49**	**61.5**	**1478**	**485**	**16.41**	**10.3**
MW-97-8	09/24/2008	N	**80**	< 2	**123**	**0.15**	**2.9**	**2.98**	**0.44**	**6.51**	< 0.0000234	**0.48**	**97.6**	**1436**	**493**	**14.43**	**3.69**
MW-06-21	10/29/2006	N	--	--	--	**7.13**	--	--	--	**7.35**	--	--	**-9.9**	**1696**	--	**11.11**	**3.34**
MW-06-21	05/17/2008	N	**101**	< 2	**124**	**1.12**	**3.4**	**1.62**	**0.08**	**7.03**	< 0.0000234	**0.55**	**8.4**	**1507**	**471**	**15.22**	**8.93**
MW-06-21	09/24/2008	N	**92**	< 2	**117**	**1.57**	**4.1**	**2.78**	< 0.05	**6.96**	< 0.0000234	**0.55**	**112.2**	**1391**	**461**	**17.81**	**0.29**
MW-06-22	10/28/2006	N	--	--	--	**2.09**	--	--	--	**6.90**	--	--	**47**	**1782**	--	**9.43**	**1.78**
MW-06-22	05/21/2008	N	**59**	< 2	**149**	**0.12**	**5.6**	**26.3**	**0.83**	**6.71**	< 0.0000234	**0.88**	**73.9**	**1827**	**601**	**8.94**	**3.54**
MW-06-22	09/26/2008	N	**38**	< 2	**155**	**0.25**	**6.2**	**43.3**	**1.54**	**6.41**	**0.0000566 R**	**1.30**	**183**	**1867**	**579**	**9.21**	**3.01**
MW-06-22	12/18/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-06-25	10/28/2006	N	--	--	--	**2.14**	--	--	--	**6.15**	--	--	**155.9**	**1154**	--	**8.45**	**3.26**
MW-06-25	05/20/2008	N	**104**	< 2	**293**	**0.56**	**5.8**	**7.25**	**0.76**	**6.40**	< 0.0000234	**2.59**	**91.2**	**2183**	**657**	**11.04**	**5.17**
MW-06-25	09/26/2008	N	**105**	< 2	**293**	**0.81**	**5.0**	**6.89**	**0.63**	**6.43**	< 0.0000234	**2.43**	**165**	**2081**	**619**	**9.08**	**3.60**
MW-97-7	11/04/1997	N	--	--	**284**	--	**3.13**	--	--	**6.12**	--	**10**	--	**1290**	**1050**	**11.1**	--
MW-97-7	10/08/1998	N	--	ND	**279**	**1.56**	**2.02**	--	--	**6.12**	--	**6.00**	**224**	**2630**	**1040**	**11.4**	--
MW-97-7	04/14/1999	N	--	--	**285**	**5.0**	**1.4**	--	--	**6.1**	< 0.000004	**4.5**	--	--	--	**22**	--
MW-97-7	10/08/2001	N	--	--	**285**	**0.89**	**2.36**	**3.39**	--	**6.13**	< 0.000004	**4.01**	**176**	**2140**	**796**	**11.9**	**1.5**
MW-97-7	01/17/2002	N	--	--	--	**0.86**	**3.08**	--	--	**6.39**	**0.000030**	**3.77 h**	**-245**	**2330**	**868**	**10.00**	**0.65**
		SPLIT	--	--	**319**	--	**3.45**	**4.06**	**0.5**	--	< 0.00050	**3.7**	--	--	**894**	--	--
MW-97-7	09/04/2002	N	--	--	--	**0.26**	--	--	--	**6.43**	< 0.0005	**4.14**	**209**	**2520**	--	**11.7**	**0.65**
MW-97-7	05/20/2008	N	**106**	< 2	**286**	**0.08**	**3.1**	**7.81**	**0.53**	**6.40**	< 0.0000234	**2.70**	**43.4**	**2112**	**620**	**15.51**	**11.4**
MW-97-7	09/26/2008	N	**112**	< 2	**273**	**0.63**	**2.7**	**6.90**	**0.60**	**6.45**	**0.0000606 R**	**2.58**	**153**	**2009**	**595**	**8.69**	**1.57**
MW-97-7	12/15/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
Wells near Brick Pile (SWMU 3)																	
MW-01-1	10/08/2001	N	--	--	**463**	**6.91**	**0.16**	**2.33**	< 0.01	**6.94**	< 0.000004	**0.096**	**57**	**1769**	**215**	**10.6**	**4.8**
MW-01-1	01/16/2002	N	--	--	**471**	**7.86**	**0.13**	**2.57**	< 0.1	**7.32**	< 0.00050	**0.04 h**	**-34**	**2150**	**233**	**8.7**	**8.88**
		SPLIT	--	--	--	--	**0.13**	--	--	--	< 0.0000040	**0.09**	--	--	**250**	--	--
MW-01-1	09/04/2002	N	--	--	--	**6.75**	--	--	--	**7.11**	< 0.0005	**0.04**	**273**	**2160**	--	**10.0**	**0.43**
MW-01-1	05/16/2008	N	**158**	< 2	**324**	**6.40**	< 0.2	**5.11**	< 0.05	**7.26**	< 0.0000234	**0.05**	**67**	**1814**	**457**	**10.49**	**1.79**

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	**Sample Date**	**Sample Type**															
MW-01-1	09/17/2008	N	**158**	< 2	**299**	**6.47**	< 0.010	**5.62**	< 0.05	**7.17**	< 0.0000234	**0.04**	**131.1**	**2102**	**441**	**11.10**	**0.91**
MW-01-4	10/04/2001	N	--	--	**153**	**6.47**	**0.16**	**1.26**	< 0.05	**7.37**	< 0.000004	**0.038**	**209**	**828**	**104**	**8.7**	**2.2**
		FD	--	--	**155**	--	**0.17**	**1.23**	< 0.05	--	< 0.000004	**0.037**	--	--	**104**	--	--
MW-01-4	01/16/2002	N	--	--	**161**	**6.87**	**0.15**	**1.36**	< 0.1	**7.32**	< 0.0000040	**0.02 h**	**214**	**964**	**113**	**8.6**	**0.31**
		SPLIT	--	--	--	--	--	--	--	--	< 0.00050	--	--	--	--	--	--
MW-01-4	09/03/2002	N	--	--	--	**7.60**	--	--	--	**7.32**	< 0.0005	**0.04**	**278**	**968**	--	**10.0**	**0.56**
MW-01-4	05/16/2008	N	**135**	< 2	**175**	**6.90**	< 0.2	**1.93**	< 0.05 J	**7.26**	< 0.0000234	**0.05**	**73**	**972**	**147**	**9.82**	**2.17**
MW-01-4	09/16/2008	N	**132**	< 2	**169**	**6.70**	**0.160 J**	**2.07**	< 0.05	**7.24**	< 0.0000234	**0.03**	**128.8**	**1091**	**147**	**10.53**	**1.53**
MW-01-5	10/04/2001	N	--	--	**138**	**7.67**	**0.16**	**1.23**	< 0.05	**7.48**	< 0.000004	**0.104**	**271**	**798**	**108**	**8.4**	**12**
MW-01-5	01/16/2002	N	--	--	**144**	**7.06**	**0.16**	**1.34**	< 0.1	**7.30**	< 0.0000040	**0.02 h**	**-7**	**932**	**113**	**8.6**	**3.84**
		SPLIT	--	--	--	--	**0.14**	--	--	--	--	**0.07**	--	--	**115**	--	--
		FD SPLIT	--	--	--	--	**0.15**	--	--	--	< 0.00050	**0.07**	--	--	**115**	--	--
MW-01-5	09/03/2002	N	--	--	--	**7.30**	--	--	--	**7.07**	< 0.0005	**0.04**	**223**	**931**	--	**10.9**	**2.19**
MW-01-5	05/17/2008	N	**137**	< 2	**182**	**6.21**	< 0.2	**1.86**	< 0.05	**7.20**	< 0.0000234	**0.05**	**70**	**950**	**153**	**10.99**	**2.21**
MW-01-5	09/16/2008	N	**134**	< 2	**183**	**5.91**	**0.142 J**	**2.00**	< 0.05	**7.18**	< 0.0000234	**0.05**	**114.3**	**1078**	**155**	**13.87**	**4.67**
Wells near Clarfier (SWMU 2)																	
MW-01-2	10/09/2001	N	--	--	**107**	**2.01**	**4.06**	**1.61**	**1.20**	**6.13**	< 0.000004	**25.3**	**281**	**1221**	**403**	**8.5**	**62.5**
MW-01-2	01/16/2002	N	--	--	**115**	**1.19**	**3.74**	--	--	**5.96**	< 0.0000040	**26.0 h**	**50**	**1354**	**417**	**10.0**	**8.02**
		SPLIT	--	--	--	--	**4.09**	**3.02**	**1.3**	--	< 0.00050	**32**	--	--	**473**	--	--
MW-01-2	09/04/2002	N	--	--	--	**0.27**	**5.56**	--	--	**6.09**	< 0.0005	**16.3**	**255**	**1150**	**342**	**10.6**	**4.78**
MW-01-2	07/22/2003	N	--	--	--	--	**6.7**	--	--	--	< 0.0001	**13**	--	--	--	--	--
		FD	--	--	--	--	**6.7**	--	--	--	< 0.0001	**12**	--	--	--	--	--
MW-01-2	05/19/2008	N	**44**	< 2	**82**	**0.62**	**10.5**	**1.89**	**0.43**	**6.21**	< 0.0000234	**18.7**	**78**	**864**	**257**	**10.00**	**2.30**
MW-01-2	09/22/2008	N	**53**	< 2	**112**	**0.33**	**7.8**	**1.95**	**0.31**	**6.11**	**0.000441 R**	**17.0**	**175.5**	**1007**	**238**	**10.22**	**2.57**
MW-01-2	12/16/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-01-6	10/09/2001	N	--	--	**126**	**1.99**	**0.73**	< 0.01	**3.79**	**5.76**	**0.00250**	**234**	**-33**	**1784**	**482**	**13.0**	**8.4**
MW-01-6	01/17/2002	N	--	--	**134**	**0.43**	**1.32**	< 0.05	**3.8**	**5.47**	< 0.000660	**271 h**	**-121**	**1823**	**443**	**13.2**	**0.51**
		SPLIT	--	--	--	--	**1.59**	--	--	--	**0.00272**	**420**	--	--	**503**	--	--
MW-01-6	09/05/2002	N	--	--	--	**0.42**	**1.64**	--	--	**5.58**	**0.00413**	**238**	**-47**	**1562**	**450**	**14.4**	**0.79**
MW-01-6	05/19/2008	N	< 2	< 2	**77**	**1.59**	< 10	< 0.05	**2.85**	**5.69**	**0.00121**	**169**	**-60**	**1127**	**249**	**16.31**	**3.60**
MW-01-6	09/18/2008	N	**2**	< 2	**78.7**	**0.30**	**2.2**	< 0.05	**2.71**	**5.83**	< 0.0000234	**91.4**	**-58.1**	**1097**	**271**	**17.76**	**4.85**
MW-01-3	10/09/2001	N	--	--	**126**	**3.45**	**0.75**	< 0.01	**1.01**	**4.99**	**0.403**	**128**	**-104**	**1505**	**486**	**9.5**	**8.8**
MW-01-3	01/22/2002	N	--	--	**133**	**0.64**	**0.98**	< 0.05	**1.0**	**5.39**	**0.250**	**54 h**	**-198**	**1460**	**489**	**10.9**	**14.8**
		FD	--	--	**131**	--	**0.98**	< 0.05	**1.0**	--	**0.3710**	**58 h**	--	--	**490**	--	--
		SPLIT	--	--	--	--	**1.14**	--	--	--	--	**84**	--	--	--	--	--
		FD SPLIT	--	--	--	--	**1.09**	--	--	--	**1.600**	**71**	--	--	**524**	--	--
		FDD SPLIT	--	--	--	--	**1.00**	--	--	--	**1.610**	**70**	--	--	**520**	--	--
MW-01-3	09/05/2002	N	--	--	--	**1.94**	**0.90**	--	--	**5.66**	**1.21**	**59**	**-121**	**1158**	**412**	**12.1**	**4.87**
		FD	--	--	--	--	**0.90**	--	--	--	**1.3**	**61**	--	--	**411**	--	--
MW-01-3	05/19/2008	N	**28**	< 2	**68**	**0.61**	**1.1**	**0.74**	**0.70**	**5.65**	**0.513**	**94.5**	**-122**	**903**	**227**	**12.79**	**3.95**
MW-01-3	09/19/2008	N	**28**	< 2	**69.2**	**0.39**	**1.2**	**0.82**	**0.74**	**5.76**	**0.290**	**68.6**	**-89.7**	**949**	**246**	**16.88**	**5.04**
MW-01-3	12/16/2008	N	--	--	--	--	--	--	--	--	**0.366**	--	--	--	--	--	--
MW-02-2	09/05/2002	N	--	--	--	**0.76**	**5.14**	--	--	**5.66**	**0.00019 J**	**36.0**	**225**	**1104**	**392**	**11.1**	**3.43**
MW-02-2	05/19/2008	N	**21**	< 2	**76**	**2.20**	**7.9**	**1.29**	**0.06**	**5.72**	< 0.0000234	**42.1**	**121**	**837**	**240**	**11.01**	**4.12**
MW-02-2	09/22/2008	N	**21**	< 2	**83**	**1.80**	**7.6**	**1.48**	< 0.05	**5.61**	**0.000382 R**	**54.5**	**152.7**	**935**	**240**	**12.36**	**5.78**
MW-02-2	12/15/2008	N	--	--	--	--	--	--	--	--	< 0.0000234	--	--	--	--	--	--
MW-02-1	01/17/2002	N	--	--	**237**	**0.40**	**0.19**	**0.06**	< 0.1	**6.94**	< 0.0000040	**17.6 h**	**-234**	**2640**	**984**	**11.4**	**11.9**
		SPLIT	--	--	--	--	**0.24**	--	--	--	< 0.00050	**19**	--	--	**1030**	--	--
MW-02-1	09/04/2002	N	--	--	--	**0.19**	**0.20**	--	--	**6.98**	**0.00045 J**	**19.2**	**-201**	**3000**	**1020**	**15.2**	**0.81**
MW-02-1	07/22/2003	N	--	--	--	--	< 1.0	--	--	--	< 0.0001	**7.9**	--	--	--	--	--
MW-02-1	05/29/2008	N	**222**	< 2	**251**	**0.32**	< 1.0	< 0.05	< 0.05	**7.15**	< 0.0000234	**4.56**	**-163**	**2584**	**1200**	**11.57**	**3.30**
		FD	**223**	< 2	**251**	--	< 1.0	< 0.05	**0.05**	--	< 0.0000234	**4.41**	--	--	**1210**	--	--
MW-02-1	09/26/2008	N	**218**	< 2	**308**	**0.35**	< 1.0	< 0.05	< 0.05	**7.14**	< 0.0000234	**1.30**	**-173**	**3201**	**1350**	**12.15**	**3.89**

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant
[concentrations in mg/l, unless noted otherwise]

Chemical Name / Analysis Location			Alkalinity, bicarbonate, as CaCO3 Lab	Alkalinity, carbonate, as CaCO3 Lab	Chloride Lab	Dissolved oxygen Field	Fluoride Lab	Nitrate + Nitrite, as N Lab	Nitrogen, ammonia (NH3), as N Lab	pH [pH units] Field	Phosphorus, elemental (white) Lab	Phosphorus, total Lab	Redox (oxidation potential) [mV] Field	Specific Conductance @ 25°C [umhos/cm] Field	Sulfate Lab	Temperature [deg C] Field	Turbidity [NTU] Field
Location ID	**Sample Date**	**Sample Type**															
Production Wells																	
RP-W-1	07/23/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-1	10/07/1998	N	--	ND	**124**	**6.85**	**0.16**	--	--	**7.26**	--	**1.01**	**307**	**1557**	**558**	**12.9**	--
RP-W-1	05/22/2008	N	--	--	--	**3.76**	--	--	--	**7.07**	< 0.0000234 J	--	**36**	**823**	--	**11.26**	**4.09**
RP-W-1	05/30/2008	N	**100**	< 2	**79**	**2.13**	**0.30**	**1.84**	< 0.05	**7.10**	--	< 0.50	**-58**	**793**	**239**	**12.93**	**1.86**
RP-W-1	09/25/2008	N	**88**	< 2	**76**	**2.94**	**0.4**	**1.66**	< 0.05	**6.88**	< 0.0000234	**0.55**	**83**	**823**	**209**	**11.67**	**1.08**
RP-W-4	06/04/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-4	08/05/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-4	05/26/1983	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-4	10/07/1998	N	--	ND	**195**	**4.34**	**1.34**	--	--	**7.06**	--	**1.52**	**201**	**2500**	**1100**	**10.7**	--
RP-W-4	05/28/2008	N	**61**	< 2	**151**	**0.57**	< 1.0	**0.24**	< 0.05	**7.03**	< 0.0000234	**0.71**	**-24**	**1374**	**785**	**11.12**	**7.15**
RP-W-4	09/24/2008	N	**59**	< 2	**147**	**0.12**	< 1.0	**0.16**	< 0.05	**7.03**	< 0.0000234	**0.35**	**-41**	**1683**	**784**	**10.55**	**7.3**
		FD	**68**	< 2	**145**	--	< 1.0	**0.16**	< 0.05	--	< 0.0000234	**0.33**	--	--	**735**	--	--
RP-W-5	07/23/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-5	10/07/1998	N	--	ND	**113**	**11.95**	**0.18**	--	--	**7.37**	--	**0.31**	**218**	**1520**	**557**	**9.3**	--
		FD	--	ND	**113**	--	**0.18**	--	--	--	--	**0.34**	--	--	**562**	--	--
RP-W-5	05/30/2008	N	**71**	< 2	**142**	**2.48**	< 1.0	**0.93**	< 0.05	**7.04**	< 0.0000234	< 0.23	**30**	**1287**	**637**	**9.13**	**1.03**
RP-W-5	09/24/2008	N	**70**	< 2	**146**	**3.39**	< 0.2	**0.93**	< 0.05	**7.04**	< 0.0000234	**0.24**	**21**	**1530**	**591**	**9.52**	**1.40**
RP-W-6	06/04/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-6	10/05/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-6	05/26/1983	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-6	04/01/1986	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-6	03/17/1987	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-6	06/23/1992	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-6	10/07/1998	N	--	ND	**231**	**2.55**	**3.43**	--	--	**7.06**	--	**5.00**	**142**	**2840**	**1270**	**11.3**	--
RP-W-6	04/14/1999	N	--	--	--	--	--	--	--	--	< 0.0000040	--	--	--	--	--	--
RP-W-6	05/30/2008	N	**60**	< 2	**200**	**0.59**	**2.8**	< 0.05	< 0.05	**6.97**	< 0.0000234	< 0.48	**-8**	**1720**	**1040**	**11.47**	**1.65**
RP-W-6	09/24/2008	N	**60**	< 2	**199**	**0.21**	**2.6**	< 0.05	< 0.05	**7.05**	< 0.0000234	**0.60**	**-65**	**2205**	**1010**	**10.98**	**1.72**
RP-W-7	07/23/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-7	10/01/1982	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RP-W-7	10/07/1998	N	--	ND	**104**	**4.78**	**0.18**	--	--	**7.64**	--	**1.69**	**391**	**1317**	**439**	**10.7**	--
RP-W-7	05/22/2008	N	**132**	< 2	**15.5**	**5.88**	< 0.2	**0.55**	< 0.05	**7.37**	< 0.0000234	**0.17**	**46**	**330**	**24.8**	**9.41**	**0.93**
RP-W-7	09/25/2008	N	**122**	< 2	**15.0**	**8.12**	< 0.2	**0.58**	< 0.05	**7.19**	< 0.0000234	**0.19**	**83**	**348**	**25.6**	**9.43**	**1.79**

Table 5.3-4a
Groundwater Data - General Parameters
Rhodia Silver Bow Plant

The analytical database contains data for the following parameters. The data set is comparitively small and was not summarized in the RFI Report.

Alkalinity, bicarbonate, as HCO3	Lab
Alkalinity, carbonate, as CO3	Lab
Alkalinity, total	Lab
Calcium Hardness as CaCO3	Lab
Cyanide	Lab
Nitrite	Lab
Nitrogen, Nitrate (NO3)	Lab
Nitrogen, Nitrite (NO2)	Lab
Nitrogen, total kjeldahl (TKN)	Lab
Orthophosphate, as PO4	Lab
pH [pH units]	Lab
Phosphate, as P	Lab
Redox (oxidation potential) [mV]	Lab
Solids, total dissolved	Lab
Specific Conductance @ 25°C [umhos/cm]	Lab
Temperature [deg C]	Lab

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Aluminum Dissolved	Aluminum Total	Antimony Dissolved	Antimony Total	Arsenic Dissolved	Arsenic Total	Barium Dissolved	Barium Total	Beryllium Dissolved	Beryllium Total	Cadmium Dissolved	Cadmium Total	Calcium Dissolved	Calcium Total	Chromium Dissolved	Chromium Total	Cobalt Dissolved	Cobalt Total	Copper Dissolved	Copper Total
Upgradient Wells																							
MW-06-23	05/13/2008	Lab	N	--	--	--	**0.00009**	--	**0.0040**	--	**0.0909**	--	< 0.00002	--	**0.00004**	--	**26.1**	--	**0.0021**	--	**0.00022**	--	< 0.0007
MW-06-23	09/16/2008	Lab	N	--	--	--	**0.00008**	--	**0.0038**	--	**0.0791**	--	< 0.000020	--	< 0.00002	--	**26.6**	--	< 0.00047	--	**0.000064**	--	< 0.000260
MW-06-24	05/13/2008	Lab	N	--	--	--	**0.00008**	--	**0.0039**	--	**0.0837**	--	< 0.00002	--	< 0.00002	--	**29**	--	**0.0002**	--	**0.00011**	--	< 0.0005
MW-06-24	09/16/2008	Lab	N	--	--	--	**0.00010**	--	**0.0036**	--	**0.0894**	--	< 0.000020	--	< 0.00002	--	**28.8**	--	< 0.00020	--	**0.000142**	--	< 0.000370
MW-GW-1	06/30/1998	Lab	N	--	--	< 0.005	--	**0.009**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	< 0.01	--
MW-GW-1	09/30/1998	Lab	N	--	--	< 0.005	--	**0.011**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	**0.01**	--
MW-GW-1	12/31/1998	Lab	N	--	--	< 0.05	--	**0.008**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	< 0.01	--
MW-GW-1	03/31/1999	Lab	N	--	--	< 0.003	--	**0.011**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.01**	--
MW-GW-1	06/30/1999	Lab	N	--	--	< 0.003	--	**0.009**	--	--	--	--	--	**0.0005**	--	--	--	--	--	--	--	**0.009**	--
MW-GW-1	09/30/1999	Lab	N	--	--	< 0.003	--	**0.01**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.004**	--
MW-GW-1	12/31/1999	Lab	N	--	--	< 0.003	--	**0.009**	--	--	--	--	--	**0.0007**	--	--	--	--	--	--	--	**0.007**	--
MW-GW-1	03/31/2000	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.008**	--
MW-GW-1	06/30/2000	Lab	N	--	--	< 0.003	--	**0.009**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.017**	--
MW-GW-1	09/30/2000	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	**0.0009**	--	--	--	--	--	--	--	**0.01**	--
MW-GW-1	12/31/2000	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.013**	--
MW-GW-1	03/31/2001	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.008**	--
MW-GW-1	06/30/2001	Lab	N	--	--	< 0.003	--	**0.009**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.004**	--
MW-GW-1	09/30/2001	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.006**	--
MW-GW-1	12/31/2001	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	< 0.011	--
MW-GW-1	03/31/2002	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.014**	--
MW-GW-1	06/30/2002	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.008**	--
MW-GW-1	09/30/2002	Lab	N	--	--	< 0.003	--	**0.009**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.033**	--
MW-GW-1	12/31/2002	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-1	03/31/2003	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-1	06/30/2003	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.005**	--
MW-GW-1	09/30/2003	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.003**	--
MW-GW-1	12/31/2003	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.006**	--
MW-GW-1	03/31/2004	Lab	N	--	--	< 0.001	--	**0.008**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.005**	--
MW-GW-1	06/30/2004	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.003**	--
MW-GW-1	09/30/2004	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.003**	--
MW-GW-1	11/30/2004	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.004**	--
MW-GW-1	12/31/2004	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.004**	--
MW-GW-1	03/31/2005	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	06/30/2005	Lab	N	--	--	< 0.001	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	07/31/2005	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	12/31/2005	Lab	N	--	--	< 0.0001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	06/30/2006	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	09/30/2006	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	12/31/2006	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	03/31/2007	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-1	06/30/2007	Lab	N	--	--	< 0.001	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	09/30/2007	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	12/31/2007	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	03/31/2008	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	05/20/2008	Lab	N	--	--	--	**0.00016**	--	**0.0068**	--	**0.0832**	--	< 0.00002	--	**0.00003**	--	**46.6**	--	**0.0002**	--	**0.00006**	--	**0.0017 J**
MW-GW-1	06/30/2008	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	09/17/2008	Lab	N	--	--	--	**0.00013**	--	**0.0066**	--	**0.0835**	--	< 0.000020	--	< 0.00002	--	**48.3**	--	**0.00056**	--	< 0.000075	--	< 0.000403
MW-GW-1	09/30/2008	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	12/31/2008	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-1	03/31/2009	Lab	N	--	--	< 0.003	--	**0.006**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	06/30/2009	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	09/30/2009	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.01	--
MW-GW-1	12/31/2009	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	03/31/2010	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	06/30/2010	Lab	N	--	--	< 0.003	--	**0.008**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-1	09/30/2010	Lab	N	--	--	< 0.003	--	**0.007**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-2	06/30/1998	Lab	N	--	--	< 0.005	--	**0.018**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	**0.02**	--
MW-GW-2	09/30/1998	Lab	N	--	--	< 0.005	--	**0.018**	--	--	--	--	--	**0.002**	--	--	--	--	--	--	--	**0.06**	--
MW-GW-2	12/31/1998	Lab	N	--	--	< 0.05	--	**0.027**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	**0.01**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Aluminum Dissolved	Aluminum Total	Antimony Dissolved	Antimony Total	Arsenic Dissolved	Arsenic Total	Barium Dissolved	Barium Total	Beryllium Dissolved	Beryllium Total	Cadmium Dissolved	Cadmium Total	Calcium Dissolved	Calcium Total	Chromium Dissolved	Chromium Total	Cobalt Dissolved	Cobalt Total	Copper Dissolved	Copper Total
MW-GW-2	03/31/1999	Lab	N	--	--	< 0.003	--	**0.028**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.008**	--
MW-GW-2	06/30/1999	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0006**	--	--	--	--	--	--	--	**0.029**	--
MW-GW-2	09/30/1999	Lab	N	--	--	< 0.003	--	**0.022**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.008**	--
MW-GW-2	12/31/1999	Lab	N	--	--	< 0.003	--	**0.017**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.034**	--
MW-GW-2	03/31/2000	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.01**	--
MW-GW-2	06/30/2000	Lab	N	--	--	< 0.003	--	**0.017**	--	--	--	--	--	**0.00009**	--	--	--	--	--	--	--	**0.027**	--
MW-GW-2	09/30/2000	Lab	N	--	--	< 0.003	--	**0.021**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.011**	--
MW-GW-2	12/31/2000	Lab	N	--	--	< 0.003	--	**0.017**	--	--	--	--	--	**0.0007**	--	--	--	--	--	--	--	**0.031**	--
MW-GW-2	03/31/2001	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.01**	--
MW-GW-2	06/30/2001	Lab	N	--	--	< 0.003	--	**0.016**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.02**	--
MW-GW-2	09/30/2001	Lab	N	--	--	< 0.003	--	**0.025**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.015**	--
MW-GW-2	12/31/2001	Lab	N	--	--	< 0.003	--	**0.014**	--	--	--	--	--	**0.0006**	--	--	--	--	--	--	--	**0.023**	--
MW-GW-2	03/31/2002	Lab	N	--	--	< 0.003	--	**0.024**	--	--	--	--	--	**0.0005**	--	--	--	--	--	--	--	**0.026**	--
MW-GW-2	06/30/2002	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0009**	--	--	--	--	--	--	--	**0.069**	--
MW-GW-2	09/30/2002	Lab	N	--	--	< 0.003	--	**0.019**	--	--	--	--	--	**0.0006**	--	--	--	--	--	--	--	**0.009**	--
MW-GW-2	12/31/2002	Lab	N	--	--	< 0.003	--	**0.017**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.008**	--
MW-GW-2	03/31/2003	Lab	N	--	--	< 0.003	--	**0.017**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.012**	--
MW-GW-2	06/30/2003	Lab	N	--	--	< 0.003	--	**0.012**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.021**	--
MW-GW-2	09/30/2003	Lab	N	--	--	< 0.003	--	**0.015**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.007**	--
MW-GW-2	12/31/2003	Lab	N	--	--	< 0.003	--	**0.012**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.008**	--
MW-GW-2	03/31/2004	Lab	N	--	--	< 0.001	--	**0.012**	--	--	--	--	--	**0.0005**	--	--	--	--	--	--	--	**0.051**	--
MW-GW-2	06/30/2004	Lab	N	--	--	< 0.001	--	**0.021**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.03**	--
MW-GW-2	09/30/2004	Lab	N	--	--	< 0.001	--	**0.016**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.007**	--
MW-GW-2	11/30/2004	Lab	N	--	--	< 0.001	--	**0.014**	--	--	--	--	--	**0.0027**	--	--	--	--	--	--	--	**0.018**	--
MW-GW-2	12/31/2004	Lab	N	--	--	< 0.001	--	**0.014**	--	--	--	--	--	**0.0027**	--	--	--	--	--	--	--	**0.018**	--
MW-GW-2	03/31/2005	Lab	N	--	--	< 0.001	--	**0.021**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.003**	--
MW-GW-2	06/30/2005	Lab	N	--	--	< 0.001	--	**0.027**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.003**	--
MW-GW-2	07/31/2005	Lab	N	--	--	< 0.001	--	**0.018**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-2	06/30/2006	Lab	N	--	--	< 0.001	--	**0.017**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.012**	--
MW-GW-2	09/30/2006	Lab	N	--	--	< 0.001	--	**0.017**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.004**	--
MW-GW-2	03/31/2007	Lab	N	--	--	< 0.001	--	**0.018**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.004**	--
MW-GW-2	06/30/2007	Lab	N	--	--	< 0.001	--	**0.017**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.004**	--
MW-GW-2	06/30/2008	Lab	N	--	--	< 0.003	--	**0.019**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.003**	--
MW-06-4	05/15/2008	Lab	N	--	--	--	**0.00042**	--	**0.0276**	--	**0.0557**	--	**0.00004**	--	< 0.00002	--	**24**	--	**0.0004**	--	**0.00019**	--	< 0.0011
MW-06-4	09/18/2008	Lab	N	--	--	--	**0.00043**	--	**0.0253**	--	**0.0195**	--	< 0.000020	--	< 0.00002	--	**25.3**	--	< 0.00022	--	**0.000087**	--	< 0.000568
MW-97-1	11/04/1997	Lab	N	< 0.1	--	< 0.05	--	**0.010**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**49**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-1	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.010**	< 0.1	--	< 0.001	--	< 0.001	--	--	**57**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-1	05/13/2008	Lab	N	--	--	--	**0.00017**	--	**0.0137**	--	**0.0409**	--	< 0.00002	--	**0.00009**	--	**204**	--	**0.0003**	--	**0.00037**	--	< 0.0020
MW-97-1	09/17/2008	Lab	N	--	--	--	**0.00015**	--	**0.0195**	--	**0.0435**	--	< 0.000026	--	**0.00010**	--	**212**	--	< 0.00020	--	< 0.000547	--	< 0.005700
MW-97-2	11/04/1997	Lab	N	< 0.1	--	< 0.05	--	**0.008**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**41**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-2	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.010**	< 0.1	--	< 0.001	--	< 0.001	--	--	**46**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-2	05/13/2008	Lab	N	--	--	--	**0.00012**	--	**0.0090**	--	**0.0300**	--	< 0.00002	--	**0.00007**	--	**193**	--	< 0.0002	--	**0.00029**	--	< 0.0016
MW-97-2	09/17/2008	Lab	N	--	--	--	**0.00013**	--	**0.0097**	--	**0.0325**	--	< 0.000076	--	**0.00009**	--	**197**	--	< 0.00020	--	< 0.000382	--	< 0.016034
MW-06-5	05/14/2008	Lab	N	--	--	--	**0.00031**	--	**0.0450**	--	**0.0614**	--	< 0.00002	--	**0.00006**	--	**148**	--	**0.0002**	--	**0.00034**	--	< 0.0018
MW-06-5	09/19/2008	Lab	N	--	--	--	**0.00039**	--	**0.0594**	--	**0.0842**	--	< 0.000020	--	**0.00004**	--	**174**	--	< 0.00020	--	**0.000346**	--	**0.001816**
			FD	--	--	--	**0.00038**	--	**0.0590**	--	**0.0803**	--	< 0.000020	--	**0.00003**	--	**180**	--	< 0.00020	--	**0.000373**	--	**0.001776**
MW-06-6	05/14/2008	Lab	N	--	--	--	**0.00010**	--	**0.0051**	--	**0.0106**	--	< 0.00002	--	< 0.00002	--	**32.8**	--	**0.0002**	--	**0.00012**	--	< 0.0005
MW-06-6	05/28/2008	Lab	N	--	--	--	< 0.00010	--	**0.0051**	--	**0.0113**	--	**0.00002**	--	**0.00004**	--	**34.5**	--	< 0.0002	--	**0.00011**	--	< 0.0004
MW-06-6	09/18/2008	Lab	N	--	--	--	**0.00010**	--	**0.0045**	--	**0.0092**	--	< 0.000020	--	**0.00003**	--	**33.5**	--	< 0.00020	--	**0.000092**	--	< 0.000289
MW-EPA-1	08/09/1988	Lab	N	--	< 0.0296 B	--	< 0.029	--	**0.010**	--	< 0.0076 B	--	< 0.001	--	< 0.005	--	**39.1**	--	< 0.005	--	< 0.005	--	< 0.0077 B
MW-EPA-1	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.011**	< 0.1	--	< 0.001	--	< 0.001	--	--	**39**	< 0.01	--	< 0.01	--	< 0.01	--
MW-EPA-1	05/14/2008	Lab	N	--	--	--	**0.00026**	--	**0.0080**	--	**0.00520**	--	< 0.00002	--	< 0.00002	--	**68.1**	--	< 0.0002	--	**0.00009**	--	< 0.0003
MW-EPA-1	09/17/2008	Lab	N	--	--	--	**0.00026**	--	**0.0080**	--	**0.0092**	--	< 0.0043	--	< 0.00002	--	**69.5**	--	< 0.00044	--	< 0.000754	--	< 0.894112 R
MW-EPA-1	12/11/2008	Lab	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.0009**
MW-GW-3	06/30/1998	Lab	N	--	--	< 0.005	--	**0.046**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	**0.02**	--
MW-GW-3	09/30/1998	Lab	N	--	--	< 0.005	--	**0.022**	--	--	--	--	--	**0.034**	--	--	--	--	--	--	--	**0.08**	--
MW-GW-3	12/31/1998	Lab	N	--	--	< 0.05	--	**0.022**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	**0.01**	--
MW-GW-3	03/31/1999	Lab	N	--	--	< 0.003	--	**0.029**	--	--	--	--	--	**0.0007**	--	--	--	--	--	--	--	**0.009**	--
MW-GW-3	06/30/1999	Lab	N	--	--	< 0.003	--	**0.023**	--	--	--	--	--	**0.0009**	--	--	--	--	--	--	--	**0.009**	--
MW-GW-3	09/30/1999	Lab	N	--	--	< 0.003	--	**0.02**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.004**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

		Chemical Name		Aluminum	Aluminum	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Calcium	Calcium	Chromium	Chromium	Cobalt	Cobalt	Copper	Copper
		Total or Dissolved		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Location ID	Sample Date	Analysis Location	Sample Type																				
MW-GW-3	12/31/1999	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.006**	--
MW-GW-3	03/31/2000	Lab	N	--	--	< 0.003	--	**0.016**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.008**	--
MW-GW-3	06/30/2000	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.009**	--
MW-GW-3	09/30/2000	Lab	N	--	--	< 0.003	--	**0.02**	--	--	--	--	--	**0.0006**	--	--	--	--	--	--	--	**0.012**	--
MW-GW-3	12/31/2000	Lab	N	--	--	< 0.003	--	**0.017**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.017**	--
MW-GW-3	03/31/2001	Lab	N	--	--	< 0.003	--	**0.02**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.005**	--
MW-GW-3	06/30/2001	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.004**	--
MW-GW-3	09/30/2001	Lab	N	--	--	< 0.003	--	**0.025**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.015**	--
MW-GW-3	12/31/2001	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.006**	--
MW-GW-3	03/31/2002	Lab	N	--	--	< 0.003	--	**0.018**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.026**	--
MW-GW-3	06/30/2002	Lab	N	--	--	< 0.003	--	**0.021**	--	--	--	--	--	**0.0005**	--	--	--	--	--	--	--	**0.007**	--
MW-GW-3	09/30/2002	Lab	N	--	--	< 0.003	--	**0.021**	--	--	--	--	--	**0.0003**	--	--	--	--	--	--	--	**0.005**	--
MW-GW-3	12/31/2002	Lab	N	--	--	< 0.003	--	**0.02**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.003**	--
MW-GW-3	03/31/2003	Lab	N	--	--	< 0.003	--	**0.02**	--	--	--	--	--	**0.0004**	--	--	--	--	--	--	--	**0.007**	--
MW-GW-3	06/30/2003	Lab	N	--	--	< 0.003	--	**0.02**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.006**	--
MW-GW-3	09/30/2003	Lab	N	--	--	< 0.003	--	**0.022**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.004**	--
MW-GW-3	12/31/2003	Lab	N	--	--	< 0.003	--	**0.021**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.007**	--
MW-GW-3	03/31/2004	Lab	N	--	--	< 0.001	--	**0.02**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.006**	--
MW-GW-3	06/30/2004	Lab	N	--	--	< 0.001	--	**0.018**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.006**	--
MW-GW-3	09/30/2004	Lab	N	--	--	< 0.001	--	**0.017**	--	--	--	--	--	**0.0002**	--	--	--	--	--	--	--	**0.004**	--
MW-GW-3	11/30/2004	Lab	N	--	--	< 0.001	--	**0.021**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.006**	--
MW-GW-3	12/31/2004	Lab	N	--	--	< 0.001	--	**0.021**	--	--	--	--	--	**0.0001**	--	--	--	--	--	--	--	**0.006**	--
MW-GW-3	03/31/2005	Lab	N	--	--	< 0.001	--	**0.023**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-3	06/30/2005	Lab	N	--	--	< 0.001	--	**0.022**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	07/31/2005	Lab	N	--	--	< 0.001	--	**0.021**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-3	12/31/2005	Lab	N	--	--	< 0.0001	--	**0.023**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	03/31/2006	Lab	N	--	--	< 0.001	--	**0.034**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	06/30/2006	Lab	N	--	--	< 0.001	--	**0.022**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	09/30/2006	Lab	N	--	--	< 0.001	--	**0.022**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	12/31/2006	Lab	N	--	--	< 0.001	--	**0.023**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	03/31/2007	Lab	N	--	--	< 0.001	--	**0.035**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.004**	--
MW-GW-3	06/30/2007	Lab	N	--	--	< 0.001	--	**0.021**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	09/30/2007	Lab	N	--	--	< 0.003	--	**0.022**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	12/31/2007	Lab	N	--	--	< 0.003	--	**0.023**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	03/31/2008	Lab	N	--	--	< 0.003	--	**0.028**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.004**	--
MW-GW-3	05/20/2008	Lab	N	--	--	--	**0.00020**	--	**0.0241**	--	**0.0714**	--	< 0.00002	--	< 0.00002	--	**182**	--	**0.0003**	--	**0.00018**	--	**0.0023 J**
MW-GW-3	06/30/2008	Lab	N	--	--	< 0.003	--	**0.022**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	09/17/2008	Lab	N	--	--	--	**0.00014**	--	**0.0192**	--	**0.0651**	--	< 0.000020	--	< 0.00002	--	**189**	--	< 0.00020	--	**0.000384**	--	**0.001198**
MW-GW-3	09/30/2008	Lab	N	--	--	< 0.003	--	**0.02**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-3	12/31/2008	Lab	N	--	--	< 0.003	--	**0.021**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	03/31/2009	Lab	N	--	--	< 0.003	--	**0.024**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	06/30/2009	Lab	N	--	--	< 0.003	--	**0.021**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--
MW-GW-3	09/30/2009	Lab	N	--	--	< 0.003	--	**0.024**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.01	--
MW-GW-3	12/31/2009	Lab	N	--	--	< 0.003	--	**0.026**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.003**	--
MW-GW-3	03/31/2010	Lab	N	--	--	< 0.003	--	**0.037**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	< 0.001	--
MW-GW-3	06/30/2010	Lab	N	--	--	< 0.003	--	**0.032**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-GW-3	09/30/2010	Lab	N	--	--	< 0.003	--	**0.03**	--	--	--	--	--	< 0.0001	--	--	--	--	--	--	--	**0.002**	--
MW-97-5	11/04/1997	Lab	N	< 0.1	--	< 0.05	--	**0.006**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**31**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-5	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.005**	< 0.1	--	< 0.001	--	< 0.001	--	--	**28**	< 0.01	--	< 0.01	--	< 0.01	--
			FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-5	05/15/2008	Lab	N	--	--	--	**0.00008**	--	**0.0051**	--	**0.101**	--	**0.00002**	--	< 0.00002	--	**30.1**	--	**0.0011**	--	**0.00029**	--	< 0.0009
MW-97-5	09/17/2008	Lab	N	--	--	--	**0.00007**	--	**0.0046**	--	**0.0923**	--	< 0.000020	--	< 0.00002	--	**30.5**	--	< 0.00064	--	**0.000217**	--	**0.001094**
MW-97-6	11/04/1997	Lab	N	< 0.1	--	< 0.05	--	< 0.005	--	**0.30**	--	< 0.001	--	< 0.001	--	--	**140**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-6	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.003**	**0.2**	--	< 0.001	--	< 0.001	--	--	**88**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-6	07/23/2003	Lab	N	**0.0024 J**	**0.168**	**0.00025 J**	< 0.0020	**0.0024 BQQ**	**0.0024**	**0.184 BQQ**	**0.203**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	--	**0.00023 J**	**0.00084 J**	**0.00051 BQQ**	**0.00044 J**	**0.00095 J**	< 0.0020
MW-97-6	05/17/2008	Lab	N	--	--	--	**0.00005**	--	**0.0032**	--	**0.118**	--	< 0.00002	--	< 0.00002	--	**113**	--	**0.0004**	--	**0.00027**	--	**0.0016**
MW-97-6	09/16/2008	Lab	N	--	--	--	**0.00007**	--	**0.0038**	--	**0.129**	--	< 0.000020	--	< 0.00002	--	**112**	--	< 0.00064	--	< 0.000443	--	< 0.001122
MW-97-6	12/11/2008	Lab	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-MT96-2	03/25/1999	Lab	N	--	--	--	--	**0.033**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-MT96-2	05/29/2008	Lab	N	--	--	--	< 0.00005	--	**0.0155**	--	**0.00520**	--	< 0.00002	--	< 0.00002	--	**13.1**	--	< 0.0002	--	< 0.00002	--	< 0.0002

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Aluminum Dissolved	Aluminum Total	Antimony Dissolved	Antimony Total	Arsenic Dissolved	Arsenic Total	Barium Dissolved	Barium Total	Beryllium Dissolved	Beryllium Total	Cadmium Dissolved	Cadmium Total	Calcium Dissolved	Calcium Total	Chromium Dissolved	Chromium Total	Cobalt Dissolved	Cobalt Total	Copper Dissolved	Copper Total
MW-MT96-2	09/19/2008	Lab	N	--	--	--	< 0.00005	--	**0.0144**	--	**0.0059**	--	< 0.000020	--	**0.00003**	--	**13.5**	--	< 0.00020	--	**0.000021**	--	< 0.000121
MW-BSB-4	03/25/1999	Lab	N	--	--	--	--	**0.012**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-BSB-4	05/29/2008	Lab	N	--	--	--	< 0.00005	--	**0.0147**	--	**0.00560**	--	< 0.00002	--	**0.00003**	--	**11**	--	< 0.0002	--	**0.00011**	--	< 0.0003
MW-BSB-4	09/19/2008	Lab	N	--	--	--	< 0.00005	--	**0.0120**	--	**0.0060**	--	< 0.000020	--	**0.00004**	--	**11.5**	--	< 0.00020	--	**0.000039**	--	< 0.000100
Wells Far Downgradient of Tailing Basin (SWMU 1)																							
MW-06-3	05/14/2008	Lab	N	--	--	--	**0.00019**	--	**0.0052**	--	**0.0739**	--	< 0.00002	--	< 0.00002	--	**192**	--	**0.0065**	--	**0.00211**	--	< 0.0011
MW-06-3	09/19/2008	Lab	N	--	--	--	**0.00020**	--	**0.0050**	--	**0.0698**	--	< 0.000020	--	< 0.00002	--	**193**	--	**0.0031**	--	**0.0018**	--	**0.000798**
MW-06-3	07/16/2010	Lab	N	--	--	--	**0.00019**	--	**0.0047**	--	**0.0537**	--	< 0.00002	--	< 0.00002	--	**199**	--	**0.0021**	--	**0.00170**	--	**0.0013**
MW-02-3	10/09/2002	Lab	N	--	--	--	--	**0.011**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	< 0.01	--
MW-02-3	10/22/2004	Lab	N	--	--	--	--	**0.012**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-02-3	01/10/2005	Lab	N	--	--	--	--	**0.011**	**0.009**	--	--	--	--	< 0.0001	< 0.0001	**300**	**282**	--	--	--	--	< 0.002	**0.003**
MW-02-3	04/12/2005	Lab	N	--	--	--	--	**0.013**	**0.009**	--	--	--	--	< 0.0001	< 0.0001	**289**	**294**	--	--	--	--	< 0.002	**0.002**
			FD	--	--	--	--	**0.012**	**0.008**	--	--	--	--	< 0.0001	< 0.0001	**291**	**278**	--	--	--	--	< 0.002	**0.002**
MW-02-3	10/31/2005	Lab	N	--	--	--	--	**0.0112**	**0.0124**	--	--	--	--	< 0.0001	< 0.0001	**274**	**293**	--	--	--	--	< 0.002	**0.002 b**
MW-02-3	10/31/2005	Field	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-3	04/20/2006	Lab	N	--	--	--	--	**0.012**	**0.014**	--	--	--	--	< 0.0001	< 0.0001	**280**	**302**	--	--	--	--	< 0.002	< 0.002
			FD	--	--	--	--	**0.012**	**0.012**	--	--	--	--	< 0.0001	< 0.0001	**280**	**309**	--	--	--	--	< 0.002	**0.002**
MW-02-3	10/24/2006	Lab	N	--	--	--	--	**0.012**	**0.011**	--	--	--	--	**0.0001**	< 0.0001	**285**	**262**	--	--	--	--	**0.002**	**0.002**
			FD	--	--	--	--	**0.012**	**0.010**	--	--	--	--	< 0.0001	< 0.0001	**288**	**271**	--	--	--	--	**0.002**	**0.003**
MW-02-3	04/24/2007	Lab	N	--	--	--	--	**0.0151**	**0.0159**	--	--	--	--	**0.0001**	**0.00012**	**286**	**275**	--	--	--	--	**0.0024 b**	**0.0027 b**
			FD	--	--	--	--	**0.0156**	**0.0156**	--	--	--	--	**0.0001**	**0.00011**	**307**	**284**	--	--	--	--	**0.0021 b**	**0.0024 b**
MW-02-3	11/06/2007	Lab	N	--	--	--	--	**0.0179**	**0.0175**	--	--	--	--	**0.00011**	**0.00009**	**276**	**270**	--	--	--	--	**0.0067**	**0.0061**
			FD	--	--	--	--	**0.0167**	**0.0176**	--	--	--	--	**0.00018**	**0.00008**	**278**	**275**	--	--	--	--	**0.0077**	**0.0063**
MW-02-3	05/15/2008	Lab	N	--	--	--	**0.00017**	--	**0.0124**	--	**0.0301**	--	**0.00002**	--	**0.00003**	--	**306**	--	**0.0006**	--	**0.00159**	--	< 0.0012
MW-02-3	09/23/2008	Lab	N	--	--	--	**0.00017**	--	**0.0132**	--	**0.02724**	--	< 0.00002	--	**0.00002**	--	**266**	--	< 0.0002	--	**0.00127**	--	< 0.0009
MW-02-3	07/17/2010	Lab	N	--	--	--	**0.00016**	--	**0.0112**	--	**0.0251**	--	< 0.00002	--	< 0.00002	--	**285**	--	**0.00030**	--	**0.00117**	--	**0.0028**
			FD	--	--	--	**0.00017**	--	**0.0113**	--	**0.0250**	--	< 0.00002	--	< 0.00002	--	**294**	--	**0.0004**	--	**0.00115**	--	**0.0029**
MW-12-3	11/07/2012	Lab	N	--	--	--	**0.00054**	--	**0.0334**	--	**0.03652**	--	< 0.000020	--	**0.000037**	--	**43.5**	--	< 0.00026	--	**0.000835**	--	< 0.00032
MW-12-7	11/06/2012	Lab	N	--	--	--	**0.00028**	--	**0.0038**	--	**0.07523**	--	< 0.000020	--	**0.000044**	--	**59.4**	--	< 0.00042	--	**0.000501**	--	< 0.00100
MW-12-8	11/06/2012	Lab	N	--	--	--	**0.00026**	--	**0.0023**	--	**0.05271**	--	< 0.000020	--	**0.000039**	--	**62.1**	--	< 0.00028	--	**0.000283**	--	< 0.00090
MW-12-4	11/07/2012	Lab	N	--	--	--	**0.00038**	--	**0.0301**	--	**0.06080**	--	< 0.000020	--	< 0.000020	--	**52.0**	--	< 0.00020	--	**0.000402**	--	< 0.00063
MW-12-5	11/07/2012	Lab	N	--	--	--	**0.00035**	--	**0.0153**	--	**0.03843**	--	< 0.000020	--	**0.000041**	--	**47.4**	--	< 0.00085	--	**0.000694**	--	< 0.00059
			FD	--	--	--	**0.00033**	--	**0.0150**	--	**0.03726**	--	< 0.000020	--	**0.000034**	--	**48.3**	--	< 0.00078	--	**0.000689**	--	< 0.00054
MW-12-6	11/07/2012	Lab	N	--	--	--	**0.00019**	--	**0.0122**	--	**0.04538**	--	< 0.000020	--	**0.000021**	--	**30.3**	--	< 0.00065	--	**0.000806**	--	< 0.00029
MW-12-2	11/08/2012	Lab	N	--	--	--	**0.00019**	--	**0.0357**	--	**0.04703**	--	< 0.000020	--	**0.000036**	--	**254**	--	< 0.00020	--	**0.000660**	--	< 0.00205
MW-02-4	10/09/2002	Lab	N	--	--	--	--	**0.013**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	< 0.01	--
			FD	--	--	--	--	**0.012**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	< 0.01	--
MW-02-4	10/22/2004	Lab	N	--	--	--	--	**0.021**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
			FD	--	--	--	--	**0.022**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-02-4	01/10/2005	Lab	N	--	--	--	--	**0.022**	**0.019**	--	--	--	--	< 0.0001	< 0.0001	**338**	**325**	--	--	--	--	< 0.002	**0.006**
			FD	--	--	--	--	**0.022**	**0.020**	--	--	--	--	< 0.0001	< 0.0001	**328**	**320**	--	--	--	--	**0.002**	**0.002**
MW-02-4	04/12/2005	Lab	N	--	--	--	--	**0.024**	**0.016**	--	--	--	--	**0.0002**	< 0.0001	**327**	**327**	--	--	--	--	**0.003**	**0.002**
MW-02-4	10/31/2005	Lab	N	--	--	--	--	**0.0250**	**0.0248**	--	--	--	--	< 0.0001	< 0.0001	**323**	**336**	--	--	--	--	< 0.002	**0.003 b**
		Field		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-4	10/31/2005	Lab	FD	--	--	--	--	**0.0243**	**0.0251**	--	--	--	--	< 0.0001	< 0.0001	**322**	**334**	--	--	--	--	**0.003**	**0.004 b**
		Field		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-4	04/20/2006	Lab	N	--	--	--	--	**0.019**	**0.020**	--	--	--	--	< 0.0001	< 0.0001	**321**	**360**	--	--	--	--	**0.002**	**0.002**
MW-02-4	10/24/2006	Lab	N	--	--	--	--	**0.019**	**0.017**	--	--	--	--	< 0.0001	< 0.0001	**325**	**298**	--	--	--	--	**0.003**	**0.003**
MW-02-4	04/24/2007	Lab	N	--	--	--	--	**0.0248**	**0.0241**	--	--	--	--	**0.00016**	**0.00019**	**314**	**313**	--	--	--	--	**0.0028 b**	**0.0036 b**
MW-02-4	11/06/2007	Lab	N	--	--	--	--	**0.0323**	**0.0331**	--	--	--	--	**0.00013**	**0.00015**	**293**	**298**	--	--	--	--	**0.0061**	**0.0067**
MW-02-4	05/15/2008	Lab	N	--	--	--	**0.00015**	--	**0.0211**	--	**0.0363**	--	< 0.00002	--	**0.00004**	--	**334**	--	**0.0004**	--	**0.00092**	--	< 0.0022
			FD	--	--	--	**0.00014**	--	**0.0217**	--	**0.0359**	--	< 0.00002	--	**0.00004**	--	**342**	--	**0.0004**	--	**0.00089**	--	< 0.0021
MW-02-4	09/23/2008	Lab	N	--	--	--	**0.00015**	--	**0.0245**	--	**0.036**	--	< 0.00002	--	**0.00004**	--	**295**	--	< 0.0002	--	**0.0007**	--	**0.0019**
MW-02-4	07/18/2010	Lab	N	--	--	--	**0.00014**	--	**0.0205**	--	**0.0340**	--	< 0.00002	--	**0.00002**	--	**314**	--	< 0.0002	--	**0.00052**	--	**0.0022**
MW-06-1	05/15/2008	Lab	N	--	--	--	**0.00026**	--	**0.0049**	--	**0.0659**	--	< 0.00002	--	**0.00005**	--	**319**	--	< 0.0002	--	**0.00074**	--	< 0.0026
MW-06-1	09/18/2008	Lab	N	--	--	--	**0.00027**	--	**0.0053**	--	**0.0782**	--	< 0.000029	--	**0.00006**	--	**274**	--	< 0.00035	--	< 0.000921	--	< 0.005197
MW-06-1	07/17/2010	Lab	N	--	--	--	**0.00026**	--	**0.0049**	--	**0.0639**	--	< 0.00002	--	**0.00004**	--	**245**	--	**0.0002**	--	**0.00029**	--	**0.0040**
MW-06-10	05/14/2008	Lab	N	--	--	--	**0.00015**	--	**0.0077**	--	**0.0318**	--	**0.00002**	--	< 0.00002	--	**225**	--	**0.0004**	--	**0.00087**	--	< 0.0014
MW-06-10	09/18/2008	Lab	N	--	--	--	**0.00015**	--	**0.0079**	--	**0.0382**	--	< 0.000020	--	**0.00003**	--	**229**	--	< 0.00033	--	< 0.000819	--	< 0.001828

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Aluminum Dissolved	Aluminum Total	Antimony Dissolved	Antimony Total	Arsenic Dissolved	Arsenic Total	Barium Dissolved	Barium Total	Beryllium Dissolved	Beryllium Total	Cadmium Dissolved	Cadmium Total	Calcium Dissolved	Calcium Total	Chromium Dissolved	Chromium Total	Cobalt Dissolved	Cobalt Total	Copper Dissolved	Copper Total
MW-12-1	11/06/2012	Lab	N	--	--	--	**0.00012**	--	**0.0023**	--	**0.13448**	--	< 0.000020	--	**0.000047**	--	**109**	--	< 0.0011	--	**0.0023**	--	< 0.00085
MW-EPA-4	11/05/1997	Lab	N	< 0.1	--	< 0.05	--	< 0.005	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**283**	< 0.01	--	< 0.01	--	< 0.01	--
MW-EPA-4	10/12/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.004**	< 0.1	--	< 0.001	--	< 0.001	--	--	**297**	< 0.01	--	< 0.01	--	< 0.01	--
MW-EPA-4	07/24/2003	Lab	N	< 0.0300	**3.16**	**0.00015 J**	< 0.0040	**0.0031 BQQ**	**0.0037**	**0.0283 BQQ**	**0.268**	< 0.0010	< 0.0020	< 0.0010	< 0.0020	--	--	< 0.0020	< 0.0040	**0.0032 BQQ**	< 0.0020	**0.0011 J**	**0.0021 J**
MW-EPA-4	05/15/2008	Lab	N	--	--	--	**0.00008**	--	**0.0046**	--	**0.0404**	--	< 0.00002	--	**0.00004**	--	**368**	--	< 0.0002	--	**0.00393**	--	< 0.0015
MW-EPA-4	09/20/2008	Lab	N	--	--	--	**0.00006**	--	**0.005**	--	**0.04292**	--	**0.00002**	--	**0.00003**	--	**324**	--	< 0.0002	--	**0.00306**	--	< 0.0009
Wells Near Slag Water Retention Ditch																							
MW-06-15	05/21/2008	Lab	N	--	--	--	**0.00006**	--	**0.0032**	--	**0.0248**	--	< 0.00002	--	< 0.00002	--	**198**	--	**0.0005**	--	**0.00095**	--	**0.0019 J**
MW-06-15	09/17/2008	Lab	N	--	--	--	**0.00007**	--	**0.0037**	--	**0.0222**	--	< 0.0036	--	**0.00003**	--	**227**	--	< 0.00063	--	< 0.0016	--	< 0.859446 R
MW-06-15	12/11/2008	Lab	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.004589**
MW-97-12	11/05/1997	Lab	N	**0.1**	--	< 0.05	--	**0.109**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**331**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-12	10/12/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.093**	< 0.1	--	< 0.001	--	< 0.001	--	--	**245**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-12	05/27/2008	Lab	N	--	--	--	< 0.00023	--	**0.0688**	--	**0.0466**	--	**0.00012**	--	**0.00005**	--	**136**	--	**0.0010**	--	**0.00091**	--	< 0.0026
MW-97-12	09/23/2008	Lab	N	--	--	--	**0.00223 R**	--	**0.0681 R**	--	**0.05607 R**	--	**0.00479 R**	--	**0.00588 R**	--	**140 R**	--	**0.0072 R**	--	**0.00808 R**	--	**3.18 R**
MW-97-12	12/15/2008	Lab	N	--	--	--	**0.00023**	--	**0.0618**	--	**0.0296**	--	**0.000060**	--	< 0.00002	--	**121**	--	**0.00043**	--	**0.000493**	--	**0.000918**
MW-06-14	05/27/2008	Lab	N	--	--	--	< 0.00007	--	**0.0042**	--	**0.0279**	--	< 0.00002	--	**0.00003**	--	**216**	--	< 0.0006	--	**0.00170**	--	< 0.0019
MW-06-14	09/18/2008	Lab	N	--	--	--	**0.00010**	--	**0.0040**	--	**0.0513**	--	< 0.000064	--	**0.00004**	--	**208**	--	< 0.00070	--	< 0.0018	--	< 0.008987
MW-06-14	12/11/2008	Lab	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-3	08/09/1988	Lab	N	--	< 0.028	--	< 0.029	--	< 0.0038 B	--	< 0.0567 B	--	< 0.001	--	< 0.005	--	**69.9**	--	< 0.005	--	< 0.006 B	--	< 0.0077 B
MW-EPA-3	11/05/1997	Lab	N	< 0.1	--	< 0.05	--	**0.005**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**99**	< 0.01	--	< 0.01	--	< 0.01	--
MW-EPA-3	10/12/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.006**	< 0.1	--	< 0.001	--	< 0.001	--	--	**95**	< 0.01	--	< 0.01	--	< 0.01	--
MW-EPA-3	07/24/2003	Lab	N	< 0.0300	< 0.0097 J	**0.00017 J**	< 0.0020	**0.0033 BQQ**	**0.0032**	**0.0542 BQQ**	**0.0610**	< 0.0010	< 0.0010	**0.00031 J**	< 0.0010	--	--	< 0.0020	**0.00011 J**	**0.00066 BQQ**	**0.00041 J**	**0.00091 J**	**0.0011 J**
MW-EPA-3	05/15/2008	Lab	N	--	--	--	**0.00005**	--	**0.0035**	--	**0.0592**	--	< 0.00002	--	< 0.00002	--	**86.6**	--	**0.0002**	--	**0.00039**	--	< 0.0020
MW-EPA-3	09/16/2008	Lab	N	--	--	--	**0.00006**	--	**0.0039**	--	< 0.0628	--	< 0.000020	--	< 0.00002	--	**88.9**	--	< 0.00036	--	< 0.000371	--	< 0.001032
Wells in Plant Area																							
MW-06-19	05/20/2008	Lab	N	--	--	--	**0.00010**	--	**0.0049**	--	**0.0444**	--	< 0.00002	--	**0.00009**	--	**427**	--	**0.0038**	--	**0.00210**	--	**0.0030 J**
MW-06-19	09/18/2008	Lab	N	--	--	--	**0.00011**	--	**0.0084**	--	**0.0508**	--	< 0.000020	--	**0.00008**	--	**473**	--	**0.0034**	--	**0.0021**	--	< 0.008247
MW-06-13	05/27/2008	Lab	N	--	--	--	< 0.00013	--	**0.0103**	--	**0.0382**	--	< 0.00002	--	**0.00004**	--	**188**	--	< 0.0003	--	**0.00199**	--	< 0.0021
			FD	--	--	--	< 0.00014	--	**0.0106**	--	**0.0387**	--	< 0.00002	--	**0.00004**	--	**185**	--	< 0.0003	--	**0.00201**	--	< 0.0026
MW-06-13	09/19/2008	Lab	N	--	--	--	**0.0001**	--	**0.0104**	--	**0.04017**	--	< 0.00002	--	**0.00005**	--	**191**	--	**0.0003**	--	**0.00191**	--	**0.0012**
MW-06-16	05/21/2008	Lab	N	--	--	--	**0.00008**	--	**0.0060**	--	**0.0274**	--	< 0.00002	--	**0.00004**	--	**335**	--	**0.0005**	--	**0.00593**	--	**0.0017 J**
MW-06-16	09/20/2008	Lab	N	--	--	--	**0.00008**	--	**0.0083**	--	**0.03035**	--	< 0.00002	--	**0.00004**	--	**318**	--	**0.0005**	--	**0.00608**	--	**0.0018**
MW-06-17	05/27/2008	Lab	N	--	--	--	< 0.00016	--	**0.0216**	--	**0.0474**	--	**0.00002**	--	**0.00144**	--	**228**	--	**0.0011**	--	**0.00314**	--	< 0.0020
MW-06-17	09/20/2008	Lab	N	--	--	--	**0.00015**	--	**0.025**	--	**0.04283**	--	< 0.00002	--	**0.00116**	--	**209**	--	**0.0011**	--	**0.00234**	--	**0.0013**
MW-06-20	05/20/2008	Lab	N	--	--	--	**0.00011**	--	**0.0177**	--	**0.0312**	--	**0.00002**	--	**0.00049**	--	**220**	--	**0.0004**	--	**0.0100**	--	**0.0038 J**
MW-06-20	09/20/2008	Lab	N	--	--	--	**0.00011**	--	**0.0187**	--	**0.03777**	--	**0.00003**	--	**0.0005**	--	**207**	--	**0.0004**	--	**0.00862**	--	**0.0021**
MW-06-20	12/12/2008	Lab	N	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-06-18	05/21/2008	Lab	N	--	--	--	**0.00011**	--	**0.0698**	--	**0.0625**	--	< 0.00002	--	**0.0405**	--	**270**	--	**0.0004**	--	**0.00802**	--	**0.0057 J**
			FD	--	--	--	**0.00011**	--	**0.0704**	--	**0.0624**	--	**0.00002**	--	**0.0402**	--	**254**	--	**0.0005**	--	**0.00801**	--	**0.0028 J**
MW-06-18	09/25/2008	Lab	N	--	--	--	< 0.00025	--	**0.0695**	--	**0.0635**	--	< 0.00010	--	**0.0465**	--	**262**	--	< 0.0010	--	**0.0081**	--	**0.0018**
Wells near Tailing Basin (SWMU 1)																							
MW-06-7	05/29/2008	Lab	N	--	--	--	**0.00085**	--	**0.0142**	--	**0.0651**	--	< 0.00002	--	**0.00025**	--	**382**	--	< 0.0002	--	**0.00038**	--	< 0.0049
MW-06-7	09/23/2008	Lab	N	--	--	--	**0.00089**	--	**0.0274**	--	**0.05552**	--	**0.00003**	--	**0.00004**	--	**317**	--	**0.0006**	--	**0.00068**	--	**0.0071**
MW-06-8	05/18/2008	Lab	N	--	--	--	**0.00022**	--	**0.0648**	--	**0.168**	--	**0.00007**	--	**0.00027**	--	**230**	--	**0.0028**	--	**0.00204**	--	**0.0011**
MW-06-8	09/25/2008	Lab	N	--	--	--	< 0.00025	--	**0.0643**	--	**0.152**	--	< 0.00010	--	**0.00013**	--	**242**	--	< 0.0010	--	**0.0024**	--	**0.0010**
MW-06-9	05/17/2008	Lab	N	--	--	--	**0.00023**	--	**0.0451**	--	**0.0425**	--	**0.00006**	--	**0.00031**	--	**257**	--	**0.0011**	--	**0.00051**	--	**0.0008**
MW-06-9	09/25/2008	Lab	N	--	--	--	< 0.00025	--	**0.0468**	--	**0.0376**	--	< 0.00010	--	**0.00012**	--	**253**	--	< 0.0010	--	**0.00068**	--	**0.0010**
PW-99-3	03/22/1999	Lab	N	--	--	--	--	**0.061**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
PW-99-3	03/23/1999	Lab	N	--	--	--	--	**0.053**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
PW-99-3	05/28/2008	Lab	N	--	--	--	**0.00060**	--	**0.129**	--	**0.152**	--	**0.00002**	--	**0.00023**	--	**153**	--	< 0.0003	--	**0.00421**	--	< 0.0019
PW-99-3	09/22/2008	Lab	N	--	--	--	**0.00075**	--	**0.1389**	--	**0.1581**	--	**0.00002**	--	**0.00029**	--	**119**	--	**0.0002**	--	**0.00381**	--	**0.0031**
MW-97-11	11/05/1997	Lab	N	< 0.1	--	< 0.05	--	**0.015**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**416**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-11	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.014**	< 0.1	--	< 0.001	--	< 0.001	--	--	**411**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-11	07/21/2003	Lab	N	< 0.0300	**0.46**	**0.00042 J**	< 0.0080	**0.0125 BQQ**	**0.0134**	**0.0261 BQQ**	**0.0362 J**	< 0.0010	< 0.0020	**0.00038 J**	< 0.0020	--	--	< 0.0020	< 0.0080	**0.0035 BQQ**	**0.0035**	**0.0037 BQQ**	**0.0055 J**
MW-97-11	01/11/2005	Lab	N	--	--	--	--	**0.016**	**0.011**	--	--	--	--	< 0.0001	< 0.0001	**387**	**368**	--	--	--	--	**0.006**	**0.006**
MW-97-11	05/21/2008	Lab	N	--	--	--	**0.00041**	--	**0.0143**	--	**0.0316**	--	< 0.00002	--	**0.00006**	--	**358**	--	**0.0007**	--	**0.00211**	--	**0.0034 J**
MW-97-11	09/25/2008	Lab	N	--	--	--	**0.00035**	--	**0.0148**	--	**0.0310**	--	< 0.00010	--	< 0.00010	--	**349**	--	< 0.0010	--	**0.0024**	--	**0.0064**
MW-97-10	11/04/1997	Lab	N	< 0.1	--	< 0.05	--	**0.028**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**461**	< 0.01	--	< 0.01	--	< 0.01	--
			FD	< 0.1	--	< 0.05	--	**0.022**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**471**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-10	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.035**	< 0.1	--	< 0.001	--	< 0.001	--	--	**410**	< 0.01	--	< 0.01	--	< 0.01	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

		Chemical Name	Aluminum	Aluminum	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Calcium	Calcium	Chromium	Chromium	Cobalt	Cobalt	Copper	Copper
		Total or Dissolved	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Location ID	**Sample Date**	**Analysis Location**	**Sample Type**																			
MW-97-10	07/23/2003	Lab	N	**0.00455 J**	**1.28**	**0.00038 J**	< 0.0020	**0.0277 BQQ**	**0.0269**	**0.0206 BQQ**	**0.0450**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	--	< 0.0020	**0.0016 J**	**0.0020 BQQ**	**0.0022**	**0.0034 BQQ**	**0.0048 J**
			FD	**0.0041 J**	--	**0.00035 J**	--	**0.0277**	--	**0.0209**	--	< 0.0010	--	**0.00010 J**	--	--	--	< 0.0020	--	**0.0020**	--	**0.0034 J**	--
MW-97-10	01/11/2005	Lab	N	--	--	--	--	**0.034**	**0.032**	--	--	--	--	< 0.0001	< 0.0001	**242**	**231**	--	--	--	--	**0.002**	**0.004**
MW-97-10	05/21/2008	Lab	N	--	--	--	**0.00024**	--	**0.0310**	--	**0.0233**	--	< 0.00002	--	**0.00003**	--	**264**	--	< 0.0002	--	**0.00067**	--	**0.0014 J**
MW-97-10	09/23/2008	Lab	N	--	--	--	**0.00025**	--	**0.0328**	--	**0.02227**	--	< 0.00002	--	**0.00003**	--	**254**	--	< 0.0002	--	**0.0007**	--	**0.0031**
MW-06-2	05/15/2008	Lab	N	--	--	--	**0.00016**	--	**0.0112**	--	**0.0392**	--	**0.00002**	--	**0.00004**	--	**356**	--	**0.0040**	--	**0.00180**	--	< 0.0019
MW-06-2	09/23/2008	Lab	N	--	--	--	**0.00015**	--	**0.014**	--	**0.03455**	--	< 0.00002	--	**0.00004**	--	**332**	--	< 0.0002	--	**0.00135**	--	**0.0011**
MW-06-2	07/18/2010	Lab	N	--	--	--	**0.00015**	--	**0.0110**	--	**0.0329**	--	< 0.00002	--	< 0.00002	--	**327**	--	**0.00030**	--	**0.00100**	--	**0.0017**
PW-99-1	03/24/1999	Lab	N	--	--	--	--	**0.043**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
PW-99-1	03/25/1999	Lab	N	--	--	--	--	**0.045**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
PW-99-1	01/10/2005	Lab	N	--	--	--	--	**0.035**	**0.032**	--	--	--	--	**0.0002**	**0.0002**	**269**	**269**	--	--	--	--	< 0.002	**0.001**
PW-99-1	05/18/2008	Lab	N	--	--	--	**0.00025**	--	**0.0333**	--	**0.0638**	--	< 0.00002	--	**0.00015**	--	**283**	--	< 0.0002	--	**0.00150**	--	**0.0013**
PW-99-1	05/29/2008	Lab	N	--	--	--	**0.00031**	--	**0.0338**	--	**0.0645**	--	< 0.00002	--	**0.00017**	--	**279**	--	< 0.0002	--	**0.00140**	--	< 0.0010
PW-99-1	09/25/2008	Lab	N	--	--	--	**0.00029**	--	**0.0335**	--	**0.0654**	--	< 0.00010	--	**0.00024**	--	**286**	--	< 0.0010	--	**0.0015**	--	**0.0011**
MW-97-3	11/04/1997	Lab	N	< 0.1	--	< 0.05	--	**0.033**	--	< 0.1	--	< 0.001	--	< 0.001	--	--	**314**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-3	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.050**	< 0.1	--	< 0.001	--	< 0.001	--	--	**290**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-3	01/10/2005	Lab	N	--	--	--	--	**0.063**	**0.058**	--	--	--	--	< 0.0001	< 0.0001	**162**	**165**	--	--	--	--	< 0.002	**0.001**
MW-97-3	05/28/2008	Lab	N	--	--	--	**0.00043**	--	**0.0517**	--	**0.0334**	--	< 0.00002	--	**0.00006**	--	**173**	--	< 0.0002	--	**0.00066**	--	< 0.0016
MW-97-3	09/23/2008	Lab	N	--	--	--	**0.00041**	--	**0.0503**	--	**0.036**	--	< 0.00002	--	**0.00006**	--	**162**	--	< 0.0002	--	**0.00064**	--	**0.0014**
MW-97-4	11/04/1997	Lab	N	< 0.1	--	< 0.05	--	**0.042**	--	< 0.1	--	< 0.001	--	**0.001**	--	--	**389**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-4	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.049**	< 0.1	--	< 0.001	--	< 0.001	--	--	**365**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-4	03/19/1999	Lab	N	--	--	--	--	**0.039**	--	--	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-97-4	01/10/2005	Lab	N	--	--	--	--	**0.037**	**0.035**	--	--	--	--	< 0.0001	< 0.0001	**218**	**210**	--	--	--	--	< 0.002	< 0.001
MW-97-4	05/20/2008	Lab	N	--	--	--	**0.00061**	--	**0.0358**	--	**0.0270**	--	< 0.00002	--	**0.00011**	--	**184**	--	**0.0002**	--	**0.00109**	--	**0.0011 J**
MW-97-4	09/22/2008	Lab	N	--	--	--	**0.00054**	--	**0.0368**	--	**0.02492**	--	< 0.00002	--	**0.0001**	--	**181**	--	< 0.0002	--	**0.00088**	--	< 0.0008
MW-06-12	05/20/2008	Lab	N	--	--	--	**0.00021**	--	**0.0223**	--	**0.0348**	--	**0.00003**	--	**0.00004**	--	**355**	--	**0.0002**	--	**0.00150**	--	**0.0014 J**
MW-06-12	09/25/2008	Lab	N	--	--	--	< 0.00025	--	**0.0212**	--	**0.0293**	--	< 0.00010	--	**0.00019**	--	**351**	--	< 0.0010	--	**0.0018**	--	**0.0018**
			FD	--	--	--	< 0.00025	--	**0.0218**	--	**0.0299**	--	< 0.00010	--	< 0.00010	--	**357**	--	< 0.0010	--	**0.0017**	--	**0.0018**
MW-06-11	05/28/2008	Lab	N	--	--	--	< 0.00010	--	**0.0204**	--	**0.0312**	--	**0.00003**	--	**0.00005**	--	**399**	--	< 0.0005	--	**0.00483**	--	< 0.0014
MW-06-11	09/23/2008	Lab	N	--	--	--	**0.00009**	--	**0.0218**	--	**0.03174**	--	< 0.00002	--	**0.00006**	--	**343**	--	< 0.0002	--	**0.00424**	--	**0.0012**
MW-97-9	11/05/1997	Lab	N	< 0.1	--	< 0.05	--	**0.055**	--	**0.1**	--	< 0.001	--	**0.014**	--	--	**408**	**0.03**	--	< 0.01	--	< 0.01	--
MW-97-9	10/07/1998	Lab	N	**0.4**	--	< 0.003	--	--	**0.106**	< 0.1	--	< 0.001	--	**0.217**	--	--	**339**	< 0.01	--	< 0.01	--	**0.01**	--
MW-97-9	05/16/2008	Lab	N	--	--	--	**0.00220**	--	**0.0579**	--	**0.0568**	--	**0.00057**	--	**0.0697**	--	**190**	--	**0.0005**	--	**0.00237**	--	< 0.0009
MW-97-9	09/24/2008	Lab	N	--	--	--	**0.0025**	--	**0.0631**	--	**0.0593**	--	**0.00078**	--	**0.0903**	--	**201**	--	< 0.0010	--	**0.0029**	--	**0.0011**
			FD	--	--	--	**0.0024**	--	**0.0629**	--	**0.0586**	--	**0.00067**	--	**0.0903**	--	**209**	--	< 0.0010	--	**0.0029**	--	**0.0010**
MW-97-8	11/05/1997	Lab	N	< 0.1	--	< 0.05	--	**0.041**	--	< 0.1	--	< 0.001	--	**0.012**	--	--	**416**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-8	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.054**	< 0.1	--	< 0.001	--	**0.009**	--	--	**242**	< 0.01	--	< 0.01	--	< 0.01	--
MW-97-8	05/15/2008	Lab	N	--	--	--	**0.00065**	--	**0.0737**	--	**0.0313**	--	**0.00008**	--	**0.00408**	--	**187**	--	**0.0008**	--	**0.00488**	--	< 0.0020
MW-97-8	09/24/2008	Lab	N	--	--	--	**0.00070**	--	**0.0745**	--	**0.0191**	--	< 0.00010	--	**0.0041**	--	**183**	--	< 0.0010	--	**0.0043**	--	**0.0012**
MW-06-21	05/17/2008	Lab	N	--	--	--	**0.00052**	--	**0.0480**	--	**0.0318**	--	**0.00008**	--	**0.00056**	--	**194**	--	**0.0016**	--	**0.00178**	--	**0.0017**
MW-06-21	09/24/2008	Lab	N	--	--	--	**0.00054**	--	**0.0564**	--	**0.0238**	--	< 0.00010	--	**0.00059**	--	**165**	--	< 0.0010	--	**0.0013**	--	< 0.0009
MW-06-22	05/21/2008	Lab	N	--	--	--	**0.00074**	--	**0.0598**	--	**0.0197**	--	**0.00007**	--	**0.0128**	--	**217**	--	**0.0012**	--	**0.0108**	--	**0.0019 J**
MW-06-22	09/26/2008	Lab	N	--	--	--	**0.00067**	--	**0.0864**	--	**0.0184**	--	< 0.00010	--	**0.0143**	--	**239**	--	< 0.0010	--	**0.0131**	--	**0.0035**
MW-06-25	05/20/2008	Lab	N	--	--	--	**0.00140**	--	**0.0455**	--	**0.0579**	--	**0.00029**	--	**0.213**	--	**320**	--	**0.0012**	--	**0.00611**	--	**0.0025 J**
MW-06-25	09/26/2008	Lab	N	--	--	--	**0.0013**	--	**0.0467**	--	**0.0469**	--	**0.00024**	--	**0.177**	--	**315**	--	< 0.0010	--	**0.0055**	--	**0.0035**
MW-97-7	11/04/1997	Lab	N	**0.1**	--	< 0.05	--	**0.125**	--	< 0.1	--	< 0.001	--	**0.032**	--	--	**378**	< 0.01	--	**0.02**	--	< 0.01	--
MW-97-7	10/08/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.113**	< 0.1	--	< 0.001	--	**0.037**	--	--	**358**	< 0.01	--	**0.02**	--	**0.05**	--
MW-97-7	10/08/2001	Lab	N	--	--	< 0.003	< 0.003	**0.075**	**0.076**	**0.037**	**0.040**	< 0.001	< 0.001	**0.0758**	**0.0821**	**332**	**346**	< 0.001	< 0.001	**0.01**	**0.01**	**0.006**	**0.006**
MW-97-7	01/17/2002	Lab	N	--	--	< 0.003	--	**0.085**	--	**0.038**	--	< 0.001	--	**0.084**	--	**327**	--	**0.001**	--	**0.01**	--	**0.003**	--
			FD	--	--	< 0.003	--	**0.078**	--	**0.035**	--	< 0.001	--	**0.093**	--	--	--	< 0.001	--	**0.01**	--	< 0.001	--
MW-97-7	05/20/2008	Lab	N	--	--	--	**0.00021**	--	**0.0593**	--	**0.0494**	--	**0.00043**	--	**0.0535**	--	**290**	--	**0.0008**	--	**0.00675**	--	**0.0025 J**
MW-97-7	09/26/2008	Lab	N	--	--	--	< 0.00025	--	**0.0594**	--	**0.0259**	--	< 0.00010	--	**0.0461**	--	**293**	--	< 0.0010	--	**0.0065**	--	**0.0026**
Wells near Brick Pile (SWMU 3)																							
MW-01-1	10/08/2001	Lab	N	--	--	< 0.003	< 0.003	< 0.003	< 0.003	**0.301**	**0.296**	< 0.001	< 0.001	< 0.0001	< 0.0001	**259**	**262**	**0.002**	**0.005**	< 0.01	< 0.01	**0.004**	**0.005**
MW-01-1	01/16/2002	Lab	N	--	--	< 0.003	--	**0.003**	--	**0.237**	--	< 0.001	--	< 0.001	--	**275**	--	**0.002**	--	< 0.01	--	**0.003**	--
			SPLIT	--	--	< 0.003	--	**0.005**	--	**0.21**	--	< 0.001	--	< 0.0001	--	--	--	**0.001**	--	< 0.01	--	< 0.001	--
MW-01-1	05/16/2008	Lab	N	--	--	--	**0.00010**	--	**0.0031**	--	**0.0863**	--	< 0.00002	--	< 0.00002	--	**354**	--	**0.0002**	--	**0.00070**	--	**0.0045**
MW-01-1	09/17/2008	Lab	N	--	--	--	**0.00009**	--	**0.0047**	--	**0.0900**	--	< 0.000025	--	**0.00002**	--	**318**	--	< 0.00056	--	< 0.000847	--	< 0.008233
MW-01-4	10/04/2001	Lab	N	--	--	< 0.003	< 0.003	< 0.003	< 0.003	**0.252**	**0.251**	< 0.001	< 0.001	< 0.0001	< 0.0001	**114**	**114**	**0.001**	**0.001**	< 0.01	< 0.01	**0.002**	**0.005**
			FD	--	--	< 0.003	< 0.003	< 0.003	< 0.003	**0.247**	**0.261**	< 0.001	< 0.001	< 0.0001	< 0.0001	**107**	**120**	< 0.001	< 0.001	< 0.01	< 0.01	**0.001**	**0.005**

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Aluminum Dissolved	Aluminum Total	Antimony Dissolved	Antimony Total	Arsenic Dissolved	Arsenic Total	Barium Dissolved	Barium Total	Beryllium Dissolved	Beryllium Total	Cadmium Dissolved	Cadmium Total	Calcium Dissolved	Calcium Total	Chromium Dissolved	Chromium Total	Cobalt Dissolved	Cobalt Total	Copper Dissolved	Copper Total
MW-01-4	01/16/2002	Lab	N	--	--	< 0.003	--	**0.003**	--	**0.260**	--	< 0.001	--	< 0.001	--	**112**	--	< 0.001	--	< 0.01	--	**0.001**	--
MW-01-4	05/16/2008	Lab	N	--	--	--	**0.00007**	--	**0.0029**	--	**0.116**	--	< 0.00002	--	< 0.00002	--	**146**	--	**0.0002**	--	**0.00037**	--	< 0.0019
MW-01-4	09/16/2008	Lab	N	--	--	--	**0.00009**	--	**0.0037**	--	**0.113**	--	< 0.000020	--	**0.00003**	--	**139**	--	< 0.00083	--	< 0.000369	--	< 0.001164
MW-01-5	10/04/2001	Lab	N	--	--	< 0.003	< 0.003	< 0.003	< 0.003	**0.247**	**0.260**	< 0.001	< 0.001	< 0.0001	< 0.0001	**111**	**108**	< 0.001	**0.001**	< 0.01	< 0.01	**0.003**	**0.007**
MW-01-5	01/16/2002	Lab	N	--	--	< 0.003	--	**0.003**	--	**0.250**	--	< 0.001	--	< 0.001	--	**106**	--	< 0.001	--	< 0.01	--	**0.001**	--
			FD SPLIT	--	--	< 0.003	--	< 0.003	--	**0.24**	--	< 0.001	--	< 0.0001	--	--	--	< 0.001	--	< 0.01	--	< 0.001	--
			SPLIT	--	--	< 0.003	--	< 0.003	--	**0.24**	--	< 0.001	--	< 0.0001	--	--	--	< 0.001	--	< 0.01	--	< 0.001	--
MW-01-5	05/17/2008	Lab	N	--	--	--	**0.00007**	--	**0.0030**	--	**0.113**	--	< 0.00002	--	< 0.00002	--	**137**	--	**0.0002**	--	**0.00033**	--	**0.0028**
MW-01-5	09/16/2008	Lab	N	--	--	--	**0.00009**	--	**0.0035**	--	**0.124**	--	< 0.000020	--	< 0.00002	--	**141**	--	< 0.00037	--	< 0.000414	--	< 0.003090
Wells near Clarfier (SWMU 2)																							
MW-01-2	10/09/2001	Lab	N	--	--	< 0.003	< 0.003	**0.019**	**0.019**	**0.026**	**0.030**	< 0.001	< 0.001	**0.0009**	**0.0014**	**134**	**152**	**0.001**	**0.002**	< 0.01	< 0.01	**0.004**	**0.005**
MW-01-2	01/16/2002	Lab	N	--	--	< 0.003	--	**0.023**	--	**0.032**	--	< 0.001	--	< 0.001	--	**148**	--	< 0.001	--	< 0.01	--	**0.003**	--
			SPLIT	--	--	< 0.003	--	**0.021**	--	**0.029**	--	< 0.001	--	**0.0007**	--	--	--	< 0.001	--	< 0.01	--	< 0.001	--
MW-01-2	09/04/2002	Lab	N	--	--	--	--	**0.015**	--	< 0.1	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-01-2	07/22/2003	Lab	N	**0.419 BQQ**	**0.64**	**0.00044 J**	< 0.0020	**0.0137 BQQ**	**0.0136**	**0.0204 BQQ**	**0.0256**	**0.00049 J**	**0.00062 J**	**0.0011 JBQQ**	**0.0010**	--	--	< 0.0020	**0.0014 J**	**0.0037 BQQ**	**0.0034**	**0.0026 JBQQ**	**0.0030 J**
			FD	**0.418 BQQ**	**0.715**	**0.00039 J**	< 0.0020	**0.0134 BQQ**	**0.0123**	**0.0202 BQQ**	**0.0259**	**0.00057 J**	**0.00047 J**	**0.00094 J**	**0.00081 J**	--	--	< 0.0020	**0.00062 J**	**0.0035 BQQ**	**0.0033**	**0.0026 JBQQ**	**0.0052 J**
MW-01-2	05/19/2008	Lab	N	--	--	--	**0.00036**	--	**0.0206**	--	**0.0145**	--	**0.00061**	--	**0.00101**	--	**104**	--	< 0.0002	--	**0.00261**	--	**0.0030 J**
MW-01-2	09/22/2008	Lab	N	--	--	--	**0.00026**	--	**0.0191**	--	**0.01892**	--	**0.00036**	--	**0.00138**	--	**103**	--	**0.0003**	--	**0.00217**	--	**0.0026**
MW-01-6	10/09/2001	Lab	N	--	--	< 0.003	< 0.003	**0.009**	**0.009**	**0.009**	**0.017**	< 0.001	< 0.001	< 0.0006	< 0.0006	**212**	**229**	< 0.001	**0.001**	**0.04**	**0.04**	**0.004**	**0.005**
MW-01-6	01/17/2002	Lab	N	--	--	< 0.003	--	**0.012**	--	**0.008**	--	< 0.001	--	< 0.001	--	**231**	--	< 0.001	--	**0.02**	--	< 0.001	--
			SPLIT	--	--	< 0.003	--	**0.011**	--	**0.007**	--	< 0.001	--	< 0.0001	--	--	--	< 0.001	--	**0.02**	--	< 0.001	--
MW-01-6	09/05/2002	Lab	N	--	--	--	--	**0.009**	--	< 0.1	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-01-6	05/19/2008	Lab	N	--	--	--	< 0.00005	--	**0.0112**	--	**0.00980**	--	**0.00006**	--	< 0.00002	--	**134**	--	< 0.0002	--	**0.0116**	--	**0.0086 J**
MW-01-6	09/18/2008	Lab	N	--	--	--	**0.00005**	--	**0.0115**	--	**0.0166**	--	**0.000176**	--	**0.00002**	--	**127**	--	< 0.00031	--	**0.0087**	--	**0.061445**
MW-01-3	10/09/2001	Lab	N	--	--	< 0.003	< 0.003	**0.030**	**0.037**	**0.073**	**0.100**	**0.002**	**0.003**	**0.0009**	**0.0010**	**185**	**192**	**0.005**	**0.008**	**0.08**	**0.10**	**0.002**	**0.010**
MW-01-3	01/22/2002	Lab	N	--	--	< 0.003	--	**0.016**	--	**0.064**	--	< 0.001	--	**0.0006**	--	**174**	--	< 0.001	--	**0.05**	--	**0.001**	--
			FD	--	--	< 0.003	--	**0.016**	--	**0.065**	--	< 0.001	--	**0.0005**	--	**173**	--	< 0.001	--	**0.05**	--	**0.001**	--
			SPLIT	--	--	< 0.003	--	**0.014**	--	**0.054**	--	< 0.001	--	**0.0006**	--	--	--	< 0.001	--	**0.04**	--	< 0.001	--
			FD SPLIT	--	--	< 0.003	--	**0.014**	--	**0.053**	--	< 0.001	--	**0.0005**	--	--	--	< 0.001	--	**0.04**	--	< 0.001	--
			FDD SPLIT	--	--	< 0.003	--	**0.014**	--	**0.055**	--	< 0.001	--	**0.0011**	--	--	--	< 0.001	--	**0.04**	--	< 0.001	--
MW-01-3	09/05/2002	Lab	N	--	--	--	--	**0.015**	--	< 0.1	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
			FD	--	--	--	--	**0.015**	--	< 0.1	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-01-3	05/19/2008	Lab	N	--	--	--	**0.00014**	--	**0.0166**	--	**0.0339**	--	**0.00006**	--	**0.00020**	--	**107**	--	**0.0002**	--	**0.0188**	--	**0.0034 J**
MW-01-3	09/19/2008	Lab	N	--	--	--	**0.00017**	--	**0.0177**	--	**0.0305**	--	**0.000099**	--	**0.00018**	--	**103**	--	< 0.00020	--	**0.0154**	--	**0.015536**
MW-02-2	09/05/2002	Lab	N	--	--	--	--	**0.031**	--	< 0.1	--	--	--	**0.005**	--	--	--	--	--	--	--	--	--
MW-02-2	05/19/2008	Lab	N	--	--	--	**0.00013**	--	**0.0453**	--	**0.0186**	--	**0.00039**	--	**0.00371**	--	**102**	--	**0.0003**	--	**0.00753**	--	**0.0016 J**
MW-02-2	09/22/2008	Lab	N	--	--	--	**0.00012**	--	**0.0515**	--	**0.02268**	--	**0.00034**	--	**0.00353**	--	**111**	--	**0.0003**	--	**0.00705**	--	**0.0021**
MW-02-1	01/17/2002	Lab	N	--	--	< 0.003	--	**0.008**	--	**0.082**	--	< 0.001	--	< 0.001	--	**265**	--	**0.003**	--	< 0.01	--	< 0.001	--
			SPLIT	--	--	< 0.003	--	**0.008**	--	**0.075**	--	< 0.001	--	< 0.0001	--	--	--	**0.002**	--	< 0.01	--	< 0.001	--
MW-02-1	09/04/2002	Lab	N	--	--	--	--	**0.007**	--	< 0.1	--	--	--	< 0.001	--	--	--	--	--	--	--	--	--
MW-02-1	07/22/2003	Lab	N	< 0.0300	**0.0162 J**	**0.00016 J**	< 0.0020	**0.0025 BQQ**	**0.0039**	**0.0403 BQQ**	**0.0425**	< 0.0010	< 0.0010	< 0.0010	**0.00012 J**	--	--	< 0.0020	**0.00063 J**	**0.0076 BQQ**	**0.0066**	**0.0046 JBQQ**	**0.0059 J**
MW-02-1	05/29/2008	Lab	N	--	--	--	< 0.00005	--	**0.0044**	--	**0.0293**	--	**0.00004**	--	**0.00003**	--	**324**	--	< 0.0002	--	**0.00185**	--	< 0.0030
			FD	--	--	--	**0.00005**	--	**0.0047**	--	**0.0286**	--	**0.00005**	--	< 0.00002	--	**325**	--	< 0.0002	--	**0.00194**	--	< 0.0026
MW-02-1	09/26/2008	Lab	N	--	--	--	< 0.00025	--	**0.0055**	--	**0.0339**	--	< 0.00010	--	< 0.00010	--	**376**	--	< 0.0010	--	**0.0025**	--	**0.0087**
Production Wells																							
RP-W-1	07/23/1982	Lab	N	--	--	--	--	--	**0.003**	--	**0.07**	--	--	--	ND	--	--	--	ND	--	--	--	--
RP-W-1	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.007**	< 0.1	--	< 0.001	--	< 0.001	--	--	**206**	< 0.01	--	< 0.01	--	**0.01**	--
RP-W-1	05/22/2008	Lab	N	--	--	--	**0.00007**	--	**0.0068**	--	**0.0273**	--	< 0.00002	--	**0.00006**	--	**110**	--	< 0.0002	--	**0.00120**	--	**0.0017**
RP-W-1	09/25/2008	Lab	N	--	--	--	< 0.00025	--	**0.0077**	--	**0.0262**	--	< 0.00010	--	**0.00010**	--	**100**	--	< 0.0010	--	**0.0012**	--	**0.0021**
RP-W-4	06/04/1982	Lab	N	--	--	--	--	--	**0.024**	--	--	--	--	--	ND	--	--	--	--	--	--	--	--
RP-W-4	08/05/1982	Lab	N	--	--	--	--	--	**0.019**	--	ND	--	--	--	ND	--	--	--	ND	--	--	--	--
RP-W-4	05/26/1983	Lab	N	--	--	--	--	--	**0.023**	--	ND	--	--	--	**0.023**	--	--	--	ND	--	--	--	--
RP-W-4	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.022**	< 0.1	--	< 0.001	--	**0.004**	--	--	**376**	< 0.01	--	< 0.01	--	**0.02**	--
RP-W-4	05/28/2008	Lab	N	--	--	--	< 0.00025	--	**0.0306**	--	**0.0253**	--	**0.00002**	--	**0.00161**	--	**283**	--	< 0.0006	--	**0.00483**	--	< 0.0049
RP-W-4	09/24/2008	Lab	N	--	--	--	< 0.00025	--	**0.0336**	--	**0.0243**	--	< 0.00010	--	**0.0016**	--	**264**	--	< 0.0010	--	**0.0044**	--	**0.0054**
			FD	--	--	--	< 0.00025	--	**0.0328**	--	**0.0250**	--	< 0.00010	--	**0.0016**	--	**253**	--	< 0.0010	--	**0.0044**	--	**0.0057**
RP-W-5	07/23/1982	Lab	N	--	--	--	--	--	**0.003**	--	**0.1**	--	--	--	ND	--	--	--	ND	--	--	--	--
RP-W-5	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.005**	< 0.1	--	< 0.001	--	< 0.001	--	--	**212**	< 0.01	--	< 0.01	--	< 0.01	--
			FD	< 0.1	--	< 0.003	--	--	**0.005**	< 0.1	--	< 0.001	--	< 0.001	--	--	**214**	< 0.01	--	< 0.01	--	< 0.01	--
RP-W-5	05/30/2008	Lab	N	--	--	--	**0.00007**	--	**0.0068**	--	**0.0335**	--	< 0.00002	--	**0.00002**	--	**245**	--	**0.0002**	--	**0.00296**	--	< 0.0014

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

		Chemical Name		Aluminum	Aluminum	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium	Calcium	Calcium	Chromium	Chromium	Cobalt	Cobalt	Copper	Copper
		Total or Dissolved		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Location ID	Sample Date	Analysis Location	Sample Type																				
RP-W-5	09/24/2008	Lab	N	--	--	--	< 0.00025	--	**0.0066**	--	**0.0333**	--	< 0.00010	--	**0.00011**	--	**229**	--	< 0.0010	--	**0.0029**	--	**0.0018**
RP-W-6	06/04/1982	Lab	N	--	--	--	--	--	**0.044**	--	ND	--	--	--	**0.005**	--	--	--	ND	--	--	--	--
RP-W-6	10/05/1982	Lab	N	--	--	--	--	--	**0.036**	--	ND	--	--	--	**0.003**	--	--	--	ND	--	--	--	--
RP-W-6	05/26/1983	Lab	N	--	--	--	--	--	**0.043**	--	**0.051**	--	--	--	**0.024**	--	--	--	**0.003**	--	--	--	--
RP-W-6	04/01/1986	Lab	N	--	--	--	--	--	**0.045**	--	**0.05**	--	--	--	**0.002**	--	--	--	**0.012**	--	--	--	--
RP-W-6	03/17/1987	Lab	N	--	--	--	--	--	**0.08**	--	**0.052**	--	--	--	**0.002**	--	--	--	ND	--	--	--	--
RP-W-6	08/05/1988	Lab	N	< 0.0280	--	< 0.0290	--	**0.0500**	--	**0.0431**	--	< 0.0010	--	< 0.0050	--	**419**	--	< 0.0050	--	--	--	**0.0094**	--
RP-W-6	08/06/1988	Lab	N	--	< 0.028	--	< 0.029	--	**0.050**	--	< 0.0431 B	--	< 0.001	--	< 0.005	--	**419**	--	< 0.005	--	< 0.0086 B	--	< 0.0094 B
RP-W-6	06/23/1992	Lab	N	--	--	--	--	--	**0.0014**	--	ND	--	--	--	**0.002**	--	--	--	ND	--	--	--	--
RP-W-6	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.033**	< 0.1	--	< 0.001	--	< 0.001	--	--	**443**	< 0.01	--	< 0.01	--	< 0.01	--
RP-W-6	05/30/2008	Lab	N	--	--	--	**0.00070**	--	**0.0310**	--	**0.0315**	--	< 0.00002	--	**0.00146**	--	**373**	--	**0.0005**	--	**0.00696**	--	< 0.0023
RP-W-6	09/24/2008	Lab	N	--	--	--	**0.00058**	--	**0.0303**	--	**0.0299**	--	< 0.00010	--	**0.0010**	--	**358**	--	< 0.0010	--	**0.0057**	--	**0.0034**
RP-W-7	07/23/1982	Lab	N	--	--	--	--	--	**0.006**	--	**0.09**	--	--	--	**0.002**	--	--	--	ND	--	--	--	--
RP-W-7	10/01/1982	Lab	N	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	**0.002**	--	--	--	--
RP-W-7	10/07/1998	Lab	N	< 0.1	--	< 0.003	--	--	**0.007**	< 0.1	--	< 0.001	--	< 0.001	--	--	**169**	< 0.01	--	< 0.01	--	< 0.01	--
RP-W-7	05/22/2008	Lab	N	--	--	--	**0.00007**	--	**0.0036**	--	**0.0934**	--	< 0.00002	--	< 0.00002	--	**36.4**	--	< 0.0002	--	**0.00015**	--	**0.0048**
RP-W-7	09/25/2008	Lab	N	--	--	--	< 0.00025	--	**0.0039**	--	**0.0885**	--	< 0.00010	--	< 0.00010	--	**38.8**	--	< 0.0010	--	< 0.00010	--	**0.0013**

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Chemical Name Total or Dissolved	Iron Dissolved	Iron Total	Lead Dissolved	Lead Total	Magnesium Dissolved	Magnesium Total	Manganese Dissolved	Manganese Total	Mercury Dissolved	Mercury Total	Nickel Dissolved	Nickel Total	Potassium Dissolved	Potassium Total	Selenium Dissolved	Selenium Total	Silver Dissolved	Silver Total	Sodium Dissolved	Sodium Total	Thallium Dissolved
Upgradient Wells																									
MW-06-23	05/13/2008	Lab	N		--	**0.571**	--	< 0.00021	--	**5.2**	--	**0.0631**	--	< 0.0002	--	**0.0021**	--	**7.54**	--	< 0.0010	--	< 0.00002	--	**17.4**	--
MW-06-23	09/16/2008	Lab	N		--	**0.09**	--	**0.000105**	--	**5.01**	--	**0.0086**	--	< 0.00020	--	**0.0004**	--	**7.4**	--	< 0.0010	--	< 0.000020	--	**17.9**	--
MW-06-24	05/13/2008	Lab	N		--	< 0.02	--	< 0.00002	--	**6.4**	--	**0.0256**	--	< 0.0002	--	**0.0004**	--	**6.86**	--	< 0.0010	--	< 0.00002	--	**17.3**	--
MW-06-24	09/16/2008	Lab	N		--	< 0.02	--	**0.000060**	--	**6.17**	--	**0.0578**	--	< 0.00020	--	**0.0006**	--	**7.0**	--	< 0.0010	--	< 0.000020	--	**18.0**	--
MW-GW-1	06/30/1998	Lab	N		**2.23**	--	< 0.01	--	--	--	--	--	--	--	< 0.01	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-1	09/30/1998	Lab	N		< 0.03	--	**0.01**	--	--	--	--	--	--	--	< 0.01	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-1	12/31/1998	Lab	N		**0.16**	--	< 0.01	--	--	--	--	--	--	--	< 0.01	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-1	03/31/1999	Lab	N		**0.086**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/1999	Lab	N		**0.429**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-1	09/30/1999	Lab	N		**0.024**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-1	12/31/1999	Lab	N		**0.027**	--	**0.002**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2000	Lab	N		**0.074**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2000	Lab	N		**0.119**	--	**0.005**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-1	09/30/2000	Lab	N		**0.053**	--	**0.002**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2000	Lab	N		**1.19**	--	**0.002**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2001	Lab	N		**0.04**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2001	Lab	N		**0.05**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-1	09/30/2001	Lab	N		**0.033**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2001	Lab	N		**0.063**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2002	Lab	N		**0.08**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2002	Lab	N		**0.054**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.013**	--	--	--	--	--	--
MW-GW-1	09/30/2002	Lab	N		**0.017**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-1	12/31/2002	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2003	Lab	N		< 0.01	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2003	Lab	N		**0.087**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	09/30/2003	Lab	N		**0.006**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2003	Lab	N		**0.006**	--	**0.002**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2004	Lab	N		< 0.0005	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2004	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	09/30/2004	Lab	N		**0.006**	--	< 0.001	--	--	--	--	--	--	--	**0.004**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	11/30/2004	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.001**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2004	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.001**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2005	Lab	N		**0.006**	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2005	Lab	N		**0.008**	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	07/31/2005	Lab	N		**0.006**	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2005	Lab	N		< 0.0001	--	< 0.0001	--	--	--	--	--	--	--	**0.001**	--	--	--	< 0.0001	--	--	--	--	--	--
MW-GW-1	06/30/2006	Lab	N		**0.012**	--	< 0.001	--	--	--	--	--	--	--	**0.001**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	09/30/2006	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-1	12/31/2006	Lab	N		**0.007**	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2007	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2007	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.001**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	09/30/2007	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2007	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2008	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	05/20/2008	Lab	N		--	**0.023**	--	**0.00062**	--	**11.6 R**	--	**0.00087**	--	< 0.0002	--	**0.0004**	--	**7.15**	--	< 0.0010	--	< 0.00002	--	**14.2**	--
MW-GW-1	06/30/2008	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	09/17/2008	Lab	N		--	< 0.02	--	**0.000238**	--	**11.9**	--	< 0.000113	--	< 0.00020	--	**0.0005**	--	**7.4**	--	< 0.0010	--	< 0.000020	--	**14.8**	--
MW-GW-1	09/30/2008	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2008	Lab	N		**0.006**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2009	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2009	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	09/30/2009	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	12/31/2009	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	03/31/2010	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	06/30/2010	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-1	09/30/2010	Lab	N		< 0.007	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/1998	Lab	N		**1.09**	--	**0.01**	--	--	--	--	--	--	--	< 0.01	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-2	09/30/1998	Lab	N		**0.38**	--	**0.03**	--	--	--	--	--	--	--	**0.01**	--	--	--	**0.005**	--	--	--	--	--	--
MW-GW-2	12/31/1998	Lab	N		**0.16**	--	< 0.01	--	--	--	--	--	--	--	< 0.01	--	--	--	< 0.005	--	--	--	--	--	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Chemical Name Total or Dissolved	Iron Dissolved	Iron Total	Lead Dissolved	Lead Total	Magnesium Dissolved	Magnesium Total	Manganese Dissolved	Manganese Total	Mercury Dissolved	Mercury Total	Nickel Dissolved	Nickel Total	Potassium Dissolved	Potassium Total	Selenium Dissolved	Selenium Total	Silver Dissolved	Silver Total	Sodium Dissolved	Sodium Total	Thallium Dissolved
MW-GW-2	03/31/1999	Lab	N		**0.229**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/1999	Lab	N		**0.238**	--	**0.011**	--	--	--	--	--	--	--	**0.008**	--	--	--	**0.002**	--	--	--	--	--	--
MW-GW-2	09/30/1999	Lab	N		**0.17**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.002**	--	--	--	--	--	--
MW-GW-2	12/31/1999	Lab	N		**0.359**	--	**0.018**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	03/31/2000	Lab	N		**0.241**	--	**0.004**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/2000	Lab	N		**0.619**	--	**0.013**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-2	09/30/2000	Lab	N		**0.078**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.002**	--	--	--	--	--	--
MW-GW-2	12/31/2000	Lab	N		**0.333**	--	**0.005**	--	--	--	--	--	--	--	**0.01**	--	--	--	**0.003**	--	--	--	--	--	--
MW-GW-2	03/31/2001	Lab	N		**0.012**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-2	06/30/2001	Lab	N		**0.266**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.002**	--	--	--	--	--	--
MW-GW-2	09/30/2001	Lab	N		**0.105**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	12/31/2001	Lab	N		**0.281**	--	**0.003**	--	--	--	--	--	--	--	**0.007**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	03/31/2002	Lab	N		**0.13**	--	**0.016**	--	--	--	--	--	--	--	**0.008**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/2002	Lab	N		**0.47**	--	**0.006**	--	--	--	--	--	--	--	**0.015**	--	--	--	**0.003**	--	--	--	--	--	--
MW-GW-2	09/30/2002	Lab	N		**0.012**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-2	12/31/2002	Lab	N		< 0.01	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	03/31/2003	Lab	N		**0.01**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-2	06/30/2003	Lab	N		**0.134**	--	< 0.002	--	--	--	--	--	--	--	**0.011**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	09/30/2003	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	12/31/2003	Lab	N		**0.02**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	03/31/2004	Lab	N		**0.09**	--	< 0.001	--	--	--	--	--	--	--	**0.016**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/2004	Lab	N		**0.076**	--	< 0.001	--	--	--	--	--	--	--	**0.008**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	09/30/2004	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.006**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	11/30/2004	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.013**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	12/31/2004	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.013**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	03/31/2005	Lab	N		**0.009**	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/2005	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	07/31/2005	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/2006	Lab	N		**0.021**	--	< 0.001	--	--	--	--	--	--	--	**0.005**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	09/30/2006	Lab	N		**0.008**	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-2	03/31/2007	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-2	06/30/2007	Lab	N		< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.003**	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-2	06/30/2008	Lab	N		< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-06-4	05/15/2008	Lab	N		--	**0.842**	--	**0.00041**	--	**3.88**	--	**0.00776**	--	< 0.0002	--	**0.0004**	--	**6.85**	--	< 0.0010	--	< 0.00002	--	**48.7**	--
MW-06-4	09/18/2008	Lab	N		--	**0.19**	--	**0.000157**	--	**3.70**	--	**0.0036**	--	< 0.00020	--	**0.0004**	--	**7.1**	--	**0.0011**	--	< 0.000020	--	**53.3**	--
MW-97-1	11/04/1997	Lab	N		**0.04**	--	< 0.01	--	--	**7**	**0.01**	--	< 0.001	--	< 0.01	--	--	**6**	< 0.005	--	< 0.005	--	--	**25**	< 0.1
MW-97-1	10/08/1998	Lab	N		< 0.03	--	< 0.01	--	--	**8**	< 0.01	--	< 0.001	--	< 0.01	--	--	**7**	< 0.005	--	< 0.005	--	--	**25**	< 0.1
MW-97-1	05/13/2008	Lab	N		--	**0.02**	--	**0.00095**	--	**29.4**	--	**0.00926**	--	< 0.0002	--	**0.0017**	--	**14.4**	--	< 0.0010	--	< 0.00002	--	**56.9**	--
MW-97-1	09/17/2008	Lab	N		--	< 0.020	--	< 0.000880	--	**30.7**	--	**0.0188**	--	< 0.00020	--	**0.0039**	--	**15.5**	--	< 0.0010	--	< 0.000020	--	**64.6**	--
MW-97-2	11/04/1997	Lab	N		< 0.03	--	< 0.01	--	--	**6**	**0.02**	--	< 0.001	--	< 0.01	--	--	**7**	< 0.005	--	< 0.005	--	--	**30**	< 0.1
MW-97-2	10/08/1998	Lab	N		< 0.03	--	< 0.01	--	--	**7**	< 0.01	--	< 0.001	--	< 0.01	--	--	**7**	< 0.005	--	< 0.005	--	--	**29**	< 0.1
MW-97-2	05/13/2008	Lab	N		--	< 0.02	--	**0.00054**	--	**29.9**	--	**0.00386**	--	< 0.0002	--	**0.0014**	--	**14.3**	--	< 0.0010	--	< 0.00002	--	**59.3**	--
MW-97-2	09/17/2008	Lab	N		--	< 0.03	--	< 0.000887	--	**30.6**	--	**0.0043**	--	< 0.00020	--	**0.0024**	--	**14.8**	--	< 0.0010	--	< 0.000020	--	**61.2**	--
MW-06-5	05/14/2008	Lab	N		--	< 0.02	--	< 0.00026	--	**24.5**	--	**0.0135**	--	< 0.0002	--	**0.0017**	--	**13.7**	--	< 0.0010	--	< 0.00002	--	**134**	--
MW-06-5	09/19/2008	Lab	N		--	**0.23**	--	**0.000296**	--	**28.9**	--	**0.0140**	--	< 0.00020	--	**0.0018**	--	**16.1**	--	< 0.0010	--	< 0.000020	--	**149**	--
			FD		--	**0.26**	--	**0.000275**	--	**29.8**	--	**0.0150**	--	< 0.00020	--	**0.0021**	--	**16.7**	--	< 0.0010	--	< 0.000020	--	**151**	--
MW-06-6	05/14/2008	Lab	N		--	**0.041**	--	< 0.00012	--	**4.84**	--	**0.0581**	--	< 0.0002	--	**0.0007**	--	**6.73**	--	< 0.0010	--	< 0.00002	--	**36.9**	--
MW-06-6	05/28/2008	Lab	N		--	**0.08**	--	< 0.00020	--	**4.83**	--	**0.0336**	--	< 0.0002	--	**0.0007**	--	**6.76**	--	< 0.0010	--	< 0.00002	--	**38.8**	--
MW-06-6	09/18/2008	Lab	N		--	**0.03**	--	**0.000164**	--	**4.66**	--	**0.0430**	--	< 0.00020	--	**0.0005**	--	**7.0**	--	< 0.0010	--	< 0.000020	--	**39.5**	--
MW-EPA-1	08/09/1988	Lab	N		--	< 0.036 B	--	< 0.0041 BC	--	< 3.81 B	--	< 0.005	--	< 0.0002	--	< 0.009	--	**5.57**	--	< 0.020	--	< 0.004	--	**35.3**	--
MW-EPA-1	10/08/1998	Lab	N		< 0.03	--	< 0.01	--	--	**4**	< 0.01	--	< 0.001	--	< 0.01	--	--	**5**	< 0.005	--	< 0.005	--	--	**34**	< 0.1
MW-EPA-1	05/14/2008	Lab	N		--	**0.038**	--	< 0.00005	--	**6.4**	--	**0.00046**	--	< 0.0002	--	**0.0005**	--	**6.93**	--	< 0.0010	--	< 0.00002	--	**50**	--
MW-EPA-1	09/17/2008	Lab	N		--	< 0.54 R	--	< 0.001280 R	--	**6.48**	--	**0.0054**	--	< 0.00020	--	**0.0011**	--	**7.3**	--	**0.0013**	--	< 0.000216	--	**51.9**	--
MW-EPA-1	12/11/2008	Lab	N		--	**0.183**	--	**0.00014**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-GW-3	06/30/1998	Lab	N		**0.56**	--	**0.01**	--	--	--	--	--	--	--	< 0.01	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-3	09/30/1998	Lab	N		**0.13**	--	**0.06**	--	--	--	--	--	--	--	**0.01**	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-3	12/31/1998	Lab	N		**0.16**	--	< 0.01	--	--	--	--	--	--	--	< 0.01	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-3	03/31/1999	Lab	N		**0.058**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/1999	Lab	N		**0.038**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.002**	--	--	--	--	--	--
MW-GW-3	09/30/1999	Lab	N		**0.033**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.002**	--	--	--	--	--	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Iron Dissolved	Iron Total	Lead Dissolved	Lead Total	Magnesium Dissolved	Magnesium Total	Manganese Dissolved	Manganese Total	Mercury Dissolved	Mercury Total	Nickel Dissolved	Nickel Total	Potassium Dissolved	Potassium Total	Selenium Dissolved	Selenium Total	Silver Dissolved	Silver Total	Sodium Dissolved	Sodium Total	Thallium Dissolved
Location ID	Sample Date	Analysis Location	Sample Type																					
MW-GW-3	12/31/1999	Lab	N	**0.025**	--	**0.002**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2000	Lab	N	**0.055**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2000	Lab	N	**0.046**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-3	09/30/2000	Lab	N	**0.046**	--	**0.003**	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.003**	--	--	--	--	--	--
MW-GW-3	12/31/2000	Lab	N	**0.274**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2001	Lab	N	**0.04**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.001**	--	--	--	--	--	--
MW-GW-3	06/30/2001	Lab	N	**0.034**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.002**	--	--	--	--	--	--
MW-GW-3	09/30/2001	Lab	N	**0.105**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	12/31/2001	Lab	N	**0.061**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2002	Lab	N	**0.18**	--	**0.004**	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2002	Lab	N	**0.04**	--	< 0.002	--	--	--	--	--	--	--	**0.005**	--	--	--	**0.012**	--	--	--	--	--	--
MW-GW-3	09/30/2002	Lab	N	< 0.005	--	< 0.02	--	--	--	--	--	--	--	< 0.005	--	--	--	**0.003**	--	--	--	--	--	--
MW-GW-3	12/31/2002	Lab	N	< 0.01	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2003	Lab	N	< 0.01	--	< 0.002	--	--	--	--	--	--	--	**0.006**	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-3	06/30/2003	Lab	N	**0.055**	--	< 0.002	--	--	--	--	--	--	--	**0.007**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	09/30/2003	Lab	N	**0.005**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	12/31/2003	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2004	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.005**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2004	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	09/30/2004	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.007**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	11/30/2004	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.005**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	12/31/2004	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.005**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2005	Lab	N	**0.01**	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2005	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	07/31/2005	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	12/31/2005	Lab	N	**0.02**	--	< 0.0001	--	--	--	--	--	--	--	**0.004**	--	--	--	< 0.0001	--	--	--	--	--	--
MW-GW-3	03/31/2006	Lab	N	**0.013**	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2006	Lab	N	**0.007**	--	< 0.001	--	--	--	--	--	--	--	**0.004**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	09/30/2006	Lab	N	**0.009**	--	< 0.001	--	--	--	--	--	--	--	**0.002**	--	--	--	< 0.005	--	--	--	--	--	--
MW-GW-3	12/31/2006	Lab	N	**0.007**	--	< 0.001	--	--	--	--	--	--	--	**0.001**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2007	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	< 0.001	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2007	Lab	N	< 0.005	--	< 0.001	--	--	--	--	--	--	--	**0.003**	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	09/30/2007	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	12/31/2007	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2008	Lab	N	< 0.01	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	05/20/2008	Lab	N	--	< 0.02	--	**0.00010**	--	**19.8 R**	--	**0.00021**	--	< 0.0002	--	**0.0012**	--	**11.5**	--	< 0.0010	--	< 0.00002	--	**114**	--
MW-GW-3	06/30/2008	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	09/17/2008	Lab	N	--	< 0.02	--	**0.000080**	--	**20.8**	--	< 0.000050	--	< 0.00020	--	**0.0028**	--	**12.5**	--	< 0.0010	--	< 0.000020	--	**109**	--
MW-GW-3	09/30/2008	Lab	N	< 0.01	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	12/31/2008	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2009	Lab	N	< 0.01	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2009	Lab	N	< 0.006	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	09/30/2009	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	12/31/2009	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	03/31/2010	Lab	N	< 0.005	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	06/30/2010	Lab	N	**0.006**	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-GW-3	09/30/2010	Lab	N	< 0.01	--	< 0.002	--	--	--	--	--	--	--	< 0.005	--	--	--	< 0.001	--	--	--	--	--	--
MW-97-5	11/04/1997	Lab	N	**0.05**	--	< 0.01	--	--	**7**	**0.03**	--	< 0.001	--	< 0.01	--	--	**7**	< 0.005	--	< 0.005	--	--	**25**	< 0.1
MW-97-5	10/08/1998	Lab	N	< 0.03	--	< 0.01	--	--	**6**	< 0.01	--	< 0.001	--	< 0.01	--	--	**7**	< 0.005	--	< 0.005	--	--	**21**	< 0.1
			FD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-5	05/15/2008	Lab	N	--	**0.851**	--	< 0.00038	--	**6.65**	--	**0.0144**	--	< 0.0002	--	**0.0014**	--	**7.69**	--	< 0.0010	--	< 0.00002	--	**22.2**	--
MW-97-5	09/17/2008	Lab	N	--	**0.55**	--	**0.000285**	--	**6.28**	--	**0.0090**	--	< 0.00020	--	**0.0012**	--	**7.8**	--	< 0.0010	--	< 0.000020	--	**22.9**	--
MW-97-6	11/04/1997	Lab	N	< 0.03	--	< 0.01	--	--	**28**	**0.05**	--	< 0.001	--	< 0.01	--	--	**13**	< 0.005	--	< 0.005	--	--	**30**	< 0.1
MW-97-6	10/08/1998	Lab	N	< 0.03	--	< 0.01	--	--	**18**	< 0.01	--	< 0.001	--	< 0.01	--	--	**11**	< 0.005	--	< 0.005	--	--	**27**	< 0.1
MW-97-6	07/23/2003	Lab	N	--	--	< 0.0010	< 0.0010	--	--	**0.00041 J**	**0.0036**	< 0.00020	< 0.00020	**0.0130 BQQ**	**0.0155 E**	--	--	**0.00084 J**	< 0.0050	**0.000050 J**	< 0.0010	--	--	< 0.0010
MW-97-6	05/17/2008	Lab	N	--	**0.043**	--	**0.00015**	--	**23.1**	--	**0.00085**	--	< 0.0002	--	**0.0009**	--	**13.1**	--	**0.0023**	--	< 0.00003	--	**31.1**	--
MW-97-6	09/16/2008	Lab	N	--	< 0.61 R	--	< 0.000706	--	**23.0**	--	< 0.0083	--	< 0.00020	--	**0.0015**	--	**12.9**	--	**0.0052**	--	< 0.000020	--	**30.9**	--
MW-97-6	12/11/2008	Lab	N	--	**0.130**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-MT96-2	03/25/1999	Lab	N	--	--	--	--	--	--	< 0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-MT96-2	05/29/2008	Lab	N	--	< 0.02	--	< 0.00003	--	**1.58**	--	< 0.00037	--	< 0.0002	--	< 0.0002	--	**3.67**	--	< 0.0010	--	< 0.00002	--	**82.7**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Chemical Name Total or Dissolved	Iron Dissolved	Iron Total	Lead Dissolved	Lead Total	Magnesium Dissolved	Magnesium Total	Manganese Dissolved	Manganese Total	Mercury Dissolved	Mercury Total	Nickel Dissolved	Nickel Total	Potassium Dissolved	Potassium Total	Selenium Dissolved	Selenium Total	Silver Dissolved	Silver Total	Sodium Dissolved	Sodium Total	Thallium Dissolved
MW-MT96-2	09/19/2008	Lab	N		--	< 0.02	--	**0.000091**	--	**1.57**	--	**0.0019**	--	< 0.00020	--	< 0.0002	--	**3.8**	--	< 0.0010	--	< 0.000020	--	**82.5**	--
MW-BSB-4	03/25/1999	Lab	N		--	--	--	--	--	--	< 0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-BSB-4	05/29/2008	Lab	N		--	**7.04**	--	< 0.00008	--	**1.29**	--	**0.0492**	--	< 0.0002	--	**0.0003**	--	**3.24**	--	< 0.0010	--	< 0.00002	--	**89.3**	--
MW-BSB-4	09/19/2008	Lab	N		--	**2.06**	--	**0.000062**	--	**1.25**	--	**0.0226**	--	< 0.00020	--	< 0.0002	--	**3.4**	--	< 0.0010	--	< 0.000020	--	**92.0**	--
Wells Far Downgradient of Tailing Basin (SWMU 1																									
MW-06-3	05/14/2008	Lab	N		--	**0.623**	--	< 0.00027	--	**20.3**	--	**0.0110**	--	< 0.0002	--	**0.0061**	--	**15.1**	--	**0.0022**	--	< 0.00002	--	**62**	--
MW-06-3	09/19/2008	Lab	N		--	**0.02**	--	**0.000065**	--	**19.4**	--	**0.0013**	--	< 0.00020	--	**0.0027**	--	**16.1**	--	**0.0043**	--	< 0.000020	--	**64.0**	--
MW-06-3	07/16/2010	Lab	N		--	**0.099**	--	**0.00010**	--	**22.5**	--	**0.00267**	--	< 0.0002	--	**0.0014**	--	**14.2**	--	**0.0014**	--	< 0.00002	--	**59**	--
MW-02-3	10/09/2002	Lab	N		--	--	< 0.01	--	--	--	< 0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-3	10/22/2004	Lab	N		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-3	01/10/2005	Lab	N		--	--	--	--	**46**	**44**	< 0.005	< 0.005	--	--	--	--	**16**	**14**	--	--	--	--	**86**	**79**	--
MW-02-3	04/12/2005	Lab	N		--	--	--	--	**47**	**46**	< 0.005	< 0.005	--	--	--	--	**15**	**18**	--	--	--	--	**86**	**87**	--
			FD		--	--	--	--	**47**	**45**	< 0.005	< 0.005	--	--	--	--	**15**	**17**	--	--	--	--	**87**	**80**	--
MW-02-3	10/31/2005	Lab	N		--	--	--	--	**44**	**47**	< 0.005	**0.007**	--	--	--	--	**15**	**15**	--	--	--	--	**82**	**87**	--
MW-02-3	10/31/2005	Field	N		**0.154**	**0.146**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			FD		**0.168**	**0.179**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-3	04/20/2006	Lab	N		--	--	--	--	**43**	**48**	< 0.005	< 0.005	--	--	--	--	**15**	**16**	--	--	--	--	**82**	**79**	--
			FD		--	--	--	--	**44**	**49**	< 0.005	< 0.005	--	--	--	--	**16**	**16**	--	--	--	--	**84**	**78**	--
MW-02-3	10/24/2006	Lab	N		--	--	--	--	**44**	**40**	< 0.005	< 0.005	--	--	--	--	**16**	**15**	--	--	--	--	**81**	**80**	--
			FD		--	--	--	--	**44**	**42**	< 0.005	< 0.005	--	--	--	--	**16**	**15**	--	--	--	--	**85**	**82**	--
MW-02-3	04/24/2007	Lab	N		--	--	--	--	**45.7**	**44.7**	< 0.0050	< 0.0050	--	--	--	--	**14.4**	**14.1**	--	--	--	--	**89.5**	**87.6**	--
			FD		--	--	--	--	**46.1**	**45.3**	< 0.0050	< 0.0050	--	--	--	--	**14.7**	**14.4**	--	--	--	--	**91**	**88.6**	--
MW-02-3	11/06/2007	Lab	N		--	--	--	--	**49.1**	**47.1**	< 0.0050	< 0.0050	--	--	--	--	**15.3**	**15.4**	--	--	--	--	**88.8**	**85**	--
			FD		--	--	--	--	**49.4**	**48.2**	< 0.0050	< 0.0050	--	--	--	--	**16.2**	**15.6**	--	--	--	--	**88.9**	**87**	--
MW-02-3	05/15/2008	Lab	N		--	**0.5**	--	< 0.00029	--	**43**	--	**0.00445**	--	< 0.0002	--	**0.0049**	--	**14.7**	--	**0.0086**	--	< 0.00002	--	**81.2**	--
MW-02-3	09/23/2008	Lab	N		--	**0.03**	--	**0.00004**	--	**42.7**	--	**0.00071**	--	< 0.0002	--	**0.009**	--	**14.9**	--	**0.013**	--	< 0.00002	--	**83.5**	--
MW-02-3	07/17/2010	Lab	N		--	**0.104**	--	**0.00020**	--	**42**	--	**0.00183**	--	< 0.0002	--	**0.0043**	--	**14.2**	--	**0.0094**	--	< 0.00002	--	**76.5**	--
			FD		--	**0.089**	--	**0.00020**	--	**42.7**	--	**0.00174**	--	< 0.0002	--	**0.0047**	--	**14.4**	--	**0.0093**	--	< 0.00002	--	**79.2**	--
MW-12-3	11/07/2012	Lab	N		--	**0.02**	--	**0.000054**	--	**6.12**	--	**0.182**	--	< 0.00020	--	**0.00096**	--	**8.7**	--	< 0.0010	--	< 0.000020	--	**58**	--
MW-12-7	11/06/2012	Lab	N		--	< 0.02	--	**0.000021**	--	**13.6**	--	**0.142**	--	< 0.00020	--	**0.00084**	--	**9.5**	--	< 0.0010	--	< 0.000020	--	**20**	--
MW-12-8	11/06/2012	Lab	N		--	**0.06**	--	**0.000034**	--	**14.6**	--	**0.0528**	--	< 0.00020	--	**0.00091**	--	**9.5**	--	< 0.0010	--	< 0.000020	--	**20**	--
MW-12-4	11/07/2012	Lab	N		--	< 0.02	--	**0.000025**	--	**10.1**	--	**0.0337**	--	< 0.00020	--	**0.00046**	--	**8.4**	--	**0.0013**	--	< 0.000020	--	**38**	--
MW-12-5	11/07/2012	Lab	N		--	**0.07**	--	**0.000037**	--	**8.36**	--	**0.175**	--	< 0.00020	--	**0.0011**	--	**8.4**	--	< 0.0010	--	< 0.000020	--	**35**	--
			FD		--	**0.03**	--	< 0.000020	--	**8.55**	--	**0.176**	--	< 0.00020	--	**0.0012**	--	**8.5**	--	**0.0010**	--	< 0.000020	--	**36**	--
MW-12-6	11/07/2012	Lab	N		--	**0.05**	--	**0.000027**	--	**5.06**	--	**0.184**	--	< 0.00020	--	**0.0010**	--	**7.9**	--	< 0.0010	--	< 0.000020	--	**37**	--
MW-12-2	11/08/2012	Lab	N		--	**0.05**	--	**0.000129**	--	**46.6**	--	**0.0084 J**	--	< 0.00020	--	**0.0043**	--	**19.1**	--	**0.0018**	--	< 0.000020	--	**120**	--
MW-02-4	10/09/2002	Lab	N		--	--	< 0.01	--	--	--	**0.40**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			FD		--	--	< 0.01	--	--	--	**0.42**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-4	10/22/2004	Lab	N		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			FD		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-4	01/10/2005	Lab	N		--	--	--	--	**55**	**55**	< 0.005	< 0.005	--	--	--	--	**17**	**16**	--	--	--	--	**81**	**84**	--
			FD		--	--	--	--	**53**	**54**	< 0.005	< 0.005	--	--	--	--	**18**	**15**	--	--	--	--	**83**	**81**	--
MW-02-4	04/12/2005	Lab	N		--	--	--	--	**58**	**55**	< 0.005	< 0.005	--	--	--	--	**18**	**19**	--	--	--	--	**85**	**80**	--
MW-02-4	10/31/2005	Lab	N		--	--	--	--	**56**	**58**	< 0.005	< 0.005	--	--	--	--	**18**	**19**	--	--	--	--	**91**	**92**	--
		Field			**0.002**	**0.039**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-4	10/31/2005	Lab	FD		--	--	--	--	**56**	**58**	< 0.005	< 0.005	--	--	--	--	**19**	**18**	--	--	--	--	**91**	**96**	--
		Field			**0**	**0.055**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-4	04/20/2006	Lab	N		--	--	--	--	**55**	**63**	< 0.005	< 0.005	--	--	--	--	**18**	**18**	--	--	--	--	**84**	**80**	--
MW-02-4	10/24/2006	Lab	N		--	--	--	--	**56**	**49**	< 0.005	< 0.005	--	--	--	--	**18**	**17**	--	--	--	--	**84**	**81**	--
MW-02-4	04/24/2007	Lab	N		--	--	--	--	**53.9**	**53.4**	< 0.0050	< 0.0050	--	--	--	--	**16.5**	**16.2**	--	--	--	--	**88.9**	**88**	--
MW-02-4	11/06/2007	Lab	N		--	--	--	--	**56.8**	**57.1**	< 0.0050	< 0.0050	--	--	--	--	**17.5**	**17.6**	--	--	--	--	**90.5**	**90.5**	--
MW-02-4	05/15/2008	Lab	N		--	**0.329**	--	< 0.00024	--	**52.5**	--	**0.00271**	--	< 0.0002	--	**0.0053**	--	**17.1**	--	**0.0017**	--	< 0.00002	--	**82.9**	--
			FD		--	**0.298**	--	< 0.00022	--	**52.8**	--	**0.00256**	--	< 0.0002	--	**0.0052**	--	**17.1**	--	**0.0013**	--	< 0.00002	--	**83.9**	--
MW-02-4	09/23/2008	Lab	N		--	**0.2**	--	**0.00013**	--	**51.9**	--	**0.00265**	--	< 0.0002	--	**0.0105**	--	**17.7**	--	**0.005**	--	< 0.00002	--	**86.6**	--
MW-02-4	07/18/2010	Lab	N		--	**0.145**	--	**0.00018**	--	**50.6**	--	**0.00207**	--	< 0.0002	--	**0.0040**	--	**16.5**	--	< 0.0010	--	< 0.00002	--	**80.6**	--
MW-06-1	05/15/2008	Lab	N		--	**0.059**	--	< 0.00016	--	**59.7**	--	**0.00137**	--	< 0.0002	--	**0.0051**	--	**17.5**	--	**0.0021**	--	< 0.00002	--	**56.8**	--
MW-06-1	09/18/2008	Lab	N		--	< 0.54	--	< 0.000504	--	**56.7**	--	**0.0109**	--	< 0.00020	--	**0.0061**	--	**17.9**	--	**0.0044**	--	< 0.000026	--	**57.7**	--
MW-06-1	07/17/2010	Lab	N		--	**0.066**	--	**0.00016**	--	**49.8**	--	**0.00191**	--	< 0.0002	--	**0.0037**	--	**15.8**	--	**0.0014**	--	< 0.00002	--	**53.9**	--
MW-06-10	05/14/2008	Lab	N		--	**0.277**	--	**0.00075**	--	**40.2**	--	**0.0178**	--	< 0.0002	--	**0.0046**	--	**14.7**	--	**0.0078**	--	< 0.00002	--	**56.6**	--
MW-06-10	09/18/2008	Lab	N		--	< 0.46	--	< 0.000468	--	**40.8**	--	**0.0215**	--	< 0.00020	--	**0.0043**	--	**15.6**	--	**0.0093**	--	< 0.000020	--	**61.5**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Chemical Name Total or Dissolved	Iron Dissolved	Iron Total	Lead Dissolved	Lead Total	Magnesium Dissolved	Magnesium Total	Manganese Dissolved	Manganese Total	Mercury Dissolved	Mercury Total	Nickel Dissolved	Nickel Total	Potassium Dissolved	Potassium Total	Selenium Dissolved	Selenium Total	Silver Dissolved	Silver Total	Sodium Dissolved	Sodium Total	Thallium Dissolved
MW-12-1	11/06/2012	Lab	N		--	**0.35**	--	**0.000269**	--	**22.5**	--	**0.263**	--	< 0.00020	--	**0.0029**	--	**10.5**	--	**0.0016**	--	< 0.000020	--	**30**	--
MW-EPA-4	11/05/1997	Lab	N		< 0.03	--	< 0.01	--	--	**51**	< 0.01	--	< 0.001	--	< 0.01	--	--	**12**	**0.005**	--	< 0.005	--	--	**39**	< 0.1
MW-EPA-4	10/12/1998	Lab	N		< 0.03	--	< 0.01	--	--	**56**	< 0.01	--	< 0.001	--	< 0.01	--	--	**15**	< 0.005	--	< 0.005	--	--	**44**	< 0.1
MW-EPA-4	07/24/2003	Lab	N		--	--	< 0.0010	**0.0011 J**	--	--	**0.00053 BQQ**	**0.0368**	< 0.00020	**0.000086 J**	**0.0491 BQQ**	**0.0266**	--	--	**0.0019 J**	< 0.0100	**0.000033 J**	< 0.0020	--	--	< 0.0010
MW-EPA-4	05/15/2008	Lab	N		--	**0.198**	--	< 0.00025	--	**61.6**	--	**0.00392**	--	< 0.0002	--	**0.0100**	--	**15.9**	--	**0.0037**	--	< 0.00002	--	**49.2**	--
MW-EPA-4	09/20/2008	Lab	N		--	**0.47**	--	**0.0004**	--	**60.6**	--	**0.00760**	--	< 0.0002	--	**0.0084**	--	**15.8**	--	**0.006**	--	< 0.00002	--	**50.6**	--
Wells Near Slag Water Retention Ditch																									
MW-06-15	05/21/2008	Lab	N		--	**0.024**	--	**0.00012**	--	**38 R**	--	**0.00287**	--	< 0.0002	--	**0.0014**	--	**17.4**	--	**0.0083**	--	< 0.00002	--	**86.6**	--
MW-06-15	09/17/2008	Lab	N		--	< 0.22 R	--	< 0.002258	--	**44.5**	--	< 0.0050	--	< 0.00020	--	**0.0023**	--	**19.0**	--	**0.0107**	--	< 0.000206	--	**104**	--
MW-06-15	12/11/2008	Lab	N		--	**0.023**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-12	11/05/1997	Lab	N		**0.14**	--	< 0.01	--	--	**47**	**0.08**	--	< 0.001	--	< 0.01	--	--	**30**	**0.03**	--	< 0.005	--	--	**117**	< 0.1
MW-97-12	10/12/1998	Lab	N		< 0.03	--	< 0.01	--	--	**34**	**0.01**	--	< 0.001	--	< 0.01	--	--	**30**	**0.025**	--	< 0.005	--	--	**103**	< 0.1
MW-97-12	05/27/2008	Lab	N		--	**1.39**	--	< 0.00091	--	**16.6**	--	**0.0218**	--	< 0.0002	--	**0.0017**	--	**29.1**	--	**0.0307**	--	< 0.00002	--	**76**	--
MW-97-12	09/23/2008	Lab	N		--	**1.65 R**	--	**0.00272 R**	--	**18.1 R**	--	**0.03106 R**	--	< 0.0002 R	--	**0.0107 R**	--	**31.1 R**	--	**0.036 R**	--	**0.00089 R**	--	**78.9 R**	--
MW-97-12	12/15/2008	Lab	N		--	**0.050**	--	< 0.000050	--	**15.5**	--	**0.0029**	--	< 0.0002	--	**0.0014**	--	**27.4**	--	**0.0275**	--	< 0.000050	--	**71.3**	--
MW-06-14	05/27/2008	Lab	N		--	**0.242**	--	< 0.00022	--	**42.4**	--	**0.00853**	--	< 0.0002	--	**0.0026**	--	**16.6**	--	**0.0090**	--	< 0.00002	--	**63.4**	--
MW-06-14	09/18/2008	Lab	N		--	**1.53 R**	--	< 0.001228	--	**41.5**	--	**0.0250**	--	< 0.00020	--	**0.0032**	--	**17.9**	--	**0.0108**	--	< 0.000020	--	**67.7**	--
MW-06-14	12/11/2008	Lab	N		--	< 0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-3	08/09/1988	Lab	N		--	< 0.020	--	< 0.0059 C	--	**14.2**	--	< 0.005	--	< 0.0002	--	< 0.009	--	**10.9**	--	< 0.002 J	--	< 0.004	--	**29.7**	--
MW-EPA-3	11/05/1997	Lab	N		< 0.03	--	< 0.01	--	--	**20**	< 0.01	--	< 0.001	--	< 0.01	--	--	**13**	< 0.005	--	< 0.005	--	--	**60**	< 0.1
MW-EPA-3	10/12/1998	Lab	N		< 0.03	--	< 0.01	--	--	**19**	< 0.01	--	< 0.001	--	< 0.01	--	--	**12**	< 0.005	--	< 0.005	--	--	**52**	< 0.1
MW-EPA-3	07/24/2003	Lab	N		--	--	< 0.0010	**0.000060 J**	--	--	**0.00071 JBQQ**	**0.0017 J**	< 0.0020	< 0.00020	**0.0102 BQQ**	**0.0096**	--	--	**0.0028 J**	**0.0034 J**	**0.000026 J**	< 0.0010	--	--	< 0.0010
MW-EPA-3	05/15/2008	Lab	N		--	**0.043**	--	< 0.00021	--	**17.2**	--	**0.00171**	--	< 0.0002	--	**0.0008**	--	**11.6**	--	**0.0044**	--	< 0.00002	--	**33.6**	--
MW-EPA-3	09/16/2008	Lab	N		--	< 0.16	--	< 0.000216	--	**17.7**	--	**0.0069**	--	< 0.00020	--	**0.0010**	--	**12.2**	--	**0.0056**	--	< 0.000020	--	**36.4**	--
Wells in Plant Area																									
MW-06-19	05/20/2008	Lab	N		--	**0.054**	--	**0.00078**	--	**82 R**	--	**0.00468**	--	< 0.0002	--	**0.0033**	--	**25.8**	--	**0.0174**	--	< 0.00002	--	**108**	--
MW-06-19	09/18/2008	Lab	N		--	< 0.34	--	< 0.000508	--	**97.5**	--	**0.0065**	--	< 0.00020	--	**0.0055**	--	**29.0**	--	**0.0342**	--	< 0.000020	--	**124**	--
MW-06-13	05/27/2008	Lab	N		--	**0.068**	--	< 0.00013	--	**36.4**	--	**0.00284**	--	< 0.0002	--	**0.0036**	--	**16.4**	--	**0.0060**	--	**0.00005**	--	**80.5**	--
			FD		--	**0.069**	--	< 0.00014	--	**35.7**	--	**0.00236**	--	< 0.0002	--	**0.0035**	--	**16.2**	--	**0.0068**	--	**0.00005**	--	**79.9**	--
MW-06-13	09/19/2008	Lab	N		--	**0.26**	--	**0.00031**	--	**37.2**	--	**0.00526**	--	< 0.0002	--	**0.0038**	--	**16.9**	--	**0.009**	--	**0.00002**	--	**81.3**	--
MW-06-16	05/21/2008	Lab	N		--	**0.031**	--	**0.00005**	--	**64 R**	--	**0.00204**	--	< 0.0002	--	**0.0127**	--	**19.7**	--	**0.0094**	--	< 0.00002	--	**65.4**	--
MW-06-16	09/20/2008	Lab	N		--	**0.14**	--	**0.00026**	--	**62.8**	--	**0.00394**	--	< 0.0002	--	**0.0187**	--	**19.1**	--	**0.017**	--	**0.00003**	--	**66**	--
MW-06-17	05/27/2008	Lab	N		--	**0.224**	--	< 0.00040	--	**45.8**	--	**0.927**	--	< 0.0002	--	**0.0065**	--	**22.1**	--	**0.0095**	--	< 0.00002	--	**93.3**	--
MW-06-17	09/20/2008	Lab	N		--	**0.1**	--	**0.00016**	--	**43.7**	--	**0.719**	--	< 0.0002	--	**0.0053**	--	**21.9**	--	**0.015**	--	< 0.00002	--	**86.5**	--
MW-06-20	05/20/2008	Lab	N		--	< 0.02	--	**0.00009**	--	**46.5 R**	--	**4.36**	--	< 0.0002	--	**0.0346**	--	**42.6**	--	**0.0034**	--	**0.00003**	--	**77.5**	--
MW-06-20	09/20/2008	Lab	N		--	**0.84 R**	--	**0.00049**	--	**45.3**	--	**4.29**	--	< 0.0002	--	**0.029**	--	**41.2**	--	**0.005**	--	< 0.00002	--	**75.8**	--
MW-06-20	12/12/2008	Lab	N		--	< 0.020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-06-18	05/21/2008	Lab	N		--	< 0.02	--	**0.00009**	--	**46.2 R**	--	**0.906**	--	< 0.0002	--	**0.0302**	--	**32**	--	**0.0328**	--	< 0.00002	--	**109**	--
			FD		--	< 0.02	--	**0.00006**	--	**43.8 R**	--	**0.908**	--	< 0.0002	--	**0.0301**	--	**29.9**	--	**0.0330**	--	< 0.00002	--	**104**	--
MW-06-18	09/25/2008	Lab	N		--	< 0.02	--	**0.00026**	--	**45.4**	--	**0.854**	--	< 0.0002	--	**0.0333**	--	**31.1**	--	**0.0380**	--	< 0.00010	--	**112**	--
Wells near Tailing Basin (SWMU 1)																									
MW-06-7	05/29/2008	Lab	N		--	**0.041**	--	< 0.00051	--	**60.5**	--	**0.2**	--	< 0.0002	--	**0.0031**	--	**67.8**	--	**0.0054**	--	< 0.00002	--	**142**	--
MW-06-7	09/23/2008	Lab	N		--	**0.04**	--	**0.00021**	--	**79.6**	--	**0.482**	--	< 0.0002	--	**0.0098**	--	**62**	--	**0.015**	--	**0.00016**	--	**140**	--
MW-06-8	05/18/2008	Lab	N		--	**1.87**	--	**0.00022**	--	**36.6**	--	**6.18**	--	< 0.0002	--	**0.0059**	--	**19**	--	**0.0021**	--	< 0.00003	--	**208**	--
MW-06-8	09/25/2008	Lab	N		--	**1.86**	--	**0.00031**	--	**39.5**	--	**6.35000**	--	< 0.0002	--	**0.0065**	--	**18.5**	--	< 0.0050	--	< 0.00010	--	**218**	--
MW-06-9	05/17/2008	Lab	N		--	**1.33**	--	**0.00024**	--	**37.2**	--	**1.99**	--	< 0.0002	--	**0.0042**	--	**16.9**	--	< 0.0020	--	< 0.00006	--	**220**	--
MW-06-9	09/25/2008	Lab	N		--	**1.19**	--	**0.00027**	--	**37.9**	--	**2.12000**	--	< 0.0002	--	**0.0046**	--	**15.9**	--	< 0.0050	--	< 0.00010	--	**212**	--
PW-99-3	03/22/1999	Lab	N		--	--	--	--	--	--	**0.98**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PW-99-3	03/23/1999	Lab	N		--	--	--	--	--	--	**0.88**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PW-99-3	05/28/2008	Lab	N		--	**0.184**	--	< 0.00012	--	**17**	--	**3.71**	--	< 0.0002	--	**0.0035**	--	**15.2**	--	< 0.0010	--	< 0.00002	--	**145**	--
PW-99-3	09/22/2008	Lab	N		--	**0.72**	--	**0.00029**	--	**14.8**	--	**3.27**	--	< 0.0002	--	**0.0027**	--	**15.3**	--	< 0.002	--	**0.00002**	--	**164**	--
MW-97-11	11/05/1997	Lab	N		< 0.03	--	< 0.01	--	--	**61**	**0.03**	--	**0.007**	--	< 0.01	--	--	**16**	**0.008**	--	< 0.005	--	--	**160**	< 0.1
MW-97-11	10/08/1998	Lab	N		< 0.03	--	< 0.01	--	--	**60**	< 0.01	--	**0.008**	--	< 0.01	--	--	**16**	**0.008**	--	< 0.005	--	--	**154**	< 0.1
MW-97-11	07/21/2003	Lab	N		--	--	**0.000040 J**	**0.00047 J**	--	--	**0.0014 BQQ**	**0.0033 J**	**0.0051**	**0.0048**	**0.0587 BQQ**	**0.0616**	--	--	**0.0047 J**	< 0.0200	**0.000040 J**	< 0.0020	--	--	**0.000063 J**
MW-97-11	01/11/2005	Lab	N		--	--	--	--	**54**	**51**	< 0.005	< 0.005	--	--	--	--	**16**	**15**	--	--	--	--	**147**	**137**	--
MW-97-11	05/21/2008	Lab	N		--	**0.166**	--	**0.00063**	--	**50.5 R**	--	**0.00211**	--	**0.00490**	--	**0.0095**	--	**16.5**	--	**0.0042**	--	**0.00002**	--	**138**	--
MW-97-11	09/25/2008	Lab	N		--	**0.24**	--	**0.00096**	--	**51.9**	--	**0.0031**	--	**0.0057**	--	**0.0104**	--	**16.3**	--	**0.0070**	--	< 0.00010	--	**137**	--
MW-97-10	11/04/1997	Lab	N		< 0.03	--	< 0.01	--	--	**65**	**0.06**	--	< 0.001	--	< 0.01	--	--	**18**	**0.011**	--	< 0.005	--	--	**106**	< 0.1
			FD		< 0.03	--	< 0.01	--	--	**68**	**0.06**	--	< 0.001	--	< 0.01	--	--	**20**	**0.012**	--	< 0.005	--	--	**117**	< 0.1
MW-97-10	10/08/1998	Lab	N		< 0.03	--	< 0.01	--	--	**62**	< 0.01	--	< 0.001	--	< 0.01	--	--	**20**	**0.012**	--	< 0.005	--	--	**116**	< 0.1

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Iron Dissolved	Iron Total	Lead Dissolved	Lead Total	Magnesium Dissolved	Magnesium Total	Manganese Dissolved	Manganese Total	Mercury Dissolved	Mercury Total	Nickel Dissolved	Nickel Total	Potassium Dissolved	Potassium Total	Selenium Dissolved	Selenium Total	Silver Dissolved	Silver Total	Sodium Dissolved	Sodium Total	Thallium Dissolved
MW-97-10	07/23/2003	Lab	N	--	--	**0.00005 J**	**0.00096 J**	--	--	< 0.0023	**0.0166 BQU**	**0.00014 J**	**0.00015 J**	**0.0526 BQQ**	**0.0524**	--	--	**0.0042 J**	**0.0047 J**	< 0.0010	< 0.0010	--	--	**0.000040 J**
			FD	--	--	**0.000030 J**	--	--	--	**0.0024 J**	--	**0.00014 J**	--	**0.0548**	--	--	--	**0.0040 J**	--	< 0.0010	--	--	--	**0.000050 J**
MW-97-10	01/11/2005	Lab	N	--	--	--	--	**36**	**35**	< 0.005	**0.005**	--	--	--	--	**17**	**17**	--	--	--	--	**93**	**93**	--
MW-97-10	05/21/2008	Lab	N	--	**0.175**	--	**0.00020**	--	**39.9 R**	--	**0.00452**	--	< 0.0002	--	**0.0081**	--	**18.4**	--	**0.0064**	--	< 0.00002	--	**92.1**	--
MW-97-10	09/23/2008	Lab	N	--	**0.07**	--	**0.00009**	--	**39**	--	**0.00131**	--	< 0.0002	--	**0.0126**	--	**18**	--	**0.010**	--	< 0.00002	--	**92.2**	--
MW-06-2	05/15/2008	Lab	N	--	**1.09**	--	**0.00049**	--	**53.2**	--	**0.0118**	--	< 0.0002	--	**0.0121**	--	**18**	--	**0.0214**	--	< 0.00002	--	**85.6**	--
MW-06-2	09/23/2008	Lab	N	--	**0.13**	--	**0.00009**	--	**55.8**	--	**0.00157**	--	< 0.0002	--	**0.0139**	--	**18.9**	--	**0.028**	--	**0.00002**	--	**91.4**	--
MW-06-2	07/18/2010	Lab	N	--	**0.046**	--	**0.00014**	--	**51**	--	**0.00099**	--	< 0.0002	--	**0.0077**	--	**17.4**	--	**0.0174**	--	< 0.00002	--	**83.5**	--
PW-99-1	03/24/1999	Lab	N	--	--	--	--	--	--	**0.74**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PW-99-1	03/25/1999	Lab	N	--	--	--	--	--	--	**0.93**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PW-99-1	01/10/2005	Lab	N	--	--	--	--	**42**	**43**	**2.09**	**2.04**	--	--	--	--	**16**	**15**	--	--	--	--	**87**	**90**	--
PW-99-1	05/18/2008	Lab	N	--	**0.021**	--	**0.00014**	--	**46.5**	--	**2.48**	--	< 0.0002	--	**0.0083**	--	**17.2**	--	**0.0012**	--	< 0.00003	--	**95.6**	--
PW-99-1	05/29/2008	Lab	N	--	< 0.02	--	**0.00165**	--	**45.5**	--	**2.12**	--	< 0.0002	--	**0.0079**	--	**17.4**	--	**0.0013**	--	< 0.00002	--	**95.6**	--
PW-99-1	09/25/2008	Lab	N	--	**0.04**	--	< 0.00025	--	**48.5**	--	**2.76000**	--	< 0.0002	--	**0.0087**	--	**19.8**	--	< 0.0050	--	< 0.00010	--	**102**	--
MW-97-3	11/04/1997	Lab	N	**0.04**	--	< 0.01	--	--	**53**	**0.08**	--	< 0.001	--	< 0.01	--	--	**18**	**0.008**	--	< 0.005	--	--	**55**	< 0.1
MW-97-3	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**54**	**0.14**	--	< 0.001	--	< 0.01	--	--	**19**	**0.007**	--	< 0.005	--	--	**62**	< 0.1
MW-97-3	01/10/2005	Lab	N	--	--	--	--	**29**	**30**	**0.119**	**0.121**	--	--	--	--	**16**	**16**	--	--	--	--	**58**	**62**	--
MW-97-3	05/28/2008	Lab	N	--	< 0.02	--	< 0.00011	--	**31.2**	--	**0.0360**	--	< 0.0002	--	**0.0037**	--	**17**	--	**0.0070**	--	< 0.00002	--	**62.9**	--
MW-97-3	09/23/2008	Lab	N	--	< 0.02	--	**0.00004**	--	**29.6**	--	**0.02317**	--	< 0.0002	--	**0.006**	--	**16.7**	--	**0.008**	--	< 0.00002	--	**60.1**	--
MW-97-4	11/04/1997	Lab	N	< 0.03	--	< 0.01	--	--	**68**	**0.23**	--	< 0.001	--	**0.01**	--	--	**21**	**0.007**	--	< 0.005	--	--	**119**	< 0.1
MW-97-4	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**68**	**0.22**	--	< 0.001	--	**0.01**	--	--	**22**	**0.007**	--	< 0.005	--	--	**85**	< 0.1
MW-97-4	03/19/1999	Lab	N	--	--	--	--	--	--	**0.350**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-4	01/10/2005	Lab	N	--	--	--	--	**37**	**36**	**0.425**	**0.434**	--	--	--	--	**20**	**18**	--	--	--	--	**74**	**72**	--
MW-97-4	05/20/2008	Lab	N	--	**0.034**	--	**0.00016**	--	**32 R**	--	**0.424**	--	< 0.0002	--	**0.0050**	--	**18**	--	**0.0057**	--	< 0.00002	--	**67.3**	--
MW-97-4	09/22/2008	Lab	N	--	< 0.02	--	**0.0002**	--	**32.7**	--	**0.373**	--	< 0.0002	--	**0.0042**	--	**17.8**	--	**0.007**	--	< 0.00002	--	**68.7**	--
MW-06-12	05/20/2008	Lab	N	--	**0.195**	--	**0.00009**	--	**61.1 R**	--	**0.347**	--	**0.0003**	--	**0.0073**	--	**19.5**	--	**0.0027**	--	< 0.00002	--	**80.4**	--
MW-06-12	09/25/2008	Lab	N	--	< 0.02	--	**0.00027**	--	**60.4**	--	**0.292**	--	**0.0006**	--	**0.0085**	--	**19.3**	--	< 0.0050	--	< 0.00010	--	**81.8**	--
			FD	--	< 0.02	--	< 0.00025	--	**61.3**	--	**0.298**	--	**0.0005**	--	**0.0080**	--	**19.6**	--	**0.0050**	--	< 0.00010	--	**84.5**	--
MW-06-11	05/28/2008	Lab	N	--	**0.46**	--	< 0.00035	--	**63.9**	--	**0.0704**	--	< 0.0002	--	**0.0101**	--	**17.3**	--	**0.0046**	--	< 0.00002	--	**72.6**	--
MW-06-11	09/23/2008	Lab	N	--	**0.17**	--	**0.00017**	--	**62**	--	**0.05497**	--	< 0.0002	--	**0.0144**	--	**17.6**	--	**0.011**	--	**0.00003**	--	**72.1**	--
MW-97-9	11/05/1997	Lab	N	< 0.03	--	< 0.01	--	--	**43**	**0.13**	--	< 0.001	--	**0.02**	--	--	**36**	**0.020**	--	< 0.005	--	--	**105**	< 0.1
MW-97-9	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**57**	**1.08**	--	< 0.001	--	**0.05**	--	--	**38**	**0.022**	--	< 0.005	--	--	**101**	< 0.1
MW-97-9	05/16/2008	Lab	N	--	**0.129**	--	< 0.00009	--	**30.8**	--	**0.499**	--	< 0.0002	--	**0.0210**	--	**27.1**	--	**0.0092**	--	< 0.00002	--	**75.5**	--
MW-97-9	09/24/2008	Lab	N	--	**0.26**	--	**0.00036**	--	**37.2**	--	**0.573**	--	< 0.0002	--	**0.0224**	--	**28.8**	--	**0.0120**	--	< 0.00010	--	**79.1**	--
			FD	--	**0.19**	--	**0.00033**	--	**38.5**	--	**0.567**	--	< 0.0002	--	**0.0225**	--	**29.7**	--	**0.0120**	--	< 0.00010	--	**82.1**	--
MW-97-8	11/05/1997	Lab	N	< 0.03	--	< 0.01	--	--	**59**	**1.51**	--	< 0.001	--	**0.03**	--	--	**33**	**0.011**	--	< 0.005	--	--	**109**	< 0.1
MW-97-8	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**35**	**0.99**	--	< 0.001	--	**0.03**	--	--	**26**	**0.006**	--	< 0.005	--	--	**75**	< 0.1
MW-97-8	05/15/2008	Lab	N	--	**1.08**	--	**0.00063**	--	**29.5 J**	--	**0.789**	--	< 0.0002	--	**0.0122**	--	**28.1**	--	**0.0242**	--	**0.00002**	--	**71.4**	--
MW-97-8	09/24/2008	Lab	N	--	**0.16**	--	**0.00030**	--	**30.3**	--	**0.706**	--	< 0.0002	--	**0.0115**	--	**28.5**	--	**0.0280**	--	< 0.00010	--	**73.6**	--
MW-06-21	05/17/2008	Lab	N	--	**1.08**	--	**0.00054**	--	**31.8**	--	**0.372**	--	< 0.0002	--	**0.0100**	--	**27.8**	--	**0.0113**	--	< 0.00003	--	**78**	--
MW-06-21	09/24/2008	Lab	N	--	< 0.02	--	< 0.00025	--	**26.2**	--	**0.377**	--	< 0.0002	--	**0.0093**	--	**27.9**	--	**0.0150**	--	< 0.00010	--	**71.4**	--
MW-06-22	05/21/2008	Lab	N	--	**0.205**	--	**0.00010**	--	**32.1 R**	--	**1.73**	--	< 0.0002	--	**0.0190**	--	**41.5**	--	**0.0340**	--	< 0.00002	--	**112**	--
MW-06-22	09/26/2008	Lab	N	--	**0.04**	--	**0.00040**	--	**32.4**	--	**2.44000**	--	< 0.0002	--	**0.0234**	--	**53.1**	--	**0.0410**	--	< 0.00010	--	**117**	--
MW-06-25	05/20/2008	Lab	N	--	**0.097**	--	**0.00005**	--	**54.2 R**	--	**0.657**	--	< 0.0002	--	**0.0265**	--	**34.8**	--	**0.0474**	--	< 0.00002	--	**90.6**	--
MW-06-25	09/26/2008	Lab	N	--	**0.03**	--	**0.00037**	--	**55.3**	--	**0.501**	--	< 0.0002	--	**0.0258**	--	**33.0**	--	**0.0600**	--	< 0.00010	--	**89.8**	--
MW-97-7	11/04/1997	Lab	N	< 0.03	--	< 0.01	--	--	**53**	**2.89**	--	< 0.001	--	**0.06**	--	--	**45**	**0.027**	--	< 0.005	--	--	**111**	< 0.1
MW-97-7	10/08/1998	Lab	N	< 0.03	--	< 0.01	--	--	**55**	**2.03**	--	< 0.001	--	**0.05**	--	--	**40**	**0.037**	--	< 0.005	--	--	**115**	< 0.1
MW-97-7	10/08/2001	Lab	N	< 0.03	< 0.03	< 0.002	< 0.002	**54**	**56**	**1.55**	**1.59**	< 0.0006	< 0.0006	**0.04**	**0.04**	**35**	**37**	**0.031**	**0.031**	< 0.003	< 0.003	**108**	**114**	< 0.002
MW-97-7	01/17/2002	Lab	N	< 0.03	--	< 0.002	--	**51**	--	**1.48**	--	< 0.0001	--	**0.039**	--	**32**	--	**0.036**	--	< 0.003	--	**98**	--	< 0.001
			FD	**0.01**	--	< 0.002	--	--	--	**1.36**	--	< 0.0006	--	**0.05**	--	--	--	**0.038**	--	< 0.003	--	--	--	< 0.002
MW-97-7	05/20/2008	Lab	N	--	**0.381**	--	**0.00031**	--	**46.8 R**	--	**1.23**	--	< 0.0002	--	**0.0303**	--	**34**	--	**0.0466**	--	**0.00002**	--	**85.9**	--
MW-97-7	09/26/2008	Lab	N	--	< 0.02	--	< 0.00025	--	**47.7**	--	**1.18000**	--	< 0.0002	--	**0.0316**	--	**34.8**	--	**0.0480**	--	< 0.00010	--	**91.0**	--
Wells near Brick Pile (SWMU 3)																								
MW-01-1	10/08/2001	Lab	N	< 0.03	**0.29**	< 0.002	< 0.002	**54**	**55**	**0.095**	**0.114**	< 0.0006	< 0.0006	< 0.01	< 0.01	**17**	**18**	**0.006**	**0.006**	< 0.003	< 0.003	**40**	**42**	< 0.002
MW-01-1	01/16/2002	Lab	N	< 0.03	--	< 0.002	--	**55**	--	**0.03**	--	< 0.0001	--	< 0.005	--	**16**	--	**0.009**	--	< 0.003	--	**37**	--	< 0.001
			SPLIT	< 0.01	--	< 0.002	--	--	--	**0.029**	--	< 0.0006	--	< 0.01	--	--	--	**0.014**	--	< 0.003	--	--	--	< 0.002
MW-01-1	05/16/2008	Lab	N	--	**0.079**	--	< 0.00036	--	**63.8**	--	**0.00255**	--	< 0.0002	--	**0.0026**	--	**17.2**	--	**0.0110**	--	**0.00003**	--	**42.4**	--
MW-01-1	09/17/2008	Lab	N	--	< 0.02	--	< 0.000219	--	**62.6**	--	< 0.000625	--	< 0.00020	--	**0.0050**	--	**17.6**	--	**0.0187**	--	< 0.000020	--	**43.4**	--
MW-01-4	10/04/2001	Lab	N	< 0.01	**0.59**	< 0.003	< 0.003	**24**	**23**	**0.051**	**0.066**	< 0.0006	< 0.0006	< 0.02	< 0.02	**12**	**12**	**0.003**	**0.002**	< 0.003	< 0.003	**27**	**28**	< 0.003
			FD	< 0.01	**0.64**	< 0.003	< 0.003	**23**	**24**	**0.046**	**0.066**	< 0.0006	< 0.0006	< 0.02	< 0.02	**11**	**13**	**0.003**	**0.002**	< 0.003	< 0.003	**26**	**29**	< 0.003

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Iron Dissolved	Iron Total	Lead Dissolved	Lead Total	Magnesium Dissolved	Magnesium Total	Manganese Dissolved	Manganese Total	Mercury Dissolved	Mercury Total	Nickel Dissolved	Nickel Total	Potassium Dissolved	Potassium Total	Selenium Dissolved	Selenium Total	Silver Dissolved	Silver Total	Sodium Dissolved	Sodium Total	Thallium Dissolved
MW-01-4	01/16/2002	Lab	N	< 0.03	--	< 0.002	--	**22**	--	**0.01**	--	< 0.0001	--	< 0.005	--	**10**	--	**0.004**	--	< 0.003	--	**25**	--	< 0.001
MW-01-4	05/16/2008	Lab	N	--	**0.032**	--	< 0.00014	--	**29.1**	--	**0.00054**	--	< 0.0002	--	**0.0012**	--	**12.4**	--	**0.0045**	--	< 0.00002	--	**29.4**	--
MW-01-4	09/16/2008	Lab	N	--	< 0.05	--	< 0.000414	--	**28.2**	--	< 0.000658	--	< 0.00020	--	**0.0019**	--	**12.3**	--	**0.0082**	--	< 0.000020	--	**29.3**	--
MW-01-5	10/04/2001	Lab	N	< 0.01	**1.51**	< 0.003	< 0.003	**23**	**22**	**0.019**	**0.039**	< 0.0006	< 0.0006	< 0.02	< 0.02	**12**	**12**	**0.003**	**0.002**	< 0.003	< 0.003	**28**	**28**	< 0.003
MW-01-5	01/16/2002	Lab	N	< 0.03	--	< 0.002	--	**21**	--	< 0.01	--	< 0.0001	--	< 0.005	--	**10**	--	**0.004**	--	< 0.003	--	**25**	--	< 0.001
			FD SPLIT	< 0.01	--	< 0.002	--	--	--	**0.008**	--	< 0.0006	--	< 0.01	--	--	--	**0.006**	--	< 0.003	--	--	--	< 0.002
			SPLIT	< 0.01	--	< 0.002	--	--	--	**0.008**	--	< 0.0006	--	< 0.01	--	--	--	**0.005**	--	< 0.003	--	--	--	< 0.002
MW-01-5	05/17/2008	Lab	N	--	**0.135**	--	**0.00043**	--	**27.9**	--	**0.00168**	--	< 0.0002	--	**0.0011**	--	**12.6**	--	**0.0046**	--	< 0.00003	--	**29.2**	--
MW-01-5	09/16/2008	Lab	N	--	< 0.40	--	< 0.000742	--	**28.4**	--	< 0.0038	--	< 0.00020	--	**0.0017**	--	**12.8**	--	**0.0072**	--	< 0.000020	--	**30.2**	--
Wells near Clarfier (SWMU 2)																								
MW-01-2	10/09/2001	Lab	N	< 0.01	< 0.01	< 0.002	< 0.002	**25**	**28**	**2.73**	**3.06**	< 0.0006	< 0.0006	< 0.01	< 0.01	**29**	**35**	**0.006**	**0.007**	< 0.003	< 0.003	**43**	**47**	< 0.002
MW-01-2	01/16/2002	Lab	N	< 0.03	--	< 0.002	--	**27**	--	**3.37**	--	< 0.0001	--	**0.007**	--	**34**	--	**0.006**	--	< 0.003	--	**44**	--	< 0.001
			SPLIT	< 0.01	--	< 0.002	--	--	--	**3.37**	--	< 0.0006	--	**0.01**	--	--	--	**0.007**	--	< 0.003	--	--	--	< 0.002
MW-01-2	09/04/2002	Lab	N	< 0.03	--	--	--	--	--	**2.67**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-01-2	07/22/2003	Lab	N	--	--	< 0.0010	**0.00027 J**	--	--	**2.01 BQQ**	**2.000**	< 0.00020	< 0.00020	**0.0231 BQQ**	**0.0219**	--	--	**0.0073 BQQ**	**0.0060**	**0.000020 J**	< 0.0010	--	--	**0.000048 J**
			FD	--	--	< 0.0010 J	**0.00037 J**	--	--	**1.97 BQQ**	**2.01**	< 0.00020	< 0.00020	**0.0225 BQQ**	**0.0222**	--	--	**0.0059 BQQ**	**0.0058**	**0.000020 J**	< 0.0010	--	--	**0.000070 J**
MW-01-2	05/19/2008	Lab	N	--	**0.02**	--	**0.00014**	--	**19 R**	--	**1.55**	--	< 0.0002	--	**0.0044**	--	**23.9**	--	**0.0121**	--	**0.00003**	--	**46.9**	--
MW-01-2	09/22/2008	Lab	N	--	**0.320**	--	**0.00028**	--	**19.2**	--	**1.18**	--	< 0.0002	--	**0.0032**	--	**25.9**	--	**0.010**	--	< 0.00002	--	**51.8**	--
MW-01-6	10/09/2001	Lab	N	**15.9**	**18.0**	< 0.002	< 0.002	**43**	**47**	**4.83**	**5.36**	< 0.0006	< 0.0006	**0.01**	**0.02**	**55**	**60**	**0.002**	**0.002**	< 0.003	< 0.003	**69**	**76**	< 0.002
MW-01-6	01/17/2002	Lab	N	**33.7**	--	< 0.002	--	**42**	--	**3.17**	--	< 0.0001	--	**0.012**	--	**54**	--	**0.003**	--	< 0.003	--	**66**	--	< 0.001
			SPLIT	**36.6**	--	< 0.002	--	--	--	**3.10**	--	< 0.0006	--	**0.02**	--	--	--	**0.005**	--	< 0.003	--	--	--	< 0.002
MW-01-6	09/05/2002	Lab	N	**36.0**	--	--	--	--	--	**2.39**	--	--	--	--	--	--	--	< 0.005	--	--	--	--	--	--
MW-01-6	05/19/2008	Lab	N	--	**23.2**	--	**0.00011**	--	**22.5 R**	--	**1.24**	--	< 0.0002	--	**0.0063**	--	**42.2**	--	**0.0012**	--	< 0.00002	--	**52.2**	--
MW-01-6	09/18/2008	Lab	N	--	**23.4**	--	**0.000707**	--	**21.0**	--	**0.965**	--	< 0.00020	--	**0.0053**	--	**41.6**	--	**0.0029**	--	< 0.000020	--	**53.9**	--
MW-01-3	10/09/2001	Lab	N	**7.61**	**10.0**	< 0.002	< 0.002	**41**	**44**	**11.6**	**13.1**	< 0.0006	< 0.0006	**0.02**	**0.03**	**36**	**40**	**0.003**	**0.003**	< 0.003	< 0.003	**50**	**53**	< 0.002
MW-01-3	01/22/2002	Lab	N	**3.30**	--	< 0.002	--	**44**	--	**12.2**	--	< 0.0001	--	**0.012**	--	**39**	--	**0.002**	--	< 0.003	--	**51**	--	< 0.003
			FD	**3.34**	--	< 0.002	--	**44**	--	**12.4**	--	< 0.0001	--	**0.012**	--	**39**	--	**0.002**	--	< 0.003	--	**51**	--	< 0.003
			SPLIT	**3.03**	--	< 0.002	--	--	--	**11.4**	--	< 0.0006	--	**0.01**	--	--	--	**0.004**	--	< 0.003	--	--	--	< 0.002
			FD SPLIT	**3.08**	--	< 0.002	--	--	--	**12.0**	--	< 0.0006	--	**0.01**	--	--	--	**0.004**	--	< 0.003	--	--	--	< 0.002
			FDD SPLIT	**3.02**	--	**0.003**	--	--	--	**12.5**	--	< 0.0006	--	**0.01**	--	--	--	**0.004**	--	< 0.003	--	--	--	< 0.002
MW-01-3	09/05/2002	Lab	N	**1.97**	--	--	--	--	--	**10.1**	--	--	--	--	--	--	--	< 0.005	--	--	--	--	--	--
			FD	**1.96**	--	--	--	--	--	**10.6**	--	--	--	--	--	--	--	< 0.005	--	--	--	--	--	--
MW-01-3	05/19/2008	Lab	N	--	**1.02**	--	**0.00013**	--	**29.1 R**	--	**8.47**	--	< 0.0002	--	**0.0057**	--	**33.7**	--	**0.0015**	--	< 0.00002	--	**42.7**	--
MW-01-3	09/19/2008	Lab	N	--	**0.67**	--	**0.000423**	--	**28.3**	--	**8.36**	--	< 0.00020	--	**0.0049**	--	**34.2**	--	**0.0020**	--	< 0.000020	--	**44.0**	--
MW-02-2	09/05/2002	Lab	N	< 0.03	--	--	--	--	--	**1.97**	--	--	--	--	--	--	--	**0.009**	--	--	--	--	--	--
MW-02-2	05/19/2008	Lab	N	--	**0.527**	--	**0.00042**	--	**18.8 R**	--	**1.03**	--	< 0.0002	--	**0.0271**	--	**18.3**	--	**0.0149**	--	**0.00010**	--	**44.6**	--
MW-02-2	09/22/2008	Lab	N	--	**0.91**	--	**0.00075**	--	**20.9**	--	**1.14**	--	< 0.0002	--	**0.0239**	--	**19.6**	--	**0.015**	--	**0.00005**	--	**47.8**	--
MW-02-1	01/17/2002	Lab	N	**0.16**	--	< 0.002	--	**53**	--	**2.92**	--	< 0.0001	--	**0.008**	--	**23**	--	**0.005**	--	< 0.003	--	**236**	--	< 0.001
			SPLIT	**0.13**	--	< 0.002	--	--	--	**2.72**	--	< 0.0006	--	**0.01**	--	--	--	**0.006**	--	< 0.003	--	--	--	< 0.002
MW-02-1	09/04/2002	Lab	N	**0.80**	--	--	--	--	--	**3.17**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02-1	07/22/2003	Lab	N	--	--	**0.000030 J**	**0.00028 J**	--	--	**1.85 BQQ**	**1.76**	< 0.00020	< 0.00020	**0.0436 BQQ**	**0.0420**	--	--	**0.00087 J**	**0.0026 J**	**0.000020 J**	< 0.0010	--	--	< 0.0010
MW-02-1	05/29/2008	Lab	N	--	**2.29**	--	< 0.00030	--	**62.7**	--	**2.15**	--	< 0.0002	--	**0.0048**	--	**28.8**	--	**0.0045**	--	**0.00002**	--	**306**	--
			FD	--	**2.41**	--	< 0.00033	--	**63.4**	--	**2.1**	--	< 0.0002	--	**0.0050**	--	**28.9**	--	**0.0054**	--	**0.00002**	--	**308**	--
MW-02-1	09/26/2008	Lab	N	--	**9.51**	--	**0.00082**	--	**71.5**	--	**2.14000**	--	< 0.0002	--	**0.0057**	--	**30.1**	--	**0.0070**	--	< 0.00010	--	**338**	--
Production Wells																								
RP-W-1	07/23/1982	Lab	N	--	--	--	ND	--	--	--	--	--	ND	--	--	--	--	--	**0.002**	--	ND	--	--	--
RP-W-1	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**40**	**0.03**	--	< 0.001	--	< 0.01	--	--	**18**	< 0.005	--	< 0.005	--	--	**54**	**0.1**
RP-W-1	05/22/2008	Lab	N	--	**0.045**	--	< 0.00002	--	**20.3 R**	--	**0.00872**	--	< 0.0002	--	**0.0015**	--	**16**	--	**0.0029**	--	< 0.00002	--	**52.6**	--
RP-W-1	09/25/2008	Lab	N	--	**0.02**	--	< 0.00025	--	**18.5**	--	**0.0062**	--	< 0.0002	--	**0.0016**	--	**15.4**	--	< 0.0050	--	< 0.00010	--	**43.5**	--
RP-W-4	06/04/1982	Lab	N	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	**0.007**	--	--	--	--	--
RP-W-4	08/05/1982	Lab	N	--	--	--	**0.017**	--	--	--	--	--	**0.0021**	--	--	--	--	--	**0.055**	--	**0.012**	--	--	--
RP-W-4	05/26/1983	Lab	N	--	--	--	ND	--	--	--	--	--	**0.0016**	--	--	--	--	--	ND	--	ND	--	--	--
RP-W-4	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**70**	**1.21**	--	< 0.001	--	**0.01**	--	--	**19**	**0.005**	--	< 0.005	--	--	**71**	< 0.1
RP-W-4	05/28/2008	Lab	N	--	**2.52**	--	< 0.00045	--	**52.2**	--	**0.725**	--	**0.0005**	--	**0.0084**	--	**15.8**	--	**0.0040**	--	< 0.00002	--	**60.9**	--
RP-W-4	09/24/2008	Lab	N	--	**2.22**	--	**0.00062**	--	**51.3**	--	**0.726**	--	**0.0004**	--	**0.0084**	--	**15.9**	--	**0.0060**	--	< 0.00010	--	**59.3**	--
			FD	--	**2.05**	--	**0.00051**	--	**49.9**	--	**0.727**	--	**0.0004**	--	**0.0080**	--	**15.3**	--	**0.0060**	--	< 0.00010	--	**55.8**	--
RP-W-5	07/23/1982	Lab	N	--	--	--	ND	--	--	--	--	--	ND	--	--	--	--	--	**0.0024**	--	ND	--	--	--
RP-W-5	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**40**	**0.01**	--	< 0.001	--	< 0.01	--	--	**13**	< 0.005	--	< 0.005	--	--	**39**	< 0.1
			FD	< 0.03	--	< 0.01	--	--	**41**	< 0.01	--	< 0.001	--	< 0.01	--	--	**13**	< 0.005	--	< 0.005	--	--	**39**	< 0.1
RP-W-5	05/30/2008	Lab	N	--	**0.191**	--	< 0.00007	--	**47.3**	--	**0.0157**	--	< 0.0002	--	**0.0056**	--	**15**	--	**0.0044**	--	< 0.00002	--	**44.8**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name	Iron	Iron	Lead	Lead	Magnesium	Magnesium	Manganese	Manganese	Mercury	Mercury	Nickel	Nickel	Potassium	Potassium	Selenium	Selenium	Silver	Silver	Sodium	Sodium	Thallium
			Total or Dissolved	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Location ID	Sample Date	Analysis Location	Sample Type																					
RP-W-5	09/24/2008	Lab	N	--	**0.17**	--	**0.00079 J**	--	**44.6**	--	**0.0158**	--	< 0.0002	--	**0.0057**	--	**13.9**	--	**0.0060**	--	< 0.00010	--	**41.8**	--
RP-W-6	06/04/1982	Lab	N	--	--	--	ND	--	--	--	--	--	ND	--	--	--	--	--	**0.002**	--	ND	--	--	--
RP-W-6	10/05/1982	Lab	N	--	--	--	**0.01**	--	--	--	--	--	**0.0007**	--	--	--	--	--	**0.002**	--	**0.013**	--	--	--
RP-W-6	05/26/1983	Lab	N	--	--	--	**0.11**	--	--	--	--	--	**0.0002**	--	--	--	--	--	**0.0012**	--	ND	--	--	--
RP-W-6	04/01/1986	Lab	N	--	--	--	**0.08**	--	--	--	--	--	ND	--	--	--	--	--	**0.001**	--	**0.016**	--	--	--
RP-W-6	03/17/1987	Lab	N	--	--	--	ND	--	--	--	--	--	ND	--	--	--	--	--	**0.005**	--	ND	--	--	--
RP-W-6	08/05/1988	Lab	N	< 0.0200	--	< 0.0020 J	--	**79.9**	--	**0.316**	--	< 0.0002	--	< 0.0090	--	**20.6**	--	< 0.0200 J	--	< 0.0040	--	**77.3**	--	**0.0028 J**
RP-W-6	08/06/1988	Lab	N	--	< 0.020	--	< 0.002 J	--	**79.9**	--	**0.316**	--	< 0.0002	--	< 0.009	--	**20.6**	--	< 0.020 J	--	< 0.004	--	**77.3**	--
RP-W-6	06/23/1992	Lab	N	--	--	--	ND	--	--	--	--	--	ND	--	--	--	--	--	ND	--	ND	--	--	--
RP-W-6	10/07/1998	Lab	N	**0.18**	--	< 0.01	--	--	**78**	**1.02**	--	< 0.001	--	**0.01**	--	--	**23**	**0.006**	--	< 0.005	--	--	**91**	< 0.1
RP-W-6	05/30/2008	Lab	N	--	**1.67**	--	< 0.00021	--	**66.9**	--	**0.883**	--	< 0.0002	--	**0.0152**	--	**22.7**	--	**0.0028**	--	< 0.00002	--	**85.9**	--
RP-W-6	09/24/2008	Lab	N	--	**0.89**	--	**0.00056**	--	**65.5**	--	**0.879**	--	< 0.0002	--	**0.0138**	--	**21.1**	--	**0.0060**	--	< 0.00010	--	**82.5**	--
RP-W-7	07/23/1982	Lab	N	--	--	--	ND	--	--	--	--	--	ND	--	--	--	--	--	**0.002**	--	**0.003**	--	--	--
RP-W-7	10/01/1982	Lab	N	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	--
RP-W-7	10/07/1998	Lab	N	< 0.03	--	< 0.01	--	--	**33**	**0.07**	--	< 0.001	--	< 0.01	--	--	**13**	< 0.005	--	< 0.005	--	--	**44**	< 0.1
RP-W-7	05/22/2008	Lab	N	--	**0.132**	--	**0.00087**	--	**7.54 R**	--	**0.0123**	--	< 0.0002	--	**0.0004**	--	**7.61**	--	< 0.0010	--	< 0.00002	--	**19.9**	--
RP-W-7	09/25/2008	Lab	N	--	**0.05**	--	< 0.00025	--	**8.44**	--	**0.0044**	--	< 0.0002	--	< 0.0010	--	**7.7**	--	< 0.0050	--	< 0.00010	--	**20.3**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
Location ID	**Sample Date**	**Analysis Location**	**Sample Type**							
Upgradient Wells										
MW-06-23	05/13/2008	Lab	N	< 0.00002	--	**0.0034**	--	**0.0081**	--	< 0.0026
MW-06-23	09/16/2008	Lab	N	< 0.000020	--	**0.003388**	--	**0.0061**	--	< 0.0059
MW-06-24	05/13/2008	Lab	N	< 0.00002	--	**0.0048**	--	**0.0067**	--	< 0.0072
MW-06-24	09/16/2008	Lab	N	< 0.000020	--	**0.004599**	--	**0.0050**	--	< 0.0097
MW-GW-1	06/30/1998	Lab	N	--	--	--	--	--	**0.05**	--
MW-GW-1	09/30/1998	Lab	N	--	--	--	--	--	**0.04**	--
MW-GW-1	12/31/1998	Lab	N	--	--	--	--	--	**0.02**	--
MW-GW-1	03/31/1999	Lab	N	--	--	--	--	--	**0.032**	--
MW-GW-1	06/30/1999	Lab	N	--	--	--	--	--	**0.02**	--
MW-GW-1	09/30/1999	Lab	N	--	--	--	--	--	**0.027**	--
MW-GW-1	12/31/1999	Lab	N	--	--	--	--	--	**0.034**	--
MW-GW-1	03/31/2000	Lab	N	--	--	--	--	--	**0.037**	--
MW-GW-1	06/30/2000	Lab	N	--	--	--	--	--	**0.043**	--
MW-GW-1	09/30/2000	Lab	N	--	--	--	--	--	**0.018**	--
MW-GW-1	12/31/2000	Lab	N	--	--	--	--	--	**0.024**	--
MW-GW-1	03/31/2001	Lab	N	--	--	--	--	--	**0.017**	--
MW-GW-1	06/30/2001	Lab	N	--	--	--	--	--	**0.013**	--
MW-GW-1	09/30/2001	Lab	N	--	--	--	--	--	**0.018**	--
MW-GW-1	12/31/2001	Lab	N	--	--	--	--	--	**0.03**	--
MW-GW-1	03/31/2002	Lab	N	--	--	--	--	--	**0.033**	--
MW-GW-1	06/30/2002	Lab	N	--	--	--	--	--	**0.022**	--
MW-GW-1	09/30/2002	Lab	N	--	--	--	--	--	**0.175**	--
MW-GW-1	12/31/2002	Lab	N	--	--	--	--	--	**0.033**	--
MW-GW-1	03/31/2003	Lab	N	--	--	--	--	--	**0.023**	--
MW-GW-1	06/30/2003	Lab	N	--	--	--	--	--	**0.012**	--
MW-GW-1	09/30/2003	Lab	N	--	--	--	--	--	**0.027**	--
MW-GW-1	12/31/2003	Lab	N	--	--	--	--	--	**0.032**	--
MW-GW-1	03/31/2004	Lab	N	--	--	--	--	--	**0.041**	--
MW-GW-1	06/30/2004	Lab	N	--	--	--	--	--	**0.036**	--
MW-GW-1	09/30/2004	Lab	N	--	--	--	--	--	**0.038**	--
MW-GW-1	11/30/2004	Lab	N	--	--	--	--	--	**0.041**	--
MW-GW-1	12/31/2004	Lab	N	--	--	--	--	--	**0.041**	--
MW-GW-1	03/31/2005	Lab	N	--	--	--	--	--	**0.014**	--
MW-GW-1	06/30/2005	Lab	N	--	--	--	--	--	**0.018**	--
MW-GW-1	07/31/2005	Lab	N	--	--	--	--	--	**0.024**	--
MW-GW-1	12/31/2005	Lab	N	--	--	--	--	--	**0.054**	--
MW-GW-1	06/30/2006	Lab	N	--	--	--	--	--	**0.005**	--
MW-GW-1	09/30/2006	Lab	N	--	--	--	--	--	**0.005**	--
MW-GW-1	12/31/2006	Lab	N	--	--	--	--	--	**0.006**	--
MW-GW-1	03/31/2007	Lab	N	--	--	--	--	--	**0.01**	--
MW-GW-1	06/30/2007	Lab	N	--	--	--	--	--	**0.004**	--
MW-GW-1	09/30/2007	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-1	12/31/2007	Lab	N	--	--	--	--	--	**0.006**	--
MW-GW-1	03/31/2008	Lab	N	--	--	--	--	--	**0.005**	--
MW-GW-1	05/20/2008	Lab	N	< 0.00002	--	**0.0173**	--	**0.0048**	--	**0.0038**
MW-GW-1	06/30/2008	Lab	N	--	--	--	--	--	**0.004**	--
MW-GW-1	09/17/2008	Lab	N	< 0.000020	--	**0.017566**	--	**0.0041**	--	< 0.0019
MW-GW-1	09/30/2008	Lab	N	--	--	--	--	--	**0.002**	--
MW-GW-1	12/31/2008	Lab	N	--	--	--	--	--	**0.011**	--
MW-GW-1	03/31/2009	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-1	06/30/2009	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-1	09/30/2009	Lab	N	--	--	--	--	--	< 0.01	--
MW-GW-1	12/31/2009	Lab	N	--	--	--	--	--	< 0.005	--
MW-GW-1	03/31/2010	Lab	N	--	--	--	--	--	< 0.005	--
MW-GW-1	06/30/2010	Lab	N	--	--	--	--	--	**0.006**	--
MW-GW-1	09/30/2010	Lab	N	--	--	--	--	--	**0.005**	--
MW-GW-2	06/30/1998	Lab	N	--	--	--	--	--	**0.04**	--
MW-GW-2	09/30/1998	Lab	N	--	--	--	--	--	**0.08**	--
MW-GW-2	12/31/1998	Lab	N	--	--	--	--	--	**0.03**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
Location ID	Sample Date	Analysis Location	Sample Type							
MW-GW-2	03/31/1999	Lab	N	--	--	--	--	--	**0.028**	--
MW-GW-2	06/30/1999	Lab	N	--	--	--	--	--	**0.056**	--
MW-GW-2	09/30/1999	Lab	N	--	--	--	--	--	**0.02**	--
MW-GW-2	12/31/1999	Lab	N	--	--	--	--	--	**0.05**	--
MW-GW-2	03/31/2000	Lab	N	--	--	--	--	--	**0.019**	--
MW-GW-2	06/30/2000	Lab	N	--	--	--	--	--	**0.041**	--
MW-GW-2	09/30/2000	Lab	N	--	--	--	--	--	**0.007**	--
MW-GW-2	12/31/2000	Lab	N	--	--	--	--	--	**0.053**	--
MW-GW-2	03/31/2001	Lab	N	--	--	--	--	--	**0.009**	--
MW-GW-2	06/30/2001	Lab	N	--	--	--	--	--	**0.019**	--
MW-GW-2	09/30/2001	Lab	N	--	--	--	--	--	**0.027**	--
MW-GW-2	12/31/2001	Lab	N	--	--	--	--	--	**0.046**	--
MW-GW-2	03/31/2002	Lab	N	--	--	--	--	--	**0.043**	--
MW-GW-2	06/30/2002	Lab	N	--	--	--	--	--	**0.083**	--
MW-GW-2	09/30/2002	Lab	N	--	--	--	--	--	**0.029**	--
MW-GW-2	12/31/2002	Lab	N	--	--	--	--	--	**0.029**	--
MW-GW-2	03/31/2003	Lab	N	--	--	--	--	--	**0.023**	--
MW-GW-2	06/30/2003	Lab	N	--	--	--	--	--	**0.059**	--
MW-GW-2	09/30/2003	Lab	N	--	--	--	--	--	**0.026**	--
MW-GW-2	12/31/2003	Lab	N	--	--	--	--	--	**0.028**	--
MW-GW-2	03/31/2004	Lab	N	--	--	--	--	--	**0.084**	--
MW-GW-2	06/30/2004	Lab	N	--	--	--	--	--	**0.072**	--
MW-GW-2	09/30/2004	Lab	N	--	--	--	--	--	**0.034**	--
MW-GW-2	11/30/2004	Lab	N	--	--	--	--	--	**0.08**	--
MW-GW-2	12/31/2004	Lab	N	--	--	--	--	--	**0.08**	--
MW-GW-2	03/31/2005	Lab	N	--	--	--	--	--	**0.025**	--
MW-GW-2	06/30/2005	Lab	N	--	--	--	--	--	**0.025**	--
MW-GW-2	06/30/2005	Lab	N	--	--	--	--	--	**0.025**	--
MW-GW-2	07/31/2005	Lab	N	--	--	--	--	--	**0.018**	--
MW-GW-2	06/30/2006	Lab	N	--	--	--	--	--	**0.011**	--
MW-GW-2	09/30/2006	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-2	03/31/2007	Lab	N	--	--	--	--	--	**0.005**	--
MW-GW-2	06/30/2007	Lab	N	--	--	--	--	--	**0.006**	--
MW-GW-2	06/30/2008	Lab	N	--	--	--	--	--	**0.003**	--
MW-06-4	05/15/2008	Lab	N	**0.00002**	--	**0.0045**	--	**0.0077**	--	< 0.0062
MW-06-4	09/18/2008	Lab	N	< 0.000020	--	**0.004817**	--	**0.0054**	--	< 0.0085
MW-97-1	11/04/1997	Lab	N	--	--	**0.0167**	< 0.1	--	< 0.01	--
MW-97-1	10/08/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-97-1	05/13/2008	Lab	N	< 0.00002	--	**0.0310**	--	**0.0044**	--	< 0.0009
MW-97-1	09/17/2008	Lab	N	**0.000022**	--	**0.028720**	--	**0.0040**	--	< 0.0022
MW-97-2	11/04/1997	Lab	N	--	--	**0.0141**	< 0.1	--	< 0.01	--
MW-97-2	10/08/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-97-2	05/13/2008	Lab	N	< 0.00002	--	**0.0520**	--	**0.0040**	--	< 0.0007
MW-97-2	09/17/2008	Lab	N	< 0.000020	--	**0.052580**	--	**0.0035**	--	< 0.0040
MW-06-5	05/14/2008	Lab	N	< 0.00002	--	**0.0068**	--	**0.0093**	--	< 0.0013
MW-06-5	09/19/2008	Lab	N	< 0.000020	--	**0.00623**	--	**0.0078**	--	< 0.0033
			FD	< 0.000020	--	**0.006714**	--	**0.0076**	--	< 0.0023
MW-06-6	05/14/2008	Lab	N	< 0.00002	--	**0.0157**	--	**0.0038**	--	< 0.0066
MW-06-6	05/28/2008	Lab	N	**0.00002**	--	**0.0153**	--	**0.0041**	--	**0.0294**
MW-06-6	09/18/2008	Lab	N	**0.000023**	--	**0.015130**	--	**0.0031**	--	**0.0157**
MW-EPA-1	08/09/1988	Lab	N	< 0.0029 JB	--	--	--	< 0.0094 B	--	< 0.0179 B
MW-EPA-1	10/08/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-EPA-1	05/14/2008	Lab	N	< 0.00002	--	**0.0095**	--	**0.0063**	--	< 0.0005
MW-EPA-1	09/17/2008	Lab	N	< 0.000020	--	**0.009785**	--	**0.0059**	--	< 0.1281 R
MW-EPA-1	12/11/2008	Lab	N	--	--	--	--	--	--	< 0.0020
MW-GW-3	06/30/1998	Lab	N	--	--	--	--	--	**0.04**	--
MW-GW-3	09/30/1998	Lab	N	--	--	--	--	--	**0.06**	--
MW-GW-3	12/31/1998	Lab	N	--	--	--	--	--	**0.03**	--
MW-GW-3	03/31/1999	Lab	N	--	--	--	--	--	**0.022**	--
MW-GW-3	06/30/1999	Lab	N	--	--	--	--	--	**0.027**	--
MW-GW-3	09/30/1999	Lab	N	--	--	--	--	--	**0.015**	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
Location ID	Sample Date	Analysis Location	Sample Type							
MW-GW-3	12/31/1999	Lab	N	--	--	--	--	--	**0.02**	--
MW-GW-3	03/31/2000	Lab	N	--	--	--	--	--	**0.029**	--
MW-GW-3	06/30/2000	Lab	N	--	--	--	--	--	**0.022**	--
MW-GW-3	09/30/2000	Lab	N	--	--	--	--	--	**0.009**	--
MW-GW-3	12/31/2000	Lab	N	--	--	--	--	--	**0.016**	--
MW-GW-3	03/31/2001	Lab	N	--	--	--	--	--	**0.012**	--
MW-GW-3	06/30/2001	Lab	N	--	--	--	--	--	**0.016**	--
MW-GW-3	09/30/2001	Lab	N	--	--	--	--	--	**0.027**	--
MW-GW-3	12/31/2001	Lab	N	--	--	--	--	--	**0.016**	--
MW-GW-3	03/31/2002	Lab	N	--	--	--	--	--	**0.028**	--
MW-GW-3	06/30/2002	Lab	N	--	--	--	--	--	**0.032**	--
MW-GW-3	09/30/2002	Lab	N	--	--	--	--	--	**0.025**	--
MW-GW-3	12/31/2002	Lab	N	--	--	--	--	--	**0.018**	--
MW-GW-3	03/31/2003	Lab	N	--	--	--	--	--	**0.02**	--
MW-GW-3	06/30/2003	Lab	N	--	--	--	--	--	**0.011**	--
MW-GW-3	09/30/2003	Lab	N	--	--	--	--	--	**0.018**	--
MW-GW-3	12/31/2003	Lab	N	--	--	--	--	--	**0.024**	--
MW-GW-3	03/31/2004	Lab	N	--	--	--	--	--	**0.016**	--
MW-GW-3	06/30/2004	Lab	N	--	--	--	--	--	**0.029**	--
MW-GW-3	09/30/2004	Lab	N	--	--	--	--	--	**0.032**	--
MW-GW-3	11/30/2004	Lab	N	--	--	--	--	--	**0.038**	--
MW-GW-3	12/31/2004	Lab	N	--	--	--	--	--	**0.038**	--
MW-GW-3	03/31/2005	Lab	N	--	--	--	--	--	**0.021**	--
MW-GW-3	06/30/2005	Lab	N	--	--	--	--	--	**0.031**	--
MW-GW-3	07/31/2005	Lab	N	--	--	--	--	--	**0.022**	--
MW-GW-3	12/31/2005	Lab	N	--	--	--	--	--	**0.021**	--
MW-GW-3	03/31/2006	Lab	N	--	--	--	--	--	**0.004**	--
MW-GW-3	06/30/2006	Lab	N	--	--	--	--	--	**0.002**	--
MW-GW-3	09/30/2006	Lab	N	--	--	--	--	--	**0.006**	--
MW-GW-3	12/31/2006	Lab	N	--	--	--	--	--	**0.006**	--
MW-GW-3	03/31/2007	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-3	06/30/2007	Lab	N	--	--	--	--	--	**0.005**	--
MW-GW-3	09/30/2007	Lab	N	--	--	--	--	--	**0.005**	--
MW-GW-3	12/31/2007	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-3	03/31/2008	Lab	N	--	--	--	--	--	**0.004**	--
MW-GW-3	05/20/2008	Lab	N	< 0.00002	--	**0.006240**	--	**0.0070**	--	**0.0009**
MW-GW-3	06/30/2008	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-3	09/17/2008	Lab	N	< 0.000020	--	**0.014717**	--	**0.0058**	--	< 0.0016
MW-GW-3	09/30/2008	Lab	N	--	--	--	--	--	**0.009**	--
MW-GW-3	12/31/2008	Lab	N	--	--	--	--	--	**0.002**	--
MW-GW-3	03/31/2009	Lab	N	--	--	--	--	--	**0.003**	--
MW-GW-3	06/30/2009	Lab	N	--	--	--	--	--	**0.006**	--
MW-GW-3	09/30/2009	Lab	N	--	--	--	--	--	< 0.01	--
MW-GW-3	12/31/2009	Lab	N	--	--	--	--	--	< 0.005	--
MW-GW-3	03/31/2010	Lab	N	--	--	--	--	--	**0.019**	--
MW-GW-3	06/30/2010	Lab	N	--	--	--	--	--	**0.024**	--
MW-GW-3	09/30/2010	Lab	N	--	--	--	--	--	**0.024**	--
MW-97-5	11/04/1997	Lab	N	--	--	**0.0286**	< 0.1	--	**0.01**	--
MW-97-5	10/08/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
			FD	--	**0.0104**	--	--	--	--	--
MW-97-5	05/15/2008	Lab	N	< 0.00002	--	**0.0093**	--	**0.0093**	--	< 0.0021
MW-97-5	09/17/2008	Lab	N	< 0.000020	--	**0.008115**	--	**0.0072**	--	< 0.0062
MW-97-6	11/04/1997	Lab	N	--	--	**0.0324**	< 0.1	--	< 0.01	--
MW-97-6	10/08/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-97-6	07/23/2003	Lab	N	< 0.0010	--	--	**0.0049 BQQ**	**0.0049 E**	< 0.0010	**0.0018**
MW-97-6	05/17/2008	Lab	N	< 0.00002	--	**0.0187**	--	**0.0050**	--	**0.0011**
MW-97-6	09/16/2008	Lab	N	< 0.000020	--	**0.017047**	--	**0.0046**	--	< 0.0028
MW-97-6	12/11/2008	Lab	N	--	--	--	--	--	--	--
MW-MT96-2	03/25/1999	Lab	N	--	--	--	--	--	--	--
MW-MT96-2	05/29/2008	Lab	N	< 0.00002	--	**0.000782**	--	**0.0005**	--	< 0.0005

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Analysis Location	Sample Type	Chemical Name Total or Dissolved: Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
MW-MT96-2	09/19/2008	Lab	N	< 0.000020	--	**0.000798**	--	**0.000455**	--	< 0.0007
MW-BSB-4	03/25/1999	Lab	N	--	--	--	--	--	--	--
MW-BSB-4	05/29/2008	Lab	N	**0.00005**	--	**0.001270**	--	**0.0021**	--	< 0.0089
MW-BSB-4	09/19/2008	Lab	N	< 0.000020	--	**0.000151**	--	< 0.000200	--	< 0.0017
Wells Far Downgradient of Tailing Basin (SWMU 1										
MW-06-3	05/14/2008	Lab	N	**0.00003**	--	**0.0071**	--	**0.0044**	--	< 0.0056
MW-06-3	09/19/2008	Lab	N	**0.000027**	--	**0.006575**	--	**0.0032**	--	< 0.0030
MW-06-3	07/16/2010	Lab	N	< 0.00002	--	**0.007370**	--	**0.0033**	--	**0.0053**
MW-02-3	10/09/2002	Lab	N	--	--	--	--	--	< 0.01	--
MW-02-3	10/22/2004	Lab	N	--	--	--	--	--	--	--
MW-02-3	01/10/2005	Lab	N	--	--	--	--	--	< 0.01 *	**0.006 ***
MW-02-3	04/12/2005	Lab	N	--	--	--	--	--	< 0.01	**0.004**
			FD	--	--	--	--	--	< 0.01	**0.004**
MW-02-3	10/31/2005	Lab	N	--	--	--	--	--	**0.02**	**0.008 ***
MW-02-3	10/31/2005	Field	N	--	--	--	--	--	--	--
			FD	--	--	--	--	--	--	--
MW-02-3	04/20/2006	Lab	N	--	--	--	--	--	< 0.01	< 0.01
			FD	--	--	--	--	--	< 0.01	< 0.01
MW-02-3	10/24/2006	Lab	N	--	--	--	--	--	< 0.01	**0.007**
			FD	--	--	--	--	--	< 0.01	**0.012**
MW-02-3	04/24/2007	Lab	N	--	--	--	--	--	< 0.01	< 0.01
			FD	--	--	--	--	--	< 0.01	< 0.01
MW-02-3	11/06/2007	Lab	N	--	--	--	--	--	< 0.01	< 0.01
			FD	--	--	--	--	--	< 0.01	< 0.01
MW-02-3	05/15/2008	Lab	N	< 0.00002	--	**0.0132**	--	**0.0051**	--	< 0.0026
MW-02-3	09/23/2008	Lab	N	< 0.00002	--	**0.01408**	--	**0.0038**	--	< 0.0084
MW-02-3	07/17/2010	Lab	N	< 0.00002	--	**0.0140**	--	**0.0042**	--	**0.0082**
			FD	< 0.00002	--	**0.0139**	--	**0.0041**	--	**0.0085**
MW-12-3	11/07/2012	Lab	N	**0.000041**	--	**0.0079**	--	**0.00513**	--	**0.0013**
MW-12-7	11/06/2012	Lab	N	**0.000022**	--	**0.0143**	--	**0.00214**	--	**0.0008**
MW-12-8	11/06/2012	Lab	N	< 0.000020	--	**0.0176**	--	**0.00169**	--	**0.0009**
MW-12-4	11/07/2012	Lab	N	**0.000023**	--	**0.0063**	--	**0.00488**	--	< 0.0005
MW-12-5	11/07/2012	Lab	N	**0.000039**	--	**0.0108**	--	**0.00542**	--	**0.0006**
			FD	**0.000038**	--	**0.0107**	--	**0.00528**	--	< 0.0005
MW-12-6	11/07/2012	Lab	N	**0.000047**	--	**0.0094**	--	**0.00252**	--	**0.0008**
MW-12-2	11/08/2012	Lab	N	**0.000022**	--	**0.0322**	--	**0.00725**	--	**0.0009**
MW-02-4	10/09/2002	Lab	N	--	--	--	--	--	**0.13**	--
			FD	--	--	--	--	--	**0.14**	--
MW-02-4	10/22/2004	Lab	N	--	--	--	--	--	--	--
			FD	--	--	--	--	--	--	--
MW-02-4	01/10/2005	Lab	N	--	--	--	--	--	< 0.01 *	**0.002 ***
			FD	--	--	--	--	--	< 0.01 *	**0.003 ***
MW-02-4	04/12/2005	Lab	N	--	--	--	--	--	< 0.01	**0.003**
MW-02-4	10/31/2005	Lab	N	--	--	--	--	--	< 0.01	**0.006 ***
		Field		--	--	--	--	--	--	--
MW-02-4	10/31/2005	Lab	FD	--	--	--	--	--	< 0.01	**0.004 b***
		Field		--	--	--	--	--	--	--
MW-02-4	04/20/2006	Lab	N	--	--	--	--	--	< 0.01	< 0.01
MW-02-4	10/24/2006	Lab	N	--	--	--	--	--	< 0.01	**0.007**
MW-02-4	04/24/2007	Lab	N	--	--	--	--	--	< 0.01	< 0.01
MW-02-4	11/06/2007	Lab	N	--	--	--	--	--	< 0.01	< 0.01
MW-02-4	05/15/2008	Lab	N	< 0.00002	--	**0.0256**	--	**0.0058**	--	< 0.0058
			FD	< 0.00002	--	**0.0258**	--	**0.0059**	--	< 0.0032
MW-02-4	09/23/2008	Lab	N	< 0.00002	--	**0.02805**	--	**0.0055**	--	< 0.0055
MW-02-4	07/18/2010	Lab	N	< 0.00002	--	**0.0300**	--	**0.0055**	--	**0.0061**
MW-06-1	05/15/2008	Lab	N	< 0.00002	--	**0.0319**	--	**0.0031**	--	< 0.0014
MW-06-1	09/18/2008	Lab	N	**0.000032**	--	**0.032374**	--	**0.0034**	--	< 0.0050
MW-06-1	07/17/2010	Lab	N	< 0.00002	--	**0.0396**	--	**0.0030**	--	**0.0078**
MW-06-10	05/14/2008	Lab	N	< 0.00002	--	**0.0207**	--	**0.0053**	--	< 0.0021
MW-06-10	09/18/2008	Lab	N	< 0.000020	--	**0.022226**	--	**0.0047**	--	< 0.0038

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
Location ID	**Sample Date**	**Analysis Location**	**Sample Type**							
MW-12-1	11/06/2012	Lab	N	**0.000059**	--	**0.0122**	--	**0.00266**	--	**0.0015**
MW-EPA-4	11/05/1997	Lab	N	--	--	**0.0066**	< 0.1	--	**0.02**	--
MW-EPA-4	10/12/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-EPA-4	07/24/2003	Lab	N	< 0.0020	--	--	**0.0033 BQQ**	**0.0040**	**0.0020 BQQ**	**0.0100**
MW-EPA-4	05/15/2008	Lab	N	< 0.00002	--	**0.0046**	--	**0.0039**	--	< 0.0012
MW-EPA-4	09/20/2008	Lab	N	< 0.00002	--	**0.00472**	--	**0.0036**	--	< 0.0023
Wells Near Slag Water Retention Ditch										
MW-06-15	05/21/2008	Lab	N	< 0.00002	--	**0.0216**	--	**0.0040**	--	**0.0016**
MW-06-15	09/17/2008	Lab	N	< 0.000020	--	**0.024377**	--	**0.0033**	--	< 0.0972 R
MW-06-15	12/11/2008	Lab	N	--	--	--	--	--	--	< 0.0039
MW-97-12	11/05/1997	Lab	N	--	--	**0.001**	< 0.1	--	**0.02**	--
MW-97-12	10/12/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-97-12	05/27/2008	Lab	N	**0.00003**	--	**0.000797**	--	**0.0094**	--	< 0.0035
MW-97-12	09/23/2008	Lab	N	**0.00098 R**	--	**0.00016 R**	--	**0.0112 R**	--	**0.485 R**
MW-97-12	12/15/2008	Lab	N	< 0.000020	--	**0.000712**	--	**0.0084**	--	< 0.0029
MW-06-14	05/27/2008	Lab	N	**0.00002**	--	**0.009020**	--	**0.0033**	--	< 0.0022
MW-06-14	09/18/2008	Lab	N	**0.000030**	--	**0.008372**	--	**0.0039**	--	< 0.0081
MW-06-14	12/11/2008	Lab	N	--	--	--	--	--	--	--
MW-EPA-3	08/09/1988	Lab	N	< 0.0029 JB	--	--	--	< 0.0084 B	--	< 0.0155 B
MW-EPA-3	11/05/1997	Lab	N	--	--	**0.0362**	< 0.1	--	< 0.01	--
MW-EPA-3	10/12/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-EPA-3	07/24/2003	Lab	N	**0.000040 J**	--	--	**0.0062 BQQ**	**0.0061**	**0.00098 J**	**0.00051 J**
MW-EPA-3	05/15/2008	Lab	N	< 0.00002	--	**0.0140**	--	**0.0062**	--	< 0.0023
MW-EPA-3	09/16/2008	Lab	N	< 0.000020	--	**0.014702**	--	**0.0053**	--	< 0.0020
Wells in Plant Area										
MW-06-19	05/20/2008	Lab	N	< 0.00002	--	**0.0809**	--	**0.0048**	--	**0.0042**
MW-06-19	09/18/2008	Lab	N	**0.000020**	--	**0.084038**	--	**0.0043**	--	< 0.0040
MW-06-13	05/27/2008	Lab	N	< 0.00002	--	**0.009860**	--	**0.0060**	--	< 0.0016
			FD	< 0.00002	--	**0.009930**	--	**0.0061**	--	< 0.0019
MW-06-13	09/19/2008	Lab	N	< 0.00002	--	**0.0113**	--	**0.0058**	--	**0.003**
MW-06-16	05/21/2008	Lab	N	< 0.00002	--	**0.0440**	--	**0.0045**	--	**0.0014**
MW-06-16	09/20/2008	Lab	N	< 0.00002	--	**0.04279**	--	**0.0042**	--	< 0.0051
MW-06-17	05/27/2008	Lab	N	**0.00002**	--	**0.005490**	--	**0.0099**	--	**0.0236**
MW-06-17	09/20/2008	Lab	N	< 0.00002	--	**0.00486**	--	**0.0089**	--	**0.0218**
MW-06-20	05/20/2008	Lab	N	**0.00005**	--	< 0.000020	--	**0.0070**	--	**0.0286**
MW-06-20	09/20/2008	Lab	N	**0.00006**	--	**0.00008**	--	**0.0067**	--	**0.0258**
MW-06-20	12/12/2008	Lab	N	--	--	--	--	--	--	--
MW-06-18	05/21/2008	Lab	N	< 0.00002	--	**0.000103**	--	**0.0068**	--	**1.24**
			FD	< 0.00002	--	**0.000109**	--	**0.0070**	--	**1.25**
MW-06-18	09/25/2008	Lab	N	< 0.00010	--	**0.00010**	--	**0.0066**	--	**1.51000**
Wells near Tailing Basin (SWMU 1)										
MW-06-7	05/29/2008	Lab	N	**0.0186**	--	**0.002710**	--	**0.0418**	--	< 0.0028
MW-06-7	09/23/2008	Lab	N	**0.00251**	--	**0.00417**	--	**0.0163**	--	< 0.006
MW-06-8	05/18/2008	Lab	N	**0.00006**	--	**0.00068**	--	**0.0035**	--	**0.0057**
MW-06-8	09/25/2008	Lab	N	< 0.00010	--	**0.00044**	--	< 0.0010	--	**0.0168**
MW-06-9	05/17/2008	Lab	N	**0.00014**	--	**0.0041**	--	**0.0008**	--	**0.0049**
MW-06-9	09/25/2008	Lab	N	< 0.00010	--	**0.00392**	--	< 0.0010	--	**0.0160**
PW-99-3	03/22/1999	Lab	N	--	--	--	--	--	--	--
PW-99-3	03/23/1999	Lab	N	--	--	--	--	--	--	--
PW-99-3	05/28/2008	Lab	N	**0.00006**	--	**0.0173**	--	**0.0036**	--	< 0.0013
PW-99-3	09/22/2008	Lab	N	**0.00005**	--	**0.01203**	--	**0.0051**	--	< 0.0014
MW-97-11	11/05/1997	Lab	N	--	--	**0.0065**	< 0.1	--	< 0.01	--
MW-97-11	10/08/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-97-11	07/21/2003	Lab	N	< 0.0040	--	--	**0.0064 BQQ**	**0.0052**	**0.0035 BQQ**	**0.0050 J**
MW-97-11	01/11/2005	Lab	N	--	--	--	--	--	< 0.01	**0.006**
MW-97-11	05/21/2008	Lab	N	**0.00007**	--	**0.004160**	--	**0.0053**	--	**0.0037**
MW-97-11	09/25/2008	Lab	N	< 0.00010	--	**0.00396**	--	**0.0057**	--	< 0.0050
MW-97-10	11/04/1997	Lab	N	--	--	**0.0076**	< 0.1	--	**0.01**	--
			FD	--	--	**0.0083**	< 0.1	--	< 0.01	--
MW-97-10	10/08/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
Location ID	**Sample Date**	**Analysis Location**	**Sample Type**							
MW-97-10	07/23/2003	Lab	N	**0.00014 J**	--	--	**0.0041 BQQ**	**0.0053**	**0.0027**	**0.0060 J**
			FD	--	--	--	**0.0043**	--	**0.0029 J**	--
MW-97-10	01/11/2005	Lab	N	--	--	--	--	--	< 0.01	**0.004**
MW-97-10	05/21/2008	Lab	N	**0.00003**	--	**0.003820**	--	**0.0044**	--	**0.0015**
MW-97-10	09/23/2008	Lab	N	**0.00002**	--	**0.00404**	--	**0.0042**	--	< 0.0013
MW-06-2	05/15/2008	Lab	N	**0.00002**	--	**0.0081**	--	**0.0049**	--	< 0.0032
MW-06-2	09/23/2008	Lab	N	< 0.00002	--	**0.00914**	--	**0.0039**	--	< 0.0083
MW-06-2	07/18/2010	Lab	N	< 0.00002	--	**0.009950**	--	**0.0039**	--	**0.0058**
PW-99-1	03/24/1999	Lab	N	--	--	--	--	--	--	--
PW-99-1	03/25/1999	Lab	N	--	--	--	--	--	--	--
PW-99-1	01/10/2005	Lab	N	--	--	--	--	--	< 0.01 *	< 0.001 *
PW-99-1	05/18/2008	Lab	N	**0.00003**	--	**0.0112**	--	**0.0030**	--	**0.0008**
PW-99-1	05/29/2008	Lab	N	< 0.00004	--	**0.0114**	--	**0.0033**	--	< 0.0008
PW-99-1	09/25/2008	Lab	N	< 0.00010	--	**0.00849**	--	**0.0034**	--	< 0.0050
MW-97-3	11/04/1997	Lab	N	--	--	**0.0111**	< 0.1	--	< 0.01	--
MW-97-3	10/07/1998	Lab	N	--	--	--	< 0.1	--	**0.01**	--
MW-97-3	01/10/2005	Lab	N	--	--	--	--	--	< 0.01 *	**0.002 ***
MW-97-3	05/28/2008	Lab	N	< 0.00002	--	**0.009500**	--	**0.0082**	--	< 0.0012
MW-97-3	09/23/2008	Lab	N	< 0.00002	--	**0.00996**	--	**0.0075**	--	< 0.0025
MW-97-4	11/04/1997	Lab	N	--	--	**0.0072**	< 0.1	--	**0.03**	--
MW-97-4	10/07/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
MW-97-4	03/19/1999	Lab	N	--	--	--	--	--	--	--
MW-97-4	01/10/2005	Lab	N	--	--	--	--	--	< 0.01 *	**0.001 ***
MW-97-4	05/20/2008	Lab	N	< 0.00002	--	**0.00726**	--	**0.0074**	--	**0.0014**
MW-97-4	09/22/2008	Lab	N	< 0.00002	--	**0.00778**	--	**0.0063**	--	< 0.0025
MW-06-12	05/20/2008	Lab	N	< 0.00002	--	**0.001810**	--	**0.0033**	--	**0.0179**
MW-06-12	09/25/2008	Lab	N	< 0.00010	--	**0.00200**	--	**0.0026**	--	**0.0142**
			FD	< 0.00010	--	**0.00199**	--	**0.0027**	--	**0.0127**
MW-06-11	05/28/2008	Lab	N	**0.00004**	--	**0.001660**	--	**0.0051**	--	< 0.0019
MW-06-11	09/23/2008	Lab	N	**0.00003**	--	**0.00179**	--	**0.0044**	--	< 0.0037
MW-97-9	11/05/1997	Lab	N	--	--	**0.0013**	< 0.1	--	**0.02**	--
MW-97-9	10/07/1998	Lab	N	--	--	--	< 0.1	--	**0.98**	--
MW-97-9	05/16/2008	Lab	N	**0.00031**	--	**0.00024**	--	**0.0225**	--	**0.251**
MW-97-9	09/24/2008	Lab	N	**0.00039**	--	**0.00019**	--	**0.0236**	--	**0.3702**
			FD	**0.00039**	--	**0.00020**	--	**0.0234**	--	**0.3704**
MW-97-8	11/05/1997	Lab	N	--	--	**0.0007**	< 0.1	--	**0.02**	--
MW-97-8	10/07/1998	Lab	N	--	--	--	< 0.1	--	**0.08**	--
MW-97-8	05/15/2008	Lab	N	**0.00006**	--	**0.00031**	--	**0.0082**	--	< 0.0035
MW-97-8	09/24/2008	Lab	N	< 0.00010	--	**0.00027**	--	**0.0069**	--	< 0.0050
MW-06-21	05/17/2008	Lab	N	**0.00006**	--	**0.0046**	--	**0.0076**	--	**0.0035**
MW-06-21	09/24/2008	Lab	N	< 0.00010	--	**0.00266**	--	**0.0068**	--	**0.0160**
MW-06-22	05/21/2008	Lab	N	**0.00005**	--	**0.001110**	--	**0.0076**	--	**0.0091**
MW-06-22	09/26/2008	Lab	N	< 0.00010	--	**0.00082**	--	**0.0066**	--	**0.0055**
MW-06-25	05/20/2008	Lab	N	**0.00012**	--	**0.0147**	--	**0.0169**	--	**0.756**
MW-06-25	09/26/2008	Lab	N	**0.00014**	--	**0.01836**	--	**0.0146**	--	**0.6912**
MW-97-7	11/04/1997	Lab	N	--	--	**0.0014**	< 0.1	--	**0.67**	--
MW-97-7	10/08/1998	Lab	N	--	--	--	< 0.1	--	**0.340**	--
MW-97-7	10/08/2001	Lab	N	< 0.002	--	**0.0029**	< 0.1	< 0.1	**0.51**	**0.54**
MW-97-7	01/17/2002	Lab	N	--	**0.0063**	--	< 0.01	--	**0.426**	--
			FD	--	**0.0063**	--	< 0.1	--	**0.54**	--
MW-97-7	05/20/2008	Lab	N	**0.00003**	--	**0.0290**	--	**0.0065**	--	**0.276**
MW-97-7	09/26/2008	Lab	N	< 0.00010	--	**0.01888**	--	**0.0055**	--	**0.2493**
Wells near Brick Pile (SWMU 3)										
MW-01-1	10/08/2001	Lab	N	< 0.002	--	**0.0310**	< 0.1	< 0.1	**0.02**	**0.02**
MW-01-1	01/16/2002	Lab	N	--	**0.0453**	--	< 0.01	--	**0.008**	--
			SPLIT	--	**0.038**	--	< 0.1	--	< 0.01	--
MW-01-1	05/16/2008	Lab	N	< 0.00002	--	**0.0522**	--	**0.0034**	--	< 0.0039
MW-01-1	09/17/2008	Lab	N	< 0.000020	--	**0.053602**	--	**0.0029**	--	< 0.0055
MW-01-4	10/04/2001	Lab	N	< 0.003	--	**0.0134**	< 0.1	< 0.1	< 0.01	**0.02**
			FD	< 0.003	--	**0.0147**	< 0.1	< 0.1	< 0.01	**0.02**

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
Location ID	**Sample Date**	**Analysis Location**	**Sample Type**							
MW-01-4	01/16/2002	Lab	N	--	**0.0202**	--	< 0.01	--	< 0.001	--
MW-01-4	05/16/2008	Lab	N	< 0.00002	--	**0.0233**	--	**0.0046**	--	< 0.0012
MW-01-4	09/16/2008	Lab	N	< 0.000020	--	**0.020712**	--	**0.0038**	--	< 0.0030
MW-01-5	10/04/2001	Lab	N	< 0.003	--	**0.0150**	< 0.1	< 0.1	**0.02**	**0.02**
MW-01-5	01/16/2002	Lab	N	--	**0.0210**	--	< 0.01	--	**0.003**	--
			FD SPLIT	--	**0.018**	--	< 0.1	--	< 0.01	--
			SPLIT	--	**0.017**	--	< 0.1	--	< 0.01	--
MW-01-5	05/17/2008	Lab	N	< 0.00002	--	**0.0233**	--	**0.0045**	--	**0.0015**
MW-01-5	09/16/2008	Lab	N	< 0.000020	--	**0.023122**	--	**0.0041**	--	< 0.0037
Wells near Clarfier (SWMU 2)										
MW-01-2	10/09/2001	Lab	N	< 0.002	--	< 0.0003	< 0.1	< 0.1	**0.20**	**0.28**
MW-01-2	01/16/2002	Lab	N	--	< 0.0002	--	< 0.01	--	**0.091**	--
			SPLIT	--	< 0.0003	--	< 0.1	--	**0.10**	--
MW-01-2	09/04/2002	Lab	N	--	--	--	--	--	**0.25**	--
MW-01-2	07/22/2003	Lab	N	**0.00012 J**	--	--	**0.0045 BQQ**	**0.0045**	**0.388 BQQ**	**0.327**
			FD	**0.00012 J**	--	--	**0.0045 BQQ**	**0.0050**	**0.399 BQQ**	**0.321**
MW-01-2	05/19/2008	Lab	N	**0.00004**	--	**0.000022**	--	**0.0064**	--	**0.222**
MW-01-2	09/22/2008	Lab	N	**0.00004**	--	**0.00004**	--	**0.0062**	--	**0.2124**
MW-01-6	10/09/2001	Lab	N	< 0.002	--	< 0.0003	< 0.1	< 0.1	**0.320**	**0.350**
MW-01-6	01/17/2002	Lab	N	--	< 0.0002	--	< 0.01	--	**0.873**	--
			SPLIT	--	< 0.0003	--	< 0.1	--	**0.97**	--
MW-01-6	09/05/2002	Lab	N	--	--	--	--	--	**0.99**	--
MW-01-6	05/19/2008	Lab	N	**0.00010**	--	< 0.000020	--	< 0.0002	--	**0.902**
MW-01-6	09/18/2008	Lab	N	**0.000098**	--	**0.000096**	--	**0.000500**	--	**0.6957**
MW-01-3	10/09/2001	Lab	N	< 0.002	--	**0.0007**	< 0.1	< 0.1	**0.47**	**0.60**
MW-01-3	01/22/2002	Lab	N	--	< 0.001	--	< 0.1	--	**0.09**	--
			FD	--	< 0.001	--	< 0.1	--	**0.10**	--
			SPLIT	--	< 0.0003	--	< 0.1	--	**0.09**	--
			FD SPLIT	--	< 0.0003	--	< 0.1	--	**0.09**	--
			FDD SPLIT	--	< 0.0003	--	< 0.1	--	**0.09**	--
MW-01-3	09/05/2002	Lab	N	--	--	--	--	--	**0.23**	--
			FD	--	--	--	--	--	**0.23**	--
MW-01-3	05/19/2008	Lab	N	**0.00005**	--	**0.000027**	--	**0.0011**	--	**0.0080**
MW-01-3	09/19/2008	Lab	N	**0.000060**	--	**0.000036**	--	**0.000903**	--	**0.0129**
MW-02-2	09/05/2002	Lab	N	--	--	--	--	--	**1.34**	--
MW-02-2	05/19/2008	Lab	N	**0.00003**	--	**0.000059**	--	**0.0045**	--	**0.524**
MW-02-2	09/22/2008	Lab	N	**0.00003**	--	**0.00008**	--	**0.0042**	--	**0.4973**
MW-02-1	01/17/2002	Lab	N	--	**0.0047**	--	< 0.01	--	**0.004**	--
			SPLIT	--	**0.0022**	--	< 0.1	--	< 0.01	--
MW-02-1	09/04/2002	Lab	N	--	--	--	--	--	**0.01**	--
MW-02-1	07/22/2003	Lab	N	**0.00044 J**	--	--	< 0.0010	< 0.0010	**0.0030 JBQQ**	**0.0032 J**
MW-02-1	05/29/2008	Lab	N	< 0.00002	--	**0.0035**	--	< 0.0004	--	< 0.0016
			FD	< 0.00002	--	**0.0034**	--	< 0.0003	--	< 0.0020
MW-02-1	09/26/2008	Lab	N	< 0.00010	--	**0.00455**	--	< 0.0010	--	**0.0143**
Production Wells										
RP-W-1	07/23/1982	Lab	N	--	--	--	--	--	--	--
RP-W-1	10/07/1998	Lab	N	--	--	--	< 0.1	--	**0.02**	--
RP-W-1	05/22/2008	Lab	N	< 0.00002	--	**0.0058**	--	**0.0059**	--	**0.0032**
RP-W-1	09/25/2008	Lab	N	< 0.00010	--	**0.00280**	--	**0.0057**	--	**0.0083**
RP-W-4	06/04/1982	Lab	N	--	--	--	--	--	--	--
RP-W-4	08/05/1982	Lab	N	--	--	--	--	--	--	--
RP-W-4	05/26/1983	Lab	N	--	--	--	--	--	--	--
RP-W-4	10/07/1998	Lab	N	--	--	--	< 0.1	--	**0.04**	--
RP-W-4	05/28/2008	Lab	N	**0.00005**	--	**0.002060**	--	**0.0049**	--	< 0.0067
RP-W-4	09/24/2008	Lab	N	< 0.00010	--	**0.00217**	--	**0.0047**	--	**0.0145**
			FD	< 0.00010	--	**0.00218**	--	**0.0047**	--	**0.0058**
RP-W-5	07/23/1982	Lab	N	--	--	--	--	--	--	--
RP-W-5	10/07/1998	Lab	N	--	--	--	< 0.1	--	**0.01**	--
			FD	--	--	--	< 0.1	--	< 0.01	--
RP-W-5	05/30/2008	Lab	N	< 0.00002	--	**0.0050**	--	**0.0037**	--	< 0.0034

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant
[concentrations in mg/l]

			Chemical Name Total or Dissolved	Thallium Total	Uranium Dissolved	Uranium Total	Vanadium Dissolved	Vanadium Total	Zinc Dissolved	Zinc Total
Location ID	Sample Date	Analysis Location	Sample Type							
RP-W-5	09/24/2008	Lab	N	< 0.00010	--	**0.00489**	--	**0.0037**	--	< 0.0050
RP-W-6	06/04/1982	Lab	N	--	--	--	--	--	--	--
RP-W-6	10/05/1982	Lab	N	--	--	--	--	--	--	--
RP-W-6	05/26/1983	Lab	N	--	--	--	--	--	--	--
RP-W-6	04/01/1986	Lab	N	--	--	--	--	--	--	--
RP-W-6	03/17/1987	Lab	N	--	--	--	--	--	--	--
RP-W-6	08/05/1988	Lab	N	--	--	--	**0.0058**	--	**0.0172**	--
RP-W-6	08/06/1988	Lab	N	< 0.0028 JB	--	--	--	< 0.0058 B	--	< 0.00172 B
RP-W-6	06/23/1992	Lab	N	--	--	--	--	--	--	--
RP-W-6	10/07/1998	Lab	N	--	--	--	< 0.1	--	< 0.01	--
RP-W-6	05/30/2008	Lab	N	< 0.00006	--	**0.0034**	--	**0.0046**	--	< 0.0232
RP-W-6	09/24/2008	Lab	N	< 0.00010	--	**0.00301**	--	**0.0039**	--	**0.0132**
RP-W-7	07/23/1982	Lab	N	--	--	--	--	--	--	--
RP-W-7	10/01/1982	Lab	N	--	--	--	--	--	--	--
RP-W-7	10/07/1998	Lab	N	--	--	--	< 0.1	--	**0.01**	--
RP-W-7	05/22/2008	Lab	N	< 0.00002	--	**0.0072**	--	**0.0057**	--	**0.0062**
RP-W-7	09/25/2008	Lab	N	< 0.00010	--	**0.00687**	--	**0.0057**	--	< 0.0050

Table 5.3-4b
Groundwater Data - Metals
Rhodia Silver Bow Plant

The analytical database contains data for the following parameters. The data set is comparitively small and was not summarized in the RFI Report.

Arsenic III	Dissolved
Arsenic III	Total
Arsenic V	Dissolved
Arsenic V	Total
Monomethylarsonic acid	Dissolved
Monomethylarsonic acid	Total
Dimethylarsinic acid	Dissolved
Dimethylarsinic acid	Total
Iron, ferrous, FE II	Total
Strontium	Dissolved

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methyl-4,6-dinitrophenol
Location ID	**Sample Date**	**Sample Type**														
Upgradient Wells																
MW-06-23	05/13/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-23	09/16/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-06-24	05/13/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-24	09/16/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-GW-1	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-GW-1	09/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-06-4	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-1	05/13/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-1	09/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-97-2	05/13/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-2	09/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-06-5	05/14/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-5	09/19/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
		FD	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-6	05/14/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-6	05/28/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-6	09/18/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-EPA-1	08/09/1988	N	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	< 0.02	< 0.02	< 0.02	--	--	< 0.02	< 0.02	< 0.02	--
MW-EPA-1	05/14/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-GW-3	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-GW-3	09/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-97-5	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-6	05/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-6	09/16/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-MT96-2	05/29/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-BSB-4	05/29/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
Wells Far Downgradient of Tailing Basin (SWMU 1)																
MW-06-3	05/14/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-02-3	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-12-3	11/07/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 J	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-12-7	11/06/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 J	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-12-8	11/06/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-12-4	11/07/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 J	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-12-5	11/07/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 J	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
		FD	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-12-6	11/07/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 J	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-12-2	11/08/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 J	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-02-4	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
		FD	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-1	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-10	05/14/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-12-1	11/06/2012	N	< 0.000016	< 0.000022	< 0.000021 R	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 J	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 J
MW-EPA-4	08/09/1988	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	--
MW-EPA-4	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
Wells Near Slag Water Retention Ditch																
MW-06-15	05/21/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-15	09/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-97-12	05/27/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-14	05/27/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-EPA-3	08/09/1988	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	--
MW-EPA-3	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-EPA-3	09/16/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
Wells in Plant Area																
MW-06-19	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-19	09/18/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-13	05/27/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
		FD	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-13	09/19/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000035	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methyl-4,6-dinitrophenol
Location ID	Sample Date	Sample Type														
MW-06-16	05/21/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-16	09/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-17	05/27/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-17	09/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-20	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-20	09/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-18	05/21/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
		FD	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-18	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
Wells near Tailing Basin (SWMU 1)																
MW-06-7	05/28/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-8	05/18/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-8	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000032	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-9	05/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-9	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000044	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
PW-99-3	05/28/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-11	05/21/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-11	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031 R	< 0.000058 R	< 0.000047 R	< 0.0022 R	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054 R	< 0.000025 R
MW-97-10	05/21/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-10	09/23/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-2	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
PW-99-1	05/18/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031 R	< 0.000058 R	< 0.000047	< 0.0022 R	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054 R	< 0.000025 R
PW-99-1	05/29/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
PW-99-1	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-3	05/28/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-3	09/23/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-4	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-4	09/22/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031 R	< 0.000058 R	< 0.000047 R	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054 R	< 0.000025 R
MW-06-12	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-12	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
		FD	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-11	05/28/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-11	09/23/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-9	05/16/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-9	09/24/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000044	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
		FD	< 0.000016	< 0.000022	< 0.000021	< 0.000045	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-8	05/15/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-8	09/24/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000035	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-21	05/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-21	09/24/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000041	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-22	05/21/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-22	09/26/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-06-25	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	**0.0010**	< 0.000025
MW-06-25	09/26/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-7	10/08/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
MW-97-7	05/20/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-97-7	09/26/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000021	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
Wells near Brick Pile (SWMU 3)																
MW-01-1	10/08/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
MW-01-1	05/16/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-01-1	09/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
MW-01-4	10/04/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
		FD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
MW-01-4	05/16/2008	N	< 0.000018	< 0.000025	< 0.000024	< 0.000032	< 0.000035	< 0.000064	< 0.000052	< 0.0025	< 0.00019	< 0.000020	< 0.000037	< 0.000046	< 0.000060	< 0.000028
MW-01-5	10/04/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
MW-01-5	05/17/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-01-5	09/16/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025 R
Wells near Clarfier (SWMU 2)																
MW-01-2	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methyl-4,6-dinitrophenol
Location ID	Sample Date	Sample Type														
MW-01-2	05/19/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-01-2	09/22/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-01-6	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
MW-01-6	05/19/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-01-6	09/18/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-01-3	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
MW-01-3	05/19/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-01-3	09/19/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-02-2	05/19/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-02-2	09/22/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022	< 0.00017 R	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
MW-02-1	01/17/2002	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05
		SPLIT	< 0.011	< 0.011	< 0.011	< 0.011	< 0.021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.021
MW-02-1	05/29/2008	N	< 0.00016	< 0.00022	< 0.00021	< 0.00029	< 0.00031	< 0.00058	< 0.00047	< 0.022 R	< 0.0017	< 0.00018	< 0.00033	< 0.00041	< 0.00054	< 0.00025
		FD	< 0.00032	< 0.00044	< 0.00042	< 0.00058	< 0.00062	< 0.0012	< 0.00094	< 0.044 R	< 0.0034	< 0.00036	< 0.00066	< 0.00082	< 0.0011	< 0.00050
MW-02-1	09/26/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
Production Wells																
RP-W-1	05/22/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-1	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-4	08/06/1988	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	--
		FD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	--
RP-W-4	05/28/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-4	09/24/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
		FD	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-5	05/30/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-5	09/24/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-6	08/06/1988	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	--
RP-W-6	05/30/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-7	05/22/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025
RP-W-7	09/25/2008	N	< 0.000016	< 0.000022	< 0.000021	< 0.000029	< 0.000031	< 0.000058	< 0.000047	< 0.0022 R	< 0.00017	< 0.000018	< 0.000033	< 0.000041	< 0.000054	< 0.000025

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type / Chemical Name	2-Methylnaphthalene	2-Nitroaniline	2-Nitrophenol	3,3`-Dichlorobenzidine	3-Nitroaniline	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl phenyl ether	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Anthracene	Azobenzene	Benz(a) anthracene
Upgradient Wells																		
MW-06-23	05/13/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-23	09/16/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-24	05/13/2008	N	< 0.000026	< 0.000024	**0.000080 J**	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-24	09/16/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-GW-1	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-GW-1	09/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000072	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-06-4	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-1	05/13/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	**0.000042 J**
MW-97-1	09/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	**0.0000041 J**
MW-97-2	05/13/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-2	09/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-5	05/14/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-5	09/19/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
		FD	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-6	05/14/2008	N	< 0.000026	< 0.000024	**0.000090 J**	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-6	05/28/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-6	09/18/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-EPA-1	08/09/1988	N	< 0.02	< 0.1	< 0.02	--	--	--	< 0.02	< 0.02	--	--	--	--	< 0.02	--	--	--
MW-EPA-1	05/14/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-GW-3	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-GW-3	09/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-5	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-6	05/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-6	09/16/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-MT96-2	05/29/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-BSB-4	05/29/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
Wells Far Downgradient of Tailing Basi																		
MW-06-3	05/14/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-02-3	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-3	11/07/2012	N	< 0.000027	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-7	11/06/2012	N	< 0.000027	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-8	11/06/2012	N	< 0.000027	< 0.000024	< 0.000063 J	< 0.00043 R	< 0.000029 J	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019 J	< 0.00028 J	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-4	11/07/2012	N	< 0.000027	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-5	11/07/2012	N	< 0.000027	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
		FD	< 0.000027	< 0.000024	< 0.000063 J	< 0.00043 R	< 0.000029 J	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019 J	< 0.00028 J	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-6	11/07/2012	N	< 0.000027	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-2	11/08/2012	N	< 0.000027	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-02-4	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
		FD	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-1	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-10	05/14/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-12-1	11/06/2012	N	< 0.000027	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000061 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-EPA-4	08/09/1988	N	< 0.01	< 0.05	< 0.01	--	--	--	< 0.01	< 0.01	--	--	--	--	< 0.01	--	--	--
MW-EPA-4	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
Wells Near Slag Water Retention Ditch																		
MW-06-15	05/21/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-15	09/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-97-12	05/27/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-14	05/27/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-EPA-3	08/09/1988	N	< 0.01	< 0.05	< 0.01	--	--	--	< 0.01	< 0.01	--	--	--	--	< 0.01	--	--	--
MW-EPA-3	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-EPA-3	09/16/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
Wells in Plant Area																		
MW-06-19	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-19	09/18/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-13	05/27/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
		FD	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-13	09/19/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			2-Methylnaphthalene	2-Nitroaniline	2-Nitrophenol	3,3`-Dichlorobenzidine	3-Nitroaniline	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl phenyl ether	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Anthracene	Azobenzene	Benz(a) anthracene
Location ID	**Sample Date**	**Sample Type**																
MW-06-16	05/21/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-16	09/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-06-17	05/27/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-17	09/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-20	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-20	09/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	**0.0000063 J**	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-06-18	05/21/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
		FD	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-18	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000075
Wells near Tailing Basin (SWMU 1)																		
MW-06-7	05/28/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-8	05/18/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-8	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-9	05/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-9	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
PW-99-3	05/28/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-11	05/21/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-11	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037 R	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-97-10	05/21/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-10	09/23/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-06-2	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
PW-99-1	05/18/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037 R	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
PW-99-1	05/29/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
PW-99-1	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-3	05/28/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-3	09/23/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-4	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-4	09/22/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037 R	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	**0.0000033 J**
MW-06-12	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-12	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
		FD	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	**0.0000046 J**	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-06-11	05/28/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-11	09/23/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-97-9	05/16/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-9	09/24/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
		FD	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-8	05/15/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	**0.000029 J**	< 0.000018
MW-97-8	09/24/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-21	05/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-21	09/24/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-22	05/21/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-22	09/26/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-06-25	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-06-25	09/26/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-7	10/08/2001	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	--	< 0.01
MW-97-7	05/20/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-97-7	09/26/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
Wells near Brick Pile (SWMU 3)																		
MW-01-1	10/08/2001	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	--	< 0.01
MW-01-1	05/16/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-01-1	09/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	**0.0000036 J**
MW-01-4	10/04/2001	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	--	< 0.01
		FD	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	--	< 0.01
MW-01-4	05/16/2008	N	< 0.000029	< 0.000027	< 0.000070	< 0.00048 R	< 0.000032	< 0.000029	< 0.000041	< 0.000028	< 0.000030	< 0.000021	< 0.00031	< 0.000029	< 0.000017	< 0.000027	< 0.000024	< 0.000020
MW-01-5	10/04/2001	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	--	< 0.01
MW-01-5	05/17/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-01-5	09/16/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	**0.000072 J**	< 0.000024	< 0.000021	**0.000024 J**
Wells near Clarfier (SWMU 2)																		
MW-01-2	10/09/2001	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	--	< 0.01

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			2-Methylnaphthalene	2-Nitroaniline	2-Nitrophenol	3,3`-Dichlorobenzidine	3-Nitroaniline	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl phenyl ether	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Anthracene	Azobenzene	Benz(a) anthracene
Location ID	**Sample Date**	**Sample Type**																
MW-01-2	05/19/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-01-2	09/22/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.0000044	< 0.0000034	< 0.0000036	< 0.000021	< 0.0000026
MW-01-6	10/09/2001	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	**0.0057 J**	< 0.01	< 0.01	--	< 0.01
MW-01-6	05/19/2008	N	**0.000082 J**	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025 R	< 0.000027	< 0.000019	< 0.00028	**0.00036**	**0.000045 J**	**0.000084 J**	< 0.000021	< 0.000018
MW-01-6	09/18/2008	N	**0.000095 J**	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	**0.00062**	**0.000010 J**	**0.000025**	< 0.000021	**0.0000049 J**
MW-01-3	10/09/2001	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	--	< 0.01
MW-01-3	05/19/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025 R	< 0.000027	< 0.000019	< 0.00028	**0.000032 J**	**0.000018 J**	**0.000025 J**	< 0.000021	**0.000026 J**
MW-01-3	09/19/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	**0.000075**	< 0.0000035	**0.000018 J**	< 0.000021	**0.000021 J**
MW-02-2	05/19/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043 R	< 0.000029	< 0.000026	< 0.000037	< 0.000025 R	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-02-2	09/22/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
MW-02-1	01/17/2002	N	< 0.01	--	< 0.01	< 0.02	--	< 0.01	< 0.01	--	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
		SPLIT	< 0.011	< 0.011	< 0.011	< 0.021	< 0.011	< 0.011	< 0.011	< 0.021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	--	< 0.011
MW-02-1	05/29/2008	N	< 0.00026	< 0.00024	< 0.00063	< 0.0043	< 0.00029	< 0.00026	< 0.00037	< 0.00025	< 0.00027	< 0.00019	< 0.0028	< 0.00026	< 0.00015	< 0.00024	< 0.00021	< 0.00018
		FD	< 0.00052	< 0.00048	< 0.0013	< 0.0086	< 0.00058	< 0.00052	< 0.00074	< 0.00050	< 0.00054	< 0.00038	< 0.0056	< 0.00052	< 0.00030	< 0.00048	< 0.00042	< 0.00036
MW-02-1	09/26/2008	N	< 0.00022	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	**0.00046**	< 0.000015	< 0.000024	< 0.000021	< 0.000018
Production Wells																		
RP-W-1	05/22/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-1	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-4	08/06/1988	N	< 0.01	< 0.05	< 0.01	--	--	--	< 0.01	< 0.01	--	--	--	--	< 0.01	--	--	--
		FD	< 0.01	< 0.05	< 0.01	--	--	--	< 0.01	< 0.01	--	--	--	--	< 0.01	--	--	--
RP-W-4	05/28/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-4	09/24/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
		FD	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-5	05/30/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-5	09/24/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-6	08/06/1988	N	< 0.01	< 0.05	< 0.01	--	--	--	< 0.01	< 0.01	--	--	--	--	< 0.01	--	--	--
RP-W-6	05/30/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-7	05/22/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018
RP-W-7	09/25/2008	N	< 0.000026	< 0.000024	< 0.000063	< 0.00043	< 0.000029	< 0.000026	< 0.000037	< 0.000025	< 0.000027	< 0.000019	< 0.00028	< 0.000026	< 0.000015	< 0.000024	< 0.000021	< 0.000018

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h) anthracene	Dibenzofuran	Diethyl phthalate
Location ID	**Sample Date**	**Sample Type**																
Upgradient Wells																		
MW-06-23	05/13/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00027	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000030
MW-06-23	09/16/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0018**	< 0.000042	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000062
MW-06-24	05/13/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00033	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000019
MW-06-24	09/16/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0043**	< 0.000052	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000062
MW-GW-1	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0035**	< 0.000063	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000045
MW-GW-1	09/17/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00023	< 0.000033	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000021
MW-06-4	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00028	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000020
MW-97-1	05/13/2008	N	**0.000039 J**	< 0.000052	**0.000048 J**	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00027	< 0.000026	< 0.000018	**0.000075 J**	< 0.000017	< 0.000018	< 0.000012
MW-97-1	09/17/2008	N	< 0.0000043	**0.0000029 J**	**0.0000031 J**	< 0.0000025	**0.0015 R**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00021	< 0.000041	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000032
MW-97-2	05/13/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00053	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000012
MW-97-2	09/17/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00015	< 0.000039	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000033
MW-06-5	05/14/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00029	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000021
MW-06-5	09/19/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00014	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000022
		FD	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	**0.00011 J**	< 0.000024	< 0.000035	< 0.000026	< 0.00017	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000025
MW-06-6	05/14/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00072	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000026
MW-06-6	05/28/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00049	< 0.000049	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000054
MW-06-6	09/18/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0015**	< 0.000069	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000037
MW-EPA-1	08/09/1988	N	--	--	--	--	< 0.1	< 0.02	< 0.02	< 0.02	< 0.02	--	--	--	--	--	--	--
MW-EPA-1	05/14/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00033	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000012
MW-GW-3	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00031 J**	< 0.000028	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000027
MW-GW-3	09/17/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000075	< 0.000024	< 0.000035	< 0.000026	< 0.00022	< 0.000037	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000023
MW-97-5	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00020	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000012
MW-97-6	05/17/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0012	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0028**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000012
MW-97-6	09/16/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00018	< 0.000041	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000027
MW-MT96-2	05/29/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00016	< 0.000029	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000034
MW-BSB-4	05/29/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000029	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000029
Wells Far Downgradient of Tailing Basi																		
MW-06-3	05/14/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00026	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000023
MW-02-3	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00029	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000026
MW-12-3	11/07/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	**0.01**	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000025
MW-12-7	11/06/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.00013	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000025
MW-12-8	11/06/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.00020	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000032
MW-12-4	11/07/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.00021	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000019
MW-12-5	11/07/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.00016	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000021
		FD	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.00017	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000028
MW-12-6	11/07/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.00021	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000029
MW-12-2	11/08/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.00021	< 0.000021	< 0.000019	< 0.000028	< 0.000017	< 0.000018	< 0.000029
MW-02-4	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00017	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000018
		FD	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00021	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000012
MW-06-1	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00029	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000018
MW-06-10	05/14/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.0016	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000019
MW-12-1	11/06/2012	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026 J	< 0.0021	< 0.000021	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000022
MW-EPA-4	08/09/1988	N	--	--	--	--	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	--	--	--	--	--	--	--
MW-EPA-4	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.0015	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000020
Wells Near Slag Water Retention Ditch																		
MW-06-15	05/21/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00024 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000028
MW-06-15	09/17/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00017	< 0.000018	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000029
MW-97-12	05/27/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00033	< 0.000039	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000040
MW-06-14	05/27/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00020	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000032
MW-EPA-3	08/09/1988	N	--	--	--	--	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	--	--	--	--	--	--	--
MW-EPA-3	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.0014	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000012
MW-EPA-3	09/16/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000040	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000025
Wells in Plant Area																		
MW-06-19	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.053**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000049
MW-06-19	09/18/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	**0.0017 R**	< 0.000074	< 0.000024	< 0.000035	< 0.000026	< 0.00034	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000037
MW-06-13	05/27/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00031	< 0.000042	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000034
		FD	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00024	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000032
MW-06-13	09/19/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 J	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00016	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000027

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type / Chemical Name	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h) anthracene	Dibenzofuran	Diethyl phthalate
MW-06-16	05/21/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00035 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000029
MW-06-16	09/20/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	**0.0019 J**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000022
MW-06-17	05/27/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	**0.0021 R**	< 0.000096	< 0.000024	< 0.000035	< 0.000026	< 0.00025	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000057
MW-06-17	09/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	**0.0023 J**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00096	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000038
MW-06-20	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00030 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000047
MW-06-20	09/20/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	**0.0022 J**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00018	< 0.000018	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000053
MW-06-18	05/21/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00031 J**	< 0.000032	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000048
		FD	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00040 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000047
MW-06-18	09/25/2008	N	**0.0000048 J**	< 0.0000047	< 0.0000069	< 0.0000058	**0.0017 J**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00030	< 0.000018	< 0.000018	**0.0000044 J**	< 0.0000066	< 0.000018	< 0.00011
Wells near Tailing Basin (SWMU 1)																		
MW-06-7	05/28/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.018	< 0.000028	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000036
MW-06-8	05/18/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0012	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00058 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000048 J**
MW-06-8	09/25/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	**0.0016 J**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.021	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000039
MW-06-9	05/17/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0013	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00019 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000041 J**
MW-06-9	09/25/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	**0.0016 J**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.014	< 0.000050	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000063
PW-99-3	05/28/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00026	< 0.000026	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000028
MW-97-11	05/21/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0012**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000043
MW-97-11	09/25/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	**0.0015 R**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00077	< 0.000038	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000086
MW-97-10	05/21/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00028 J**	< 0.000041	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000041
MW-97-10	09/23/2008	N	< 0.0000043	< 0.0000023	< 0.0000057	< 0.0000025	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000037	< 0.000018	< 0.0000034	< 0.0000026	< 0.000018	< 0.000045
MW-06-2	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000022
PW-99-1	05/18/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0017	**0.000095 J**	< 0.000024	< 0.000035	< 0.000026	**0.00031 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000012
PW-99-1	05/29/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00029	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000031
PW-99-1	09/25/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000048	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000059
MW-97-3	05/28/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00047	< 0.000031	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000042
MW-97-3	09/23/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000035	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000035
MW-97-4	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00017 J**	< 0.000048	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000049
MW-97-4	09/22/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000047	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000047
MW-06-12	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00040 J**	< 0.000058	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000061
MW-06-12	09/25/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0011	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00017	< 0.000049	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.00013
		FD	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0011	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00014	< 0.000041	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.00011
MW-06-11	05/28/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00067	< 0.000037	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.00011
MW-06-11	09/23/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000035	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000093
MW-97-9	05/16/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000048
MW-97-9	09/24/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.0036	< 0.000041	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000041
		FD	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.018	< 0.000033	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000045
MW-97-8	05/15/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000046 J**
MW-97-8	09/24/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.0016	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000042
MW-06-21	05/17/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011	**0.000077 J**	< 0.000024	< 0.000035	< 0.000026	**0.00014 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000048 J**
MW-06-21	09/24/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.015**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000050
MW-06-22	05/21/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000054	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000036
MW-06-22	09/26/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0015	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00022	< 0.000018	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000035
MW-06-25	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000026
MW-06-25	09/26/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0018	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000030
MW-97-7	10/08/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	--	< 0.01
MW-97-7	05/20/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00057 J**	< 0.000048	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000048
MW-97-7	09/26/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0017 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.00047
Wells near Brick Pile (SWMU 3)																		
MW-01-1	10/08/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	**0.00161 jBQQ**	< 0.01	--	< 0.01	< 0.01	--	< 0.01
MW-01-1	05/16/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0016	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00033	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000045 J**
MW-01-1	09/17/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	**0.0017 R**	< 0.000074	< 0.000024	< 0.000035	< 0.000026	< 0.00019	< 0.000018	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000037
MW-01-4	10/04/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	**0.00911 jBQQ**	< 0.01	--	< 0.01	< 0.01	--	< 0.01
		FD	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	**0.023 BQQ**	< 0.01	--	< 0.01	< 0.01	--	< 0.01
MW-01-4	05/16/2008	N	< 0.000035	< 0.000019	< 0.000021	< 0.000027	< 0.0013	< 0.000081	< 0.000027	< 0.000039	< 0.000029	< 0.00074	< 0.000020	< 0.000020	< 0.000031	< 0.000019	< 0.000020	< 0.000014
MW-01-5	10/04/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	**0.0015 jBQQ**	< 0.01	--	< 0.01	< 0.01	--	< 0.01
MW-01-5	05/17/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0013	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0015**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000034 J**
MW-01-5	09/16/2008	N	< 0.000031	< 0.000017	**0.000020 J**	< 0.000024	**0.0016 R**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000028
Wells near Clarfier (SWMU 2)																		
MW-01-2	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	--	< 0.01

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h) anthracene	Dibenzofuran	Diethyl phthalate
MW-01-2	05/19/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00052 J**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000033
MW-01-2	09/22/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	**0.0016 R**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00018	< 0.000056	< 0.000018	< 0.0000034	< 0.0000025	< 0.000018	< 0.000042
MW-01-6	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	--	< 0.01
MW-01-6	05/19/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	**0.0011 R**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0026**	< 0.000018	**0.00031**	< 0.000028	< 0.000017	**0.00014 J**	**0.00020**
MW-01-6	09/18/2008	N	< 0.0000043	< 0.0000023	< 0.0000029	< 0.0000025	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00025	< 0.000062	**0.00061**	< 0.0000034	< 0.0000025	**0.00030**	< 0.00015
MW-01-3	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	--	< 0.01
MW-01-3	05/19/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00079 J**	< 0.000018	**0.000019 J**	**0.000032 J**	< 0.000017	< 0.000018	< 0.000055
MW-01-3	09/19/2008	N	< 0.0000044	**0.0000027 J**	< 0.0000030	< 0.0000026	**0.0015 R**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00021	< 0.000037	**0.000029 J**	**0.000033**	< 0.0000026	**0.000031 J**	< 0.000069
MW-02-2	05/19/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.0019**	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000023
MW-02-2	09/22/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	**0.0022 R**	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00025	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000039
MW-02-1	01/17/2002	N	< 0.01	< 0.01	< 0.01	< 0.01	--	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01	< 0.01	--	< 0.01
		SPLIT	< 0.021	< 0.011	< 0.011	< 0.011	< 0.053	< 0.021	< 0.011	< 0.021 *	< 0.011	< 0.021	< 0.011	< 0.032	< 0.011	< 0.021	< 0.011	< 0.032
MW-02-1	05/29/2008	N	< 0.00031	< 0.00017	< 0.00019	< 0.00024	< 0.011 R	< 0.00073	< 0.00024	< 0.00035	< 0.00026	**1.4 J**	< 0.00018	< 0.00018	< 0.00028	< 0.00017	< 0.00018	< 0.00012
		FD	< 0.00062	< 0.00034	< 0.00038	< 0.00048	< 0.022 R	< 0.0015	< 0.00048	< 0.00070	< 0.00052	**22 J**	< 0.00036	< 0.00036	< 0.00056	< 0.00034	< 0.00036	< 0.00024
MW-02-1	09/26/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.16	< 0.000018	< 0.000018	< 0.000028	< 0.000017	**0.00070**	< 0.000012
Production Wells																		
RP-W-1	05/22/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00017 J**	< 0.000061	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000032 J**
RP-W-1	09/25/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000025
RP-W-4	08/06/1988	N	--	--	--	--	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	--	--	--	--	--	--	--
		FD	--	--	--	--	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	--	--	--	--	--	--	--
RP-W-4	05/28/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000027	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000056
RP-W-4	09/24/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000042
		FD	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000020	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000032
RP-W-5	05/30/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00016	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000034
RP-W-5	09/24/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.0011	< 0.000057	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000043
RP-W-6	08/06/1988	N	--	--	--	--	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	--	--	--	--	--	--	--
RP-W-6	05/30/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000052	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000049
RP-W-7	05/22/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	**0.00042 J**	< 0.00011	< 0.000018	< 0.000028	< 0.000017	< 0.000018	**0.000031 J**
RP-W-7	09/25/2008	N	< 0.000031	< 0.000017	< 0.000019	< 0.000024	< 0.0011 R	< 0.000073	< 0.000024	< 0.000035	< 0.000026	< 0.00013	< 0.000018	< 0.000018	< 0.000028	< 0.000017	< 0.000018	< 0.000020

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	m,p cresols	Naphthalene	Nitrobenzene	N-Nitrosodimethylamine
Upgradient Wells																	
MW-06-23	05/13/2008	N	< 0.000021	< 0.000044	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-23	09/16/2008	N	< 0.000021	< 0.000069	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-24	05/13/2008	N	< 0.000021	< 0.000058	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-24	09/16/2008	N	< 0.000021	< 0.000089	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-GW-1	05/20/2008	N	< 0.000021	< 0.00020	< 0.000018	< 0.000021	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-GW-1	09/17/2008	N	< 0.000021	< 0.000055	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.0000026	< 0.000016	--	< 0.0000046	< 0.000028	< 0.00042
MW-06-4	05/15/2008	N	< 0.000021	< 0.000038	< 0.000018	< 0.000026	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-1	05/13/2008	N	< 0.000021	< 0.000047	< 0.000018	**0.00013 J**	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	**0.000039 J**	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-1	09/17/2008	N	< 0.000021	< 0.000074	< 0.000018	**0.000012 J**	< 0.0000038	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	**0.0000027 J**	< 0.000016	--	< 0.000011	< 0.000028	< 0.00042
MW-97-2	05/13/2008	N	< 0.000021	< 0.000044	< 0.000018	< 0.000021	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-2	09/17/2008	N	< 0.000021	< 0.000070	< 0.000018	**0.000027 J**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-5	05/14/2008	N	< 0.000021	< 0.000044	< 0.000018	< 0.000022	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-5	09/19/2008	N	< 0.000021	< 0.000065	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.000075	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-6	05/14/2008	N	< 0.000021	< 0.000065	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-6	05/28/2008	N	< 0.000021	< 0.00012	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-6	09/18/2008	N	< 0.000021	< 0.000063	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-EPA-1	08/09/1988	N	< 0.02	--	--	--	--	--	< 0.02	< 0.02	< 0.02	--	< 0.02	--	< 0.02	< 0.02	--
MW-EPA-1	05/14/2008	N	< 0.000021	< 0.000039	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-GW-3	05/20/2008	N	< 0.000021	< 0.000092	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-GW-3	09/17/2008	N	< 0.000021	< 0.000071	< 0.000018	**0.000023 J**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-5	05/15/2008	N	< 0.000021	< 0.000036	< 0.000018	< 0.000022	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-6	05/17/2008	N	< 0.000021	< 0.000054	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-6	09/16/2008	N	< 0.000021	< 0.000071	< 0.000018	**0.000024 J**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-MT96-2	05/29/2008	N	< 0.000021	< 0.00013	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-BSB-4	05/29/2008	N	< 0.000021	< 0.000098	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
Wells Far Downgradient of Tailing Basi																	
MW-06-3	05/14/2008	N	< 0.000021	< 0.000052	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-02-3	05/15/2008	N	< 0.000021	< 0.000059	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-3	11/07/2012	N	< 0.000021	< 0.000046	< 0.000033	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-7	11/06/2012	N	< 0.000021	< 0.000040	< 0.00019	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-8	11/06/2012	N	< 0.000021	< 0.000053	< 0.00019	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-4	11/07/2012	N	< 0.000021	< 0.000050	< 0.00019	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-5	11/07/2012	N	< 0.000021	< 0.000049	< 0.00019	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.000065	< 0.00019	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-6	11/07/2012	N	< 0.000021	< 0.000051	< 0.000033	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-2	11/08/2012	N	< 0.000021	< 0.000064	< 0.00019	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-02-4	05/15/2008	N	< 0.000021	< 0.000048	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.000031	< 0.000018	< 0.000022	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-1	05/15/2008	N	< 0.000021	< 0.000034	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-10	05/14/2008	N	< 0.000021	< 0.000044	< 0.000018	< 0.000021	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-12-1	11/06/2012	N	< 0.000021	< 0.000061	< 0.00019	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-EPA-4	08/09/1988	N	< 0.01	--	--	--	--	--	< 0.01	< 0.01	< 0.01	--	< 0.01	--	< 0.01	< 0.01	--
MW-EPA-4	05/15/2008	N	< 0.000021	< 0.000046	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
Wells Near Slag Water Retention Ditch																	
MW-06-15	05/21/2008	N	< 0.000021	< 0.00013	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000054 J**	< 0.000028	< 0.00042
MW-06-15	09/17/2008	N	< 0.000021	< 0.000065	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.0000026	< 0.000016	--	< 0.000021	< 0.000028	< 0.00042
MW-97-12	05/27/2008	N	< 0.000021	< 0.00013	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000033	< 0.000028	< 0.00042
MW-06-14	05/27/2008	N	< 0.000021	< 0.000079	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-EPA-3	08/09/1988	N	< 0.01	--	--	--	--	--	< 0.01	< 0.01	< 0.01	--	< 0.01	--	< 0.01	< 0.01	--
MW-EPA-3	05/15/2008	N	< 0.000021	< 0.000042	< 0.000018	< 0.000022	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-EPA-3	09/16/2008	N	< 0.000021	< 0.000052	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
Wells in Plant Area																	
MW-06-19	05/20/2008	N	< 0.000021	< 0.00010	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-19	09/18/2008	N	< 0.000021	< 0.000078	< 0.000018	**0.000026 J**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-13	05/27/2008	N	< 0.000021	< 0.00022	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.00011	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000028	< 0.000028	< 0.00042
MW-06-13	09/19/2008	N	< 0.000021	< 0.000062	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	m,p cresols	Naphthalene	Nitrobenzene	N-Nitrosodimethylamine
Location ID	**Sample Date**	**Sample Type**															
MW-06-16	05/21/2008	N	< 0.000021	< 0.00011	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000022 J**	< 0.000028	< 0.00042
MW-06-16	09/20/2008	N	< 0.000021	< 0.000064	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019	< 0.000024	< 0.0000026	< 0.000016	--	< 0.0000034	< 0.000028	< 0.00042
MW-06-17	05/27/2008	N	< 0.000021	< 0.00012	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-17	09/20/2008	N	< 0.000021	< 0.000057	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-20	05/20/2008	N	< 0.000021	< 0.00012	< 0.000018	< 0.000072	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-20	09/20/2008	N	< 0.000021	< 0.000054	< 0.000018	**0.000052**	< 0.0000038	< 0.000022	< 0.000027	< 0.00019	< 0.000024	< 0.0000026	< 0.000016	--	< 0.0000060	< 0.000028	< 0.00042
MW-06-18	05/21/2008	N	< 0.000021	< 0.00011	< 0.000018	**0.00011 J**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.00013	< 0.000018	**0.00012 J**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000052 J**	< 0.000028	< 0.00042
MW-06-18	09/25/2008	N	< 0.000021	< 0.000068	< 0.000018	**0.000098**	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000076	< 0.000016	--	< 0.0000060	< 0.000028	< 0.00042
Wells near Tailing Basin (SWMU 1)																	
MW-06-7	05/28/2008	N	< 0.000021	< 0.00013	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-8	05/18/2008	N	< 0.000021	< 0.000057	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-8	09/25/2008	N	< 0.000021	< 0.000086	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-9	05/17/2008	N	< 0.000021	< 0.000083	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-9	09/25/2008	N	< 0.000021	< 0.000066	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
PW-99-3	05/28/2008	N	< 0.000021	< 0.000091	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-11	05/21/2008	N	< 0.000021	< 0.000097	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000029 J**	< 0.000028	< 0.00042
MW-97-11	09/25/2008	N	< 0.000021	< 0.000052	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.0000030	< 0.000028	< 0.00042
MW-97-10	05/21/2008	N	< 0.000021	< 0.00011	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000037 J**	< 0.000028	< 0.00042
MW-97-10	09/23/2008	N	< 0.000021	< 0.000077	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000065	< 0.000016	--	< 0.0000033	< 0.000028	< 0.00042
MW-06-2	05/15/2008	N	< 0.000021	< 0.000035	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
PW-99-1	05/18/2008	N	< 0.000021	< 0.000053	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
PW-99-1	05/29/2008	N	< 0.000021	< 0.000076	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
PW-99-1	09/25/2008	N	< 0.000021	< 0.000079	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000075	< 0.000028	< 0.00042
MW-97-3	05/28/2008	N	< 0.000021	< 0.00015	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000026	< 0.000028	< 0.00042
MW-97-3	09/23/2008	N	< 0.000021	< 0.000076	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-4	05/20/2008	N	< 0.000021	< 0.00016	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000022 J**	< 0.000028	< 0.00042
MW-97-4	09/22/2008	N	< 0.000021	< 0.000096	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.0000030	< 0.000028	< 0.00042
MW-06-12	05/20/2008	N	< 0.000021	< 0.00020	< 0.000018	< 0.000021	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000039 J**	< 0.000028	< 0.00042
MW-06-12	09/25/2008	N	< 0.000021	< 0.000092	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.0000061	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.000062	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.0000088	< 0.000028	< 0.00042
MW-06-11	05/28/2008	N	< 0.000021	< 0.00017	< 0.000018	**0.000024 J**	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-11	09/23/2008	N	< 0.000021	< 0.000077	< 0.000018	**0.0000097 J**	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.000015	< 0.000028	< 0.00042
MW-97-9	05/16/2008	N	< 0.000021	< 0.000042	< 0.000018	< 0.000025	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-9	09/24/2008	N	< 0.000021	< 0.000064	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.000067	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-8	05/15/2008	N	< 0.000021	< 0.000069	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-8	09/24/2008	N	< 0.000021	< 0.000050	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-21	05/17/2008	N	< 0.000021	< 0.000084	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-21	09/24/2008	N	< 0.000021	< 0.000069	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-22	05/21/2008	N	< 0.000021	< 0.00011	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000047 J**	< 0.000028	< 0.00042
MW-06-22	09/26/2008	N	< 0.000021	< 0.000069	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.0000030	< 0.000028	< 0.00042
MW-06-25	05/20/2008	N	< 0.000021	< 0.000090	< 0.000018	< 0.000023	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-06-25	09/26/2008	N	< 0.000021	< 0.000065	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-97-7	10/08/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MW-97-7	05/20/2008	N	< 0.000021	< 0.00012	< 0.000018	< 0.000022	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000026 J**	< 0.000028	< 0.00042
MW-97-7	09/26/2008	N	< 0.000021	< 0.000095	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.000010	< 0.000028	< 0.00042
Wells near Brick Pile (SWMU 3)																	
MW-01-1	10/08/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MW-01-1	05/16/2008	N	< 0.000021	< 0.000077	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000025 J**	< 0.000028	< 0.00042
MW-01-1	09/17/2008	N	< 0.000021	< 0.000090	< 0.000018	**0.0000045 J**	< 0.0000038	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.0000026	< 0.000016	--	< 0.000010	< 0.000028	< 0.00042
MW-01-4	10/04/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
		FD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MW-01-4	05/16/2008	N	< 0.000024	< 0.000083	< 0.000020	< 0.000022	< 0.000030	< 0.000025	< 0.000030 R	< 0.00021 R	< 0.000027	< 0.000024	< 0.000018	--	< 0.000025	< 0.000031	< 0.00047
MW-01-5	10/04/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MW-01-5	05/17/2008	N	< 0.000021	< 0.000070	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-01-5	09/16/2008	N	< 0.000021	< 0.000070	< 0.000018	**0.000043 J**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
Wells near Clarfier (SWMU 2)																	
MW-01-2	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	m,p cresols	Naphthalene	Nitrobenzene	N-Nitrosodimethylamine
Location ID	**Sample Date**	**Sample Type**															
MW-01-2	05/19/2008	N	< 0.000021	< 0.000044	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000069 J**	**0.000099 J**	< 0.00042
MW-01-2	09/22/2008	N	< 0.000021	< 0.000088	< 0.000018	< 0.0000044	< 0.0000038	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.0000026	< 0.000016	--	< 0.000011	< 0.000028	< 0.00042
MW-01-6	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	**0.015**	< 0.01	< 0.01
MW-01-6	05/19/2008	N	< 0.000021	< 0.000043	< 0.000018	**0.00019 J**	**0.00014 J**	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.00032**	< 0.000028	< 0.00042
MW-01-6	09/18/2008	N	< 0.000021	< 0.000080	< 0.000018	**0.00031**	**0.00017**	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.0000026	< 0.000016	--	< 0.00030	< 0.000028	< 0.00042
MW-01-3	10/09/2001	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	**0.015**	< 0.01	< 0.01
MW-01-3	05/19/2008	N	< 0.000021	< 0.000053	< 0.000018	**0.00031**	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	**0.000024 J**	< 0.000028	< 0.00042
MW-01-3	09/19/2008	N	< 0.000021	< 0.000083	< 0.000018	**0.00049**	**0.0000085 J**	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.0000027	< 0.000016	--	< 0.000036	< 0.000028	< 0.00042
MW-02-2	05/19/2008	N	< 0.000021	< 0.000043	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-02-2	09/22/2008	N	< 0.000021	< 0.000090	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
MW-02-1	01/17/2002	N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
		SPLIT	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	--	< 0.011	< 0.011	< 0.011 *
MW-02-1	05/29/2008	N	< 0.00021	< 0.00023	< 0.00018	< 0.00020	< 0.00027	< 0.00022	< 0.00027 R	< 0.0019 R	< 0.00024 R	< 0.00021	< 0.00016	--	< 0.00022	< 0.00028	< 0.0042
		FD	< 0.00042	< 0.00046	< 0.00036	< 0.00040	< 0.00054	< 0.00044	< 0.00054 R	< 0.0038 R	< 0.00048 R	< 0.00042	< 0.00032	--	< 0.00044	< 0.00056	< 0.0084
MW-02-1	09/26/2008	N	< 0.000021	< 0.000023	< 0.000018	< 0.000020	**0.00064**	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
Production Wells																	
RP-W-1	05/22/2008	N	< 0.000021	< 0.00011	**0.000056 J**	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
RP-W-1	09/25/2008	N	< 0.000021	< 0.000066	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
RP-W-4	08/06/1988	N	< 0.01	--	--	--	--	--	< 0.01	< 0.01	< 0.01	--	< 0.01	--	< 0.01	< 0.01	--
		FD	< 0.01	--	--	--	--	--	< 0.01	< 0.01	< 0.01	--	< 0.01	--	< 0.01	< 0.01	--
RP-W-4	05/28/2008	N	< 0.000021	< 0.00010	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
RP-W-4	09/24/2008	N	< 0.000021	< 0.000087	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
		FD	< 0.000021	< 0.000085	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
RP-W-5	05/30/2008	N	< 0.000021	< 0.00038	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000031	< 0.000028	< 0.00042
RP-W-5	09/24/2008	N	< 0.000021	< 0.000087	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
RP-W-6	08/06/1988	N	< 0.01	--	--	--	--	--	< 0.01	< 0.01	< 0.01	--	< 0.01	--	< 0.01	< 0.01	--
RP-W-6	05/30/2008	N	< 0.000021	< 0.000082	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
RP-W-7	05/22/2008	N	< 0.000021	< 0.00013	**0.000072 J**	< 0.000020	< 0.000027	< 0.000022	< 0.000027 R	< 0.00019 R	< 0.000024 R	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042
RP-W-7	09/25/2008	N	< 0.000021	< 0.000042	< 0.000018	< 0.000020	< 0.000027	< 0.000022	< 0.000027	< 0.00019 R	< 0.000024	< 0.000021	< 0.000016	--	< 0.000022	< 0.000028	< 0.00042

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	o-cresol	p-cresol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Location ID	**Sample Date**	**Sample Type**								
Upgradient Wells										
MW-06-23	05/13/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0034	< 0.000019
MW-06-23	09/16/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.000022	< 0.000063	< 0.000019
MW-06-24	05/13/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.073**	< 0.000021
MW-06-24	09/16/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.000022	< 0.000063	< 0.000019
MW-GW-1	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0089**	**0.000020 J**
MW-GW-1	09/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.0000050	< 0.000063	< 0.0000035
MW-06-4	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00064	< 0.000025
MW-97-1	05/13/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	**0.000037 J**	< 0.0027	< 0.00017
MW-97-1	09/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	**0.0000092 J**	< 0.000063	**0.000013 J**
MW-97-2	05/13/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0049	< 0.000021
MW-97-2	09/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.000022	< 0.000063	**0.000025 J**
MW-06-5	05/14/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000020
MW-06-5	09/19/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-6	05/14/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.099**	< 0.000021
MW-06-6	05/28/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-6	09/18/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-EPA-1	08/09/1988	N	< 0.02	--	< 0.02	< 0.02	--	--	< 0.02	--
MW-EPA-1	05/14/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0010	< 0.000020
MW-GW-3	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-GW-3	09/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.000022	< 0.000063	**0.000021 J**
MW-97-5	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000020
MW-97-6	05/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0011**	< 0.000019
MW-97-6	09/16/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.000022	< 0.000063	**0.000022 J**
MW-MT96-2	05/29/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00032	< 0.000019
MW-BSB-4	05/29/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00018	< 0.000019
Wells Far Downgradient of Tailing Basi										
MW-06-3	05/14/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0038	< 0.000020
MW-02-3	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0018	< 0.000021
MW-12-3	11/07/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-12-7	11/06/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-12-8	11/06/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-12-4	11/07/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-12-5	11/07/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-12-6	11/07/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-12-2	11/08/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-02-4	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00028	< 0.000019
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00045	< 0.000020
MW-06-1	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000097	< 0.000019
MW-06-10	05/14/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0017	< 0.000019
MW-12-1	11/06/2012	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-EPA-4	08/09/1988	N	< 0.01	--	< 0.01	< 0.01	--	--	< 0.01	--
MW-EPA-4	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0018	< 0.000019
Wells Near Slag Water Retention Ditch										
MW-06-15	05/21/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.00091**	< 0.000019
MW-06-15	09/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.0000050	< 0.000063	< 0.0000035
MW-97-12	05/27/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0014	< 0.000019
MW-06-14	05/27/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0012	< 0.000019
MW-EPA-3	08/09/1988	N	< 0.01	--	< 0.01	< 0.01	--	--	< 0.01	--
MW-EPA-3	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00098	< 0.000019
MW-EPA-3	09/16/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.000022	< 0.000063	< 0.000019
Wells in Plant Area										
MW-06-19	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0050**	< 0.000019
MW-06-19	09/18/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-13	05/27/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00082	< 0.000019
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00054	< 0.000019
MW-06-13	09/19/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	o-cresol	p-cresol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Location ID	**Sample Date**	**Sample Type**								
MW-06-16	05/21/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.00081**	< 0.000019
MW-06-16	09/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	< 0.0000035
MW-06-17	05/27/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0043	< 0.000019
MW-06-17	09/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-20	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0012**	**0.000057 J**
MW-06-20	09/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	**0.000046**
MW-06-18	05/21/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0016**	< 0.000019
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	**0.000023 J**	**0.0015**	< 0.000019
MW-06-18	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	**0.000014 J**	< 0.000063	**0.0000056 J**
Wells near Tailing Basin (SWMU 1)										
MW-06-7	05/28/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0020	< 0.000019
MW-06-8	05/18/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-8	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-9	05/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-9	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
PW-99-3	05/28/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00046	< 0.000019
MW-97-11	05/21/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-97-11	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.0000050	< 0.000063	< 0.0000035
MW-97-10	05/21/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0016**	< 0.000019
MW-97-10	09/23/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	< 0.0000035
MW-06-2	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
PW-99-1	05/18/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.000022	**0.00035 J**	< 0.000019
PW-99-1	05/29/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.00091	< 0.000019
PW-99-1	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-97-3	05/28/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0010	< 0.000019
MW-97-3	09/23/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-97-4	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	**0.000021 J**
MW-97-4	09/22/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.0000050	< 0.000063	< 0.0000035
MW-06-12	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	**0.000019 J**
MW-06-12	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	< 0.0000035
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	< 0.0000035
MW-06-11	05/28/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-11	09/23/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	**0.0000047 J**
MW-97-9	05/16/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000064	< 0.000021
MW-97-9	09/24/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-97-8	05/15/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000090	< 0.000019
MW-97-8	09/24/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-21	05/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-21	09/24/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-22	05/21/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-22	09/26/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	< 0.0000035
MW-06-25	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-06-25	09/26/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
MW-97-7	10/08/2001	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
MW-97-7	05/20/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	**0.000025 J**
MW-97-7	09/26/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	< 0.000063	< 0.0000035
Wells near Brick Pile (SWMU 3)										
MW-01-1	10/08/2001	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
MW-01-1	05/16/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.0027	< 0.000019
MW-01-1	09/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	< 0.0000050	< 0.000063	**0.0000042 J**
MW-01-4	10/04/2001	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
		FD	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
MW-01-4	05/16/2008	N	< 0.000041	< 0.000053	< 0.00013	< 0.00014	< 0.00038	< 0.000025	< 0.000070	< 0.000021
MW-01-5	10/04/2001	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
MW-01-5	05/17/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0024**	< 0.000019
MW-01-5	09/16/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034 R	**0.000026 J**	< 0.000063	**0.000046 J**
Wells near Clarfier (SWMU 2)										
MW-01-2	10/09/2001	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	o-cresol	p-cresol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Location ID	**Sample Date**	**Sample Type**								
MW-01-2	05/19/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0017**	< 0.000019
MW-01-2	09/22/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.0000050	**0.00019 J**	< 0.0000035
MW-01-6	10/09/2001	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
MW-01-6	05/19/2008	N	< 0.000037	< 0.000048	**0.00020 J**	**0.00039 J**	< 0.00034	**0.00037**	**0.0062**	**0.00012 J**
MW-01-6	09/18/2008	N	< 0.000037	< 0.000048	**0.00011 J**	< 0.00012	< 0.00034	**0.00051**	< 0.000063	**0.00020**
MW-01-3	10/09/2001	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
MW-01-3	05/19/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	**0.000072 J**	**0.0018**	**0.00021**
MW-01-3	09/19/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	**0.000074**	< 0.000063	**0.00033**
MW-02-2	05/19/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0014**	< 0.000019
MW-02-2	09/22/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	**0.00080 J**	< 0.000022	< 0.000063	< 0.000019
MW-02-1	01/17/2002	N	< 0.01	< 0.01	< 0.01	--	< 0.05	< 0.01	< 0.01	< 0.01
		SPLIT	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011 *	< 0.011
MW-02-1	05/29/2008	N	< 0.00037	< 0.00048	< 0.0011	< 0.0012	< 0.0034	< 0.00022	< 0.013	< 0.00019
		FD	< 0.00074	< 0.00096	< 0.0022	< 0.0024	< 0.0068	< 0.00044	< 0.015	< 0.00038
MW-02-1	09/26/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	**0.00056**	**0.0020**	< 0.000019
Production Wells										
RP-W-1	05/22/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
RP-W-1	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
RP-W-4	08/06/1988	N	< 0.01	--	< 0.01	< 0.01	--	--	< 0.01	--
		FD	< 0.01	--	< 0.01	< 0.01	--	--	< 0.01	--
RP-W-4	05/28/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
RP-W-4	09/24/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
		FD	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
RP-W-5	05/30/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
RP-W-5	09/24/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000019
RP-W-6	08/06/1988	N	< 0.01	--	< 0.01	< 0.01	--	--	< 0.01	--
RP-W-6	05/30/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	< 0.000063	< 0.000022
RP-W-7	05/22/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.0027**	< 0.000019
RP-W-7	09/25/2008	N	< 0.000037	< 0.000048	< 0.00011	< 0.00012	< 0.00034	< 0.000022	**0.00024 J**	< 0.000019

Table 5.3-4c
Groundwater Data - SVOCs
Rhodia Silver Bow Plant

The analytical database contains data for the following parameters. The data set is comparitively small and was not summarized in the RFI Report.

1,2,4,5-Tetrachlorobenzene
1-Methylnaphthalene
4-Chlorophenol
Benzidine
N-Nitrosopyrrolidine
Pentachlorobenzene
Pyridine

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloro-1-propene	1,1-Dichloroethane	1,1-Dichloroethylene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane
Location ID	**Sample Date**	**Sample Type**													
Upgradient Wells															
MW-06-23	05/13/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-23	09/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-24	05/13/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	**0.000050 J**	< 0.00022	< 0.000084
MW-06-24	09/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-GW-1	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-GW-1	09/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-4	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-1	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-1	05/13/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-1	09/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-2	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-2	05/13/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-2	09/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-5	05/14/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-5	09/19/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
		FD	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-6	05/14/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	**0.000040 J**	< 0.00022	< 0.000084
MW-06-6	05/28/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-6	09/18/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-EPA-1	08/09/1988	N	--	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--	--
MW-EPA-1	05/14/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-GW-3	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-GW-3	09/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-5	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-5	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-6	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-6	05/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-6	09/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-MT96-2	05/29/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-BSB-4	05/29/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
Wells Far Downgradient of Tailing Basin (SWMU 1)															
MW-06-3	05/14/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-02-3	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-12-3	11/07/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-12-7	11/06/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-12-8	11/06/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-12-4	11/07/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-12-5	11/07/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
		FD	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-12-6	11/07/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-12-2	11/08/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-02-4	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
		FD	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-1	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00011	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-10	05/14/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-12-1	11/06/2012	N	< 0.00011	< 0.000075	< 0.00016	< 0.00014	< 0.000089	< 0.000077	< 0.000080	< 0.00011	< 0.00020	< 0.000096	< 0.000069	< 0.00020	< 0.00010
MW-EPA-4	08/09/1988	N	--	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--	--
		FD	--	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--	--
MW-EPA-4	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-4	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
Wells Near Slag Water Retention Ditch															
MW-06-15	05/21/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-15	09/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-12	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-12	05/27/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-14	05/27/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-EPA-3	08/09/1988	N	--	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--	--
MW-EPA-3	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-3	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-EPA-3	09/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloro-1-propene	1,1-Dichloroethane	1,1-Dichloroethylene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane
Location ID	Sample Date	Sample Type													
Wells in Plant Area															
MW-06-19	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-19	09/18/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-13	05/27/2008	N	< 0.000047	**0.000070 J**	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
		FD	< 0.000047	**0.000080 J**	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-13	09/19/2008	N	< 0.000047	**0.000080 J**	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-16	05/21/2008	N	< 0.000047	**0.00012 J**	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-16	09/20/2008	N	< 0.000047	**0.000090 J**	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-17	05/27/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-17	09/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-20	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-20	09/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-18	05/21/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
		FD	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-18	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
Wells near Tailing Basin (SWMU 1)															
MW-06-7	05/28/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-8	05/18/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-8	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-9	05/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-9	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
PW-99-3	05/28/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-11	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-11	05/21/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-11	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-97-10	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
		FD	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-10	05/21/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-10	09/23/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-2	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
PW-99-1	05/18/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
PW-99-1	05/29/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
PW-99-1	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-97-3	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-3	05/28/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-3	09/23/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-97-4	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-4	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-4	09/22/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-12	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-12	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
		FD	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-11	05/28/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-11	09/23/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-97-9	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-9	05/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-9	09/24/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
		FD	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-8	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-8	05/15/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-8	09/24/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-21	05/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-21	09/24/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-22	05/21/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-22	09/26/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-06-25	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-06-25	09/26/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-97-7	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-7	10/08/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	< 0.0010	--	--	< 0.0010	< 0.0010
MW-97-7	05/20/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-97-7	09/26/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloro-1-propene	1,1-Dichloroethane	1,1-Dichloroethylene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane
Location ID	**Sample Date**	**Sample Type**													
Wells near Brick Pile (SWMU 3)															
MW-01-1	10/08/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	< 0.0010	--	--	< 0.0010	< 0.0010
MW-01-1	05/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-01-1	09/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-01-4	10/04/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		FD	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-4	05/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-01-5	10/04/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-5	05/17/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-01-5	09/16/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
Wells near Clarfier (SWMU 2)															
MW-01-2	10/09/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	< 0.0010	--	--	< 0.0010	< 0.0010
MW-01-2	05/19/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-01-2	09/22/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-01-6	10/09/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	< 0.0010	--	--	< 0.0010	< 0.0010
MW-01-6	05/19/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	**0.00010 J**	< 0.00022	< 0.000084
MW-01-6	09/18/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	**0.000090 J**	< 0.00022	< 0.000084
MW-01-3	10/09/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	< 0.0010	--	--	< 0.0010	< 0.0010
MW-01-3	05/19/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-01-3	09/19/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-02-2	05/19/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-02-2	09/22/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
MW-02-1	01/17/2002	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.012**	< 0.0010	< 0.0010
		SPLIT	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.014**	< 0.005	< 0.001
MW-02-1	05/29/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
		FD	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
MW-02-1	09/26/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
Production Wells															
RP-W-1	05/22/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
RP-W-1	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
RP-W-4	08/06/1988	N	--	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--	--
		FD	--	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--	--
RP-W-4	05/28/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
RP-W-4	09/24/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
		FD	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
RP-W-5	05/30/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
RP-W-5	09/24/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084
RP-W-6	08/06/1988	N	--	< 0.005	< 0.005	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--	--
RP-W-6	05/30/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
RP-W-7	05/22/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022	< 0.000084
RP-W-7	09/25/2008	N	< 0.000047	< 0.000050	< 0.000064	< 0.000061	< 0.000051	< 0.000042	< 0.00010	< 0.00010	< 0.00014	< 0.00013	< 0.000037	< 0.00022 J	< 0.000084

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethylene, cis	1,2-Dichloroethylene, trans	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichloro-1-propene, cis	1,3-Dichloro-1-propene, trans	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chloroethyl vinyl ether
Upgradient Wells															
MW-06-23	05/13/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-23	09/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-24	05/13/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-24	09/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-GW-1	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-GW-1	09/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-4	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-1	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-1	05/13/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-1	09/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-2	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-2	05/13/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-2	09/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-5	05/14/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-5	09/19/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-6	05/14/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-6	05/28/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-6	09/18/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-EPA-1	08/09/1988	N	--	< 0.005	--	--	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--
MW-EPA-1	05/14/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-GW-3	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-GW-3	09/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-5	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-5	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-6	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-6	05/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-6	09/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-MT96-2	05/29/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-BSB-4	05/29/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
Wells Far Downgradient of Tailing Basi															
MW-06-3	05/14/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-02-3	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-12-3	11/07/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-12-7	11/06/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-12-8	11/06/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-12-4	11/07/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-12-5	11/07/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
		FD	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-12-6	11/07/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-12-2	11/08/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-02-4	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-1	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-10	05/14/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-12-1	11/06/2012	N	< 0.00012	< 0.000080	< 0.000067	< 0.000072	< 0.000095	< 0.000089	< 0.00018	< 0.000068	< 0.00010	< 0.00014	< 0.00012	< 0.000060	< 0.00016 R
MW-EPA-4	08/09/1988	N	--	< 0.005	--	--	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--
		FD	--	< 0.005	--	--	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--
MW-EPA-4	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-4	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
Wells Near Slag Water Retention Ditch															
MW-06-15	05/21/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-15	09/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-12	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-12	05/27/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-14	05/27/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-EPA-3	08/09/1988	N	--	< 0.005	--	--	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--
MW-EPA-3	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-3	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-EPA-3	09/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethylene, cis	1,2-Dichloroethylene, trans	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichloro-1-propene, cis	1,3-Dichloro-1-propene, trans	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chloroethyl vinyl ether
Wells in Plant Area															
MW-06-19	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-19	09/18/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-13	05/27/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-13	09/19/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000060	< 0.000050	< 0.00019 R
MW-06-16	05/21/2008	N	< 0.000044	**0.00019 J**	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-16	09/20/2008	N	< 0.000044	**0.00016 J**	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-17	05/27/2008	N	< 0.000044	**0.00056**	**0.00010 J**	**0.00014 J**	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-17	09/20/2008	N	< 0.000044	**0.00056**	< 0.000045	**0.00010 J**	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-20	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-20	09/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-18	05/21/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-18	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
Wells near Tailing Basin (SWMU 1)															
MW-06-7	05/28/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-8	05/18/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-8	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-9	05/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-9	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000060	< 0.000050	< 0.00019 R
PW-99-3	05/28/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-11	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-11	05/21/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-11	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-10	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
		FD	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-10	05/21/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-10	09/23/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-2	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
PW-99-1	05/18/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
PW-99-1	05/29/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
PW-99-1	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-3	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-3	05/28/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-3	09/23/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-4	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-4	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-4	09/22/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-12	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-12	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-11	05/28/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-11	09/23/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-9	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-9	05/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-9	09/24/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000070	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000080	< 0.000050	< 0.00019 R
MW-97-8	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-8	05/15/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-8	09/24/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-21	05/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-21	09/24/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000060	< 0.000050	< 0.00019 R
MW-06-22	05/21/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-22	09/26/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-25	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-06-25	09/26/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-7	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-97-7	10/08/2001	N	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	--	--	--	--
MW-97-7	05/20/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-97-7	09/26/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethylene, cis	1,2-Dichloroethylene, trans	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichloro-1-propene, cis	1,3-Dichloro-1-propene, trans	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chloroethyl vinyl ether
Wells near Brick Pile (SWMU 3)															
MW-01-1	10/08/2001	N	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	--	--	--	--
MW-01-1	05/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-1	09/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-4	10/04/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		FD	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-4	05/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-5	10/04/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-5	05/17/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-5	09/16/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
Wells near Clarfier (SWMU 2)															
MW-01-2	10/09/2001	N	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	--	--	--	--
MW-01-2	05/19/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-2	09/22/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-6	10/09/2001	N	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	--	--	--	--
MW-01-6	05/19/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-6	09/18/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-3	10/09/2001	N	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	< 0.0010	< 0.0010	--	--	--	--	--
MW-01-3	05/19/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-01-3	09/19/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-02-2	05/19/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-02-2	09/22/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-02-1	01/17/2002	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0058**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		SPLIT	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.007**	--	--	< 0.001	< 0.001	< 0.001	< 0.001	--
MW-02-1	05/29/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	**0.00078**	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	**0.00032 J**	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
MW-02-1	09/26/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	**0.00031 J**	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
Production Wells															
RP-W-1	05/22/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-1	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-4	08/06/1988	N	--	< 0.005	--	--	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--
		FD	--	< 0.005	--	--	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--
RP-W-4	05/28/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-4	09/24/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
		FD	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-5	05/30/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-5	09/24/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-6	08/06/1988	N	--	< 0.005	--	--	< 0.005	--	< 0.005	< 0.005	--	--	--	--	--
RP-W-6	05/30/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-7	05/22/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R
RP-W-7	09/25/2008	N	< 0.000044	< 0.000073	< 0.000045	< 0.000048	< 0.000042	< 0.000042	< 0.000038	< 0.000041	< 0.000041	< 0.000032	< 0.000054	< 0.000050	< 0.00019 R

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	2-Hexanone	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Butyl benzene	Butylbenzene, sec	Butylbenzene, tert	Carbon disulfide	Carbon tetrachloride	Chlorobenzene
Upgradient Wells																		
MW-06-23	05/13/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-23	09/16/2008	N	< 0.0029	< 0.0025	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 R	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-24	05/13/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-24	09/16/2008	N	< 0.0029	< 0.0026	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 R	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-GW-1	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	**0.00012 J**	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-GW-1	09/17/2008	N	< 0.0029	< 0.0035	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-4	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-1	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-1	05/13/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-1	09/17/2008	N	< 0.0029	< 0.0038	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-2	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-2	05/13/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-2	09/17/2008	N	< 0.0029	< 0.0055	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-5	05/14/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-5	09/19/2008	N	< 0.0029	< 0.0079	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0065	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-6	05/14/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000050	< 0.000068	< 0.000045
MW-06-6	05/28/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-6	09/18/2008	N	< 0.0029	< 0.0033	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-EPA-1	08/09/1988	N	< 0.01	< 0.036 B	--	--	< 0.005	--	--	< 0.005	< 0.005	< 0.01	--	--	--	< 0.005	< 0.005	< 0.005
MW-EPA-1	05/14/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000050	< 0.000068	< 0.000045
MW-GW-3	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-GW-3	09/17/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-5	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-5	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-6	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-6	05/17/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	**0.000060 J**	< 0.000068	< 0.000045
MW-97-6	09/16/2008	N	< 0.0029	< 0.0025	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 R	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-MT96-2	05/29/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-BSB-4	05/29/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	< 0.000045	< 0.000068	< 0.000045
Wells Far Downgradient of Tailing Basi																		
MW-06-3	05/14/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000080	< 0.000068	< 0.000045
MW-02-3	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-12-3	11/07/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-12-7	11/06/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-12-8	11/06/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-12-4	11/07/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-12-5	11/07/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
		FD	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-12-6	11/07/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-12-2	11/08/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-02-4	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-1	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-10	05/14/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-12-1	11/06/2012	N	< 0.0027	< 0.0033	< 0.0012	< 0.00028	< 0.000062	< 0.00012	< 0.00016	< 0.000091	< 0.00016	< 0.00010 J	< 0.000054	< 0.000062	< 0.000059	< 0.000069	< 0.000096	< 0.00011
MW-EPA-4	08/09/1988	N	< 0.01	< 0.01 EB	--	--	< 0.005	--	--	< 0.005	< 0.005	< 0.01	--	--	--	< 0.005	< 0.005	< 0.005
		FD	< 0.01	< 0.078 B	--	--	< 0.005	--	--	< 0.005	< 0.005	< 0.01	--	--	--	< 0.005	< 0.005	< 0.005
MW-EPA-4	11/05/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-4	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
Wells Near Slag Water Retention Ditch																		
MW-06-15	05/21/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-15	09/17/2008	N	< 0.0029	< 0.011	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-12	11/05/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-12	05/27/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 J	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-14	05/27/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 J	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-EPA-3	08/09/1988	N	< 0.005	< 0.055 B	--	--	< 0.005	--	--	< 0.005	< 0.005	< 0.01	--	--	--	< 0.005	< 0.005	< 0.005
MW-EPA-3	11/05/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-EPA-3	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-EPA-3	09/16/2008	N	< 0.0029	< 0.0035	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 R	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	2-Hexanone	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Butyl benzene	Butylbenzene, sec	Butylbenzene, tert	Carbon disulfide	Carbon tetrachloride	Chlorobenzene
Wells in Plant Area																		
MW-06-19	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-19	09/18/2008	N	< 0.0029	< 0.0080	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-13	05/27/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 J	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 J	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-13	09/19/2008	N	< 0.0029	< 0.0072	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-16	05/21/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-16	09/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-17	05/27/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000050	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 J	< 0.000056	**0.00045 J**	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-17	09/20/2008	N	< 0.0029	< 0.0028	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	**0.00027 J**	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-20	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.000050 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-20	09/20/2008	N	< 0.0029	< 0.011	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-18	05/21/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.000050 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-18	09/25/2008	N	< 0.0029	< 0.014	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
Wells near Tailing Basin (SWMU 1)																		
MW-06-7	05/28/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-8	05/18/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.000070 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	**0.00010 J**	< 0.000068	< 0.000045
MW-06-8	09/25/2008	N	< 0.0029	< 0.0025	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000060	< 0.000068	< 0.000045
MW-06-9	05/17/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	**0.00025 J**	< 0.000068	< 0.000045
MW-06-9	09/25/2008	N	< 0.0029	< 0.0025	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000090	< 0.000068	< 0.000045
PW-99-3	05/28/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-11	11/05/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-11	05/21/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.000060 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-11	09/25/2008	N	< 0.0029	< 0.0058	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-10	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
		FD	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-10	05/21/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-10	09/23/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.000050 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-2	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
PW-99-1	05/18/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	**0.000050 J**	< 0.000068	< 0.000045
PW-99-1	05/29/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
PW-99-1	09/25/2008	N	< 0.0029	< 0.0025	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-3	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-3	05/28/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-3	09/23/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-4	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-4	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-4	09/22/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-12	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-12	09/25/2008	N	< 0.0029	< 0.0042	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000060	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0025	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000060	< 0.000068	< 0.000045
MW-06-11	05/28/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-11	09/23/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-9	11/05/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-9	05/16/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-9	09/24/2008	N	< 0.0029	< 0.0034	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0076	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-8	11/05/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-8	05/15/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-8	09/24/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-21	05/17/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-21	09/24/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-22	05/21/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000090	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-22	09/26/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-25	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.000060 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-06-25	09/26/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-7	11/04/1997	N	--	--	--	--	< 0.0010	--	--	--	--	--	--	--	--	--	--	--
MW-97-7	10/08/2001	N	< 0.02	< 0.02	--	--	< 0.0010	--	--	**0.00024 J**	< 0.0010	< 0.0010	--	--	--	**0.0046 ***	< 0.0010	< 0.0010
MW-97-7	05/20/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.000070 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-97-7	09/26/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	2-Hexanone	Acetone	Acrolein	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Butyl benzene	Butylbenzene, sec	Butylbenzene, tert	Carbon disulfide	Carbon tetrachloride	Chlorobenzene
Wells near Brick Pile (SWMU 3)																		
MW-01-1	10/08/2001	N	< 0.02	< 0.02	--	--	< 0.0010	--	--	< 0.0010	< 0.0010	< 0.0010	--	--	--	**0.0011 ***	< 0.0010	< 0.0010
MW-01-1	05/16/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-01-1	09/17/2008	N	< 0.0029	< 0.0036	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-01-4	10/04/2001	N	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		FD	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-4	05/16/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-01-5	10/04/2001	N	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-5	05/17/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	**0.000050 J**	< 0.000068	< 0.000045
MW-01-5	09/16/2008	N	< 0.0029	< 0.0067	< 0.0020 R	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072 R	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
Wells near Clarfier (SWMU 2)																		
MW-01-2	10/09/2001	N	< 0.02	< 0.02	--	--	< 0.0010	--	--	< 0.0010	< 0.0010	< 0.0010	--	--	--	**0.00030 J***	< 0.0010	< 0.0010
MW-01-2	05/19/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000080	< 0.000068	< 0.000045
MW-01-2	09/22/2008	N	< 0.0029	< 0.0051	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-01-6	10/09/2001	N	< 0.02	< 0.02	--	--	**0.00070 J**	--	--	< 0.0010	< 0.0010	< 0.0010	--	--	--	< 0.0010	< 0.0010	< 0.0010
MW-01-6	05/19/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.00060**	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-01-6	09/18/2008	N	< 0.0029	< 0.017	< 0.0020	< 0.00031	**0.00048 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-01-3	10/09/2001	N	< 0.02	**0.012 J**	--	--	< 0.0010	--	--	< 0.0010	< 0.0010	< 0.0010	--	--	--	< 0.0010	< 0.0010	< 0.0010
MW-01-3	05/19/2008	N	< 0.0029	**0.0084 J**	< 0.0020	< 0.00031	**0.00027 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-01-3	09/19/2008	N	< 0.0029	< 0.023	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-02-2	05/19/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000060	< 0.000068	< 0.000045
MW-02-2	09/22/2008	N	< 0.0029	< 0.0046	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
MW-02-1	01/17/2002	N	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0047**	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		SPLIT	--	--	--	--	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.002**	**0.005**	**0.004**	--	< 0.001	< 0.001
MW-02-1	05/29/2008	N	< 0.0029	< 0.0025	< 0.0020 J	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.00072	**0.0029**	**0.00013 J**	< 0.000045	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0025	< 0.0020 J	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	**0.00069 J**	**0.000050 J**	< 0.000045	< 0.000068	< 0.000045
MW-02-1	09/26/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	**0.00012 J**	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	**0.00035 J**	**0.0016 J**	**0.000060 J**	< 0.00028	< 0.000068	< 0.000045
Production Wells																		
RP-W-1	05/22/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
RP-W-1	09/25/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000060	< 0.000068	< 0.000045
RP-W-4	08/06/1988	N	< 0.01	< 0.01 B	--	--	< 0.005	--	--	< 0.005	< 0.005	< 0.01	--	--	--	< 0.005	< 0.005	< 0.005
		FD	< 0.01	< 0.004 B	--	--	< 0.005	--	--	< 0.005	< 0.005	< 0.01	--	--	--	< 0.005	< 0.005	< 0.005
RP-W-4	05/28/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036 J	< 0.000038	**0.000060 J**	< 0.000068	< 0.000045
RP-W-4	09/24/2008	N	< 0.0029	< 0.0031	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
		FD	< 0.0029	< 0.0032	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
RP-W-5	05/30/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
RP-W-5	09/24/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
RP-W-6	08/06/1988	N	< 0.01	< 0.022 B	--	--	< 0.005	--	--	< 0.005	< 0.005	< 0.01	--	--	--	< 0.005	< 0.005	< 0.005
RP-W-6	05/30/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045
RP-W-7	05/22/2008	N	< 0.0029	< 0.0025	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080 J	< 0.000072	< 0.000056	< 0.000036	< 0.000038	**0.000060 J**	< 0.000068	< 0.000045
RP-W-7	09/25/2008	N	< 0.0029	< 0.0030	< 0.0020	< 0.00031	< 0.000045	< 0.000027	< 0.000091	< 0.000036	< 0.000080	< 0.000072	< 0.000056	< 0.000036	< 0.000038	< 0.000045	< 0.000068	< 0.000045

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	Chlorotoluene, o	Chlorotoluene, p	Cumene (isopropyl benzene)	Cymene p- (Toluene isopropyl p-)	Dibromomethane (methylene bromide)	Dichlorodifluoromethane (CFC-12)	Ethyl benzene	Hexachlorobutadiene
Location ID	Sample Date	Sample Type												
Upgradient Wells														
MW-06-23	05/13/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-23	09/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-24	05/13/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-24	09/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-GW-1	05/20/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.00012 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-GW-1	09/17/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-4	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-1	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-1	05/13/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-1	09/17/2008	N	< 0.000057	< 0.00013	**0.000070 J**	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-2	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-2	05/13/2008	N	< 0.000057	< 0.00013	< 0.000060	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-2	09/17/2008	N	< 0.000057	< 0.00013	**0.000060 J**	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-5	05/14/2008	N	< 0.000057	< 0.00013	< 0.000060	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-5	09/19/2008	N	< 0.000057	< 0.00013	< 0.000050	**0.000060 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	< 0.00013	< 0.000060	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-6	05/14/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-6	05/28/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000070	< 0.00019
MW-06-6	09/18/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.000060 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-EPA-1	08/09/1988	N	< 0.005	< 0.01	< 0.005	< 0.01	--	--	--	--	--	--	< 0.005	--
MW-EPA-1	05/14/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-GW-3	05/20/2008	N	< 0.000057	< 0.00013	**0.00010 J**	**0.00012 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-GW-3	09/17/2008	N	< 0.000057	< 0.00013	**0.00013 J**	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-5	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-5	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-6	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-6	05/17/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-6	09/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-MT96-2	05/29/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-BSB-4	05/29/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
Wells Far Downgradient of Tailing Basi														
MW-06-3	05/14/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-02-3	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-12-3	11/07/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.00013	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-12-7	11/06/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.00011	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-12-8	11/06/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.000068	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-12-4	11/07/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.00011	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-12-5	11/07/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.00010	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
		FD	< 0.00014	< 0.00016	< 0.000072	< 0.00011	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-12-6	11/07/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.00010	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-12-2	11/08/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.00016	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-02-4	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-1	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-10	05/14/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-12-1	11/06/2012	N	< 0.00014	< 0.00016	< 0.000072	< 0.00014	< 0.00010	< 0.00013	< 0.000051	< 0.000060	< 0.00015	< 0.00013	< 0.000050	< 0.00011
MW-EPA-4	08/09/1988	N	< 0.005	< 0.01	< 0.005	< 0.01	--	--	--	--	--	--	< 0.005	--
		FD	< 0.005	< 0.01	< 0.005	< 0.01	--	--	--	--	--	--	< 0.005	--
MW-EPA-4	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-EPA-4	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
Wells Near Slag Water Retention Ditch														
MW-06-15	05/21/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.00013 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-15	09/17/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000070	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-12	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-12	05/27/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-14	05/27/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-EPA-3	08/09/1988	N	< 0.005	< 0.01	< 0.005	< 0.01	--	--	--	--	--	--	< 0.005	--
MW-EPA-3	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-EPA-3	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-EPA-3	09/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	Chlorotoluene, o	Chlorotoluene, p	Cumene (isopropyl benzene)	Cymene p- (Toluene isopropyl p-)	Dibromomethane (methylene bromide)	Dichlorodifluoromethane (CFC-12)	Ethyl benzene	Hexachlorobutadiene
Location ID	Sample Date	Sample Type												
Wells in Plant Area														
MW-06-19	05/20/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-19	09/18/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-13	05/27/2008	N	< 0.000057	< 0.00013	< 0.00013	< 0.00014	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	< 0.00013	< 0.00012	< 0.000080	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-13	09/19/2008	N	< 0.000057	< 0.00013	< 0.00017	< 0.000053	< 0.000035	< 0.000025	< 0.00010	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-16	05/21/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.000090 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-16	09/20/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000050	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-17	05/27/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.00011	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-17	09/20/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000040	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-20	05/20/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-20	09/20/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.000060 J**	< 0.000035	< 0.000025	< 0.000040	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-18	05/21/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	**0.000040 J**	**0.000040 J**	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-18	09/25/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
Wells near Tailing Basin (SWMU 1)														
MW-06-7	05/28/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-8	05/18/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-8	09/25/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-9	05/17/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-9	09/25/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
PW-99-3	05/28/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-11	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-11	05/21/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-11	09/25/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.000060 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-10	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
		FD	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-10	05/21/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-10	09/23/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-2	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
PW-99-1	05/18/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
PW-99-1	05/29/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
PW-99-1	09/25/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-3	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-3	05/28/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-3	09/23/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-4	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-4	05/20/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-4	09/22/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-12	05/20/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-12	09/25/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-11	05/28/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-11	09/23/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-9	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-9	05/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-9	09/24/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.000060 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	< 0.00013	< 0.000042	**0.000060 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-8	11/05/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-8	05/15/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-8	09/24/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-21	05/17/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-21	09/24/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-22	05/21/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-22	09/26/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-25	05/20/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.00013 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-06-25	09/26/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-7	11/04/1997	N	--	--	--	--	--	--	--	--	--	--	< 0.0010	--
MW-97-7	10/08/2001	N	< 0.0010	< 0.0010	**0.0032**	< 0.0010	--	--	--	--	--	< 0.0010	< 0.0010	--
MW-97-7	05/20/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-97-7	09/26/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	Chlorotoluene, o	Chlorotoluene, p	Cumene (isopropyl benzene)	Cymene p- (Toluene isopropyl p-)	Dibromomethane (methylene bromide)	Dichlorodifluoromethane (CFC-12)	Ethyl benzene	Hexachlorobutadiene
Location ID	**Sample Date**	**Sample Type**												
Wells near Brick Pile (SWMU 3)														
MW-01-1	10/08/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	--	--	--	--	< 0.0010	< 0.0010	--
MW-01-1	05/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-01-1	09/17/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-01-4	10/04/2001	N	< 0.0010	< 0.0010	**0.0014**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		FD	< 0.0010	< 0.0010	**0.0022**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-4	05/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-01-5	10/04/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-5	05/17/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-01-5	09/16/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
Wells near Clarfier (SWMU 2)														
MW-01-2	10/09/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	--	--	--	--	< 0.0010	< 0.0010	--
MW-01-2	05/19/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-01-2	09/22/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-01-6	10/09/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	--	--	--	--	< 0.0010	< 0.0010	--
MW-01-6	05/19/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.000090 J**	< 0.000035	< 0.000025	**0.000040 J**	< 0.000044	< 0.000089	< 0.000083	**0.000070 J**	< 0.00019
MW-01-6	09/18/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	**0.000060 J**	< 0.00019
MW-01-3	10/09/2001	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	--	--	--	--	--	< 0.0010	< 0.0010	--
MW-01-3	05/19/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-01-3	09/19/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.00016 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-02-2	05/19/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-02-2	09/22/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-02-1	01/17/2002	N	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0016**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		SPLIT	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.002**	--	< 0.001	< 0.001	< 0.001	< 0.001
MW-02-1	05/29/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	**0.00034 J**	**0.0014 J**	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	**0.00022 J**	< 0.000042	< 0.000053	< 0.000035	< 0.000025	**0.00016 J**	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
MW-02-1	09/26/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	**0.00017 J**	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
Production Wells														
RP-W-1	05/22/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-1	09/25/2008	N	< 0.000057	< 0.00013	**0.000070 J**	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-4	08/06/1988	N	< 0.005	< 0.01	< 0.005	< 0.01	--	--	--	--	--	--	< 0.005	--
		FD	< 0.005	< 0.01	< 0.005	< 0.01	--	--	--	--	--	--	< 0.005	--
RP-W-4	05/28/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-4	09/24/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
		FD	< 0.000057	< 0.00013	< 0.000042	**0.000070 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-5	05/30/2008	N	< 0.000057	< 0.00013	< 0.000042	**0.000080 J**	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-5	09/24/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-6	08/06/1988	N	< 0.005	< 0.01	< 0.005	< 0.01	--	--	--	--	--	--	< 0.005	--
RP-W-6	05/30/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-7	05/22/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019
RP-W-7	09/25/2008	N	< 0.000057	< 0.00013	< 0.000042	< 0.000053	< 0.000035	< 0.000025	< 0.000031	< 0.000044	< 0.000089	< 0.000083	< 0.000042	< 0.00019

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	Chemical Name: Iodomethane	Methyl ethyl ketone	Methyl isobutyl ketone	Methyl tertiary butyl ether (MTBE)	Methylene chloride	Naphthalene	Propylbenzene	Styrene	Tetrachloroethylene	Toluene	Trichloroethylene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride	Xylene, m & p	Xylene, o
Upgradient Wells																		
MW-06-23	05/13/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000050	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-23	09/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-24	05/13/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	**0.00023 J**	**0.00018 J**
MW-06-24	09/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	**0.00027 J**	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-GW-1	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00031 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-GW-1	09/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00043	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-4	05/15/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000070	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-1	11/04/1997	N	--	--	--	--	--	--	--	--	--	< 0.0010	--	--	--	--	< 0.0010	< 0.0010
MW-97-1	05/13/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-1	09/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00016	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-2	11/04/1997	N	--	--	--	--	--	--	--	--	--	< 0.0010	--	--	--	--	< 0.0010	< 0.0010
MW-97-2	05/13/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-2	09/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-5	05/14/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00010	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-5	09/19/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000060	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-6	05/14/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	**0.00019 J**	**0.00014 J**
MW-06-6	05/28/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00018	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.00029	< 0.00023
MW-06-6	09/18/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00017	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-EPA-1	08/09/1988	N	--	< 0.01	< 0.01	--	< 0.009 B	--	--	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.01	< 0.01	--	--
MW-EPA-1	05/14/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00023	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-GW-3	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00020	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-GW-3	09/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-5	11/04/1997	N	--	--	--	--	--	--	--	--	--	< 0.0010	--	--	--	--	< 0.0010	< 0.0010
MW-97-5	05/15/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00019	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-6	11/04/1997	N	--	--	--	--	--	--	--	--	--	**0.00053 J**	--	--	--	--	< 0.0010	< 0.0010
MW-97-6	05/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00014 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-6	09/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00019	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-MT96-2	05/29/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000070	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.00016	< 0.00010
MW-BSB-4	05/29/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000080	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000080	< 0.000060
Wells Far Downgradient of Tailing Basi																		
MW-06-3	05/14/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000050	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-02-3	05/15/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00017	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-12-3	11/07/2012	N	< 0.00015 J	< 0.0019	< 0.0026	< 0.00011	< 0.00011	< 0.000088	< 0.000054	< 0.000089	< 0.000099	**0.00025 J**	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-12-7	11/06/2012	N	< 0.00012 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	**0.00010 J**	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-12-8	11/06/2012	N	< 0.00012 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	**0.000090 J**	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-12-4	11/07/2012	N	< 0.00012 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	< 0.000054	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-12-5	11/07/2012	N	< 0.00012 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	**0.000090 J**	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
		FD	< 0.00012 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	**0.000070 J**	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-12-6	11/07/2012	N	< 0.00012 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	**0.00028 J**	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-12-2	11/08/2012	N	< 0.00012 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	< 0.000054	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-02-4	05/15/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00013	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000080	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-1	05/15/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-10	05/14/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000090	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-12-1	11/06/2012	N	< 0.00024 J	< 0.0019	< 0.0026	< 0.00011	< 0.00010	< 0.000088	< 0.000054	< 0.000089	< 0.000099	**0.00010 J**	< 0.00010	< 0.00012	< 0.00043	< 0.000075	< 0.00011	< 0.000074
MW-EPA-4	08/09/1988	N	--	< 0.01	< 0.01	--	< 0.01 B	--	--	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.01	< 0.01	--	--
		FD	--	< 0.01	< 0.01	--	< 0.011 B	--	--	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.01	< 0.01	--	--
MW-EPA-4	11/05/1997	N	--	--	--	--	--	--	--	--	--	**0.00025 J**	--	--	--	--	< 0.0010	< 0.0010
MW-EPA-4	05/15/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000060	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
Wells Near Slag Water Retention Ditch																		
MW-06-15	05/21/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00036 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-15	09/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00013	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-12	11/05/1997	N	--	--	--	--	--	--	--	--	--	< 0.0010	--	--	--	--	< 0.0010	< 0.0010
MW-97-12	05/27/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010 J	< 0.000037	< 0.000039	< 0.000077	< 0.000060	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-14	05/27/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010 J	< 0.000037	< 0.000039	< 0.000077	< 0.000060	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-EPA-3	08/09/1988	N	--	< 0.01	< 0.01	--	< 0.011 B	--	--	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.01	< 0.01	--	--
MW-EPA-3	11/05/1997	N	--	--	--	--	--	--	--	--	--	**0.00024 J**	--	--	--	--	< 0.0010	< 0.0010
MW-EPA-3	05/15/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.000050 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-EPA-3	09/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00046	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Iodomethane	Methyl ethyl ketone	Methyl isobutyl ketone	Methyl tertiary butyl ether (MTBE)	Methylene chloride	Naphthalene	Propylbenzene	Styrene	Tetrachloroethylene	Toluene	Trichloroethylene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride	Xylene, m & p	Xylene, o
Location ID	**Sample Date**	**Sample Type**																
Wells in Plant Area																		
MW-06-19	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00014	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-19	09/18/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-13	05/27/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010 J	< 0.000037	< 0.000039	< 0.000080	< 0.00010	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010 J	< 0.000037	< 0.000039	< 0.000090	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-13	09/19/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.000090 J**	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-16	05/21/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.00019 J**	< 0.00016	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-16	09/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.00013 J**	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-17	05/27/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010 J	< 0.000037	< 0.000039	< 0.0011	< 0.00016	< 0.00060	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-17	09/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.0011**	< 0.00033	**0.00051**	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-20	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.000080 J**	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-20	09/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.00010 J**	< 0.00046	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-18	05/21/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00021	< 0.000037	< 0.000039	**0.0014**	**0.00063**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.0015**	< 0.00018	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-18	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.0019**	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
Wells near Tailing Basin (SWMU 1)																		
MW-06-7	05/28/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00020	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-8	05/18/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00019 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-8	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00020	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-9	05/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00016 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-9	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
PW-99-3	05/28/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00015	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-11	11/05/1997	N	--	--	--	--	--	--	--	--	--	**0.00034 J**	--	--	--	--	< 0.0010	< 0.0010
MW-97-11	05/21/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00018	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-11	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-10	11/04/1997	N	--	--	--	--	--	--	--	--	--	< 0.0010	--	--	--	--	< 0.0010	< 0.0010
		FD	--	--	--	--	--	--	--	--	--	< 0.0010	--	--	--	--	< 0.0010	< 0.0010
MW-97-10	05/21/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00015	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-10	09/23/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00053	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-2	05/15/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00017	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
PW-99-1	05/18/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00012 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
PW-99-1	05/29/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	**0.000050 J**	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
PW-99-1	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-3	11/04/1997	N	--	--	--	--	--	--	--	--	--	< 0.0010	--	--	--	--	< 0.0010	< 0.0010
MW-97-3	05/28/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00014	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-3	09/23/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00017	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-4	11/04/1997	N	--	--	--	--	--	--	--	--	--	**0.00036 J**	--	--	--	--	< 0.0010	< 0.0010
MW-97-4	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00013	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-4	09/22/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00012	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-12	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00027	< 0.000061	< 0.000086	< 0.00091	< 0.000071	**0.00017 J**	**0.00013 J**
MW-06-12	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00039	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-11	05/28/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00014	< 0.000061	**0.00010 J**	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-11	09/23/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	**0.000090 J**	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-9	11/05/1997	N	--	--	--	--	--	--	--	--	--	**0.00020 J**	--	--	--	--	< 0.0010	< 0.0010
MW-97-9	05/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-9	09/24/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00021	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00033	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-8	11/05/1997	N	--	--	--	--	--	--	--	--	--	**0.00055 J**	--	--	--	--	< 0.0010	< 0.0010
MW-97-8	05/15/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000070	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-8	09/24/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00018	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-21	05/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00015 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-21	09/24/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00044	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000080	< 0.000037
MW-06-22	05/21/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00014	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-22	09/26/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000090	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-25	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000060	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-06-25	09/26/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-7	11/04/1997	N	--	--	--	--	--	--	--	--	--	**0.00044 J**	--	--	--	--	< 0.0010	< 0.0010
MW-97-7	10/08/2001	N	< 0.0010	< 0.02	< 0.02	--	< 0.0010	--	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-97-7	05/20/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00012	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-97-7	09/26/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00010	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Location ID	Sample Date	Sample Type	Chemical Name: Iodomethane	Methyl ethyl ketone	Methyl isobutyl ketone	Methyl tertiary butyl ether (MTBE)	Methylene chloride	Naphthalene	Propylbenzene	Styrene	Tetrachloroethylene	Toluene	Trichloroethylene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride	Xylene, m & p	Xylene, o
Wells near Brick Pile (SWMU 3)																		
MW-01-1	10/08/2001	N	< 0.0010	< 0.02	< 0.02	--	< 0.0010	--	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-1	05/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000090	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-01-1	09/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00036	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-01-4	10/04/2001	N	< 0.0010	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		FD	< 0.0010	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-4	05/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000070	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-01-5	10/04/2001	N	< 0.0010	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-5	05/17/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00010 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-01-5	09/16/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000070	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
Wells near Clarfier (SWMU 2)																		
MW-01-2	10/09/2001	N	< 0.0010	< 0.02	< 0.02	--	< 0.0010	--	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-2	05/19/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.00030 J**	< 0.00023	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-01-2	09/22/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	**0.00030 J**	< 0.00050	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-01-6	10/09/2001	N	< 0.0010	< 0.02	< 0.02	--	< 0.0010	--	--	< 0.0010	< 0.0010	**0.00020 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.00024 J**	< 0.0010
MW-01-6	05/19/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00031	< 0.000037	< 0.000039	< 0.000077	**0.00041 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	**0.00027 J**	**0.00011 J**
MW-01-6	09/18/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	**0.00023 J**	< 0.000037	**0.000050 J**	< 0.000077	< 0.00011	< 0.000061	< 0.000086	< 0.00091	< 0.000071	**0.00015 J**	**0.000090 J**
MW-01-3	10/09/2001	N	< 0.0010	< 0.02	< 0.02	--	< 0.0010	--	--	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
MW-01-3	05/19/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000060	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-01-3	09/19/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00046	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-02-2	05/19/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00012	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-02-2	09/22/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000090	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-02-1	01/17/2002	N	< 0.0010	< 0.02	< 0.02	< 0.0010	< 0.0010	< 0.0010	**0.00086 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
		SPLIT	--	--	--	< 0.001	< 0.005	< 0.005	**0.001**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	--	< 0.001	--	--
MW-02-1	05/29/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00053	**0.00018 J**	< 0.000039	< 0.000077	< 0.000060	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00038	**0.000070 J**	< 0.000039	< 0.000077	< 0.00020	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
MW-02-1	09/26/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	**0.000080 J**	**0.000060 J**	< 0.000077	< 0.00015	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
Production Wells																		
RP-W-1	05/22/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.000090 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-1	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00019	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-4	08/06/1988	N	--	< 0.015	< 0.01	--	< 0.009 B	--	--	< 0.005	< 0.005	< 0.003	< 0.005	--	< 0.01	< 0.01	--	--
		FD	--	< 0.01	< 0.01	--	< 0.005 B	--	--	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.01	< 0.01	--	--
RP-W-4	05/28/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000070	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-4	09/24/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000048	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
		FD	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000060	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-5	05/30/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00010	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-5	09/24/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00023	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-6	08/06/1988	N	--	< 0.014	< 0.01	--	< 0.015 B	--	--	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.01	< 0.01	--	--
RP-W-6	05/30/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.000050	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-7	05/22/2008	N	< 0.00027 R	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	**0.00018 J**	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037
RP-W-7	09/25/2008	N	< 0.00027	< 0.0038	< 0.0030	< 0.000070	< 0.00023	< 0.00010	< 0.000037	< 0.000039	< 0.000077	< 0.00030	< 0.000061	< 0.000086	< 0.00091	< 0.000071	< 0.000078	< 0.000037

Table 5.3-4d
Groundwater Data - VOCs
Rhodia Silver Bow Plant

The analytical database contains data for the following parameters. The data set is comparitively small and was not summarized in the RFI Report.

1,2-Dichloroethylene
Isopropyl toluene
Xylene, total

Table 5.3-4e
Groundwater Data - PCBs
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
Location ID	Sample Date	Sample Type									
Upgradient Wells											
MW-06-23	05/13/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-24	05/13/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-GW-1	05/20/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-4	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-1	05/13/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-2	05/13/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-5	05/14/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-6	05/14/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-6	05/28/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-EPA-1	05/14/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-GW-3	05/20/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-5	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-6	05/17/2008	N	< 0.000022	< 0.000020	< 0.000023	< 0.000021	< 0.0000054	< 0.0000093	< 0.0000050	< 0.0000048	< 0.0000065
MW-MT96-2	05/29/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-BSB-4	05/29/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
Wells Far Downgradient of Tailing Basin (SWMU 1)											
MW-06-3	05/14/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-02-3	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-12-3	11/07/2012	N	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
MW-12-7	11/06/2012	N	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
MW-12-8	11/06/2012	N	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
MW-12-4	11/07/2012	N	< 0.0000095	< 0.0000095	< 0.0000095	< 0.0000095	< 0.0000095	< 0.0000095	< 0.0000095	< 0.0000095	< 0.0000095
MW-12-5	11/07/2012	N	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
		FD	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
MW-12-6	11/07/2012	N	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
MW-12-2	11/08/2012	N	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
MW-02-4	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
		FD	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-1	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-10	05/14/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-12-1	11/06/2012	N	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094	< 0.0000094
MW-EPA-4	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
Wells Near Slag Water Retention Ditch											
MW-06-15	05/21/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-12	05/27/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-14	05/27/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-EPA-3	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
Wells in Plant Area											
MW-06-19	05/20/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-13	05/27/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	**0.0000042 J**	< 0.0000048	< 0.0000065
		FD	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	**0.0000075 J**	< 0.0000048	< 0.0000065
MW-06-13	09/19/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-16	05/21/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-17	05/27/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-20	05/20/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000019	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-18	05/21/2008	N	< 0.000028	< 0.000020	< 0.000064	< 0.000031	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
		FD	< 0.000024	< 0.000020	< 0.000051	< 0.000064	< 0.0000056	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
Wells near Tailing Basin (SWMU 1)											
MW-06-7	05/29/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-8	05/18/2008	N	< 0.000019	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.000023	< 0.000011	< 0.0000048	< 0.0000065
MW-06-9	05/17/2008	N	< 0.000024	< 0.000020	< 0.000046	< 0.000022	< 0.00015	< 0.000033	< 0.000015	< 0.0000048	< 0.0000065
PW-99-3	05/28/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-11	05/21/2008	N	< 0.000033	< 0.000020	< 0.00019	< 0.000092	< 0.000062	< 0.00022	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-10	05/21/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-2	05/15/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
PW-99-1	05/18/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
PW-99-1	05/29/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-3	05/28/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-4	05/20/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-12	05/20/2008	N	< 0.000011	< 0.000020	< 0.000028	< 0.000019	< 0.0000054	< 0.0000070	< 0.0000043	< 0.0000048	< 0.0000065
MW-06-11	05/28/2008	N	< 0.00020	< 0.000020	< 0.00028	< 0.00020	< 0.000019	< 0.00090	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-9	05/16/2008	N	< 0.000011	< 0.000020	< 0.000042	< 0.000015	< 0.0000059	< 0.0000070	< 0.0000055	< 0.0000048	< 0.0000065
MW-97-8	05/15/2008	N	< 0.000013	< 0.000020	< 0.000023	< 0.000040	< 0.0000064	< 0.000026	< 0.0000068	< 0.0000048	< 0.0000065
MW-06-21	05/17/2008	N	< 0.000041	< 0.000020	< 0.000049	< 0.00020	< 0.000042	< 0.000014	< 0.0000032	< 0.0000048	< 0.0000065
MW-06-22	05/21/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-06-25	05/20/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-97-7	05/20/2008	N	< 0.000013	< 0.000020	< 0.000057	< 0.000037	< 0.0000054	< 0.000065	< 0.0000031	< 0.0000048	< 0.0000065
Wells near Brick Pile (SWMU 3)											
MW-01-1	05/16/2008	N	< 0.000013	< 0.000020	< 0.000023	< 0.000013	< 0.000011	< 0.0000096	< 0.0000057	< 0.0000048	< 0.0000065
MW-01-4	05/16/2008	N	< 0.0000099	< 0.000022	< 0.000025	< 0.000014	< 0.0000057	< 0.0000097	< 0.0000043	< 0.0000051	< 0.0000069
MW-01-5	05/17/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000034	< 0.0000048	< 0.0000065
Wells near Clarfier (SWMU 2)											
MW-01-2	05/19/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-01-6	05/19/2008	N	< 0.000033	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-01-3	05/19/2008	N	< 0.000016	< 0.000020	< 0.000047	< 0.000040	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-02-2	05/19/2008	N	< 0.000012	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
MW-02-1	01/17/2002	N	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
		SPLIT	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	--	--
		FD SPLIT	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	--	--
MW-02-1	05/29/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
		FD	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
Production Wells											
RP-W-1	05/22/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
RP-W-4	05/28/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
RP-W-5	05/30/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
RP-W-6	05/30/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065
RP-W-7	05/22/2008	N	< 0.0000094	< 0.000020	< 0.000023	< 0.000013	< 0.0000054	< 0.0000070	< 0.0000031	< 0.0000048	< 0.0000065

Table 5.3-4f
Groundwater Data - Radionuclides
Rhodia Silver Bow Plant
[concentrations in pCi/l]

Chemical Name			Cesium 137	Gross Alpha (radiation)	Gross Beta (radiation)	Radium 226	Radium 228
Location ID	Sample Date	Sample Type					
Upgradient Wells							
MW-06-23	05/13/2008	N	--	**6.4 +/- 2.5**	**8.4 +/- 2.4**	< 0.28	< 0.63
MW-06-23	09/16/2008	N	--	**2 +/- 1.8**	**5.7 +/- 2.2**	< 0.54	< 0.69
MW-06-24	05/13/2008	N	--	**5.6 +/- 2.5**	**8.4 +/- 2.3**	< 0.28	< 0.75
MW-06-24	09/16/2008	N	--	**3.8 +/- 2.2**	**7.5 +/- 2.5**	< 0.2	< 0.68
MW-GW-1	05/20/2008	N	--	**7.8 +/- 2.4**	**14 +/- 2.7**	< 0.17	< 0.7
MW-GW-1	09/17/2008	N	--	**12 +/- 3.6**	**8.6 +/- 2.4**	< 0.32	< 0.69
MW-06-4	05/15/2008	N	--	**5.6 +/- 2.5**	**7.4 +/- 2.3**	< 0.23	< 0.82
MW-06-4	09/18/2008	N	--	**4.8 +/- 2.6**	**7.6 +/- 2.3**	< 0.28	< 0.74
MW-97-1	11/04/1997	N	--	< 1.0	--	< 0.2	**1.0 +/- 0.3**
MW-97-1	05/13/2008	N	--	**22 +/- 7.1**	**24 +/- 6.3**	< 0.18	< 0.73
MW-97-1	09/17/2008	N	--	**16 +/- 7.3**	**22 +/- 7.4**	< 0.24	**9.2 +/- 1.7**
MW-97-2	11/04/1997	N	--	< 1.0	--	< 0.2	< 1.0
MW-97-2	05/13/2008	N	--	**26 +/- 7.1**	**22 +/- 5.6**	< 0.19	< 0.71
MW-97-2	09/17/2008	N	--	**26 +/- 8.1**	**30 +/- 6.9**	< 0.33	< 0.7
MW-06-5	05/14/2008	N	--	< 3.5	**18 +/- 6.3**	< 0.2	< 0.71
MW-06-5	09/19/2008	N	--	< 4.6	**29 +/- 7.8**	< 0.23	**0.9 +/- 0.31**
		FD	--	< 4.4	**20 +/- 7.9**	< 0.36	**0.87 +/- 0.31**
MW-06-6	05/14/2008	N	--	**15 +/- 3.6**	**9.8 +/- 2.6**	< 0.28	< 0.71
MW-06-6	05/28/2008	N	--	**13 +/- 3.6**	**7.9 +/- 2.3**	< 0.42	< 0.71
MW-06-6	09/18/2008	N	--	**13 +/- 3.5**	**9.6 +/- 2.4**	< 0.2	**2.6 +/- 0.58**
MW-EPA-1	08/09/1988	N	--	--	--	< 1	--
MW-EPA-1	05/14/2008	N	--	**5.6 +/- 2.5**	**7 +/- 2.8**	< 0.19	< 0.7
MW-EPA-1	09/17/2008	N	--	**7.7 +/- 3**	**13 +/- 3.4**	< 0.3	< 0.7
MW-GW-3	05/20/2008	N	--	< 3.5	**9.2 +/- 5.6**	< 0.19	< 1.9
MW-GW-3	09/17/2008	N	--	**16 +/- 6.3**	**24 +/- 6.8**	< 0.38	**2.5 +/- 0.58**
MW-97-5	11/04/1997	N	--	**6.9 +/- 0.4**	--	**5.7 +/- 0.4**	**12.5 +/- 1.1**
MW-97-5	01/23/2002	N	--	**6.7 +/- 1.0**	**15 +/- 2.0**	**1.0 +/- 0**	< 1.0
		FD	--	**9.4**	**7.2**	**0.2**	**1.3**
MW-97-5	05/15/2008	N	--	**11 +/- 3.2**	**12 +/- 2.7**	< 0.43	**1.7 +/- 0.32**
MW-97-5	09/17/2008	N	--	**9.6 +/- 3.3**	**12 +/- 2.5**	< 0.23	**1.6 +/- 0.53**
MW-97-6	11/04/1997	N	--	**1.0 +/- 0.2**	--	**0.6 +/- 0.2**	**2.3 +/- 0.3**
MW-97-6	07/17/2003	N	< 34.2	**8.32 +/- 2.35**	< 3.92	< 2.09 J	--
MW-97-6	07/23/2003	N	< 53.0	**12.6 +/- 2.25 J**	**23.2 +/- 4.05**	< 1.42	--
MW-97-6	05/17/2008	N	--	**30 +/- 6.5**	**19 +/- 4.4**	< 0.22	< 0.79
MW-97-6	09/16/2008	N	--	**13 +/- 4.4**	**16 +/- 4.7**	< 0.2	< 0.7
MW-MT96-2	07/17/2003	N	< 44.9	**2.81 +/- 1.57 J**	**3.83 +/- 2.05 J**	< 2.09 J	--
MW-MT96-2	05/29/2008	N	--	**5.6 +/- 2.6**	**5.3 +/- 2.2**	< 0.4	< 0.68
MW-MT96-2	09/19/2008	N	--	**4.3 +/- 2.3**	**5.2 +/- 2.2**	< 0.36	< 0.73
MW-BSB-4	05/29/2008	N	--	**7.7 +/- 2.8**	**5 +/- 2.1**	< 0.49	< 0.69
MW-BSB-4	09/19/2008	N	--	< 1.5	**4.8 +/- 2.4**	< 0.39	< 0.73
Wells Far Downgradient of Tailing Basin (SWMU 1)							
MW-06-3	05/14/2008	N	--	**6.5 +/- 4.1**	**20 +/- 5.3**	< 0.17	< 0.73
MW-06-3	09/19/2008	N	--	**6.2 +/- 3.4**	**16 +/- 4.7**	< 0.22	< 0.73
MW-06-3	07/16/2010	N	--	**3.5 +/- 2.7**	**12 +/- 3.9**	**0.11 +/- 0.09**	**0.88 +/- 0.48**
MW-02-3	05/15/2008	N	--	**13 +/- 6.9**	**21 +/- 7.1**	< 0.31	< 0.78
MW-02-3	09/23/2008	N	--	**14 +/- 6**	**20 +/- 6.7**	< 0.3	< 0.9
MW-02-3	07/17/2010	N	--	**16 +/- 6.3**	**16 +/- 5.5**	**0.12 +/- 0.1**	**1.2 +/- 0.49**
		FD	--	**12 +/- 5.8**	**14 +/- 5.3**	**0.13 +/- 0.1**	**0.32 +/- 0.43**
MW-12-3	11/07/2012	N	--	**13 +/- 3.2**	**7.7 +/- 3.1**	< 0.27	**2.1 +/- 0.56**
MW-12-7	11/06/2012	N	--	**13 +/- 4**	**16 +/- 3.4**	**0.17 +/- 0.08**	**1.8 +/- 0.56**
MW-12-8	11/06/2012	N	--	**11 +/- 3.6**	**13 +/- 3.3**	< 0.34	< 1.1
MW-12-4	11/07/2012	N	--	**5.6 +/- 3.1**	**8.8 +/- 3.2**	< 0.2	**2 +/- 0.52**
MW-12-5	11/07/2012	N	--	**13 +/- 3.9**	**14 +/- 3.5**	**0.11 +/- 0.1**	< 1.3
		FD	--	**12 +/- 3.9**	**13 +/- 3.4**	**0.28 +/- 0.13**	**1.2 +/- 0.45**
MW-12-6	11/07/2012	N	--	**9.1 +/- 3.4**	**8.4 +/- 3**	< 0.31	**2.4 +/- 0.55**
MW-12-2	11/08/2012	N	--	**17 +/- 7.6**	**25 +/- 6.5**	< 0.23	**1.4 +/- 0.53**
MW-02-4	05/15/2008	N	--	**6.8 +/- 5.9**	**24 +/- 7.6**	< 0.24	**0.71 +/- 0.28**
		FD	--	**11 +/- 6.5**	**25 +/- 8.8**	< 0.21	< 0.7

Table 5.3-4f
Groundwater Data - Radionuclides
Rhodia Silver Bow Plant
[concentrations in pCi/l]

Location ID	Sample Date	Sample Type	Cesium 137	Gross Alpha (radiation)	Gross Beta (radiation)	Radium 226	Radium 228
MW-02-4	09/23/2008	N	--	**24 +/- 8.1**	**31 +/- 8.4**	< 0.19	**0.84 +/- 0.32**
MW-02-4	07/18/2010	N	--	**14 +/- 6.5**	**22 +/- 6.5**	**0.12 +/- 0.1**	**0.30 +/- 0.43**
MW-06-1	05/15/2008	N	--	**17 +/- 7.4**	**27 +/- 7.7**	< 0.22	< 0.7
MW-06-1	09/18/2008	N	--	**20 +/- 7.9**	**25 +/- 7.7**	< 0.42	< 0.75
MW-06-1	07/17/2010	N	--	**21 +/- 6.9**	**21 +/- 5.6**	**0.17 +/- 0.1**	**0.01 +/- 0.4**
MW-06-10	05/14/2008	N	--	**14 +/- 6.4**	**27 +/- 6.7**	< 0.24	< 0.72
MW-06-10	09/18/2008	N	--	**21 +/- 7.7**	**26 +/- 6.8**	< 0.4	< 1.6
MW-12-1	11/06/2012	N	--	**8.8 +/- 3.5**	**11 +/- 3.2**	**0.17 +/- 0.08**	**1.3 +/- 0.49**
MW-EPA-4	08/09/1988	N	--	--	--	< 1	--
MW-EPA-4	11/05/1997	N	--	< 1.0	--	< 0.2	< 1.0
MW-EPA-4	07/16/2003	N	< 52.9	< 13.5	**29.7 +/- 87.3**	< 2.12 J	--
MW-EPA-4	07/24/2003	N	< 53.0	< 6.33 J	**14.3 +/- 48.3**	< 1.69	--
MW-EPA-4	05/15/2008	N	--	< 4.4	**16 +/- 7**	< 0.24	< 0.81
MW-EPA-4	09/20/2008	N	--	**6.7 +/- 5.8**	**17 +/- 7.4**	< 0.21	**1.3 +/- 0.34**
Wells Near Slag Water Retention Ditch							
MW-06-15	05/21/2008	N	--	**27 +/- 8.9**	**30 +/- 7.7**	< 0.21	< 0.85
MW-06-15	09/17/2008	N	--	**19 +/- 7.3**	**28 +/- 8.2**	< 0.4	< 0.71
MW-97-12	11/05/1997	N	--	< 1.0	--	< 0.2	**2.2 +/- 0.3**
MW-97-12	05/27/2008	N	--	< 2.2	**24 +/- 4.5**	< 0.52	< 0.74
MW-97-12	09/23/2008	N	--	**4.9 +/- 3.6**	**35 +/- 5.7**	< 0.22	< 0.77
MW-06-14	05/27/2008	N	--	**4 +/- 3.8**	**21 +/- 6**	< 0.3	< 0.81
MW-06-14	09/18/2008	N	--	**7.9 +/- 4.3**	**23 +/- 6.1**	< 0.23	**5.1 +/- 1**
MW-EPA-3	08/09/1988	N	--	--	--	< 1	--
MW-EPA-3	11/05/1997	N	--	< 1.0	--	< 0.2	< 1.0
MW-EPA-3	07/15/2003	N	< 49.1	**7.06 +/- 1.57**	**23.1 +/- 5.28**	< 2.03	--
MW-EPA-3	07/24/2003	N	< 40.0	**8.82 +/- 1.77 J**	**6.48 +/- 1.41**	< 1.58	--
MW-EPA-3	05/15/2008	N	--	**7.4 +/- 2.8**	**18 +/- 3.5**	< 0.17	< 0.73
MW-EPA-3	09/17/2008	N	--	**7.1 +/- 2.9**	**15 +/- 3.4**	< 0.26	< 1.4
Wells in Plant Area							
MW-06-19	05/20/2008	N	--	**54 +/- 14**	**47 +/- 13**	**0.27 +/- 0.12**	< 0.7
MW-06-19	09/18/2008	N	--	**42 +/- 16**	**57 +/- 17**	< 0.31	**5.6 +/- 1**
MW-06-13	05/27/2008	N	--	**5.8 +/- 4.3**	**20 +/- 5.4**	< 0.52	< 0.71
		FD	--	**7 +/- 4.9**	**18 +/- 5.5**	< 0.35	**0.72 +/- 0.28**
MW-06-13	09/19/2008	N	--	**7.7 +/- 4.9**	**19 +/- 5.5**	< 0.23	**1.1 +/- 0.3**
MW-06-16	05/21/2008	N	--	**28 +/- 10**	**26 +/- 9.2**	< 0.21	< 0.76
MW-06-16	09/20/2008	N	--	**25 +/- 9**	**28 +/- 8.6**	< 0.23	**0.9 +/- 0.31**
MW-06-17	05/27/2008	N	--	< 3.7	**21 +/- 6.4**	< 0.36	< 0.66
MW-06-17	09/20/2008	N	--	**6.4 +/- 4.7**	**26 +/- 7.1**	< 0.2	< 0.71
MW-06-20	05/20/2008	N	--	< 3.6	**36 +/- 7**	< 0.29	< 0.69
MW-06-20	09/20/2008	N	--	**5 +/- 4.5**	**51 +/- 7.7**	< 0.22	**0.76 +/- 0.3**
MW-06-18	05/21/2008	N	--	**7.5 +/- 5.4**	**43 +/- 9.1**	< 0.23	< 0.69
		FD	--	**10 +/- 6.3**	**35 +/- 8.8**	< 0.18	< 0.73
MW-06-18	09/25/2008	N	--	**12 +/- 6.4**	**43 +/- 8.5**	< 0.25	< 1.4
Wells near Tailing Basin (SWMU 1)							
MW-06-7	05/29/2008	N	--	**6.3 +/- 6.5**	**79 +/- 12**	**0.74 +/- 0.28**	**1.3 +/- 0.32**
MW-06-7	09/23/2008	N	--	**14 +/- 7.2**	**70 +/- 10**	**1.2 +/- 0.19**	**1.3 +/- 0.35**
MW-06-8	05/18/2008	N	--	< 5.1 J	**29 +/- 5.2**	< 0.2	**0.79 +/- 0.31**
MW-06-8	09/25/2008	N	--	**16 +/- 6.7 R**	**37 +/- 8.8**	**0.33 +/- 0.1**	< 1.4
MW-06-9	05/17/2008	N	--	< 5	**23 +/- 7.9**	**0.31 +/- 0.12**	**0.86 +/- 0.33**
MW-06-9	09/25/2008	N	--	**20 +/- 8.8**	**30 +/- 8.7**	**0.25 +/- 0.09**	< 1.4
PW-99-3	05/28/2008	N	--	**6.5 +/- 4.4**	**26 +/- 6.9**	< 0.44	**1.3 +/- 0.32**
PW-99-3	09/22/2008	N	--	**14 +/- 5.3**	**23 +/- 6**	< 0.2	**0.91 +/- 0.31**
MW-97-11	11/05/1997	N	--	< 1.0	--	< 0.2	< 1.0
MW-97-11	07/21/2003	N	< -2.53	**21.1 +/- 5.45**	**29.5 +/- 7.58**	< 0.236	--
MW-97-11	05/21/2008	N	--	**8.4 +/- 6.5**	**20 +/- 8.5**	< 0.19	< 0.77
MW-97-11	09/25/2008	N	--	**19 +/- 7.7**	**47 +/- 9.6**	< 0.32	< 1.5
MW-97-10	11/04/1997	N	--	< 1.0	--	< 0.2	**1.0 +/- 0.3**
		FD	--	**1.2 +/- 0.2**	--	**1.1 +/- 0.2**	**2.6 +/- 0.3**
MW-97-10	07/16/2003	N	< 49.1	< 10.5	**36.3 +/- 351**	< 2.10 J	--

Table 5.3-4f
Groundwater Data - Radionuclides
Rhodia Silver Bow Plant
[concentrations in pCi/l]

		Chemical Name	Cesium 137	Gross Alpha (radiation)	Gross Beta (radiation)	Radium 226	Radium 228
Location ID	**Sample Date**	**Sample Type**					
MW-97-10	07/23/2003	N	< -17.7	**-3.07 +/- 4.03 J**	**8.89 +/- 12.6**	< 0.509	--
MW-97-10	05/21/2008	N	--	**7.5 +/- 6**	**17 +/- 7.1**	< 0.2	**0.69 +/- 0.28**
MW-97-10	09/23/2008	N	--	< 3.7	**25 +/- 7.2**	< 0.29	< 0.91
MW-06-2	05/15/2008	N	--	**12 +/- 6.4**	**24 +/- 7.4**	**4.7 +/- 0.34**	**0.74 +/- 0.32**
MW-06-2	09/23/2008	N	--	**17 +/- 7.9**	**24 +/- 7.7**	< 0.25	< 0.79
MW-06-2	07/18/2010	N	--	**9.1 +/- 5.1**	**22 +/- 6**	**0.06 +/- 0.09**	**0.96 +/- 0.47**
PW-99-1	05/18/2008	N	--	**16 +/- 7**	**18 +/- 7.1**	< 0.19	< 0.76
PW-99-1	05/29/2008	N	--	**6.5 +/- 5.8**	**19 +/- 7.1**	< 0.23	< 0.68
PW-99-1	09/25/2008	N	--	**8.2 +/- 5.3**	**23 +/- 7.7**	< 0.21	< 1.4
MW-97-3	11/04/1997	N	--	< 1.0	--	< 0.2	< 1.0
MW-97-3	05/28/2008	N	--	**5.7 +/- 3.7**	**20 +/- 5.1**	< 0.95	**0.74 +/- 0.31**
MW-97-3	09/23/2008	N	--	**11 +/- 4.6**	**30 +/- 5.6**	< 0.3	< 0.93
MW-97-4	11/04/1997	N	--	< 1.0	--	< 0.2	< 1.0
MW-97-4	05/20/2008	N	--	**10 +/- 4.4**	**16 +/- 5.2**	< 0.46	**0.79 +/- 0.31**
MW-97-4	09/22/2008	N	--	**5.8 +/- 4.2**	**26 +/- 5.4**	< 0.23	**1.2 +/- 0.31**
MW-06-12	05/20/2008	N	--	< 5	**24 +/- 8.2**	< 0.17	< 0.73
MW-06-12	09/25/2008	N	--	**11 +/- 6.7**	**32 +/- 8.6**	< 0.26	< 1.4
		FD	--	**7.4 +/- 5.8**	**43 +/- 10**	< 0.34	< 1.4
MW-06-11	06/03/2008	N	--	< 4.3	**20 +/- 7.6**	< 0.5	**0.84 +/- 0.3**
MW-06-11	09/23/2008	N	--	**7.8 +/- 5.8**	**30 +/- 7.8**	< 0.25	**1.3 +/- 0.33**
MW-97-9	11/05/1997	N	--	< 1.0	--	**1.9 +/- 0.1**	**1.4 +/- 0.2**
MW-97-9	05/16/2008	N	--	< 2.7	**33 +/- 5.9**	< 0.22	< 0.78
MW-97-9	09/24/2008	N	--	< 3.9	**30 +/- 6.7**	< 0.26	< 1.5
		FD	--	< 3.2	**33 +/- 6.1**	< 0.33	< 1.5
MW-97-8	11/05/1997	N	--	< 1.0	--	< 0.2	< 1.0
MW-97-8	05/15/2008	N	--	**3.3 +/- 3.6 J**	**30 +/- 5.6**	**3 +/- 0.28**	< 0.74
MW-97-8	09/24/2008	N	--	**8.7 +/- 3.9**	**36 +/- 5.4**	< 0.18	< 1.4
MW-06-21	05/17/2008	N	--	**7 +/- 4.2 J**	**24 +/- 6**	< 0.24	< 0.76
MW-06-21	09/24/2008	N	--	< 2.7	**27 +/- 5**	< 0.32	< 1.4
MW-06-22	05/21/2008	N	--	< 4.4 J	**42 +/- 8.6**	< 0.31	**1.1 +/- 0.29**
MW-06-22	09/26/2008	N	--	**17 +/- 7**	**68 +/- 9.4**	< 0.26	< 1.4
MW-06-25	05/20/2008	N	--	**14 +/- 6.7**	**32 +/- 8.5**	< 0.3	< 0.71
MW-06-25	09/26/2008	N	--	**30 +/- 9.2**	**70 +/- 11**	< 0.22	< 1.4
MW-97-7	11/04/1997	N	--	< 1.0	--	< 0.2	**1.2 +/- 0.3**
MW-97-7	10/08/2001	N	--	**1.4 +/- 3.1**	**25 +/- 8.4**	< 0.2	< 1
MW-97-7	01/17/2002	N	--	< 1.0	**32 +/- 7.5**	< 0.20	< 1.0
		FD	--	**2.8**	**17**	**0.1**	**0.5**
MW-97-7	05/20/2008	N	--	**34 +/- 9**	**32 +/- 7.8**	< 0.34	< 0.68
MW-97-7	09/26/2008	N	--	**33 +/- 9.9**	**68 +/- 9.8**	< 0.34	< 1.4
Wells near Brick Pile (SWMU 3)							
MW-01-1	10/08/2001	N	--	**10 +/- 3.1**	**12 +/- 8.4**	**0.70 +/- 0.2**	**2.4 +/- 1.0**
MW-01-1	01/16/2002	N	--	**15 +/- 2.6**	**17 +/- 5.6**	**0.40 +/- 0**	**1.8 +/- 1**
		SPLIT	--	**26**	**23**	**0.4**	**1**
MW-01-1	05/16/2008	N	--	**24 +/- 8.1**	**37 +/- 8.8**	< 0.28	< 0.77
MW-01-1	09/17/2008	N	--	**33 +/- 10**	**22 +/- 7.7**	< 0.22	**4.5 +/- 1**
MW-01-4	10/04/2001	N	--	**6.5 +/- 1.0**	**11 +/- 2.8**	**0.30 +/- 0.2**	**2.5 +/- 1.0**
		FD	--	**6.7 +/- 1.0**	**12 +/- 2.8**	**0.50 +/- 0.2**	< 1.0
MW-01-4	01/16/2002	N	--	**8.3 +/- 1.5**	**17 +/- 3.2**	**0.50 +/- 0**	< 1.0
MW-01-4	05/16/2008	N	--	**14 +/- 4.2**	**19 +/- 3.8**	< 0.22	< 0.74
MW-01-4	09/16/2008	N	--	**16 +/- 5.2**	**16 +/- 4.3**	< 0.19	< 0.7
MW-01-5	10/04/2001	N	--	**10 +/- 1.1**	**15 +/- 2.8**	< 0.20	< 1.0
MW-01-5	01/16/2002	N	--	**8.1 +/- 1.5**	**19 +/- 3.2**	< 0.20	< 1.0
		SPLIT	--	**20**	**8.8**	**0.2**	**0.30**
MW-01-5	05/17/2008	N	--	**29 +/- 7.1**	**17 +/- 4.7**	< 0.25	< 0.73
MW-01-5	09/16/2008	N	--	**15 +/- 5.5**	**18 +/- 5**	< 0.4	< 0.69
Wells near Clarfier (SWMU 2)							

Table 5.3-4f
Groundwater Data - Radionuclides
Rhodia Silver Bow Plant
[concentrations in pCi/l]

		Chemical Name	Cesium 137	Gross Alpha (radiation)	Gross Beta (radiation)	Radium 226	Radium 228
Location ID	**Sample Date**	**Sample Type**					
MW-01-2	10/09/2001	N	--	< 1	**31 +/- 5.0**	**0.30 +/- 0.2**	< 1
MW-01-2	01/16/2002	N	--	< 1.0	**33 +/- 4.5**	< 0.20	**1.5 +/- 1**
		SPLIT	--	**0.7**	**32**	--	**0.5**
MW-01-2	09/04/2002	N	--	**1.4 +/- 1.2**	**17.6 +/- 2.7**	< 0.2	< 1.0
MW-01-2	07/22/2003	N	< 49.1	**5.68 +/- 2.34 J**	**23.8 +/- 9.41**	< 1.56	--
		FD	< 40.1	< 3.55 J	**27.3 +/- 19.8**	< 1.76	--
MW-01-2	05/19/2008	N	--	< 2.3	**24 +/- 4.3**	< 0.32	< 0.71
MW-01-2	09/22/2008	N	--	**2.1 +/- 2.4**	**27 +/- 4.5**	< 0.3	**0.82 +/- 0.26**
MW-01-6	10/09/2001	N	--	**2.2 +/- 2.3**	**63 +/- 6.3**	**0.70 +/- 0.2**	< 1
MW-01-6	01/17/2002	N	--	< 1.0	**67 +/- 5.6**	< 0.20	**3.4 +/- 3**
		SPLIT	--	**5**	**29**	--	**0.5**
MW-01-6	09/05/2002	N	--	< 1.0	**49.2 +/- 6.1**	< 0.2	**2.2 +/- 1.1**
MW-01-6	05/19/2008	N	--	< 3.3	**41 +/- 6.4**	< 0.2	< 0.72
MW-01-6	09/16/2008	N	--	< 2.7	**39 +/- 5.6**	< 0.21	**2.5 +/- 0.7**
MW-01-3	10/09/2001	N	--	**6.5 +/- 1.9**	**50 +/- 5.0**	**1.0 +/- 0.20**	< 1
MW-01-3	01/22/2002	N	--	**3.1 +/- 2.5**	**46 +/- 4.9**	< 0.20	< 1.0
		FD	--	< 1.0	**45 +/- 4.9**	< 0.20	< 1.0
		SPLIT	--	**4.8**	**32**	**0.2**	--
		FD SPLIT	--	**8.1**	**29**	**0.5**	--
MW-01-3	09/05/2002	N	--	< 1.0	**42.2 +/- 4.1**	< 0.2	< 1.0
		FD	--	< 1.0	**41.3 +/- 4.1**	< 0.2	< 1.0
MW-01-3	05/19/2008	N	--	**2.7 +/- 2.6**	**35 +/- 4.9**	< 0.32	< 0.73
MW-01-3	09/19/2008	N	--	< 2.1	**33 +/- 4.6**	< 0.35	< 0.72
MW-02-2	09/05/2002	N	--	< 1.0	**23.5 +/- 3.5**	< 0.2	< 1.0
MW-02-2	05/19/2008	N	--	< 2	**25 +/- 4.2**	< 0.59	< 4
MW-02-2	09/22/2008	N	--	**4.9 +/- 2.9**	**21 +/- 3.9**	< 0.31	< 0.7
MW-02-1	01/17/2002	N	--	< 1.0	**22 +/- 7.5**	**0.80 +/- 0**	**1.9 +/- 1**
		SPLIT	--	**4**	**5**	**0.4**	**1.2**
MW-02-1	09/04/2002	N	--	**7.1 +/- 3.6**	< 2.0	**0.5**	< 1.0
MW-02-1	07/22/2003	N	< 56.5	< 9.40 J	**21.9 +/- 77.9**	< 1.82	--
MW-02-1	05/29/2008	N	--	< 6.3	**24 +/- 11**	< 0.17	**1.1 +/- 0.32**
		FD	--	< 6.9	**27 +/- 11**	< 0.35	**1.2 +/- 0.32**
MW-02-1	09/26/2008	N	--	< 7.6	**37 +/- 12**	**0.6 +/- 0.16**	< 1.4
Production Wells							
RP-W-1	05/22/2008	N	--	**12 +/- 4.6**	**23 +/- 4.4**	< 0.4	< 0.72
RP-W-1	09/25/2008	N	--	**9.4 +/- 3.8**	**30 +/- 4.8**	< 0.23	< 1.5
RP-W-4	08/06/1988	N	--	--	--	< 1	--
		FD	--	--	--	< 1	--
RP-W-4	05/28/2008	N	--	< 3.7 R	**21 +/- 6.3**	< 0.43	< 0.73
RP-W-4	09/24/2008	N	--	**8.8 +/- 4.8**	**21 +/- 6.7**	< 0.4	< 1.4
		FD	--	**6.4 +/- 4.4**	**29 +/- 6.6**	< 0.29	< 1.5
RP-W-5	05/30/2008	N	--	< 3.8	**17 +/- 5.9**	< 0.3	**1.2 +/- 0.35**
RP-W-5	09/24/2008	N	--	**10 +/- 4.5**	**19 +/- 5**	< 0.28	< 1.4 J
RP-W-6	08/06/1988	N	--	--	--	< 1	--
		FD	--	--	--	< 1	--
RP-W-6	05/30/2008	N	--	< 4.8	**21 +/- 8.4**	< 0.22	< 0.8
RP-W-6	09/24/2008	N	--	< 4.4	**17 +/- 7.9**	**1.3 +/- 0.18**	< 1.4
RP-W-7	05/22/2008	N	--	**8.3 +/- 2.8**	**10 +/- 2.6**	< 0.22	< 2
RP-W-7	09/25/2008	N	--	**11 +/- 4**	**15 +/- 3.6**	< 0.26	< 1.6

Table 5.3-4f
Groundwater Data - Radionuclides
Rhodia Silver Bow Plant

The analytical database contains data for the following parameters. The data set is comparitively small and was not summarized in the RFI Report.

Radium, total
Strontium 90
Total Uranium

Table 5.3-5
Summary Statistics for Upgradient and Site or Downgradient Groundwater Quality
Rhodia Silver Bow Plant

				Upgradient statistics for detected concentrations									Site or downgradient statistics for detected concentrations							
				Count									Count							
Chemical Name	Units	Total or Dissolved	Analysis Location	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum
General Parameters																					
Alkalinity, bicarbonate as CaCO3	mg/L	NA	Lab	27	0	100	102	118	145	262	313	322	113	1	2	24	71	116	146	226	499
Alkalinity, bicarbonate as HCO3	mg/L	NA	Lab	4	0	148.0	154.8	181.8	193.0	194.0	196.4	197.0	31	0	14.0	36.0	95.0	125.0	169.5	232.0	252.0
Alkalinity, carbonate as CaCO3	mg/L	NA	Lab	2	29	4.0						8.0	6	136	23.0	24.8	31.0	45.0	68.8	192.3	232.0
Alkalinity, carbonate as CO3	mg/L	NA	Lab	7	0	122.0	125.9	143.5	158.0	160.0	166.9	169.0	30	4	12.0	20.3	63.0	83.5	103.0	175.7	186.0
Alkalinity, total	mg/L	NA	Lab	4	0	93.00	95.85	107.25	128.00	152.00	171.20	176.00	30	0	122.00	126.35	168.25	303.50	964.25	1275.50	1430.00
Chloride	mg/L	NA	Lab	34	0	8.00	8.69	10.00	12.00	101.78	338.45	386.00	171	0	1.40	31.35	137.00	173.00	202.50	293.00	726.00
Cyanide	mg/L	NA	Lab	0	0				--				3	24	0.02	0.02	0.02	0.02	0.05	0.08	0.08
Dissolved oxygen	mg/L	NA	Field	39	0	0.11	0.28	1.28	5.75	7.56	8.75	11.30	194	0	0.06	0.17	0.58	2.33	5.70	7.62	11.95
Fluoride	mg/L	NA	Lab	35	3	0.15	0.18	0.30	0.30	0.44	11.72	12.20	161	38	0.08	0.16	0.37	1.30	3.40	7.80	11.30
Nitrate + Nitrite, as N	mg/L	NA	Lab	154	10	0.05	0.10	0.21	0.45	0.50	0.69	13.00	113	29	0.05	0.13	0.25	1.04	3.39	8.07	43.30
Nitrogen, ammonia (NH3) as N	mg/L	NA	Lab	1	26				0.05				32	109	0.06	0.07	0.30	0.66	1.06	6.82	11.00
Nitrogen, Nitrate (NO3)	mg/L	NA	Lab	7	0	0.56	0.59	0.69	0.73	0.86	1.07	1.16	49	11	0.01	0.10	0.23	0.66	1.85	7.47	10.10
Nitrogen, Nitrite (NO2)	mg/L	NA	Lab	0	7				--				4	40	0.18	0.28	0.68	0.94	1.29	1.94	2.10
Nitrogen, total kjeldahl (TKN)	mg/L	NA	Lab	8	128	0.50	0.54	0.60	0.70	1.58	2.79	3.00	0	0				--			
pH	S.U.	NA	Lab	0	0				--				7	0	5.00	5.09	5.55	6.80	7.10	7.10	7.10
pH	S.U.	NA	Field	179	0	6.30	6.50	7.10	7.40	7.57	7.90	9.14	205	0	4.99	5.76	6.59	7.02	7.17	7.61	9.78
Phosphate as P	mg/L	NA	Lab	0	0				--				2	8	4.10						22.00
Phosphate, ortho as PO4	mg/L	NA	Lab	0	0				--				26	0	0.04	0.05	0.07	3.84	31.83	122.60	134.00
Phosphorus, elemental (white)	mg/L	NA	Lab	1	28				0.0000716				16	144	0.000030	0.000050	0.000198	0.001855	0.309000	0.687250	1.210000
Phosphorus, total	mg/L	NA	Lab	34	2	0.01	0.03	0.05	0.09	0.15	0.61	8.68	191	5	0.02	0.04	0.17	0.55	4.17	57.05	300.00
Redox (oxidation potential)	mV	NA	Lab	0	0				--				7	0	135.0	190.8	322.0	328.0	336.0	348.2	350.0
Redox (oxidation potential)	mV	NA	Field	37	0	-199.00	-72.60	27.00	54.00	122.00	273.80	325.00	190	0	-322.30	-122.55	31.10	86.45	155.18	287.60	391.00
Solids, total dissolved	mg/L	NA	Lab	144	0	195.00	244.60	269.00	783.00	1005.00	1248.90	1460.00	27	0	544.0	590.7	1290.0	1970.0	2160.0	2432.0	2560.0
Specific Conductance @ 25oC	umhos/cm	NA	Lab	0	0				--				7	0	869.0	882.2	1061.5	1450.0	1845.0	2389.0	2560.0
Specific Conductance @ 25oC	umhos/cm	NA	Field	177	0	210.00	297.40	418.00	941.00	1487.00	1649.20	1835.00	201	0	210.00	558.00	1174.00	1683.00	2048.00	2520.00	3414.00
Sulfate	mg/L	NA	Lab	34	0	13.60	14.81	23.60	33.05	44.50	67.51	72.60	178	0	24.80	87.19	356.00	569.50	781.50	1130.00	1350.00
Temperature, degrees C	deg C	NA	Field	42	0	8.30	9.00	9.58	11.17	12.88	16.10	23.00	205	0	3.60	7.55	9.26	10.51	12.31	16.40	23.00
Turbidity	NTU	NA	Lab	0	0				--				7	0	0.91	1.03	2.65	9.00	11.00	20.40	24.00
Turbidity	NTU	NA	Field	31	0	0.35	0.37	1.27	2.21	4.97	16.02	27.00	171	0	0.29	0.48	1.52	3.07	4.77	10.04	62.50
Metals																					
Aluminum	mg/L	Dissolved	Lab	0	7				--				5	29	0.0024	0.0028	0.0046	0.1000	0.1000	0.3400	0.4000
Aluminum	mg/L	Total	Lab	0	0				--				6	3	0.0162	0.0542	0.2410	0.5500	1.1200	2.6900	3.1600
Antimony	mg/L	Dissolved	Lab	0	144				--				7	43	0.00015	0.00015	0.00017	0.00025	0.00040	0.00043	0.00044
Antimony	mg/L	Total	Lab	22	6	0.00007	0.00008	0.00010	0.00014	0.00025	0.00042	0.00043	82	34	0.00005	0.00006	0.00010	0.00019	0.00041	0.00089	0.00250
Arsenic	mg/L	Dissolved	Lab	142	0	0.006	0.007	0.008	0.017	0.021	0.029	0.046	46	5	0.003	0.004	0.012	0.018	0.042	0.083	0.125
Arsenic	mg/L	Total	Lab	32	0	0.004	0.004	0.005	0.010	0.015	0.035	0.059	152	3	0.001	0.003	0.006	0.018	0.043	0.075	0.139
Arsenic III	mg/L	Dissolved	Lab	0	0				--				0	2				--			
Arsenic III	mg/L	Total	Lab	4	0	0.0020	0.0020	0.0020	0.0020	0.0023	0.0029	0.0030	16	2	0.001	0.002	0.005	0.009	0.045	0.086	0.096
Arsenic V	mg/L	Dissolved	Lab	0	0				--				1	0				0.0117			
Arsenic V	mg/L	Total	Lab	4	0	0.0030	0.0036	0.0060	0.0075	0.0083	0.0089	0.0090	14	3	0.0010	0.0010	0.0030	0.0040	0.0109	0.0556	0.1030
Barium	mg/L	Dissolved	Lab	0	7				--				19	29	0.008	0.009	0.038	0.082	0.249	0.300	0.301
Barium	mg/L	Total	Lab	27	0	0.01	0.01	0.01	0.04	0.08	0.09	0.10	119	6	0.010	0.019	0.030	0.040	0.063	0.159	0.296
Beryllium	mg/L	Dissolved	Lab	0	7				--				2	48	0.00049						0.00200
Beryllium	mg/L	Total	Lab	3	25	0.00002	0.00002	0.00002	0.00002	0.00003	0.00004	0.00004	35	90	0.000020	0.000020	0.000030	0.000070	0.000315	0.000668	0.003000
Cadmium	mg/L	Dissolved	Lab	58	88	0.00009	0.00010	0.00020	0.00030	0.00050	0.00211	0.03400	20	59	0.00010	0.00010	0.00036	0.00250	0.01850	0.09065	0.21700
Cadmium	mg/L	Total	Lab	13	15	0.000030	0.000030	0.000030	0.000040	0.000070	0.000094	0.000100	96	52	0.00002	0.00003	0.00004	0.00018	0.00160	0.05755	0.21300
Calcium	mg/L	Dissolved	Lab	0	0				--				28	0	106	111	171	262	285	368	419
Calcium	mg/L	Total	Lab	35	0	11.0	12.6	28.4	39.0	68.8	199.1	212.0	148	0	30.3	64.8	150.5	240.5	318.0	410.7	473.0
Chromium	mg/L	Dissolved	Lab	0	7				--				9	41	0.00023	0.00054	0.00100	0.00200	0.00300	0.02000	0.03000
Chromium	mg/L	Total	Lab	10	18	0.00020	0.00020	0.00020	0.00030	0.00052	0.00165	0.00210	56	77	0.00011	0.00020	0.00030	0.00060	0.00120	0.00410	0.01200
Cobalt	mg/L	Dissolved	Lab	0	7				--				8	34	0.010	0.010	0.018	0.020	0.043	0.070	0.080
Cobalt	mg/L	Total	Lab	22	6	0.000021	0.000040	0.000091	0.000131	0.000273	0.000369	0.000384	100	15	0.00015	0.00038	0.00088	0.00211	0.00484	0.01168	0.10000
Copper	mg/L	Dissolved	Lab	118	26	0.001	0.001	0.003	0.006	0.010	0.031	0.080	25	36	0.0009	0.0010	0.0020	0.0030	0.0060	0.0180	0.0500
Copper	mg/L	Total	Lab	6	21	0.0009	0.0009	0.0011	0.0014	0.0018	0.0022	0.0023	81	49	0.0008	0.0010	0.0014	0.0025	0.0048	0.0086	0.0614

Table 5.3-5
Summary Statistics for Upgradient and Site or Downgradient Groundwater Quality
Rhodia Silver Bow Plant

				Upgradient statistics for detected concentrations									Site or downgradient statistics for detected concentrations							
				Count									Count							
Chemical Name	Units	Total or Dissolved	Analysis Location	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum
Dimethylarsinic acid	mg/L	Dissolved	Lab	0	0	--							0	2	--						
Dimethylarsinic acid	mg/L	Total	Lab	0	0	--							0	2	--						
Iron	mg/L	Dissolved	Lab	81	63	0.01	0.01	0.01	0.05	0.16	0.56	2.23	11	37	0.040	0.090	0.170	1.970	11.755	34.850	36.000
Iron	mg/L	Total	Lab	16	11	0.02	0.02	0.04	0.19	0.64	3.31	7.04	86	26	0.020	0.023	0.050	0.188	0.810	7.763	23.400
Iron	mg/L	Dissolved	Field	0	0	--							1	0	0.154						
Iron	mg/L	Total	Field	0	0	--							1	0	0.146						
Iron, ferrous, FE II	mg/L	Total	Field	0	0	--							1	0	0.131						
Lead	mg/L	Dissolved	Lab	31	113	0.002	0.002	0.003	0.003	0.010	0.024	0.060	3	49	0.00003	0.00003	0.00004	0.00004	0.00005	0.00005	0.00005
Lead	mg/L	Total	Lab	16	11	0.00006	0.00006	0.00010	0.00016	0.00032	0.00070	0.00095	76	57	0.00002	0.00004	0.00013	0.00027	0.00055	0.00374	0.11000
Magnesium	mg/L	Dissolved	Lab	0	0	--							28	0	21.00	22.35	34.25	43.50	49.58	54.65	79.90
Magnesium	mg/L	Total	Lab	32	0	1.25	1.44	4.79	6.34	8.98	30.22	30.70	135	0	5.06	14.48	29.30	43.00	54.60	68.60	97.50
Manganese	mg/L	Dissolved	Lab	3	6	0.0100	0.0110	0.0150	0.0200	0.0250	0.0290	0.0300	49	26	0.00041	0.01000	0.08000	0.88000	2.09000	7.99200	12.20000
Manganese	mg/L	Total	Lab	24	4	0.00021	0.00052	0.00419	0.01138	0.02760	0.05806	0.06310	114	20	0.00054	0.00169	0.00660	0.19200	1.17000	4.71000	13.10000
Mercury	mg/L	Dissolved	Lab	0	7	--							4	46	0.00014	0.00088	0.00386	0.00605	0.00725	0.00785	0.00800
Mercury	mg/L	Total	Lab	0	28	--							13	124	0.00009	0.00012	0.00030	0.00060	0.00210	0.00522	0.00570
Monomethylarsonic acid	mg/L	Dissolved	Lab	0	0	--							0	2	--						
Monomethylarsonic acid	mg/L	Total	Lab	0	0	--							0	2	--						
Nickel	mg/L	Dissolved	Lab	41	103	0.001	0.001	0.002	0.005	0.008	0.013	0.016	18	25	0.007	0.008	0.010	0.016	0.037	0.052	0.060
Nickel	mg/L	Total	Lab	24	4	0.0003	0.0004	0.0005	0.0009	0.0017	0.0027	0.0039	109	7	0.00040	0.00093	0.00320	0.00590	0.01270	0.03262	0.06160
Phosphorus, total	mg/L	Total	Lab	0	4	--							14	2	0.200	0.395	1.075	3.050	5.475	10.105	10.300
Potassium	mg/L	Dissolved	Lab	0	0	--							28	0	10.00	10.70	15.00	16.00	29.75	48.75	55.00
Potassium	mg/L	Total	Lab	35	0	3.24	3.59	6.81	7.00	7.75	15.01	16.10	148	0	7.61	9.85	15.00	17.85	27.18	41.57	67.80
Selenium	mg/L	Dissolved	Lab	25	119	0.001	0.001	0.001	0.002	0.003	0.011	0.013	41	11	0.0008	0.0019	0.0040	0.0060	0.0110	0.0310	0.0370
Selenium	mg/L	Total	Lab	2	26	0.0011						0.0013	106	23	0.0010	0.0013	0.0031	0.0067	0.0118	0.0403	0.0600
Silver	mg/L	Dissolved	Lab	0	7	--							6	44	0.00002	0.00002	0.00002	0.00003	0.00004	0.00005	0.00005
Silver	mg/L	Total	Lab	0	28	--							19	118	0.00002	0.00002	0.00002	0.00003	0.00013	0.01330	0.01600
Sodium	mg/L	Dissolved	Lab	0	0	--							28	0	25.00	25.70	43.75	75.65	87.45	133.35	236.00
Sodium	mg/L	Total	Lab	35	0	14.20	16.55	23.95	38.80	62.90	120.00	149.00	148	0	19.90	29.24	48.85	75.65	93.88	157.90	338.00
Strontium	mg/L	Dissolved	Lab	7	0	0.10	0.13	0.20	0.20	0.25	0.30	0.30	27	0	0.50	0.60	1.15	1.60	2.00	2.40	2.80
Thallium	mg/L	Dissolved	Lab	0	7	--							5	45	0.00004	0.00004	0.00005	0.00006	0.00280	0.08056	0.10000
Thallium	mg/L	Total	Lab	5	22	0.000020	0.000020	0.000020	0.000022	0.000023	0.000045	0.000050	47	73	0.00002	0.00002	0.00003	0.00005	0.00008	0.00043	0.01860
Uranium	mg/L	Dissolved	Lab	0	0	--							5	3	0.005	0.005	0.006	0.020	0.021	0.040	0.045
Uranium	mg/L	Total	Lab	30	0	0.00015	0.00079	0.00465	0.00940	0.01645	0.04255	0.05258	114	4	0.000022	0.000080	0.002015	0.006735	0.014245	0.038507	0.084038
Vanadium	mg/L	Dissolved	Lab	0	7	--							1	43	0.006						
Vanadium	mg/L	Total	Lab	26	1	0.0005	0.0009	0.0040	0.0052	0.0069	0.0090	0.0093	101	13	0.0005	0.0021	0.0039	0.0049	0.0064	0.0146	0.0418
Zinc	mg/L	Dissolved	Lab	133	11	0.002	0.003	0.009	0.022	0.032	0.065	0.175	37	34	0.001	0.003	0.010	0.020	0.320	0.982	1.340
Zinc	mg/L	Total	Lab	4	23	0.0009	0.0013	0.0031	0.0098	0.0191	0.0273	0.0294	80	59	0.0005	0.0008	0.0032	0.0080	0.0265	0.6987	1.5100
Q1 - Quartile 1 - (25th percentile)																					
Q2 - Quartile 2 - (median)																					
Q3 - Quartile 3 - (75th percentile)																					

Table 5.3-5
Summary Statistics for Upgradient and Site or Downgradient Groundwater Quality
Rhodia Silver Bow Plant

Chemical Name	Units	Total or Dissolved	Analysis Location	Upgradient statistics for detected concentrations									Site or downgradient statistics for detected concentrations							
				Count									Count							
				Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum
SVOCs																				
1,2,4,5-Tetrachlorobenzene	ug/L	NA	Lab	0	0	--							0	7	--						
1,2,4-Trichlorobenzene	ug/L	NA	Lab	0	23	--							0	104	--						
1,2-Dichlorobenzene	ug/L	NA	Lab	0	23	--							0	104	--						
1,3-Dichlorobenzene	ug/L	NA	Lab	0	23	--							0	104	--						
1,4-Dichlorobenzene	ug/L	NA	Lab	0	23	--							0	104	--						
1-Methylnaphthalene	ug/L	NA	Lab	0	0	--							0	1	--						
2,4,5-Trichlorophenol	ug/L	NA	Lab	0	23	--							0	101	--						
2,4,6-Trichlorophenol	ug/L	NA	Lab	0	23	--							0	101	--						
2,4-Dichlorophenol	ug/L	NA	Lab	0	23	--							0	102	--						
2,4-Dimethylphenol	ug/L	NA	Lab	0	9	--							0	63	--						
2,4-Dinitrophenol	ug/L	NA	Lab	0	14	--							0	86	--						
2,4-Dinitrotoluene	ug/L	NA	Lab	0	22	--							0	100	--						
2,6-Dinitrotoluene	ug/L	NA	Lab	0	23	--							0	104	--						
2-Chloronaphthalene	ug/L	NA	Lab	0	23	--							0	104	--						
2-Chlorophenol	ug/L	NA	Lab	0	23	--							1	100	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2-Methyl-4,6-dinitrophenol	ug/L	NA	Lab	0	16	--							0	93	--						
2-Methylnaphthalene	ug/L	NA	Lab	0	23	--							2	102	0.082						0.095
2-Nitroaniline	ug/L	NA	Lab	0	23	--							0	96	--						
2-Nitrophenol	ug/L	NA	Lab	2	21	0.08						0.09	0	104	--						
3,3`-Dichlorobenzidine	ug/L	NA	Lab	0	22	--							0	88	--						
3,4-Methylphenol (m,p cresols)	ug/L	NA	Lab	0	0	--							0	8	--						
3-Nitroaniline	ug/L	NA	Lab	0	22	--							0	92	--						
4-Bromophenyl phenyl ether	ug/L	NA	Lab	0	22	--							0	100	--						
4-Chloro-3-methylphenol	ug/L	NA	Lab	0	23	--							0	101	--						
4-Chloroaniline	ug/L	NA	Lab	0	23	--							0	92	--						
4-Chlorophenol	ug/L	NA	Lab	0	0	--							0	1	--						
4-Chlorophenyl phenyl ether	ug/L	NA	Lab	0	22	--							0	100	--						
4-Nitroaniline	ug/L	NA	Lab	0	22	--							0	92	--						
4-Nitrophenol	ug/L	NA	Lab	0	22	--							0	100	--						
Acenaphthene	ug/L	NA	Lab	0	22	--							7	93	0.006	0.014	0.054	0.360	0.540	4.176	5.700
Acenaphthylene	ug/L	NA	Lab	0	23	--							4	100	0.010	0.011	0.016	0.032	0.052	0.068	0.072
Anthracene	ug/L	NA	Lab	0	22	--							4	96	0.018	0.019	0.023	0.025	0.040	0.075	0.084
Azobenzene	ug/L	NA	Lab	0	22	--							1	92	0.029						
Benzidine	ug/L	NA	Lab	0	0	--							0	8	--						
Benzo(a)anthracene	ug/L	NA	Lab	2	20	0.004						0.042	6	94	0.003	0.003	0.004	0.013	0.023	0.026	0.026
Benzo(a)pyrene	ug/L	NA	Lab	1	21	0.039							1	99	0.0048						
Benzo(b)fluoranthene	ug/L	NA	Lab	1	21	0.0029							1	99	0.0027						
Benzo(g,h,i)perylene	ug/L	NA	Lab	2	20	0.0031						0.0480	1	99	0.020						
Benzo(k)fluoranthene	ug/L	NA	Lab	0	22	--							0	100	--						
Benzoic acid	ug/L	NA	Lab	0	1	--							7	37	1.60	1.60	1.65	1.70	2.00	2.17	2.20
Benzyl alcohol	ug/L	NA	Lab	0	23	--							2	94	0.077						0.095
Bis(2-chloroethoxy)methane	ug/L	NA	Lab	0	23	--							0	104	--						
Bis(2-chloroethyl)ether	ug/L	NA	Lab	0	23	--							0	104	--						
Bis(2-chloroisopropyl)ether	ug/L	NA	Lab	0	23	--							0	104	--						
Bis(2-ethylhexyl)phthalate	ug/L	NA	Lab	5	17	0.31	0.55	1.50	1.80	3.50	4.14	4.30	25	72	0.14	0.17	0.30	0.52	1.90	45.40	1400.00
Butyl benzyl phthalate	ug/L	NA	Lab	0	22	--							0	100	--						
Carbazole	ug/L	NA	Lab	0	22	--							4	88	0.019	0.021	0.027	0.170	0.385	0.565	0.610
Chrysene	ug/L	NA	Lab	1	21	0.075							3	97	0.004	0.007	0.018	0.032	0.033	0.033	0.033
Dibenz(a,h)anthracene	ug/L	NA	Lab	0	22	--							0	100	--						
Dibenzofuran	ug/L	NA	Lab	0	22	--							4	88	0.031	0.047	0.113	0.220	0.400	0.640	0.700
Diethyl phthalate	ug/L	NA	Lab	0	22	--							9	91	0.031	0.031	0.034	0.045	0.048	0.139	0.200
Dimethyl phthalate	ug/L	NA	Lab	0	23	--							0	104	--						
Di-n-butyl phthalate	ug/L	NA	Lab	0	22	--							0	100	--						
Di-n-octyl phthalate	ug/L	NA	Lab	0	22	--							2	98	0.056						0.072

Table 5.3-5
Summary Statistics for Upgradient and Site or Downgradient Groundwater Quality
Rhodia Silver Bow Plant

				Upgradient statistics for detected concentrations									Site or downgradient statistics for detected concentrations							
				Count									Count							
Chemical Name	Units	Total or Dissolved	Analysis Location	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum
Fluoranthene	ug/L	NA	Lab	4	18	0.012	0.014	0.020	0.025	0.053	0.115	0.130	13	87	0.005	0.008	0.024	0.052	0.190	0.382	0.490
Fluorene	ug/L	NA	Lab	0	22	--							4	96	0.009	0.028	0.107	0.155	0.288	0.570	0.640
Hexachlorobenzene	ug/L	NA	Lab	0	22	--							0	100	--						
Hexachlorobutadiene	ug/L	NA	Lab	0	12	--							0	72	--						
Hexachlorocyclopentadiene	ug/L	NA	Lab	0	2	--							0	40	--						
Hexachloroethane	ug/L	NA	Lab	0	15	--							0	91	--						
Indeno(1,2,3-cd)pyrene	ug/L	NA	Lab	2	20	0.0027						0.0390	0	100	--						
Isophorone	ug/L	NA	Lab	0	23	--							0	104	--						
Naphthalene	ug/L	NA	Lab	0	23	--							14	90	0.022	0.022	0.025	0.038	0.065	15.000	15.000
Nitrobenzene	ug/L	NA	Lab	0	23	--							1	103	0.099						
N-Nitrosodimethylamine	ug/L	NA	Lab	0	22	--							0	100	--						
N-Nitrosodi-n-propylamine	ug/L	NA	Lab	0	23	--							0	104	--						
N-Nitrosodiphenylamine	ug/L	NA	Lab	0	22	--							0	100	--						
N-Nitrosopyrrolidine	ug/L	NA	Lab	0	0	--							0	7	--						
o-Cresol	ug/L	NA	Lab	0	23	--							2	102	0.110						0.200
p-Cresol	ug/L	NA	Lab	0	23	--							1	95	0.390						
Pentachlorobenzene	ug/L	NA	Lab	0	0	--							0	7	--						
Pentachlorophenol	ug/L	NA	Lab	0	16	--							1	92	0.800						
Phenanthrene	ug/L	NA	Lab	2	20	0.0092						0.0370	7	93	0.014	0.018	0.049	0.074	0.440	0.545	0.560
Phenol	ug/L	NA	Lab	3	20	8.90	15.31	40.95	73.00	86.00	96.40	99.00	17	87	0.19	0.23	0.91	1.60	2.00	5.24	6.20
Pyrene	ug/L	NA	Lab	4	18	0.013	0.014	0.018	0.021	0.022	0.024	0.025	14	86	0.004	0.005	0.020	0.036	0.104	0.252	0.330
Pyridine	ug/L	NA	Lab	0	0	--							0	29	--						
Q1 - Quartile 1 - (25th percentile)																					
Q2 - Quartile 2 - (median)																					
Q3 - Quartile 3 - (75th percentile)																					

Table 5.3-5
Summary Statistics for Upgradient and Site or Downgradient Groundwater Quality
Rhodia Silver Bow Plant

Chemical Name	Units	Total or Dissolved	Analysis Location	Upgradient statistics for detected concentrations									Site or downgradient statistics for detected concentrations							
				Count									Count							
				Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum
VOCs																				
1,1,1,2-Tetrachloroethane	ug/L	NA	Lab	0	22	--							0	100	--						
1,1,1-Trichloroethane	ug/L	NA	Lab	0	23	--							4	100	0.070	0.072	0.078	0.085	0.098	0.116	0.120
1,1,2,2-Tetrachloroethane	ug/L	NA	Lab	0	23	--							0	104	--						
1,1,2-Trichloroethane	ug/L	NA	Lab	0	23	--							0	104	--						
1,1-Dichloro-1-propene	ug/L	NA	Lab	0	22	--							0	95	--						
1,1-Dichloroethane	ug/L	NA	Lab	0	23	--							0	104	--						
1,1-Dichloroethylene	ug/L	NA	Lab	0	23	--							0	104	--						
1,2,3-Trichlorobenzene	ug/L	NA	Lab	0	22	--							0	95	--						
1,2,3-Trichloropropane	ug/L	NA	Lab	0	22	--							0	100	--						
1,2,4-Trichlorobenzene	ug/L	NA	Lab	0	22	--							0	95	--						
1,2,4-Trimethylbenzene	ug/L	NA	Lab	2	20	0.040						0.050	3	92	0.090	0.091	0.095	0.100	6.050	10.810	12.000
1,2-Dibromo-3-chloropropane	ug/L	NA	Lab	0	22	--							0	100	--						
1,2-Dibromoethane	ug/L	NA	Lab	0	22	--							0	100	--						
1,2-Dichlorobenzene	ug/L	NA	Lab	0	22	--							0	95	--						
1,2-Dichloroethane	ug/L	NA	Lab	0	23	--							4	100	0.160	0.165	0.183	0.375	0.560	0.560	0.560
1,2-Dichloroethylene	ug/L	NA	Lab	0	1	--							0	4	--						
1,2-Dichloroethylene, cis	ug/L	NA	Lab	0	22	--							1	99	0.100						
1,2-Dichloroethylene, trans	ug/L	NA	Lab	0	22	--							2	98	0.100						0.140
1,2-Dichloropropane	ug/L	NA	Lab	0	23	--							0	104	--						
1,3,5-Trimethylbenzene	ug/L	NA	Lab	0	22	--							3	92	0.310	0.357	0.545	0.780	3.290	5.298	5.800
1,3-Dichloro-1-propene, cis	ug/L	NA	Lab	0	23	--							0	104	--						
1,3-Dichloro-1-propene, trans	ug/L	NA	Lab	0	23	--							0	104	--						
1,3-Dichlorobenzene	ug/L	NA	Lab	0	22	--							0	95	--						
1,3-Dichloropropane	ug/L	NA	Lab	0	22	--							0	95	--						
1,4-Dichlorobenzene	ug/L	NA	Lab	0	22	--							0	95	--						
2,2-Dichloropropane	ug/L	NA	Lab	0	22	--							0	95	--						
2-Chloroethyl vinyl ether	ug/L	NA	Lab	0	0	--							0	8	--						
2-Hexanone	ug/L	NA	Lab	0	23	--							0	104	--						
Acetone	ug/L	NA	Lab	0	22	--							2	98	8.400						12.000
Acrolein	ug/L	NA	Lab	0	20	--							0	91	--						
Acrylonitrile	ug/L	NA	Lab	0	22	--							0	95	--						
Benzene	ug/L	NA	Lab	0	26	--							12	103	0.050	0.050	0.058	0.070	0.323	0.645	0.700
Bromobenzene	ug/L	NA	Lab	0	22	--							0	95	--						
Bromochloromethane	ug/L	NA	Lab	0	22	--							0	95	--						
Bromodichloromethane	ug/L	NA	Lab	0	23	--							1	103	0.24						
Bromoform	ug/L	NA	Lab	1	22	0.12							0	104	--						
Bromomethane	ug/L	NA	Lab	0	21	--							0	101	--						
Butyl benzene	ug/L	NA	Lab	0	22	--							1	94	0.35						
Butylbenzene, sec	ug/L	NA	Lab	0	22	--							5	90	0.270	0.306	0.450	1.600	2.900	4.340	4.700
Butylbenzene, tert	ug/L	NA	Lab	0	22	--							2	93	0.060						0.130
Carbon disulfide	ug/L	NA	Lab	0	23	--							10	94	0.050	0.050	0.060	0.080	0.288	3.025	4.600
Carbon tetrachloride	ug/L	NA	Lab	0	23	--							0	104	--						
Chlorobenzene	ug/L	NA	Lab	0	23	--							0	104	--						
Chlorodibromomethane	ug/L	NA	Lab	0	23	--							0	104	--						
Chloroethane	ug/L	NA	Lab	0	23	--							0	104	--						
Chloroform	ug/L	NA	Lab	4	19	0.060	0.062	0.068	0.085	0.108	0.126	0.130	3	101	0.070	0.203	0.735	1.400	2.300	3.020	3.200
Chloromethane	ug/L	NA	Lab	4	19	0.06	0.06	0.06	0.09	0.12	0.12	0.12	9	95	0.06	0.06	0.06	0.09	0.13	0.15	0.16
Chlorotoluene o-	ug/L	NA	Lab	0	22	--							1	94	0.04						
Chlorotoluene p-	ug/L	NA	Lab	0	22	--							1	94	0.04						
Cumene (isopropyl benzene)	ug/L	NA	Lab	0	22	--							4	91	0.040	0.060	0.138	0.255	0.655	1.411	1.600
Cymene p- (Toluene isopropyl p-)	ug/L	NA	Lab	0	22	--							1	94	1.400						
Dibromomethane (methylene bromide)	ug/L	NA	Lab	0	22	--							0	95	--						
Dichlorodifluoromethane (CFC-12)	ug/L	NA	Lab	0	22	--							0	100	--						
Ethyl benzene	ug/L	NA	Lab	0	26	--							2	113	0.06						0.07

Table 5.3-5
Summary Statistics for Upgradient and Site or Downgradient Groundwater Quality
Rhodia Silver Bow Plant

Chemical Name	Units	Total or Dissolved	Analysis Location	Upgradient statistics for detected concentrations									Site or downgradient statistics for detected concentrations							
				Count									Count							
				Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum	Detected observations	Non-detects	Minimum	5th Percentile	Q1	Q2	Q3	95th Percentile	Maximum
Hexachlorobutadiene	ug/L	NA	Lab	0	22				--				0	95				--			
Iodomethane	ug/L	NA	Lab	0	13				--				0	89				--			
Methyl ethyl ketone	ug/L	NA	Lab	0	23				--				0	104				--			
Methyl isobutyl ketone	ug/L	NA	Lab	0	23				--				0	104				--			
Methyl tertiary butyl ether (MTBE)	ug/L	NA	Lab	0	22				--				0	95				--			
Methylene chloride	ug/L	NA	Lab	1	21				0.27				0	100				--			
Naphthalene	ug/L	NA	Lab	0	22				--				1	94				0.230			
Propylbenzene	ug/L	NA	Lab	0	22				--				4	91	0.050	0.055	0.073	0.130	0.350	0.758	0.860
Styrene	ug/L	NA	Lab	0	23				--				2	102	0.050						0.060
Tetrachloroethylene	ug/L	NA	Lab	0	23				--				10	94	0.080	0.085	0.108	0.245	0.900	1.675	1.900
Toluene	ug/L	NA	Lab	1	25				0.31				27	88	0.05	0.09	0.11	0.20	0.35	0.54	0.63
Trichloroethylene	ug/L	NA	Lab	0	23				--				1	103				0.51			
Trichlorofluoromethane	ug/L	NA	Lab	0	22				--				2	98	0.090						0.100
Vinyl acetate	ug/L	NA	Lab	0	23				--				0	104				--			
Vinyl chloride	ug/L	NA	Lab	0	23				--				0	104				--			
Xylene, m & p	ug/L	NA	Lab	2	23	0.19						0.23	4	107	0.150	0.153	0.165	0.205	0.248	0.266	0.270
Xylene, o	ug/L	NA	Lab	2	23	0.14						0.18	3	108	0.090	0.092	0.100	0.110	0.120	0.128	0.130
Xylenes, total	ug/L	NA	Lab	0	1				--				1	11				0.240			
PCBs																					
Aroclor 1016	ug/L	NA	Lab	0	14				--				0	59				--			
Aroclor 1221	ug/L	NA	Lab	0	14				--				0	59				--			
Aroclor 1232	ug/L	NA	Lab	0	14				--				0	59				--			
Aroclor 1242	ug/L	NA	Lab	0	14				--				0	59				--			
Aroclor 1248	ug/L	NA	Lab	0	14				--				0	59				--			
Aroclor 1254	ug/L	NA	Lab	0	14				--				0	59				--			
Aroclor 1260	ug/L	NA	Lab	0	14				--				1	58				0.0042			
Aroclor 1262	ug/L	NA	Lab	0	14				--				0	59				--			
Aroclor 1268	ug/L	NA	Lab	0	14				--				0	59				--			
Radiochemical Parameters																					
Cesium 137	pCi/L	NA	Lab	0	1				--				0	11				--			
Gross Alpha (radiation)	pCi/L	NA	Lab	26	6	2.00	3.06	5.60	7.70	13.00	25.00	26.00	106	45	-3.07	2.19	6.50	9.70	16.00	30.45	54.00
Gross Beta (radiation)	pCi/L	NA	Lab	29	0	3.83	4.88	7.40	9.20	15.00	27.00	30.00	139	2	6.48	14.65	19.50	24.00	32.00	60.00	79.00
Radium 226	pCi/L	NA	Lab	2	31	1.00						5.70	29	127	0.06	0.11	0.29	0.50	0.90	2.67	4.70
Radium 228	pCi/L	NA	Lab	8	23	0.90	0.94	1.45	2.10	4.25	11.35	12.50	50	91	0.01	0.69	0.84	1.20	1.83	4.34	5.60
Radium, total	pCi/L	NA	Lab	0	0				--				2	3	0.50						2.20
Strontium 90	pCi/L	NA	Lab	0	4				--				0	26				--			
Uranium	pCi/L	NA	Lab	1	0				7.90				2	2	5.00						20.00

Q1 - Quartile 1 - (25th percentile)																					
Q2 - Quartile 2 - (median)																					
Q3 - Quartile 3 - (75th percentile)																					

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Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
Alkalinity, bicarbonate as CaCO3	NA	Lab	27	113	2	2	2	2	--
Alkalinity, bicarbonate as HCO3	NA	Lab	4	31	7	23	7	23	--
Alkalinity, carbonate as CaCO3	NA	Lab	2	6	6	100	6	100	--
Alkalinity, carbonate as CO3	NA	Lab	7	30	3	10	3	10	--
Alkalinity, total	NA	Lab	4	30	23	77	22	73	--
Chloride	NA	Lab	34	171	147	86	4	2	--
Cyanide	NA	Lab	0	3	3	100	3	100	P030
Dissolved oxygen	NA	Field	39	194	12	6	1	1	--
Fluoride	NA	Lab	35	161	106	66	0	0	Special
Nitrate + Nitrite, as N	NA	Lab	154	113	65	58	4	4	--
Nitrogen, ammonia (NH3) as N	NA	Lab	1	32	32	100	32	100	--
Nitrogen, Nitrate (NO3)	NA	Lab	7	49	21	43	20	41	--
Nitrogen, Nitrite (NO2)	NA	Lab	0	4	4	100	4	100	--
Nitrogen, total kjeldahl (TKN)	NA	Lab	8	0	--	--	--	--	--
pH	NA	Field	179	205	7	3	7	3	--
pH	NA	Lab	0	7	12	171	3	43	--
Phosphate as P	NA	Lab	0	2	2	100	2	100	Special
Phosphate, ortho as PO4	NA	Lab	0	26	26	100	26	100	Special
Phosphorus, elemental (white)	NA	Lab	1	16	13	81	13	81	Special
Phosphorus, total	NA	Lab	34	191	147	77	29	15	Special
Redox (oxidation potential)	NA	Field	37	190	7	4	7	4	--
Redox (oxidation potential)	NA	Lab	0	7	61	871	4	57	--
Solids, total dissolved	NA	Lab	144	27	22	81	17	63	--
Specific Conductance @ 25oC	NA	Field	177	201	7	3	7	3	--
Specific Conductance @ 25oC	NA	Lab	0	7	121	1729	71	1014	--
Sulfate	NA	Lab	34	178	168	94	165	93	Special
Temperature, degrees C	NA	Field	42	205	48	23	0	0	--
Turbidity	NA	Field	31	171	7	4	7	4	--
Turbidity	NA	Lab	0	7	32	457	1	14	--

[1] $n_{>Q3}$ – Number of site or downgradient detections great than Q3 of upgradient detections

[2] $n_{>Max}$ – Number of site or downgradient detections greater than maximum of upgradient detections

[3] RCRA Hazardous constituents list; "Special" indicates site-specific parameter of interest.

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
Aluminum	Dissolved	Lab	0	5	5	100	5	100	--
Aluminum	Total	Lab	0	6	6	100	6	100	--
Antimony	Dissolved	Lab	0	7	7	100	7	100	K177
Antimony	Total	Lab	22	82	28	34	18	22	K177
Arsenic	Dissolved	Lab	142	46	22	48	9	20	K176
Arsenic	Total	Lab	32	152	78	51	18	12	K176
Arsenic III	Dissolved	Lab	0	0	--	--	--	--	K176
Arsenic III	Total	Lab	4	16	13	81	12	75	K176
Arsenic V	Dissolved	Lab	0	1	1	100	1	100	K176
Arsenic V	Total	Lab	4	14	6	43	6	43	K176
Barium	Dissolved	Lab	0	19	19	100	19	100	Listed
Barium	Total	Lab	27	119	22	18	15	13	Listed
Beryllium	Dissolved	Lab	0	2	2	100	2	100	Listed
Beryllium	Total	Lab	3	35	23	66	22	63	Listed
Cadmium	Dissolved	Lab	58	20	14	70	4	20	Listed
Cadmium	Total	Lab	13	96	61	64	56	58	Listed
Calcium	Dissolved	Lab	0	28	28	100	28	100	--
Calcium	Total	Lab	35	148	138	93	85	57	--
Chromium	Dissolved	Lab	0	9	9	100	9	100	Listed
Chromium	Total	Lab	10	56	29	52	7	13	Listed
Cobalt	Dissolved	Lab	0	8	8	100	8	100	Special
Cobalt	Total	Lab	22	100	90	90	87	87	Special
Copper	Dissolved	Lab	118	25	2	8	0	0	--
Copper	Total	Lab	6	81	54	67	42	52	--
Dimethylarsinic acid	Dissolved	Lab	0	0	--	--	--	--	K176
Dimethylarsinic acid	Total	Lab	0	0	--	--	--	--	K176
Iron	Dissolved	Lab	81	11	8	73	5	45	--
Iron	Total	Lab	16	86	24	28	5	6	--
Iron	Dissolved	Field	0	1	1	100	1	100	--
Iron	Total	Field	0	1	1	100	1	100	--
Iron, ferrous, FE II	Total	Field	0	1	1	100	1	100	--
Lead	Dissolved	Lab	31	3	0	0	0	0	K176
Lead	Total	Lab	16	76	29	38	8	11	K176

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
Magnesium	Dissolved	Lab	0	28	28	100	28	100	--
Magnesium	Total	Lab	32	135	126	93	96	71	--
Manganese	Dissolved	Lab	3	49	44	90	41	84	Special
Manganese	Total	Lab	24	114	64	56	60	53	Special
Mercury	Dissolved	Lab	0	4	4	100	4	100	U151
Mercury	Total	Lab	0	13	13	100	13	100	U151
Monomethylarsonic acid	Dissolved	Lab	0	0	--	--	--	--	K176
Monomethylarsonic acid	Total	Lab	0	0	--	--	--	--	K176
Nickel	Dissolved	Lab	41	18	16	89	9	50	Listed
Nickel	Total	Lab	24	109	87	80	74	68	Listed
Phosphorus, total	Total	Lab	0	14	14	100	14	100	Special
Potassium	Dissolved	Lab	0	28	28	100	28	100	--
Potassium	Total	Lab	35	148	138	93	91	61	--
Selenium	Dissolved	Lab	25	41	31	76	8	20	Listed
Selenium	Total	Lab	2	106	99	93	98	92	Listed
Silver	Dissolved	Lab	0	6	6	100	6	100	Listed
Silver	Total	Lab	0	19	19	100	19	100	Listed
Sodium	Dissolved	Lab	0	28	28	100	28	100	--
Sodium	Total	Lab	35	148	89	60	9	6	--
Strontium	Dissolved	Lab	7	27	27	100	27	100	--
Thallium	Dissolved	Lab	0	5	5	100	5	100	Listed
Thallium	Total	Lab	5	47	36	77	19	40	K178
Uranium	Dissolved	Lab	0	5	5	100	5	100	Special
Uranium	Total	Lab	30	114	23	20	3	3	Special
Vanadium	Dissolved	Lab	0	1	1	100	1	100	--
Vanadium	Total	Lab	26	101	17	17	8	8	--
Zinc	Dissolved	Lab	133	37	17	46	13	35	--
Zinc	Total	Lab	4	80	26	33	19	24	--

[1] $n_{>Q3}$ – Number of site or downgradient detections great than Q3 of upgradient detections

[2] $n_{>Max}$ – Number of site or downgradientdetections greater than maximum of upgradient detections

[3] RCRA Hazardous constituents list; "Special" indicates site-specific parameter of interest.

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
1,2,4,5-Tetrachlorobenzene	NA	Lab	0	0	--	--	--	--	U207
1,2,4-Trichlorobenzene	NA	Lab	0	0	--	--	--	--	Listed
1,2-Dichlorobenzene	NA	Lab	0	0	--	--	--	--	U070
1,3-Dichlorobenzene	NA	Lab	0	0	--	--	--	--	U071
1,4-Dichlorobenzene	NA	Lab	0	0	--	--	--	--	U072
1-Methylnaphthalene	NA	Lab	0	0	--	--	--	--	--
2,4,5-Trichlorophenol	NA	Lab	0	0	--	--	--	--	F027
2,4,6-Trichlorophenol	NA	Lab	0	0	--	--	--	--	F027
2,4-Dichlorophenol	NA	Lab	0	0	--	--	--	--	U081
2,4-Dimethylphenol	NA	Lab	0	0	--	--	--	--	U101
2,4-Dinitrophenol	NA	Lab	0	0	--	--	--	--	P048
2,4-Dinitrotoluene	NA	Lab	0	0	--	--	--	--	U105
2,6-Dinitrotoluene	NA	Lab	0	0	--	--	--	--	U082
2-Chloronaphthalene	NA	Lab	0	0	--	--	--	--	--
2-Chlorophenol	NA	Lab	0	1	1	100	1	100	--
2-Methyl-4,6-dinitrophenol	NA	Lab	0	0	--	--	--	--	P047?
2-Methylnaphthalene	NA	Lab	0	2	2	100	2	100	--
2-Nitroaniline	NA	Lab	0	0	--	--	--	--	--
2-Nitrophenol	NA	Lab	2	0	--	--	--	--	--
3,3`-Dichlorobenzidine	NA	Lab	0	0	--	--	--	--	U073
3,4-Methylphenol (m,p cresols)	NA	Lab	0	0	--	--	--	--	--
3-Nitroaniline	NA	Lab	0	0	--	--	--	--	--
4-Bromophenyl phenyl ether	NA	Lab	0	0	--	--	--	--	U030
4-Chloro-3-methylphenol	NA	Lab	0	0	--	--	--	--	--
4-Chloroaniline	NA	Lab	0	0	--	--	--	--	K181
4-Chlorophenol	NA	Lab	0	0	--	--	--	--	--
4-Chlorophenyl phenyl ether	NA	Lab	0	0	--	--	--	--	--
4-Nitroaniline	NA	Lab	0	0	--	--	--	--	--
4-Nitrophenol	NA	Lab	0	0	--	--	--	--	--
Acenaphthene	NA	Lab	0	7	7	100	7	100	--
Acenaphthylene	NA	Lab	0	4	4	100	4	100	--
Anthracene	NA	Lab	0	4	4	100	4	100	--
Azobenzene	NA	Lab	0	1	1	100	1	100	--
Benzidine	NA	Lab	0	0	--	--	--	--	U021
Benzo(a)anthracene	NA	Lab	2	6	0	0	0	0	U018
Benzo(a)pyrene	NA	Lab	1	1	0	0	0	0	U022
Benzo(b)fluoranthene	NA	Lab	1	1	0	0	0	0	--
Benzo(g,h,i)perylene	NA	Lab	2	1	0	0	0	0	--
Benzo(k)fluoranthene	NA	Lab	0	0	--	--	--	--	Listed
Benzoic acid	NA	Lab	0	7	7	100	7	100	P188
Benzyl alcohol	NA	Lab	0	2	2	100	2	100	--

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
Bis(2-chloroethoxy)methane	NA	Lab	0	0	--	--	--	--	--
Bis(2-chloroethyl)ether	NA	Lab	0	0	--	--	--	--	--
Bis(2-chloroisopropyl)ether	NA	Lab	0	0	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	NA	Lab	5	25	3	12	3	12	--
Butyl benzyl phthalate	NA	Lab	0	0	--	--	--	--	Listed
Carbazole	NA	Lab	0	4	4	100	4	100	--
Chrysene	NA	Lab	1	3	0	0	0	0	U050
Dibenz(a,h)anthracene	NA	Lab	0	0	--	--	--	--	U063
Dibenzofuran	NA	Lab	0	4	4	100	4	100	--
Diethyl phthalate	NA	Lab	0	9	9	100	9	100	U088
Dimethyl phthalate	NA	Lab	0	0	--	--	--	--	U102
Di-n-butyl phthalate	NA	Lab	0	0	--	--	--	--	--
Di-n-octyl phthalate	NA	Lab	0	2	2	100	2	100	U017
Fluoranthene	NA	Lab	4	13	6	46	4	31	U120
Fluorene	NA	Lab	0	4	4	100	4	100	--
Hexachlorobenzene	NA	Lab	0	0	--	--	--	--	U127
Hexachlorobutadiene	NA	Lab	0	0	--	--	--	--	U128
Hexachlorocyclopentadiene	NA	Lab	0	0	--	--	--	--	U130
Hexachloroethane	NA	Lab	0	0	--	--	--	--	U131
Indeno(1,2,3-cd)pyrene	NA	Lab	2	0	--	--	--	--	U137
Isophorone	NA	Lab	0	0	--	--	--	--	--
Naphthalene	NA	Lab	0	14	14	100	14	100	U165
Nitrobenzene	NA	Lab	0	1	1	100	1	100	Listed
N-Nitrosodimethylamine	NA	Lab	0	0	--	--	--	--	P082
N-Nitrosodi-n-propylamine	NA	Lab	0	0	--	--	--	--	--
N-Nitrosodiphenylamine	NA	Lab	0	0	--	--	--	--	--
N-Nitrosopyrrolidine	NA	Lab	0	0	--	--	--	--	U180
o-Cresol	NA	Lab	0	2	2	100	2	100	--
p-Cresol	NA	Lab	0	1	1	100	1	100	--
Pentachlorobenzene	NA	Lab	0	0	--	--	--	--	U183
Pentachlorophenol	NA	Lab	0	1	1	100	1	100	F027
Phenanthrene	NA	Lab	2	7	5	71	5	71	--
Phenol	NA	Lab	3	17	0	0	0	0	U188
Pyrene	NA	Lab	4	14	8	57	7	50	--
Pyridine	NA	Lab	0	0	--	--	--	--	U196

[1] $n_{>Q3}$ – Number of site or downgradient detections great than Q3 of upgradient detections

[2] $n_{>Max}$ – Number of site or downgradientdetections greater than maximum of upgradient detections

[3] RCRA Hazardous constituents list; "Special" indicates site-specific parameter of interest.

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
1,1,1,2-Tetrachloroethane	NA	Lab	0	0	--	--	--	--	U208
1,1,1-Trichloroethane	NA	Lab	0	4	4	100	4	100	--
1,1,2,2-Tetrachloroethane	NA	Lab	0	0	--	--	--	--	U209
1,1,2-Trichloroethane	NA	Lab	0	0	--	--	--	--	U227
1,1-Dichloro-1-propene	NA	Lab	0	0	--	--	--	--	--
1,1-Dichloroethane	NA	Lab	0	0	--	--	--	--	--
1,1-Dichloroethylene	NA	Lab	0	0	--	--	--	--	U078
1,2,3-Trichlorobenzene	NA	Lab	0	0	--	--	--	--	--
1,2,3-Trichloropropane	NA	Lab	0	0	--	--	--	--	Listed
1,2,4-Trichlorobenzene	NA	Lab	0	0	--	--	--	--	Listed
1,2,4-Trimethylbenzene	NA	Lab	2	3	3	100	3	100	--
1,2-Dibromo-3-chloropropane	NA	Lab	0	0	--	--	--	--	U066
1,2-Dibromoethane	NA	Lab	0	0	--	--	--	--	--
1,2-Dichlorobenzene	NA	Lab	0	0	--	--	--	--	U070
1,2-Dichloroethane	NA	Lab	0	4	4	100	4	100	--
1,2-Dichloroethylene	NA	Lab	0	0	--	--	--	--	U079
1,2-Dichloroethylene, cis	NA	Lab	0	1	1	100	1	100	U079
1,2-Dichloroethylene, trans	NA	Lab	0	2	2	100	2	100	U079
1,2-Dichloropropane	NA	Lab	0	0	--	--	--	--	--
1,3,5-Trimethylbenzene	NA	Lab	0	3	3	100	3	100	--
1,3-Dichloro-1-propene, cis	NA	Lab	0	0	--	--	--	--	--
1,3-Dichloro-1-propene, trans	NA	Lab	0	0	--	--	--	--	--
1,3-Dichlorobenzene	NA	Lab	0	0	--	--	--	--	U071
1,3-Dichloropropane	NA	Lab	0	0	--	--	--	--	--
1,4-Dichlorobenzene	NA	Lab	0	0	--	--	--	--	U072
2,2-Dichloropropane	NA	Lab	0	0	--	--	--	--	--
2-Chloroethyl vinyl ether	NA	Lab	0	0	--	--	--	--	U042
2-Hexanone	NA	Lab	0	0	--	--	--	--	--
Acetone	NA	Lab	0	2	2	100	2	100	--
Acrolein	NA	Lab	0	0	--	--	--	--	P003
Acrylonitrile	NA	Lab	0	0	--	--	--	--	U009
Benzene	NA	Lab	0	12	12	100	12	100	U019
Bromobenzene	NA	Lab	0	0	--	--	--	--	--
Bromochloromethane	NA	Lab	0	0	--	--	--	--	--
Bromodichloromethane	NA	Lab	0	1	1	100	1	100	--
Bromoform	NA	Lab	1	0	--	--	--	--	U225
Bromomethane	NA	Lab	0	0	--	--	--	--	--
Butyl benzene	NA	Lab	0	1	1	100	1	100	--
Butylbenzene, sec	NA	Lab	0	5	5	100	5	100	--
Butylbenzene, tert	NA	Lab	0	2	2	100	2	100	--
Carbon disulfide	NA	Lab	0	10	10	100	10	100	P022

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
Carbon tetrachloride	NA	Lab	0	0	--	--	--	--	U211
Chlorobenzene	NA	Lab	0	0	--	--	--	--	U037
Chlorodibromomethane	NA	Lab	0	0	--	--	--	--	--
Chloroethane	NA	Lab	0	0	--	--	--	--	--
Chloroform	NA	Lab	4	3	2	67	2	67	U044
Chloromethane	NA	Lab	4	9	3	33	3	33	--
Chlorotoluene o-	NA	Lab	0	1	1	100	1	100	--
Chlorotoluene p-	NA	Lab	0	1	1	100	1	100	--
Cumene (isopropyl benzene)	NA	Lab	0	4	4	100	4	100	--
Cymene p- (Toluene isopropyl p-)	NA	Lab	0	1	1	100	1	100	--
Dibromomethane (methylene bromide)	NA	Lab	0	0	--	--	--	--	U068
Dichlorodifluoromethane (CFC-12)	NA	Lab	0	0	--	--	--	--	U075
Ethyl benzene	NA	Lab	0	2	2	100	2	100	--
Hexachlorobutadiene	NA	Lab	0	0	--	--	--	--	U128
Iodomethane	NA	Lab	0	0	--	--	--	--	--
Methyl ethyl ketone	NA	Lab	0	0	--	--	--	--	U159
Methyl isobutyl ketone	NA	Lab	0	0	--	--	--	--	--
Methyl tertiary butyl ether (MTBE)	NA	Lab	0	0	--	--	--	--	--
Methylene chloride	NA	Lab	1	0	--	--	--	--	U080
Naphthalene	NA	Lab	0	1	1	100	1	100	U165
Propylbenzene	NA	Lab	0	4	4	100	4	100	--
Styrene	NA	Lab	0	2	2	100	2	100	--
Tetrachloroethylene	NA	Lab	0	10	10	100	10	100	U210
Toluene	NA	Lab	1	27	8	30	8	30	U220
Trichloroethylene	NA	Lab	0	1	1	100	1	100	U228
Trichlorofluoromethane	NA	Lab	0	2	2	100	2	100	--
Vinyl acetate	NA	Lab	0	0	--	--	--	--	--
Vinyl chloride	NA	Lab	0	0	--	--	--	--	U043
Xylene, m & p	NA	Lab	2	4	2	50	2	50	--
Xylene, o	NA	Lab	2	3	0	0	0	0	--
Xylenes, total	NA	Lab	0	1	1	100	1	100	--

[1] $n_{>Q3}$ – Number of site or downgradient detections great than Q3 of upgradient detections

[2] $n_{>Max}$ – Number of site or downgradientdetections greater than maximum of upgradient detections

[3] RCRA Hazardous constituents list; “Special” indicates site-specific parameter of interest.

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
Aroclor 1016	NA	Lab	0	0	--	--	--	--	Special
Aroclor 1221	NA	Lab	0	0	--	--	--	--	Special
Aroclor 1232	NA	Lab	0	0	--	--	--	--	Special
Aroclor 1242	NA	Lab	0	0	--	--	--	--	Special
Aroclor 1248	NA	Lab	0	0	--	--	--	--	Special
Aroclor 1254	NA	Lab	0	0	--	--	--	--	Special
Aroclor 1260	NA	Lab	0	1	1	100	1	100	Special
Aroclor 1262	NA	Lab	0	0	--	--	--	--	Special
Aroclor 1268	NA	Lab	0	0	--	--	--	--	Special

[1] $n_{>Q3}$ – Number of site or downgradient detections great than Q3 of upgradient detections

[2] $n_{>Max}$ – Number of site or downgradientdetections greater than maximum of upgradient detections

[3] RCRA Hazardous constituents list; “Special” indicates site-specific parameter of interest.

Table 5.3-6
Comparison of Upgradient and Site or Downgradient Detected Concentrations of Constituents in Groundwater
Rhodia Silver Bow Plant

Parameter	Total or Dissolved	Analysis Location	Number of upgradient detections	Number of site or downgradient detections	$n_{>Q3}$ [1]	% $n_{>Q3}$	$n_{>Max}$ [2]	% $n_{>Max}$	40 CFR 261, Appendix VII Hazardous Constituent[3]
Cesium 137	NA	Lab	0	0	--	--	--	--	Special
Gross Alpha (radiation)	NA	Lab	26	106	36	34	10	9	Special
Gross Beta (radiation)	NA	Lab	29	139	121	87	37	27	Special
Radium 226	NA	Lab	2	29	1	3	0	0	Special
Radium 228	NA	Lab	8	50	3	6	0	0	Special
Radium, total	NA	Lab	0	2	2	100	2	100	Special
Strontium 90	NA	Lab	0	0	--	--	--	--	Special
Uranium	NA	Lab	1	2	2	100	2	100	Special

[1] $n_{>Q3}$ – Number of site or downgradient detections great than Q3 of upgradient detections

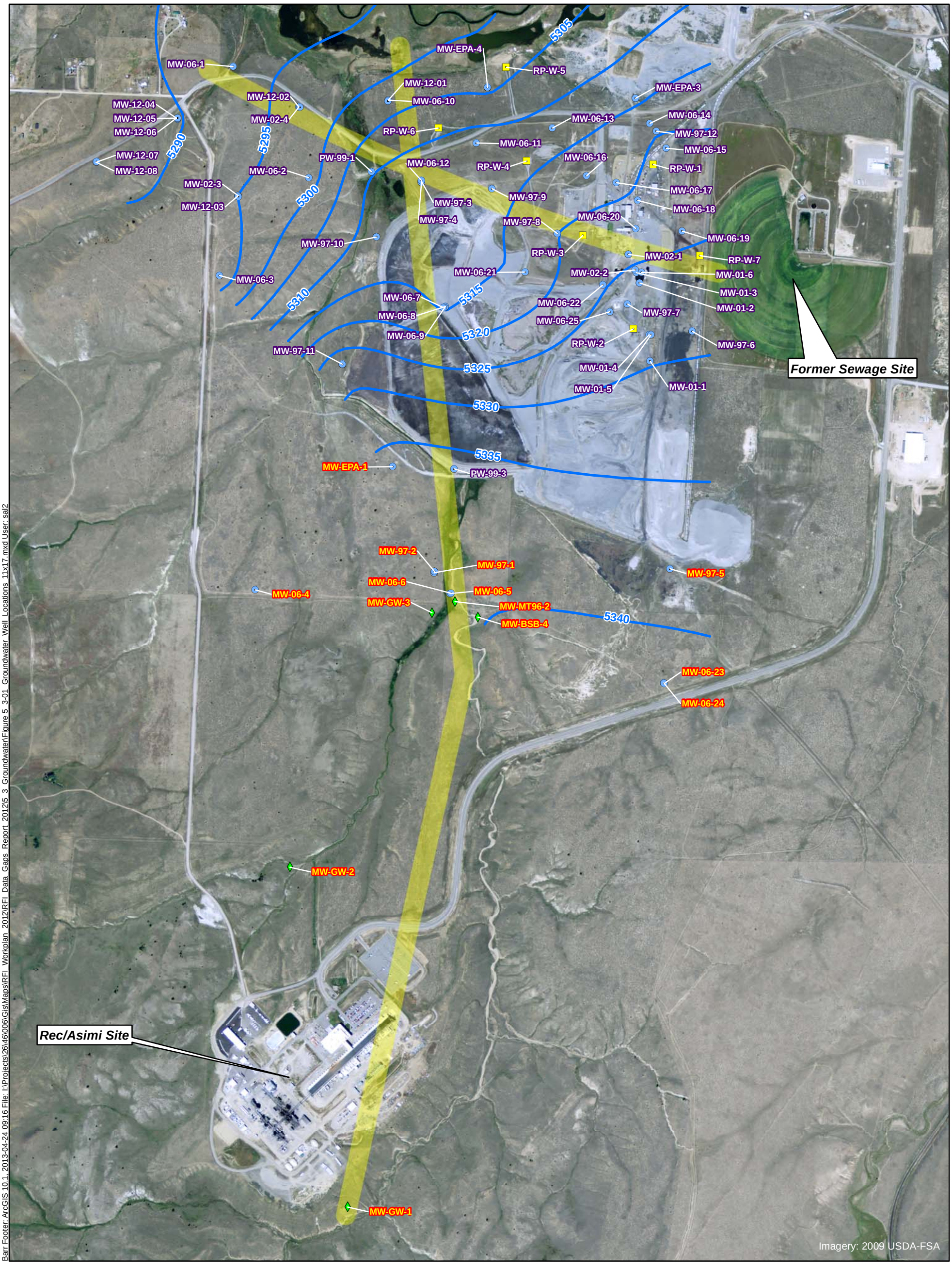
[2] $n_{>Max}$ – Number of site or downgradientdetections greater than maximum of upgradient detections

[3] RCRA Hazardous constituents list; “Special” indicates site-specific parameter of interest.

Table 5.3-7 Summary of SVOC Detections (in text)

Table 5.3-8 Summary of VOC Detections (in text)

Figures



Barr Footer: ArcGIS 10.1, 2013-04-24 09:16 File: I:\Projects\2614\006\Gis\Maps\RFI Workplan 2012\RFI Data Gaps Report 2012\5 3 Groundwater\Figure 5 3-01 Groundwater Well Locations 11x17.mxd User: sal2

- Monitoring Well
- Production Well
- REC Plant Monitoring Well
- November, 2012 Groundwater Elevation Contours
- General Location of Hydrochemistry Cross Section
- XXX Labels Denotes Upgradient Wells
- XXX Labels Denotes Site or Downgradient Wells

N

Feet
1,000 0 1,000 2,000

Meters
200 0 200 400 600

Figure 5.3-1

GROUNDWATER WELL LOCATIONS
Rhodia Silver Bow Plant
Montana

MW-06-1
5/15/2008: 182 mg/l
9/18/2008: 180 mg/l
7/17/2010: 137 mg/l

MW-12-04
11/7/2012: 144 mg/l

MW-12-07
11/6/2012: 163 mg/l

MW-06-2
5/15/2008: 90 mg/l
9/23/2008: 95 mg/l
7/18/2010: 102 mg/l

MW-02-3
4/24/2007: 130 mg/l
11/6/2007: 130 mg/l
5/15/2008: 132 mg/l
9/23/2008: 135 mg/l
7/17/2010: 134 mg/l

MW-06-3
5/14/2008: 4 mg/l
9/19/2008: 61 mg/l
7/16/2010: 86.1 mg/l

MW-06-10
5/14/2008: 142 mg/l
9/18/2008: 145 mg/l

MW-12-02
11/8/2012: 268 mg/l

MW-97-3
5/28/2008: 148 mg/l
9/23/2008: 146 mg/l

MW-97-10
5/21/2008: 108 mg/l
9/23/2008: 108 mg/l

MW-97-8
5/15/2008: 76 mg/l
9/24/2008: 80 mg/l

MW-06-21
5/17/2008: 101 mg/l
9/24/2008: 92 mg/l

MW-97-11
5/21/2008: 86 mg/l
9/25/2008: 87 mg/l

MW-06-7 *
5/29/2008: 17 mg/l
9/23/2008: 5 mg/l

MW-EPA-1
5/14/2008: 138 mg/l
9/17/2008: 160 mg/l

MW-06-4
5/15/2008: 138 mg/l
9/18/2008: 134 mg/l

MW-97-1
5/13/2008: 286 mg/l
9/17/2008: 288 mg/l

MW-06-5
5/14/2008: 316 mg/l
9/19/2008: 306 mg/l

MW-GW-3
5/20/2008: 322 mg/l
9/17/2008: 284 mg/l

MW-EPA-4
5/15/2008: 60 mg/l
9/20/2008: 57 mg/l

MW-06-13
5/27/2008: 104 mg/l
9/19/2008: 102 mg/l

MW-06-11
5/28/2008: 51 mg/l
9/23/2008: 46 mg/l

MW-06-16
5/21/2008: 154 mg/l
9/20/2008: 157 mg/l

MW-06-22
5/21/2008: 59 mg/l
9/26/2008: 38 mg/l

MW-06-25
5/20/2008: 104 mg/l
9/26/2008: 105 mg/l

MW-97-7
5/20/2008: 106 mg/l
9/26/2008: 112 mg/l

MW-06-23
5/13/2008: 103 mg/l
9/16/2008: 101 mg/l

MW-EPA-3
5/15/2008: 138 mg/l
9/16/2008: 138 mg/l

MW-06-14
5/27/2008: 102 mg/l
9/18/2008: 103 mg/l

MW-97-12
5/27/2008: 116 mg/l
9/23/2008: 112 mg/l

MW-06-17
5/27/2008: 152 mg/l
9/20/2008: 138 mg/l

MW-06-15
5/21/2008: 210 mg/l
9/17/2008: 222 mg/l

MW-06-18
5/21/2008: 26 mg/l
9/25/2008: 38 mg/l

MW-06-20
5/20/2008: 36 mg/l
9/20/2008: 34 mg/l

MW-06-19
5/20/2008: 243 mg/l
9/18/2008: 232 mg/l

MW-02-1
5/29/2008: 222 mg/l
9/26/2008: 218 mg/l

MW-02-2
5/19/2008: 21 mg/l
9/22/2008: 21 mg/l

MW-01-6
5/19/2008: < 2 mg/l
9/18/2008: 2 mg/l

MW-01-3
5/19/2008: 28 mg/l
9/19/2008: 28 mg/l

MW-97-6
5/17/2008: 140 mg/l
9/16/2008: 136 mg/l

MW-01-2
5/19/2008: 44 mg/l
9/22/2008: 53 mg/l

MW-01-5
5/17/2008: 137 mg/l
9/16/2008: 134 mg/l

MW-01-4
5/16/2008: 135 mg/l
9/16/2008: 132 mg/l

MW-01-1
5/16/2008: 158 mg/l
9/17/2008: 158 mg/l

MW-97-5
5/15/2008: 120 mg/l
9/17/2008: 118 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

N

Feet
800 0 800

Figure 5.3-2a

ANALYTICAL GROUNDWATER
ALKALINITY, BICARBONATE as $CaCO_3$
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:10 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-02a GW SW Data Alkalinity Bicarbonate WaterTable.mxd User: sal2

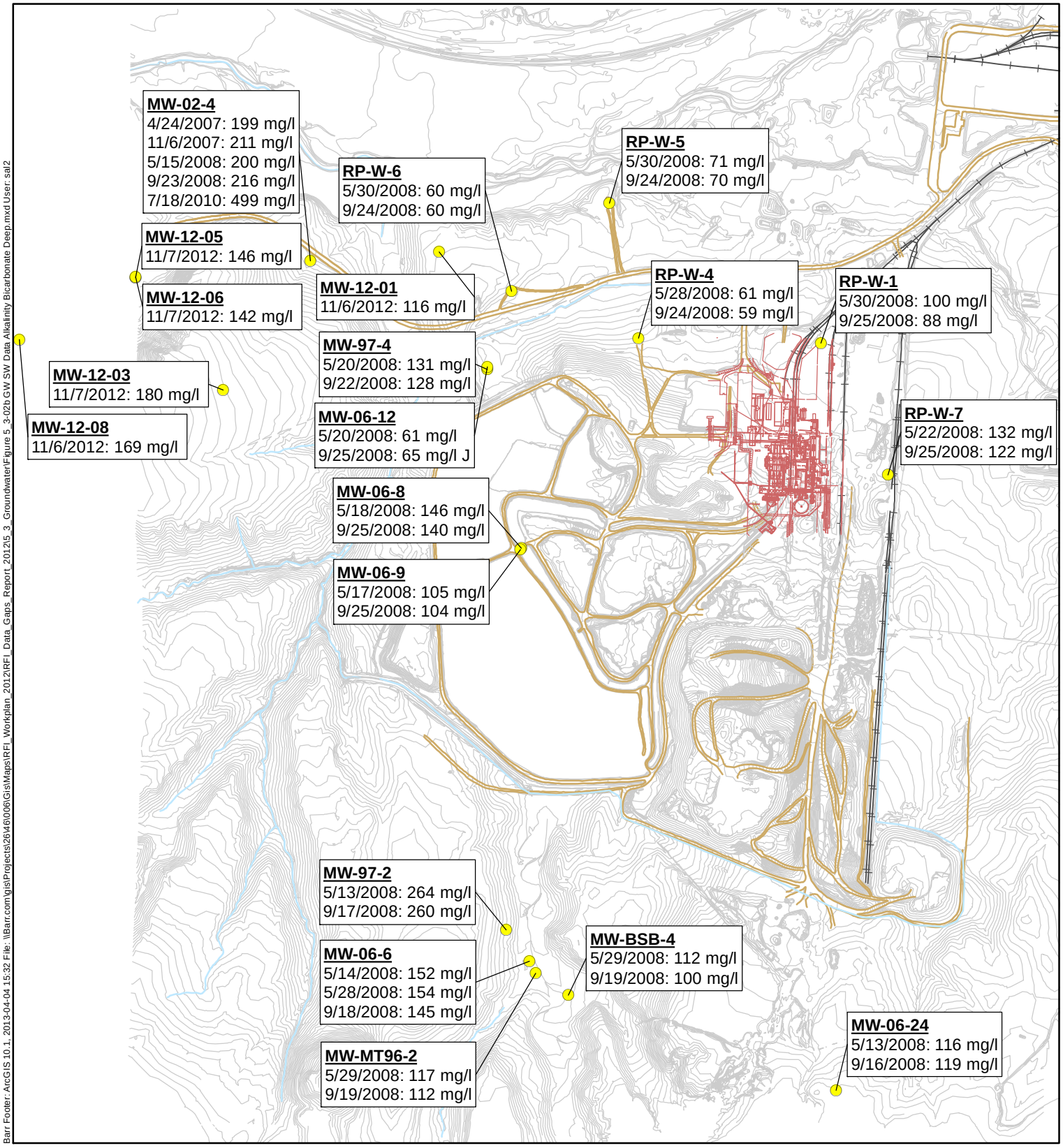


Figure 5.3-2b

ANALYTICAL GROUNDWATER
ALKALINITY, BICARBONATE as $CaCO_3$
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-1
5/15/2008: < 2 mg/l
9/18/2008: < 2 mg/l
7/17/2010: < 9.0 mg/l

MW-12-04
11/7/2012: < 9.0 mg/l

MW-12-02
11/8/2012: < 9.0 mg/l

MW-12-07
11/6/2012: < 9.0 mg/l

MW-06-2
5/15/2008: < 2 mg/l
9/23/2008: < 2 mg/l
7/18/2010: < 9.0 mg/l

MW-02-3
1/10/2005: < 2 mg/l
4/12/2005: < 1 mg/l
10/31/2005: < 1 mg/l
4/24/2007: < 2 mg/l
11/6/2007: < 2 mg/l
5/15/2008: < 2 mg/l
9/23/2008: < 2 mg/l
7/17/2010: < 2.0 mg/l

MW-06-3
5/14/2008: < 2 mg/l
9/19/2008: 23 mg/l
7/16/2010: < 9.0 mg/l

MW-06-10
5/14/2008: < 2 mg/l
9/18/2008: < 2 mg/l

MW-EPA-4
11/5/1997: 73 mg/l
5/15/2008: < 2 mg/l
9/20/2008: < 2 mg/l

PW-99-1
1/10/2005: < 2 mg/l
5/18/2008: < 2 mg/l
5/29/2008: < 2 mg/l
9/25/2008: < 2 mg/l

MW-97-3
1/10/2005: < 2 mg/l
5/28/2008: < 2 mg/l
9/23/2008: < 2 mg/l

MW-97-10
1/11/2005: < 2 mg/l
5/21/2008: < 2 mg/l
9/23/2008: < 2 mg/l

MW-97-8
5/15/2008: < 2 mg/l
9/24/2008: < 2 mg/l

MW-06-21
5/17/2008: < 2 mg/l
9/24/2008: < 2 mg/l

MW-97-11
1/11/2005: < 2 mg/l
5/21/2008: < 2 mg/l
9/25/2008: < 2 mg/l

MW-06-7 *
5/29/2008: 30 mg/l
9/23/2008: < 2 mg/l

MW-EPA-1
5/14/2008: < 2 mg/l
9/17/2008: < 2 mg/l

PW-99-3
5/28/2008: < 2 mg/l
9/22/2008: < 2 mg/l

MW-97-1
5/13/2008: < 2 mg/l
9/17/2008: < 2 mg/l

MW-06-5
5/14/2008: < 2 mg/l
9/19/2008: < 2 mg/l

MW-GW-3
5/20/2008: < 2 mg/l
9/17/2008: < 2 mg/l

MW-06-4
5/15/2008: < 2 mg/l
9/18/2008: < 2 mg/l

MW-06-11
5/28/2008: < 2 mg/l
9/23/2008: < 2 mg/l

MW-06-13
5/27/2008: < 2 mg/l
9/19/2008: < 2 mg/l

MW-97-9
5/16/2008: < 2 mg/l
9/24/2008: < 2 mg/l

MW-06-22
5/21/2008: < 2 mg/l
9/26/2008: < 2 mg/l

MW-06-25
5/20/2008: < 2 mg/l
9/26/2008: < 2 mg/l

MW-97-7
5/20/2008: < 2 mg/l
9/26/2008: < 2 mg/l

MW-06-23
5/13/2008: < 2 mg/l
9/16/2008: < 2 mg/l

MW-EPA-3
5/15/2008: < 2 mg/l
9/16/2008: < 2 mg/l

MW-06-16
5/21/2008: < 2 mg/l
9/20/2008: < 2 mg/l

MW-06-14
5/27/2008: < 2 mg/l
9/18/2008: < 2 mg/l

MW-97-12
11/5/1997: 56 mg/l
5/27/2008: < 2 mg/l
9/23/2008: < 2 mg/l

MW-06-17
5/27/2008: < 2 mg/l
9/20/2008: < 2 mg/l

MW-06-15
5/21/2008: < 2 mg/l
9/17/2008: < 2 mg/l

MW-06-18
5/21/2008: < 2 mg/l
9/25/2008: < 2 mg/l

MW-06-20
5/20/2008: < 2 mg/l
9/20/2008: 34 mg/l

MW-06-19
5/20/2008: < 2 mg/l
9/18/2008: 232 mg/l

MW-02-1
5/29/2008: < 2 mg/l
9/26/2008: < 2 mg/l

MW-02-2
5/19/2008: < 2 mg/l
9/22/2008: < 2 mg/l

MW-01-6
5/19/2008: < 2 mg/l
9/18/2008: < 2 mg/l

MW-01-3
5/19/2008: < 2 mg/l
9/19/2008: < 2 mg/l

MW-97-6
5/17/2008: < 2 mg/l
9/16/2008: < 2 mg/l

MW-01-2
5/19/2008: < 2 mg/l
9/22/2008: < 2 mg/l

MW-01-5
5/17/2008: < 2 mg/l
9/16/2008: < 2 mg/l

MW-01-4
5/16/2008: < 2 mg/l
9/16/2008: < 2 mg/l

MW-01-1
5/16/2008: < 2 mg/l
9/17/2008: < 2 mg/l

MW-97-5
5/15/2008: < 2 mg/l
9/17/2008: < 2 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

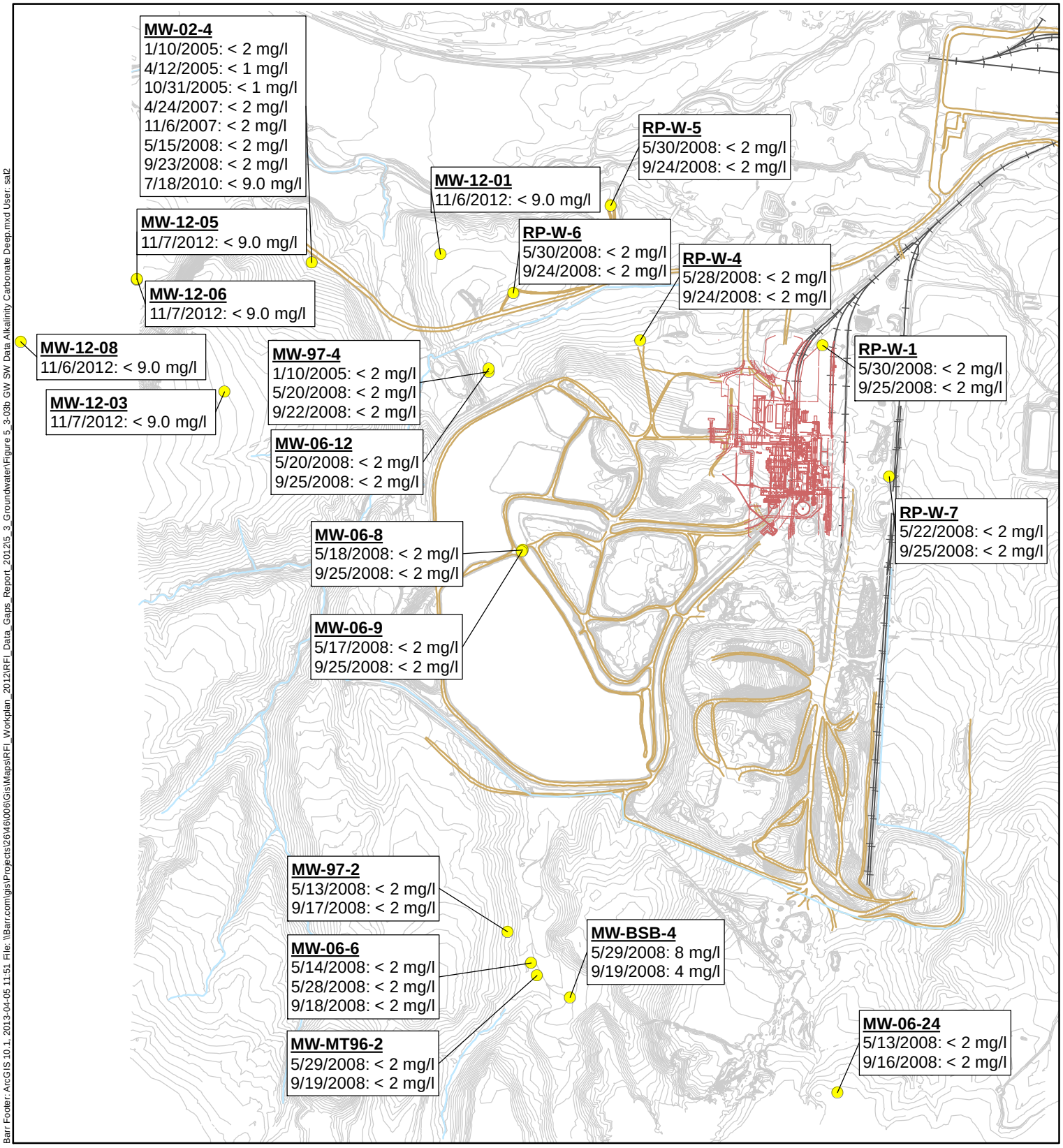
N

Feet
800 0 800

Figure 5.3-3a

ANALYTICAL GROUNDWATER
ALKALINITY, CARBONATE as $CaCO_3$
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:36 File: \\Barr.com\gis\Projects\2646\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-03a GW SW Data Alkalinity Carbonate WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 11:51 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-03b GW SW Data Alkalinity Carbonate Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-3b

ANALYTICAL GROUNDWATER
ALKALINITY, CARBONATE as $CaCO_3$
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 197 mg/l
9/18/2008: 177 mg/l

MW-97-3
11/4/1997: 138 mg/l
10/7/1998: 149 mg/l
1/10/2005: 142 mg/l
5/28/2008: 166 mg/l
9/23/2008: 167 mg/l

MW-12-02
11/8/2012: 222 mg/l

MW-06-1
5/15/2008: 191 mg/l
9/18/2008: 192 mg/l
7/17/2010: 234 mg/l

PW-99-1
1/10/2005: 191 mg/l
5/18/2008: 186 mg/l
5/29/2008: 192 mg/l
9/25/2008: 196 mg/l

MW-12-04
11/7/2012: 19.7 mg/l

MW-12-07
11/6/2012: 13.4 mg/l

MW-06-2
5/15/2008: 194 mg/l
9/23/2008: 198 mg/l
7/18/2010: 178 mg/l

MW-97-10
11/4/1997: 251 mg/l
10/8/1998: 248 mg/l
1/11/2005: 194 mg/l
5/21/2008: 199 mg/l
9/23/2008: 202 mg/l

MW-02-3
1/10/2005: 165 mg/l
4/12/2005: 164 mg/l
10/31/2005: 165 mg/l
4/20/2006: 166 mg/l
10/24/2006: 166 mg/l
4/24/2007: 165 mg/l
11/6/2007: 161 mg/l
5/15/2008: 158 mg/l
9/23/2008: 178 mg/l
7/17/2010: 169 mg/l

MW-97-8
11/5/1997: 262 mg/l
10/7/1998: 161 mg/l
5/15/2008: 122 mg/l
9/24/2008: 123 mg/l

MW-06-21
5/17/2008: 124 mg/l
9/24/2008: 117 mg/l

MW-06-3
5/14/2008: 106 mg/l
9/19/2008: 103 mg/l
7/16/2010: 108 mg/l

MW-97-11
11/5/1997: 216 mg/l
10/8/1998: 237 mg/l
1/11/2005: 245 mg/l
5/21/2008: 229 mg/l
9/25/2008: 239 mg/l

MW-06-7 *
5/29/2008: 170 mg/l
9/23/2008: 158 mg/l

MW-EPA-1
10/8/1998: 12 mg/l
5/14/2008: 98.1 mg/l
9/17/2008: 103 mg/l

MW-06-4
5/15/2008: 20.2 mg/l
9/18/2008: 16.6 mg/l

MW-97-1
11/4/1997: 10 mg/l
10/8/1998: 29 mg/l
5/13/2008: 332 mg/l
9/17/2008: 343 mg/l

MW-06-5
5/14/2008: 295 mg/l
9/19/2008: 386 mg/l

MW-GW-3
5/20/2008: 326 mg/l
9/17/2008: 326 mg/l

MW-97-9
11/5/1997: 242 mg/l
10/7/1998: 234 mg/l
5/16/2008: 141 mg/l
9/24/2008: 144 mg/l

MW-EPA-4
11/5/1997: 1.40 mg/l
10/12/1998: 148 mg/l
5/15/2008: 187 mg/l
9/20/2008: 206 mg/l

MW-06-11
5/28/2008: 204 mg/l
9/23/2008: 203 mg/l

PW-99-3
5/28/2008: 281 mg/l
9/22/2008: 311 mg/l

MW-06-16
5/21/2008: 270 mg/l
9/20/2008: 273 mg/l

MW-06-13
5/27/2008: 168 mg/l
9/19/2008: 195 mg/l

MW-06-22
5/21/2008: 149 mg/l
9/26/2008: 155 mg/l

MW-06-25
5/20/2008: 293 mg/l
9/26/2008: 293 mg/l

MW-97-7
11/4/1997: 284 mg/l
10/8/1998: 279 mg/l
4/14/1999: 285 mg/l
10/8/2001: 285 mg/l
1/17/2002: 319 mg/l
5/20/2008: 286 mg/l
9/26/2008: 273 mg/l

MW-06-23
5/13/2008: 9.4 mg/l
9/16/2008: 9.4 mg/l

MW-EPA-3
11/5/1997: 52 mg/l
10/12/1998: 51 mg/l
5/15/2008: 71.7 mg/l
9/16/2008: 65.0 mg/l

MW-06-17
5/27/2008: 184 mg/l
9/20/2008: 201 mg/l

MW-06-14
5/27/2008: 146 mg/l
9/18/2008: 151 mg/l

MW-97-12
11/5/1997: 173 mg/l
10/12/1998: 133 mg/l
5/27/2008: 136 mg/l
9/23/2008: 140 mg/l

MW-06-15
5/21/2008: 197 mg/l
9/17/2008: 167 mg/l

MW-06-18
5/21/2008: 231 mg/l
9/25/2008: 241 mg/l

MW-06-20
5/20/2008: 173 mg/l
9/20/2008: 179 mg/l

MW-02-1
1/17/2002: 237 mg/l
5/29/2008: 251 mg/l
9/26/2008: 308 mg/l

MW-06-19
5/20/2008: 672 mg/l
9/18/2008: 726 mg/l

MW-02-2
5/19/2008: 76 mg/l
9/22/2008: 83 mg/l

MW-01-6
10/9/2001: 126 mg/l
1/17/2002: 134 mg/l
5/19/2008: 77 mg/l
9/18/2008: 78.7 mg/l

MW-01-3
10/9/2001: 126 mg/l
1/22/2002: 133 mg/l
5/19/2008: 68 mg/l
9/19/2008: 69.2 mg/l

MW-97-6
11/4/1997: 212 mg/l
10/8/1998: 132 mg/l
5/17/2008: 172 mg/l
9/16/2008: 170 mg/l

MW-01-2
10/9/2001: 107 mg/l
1/16/2002: 115 mg/l
5/19/2008: 82 mg/l
9/22/2008: 112 mg/l

MW-01-5
10/4/2001: 138 mg/l
1/16/2002: 144 mg/l
5/17/2008: 182 mg/l
9/16/2008: 183 mg/l

MW-01-4
10/4/2001: 153 mg/l
1/16/2002: 161 mg/l
5/16/2008: 175 mg/l
9/16/2008: 169 mg/l

MW-01-1
10/8/2001: 463 mg/l
1/16/2002: 471 mg/l
5/16/2008: 324 mg/l
9/17/2008: 299 mg/l

MW-97-5
11/4/1997: 9 mg/l
10/8/1998: 10 mg/l
5/15/2008: 10.0 mg/l
9/17/2008: 9.9 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

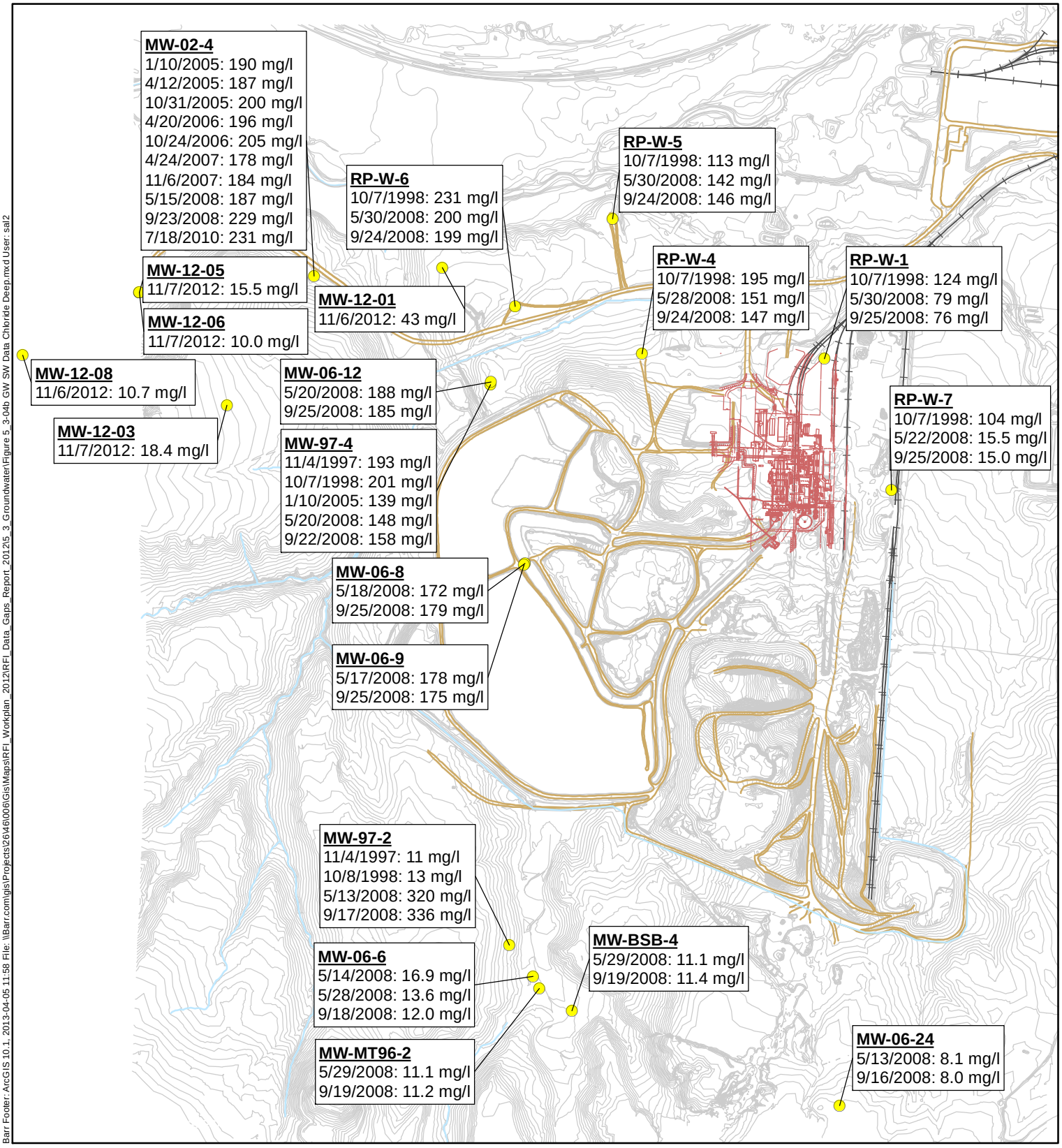
N

Feet
800 0 800

Figure 5.3-4a

ANALYTICAL GROUNDWATER
CHLORIDE
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:41 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-04a GW SW Data Chloride WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 11:58 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-04b GW SW Data Chloride Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-4b

ANALYTICAL GROUNDWATER
CHLORIDE
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-16
5/21/2008: < 1.0 mg/l
9/20/2008: < 0.2 mg/l

MW-06-13
5/27/2008: 0.30 mg/l
9/19/2008: 0.30 mg/l

MW-97-8
11/5/1997: 1.12 mg/l
10/7/1998: 1.72 mg/l
5/15/2008: 2.7 mg/l
9/24/2008: 2.9 mg/l

MW-EPA-3
11/5/1997: 0.28 mg/l
10/12/1998: 0.26 mg/l
7/15/2003: 0.81 mg/l
7/24/2003: 0.78 mg/l J
5/15/2008: 0.2 mg/l
9/16/2008: 0.30 mg/l

MW-06-14
5/27/2008: < 0.2 mg/l
9/18/2008: 0.081 mg/l J

MW-06-10
5/14/2008: 0.30 mg/l
9/18/2008: 0.30 mg/l

MW-06-17
5/27/2008: 0.2 mg/l
9/20/2008: 0.30 mg/l

PW-99-1
3/24/1999: 2.77 mg/l
3/25/1999: 3.25 mg/l
4/14/1999: 1.5 mg/l
1/10/2005: 3.24 mg/l
5/18/2008: 2.3 mg/l
5/29/2008: 2.6 mg/l
9/25/2008: 2.6 mg/l

MW-EPA-4
11/5/1997: 0.20 mg/l
10/12/1998: 0.19 mg/l
7/16/2003: < 1.0 mg/l
7/24/2003: < 0.133 mg/l
5/15/2008: 0.30 mg/l
9/20/2008: < 1.0 mg/l

MW-97-12
11/5/1997: 1.47 mg/l
10/12/1998: 2.30 mg/l
5/27/2008: 7.8 mg/l
9/23/2008: 7.9 mg/l

MW-06-1
5/15/2008: 0.30 mg/l
9/18/2008: 0.396 mg/l J
7/17/2010: 0.43 mg/l

MW-06-11
5/28/2008: < 1.0 mg/l
9/23/2008: < 1.0 mg/l

MW-06-15
5/21/2008: < 0.2 mg/l
9/17/2008: 0.114 mg/l J

MW-12-02
11/8/2012: 0.88 mg/l

MW-06-18
5/21/2008: < 1.0 mg/l
9/25/2008: 0.30 mg/l

MW-12-04
11/7/2012: 0.44 mg/l

MW-97-9
11/5/1997: 7.56 mg/l
10/7/1998: 9.2 mg/l
4/14/1999: 5.8 mg/l
5/16/2008: 11.3 mg/l
9/24/2008: 11.1 mg/l

MW-06-20
5/20/2008: < 1.0 mg/l
9/20/2008: 0.5 mg/l

MW-12-07
11/6/2012: < 0.40 mg/l

MW-06-2
5/15/2008: 0.5 mg/l
9/23/2008: < 1.0 mg/l
7/18/2010: < 0.40 mg/l

MW-02-1
1/17/2002: 0.19 mg/l
9/4/2002: 0.20 mg/l
7/22/2003: < 1.0 mg/l
5/29/2008: < 1.0 mg/l
9/26/2008: < 1.0 mg/l

MW-06-19
5/20/2008: < 1.0 mg/l
9/18/2008: 0.151 mg/l J

MW-02-3
10/9/2002: 0.41 mg/l
10/22/2004: 0.53 mg/l
1/10/2005: 0.53 mg/l
4/12/2005: 0.450 mg/l
10/31/2005: 0.500 mg/l
4/20/2006: 0.450 mg/l
10/24/2006: 0.450 mg/l
4/24/2007: 0.5 mg/l
11/6/2007: 0.4 mg/l
5/15/2008: 0.4 mg/l
9/23/2008: 0.4 mg/l
7/17/2010: 0.49 mg/l

MW-97-3
11/4/1997: 1.42 mg/l
10/7/1998: 2.36 mg/l
1/10/2005: 4.18 mg/l
5/28/2008: 3.6 mg/l
9/23/2008: 3.4 mg/l

MW-02-2
9/5/2002: 5.14 mg/l
5/19/2008: 7.9 mg/l
9/22/2008: 7.6 mg/l

MW-97-10
11/4/1997: 1.26 mg/l
10/8/1998: 1.39 mg/l
7/16/2003: 2.2 mg/l
7/23/2003: 2.1 mg/l
1/11/2005: 2.04 mg/l
5/21/2008: 1.3 mg/l
9/23/2008: 1.2 mg/l

MW-06-7 *
5/29/2008: < 10 mg/l
9/23/2008: < 4.0 mg/l

MW-01-6
10/9/2001: 0.73 mg/l
1/17/2002: 1.32 mg/l
9/5/2002: 1.64 mg/l
5/19/2008: < 10 mg/l
9/18/2008: 2.2 mg/l

MW-06-3
5/14/2008: 0.30 mg/l
9/19/2008: 0.4 mg/l
7/16/2010: < 0.40 mg/l

MW-06-21
5/17/2008: 3.4 mg/l
9/24/2008: 4.1 mg/l

MW-97-11
11/5/1997: 2.59 mg/l
10/8/1998: 3.32 mg/l
7/21/2003: 3.9 mg/l
1/11/2005: 3.42 mg/l
5/21/2008: 3.5 mg/l
9/25/2008: 3.6 mg/l

MW-97-6
11/4/1997: 0.26 mg/l
10/8/1998: 0.20 mg/l
7/23/2003: 0.75 mg/l
5/17/2008: < 0.2 mg/l
9/16/2008: 0.160 mg/l J

MW-EPA-1
10/8/1998: 0.45 mg/l
5/14/2008: 0.30 mg/l
9/17/2008: 0.4 mg/l

MW-01-3
10/9/2001: 0.75 mg/l
1/22/2002: 0.98 mg/l
9/5/2002: 0.90 mg/l
5/19/2008: 1.1 mg/l
9/19/2008: 1.2 mg/l

MW-06-22
5/21/2008: 5.6 mg/l
9/26/2008: 6.2 mg/l

PW-99-3
3/22/1999: 7.90 mg/l
3/23/1999: 6.94 mg/l
5/28/2008: 7.1 mg/l
9/22/2008: 7.1 mg/l

MW-06-25
5/20/2008: 5.8 mg/l
9/26/2008: 5.0 mg/l

MW-01-2
10/9/2001: 4.06 mg/l
1/16/2002: 3.74 mg/l
9/4/2002: 5.56 mg/l
7/22/2003: 6.7 mg/l
5/19/2008: 10.5 mg/l
9/22/2008: 7.8 mg/l

MW-06-4
5/15/2008: 0.5 mg/l
9/18/2008: 0.5 mg/l

MW-97-1
11/4/1997: 0.28 mg/l
10/8/1998: 0.31 mg/l
4/14/1999: 0.30 mg/l
5/13/2008: < 0.2 mg/l
9/17/2008: 0.154 mg/l J

MW-97-7
11/4/1997: 3.13 mg/l
10/8/1998: 2.02 mg/l
4/14/1999: 1.4 mg/l
10/8/2001: 2.36 mg/l
1/17/2002: 3.45 mg/l
1/17/2002: 3.08 mg/l
5/20/2008: 3.1 mg/l
9/26/2008: 2.7 mg/l

MW-01-5
10/4/2001: 0.16 mg/l
1/16/2002: 0.16 mg/l
5/17/2008: < 0.2 mg/l
9/16/2008: 0.142 mg/l J

MW-GW-3
5/20/2008: 0.30 mg/l
9/17/2008: 0.30 mg/l

MW-01-4
10/4/2001: 0.16 mg/l
1/16/2002: 0.15 mg/l
5/16/2008: < 0.2 mg/l
9/16/2008: 0.160 mg/l J

MW-06-5
5/14/2008: 0.30 mg/l
9/19/2008: 0.30 mg/l

MW-06-23
5/13/2008: 0.2 mg/l
9/16/2008: 0.2 mg/l

MW-01-1
10/8/2001: 0.16 mg/l
1/16/2002: 0.13 mg/l
5/16/2008: < 0.2 mg/l
9/17/2008: < 0.010 mg/l

MW-97-5
11/4/1997: 0.42 mg/l
10/8/1998: 0.32 mg/l
4/14/1999: 0.30 mg/l
5/15/2008: 0.30 mg/l
9/17/2008: 0.30 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

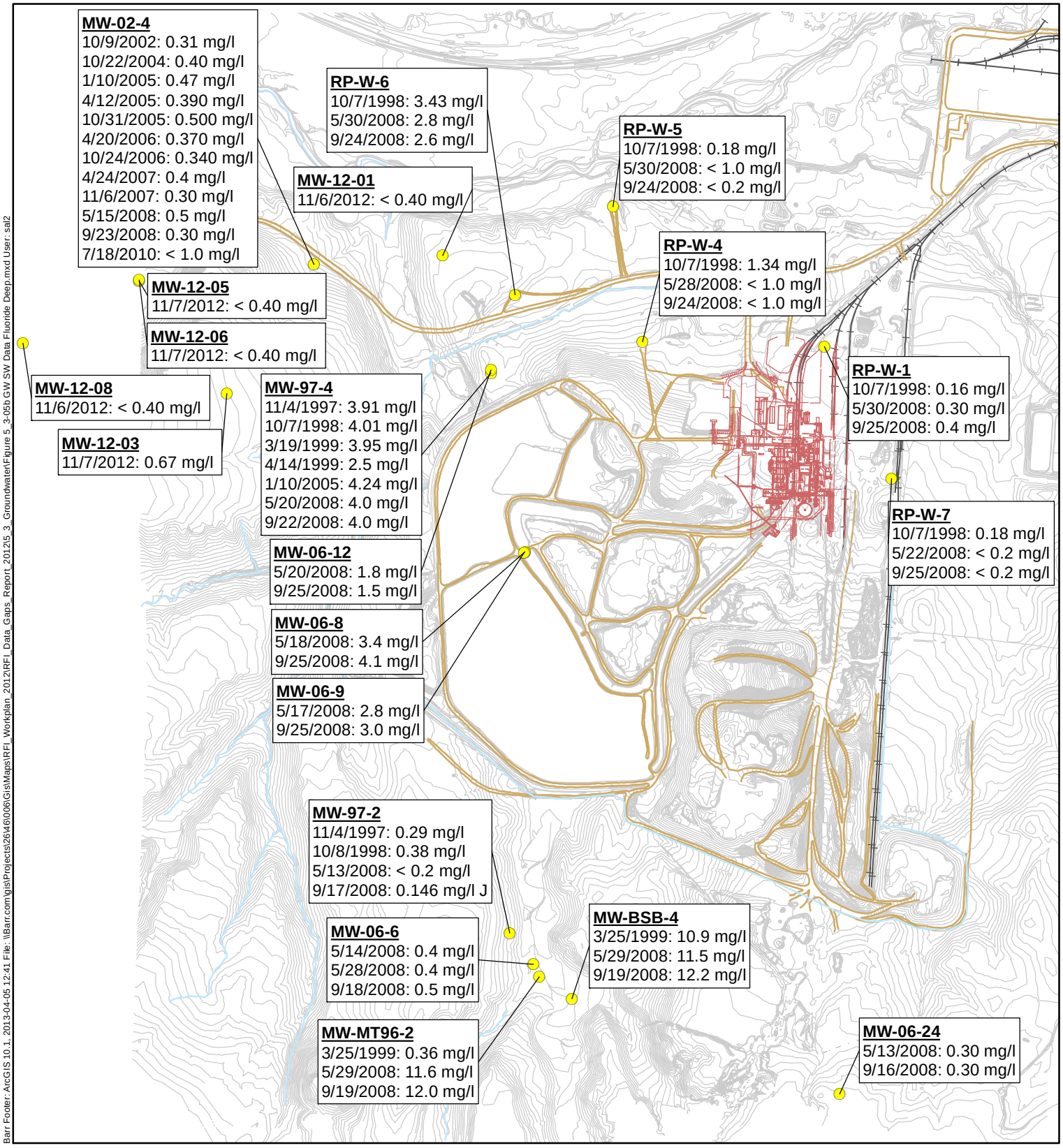
N

Feet
800 0 800

Figure 5.3-5a

ANALYTICAL GROUNDWATER
FLUORIDE
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:43 File: \\Barr.com\gis\Projects\26\46\006\GisMaps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-05a GW SW Data Fluoride WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 12:41 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-05b GW SW Data Fluoride Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-5b

ANALYTICAL GROUNDWATER
FLUORIDE
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-1
5/15/2008: 1.04 mg/l
9/18/2008: 1.17 mg/l
7/17/2010: 1.05 mg/l

MW-12-04
11/7/2012: 0.435 mg/l

MW-12-02
11/8/2012: 0.176 mg/l

MW-12-07
11/6/2012: 0.390 mg/l

MW-02-3
1/10/2005: 0.21 mg/l
4/12/2005: 0.22 mg/l
10/31/2005: 0.24 mg/l
4/20/2006: 0.23 mg/l
10/24/2006: 0.23 mg/l
4/24/2007: 0.25 mg/l J
11/6/2007: 0.25 mg/l
5/15/2008: 0.20 mg/l
9/23/2008: 0.25 mg/l
7/17/2010: 0.240 mg/l

MW-06-3
5/14/2008: 0.34 mg/l
9/19/2008: 0.36 mg/l
7/16/2010: 0.348 mg/l

MW-06-4
5/15/2008: 0.23 mg/l
9/18/2008: 0.24 mg/l

MW-GW-2
6/30/1998: 0.49 mg/l
9/30/1998: 0.07 mg/l
12/31/1998: 0.07 mg/l
3/31/1999: < 0.05 mg/l
6/30/1999: 0.11 mg/l
9/30/1999: 0.11 mg/l
12/31/1999: 0.13 mg/l
3/31/2000: 0.08 mg/l
6/30/2000: < 0.05 mg/l
9/30/2000: 0.15 mg/l
12/31/2000: 0.17 mg/l
3/31/2001: 0.26 mg/l
6/30/2001: 0.32 mg/l
9/30/2001: 0.13 mg/l
12/31/2001: 0.21 mg/l
3/31/2002: 0.5 mg/l
6/30/2002: 0.47 mg/l
9/30/2002: 0.63 mg/l
12/31/2002: 0.72 mg/l
3/31/2003: 0.51 mg/l
6/30/2003: 0.62 mg/l
9/30/2003: 0.57 mg/l
12/31/2003: 0.82 mg/l
3/31/2004: 0.47 mg/l
6/30/2004: 0.44 mg/l
9/30/2004: 0.58 mg/l
11/30/2004: 0.63 mg/l
12/31/2004: 0.63 mg/l
3/31/2005: 0.64 mg/l
6/30/2005: 0.47 mg/l
7/31/2005: 0.52 mg/l
6/30/2006: 0.48 mg/l
9/30/2006: 0.36 mg/l
3/31/2007: 0.58 mg/l
6/30/2007: 0.26 mg/l
6/30/2008: 0.4 mg/l

MW-06-10
5/14/2008: 0.12 mg/l
9/18/2008: 0.14 mg/l

MW-06-11
5/28/2008: 0.05 mg/l
9/23/2008: 0.08 mg/l

MW-06-2
5/15/2008: 0.39 mg/l
9/23/2008: 0.45 mg/l
7/18/2010: 0.423 mg/l

MW-97-3
1/10/2005: < 0.05 mg/l
5/28/2008: 0.17 mg/l
9/23/2008: 0.25 mg/l

MW-97-10
1/11/2005: 0.15 mg/l
5/21/2008: 0.12 mg/l
9/23/2008: 0.13 mg/l

MW-06-7 *
5/29/2008: < 0.05 mg/l
9/23/2008: < 0.05 mg/l

MW-97-11
1/11/2005: < 0.05 mg/l
5/21/2008: < 0.05 mg/l
9/25/2008: < 0.05 mg/l

MW-GW-3
6/30/1998: 1.06 mg/l
9/30/1998: 0.68 mg/l
12/31/1998: 0.13 mg/l
3/31/1999: 0.14 mg/l
6/30/1999: 0.12 mg/l
9/30/1999: 0.14 mg/l
12/31/1999: 0.13 mg/l
3/31/2000: 0.17 mg/l
6/30/2000: 0.17 mg/l
9/30/2000: 0.17 mg/l
12/31/2000: 0.18 mg/l
3/31/2001: 0.1 mg/l
6/30/2001: 0.17 mg/l
9/30/2001: 13 mg/l
12/31/2001: 0.53 mg/l
3/31/2002: 0.51 mg/l
6/30/2002: 0.26 mg/l
9/30/2002: 0.29 mg/l
12/31/2002: 0.21 mg/l
3/31/2003: 0.25 mg/l
6/30/2003: 0.36 mg/l
9/30/2003: 0.06 mg/l
12/31/2003: 0.09 mg/l
3/31/2004: 0.1 mg/l
6/30/2004: 0.13 mg/l
9/30/2004: 0.05 mg/l
11/30/2004: 0.08 mg/l
12/31/2004: 0.08 mg/l
3/31/2005: 0.13 mg/l
6/30/2005: 0.14 mg/l
7/31/2005: 0.14 mg/l
12/31/2005: 0.14 mg/l
3/31/2006: 0.18 mg/l
6/30/2006: 0.17 mg/l
9/30/2006: 0.12 mg/l
12/31/2006: 0.12 mg/l
3/31/2007: 0.58 mg/l
6/30/2007: 0.18 mg/l
9/30/2007: 0.19 mg/l
12/31/2007: 0.21 mg/l
3/31/2008: 0.25 mg/l
5/20/2008: 0.30 mg/l
6/30/2008: 0.28 mg/l
9/17/2008: 0.26 mg/l
9/30/2008: 0.26 mg/l
12/31/2008: 0.34 mg/l
3/31/2009: 0.49 mg/l
6/30/2009: 0.53 mg/l
9/30/2009: 1.1 mg/l
12/31/2009: 0.33 mg/l
3/31/2010: 0.29 mg/l
6/30/2010: 0.36 mg/l
9/30/2010: 0.54 mg/l

MW-97-8
5/15/2008: 2.60 mg/l
9/24/2008: 2.98 mg/l

MW-06-21
5/17/2008: 1.62 mg/l
9/24/2008: 2.78 mg/l

MW-EPA-4
5/15/2008: 1.25 mg/l
9/20/2008: 1.31 mg/l

MW-97-9
5/16/2008: 0.93 mg/l
9/24/2008: 1.25 mg/l

PW-99-1
1/10/2005: < 0.05 mg/l
5/18/2008: < 0.05 mg/l
5/29/2008: < 0.05 mg/l
9/25/2008: < 0.05 mg/l

PW-99-3
5/28/2008: < 0.05 mg/l
9/22/2008: < 0.05 mg/l

MW-EPA-1
5/14/2008: 0.30 mg/l
9/17/2008: 0.31 mg/l

MW-06-5
5/14/2008: 0.30 mg/l
9/19/2008: 0.73 mg/l

MW-97-1
5/13/2008: < 0.05 mg/l
9/17/2008: < 0.05 mg/l

MW-06-13
5/27/2008: 3.62 mg/l
9/19/2008: 4.47 mg/l

MW-06-16
5/21/2008: 6.48 mg/l
9/20/2008: 6.48 mg/l

MW-06-17
5/27/2008: 4.70 mg/l
9/20/2008: 5.08 mg/l

MW-97-5
5/15/2008: 0.68 mg/l
9/17/2008: 0.73 mg/l

MW-06-23
5/13/2008: 0.68 mg/l
9/16/2008: 0.74 mg/l

MW-EPA-3
5/15/2008: 3.68 mg/l
9/16/2008: 3.95 mg/l

MW-06-14
5/27/2008: 5.90 mg/l
9/18/2008: 6.66 mg/l

MW-97-12
5/27/2008: 7.08 mg/l
9/23/2008: 7.39 mg/l

MW-06-15
5/21/2008: 8.19 mg/l
9/17/2008: 8.25 mg/l

MW-06-18
5/21/2008: 14.0 mg/l
9/25/2008: 14.8 mg/l

MW-06-20
5/20/2008: 7.99 mg/l
9/20/2008: 6.90 mg/l

MW-02-1
1/17/2002: 0.06 mg/l
5/29/2008: < 0.05 mg/l
9/26/2008: < 0.05 mg/l

MW-06-19
5/20/2008: 4.69 mg/l
9/18/2008: 4.89 mg/l

MW-02-2
5/19/2008: 1.29 mg/l
9/22/2008: 1.48 mg/l

MW-01-6
10/9/2001: < 0.01 mg/l
1/17/2002: < 0.05 mg/l
5/19/2008: < 0.05 mg/l
9/18/2008: < 0.05 mg/l

MW-01-3
10/9/2001: < 0.01 mg/l
1/22/2002: < 0.05 mg/l
5/19/2008: 0.74 mg/l
9/19/2008: 0.82 mg/l

MW-97-6
5/17/2008: 0.93 mg/l
9/16/2008: 1.04 mg/l

MW-01-2
10/9/2001: 1.61 mg/l
5/19/2008: 1.89 mg/l
9/22/2008: 1.95 mg/l

MW-01-5
10/4/2001: 1.23 mg/l
1/16/2002: 1.34 mg/l
5/17/2008: 1.86 mg/l
9/16/2008: 2.00 mg/l

MW-01-4
10/4/2001: 1.26 mg/l
1/16/2002: 1.36 mg/l
5/16/2008: 1.93 mg/l
9/16/2008: 2.07 mg/l

MW-01-1
10/8/2001: 2.33 mg/l
1/16/2002: 2.57 mg/l
5/16/2008: 5.11 mg/l
9/17/2008: 5.62 mg/l

MW-97-7
10/8/2001: 3.39 mg/l
1/17/2002: 4.06 mg/l
5/20/2008: 7.81 mg/l
9/26/2008: 6.90 mg/l

MW-06-22
5/21/2008: 26.3 mg/l
9/26/2008: 43.3 mg/l

MW-06-25
5/20/2008: 7.25 mg/l
9/26/2008: 6.89 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

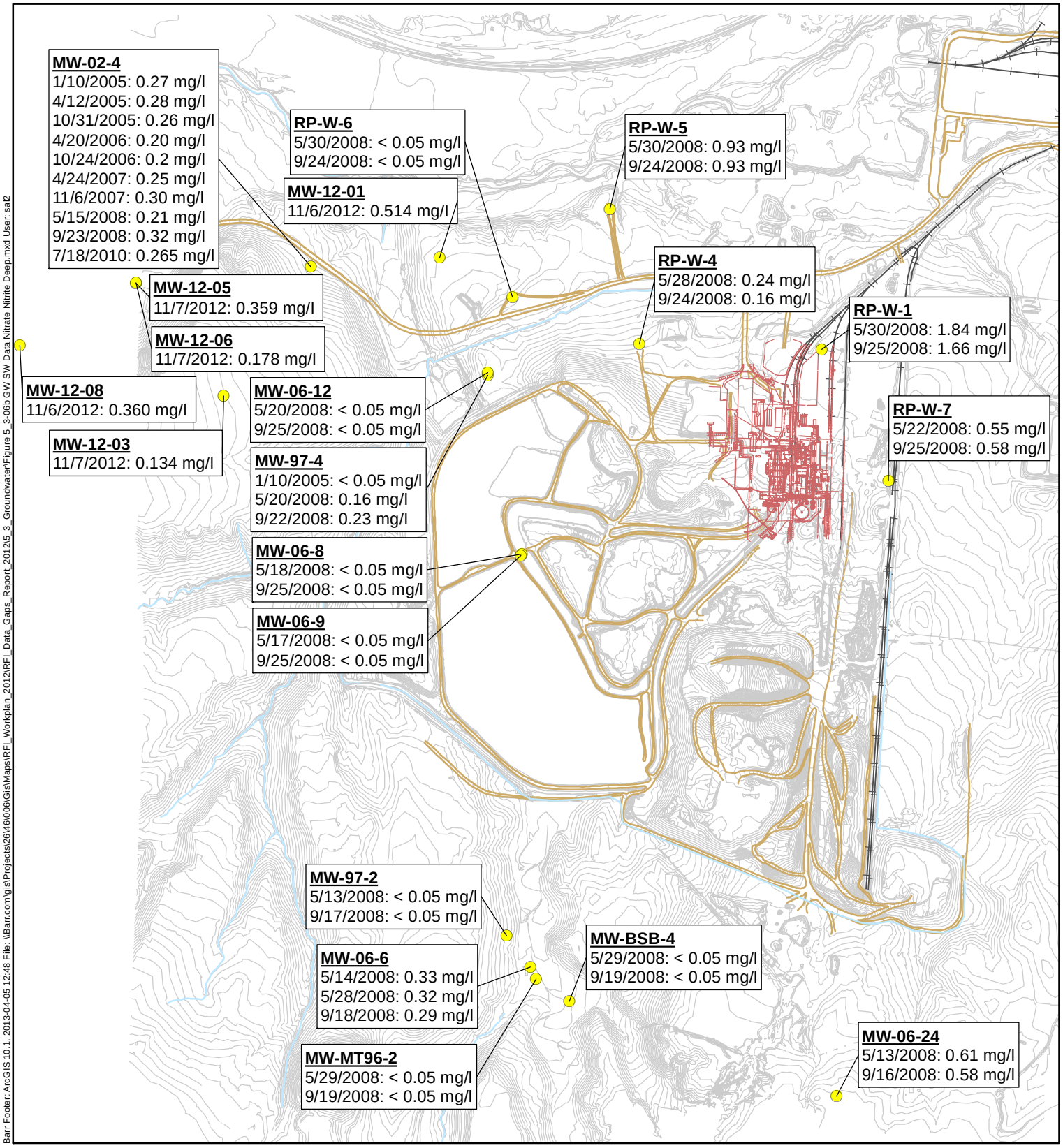
N

Feet
800 0 800

Figure 5.3-6a

ANALYTICAL GROUNDWATER
NITRATE + NITRITE
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:45 File: \\Barr.com\gis\Projects\26k46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-06a GW SW Data Nitrate Nitrite WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 12:48 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-06b GW SW Data Nitrate Nitrite Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-6b

ANALYTICAL GROUNDWATER
NITRATE + NITRITE
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-13
5/27/2008: < 0.05 mg/l
9/19/2008: < 0.05 mg/l

MW-EPA-3
5/15/2008: < 0.05 mg/l
9/16/2008: < 0.05 mg/l

MW-06-16
5/21/2008: < 0.05 mg/l
9/20/2008: < 0.05 mg/l

MW-06-14
5/27/2008: < 0.05 mg/l
9/18/2008: < 0.05 mg/l

MW-97-12
5/27/2008: < 0.05 mg/l
9/23/2008: < 0.05 mg/l

MW-06-15
5/21/2008: < 0.05 mg/l
9/17/2008: < 0.05 mg/l

MW-06-17
5/27/2008: < 0.05 mg/l
9/20/2008: < 0.05 mg/l

MW-06-18
5/21/2008: 0.22 mg/l
9/25/2008: 0.25 mg/l

MW-06-19
5/20/2008: < 0.05 mg/l
9/18/2008: < 0.05 mg/l

MW-06-20
5/20/2008: 0.69 mg/l
9/20/2008: 0.80 mg/l

MW-02-1
1/17/2002: < 0.1 mg/l
5/29/2008: < 0.05 mg/l
9/26/2008: < 0.05 mg/l

MW-97-6
5/17/2008: < 0.05 mg/l
9/16/2008: < 0.05 mg/l

MW-01-6
10/9/2001: 3.79 mg/l
1/17/2002: 3.8 mg/l
5/19/2008: 2.85 mg/l
9/18/2008: 2.71 mg/l

MW-01-3
10/9/2001: 1.01 mg/l
1/22/2002: 1.0 mg/l
5/19/2008: 0.70 mg/l
9/19/2008: 0.74 mg/l

MW-02-2
5/19/2008: 0.06 mg/l
9/22/2008: < 0.05 mg/l

MW-01-2
10/9/2001: 1.20 mg/l
5/19/2008: 0.43 mg/l
9/22/2008: 0.31 mg/l

MW-01-5
10/4/2001: < 0.05 mg/l
1/16/2002: < 0.1 mg/l
5/17/2008: < 0.05 mg/l
9/16/2008: < 0.05 mg/l

MW-01-4
10/4/2001: < 0.05 mg/l
1/16/2002: < 0.1 mg/l
5/16/2008: < 0.05 mg/l J
9/16/2008: < 0.05 mg/l

MW-01-1
10/8/2001: < 0.01 mg/l
1/16/2002: < 0.1 mg/l
5/16/2008: < 0.05 mg/l
9/17/2008: < 0.05 mg/l

MW-97-3
1/10/2005: < 0.1 mg/l
5/28/2008: < 0.05 mg/l
9/23/2008: < 0.05 mg/l

MW-06-10
5/14/2008: < 0.05 mg/l
9/18/2008: < 0.05 mg/l

MW-06-11
5/28/2008: < 0.05 mg/l
9/23/2008: < 0.05 mg/l

MW-EPA-4
5/15/2008: < 0.05 mg/l
9/20/2008: < 0.05 mg/l

MW-06-1
5/15/2008: < 0.05 mg/l
9/18/2008: < 0.05 mg/l
7/17/2010: < 0.050 mg/l

PW-99-1
1/10/2005: < 0.1 mg/l
5/18/2008: < 0.05 mg/l J
5/29/2008: < 0.05 mg/l
9/25/2008: < 0.05 mg/l

MW-12-04
11/7/2012: < 0.050 mg/l

MW-12-02
11/8/2012: < 0.050 mg/l

MW-12-07
11/6/2012: < 0.050 mg/l

MW-97-9
5/16/2008: 0.26 mg/l
9/24/2008: 0.49 mg/l

MW-02-3
1/10/2005: < 0.1 mg/l
4/12/2005: < 0.1 mg/l
10/31/2005: < 0.1 mg/l
4/20/2006: < 0.1 mg/l
10/24/2006: < 0.1 mg/l
4/24/2007: < 0.05 mg/l
11/6/2007: < 0.05 mg/l
5/15/2008: < 0.05 mg/l
9/23/2008: < 0.05 mg/l
7/17/2010: < 0.050 mg/l

MW-06-2
5/15/2008: < 0.05 mg/l
9/23/2008: < 0.05 mg/l
7/18/2010: < 0.050 mg/l

MW-97-8
5/15/2008: 0.40 mg/l
9/24/2008: 0.44 mg/l

MW-97-10
1/11/2005: < 0.1 mg/l
5/21/2008: 0.06 mg/l
9/23/2008: < 0.05 mg/l

MW-06-3
5/14/2008: < 0.05 mg/l
9/19/2008: < 0.05 mg/l
7/16/2010: < 0.050 mg/l

MW-06-21
5/17/2008: 0.08 mg/l
9/24/2008: < 0.05 mg/l

MW-06-7 *
5/29/2008: 10.5 mg/l
9/23/2008: 11.0 mg/l

MW-97-11
1/11/2005: < 0.1 mg/l
5/21/2008: < 0.05 mg/l
9/25/2008: < 0.05 mg/l

MW-EPA-1
5/14/2008: < 0.05 mg/l
9/17/2008: < 0.05 mg/l

PW-99-3
5/28/2008: 0.27 mg/l
9/22/2008: 0.23 mg/l

MW-06-22
5/21/2008: 0.83 mg/l
9/26/2008: 1.54 mg/l

MW-97-1
5/13/2008: < 0.05 mg/l
9/17/2008: < 0.05 mg/l

MW-06-25
5/20/2008: 0.76 mg/l
9/26/2008: 0.63 mg/l

MW-06-4
5/15/2008: < 0.05 mg/l
9/18/2008: < 0.05 mg/l

MW-06-5
5/14/2008: < 0.05 mg/l
9/19/2008: < 0.05 mg/l

MW-97-7
1/17/2002: 0.5 mg/l
5/20/2008: 0.53 mg/l
9/26/2008: 0.60 mg/l

MW-GW-3
5/20/2008: < 0.05 mg/l
9/17/2008: < 0.05 mg/l

MW-97-5
5/15/2008: < 0.05 mg/l
9/17/2008: < 0.05 mg/l

MW-06-23
5/13/2008: < 0.05 mg/l
9/16/2008: < 0.05 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

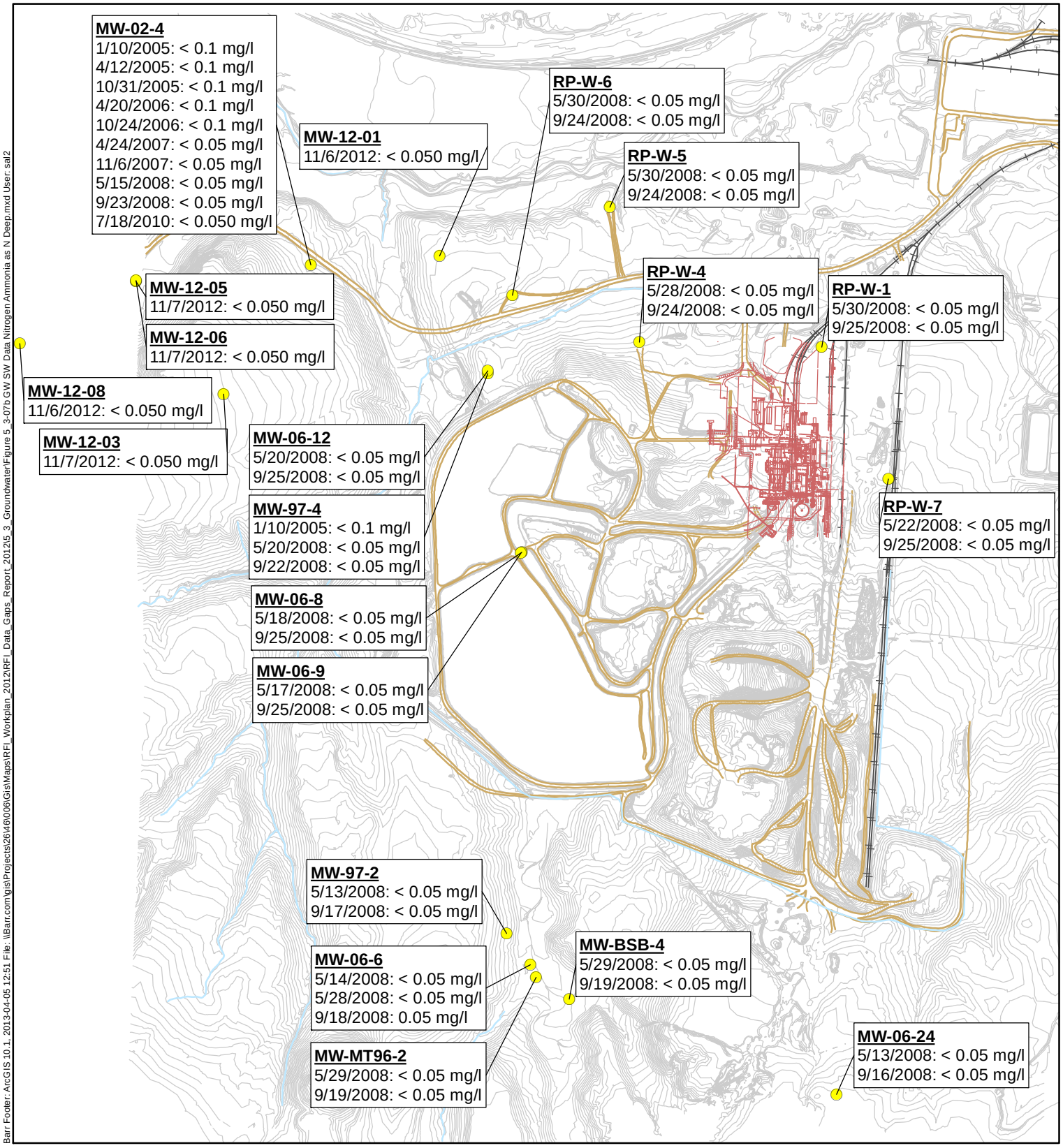
N

Feet
800 0 800

Figure 5.3-7a

ANALYTICAL GROUNDWATER
NITROGEN, AMMONIA as N
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:48 File: \\Barr.com\gis\Projects\26M46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-07a GW SW Data Nitrogen Ammonia as N WaterTable.mxd User: sal2



Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-7b

ANALYTICAL GROUNDWATER
NITROGEN, AMMONIA as N
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-EPA-4
7/16/2003: < 0.0001 mg/l
7/18/2003: < 0.0001 mg/l
7/24/2003: < 0.0001 mg/l
5/15/2008: < 0.0000234 mg/l
9/20/2008: < 0.00153 mg/l R
12/12/2008: < 0.0000234 mg/l

MW-06-11
5/28/2008: < 0.0000234 mg/l
9/23/2008: 0.000201 mg/l R
12/13/2008: < 0.0000234 mg/l

MW-97-9
4/14/1999: < 0.000004 mg/l
5/16/2008: < 0.0000234 mg/l
9/24/2008: < 0.0000234 mg/l

MW-06-10
5/14/2008: < 0.0000234 mg/l
9/18/2008: < 0.0000234 mg/l

MW-06-1
5/15/2008: < 0.0000234 mg/l
9/18/2008: < 0.0000234 mg/l
7/17/2010: < 0.011 ug/l

PW-99-1
4/14/1999: < 0.000004 mg/l
5/18/2008: < 0.0000234 mg/l
5/29/2008: < 0.0000234 mg/l
9/25/2008: < 0.0000234 mg/l

MW-12-07
11/6/2012: < 0.000017 mg/l

MW-12-04
11/7/2012: < 0.000017 mg/l

MW-12-02
11/8/2012: < 0.000017 mg/l

MW-06-2
5/15/2008: < 0.0000234 mg/l
9/23/2008: < 0.0000234 mg/l
7/18/2010: < 0.011 ug/l

MW-97-3
5/28/2008: < 0.0000234 mg/l
9/23/2008: 0.000240 mg/l R
12/14/2008: < 0.0000234 mg/l

MW-02-3
10/22/2004: < 0.00005 mg/l
5/15/2008: < 0.0000234 mg/l
9/23/2008: < 0.0000234 mg/l
7/17/2010: < 0.011 ug/l

MW-97-10
7/16/2003: < 0.0001 mg/l
7/23/2003: < 0.0001 mg/l
5/21/2008: < 0.0000234 mg/l
9/23/2008: 0.000115 mg/l R
12/13/2008: < 0.0000234 mg/l

MW-06-3
5/14/2008: < 0.0000234 mg/l
9/19/2008: < 0.0000234 mg/l
7/16/2010: < 0.011 ug/l

MW-06-7 *
5/28/2008: < 0.0000234 mg/l
9/23/2008: 0.000326 mg/l R
12/16/2008: < 0.0000234 mg/l

MW-97-11
7/21/2003: < 0.0001 mg/l
5/21/2008: < 0.0000234 mg/l
9/25/2008: < 0.0000234 mg/l

MW-EPA-1
5/14/2008: < 0.0000234 mg/l
9/17/2008: < 0.0000234 mg/l

PW-99-3
5/28/2008: < 0.0000234 mg/l
9/22/2008: 0.000329 mg/l R
12/16/2008: < 0.0000234 mg/l

MW-06-4
5/15/2008: < 0.0000234 mg/l
9/18/2008: < 0.0000234 mg/l

MW-97-1
4/14/1999: < 0.000004 mg/l
5/13/2008: < 0.0000234 mg/l
9/17/2008: < 0.0000234 mg/l

MW-06-5
5/14/2008: < 0.0000234 mg/l
9/19/2008: 0.00358 mg/l R
12/13/2008: < 0.0000234 mg/l

MW-GW-3
5/20/2008: < 0.0000234 mg/l
9/17/2008: < 0.0000234 mg/l

MW-97-8
9/24/2008: < 0.0000234 mg/l

MW-06-21
5/17/2008: < 0.0000234 mg/l
9/24/2008: < 0.0000234 mg/l

MW-06-16
5/21/2008: < 0.0000234 mg/l
9/20/2008: < 0.00119 mg/l R
12/12/2008: < 0.0000234 mg/l

MW-06-13
6/9/2008: < 0.0000234 mg/l
9/19/2008: < 0.00168 mg/l R
12/12/2008: < 0.0000234 mg/l

MW-06-22
5/21/2008: < 0.0000234 mg/l
9/26/2008: 0.0000566 mg/l R
12/18/2008: < 0.0000234 mg/l

MW-06-25
5/20/2008: < 0.0000234 mg/l
9/26/2008: < 0.0000234 mg/l

MW-97-7
4/14/1999: < 0.000004 mg/l
10/8/2001: < 0.000004 mg/l
1/17/2002: < 0.00050 mg/l
1/17/2002: 0.000030 mg/l
9/4/2002: < 0.0005 mg/l
5/20/2008: < 0.0000234 mg/l
9/26/2008: 0.0000606 mg/l R
12/15/2008: < 0.0000234 mg/l

MW-97-5
4/14/1999: < 0.000004 mg/l
5/15/2008: < 0.0000234 mg/l
9/17/2008: < 0.0000234 mg/l

MW-06-23
5/13/2008: < 0.0000234 mg/l
9/16/2008: < 0.0000234 mg/l

MW-EPA-3
7/15/2003: < 0.0001 mg/l
7/24/2003: < 0.0001 mg/l
5/15/2008: < 0.0000234 mg/l
9/16/2008: < 0.0000234 mg/l

MW-06-17
6/9/2008: < 0.0000234 mg/l
9/20/2008: < 0.000946 mg/l R
12/13/2008: < 0.0000234 mg/l

MW-06-14
6/9/2008: < 0.0000234 mg/l
9/18/2008: < 0.0000234 mg/l

MW-97-12
6/9/2008: < 0.0000234 mg/l
9/23/2008: 0.000112 mg/l R
12/15/2008: < 0.0000234 mg/l

MW-06-18
5/21/2008: < 0.0000234 mg/l
9/25/2008: 0.0000562 mg/l R
12/14/2008: < 0.0000234 mg/l

MW-06-15
5/21/2008: < 0.0000234 mg/l
9/17/2008: < 0.0000234 mg/l

MW-06-20
5/20/2008: < 0.0000234 mg/l
9/20/2008: < 0.000805 mg/l R
12/12/2008: < 0.0000234 mg/l

MW-06-19
5/20/2008: < 0.0000234 mg/l
9/18/2008: < 0.0000234 mg/l

MW-02-1
1/17/2002: < 0.0000040 mg/l
9/4/2002: 0.00045 mg/l J
7/22/2003: < 0.0001 mg/l
5/29/2008: < 0.0000234 mg/l
9/26/2008: < 0.0000234 mg/l

MW-97-6
7/23/2003: < 0.0001 mg/l
5/17/2008: < 0.0000234 mg/l
9/16/2008: < 0.0000234 mg/l

MW-01-6
10/9/2001: 0.00250 mg/l
1/17/2002: < 0.000660 mg/l
9/5/2002: 0.00413 mg/l
5/19/2008: 0.00121 mg/l
9/18/2008: < 0.0000234 mg/l

MW-02-2
9/5/2002: 0.00019 mg/l J
5/19/2008: < 0.0000234 mg/l
9/22/2008: 0.000382 mg/l R
12/15/2008: < 0.0000234 mg/l

MW-01-3
10/9/2001: 0.403 mg/l
1/22/2002: 0.250 mg/l
9/5/2002: 1.21 mg/l
5/19/2008: 0.513 mg/l
9/19/2008: 0.290 mg/l
12/16/2008: 0.366 mg/l

MW-01-2
10/9/2001: < 0.000004 mg/l
1/16/2002: < 0.0000040 mg/l
9/4/2002: < 0.0005 mg/l
7/22/2003: < 0.0001 mg/l
5/19/2008: < 0.0000234 mg/l
9/22/2008: 0.000441 mg/l R
12/16/2008: < 0.0000234 mg/l

MW-01-5
10/4/2001: < 0.000004 mg/l
1/16/2002: < 0.0000040 mg/l
9/3/2002: < 0.0005 mg/l
5/17/2008: < 0.0000234 mg/l
9/16/2008: < 0.0000234 mg/l

MW-01-4
10/4/2001: < 0.000004 mg/l
1/16/2002: < 0.0000040 mg/l
9/3/2002: < 0.0005 mg/l
5/16/2008: < 0.0000234 mg/l
9/16/2008: < 0.0000234 mg/l

MW-01-1
10/8/2001: < 0.000004 mg/l
1/16/2002: < 0.00050 mg/l
9/4/2002: < 0.0005 mg/l
5/16/2008: < 0.0000234 mg/l
9/17/2008: < 0.0000234 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

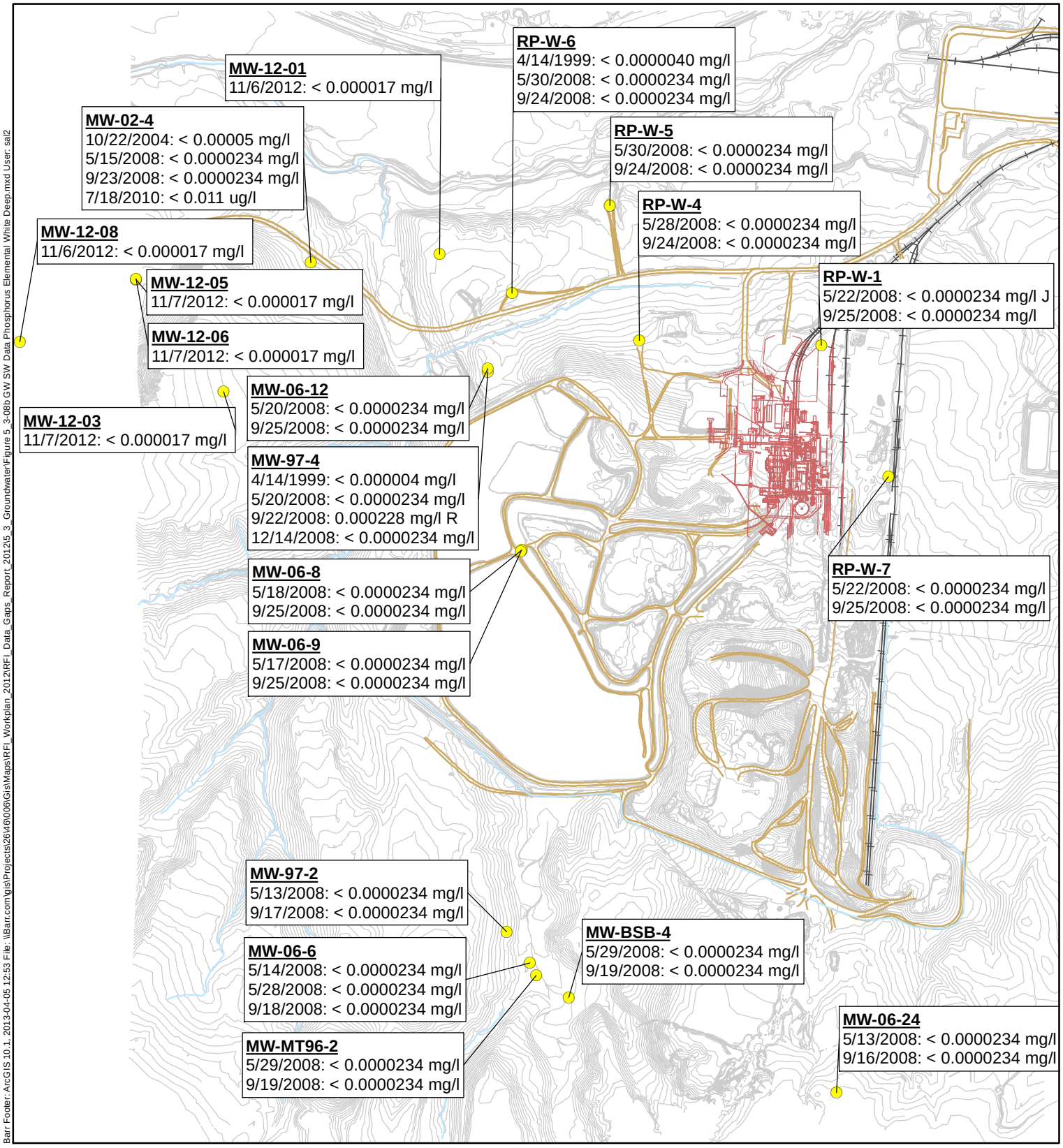
N

Feet
800 0 800

Figure 5.3-8a

ANALYTICAL GROUNDWATER
PHOSPHORUS, ELEMENTAL (WHITE)
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:51 File: \\Barr.com\gis\Projects\26A6\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-08a GW SW Data Phosphorus Elemental White WaterTable.mxd User: sal2



Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-8b

ANALYTICAL GROUNDWATER
PHOSPHORUS, ELEMENTAL (WHITE)
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-97-9
11/5/1997: 3.53 mg/l
10/7/1998: 10.2 mg/l
10/7/1998: 10.3 mg/l
4/14/1999: 4.2 mg/l
5/16/2008: 5.70 mg/l
9/24/2008: 7.12 mg/l

MW-EPA-3
11/5/1997: 0.08 mg/l
10/12/1998: 0.07 mg/l
10/12/1998: < 0.1 mg/l
7/15/2003: < 0.02 mg/l
7/24/2003: 0.043 mg/l
5/15/2008: 0.05 mg/l
9/16/2008: 0.05 mg/l

MW-EPA-4
11/5/1997: 0.20 mg/l
10/12/1998: 1.41 mg/l
10/12/1998: 0.2 mg/l
7/15/2003: 0.21 mg/l
7/24/2003: 0.21 mg/l
5/15/2008: 0.17 mg/l
9/20/2008: 0.17 mg/l

MW-06-14
5/27/2008: 0.16 mg/l
9/18/2008: 0.14 mg/l

MW-06-10
5/14/2008: 0.23 mg/l
9/18/2008: 0.20 mg/l

MW-97-12
11/5/1997: 5.89 mg/l
10/12/1998: 6.26 mg/l
10/12/1998: 5.5 mg/l
5/27/2008: 3.97 mg/l
9/23/2008: 8.44 mg/l

MW-97-3
11/4/1997: 1.19 mg/l
10/7/1998: 0.51 mg/l
10/7/1998: 2.7 mg/l
1/10/2005: 0.15 mg/l
5/28/2008: 0.17 mg/l
9/23/2008: 0.15 mg/l

MW-06-11
5/28/2008: 0.55 mg/l
9/23/2008: 0.43 mg/l

MW-06-15
5/21/2008: 0.11 mg/l
9/17/2008: 0.10 mg/l

MW-06-1
5/15/2008: 0.21 mg/l
9/18/2008: 0.20 mg/l
7/17/2010: 0.200 mg/l

MW-06-17
5/27/2008: 8.07 mg/l
9/20/2008: 8.64 mg/l

MW-06-18
5/21/2008: 51.3 mg/l
9/25/2008: 49.0 mg/l

MW-06-13
5/27/2008: 0.49 mg/l
9/19/2008: 0.40 mg/l

MW-12-02
11/8/2012: 0.800 mg/l

MW-06-20
5/20/2008: 41.3 mg/l
9/20/2008: 31.3 mg/l

MW-12-04
11/7/2012: 0.120 mg/l

MW-12-07
11/6/2012: 0.132 mg/l

MW-06-2
5/15/2008: 0.22 mg/l
9/23/2008: 0.19 mg/l
7/18/2010: 0.224 mg/l

MW-06-16
5/21/2008: 0.28 mg/l
9/20/2008: 0.30 mg/l

MW-06-19
5/20/2008: 0.13 mg/l
9/18/2008: 0.13 mg/l

MW-02-3
10/9/2002: 0.23 mg/l
1/10/2005: 0.17 mg/l
4/12/2005: 0.19 mg/l
10/31/2005: 0.21 mg/l
4/20/2006: 0.20 mg/l
10/24/2006: 0.5 mg/l
4/24/2007: 0.20 mg/l
11/6/2007: 0.17 mg/l
5/15/2008: 0.19 mg/l
9/23/2008: 0.21 mg/l
7/17/2010: 0.187 mg/l

PW-99-1
4/14/1999: 2.5 mg/l
1/10/2005: 0.94 mg/l
5/18/2008: 0.81 mg/l
5/29/2008: < 0.82 mg/l
9/25/2008: 0.75 mg/l

MW-97-8
11/5/1997: 0.46 mg/l
10/7/1998: 3.43 mg/l
10/7/1998: 1.3 mg/l
5/15/2008: 0.49 mg/l
9/24/2008: 0.48 mg/l

MW-02-1
1/17/2002: 17.6 mg/l h
9/4/2002: 19.2 mg/l
7/22/2003: 7.9 mg/l
5/29/2008: 4.56 mg/l
9/26/2008: 1.30 mg/l

MW-97-10
11/4/1997: 0.69 mg/l
10/8/1998: 0.49 mg/l
10/8/1998: 0.5 mg/l
7/15/2003: 0.71 mg/l
7/23/2003: 0.27 mg/l
1/11/2005: 0.19 mg/l
5/21/2008: 0.20 mg/l
9/23/2008: 0.21 mg/l

MW-06-7 *
5/29/2008: 55.1 mg/l
9/23/2008: 300 mg/l

MW-01-6
10/9/2001: 234 mg/l
1/17/2002: 271 mg/l h
9/5/2002: 238 mg/l
5/19/2008: 169 mg/l
9/18/2008: 91.4 mg/l

MW-06-3
5/14/2008: 0.11 mg/l
9/19/2008: 0.07 mg/l
7/16/2010: 0.084 mg/l

MW-97-6
11/4/1997: 0.25 mg/l
10/8/1998: 0.81 mg/l
10/8/1998: < 0.1 mg/l
7/23/2003: 0.036 mg/l
5/17/2008: 0.04 mg/l
9/16/2008: 0.11 mg/l

MW-97-11
11/5/1997: 3.46 mg/l
10/8/1998: 1.86 mg/l
10/8/1998: 3.4 mg/l
7/21/2003: 0.75 mg/l
1/11/2005: 0.69 mg/l
5/21/2008: 0.31 mg/l
9/25/2008: 0.19 mg/l

MW-01-3
10/9/2001: 128 mg/l
1/22/2002: 54 mg/l h
9/5/2002: 59 mg/l
5/19/2008: 94.5 mg/l
9/19/2008: 68.6 mg/l

MW-EPA-1
10/8/1998: 0.06 mg/l
10/8/1998: < 0.1 mg/l
5/14/2008: 0.05 mg/l
9/17/2008: 0.05 mg/l

MW-06-21
5/17/2008: 0.55 mg/l
9/24/2008: 0.55 mg/l

MW-02-2
9/5/2002: 36.0 mg/l
5/19/2008: 42.1 mg/l
9/22/2008: 54.5 mg/l

PW-99-3
5/28/2008: 0.70 mg/l
9/22/2008: 1.79 mg/l

MW-06-22
5/21/2008: 0.88 mg/l
9/26/2008: 1.30 mg/l

MW-06-4
5/15/2008: 0.04 mg/l
9/18/2008: 0.06 mg/l

MW-01-2
10/9/2001: 25.3 mg/l
1/16/2002: 26.0 mg/l h
9/4/2002: 16.3 mg/l
7/22/2003: 13 mg/l
5/19/2008: 18.7 mg/l
9/22/2008: 17.0 mg/l

MW-97-1
11/4/1997: 0.15 mg/l
10/8/1998: 0.12 mg/l
10/8/1998: < 0.1 mg/l
4/14/1999: 1.0 mg/l
5/13/2008: 0.15 mg/l
9/17/2008: 0.18 mg/l

MW-06-25
5/20/2008: 2.59 mg/l
9/26/2008: 2.43 mg/l

MW-01-5
10/4/2001: 0.104 mg/l
1/16/2002: 0.02 mg/l h
9/3/2002: 0.04 mg/l
5/17/2008: 0.05 mg/l
9/16/2008: 0.05 mg/l

MW-GW-3
5/20/2008: 0.22 mg/l
9/17/2008: 0.14 mg/l

MW-97-7
11/4/1997: 10 mg/l
10/8/1998: 6.00 mg/l
10/8/1998: 4.9 mg/l
4/14/1999: 4.5 mg/l
10/8/2001: 4.01 mg/l
1/17/2002: 3.7 mg/l
1/17/2002: 3.77 mg/l h
9/4/2002: 4.14 mg/l
5/20/2008: 2.70 mg/l
9/26/2008: 2.58 mg/l

MW-97-5
11/4/1997: 8.68 mg/l
10/8/1998: 0.07 mg/l
10/8/1998: < 0.1 mg/l
4/14/1999: 0.4 mg/l
5/15/2008: 0.18 mg/l
9/17/2008: 0.09 mg/l

MW-01-4
10/4/2001: 0.038 mg/l
1/16/2002: 0.02 mg/l h
9/3/2002: 0.04 mg/l
5/16/2008: 0.05 mg/l
9/16/2008: 0.03 mg/l

MW-06-5
5/14/2008: 0.29 mg/l
9/19/2008: 0.25 mg/l

MW-06-23
5/13/2008: 0.06 mg/l
9/16/2008: 0.04 mg/l

MW-01-1
10/8/2001: 0.096 mg/l
1/16/2002: 0.04 mg/l h
9/4/2002: 0.04 mg/l
5/16/2008: 0.05 mg/l
9/17/2008: 0.04 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

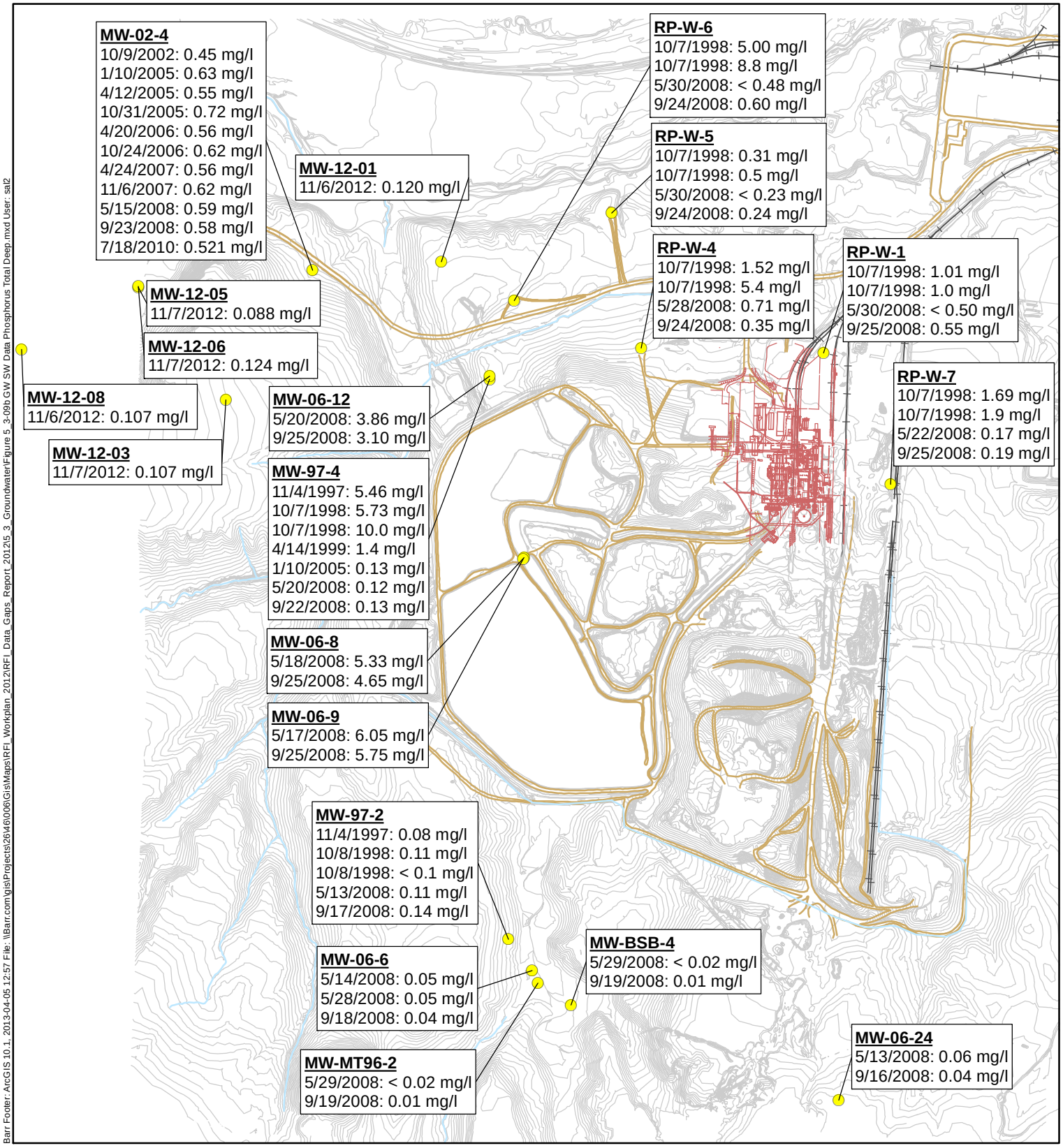
N

Feet
800 0 800

Figure 5.3-9a

ANALYTICAL GROUNDWATER
PHOSPHORUS, TOTAL
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:54 File: \\Barr.com\gis\Projects\26k46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-09a GW SW Data Phosphorus Total WaterTable.mxd User: sal2



Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-9b

ANALYTICAL GROUNDWATER
PHOSPHORUS, TOTAL
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-13
5/27/2008: 471 mg/l
9/19/2008: 446 mg/l

MW-EPA-4
11/5/1997: 709 mg/l
10/12/1998: 746 mg/l
5/15/2008: 811 mg/l
9/20/2008: 805 mg/l

MW-06-11
5/28/2008: 1130 mg/l
9/23/2008: 900 mg/l

MW-97-9
11/5/1997: 1020 mg/l
10/7/1998: 938 mg/l
5/16/2008: 464 mg/l
9/24/2008: 478 mg/l

MW-06-10
5/14/2008: 414 mg/l
9/18/2008: 425 mg/l

MW-97-8
11/5/1997: 1150 mg/l
10/7/1998: 691 mg/l
5/15/2008: 485 mg/l
9/24/2008: 493 mg/l

MW-06-16
5/21/2008: 703 mg/l
9/20/2008: 710 mg/l

MW-EPA-3
11/5/1997: 186 mg/l
10/12/1998: 174 mg/l
5/15/2008: 133 mg/l
9/16/2008: 117 mg/l

MW-06-14
5/27/2008: 558 mg/l
9/18/2008: 487 mg/l

MW-97-12
11/5/1997: 959 mg/l
10/12/1998: 655 mg/l
5/27/2008: 236 mg/l
9/23/2008: 245 mg/l

MW-06-17
5/27/2008: 575 mg/l
9/20/2008: 489 mg/l

MW-06-15
5/21/2008: 429 mg/l
9/17/2008: 461 mg/l

MW-06-18
5/21/2008: 647 mg/l
9/25/2008: 601 mg/l

MW-06-20
5/20/2008: 557 mg/l
9/20/2008: 528 mg/l

MW-06-19
5/20/2008: 525 mg/l
9/18/2008: 465 mg/l

MW-02-1
1/17/2002: 984 mg/l
9/4/2002: 1020 mg/l
5/29/2008: 1200 mg/l
9/26/2008: 1350 mg/l

MW-97-6
11/4/1997: 108 mg/l
10/8/1998: 64 mg/l
5/17/2008: 86.0 mg/l
9/16/2008: 87.4 mg/l

MW-01-6
10/9/2001: 482 mg/l
1/17/2002: 443 mg/l
9/5/2002: 450 mg/l
5/19/2008: 249 mg/l
9/18/2008: 271 mg/l

MW-02-2
9/5/2002: 392 mg/l
5/19/2008: 240 mg/l
9/22/2008: 240 mg/l

MW-01-3
10/9/2001: 486 mg/l
1/22/2002: 489 mg/l
9/5/2002: 412 mg/l
5/19/2008: 227 mg/l
9/19/2008: 246 mg/l

MW-01-2
10/9/2001: 403 mg/l
1/16/2002: 417 mg/l
9/4/2002: 342 mg/l
5/19/2008: 257 mg/l
9/22/2008: 238 mg/l

MW-01-5
10/4/2001: 108 mg/l
1/16/2002: 113 mg/l
5/17/2008: 153 mg/l
9/16/2008: 155 mg/l

MW-01-4
10/4/2001: 104 mg/l
1/16/2002: 113 mg/l
5/16/2008: 147 mg/l
9/16/2008: 147 mg/l

MW-01-1
10/8/2001: 215 mg/l
1/16/2002: 233 mg/l
5/16/2008: 457 mg/l
9/17/2008: 441 mg/l

MW-12-02
11/8/2012: 492 mg/l

MW-06-1
5/15/2008: 591 mg/l
9/18/2008: 568 mg/l
7/17/2010: 401 mg/l

MW-97-3
11/4/1997: 786 mg/l
10/7/1998: 802 mg/l
1/10/2005: 324 mg/l
5/28/2008: 343 mg/l
9/23/2008: 344 mg/l

MW-12-04
11/7/2012: 96.5 mg/l

MW-12-07
11/6/2012: 88.8 mg/l

MW-06-2
5/15/2008: 693 mg/l
9/23/2008: 835 mg/l
7/18/2010: 796 mg/l

MW-02-3
10/9/2002: 909 mg/l
1/10/2005: 744 mg/l
4/12/2005: 740 mg/l
10/31/2005: 722 mg/l
4/20/2006: 739 mg/l
10/24/2006: 722 mg/l
4/24/2007: 670 mg/l
11/6/2007: 672 mg/l
5/15/2008: 641 mg/l
9/23/2008: 628 mg/l
7/17/2010: 632 mg/l

MW-06-3
5/14/2008: 445 mg/l
9/19/2008: 454 mg/l
7/16/2010: 468 mg/l

PW-99-1
1/10/2005: 587 mg/l
5/18/2008: 670 mg/l
5/29/2008: 660 mg/l
9/25/2008: 679 mg/l

MW-97-10
11/4/1997: 1290 mg/l
10/8/1998: 1140 mg/l
1/11/2005: 555 mg/l
5/21/2008: 652 mg/l
9/23/2008: 607 mg/l

MW-06-7 *
5/29/2008: 813 mg/l
9/23/2008: 732 mg/l

MW-97-11
11/5/1997: 1130 mg/l
10/8/1998: 1220 mg/l
1/11/2005: 1070 mg/l
5/21/2008: 1010 mg/l
9/25/2008: 1290 mg/l

MW-EPA-1
10/8/1998: 27 mg/l
5/14/2008: 33.4 mg/l
9/17/2008: 32.6 mg/l

PW-99-3
5/28/2008: 64.4 mg/l
9/22/2008: 65 mg/l

MW-06-21
5/17/2008: 471 mg/l
9/24/2008: 461 mg/l

MW-06-22
5/21/2008: 601 mg/l
9/26/2008: 579 mg/l

MW-06-25
5/20/2008: 657 mg/l
9/26/2008: 619 mg/l

MW-97-1
11/4/1997: 35 mg/l
10/8/1998: 39 mg/l
5/13/2008: 44.9 mg/l
9/17/2008: 41.2 mg/l

MW-06-4
5/15/2008: 26.7 mg/l
9/18/2008: 25.6 mg/l

MW-GW-3
5/20/2008: 58 mg/l
9/17/2008: 57.6 mg/l

MW-06-5
5/14/2008: 53.6 mg/l
9/19/2008: 53 mg/l

MW-97-7
11/4/1997: 1050 mg/l
10/8/1998: 1040 mg/l
10/8/2001: 796 mg/l
1/17/2002: 894 mg/l
1/17/2002: 868 mg/l
5/20/2008: 620 mg/l
9/26/2008: 595 mg/l

MW-97-5
11/4/1997: 22 mg/l
10/8/1998: 16 mg/l
5/15/2008: 17.6 mg/l
9/17/2008: 17.7 mg/l

MW-06-23
5/13/2008: 15.4 mg/l
9/16/2008: 15.4 mg/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

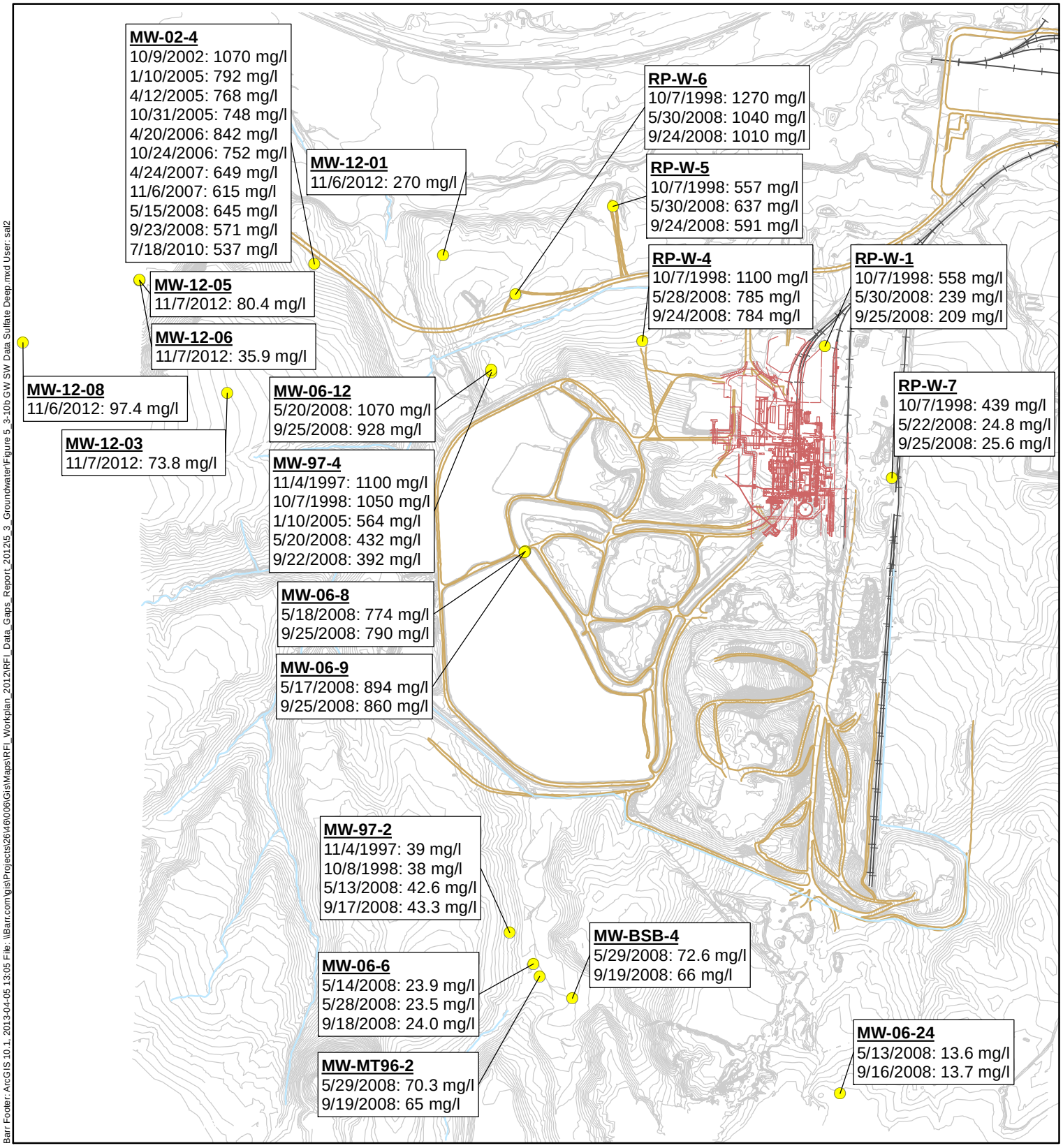
N

Feet
800 0 800

Figure 5.3-10a

ANALYTICAL GROUNDWATER
SULFATE
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:55 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-10a GW SW Data Sulfate WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 13:05 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-10b GW SW Data Sulfate Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-10b

ANALYTICAL GROUNDWATER
SULFATE
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-EPA-4
11/5/1997: < 50 ug/l D
10/12/1998: < 3 ug/l D
7/24/2003: < 4 ug/l T
7/24/2003: 0.15 ug/l J D
5/15/2008: 0.08 ug/l T
9/20/2008: 0.06 ug/l T

MW-06-11
5/28/2008: < 0.1 ug/l T
9/23/2008: 0.09 ug/l T

MW-97-9
11/5/1997: < 50 ug/l D
10/7/1998: < 3 ug/l D
5/16/2008: 2.2 ug/l T
9/24/2008: 2.5 ug/l T

MW-06-1
5/15/2008: 0.26 ug/l T
9/18/2008: 0.27 ug/l T
7/17/2010: 0.26 ug/l T

MW-97-3
11/4/1997: < 50 ug/l D
10/7/1998: < 3 ug/l D
5/28/2008: 0.43 ug/l T
9/23/2008: 0.41 ug/l T

MW-06-10
5/14/2008: 0.15 ug/l T
9/18/2008: 0.15 ug/l T

MW-12-02
11/8/2012: 0.19 ug/l T

MW-12-04
11/7/2012: 0.38 ug/l T

MW-12-07
11/6/2012: 0.28 ug/l T

PW-99-1
5/18/2008: 0.25 ug/l T
5/29/2008: 0.31 ug/l T
9/25/2008: 0.29 ug/l T

MW-06-2
5/15/2008: 0.16 ug/l T
9/23/2008: 0.15 ug/l T
7/18/2010: 0.15 ug/l T

MW-02-3
5/15/2008: 0.17 ug/l T
9/23/2008: 0.17 ug/l T
7/17/2010: 0.16 ug/l T

MW-97-10
11/4/1997: < 50 ug/l D
10/8/1998: < 3 ug/l D
7/23/2003: < 2 ug/l T
7/23/2003: 0.38 ug/l J D
5/21/2008: 0.24 ug/l T
9/23/2008: 0.25 ug/l T

MW-06-3
5/14/2008: 0.19 ug/l T
9/19/2008: 0.2 ug/l T
7/16/2010: 0.19 ug/l T

MW-06-7 *
5/29/2008: 0.85 ug/l T
9/23/2008: 0.89 ug/l T

MW-97-11
11/5/1997: < 50 ug/l D
10/8/1998: < 3 ug/l D
7/21/2003: < 8 ug/l T
7/21/2003: 0.42 ug/l J D
5/21/2008: 0.41 ug/l T
9/25/2008: 0.35 ug/l T

MW-GW-3
6/30/1998: < 5 ug/l D
9/30/1998: < 5 ug/l D
12/31/1998: < 50 ug/l D
3/31/1999: < 3 ug/l D
6/30/1999: < 3 ug/l D
9/30/1999: < 3 ug/l D
12/31/1999: < 3 ug/l D
3/31/2000: < 3 ug/l D
6/30/2000: < 3 ug/l D
9/30/2000: < 3 ug/l D
12/31/2000: < 3 ug/l D
3/31/2001: < 3 ug/l D
6/30/2001: < 3 ug/l D
9/30/2001: < 3 ug/l D
12/31/2001: < 3 ug/l D
3/31/2002: < 3 ug/l D
6/30/2002: < 3 ug/l D
9/30/2002: < 3 ug/l D
12/31/2002: < 3 ug/l D
3/31/2003: < 3 ug/l D
6/30/2003: < 3 ug/l D
9/30/2003: < 3 ug/l D
12/31/2003: < 3 ug/l D
3/31/2004: < 1 ug/l D
6/30/2004: < 1 ug/l D
9/30/2004: < 1 ug/l D
11/30/2004: < 1 ug/l D
12/31/2004: < 1 ug/l D
3/31/2005: < 1 ug/l D
6/30/2005: < 1 ug/l D
7/31/2005: < 1 ug/l D
12/31/2005: < 0.1 ug/l D
3/31/2006: < 1 ug/l D
6/30/2006: < 1 ug/l D
9/30/2006: < 1 ug/l D
12/31/2006: < 1 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: < 1 ug/l D
9/30/2007: < 3 ug/l D
12/31/2007: < 3 ug/l D
3/31/2008: < 3 ug/l D
5/20/2008: 0.2 ug/l T
6/30/2008: < 3 ug/l D
9/17/2008: 0.14 ug/l T
9/30/2008: < 3 ug/l D
12/31/2008: < 3 ug/l D
3/31/2009: < 3 ug/l D
6/30/2009: < 3 ug/l D
9/30/2009: < 3 ug/l D
12/31/2009: < 3 ug/l D
3/31/2010: < 3 ug/l D
6/30/2010: < 3 ug/l D
9/30/2010: < 3 ug/l D

MW-06-4
5/15/2008: 0.42 ug/l T
9/18/2008: 0.43 ug/l T

MW-GW-2
6/30/1998: < 5 ug/l D
9/30/1998: < 5 ug/l D
12/31/1998: < 50 ug/l D
3/31/1999: < 3 ug/l D
6/30/1999: < 3 ug/l D
9/30/1999: < 3 ug/l D
12/31/1999: < 3 ug/l D
3/31/2000: < 3 ug/l D
6/30/2000: < 3 ug/l D
9/30/2000: < 3 ug/l D
12/31/2000: < 3 ug/l D
3/31/2001: < 3 ug/l D
6/30/2001: < 3 ug/l D
9/30/2001: < 3 ug/l D
12/31/2001: < 3 ug/l D
3/31/2002: < 3 ug/l D
6/30/2002: < 3 ug/l D
9/30/2002: < 3 ug/l D
12/31/2002: < 3 ug/l D
3/31/2003: < 3 ug/l D
6/30/2003: < 3 ug/l D
9/30/2003: < 3 ug/l D
12/31/2003: < 3 ug/l D
3/31/2004: < 1 ug/l D
6/30/2004: < 1 ug/l D
9/30/2004: < 1 ug/l D
11/30/2004: < 1 ug/l D
12/31/2004: < 1 ug/l D
3/31/2005: < 1 ug/l D
6/30/2005: < 1 ug/l D
7/31/2005: < 1 ug/l D
6/30/2006: < 1 ug/l D
9/30/2006: < 1 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: < 1 ug/l D
6/30/2008: < 3 ug/l D

MW-EPA-1
8/9/1988: < 29 ug/l T
10/8/1998: < 3 ug/l D
5/14/2008: 0.26 ug/l T
9/17/2008: 0.26 ug/l T

PW-99-3
5/28/2008: 0.6 ug/l T
9/22/2008: 0.75 ug/l T

MW-97-1
11/4/1997: < 50 ug/l D
10/8/1998: < 3 ug/l D
5/13/2008: 0.17 ug/l T
9/17/2008: 0.15 ug/l T

MW-06-22
5/21/2008: 0.74 ug/l T
9/26/2008: 0.67 ug/l T

MW-06-25
5/20/2008: 1.4 ug/l T
9/26/2008: 1.3 ug/l T

MW-06-5
5/14/2008: 0.31 ug/l T
9/19/2008: 0.39 ug/l T

MW-97-7
11/4/1997: < 50 ug/l D
10/8/1998: < 3 ug/l D
10/8/2001: < 3 ug/l D
10/8/2001: < 3 ug/l T
1/17/2002: < 3 ug/l D
1/17/2002: < 3 ug/l D
5/20/2008: 0.21 ug/l T
9/26/2008: < 0.25 ug/l T

MW-97-5
11/4/1997: < 50 ug/l D
10/8/1998: < 3 ug/l D
5/15/2008: 0.08 ug/l T
9/17/2008: 0.07 ug/l T

MW-06-23
5/13/2008: 0.09 ug/l T
9/16/2008: 0.08 ug/l T

MW-06-21
5/17/2008: 0.52 ug/l T
9/24/2008: 0.54 ug/l T

MW-06-13
5/27/2008: < 0.13 ug/l T
9/19/2008: 0.1 ug/l T

MW-97-8
11/5/1997: < 50 ug/l D
10/7/1998: < 3 ug/l D
5/15/2008: 0.65 ug/l T
9/24/2008: 0.7 ug/l T

MW-06-16
5/21/2008: 0.08 ug/l T
9/20/2008: 0.08 ug/l T

MW-EPA-3
8/9/1988: < 29 ug/l T
11/5/1997: < 50 ug/l D
10/12/1998: < 3 ug/l D
7/24/2003: < 2 ug/l T
7/24/2003: 0.17 ug/l J D
5/15/2008: 0.05 ug/l T
9/16/2008: 0.06 ug/l T

MW-06-14
5/27/2008: < 0.07 ug/l T
9/18/2008: 0.1 ug/l T

MW-97-12
11/5/1997: < 50 ug/l D
10/12/1998: < 3 ug/l D
5/27/2008: < 0.23 ug/l T
9/23/2008: 2.23 ug/l R T
12/15/2008: 0.23 ug/l T

MW-06-17
5/27/2008: < 0.16 ug/l T
9/20/2008: 0.15 ug/l T

MW-06-15
5/21/2008: 0.06 ug/l T
9/17/2008: 0.07 ug/l T

MW-06-18
5/21/2008: 0.11 ug/l T
9/25/2008: < 0.25 ug/l T

MW-06-20
5/20/2008: 0.11 ug/l T
9/20/2008: 0.11 ug/l T

MW-06-19
5/20/2008: 0.1 ug/l T
9/18/2008: 0.11 ug/l T

MW-02-1
1/17/2002: < 3 ug/l D
7/22/2003: < 2 ug/l T
7/22/2003: 0.16 ug/l J D
5/29/2008: < 0.05 ug/l T
9/26/2008: < 0.25 ug/l T

MW-01-6
10/9/2001: < 3 ug/l D
10/9/2001: < 3 ug/l T
1/17/2002: < 3 ug/l D
5/19/2008: < 0.05 ug/l T
9/18/2008: 0.05 ug/l T

MW-97-6
11/4/1997: < 50 ug/l D
10/8/1998: < 3 ug/l D
7/23/2003: < 2 ug/l T
7/23/2003: 0.25 ug/l J D
5/17/2008: 0.05 ug/l T
9/16/2008: 0.07 ug/l T

MW-02-2
5/19/2008: 0.13 ug/l T
9/22/2008: 0.12 ug/l T

MW-01-3
10/9/2001: < 3 ug/l D
10/9/2001: < 3 ug/l T
1/22/2002: < 3 ug/l D
5/19/2008: 0.14 ug/l T
9/19/2008: 0.17 ug/l T

MW-01-2
10/9/2001: < 3 ug/l D
10/9/2001: < 3 ug/l T
1/16/2002: < 3 ug/l D
7/22/2003: 0.44 ug/l J D
7/22/2003: < 2 ug/l T
5/19/2008: 0.36 ug/l T
9/22/2008: 0.26 ug/l T

MW-01-5
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 3 ug/l D
5/17/2008: 0.07 ug/l T
9/16/2008: 0.09 ug/l T

MW-01-4
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 3 ug/l D
5/16/2008: 0.07 ug/l T
9/16/2008: 0.09 ug/l T

MW-01-1
10/8/2001: < 3 ug/l D
10/8/2001: < 3 ug/l T
1/16/2002: < 3 ug/l D
5/16/2008: 0.1 ug/l T
9/17/2008: 0.09 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

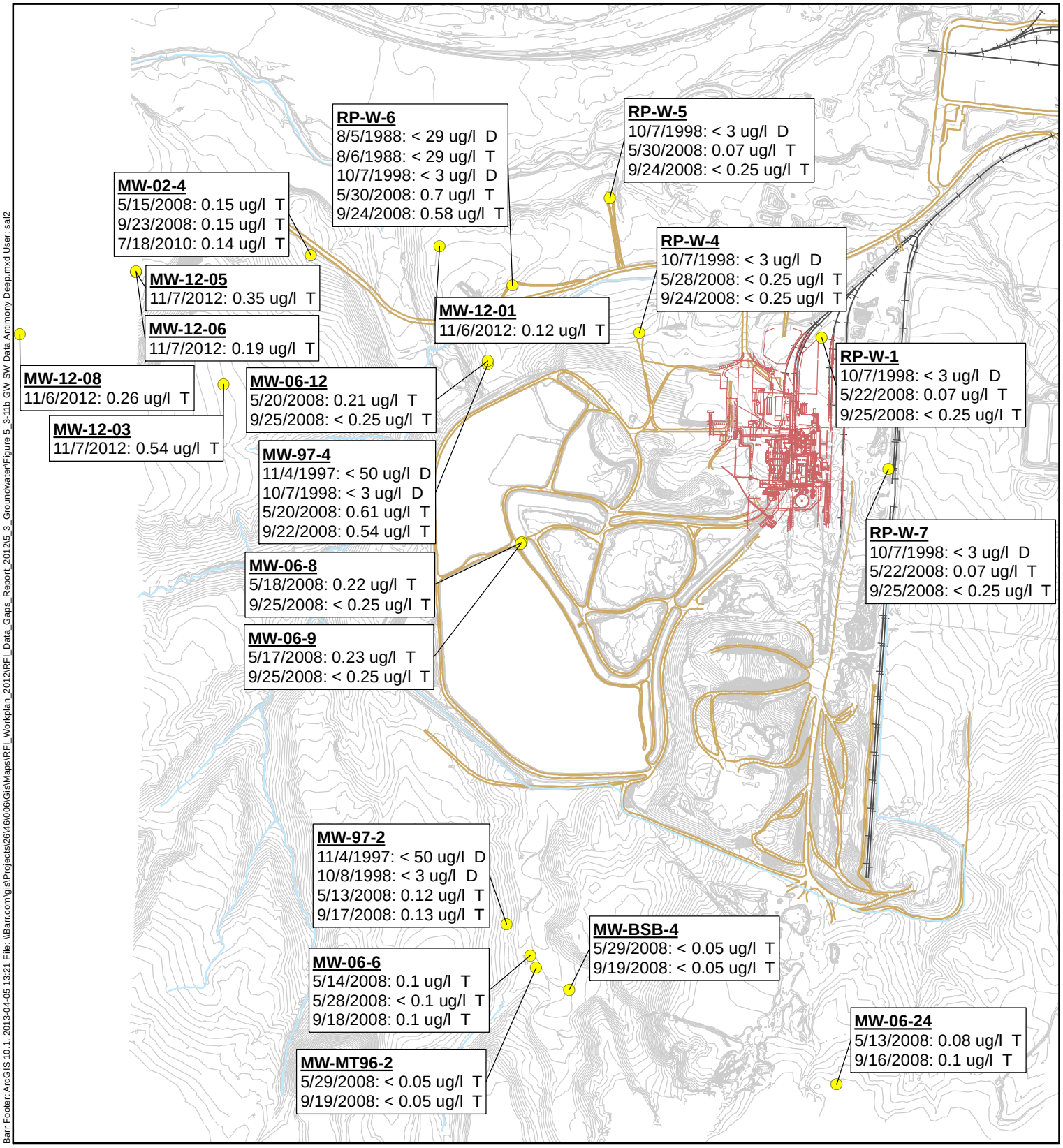
N

Feet
800 0 800

Figure 5.3-11a

ANALYTICAL GROUNDWATER
ANTIMONY
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 15:59 File: \\Barr.com\gis\Projects\26x46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-11a GW SW Data Antimony WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 13:21 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-11b GW SW Data Antimony Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-11b

ANALYTICAL GROUNDWATER
ANTIMONY
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-1
5/15/2008: 4.9 ug/l T
9/18/2008: 5.3 ug/l T
7/17/2010: 4.9 ug/l T

MW-02-3
10/9/2002: 11 ug/l D
10/22/2004: 12 ug/l D
1/10/2005: 11 ug/l D
1/10/2005: 9 ug/l T
4/12/2005: 13 ug/l D
4/12/2005: 9 ug/l T
10/31/2005: 11.2 ug/l D
10/31/2005: 12.4 ug/l T
10/31/2005: 11 ug/l D
10/31/2005: 10 ug/l T
4/20/2006: 12 ug/l D
4/20/2006: 14 ug/l T
10/24/2006: 12 ug/l D
10/24/2006: 11 ug/l T
4/24/2007: 15.1 ug/l D
4/24/2007: 15.9 ug/l T
11/6/2007: 17.9 ug/l D
11/6/2007: 17.5 ug/l T
5/15/2008: 12.4 ug/l T
9/23/2008: 13.2 ug/l T
7/17/2010: 11.2 ug/l T

MW-06-10
5/14/2008: 7.7 ug/l T
9/18/2008: 7.9 ug/l T

PW-99-1
3/24/1999: 43 ug/l D
3/25/1999: 45 ug/l D
1/10/2005: 35 ug/l D
1/10/2005: 32 ug/l T
5/18/2008: 33.3 ug/l T
5/29/2008: 33.8 ug/l T
9/25/2008: 33.5 ug/l T

MW-06-16
10/1/2006: < 500 ug/l
5/21/2008: 6 ug/l T
9/20/2008: 8.3 ug/l T

MW-06-13
10/2/2006: < 500 ug/l
5/27/2008: 10.3 ug/l T
9/19/2008: 10.4 ug/l T

MW-06-21
10/11/2006: < 500 ug/l
5/17/2008: 48 ug/l T
9/24/2008: 56.4 ug/l T

MW-EPA-4
11/5/1997: < 5 ug/l D
10/12/1998: 4 ug/l T
7/24/2003: 3.7 ug/l T
7/24/2003: 3.1 ug/l BQQ D
5/15/2008: 4.6 ug/l T
9/20/2008: 5 ug/l T

MW-06-11
5/28/2008: 20.4 ug/l T
9/23/2008: 21.8 ug/l T

MW-02-1
1/17/2002: 8 ug/l D
9/4/2002: 7 ug/l D
7/22/2003: 3.9 ug/l T
7/22/2003: 2.5 ug/l BQQ D
5/29/2008: 4.4 ug/l T
9/26/2008: 5.5 ug/l T

MW-06-17
9/30/2006: < 500 ug/l
5/27/2008: 21.6 ug/l T
9/20/2008: 25 ug/l T

MW-EPA-3
8/9/1988: < 3.8 ug/l B T
11/5/1997: 5 ug/l D
10/12/1998: 6 ug/l T
7/24/2003: 3.2 ug/l T
7/24/2003: 3.3 ug/l BQQ D
5/15/2008: 3.5 ug/l T
9/16/2008: 3.9 ug/l T

MW-06-14
5/27/2008: 4.2 ug/l T
9/18/2008: 4 ug/l T

MW-97-12
11/5/1997: 109 ug/l D
10/12/1998: 93 ug/l T
5/27/2008: 68.8 ug/l T
9/23/2008: 68.1 ug/l R T
12/15/2008: 61.8 ug/l T

MW-06-15
5/21/2008: 3.2 ug/l T
9/17/2008: 3.7 ug/l T

MW-06-18
9/29/2006: < 500 ug/l
5/21/2008: 69.8 ug/l T
9/25/2008: 69.5 ug/l T

MW-06-20
10/3/2006: < 500 ug/l
5/20/2008: 17.7 ug/l T
9/20/2008: 18.7 ug/l T

MW-06-19
5/20/2008: 4.9 ug/l T
9/18/2008: 8.4 ug/l T

MW-02-2
9/5/2002: 31 ug/l D
5/19/2008: 45.3 ug/l T
9/22/2008: 51.5 ug/l T

MW-01-6
10/9/2001: 9 ug/l D
10/9/2001: 9 ug/l T
10/10/2001: < 500 ug/l
1/17/2002: 12 ug/l D
9/5/2002: 9 ug/l D
5/19/2008: 11.2 ug/l T
9/18/2008: 11.5 ug/l T

MW-12-04
11/7/2012: 30.1 ug/l T

MW-12-07
11/6/2012: 3.8 ug/l T

MW-12-02
11/8/2012: 35.7 ug/l T

MW-06-2
5/15/2008: 11.2 ug/l T
9/23/2008: 14 ug/l T
7/18/2010: 11.0 ug/l T

MW-97-10
11/4/1997: 28 ug/l D
10/8/1998: 35 ug/l T
7/23/2003: 26.9 ug/l T
7/23/2003: 27.7 ug/l BQQ D
1/11/2005: 34 ug/l D
1/11/2005: 32 ug/l T
5/21/2008: 31 ug/l T
9/23/2008: 32.8 ug/l T

MW-97-3
11/4/1997: 33 ug/l D
10/7/1998: 50 ug/l T
1/10/2005: 63 ug/l D
1/10/2005: 58 ug/l T
5/28/2008: 51.7 ug/l T
9/23/2008: 50.3 ug/l T

MW-06-3
5/14/2008: 5.2 ug/l T
9/19/2008: 5 ug/l T
7/16/2010: 4.7 ug/l T

MW-97-11
11/5/1997: 15 ug/l D
10/8/1998: 14 ug/l T
7/21/2003: 13.4 ug/l T
7/21/2003: 12.5 ug/l BQQ D
1/11/2005: 16 ug/l D
1/11/2005: 11 ug/l T
5/21/2008: 14.3 ug/l T
9/25/2008: 14.8 ug/l T

MW-97-8
11/5/1997: 41 ug/l D
10/7/1998: 54 ug/l T
5/15/2008: 73.7 ug/l T
9/24/2008: 74.5 ug/l T

MW-06-7 *
5/29/2008: 14.2 ug/l T
9/23/2008: 27.4 ug/l T

MW-97-6
11/4/1997: < 5 ug/l D
10/8/1998: 3 ug/l T
7/23/2003: 2.4 ug/l T
7/23/2003: 2.4 ug/l BQQ D
5/17/2008: 3.2 ug/l T
9/16/2008: 3.8 ug/l T

MW-06-4
5/15/2008: 27.6 ug/l T
9/18/2008: 25.3 ug/l T

MW-GW-3
6/30/1998: 46 ug/l D
9/30/1998: 22 ug/l D
12/31/1998: 22 ug/l D
3/31/1999: 29 ug/l D
6/30/1999: 23 ug/l D
9/30/1999: 20 ug/l D
12/31/1999: 18 ug/l D
3/31/2000: 16 ug/l D
6/30/2000: 18 ug/l D
9/30/2000: 20 ug/l D
12/31/2000: 17 ug/l D
3/31/2001: 20 ug/l D
6/30/2001: 18 ug/l D
9/30/2001: 25 ug/l D
12/31/2001: 18 ug/l D
3/31/2002: 18 ug/l D
6/30/2002: 21 ug/l D
9/30/2002: 21 ug/l D
12/31/2002: 20 ug/l D
3/31/2003: 20 ug/l D
6/30/2003: 20 ug/l D
9/30/2003: 22 ug/l D
12/31/2003: 21 ug/l D
3/31/2004: 20 ug/l D
6/30/2004: 18 ug/l D
9/30/2004: 17 ug/l D
11/30/2004: 21 ug/l D
12/31/2004: 21 ug/l D
3/31/2005: 23 ug/l D
6/30/2005: 22 ug/l D
7/31/2005: 21 ug/l D
12/31/2005: 23 ug/l D
3/31/2006: 34 ug/l D
6/30/2006: 22 ug/l D
9/30/2006: 22 ug/l D
12/31/2006: 23 ug/l D
3/31/2007: 35 ug/l D
6/30/2007: 21 ug/l D
9/30/2007: 22 ug/l D
12/31/2007: 23 ug/l D
3/31/2008: 28 ug/l D
5/20/2008: 24.1 ug/l T
6/30/2008: 22 ug/l D
9/17/2008: 19.2 ug/l T
9/30/2008: 20 ug/l D
12/31/2008: 21 ug/l D
3/31/2009: 24 ug/l D
6/30/2009: 21 ug/l D
9/30/2009: 24 ug/l D
12/31/2009: 26 ug/l D
3/31/2010: 37 ug/l D
6/30/2010: 32 ug/l D
9/30/2010: 30 ug/l D

MW-EPA-1
8/9/1988: 10 ug/l T
10/8/1998: 11 ug/l T
5/14/2008: 8 ug/l T
9/17/2008: 8 ug/l T

MW-GW-2
6/30/1998: 18 ug/l D
9/30/1998: 18 ug/l D
12/31/1998: 27 ug/l D
3/31/1999: 28 ug/l D
6/30/1999: 18 ug/l D
9/30/1999: 22 ug/l D
12/31/1999: 17 ug/l D
3/31/2000: 18 ug/l D
6/30/2000: 17 ug/l D
9/30/2000: 21 ug/l D
12/31/2000: 17 ug/l D
3/31/2001: 18 ug/l D
6/30/2001: 16 ug/l D
9/30/2001: 25 ug/l D
12/31/2001: 14 ug/l D
3/31/2002: 24 ug/l D
6/30/2002: 18 ug/l D
9/30/2002: 19 ug/l D
12/31/2002: 17 ug/l D
3/31/2003: 17 ug/l D
6/30/2003: 12 ug/l D
9/30/2003: 15 ug/l D
12/31/2003: 12 ug/l D
3/31/2004: 12 ug/l D
6/30/2004: 21 ug/l D
9/30/2004: 16 ug/l D
11/30/2004: 14 ug/l D
12/31/2004: 14 ug/l D
3/31/2005: 21 ug/l D
6/30/2005: 27 ug/l D
7/31/2005: 18 ug/l D
6/30/2006: 17 ug/l D
9/30/2006: 17 ug/l D
3/31/2007: 18 ug/l D
6/30/2007: 17 ug/l D
6/30/2008: 19 ug/l D

PW-99-3
3/22/1999: 61 ug/l D
3/23/1999: 53 ug/l D
5/28/2008: 129 ug/l T
9/22/2008: 138.9 ug/l T

MW-06-22
10/4/2006: < 500 ug/l
5/21/2008: 59.8 ug/l T
9/26/2008: 86.4 ug/l T

MW-06-25
10/15/2006: < 500 ug/l
5/20/2008: 45.5 ug/l T
9/26/2008: 46.7 ug/l T

MW-97-7
11/4/1997: 125 ug/l D
10/8/1998: 113 ug/l T
10/8/2001: 75 ug/l D
10/8/2001: 76 ug/l T
1/17/2002: 78 ug/l D
1/17/2002: 85 ug/l D
5/20/2008: 59.3 ug/l T
9/26/2008: 59.4 ug/l T

MW-97-5
11/4/1997: 6 ug/l D
10/8/1998: 5 ug/l T
5/15/2008: 5.1 ug/l T
9/17/2008: 4.6 ug/l T

MW-06-23
5/13/2008: 4 ug/l T
9/16/2008: 3.8 ug/l T

MW-06-5
5/14/2008: 45 ug/l T
9/19/2008: 59.4 ug/l T

MW-97-1
11/4/1997: 10 ug/l D
10/8/1998: 10 ug/l T
5/13/2008: 13.7 ug/l T
9/17/2008: 19.5 ug/l T

MW-01-3
10/9/2001: 30 ug/l D
10/9/2001: 37 ug/l T
1/22/2002: 16 ug/l D
9/5/2002: 15 ug/l D
5/19/2008: 16.6 ug/l T
9/19/2008: 17.7 ug/l T

MW-01-2
10/9/2001: 19 ug/l D
10/9/2001: 19 ug/l T
10/10/2001: < 500 ug/l
1/16/2002: 23 ug/l D
9/4/2002: 15 ug/l D
7/22/2003: 13.7 ug/l BQQ D
7/22/2003: 13.6 ug/l T
5/19/2008: 20.6 ug/l T
9/22/2008: 19.1 ug/l T

MW-01-5
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: 3 ug/l D
5/17/2008: 3 ug/l T
9/16/2008: 3.5 ug/l T

MW-01-4
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: 3 ug/l D
5/16/2008: 2.9 ug/l T
9/16/2008: 3.7 ug/l T

MW-01-1
10/8/2001: < 3 ug/l D
10/8/2001: < 3 ug/l T
1/16/2002: 3 ug/l D
5/16/2008: 3.1 ug/l T
9/17/2008: 4.7 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

N

Feet
800 0 800

Figure 5.3-12a

ANALYTICAL GROUNDWATER
ARSENIC
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 16:01 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_201215_3_GroundwaterTable\Figure 5_3-12a GW SW Data Arsenic WaterTable.mxd User: sal2

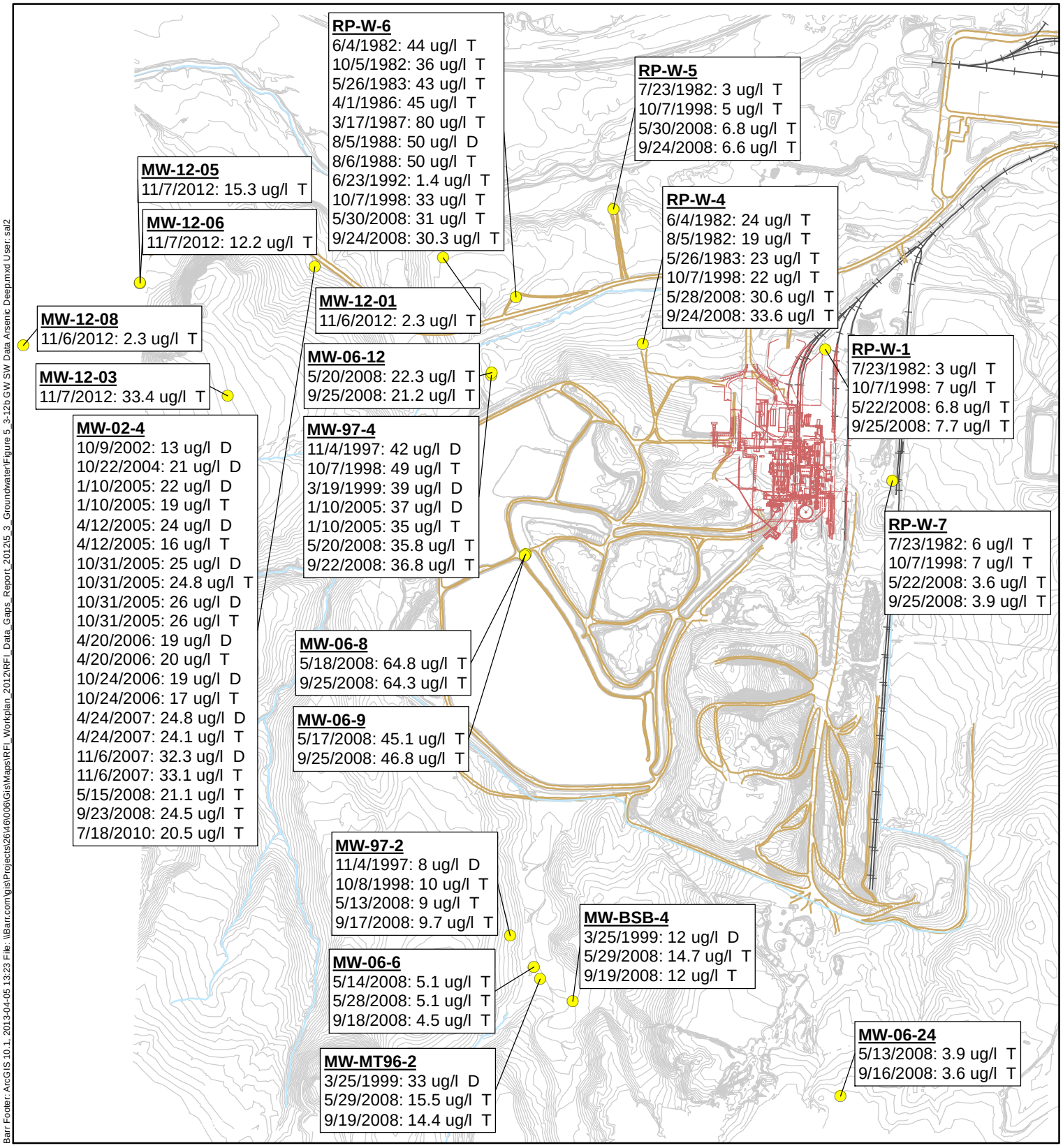


Figure 5.3-12b

ANALYTICAL GROUNDWATER
ARSENIC
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-EPA-4
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
7/24/2003: 268 ug/l T
7/24/2003: 28.3 ug/l BQQ D
5/15/2008: 40.4 ug/l T
9/20/2008: 42.92 ug/l T

MW-06-11
5/28/2008: 31.2 ug/l T
9/23/2008: 31.74 ug/l T

MW-97-9
11/5/1997: 100 ug/l D
10/7/1998: < 100 ug/l D
5/16/2008: 56.8 ug/l T
9/24/2008: 59.3 ug/l T

MW-06-21
10/11/2006: < 10000 ug/l
5/17/2008: 31.8 ug/l T
9/24/2008: 23.8 ug/l T

MW-06-10
5/14/2008: 31.8 ug/l T
9/18/2008: 38.2 ug/l T

MW-06-1
5/15/2008: 65.9 ug/l T
9/18/2008: 78.2 ug/l T
7/17/2010: 63.9 ug/l T

MW-12-07
11/6/2012: 75.23 ug/l T

MW-12-02
11/8/2012: 47.03 ug/l T

MW-12-04
11/7/2012: 60.80 ug/l T

MW-06-2
5/15/2008: 39.2 ug/l T
9/23/2008: 34.55 ug/l T
7/18/2010: 32.9 ug/l T

MW-97-3
11/4/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/28/2008: 33.4 ug/l T
9/23/2008: 36 ug/l T

MW-02-3
5/15/2008: 30.1 ug/l T
9/23/2008: 27.24 ug/l T
7/17/2010: 25.1 ug/l T

PW-99-1
5/18/2008: 63.8 ug/l T
5/29/2008: 64.5 ug/l T
9/25/2008: 65.4 ug/l T

MW-06-3
5/14/2008: 73.9 ug/l T
9/19/2008: 69.8 ug/l T
7/16/2010: 53.7 ug/l T

MW-97-10
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/23/2003: 45 ug/l T
7/23/2003: 20.6 ug/l BQQ D
5/21/2008: 23.3 ug/l T
9/23/2008: 22.27 ug/l T

MW-06-7 *
5/29/2008: 65.1 ug/l T
9/23/2008: 55.52 ug/l T

MW-97-11
11/5/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/21/2003: 36.2 ug/l J T
7/21/2003: 26.1 ug/l BQQ D
5/21/2008: 31.6 ug/l T
9/25/2008: 31 ug/l T

MW-EPA-1
8/9/1988: < 7.6 ug/l B T
10/8/1998: < 100 ug/l D
5/14/2008: 5.2 ug/l T
9/17/2008: 9.2 ug/l T

MW-06-4
5/15/2008: 55.7 ug/l T
9/18/2008: 19.5 ug/l T

PW-99-3
5/28/2008: 152 ug/l T
9/22/2008: 158.1 ug/l T

MW-97-1
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
5/13/2008: 40.9 ug/l T
9/17/2008: 43.5 ug/l T

MW-GW-3
5/20/2008: 71.4 ug/l T
9/17/2008: 65.1 ug/l T

MW-06-5
5/14/2008: 61.4 ug/l T
9/19/2008: 84.2 ug/l T

MW-06-16
10/1/2006: < 10000 ug/l
5/21/2008: 27.4 ug/l T
9/20/2008: 30.35 ug/l T

MW-06-13
10/2/2006: < 10000 ug/l
5/27/2008: 38.2 ug/l T
9/19/2008: 40.17 ug/l T

MW-97-8
11/5/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/15/2008: 31.3 ug/l T
9/24/2008: 19.1 ug/l T

MW-06-22
10/4/2006: < 10000 ug/l
5/21/2008: 19.7 ug/l T
9/26/2008: 18.4 ug/l T

MW-06-25
10/15/2006: < 10000 ug/l
5/20/2008: 57.9 ug/l T
9/26/2008: 46.9 ug/l T

MW-97-7
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
10/8/2001: 37 ug/l D
10/8/2001: 40 ug/l T
1/17/2002: 35 ug/l D
1/17/2002: 38 ug/l D
5/20/2008: 49.4 ug/l T
9/26/2008: 25.9 ug/l T

MW-02-1
1/17/2002: 82 ug/l D
9/4/2002: < 100 ug/l D
7/22/2003: 42.5 ug/l T
7/22/2003: 40.3 ug/l BQQ D
5/29/2008: 29.3 ug/l T
9/26/2008: 33.9 ug/l T

MW-97-5
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
5/15/2008: 101 ug/l T
9/17/2008: 92.3 ug/l T

MW-06-23
5/13/2008: 90.9 ug/l T
9/16/2008: 79.1 ug/l T

MW-EPA-3
8/9/1988: < 56.7 ug/l B T
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
7/24/2003: 61 ug/l T
7/24/2003: 54.2 ug/l BQQ D
5/15/2008: 59.2 ug/l T
9/16/2008: < 62.8 ug/l T

MW-06-17
9/30/2006: < 10000 ug/l
5/27/2008: 47.4 ug/l T
9/20/2008: 42.83 ug/l T

MW-06-14
5/27/2008: 27.9 ug/l T
9/18/2008: 51.3 ug/l T

MW-97-12
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
5/27/2008: 46.6 ug/l T
9/23/2008: 56.07 ug/l R T
12/15/2008: 29.6 ug/l T

MW-06-15
5/21/2008: 24.8 ug/l T
9/17/2008: 22.2 ug/l T

MW-06-18
9/29/2006: < 10000 ug/l
5/21/2008: 62.5 ug/l T
9/25/2008: 63.5 ug/l T

MW-06-20
10/3/2006: < 10000 ug/l
5/20/2008: 31.2 ug/l T
9/20/2008: 37.77 ug/l T

MW-06-19
5/20/2008: 44.4 ug/l T
9/18/2008: 50.8 ug/l T

MW-01-6
10/9/2001: 9 ug/l D
10/9/2001: 17 ug/l T
10/10/2001: < 10000 ug/l
1/17/2002: 8 ug/l D
9/5/2002: < 100 ug/l D
5/19/2008: 9.8 ug/l T
9/18/2008: 16.6 ug/l T

MW-97-6
11/4/1997: 300 ug/l D
10/8/1998: 200 ug/l D
7/23/2003: 203 ug/l T
7/23/2003: 184 ug/l BQQ D
5/17/2008: 118 ug/l T
9/16/2008: 129 ug/l T

MW-01-3
10/9/2001: 73 ug/l D
10/9/2001: 100 ug/l T
1/22/2002: 64 ug/l D
9/5/2002: < 100 ug/l D
5/19/2008: 33.9 ug/l T
9/19/2008: 30.5 ug/l T

MW-02-2
9/5/2002: < 100 ug/l D
5/19/2008: 18.6 ug/l T
9/22/2008: 22.68 ug/l T

MW-01-2
10/9/2001: 26 ug/l D
10/9/2001: 30 ug/l T
10/10/2001: < 10000 ug/l
1/16/2002: 32 ug/l D
9/4/2002: < 100 ug/l D
7/22/2003: 20.4 ug/l BQQ D
7/22/2003: 25.6 ug/l T
5/19/2008: 14.5 ug/l T
9/22/2008: 18.92 ug/l T

MW-01-5
10/4/2001: 247 ug/l D
10/4/2001: 260 ug/l T
1/16/2002: 250 ug/l D
5/17/2008: 113 ug/l T
9/16/2008: 124 ug/l T

MW-01-4
10/4/2001: 252 ug/l D
10/4/2001: 251 ug/l T
1/16/2002: 260 ug/l D
5/16/2008: 116 ug/l T
9/16/2008: 113 ug/l T

MW-01-1
10/8/2001: 301 ug/l D
10/8/2001: 296 ug/l T
1/16/2002: 237 ug/l D
5/16/2008: 86.3 ug/l T
9/17/2008: 90 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

N

Feet
800 0 800

Figure 5.3-13a

ANALYTICAL GROUNDWATER
BARIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 16:02 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-13a GW SW Data Barium WaterTable.mxd User: sal2

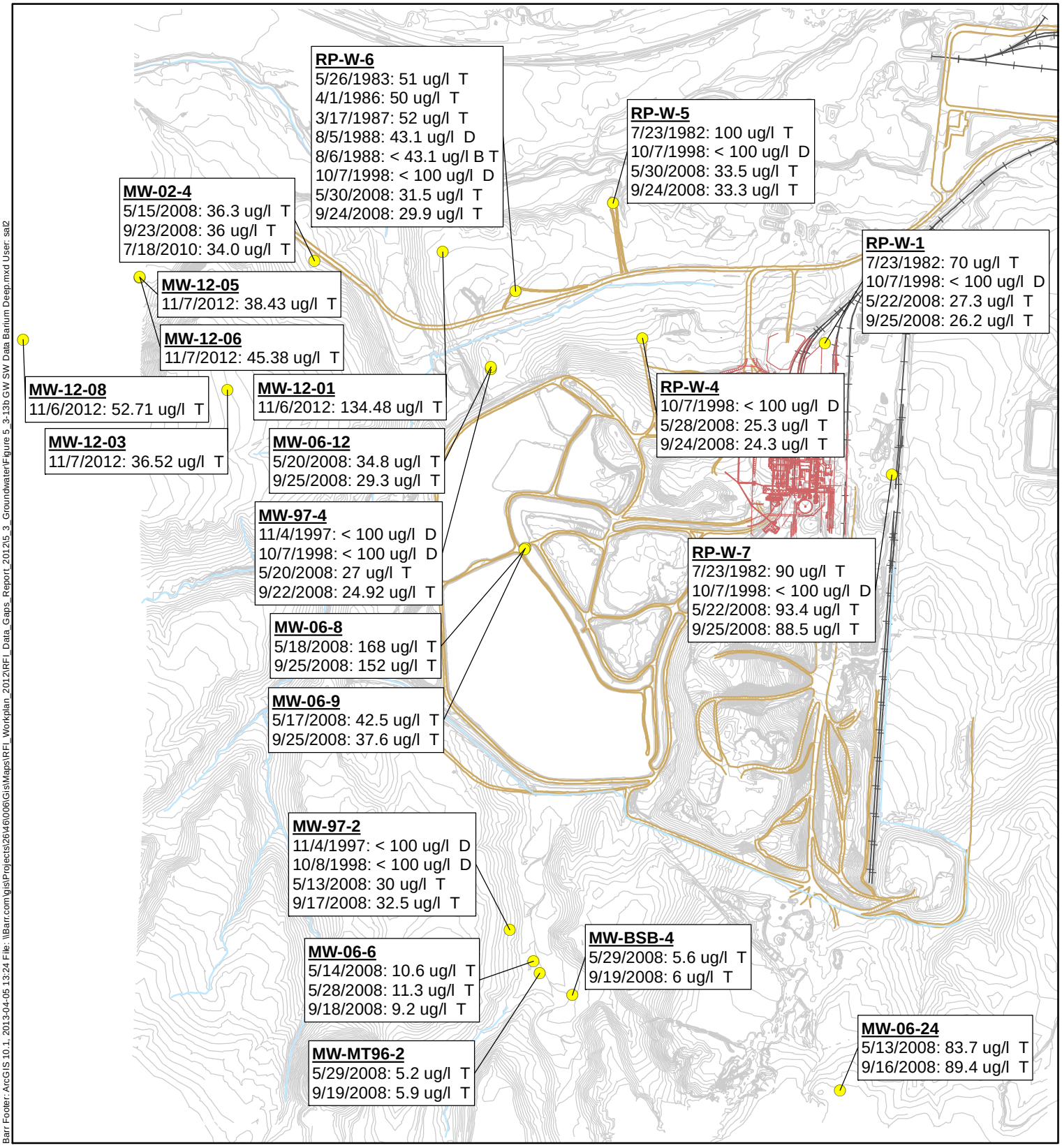


Figure 5.3-13b

ANALYTICAL GROUNDWATER
BARIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-EPA-3
8/9/1988: < 1 ug/l T
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
7/24/2003: < 1 ug/l T
7/24/2003: < 1 ug/l D
5/15/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-97-9
11/5/1997: < 1 ug/l D
10/7/1998: < 1 ug/l D
5/16/2008: 0.57 ug/l T
9/24/2008: 0.78 ug/l T

MW-EPA-4
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
7/24/2003: < 2 ug/l T
7/24/2003: < 1 ug/l D
5/15/2008: < 0.02 ug/l T
9/20/2008: 0.02 ug/l T

MW-06-17
5/27/2008: 0.02 ug/l T
9/20/2008: < 0.02 ug/l T

MW-06-11
5/28/2008: 0.03 ug/l T
9/23/2008: < 0.02 ug/l T

MW-06-14
5/27/2008: < 0.02 ug/l T
9/18/2008: < 0.064 ug/l T

MW-06-13
5/27/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T

MW-97-3
11/4/1997: < 1 ug/l D
10/7/1998: < 1 ug/l D
5/28/2008: < 0.02 ug/l T
9/23/2008: < 0.02 ug/l T

MW-97-12
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
5/27/2008: 0.12 ug/l T
9/23/2008: 4.79 ug/l R T
12/15/2008: 0.06 ug/l T

MW-06-1
5/15/2008: < 0.02 ug/l T
9/18/2008: < 0.029 ug/l T
7/17/2010: < 0.02 ug/l T

MW-06-10
5/14/2008: 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-06-15
5/21/2008: < 0.02 ug/l T
9/17/2008: < 3.6 ug/l T

MW-12-02
11/8/2012: < 0.020 ug/l T

MW-12-04
11/7/2012: < 0.020 ug/l T

MW-06-18
5/21/2008: < 0.02 ug/l T
9/25/2008: < 0.1 ug/l T

MW-12-07
11/6/2012: < 0.020 ug/l T

PW-99-1
5/18/2008: < 0.02 ug/l T
5/29/2008: < 0.02 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-16
5/21/2008: < 0.02 ug/l T
9/20/2008: < 0.02 ug/l T

MW-06-20
5/20/2008: 0.02 ug/l T
9/20/2008: 0.03 ug/l T

MW-06-2
5/15/2008: 0.02 ug/l T
9/23/2008: < 0.02 ug/l T
7/18/2010: < 0.02 ug/l T

MW-06-19
5/20/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-97-10
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: < 1 ug/l D
5/21/2008: < 0.02 ug/l T
9/23/2008: < 0.02 ug/l T

MW-02-1
1/17/2002: < 1 ug/l D
7/22/2003: < 1 ug/l T
7/22/2003: < 1 ug/l D
5/29/2008: 0.04 ug/l T
9/26/2008: < 0.1 ug/l T

MW-02-3
5/15/2008: 0.02 ug/l T
9/23/2008: < 0.02 ug/l T
7/17/2010: < 0.02 ug/l T

MW-97-8
11/5/1997: < 1 ug/l D
10/7/1998: < 1 ug/l D
5/15/2008: 0.08 ug/l T
9/24/2008: < 0.1 ug/l T

MW-01-6
10/9/2001: < 1 ug/l D
10/9/2001: < 1 ug/l T
1/17/2002: < 1 ug/l D
5/19/2008: 0.06 ug/l T
9/18/2008: 0.176 ug/l T

MW-06-3
5/14/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T
7/16/2010: < 0.02 ug/l T

MW-06-7 *
5/29/2008: < 0.02 ug/l T
9/23/2008: 0.03 ug/l T

MW-02-2
5/19/2008: 0.39 ug/l T
9/22/2008: 0.34 ug/l T

MW-97-11
11/5/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/21/2003: < 2 ug/l T
7/21/2003: < 1 ug/l D
5/21/2008: < 0.02 ug/l T
9/25/2008: < 0.1 ug/l T

MW-97-6
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: < 1 ug/l D
5/17/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-06-21
5/17/2008: 0.08 ug/l T
9/24/2008: < 0.1 ug/l T

MW-01-3
10/9/2001: 2 ug/l D
10/9/2001: 3 ug/l T
1/22/2002: < 1 ug/l D
5/19/2008: 0.06 ug/l T
9/19/2008: 0.099 ug/l T

PW-99-3
5/28/2008: 0.02 ug/l T
9/22/2008: 0.02 ug/l T

MW-EPA-1
8/9/1988: < 1 ug/l T
10/8/1998: < 1 ug/l D
5/14/2008: < 0.02 ug/l T
9/17/2008: < 4.3 ug/l T

MW-06-22
5/21/2008: 0.07 ug/l T
9/26/2008: < 0.1 ug/l T

MW-97-1
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
5/13/2008: < 0.02 ug/l T
9/17/2008: < 0.026 ug/l T

MW-01-2
10/9/2001: < 1 ug/l D
10/9/2001: < 1 ug/l T
1/16/2002: < 1 ug/l D
7/22/2003: 0.49 ug/l J D
7/22/2003: 0.62 ug/l J T
5/19/2008: 0.61 ug/l T
9/22/2008: 0.36 ug/l T

MW-06-25
5/20/2008: 0.29 ug/l T
9/26/2008: 0.24 ug/l T

MW-06-4
5/15/2008: 0.04 ug/l T
9/18/2008: < 0.02 ug/l T

MW-06-5
5/14/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T

MW-97-7
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
10/8/2001: < 1 ug/l D
10/8/2001: < 1 ug/l T
1/17/2002: < 1 ug/l D
1/17/2002: < 1 ug/l D
5/20/2008: 0.43 ug/l T
9/26/2008: < 0.1 ug/l T

MW-01-5
10/4/2001: < 1 ug/l D
10/4/2001: < 1 ug/l T
1/16/2002: < 1 ug/l D
5/17/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-GW-3
5/20/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-06-23
5/13/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-01-4
10/4/2001: < 1 ug/l D
10/4/2001: < 1 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-97-5
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
5/15/2008: 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-01-1
10/8/2001: < 1 ug/l D
10/8/2001: < 1 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: < 0.02 ug/l T
9/17/2008: < 0.025 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

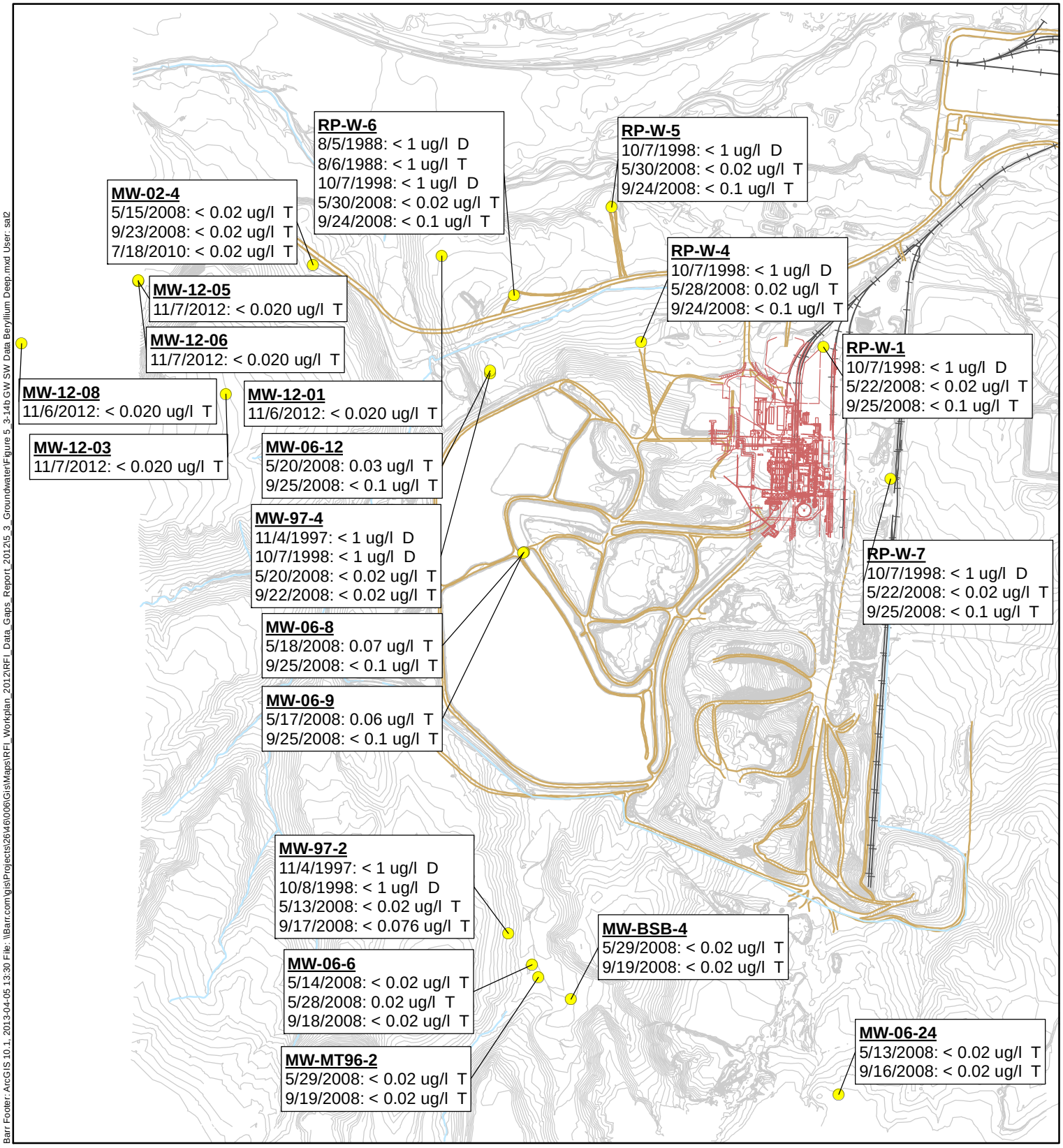
N

Feet
800 0 800

Figure 5.3-14a

ANALYTICAL GROUNDWATER
BERYLLIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 16:04 File: \\Barr.com\gis\Projects\26\46\006\GisMaps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-14a GW SW Data Beryllium WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 13:30 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-14b GW SW Data Beryllium Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-14b

ANALYTICAL GROUNDWATER
BERYLLIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-1
5/15/2008: 0.05 ug/l T
9/18/2008: 0.06 ug/l T
7/17/2010: 0.04 ug/l T

MW-02-3
10/9/2002: < 1 ug/l D
10/22/2004: < 1 ug/l D
1/10/2005: < 0.1 ug/l D
1/10/2005: < 0.1 ug/l T
4/12/2005: < 0.1 ug/l D
4/12/2005: < 0.1 ug/l T
10/31/2005: < 0.1 ug/l D
10/31/2005: < 0.1 ug/l T
4/20/2006: < 0.1 ug/l D
4/20/2006: < 0.1 ug/l T
10/24/2006: 0.1 ug/l D
10/24/2006: < 0.1 ug/l T
4/24/2007: 0.1 ug/l D
4/24/2007: 0.12 ug/l T
11/6/2007: 0.11 ug/l D
11/6/2007: 0.09 ug/l T
5/15/2008: 0.03 ug/l T
9/23/2008: 0.02 ug/l T
7/17/2010: < 0.02 ug/l T

MW-06-10
5/14/2008: < 0.02 ug/l T
9/18/2008: 0.03 ug/l T

PW-99-1
3/24/1999: < 1 ug/l D
3/25/1999: < 1 ug/l D
1/10/2005: 0.2 ug/l D
1/10/2005: 0.2 ug/l T
5/18/2008: 0.15 ug/l T
5/29/2008: 0.17 ug/l T
9/25/2008: 0.24 ug/l T

MW-06-13
10/2/2006: < 100 ug/l
5/27/2008: 0.04 ug/l T
9/19/2008: 0.05 ug/l T

MW-97-8
11/5/1997: 12 ug/l D
10/7/1998: 9 ug/l D
5/15/2008: 4.08 ug/l T
9/24/2008: 4.1 ug/l T

MW-97-9
11/5/1997: 14 ug/l D
10/7/1998: 217 ug/l D
5/16/2008: 69.7 ug/l T
9/24/2008: 90.3 ug/l T

MW-EPA-4
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
7/24/2003: < 2 ug/l T
7/24/2003: < 1 ug/l D
5/15/2008: 0.04 ug/l T
9/20/2008: 0.03 ug/l T

MW-06-22
10/4/2006: < 100 ug/l
5/21/2008: 12.8 ug/l T
9/26/2008: 14.3 ug/l T

MW-06-16
10/1/2006: < 100 ug/l
5/21/2008: 0.04 ug/l T
9/20/2008: 0.04 ug/l T

MW-EPA-3
8/9/1988: < 5 ug/l T
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
7/24/2003: < 1 ug/l T
7/24/2003: 0.31 ug/l J D
5/15/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-06-17
9/30/2006: < 100 ug/l
5/27/2008: 1.44 ug/l T
9/20/2008: 1.16 ug/l T

MW-06-14
5/27/2008: 0.03 ug/l T
9/18/2008: 0.04 ug/l T

MW-97-12
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
5/27/2008: 0.05 ug/l T
9/23/2008: 5.88 ug/l R T
12/15/2008: < 0.02 ug/l T

MW-06-15
5/21/2008: < 0.02 ug/l T
9/17/2008: 0.03 ug/l T

MW-06-18
9/29/2006: < 100 ug/l
5/21/2008: 40.5 ug/l T
9/25/2008: 46.5 ug/l T

MW-06-20
10/3/2006: < 100 ug/l
5/20/2008: 0.49 ug/l T
9/20/2008: 0.5 ug/l T

MW-06-19
5/20/2008: 0.09 ug/l T
9/18/2008: 0.08 ug/l T

MW-02-1
1/17/2002: < 1 ug/l D
9/4/2002: < 1 ug/l D
7/22/2003: 0.12 ug/l J T
7/22/2003: < 1 ug/l D
5/29/2008: 0.03 ug/l T
9/26/2008: < 0.1 ug/l T

MW-02-2
9/5/2002: 5 ug/l D
5/19/2008: 3.71 ug/l T
9/22/2008: 3.53 ug/l T

MW-97-6
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: < 1 ug/l D
5/17/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-01-6
10/9/2001: < 0.6 ug/l D
10/9/2001: < 0.6 ug/l T
10/10/2001: < 100 ug/l
1/17/2002: < 1 ug/l D
9/5/2002: < 1 ug/l D
5/19/2008: < 0.02 ug/l T
9/18/2008: 0.02 ug/l T

MW-01-3
10/9/2001: 0.9 ug/l D
10/9/2001: 1 ug/l T
1/22/2002: 0.6 ug/l D
9/5/2002: < 1 ug/l D
5/19/2008: 0.2 ug/l T
9/19/2008: 0.18 ug/l T

MW-01-2
10/9/2001: 0.9 ug/l D
10/9/2001: 1.4 ug/l T
10/10/2001: < 100 ug/l
1/16/2002: < 1 ug/l D
9/4/2002: < 1 ug/l D
7/22/2003: 1.1 ug/l BQQJ D
7/22/2003: 1 ug/l T
5/19/2008: 1.01 ug/l T
9/22/2008: 1.38 ug/l T

MW-01-5
10/4/2001: < 0.1 ug/l D
10/4/2001: < 0.1 ug/l T
1/16/2002: < 1 ug/l D
5/17/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-12-02
11/8/2012: 0.036 ug/l T

MW-06-11
5/28/2008: 0.05 ug/l T
9/23/2008: 0.06 ug/l T

MW-12-04
11/7/2012: < 0.020 ug/l T

MW-12-07
11/6/2012: 0.044 ug/l T

MW-06-2
5/15/2008: 0.04 ug/l T
9/23/2008: 0.04 ug/l T
7/18/2010: < 0.02 ug/l T

MW-97-10
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: < 1 ug/l D
1/11/2005: < 0.1 ug/l D
1/11/2005: < 0.1 ug/l T
5/21/2008: 0.03 ug/l T
9/23/2008: 0.03 ug/l T

MW-97-3
11/4/1997: < 1 ug/l D
10/7/1998: < 1 ug/l D
1/10/2005: < 0.1 ug/l D
1/10/2005: < 0.1 ug/l T
5/28/2008: 0.06 ug/l T
9/23/2008: 0.06 ug/l T

MW-06-3
5/14/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T
7/16/2010: < 0.02 ug/l T

MW-06-7
5/29/2008: 0.25 ug/l T
9/23/2008: 0.04 ug/l T

MW-97-11
11/5/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/21/2003: < 2 ug/l T
7/21/2003: 0.38 ug/l J D
1/11/2005: < 0.1 ug/l D
1/11/2005: < 0.1 ug/l T
5/21/2008: 0.06 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-21
10/11/2006: < 100 ug/l
5/17/2008: 0.56 ug/l T
9/24/2008: 0.59 ug/l T

MW-06-4
5/15/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-GW-3
6/30/1998: < 1 ug/l D
9/30/1998: 34 ug/l D
12/31/1998: < 1 ug/l D
3/31/1999: 0.7 ug/l D
6/30/1999: 0.9 ug/l D
9/30/1999: 0.4 ug/l D
12/31/1999: 0.1 ug/l D
3/31/2000: < 0.1 ug/l D
6/30/2000: 0.3 ug/l D
9/30/2000: 0.6 ug/l D
12/31/2000: 0.3 ug/l D
3/31/2001: < 0.1 ug/l D
6/30/2001: 0.1 ug/l D
9/30/2001: < 0.1 ug/l D
12/31/2001: 0.1 ug/l D
3/31/2002: 0.1 ug/l D
6/30/2002: 0.5 ug/l D
9/30/2002: 0.3 ug/l D
12/31/2002: 0.1 ug/l D
3/31/2003: 0.4 ug/l D
6/30/2003: 0.1 ug/l D
9/30/2003: < 0.1 ug/l D
12/31/2003: < 0.1 ug/l D
3/31/2004: 0.1 ug/l D
6/30/2004: < 0.1 ug/l D
9/30/2004: 0.2 ug/l D
11/30/2004: 0.1 ug/l D
12/31/2004: 0.1 ug/l D
3/31/2005: < 0.1 ug/l D
6/30/2005: < 0.1 ug/l D
7/31/2005: < 0.1 ug/l D
12/31/2005: < 0.1 ug/l D
3/31/2006: < 0.1 ug/l D
6/30/2006: < 0.1 ug/l D
9/30/2006: < 0.1 ug/l D
12/31/2006: < 0.1 ug/l D
3/31/2007: < 0.1 ug/l D
6/30/2007: < 0.1 ug/l D
9/30/2007: < 0.1 ug/l D
12/31/2007: < 0.1 ug/l D
3/31/2008: < 0.1 ug/l D
5/20/2008: < 0.02 ug/l T
6/30/2008: < 0.1 ug/l D
9/17/2008: < 0.02 ug/l T
9/30/2008: < 0.1 ug/l D
12/31/2008: < 0.1 ug/l D
3/31/2009: < 0.1 ug/l D
6/30/2009: < 0.1 ug/l D
9/30/2009: < 0.1 ug/l D
12/31/2009: < 0.1 ug/l D
3/31/2010: < 0.1 ug/l D
6/30/2010: < 0.1 ug/l D
9/30/2010: < 0.1 ug/l D

MW-EPA-1
8/9/1988: < 5 ug/l T
10/8/1998: < 1 ug/l D
5/14/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-06-25
10/15/2006: < 100 ug/l
5/20/2008: 213 ug/l T
9/26/2008: 177 ug/l T

PW-99-3
3/22/1999: < 1 ug/l D
3/23/1999: < 1 ug/l D
5/28/2008: 0.23 ug/l T
9/22/2008: 0.29 ug/l T

MW-97-1
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
5/13/2008: 0.09 ug/l T
9/17/2008: 0.1 ug/l T

MW-97-7
11/4/1997: 32 ug/l D
10/8/1998: 37 ug/l D
10/8/2001: 75.8 ug/l D
10/8/2001: 82.1 ug/l T
1/17/2002: 93 ug/l D
1/17/2002: 84 ug/l D
5/20/2008: 53.5 ug/l T
9/26/2008: 46.1 ug/l T

MW-06-5
5/14/2008: 0.06 ug/l T
9/19/2008: 0.04 ug/l T

MW-01-4
10/4/2001: < 0.1 ug/l D
10/4/2001: < 0.1 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: < 0.02 ug/l T
9/16/2008: 0.03 ug/l T

MW-01-1
10/8/2001: < 0.1 ug/l D
10/8/2001: < 0.1 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: < 0.02 ug/l T
9/17/2008: 0.02 ug/l T

MW-06-23
5/13/2008: 0.04 ug/l T
9/16/2008: < 0.02 ug/l T

MW-97-5
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
5/15/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-GW-2
6/30/1998: < 1 ug/l D
9/30/1998: 2 ug/l D
12/31/1998: < 1 ug/l D
3/31/1999: < 0.1 ug/l D
6/30/1999: 0.6 ug/l D
9/30/1999: 0.2 ug/l D
12/31/1999: 0.3 ug/l D
3/31/2000: 0.1 ug/l D
6/30/2000: 0.09 ug/l D
9/30/2000: 0.3 ug/l D
12/31/2000: 0.7 ug/l D
3/31/2001: < 0.1 ug/l D
6/30/2001: 0.3 ug/l D
9/30/2001: 0.1 ug/l D
12/31/2001: 0.6 ug/l D
3/31/2002: 0.5 ug/l D
6/30/2002: 0.9 ug/l D
9/30/2002: 0.6 ug/l D
12/31/2002: 0.4 ug/l D
3/31/2003: < 0.1 ug/l D
6/30/2003: 0.2 ug/l D
9/30/2003: < 0.1 ug/l D
12/31/2003: 0.4 ug/l D
3/31/2004: 0.5 ug/l D
6/30/2004: 0.4 ug/l D
9/30/2004: 0.2 ug/l D
11/30/2004: 2.7 ug/l D
12/31/2004: 2.7 ug/l D
3/31/2005: < 0.1 ug/l D
6/30/2005: < 0.1 ug/l D
7/31/2005: < 0.1 ug/l D
6/30/2006: 0.4 ug/l D
9/30/2006: < 0.1 ug/l D
3/31/2007: < 0.1 ug/l D
6/30/2007: < 0.1 ug/l D
6/30/2008: < 0.1 ug/l D

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

N

Feet
800 0 800

Figure 5.3-15a

ANALYTICAL GROUNDWATER
CADMIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-04 16:05 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-15a GW SW Data Cadmium WaterTable.mxd User: sal2

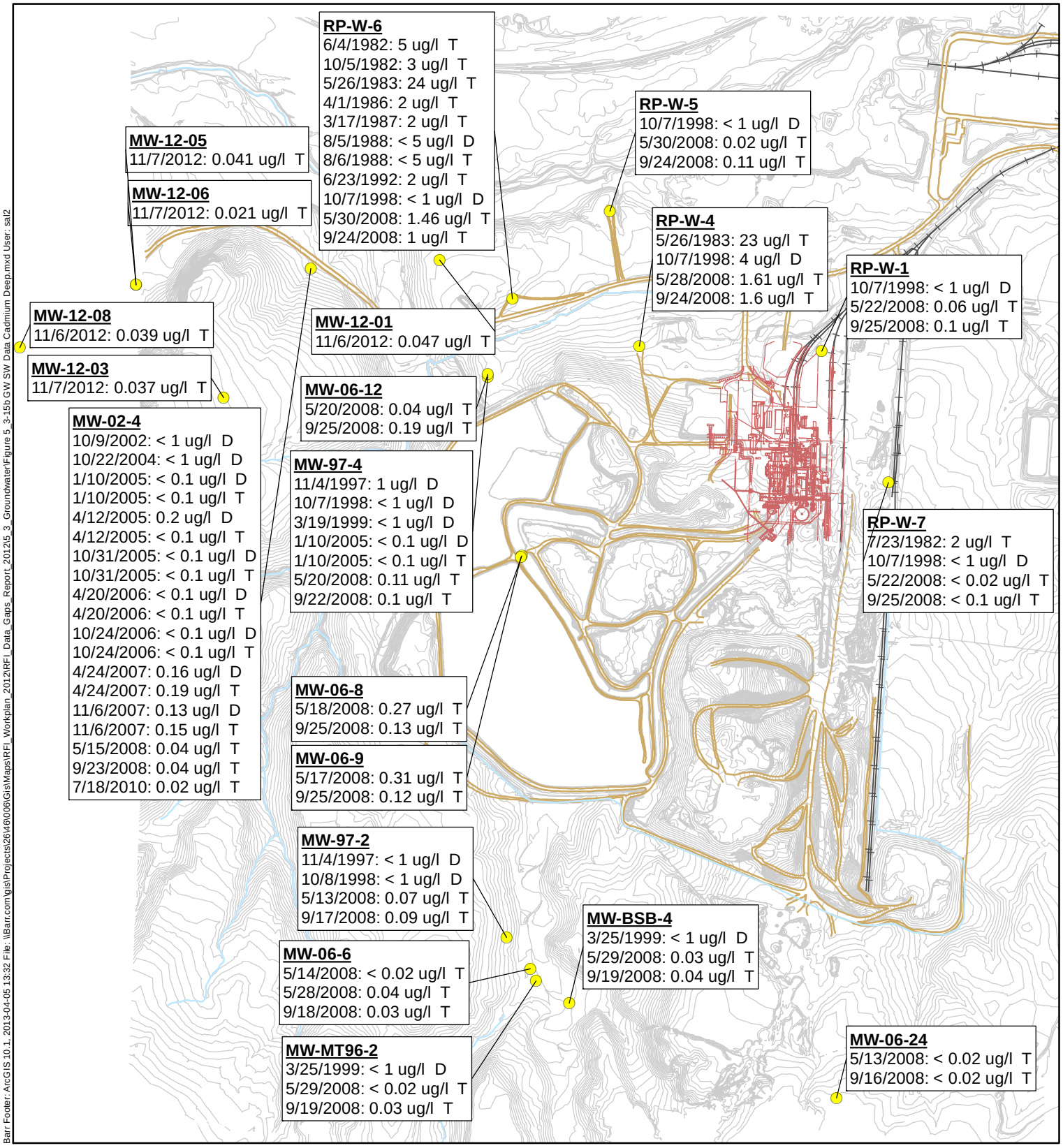


Figure 5.3-15b

ANALYTICAL GROUNDWATER
CADMIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-97-3
11/4/1997: 314000 ug/l T
10/7/1998: 290000 ug/l T
1/10/2005: 162000 ug/l D
1/10/2005: 165000 ug/l T
5/28/2008: 173000 ug/l T
9/23/2008: 162000 ug/l T

PW-99-1
1/10/2005: 269000 ug/l D
1/10/2005: 269000 ug/l T
5/18/2008: 283000 ug/l T
5/29/2008: 279000 ug/l T
9/25/2008: 286000 ug/l T

MW-12-02
11/8/2012: 254000 ug/l T

MW-06-1
5/15/2008: 319000 ug/l T
9/18/2008: 274000 ug/l T
7/17/2010: 245000 ug/l T

MW-12-04
11/7/2012: 52000 ug/l T

MW-12-07
11/6/2012: 59400 ug/l T

MW-02-3
1/10/2005: 300000 ug/l D
1/10/2005: 282000 ug/l T
4/12/2005: 294000 ug/l T
4/12/2005: 289000 ug/l D
10/31/2005: 274000 ug/l D
10/31/2005: 293000 ug/l T
4/20/2006: 280000 ug/l D
4/20/2006: 302000 ug/l T
10/24/2006: 285000 ug/l D
10/24/2006: 262000 ug/l T
4/24/2007: 286000 ug/l D
4/24/2007: 275000 ug/l T
11/6/2007: 276000 ug/l D
11/6/2007: 270000 ug/l T
5/15/2008: 306000 ug/l T
9/23/2008: 266000 ug/l T
7/17/2010: 285000 ug/l T

MW-06-3
5/14/2008: 192000 ug/l T
9/19/2008: 193000 ug/l T
7/16/2010: 199000 ug/l T

MW-06-2
5/15/2008: 356000 ug/l T
9/23/2008: 332000 ug/l T
7/18/2010: 327000 ug/l T

MW-06-4
5/15/2008: 24000 ug/l T
9/18/2008: 25300 ug/l T

MW-06-11
5/28/2008: 399000 ug/l T
9/23/2008: 343000 ug/l T

MW-06-10
5/14/2008: 225000 ug/l T
9/18/2008: 229000 ug/l T

MW-97-10
11/4/1997: 461000 ug/l T
10/8/1998: 410000 ug/l T
1/11/2005: 242000 ug/l D
1/11/2005: 231000 ug/l T
5/21/2008: 264000 ug/l T
9/23/2008: 254000 ug/l T

MW-97-8
11/5/1997: 416000 ug/l T
10/7/1998: 242000 ug/l T
5/15/2008: 187000 ug/l T
9/24/2008: 183000 ug/l T

MW-06-7 *
5/29/2008: 382000 ug/l T
9/23/2008: 317000 ug/l T

MW-97-11
11/5/1997: 416000 ug/l T
10/8/1998: 411000 ug/l T
1/11/2005: 387000 ug/l D
1/11/2005: 368000 ug/l T
5/21/2008: 358000 ug/l T
9/25/2008: 349000 ug/l T

MW-EPA-1
8/9/1988: 39100 ug/l T
10/8/1998: 39000 ug/l T
5/14/2008: 68100 ug/l T
9/17/2008: 69500 ug/l T

MW-97-1
11/4/1997: 49000 ug/l T
10/8/1998: 57000 ug/l T
5/13/2008: 204000 ug/l T
9/17/2008: 212000 ug/l T

MW-06-5
5/14/2008: 148000 ug/l T
9/19/2008: 174000 ug/l T

MW-GW-3
5/20/2008: 182000 ug/l T
9/17/2008: 189000 ug/l T

MW-06-21
5/17/2008: 194000 ug/l T
9/24/2008: 165000 ug/l T

PW-99-3
5/28/2008: 153000 ug/l T
9/22/2008: 119000 ug/l T

MW-EPA-4
11/5/1997: 283000 ug/l T
10/12/1998: 297000 ug/l T
5/15/2008: 368000 ug/l T
9/20/2008: 324000 ug/l T

MW-97-9
11/5/1997: 408000 ug/l T
10/7/1998: 339000 ug/l T
5/16/2008: 190000 ug/l T
9/24/2008: 201000 ug/l T

MW-06-13
5/27/2008: 188000 ug/l T
9/19/2008: 191000 ug/l T

MW-06-16
5/21/2008: 335000 ug/l T
9/20/2008: 318000 ug/l T

MW-06-22
5/21/2008: 217000 ug/l T
9/26/2008: 239000 ug/l T

MW-06-25
5/20/2008: 320000 ug/l T
9/26/2008: 315000 ug/l T

MW-97-7
11/4/1997: 378000 ug/l T
10/8/1998: 358000 ug/l T
10/8/2001: 332000 ug/l D
10/8/2001: 346000 ug/l T
1/17/2002: 327000 ug/l D
5/20/2008: 290000 ug/l T
9/26/2008: 293000 ug/l T

MW-06-23
5/13/2008: 26100 ug/l T
9/16/2008: 26600 ug/l T

MW-EPA-3
8/9/1988: 69900 ug/l T
11/5/1997: 99000 ug/l T
10/12/1998: 95000 ug/l T
5/15/2008: 86600 ug/l T
9/16/2008: 88900 ug/l T

MW-06-17
5/27/2008: 228000 ug/l T
9/20/2008: 209000 ug/l T

MW-06-14
5/27/2008: 216000 ug/l T
9/18/2008: 208000 ug/l T

MW-97-12
11/5/1997: 331000 ug/l T
10/12/1998: 245000 ug/l T
5/27/2008: 136000 ug/l T
9/23/2008: 140000 ug/l R T
12/15/2008: 121000 ug/l T

MW-06-15
5/21/2008: 198000 ug/l T
9/17/2008: 227000 ug/l T

MW-06-18
5/21/2008: 270000 ug/l T
9/25/2008: 262000 ug/l T

MW-06-20
5/20/2008: 220000 ug/l T
9/20/2008: 207000 ug/l T

MW-02-1
1/17/2002: 265000 ug/l D
5/29/2008: 324000 ug/l T
9/26/2008: 376000 ug/l T

MW-06-19
5/20/2008: 427000 ug/l T
9/18/2008: 473000 ug/l T

MW-02-2
5/19/2008: 102000 ug/l T
9/22/2008: 111000 ug/l T

MW-01-6
10/9/2001: 212000 ug/l D
10/9/2001: 229000 ug/l T
1/17/2002: 231000 ug/l D
5/19/2008: 134000 ug/l T
9/18/2008: 127000 ug/l T

MW-97-6
11/4/1997: 140000 ug/l T
10/8/1998: 88000 ug/l T
5/17/2008: 113000 ug/l T
9/16/2008: 112000 ug/l T

MW-01-3
10/9/2001: 185000 ug/l D
10/9/2001: 192000 ug/l T
1/22/2002: 174000 ug/l D
5/19/2008: 107000 ug/l T
9/19/2008: 103000 ug/l T

MW-01-2
10/9/2001: 134000 ug/l D
10/9/2001: 152000 ug/l T
1/16/2002: 148000 ug/l D
5/19/2008: 104000 ug/l T
9/22/2008: 103000 ug/l T

MW-01-5
10/4/2001: 111000 ug/l D
10/4/2001: 108000 ug/l T
1/16/2002: 106000 ug/l D
5/17/2008: 137000 ug/l T
9/16/2008: 141000 ug/l T

MW-01-4
10/4/2001: 114000 ug/l D
10/4/2001: 114000 ug/l T
1/16/2002: 112000 ug/l D
5/16/2008: 146000 ug/l T
9/16/2008: 139000 ug/l T

MW-01-1
10/8/2001: 259000 ug/l D
10/8/2001: 262000 ug/l T
1/16/2002: 275000 ug/l D
5/16/2008: 354000 ug/l T
9/17/2008: 318000 ug/l T

MW-97-5
11/4/1997: 31000 ug/l T
10/8/1998: 28000 ug/l T
5/15/2008: 30100 ug/l T
9/17/2008: 30500 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

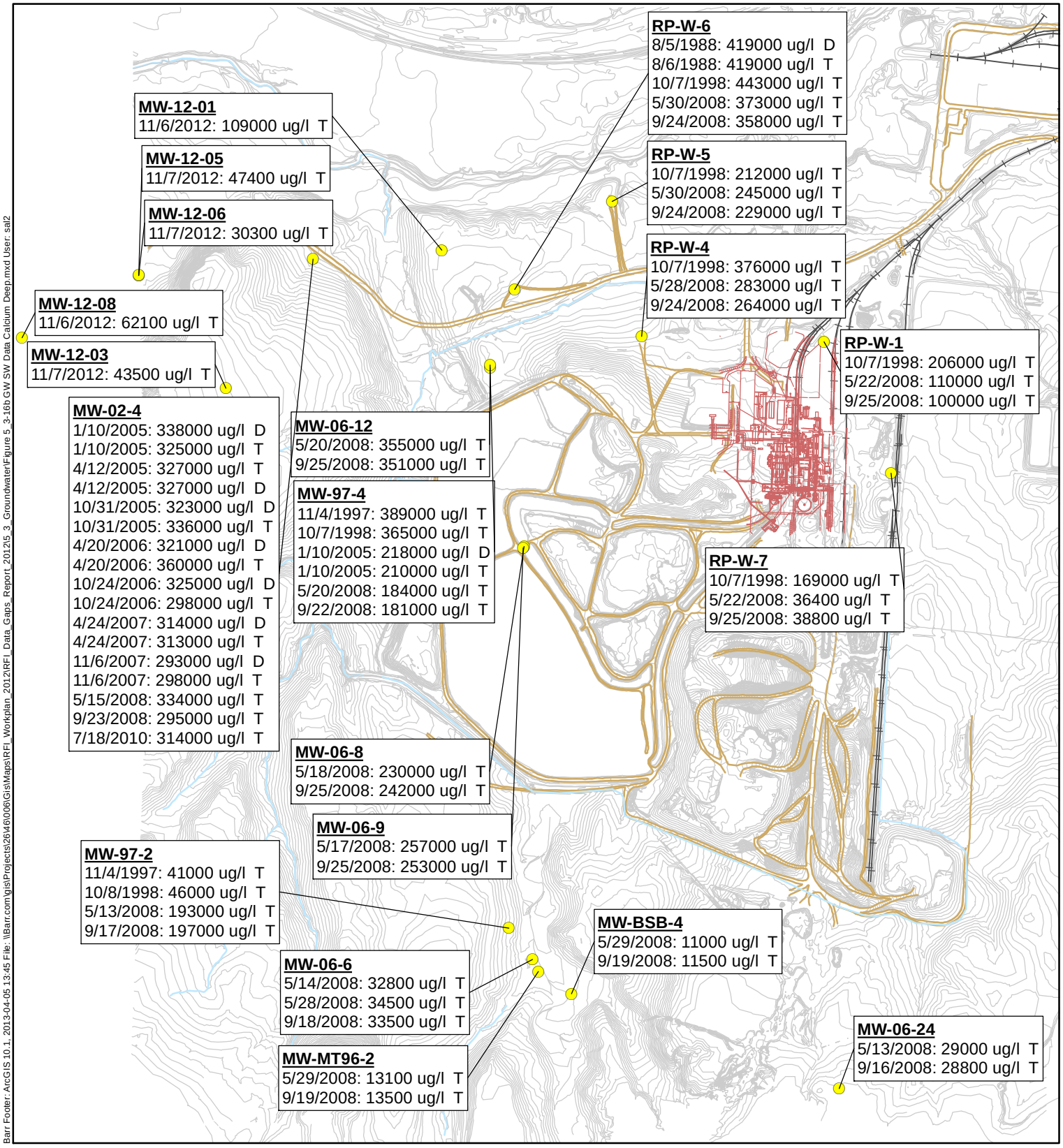
N

Feet
800 0 800

Figure 5.3-16a

ANALYTICAL GROUNDWATER
CALCIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:10 File: \\Barr.com\gis\Projects\26x46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-16a GW SW Data Calcium WaterTable.mxd User: sal2



Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-16b

ANALYTICAL GROUNDWATER
CALCIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-EPA-4
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: < 4 ug/l T
7/24/2003: < 2 ug/l D
5/15/2008: < 0.2 ug/l T
9/20/2008: < 0.2 ug/l T

MW-97-9
11/5/1997: 30 ug/l D
10/7/1998: < 10 ug/l D
5/16/2008: 0.5 ug/l T
9/24/2008: < 1 ug/l T

MW-06-13
10/2/2006: < 500 ug/l
5/27/2008: < 0.3 ug/l T
9/19/2008: 0.3 ug/l T

MW-EPA-3
8/9/1988: < 5 ug/l T
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 0.11 ug/l J T
7/24/2003: < 2 ug/l D
5/15/2008: 0.2 ug/l T
9/16/2008: < 0.36 ug/l T

MW-06-11
5/28/2008: < 0.5 ug/l T
9/23/2008: < 0.2 ug/l T

MW-06-16
10/1/2006: < 500 ug/l
5/21/2008: 0.5 ug/l T
9/20/2008: 0.5 ug/l T

MW-06-17
9/30/2006: < 500 ug/l
5/27/2008: 1.1 ug/l T
9/20/2008: 1.1 ug/l T

MW-97-3
11/4/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/28/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T

MW-06-14
5/27/2008: < 0.6 ug/l T
9/18/2008: < 0.7 ug/l T

MW-06-10
5/14/2008: 0.4 ug/l T
9/18/2008: < 0.33 ug/l T

MW-97-12
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
5/27/2008: 1 ug/l T
9/23/2008: 7.2 ug/l R T
12/15/2008: 0.43 ug/l T

MW-06-1
5/15/2008: < 0.2 ug/l T
9/18/2008: < 0.35 ug/l T
7/17/2010: 0.2 ug/l T

MW-06-15
5/21/2008: 0.5 ug/l T
9/17/2008: < 0.63 ug/l T

MW-12-02
11/8/2012: < 0.20 ug/l T

MW-12-04
11/7/2012: < 0.20 ug/l T

MW-06-18
9/29/2006: < 500 ug/l
5/21/2008: 0.4 ug/l T
9/25/2008: < 1 ug/l T

MW-12-07
11/6/2012: < 0.42 ug/l T

PW-99-1
5/18/2008: < 0.2 ug/l T
5/29/2008: < 0.2 ug/l T
9/25/2008: < 1 ug/l T

MW-06-20
10/3/2006: < 500 ug/l
5/20/2008: 0.4 ug/l T
9/20/2008: 0.4 ug/l T

MW-06-2
5/15/2008: 4 ug/l T
9/23/2008: < 0.2 ug/l T
7/18/2010: 0.30 ug/l T

MW-06-19
5/20/2008: 3.8 ug/l T
9/18/2008: 3.4 ug/l T

MW-97-10
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 1.6 ug/l J T
7/23/2003: < 2 ug/l D
5/21/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T

MW-02-3
5/15/2008: 0.6 ug/l T
9/23/2008: < 0.2 ug/l T
7/17/2010: 0.30 ug/l T

MW-02-1
1/17/2002: 3 ug/l D
7/22/2003: 0.63 ug/l J T
7/22/2003: < 2 ug/l D
5/29/2008: < 0.2 ug/l T
9/26/2008: < 1 ug/l T

MW-97-8
11/5/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/15/2008: 0.8 ug/l T
9/24/2008: < 1 ug/l T

MW-06-3
5/14/2008: 6.5 ug/l T
9/19/2008: 3.1 ug/l T
7/16/2010: 2.1 ug/l T

MW-97-6
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 0.84 ug/l J T
7/23/2003: 0.23 ug/l J D
5/17/2008: 0.4 ug/l T
9/16/2008: < 0.64 ug/l T

MW-06-7 *
5/29/2008: < 0.2 ug/l T
9/23/2008: 0.6 ug/l T

MW-97-11
11/5/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/21/2003: < 8 ug/l T
7/21/2003: < 2 ug/l D
5/21/2008: 0.7 ug/l T
9/25/2008: < 1 ug/l T

MW-01-6
10/9/2001: < 1 ug/l D
10/9/2001: 1 ug/l T
10/10/2001: < 500 ug/l
1/17/2002: < 1 ug/l D
5/19/2008: < 0.2 ug/l T
9/18/2008: < 0.31 ug/l T

MW-06-21
10/11/2006: < 500 ug/l
5/17/2008: 1.6 ug/l T
9/24/2008: < 1 ug/l T

MW-06-22
10/4/2006: < 500 ug/l
5/21/2008: 1.2 ug/l T
9/26/2008: < 1 ug/l T

MW-02-2
5/19/2008: 0.3 ug/l T
9/22/2008: 0.3 ug/l T

MW-EPA-1
8/9/1988: < 5 ug/l T
10/8/1998: < 10 ug/l D
5/14/2008: < 0.2 ug/l T
9/17/2008: < 0.44 ug/l T

PW-99-3
5/28/2008: < 0.3 ug/l T
9/22/2008: 0.2 ug/l T

MW-06-25
10/15/2006: < 500 ug/l
5/20/2008: 1.2 ug/l T
9/26/2008: < 1 ug/l T

MW-01-3
10/9/2001: 5 ug/l D
10/9/2001: 8 ug/l T
1/22/2002: < 1 ug/l D
5/19/2008: 0.2 ug/l T
9/19/2008: < 0.2 ug/l T

MW-97-1
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/13/2008: 0.3 ug/l T
9/17/2008: < 0.2 ug/l T

MW-97-7
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
10/8/2001: < 1 ug/l D
10/8/2001: < 1 ug/l T
1/17/2002: < 1 ug/l D
1/17/2002: 1 ug/l D
5/20/2008: 0.8 ug/l T
9/26/2008: < 1 ug/l T

MW-06-4
5/15/2008: 0.4 ug/l T
9/18/2008: < 0.22 ug/l T

MW-01-2
10/9/2001: 1 ug/l D
10/9/2001: 2 ug/l T
10/10/2001: < 500 ug/l
1/16/2002: < 1 ug/l D
7/22/2003: < 2 ug/l D
7/22/2003: 1.4 ug/l J T
5/19/2008: < 0.2 ug/l T
9/22/2008: 0.3 ug/l T

MW-GW-3
5/20/2008: 0.3 ug/l T
9/17/2008: < 0.2 ug/l T

MW-06-5
5/14/2008: 0.2 ug/l T
9/19/2008: < 0.2 ug/l T

MW-01-1
10/8/2001: 2 ug/l D
10/8/2001: 5 ug/l T
1/16/2002: 2 ug/l D
5/16/2008: 0.2 ug/l T
9/17/2008: < 0.56 ug/l T

MW-01-5
10/4/2001: < 1 ug/l D
10/4/2001: 1 ug/l T
1/16/2002: < 1 ug/l D
5/17/2008: 0.2 ug/l T
9/16/2008: < 0.37 ug/l T

MW-06-23
5/13/2008: 2.1 ug/l T
9/16/2008: < 0.47 ug/l T

MW-01-4
10/4/2001: 1 ug/l D
10/4/2001: 1 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: 0.2 ug/l T
9/16/2008: < 0.83 ug/l T

MW-97-5
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/15/2008: 1.1 ug/l T
9/17/2008: < 0.64 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

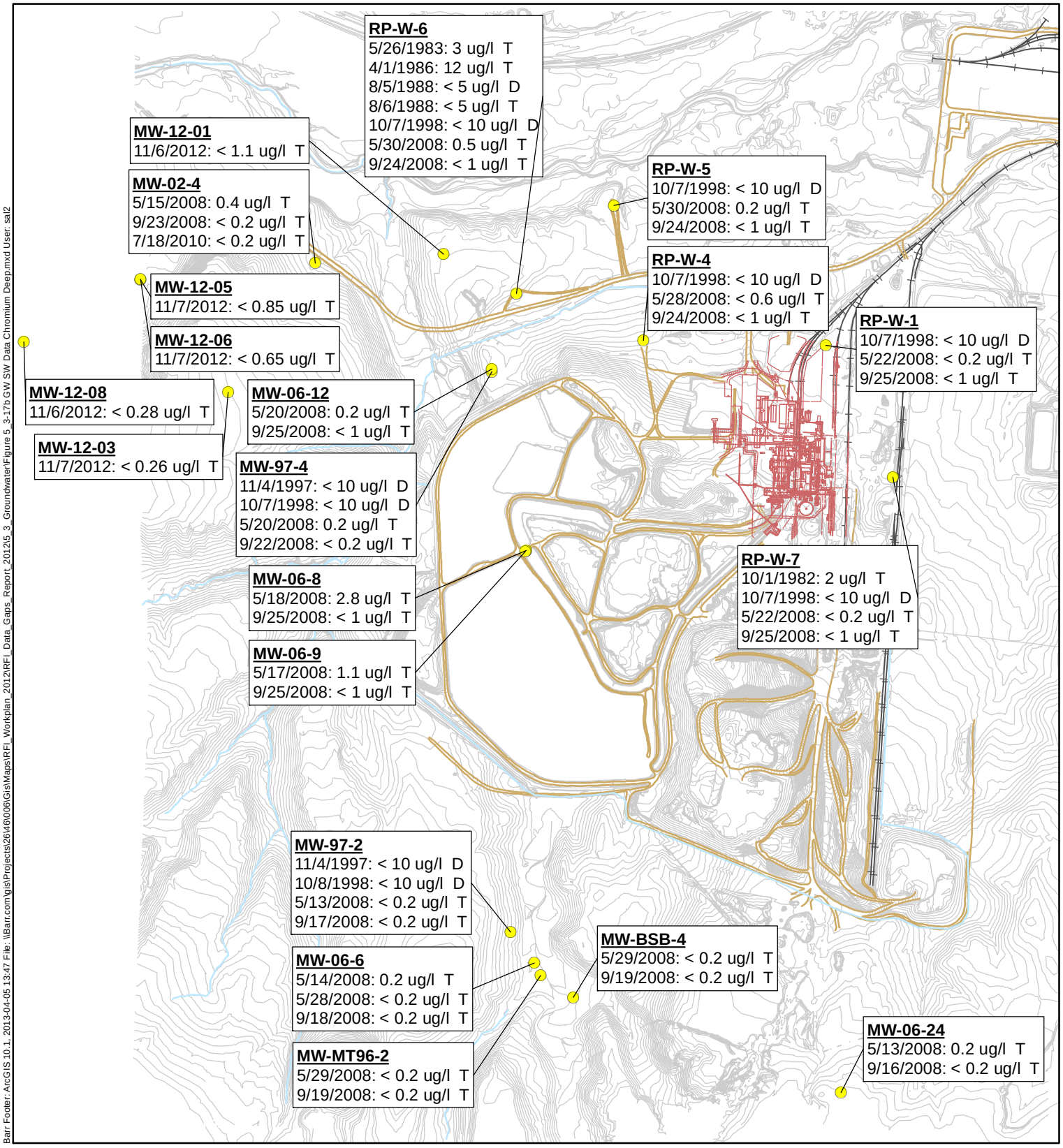
N

Feet
800 0 800

Figure 5.3-17a

ANALYTICAL GROUNDWATER
CHROMIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:17 File: \\Barr.com\gis\Projects\26k46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-17a GW SW Data Chromium WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 13:47 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-17b GW SW Data Chromium Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-17b

ANALYTICAL GROUNDWATER
CHROMIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 0.87 ug/l T
9/18/2008: < 0.819 ug/l T

MW-97-3
11/4/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/28/2008: 0.66 ug/l T
9/23/2008: 0.64 ug/l T

MW-06-1
5/15/2008: 0.74 ug/l T
9/18/2008: < 0.921 ug/l T
7/17/2010: 0.29 ug/l T

MW-12-02
11/8/2012: 0.660 ug/l T

MW-12-04
11/7/2012: 0.402 ug/l T

MW-12-07
11/6/2012: 0.501 ug/l T

MW-06-2
5/15/2008: 1.8 ug/l T
9/23/2008: 1.35 ug/l T
7/18/2010: 1.00 ug/l T

MW-02-3
5/15/2008: 1.59 ug/l T
9/23/2008: 1.27 ug/l T
7/17/2010: 1.17 ug/l T

MW-06-3
5/14/2008: 2.11 ug/l T
9/19/2008: 1.8 ug/l T
7/16/2010: 1.70 ug/l T

PW-99-1
5/18/2008: 1.5 ug/l T
5/29/2008: 1.4 ug/l T
9/25/2008: 1.5 ug/l T

MW-97-10
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 2.2 ug/l T
7/23/2003: 2 ug/l BQQ D
5/21/2008: 0.67 ug/l T
9/23/2008: 0.7 ug/l T

MW-97-8
11/5/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/15/2008: 4.88 ug/l T
9/24/2008: 4.3 ug/l T

MW-06-7 *
5/29/2008: 0.38 ug/l T
9/23/2008: 0.68 ug/l T

MW-97-11
11/5/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/21/2003: 3.5 ug/l T
7/21/2003: 3.5 ug/l BQQ D
5/21/2008: 2.11 ug/l T
9/25/2008: 2.4 ug/l T

MW-06-21
5/17/2008: 1.78 ug/l T
9/24/2008: 1.3 ug/l T

MW-EPA-1
8/9/1988: < 5 ug/l T
10/8/1998: < 10 ug/l D
5/14/2008: 0.09 ug/l T
9/17/2008: < 0.754 ug/l T

MW-06-4
5/15/2008: 0.19 ug/l T
9/18/2008: 0.087 ug/l T

MW-97-1
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/13/2008: 0.37 ug/l T
9/17/2008: < 0.547 ug/l T

MW-GW-3
5/20/2008: 0.18 ug/l T
9/17/2008: 0.384 ug/l T

MW-06-5
5/14/2008: 0.34 ug/l T
9/19/2008: 0.346 ug/l T

MW-EPA-4
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: < 2 ug/l T
7/24/2003: 3.2 ug/l BQQ D
5/15/2008: 3.93 ug/l T
9/20/2008: 3.06 ug/l T

MW-97-9
11/5/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/16/2008: 2.37 ug/l T
9/24/2008: 2.9 ug/l T

MW-06-11
5/28/2008: 4.83 ug/l T
9/23/2008: 4.24 ug/l T

PW-99-3
5/28/2008: 4.21 ug/l T
9/22/2008: 3.81 ug/l T

MW-06-16
5/21/2008: 5.93 ug/l T
9/20/2008: 6.08 ug/l T

MW-06-22
5/21/2008: 10.8 ug/l T
9/26/2008: 13.1 ug/l T

MW-06-25
5/20/2008: 6.11 ug/l T
9/26/2008: 5.5 ug/l T

MW-97-7
11/4/1997: 20 ug/l D
10/8/1998: 20 ug/l D
10/8/2001: 10 ug/l D
10/8/2001: 10 ug/l T
1/17/2002: 10 ug/l D
1/17/2002: 10 ug/l D
5/20/2008: 6.75 ug/l T
9/26/2008: 6.5 ug/l T

MW-01-1
10/8/2001: < 10 ug/l D
10/8/2001: < 10 ug/l T
1/16/2002: < 10 ug/l D
5/16/2008: 0.7 ug/l T
9/17/2008: < 0.847 ug/l T

MW-06-23
5/13/2008: 0.22 ug/l T
9/16/2008: 0.064 ug/l T

MW-06-13
5/27/2008: 1.99 ug/l T
9/19/2008: 1.91 ug/l T

MW-EPA-3
8/9/1988: < 6 ug/l B T
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 0.41 ug/l J T
7/24/2003: 0.66 ug/l BQQ D
5/15/2008: 0.39 ug/l T
9/16/2008: < 0.371 ug/l T

MW-06-17
5/27/2008: 3.14 ug/l T
9/20/2008: 2.34 ug/l T

MW-06-14
5/27/2008: 1.7 ug/l T
9/18/2008: < 1.8 ug/l T

MW-97-12
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
5/27/2008: 0.91 ug/l T
9/23/2008: 8.08 ug/l R T
12/15/2008: 0.493 ug/l T

MW-06-15
5/21/2008: 0.95 ug/l T
9/17/2008: < 1.6 ug/l T

MW-06-18
5/21/2008: 8.02 ug/l T
9/25/2008: 8.1 ug/l T

MW-06-20
5/20/2008: 10 ug/l T
9/20/2008: 8.62 ug/l T

MW-02-1
1/17/2002: < 10 ug/l D
7/22/2003: 6.6 ug/l T
7/22/2003: 7.6 ug/l BQQ D
5/29/2008: 1.85 ug/l T
9/26/2008: 2.5 ug/l T

MW-06-19
5/20/2008: 2.1 ug/l T
9/18/2008: 2.1 ug/l T

MW-02-2
5/19/2008: 7.53 ug/l T
9/22/2008: 7.05 ug/l T

MW-01-6
10/9/2001: 40 ug/l D
10/9/2001: 40 ug/l T
1/17/2002: 20 ug/l D
5/19/2008: 11.6 ug/l T
9/18/2008: 8.7 ug/l T

MW-97-6
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 0.44 ug/l J T
7/23/2003: 0.51 ug/l BQQ D
5/17/2008: 0.27 ug/l T
9/16/2008: < 0.443 ug/l T

MW-01-3
10/9/2001: 80 ug/l D
10/9/2001: 100 ug/l T
1/22/2002: 50 ug/l D
5/19/2008: 18.8 ug/l T
9/19/2008: 15.4 ug/l T

MW-01-2
10/9/2001: < 10 ug/l D
10/9/2001: < 10 ug/l T
1/16/2002: < 10 ug/l D
7/22/2003: 3.7 ug/l BQQ D
7/22/2003: 3.4 ug/l T
5/19/2008: 2.61 ug/l T
9/22/2008: 2.17 ug/l T

MW-01-5
10/4/2001: < 10 ug/l D
10/4/2001: < 10 ug/l T
1/16/2002: < 10 ug/l D
5/17/2008: 0.33 ug/l T
9/16/2008: < 0.414 ug/l T

MW-01-4
10/4/2001: < 10 ug/l D
10/4/2001: < 10 ug/l T
1/16/2002: < 10 ug/l D
5/16/2008: 0.37 ug/l T
9/16/2008: < 0.369 ug/l T

MW-97-5
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/15/2008: 0.29 ug/l T
9/17/2008: 0.217 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

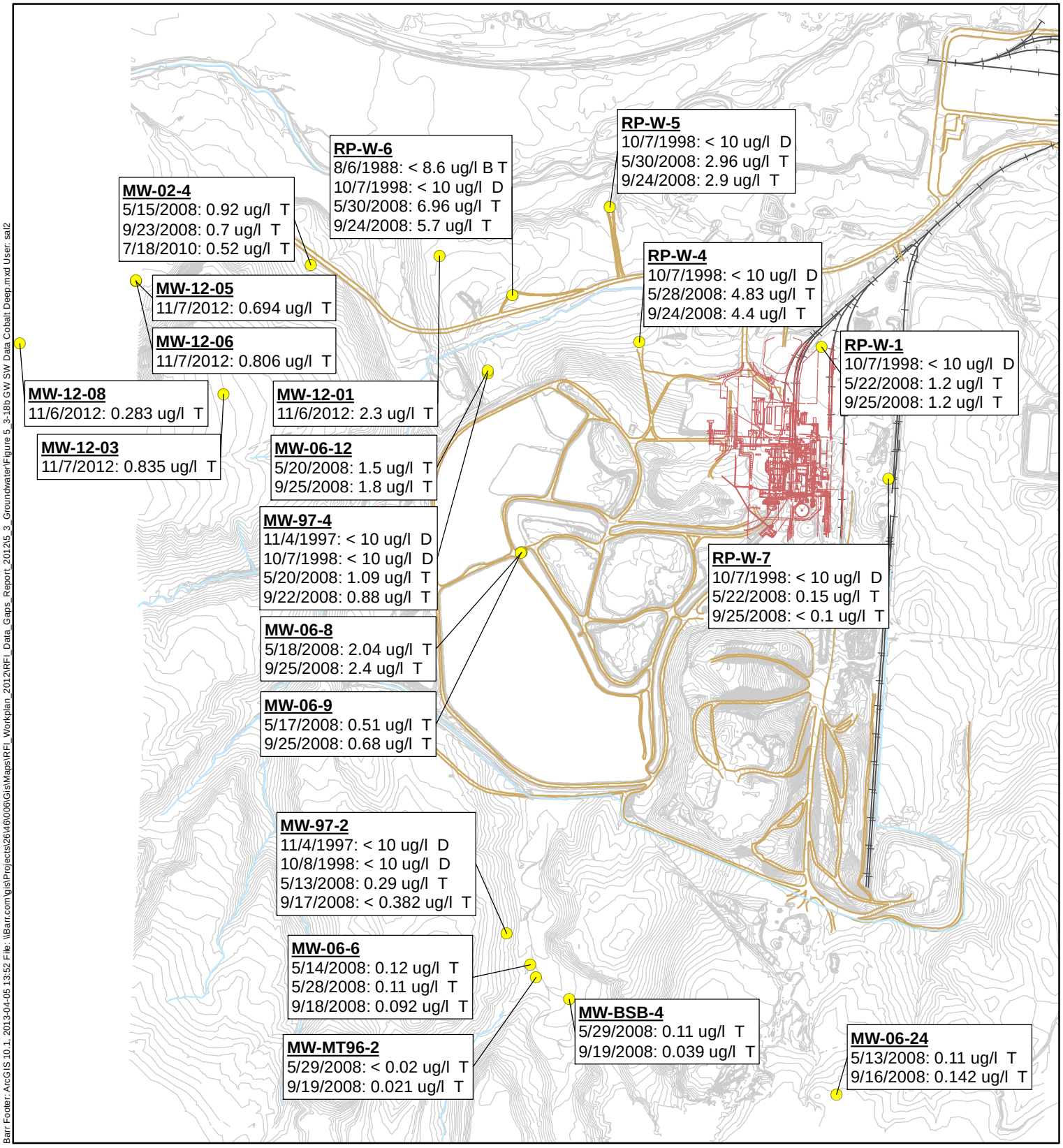
N

Feet
800 0 800

Figure 5.3-18a

ANALYTICAL GROUNDWATER
COBALT
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:26 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-18a GW SW Data Cobalt WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 13:52 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-18b GW SW Data Cobalt Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-18b

ANALYTICAL GROUNDWATER
COBALT
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: < 1.4 ug/l T
9/18/2008: < 1.828 ug/l T

MW-97-3
11/4/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
1/10/2005: < 2 ug/l D
1/10/2005: 1 ug/l T
5/28/2008: < 1.6 ug/l T
9/23/2008: 1.4 ug/l T

PW-99-1
1/10/2005: < 2 ug/l D
1/10/2005: 1 ug/l T
5/18/2008: 1.3 ug/l T
5/29/2008: < 1 ug/l T
9/25/2008: 1.1 ug/l T

MW-06-1
5/15/2008: < 2.6 ug/l T
9/18/2008: < 5.197 ug/l T
7/17/2010: 4.0 ug/l T

MW-12-02
11/8/2012: < 2.05 ug/l T

MW-12-04
11/7/2012: < 0.63 ug/l T

MW-06-2
5/15/2008: < 1.9 ug/l T
9/23/2008: 1.1 ug/l T
7/18/2010: 1.7 ug/l T

MW-12-07
11/6/2012: < 1.00 ug/l T

MW-02-3
10/9/2002: < 10 ug/l D
1/10/2005: < 2 ug/l D
1/10/2005: 3 ug/l T
4/12/2005: 2 ug/l T
4/12/2005: < 2 ug/l D
10/31/2005: < 2 ug/l D
10/31/2005: 2 ug/l b T
4/20/2006: < 2 ug/l T
4/20/2006: < 2 ug/l D
10/24/2006: 2 ug/l D
10/24/2006: 2 ug/l T
4/24/2007: 2.4 ug/l b D
4/24/2007: 2.7 ug/l b T
11/6/2007: 6.7 ug/l D
11/6/2007: 6.1 ug/l T
5/15/2008: < 1.2 ug/l T
9/23/2008: < 0.9 ug/l T
7/17/2010: 2.8 ug/l T

MW-06-3
5/14/2008: < 1.1 ug/l T
9/19/2008: 0.798 ug/l T
7/16/2010: 1.3 ug/l T

MW-06-4
5/15/2008: < 1.1 ug/l T
9/18/2008: < 0.568 ug/l T

MW-GW-2
6/30/1998: 20 ug/l D
9/30/1998: 60 ug/l D
12/31/1998: 10 ug/l D
3/31/1999: 8 ug/l D
6/30/1999: 29 ug/l D
9/30/1999: 8 ug/l D
12/31/1999: 34 ug/l D
3/31/2000: 10 ug/l D
6/30/2000: 27 ug/l D
9/30/2000: 11 ug/l D
12/31/2000: 31 ug/l D
3/31/2001: 10 ug/l D
6/30/2001: 20 ug/l D
9/30/2001: 15 ug/l D
12/31/2001: 23 ug/l D
3/31/2002: 26 ug/l D
6/30/2002: 69 ug/l D
9/30/2002: 9 ug/l D
12/31/2002: 8 ug/l D
3/31/2003: 12 ug/l D
6/30/2003: 21 ug/l D
9/30/2003: 7 ug/l D
12/31/2003: 8 ug/l D
3/31/2004: 51 ug/l D
6/30/2004: 30 ug/l D
9/30/2004: 7 ug/l D
11/30/2004: 18 ug/l D
12/31/2004: 18 ug/l D
3/31/2005: 3 ug/l D
6/30/2005: 3 ug/l D
7/31/2005: 2 ug/l D
6/30/2006: 12 ug/l D
9/30/2006: 4 ug/l D
3/31/2007: 4 ug/l D
6/30/2007: 4 ug/l D
6/30/2008: 3 ug/l D

MW-97-10
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 4.8 ug/l J T
7/23/2003: 3.4 ug/l BQQ D
1/11/2005: 2 ug/l D
1/11/2005: 4 ug/l T
5/21/2008: 1.4 ug/l J T
9/23/2008: 3.1 ug/l T

MW-97-11
11/5/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/21/2003: 5.5 ug/l J T
7/21/2003: 3.7 ug/l BQQ D
1/11/2005: 6 ug/l D
1/11/2005: 6 ug/l T
5/21/2008: 3.4 ug/l J T
9/25/2008: 6.4 ug/l T

MW-GW-3
6/30/1998: 20 ug/l D
9/30/1998: 80 ug/l D
12/31/1998: 10 ug/l D
3/31/1999: 9 ug/l D
6/30/1999: 9 ug/l D
9/30/1999: 4 ug/l D
12/31/1999: 6 ug/l D
3/31/2000: 8 ug/l D
6/30/2000: 9 ug/l D
9/30/2000: 12 ug/l D
12/31/2000: 17 ug/l D
3/31/2001: 5 ug/l D
6/30/2001: 4 ug/l D
9/30/2001: 15 ug/l D
12/31/2001: 6 ug/l D
3/31/2002: 26 ug/l D
6/30/2002: 7 ug/l D
9/30/2002: 5 ug/l D
12/31/2002: 3 ug/l D
3/31/2003: 7 ug/l D
6/30/2003: 6 ug/l D
9/30/2003: 4 ug/l D
12/31/2003: 7 ug/l D
3/31/2004: 6 ug/l D
6/30/2004: 6 ug/l D
9/30/2004: 4 ug/l D
11/30/2004: 6 ug/l D
12/31/2004: 6 ug/l D
3/31/2005: < 1 ug/l D
6/30/2005: 2 ug/l D
7/31/2005: < 1 ug/l D
12/31/2005: 2 ug/l D
3/31/2006: 2 ug/l D
6/30/2006: 2 ug/l D
9/30/2006: 2 ug/l D
12/31/2006: 2 ug/l D
3/31/2007: 4 ug/l D
6/30/2007: 2 ug/l D
9/30/2007: 2 ug/l D
12/31/2007: 2 ug/l D
3/31/2008: 4 ug/l D
5/20/2008: 2.3 ug/l J T
6/30/2008: 2 ug/l D
9/17/2008: 1.198 ug/l T
9/30/2008: 1 ug/l D
12/31/2008: 2 ug/l D
3/31/2009: 2 ug/l D
6/30/2009: 1 ug/l D
9/30/2009: < 10 ug/l D
12/31/2009: 3 ug/l D
3/31/2010: < 1 ug/l D
6/30/2010: 2 ug/l D
9/30/2010: 2 ug/l D

MW-06-11
5/28/2008: < 1.4 ug/l T
9/23/2008: 1.2 ug/l T

MW-97-8
11/5/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/15/2008: < 2 ug/l T
9/24/2008: 1.2 ug/l T

MW-06-21
5/17/2008: 1.7 ug/l T
9/24/2008: < 0.9 ug/l T

MW-06-7 *
5/29/2008: < 4.9 ug/l T
9/23/2008: 7.1 ug/l T

MW-EPA-1
8/9/1988: < 7.7 ug/l B T
10/8/1998: < 10 ug/l D
5/14/2008: < 0.3 ug/l T
9/17/2008: < 894.112 ug/l R T
12/11/2008: 0.9 ug/l T

MW-EPA-4
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 2.1 ug/l J T
7/24/2003: 1.1 ug/l J D
5/15/2008: < 1.5 ug/l T
9/20/2008: < 0.9 ug/l T

MW-97-9
11/5/1997: < 10 ug/l D
10/7/1998: 10 ug/l D
5/16/2008: < 0.9 ug/l T
9/24/2008: 1.1 ug/l T

MW-06-13
5/27/2008: < 2.1 ug/l T
9/19/2008: 1.2 ug/l T

MW-06-16
5/21/2008: 1.7 ug/l J T
9/20/2008: 1.8 ug/l T

MW-06-22
5/21/2008: 1.9 ug/l J T
9/26/2008: 3.5 ug/l T

MW-06-25
5/20/2008: 2.5 ug/l J T
9/26/2008: 3.5 ug/l T

MW-97-7
11/4/1997: < 10 ug/l D
10/8/1998: 50 ug/l D
10/8/2001: 6 ug/l D
10/8/2001: 6 ug/l T
1/17/2002: < 1 ug/l D
1/17/2002: 3 ug/l D
5/20/2008: 2.5 ug/l J T
9/26/2008: 2.6 ug/l T

MW-97-5
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/15/2008: < 0.9 ug/l T
9/17/2008: 1.094 ug/l T

PW-99-3
5/28/2008: < 1.9 ug/l T
9/22/2008: 3.1 ug/l T

MW-06-5
5/14/2008: < 1.8 ug/l T
9/19/2008: 1.816 ug/l T

MW-97-1
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/13/2008: < 2 ug/l T
9/17/2008: < 5.7 ug/l T

MW-06-23
5/13/2008: < 0.7 ug/l T
9/16/2008: < 0.26 ug/l T

MW-01-1
10/8/2001: 4 ug/l D
10/8/2001: 5 ug/l T
1/16/2002: 3 ug/l D
5/16/2008: 4.5 ug/l T
9/17/2008: < 8.233 ug/l T

MW-EPA-3
8/9/1988: < 7.7 ug/l B T
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 1.1 ug/l J T
7/24/2003: 0.91 ug/l J D
5/15/2008: < 2 ug/l T
9/16/2008: < 1.032 ug/l T

MW-06-17
5/27/2008: < 2 ug/l T
9/20/2008: 1.3 ug/l T

MW-06-14
5/27/2008: < 1.9 ug/l T
9/18/2008: < 8.987 ug/l T

MW-97-12
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
5/27/2008: < 2.6 ug/l T
9/23/2008: 3180 ug/l R T
12/15/2008: 0.918 ug/l T

MW-06-15
5/21/2008: 1.9 ug/l J T
9/17/2008: < 859.446 ug/l R T
12/11/2008: 4.589 ug/l T

MW-06-18
5/21/2008: 5.7 ug/l J T
9/25/2008: 1.8 ug/l T

MW-06-20
5/20/2008: 3.8 ug/l J T
9/20/2008: 2.1 ug/l T

MW-06-19
5/20/2008: 3 ug/l J T
9/18/2008: < 8.247 ug/l T

MW-02-1
1/17/2002: < 1 ug/l D
7/22/2003: 5.9 ug/l J T
7/22/2003: 4.6 ug/l BQQJ D
5/29/2008: < 3 ug/l T
9/26/2008: 8.7 ug/l T

MW-02-2
5/19/2008: 1.6 ug/l J T
9/22/2008: 2.1 ug/l T

MW-97-6
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: < 2 ug/l T
7/23/2003: 0.95 ug/l J D
5/17/2008: 1.6 ug/l T
9/16/2008: < 1.122 ug/l T

MW-01-6
10/9/2001: 4 ug/l D
10/9/2001: 5 ug/l T
1/17/2002: < 1 ug/l D
5/19/2008: 8.6 ug/l J T
9/18/2008: 61.445 ug/l T

MW-01-2
10/9/2001: 4 ug/l D
10/9/2001: 5 ug/l T
1/16/2002: 3 ug/l D
7/22/2003: 2.6 ug/l BQQJ D
7/22/2003: 3 ug/l J T
5/19/2008: 3 ug/l J T
9/22/2008: 2.6 ug/l T

MW-01-5
10/4/2001: 3 ug/l D
10/4/2001: 7 ug/l T
1/16/2002: 1 ug/l D
5/17/2008: 2.8 ug/l T
9/16/2008: < 3.09 ug/l T

MW-01-3
10/9/2001: 2 ug/l D
10/9/2001: 10 ug/l T
1/22/2002: 1 ug/l D
5/19/2008: 3.4 ug/l J T
9/19/2008: 15.536 ug/l T

MW-01-4
10/4/2001: 2 ug/l D
10/4/2001: 5 ug/l T
1/16/2002: 1 ug/l D
5/16/2008: < 1.9 ug/l T
9/16/2008: < 1.164 ug/l T

Barr Footer: ArcGIS 10.1, 2013-04-05 09:28 File: \\Barr.com\gis\Projects\26\46\006\GisMaps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-19a GW SW Data Copper WaterTable.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

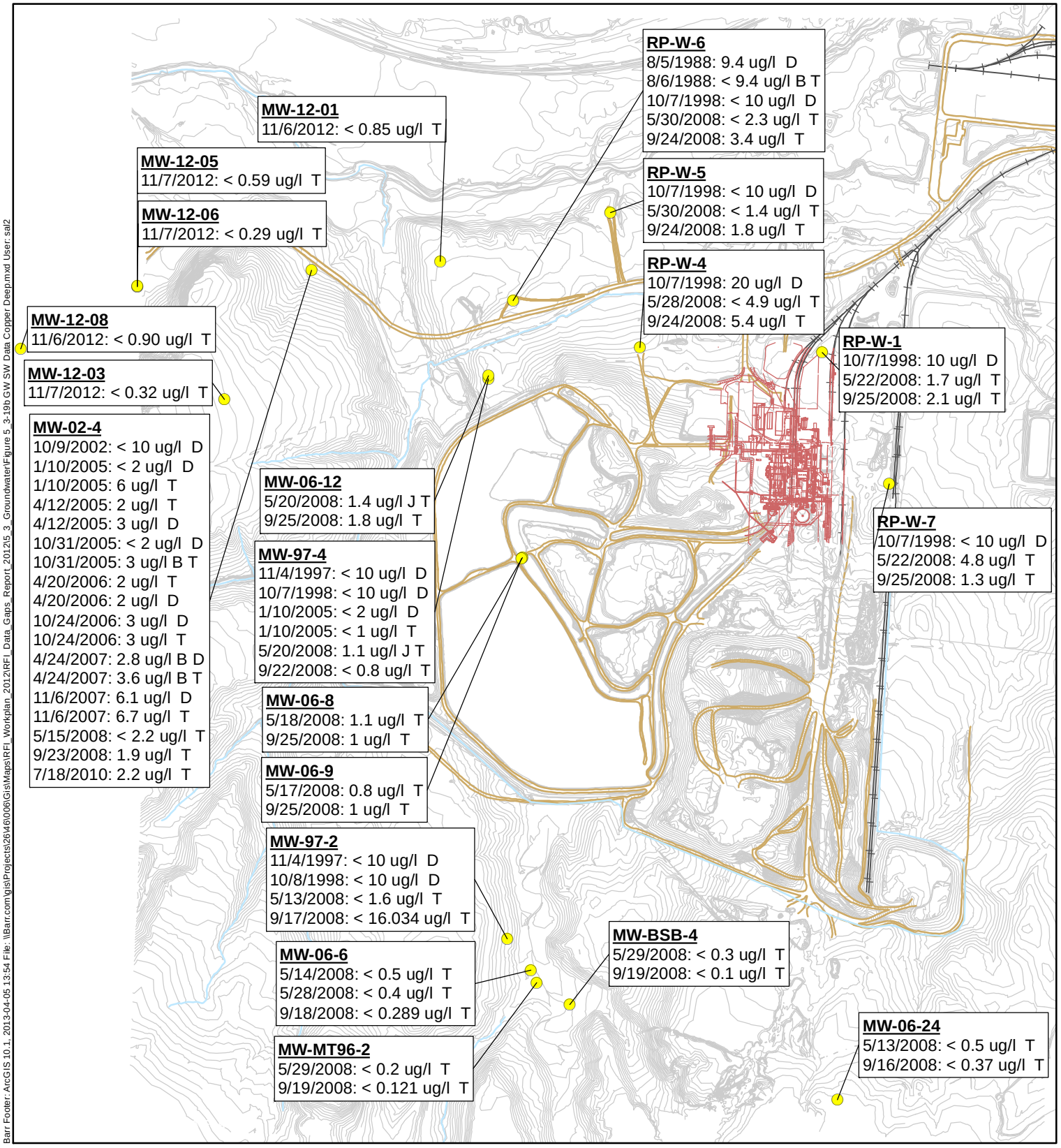
* Screened within tailings basin

N

Feet
800 0 800

Figure 5.3-19a

ANALYTICAL GROUNDWATER
COPPER
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana



Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-19b

ANALYTICAL GROUNDWATER
COPPER
DEEP WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 13:54 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-19b GW SW Data Copper Deep.mxd User: sal2

MW-06-10
5/14/2008: 277 ug/l T
9/18/2008: < 460 ug/l T

MW-97-3
11/4/1997: 40 ug/l D
10/7/1998: < 30 ug/l D
5/28/2008: < 20 ug/l T
9/23/2008: < 20 ug/l T

PW-99-1
5/18/2008: 21 ug/l T
5/29/2008: < 20 ug/l T
9/25/2008: 40 ug/l T

MW-06-1
5/15/2008: 59 ug/l T
9/18/2008: < 540 ug/l T
7/17/2010: 66 ug/l T

MW-12-02
11/8/2012: 50 ug/l T

MW-12-04
11/7/2012: < 20 ug/l T

MW-06-2
5/15/2008: 1090 ug/l T
9/23/2008: 130 ug/l T
7/18/2010: 46 ug/l T

MW-12-07
11/6/2012: < 20 ug/l T

MW-02-3
10/31/2005: 146 ug/l T
10/31/2005: 154 ug/l D
5/15/2008: 500 ug/l T
9/23/2008: 30 ug/l T
7/17/2010: 104 ug/l T

MW-06-3
5/14/2008: 623 ug/l T
9/19/2008: 20 ug/l T
7/16/2010: 99 ug/l T

MW-97-9
11/5/1997: < 30 ug/l D
10/7/1998: < 30 ug/l D
5/16/2008: 129 ug/l T
9/24/2008: 260 ug/l T

MW-EPA-4
11/5/1997: < 30 ug/l D
10/12/1998: < 30 ug/l D
5/15/2008: 198 ug/l T
9/20/2008: 470 ug/l T

MW-06-11
5/28/2008: 460 ug/l T
9/23/2008: 170 ug/l T

MW-97-10
11/4/1997: < 30 ug/l D
10/8/1998: < 30 ug/l D
5/21/2008: 175 ug/l T
9/23/2008: 70 ug/l T

MW-97-8
11/5/1997: < 30 ug/l D
10/7/1998: < 30 ug/l D
5/15/2008: 1080 ug/l T
9/24/2008: 160 ug/l T

MW-06-7 *
5/29/2008: 41 ug/l T
9/23/2008: 40 ug/l T

MW-97-11
11/5/1997: < 30 ug/l D
10/8/1998: < 30 ug/l D
5/21/2008: 166 ug/l T
9/25/2008: 240 ug/l T

MW-06-21
5/17/2008: 1080 ug/l T
9/24/2008: < 20 ug/l T

MW-EPA-1
8/9/1988: < 36 ug/l B T
10/8/1998: < 30 ug/l D
5/14/2008: 38 ug/l T
9/17/2008: < 540 ug/l R T
12/11/2008: 183 ug/l T

PW-99-3
5/28/2008: 184 ug/l T
9/22/2008: 720 ug/l T

MW-97-1
11/4/1997: 40 ug/l D
10/8/1998: < 30 ug/l D
5/13/2008: 20 ug/l T
9/17/2008: < 20 ug/l T

MW-06-22
5/21/2008: 205 ug/l T
9/26/2008: 40 ug/l T

MW-06-25
5/20/2008: 97 ug/l T
9/26/2008: 30 ug/l T

MW-06-5
5/14/2008: < 20 ug/l T
9/19/2008: 230 ug/l T

MW-97-7
11/4/1997: < 30 ug/l D
10/8/1998: < 30 ug/l D
10/8/2001: < 30 ug/l D
10/8/2001: < 30 ug/l T
1/17/2002: 10 ug/l D
1/17/2002: < 30 ug/l D
5/20/2008: 381 ug/l T
9/26/2008: < 20 ug/l T

MW-97-5
11/4/1997: 50 ug/l D
10/8/1998: < 30 ug/l D
5/15/2008: 851 ug/l T
9/17/2008: 550 ug/l T

MW-06-23
5/13/2008: 571 ug/l T
9/16/2008: 90 ug/l T

MW-06-13
5/27/2008: 68 ug/l T
9/19/2008: 260 ug/l T

MW-06-16
5/21/2008: 31 ug/l T
9/20/2008: 140 ug/l T

MW-EPA-3
8/9/1988: < 20 ug/l T
11/5/1997: < 30 ug/l D
10/12/1998: < 30 ug/l D
5/15/2008: 43 ug/l T
9/16/2008: < 160 ug/l T

MW-06-17
5/27/2008: 224 ug/l T
9/20/2008: 100 ug/l T

MW-06-14
5/27/2008: 242 ug/l T
9/18/2008: 1530 ug/l R T
12/11/2008: < 20 ug/l T

MW-97-12
11/5/1997: 140 ug/l D
10/12/1998: < 30 ug/l D
5/27/2008: 1390 ug/l T
9/23/2008: 1650 ug/l R T
12/15/2008: 50 ug/l T

MW-06-15
5/21/2008: 24 ug/l T
9/17/2008: < 220 ug/l R T
12/11/2008: 23 ug/l T

MW-06-18
5/21/2008: < 20 ug/l T
9/25/2008: < 20 ug/l T

MW-06-20
5/20/2008: < 20 ug/l T
9/20/2008: 840 ug/l R T
12/12/2008: < 20 ug/l T

MW-06-19
5/20/2008: 54 ug/l T
9/18/2008: < 340 ug/l T

MW-02-1
1/17/2002: 160 ug/l D
9/4/2002: 800 ug/l D
5/29/2008: 2290 ug/l T
9/26/2008: 9510 ug/l T

MW-01-6
10/9/2001: 15900 ug/l D
10/9/2001: 18000 ug/l T
1/17/2002: 33700 ug/l D
9/5/2002: 36000 ug/l D
5/19/2008: 23200 ug/l T
9/18/2008: 23400 ug/l T

MW-97-6
11/4/1997: < 30 ug/l D
10/8/1998: < 30 ug/l D
5/17/2008: 43 ug/l T
9/16/2008: < 610 ug/l R T
12/11/2008: 130 ug/l T

MW-02-2
9/5/2002: < 30 ug/l D
5/19/2008: 527 ug/l T
9/22/2008: 910 ug/l T

MW-01-3
10/9/2001: 7610 ug/l D
10/9/2001: 10000 ug/l T
1/22/2002: 3300 ug/l D
9/5/2002: 1970 ug/l D
5/19/2008: 1020 ug/l T
9/19/2008: 670 ug/l T

MW-01-2
10/9/2001: < 10 ug/l D
10/9/2001: < 10 ug/l T
1/16/2002: < 30 ug/l D
9/4/2002: < 30 ug/l D
5/19/2008: 20 ug/l T
9/22/2008: 320 ug/l T

MW-01-5
10/4/2001: < 10 ug/l D
10/4/2001: 1510 ug/l T
1/16/2002: < 30 ug/l D
5/17/2008: 135 ug/l T
9/16/2008: < 400 ug/l T

MW-01-4
10/4/2001: < 10 ug/l D
10/4/2001: 590 ug/l T
1/16/2002: < 30 ug/l D
5/16/2008: 32 ug/l T
9/16/2008: < 50 ug/l T

MW-01-1
10/8/2001: < 30 ug/l D
10/8/2001: 290 ug/l T
1/16/2002: < 30 ug/l D
5/16/2008: 79 ug/l T
9/17/2008: < 20 ug/l T

MW-06-4
5/15/2008: 842 ug/l T
9/18/2008: 190 ug/l T

MW-GW-2
6/30/1998: 1090 ug/l D
9/30/1998: 380 ug/l D
12/31/1998: 160 ug/l D
3/31/1999: 229 ug/l D
6/30/1999: 238 ug/l D
9/30/1999: 170 ug/l D
12/31/1999: 359 ug/l D
3/31/2000: 241 ug/l D
6/30/2000: 619 ug/l D
9/30/2000: 78 ug/l D
12/31/2000: 333 ug/l D
3/31/2001: 12 ug/l D
6/30/2001: 266 ug/l D
9/30/2001: 105 ug/l D
12/31/2001: 281 ug/l D
3/31/2002: 130 ug/l D
6/30/2002: 470 ug/l D
9/30/2002: 12 ug/l D
12/31/2002: < 10 ug/l D
3/31/2003: 10 ug/l D
6/30/2003: 134 ug/l D
9/30/2003: < 5 ug/l D
12/31/2003: 20 ug/l D
3/31/2004: 90 ug/l D
6/30/2004: 76 ug/l D
9/30/2004: < 5 ug/l D
11/30/2004: < 5 ug/l D
12/31/2004: < 5 ug/l D
3/31/2005: 9 ug/l D
6/30/2005: < 5 ug/l D
7/31/2005: < 5 ug/l D
6/30/2006: 21 ug/l D
9/30/2006: 8 ug/l D
3/31/2007: < 5 ug/l D
6/30/2007: < 5 ug/l D
6/30/2008: < 5 ug/l D

MW-GW-3
6/30/1998: 560 ug/l D
9/30/1998: 130 ug/l D
12/31/1998: 160 ug/l D
3/31/1999: 58 ug/l D
6/30/1999: 38 ug/l D
9/30/1999: 33 ug/l D
12/31/1999: 25 ug/l D
3/31/2000: 55 ug/l D
6/30/2000: 46 ug/l D
9/30/2000: 46 ug/l D
12/31/2000: 274 ug/l D
3/31/2001: 40 ug/l D
6/30/2001: 34 ug/l D
9/30/2001: 105 ug/l D
12/31/2001: 61 ug/l D
3/31/2002: 180 ug/l D
6/30/2002: 40 ug/l D
9/30/2002: < 5 ug/l D
12/31/2002: < 10 ug/l D
3/31/2003: < 10 ug/l D
6/30/2003: 55 ug/l D
9/30/2003: 5 ug/l D
12/31/2003: < 5 ug/l D
3/31/2004: < 5 ug/l D
6/30/2004: < 5 ug/l D
9/30/2004: < 5 ug/l D
11/30/2004: < 5 ug/l D
12/31/2004: < 5 ug/l D
3/31/2005: 10 ug/l D
6/30/2005: < 5 ug/l D
7/31/2005: < 5 ug/l D
12/31/2005: 20 ug/l D
3/31/2006: 13 ug/l D
6/30/2006: 7 ug/l D
9/30/2006: 9 ug/l D
12/31/2006: 7 ug/l D
3/31/2007: < 5 ug/l D
6/30/2007: < 5 ug/l D
9/30/2007: < 5 ug/l D
12/31/2007: < 5 ug/l D
3/31/2008: < 10 ug/l D
5/20/2008: < 20 ug/l T
6/30/2008: < 5 ug/l D
9/17/2008: < 20 ug/l T
9/30/2008: < 10 ug/l D
12/31/2008: < 5 ug/l D
3/31/2009: < 10 ug/l D
6/30/2009: < 6 ug/l D
9/30/2009: < 5 ug/l D
12/31/2009: < 5 ug/l D
3/31/2010: < 5 ug/l D
6/30/2010: 6 ug/l D
9/30/2010: < 10 ug/l D

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

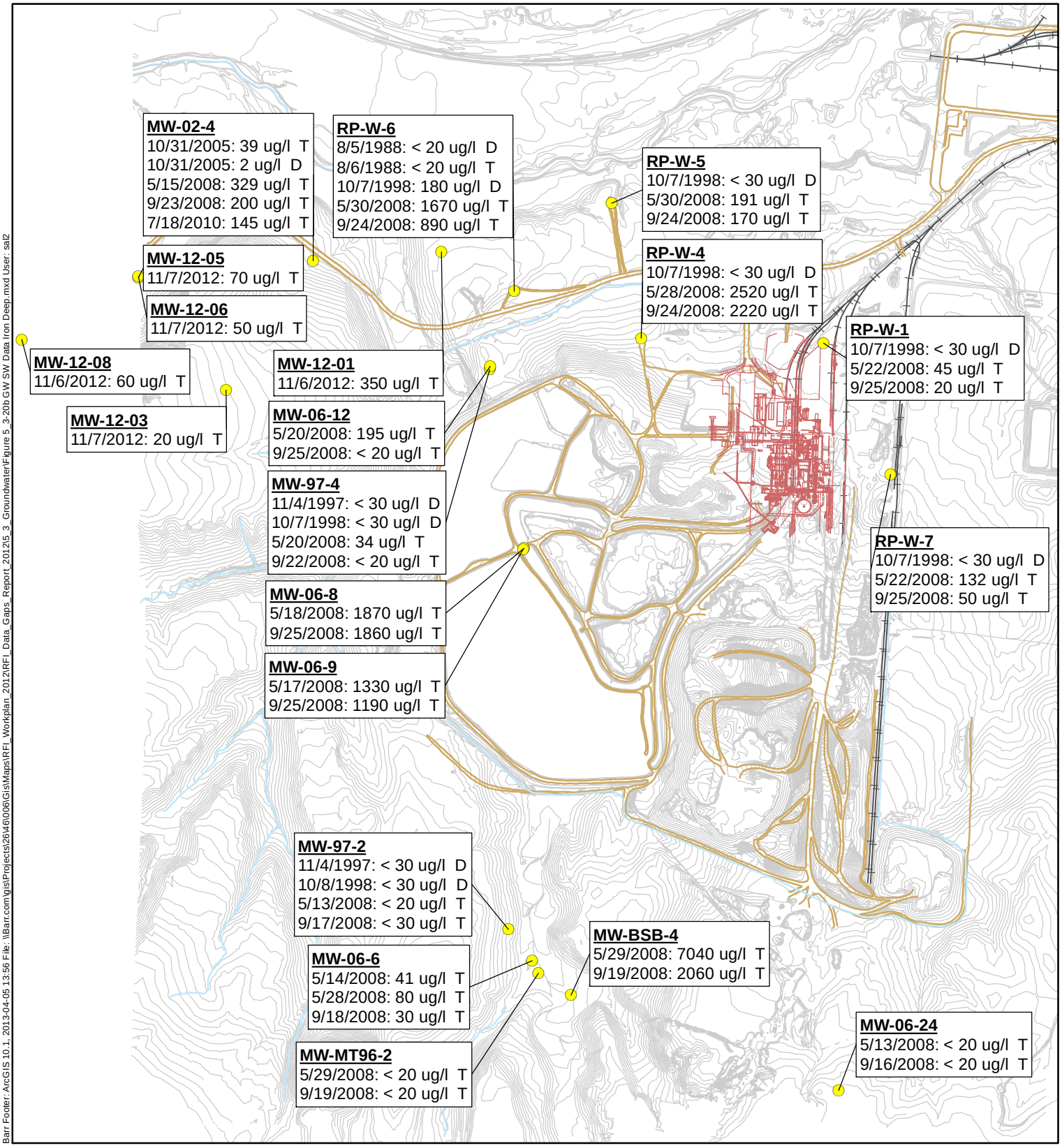
N

Feet
800 0 800

Figure 5.3-20a

ANALYTICAL GROUNDWATER
IRON
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:29 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-20a GW SW Data Iron WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 13:56 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-20b GW SW Data Iron Deep.mxd User: sa2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-20b

ANALYTICAL GROUNDWATER
IRON
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 0.75 ug/l T
9/18/2008: < 0.468 ug/l T

MW-97-3
11/4/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/28/2008: < 0.11 ug/l T
9/23/2008: 0.04 ug/l T

PW-99-1
5/18/2008: 0.14 ug/l T
5/29/2008: 1.65 ug/l T
9/25/2008: < 0.25 ug/l T

MW-06-1
5/15/2008: < 0.16 ug/l T
9/18/2008: < 0.504 ug/l T
7/17/2010: 0.16 ug/l T

MW-12-02
11/8/2012: 0.129 ug/l T

MW-12-04
11/7/2012: 0.025 ug/l T

MW-06-2
5/15/2008: 0.49 ug/l T
9/23/2008: 0.09 ug/l T
7/18/2010: 0.14 ug/l T

MW-12-07
11/6/2012: 0.021 ug/l T

MW-02-3
10/9/2002: < 10 ug/l D
5/15/2008: < 0.29 ug/l T
9/23/2008: 0.04 ug/l T
7/17/2010: 0.20 ug/l T

MW-06-3
5/14/2008: < 0.27 ug/l T
9/19/2008: 0.065 ug/l T
7/16/2010: 0.10 ug/l T

MW-97-10
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 0.96 ug/l J T
7/23/2003: 0.05 ug/l J D
5/21/2008: 0.2 ug/l T
9/23/2008: 0.09 ug/l T

MW-06-7 *
5/29/2008: < 0.51 ug/l T
9/23/2008: 0.21 ug/l T

MW-97-11
11/5/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/21/2003: 0.47 ug/l J T
7/21/2003: 0.04 ug/l J D
5/21/2008: 0.63 ug/l T
9/25/2008: 0.96 ug/l T

MW-06-4
5/15/2008: 0.41 ug/l T
9/18/2008: 0.157 ug/l T

MW-GW-2
6/30/1998: 10 ug/l D
9/30/1998: 30 ug/l D
12/31/1998: < 10 ug/l D
3/31/1999: < 2 ug/l D
6/30/1999: 11 ug/l D
9/30/1999: 3 ug/l D
12/31/1999: 18 ug/l D
3/31/2000: 4 ug/l D
6/30/2000: 13 ug/l D
9/30/2000: 3 ug/l D
12/31/2000: 5 ug/l D
3/31/2001: < 2 ug/l D
6/30/2001: 3 ug/l D
9/30/2001: < 2 ug/l D
12/31/2001: 3 ug/l D
3/31/2002: 16 ug/l D
6/30/2002: 6 ug/l D
9/30/2002: < 2 ug/l D
12/31/2002: < 2 ug/l D
3/31/2003: < 2 ug/l D
6/30/2003: < 2 ug/l D
9/30/2003: < 2 ug/l D
12/31/2003: < 2 ug/l D
3/31/2004: < 1 ug/l D
6/30/2004: < 1 ug/l D
9/30/2004: < 1 ug/l D
11/30/2004: < 1 ug/l D
12/31/2004: < 1 ug/l D
3/31/2005: < 1 ug/l D
6/30/2005: < 1 ug/l D
7/31/2005: < 1 ug/l D
6/30/2006: < 1 ug/l D
9/30/2006: < 1 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: < 1 ug/l D
6/30/2008: < 2 ug/l D

MW-GW-3
6/30/1998: 10 ug/l D
9/30/1998: 60 ug/l D
12/31/1998: < 10 ug/l D
3/31/1999: 3 ug/l D
6/30/1999: 3 ug/l D
9/30/1999: < 2 ug/l D
12/31/1999: 2 ug/l D
3/31/2000: 3 ug/l D
6/30/2000: 3 ug/l D
9/30/2000: 3 ug/l D
12/31/2000: < 2 ug/l D
3/31/2001: < 2 ug/l D
6/30/2001: < 2 ug/l D
9/30/2001: < 2 ug/l D
12/31/2001: < 2 ug/l D
3/31/2002: 4 ug/l D
6/30/2002: < 2 ug/l D
9/30/2002: < 20 ug/l D
12/31/2002: < 2 ug/l D
3/31/2003: < 2 ug/l D
6/30/2003: < 2 ug/l D
9/30/2003: < 2 ug/l D
12/31/2003: < 2 ug/l D
3/31/2004: < 1 ug/l D
6/30/2004: < 1 ug/l D
9/30/2004: < 1 ug/l D
11/30/2004: < 1 ug/l D
12/31/2004: < 1 ug/l D
3/31/2005: < 1 ug/l D
6/30/2005: < 1 ug/l D
7/31/2005: < 1 ug/l D
12/31/2005: < 0.1 ug/l D
3/31/2006: < 1 ug/l D
6/30/2006: < 1 ug/l D
9/30/2006: < 1 ug/l D
12/31/2006: < 1 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: < 1 ug/l D
9/30/2007: < 2 ug/l D
12/31/2007: < 2 ug/l D
3/31/2008: < 2 ug/l D
5/20/2008: 0.1 ug/l T
6/30/2008: < 2 ug/l D
9/17/2008: 0.08 ug/l T
9/30/2008: < 2 ug/l D
12/31/2008: < 2 ug/l D
3/31/2009: < 2 ug/l D
6/30/2009: < 2 ug/l D
9/30/2009: < 2 ug/l D
12/31/2009: < 2 ug/l D
3/31/2010: < 2 ug/l D
6/30/2010: < 2 ug/l D
9/30/2010: < 2 ug/l D

MW-06-11
5/28/2008: < 0.35 ug/l T
9/23/2008: 0.17 ug/l T

MW-EPA-4
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 1.1 ug/l J T
7/24/2003: < 1 ug/l D
5/15/2008: < 0.25 ug/l T
9/20/2008: 0.4 ug/l T

MW-97-9
11/5/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/16/2008: < 0.09 ug/l T
9/24/2008: 0.36 ug/l T

MW-06-13
10/2/2006: < 500 ug/l
5/27/2008: < 0.13 ug/l T
9/19/2008: 0.31 ug/l T

MW-06-16
10/1/2006: < 500 ug/l
5/21/2008: 0.05 ug/l T
9/20/2008: 0.26 ug/l T

MW-06-21
10/11/2006: < 500 ug/l
5/17/2008: 0.54 ug/l T
9/24/2008: < 0.25 ug/l T

MW-97-8
11/5/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/15/2008: 0.63 ug/l T
9/24/2008: 0.3 ug/l T

MW-06-22
10/4/2006: < 500 ug/l
5/21/2008: 0.1 ug/l T
9/26/2008: 0.4 ug/l T

MW-06-25
10/15/2006: < 500 ug/l
5/20/2008: 0.05 ug/l T
9/26/2008: 0.37 ug/l T

PW-99-3
5/28/2008: < 0.12 ug/l T
9/22/2008: 0.29 ug/l T

MW-EPA-1
8/9/1988: < 4.1 ug/l BC T
10/8/1998: < 10 ug/l D
5/14/2008: < 0.05 ug/l T
9/17/2008: < 1.28 ug/l R T
12/11/2008: 0.14 ug/l T

MW-06-5
5/14/2008: < 0.26 ug/l T
9/19/2008: 0.296 ug/l T

MW-97-1
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/13/2008: 0.95 ug/l T
9/17/2008: < 0.88 ug/l T

MW-97-7
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
10/8/2001: < 2 ug/l D
10/8/2001: < 2 ug/l T
1/17/2002: < 2 ug/l D
1/17/2002: < 2 ug/l D
5/20/2008: 0.31 ug/l T
9/26/2008: < 0.25 ug/l T

MW-97-5
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/15/2008: < 0.38 ug/l T
9/17/2008: 0.285 ug/l T

MW-06-23
5/13/2008: < 0.21 ug/l T
9/16/2008: 0.105 ug/l T

MW-01-1
10/8/2001: < 2 ug/l D
10/8/2001: < 2 ug/l T
1/16/2002: < 2 ug/l D
5/16/2008: < 0.36 ug/l T
9/17/2008: < 0.219 ug/l T

MW-EPA-3
8/9/1988: < 5.9 ug/l C T
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 0.06 ug/l J T
7/24/2003: < 1 ug/l D
5/15/2008: < 0.21 ug/l T
9/16/2008: < 0.216 ug/l T

MW-06-17
9/30/2006: < 500 ug/l
5/27/2008: < 0.4 ug/l T
9/20/2008: 0.16 ug/l T

MW-06-14
5/27/2008: < 0.22 ug/l T
9/18/2008: < 1.228 ug/l T

MW-97-12
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
5/27/2008: < 0.91 ug/l T
9/23/2008: 2.72 ug/l R T
12/15/2008: < 0.05 ug/l T

MW-06-15
5/21/2008: 0.12 ug/l T
9/17/2008: < 2.258 ug/l T

MW-06-18
9/29/2006: < 500 ug/l
5/21/2008: 0.09 ug/l T
9/25/2008: 0.26 ug/l T

MW-06-20
10/3/2006: < 500 ug/l
5/20/2008: 0.09 ug/l T
9/20/2008: 0.49 ug/l T

MW-06-19
5/20/2008: 0.78 ug/l T
9/18/2008: < 0.508 ug/l T

MW-02-1
1/17/2002: < 2 ug/l D
7/22/2003: 0.28 ug/l J T
7/22/2003: 0.03 ug/l J D
5/29/2008: < 0.3 ug/l T
9/26/2008: 0.82 ug/l T

MW-01-6
10/9/2001: < 2 ug/l D
10/9/2001: < 2 ug/l T
10/10/2001: < 500 ug/l
1/17/2002: < 2 ug/l D
5/19/2008: 0.11 ug/l T
9/18/2008: 0.707 ug/l T

MW-97-6
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: < 1 ug/l D
5/17/2008: 0.15 ug/l T
9/16/2008: < 0.706 ug/l T

MW-02-2
5/19/2008: 0.42 ug/l T
9/22/2008: 0.75 ug/l T

MW-01-3
10/9/2001: < 2 ug/l D
10/9/2001: < 2 ug/l T
1/22/2002: < 2 ug/l D
5/19/2008: 0.13 ug/l T
9/19/2008: 0.423 ug/l T

MW-01-2
10/9/2001: < 2 ug/l D
10/9/2001: < 2 ug/l T
10/10/2001: < 500 ug/l
1/16/2002: < 2 ug/l D
7/22/2003: < 1 ug/l D
7/22/2003: 0.27 ug/l J T
5/19/2008: 0.14 ug/l T
9/22/2008: 0.28 ug/l T

MW-01-5
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 2 ug/l D
5/17/2008: 0.43 ug/l T
9/16/2008: < 0.742 ug/l T

MW-01-4
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 2 ug/l D
5/16/2008: < 0.14 ug/l T
9/16/2008: < 0.414 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

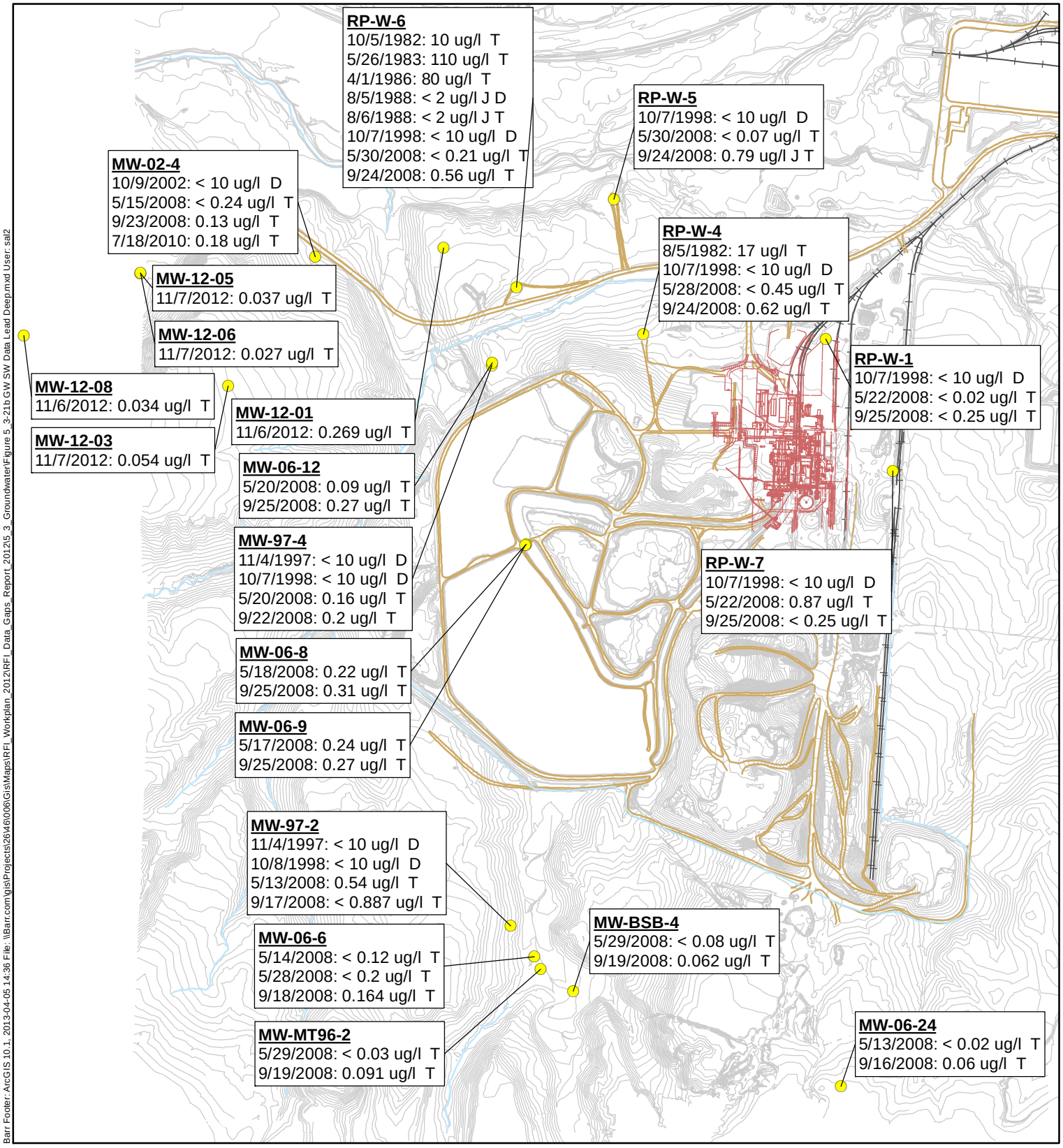
N

Feet
800 0 800

Figure 5.3-21a

ANALYTICAL GROUNDWATER
LEAD
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:34 File: \\Barr.com\gis\Projects\26k46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-21a GW SW Data Lead WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 14:36 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-21b GW SW Data Lead Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-21b

ANALYTICAL GROUNDWATER
LEAD
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 40200 ug/l T
9/18/2008: 40800 ug/l T

MW-97-3
11/4/1997: 53000 ug/l T
10/7/1998: 54000 ug/l T
1/10/2005: 29000 ug/l D
1/10/2005: 30000 ug/l T
5/28/2008: 31200 ug/l T
9/23/2008: 29600 ug/l T

PW-99-1
1/10/2005: 42000 ug/l D
1/10/2005: 43000 ug/l T
5/18/2008: 46500 ug/l T
5/29/2008: 45500 ug/l T
9/25/2008: 48500 ug/l T

MW-12-02
11/8/2012: 46600 ug/l T

MW-06-1
5/15/2008: 59700 ug/l T
9/18/2008: 56700 ug/l T
7/17/2010: 49800 ug/l T

MW-12-07
11/6/2012: 13600 ug/l T

MW-12-04
11/7/2012: 10100 ug/l T

MW-06-2
5/15/2008: 53200 ug/l T
9/23/2008: 55800 ug/l T
7/18/2010: 51000 ug/l T

MW-02-3
1/10/2005: 46000 ug/l D
1/10/2005: 44000 ug/l T
4/12/2005: 46000 ug/l T
4/12/2005: 47000 ug/l D
10/31/2005: 44000 ug/l D
10/31/2005: 47000 ug/l T
4/20/2006: 43000 ug/l D
4/20/2006: 48000 ug/l T
10/24/2006: 44000 ug/l D
10/24/2006: 40000 ug/l T
4/24/2007: 45700 ug/l D
4/24/2007: 44700 ug/l T
11/6/2007: 49100 ug/l D
11/6/2007: 47100 ug/l T
5/15/2008: 43000 ug/l T
9/23/2008: 42700 ug/l T
7/17/2010: 42000 ug/l T

MW-06-3
5/14/2008: 20300 ug/l T
9/19/2008: 19400 ug/l T
7/16/2010: 22500 ug/l T

MW-97-10
11/4/1997: 65000 ug/l T
10/8/1998: 62000 ug/l T
1/11/2005: 36000 ug/l D
1/11/2005: 35000 ug/l T
5/21/2008: 39900 ug/l R T
9/23/2008: 39000 ug/l T

MW-97-8
11/5/1997: 59000 ug/l T
10/7/1998: 35000 ug/l T
5/15/2008: 29500 ug/l J T
9/24/2008: 30300 ug/l T

MW-06-21
5/17/2008: 31800 ug/l T
9/24/2008: 26200 ug/l T

MW-97-11
11/5/1997: 61000 ug/l T
10/8/1998: 60000 ug/l T
1/11/2005: 54000 ug/l D
1/11/2005: 51000 ug/l T
5/21/2008: 50500 ug/l R T
9/25/2008: 51900 ug/l T

MW-06-7 *
5/29/2008: 60500 ug/l T
9/23/2008: 79600 ug/l T

MW-EPA-1
8/9/1988: < 3810 ug/l B T
10/8/1998: 4000 ug/l T
5/14/2008: 6400 ug/l T
9/17/2008: 6480 ug/l T

MW-06-4
5/15/2008: 3880 ug/l T
9/18/2008: 3700 ug/l T

MW-97-1
11/4/1997: 7000 ug/l T
10/8/1998: 8000 ug/l T
5/13/2008: 29400 ug/l T
9/17/2008: 30700 ug/l T

MW-GW-3
5/20/2008: 19800 ug/l R T
9/17/2008: 20800 ug/l T

MW-06-5
5/14/2008: 24500 ug/l T
9/19/2008: 28900 ug/l T

MW-06-11
5/28/2008: 63900 ug/l T
9/23/2008: 62000 ug/l T

PW-99-3
5/28/2008: 17000 ug/l T
9/22/2008: 14800 ug/l T

MW-06-22
5/21/2008: 32100 ug/l R T
9/26/2008: 32400 ug/l T

MW-06-25
5/20/2008: 54200 ug/l R T
9/26/2008: 55300 ug/l T

MW-97-7
11/4/1997: 53000 ug/l T
10/8/1998: 55000 ug/l T
10/8/2001: 54000 ug/l D
10/8/2001: 56000 ug/l T
1/17/2002: 51000 ug/l D
5/20/2008: 46800 ug/l R T
9/26/2008: 47700 ug/l T

MW-06-23
5/13/2008: 5200 ug/l T
9/16/2008: 5010 ug/l T

MW-EPA-4
11/5/1997: 51000 ug/l T
10/12/1998: 56000 ug/l T
5/15/2008: 61600 ug/l T
9/20/2008: 60600 ug/l T

MW-97-9
11/5/1997: 43000 ug/l T
10/7/1998: 57000 ug/l T
5/16/2008: 30800 ug/l T
9/24/2008: 37200 ug/l T

MW-06-13
5/27/2008: 36400 ug/l T
9/19/2008: 37200 ug/l T

MW-06-16
5/21/2008: 64000 ug/l R T
9/20/2008: 62800 ug/l T

MW-EPA-3
8/9/1988: 14200 ug/l T
11/5/1997: 20000 ug/l T
10/12/1998: 19000 ug/l T
5/15/2008: 17200 ug/l T
9/16/2008: 17700 ug/l T

MW-06-17
5/27/2008: 45800 ug/l T
9/20/2008: 43700 ug/l T

MW-06-14
5/27/2008: 42400 ug/l T
9/18/2008: 41500 ug/l T

MW-97-12
11/5/1997: 47000 ug/l T
10/12/1998: 34000 ug/l T
5/27/2008: 16600 ug/l T
9/23/2008: 18100 ug/l R T
12/15/2008: 15500 ug/l T

MW-06-15
5/21/2008: 38000 ug/l R T
9/17/2008: 44500 ug/l T

MW-06-18
5/21/2008: 46200 ug/l R T
9/25/2008: 45400 ug/l T

MW-06-20
5/20/2008: 46500 ug/l R T
9/20/2008: 45300 ug/l T

MW-02-1
1/17/2002: 53000 ug/l D
5/29/2008: 62700 ug/l T
9/26/2008: 71500 ug/l T

MW-06-19
5/20/2008: 82000 ug/l R T
9/18/2008: 97500 ug/l T

MW-02-2
5/19/2008: 18800 ug/l R T
9/22/2008: 20900 ug/l T

MW-01-6
10/9/2001: 43000 ug/l D
10/9/2001: 47000 ug/l T
1/17/2002: 42000 ug/l D
5/19/2008: 22500 ug/l R T
9/18/2008: 21000 ug/l T

MW-97-6
11/4/1997: 28000 ug/l T
10/8/1998: 18000 ug/l T
5/17/2008: 23100 ug/l T
9/16/2008: 23000 ug/l T

MW-01-3
10/9/2001: 41000 ug/l D
10/9/2001: 44000 ug/l T
1/22/2002: 44000 ug/l D
5/19/2008: 29100 ug/l R T
9/19/2008: 28300 ug/l T

MW-01-2
10/9/2001: 25000 ug/l D
10/9/2001: 28000 ug/l T
1/16/2002: 27000 ug/l D
5/19/2008: 19000 ug/l R T
9/22/2008: 19200 ug/l T

MW-01-5
10/4/2001: 23000 ug/l D
10/4/2001: 22000 ug/l T
1/16/2002: 21000 ug/l D
5/17/2008: 27900 ug/l T
9/16/2008: 28400 ug/l T

MW-01-4
10/4/2001: 24000 ug/l D
10/4/2001: 23000 ug/l T
1/16/2002: 22000 ug/l D
5/16/2008: 29100 ug/l T
9/16/2008: 28200 ug/l T

MW-01-1
10/8/2001: 54000 ug/l D
10/8/2001: 55000 ug/l T
1/16/2002: 55000 ug/l D
5/16/2008: 63800 ug/l T
9/17/2008: 62600 ug/l T

MW-97-5
11/4/1997: 7000 ug/l T
10/8/1998: 6000 ug/l T
5/15/2008: 6650 ug/l T
9/17/2008: 6280 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

N

Feet
800 0 800

Figure 5.3-22a

ANALYTICAL GROUNDWATER
MAGNESIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:35 File: \\Barr.com\gis\Projects\26k46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-22a GW SW Data Magnesium WaterTable.mxd User: sal2

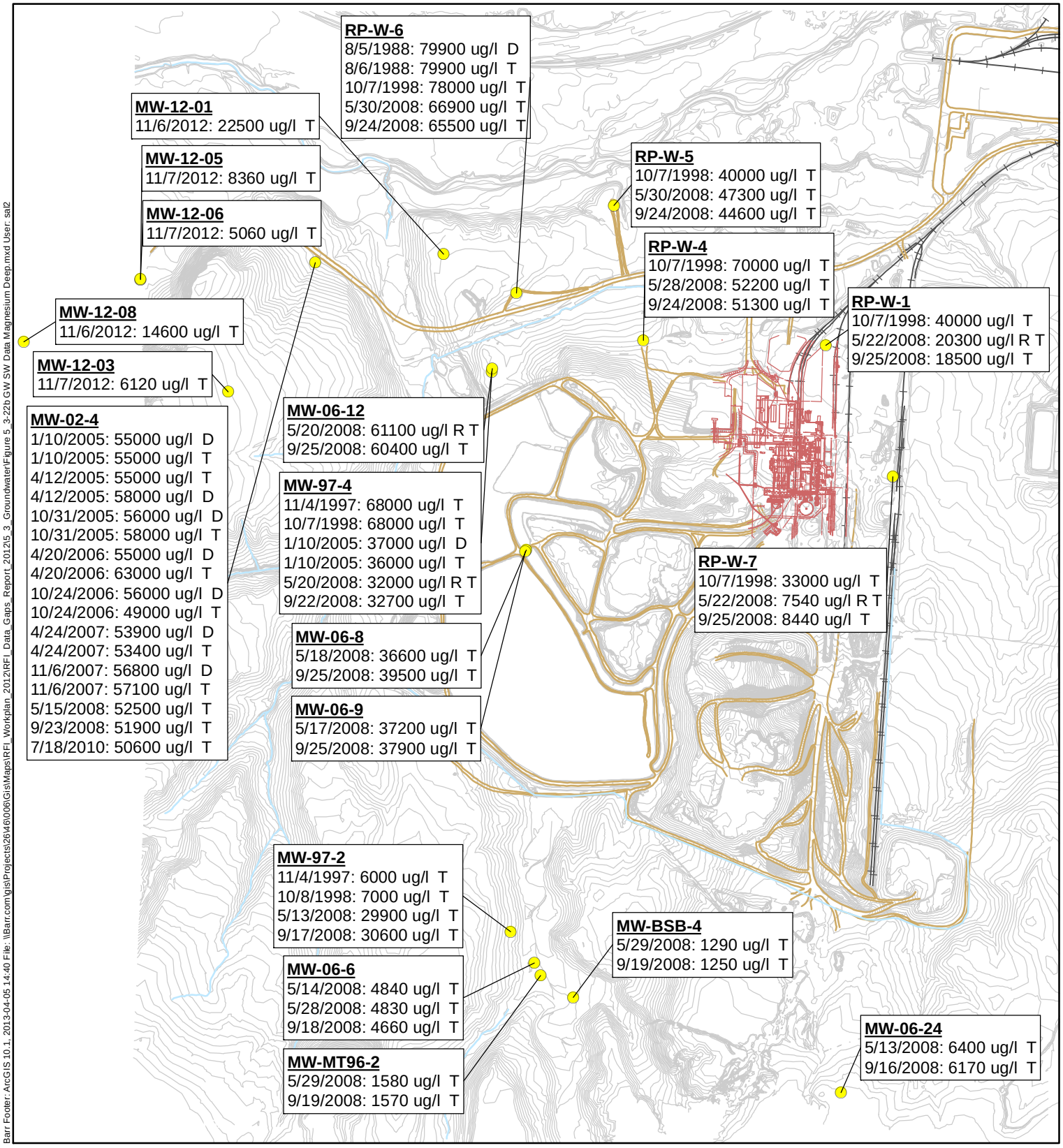


Figure 5.3-22b

ANALYTICAL GROUNDWATER
MAGNESIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 17.8 ug/l T
9/18/2008: 21.5 ug/l T

MW-97-3
11/4/1997: 80 ug/l D
10/7/1998: 140 ug/l D
1/10/2005: 119 ug/l D
1/10/2005: 121 ug/l T
5/28/2008: 36 ug/l T
9/23/2008: 23.17 ug/l T

PW-99-1
3/24/1999: 740 ug/l D
3/25/1999: 930 ug/l D
1/10/2005: 2090 ug/l D
1/10/2005: 2040 ug/l T
5/18/2008: 2480 ug/l T
5/29/2008: 2120 ug/l T
9/25/2008: 2760 ug/l T

MW-06-1
5/15/2008: 1.37 ug/l T
9/18/2008: 10.9 ug/l T
7/17/2010: 1.91 ug/l T

MW-12-07
11/6/2012: 142 ug/l T

MW-12-02
11/8/2012: 8.4 ug/l J T

MW-12-04
11/7/2012: 33.7 ug/l T

MW-06-2
5/15/2008: 11.8 ug/l T
9/23/2008: 1.57 ug/l T
7/18/2010: 0.99 ug/l T

MW-02-3
10/9/2002: < 10 ug/l D
1/10/2005: < 5 ug/l D
1/10/2005: < 5 ug/l T
4/12/2005: < 5 ug/l T
4/12/2005: < 5 ug/l D
10/31/2005: < 5 ug/l D
10/31/2005: 7 ug/l T
4/20/2006: < 5 ug/l D
4/20/2006: < 5 ug/l T
10/24/2006: < 5 ug/l D
10/24/2006: < 5 ug/l T
4/24/2007: < 5 ug/l D
4/24/2007: < 5 ug/l T
11/6/2007: < 5 ug/l D
11/6/2007: < 5 ug/l T
5/15/2008: 4.45 ug/l T
9/23/2008: 0.71 ug/l T
7/17/2010: 1.83 ug/l T

MW-97-10
11/4/1997: 60 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 16.6 ug/l BQU T
7/23/2003: < 2.3 ug/l D
1/11/2005: < 5 ug/l D
1/11/2005: 5 ug/l T
5/21/2008: 4.52 ug/l T
9/23/2008: 1.31 ug/l T

MW-97-8
11/5/1997: 1510 ug/l D
10/7/1998: 990 ug/l D
5/15/2008: 789 ug/l T
9/24/2008: 706 ug/l T

MW-06-7 *
5/29/2008: 200 ug/l T
9/23/2008: 482 ug/l T

MW-06-3
5/14/2008: 11 ug/l T
9/19/2008: 1.3 ug/l T
7/16/2010: 2.67 ug/l T

MW-97-11
11/5/1997: 30 ug/l D
10/8/1998: < 10 ug/l D
7/21/2003: 3.3 ug/l J T
7/21/2003: 1.4 ug/l BQQ D
1/11/2005: < 5 ug/l D
1/11/2005: < 5 ug/l T
5/21/2008: 2.11 ug/l T
9/25/2008: 3.1 ug/l T

MW-06-11
5/28/2008: 70.4 ug/l T
9/23/2008: 54.97 ug/l T

MW-06-21
5/17/2008: 372 ug/l T
9/24/2008: 377 ug/l T

MW-EPA-1
8/9/1988: < 5 ug/l T
10/8/1998: < 10 ug/l D
5/14/2008: 0.46 ug/l T
9/17/2008: 5.4 ug/l T

PW-99-3
3/22/1999: 980 ug/l D
3/23/1999: 880 ug/l D
5/28/2008: 3710 ug/l T
9/22/2008: 3270 ug/l T

MW-06-4
5/15/2008: 7.76 ug/l T
9/18/2008: 3.6 ug/l T

MW-97-1
11/4/1997: 10 ug/l D
10/8/1998: < 10 ug/l D
5/13/2008: 9.26 ug/l T
9/17/2008: 18.8 ug/l T

MW-GW-3
5/20/2008: 0.21 ug/l T
9/17/2008: < 0.05 ug/l T

MW-06-5
5/14/2008: 13.5 ug/l T
9/19/2008: 14 ug/l T

MW-EPA-4
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 36.8 ug/l T
7/24/2003: 0.53 ug/l BQQ D
5/15/2008: 3.92 ug/l T
9/20/2008: 7.6 ug/l T

MW-97-9
11/5/1997: 130 ug/l D
10/7/1998: 1080 ug/l D
5/16/2008: 499 ug/l T
9/24/2008: 573 ug/l T

MW-06-13
5/27/2008: 2.84 ug/l T
9/19/2008: 5.26 ug/l T

MW-06-16
5/21/2008: 2.04 ug/l T
9/20/2008: 3.94 ug/l T

MW-06-22
5/21/2008: 1730 ug/l T
9/26/2008: 2440 ug/l T

MW-06-25
5/20/2008: 657 ug/l T
9/26/2008: 501 ug/l T

MW-97-7
11/4/1997: 2890 ug/l D
10/8/1998: 2030 ug/l D
10/8/2001: 1550 ug/l D
10/8/2001: 1590 ug/l T
1/17/2002: 1360 ug/l D
1/17/2002: 1480 ug/l D
5/20/2008: 1230 ug/l T
9/26/2008: 1180 ug/l T

MW-02-2
9/5/2002: 1970 ug/l D
5/19/2008: 1030 ug/l T
9/22/2008: 1140 ug/l T

MW-06-23
5/13/2008: 63.1 ug/l T
9/16/2008: 8.6 ug/l T

MW-97-5
11/4/1997: 30 ug/l D
10/8/1998: < 10 ug/l D
5/15/2008: 14.4 ug/l T
9/17/2008: 9 ug/l T

MW-EPA-3
8/9/1988: < 5 ug/l T
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 1.7 ug/l J T
7/24/2003: 0.71 ug/l BQQJ D
5/15/2008: 1.71 ug/l T
9/16/2008: 6.9 ug/l T

MW-06-17
5/27/2008: 927 ug/l T
9/20/2008: 719 ug/l T

MW-06-14
5/27/2008: 8.53 ug/l T
9/18/2008: 25 ug/l T

MW-97-12
11/5/1997: 80 ug/l D
10/12/1998: 10 ug/l D
5/27/2008: 21.8 ug/l T
9/23/2008: 31.06 ug/l R T
12/15/2008: 2.9 ug/l T

MW-06-15
5/21/2008: 2.87 ug/l T
9/17/2008: < 5 ug/l T

MW-06-18
5/21/2008: 906 ug/l T
9/25/2008: 854 ug/l T

MW-06-20
5/20/2008: 4360 ug/l T
9/20/2008: 4290 ug/l T

MW-06-19
5/20/2008: 4.68 ug/l T
9/18/2008: 6.5 ug/l T

MW-02-1
1/17/2002: 2920 ug/l D
9/4/2002: 3170 ug/l D
7/22/2003: 1760 ug/l T
7/22/2003: 1850 ug/l BQQ D
5/29/2008: 2150 ug/l T
9/26/2008: 2140 ug/l T

MW-01-6
10/9/2001: 4830 ug/l D
10/9/2001: 5360 ug/l T
1/17/2002: 3170 ug/l D
9/5/2002: 2390 ug/l D
5/19/2008: 1240 ug/l T
9/18/2008: 965 ug/l T

MW-97-6
11/4/1997: 50 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 3.6 ug/l T
7/23/2003: 0.41 ug/l J D
5/17/2008: 0.85 ug/l T
9/16/2008: < 8.3 ug/l T

MW-01-3
10/9/2001: 11600 ug/l D
10/9/2001: 13100 ug/l T
1/22/2002: 12200 ug/l D
9/5/2002: 10100 ug/l D
5/19/2008: 8470 ug/l T
9/19/2008: 8360 ug/l T

MW-01-2
10/9/2001: 2730 ug/l D
10/9/2001: 3060 ug/l T
1/16/2002: 3370 ug/l D
9/4/2002: 2670 ug/l D
7/22/2003: 2010 ug/l BQQ D
7/22/2003: 2000 ug/l T
5/19/2008: 1550 ug/l T
9/22/2008: 1180 ug/l T

MW-01-5
10/4/2001: 19 ug/l D
10/4/2001: 39 ug/l T
1/16/2002: < 10 ug/l D
5/17/2008: 1.68 ug/l T
9/16/2008: < 3.8 ug/l T

MW-01-4
10/4/2001: 51 ug/l D
10/4/2001: 66 ug/l T
1/16/2002: 10 ug/l D
5/16/2008: 0.54 ug/l T
9/16/2008: < 0.658 ug/l T

MW-01-1
10/8/2001: 95 ug/l D
10/8/2001: 114 ug/l T
1/16/2002: 30 ug/l D
5/16/2008: 2.55 ug/l T
9/17/2008: < 0.625 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

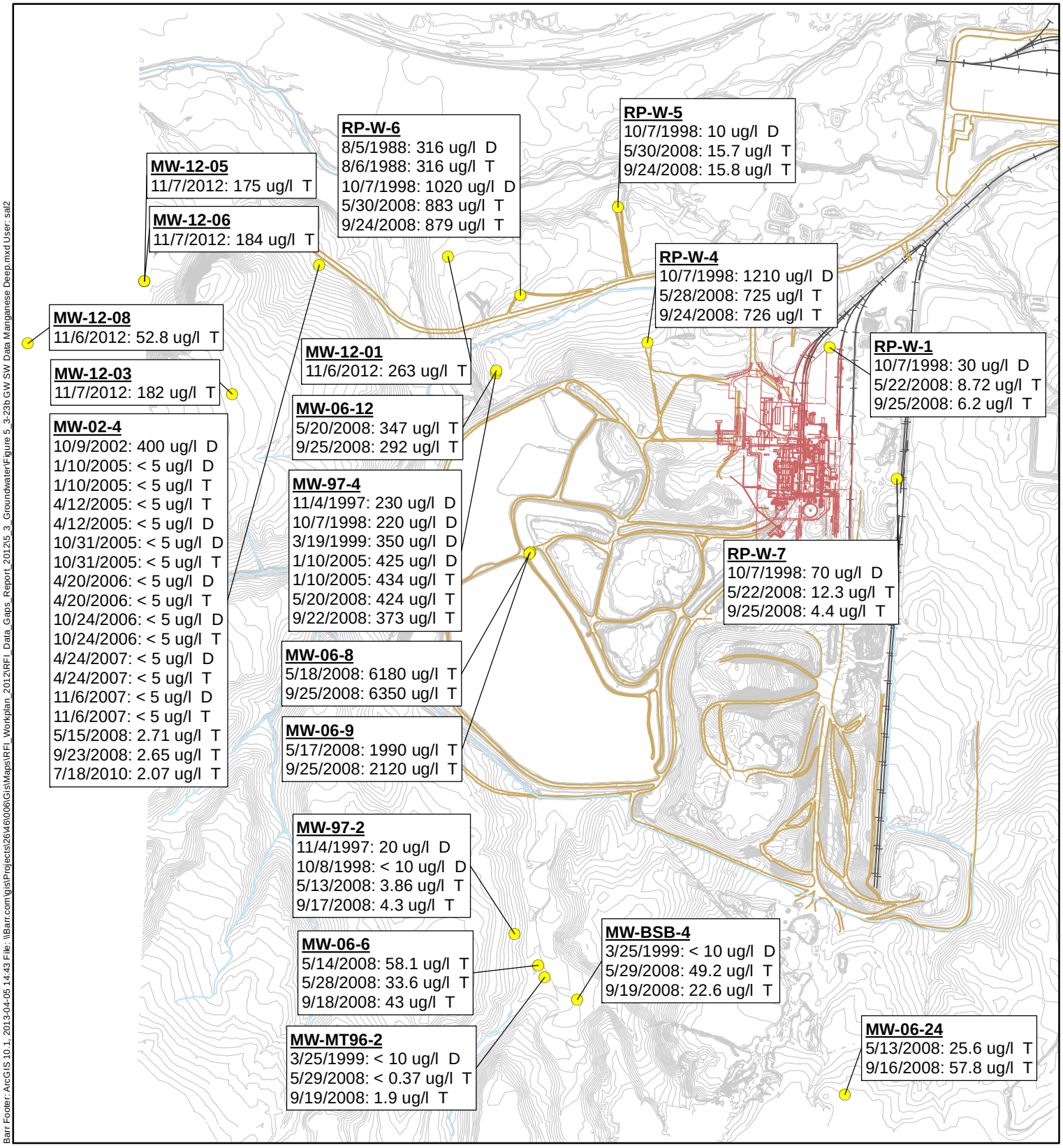
N

Feet
800 0 800

Figure 5.3-23a

ANALYTICAL GROUNDWATER
MANGANESE
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:44 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_201205_3_Groundwater\Figure 5_3-23a GW SW Data Manganese WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 14:43 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-23b GW SW Data Manganese Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-23b

ANALYTICAL GROUNDWATER
MANGANESE
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: < 0.2 ug/l T
9/18/2008: < 0.2 ug/l T

MW-97-3
11/4/1997: < 1 ug/l D
10/7/1998: < 1 ug/l D
5/28/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T

PW-99-1
5/18/2008: < 0.2 ug/l T
5/29/2008: < 0.2 ug/l T
9/25/2008: < 0.2 ug/l T

MW-06-1
5/15/2008: < 0.2 ug/l T
9/18/2008: < 0.2 ug/l T
7/17/2010: < 0.2 ug/l T

MW-12-02
11/8/2012: < 0.20 ug/l T

MW-12-04
11/7/2012: < 0.20 ug/l T

MW-06-2
5/15/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T
7/18/2010: < 0.2 ug/l T

MW-12-07
11/6/2012: < 0.20 ug/l T

MW-97-10
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/23/2003: 0.14 ug/l J D
7/23/2003: 0.15 ug/l J T
5/21/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T

MW-02-3
5/15/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T
7/17/2010: < 0.2 ug/l T

MW-97-8
11/5/1997: < 1 ug/l D
10/7/1998: < 1 ug/l D
5/15/2008: < 0.2 ug/l T
9/24/2008: < 0.2 ug/l T

MW-06-3
5/14/2008: < 0.2 ug/l T
9/19/2008: < 0.2 ug/l T
7/16/2010: < 0.2 ug/l T

MW-06-7 *
5/29/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T

MW-97-11
11/5/1997: 7 ug/l D
10/8/1998: 8 ug/l D
7/21/2003: 4.8 ug/l T
7/21/2003: 5.1 ug/l D
5/21/2008: 4.9 ug/l T
9/25/2008: 5.7 ug/l T

MW-06-21
10/11/2006: < 20 ug/l
5/17/2008: < 0.2 ug/l T
9/24/2008: < 0.2 ug/l T

MW-EPA-1
8/9/1988: < 0.2 ug/l T
10/8/1998: < 1 ug/l D
5/14/2008: < 0.2 ug/l T
9/17/2008: < 0.2 ug/l T

MW-06-4
5/15/2008: < 0.2 ug/l T
9/18/2008: < 0.2 ug/l T

MW-97-1
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
5/13/2008: < 0.2 ug/l T
9/17/2008: < 0.2 ug/l T

MW-GW-3
5/20/2008: < 0.2 ug/l T
9/17/2008: < 0.2 ug/l T

MW-06-5
5/14/2008: < 0.2 ug/l T
9/19/2008: < 0.2 ug/l T

MW-EPA-4
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
7/24/2003: 0.086 ug/l J T
7/24/2003: < 0.2 ug/l D
5/15/2008: < 0.2 ug/l T
9/20/2008: < 0.2 ug/l T

MW-97-9
11/5/1997: < 1 ug/l D
10/7/1998: < 1 ug/l D
5/16/2008: < 0.2 ug/l T
9/24/2008: < 0.2 ug/l T

MW-06-11
5/28/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l T

PW-99-3
5/28/2008: < 0.2 ug/l T
9/22/2008: < 0.2 ug/l T

MW-06-22
10/4/2006: < 20 ug/l
5/21/2008: < 0.2 ug/l T
9/26/2008: < 0.2 ug/l T

MW-06-25
10/15/2006: < 20 ug/l
5/20/2008: < 0.2 ug/l T
9/26/2008: < 0.2 ug/l T

MW-97-7
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
10/8/2001: < 0.6 ug/l D
10/8/2001: < 0.6 ug/l T
1/17/2002: < 0.6 ug/l D
1/17/2002: < 0.1 ug/l D
5/20/2008: < 0.2 ug/l T
9/26/2008: < 0.2 ug/l T

MW-06-13
10/2/2006: < 20 ug/l
5/27/2008: < 0.2 ug/l T
9/19/2008: < 0.2 ug/l T

MW-06-16
10/1/2006: < 20 ug/l
5/21/2008: < 0.2 ug/l T
9/20/2008: < 0.2 ug/l T

MW-01-1
10/8/2001: < 0.6 ug/l D
10/8/2001: < 0.6 ug/l T
1/16/2002: < 0.1 ug/l D
5/16/2008: < 0.2 ug/l T
9/17/2008: < 0.2 ug/l T

MW-06-23
5/13/2008: < 0.2 ug/l T
9/16/2008: < 0.2 ug/l T

MW-97-5
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
5/15/2008: < 0.2 ug/l T
9/17/2008: < 0.2 ug/l T

MW-EPA-3
8/9/1988: < 0.2 ug/l T
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
7/24/2003: < 2 ug/l D
7/24/2003: < 0.2 ug/l T
5/15/2008: < 0.2 ug/l T
9/16/2008: < 0.2 ug/l T

MW-06-17
9/30/2006: < 20 ug/l
5/27/2008: < 0.2 ug/l T
9/20/2008: < 0.2 ug/l T

MW-06-14
5/27/2008: < 0.2 ug/l T
9/18/2008: < 0.2 ug/l T

MW-97-12
11/5/1997: < 1 ug/l D
10/12/1998: < 1 ug/l D
5/27/2008: < 0.2 ug/l T
9/23/2008: < 0.2 ug/l R T
12/15/2008: < 0.2 ug/l T

MW-06-15
5/21/2008: < 0.2 ug/l T
9/17/2008: < 0.2 ug/l T

MW-06-18
9/29/2006: < 20 ug/l
5/21/2008: < 0.2 ug/l T
9/25/2008: < 0.2 ug/l T

MW-06-20
10/3/2006: < 20 ug/l
5/20/2008: < 0.2 ug/l T
9/20/2008: < 0.2 ug/l T

MW-06-19
5/20/2008: < 0.2 ug/l T
9/18/2008: < 0.2 ug/l T

MW-02-1
1/17/2002: < 0.1 ug/l D
7/22/2003: < 0.2 ug/l T
7/22/2003: < 0.2 ug/l D
5/29/2008: < 0.2 ug/l T
9/26/2008: < 0.2 ug/l T

MW-01-6
10/9/2001: < 0.6 ug/l D
10/9/2001: < 0.6 ug/l T
10/10/2001: < 20 ug/l
1/17/2002: < 0.1 ug/l D
5/19/2008: < 0.2 ug/l T
9/18/2008: < 0.2 ug/l T

MW-97-6
11/4/1997: < 1 ug/l D
10/8/1998: < 1 ug/l D
7/23/2003: < 0.2 ug/l D
7/23/2003: < 0.2 ug/l T
5/17/2008: < 0.2 ug/l T
9/16/2008: < 0.2 ug/l T

MW-02-2
5/19/2008: < 0.2 ug/l T
9/22/2008: < 0.2 ug/l T

MW-01-3
10/9/2001: < 0.6 ug/l D
10/9/2001: < 0.6 ug/l T
1/22/2002: < 0.1 ug/l D
5/19/2008: < 0.2 ug/l T
9/19/2008: < 0.2 ug/l T

MW-01-2
10/9/2001: < 0.6 ug/l D
10/9/2001: < 0.6 ug/l T
10/10/2001: < 20 ug/l
1/16/2002: < 0.1 ug/l D
7/22/2003: < 0.2 ug/l D
7/22/2003: < 0.2 ug/l T
5/19/2008: < 0.2 ug/l T
9/22/2008: < 0.2 ug/l T

MW-01-5
10/4/2001: < 0.6 ug/l D
10/4/2001: < 0.6 ug/l T
1/16/2002: < 0.1 ug/l D
5/17/2008: < 0.2 ug/l T
9/16/2008: < 0.2 ug/l T

MW-01-4
10/4/2001: < 0.6 ug/l D
10/4/2001: < 0.6 ug/l T
1/16/2002: < 0.1 ug/l D
5/16/2008: < 0.2 ug/l T
9/16/2008: < 0.2 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

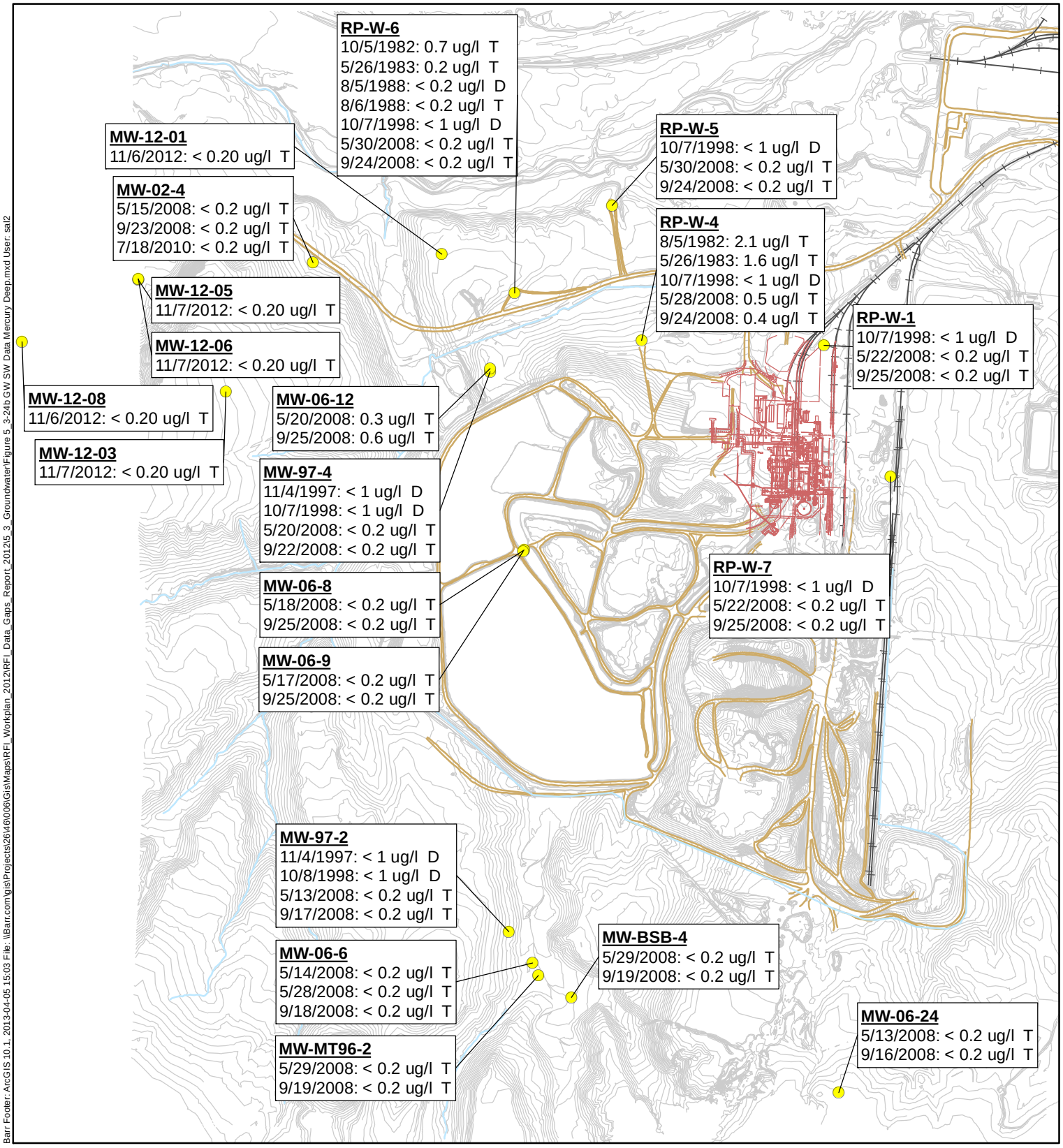
N

Feet
800 0 800

Figure 5.3-24a

ANALYTICAL GROUNDWATER
MERCURY
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:46 File: \\Barr.com\gis\Projects\26k46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-24a GW SW Data Mercury WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:03 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-24b GW SW Data Mercury Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-24b

ANALYTICAL GROUNDWATER
MERCURY
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 4.6 ug/l T
9/18/2008: 4.3 ug/l T

MW-97-3
11/4/1997: < 10 ug/l D
10/7/1998: < 10 ug/l D
5/28/2008: 3.7 ug/l T
9/23/2008: 6 ug/l T

PW-99-1
5/18/2008: 8.3 ug/l T
5/29/2008: 7.9 ug/l T
9/25/2008: 8.7 ug/l T

MW-06-1
5/15/2008: 5.1 ug/l T
9/18/2008: 6.1 ug/l T
7/17/2010: 3.7 ug/l T

MW-12-02
11/8/2012: 4.3 ug/l T

MW-12-04
11/7/2012: 0.46 ug/l T

MW-06-2
5/15/2008: 12.1 ug/l T
9/23/2008: 13.9 ug/l T
7/18/2010: 7.7 ug/l T

MW-12-07
11/6/2012: 0.84 ug/l T

MW-97-10
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 52.4 ug/l T
7/23/2003: 52.6 ug/l BQQ D
5/21/2008: 8.1 ug/l T
9/23/2008: 12.6 ug/l T

MW-02-3
5/15/2008: 4.9 ug/l T
9/23/2008: 9 ug/l T
7/17/2010: 4.3 ug/l T

MW-06-3
5/14/2008: 6.1 ug/l T
9/19/2008: 2.7 ug/l T
7/16/2010: 1.4 ug/l T

MW-06-7 *
5/29/2008: 3.1 ug/l T
9/23/2008: 9.8 ug/l T

MW-97-11
11/5/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/21/2003: 61.6 ug/l T
7/21/2003: 58.7 ug/l BQQ D
5/21/2008: 9.5 ug/l T
9/25/2008: 10.4 ug/l T

MW-06-4
5/15/2008: 0.4 ug/l T
9/18/2008: 0.4 ug/l T

MW-GW-2
6/30/1998: < 10 ug/l D
9/30/1998: 10 ug/l D
12/31/1998: < 10 ug/l D
3/31/1999: < 5 ug/l D
6/30/1999: 8 ug/l D
9/30/1999: < 5 ug/l D
12/31/1999: < 5 ug/l D
3/31/2000: < 5 ug/l D
6/30/2000: < 5 ug/l D
9/30/2000: < 5 ug/l D
12/31/2000: 10 ug/l D
3/31/2001: < 5 ug/l D
6/30/2001: < 5 ug/l D
9/30/2001: < 5 ug/l D
12/31/2001: 7 ug/l D
3/31/2002: 8 ug/l D
6/30/2002: 15 ug/l D
9/30/2002: < 5 ug/l D
12/31/2002: < 5 ug/l D
3/31/2003: < 5 ug/l D
6/30/2003: 11 ug/l D
9/30/2003: < 5 ug/l D
12/31/2003: < 5 ug/l D
3/31/2004: 16 ug/l D
6/30/2004: 8 ug/l D
9/30/2004: 6 ug/l D
11/30/2004: 13 ug/l D
12/31/2004: 13 ug/l D
3/31/2005: 2 ug/l D
6/30/2005: 2 ug/l D
7/31/2005: < 1 ug/l D
6/30/2006: 5 ug/l D
9/30/2006: 2 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: 3 ug/l D
6/30/2008: < 5 ug/l D

MW-GW-3
6/30/1998: < 10 ug/l D
9/30/1998: 10 ug/l D
12/31/1998: < 10 ug/l D
3/31/1999: < 5 ug/l D
6/30/1999: < 5 ug/l D
9/30/1999: < 5 ug/l D
12/31/1999: < 5 ug/l D
3/31/2000: < 5 ug/l D
6/30/2000: < 5 ug/l D
9/30/2000: < 5 ug/l D
12/31/2000: < 5 ug/l D
3/31/2001: < 5 ug/l D
6/30/2001: < 5 ug/l D
9/30/2001: < 5 ug/l D
12/31/2001: < 5 ug/l D
3/31/2002: < 5 ug/l D
6/30/2002: 5 ug/l D
9/30/2002: < 5 ug/l D
12/31/2002: < 5 ug/l D
3/31/2003: 6 ug/l D
6/30/2003: 7 ug/l D
9/30/2003: < 5 ug/l D
12/31/2003: < 5 ug/l D
3/31/2004: 5 ug/l D
6/30/2004: 2 ug/l D
9/30/2004: 7 ug/l D
11/30/2004: 5 ug/l D
12/31/2004: 5 ug/l D
3/31/2005: 2 ug/l D
6/30/2005: 2 ug/l D
7/31/2005: < 1 ug/l D
12/31/2005: 4 ug/l D
3/31/2006: < 1 ug/l D
6/30/2006: 4 ug/l D
9/30/2006: 2 ug/l D
12/31/2006: 1 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: 3 ug/l D
9/30/2007: < 5 ug/l D
12/31/2007: < 5 ug/l D
3/31/2008: < 5 ug/l D
5/20/2008: 1.2 ug/l T
6/30/2008: < 5 ug/l D
9/17/2008: 2.8 ug/l T
9/30/2008: < 5 ug/l D
12/31/2008: < 5 ug/l D
3/31/2009: < 5 ug/l D
6/30/2009: < 5 ug/l D
9/30/2009: < 5 ug/l D
12/31/2009: < 5 ug/l D
3/31/2010: < 5 ug/l D
6/30/2010: < 5 ug/l D
9/30/2010: < 5 ug/l D

MW-EPA-4
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 26.6 ug/l T
7/24/2003: 49.1 ug/l BQQ D
5/15/2008: 10 ug/l T
9/20/2008: 8.4 ug/l T

MW-06-11
5/28/2008: 10.1 ug/l T
9/23/2008: 14.4 ug/l T

MW-97-8
11/5/1997: 30 ug/l D
10/7/1998: 30 ug/l D
5/15/2008: 12.2 ug/l T
9/24/2008: 11.5 ug/l T

MW-06-21
5/17/2008: 10 ug/l T
9/24/2008: 9.3 ug/l T

PW-99-3
5/28/2008: 3.5 ug/l T
9/22/2008: 2.7 ug/l T

MW-EPA-1
8/9/1988: < 9 ug/l T
10/8/1998: < 10 ug/l D
5/14/2008: 0.5 ug/l T
9/17/2008: 1.1 ug/l T

MW-97-1
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/13/2008: 1.7 ug/l T
9/17/2008: 3.9 ug/l T

MW-06-5
5/14/2008: 1.7 ug/l T
9/19/2008: 1.8 ug/l T

MW-06-22
5/21/2008: 19 ug/l T
9/26/2008: 23.4 ug/l T

MW-06-25
5/20/2008: 26.5 ug/l T
9/26/2008: 25.8 ug/l T

MW-97-7
11/4/1997: 60 ug/l D
10/8/1998: 50 ug/l D
10/8/2001: 40 ug/l D
10/8/2001: 40 ug/l T
1/17/2002: 50 ug/l D
1/17/2002: 39 ug/l D
5/20/2008: 30.3 ug/l T
9/26/2008: 31.6 ug/l T

MW-97-9
11/5/1997: 20 ug/l D
10/7/1998: 50 ug/l D
5/16/2008: 21 ug/l T
9/24/2008: 22.4 ug/l T

MW-06-13
5/27/2008: 3.6 ug/l T
9/19/2008: 3.8 ug/l T

MW-06-16
5/21/2008: 12.7 ug/l T
9/20/2008: 18.7 ug/l T

MW-97-5
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/15/2008: 1.4 ug/l T
9/17/2008: 1.2 ug/l T

MW-06-23
5/13/2008: 2.1 ug/l T
9/16/2008: 0.4 ug/l T

MW-EPA-3
8/9/1988: < 9 ug/l T
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 9.6 ug/l T
7/24/2003: 10.2 ug/l BQQ D
5/15/2008: 0.8 ug/l T
9/16/2008: 1 ug/l T

MW-06-17
5/27/2008: 6.5 ug/l T
9/20/2008: 5.3 ug/l T

MW-06-14
5/27/2008: 2.6 ug/l T
9/18/2008: 3.2 ug/l T

MW-97-12
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
5/27/2008: 1.7 ug/l T
9/23/2008: 10.7 ug/l R T
12/15/2008: 1.4 ug/l T

MW-06-15
5/21/2008: 1.4 ug/l T
9/17/2008: 2.3 ug/l T

MW-06-18
5/21/2008: 30.2 ug/l T
9/25/2008: 33.3 ug/l T

MW-06-20
5/20/2008: 34.6 ug/l T
9/20/2008: 29 ug/l T

MW-06-19
5/20/2008: 3.3 ug/l T
9/18/2008: 5.5 ug/l T

MW-02-1
1/17/2002: 8 ug/l D
7/22/2003: 42 ug/l T
7/22/2003: 43.6 ug/l BQQ D
5/29/2008: 4.8 ug/l T
9/26/2008: 5.7 ug/l T

MW-97-6
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 15.5 ug/l E T
7/23/2003: 13 ug/l BQQ D
5/17/2008: 0.9 ug/l T
9/16/2008: 1.5 ug/l T

MW-01-6
10/9/2001: 10 ug/l D
10/9/2001: 20 ug/l T
1/17/2002: 12 ug/l D
5/19/2008: 6.3 ug/l T
9/18/2008: 5.3 ug/l T

MW-02-2
5/19/2008: 27.1 ug/l T
9/22/2008: 23.9 ug/l T

MW-01-3
10/9/2001: 20 ug/l D
10/9/2001: 30 ug/l T
1/22/2002: 12 ug/l D
5/19/2008: 5.7 ug/l T
9/19/2008: 4.9 ug/l T

MW-01-2
10/9/2001: < 10 ug/l D
10/9/2001: < 10 ug/l T
1/16/2002: 7 ug/l D
7/22/2003: 23.1 ug/l BQQ D
7/22/2003: 21.9 ug/l T
5/19/2008: 4.4 ug/l T
9/22/2008: 3.2 ug/l T

MW-01-5
10/4/2001: < 20 ug/l D
10/4/2001: < 20 ug/l T
1/16/2002: < 5 ug/l D
5/17/2008: 1.1 ug/l T
9/16/2008: 1.7 ug/l T

MW-01-4
10/4/2001: < 20 ug/l D
10/4/2001: < 20 ug/l T
1/16/2002: < 5 ug/l D
5/16/2008: 1.2 ug/l T
9/16/2008: 1.9 ug/l T

MW-01-1
10/8/2001: < 10 ug/l D
10/8/2001: < 10 ug/l T
1/16/2002: < 5 ug/l D
5/16/2008: 2.6 ug/l T
9/17/2008: 5 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

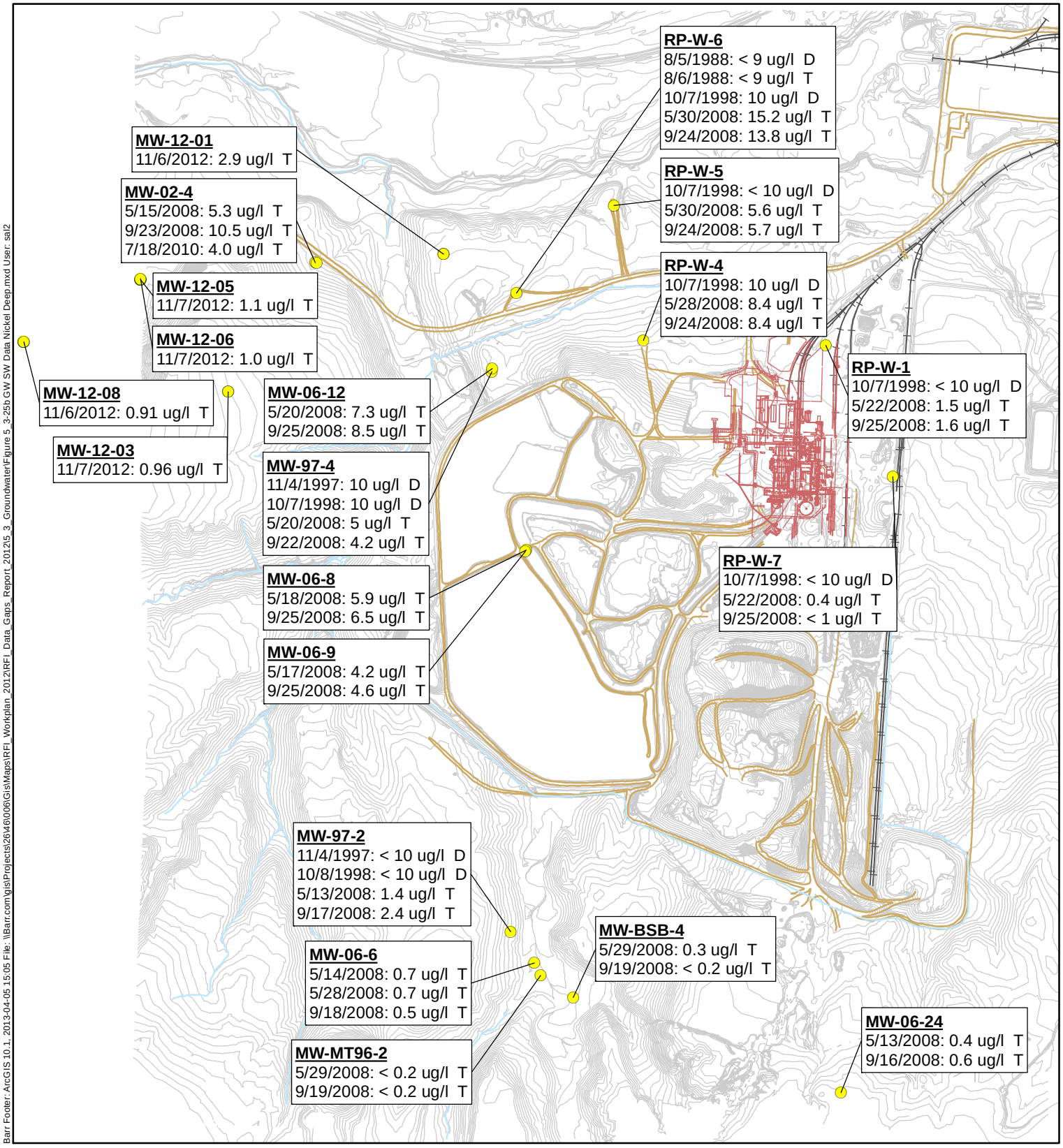
N

Feet
800 0 800

Figure 5.3-25a

ANALYTICAL GROUNDWATER
NICKEL
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:34 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_GroundwaterFigure 5_3-25a GW SW Data Nickel WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:05 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-25b GW SW Data Nickel Deep.mxd User: sal2

Figure 5.3-25b

ANALYTICAL GROUNDWATER
NICKEL
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 14700 ug/l T
9/18/2008: 15600 ug/l T

MW-97-3
11/4/1997: 18000 ug/l T
10/7/1998: 19000 ug/l T
1/10/2005: 16000 ug/l D
1/10/2005: 16000 ug/l T
5/28/2008: 17000 ug/l T
9/23/2008: 16700 ug/l T

PW-99-1
1/10/2005: 16000 ug/l D
1/10/2005: 15000 ug/l T
5/18/2008: 17200 ug/l T
5/29/2008: 17400 ug/l T
9/25/2008: 19800 ug/l T

MW-06-1
5/15/2008: 17500 ug/l T
9/18/2008: 17900 ug/l T
7/17/2010: 15800 ug/l T

MW-12-02
11/8/2012: 19100 ug/l T

MW-12-04
11/7/2012: 8400 ug/l T

MW-12-07
11/6/2012: 9500 ug/l T

MW-06-2
5/15/2008: 18000 ug/l T
9/23/2008: 18900 ug/l T
7/18/2010: 17400 ug/l T

MW-02-3
1/10/2005: 16000 ug/l D
1/10/2005: 14000 ug/l T
4/12/2005: 18000 ug/l T
4/12/2005: 15000 ug/l D
10/31/2005: 15000 ug/l D
10/31/2005: 15000 ug/l T
4/20/2006: 15000 ug/l D
4/20/2006: 16000 ug/l T
10/24/2006: 16000 ug/l D
10/24/2006: 15000 ug/l T
4/24/2007: 14400 ug/l D
4/24/2007: 14100 ug/l T
11/6/2007: 15300 ug/l D
11/6/2007: 15400 ug/l T
5/15/2008: 14700 ug/l T
9/23/2008: 14900 ug/l T
7/17/2010: 14200 ug/l T

MW-97-10
11/4/1997: 18000 ug/l T
10/8/1998: 20000 ug/l T
1/11/2005: 17000 ug/l D
1/11/2005: 17000 ug/l T
5/21/2008: 18400 ug/l T
9/23/2008: 18000 ug/l T

MW-97-8
11/5/1997: 33000 ug/l T
10/7/1998: 26000 ug/l T
5/15/2008: 28100 ug/l T
9/24/2008: 28500 ug/l T

MW-06-21
5/17/2008: 27800 ug/l T
9/24/2008: 27900 ug/l T

MW-97-11
11/5/1997: 16000 ug/l T
10/8/1998: 16000 ug/l T
1/11/2005: 16000 ug/l D
1/11/2005: 15000 ug/l T
5/21/2008: 16500 ug/l T
9/25/2008: 16300 ug/l T

MW-06-3
5/14/2008: 15100 ug/l T
9/19/2008: 16100 ug/l T
7/16/2010: 14200 ug/l T

MW-06-7 *
5/29/2008: 67800 ug/l T
9/23/2008: 62000 ug/l T

MW-EPA-1
8/9/1988: 5570 ug/l T
10/8/1998: 5000 ug/l T
5/14/2008: 6930 ug/l T
9/17/2008: 7300 ug/l T

MW-06-4
5/15/2008: 6850 ug/l T
9/18/2008: 7100 ug/l T

MW-97-1
11/4/1997: 6000 ug/l T
10/8/1998: 7000 ug/l T
5/13/2008: 14400 ug/l T
9/17/2008: 15500 ug/l T

MW-GW-3
5/20/2008: 11500 ug/l T
9/17/2008: 12500 ug/l T

MW-06-5
5/14/2008: 13700 ug/l T
9/19/2008: 16100 ug/l T

MW-EPA-4
11/5/1997: 12000 ug/l T
10/12/1998: 15000 ug/l T
5/15/2008: 15900 ug/l T
9/20/2008: 15800 ug/l T

MW-06-11
5/28/2008: 17300 ug/l T
9/23/2008: 17600 ug/l T

PW-99-3
5/28/2008: 15200 ug/l T
9/22/2008: 15300 ug/l T

MW-06-22
5/21/2008: 41500 ug/l T
9/26/2008: 53100 ug/l T

MW-06-25
5/20/2008: 34800 ug/l T
9/26/2008: 33000 ug/l T

MW-97-7
11/4/1997: 45000 ug/l T
10/8/1998: 40000 ug/l T
10/8/2001: 35000 ug/l D
10/8/2001: 37000 ug/l T
1/17/2002: 32000 ug/l D
5/20/2008: 34000 ug/l T
9/26/2008: 34800 ug/l T

MW-97-9
11/5/1997: 36000 ug/l T
10/7/1998: 38000 ug/l T
5/16/2008: 27100 ug/l T
9/24/2008: 28800 ug/l T

MW-06-13
5/27/2008: 16400 ug/l T
9/19/2008: 16900 ug/l T

MW-06-16
5/21/2008: 19700 ug/l T
9/20/2008: 19100 ug/l T

MW-EPA-3
8/9/1988: 10900 ug/l T
11/5/1997: 13000 ug/l T
10/12/1998: 12000 ug/l T
5/15/2008: 11600 ug/l T
9/16/2008: 12200 ug/l T

MW-06-17
5/27/2008: 22100 ug/l T
9/20/2008: 21900 ug/l T

MW-06-14
5/27/2008: 16600 ug/l T
9/18/2008: 17900 ug/l T

MW-97-12
11/5/1997: 30000 ug/l T
10/12/1998: 30000 ug/l T
5/27/2008: 29100 ug/l T
9/23/2008: 31100 ug/l R T
12/15/2008: 27400 ug/l T

MW-06-15
5/21/2008: 17400 ug/l T
9/17/2008: 19000 ug/l T

MW-06-18
5/21/2008: 32000 ug/l T
9/25/2008: 31100 ug/l T

MW-06-20
5/20/2008: 42600 ug/l T
9/20/2008: 41200 ug/l T

MW-02-1
1/17/2002: 23000 ug/l D
5/29/2008: 28800 ug/l T
9/26/2008: 30100 ug/l T

MW-06-19
5/20/2008: 25800 ug/l T
9/18/2008: 29000 ug/l T

MW-02-2
5/19/2008: 18300 ug/l T
9/22/2008: 19600 ug/l T

MW-01-6
10/9/2001: 55000 ug/l D
10/9/2001: 60000 ug/l T
1/17/2002: 54000 ug/l D
5/19/2008: 42200 ug/l T
9/18/2008: 41600 ug/l T

MW-97-6
11/4/1997: 13000 ug/l T
10/8/1998: 11000 ug/l T
5/17/2008: 13100 ug/l T
9/16/2008: 12900 ug/l T

MW-01-3
10/9/2001: 36000 ug/l D
10/9/2001: 40000 ug/l T
1/22/2002: 39000 ug/l D
5/19/2008: 33700 ug/l T
9/19/2008: 34200 ug/l T

MW-01-2
10/9/2001: 29000 ug/l D
10/9/2001: 35000 ug/l T
1/16/2002: 34000 ug/l D
5/19/2008: 23900 ug/l T
9/22/2008: 25900 ug/l T

MW-01-5
10/4/2001: 12000 ug/l D
10/4/2001: 12000 ug/l T
1/16/2002: 10000 ug/l D
5/17/2008: 12600 ug/l T
9/16/2008: 12800 ug/l T

MW-01-4
10/4/2001: 12000 ug/l D
10/4/2001: 12000 ug/l T
1/16/2002: 10000 ug/l D
5/16/2008: 12400 ug/l T
9/16/2008: 12300 ug/l T

MW-01-1
10/8/2001: 17000 ug/l D
10/8/2001: 18000 ug/l T
1/16/2002: 16000 ug/l D
5/16/2008: 17200 ug/l T
9/17/2008: 17600 ug/l T

MW-97-5
11/4/1997: 7000 ug/l T
10/8/1998: 7000 ug/l T
5/15/2008: 7690 ug/l T
9/17/2008: 7800 ug/l T

MW-06-23
5/13/2008: 7540 ug/l T
9/16/2008: 7400 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

N

Feet
800 0 800

Figure 5.3-26a

ANALYTICAL GROUNDWATER
POTASSIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:55 File: \\Barr.com\gis\Projects\26M46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-26a GW SW Data Potassium WaterTable.mxd User: sal2

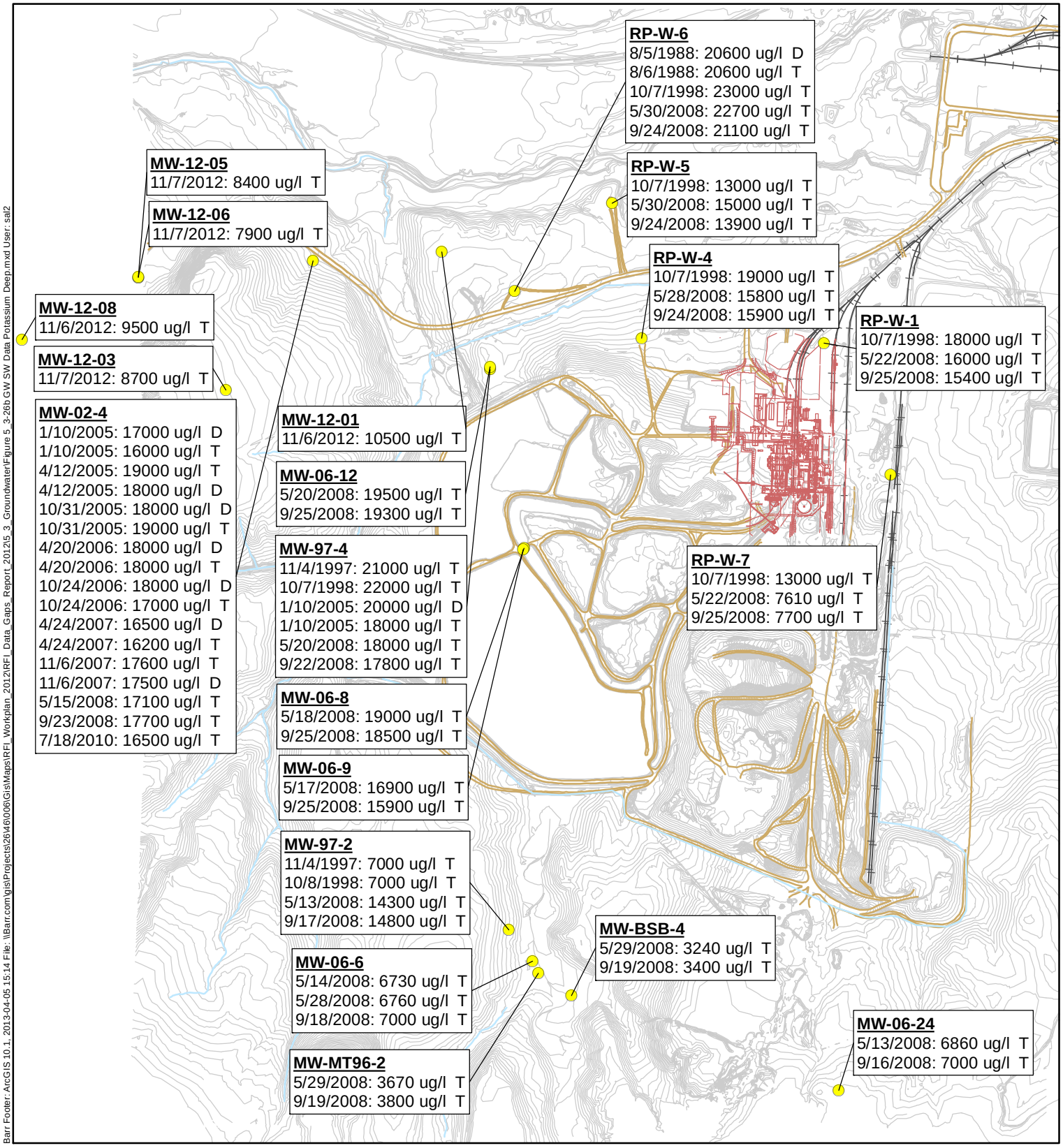


Figure 5.3-26b

ANALYTICAL GROUNDWATER
POTASSIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 7.8 ug/l T
9/18/2008: 9.3 ug/l T

MW-97-3
11/4/1997: 8 ug/l D
10/7/1998: 7 ug/l D
5/28/2008: 7 ug/l T
9/23/2008: 8 ug/l T

PW-99-1
5/18/2008: 1.2 ug/l T
5/29/2008: 1.3 ug/l T
9/25/2008: < 5 ug/l T

MW-06-1
5/15/2008: 2.1 ug/l T
9/18/2008: 4.4 ug/l T
7/17/2010: 1.4 ug/l T

MW-12-02
11/8/2012: 1.8 ug/l T

MW-12-04
11/7/2012: 1.3 ug/l T

MW-06-2
5/15/2008: 21.4 ug/l T
9/23/2008: 28 ug/l T
7/18/2010: 17.4 ug/l T

MW-12-07
11/6/2012: < 1.0 ug/l T

MW-02-3
5/15/2008: 8.6 ug/l T
9/23/2008: 13 ug/l T
7/17/2010: 9.4 ug/l T

MW-97-10
11/4/1997: 11 ug/l D
10/8/1998: 12 ug/l D
7/23/2003: 4.7 ug/l J T
7/23/2003: 4.2 ug/l J D
5/21/2008: 6.4 ug/l T
9/23/2008: 10 ug/l T

MW-06-3
5/14/2008: 2.2 ug/l T
9/19/2008: 4.3 ug/l T
7/16/2010: 1.4 ug/l T

MW-06-21
10/11/2006: < 100 ug/l
5/17/2008: 11.3 ug/l T
9/24/2008: 15 ug/l T

MW-97-11
11/5/1997: 8 ug/l D
10/8/1998: 8 ug/l D
7/21/2003: < 20 ug/l T
7/21/2003: 4.7 ug/l J D
5/21/2008: 4.2 ug/l T
9/25/2008: 7 ug/l T

MW-06-7 *
5/29/2008: 5.4 ug/l T
9/23/2008: 15 ug/l T

MW-EPA-4
11/5/1997: 5 ug/l D
10/12/1998: < 5 ug/l D
7/24/2003: < 10 ug/l T
7/24/2003: 1.9 ug/l J D
5/15/2008: 3.7 ug/l T
9/20/2008: 6 ug/l T

MW-06-11
5/28/2008: 4.6 ug/l T
9/23/2008: 11 ug/l T

MW-97-8
11/5/1997: 11 ug/l D
10/7/1998: 6 ug/l D
5/15/2008: 24.2 ug/l T
9/24/2008: 28 ug/l T

MW-97-9
11/5/1997: 20 ug/l D
10/7/1998: 22 ug/l D
5/16/2008: 9.2 ug/l T
9/24/2008: 12 ug/l T

MW-06-13
10/2/2006: < 100 ug/l
5/27/2008: 6 ug/l T
9/19/2008: 9 ug/l T

MW-06-16
10/1/2006: < 100 ug/l
5/21/2008: 9.4 ug/l T
9/20/2008: 17 ug/l T

MW-EPA-3
8/9/1988: < 2 ug/l J T
11/5/1997: < 5 ug/l D
10/12/1998: < 5 ug/l D
7/24/2003: 3.4 ug/l J T
7/24/2003: 2.8 ug/l J D
5/15/2008: 4.4 ug/l T
9/16/2008: 5.6 ug/l T

MW-06-17
9/30/2006: < 100 ug/l
5/27/2008: 9.5 ug/l T
9/20/2008: 15 ug/l T

MW-06-14
5/27/2008: 9 ug/l T
9/18/2008: 10.8 ug/l T

MW-97-12
11/5/1997: 30 ug/l D
10/12/1998: 25 ug/l D
5/27/2008: 30.7 ug/l T
9/23/2008: 36 ug/l R T
12/15/2008: 27.5 ug/l T

MW-06-15
5/21/2008: 8.3 ug/l T
9/17/2008: 10.7 ug/l T

MW-06-18
9/29/2006: < 100 ug/l
5/21/2008: 32.8 ug/l T
9/25/2008: 38 ug/l T

MW-06-20
10/3/2006: < 100 ug/l
5/20/2008: 3.4 ug/l T
9/20/2008: 5 ug/l T

MW-06-19
5/20/2008: 17.4 ug/l T
9/18/2008: 34.2 ug/l T

MW-02-1
1/17/2002: 5 ug/l D
7/22/2003: 2.6 ug/l J T
7/22/2003: 0.87 ug/l J D
5/29/2008: 4.5 ug/l T
9/26/2008: 7 ug/l T

MW-97-6
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
7/23/2003: < 5 ug/l T
7/23/2003: 0.84 ug/l J D
5/17/2008: 2.3 ug/l T
9/16/2008: 5.2 ug/l T

MW-01-6
10/9/2001: 2 ug/l D
10/9/2001: 2 ug/l T
10/10/2001: < 100 ug/l
1/17/2002: 3 ug/l D
9/5/2002: < 5 ug/l D
5/19/2008: 1.2 ug/l T
9/18/2008: 2.9 ug/l T

MW-06-4
5/15/2008: < 1 ug/l T
9/18/2008: 1.1 ug/l T

MW-GW-2
6/30/1998: < 5 ug/l D
9/30/1998: 5 ug/l D
12/31/1998: < 5 ug/l D
3/31/1999: < 1 ug/l D
6/30/1999: 2 ug/l D
9/30/1999: 2 ug/l D
12/31/1999: < 1 ug/l D
3/31/2000: < 1 ug/l D
6/30/2000: 1 ug/l D
9/30/2000: 2 ug/l D
12/31/2000: 3 ug/l D
3/31/2001: 1 ug/l D
6/30/2001: 2 ug/l D
9/30/2001: < 1 ug/l D
12/31/2001: < 1 ug/l D
3/31/2002: < 1 ug/l D
6/30/2002: 3 ug/l D
9/30/2002: 1 ug/l D
12/31/2002: < 1 ug/l D
3/31/2003: < 5 ug/l D
6/30/2003: < 1 ug/l D
9/30/2003: < 1 ug/l D
12/31/2003: < 1 ug/l D
3/31/2004: < 1 ug/l D
6/30/2004: < 1 ug/l D
9/30/2004: < 1 ug/l D
11/30/2004: < 1 ug/l D
12/31/2004: < 1 ug/l D
3/31/2005: < 1 ug/l D
6/30/2005: < 1 ug/l D
7/31/2005: < 1 ug/l D
6/30/2006: < 1 ug/l D
9/30/2006: < 5 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: 1 ug/l D
6/30/2008: < 1 ug/l D

MW-GW-3
6/30/1998: < 5 ug/l D
9/30/1998: < 5 ug/l D
12/31/1998: < 5 ug/l D
3/31/1999: < 1 ug/l D
6/30/1999: 2 ug/l D
9/30/1999: 2 ug/l D
12/31/1999: < 1 ug/l D
3/31/2000: < 1 ug/l D
6/30/2000: 1 ug/l D
9/30/2000: 3 ug/l D
12/31/2000: < 1 ug/l D
3/31/2001: 1 ug/l D
6/30/2001: 2 ug/l D
9/30/2001: < 1 ug/l D
12/31/2001: < 1 ug/l D
3/31/2002: < 1 ug/l D
6/30/2002: 12 ug/l D
9/30/2002: 3 ug/l D
12/31/2002: < 1 ug/l D
3/31/2003: < 5 ug/l D
6/30/2003: < 1 ug/l D
9/30/2003: < 1 ug/l D
12/31/2003: < 1 ug/l D
3/31/2004: < 1 ug/l D
6/30/2004: < 1 ug/l D
9/30/2004: < 1 ug/l D
11/30/2004: < 1 ug/l D
12/31/2004: < 1 ug/l D
3/31/2005: < 1 ug/l D
6/30/2005: < 1 ug/l D
7/31/2005: < 1 ug/l D
12/31/2005: < 0.1 ug/l D
3/31/2006: < 1 ug/l D
6/30/2006: < 1 ug/l D
9/30/2006: < 5 ug/l D
12/31/2006: < 1 ug/l D
3/31/2007: < 1 ug/l D
6/30/2007: < 1 ug/l D
9/30/2007: < 1 ug/l D
12/31/2007: < 1 ug/l D
3/31/2008: < 1 ug/l D
5/20/2008: < 1 ug/l T
6/30/2008: < 1 ug/l D
9/17/2008: < 1 ug/l T
9/30/2008: < 1 ug/l D
12/31/2008: < 1 ug/l D
3/31/2009: < 1 ug/l D
6/30/2009: < 1 ug/l D
9/30/2009: < 1 ug/l D
12/31/2009: < 1 ug/l D
3/31/2010: < 1 ug/l D
6/30/2010: < 1 ug/l D
9/30/2010: < 1 ug/l D

PW-99-3
5/28/2008: < 1 ug/l T
9/22/2008: < 2 ug/l T

MW-EPA-1
8/9/1988: < 20 ug/l T
10/8/1998: < 5 ug/l D
5/14/2008: < 1 ug/l T
9/17/2008: 1.3 ug/l T

MW-06-22
10/4/2006: < 100 ug/l
5/21/2008: 34 ug/l T
9/26/2008: 41 ug/l T

MW-06-25
10/15/2006: < 100 ug/l
5/20/2008: 47.4 ug/l T
9/26/2008: 60 ug/l T

MW-06-5
5/14/2008: < 1 ug/l T
9/19/2008: < 1 ug/l T

MW-97-1
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
5/13/2008: < 1 ug/l T
9/17/2008: < 1 ug/l T

MW-97-7
11/4/1997: 27 ug/l D
10/8/1998: 37 ug/l D
10/8/2001: 31 ug/l D
10/8/2001: 31 ug/l T
1/17/2002: 38 ug/l D
1/17/2002: 36 ug/l D
5/20/2008: 46.6 ug/l T
9/26/2008: 48 ug/l T

MW-01-1
10/8/2001: 6 ug/l D
10/8/2001: 6 ug/l T
1/16/2002: 9 ug/l D
5/16/2008: 11 ug/l T
9/17/2008: 18.7 ug/l T

MW-97-5
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
5/15/2008: < 1 ug/l T
9/17/2008: < 1 ug/l T

MW-06-23
5/13/2008: < 1 ug/l T
9/16/2008: < 1 ug/l T

MW-02-2
9/5/2002: 9 ug/l D
5/19/2008: 14.9 ug/l T
9/22/2008: 15 ug/l T

MW-01-3
10/9/2001: 3 ug/l D
10/9/2001: 3 ug/l T
1/22/2002: 2 ug/l D
9/5/2002: < 5 ug/l D
5/19/2008: 1.5 ug/l T
9/19/2008: 2 ug/l T

MW-01-2
10/9/2001: 6 ug/l D
10/9/2001: 7 ug/l T
10/10/2001: < 100 ug/l
1/16/2002: 6 ug/l D
7/22/2003: 7.3 ug/l BQQ D
7/22/2003: 6 ug/l T
5/19/2008: 12.1 ug/l T
9/22/2008: 10 ug/l T

MW-01-5
10/4/2001: 3 ug/l D
10/4/2001: 2 ug/l T
1/16/2002: 4 ug/l D
5/17/2008: 4.6 ug/l T
9/16/2008: 7.2 ug/l T

MW-01-4
10/4/2001: 3 ug/l D
10/4/2001: 2 ug/l T
1/16/2002: 4 ug/l D
5/16/2008: 4.5 ug/l T
9/16/2008: 8.2 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

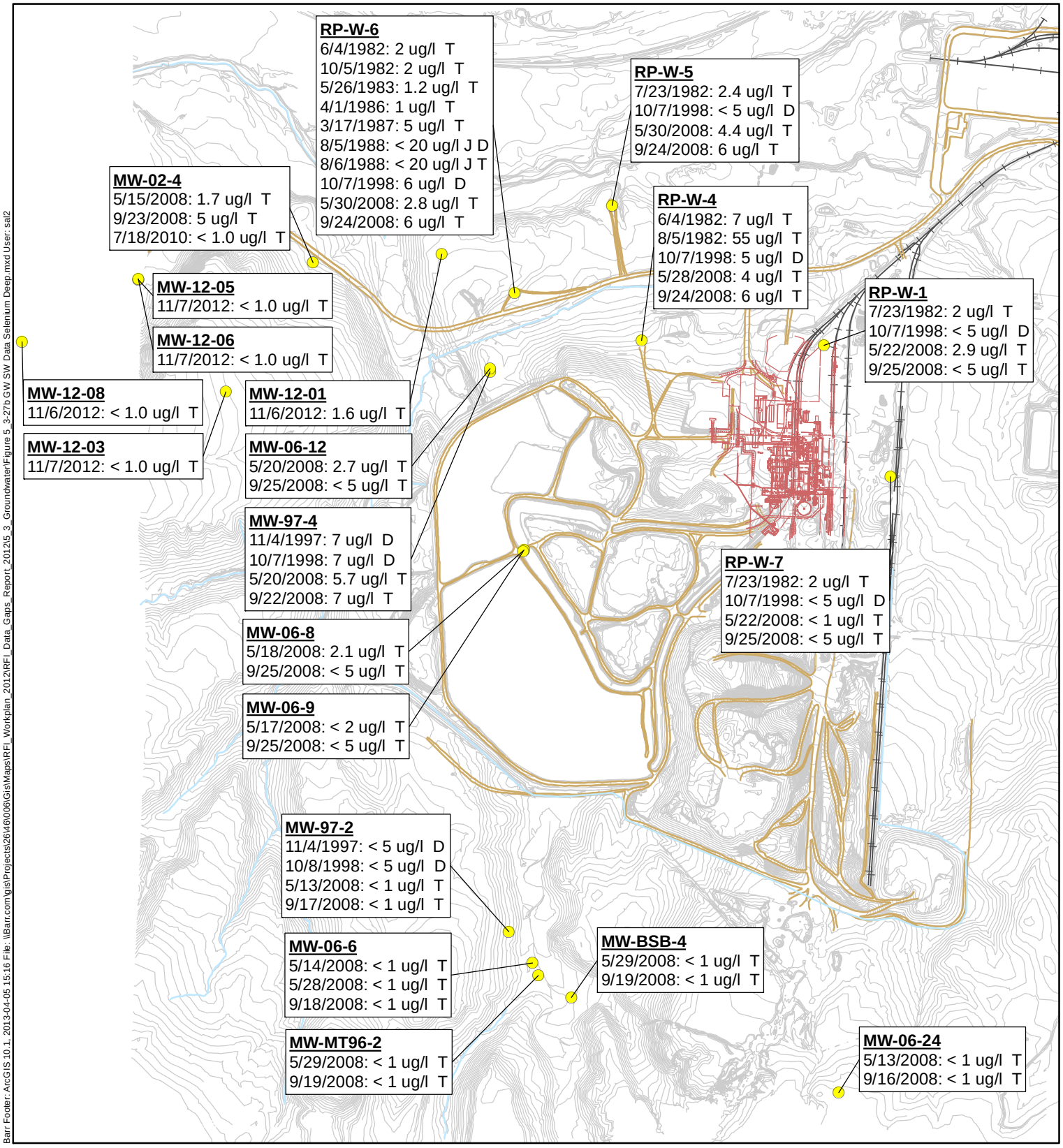
N

Feet
800 0 800

Figure 5.3-27a

ANALYTICAL GROUNDWATER
SELENIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:57 File: \\Barr.com\gis\Projects\26\46\006\GisMaps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_GroundwaterFigure 5_3-27a GW SW Data Selenium WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:16 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-27b GW SW Data Selenium Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-27b

ANALYTICAL GROUNDWATER
SELENIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-97-3
11/4/1997: < 5 ug/l D
10/7/1998: < 5 ug/l D
5/28/2008: < 0.02 ug/l T
9/23/2008: < 0.02 ug/l T

PW-99-1
5/18/2008: < 0.03 ug/l T
5/29/2008: < 0.02 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-1
5/15/2008: < 0.02 ug/l T
9/18/2008: < 0.026 ug/l T
7/17/2010: < 0.02 ug/l T

MW-12-02
11/8/2012: < 0.020 ug/l T

MW-12-04
11/7/2012: < 0.020 ug/l T

MW-06-2
5/15/2008: < 0.02 ug/l T
9/23/2008: 0.02 ug/l T
7/18/2010: < 0.02 ug/l T

MW-12-07
11/6/2012: < 0.020 ug/l T

MW-02-3
5/15/2008: < 0.02 ug/l T
9/23/2008: < 0.02 ug/l T
7/17/2010: < 0.02 ug/l T

MW-06-3
5/14/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T
7/16/2010: < 0.02 ug/l T

MW-97-10
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: < 1 ug/l D
5/21/2008: < 0.02 ug/l T
9/23/2008: < 0.02 ug/l T

MW-97-8
11/5/1997: < 5 ug/l D
10/7/1998: < 5 ug/l D
5/15/2008: 0.02 ug/l T
9/24/2008: < 0.1 ug/l T

MW-06-7 *
5/29/2008: < 0.02 ug/l T
9/23/2008: 0.16 ug/l T

MW-97-11
11/5/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
7/21/2003: < 2 ug/l T
7/21/2003: 0.04 ug/l J D
5/21/2008: 0.02 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-21
10/11/2006: < 500 ug/l
5/17/2008: < 0.03 ug/l T
9/24/2008: < 0.1 ug/l T

MW-EPA-1
8/9/1988: < 4 ug/l T
10/8/1998: < 5 ug/l D
5/14/2008: < 0.02 ug/l T
9/17/2008: < 0.216 ug/l T

MW-06-4
5/15/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-97-1
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
5/13/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-GW-3
5/20/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-06-5
5/14/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T

PW-99-3
5/28/2008: < 0.02 ug/l T
9/22/2008: 0.02 ug/l T

MW-EPA-4
11/5/1997: < 5 ug/l D
10/12/1998: < 5 ug/l D
7/24/2003: < 2 ug/l T
7/24/2003: 0.033 ug/l J D
5/15/2008: < 0.02 ug/l T
9/20/2008: < 0.02 ug/l T

MW-06-11
5/28/2008: < 0.02 ug/l T
9/23/2008: 0.03 ug/l T

MW-06-22
10/4/2006: < 500 ug/l
5/21/2008: < 0.02 ug/l T
9/26/2008: < 0.1 ug/l T

MW-06-25
10/15/2006: < 500 ug/l
5/20/2008: < 0.02 ug/l T
9/26/2008: < 0.1 ug/l T

MW-97-7
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
10/8/2001: < 3 ug/l D
10/8/2001: < 3 ug/l T
1/17/2002: < 3 ug/l D
1/17/2002: < 3 ug/l D
5/20/2008: 0.02 ug/l T
9/26/2008: < 0.1 ug/l T

MW-01-1
10/8/2001: < 3 ug/l D
10/8/2001: < 3 ug/l T
1/16/2002: < 3 ug/l D
5/16/2008: 0.03 ug/l T
9/17/2008: < 0.02 ug/l T

MW-97-9
11/5/1997: < 5 ug/l D
10/7/1998: < 5 ug/l D
5/16/2008: < 0.02 ug/l T
9/24/2008: < 0.1 ug/l T

MW-06-13
10/2/2006: < 500 ug/l
5/27/2008: 0.05 ug/l T
9/19/2008: 0.02 ug/l T

MW-06-16
10/1/2006: < 500 ug/l
5/21/2008: < 0.02 ug/l T
9/20/2008: 0.03 ug/l T

MW-06-23
5/13/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-97-5
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
5/15/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-EPA-3
8/9/1988: < 4 ug/l T
11/5/1997: < 5 ug/l D
10/12/1998: < 5 ug/l D
7/24/2003: < 1 ug/l T
7/24/2003: 0.026 ug/l J D
5/15/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-06-17
9/30/2006: < 500 ug/l
5/27/2008: < 0.02 ug/l T
9/20/2008: < 0.02 ug/l T

MW-06-14
5/27/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-97-12
11/5/1997: < 5 ug/l D
10/12/1998: < 5 ug/l D
5/27/2008: < 0.02 ug/l T
9/23/2008: 0.89 ug/l R T
12/15/2008: < 0.05 ug/l T

MW-06-15
5/21/2008: < 0.02 ug/l T
9/17/2008: < 0.206 ug/l T

MW-06-18
9/29/2006: < 500 ug/l
5/21/2008: < 0.02 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-20
10/3/2006: < 500 ug/l
5/20/2008: 0.03 ug/l T
9/20/2008: < 0.02 ug/l T

MW-06-19
5/20/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-02-1
1/17/2002: < 3 ug/l D
7/22/2003: < 1 ug/l T
7/22/2003: 0.02 ug/l J D
5/29/2008: 0.02 ug/l T
9/26/2008: < 0.1 ug/l T

MW-97-6
11/4/1997: < 5 ug/l D
10/8/1998: < 5 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: 0.05 ug/l J D
5/17/2008: < 0.03 ug/l T
9/16/2008: < 0.02 ug/l T

MW-01-6
10/9/2001: < 3 ug/l D
10/9/2001: < 3 ug/l T
10/10/2001: < 500 ug/l *
1/17/2002: < 3 ug/l D
5/19/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-01-3
10/9/2001: < 3 ug/l D
10/9/2001: < 3 ug/l T
1/22/2002: < 3 ug/l D
5/19/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T

MW-01-2
10/9/2001: < 3 ug/l D
10/9/2001: < 3 ug/l T
10/10/2001: < 500 ug/l *
1/16/2002: < 3 ug/l D
7/22/2003: 0.02 ug/l J D
7/22/2003: < 1 ug/l T
5/19/2008: 0.03 ug/l T
9/22/2008: < 0.02 ug/l T

MW-01-5
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 3 ug/l D
5/17/2008: < 0.03 ug/l T
9/16/2008: < 0.02 ug/l T

MW-01-4
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 3 ug/l D
5/16/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-02-2
5/19/2008: 0.1 ug/l T
9/22/2008: 0.05 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

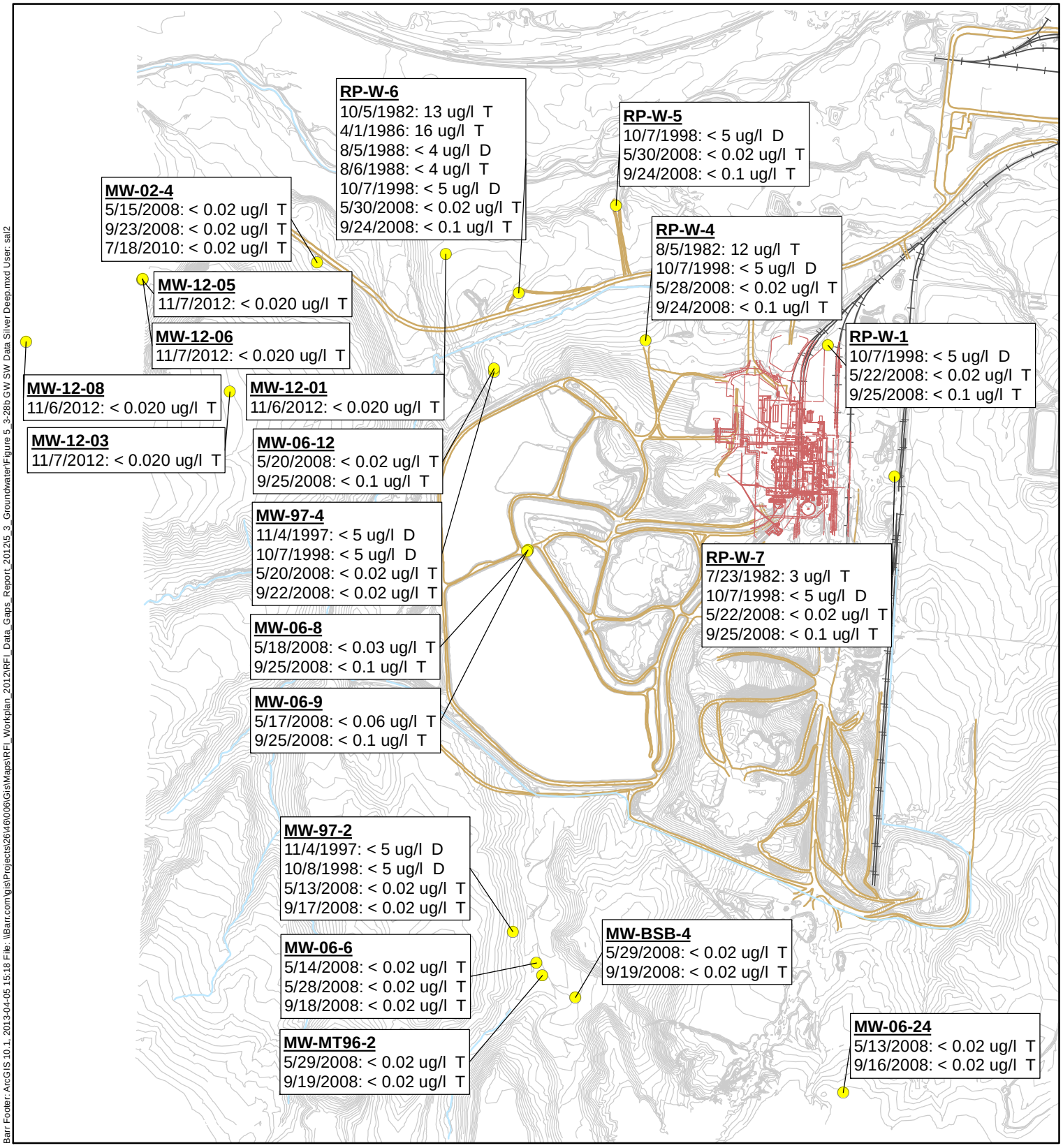
N

Feet
800 0 800

Figure 5.3-28a

ANALYTICAL GROUNDWATER
SILVER
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 09:59 File: \\Barr.com\gis\Projects\26k46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-28a GW SW Data Silver WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:18 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-28b GW SW Data Silver Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-28b

ANALYTICAL GROUNDWATER
SILVER
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 56600 ug/l T
9/18/2008: 61500 ug/l T

MW-97-3
11/4/1997: 55000 ug/l T
10/7/1998: 62000 ug/l T
1/10/2005: 58000 ug/l D
1/10/2005: 62000 ug/l T
5/28/2008: 62900 ug/l T
9/23/2008: 60100 ug/l T

PW-99-1
1/10/2005: 87000 ug/l D
1/10/2005: 90000 ug/l T
5/18/2008: 95600 ug/l T
5/29/2008: 95600 ug/l T
9/25/2008: 102000 ug/l T

MW-06-1
5/15/2008: 56800 ug/l T
9/18/2008: 57700 ug/l T
7/17/2010: 53900 ug/l T

MW-12-07
11/6/2012: 20000 ug/l T

MW-12-02
11/8/2012: 120000 ug/l T

MW-12-04
11/7/2012: 38000 ug/l T

MW-06-2
5/15/2008: 85600 ug/l T
9/23/2008: 91400 ug/l T
7/18/2010: 83500 ug/l T

MW-02-3
1/10/2005: 86000 ug/l D
1/10/2005: 79000 ug/l T
4/12/2005: 87000 ug/l T
4/12/2005: 86000 ug/l D
10/31/2005: 82000 ug/l D
10/31/2005: 87000 ug/l T
4/20/2006: 82000 ug/l D
4/20/2006: 79000 ug/l T
10/24/2006: 81000 ug/l D
10/24/2006: 80000 ug/l T
4/24/2007: 89500 ug/l D
4/24/2007: 87600 ug/l T
11/6/2007: 88800 ug/l D
11/6/2007: 85000 ug/l T
5/15/2008: 81200 ug/l T
9/23/2008: 83500 ug/l T
7/17/2010: 76500 ug/l T

MW-97-10
11/4/1997: 106000 ug/l T
10/8/1998: 116000 ug/l T
1/11/2005: 93000 ug/l D
1/11/2005: 93000 ug/l T
5/21/2008: 92100 ug/l T
9/23/2008: 92200 ug/l T

MW-97-8
11/5/1997: 109000 ug/l T
10/7/1998: 75000 ug/l T
5/15/2008: 71400 ug/l T
9/24/2008: 73600 ug/l T

MW-06-21
5/17/2008: 78000 ug/l T
9/24/2008: 71400 ug/l T

MW-97-11
11/5/1997: 160000 ug/l T
10/8/1998: 154000 ug/l T
1/11/2005: 147000 ug/l D
1/11/2005: 137000 ug/l T
5/21/2008: 138000 ug/l T
9/25/2008: 137000 ug/l T

MW-06-3
5/14/2008: 62000 ug/l T
9/19/2008: 64000 ug/l T
7/16/2010: 59000 ug/l T

MW-06-7 *
5/29/2008: 142000 ug/l T
9/23/2008: 140000 ug/l T

MW-EPA-1
8/9/1988: 35300 ug/l T
10/8/1998: 34000 ug/l T
5/14/2008: 50000 ug/l T
9/17/2008: 51900 ug/l T

MW-06-4
5/15/2008: 48700 ug/l T
9/18/2008: 53300 ug/l T

MW-97-1
11/4/1997: 25000 ug/l T
10/8/1998: 25000 ug/l T
5/13/2008: 56900 ug/l T
9/17/2008: 64600 ug/l T

MW-GW-3
5/20/2008: 114000 ug/l T
9/17/2008: 109000 ug/l T

MW-06-5
5/14/2008: 134000 ug/l T
9/19/2008: 149000 ug/l T

MW-EPA-4
11/5/1997: 39000 ug/l T
10/12/1998: 44000 ug/l T
5/15/2008: 49200 ug/l T
9/20/2008: 50600 ug/l T

MW-06-11
5/28/2008: 72600 ug/l T
9/23/2008: 72100 ug/l T

PW-99-3
5/28/2008: 145000 ug/l T
9/22/2008: 164000 ug/l T

MW-06-22
5/21/2008: 112000 ug/l T
9/26/2008: 117000 ug/l T

MW-06-25
5/20/2008: 90600 ug/l T
9/26/2008: 89800 ug/l T

MW-97-7
11/4/1997: 111000 ug/l T
10/8/1998: 115000 ug/l T
10/8/2001: 108000 ug/l D
10/8/2001: 114000 ug/l T
1/17/2002: 98000 ug/l D
5/20/2008: 85900 ug/l T
9/26/2008: 91000 ug/l T

MW-97-5
11/4/1997: 25000 ug/l T
10/8/1998: 21000 ug/l T
5/15/2008: 22200 ug/l T
9/17/2008: 22900 ug/l T

MW-06-23
5/13/2008: 17400 ug/l T
9/16/2008: 17900 ug/l T

MW-97-9
11/5/1997: 105000 ug/l T
10/7/1998: 101000 ug/l T
5/16/2008: 75500 ug/l T
9/24/2008: 79100 ug/l T

MW-06-13
5/27/2008: 80500 ug/l T
9/19/2008: 81300 ug/l T

MW-06-16
5/21/2008: 65400 ug/l T
9/20/2008: 66000 ug/l T

MW-EPA-3
8/9/1988: 29700 ug/l T
11/5/1997: 60000 ug/l T
10/12/1998: 52000 ug/l T
5/15/2008: 33600 ug/l T
9/16/2008: 36400 ug/l T

MW-06-17
5/27/2008: 93300 ug/l T
9/20/2008: 86500 ug/l T

MW-06-14
5/27/2008: 63400 ug/l T
9/18/2008: 67700 ug/l T

MW-97-12
11/5/1997: 117000 ug/l T
10/12/1998: 103000 ug/l T
5/27/2008: 76000 ug/l T
9/23/2008: 78900 ug/l R T
12/15/2008: 71300 ug/l T

MW-06-15
5/21/2008: 86600 ug/l T
9/17/2008: 104000 ug/l T

MW-06-18
5/21/2008: 109000 ug/l T
9/25/2008: 112000 ug/l T

MW-06-20
5/20/2008: 77500 ug/l T
9/20/2008: 75800 ug/l T

MW-02-1
1/17/2002: 236000 ug/l D
5/29/2008: 306000 ug/l T
9/26/2008: 338000 ug/l T

MW-06-19
5/20/2008: 108000 ug/l T
9/18/2008: 124000 ug/l T

MW-02-2
5/19/2008: 44600 ug/l T
9/22/2008: 47800 ug/l T

MW-01-6
10/9/2001: 69000 ug/l D
10/9/2001: 76000 ug/l T
1/17/2002: 66000 ug/l D
5/19/2008: 52200 ug/l T
9/18/2008: 53900 ug/l T

MW-97-6
11/4/1997: 30000 ug/l T
10/8/1998: 27000 ug/l T
5/17/2008: 31100 ug/l T
9/16/2008: 30900 ug/l T

MW-01-3
10/9/2001: 50000 ug/l D
10/9/2001: 53000 ug/l T
1/22/2002: 51000 ug/l D
5/19/2008: 42700 ug/l T
9/19/2008: 44000 ug/l T

MW-01-2
10/9/2001: 43000 ug/l D
10/9/2001: 47000 ug/l T
1/16/2002: 44000 ug/l D
5/19/2008: 46900 ug/l T
9/22/2008: 51800 ug/l T

MW-01-5
10/4/2001: 28000 ug/l D
10/4/2001: 28000 ug/l T
1/16/2002: 25000 ug/l D
5/17/2008: 29200 ug/l T
9/16/2008: 30200 ug/l T

MW-01-4
10/4/2001: 27000 ug/l D
10/4/2001: 28000 ug/l T
1/16/2002: 25000 ug/l D
5/16/2008: 29400 ug/l T
9/16/2008: 29300 ug/l T

MW-01-1
10/8/2001: 40000 ug/l D
10/8/2001: 42000 ug/l T
1/16/2002: 37000 ug/l D
5/16/2008: 42400 ug/l T
9/17/2008: 43400 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

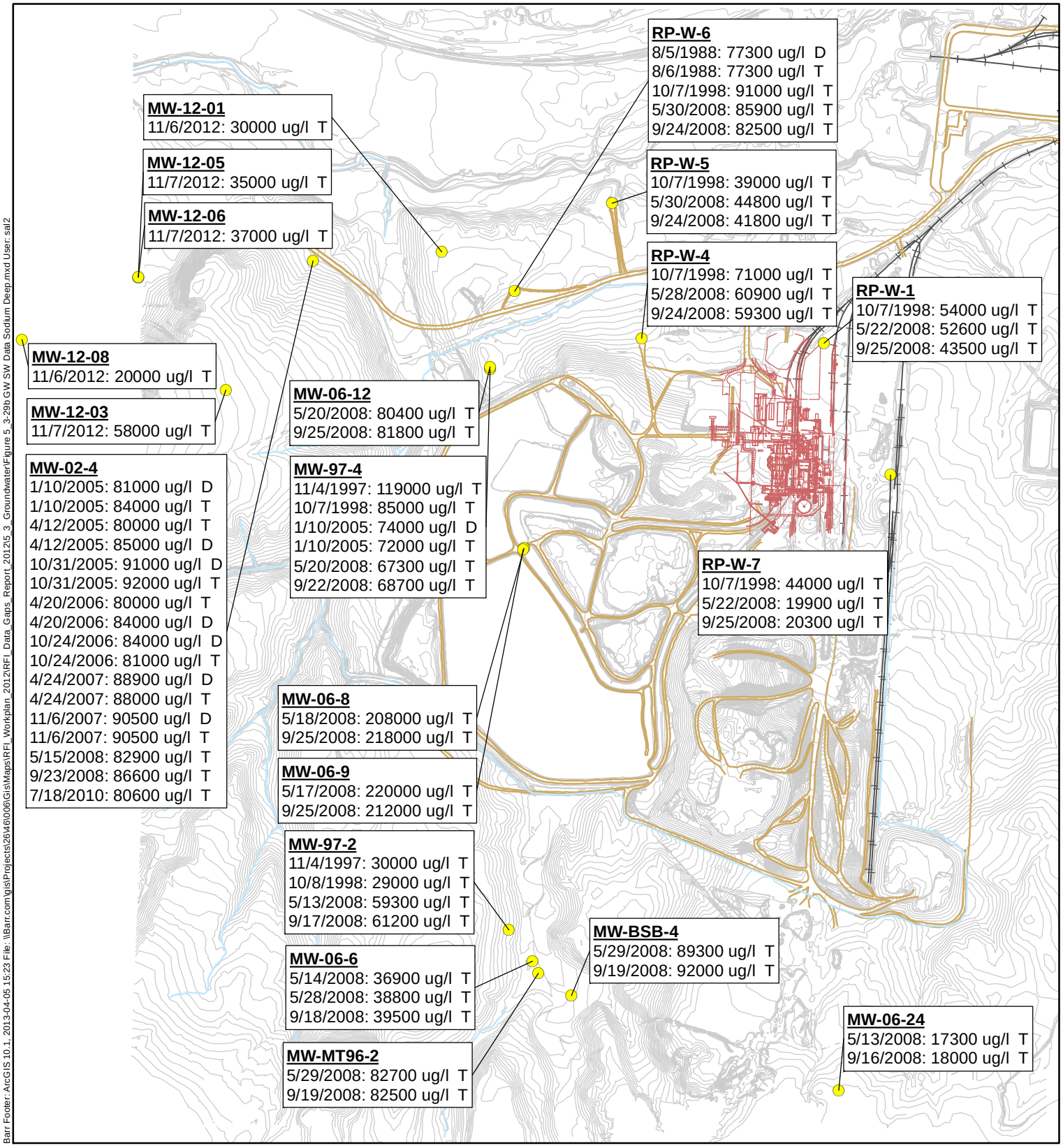
N

Feet
800 0 800

Figure 5.3-29a

ANALYTICAL GROUNDWATER
SODIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 10:46 File: \\Barr.com\gis\Projects\2648\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-29a GW SW Data Sodium WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:23 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-29b GW SW Data Sodium Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-29b

ANALYTICAL GROUNDWATER
SODIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: < 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-97-3
11/4/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/28/2008: < 0.02 ug/l T
9/23/2008: < 0.02 ug/l T

PW-99-1
5/18/2008: 0.03 ug/l T
5/29/2008: < 0.04 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-1
5/15/2008: < 0.02 ug/l T
9/18/2008: 0.032 ug/l T
7/17/2010: < 0.02 ug/l T

MW-12-07
11/6/2012: 0.022 ug/l T

MW-12-02
11/8/2012: 0.022 ug/l T

MW-12-04
11/7/2012: 0.023 ug/l T

MW-06-2
5/15/2008: 0.02 ug/l T
9/23/2008: < 0.02 ug/l T
7/18/2010: < 0.02 ug/l T

MW-02-3
5/15/2008: < 0.02 ug/l T
9/23/2008: < 0.02 ug/l T
7/17/2010: < 0.02 ug/l T

MW-97-10
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/23/2003: 0.14 ug/l J T
7/23/2003: 0.04 ug/l J D
5/21/2008: 0.03 ug/l T
9/23/2008: 0.02 ug/l T

MW-06-3
5/14/2008: 0.03 ug/l T
9/19/2008: 0.027 ug/l T
7/16/2010: < 0.02 ug/l T

MW-97-8
11/5/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/15/2008: 0.06 ug/l T
9/24/2008: < 0.1 ug/l T

MW-06-21
5/17/2008: 0.06 ug/l T
9/24/2008: < 0.1 ug/l T

MW-97-11
11/5/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/21/2003: < 4 ug/l T
7/21/2003: 0.063 ug/l J D
5/21/2008: 0.07 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-7 *
5/29/2008: 18.6 ug/l T
9/23/2008: 2.51 ug/l T

MW-EPA-1
8/9/1988: < 2.9 ug/l BJ T
10/8/1998: < 100 ug/l D
5/14/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-06-4
5/15/2008: 0.02 ug/l T
9/18/2008: < 0.02 ug/l T

MW-97-1
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
5/13/2008: < 0.02 ug/l T
9/17/2008: 0.022 ug/l T

MW-GW-3
5/20/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-06-5
5/14/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T

MW-EPA-4
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
7/24/2003: < 2 ug/l T
7/24/2003: < 1 ug/l D
5/15/2008: < 0.02 ug/l T
9/20/2008: < 0.02 ug/l T

MW-06-11
5/28/2008: 0.04 ug/l T
9/23/2008: 0.03 ug/l T

PW-99-3
5/28/2008: 0.06 ug/l T
9/22/2008: 0.05 ug/l T

MW-06-22
5/21/2008: 0.05 ug/l T
9/26/2008: < 0.1 ug/l T

MW-06-25
5/20/2008: 0.12 ug/l T
9/26/2008: 0.14 ug/l T

MW-97-7
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
10/8/2001: < 2 ug/l D
10/8/2001: < 2 ug/l T
1/17/2002: < 2 ug/l D
1/17/2002: < 1 ug/l D
5/20/2008: 0.03 ug/l T
9/26/2008: < 0.1 ug/l T

MW-97-5
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
5/15/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-06-23
5/13/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-97-9
11/5/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/16/2008: 0.31 ug/l T
9/24/2008: 0.39 ug/l T

MW-06-13
5/27/2008: < 0.02 ug/l T
9/19/2008: < 0.02 ug/l T

MW-06-16
5/21/2008: < 0.02 ug/l T
9/20/2008: < 0.02 ug/l T

MW-EPA-3
8/9/1988: < 2.9 ug/l BJ T
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
7/24/2003: 0.04 ug/l J T
7/24/2003: < 1 ug/l D
5/15/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-06-17
5/27/2008: 0.02 ug/l T
9/20/2008: < 0.02 ug/l T

MW-06-14
5/27/2008: 0.02 ug/l T
9/18/2008: 0.03 ug/l T

MW-97-12
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
5/27/2008: 0.03 ug/l T
9/23/2008: 0.98 ug/l R T
12/15/2008: < 0.02 ug/l T

MW-06-15
5/21/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

MW-06-18
5/21/2008: < 0.02 ug/l T
9/25/2008: < 0.1 ug/l T

MW-06-20
5/20/2008: 0.05 ug/l T
9/20/2008: 0.06 ug/l T

MW-06-19
5/20/2008: < 0.02 ug/l T
9/18/2008: 0.02 ug/l T

MW-02-1
1/17/2002: < 1 ug/l D
7/22/2003: 0.44 ug/l J T
7/22/2003: < 1 ug/l D
5/29/2008: < 0.02 ug/l T
9/26/2008: < 0.1 ug/l T

MW-01-6
10/9/2001: < 2 ug/l D
10/9/2001: < 2 ug/l T
1/17/2002: < 1 ug/l D
5/19/2008: 0.1 ug/l T
9/18/2008: 0.098 ug/l T

MW-97-6
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/23/2003: < 1 ug/l T
7/23/2003: < 1 ug/l D
5/17/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-02-2
5/19/2008: 0.03 ug/l T
9/22/2008: 0.03 ug/l T

MW-01-3
10/9/2001: < 2 ug/l D
10/9/2001: < 2 ug/l T
1/22/2002: < 3 ug/l D
5/19/2008: 0.05 ug/l T
9/19/2008: 0.06 ug/l T

MW-01-2
10/9/2001: < 2 ug/l D
10/9/2001: < 2 ug/l T
1/16/2002: < 1 ug/l D
7/22/2003: 0.048 ug/l J D
7/22/2003: 0.12 ug/l J T
5/19/2008: 0.04 ug/l T
9/22/2008: 0.04 ug/l T

MW-01-5
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 1 ug/l D
5/17/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-01-4
10/4/2001: < 3 ug/l D
10/4/2001: < 3 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: < 0.02 ug/l T
9/16/2008: < 0.02 ug/l T

MW-01-1
10/8/2001: < 2 ug/l D
10/8/2001: < 2 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: < 0.02 ug/l T
9/17/2008: < 0.02 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

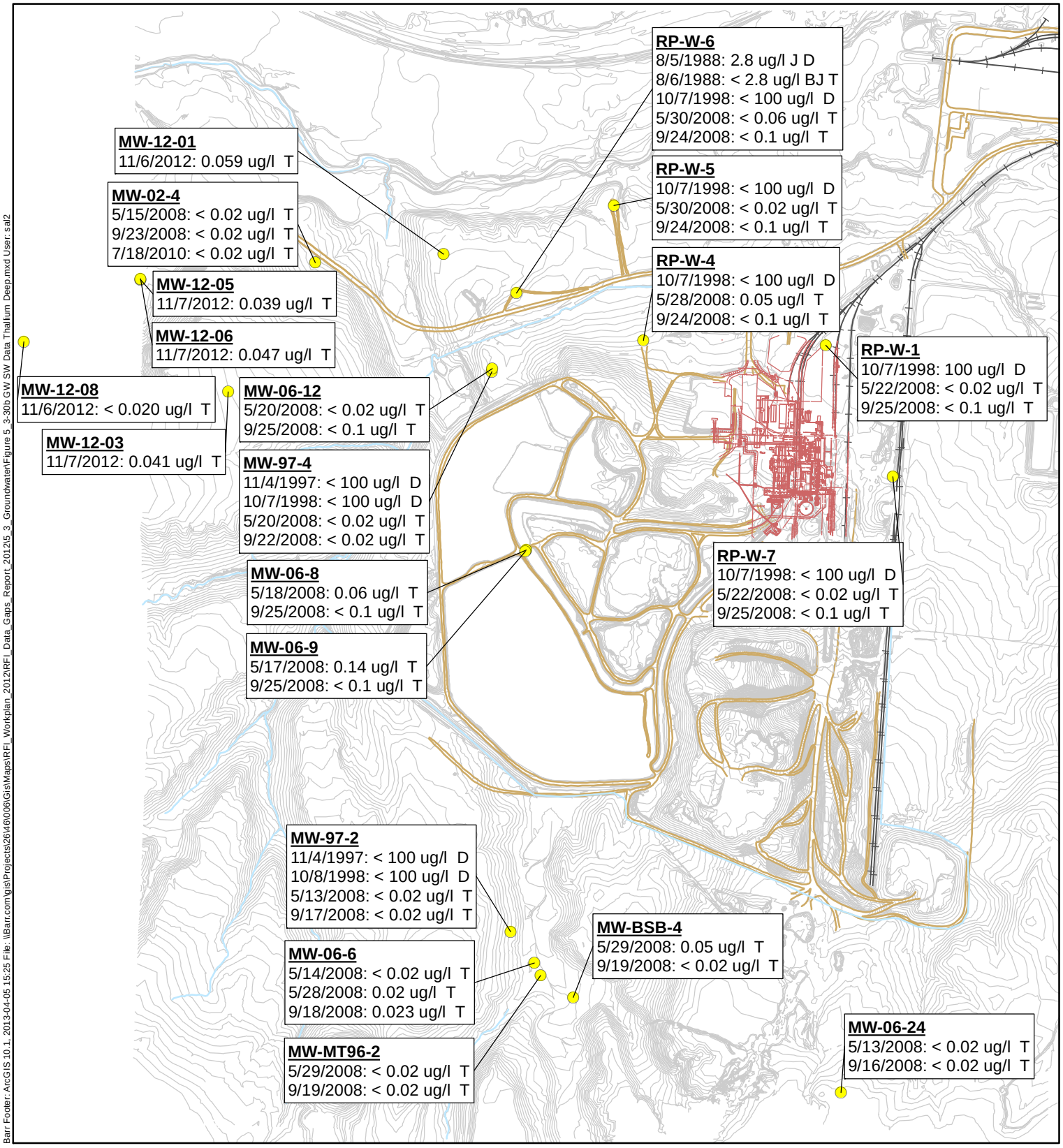
N

Feet
800 0 800

Figure 5.3-30a

ANALYTICAL GROUNDWATER
THALLIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 10:51 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-30a GW SW Data Thallium WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:25 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-30b GW SW Data Thallium Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-30b

ANALYTICAL GROUNDWATER
THALLIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 20.7 ug/l T
9/18/2008: 22.226 ug/l T

MW-97-3
11/4/1997: 11.1 ug/l T
5/28/2008: 9.5 ug/l T
9/23/2008: 9.96 ug/l T

PW-99-1
5/18/2008: 11.2 ug/l T
5/29/2008: 11.4 ug/l T
9/25/2008: 8.49 ug/l T

MW-06-1
5/15/2008: 31.9 ug/l T
9/18/2008: 32.374 ug/l T
7/17/2010: 39.6 ug/l T

MW-12-02
11/8/2012: 32.2 ug/l T

MW-12-04
11/7/2012: 6.3 ug/l T

MW-12-07
11/6/2012: 14.3 ug/l T

MW-06-2
5/15/2008: 8.1 ug/l T
9/23/2008: 9.14 ug/l T
7/18/2010: 9.950 ug/l T

MW-02-3
5/15/2008: 13.2 ug/l T
9/23/2008: 14.08 ug/l T
7/17/2010: 14.0 ug/l T

MW-06-3
5/14/2008: 7.1 ug/l T
9/19/2008: 6.575 ug/l T
7/16/2010: 7.370 ug/l T

MW-97-10
11/4/1997: 7.6 ug/l T
5/21/2008: 3.82 ug/l T
9/23/2008: 4.04 ug/l T

MW-97-8
11/5/1997: 0.7 ug/l T
5/15/2008: 0.31 ug/l T
9/24/2008: 0.27 ug/l T

MW-06-21
5/17/2008: 4.6 ug/l T
9/24/2008: 2.66 ug/l T

MW-97-11
11/5/1997: 6.5 ug/l T
5/21/2008: 4.16 ug/l T
9/25/2008: 3.96 ug/l T

MW-06-7 *
5/29/2008: 2.71 ug/l T
9/23/2008: 4.17 ug/l T

MW-EPA-1
5/14/2008: 9.5 ug/l T
9/17/2008: 9.785 ug/l T

MW-EPA-4
11/5/1997: 6.6 ug/l T
5/15/2008: 4.6 ug/l T
9/20/2008: 4.72 ug/l T

MW-06-11
5/28/2008: 1.66 ug/l T
9/23/2008: 1.79 ug/l T

PW-99-3
5/28/2008: 17.3 ug/l T
9/22/2008: 12.03 ug/l T

MW-97-1
11/4/1997: 16.7 ug/l T
5/13/2008: 31 ug/l T
9/17/2008: 28.72 ug/l T

MW-06-4
5/15/2008: 4.5 ug/l T
9/18/2008: 4.817 ug/l T

MW-06-5
5/14/2008: 6.8 ug/l T
9/19/2008: 6.23 ug/l T

MW-GW-3
5/20/2008: 6.24 ug/l T
9/17/2008: 14.717 ug/l T

MW-97-9
11/5/1997: 1.3 ug/l T
5/16/2008: 0.24 ug/l T
9/24/2008: 0.19 ug/l T

MW-06-13
5/27/2008: 9.86 ug/l T
9/19/2008: 11.3 ug/l T

MW-06-16
5/21/2008: 44 ug/l T
9/20/2008: 42.79 ug/l T

MW-06-22
5/21/2008: 1.11 ug/l T
9/26/2008: 0.82 ug/l T

MW-06-25
5/20/2008: 14.7 ug/l T
9/26/2008: 18.36 ug/l T

MW-97-7
11/4/1997: 1.4 ug/l T
10/8/2001: 2.9 ug/l T
1/17/2002: 6.3 ug/l D
1/17/2002: 6.3 ug/l D
5/20/2008: 29 ug/l T
9/26/2008: 18.88 ug/l T

MW-06-23
5/13/2008: 3.4 ug/l T
9/16/2008: 3.388 ug/l T

MW-EPA-3
11/5/1997: 36.2 ug/l T
5/15/2008: 14 ug/l T
9/16/2008: 14.702 ug/l T

MW-06-17
5/27/2008: 5.49 ug/l T
9/20/2008: 4.86 ug/l T

MW-06-14
5/27/2008: 9.02 ug/l T
9/18/2008: 8.372 ug/l T

MW-97-12
11/5/1997: 1 ug/l T
5/27/2008: 0.797 ug/l T
9/23/2008: 0.16 ug/l R T
12/15/2008: 0.712 ug/l T

MW-06-15
5/21/2008: 21.6 ug/l T
9/17/2008: 24.377 ug/l T

MW-06-18
5/21/2008: 0.103 ug/l T
9/25/2008: 0.1 ug/l T

MW-06-20
5/20/2008: < 0.02 ug/l T
9/20/2008: 0.08 ug/l T

MW-02-1
1/17/2002: 4.7 ug/l D
5/29/2008: 3.5 ug/l T
9/26/2008: 4.55 ug/l T

MW-06-19
5/20/2008: 80.9 ug/l T
9/18/2008: 84.038 ug/l T

MW-02-2
5/19/2008: 0.059 ug/l T
9/22/2008: 0.08 ug/l T

MW-01-6
10/9/2001: < 0.3 ug/l T
1/17/2002: < 0.2 ug/l D
5/19/2008: < 0.02 ug/l T
9/18/2008: 0.096 ug/l T

MW-97-6
11/4/1997: 32.4 ug/l T
5/17/2008: 18.7 ug/l T
9/16/2008: 17.047 ug/l T

MW-01-3
10/9/2001: 0.7 ug/l T
1/22/2002: < 1 ug/l D
5/19/2008: 0.027 ug/l T
9/19/2008: 0.036 ug/l T

MW-01-2
10/9/2001: < 0.3 ug/l T
1/16/2002: < 0.2 ug/l D
5/19/2008: 0.022 ug/l T
9/22/2008: 0.04 ug/l T

MW-01-5
10/4/2001: 15 ug/l T
1/16/2002: 21 ug/l D
5/17/2008: 23.3 ug/l T
9/16/2008: 23.122 ug/l T

MW-01-4
10/4/2001: 13.4 ug/l T
1/16/2002: 20.2 ug/l D
5/16/2008: 23.3 ug/l T
9/16/2008: 20.712 ug/l T

MW-01-1
10/8/2001: 31 ug/l T
1/16/2002: 45.3 ug/l D
5/16/2008: 52.2 ug/l T
9/17/2008: 53.602 ug/l T

MW-97-5
11/4/1997: 28.6 ug/l T
1/23/2002: 10.4 ug/l T
5/15/2008: 9.3 ug/l T
9/17/2008: 8.115 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

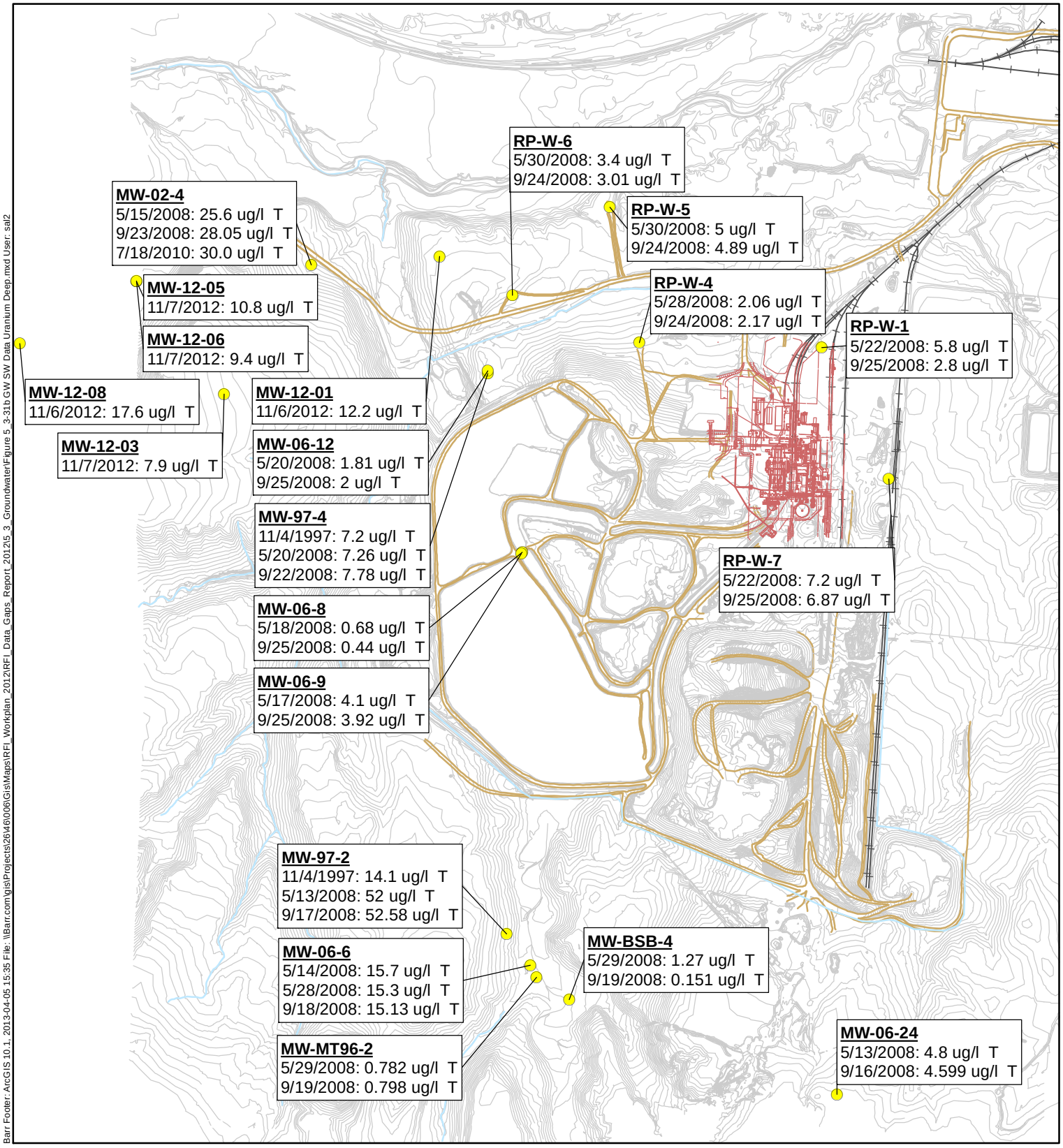
N

Feet
800 0 800

Figure 5.3-31a

ANALYTICAL GROUNDWATER
URANIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 10:53 File: \\Barr.com\gis\Projects\26\46\006\GisMaps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-31a GW SW Data Uranium WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:35 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-31b GW SW Data Uranium Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-31b

ANALYTICAL GROUNDWATER
URANIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 5.3 ug/l T
9/18/2008: 4.7 ug/l T

MW-97-3
11/4/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/28/2008: 8.2 ug/l T
9/23/2008: 7.5 ug/l T

PW-99-1
5/18/2008: 3 ug/l T
5/29/2008: 3.3 ug/l T
9/25/2008: 3.4 ug/l T

MW-06-1
5/15/2008: 3.1 ug/l T
9/18/2008: 3.4 ug/l T
7/17/2010: 3.0 ug/l T

MW-12-02
11/8/2012: 7.25 ug/l T

MW-12-04
11/7/2012: 4.88 ug/l T

MW-12-07
11/6/2012: 2.14 ug/l T

MW-06-2
5/15/2008: 4.9 ug/l T
9/23/2008: 3.9 ug/l T
7/18/2010: 3.9 ug/l T

MW-02-3
5/15/2008: 5.1 ug/l T
9/23/2008: 3.8 ug/l T
7/17/2010: 4.2 ug/l T

MW-97-10
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/23/2003: 5.3 ug/l T
7/23/2003: 4.1 ug/l BQQ D
5/21/2008: 4.4 ug/l T
9/23/2008: 4.2 ug/l T

MW-06-3
5/14/2008: 4.4 ug/l T
9/19/2008: 3.2 ug/l T
7/16/2010: 3.3 ug/l T

MW-97-8
11/5/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/15/2008: 8.2 ug/l T
9/24/2008: 6.9 ug/l T

MW-06-7 *
5/29/2008: 41.8 ug/l T
9/23/2008: 16.3 ug/l T

MW-97-11
11/5/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/21/2003: 5.2 ug/l T
7/21/2003: 6.4 ug/l BQQ D
5/21/2008: 5.3 ug/l T
9/25/2008: 5.7 ug/l T

MW-06-21
5/17/2008: 7.6 ug/l T
9/24/2008: 6.8 ug/l T

MW-EPA-1
8/9/1988: < 9.4 ug/l B T
10/8/1998: < 100 ug/l D
5/14/2008: 6.3 ug/l T
9/17/2008: 5.9 ug/l T

MW-06-4
5/15/2008: 7.7 ug/l T
9/18/2008: 5.4 ug/l T

MW-97-1
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
5/13/2008: 4.4 ug/l T
9/17/2008: 4 ug/l T

MW-GW-3
5/20/2008: 7 ug/l T
9/17/2008: 5.8 ug/l T

MW-06-5
5/14/2008: 9.3 ug/l T
9/19/2008: 7.8 ug/l T

MW-EPA-4
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
7/24/2003: 4 ug/l T
7/24/2003: 3.3 ug/l BQQ D
5/15/2008: 3.9 ug/l T
9/20/2008: 3.6 ug/l T

MW-06-11
5/28/2008: 5.1 ug/l T
9/23/2008: 4.4 ug/l T

PW-99-3
5/28/2008: 3.6 ug/l T
9/22/2008: 5.1 ug/l T

MW-06-22
5/21/2008: 7.6 ug/l T
9/26/2008: 6.6 ug/l T

MW-06-25
5/20/2008: 16.9 ug/l T
9/26/2008: 14.6 ug/l T

MW-97-7
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
10/8/2001: < 100 ug/l D
10/8/2001: < 100 ug/l T
1/17/2002: < 100 ug/l D
1/17/2002: < 10 ug/l D
5/20/2008: 6.5 ug/l T
9/26/2008: 5.5 ug/l T

MW-01-1
10/8/2001: < 100 ug/l D
10/8/2001: < 100 ug/l T
1/16/2002: < 10 ug/l D
5/16/2008: 3.4 ug/l T
9/17/2008: 2.9 ug/l T

MW-06-23
5/13/2008: 8.1 ug/l T
9/16/2008: 6.1 ug/l T

MW-97-9
11/5/1997: < 100 ug/l D
10/7/1998: < 100 ug/l D
5/16/2008: 22.5 ug/l T
9/24/2008: 23.6 ug/l T

MW-06-13
5/27/2008: 6 ug/l T
9/19/2008: 5.8 ug/l T

MW-06-16
5/21/2008: 4.5 ug/l T
9/20/2008: 4.2 ug/l T

MW-EPA-3
8/9/1988: < 8.4 ug/l B T
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
7/24/2003: 6.1 ug/l T
7/24/2003: 6.2 ug/l BQQ D
5/15/2008: 6.2 ug/l T
9/16/2008: 5.3 ug/l T

MW-06-17
5/27/2008: 9.9 ug/l T
9/20/2008: 8.9 ug/l T

MW-06-14
5/27/2008: 3.3 ug/l T
9/18/2008: 3.9 ug/l T

MW-97-12
11/5/1997: < 100 ug/l D
10/12/1998: < 100 ug/l D
5/27/2008: 9.4 ug/l T
9/23/2008: 11.2 ug/l R T
12/15/2008: 8.4 ug/l T

MW-06-15
5/21/2008: 4 ug/l T
9/17/2008: 3.3 ug/l T

MW-06-18
5/21/2008: 6.8 ug/l T
9/25/2008: 6.6 ug/l T

MW-06-20
5/20/2008: 7 ug/l T
9/20/2008: 6.7 ug/l T

MW-02-1
1/17/2002: < 10 ug/l D
7/22/2003: < 1 ug/l T
7/22/2003: < 1 ug/l D
5/29/2008: < 0.4 ug/l T
9/26/2008: < 1 ug/l T

MW-06-19
5/20/2008: 4.8 ug/l T
9/18/2008: 4.3 ug/l T

MW-01-6
10/9/2001: < 100 ug/l D
10/9/2001: < 100 ug/l T
1/17/2002: < 10 ug/l D
5/19/2008: < 0.2 ug/l T
9/18/2008: 0.5 ug/l T

MW-97-6
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
7/23/2003: 4.9 ug/l E T
7/23/2003: 4.9 ug/l BQQ D
5/17/2008: 5 ug/l T
9/16/2008: 4.6 ug/l T

MW-01-2
10/9/2001: < 100 ug/l D
10/9/2001: < 100 ug/l T
1/16/2002: < 10 ug/l D
7/22/2003: 4.5 ug/l BQQ D
7/22/2003: 4.5 ug/l T
5/19/2008: 6.4 ug/l T
9/22/2008: 6.2 ug/l T

MW-02-2
5/19/2008: 4.5 ug/l T
9/22/2008: 4.2 ug/l T

MW-01-3
10/9/2001: < 100 ug/l D
10/9/2001: < 100 ug/l T
1/22/2002: < 100 ug/l D
5/19/2008: 1.1 ug/l T
9/19/2008: 0.903 ug/l T

MW-01-4
10/4/2001: < 100 ug/l D
10/4/2001: < 100 ug/l T
1/16/2002: < 10 ug/l D
5/16/2008: 4.6 ug/l T
9/16/2008: 3.8 ug/l T

MW-01-5
10/4/2001: < 100 ug/l D
10/4/2001: < 100 ug/l T
1/16/2002: < 10 ug/l D
5/17/2008: 4.5 ug/l T
9/16/2008: 4.1 ug/l T

MW-97-5
11/4/1997: < 100 ug/l D
10/8/1998: < 100 ug/l D
5/15/2008: 9.3 ug/l T
9/17/2008: 7.2 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

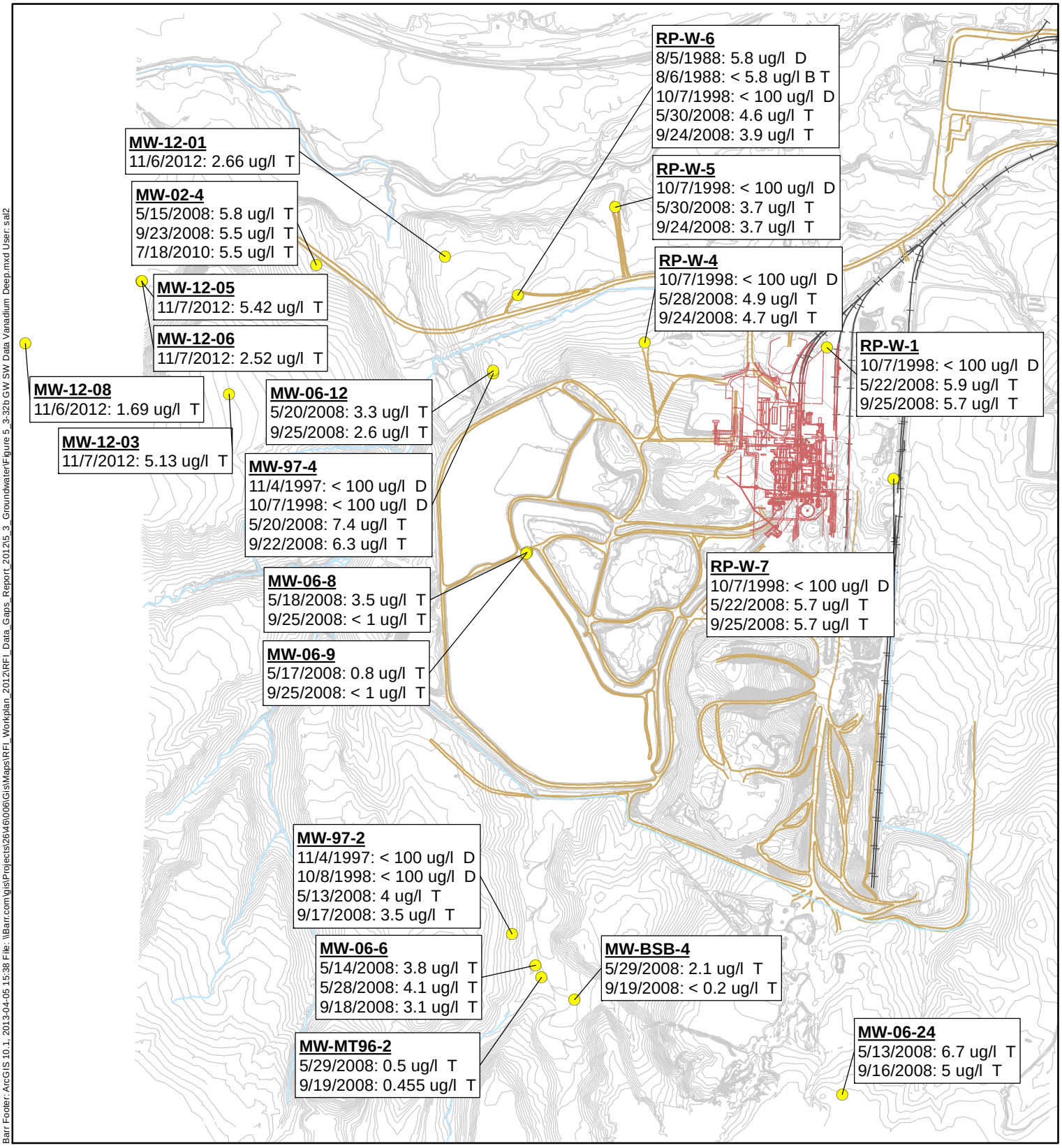
N

Feet
800 0 800

Figure 5.3-32a

ANALYTICAL GROUNDWATER
VANADIUM
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 11:05 File: \\Barr.com\gis\Projects\26\v46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-32a GW SW Data Vanadium WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:38 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-32b GW SW Data Vanadium Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet

1,000 0 1,000

Figure 5.3-32b

ANALYTICAL GROUNDWATER
VANADIUM
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: < 2.1 ug/l T
9/18/2008: < 3.8 ug/l T

MW-97-3
11/4/1997: < 10 ug/l D
10/7/1998: 10 ug/l D
1/10/2005: < 10 ug/l * D
1/10/2005: 2 ug/l * T
5/28/2008: < 1.2 ug/l T
9/23/2008: < 2.5 ug/l T

PW-99-1
1/10/2005: < 10 ug/l * D
1/10/2005: < 1 ug/l * T
5/18/2008: 0.8 ug/l T
5/29/2008: < 0.8 ug/l T
9/25/2008: < 5 ug/l T

MW-06-1
5/15/2008: < 1.4 ug/l T
9/18/2008: < 5 ug/l T
7/17/2010: 7.8 ug/l T

MW-12-02
11/8/2012: 0.9 ug/l T

MW-12-04
11/7/2012: < 0.5 ug/l T

MW-12-07
11/6/2012: 0.8 ug/l T

MW-02-3
10/9/2002: < 10 ug/l D
1/10/2005: < 10 ug/l * D
1/10/2005: 6 ug/l * T
4/12/2005: < 10 ug/l D
4/12/2005: 4 ug/l T
10/31/2005: 20 ug/l D
10/31/2005: 8 ug/l * T
4/20/2006: < 10 ug/l D
4/20/2006: < 10 ug/l T
10/24/2006: < 10 ug/l D
10/24/2006: 7 ug/l T
4/24/2007: < 10 ug/l D
4/24/2007: < 10 ug/l T
11/6/2007: < 10 ug/l D
11/6/2007: < 10 ug/l T
5/15/2008: < 2.6 ug/l T
9/23/2008: < 8.4 ug/l T
7/17/2010: 8.2 ug/l T

MW-06-3
5/14/2008: < 5.6 ug/l T
9/19/2008: < 3 ug/l T
7/16/2010: 5.3 ug/l T

MW-06-4
5/15/2008: < 6.2 ug/l T
9/18/2008: < 8.5 ug/l T

MW-GW-2
6/30/1998: 40 ug/l D
9/30/1998: 80 ug/l D
12/31/1998: 30 ug/l D
3/31/1999: 28 ug/l D
6/30/1999: 56 ug/l D
9/30/1999: 20 ug/l D
12/31/1999: 50 ug/l D
3/31/2000: 19 ug/l D
6/30/2000: 41 ug/l D
9/30/2000: 7 ug/l D
12/31/2000: 53 ug/l D
3/31/2001: 9 ug/l D
6/30/2001: 19 ug/l D
9/30/2001: 27 ug/l D
12/31/2001: 46 ug/l D
3/31/2002: 43 ug/l D
6/30/2002: 83 ug/l D
9/30/2002: 29 ug/l D
12/31/2002: 29 ug/l D
3/31/2003: 23 ug/l D
6/30/2003: 59 ug/l D
9/30/2003: 26 ug/l D
12/31/2003: 28 ug/l D
3/31/2004: 84 ug/l D
6/30/2004: 72 ug/l D
9/30/2004: 34 ug/l D
11/30/2004: 80 ug/l D
12/31/2004: 80 ug/l D
3/31/2005: 25 ug/l D
6/30/2005: 25 ug/l D
7/31/2005: 18 ug/l D
6/30/2006: 11 ug/l D
9/30/2006: 3 ug/l D
3/31/2007: 5 ug/l D
6/30/2007: 6 ug/l D
6/30/2008: 3 ug/l D

MW-06-2
5/15/2008: < 3.2 ug/l T
9/23/2008: < 8.3 ug/l T
7/18/2010: 5.8 ug/l T

MW-97-10
11/4/1997: 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 6 ug/l J T
7/23/2003: 2.7 ug/l D
1/11/2005: < 10 ug/l D
1/11/2005: 4 ug/l T
5/21/2008: 1.5 ug/l T
9/23/2008: < 1.3 ug/l T

MW-97-11
11/5/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/21/2003: 5 ug/l J T
7/21/2003: 3.5 ug/l BQQ D
1/11/2005: < 10 ug/l D
1/11/2005: 6 ug/l T
5/21/2008: 3.7 ug/l T
9/25/2008: < 5 ug/l T

MW-GW-3
6/30/1998: 40 ug/l D
9/30/1998: 60 ug/l D
12/31/1998: 30 ug/l D
3/31/1999: 22 ug/l D
6/30/1999: 27 ug/l D
9/30/1999: 15 ug/l D
12/31/1999: 20 ug/l D
3/31/2000: 29 ug/l D
6/30/2000: 22 ug/l D
9/30/2000: 9 ug/l D
12/31/2000: 16 ug/l D
3/31/2001: 12 ug/l D
6/30/2001: 16 ug/l D
9/30/2001: 27 ug/l D
12/31/2001: 16 ug/l D
3/31/2002: 28 ug/l D
6/30/2002: 32 ug/l D
9/30/2002: 25 ug/l D
12/31/2002: 18 ug/l D
3/31/2003: 20 ug/l D
6/30/2003: 11 ug/l D
9/30/2003: 18 ug/l D
12/31/2003: 24 ug/l D
3/31/2004: 16 ug/l D
6/30/2004: 29 ug/l D
9/30/2004: 32 ug/l D
11/30/2004: 38 ug/l D
12/31/2004: 38 ug/l D
3/31/2005: 21 ug/l D
6/30/2005: 31 ug/l D
7/31/2005: 22 ug/l D
12/31/2005: 21 ug/l D
3/31/2006: 4 ug/l D
6/30/2006: 2 ug/l D
9/30/2006: 6 ug/l D
12/31/2006: 6 ug/l D
3/31/2007: 3 ug/l D
6/30/2007: 5 ug/l D
9/30/2007: 5 ug/l D
12/31/2007: 3 ug/l D
3/31/2008: 4 ug/l D
5/20/2008: 0.9 ug/l T
6/30/2008: 3 ug/l D
9/17/2008: < 1.6 ug/l T
9/30/2008: 9 ug/l D
12/31/2008: 2 ug/l D
3/31/2009: 3 ug/l D
6/30/2009: 6 ug/l D
9/30/2009: < 10 ug/l D
12/31/2009: < 5 ug/l D
3/31/2010: 19 ug/l D
6/30/2010: 24 ug/l D
9/30/2010: 24 ug/l D

MW-EPA-4
11/5/1997: 20 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 10 ug/l T
7/24/2003: 2 ug/l BQQ D
5/15/2008: < 1.2 ug/l T
9/20/2008: < 2.3 ug/l T

MW-06-11
5/28/2008: < 1.9 ug/l T
9/23/2008: < 3.7 ug/l T

MW-97-8
11/5/1997: 20 ug/l D
10/7/1998: 80 ug/l D
5/15/2008: < 3.5 ug/l T
9/24/2008: < 5 ug/l T

MW-06-7 *
5/29/2008: < 2.8 ug/l T
9/23/2008: < 6 ug/l T

MW-06-21
5/17/2008: 3.5 ug/l T
9/24/2008: 16 ug/l T

MW-EPA-1
8/9/1988: < 17.9 ug/l B T
10/8/1998: < 10 ug/l D
5/14/2008: < 0.5 ug/l T
9/17/2008: < 128.1 ug/l R T
12/11/2008: < 2 ug/l T

PW-99-3
5/28/2008: < 1.3 ug/l T
9/22/2008: < 1.4 ug/l T

MW-97-1
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
5/13/2008: < 0.9 ug/l T
9/17/2008: < 2.2 ug/l T

MW-06-5
5/14/2008: < 1.3 ug/l T
9/19/2008: < 3.3 ug/l T

MW-97-9
11/5/1997: 20 ug/l D
10/7/1998: 980 ug/l D
5/16/2008: 251 ug/l T
9/24/2008: 370.2 ug/l T

MW-06-13
5/27/2008: < 1.6 ug/l T
9/19/2008: 3 ug/l T

MW-06-16
5/21/2008: 1.4 ug/l T
9/20/2008: < 5.1 ug/l T

MW-06-22
5/21/2008: 9.1 ug/l T
9/26/2008: 5.5 ug/l T

MW-06-25
5/20/2008: 756 ug/l T
9/26/2008: 691.2 ug/l T

MW-97-7
11/4/1997: 670 ug/l D
10/8/1998: 340 ug/l D
10/8/2001: 510 ug/l D
10/8/2001: 540 ug/l T
1/17/2002: 540 ug/l D
1/17/2002: 426 ug/l D
5/20/2008: 276 ug/l T
9/26/2008: 249.3 ug/l T

MW-01-1
10/8/2001: 20 ug/l D
10/8/2001: 20 ug/l T
1/16/2002: 8 ug/l D
5/16/2008: < 3.9 ug/l T
9/17/2008: < 5.5 ug/l T

MW-97-5
11/4/1997: 10 ug/l D
10/8/1998: < 10 ug/l D
5/15/2008: < 2.1 ug/l T
9/17/2008: < 6.2 ug/l T

MW-06-23
5/13/2008: < 2.6 ug/l T
9/16/2008: < 5.9 ug/l T

MW-EPA-3
8/9/1988: < 15.5 ug/l B T
11/5/1997: < 10 ug/l D
10/12/1998: < 10 ug/l D
7/24/2003: 0.51 ug/l J T
7/24/2003: 0.98 ug/l J D
5/15/2008: < 2.3 ug/l T
9/16/2008: < 2 ug/l T

MW-06-17
5/27/2008: 23.6 ug/l T
9/20/2008: 21.8 ug/l T

MW-06-14
5/27/2008: < 2.2 ug/l T
9/18/2008: < 8.1 ug/l T

MW-97-12
11/5/1997: 20 ug/l D
10/12/1998: < 10 ug/l D
5/27/2008: < 3.5 ug/l T
9/23/2008: 485 ug/l R T
12/15/2008: < 2.9 ug/l T

MW-06-15
5/21/2008: 1.6 ug/l T
9/17/2008: < 97.2 ug/l R T
12/11/2008: < 3.9 ug/l T

MW-06-18
5/21/2008: 1240 ug/l T
9/25/2008: 1510 ug/l T

MW-06-20
5/20/2008: 28.6 ug/l T
9/20/2008: 25.8 ug/l T

MW-06-19
5/20/2008: 4.2 ug/l T
9/18/2008: < 4 ug/l T

MW-02-1
1/17/2002: 4 ug/l D
9/4/2002: 10 ug/l D
7/22/2003: 3.2 ug/l J T
7/22/2003: 3 ug/l BQQJ D
5/29/2008: < 1.6 ug/l T
9/26/2008: 14.3 ug/l T

MW-01-6
10/9/2001: 320 ug/l D
10/9/2001: 350 ug/l T
1/17/2002: 873 ug/l D
9/5/2002: 990 ug/l D
5/19/2008: 902 ug/l T
9/18/2008: 695.7 ug/l T

MW-97-6
11/4/1997: < 10 ug/l D
10/8/1998: < 10 ug/l D
7/23/2003: 1.8 ug/l T
7/23/2003: < 1 ug/l D
5/17/2008: 1.1 ug/l T
9/16/2008: < 2.8 ug/l T

MW-02-2
9/5/2002: 1340 ug/l D
5/19/2008: 524 ug/l T
9/22/2008: 497.3 ug/l T

MW-01-2
10/9/2001: 200 ug/l D
10/9/2001: 280 ug/l T
1/16/2002: 91 ug/l D
9/4/2002: 250 ug/l D
7/22/2003: 388 ug/l BQQ D
7/22/2003: 327 ug/l T
5/19/2008: 222 ug/l T
9/22/2008: 212.4 ug/l T

MW-01-3
10/9/2001: 470 ug/l D
10/9/2001: 600 ug/l T
1/22/2002: 90 ug/l D
9/5/2002: 230 ug/l D
5/19/2008: 8 ug/l T
9/19/2008: 12.9 ug/l T

MW-01-5
10/4/2001: 20 ug/l D
10/4/2001: 20 ug/l T
1/16/2002: 3 ug/l D
5/17/2008: 1.5 ug/l T
9/16/2008: < 3.7 ug/l T

MW-01-4
10/4/2001: < 10 ug/l D
10/4/2001: 20 ug/l T
1/16/2002: < 1 ug/l D
5/16/2008: < 1.2 ug/l T
9/16/2008: < 3 ug/l T

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

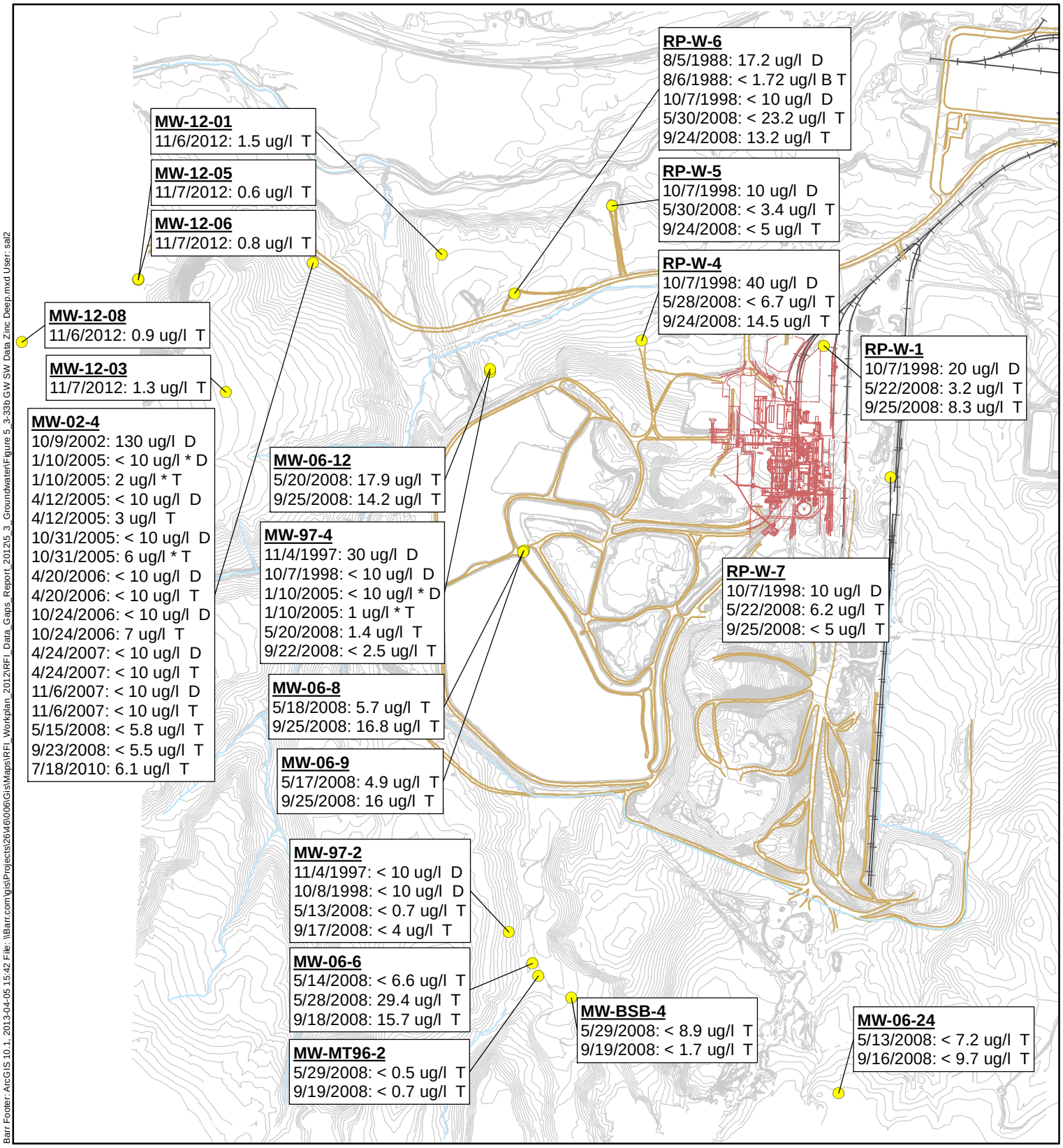
N

Feet
800 0 800

Figure 5.3-33a

ANALYTICAL GROUNDWATER
ZINC
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 11:06 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-33a GW SW Data Zinc WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:42 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-33b GW SW Data Zinc Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-33b

ANALYTICAL GROUNDWATER
ZINC
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 14 pCi/l
9/18/2008: 21 pCi/l

MW-97-3
11/4/1997: < 1.0 pCi/l
5/28/2008: 5.7 pCi/l
9/23/2008: 11 pCi/l

PW-99-1
5/18/2008: 16 pCi/l
5/29/2008: 6.5 pCi/l
9/25/2008: 8.2 pCi/l

MW-06-1
5/15/2008: 17 pCi/l
9/18/2008: 20 pCi/l
7/17/2010: 21 pCi/l

MW-12-02
11/8/2012: 17 pCi/l

MW-12-04
11/7/2012: 5.6 pCi/l

MW-12-07
11/6/2012: 13 pCi/l

MW-06-2
5/15/2008: 12 pCi/l
9/23/2008: 17 pCi/l
7/18/2010: 9.1 pCi/l

MW-02-3
5/15/2008: 13 pCi/l
9/23/2008: 14 pCi/l
7/17/2010: 16 pCi/l

MW-97-10
11/4/1997: < 1.0 pCi/l
7/16/2003: < 10.5 pCi/l
7/23/2003: -3.07 pCi/l J
5/21/2008: 7.5 pCi/l
9/23/2008: < 3.7 pCi/l

MW-06-3
5/14/2008: 6.5 pCi/l
9/19/2008: 6.2 pCi/l
7/16/2010: 3.5 pCi/l

MW-97-8
11/5/1997: < 1.0 pCi/l
5/15/2008: 3.3 pCi/l J
9/24/2008: 8.7 pCi/l

MW-06-21
5/17/2008: 7 pCi/l J
9/24/2008: < 2.7 pCi/l

MW-06-7 *
5/29/2008: 6.3 pCi/l
9/23/2008: 14 pCi/l

MW-97-11
11/5/1997: < 1.0 pCi/l
7/21/2003: 21.1 pCi/l
5/21/2008: 8.4 pCi/l
9/25/2008: 19 pCi/l

MW-EPA-1
5/14/2008: 5.6 pCi/l
9/17/2008: 7.7 pCi/l

MW-06-4
5/15/2008: 5.6 pCi/l
9/18/2008: 4.8 pCi/l

MW-EPA-4
11/5/1997: < 1.0 pCi/l
7/16/2003: < 13.5 pCi/l
7/24/2003: < 6.33 pCi/l J
5/15/2008: < 4.4 pCi/l
9/20/2008: 6.7 pCi/l

MW-06-11
6/3/2008: < 4.3 pCi/l
9/23/2008: 7.8 pCi/l

PW-99-3
5/28/2008: 6.5 pCi/l
9/22/2008: 14 pCi/l

MW-97-1
11/4/1997: < 1.0 pCi/l
5/13/2008: 22 pCi/l
9/17/2008: 16 pCi/l

MW-06-5
5/14/2008: < 3.5 pCi/l
9/19/2008: < 4.6 pCi/l

MW-GW-3
5/20/2008: < 3.5 pCi/l
9/17/2008: 16 pCi/l

MW-97-9
11/5/1997: < 1.0 pCi/l
5/16/2008: < 2.7 pCi/l
9/24/2008: < 3.9 pCi/l

MW-06-13
5/27/2008: 5.8 pCi/l
9/19/2008: 7.7 pCi/l

MW-06-16
5/21/2008: 28 pCi/l
9/20/2008: 25 pCi/l

MW-06-22
5/21/2008: < 4.4 pCi/l J
9/26/2008: 17 pCi/l

MW-06-25
5/20/2008: 14 pCi/l
9/26/2008: 30 pCi/l

MW-97-7
11/4/1997: < 1.0 pCi/l
10/8/2001: 1.4 pCi/l
1/17/2002: 2.8 pCi/l
1/17/2002: < 1.0 pCi/l
5/20/2008: 34 pCi/l
9/26/2008: 33 pCi/l

MW-97-5
11/4/1997: 6.9 pCi/l
1/23/2002: 9.4 pCi/l
1/23/2002: 6.7 pCi/l
5/15/2008: 11 pCi/l
9/17/2008: 9.6 pCi/l

MW-06-23
5/13/2008: 6.4 pCi/l
9/16/2008: 2 pCi/l

MW-EPA-3
11/5/1997: < 1.0 pCi/l
7/15/2003: 7.06 pCi/l
7/24/2003: 8.82 pCi/l J
5/15/2008: 7.4 pCi/l
9/17/2008: 7.1 pCi/l

MW-06-17
5/27/2008: < 3.7 pCi/l
9/20/2008: 6.4 pCi/l

MW-06-14
5/27/2008: 4 pCi/l
9/18/2008: 7.9 pCi/l

MW-97-12
11/5/1997: < 1.0 pCi/l
5/27/2008: < 2.2 pCi/l
9/23/2008: 4.9 pCi/l

MW-06-15
5/21/2008: 27 pCi/l
9/17/2008: 19 pCi/l

MW-06-18
5/21/2008: 7.5 pCi/l
9/25/2008: 12 pCi/l

MW-06-20
5/20/2008: < 3.6 pCi/l
9/20/2008: 5 pCi/l

MW-02-1
9/4/2002: 7.1 pCi/l
7/22/2003: < 9.40 pCi/l J
5/29/2008: < 6.3 pCi/l
9/26/2008: < 7.6 pCi/l

MW-06-19
5/20/2008: 54 pCi/l
9/18/2008: 42 pCi/l

MW-02-2
9/5/2002: < 1.0 pCi/l
5/19/2008: < 2 pCi/l
9/22/2008: 4.9 pCi/l

MW-01-6
10/9/2001: 2.2 pCi/l
1/17/2002: < 1.0 pCi/l
9/5/2002: < 1.0 pCi/l
5/19/2008: < 3.3 pCi/l
9/16/2008: < 2.7 pCi/l

MW-97-6
11/4/1997: 1.0 pCi/l
7/23/2003: 8.32 pCi/l
7/23/2003: 12.6 pCi/l J
5/17/2008: 30 pCi/l
9/16/2008: 13 pCi/l

MW-01-3
10/9/2001: 6.5 pCi/l
1/22/2002: 3.1 pCi/l
9/5/2002: < 1.0 pCi/l
5/19/2008: 2.7 pCi/l
9/19/2008: < 2.1 pCi/l

MW-01-2
10/9/2001: < 1 pCi/l
1/16/2002: < 1.0 pCi/l
9/4/2002: 1.4 pCi/l
7/22/2003: 5.68 pCi/l J
5/19/2008: < 2.3 pCi/l
9/22/2008: 2.1 pCi/l

MW-01-5
10/4/2001: 10 pCi/l
1/16/2002: 8.1 pCi/l
5/17/2008: 29 pCi/l
9/16/2008: 15 pCi/l

MW-01-4
10/4/2001: 6.5 pCi/l
1/16/2002: 8.3 pCi/l
5/16/2008: 14 pCi/l
9/16/2008: 16 pCi/l

MW-01-1
10/8/2001: 10 pCi/l
1/16/2002: 15 pCi/l
5/16/2008: 24 pCi/l
9/17/2008: 33 pCi/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

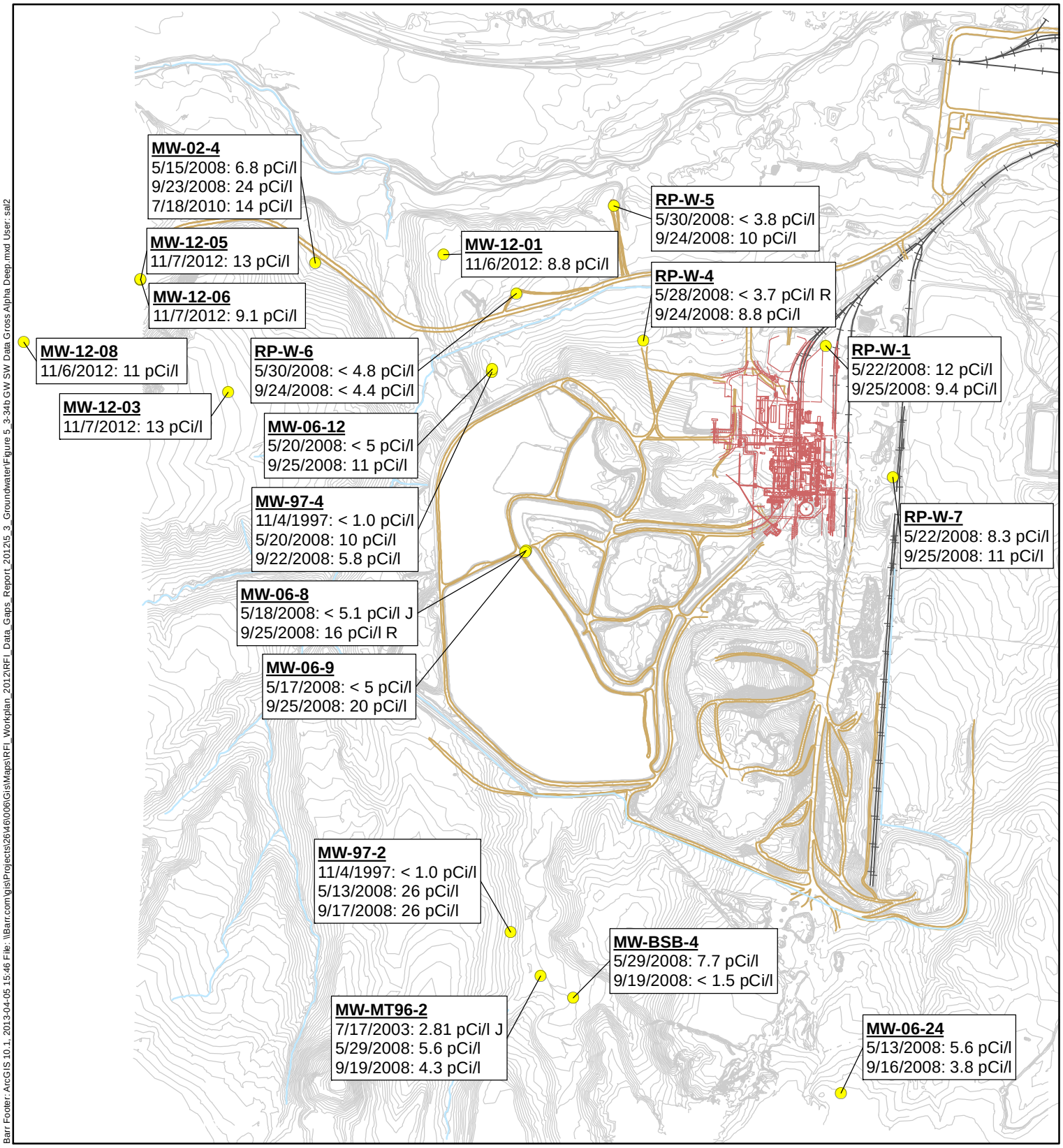
N

Feet
800 0 800

Figure 5.3-34a

ANALYTICAL GROUNDWATER
GROSS ALPHA
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 11:27 File: \\Barr.com\gis\Projects\26\49\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-34a GW SW Data Gross Alpha WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:46 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-34b GW SW Data Gross Alpha Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-34b

ANALYTICAL GROUNDWATER
GROSS ALPHA
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: 27 pCi/l
9/18/2008: 26 pCi/l

MW-97-3
5/28/2008: 20 pCi/l
9/23/2008: 30 pCi/l

PW-99-1
5/18/2008: 18 pCi/l
5/29/2008: 19 pCi/l
9/25/2008: 23 pCi/l

MW-06-1
5/15/2008: 27 pCi/l
9/18/2008: 25 pCi/l
7/17/2010: 21 pCi/l

MW-12-02
11/8/2012: 25 pCi/l

MW-12-04
11/7/2012: 8.8 pCi/l

MW-12-07
11/6/2012: 16 pCi/l

MW-06-2
5/15/2008: 24 pCi/l
9/23/2008: 24 pCi/l
7/18/2010: 22 pCi/l

MW-02-3
5/15/2008: 21 pCi/l
9/23/2008: 20 pCi/l
7/17/2010: 16 pCi/l

MW-06-3
5/14/2008: 20 pCi/l
9/19/2008: 16 pCi/l
7/16/2010: 12 pCi/l

MW-97-10
7/16/2003: 36.3 pCi/l
7/23/2003: 8.89 pCi/l
5/21/2008: 17 pCi/l
9/23/2008: 25 pCi/l

MW-97-8
5/15/2008: 30 pCi/l
9/24/2008: 36 pCi/l

MW-06-21
5/17/2008: 24 pCi/l
9/24/2008: 27 pCi/l

MW-97-11
7/21/2003: 29.5 pCi/l
5/21/2008: 20 pCi/l
9/25/2008: 47 pCi/l

MW-06-7 *
5/29/2008: 79 pCi/l
9/23/2008: 70 pCi/l

MW-EPA-1
5/14/2008: 7 pCi/l
9/17/2008: 13 pCi/l

MW-EPA-4
7/16/2003: 29.7 pCi/l
7/24/2003: 14.3 pCi/l
5/15/2008: 16 pCi/l
9/20/2008: 17 pCi/l

MW-06-11
6/3/2008: 20 pCi/l
9/23/2008: 30 pCi/l

PW-99-3
5/28/2008: 26 pCi/l
9/22/2008: 23 pCi/l

MW-06-4
5/15/2008: 7.4 pCi/l
9/18/2008: 7.6 pCi/l

MW-97-1
5/13/2008: 24 pCi/l
9/17/2008: 22 pCi/l

MW-06-5
5/14/2008: 18 pCi/l
9/19/2008: 29 pCi/l

MW-GW-3
5/20/2008: 9.2 pCi/l
9/17/2008: 24 pCi/l

MW-97-9
5/16/2008: 33 pCi/l
9/24/2008: 30 pCi/l

MW-06-13
5/27/2008: 20 pCi/l
9/19/2008: 19 pCi/l

MW-06-16
5/21/2008: 26 pCi/l
9/20/2008: 28 pCi/l

MW-06-22
5/21/2008: 42 pCi/l
9/26/2008: 68 pCi/l

MW-06-25
5/20/2008: 32 pCi/l
9/26/2008: 70 pCi/l

MW-97-7
10/8/2001: 25 pCi/l
1/17/2002: 17 pCi/l
1/17/2002: 32 pCi/l
5/20/2008: 32 pCi/l
9/26/2008: 68 pCi/l

MW-97-5
1/23/2002: 7.2 pCi/l
1/23/2002: 15 pCi/l
5/15/2008: 12 pCi/l
9/17/2008: 12 pCi/l

MW-06-23
5/13/2008: 8.4 pCi/l
9/16/2008: 5.7 pCi/l

MW-EPA-3
7/15/2003: 23.1 pCi/l
7/24/2003: 6.48 pCi/l
5/15/2008: 18 pCi/l
9/17/2008: 15 pCi/l

MW-06-17
5/27/2008: 21 pCi/l
9/20/2008: 26 pCi/l

MW-06-14
5/27/2008: 21 pCi/l
9/18/2008: 23 pCi/l

MW-97-12
5/27/2008: 24 pCi/l
9/23/2008: 35 pCi/l

MW-06-15
5/21/2008: 30 pCi/l
9/17/2008: 28 pCi/l

MW-06-18
5/21/2008: 43 pCi/l
9/25/2008: 43 pCi/l

MW-06-20
5/20/2008: 36 pCi/l
9/20/2008: 51 pCi/l

MW-02-1
9/4/2002: < 2.0 pCi/l
7/22/2003: 21.9 pCi/l
5/29/2008: 24 pCi/l
9/26/2008: 37 pCi/l

MW-06-19
5/20/2008: 47 pCi/l
9/18/2008: 57 pCi/l

MW-01-6
10/9/2001: 63 pCi/l
1/17/2002: 67 pCi/l
9/5/2002: 49.2 pCi/l
5/19/2008: 41 pCi/l
9/16/2008: 39 pCi/l

MW-01-3
10/9/2001: 50 pCi/l
1/22/2002: 46 pCi/l
9/5/2002: 42.2 pCi/l
5/19/2008: 35 pCi/l
9/19/2008: 33 pCi/l

MW-97-6
7/23/2003: < 3.92 pCi/l
7/23/2003: 23.2 pCi/l
5/17/2008: 19 pCi/l
9/16/2008: 16 pCi/l

MW-02-2
9/5/2002: 23.5 pCi/l
5/19/2008: 25 pCi/l
9/22/2008: 21 pCi/l

MW-01-2
10/9/2001: 31 pCi/l
1/16/2002: 33 pCi/l
9/4/2002: 17.6 pCi/l
7/22/2003: 23.8 pCi/l
5/19/2008: 24 pCi/l
9/22/2008: 27 pCi/l

MW-01-5
10/4/2001: 15 pCi/l
1/16/2002: 19 pCi/l
5/17/2008: 17 pCi/l
9/16/2008: 18 pCi/l

MW-01-4
10/4/2001: 11 pCi/l
1/16/2002: 17 pCi/l
5/16/2008: 19 pCi/l
9/16/2008: 16 pCi/l

MW-01-1
10/8/2001: 12 pCi/l
1/16/2002: 17 pCi/l
5/16/2008: 37 pCi/l
9/17/2008: 22 pCi/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

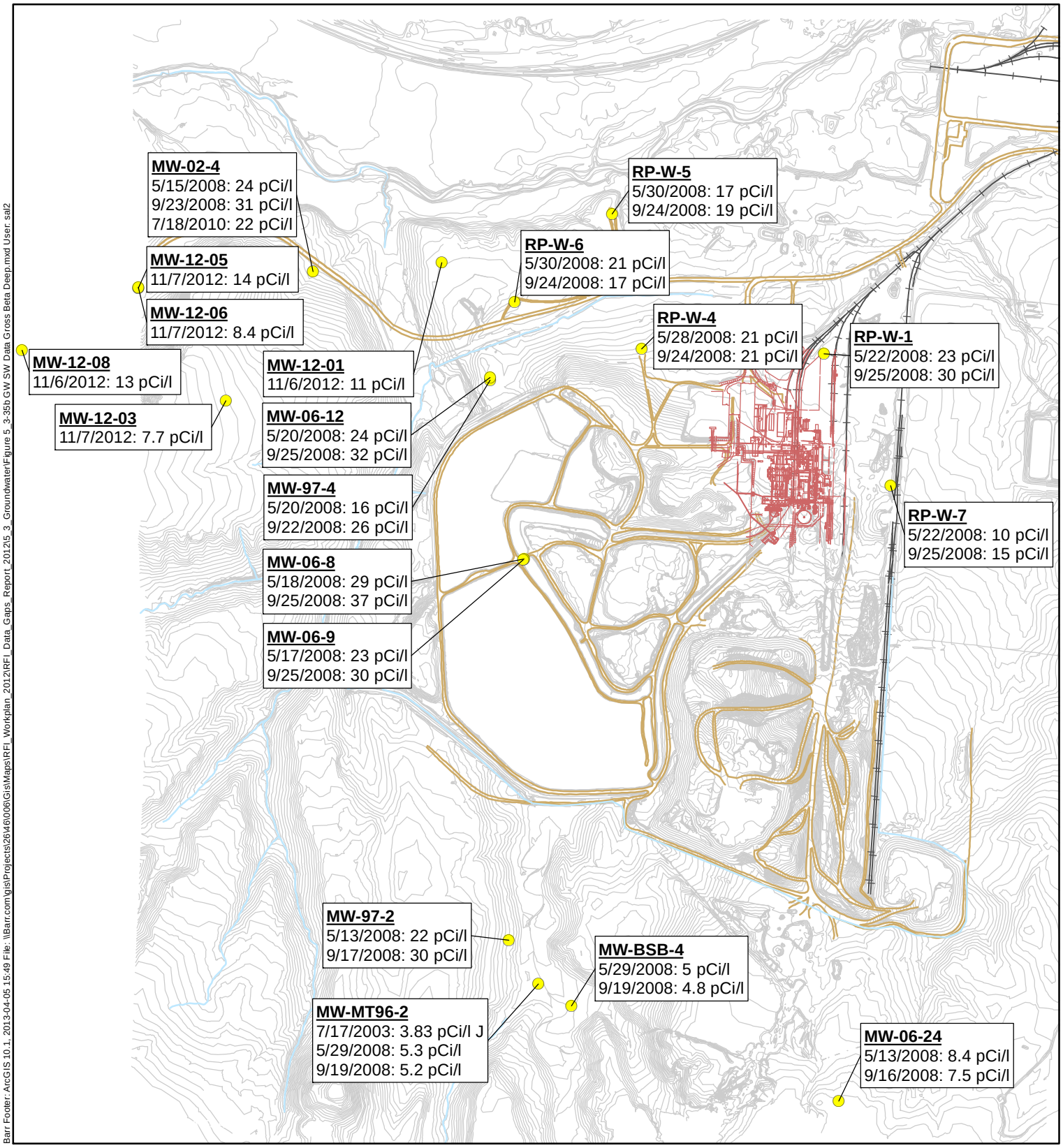
N

Feet
800 0 800

Figure 5.3-35a

ANALYTICAL GROUNDWATER
GROSS BETA
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 11:28 File: \\Barr.com\gis\Projects\26\4\6\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-35a GW SW Data Gross Beta WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:49 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-35b GW SW Data Gross Beta Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-35b

ANALYTICAL GROUNDWATER
GROSS BETA
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: < 0.24 pCi/l
9/18/2008: < 0.4 pCi/l

MW-97-3
11/4/1997: < 0.2 pCi/l
5/28/2008: < 0.95 pCi/l
9/23/2008: < 0.3 pCi/l

PW-99-1
5/18/2008: < 0.19 pCi/l
5/29/2008: < 0.23 pCi/l
9/25/2008: < 0.21 pCi/l

MW-06-1
5/15/2008: < 0.22 pCi/l
9/18/2008: < 0.42 pCi/l
7/17/2010: 0.17 pCi/l

MW-12-02
11/8/2012: < 0.23 pCi/l

MW-12-04
11/7/2012: < 0.2 pCi/l

MW-12-07
11/6/2012: 0.17 pCi/l

MW-06-2
5/15/2008: 4.7 pCi/l
9/23/2008: < 0.25 pCi/l
7/18/2010: 0.06 pCi/l

MW-02-3
5/15/2008: < 0.31 pCi/l
9/23/2008: < 0.3 pCi/l
7/17/2010: 0.12 pCi/l

MW-97-10
11/4/1997: < 0.2 pCi/l
7/16/2003: < 2.10 pCi/l J
7/23/2003: < 0.509 pCi/l
5/21/2008: < 0.2 pCi/l
9/23/2008: < 0.29 pCi/l

MW-06-3
5/14/2008: < 0.17 pCi/l
9/19/2008: < 0.22 pCi/l
7/16/2010: 0.11 pCi/l

MW-97-8
11/5/1997: < 0.2 pCi/l
5/15/2008: 3 pCi/l
9/24/2008: < 0.18 pCi/l

MW-06-21
5/17/2008: < 0.24 pCi/l
9/24/2008: < 0.32 pCi/l

MW-97-11
11/5/1997: < 0.2 pCi/l
7/21/2003: < 0.236 pCi/l
5/21/2008: < 0.19 pCi/l
9/25/2008: < 0.32 pCi/l

MW-06-7 *
5/29/2008: 0.74 pCi/l
9/23/2008: 1.2 pCi/l

MW-EPA-1
8/9/1988: < 1 pCi/l
5/14/2008: < 0.19 pCi/l
9/17/2008: < 0.3 pCi/l

MW-EPA-4
8/9/1988: < 1 pCi/l
11/5/1997: < 0.2 pCi/l
7/16/2003: < 2.12 pCi/l J
7/24/2003: < 1.69 pCi/l
5/15/2008: < 0.24 pCi/l
9/20/2008: < 0.21 pCi/l

MW-06-11
6/3/2008: < 0.5 pCi/l
9/23/2008: < 0.25 pCi/l

PW-99-3
5/28/2008: < 0.44 pCi/l
9/22/2008: < 0.2 pCi/l

MW-97-1
11/4/1997: < 0.2 pCi/l
5/13/2008: < 0.18 pCi/l
9/17/2008: < 0.24 pCi/l

MW-06-4
5/15/2008: < 0.23 pCi/l
9/18/2008: < 0.28 pCi/l

MW-06-5
5/14/2008: < 0.2 pCi/l
9/19/2008: < 0.23 pCi/l

MW-GW-3
5/20/2008: < 0.19 pCi/l
9/17/2008: < 0.38 pCi/l

MW-97-9
11/5/1997: 1.9 pCi/l
5/16/2008: < 0.22 pCi/l
9/24/2008: < 0.26 pCi/l

MW-06-13
5/27/2008: < 0.52 pCi/l
9/19/2008: < 0.23 pCi/l

MW-06-16
5/21/2008: < 0.21 pCi/l
9/20/2008: < 0.23 pCi/l

MW-06-22
5/21/2008: < 0.31 pCi/l
9/26/2008: < 0.26 pCi/l

MW-06-25
5/20/2008: < 0.3 pCi/l
9/26/2008: < 0.22 pCi/l

MW-97-7
11/4/1997: < 0.2 pCi/l
10/8/2001: < 0.2 pCi/l
1/17/2002: 0.1 pCi/l
1/17/2002: < 0.20 pCi/l
5/20/2008: < 0.34 pCi/l
9/26/2008: < 0.34 pCi/l

MW-06-23
5/13/2008: < 0.28 pCi/l
9/16/2008: < 0.54 pCi/l

MW-EPA-3
8/9/1988: < 1 pCi/l
11/5/1997: < 0.2 pCi/l
7/15/2003: < 2.03 pCi/l
7/24/2003: < 1.58 pCi/l
5/15/2008: < 0.17 pCi/l
9/17/2008: < 0.26 pCi/l

MW-06-17
5/27/2008: < 0.36 pCi/l
9/20/2008: < 0.2 pCi/l

MW-06-14
5/27/2008: < 0.3 pCi/l
9/18/2008: < 0.23 pCi/l

MW-97-12
11/5/1997: < 0.2 pCi/l
5/27/2008: < 0.52 pCi/l
9/23/2008: < 0.22 pCi/l

MW-06-15
5/21/2008: < 0.21 pCi/l
9/17/2008: < 0.4 pCi/l

MW-06-18
5/21/2008: < 0.23 pCi/l
9/25/2008: < 0.25 pCi/l

MW-06-20
5/20/2008: < 0.29 pCi/l
9/20/2008: < 0.22 pCi/l

MW-02-1
9/4/2002: 0.5 pCi/l
7/22/2003: < 1.82 pCi/l
5/29/2008: < 0.17 pCi/l
9/26/2008: 0.6 pCi/l

MW-06-19
5/20/2008: 0.27 pCi/l
9/18/2008: < 0.31 pCi/l

MW-02-2
9/5/2002: < 0.2 pCi/l
5/19/2008: < 0.59 pCi/l
9/22/2008: < 0.31 pCi/l

MW-01-6
10/9/2001: 0.70 pCi/l
1/17/2002: < 0.20 pCi/l
9/5/2002: < 0.2 pCi/l
5/19/2008: < 0.2 pCi/l
9/16/2008: < 0.21 pCi/l

MW-97-6
11/4/1997: 0.6 pCi/l
7/23/2003: < 2.09 pCi/l J
7/23/2003: < 1.42 pCi/l
5/17/2008: < 0.22 pCi/l
9/16/2008: < 0.2 pCi/l

MW-01-3
10/9/2001: 1.0 pCi/l
1/22/2002: < 0.20 pCi/l
9/5/2002: < 0.2 pCi/l
5/19/2008: < 0.32 pCi/l
9/19/2008: < 0.35 pCi/l

MW-01-2
10/9/2001: 0.30 pCi/l
1/16/2002: < 0.20 pCi/l
9/4/2002: < 0.2 pCi/l
7/22/2003: < 1.56 pCi/l
5/19/2008: < 0.32 pCi/l
9/22/2008: < 0.3 pCi/l

MW-01-5
10/4/2001: < 0.20 pCi/l
1/16/2002: < 0.20 pCi/l
5/17/2008: < 0.25 pCi/l
9/16/2008: < 0.4 pCi/l

MW-01-4
10/4/2001: 0.30 pCi/l
1/16/2002: 0.50 pCi/l
5/16/2008: < 0.22 pCi/l
9/16/2008: < 0.19 pCi/l

MW-01-1
10/8/2001: 0.70 pCi/l
1/16/2002: 0.40 pCi/l
5/16/2008: < 0.28 pCi/l
9/17/2008: < 0.22 pCi/l

MW-97-5
11/4/1997: 5.7 pCi/l
1/23/2002: 0.2 pCi/l
1/23/2002: 1.0 pCi/l
5/15/2008: < 0.43 pCi/l
9/17/2008: < 0.23 pCi/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

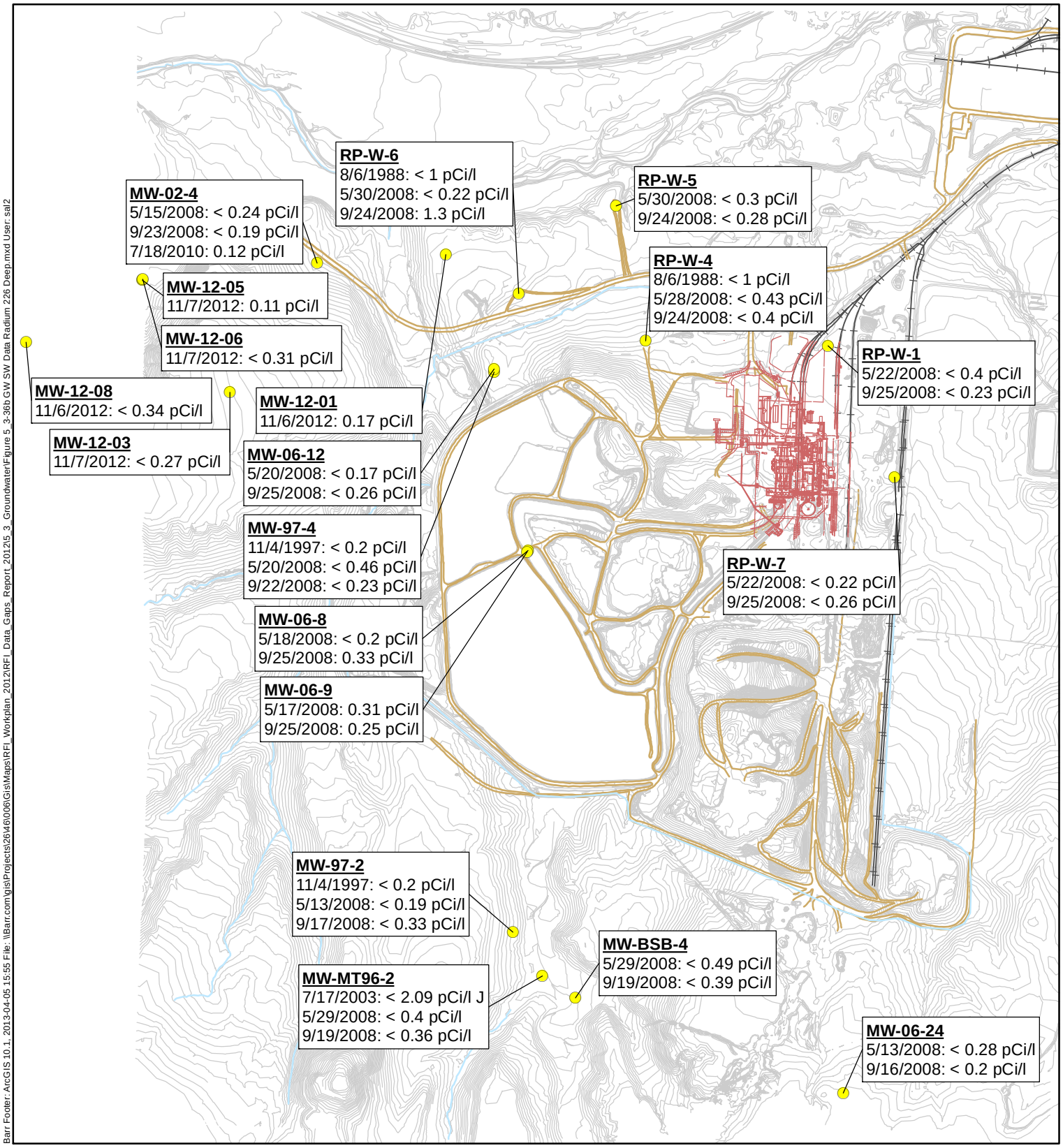
N

Feet
800 0 800

Figure 5.3-36a

ANALYTICAL GROUNDWATER
RADIUM 226
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 11:29 File: \\Barr.com\gis\Projects\2646\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Figure 5_3-36a GW SW Data Radium 226 WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:55 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_GroundwaterFigure 5_3-36b GW SW Data Radium 226 Deep.mxd User: sal2

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-36b

ANALYTICAL GROUNDWATER
RADIUM 226
DEEP WELLS
Rhodia Silver Bow Plant
Montana

MW-06-10
5/14/2008: < 0.72 pCi/l
9/18/2008: < 1.6 pCi/l

MW-97-3
11/4/1997: < 1.0 pCi/l
5/28/2008: 0.74 pCi/l
9/23/2008: < 0.93 pCi/l

PW-99-1
5/18/2008: < 0.76 pCi/l
5/29/2008: < 0.68 pCi/l
9/25/2008: < 1.4 pCi/l

MW-06-1
5/15/2008: < 0.7 pCi/l
9/18/2008: < 0.75 pCi/l
7/17/2010: 0.01 pCi/l

MW-12-02
11/8/2012: 1.4 pCi/l

MW-12-04
11/7/2012: 2 pCi/l

MW-12-07
11/6/2012: 1.8 pCi/l

MW-06-2
5/15/2008: 0.74 pCi/l
9/23/2008: < 0.79 pCi/l
7/18/2010: 0.96 pCi/l

MW-02-3
5/15/2008: < 0.78 pCi/l
9/23/2008: < 0.9 pCi/l
7/17/2010: 1.2 pCi/l

MW-97-10
11/4/1997: 1.0 pCi/l
5/21/2008: 0.69 pCi/l
9/23/2008: < 0.91 pCi/l

MW-06-3
5/14/2008: < 0.73 pCi/l
9/19/2008: < 0.73 pCi/l
7/16/2010: 0.88 pCi/l

MW-97-8
11/5/1997: < 1.0 pCi/l
5/15/2008: < 0.74 pCi/l
9/24/2008: < 1.4 pCi/l

MW-06-21
5/17/2008: < 0.76 pCi/l
9/24/2008: < 1.4 pCi/l

MW-06-7 *
5/29/2008: 1.3 pCi/l
9/23/2008: 1.3 pCi/l

MW-97-11
11/5/1997: < 1.0 pCi/l
5/21/2008: < 0.77 pCi/l
9/25/2008: < 1.5 pCi/l

MW-EPA-1
5/14/2008: < 0.7 pCi/l
9/17/2008: < 0.7 pCi/l

MW-06-4
5/15/2008: < 0.82 pCi/l
9/18/2008: < 0.74 pCi/l

MW-97-1
11/4/1997: 1.0 pCi/l
5/13/2008: < 0.73 pCi/l
9/17/2008: 9.2 pCi/l

MW-GW-3
5/20/2008: < 1.9 pCi/l
9/17/2008: 2.5 pCi/l

MW-06-5
5/14/2008: < 0.71 pCi/l
9/19/2008: 0.9 pCi/l

MW-EPA-4
11/5/1997: < 1.0 pCi/l
5/15/2008: < 0.81 pCi/l
9/20/2008: 1.3 pCi/l

MW-06-11
6/3/2008: 0.84 pCi/l
9/23/2008: 1.3 pCi/l

PW-99-3
5/28/2008: 1.3 pCi/l
9/22/2008: 0.91 pCi/l

MW-06-22
5/21/2008: 1.1 pCi/l
9/26/2008: < 1.4 pCi/l

MW-06-25
5/20/2008: < 0.71 pCi/l
9/26/2008: < 1.4 pCi/l

MW-97-7
11/4/1997: 1.2 pCi/l
10/8/2001: < 1 pCi/l
1/17/2002: 0.5 pCi/l
1/17/2002: < 1.0 pCi/l
5/20/2008: < 0.68 pCi/l
9/26/2008: < 1.4 pCi/l

MW-06-23
5/13/2008: < 0.63 pCi/l
9/16/2008: < 0.69 pCi/l

MW-97-9
11/5/1997: 1.4 pCi/l
5/16/2008: < 0.78 pCi/l
9/24/2008: < 1.5 pCi/l

MW-06-13
5/27/2008: < 0.71 pCi/l
9/19/2008: 1.1 pCi/l

MW-06-16
5/21/2008: < 0.76 pCi/l
9/20/2008: 0.9 pCi/l

MW-EPA-3
11/5/1997: < 1.0 pCi/l
5/15/2008: < 0.73 pCi/l
9/17/2008: < 1.4 pCi/l

MW-06-17
5/27/2008: < 0.66 pCi/l
9/20/2008: < 0.71 pCi/l

MW-06-14
5/27/2008: < 0.81 pCi/l
9/18/2008: 5.1 pCi/l

MW-97-12
11/5/1997: 2.2 pCi/l
5/27/2008: < 0.74 pCi/l
9/23/2008: < 0.77 pCi/l

MW-06-15
5/21/2008: < 0.85 pCi/l
9/17/2008: < 0.71 pCi/l

MW-06-18
5/21/2008: < 0.69 pCi/l
9/25/2008: < 1.4 pCi/l

MW-06-20
5/20/2008: < 0.69 pCi/l
9/20/2008: 0.76 pCi/l

MW-02-1
9/4/2002: < 1.0 pCi/l
5/29/2008: 1.1 pCi/l
9/26/2008: < 1.4 pCi/l

MW-06-19
5/20/2008: < 0.7 pCi/l
9/18/2008: 5.6 pCi/l

MW-02-2
9/5/2002: < 1.0 pCi/l
5/19/2008: < 4 pCi/l
9/22/2008: < 0.7 pCi/l

MW-01-6
10/9/2001: < 1 pCi/l
1/17/2002: 3.4 pCi/l
9/5/2002: 2.2 pCi/l
5/19/2008: < 0.72 pCi/l
9/16/2008: 2.5 pCi/l

MW-97-6
11/4/1997: 2.3 pCi/l
5/17/2008: < 0.79 pCi/l
9/16/2008: < 0.7 pCi/l

MW-01-3
10/9/2001: < 1 pCi/l
1/22/2002: < 1.0 pCi/l
9/5/2002: < 1.0 pCi/l
5/19/2008: < 0.73 pCi/l
9/19/2008: < 0.72 pCi/l

MW-01-2
10/9/2001: < 1 pCi/l
1/16/2002: 1.5 pCi/l
9/4/2002: < 1.0 pCi/l
5/19/2008: < 0.71 pCi/l
9/22/2008: 0.82 pCi/l

MW-01-5
10/4/2001: < 1.0 pCi/l
1/16/2002: < 1.0 pCi/l
5/17/2008: < 0.73 pCi/l
9/16/2008: < 0.69 pCi/l

MW-01-4
10/4/2001: 2.5 pCi/l
1/16/2002: < 1.0 pCi/l
5/16/2008: < 0.74 pCi/l
9/16/2008: < 0.7 pCi/l

MW-01-1
10/8/2001: 2.4 pCi/l
1/16/2002: 1.8 pCi/l
5/16/2008: < 0.77 pCi/l
9/17/2008: 4.5 pCi/l

MW-97-5
11/4/1997: 12.5 pCi/l
1/23/2002: 1.3 pCi/l
1/23/2002: < 1.0 pCi/l
5/15/2008: 1.7 pCi/l
9/17/2008: 1.6 pCi/l

Sample Location
Elevation Contour
Drainage
Railroad
Road
Former Plant Structures

* Screened within tailings basin

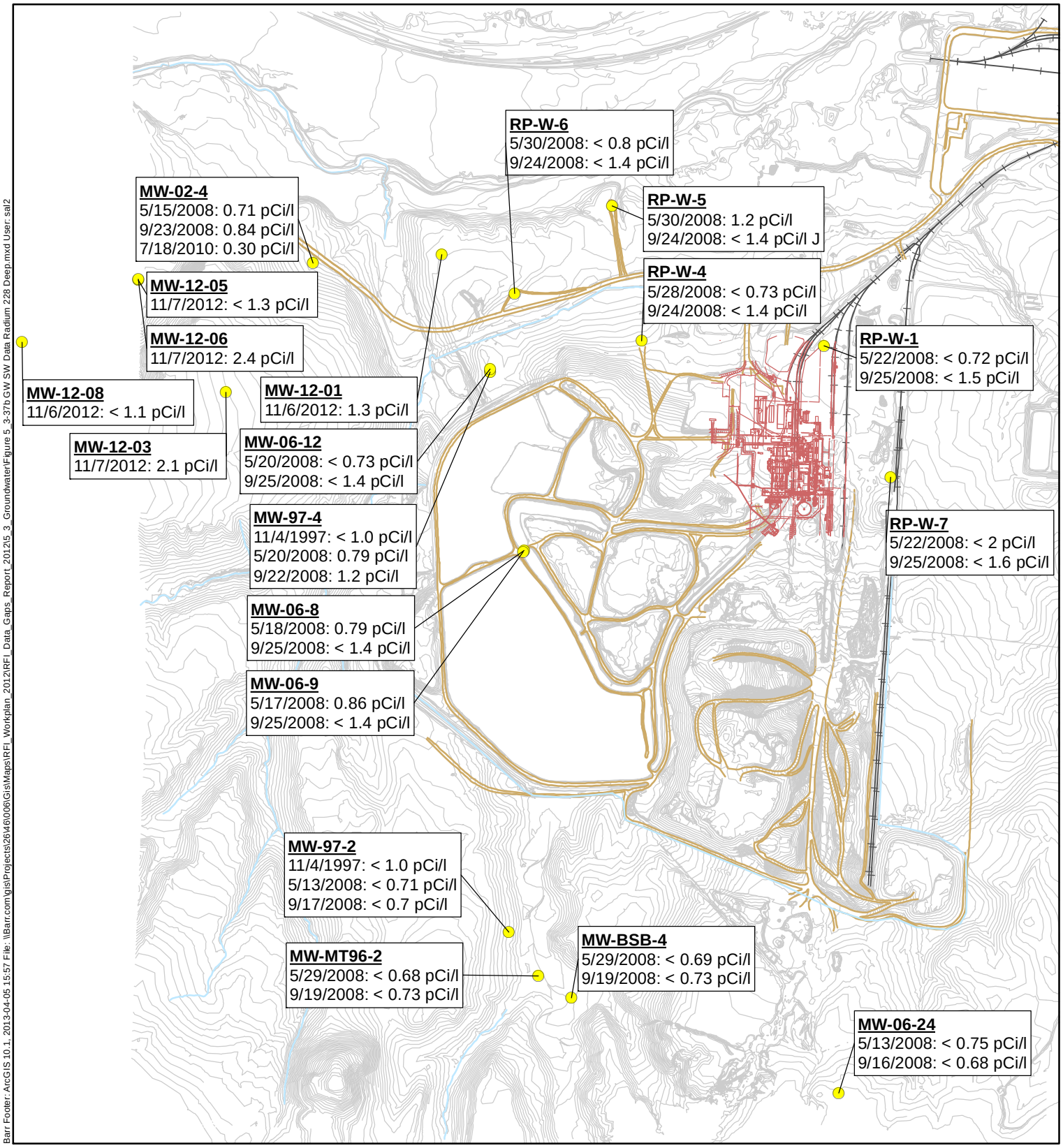
N

Feet
800 0 800

Figure 5.3-37a

ANALYTICAL GROUNDWATER
RADIUM 228
WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-05 11:29 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-37a GW SW Data Radium 228 WaterTable.mxd User: sal2



Barr Footer: ArcGIS 10.1, 2013-04-05 15:57 File: \\Barr.com\gis\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Figure 5_3-37b GW SW Data Radium 228 Deep.mxd User: sal2

- Sample Location
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures

N

Feet
1,000 0 1,000

Figure 5.3-37b

ANALYTICAL GROUNDWATER
RADIUM 228
DEEP WELLS
Rhodia Silver Bow Plant
Montana

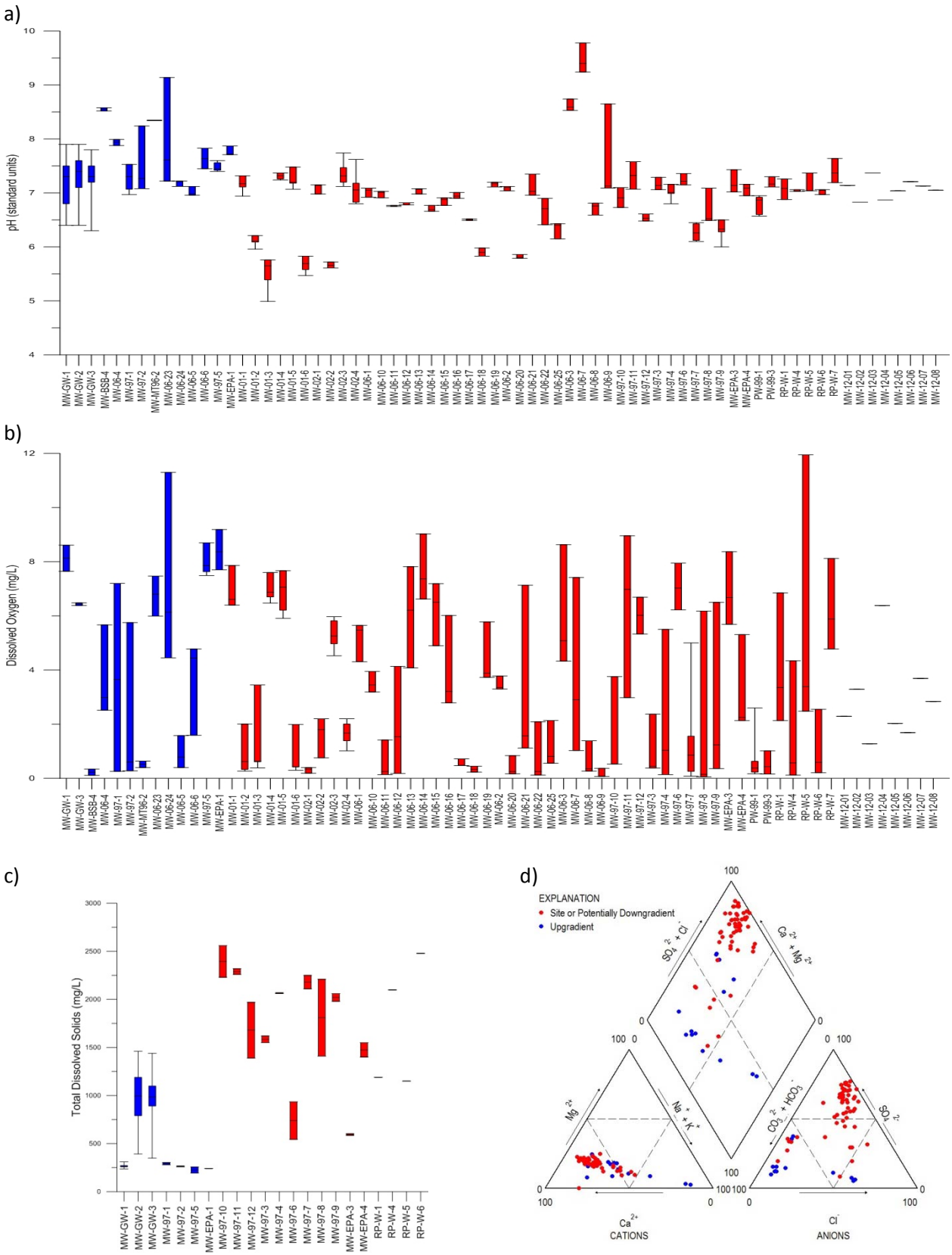
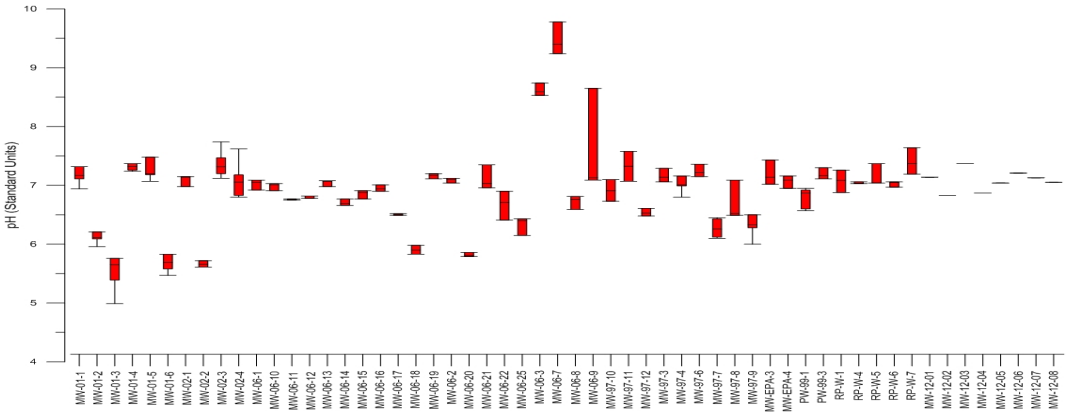
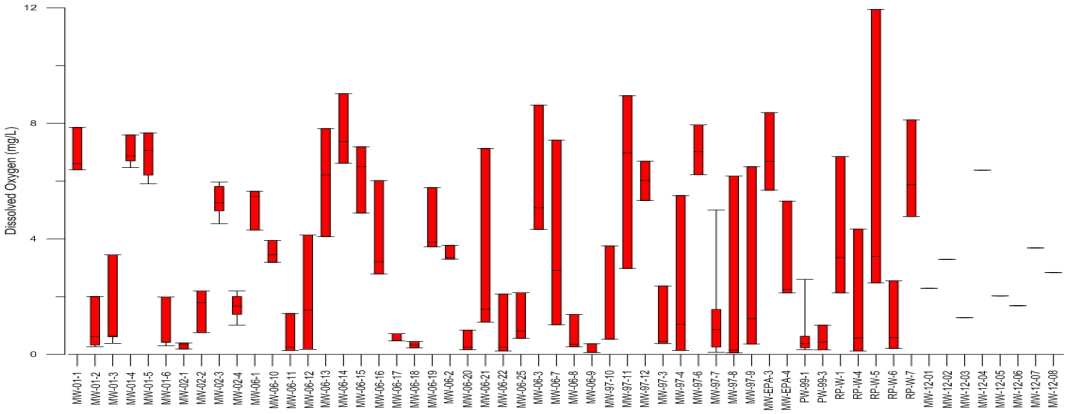


Figure 5.3-38a. Groundwater quality for all wells, including box-whisker diagrams of a) pH, b) dissolved oxygen, and c) total dissolved solids for all data. Whiskers are minimum and maximum values, while boxes are 25th and 75th percentiles, and the median value is indicated. Major ion chemistry data for groundwater samples collected in 2008 or 2012 and having a charge balance closest to zero are shown on the Piper plot (d). Note that upgradient samples tend to have variable water quality, plotting in three different hydrochemical fields of the Piper plot, while the site and downgradient sample water quality is relatively homogeneous, with all samples plotting in two hydrochemical fields.

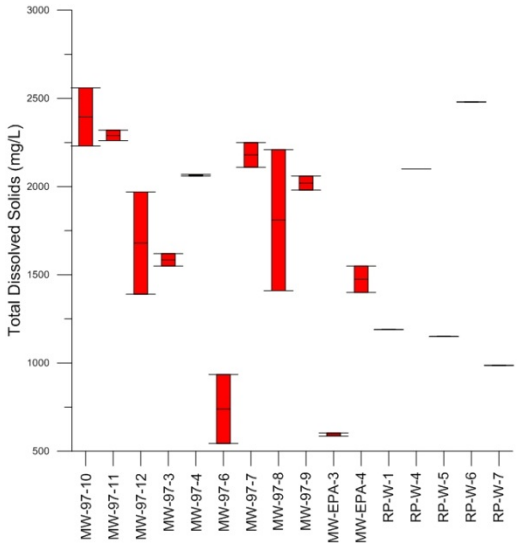
a)



b)



c)



d)

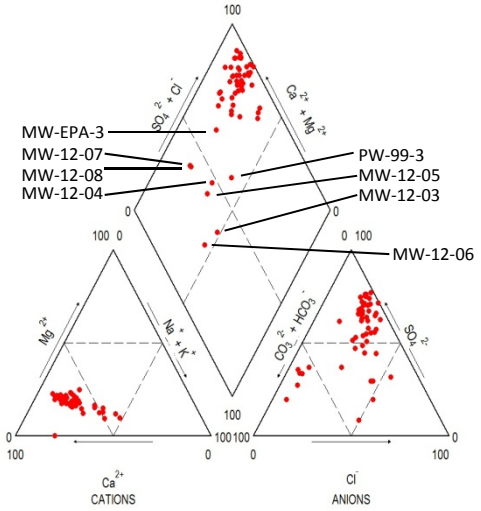


Figure 5.3-38b. Groundwater quality for site and downgradient wells, including box-whisker diagrams of a) pH, b) dissolved oxygen, and c) total dissolved solids for all data. Whiskers are minimum and maximum values, while boxes are 25th and 75th percentiles, and the median value is indicated. Major ion chemistry data for groundwater samples collected in 2008 and 2012 and having a charge balance closest to zero are shown on the Piper plot (d).

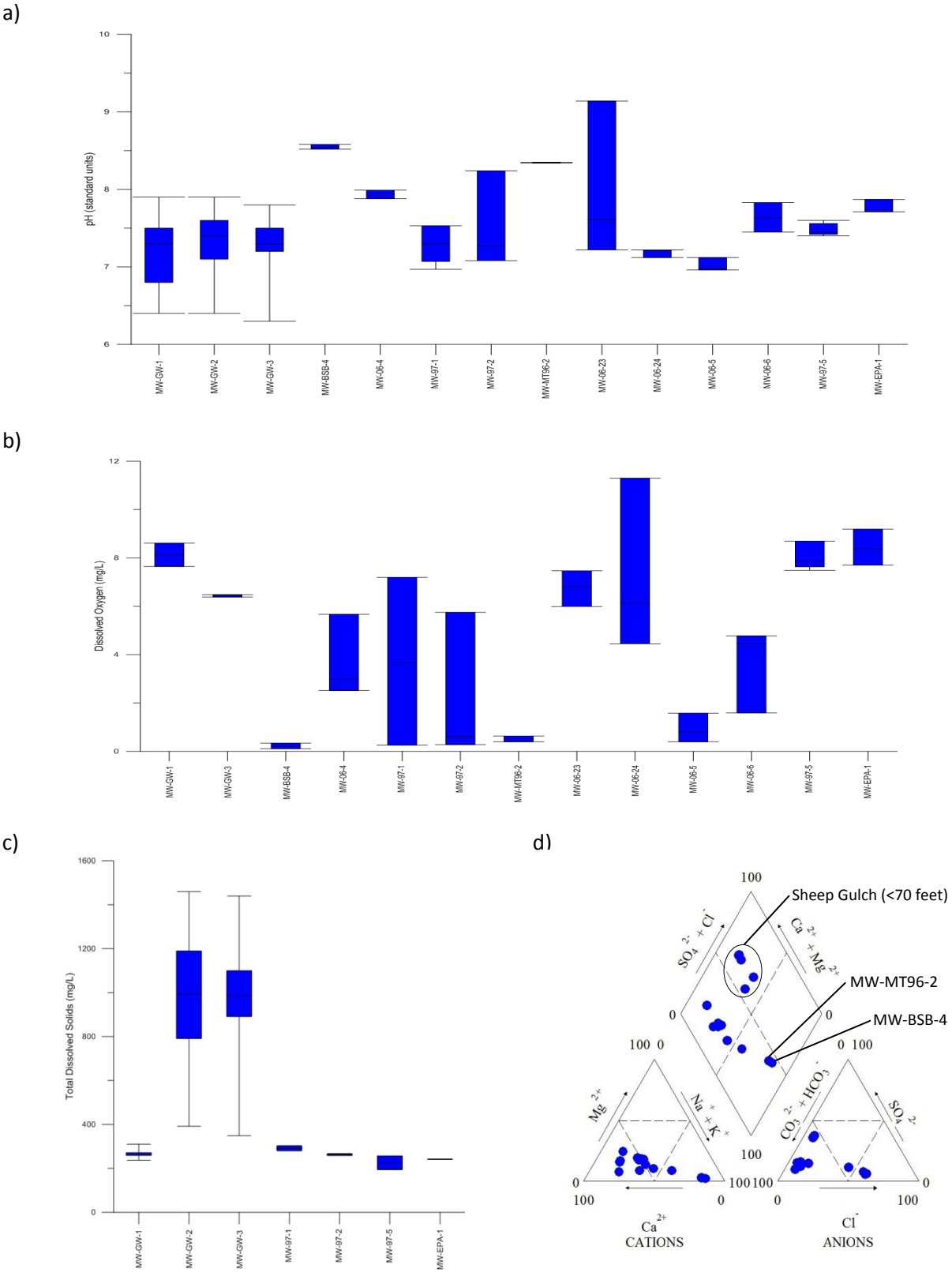


Figure 5.3-38c. Groundwater quality for upgradient wells, including box-whisker diagrams of a) pH, b) dissolved oxygen, and c) total dissolved solids for all data. Whiskers are minimum and maximum values, while boxes are 25th and 75th percentiles, and the median value is indicated. Major ion chemistry data for groundwater samples collected in 2008 and having a charge balance closest to zero are shown on the Piper plot (d).

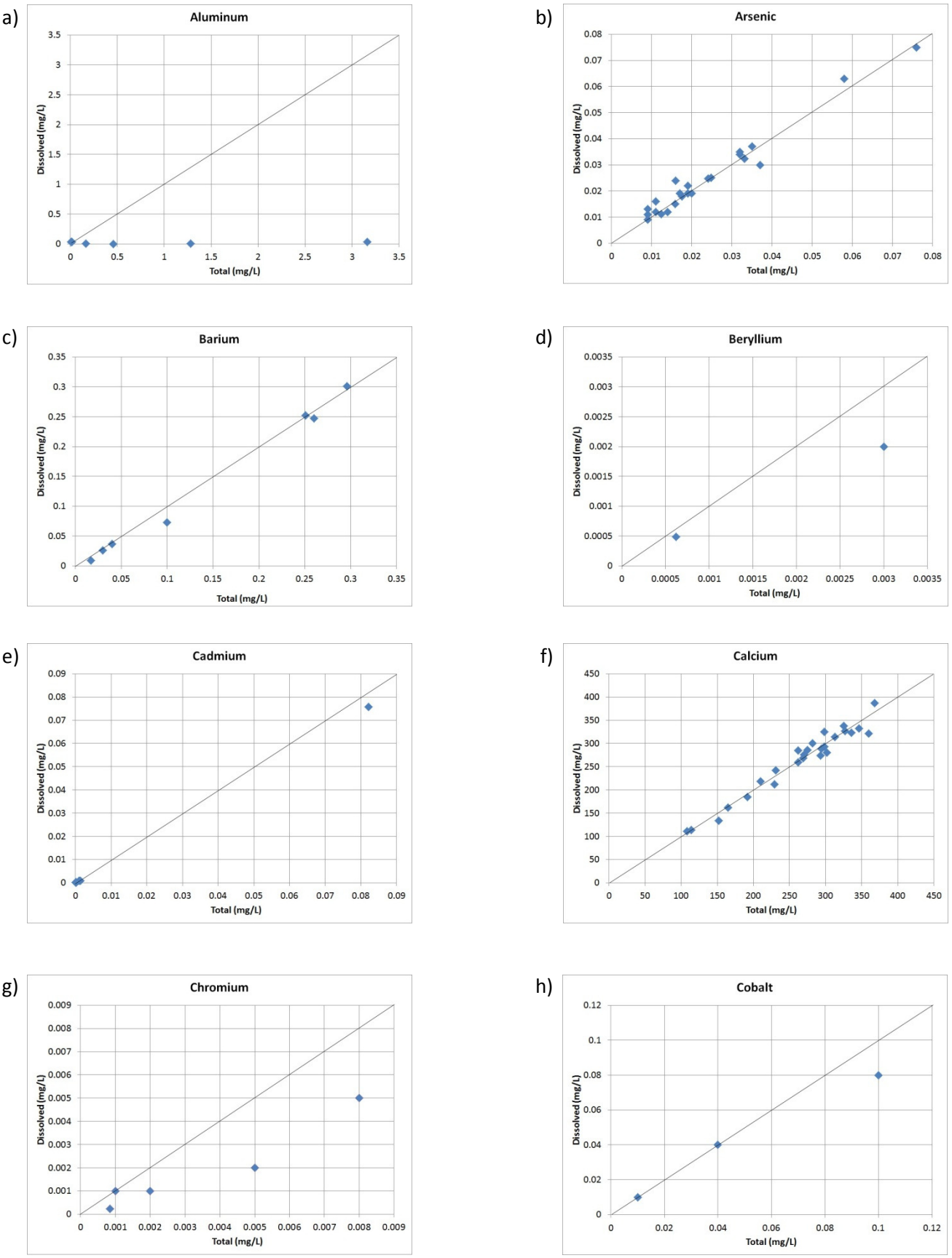
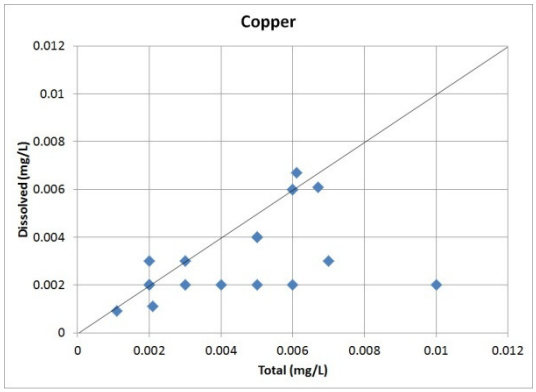
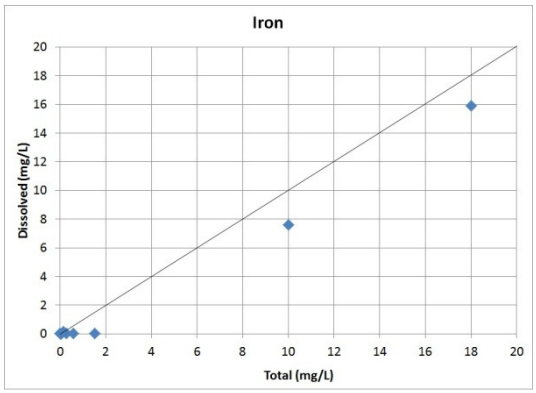


Figure 39- Dissolved versus total concentrations of select metals. Plots indicate arsenic (b), barium (c), beryllium (d), cadmium (e), calcium (f), cobalt (h), magnesium (m), manganese (n), mercury (o), potassium (p), selenium (q), and sodium (r) exist primarily in the dissolved phase. Apparent colloidal and dissolved phase concentrations of chromium (g), copper (i), iron (j), nickel (l), thallium (s), and zinc (t) exist, while aluminum (a) and lead (k) exist almost entirely in the colloidal phase.

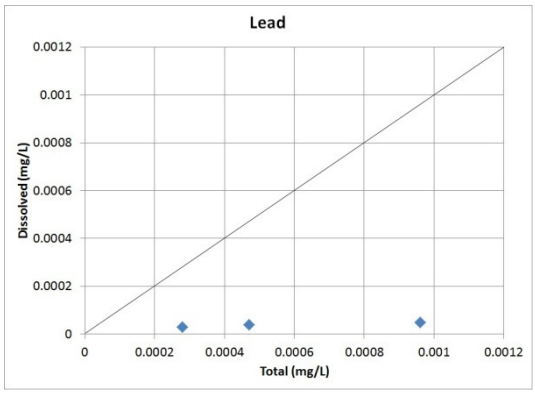
i)



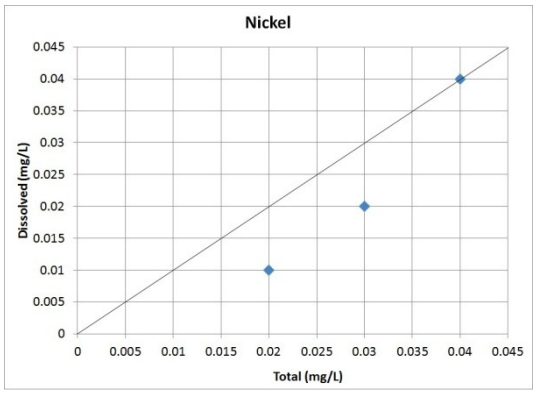
j)



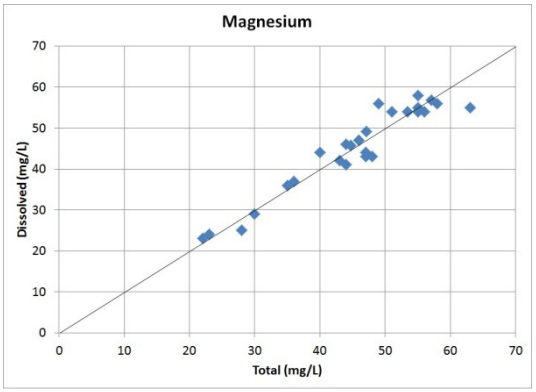
k)



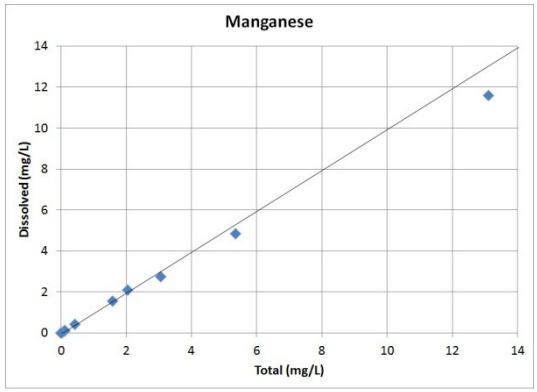
l)



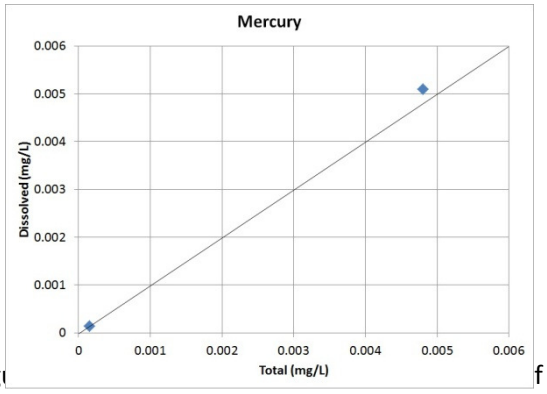
m)



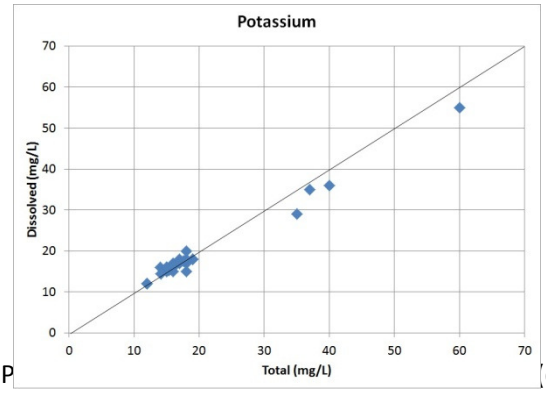
n)



o)

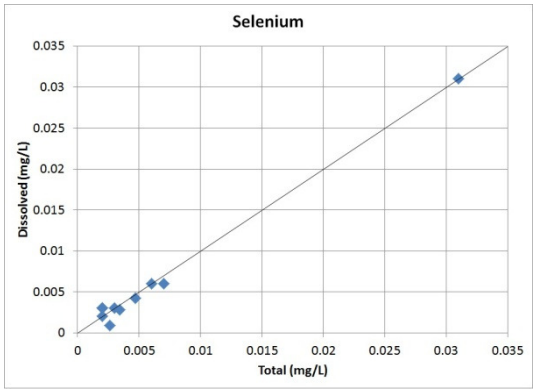


p)

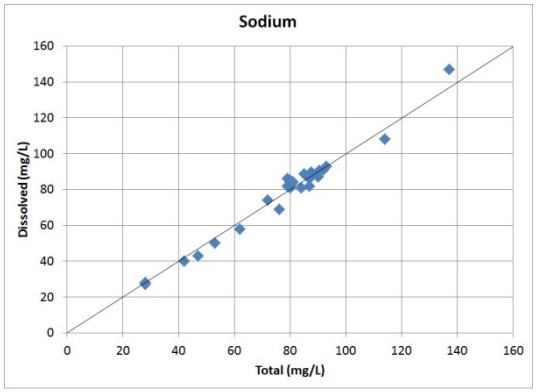


Figu f select metals. P d), cadmium (e), calcium (f), cobalt (h), magnesium (m), manganese (n), mercury (o), potassium (p), selenium (q), and sodium (r) exist primarily in the dissolved phase. Apparent colloidal and dissolved phase concentrations of chromium (g), copper (i), iron (j), nickel (l), thallium (s), and zinc (t) exist, while aluminum (a) and lead (k) exist almost entirely in the colloidal phase.

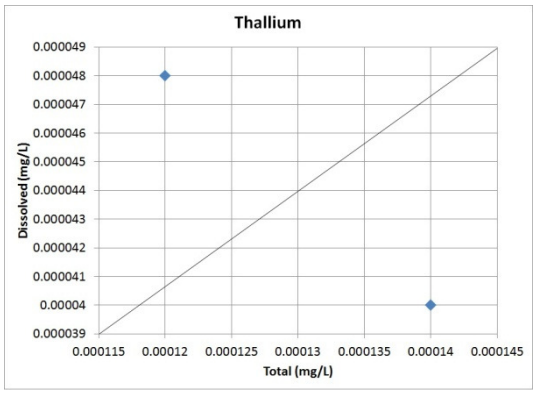
q)



r)



s)



t)

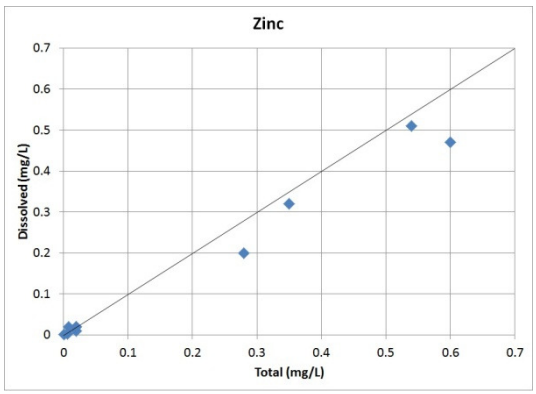
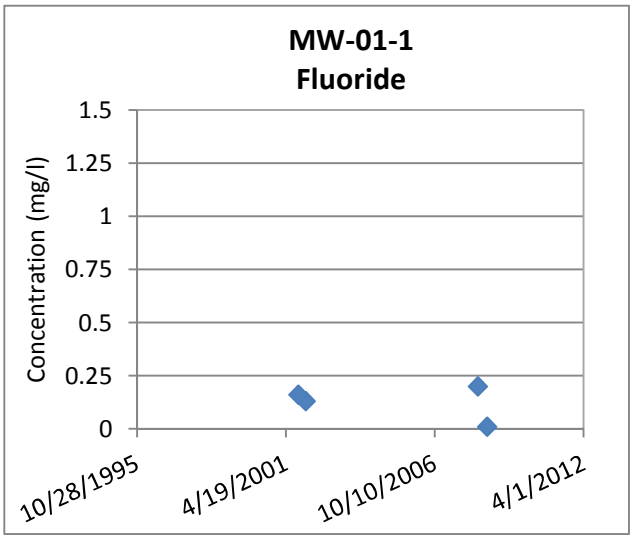
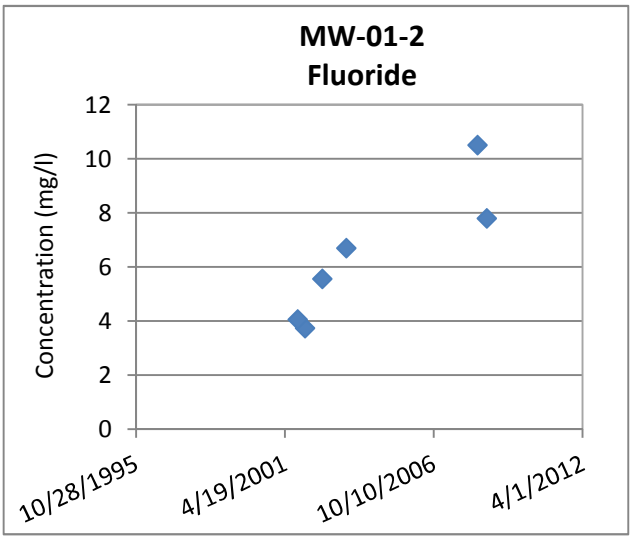
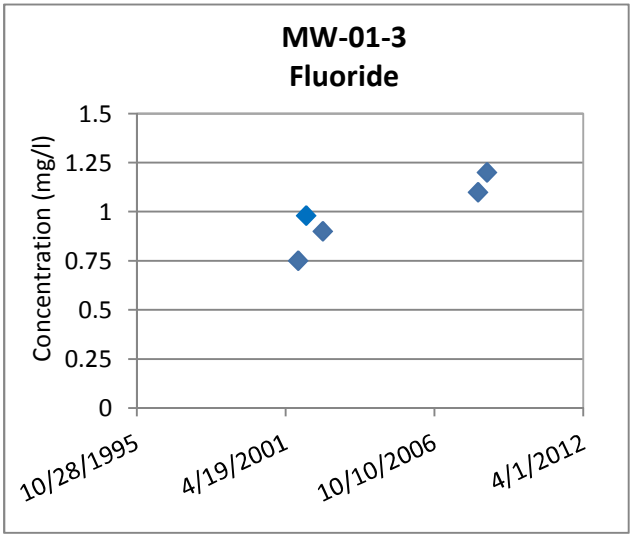


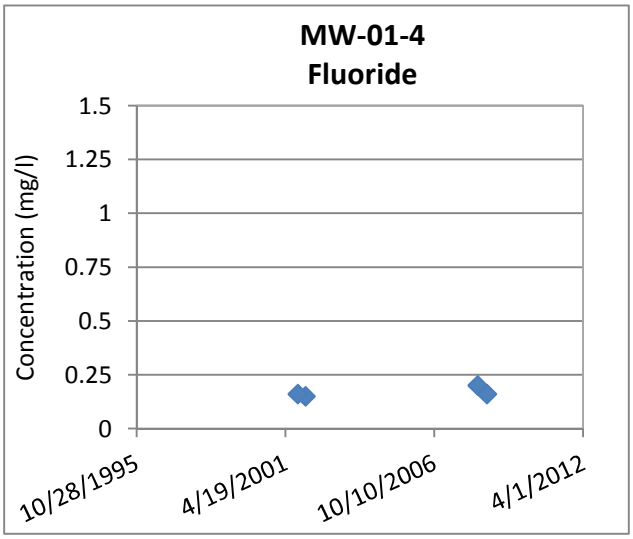
Figure 39- Dissolved versus total concentrations of select metals. Plots indicate arsenic (b), barium (c), beryllium (d), cadmium (e), calcium (f), cobalt (h), magnesium (m), manganese (n), mercury (o), potassium (p), selenium (q), and sodium (r) exist primarily in the dissolved phase. Apparent colloidal and dissolved phase concentrations of chromium (g), copper (i), iron (j), nickel (l), thallium (s), and zinc (t) exist, while aluminum (a) and lead (k) exist almost entirely in the colloidal phase.

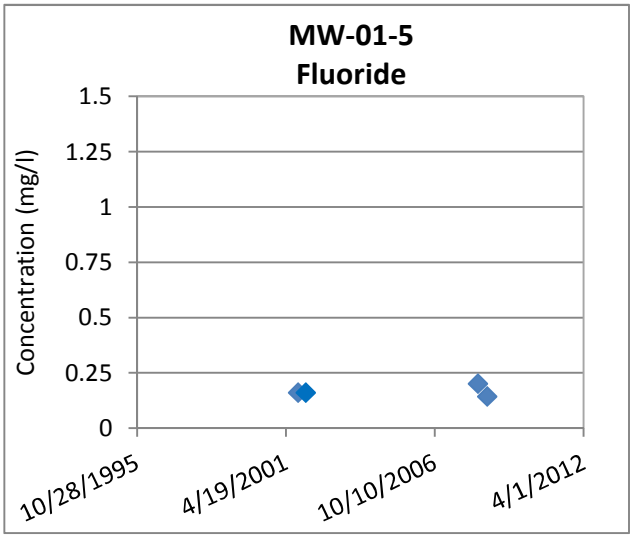
Figure 5.3-40a
Time Series Plots - Fluoride
Groundwater Quality
Rhodia Silver Bow Plant

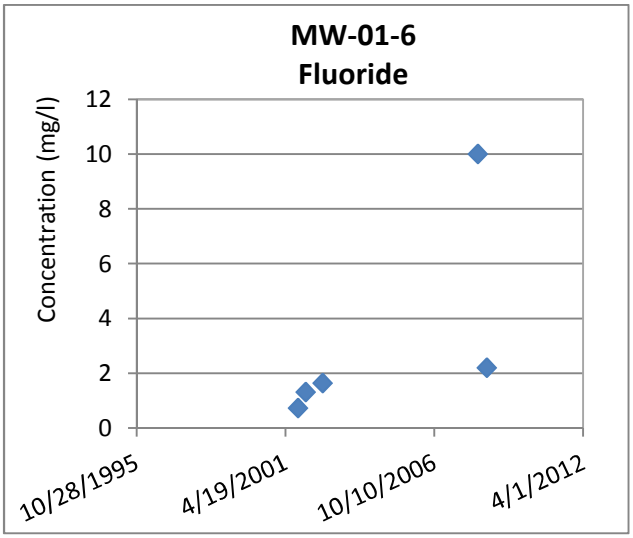






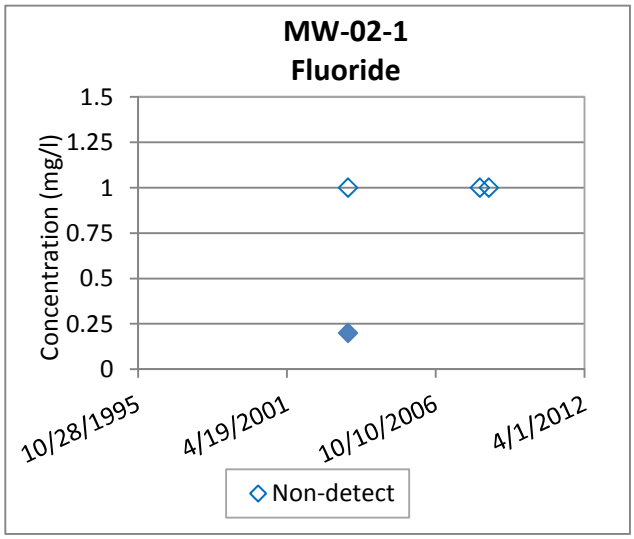


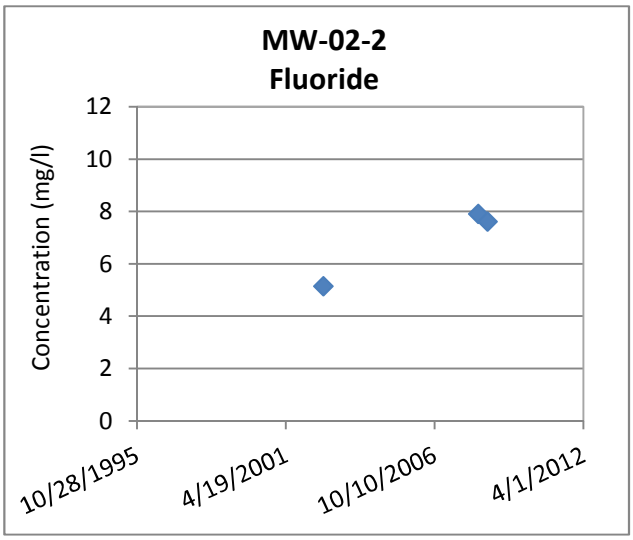


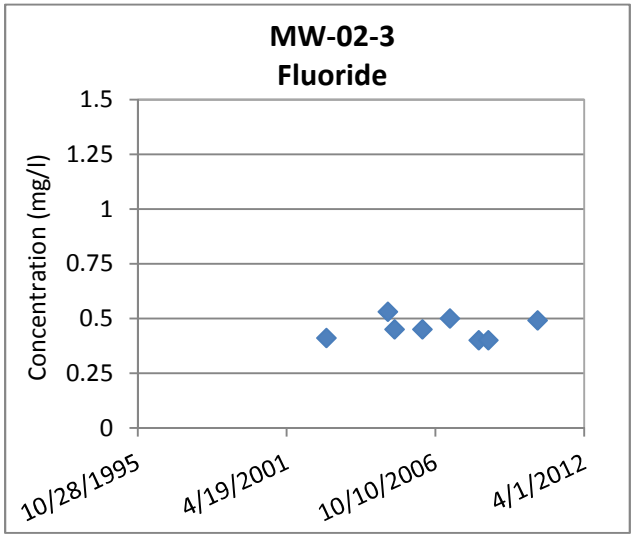


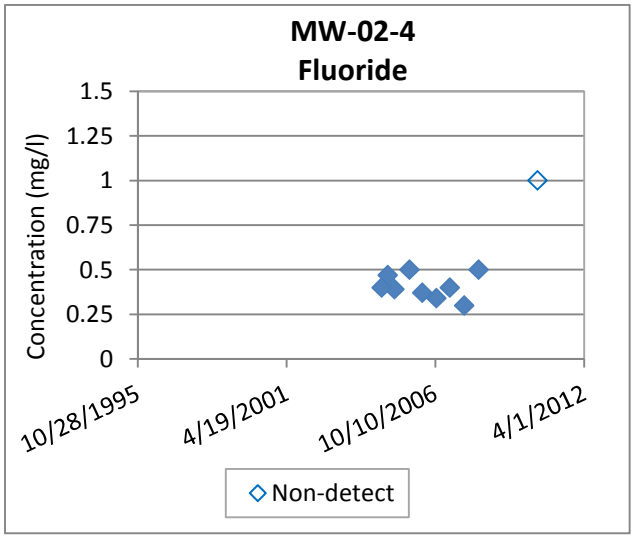
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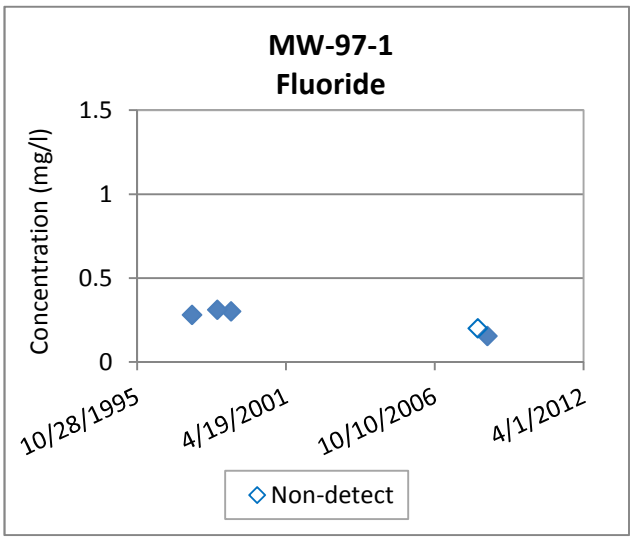
Figure 5.3-40a
Time Series Plots - Fluoride
Groundwater Quality
Rhodia Silver Bow Plant











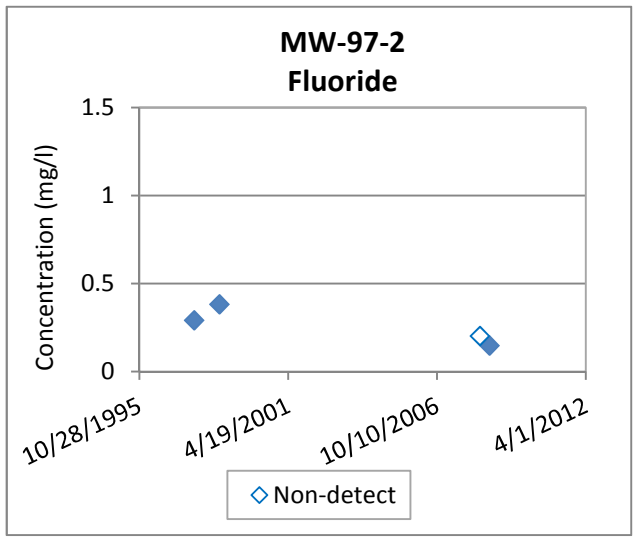
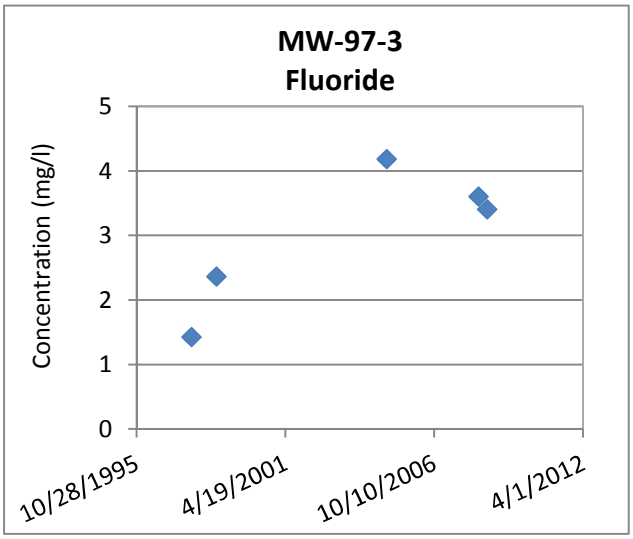
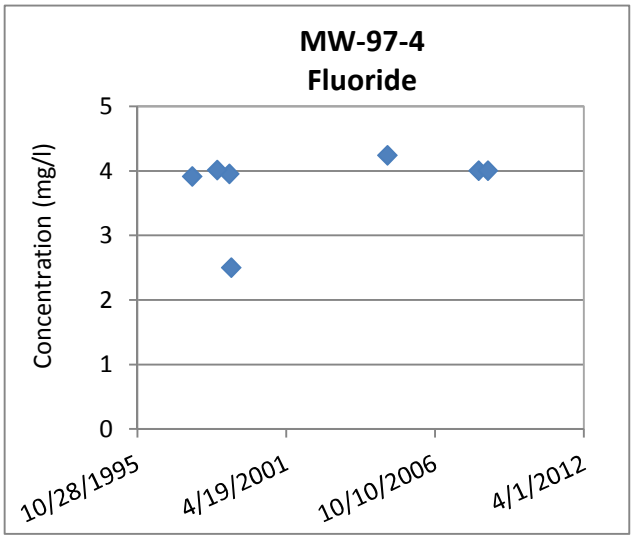
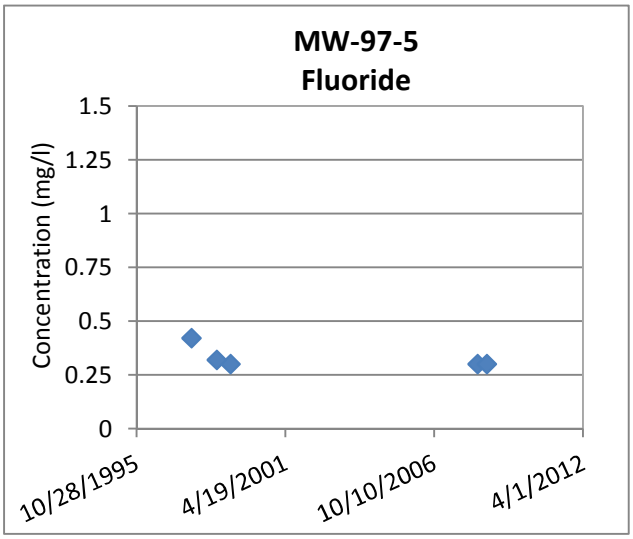
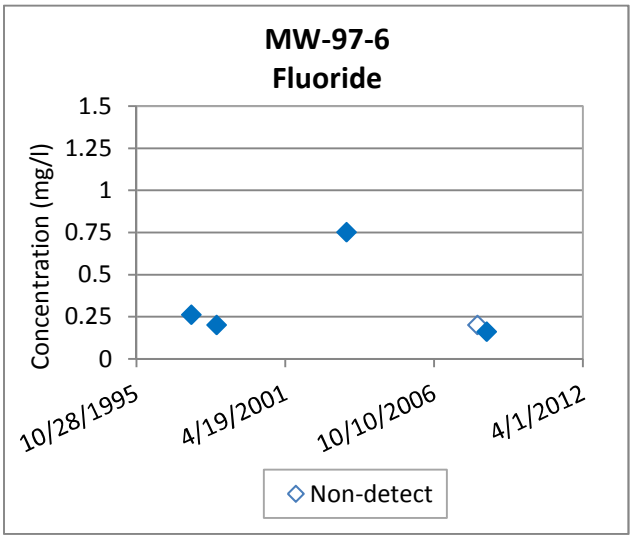


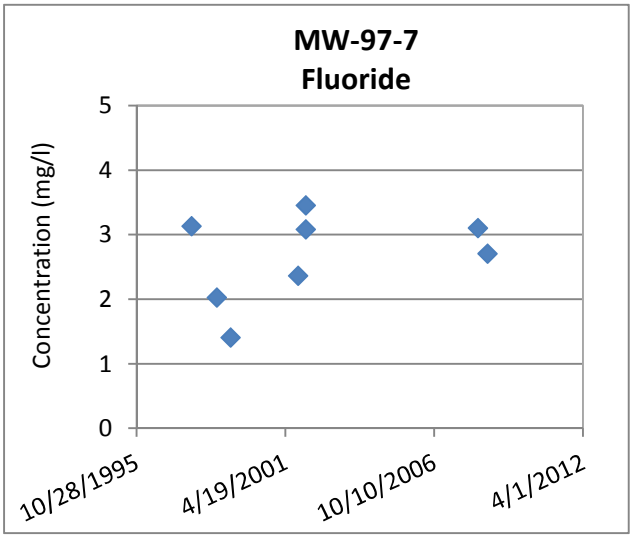
Figure 5.3-40a
Time Series Plots - Fluoride
Groundwater Quality
Rhodia Silver Bow Plant











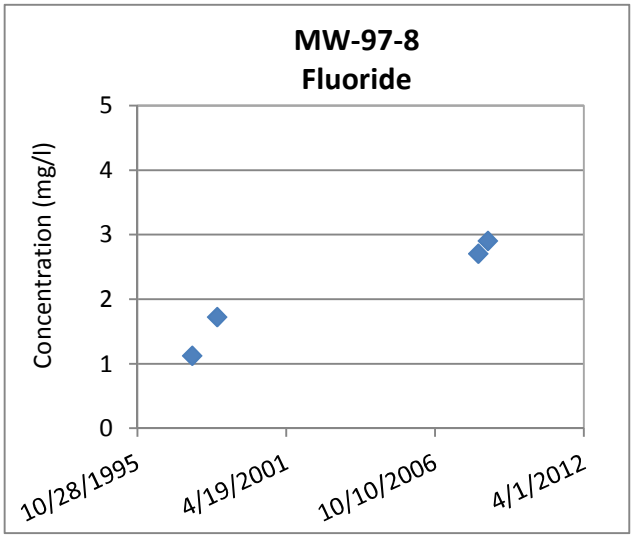
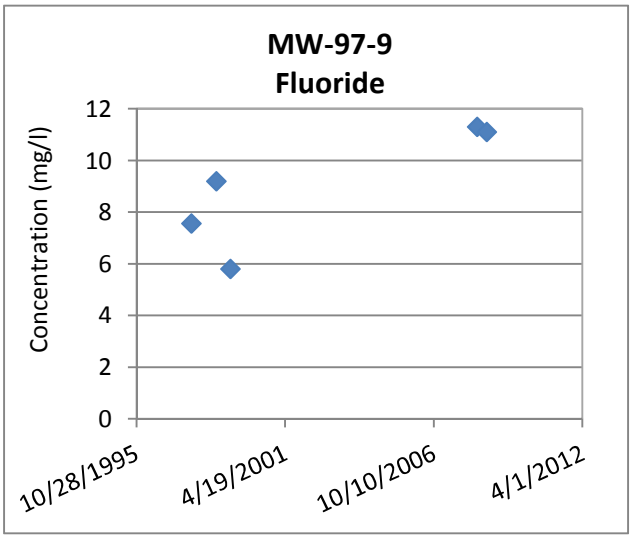
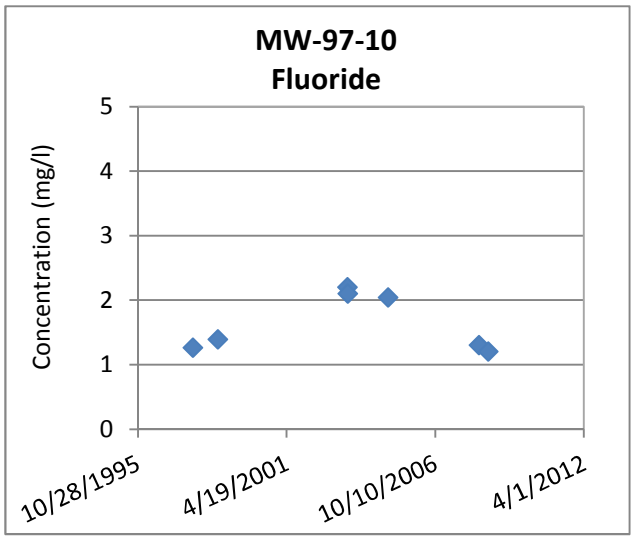
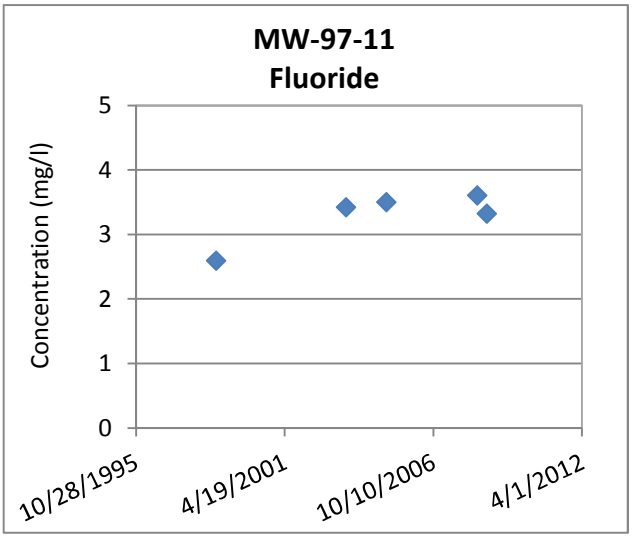
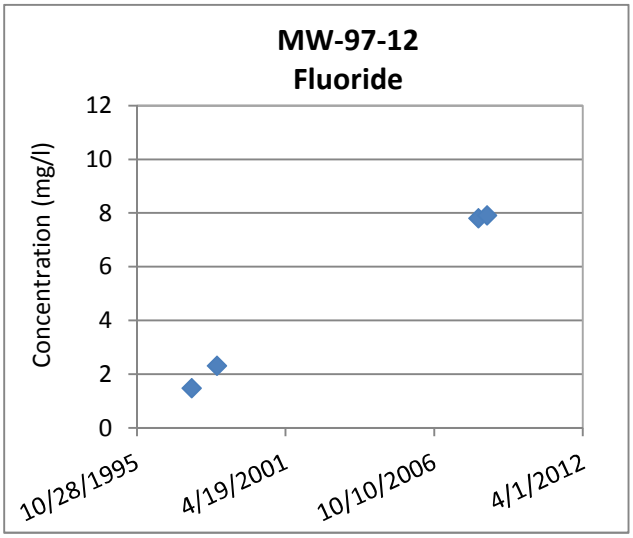


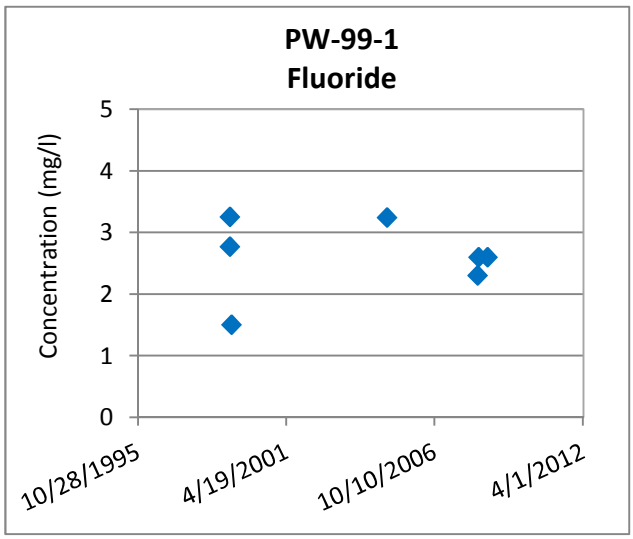
Figure 5.3-40a
Time Series Plots - Fluoride
Groundwater Quality
Rhodia Silver Bow Plant











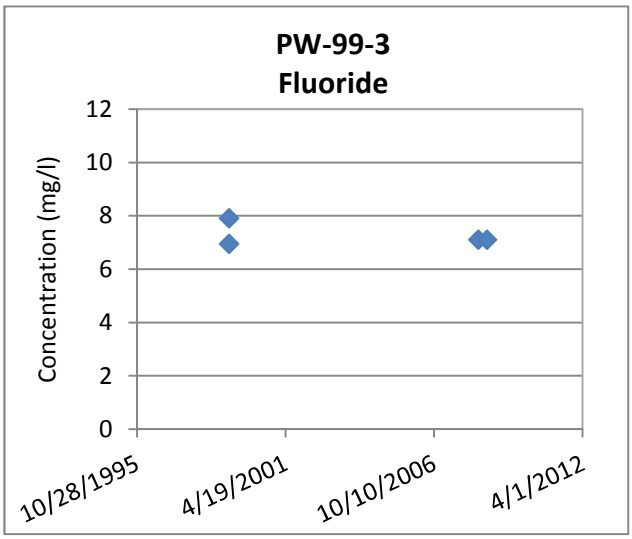
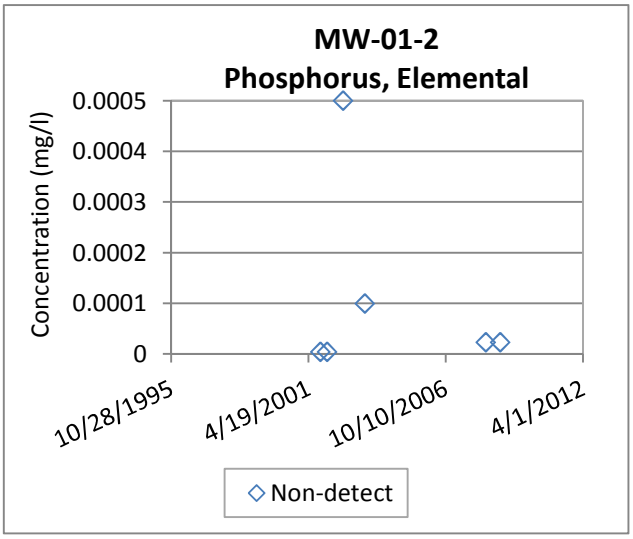
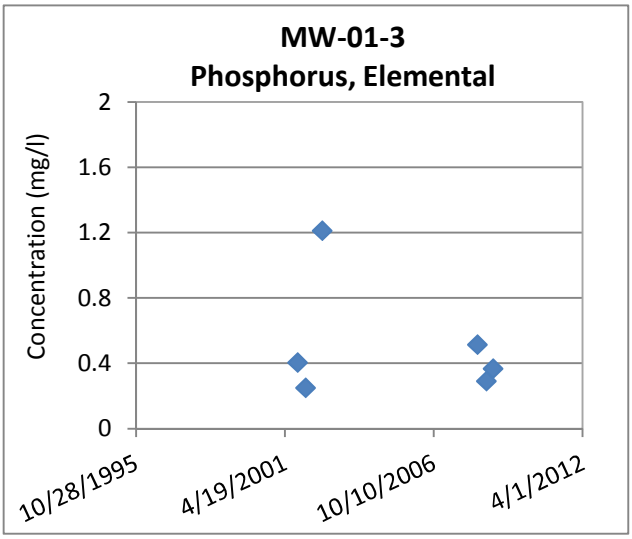
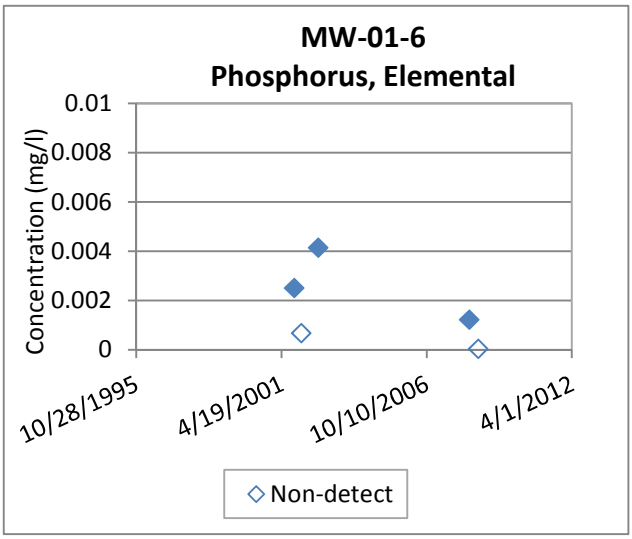
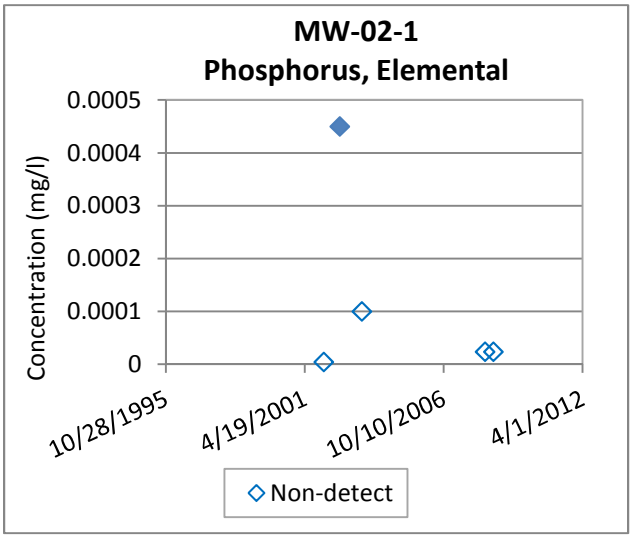


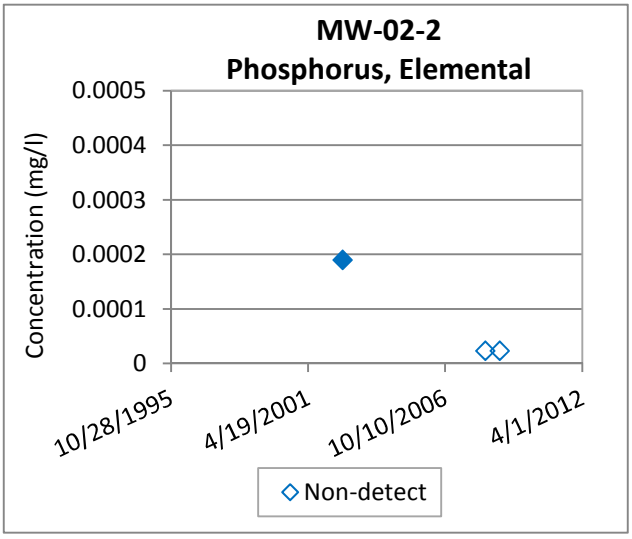
Figure 5.3-40b
Time Series Plots -Phosphorus (Elemental)
Groundwater Quality
Rhodia Silver Bow Plant





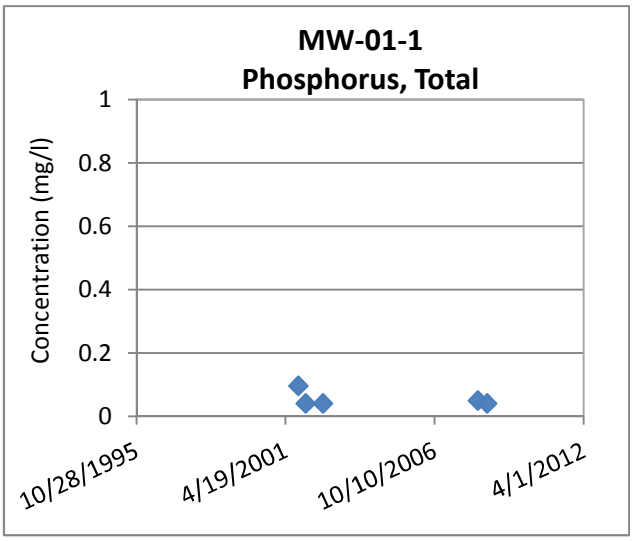


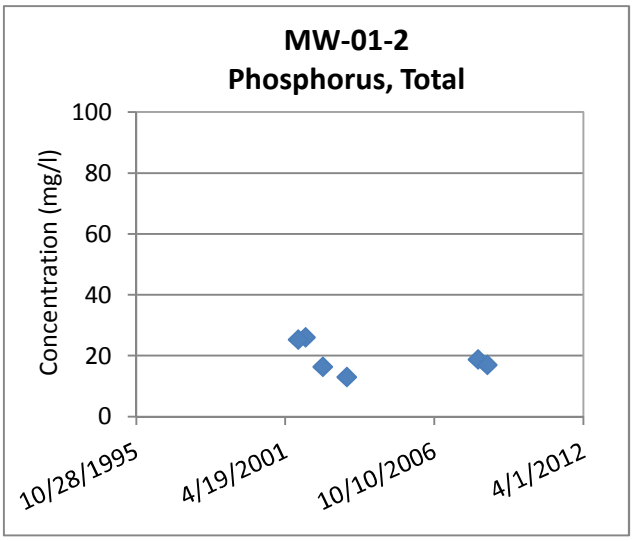


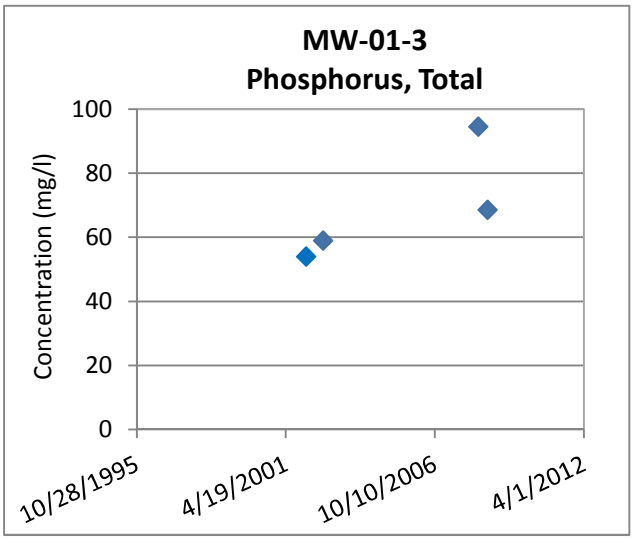


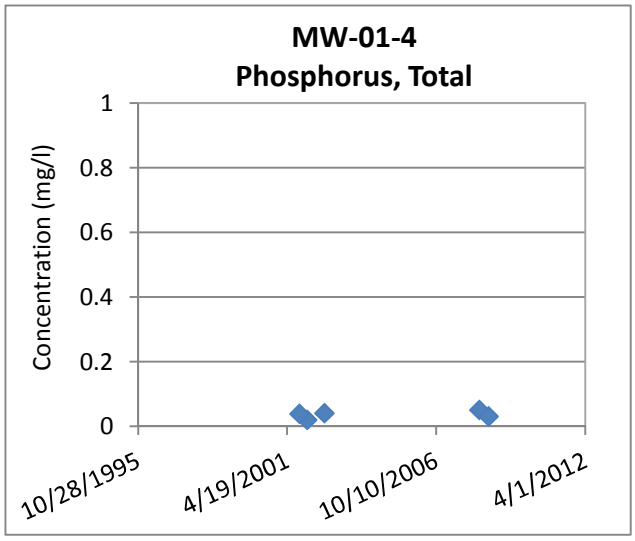
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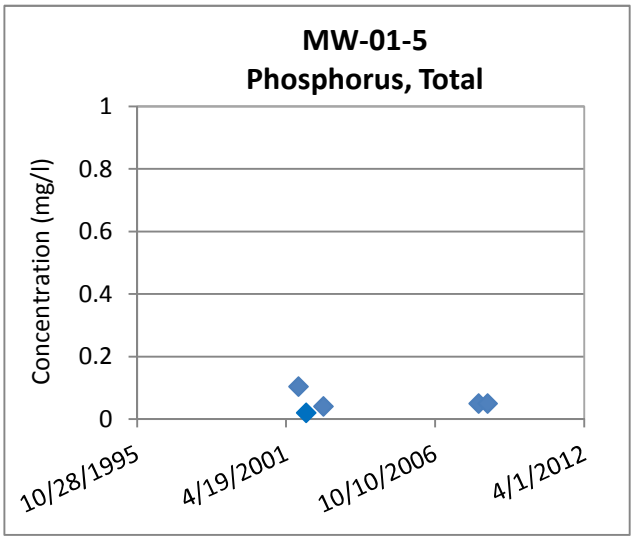
Figure 5.3-40c
Time Series Plots - Phosphorus (Total)
Groundwater Quality
Rhodia Silver Bow Plant











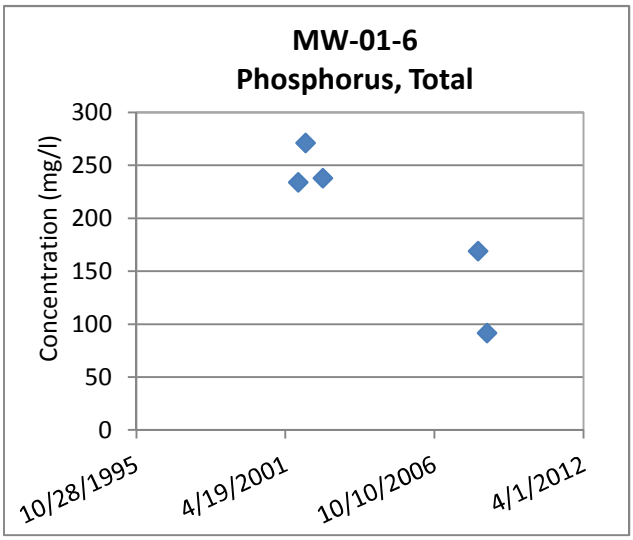
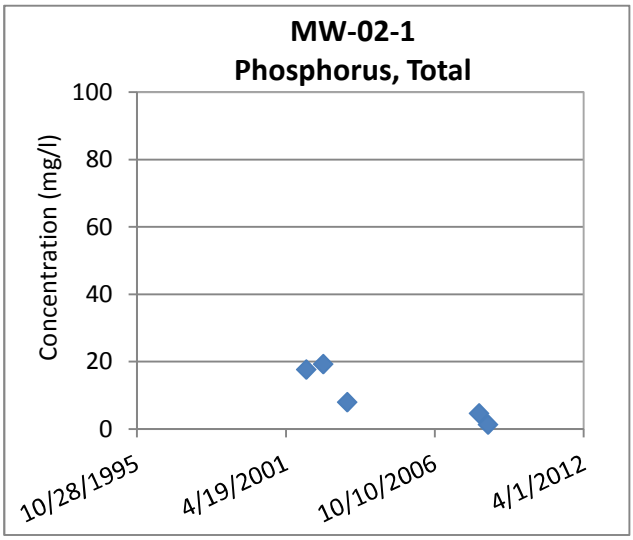
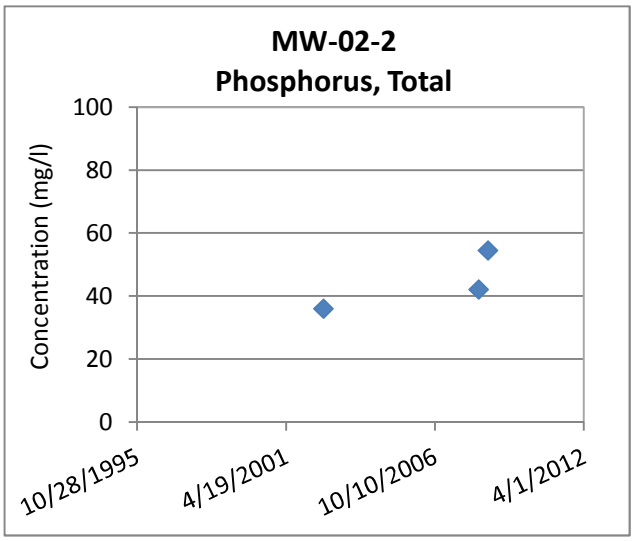
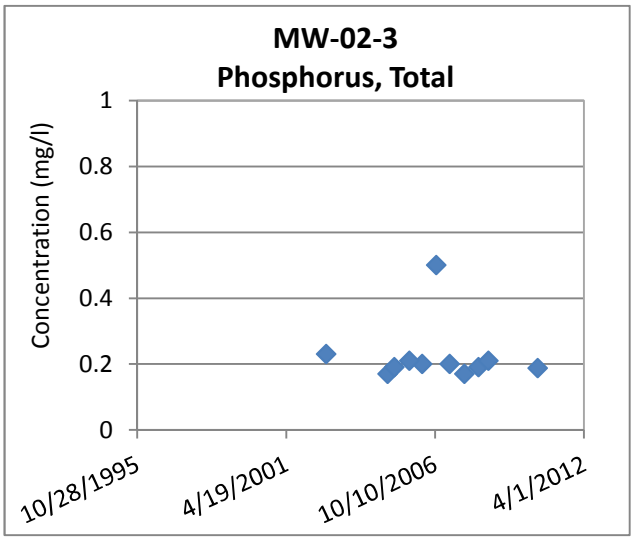
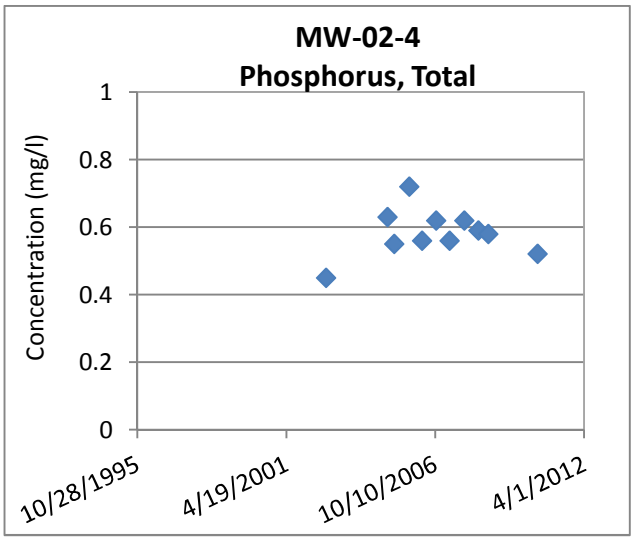


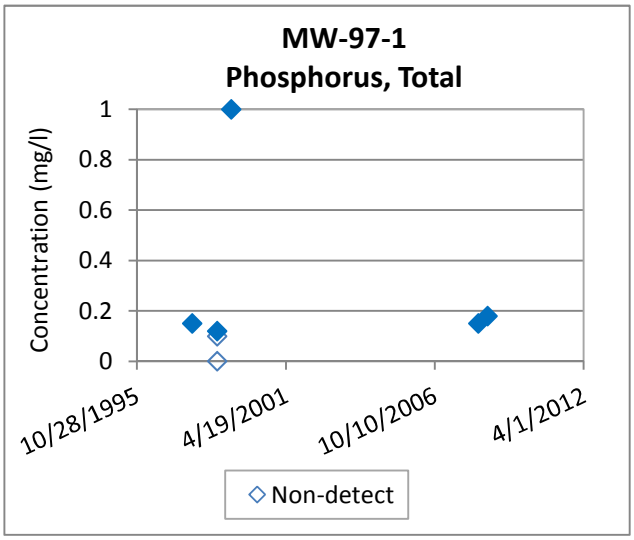
Figure 5.3-40c
Time Series Plots - Phosphorus (Total)
Groundwater Quality
Rhodia Silver Bow Plant











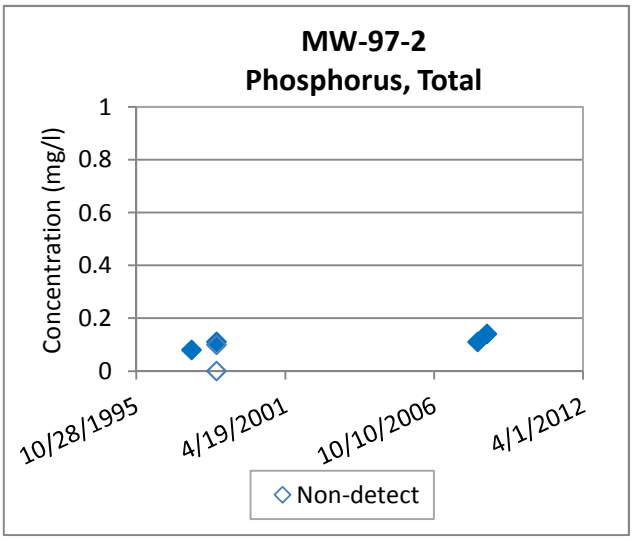
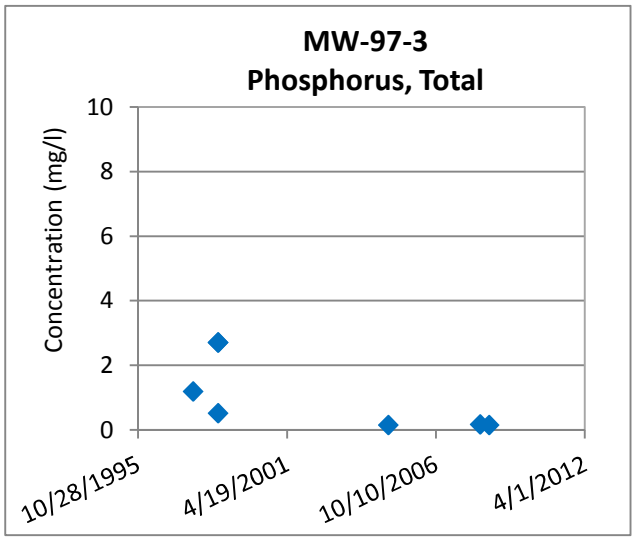
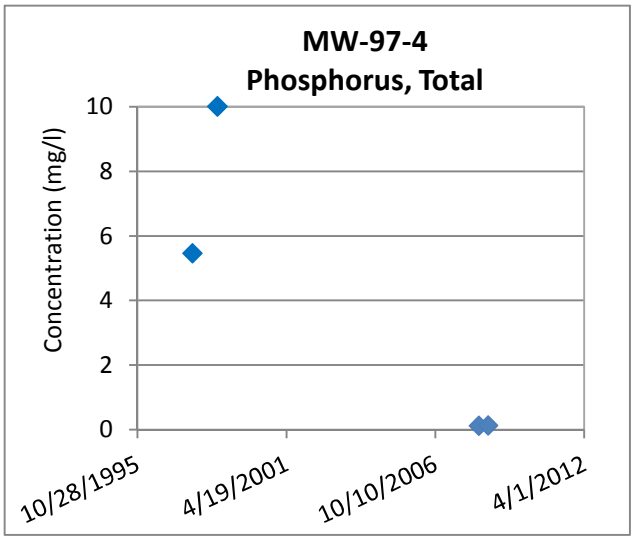
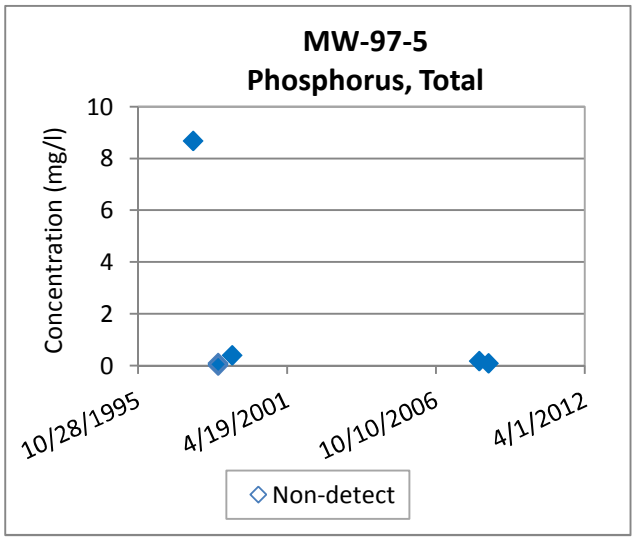
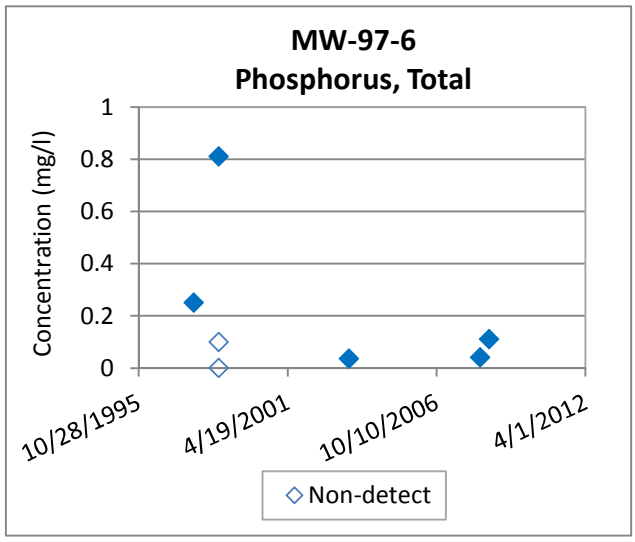


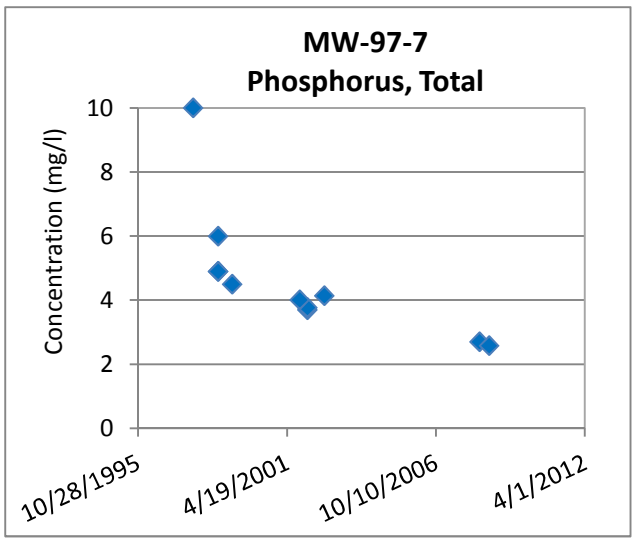
Figure 5.3-40c
Time Series Plots - Phosphorus (Total)
Groundwater Quality
Rhodia Silver Bow Plant











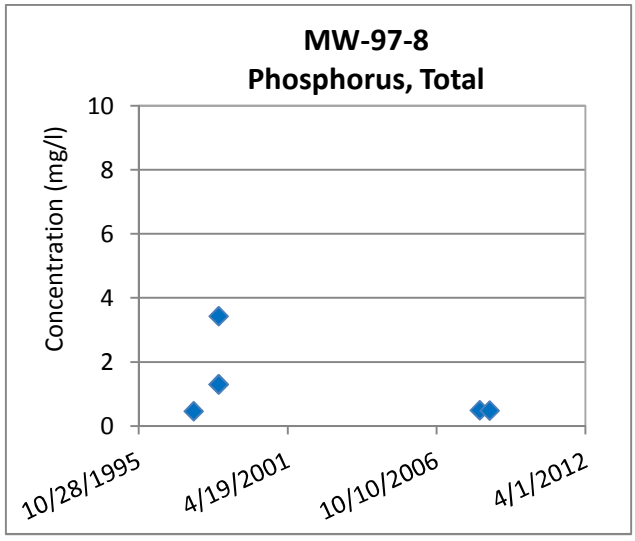
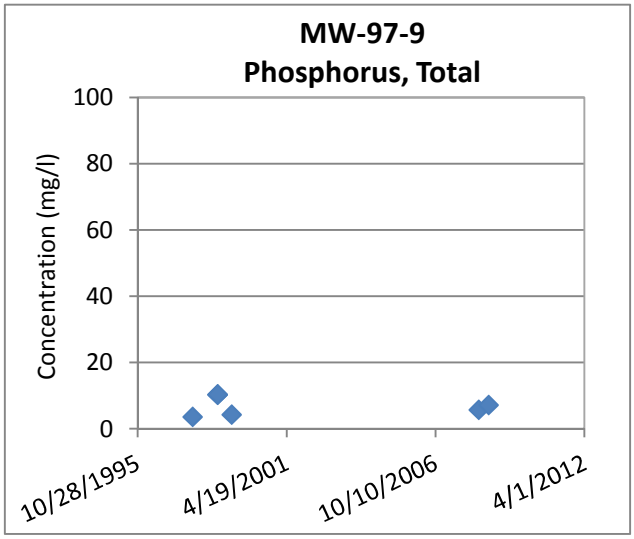
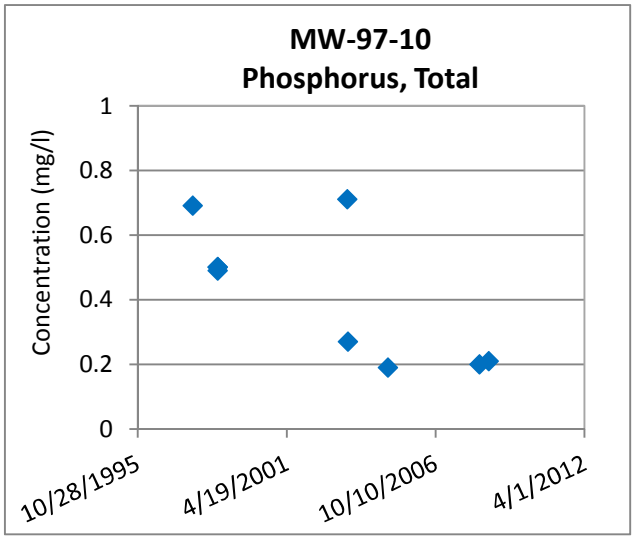
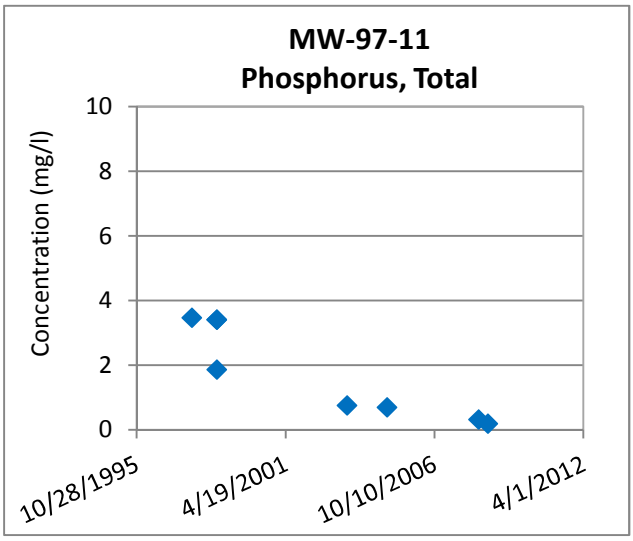
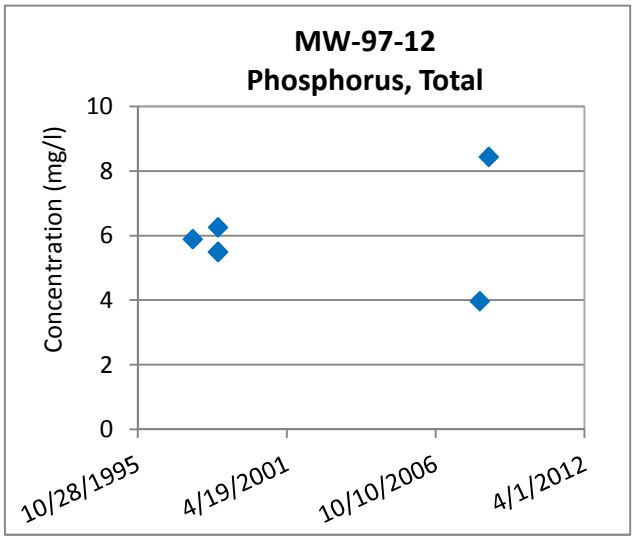


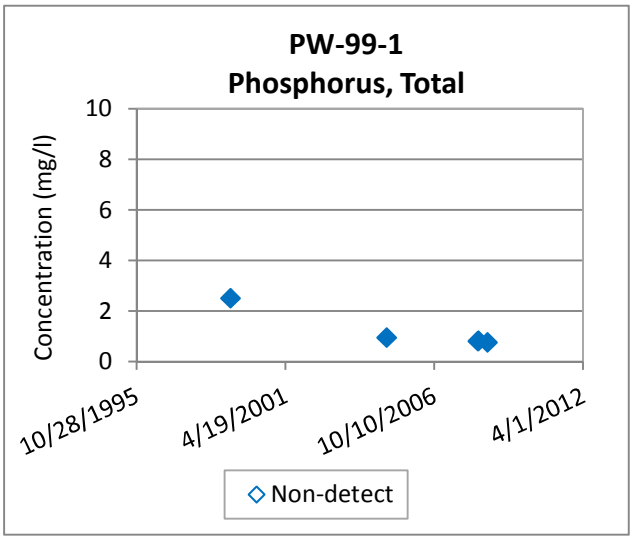
Figure 5.3-40c
Time Series Plots - Phosphorus (Total)
Groundwater Quality
Rhodia Silver Bow Plant

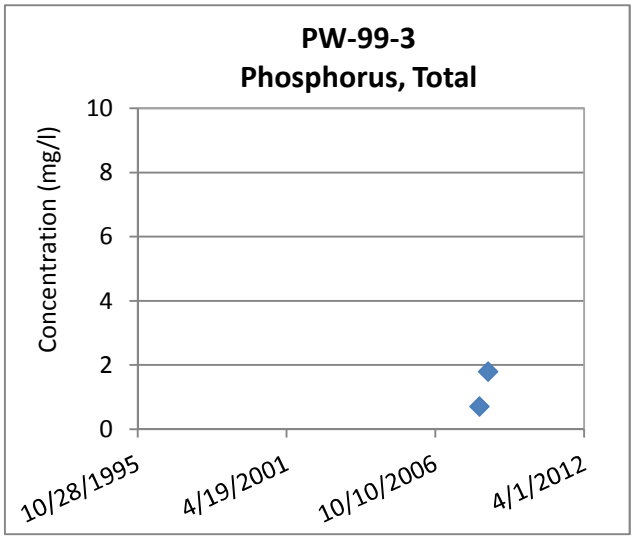






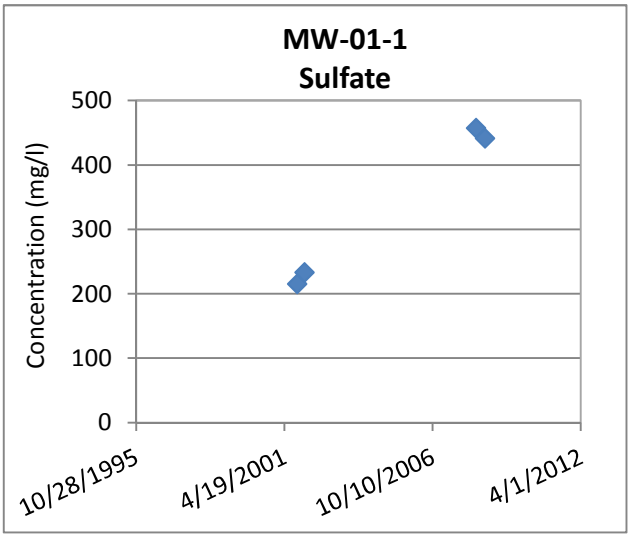


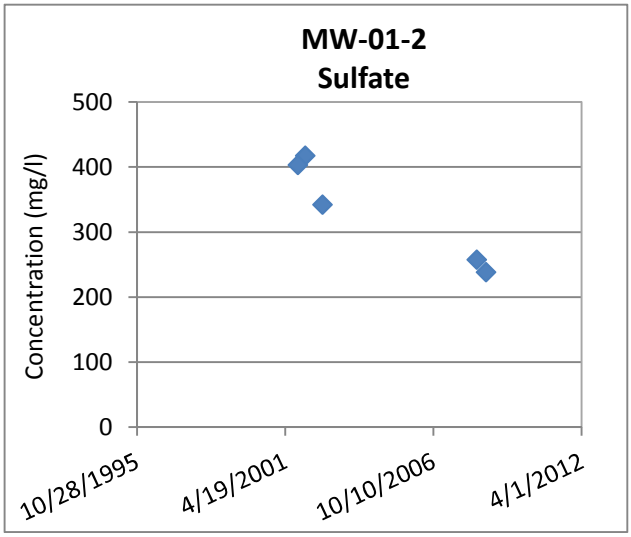


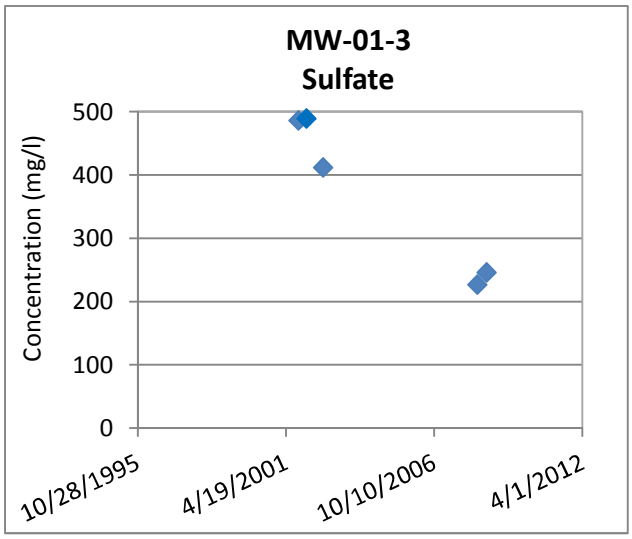


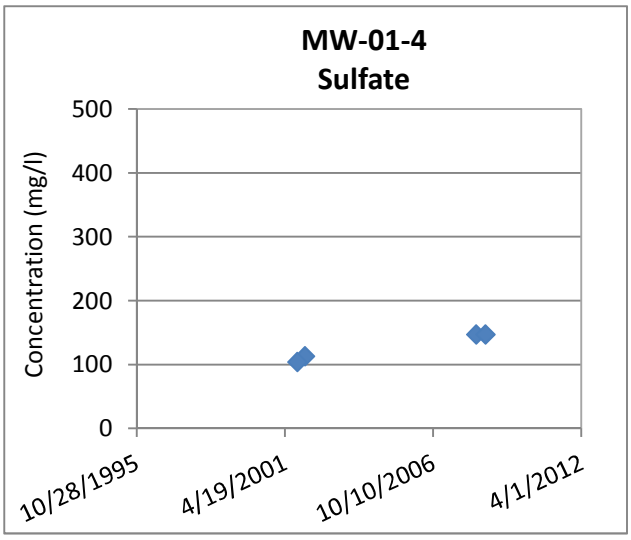
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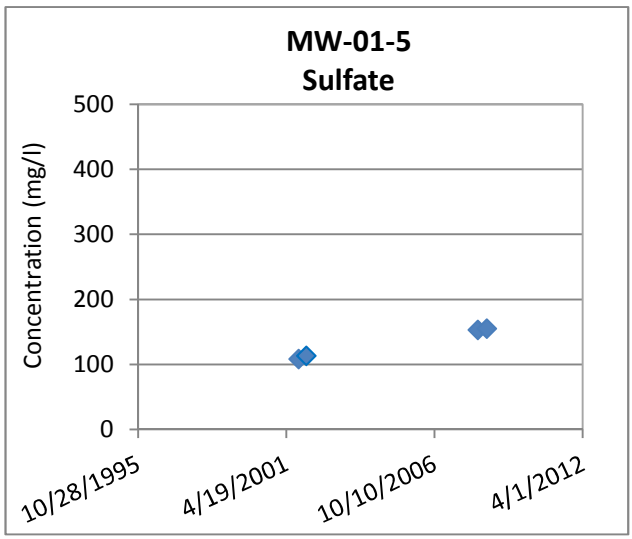
Figure 5.3-40d
Time Series Plots - Sulfate
Groundwater Quality
Rhodia Silver Bow Plant











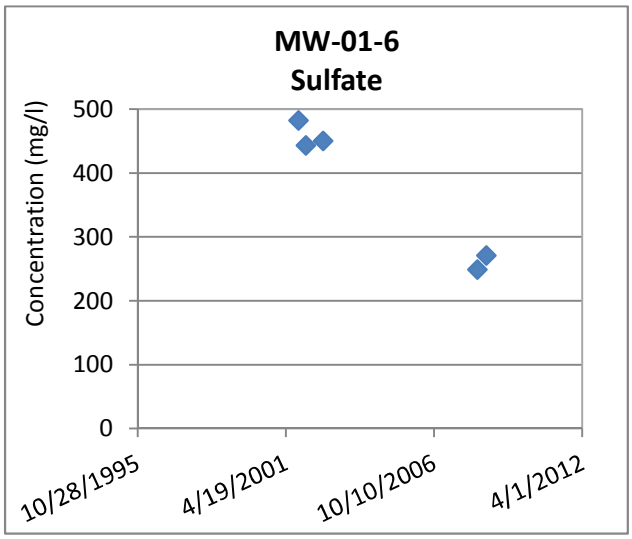
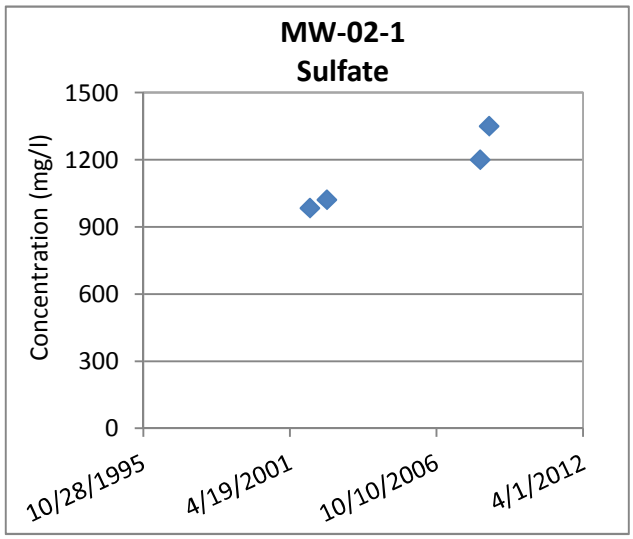
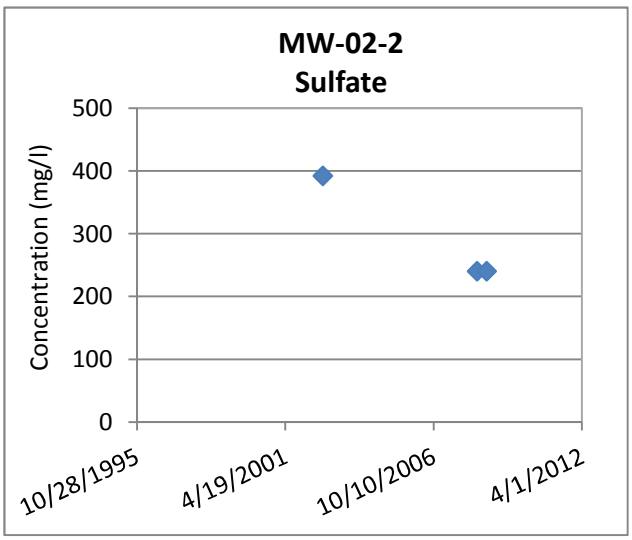
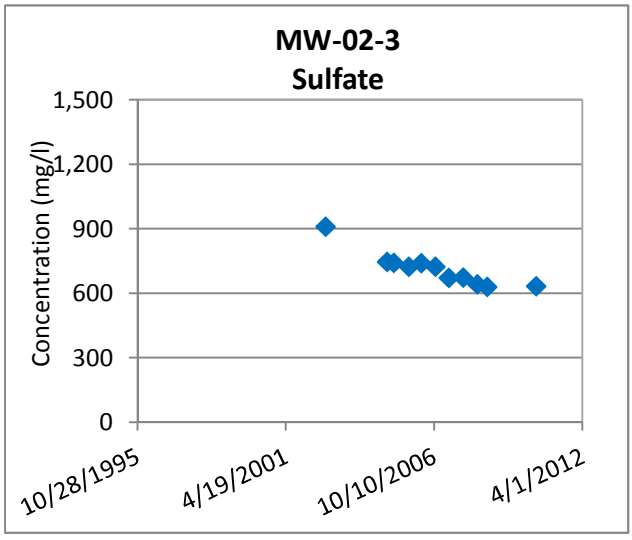
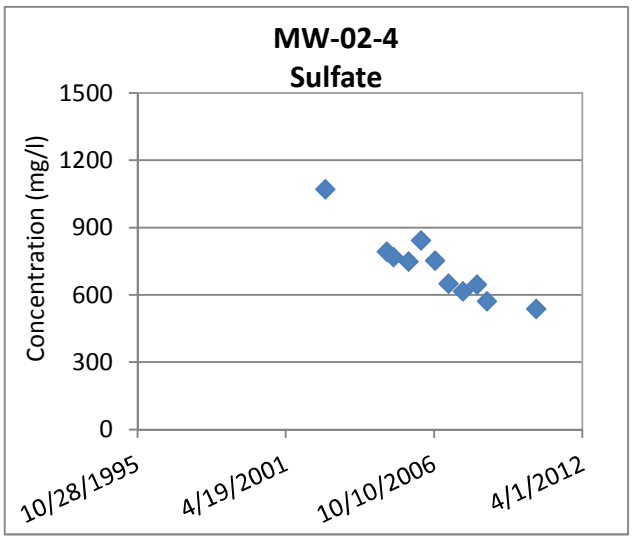


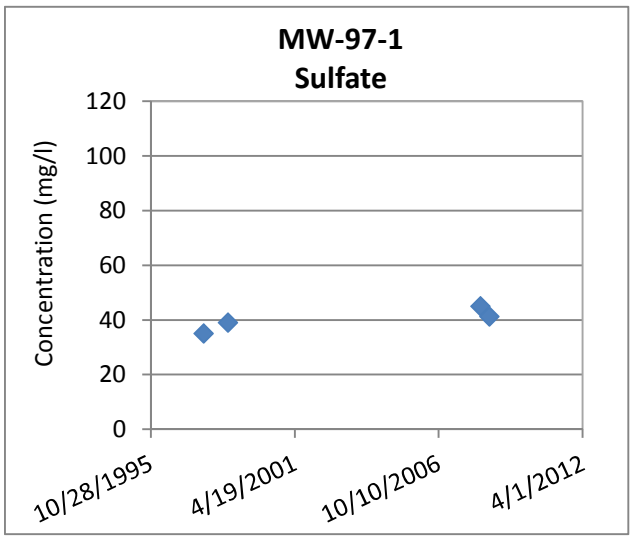
Figure 5.3-40d
Time Series Plots - Sulfate
Groundwater Quality
Rhodia Silver Bow Plant











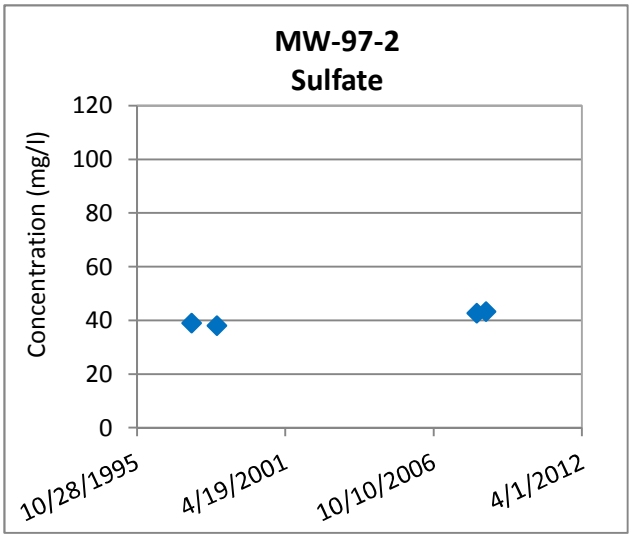
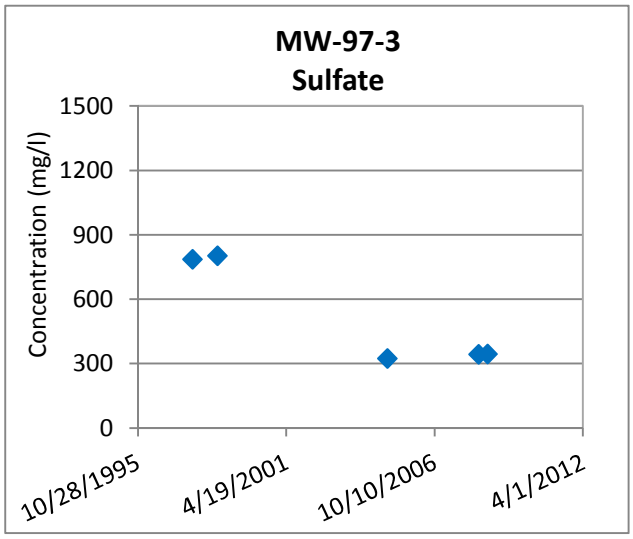
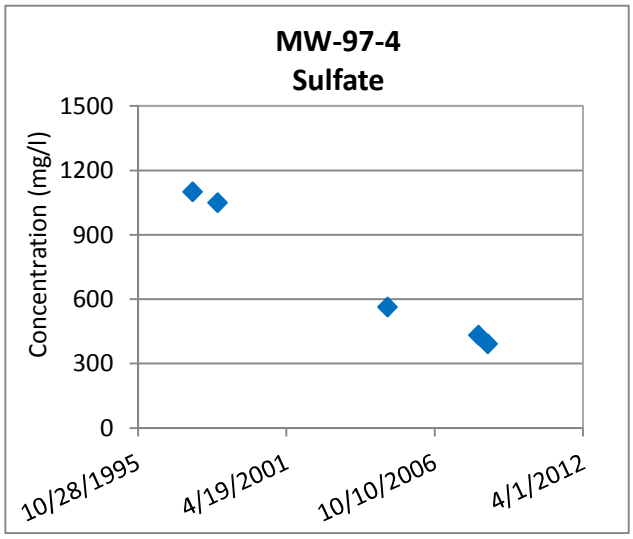
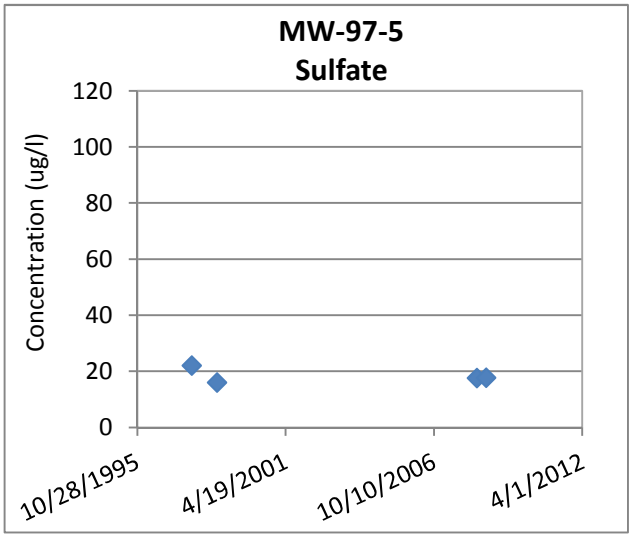
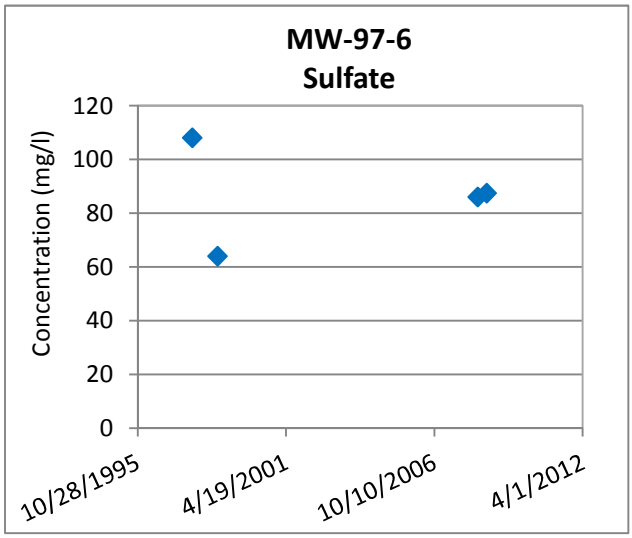


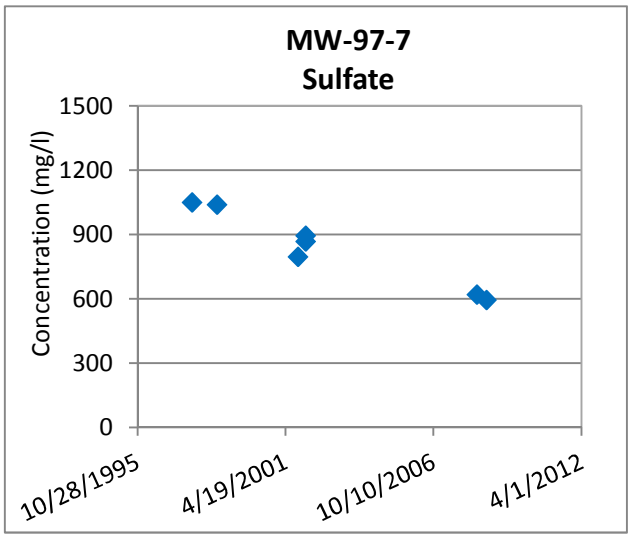
Figure 5.3-40d
Time Series Plots - Sulfate
Groundwater Quality
Rhodia Silver Bow Plant











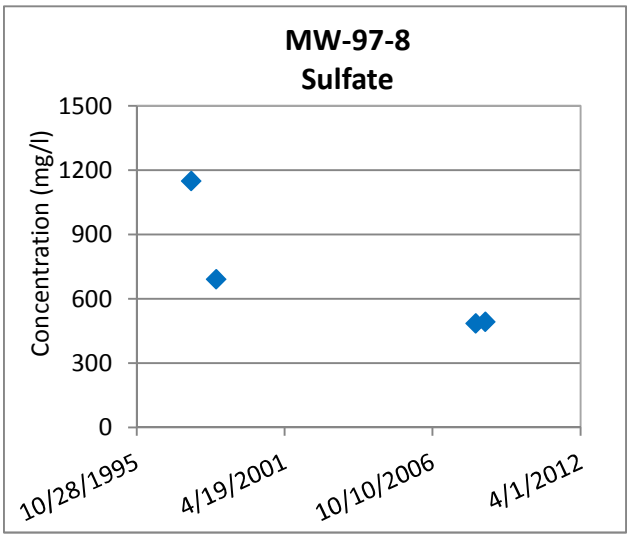
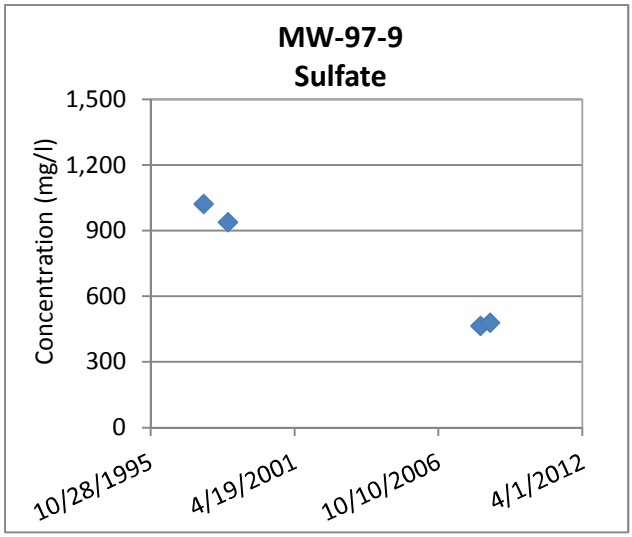
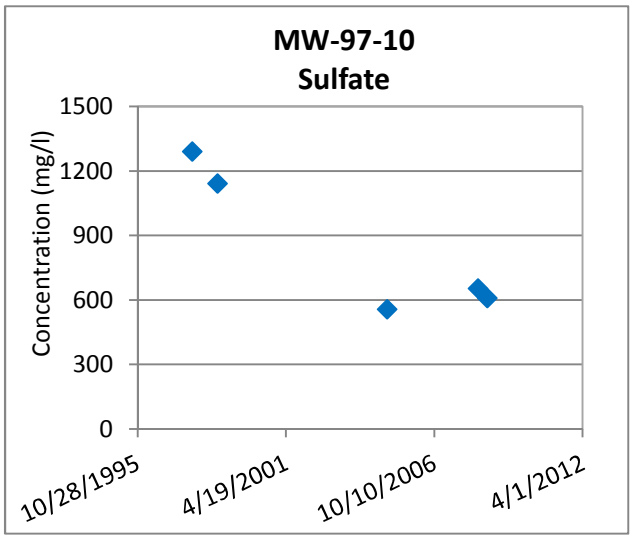
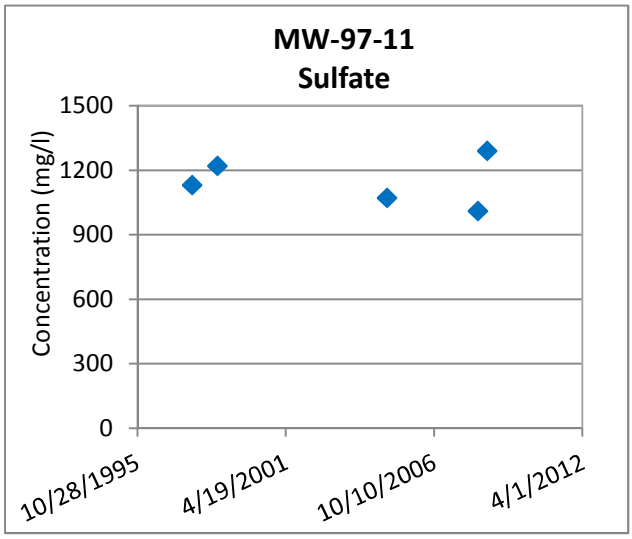
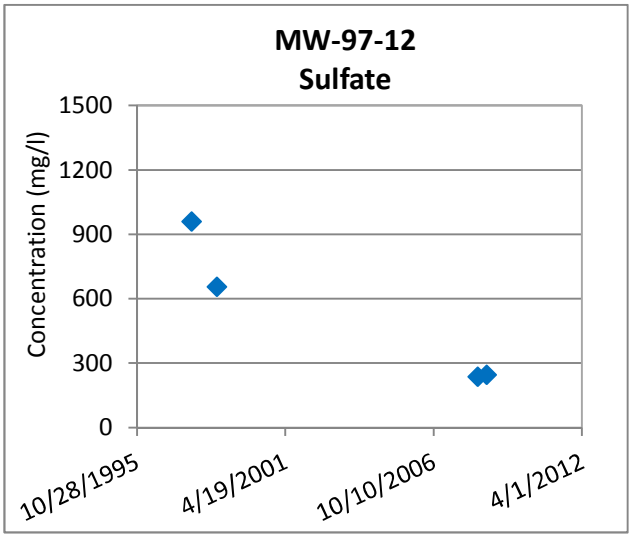


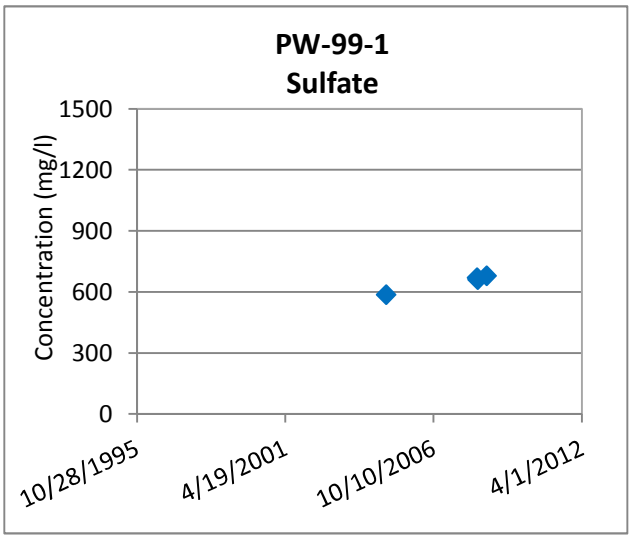
Figure 5.3-40d
Time Series Plots - Sulfate
Groundwater Quality
Rhodia Silver Bow Plant











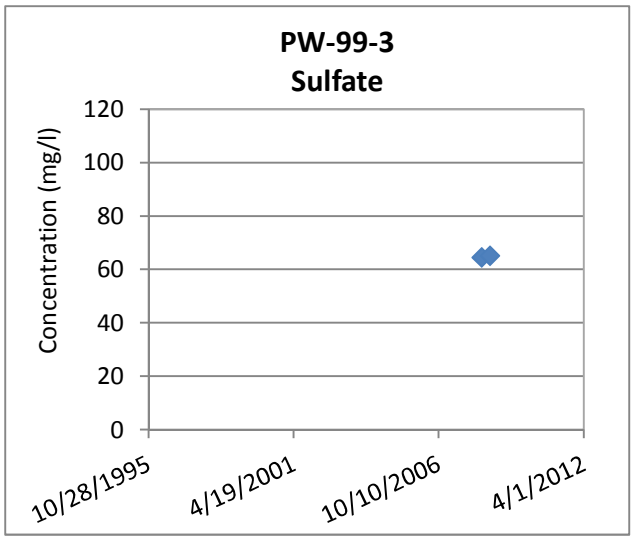
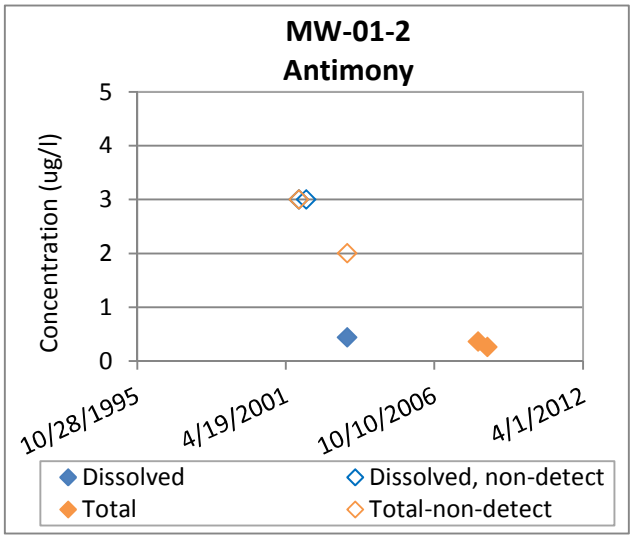
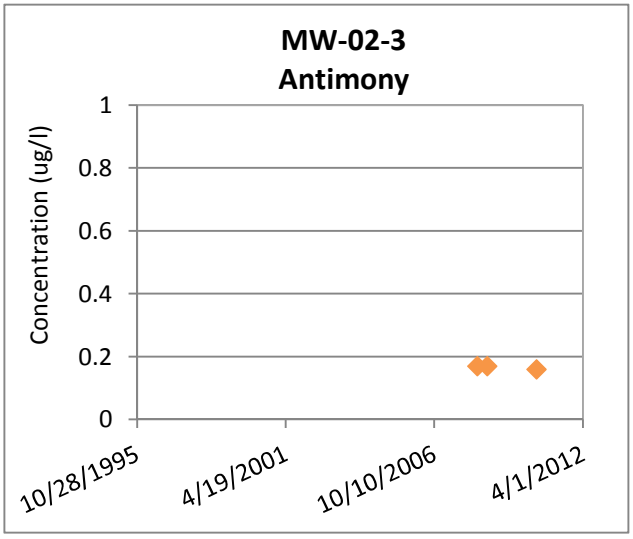
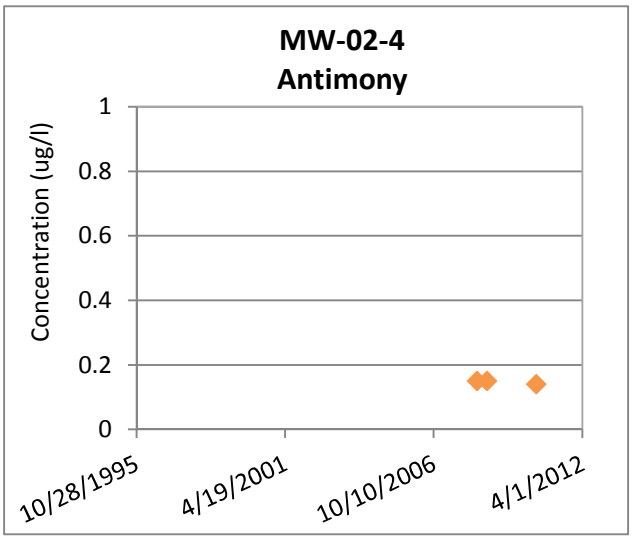
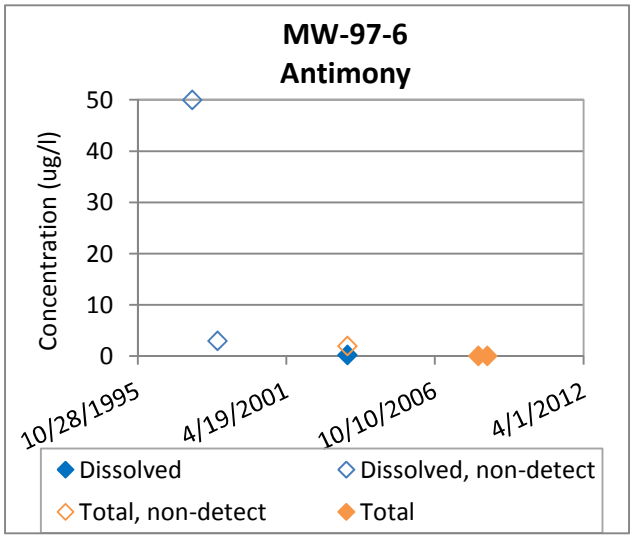


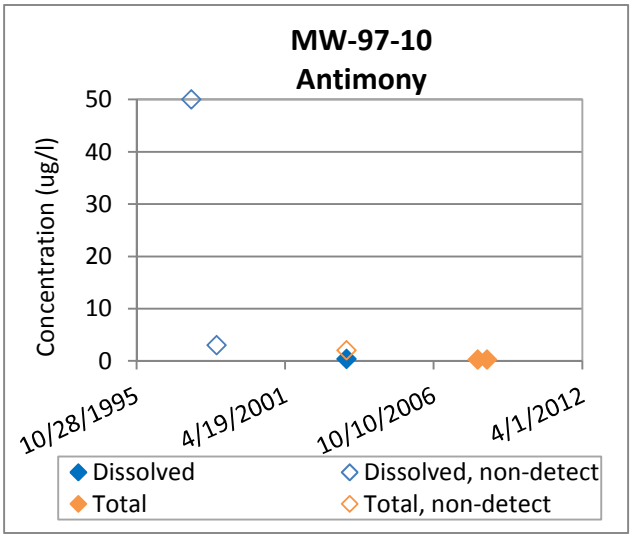
Figure 5.3-40e
Time Series Plots - Antimony
Groundwater Quality
Rhodia Silver Bow Plant

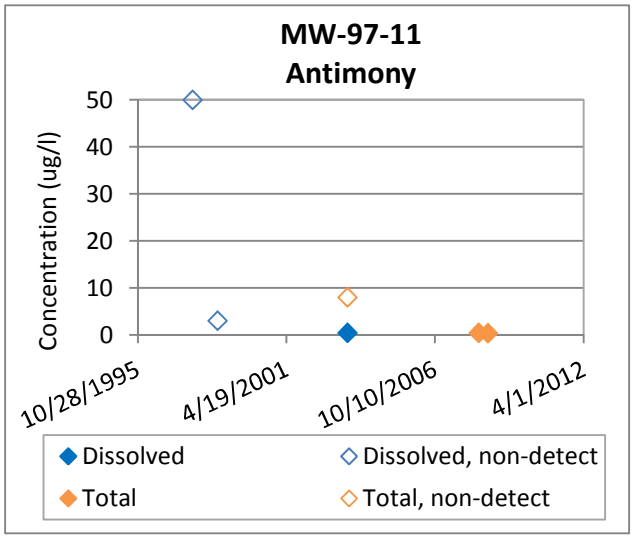






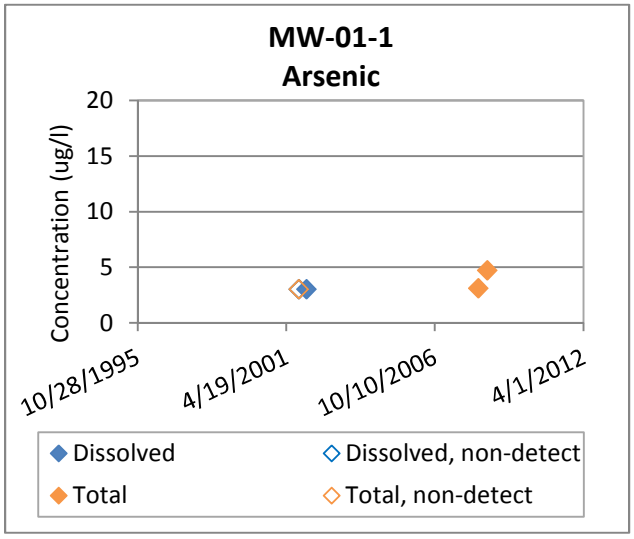


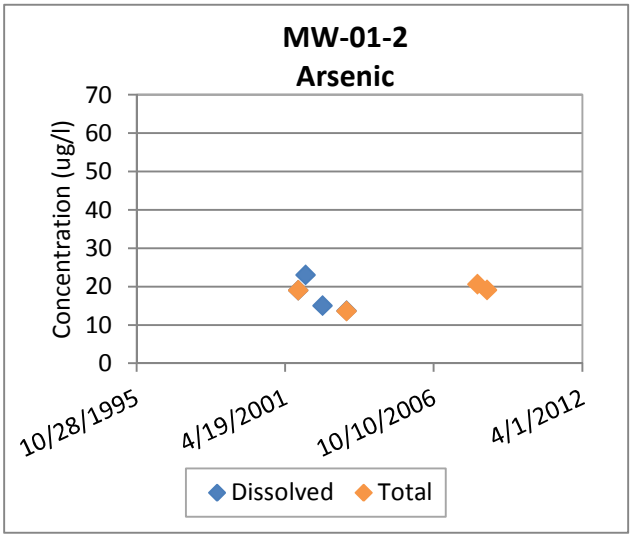


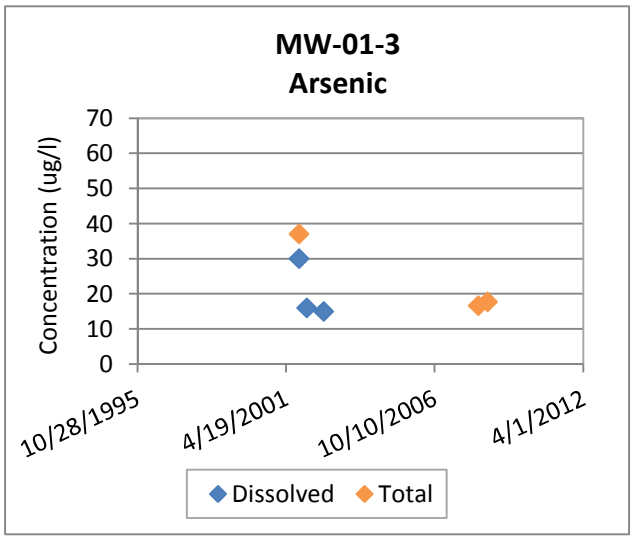


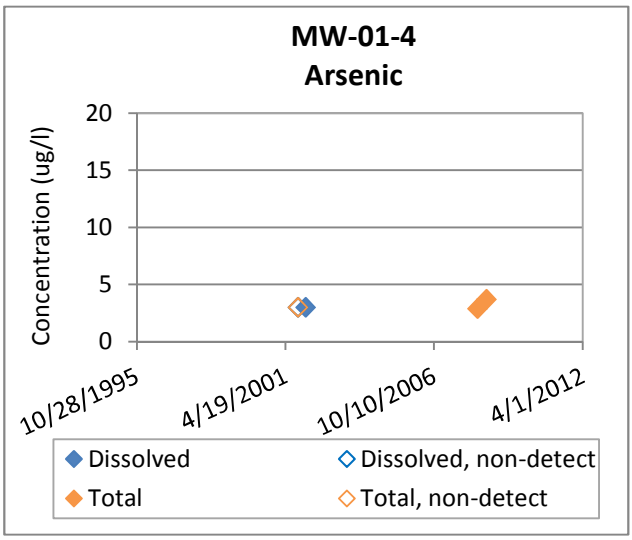
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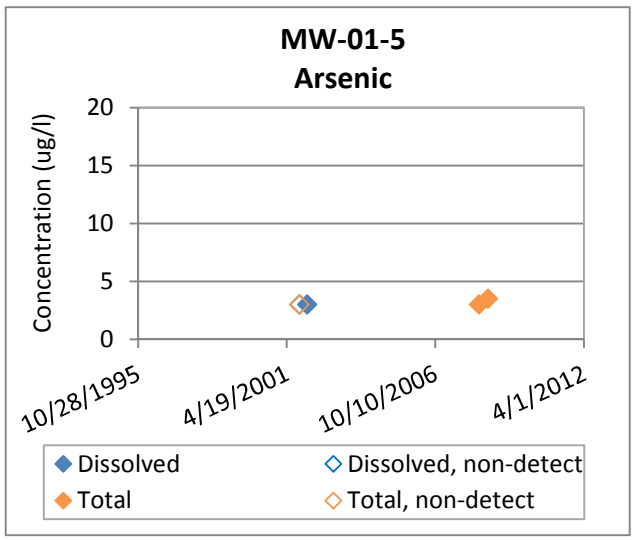
Figure 5.3-40f
Time Series Plots - Arsenic
Groundwater Quality
Rhodia Silver Bow Plant

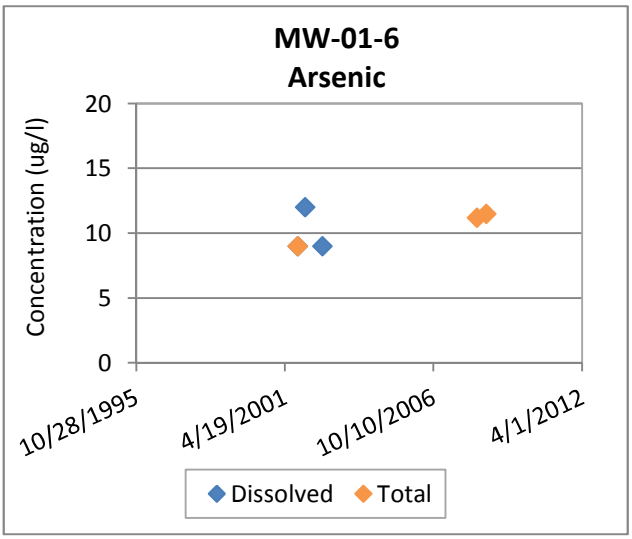






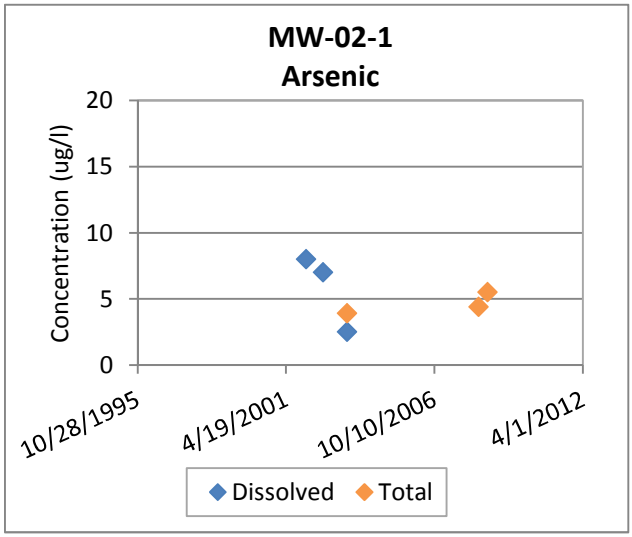


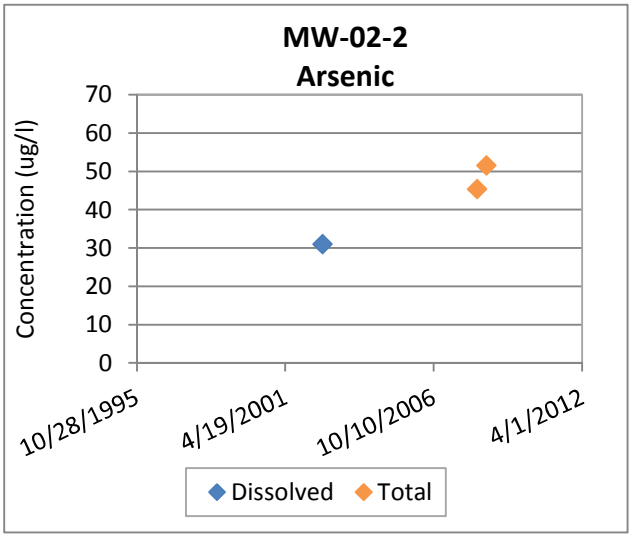


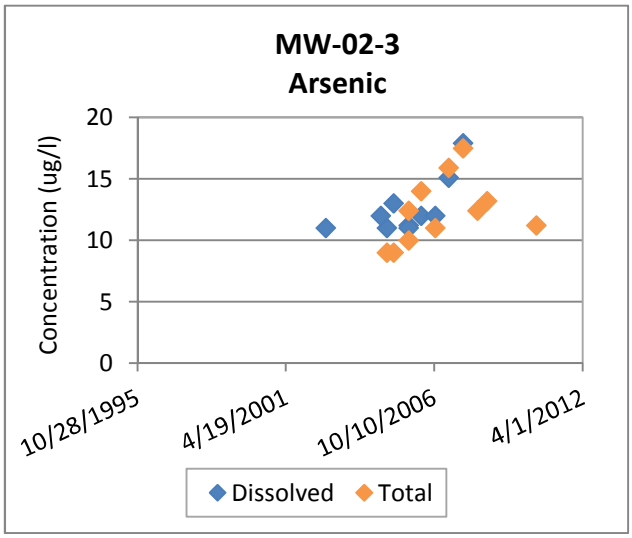


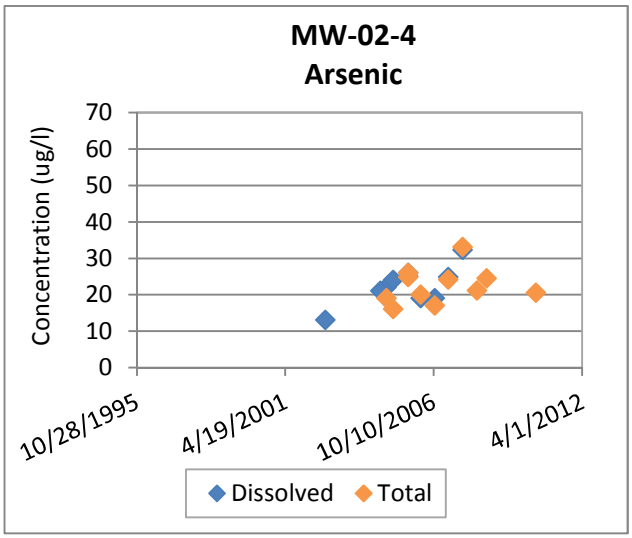
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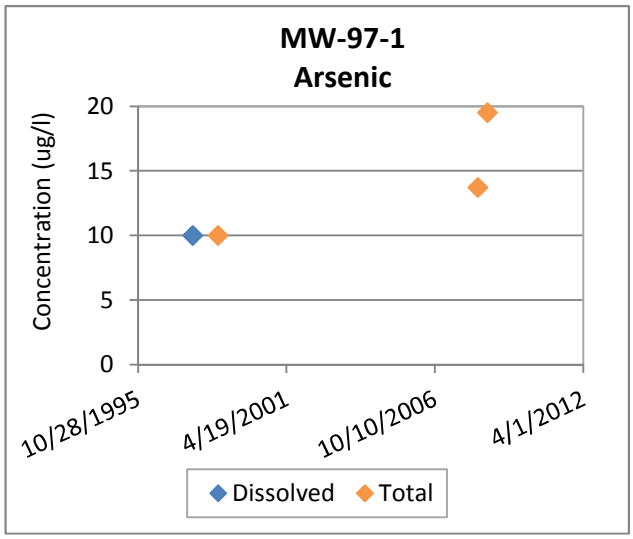
Figure 5.3-40f
Time Series Plots - Arsenic
Groundwater Quality
Rhodia Silver Bow Plant

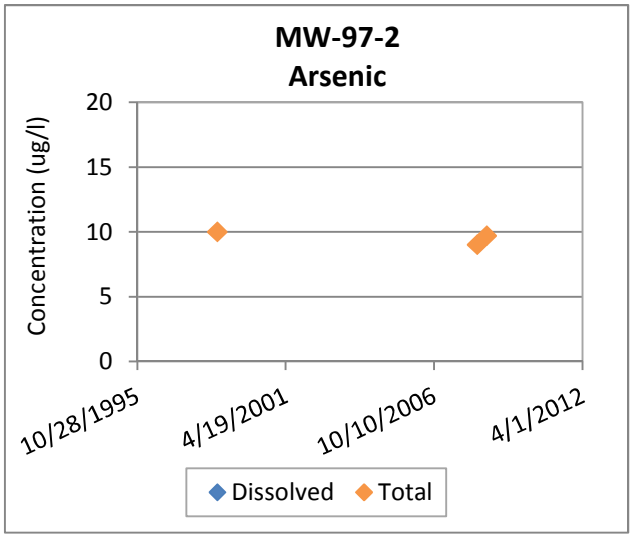






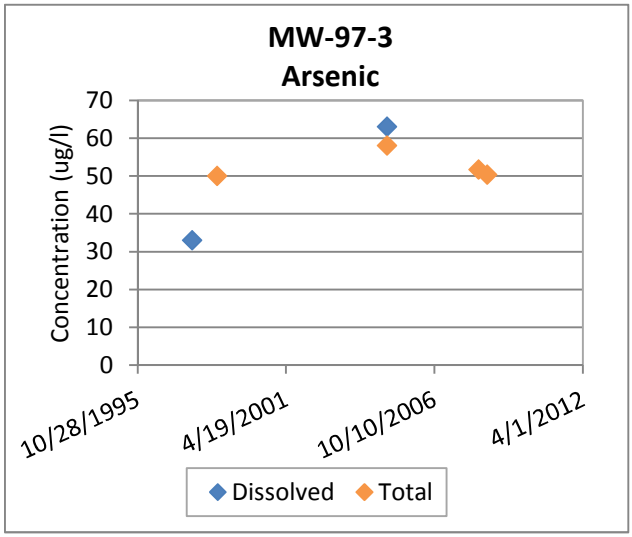


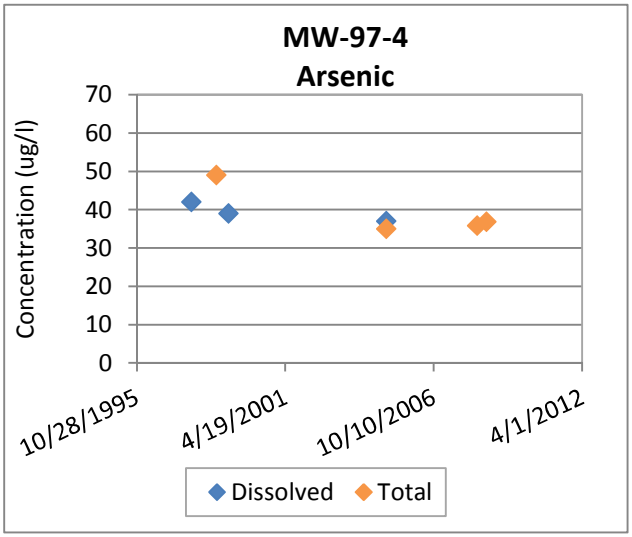


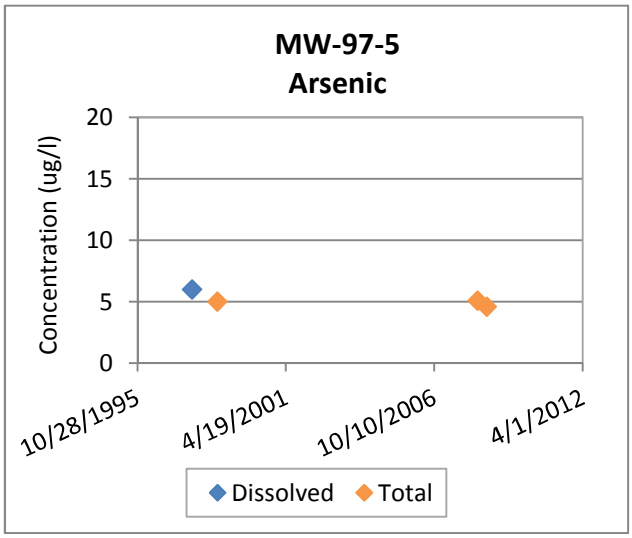


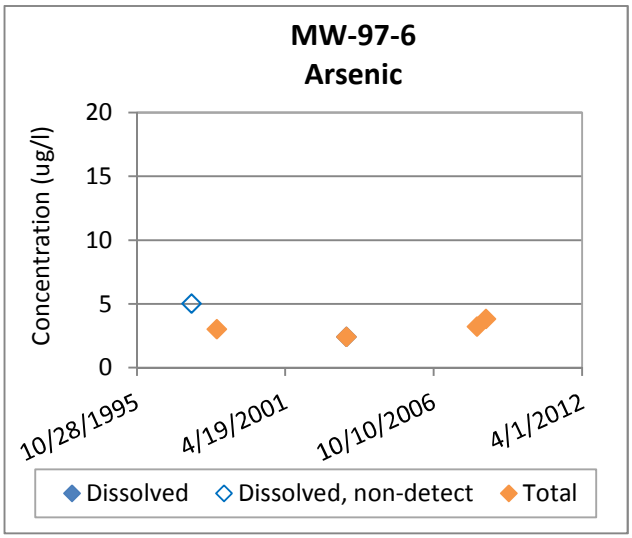
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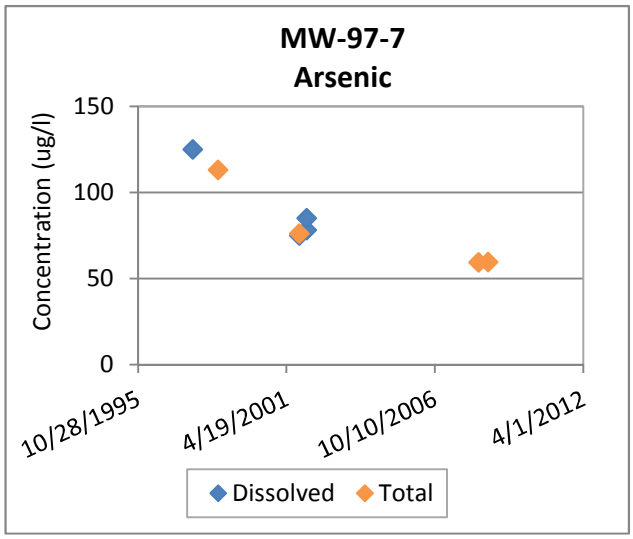
Figure 5.3-40f
Time Series Plots - Arsenic
Groundwater Quality
Rhodia Silver Bow Plant











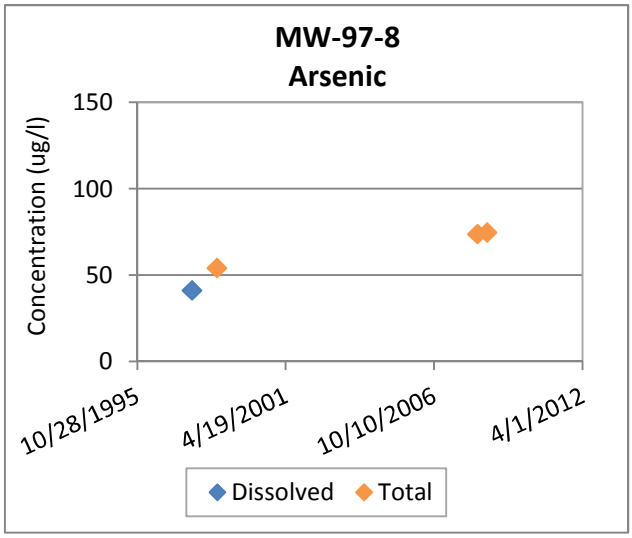
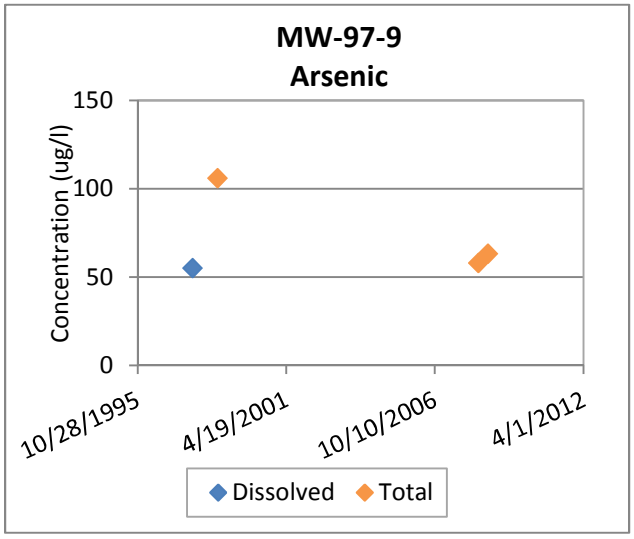
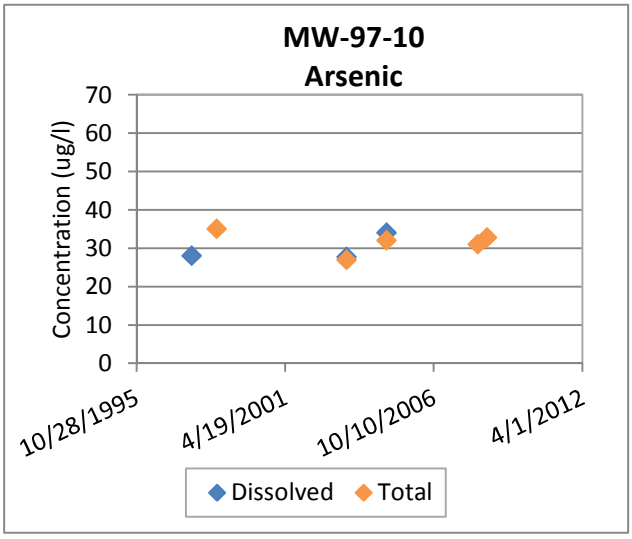
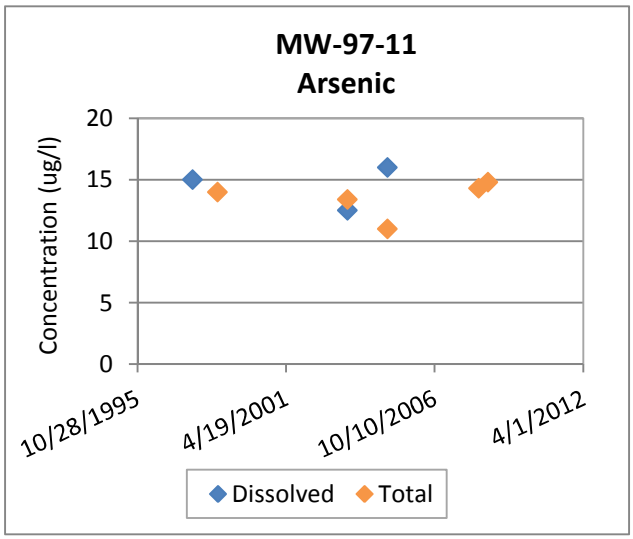
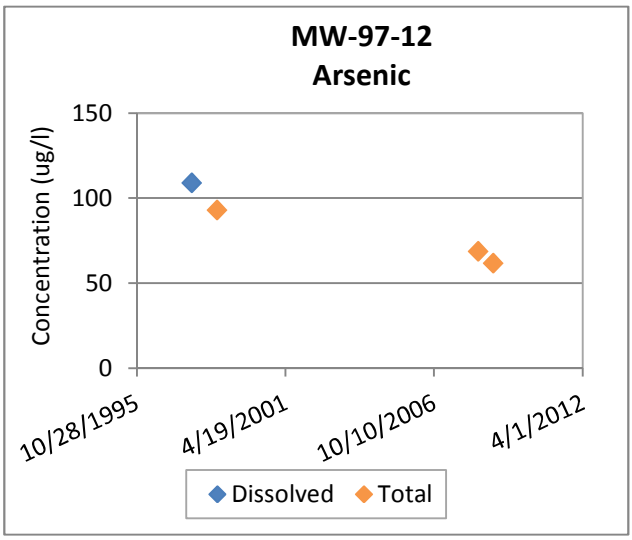


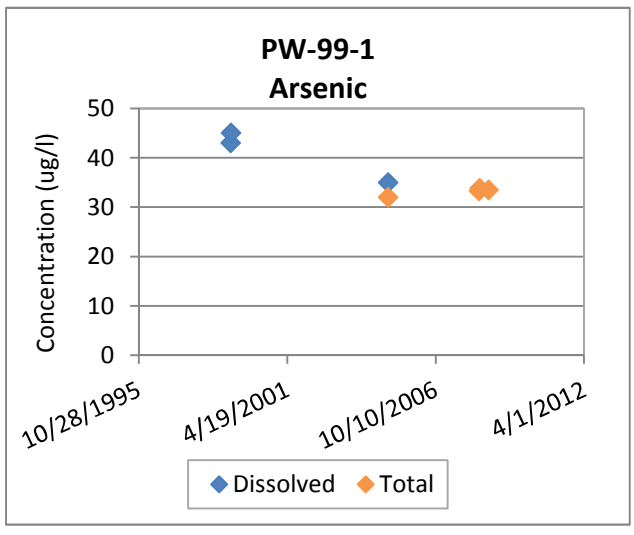
Figure 5.3-40f
Time Series Plots - Arsenic
Groundwater Quality
Rhodia Silver Bow Plant

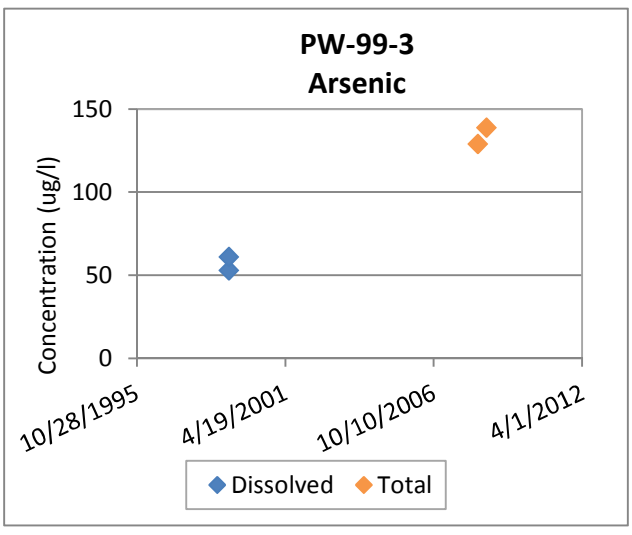






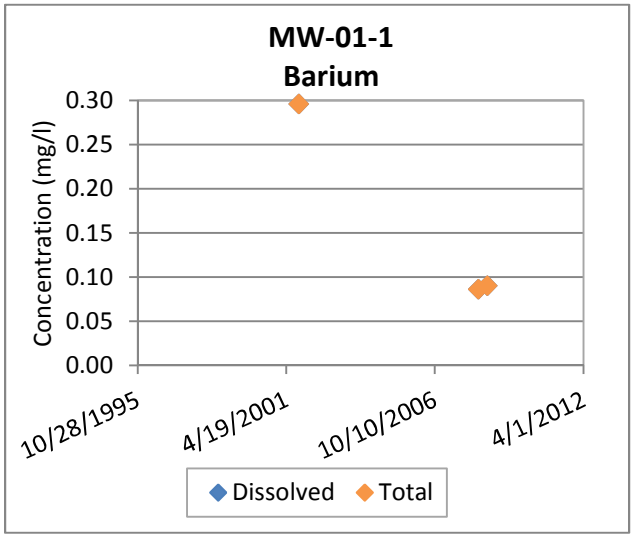


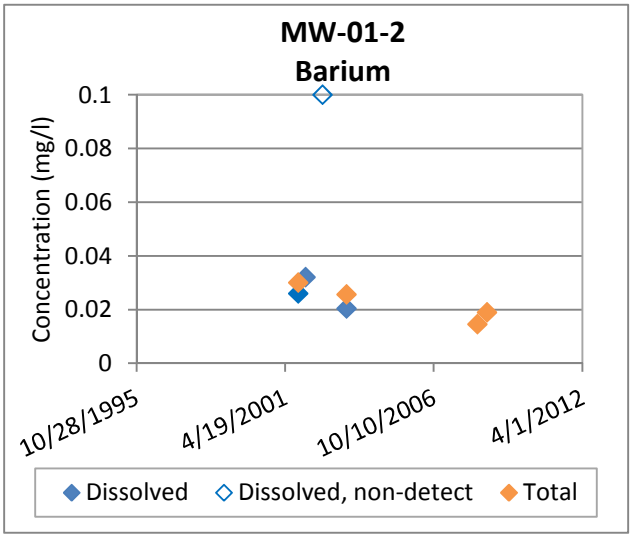


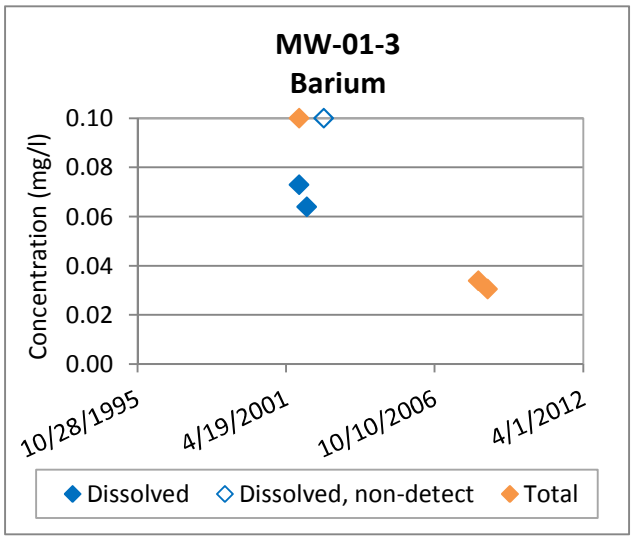


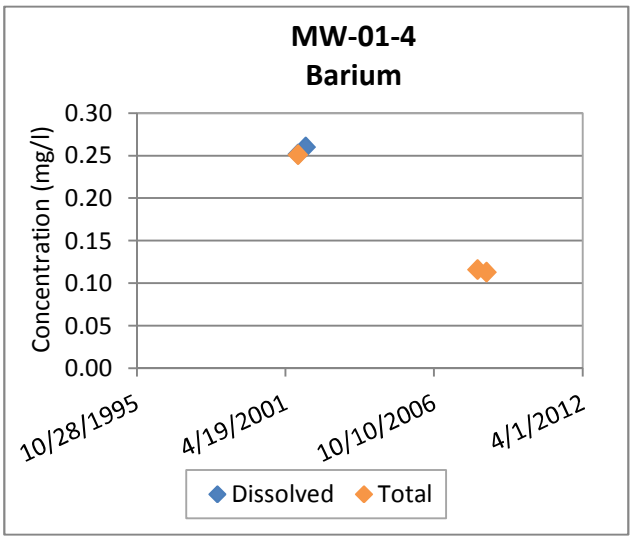
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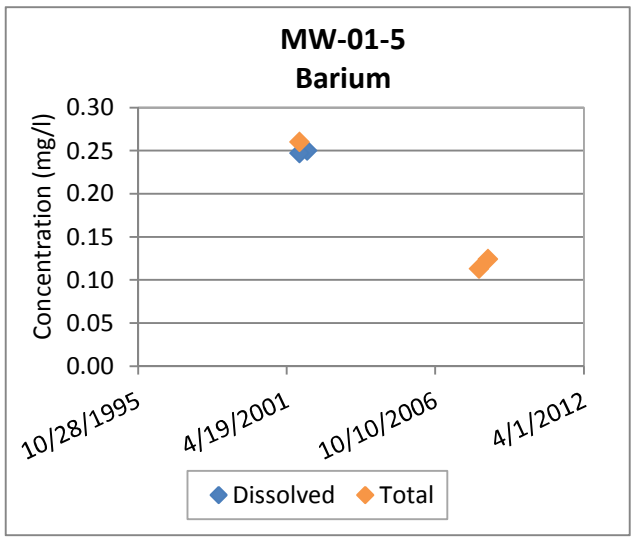
Figure 5.3-40g
Time Series Plots - Barium
Groundwater Quality
Rhodia Silver Bow Plant











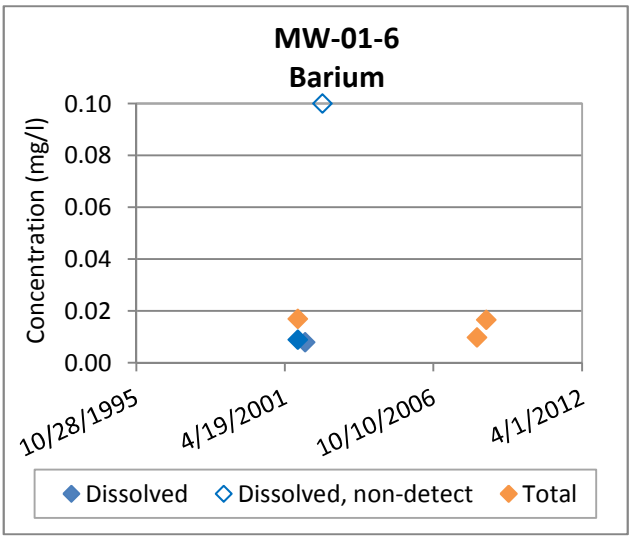
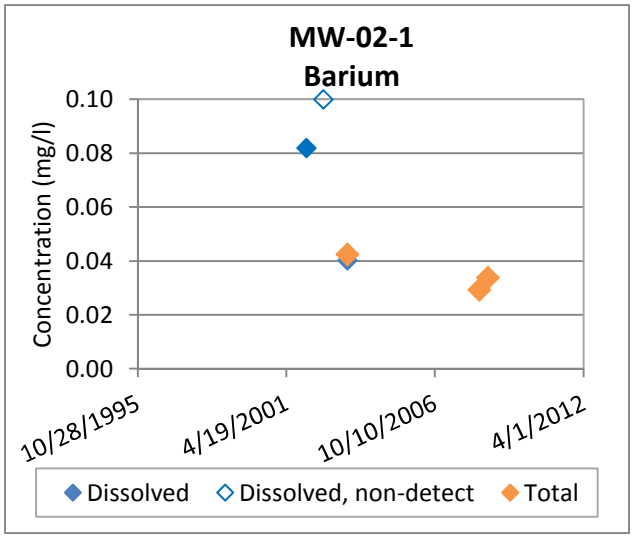
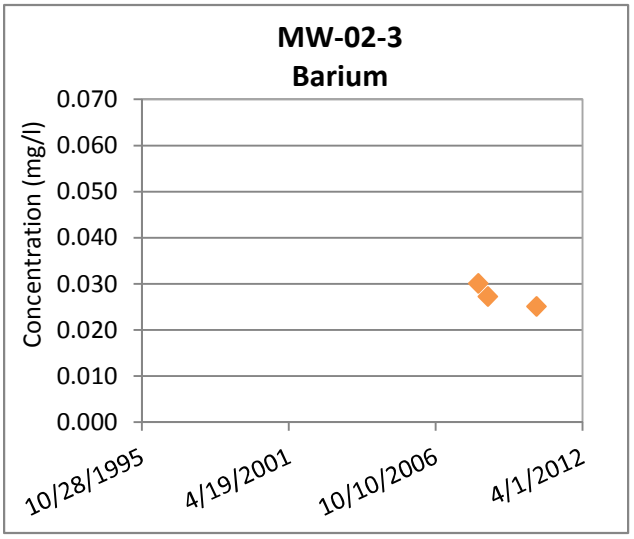
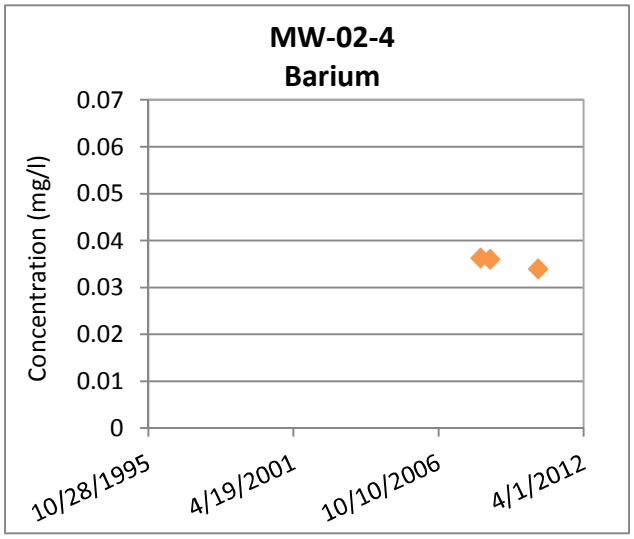
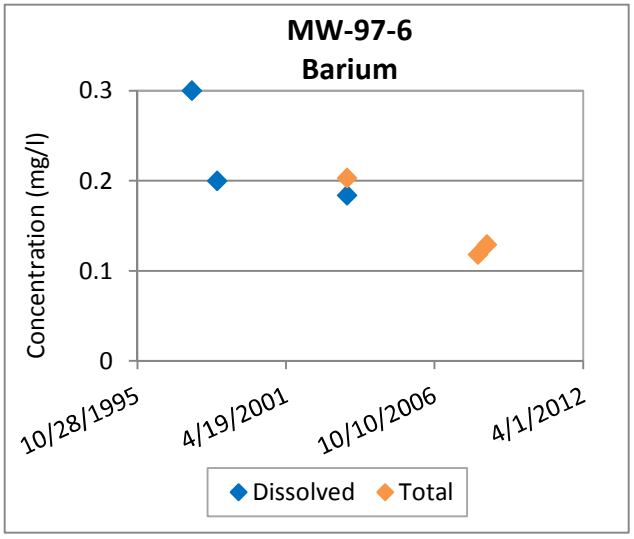


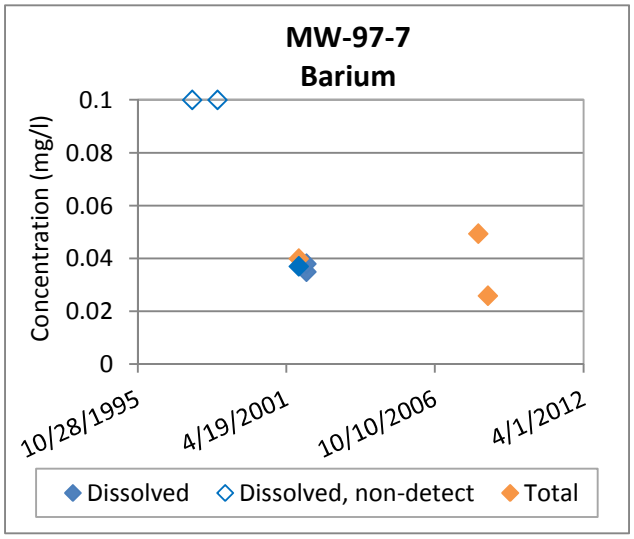
Figure 5.3-40g
Time Series Plots - Barium
Groundwater Quality
Rhodia Silver Bow Plant











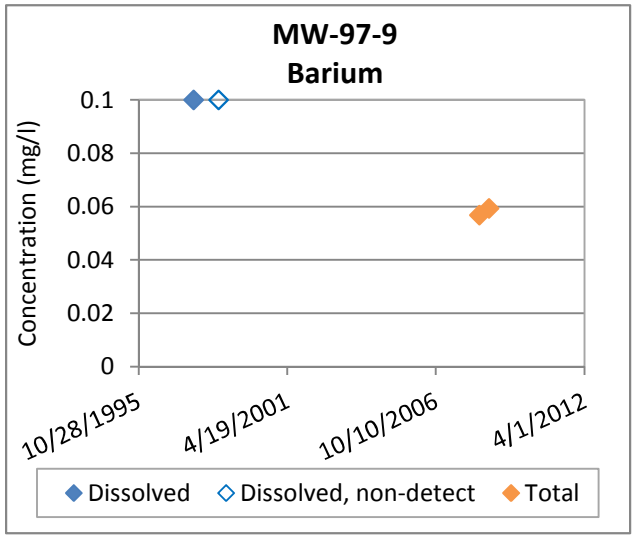
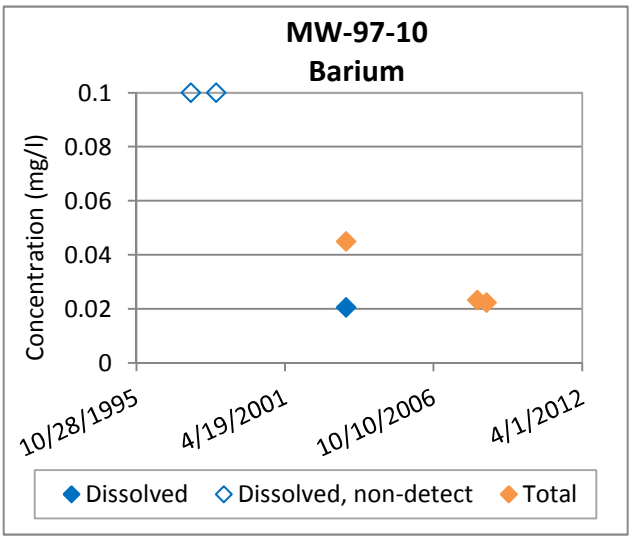


Figure 5.3-40g
Time Series Plots - Barium
Groundwater Quality
Rhodia Silver Bow Plant



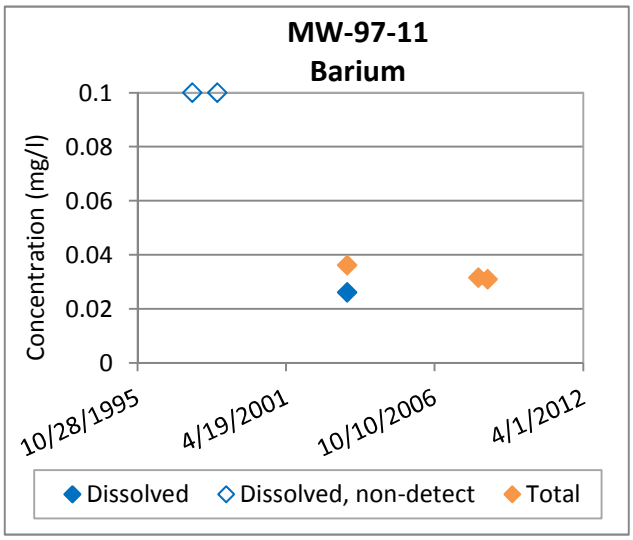
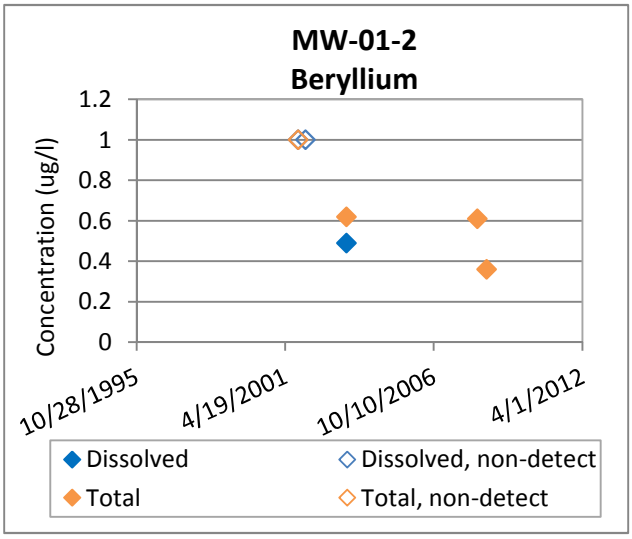
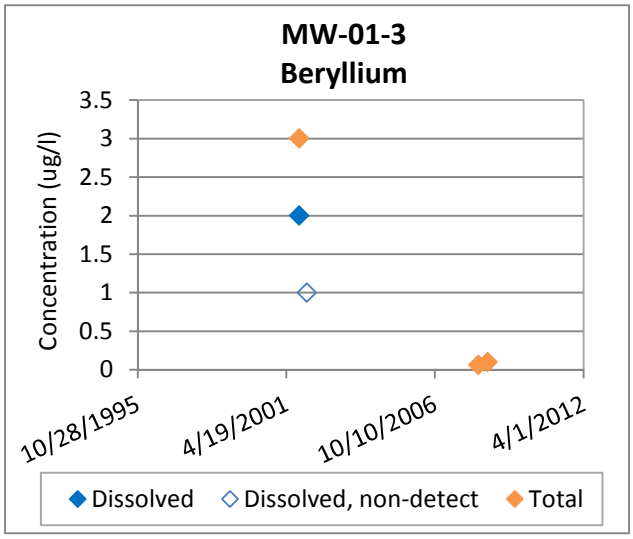


Figure 5.3-40h
Time Series Plots - Beryllium
Groundwater Quality
Rhodia Silver Bow Plant





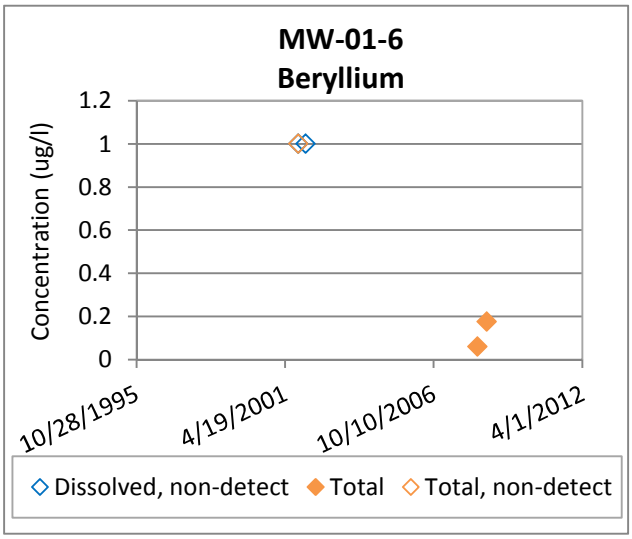
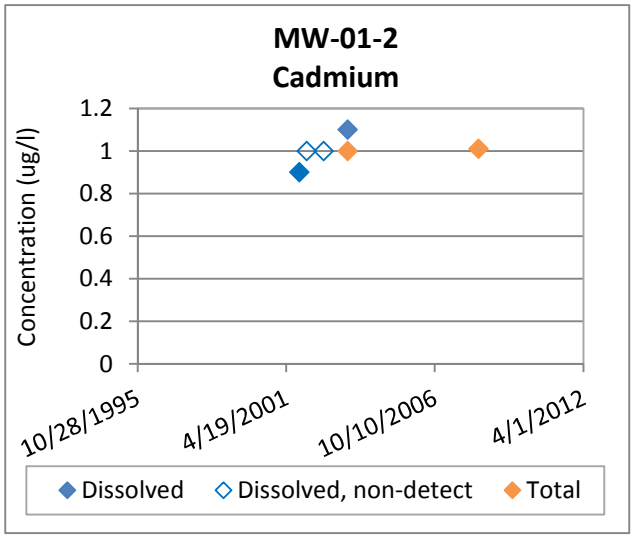
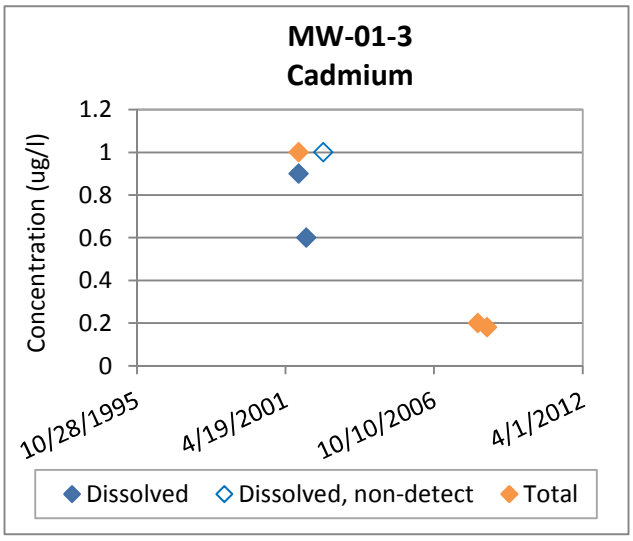
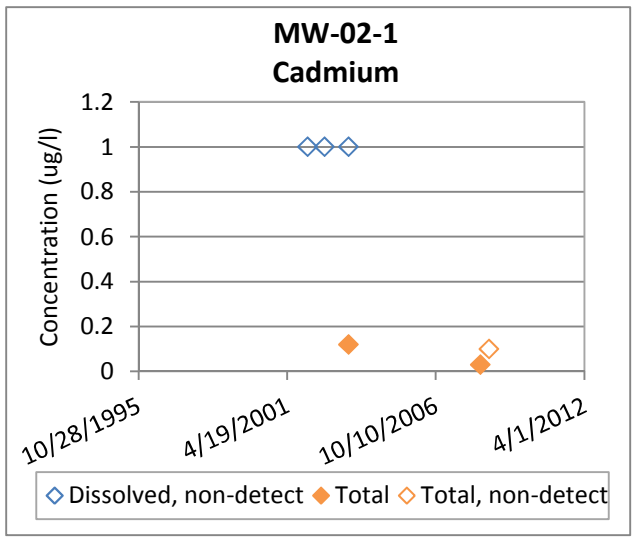
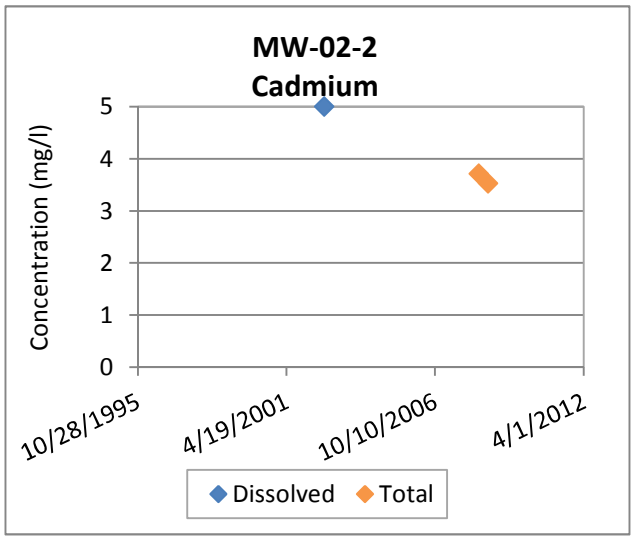


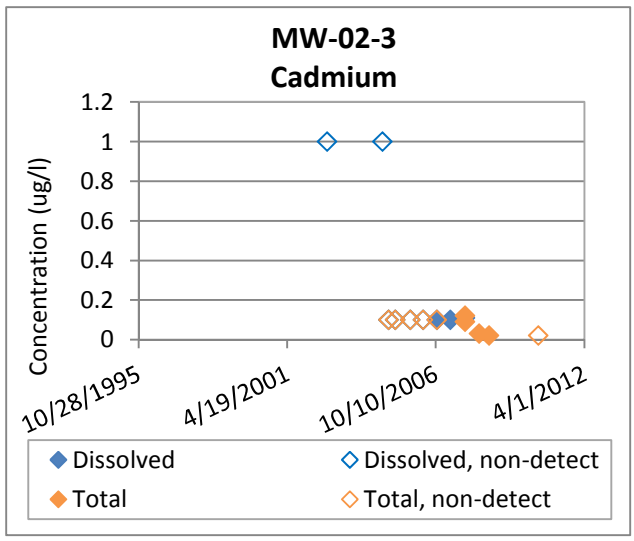
Figure 5.3-40i
Time Series Plots - Cadmium
Groundwater Quality
Rhodia Silver Bow Plant











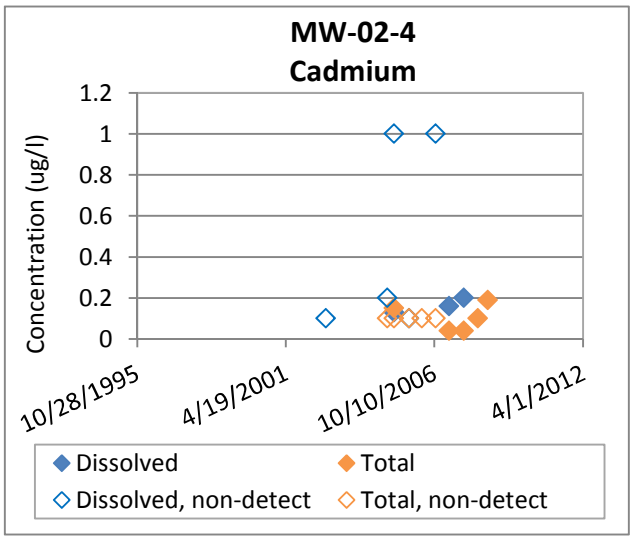
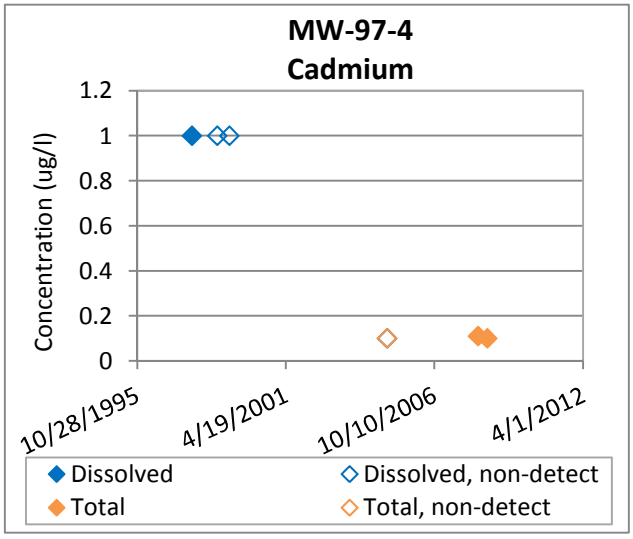
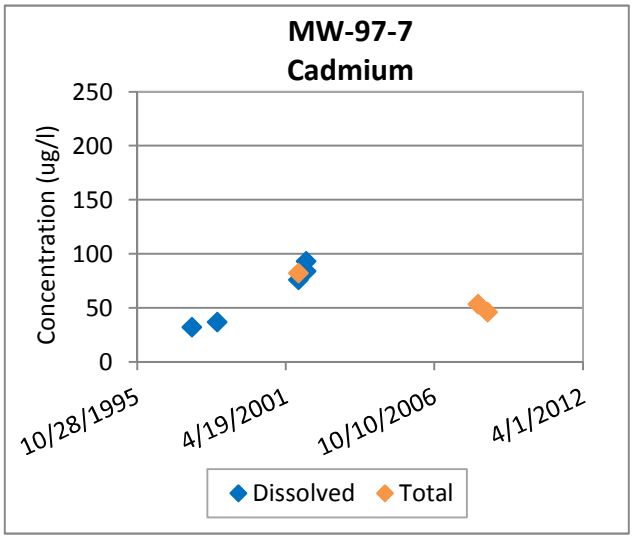
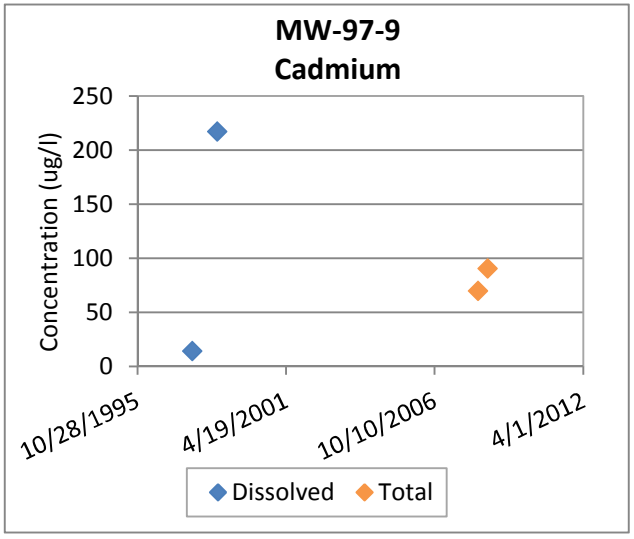
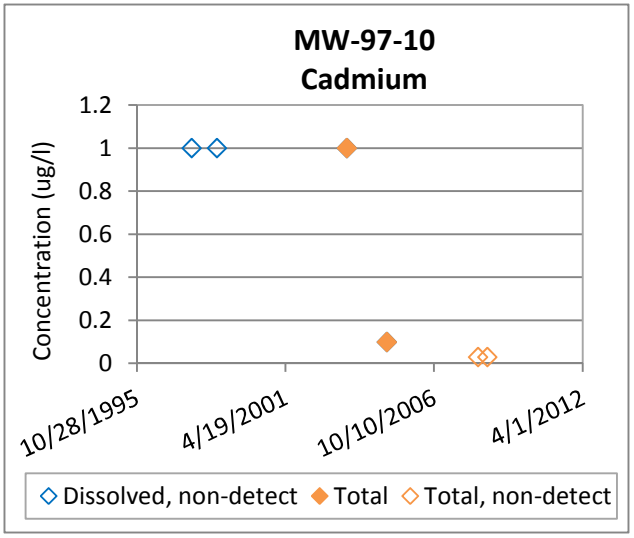


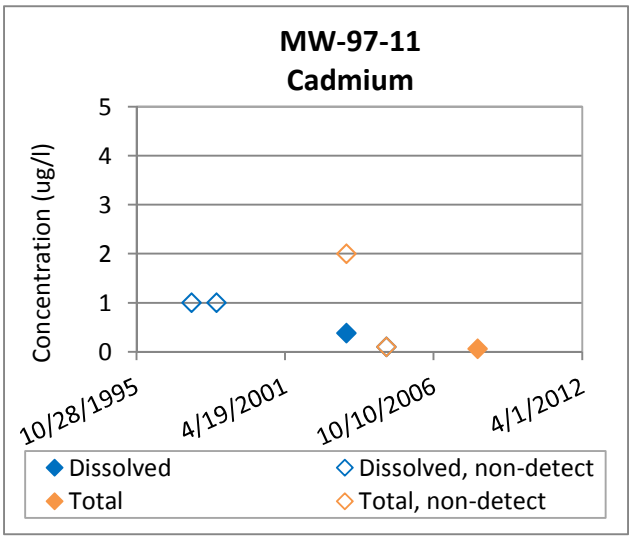
Figure 5.3-40i
Time Series Plots - Cadmium
Groundwater Quality
Rhodia Silver Bow Plant

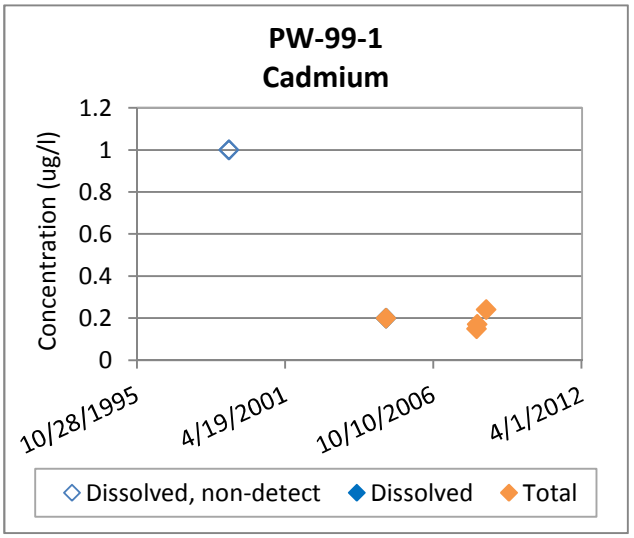






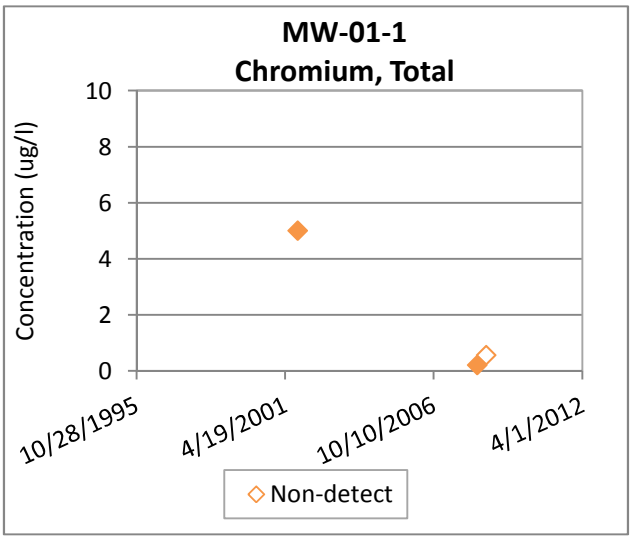


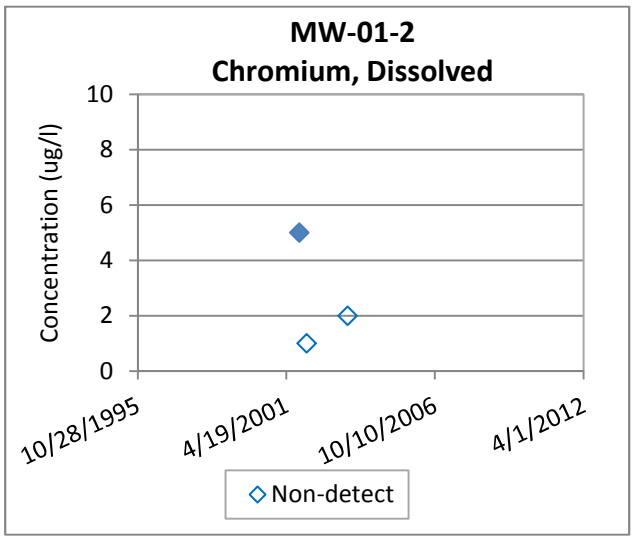


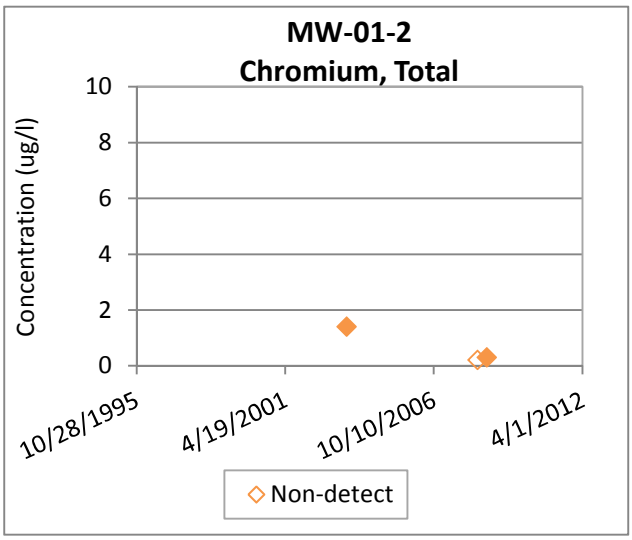


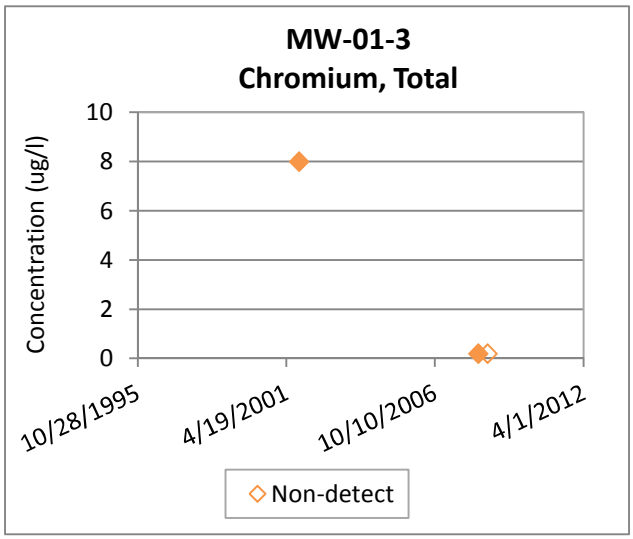
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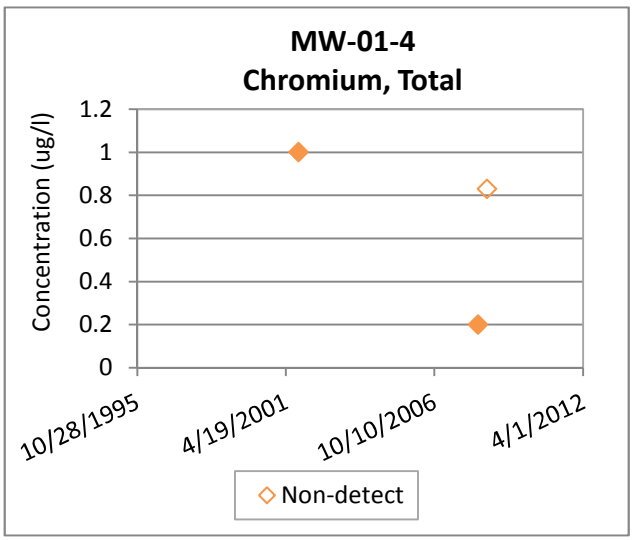
Figure 5.3-40j
Time Series Plots - Chromium
Groundwater Quality
Rhodia Silver Bow Plant











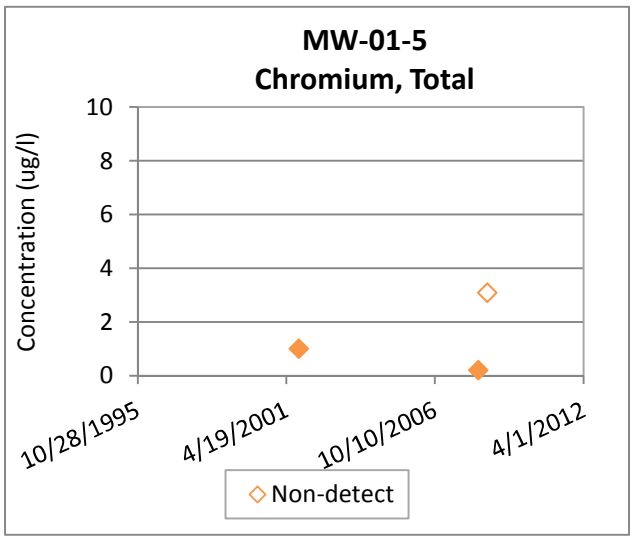
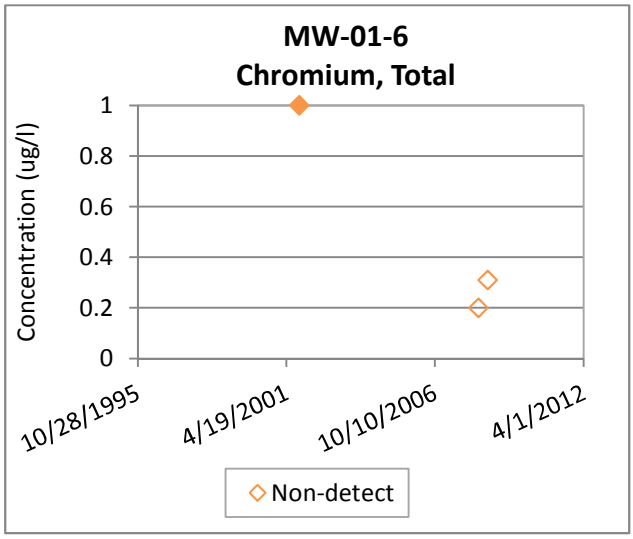
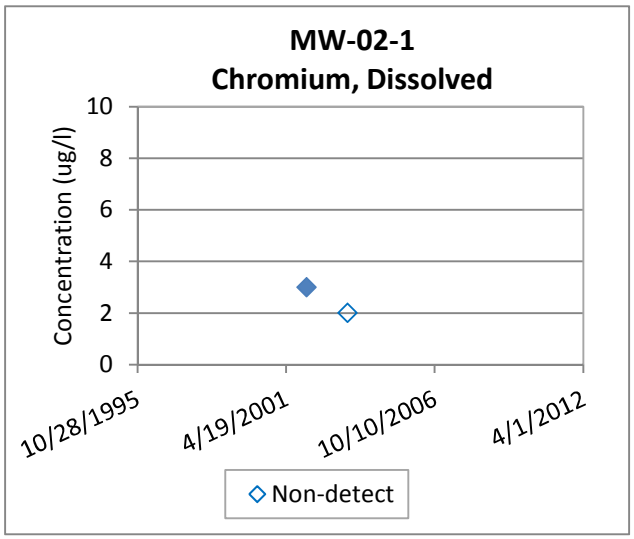
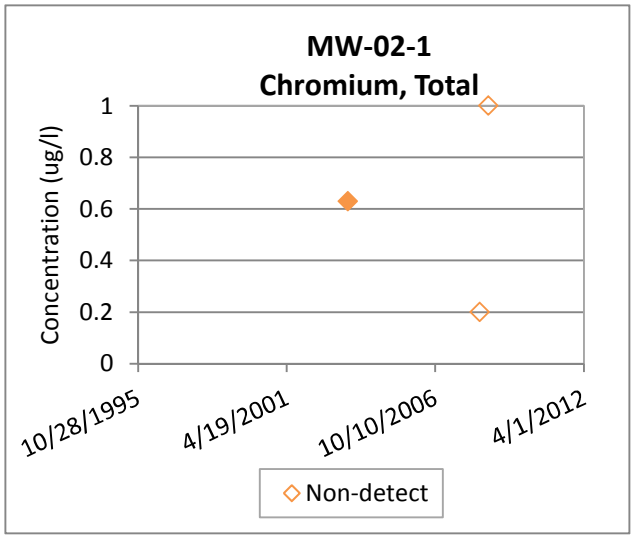
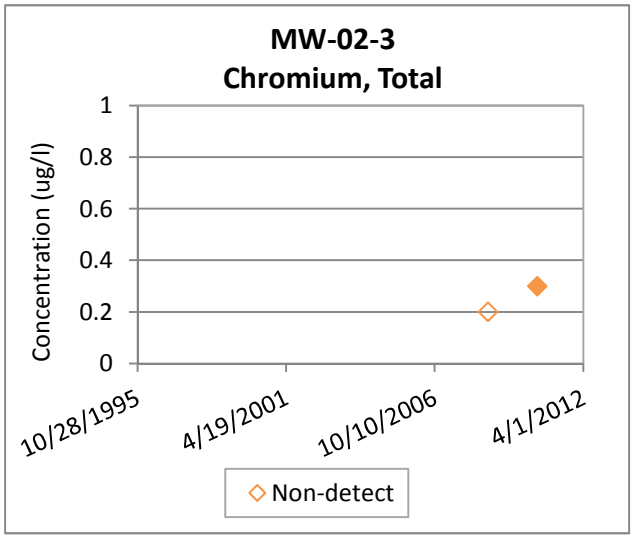


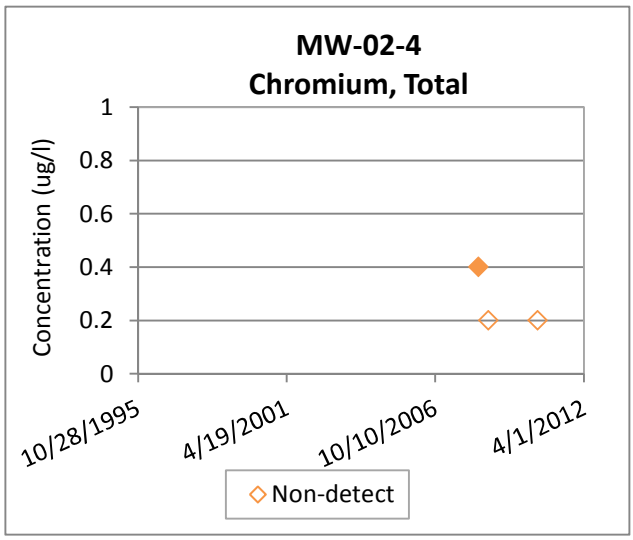
Figure 5.3-40j
Time Series Plots - Chromium
Groundwater Quality
Rhodia Silver Bow Plant











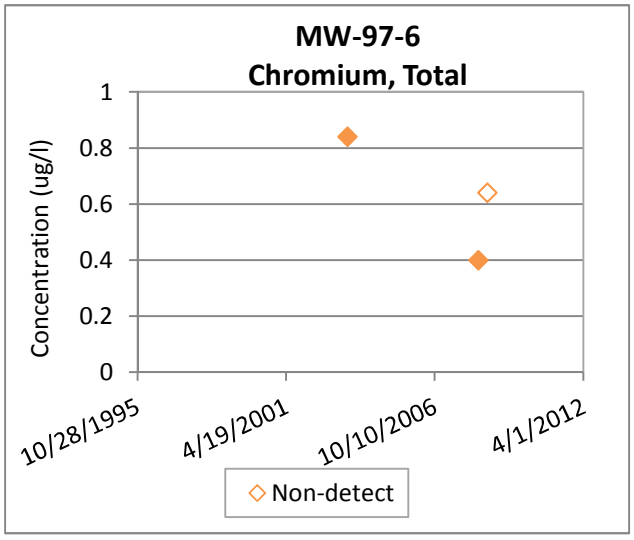


Figure 5.3-40j
Time Series Plots - Chromium
Groundwater Quality
Rhodia Silver Bow Plant

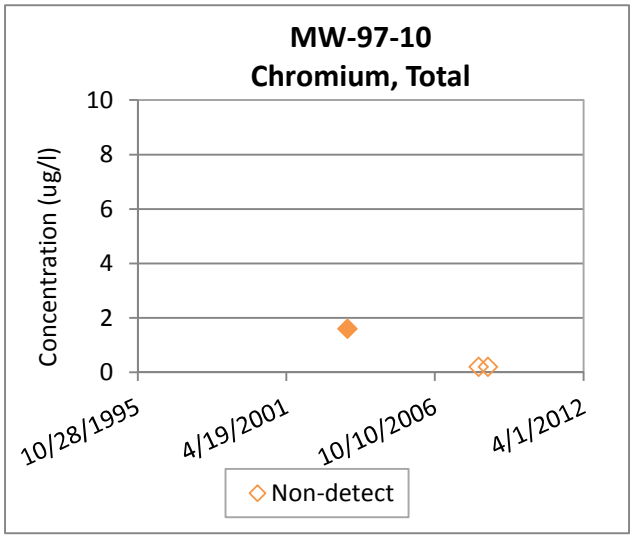
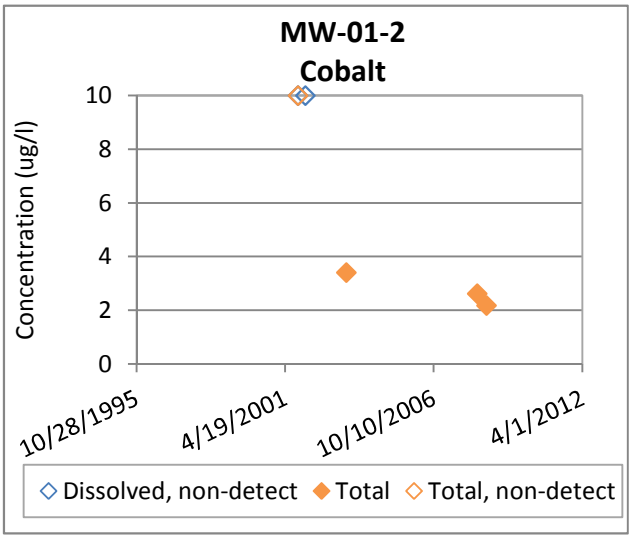
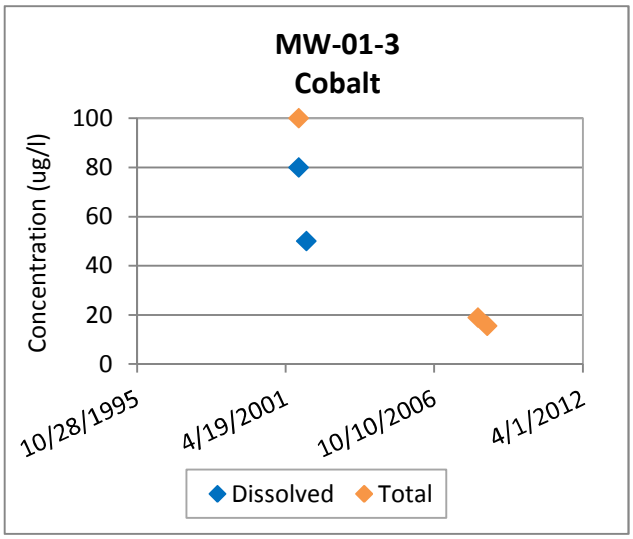
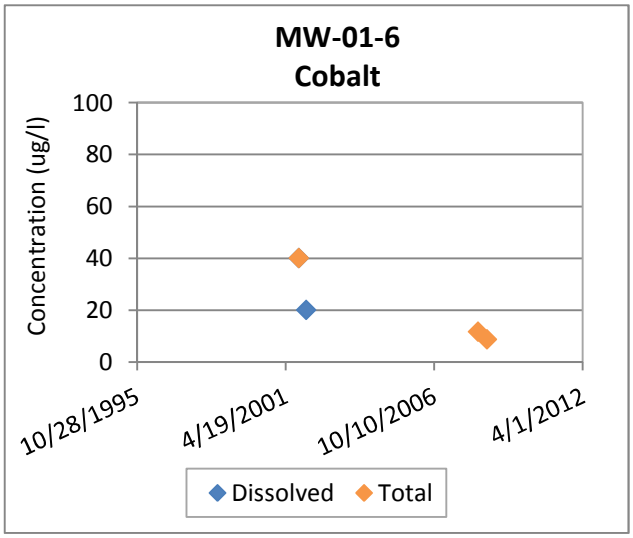
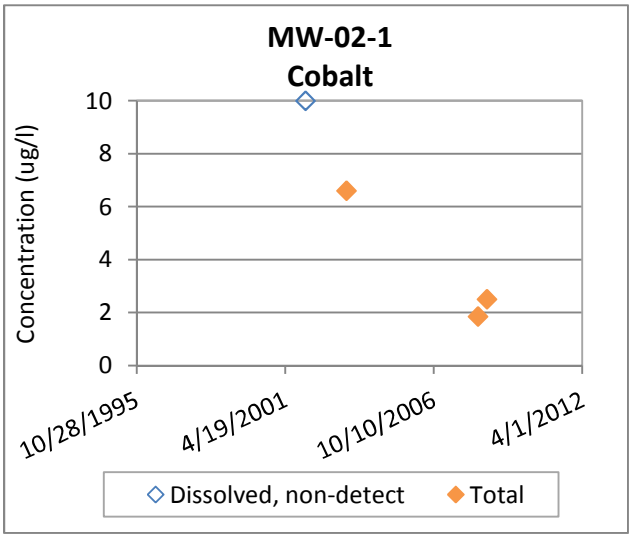


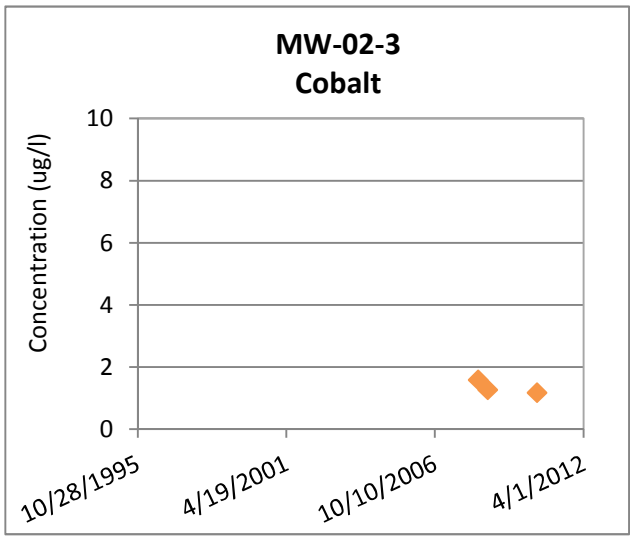
Figure 5.3-40k
Time Series Plots - Cobalt
Groundwater Quality
Rhodia Silver Bow Plant

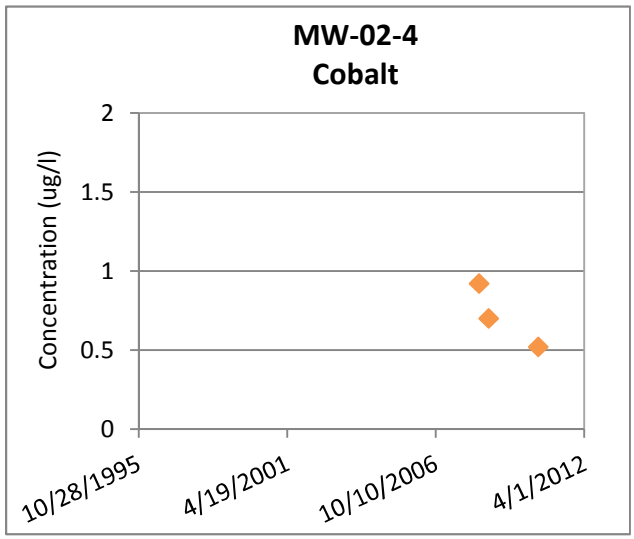






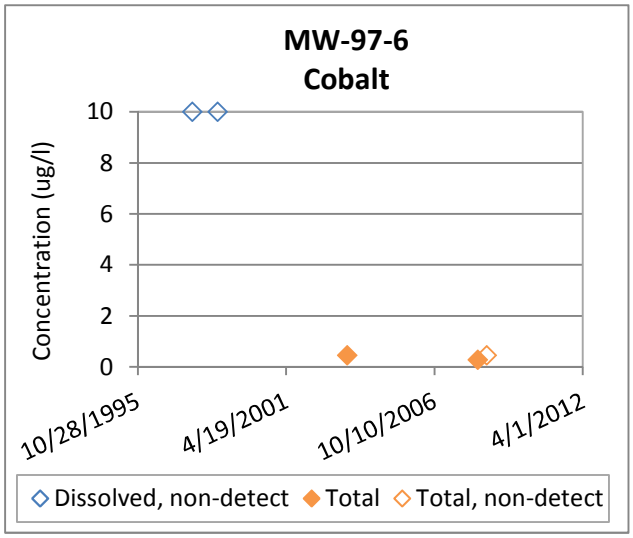


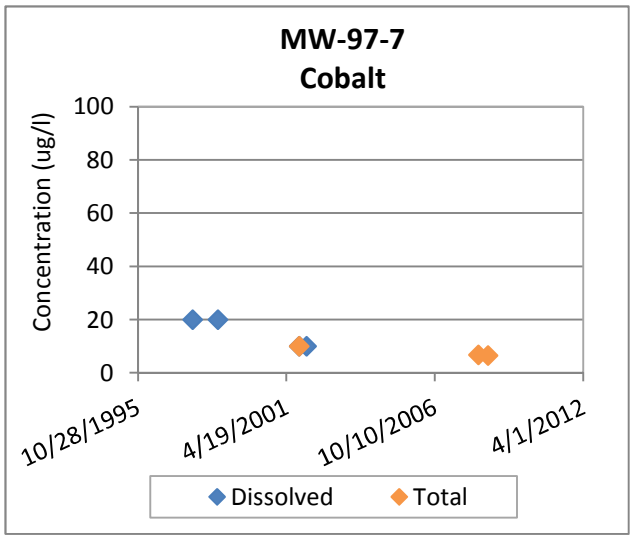


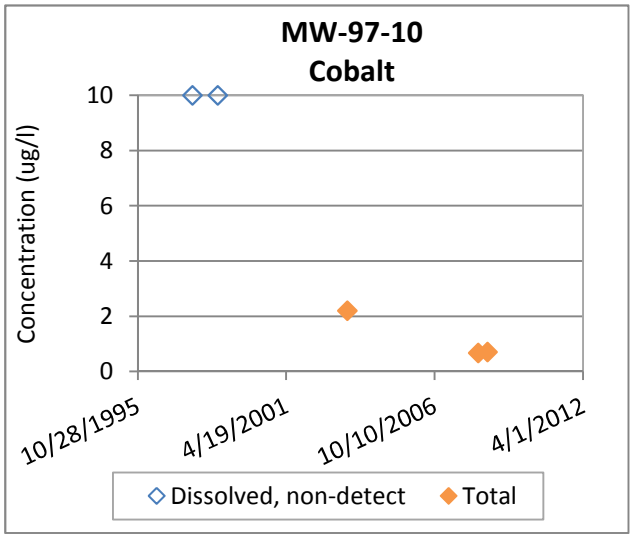


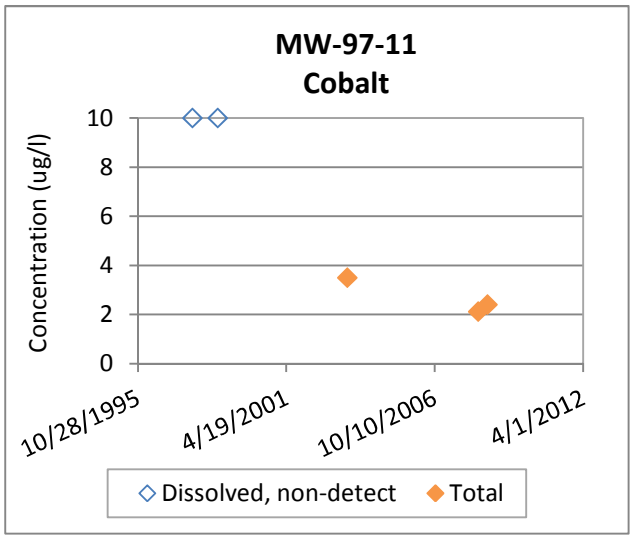
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Figure 5.3-40k
Time Series Plots - Cobalt
Groundwater Quality
Rhodia Silver Bow Plant



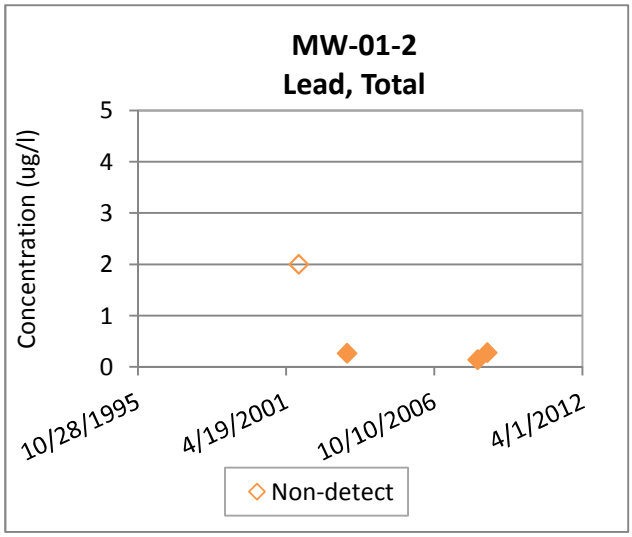


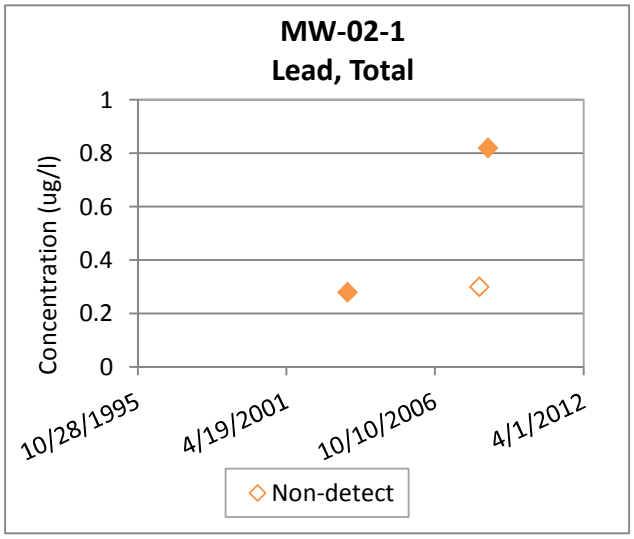


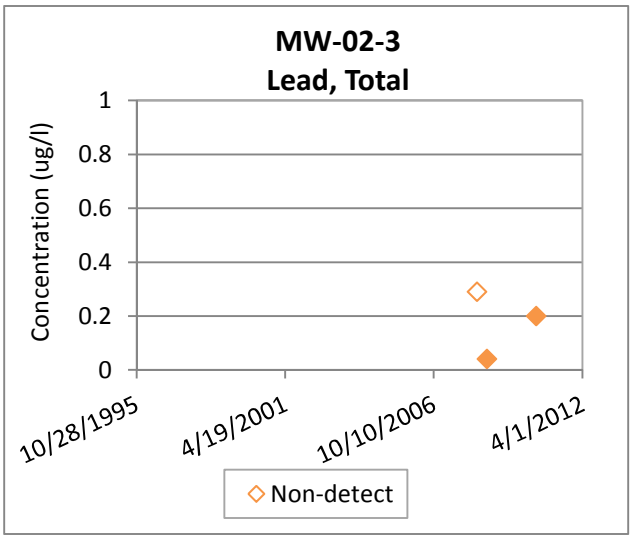


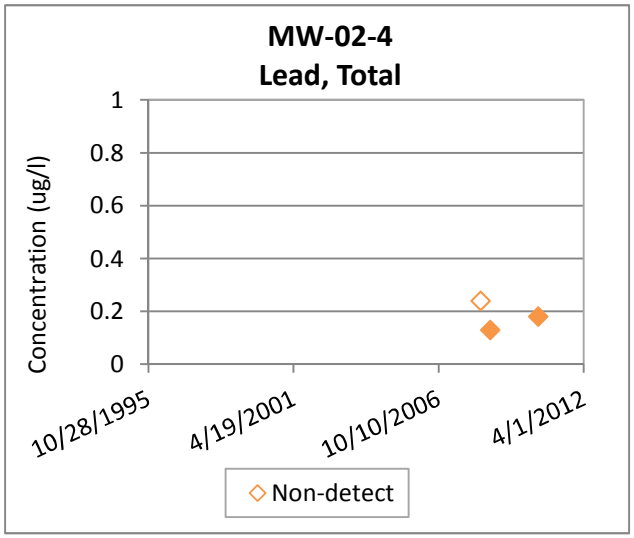
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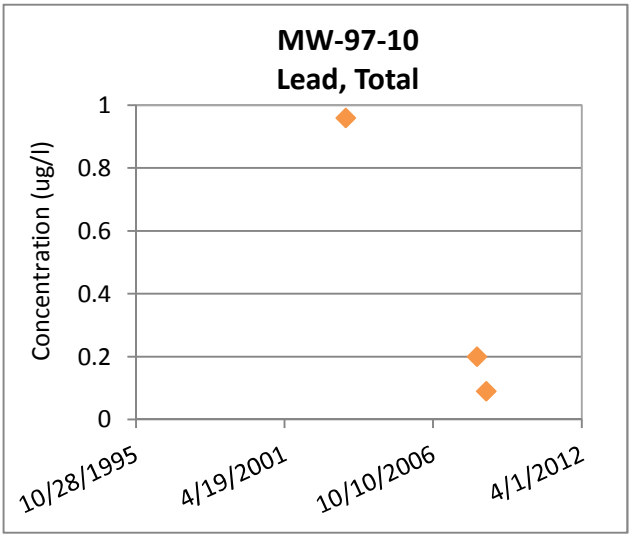
Figure 5.3-40l
Time Series Plots - Lead
Groundwater Quality
Rhodia Silver Bow Plant

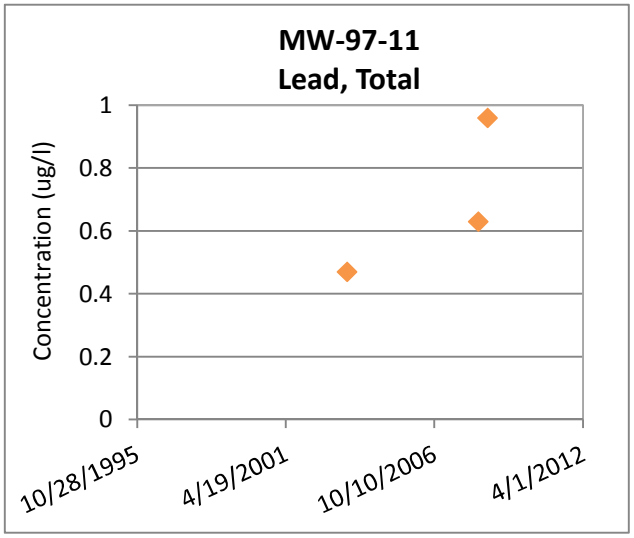






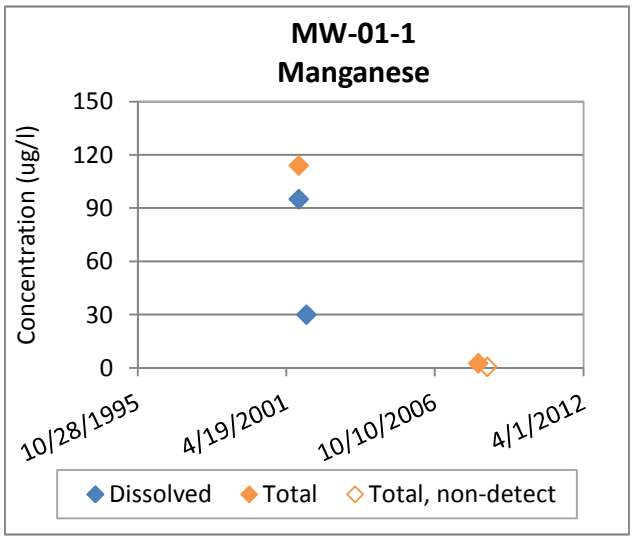


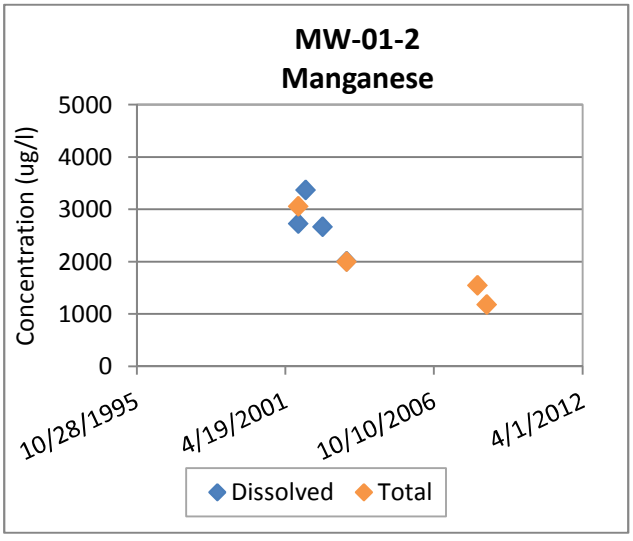


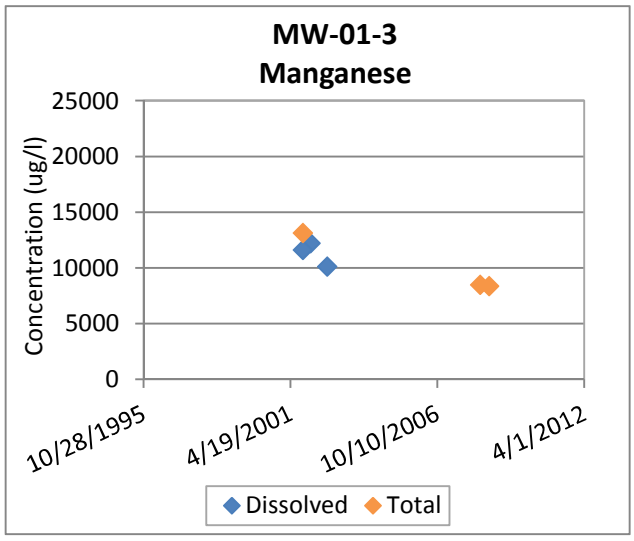


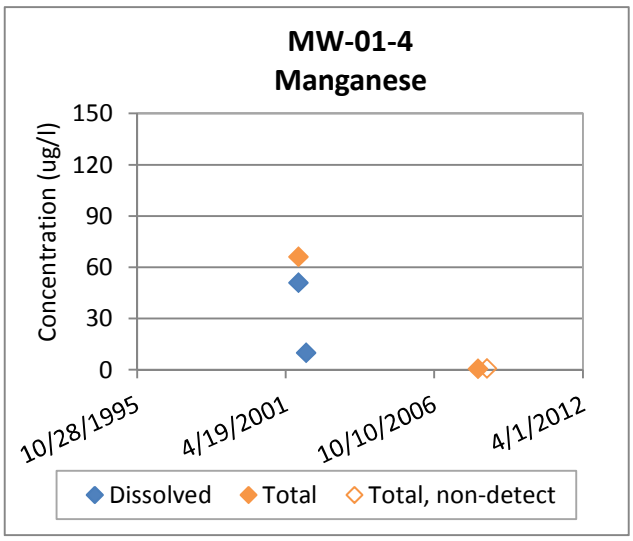
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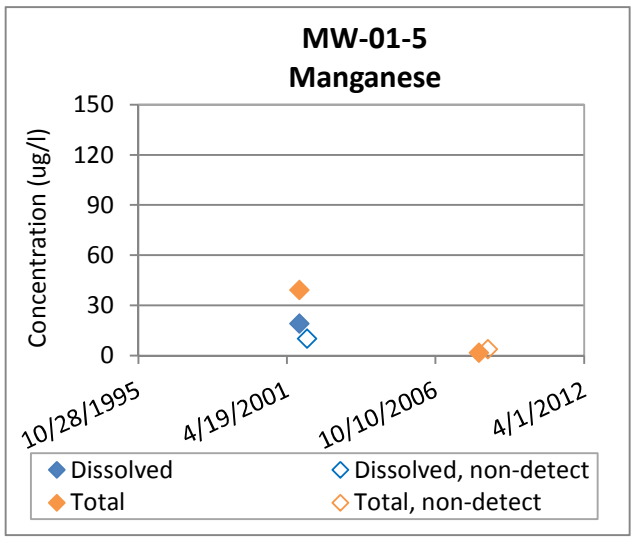
Figure 5.3-40m
Time Series Plots -Manganese
Groundwater Quality
Rhodia Silver Bow Plant











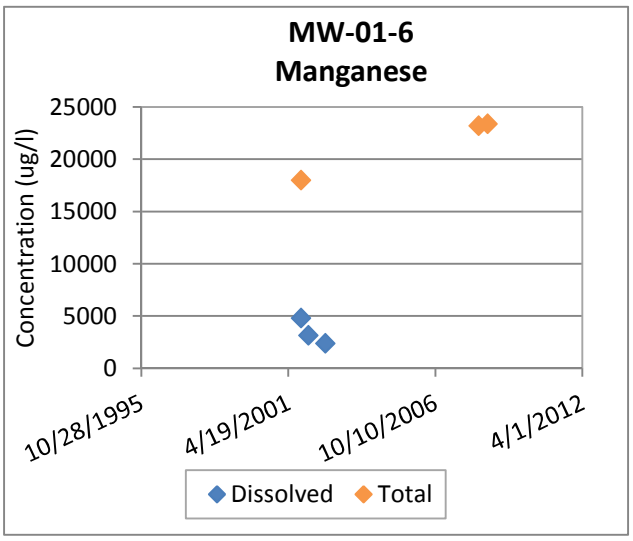
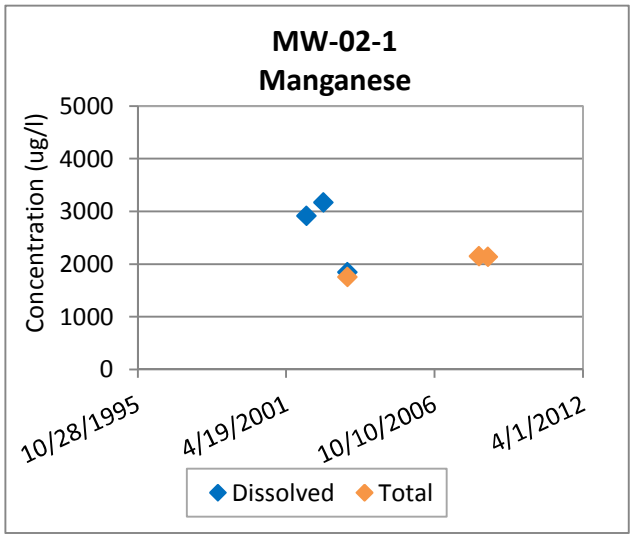
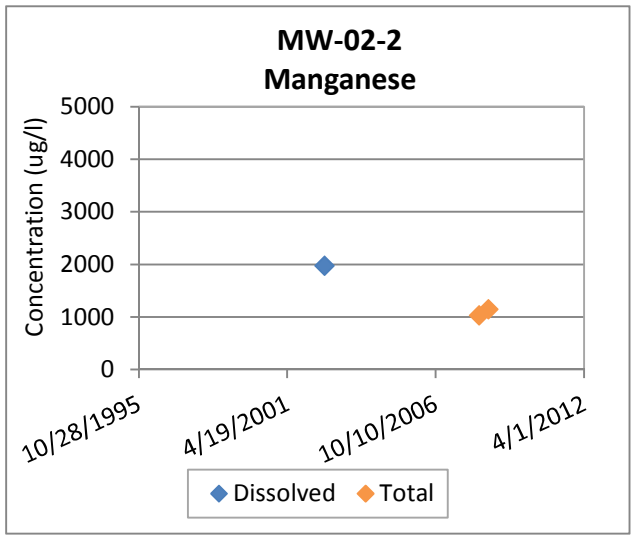
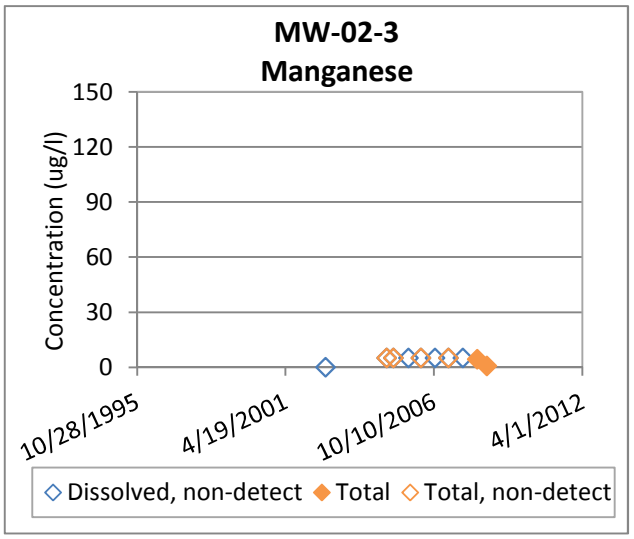
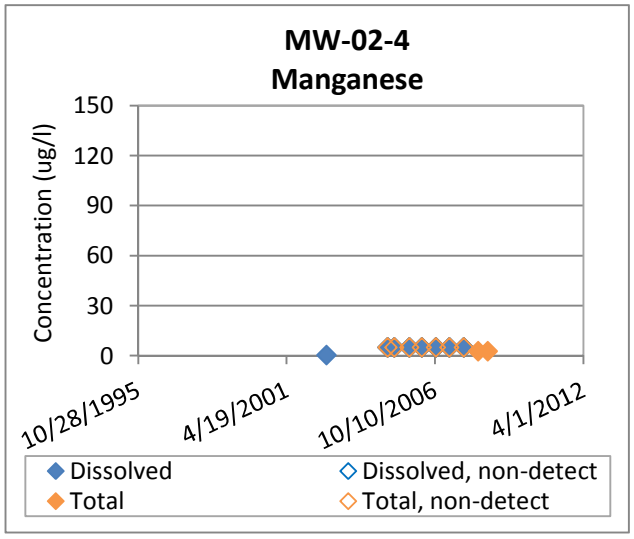


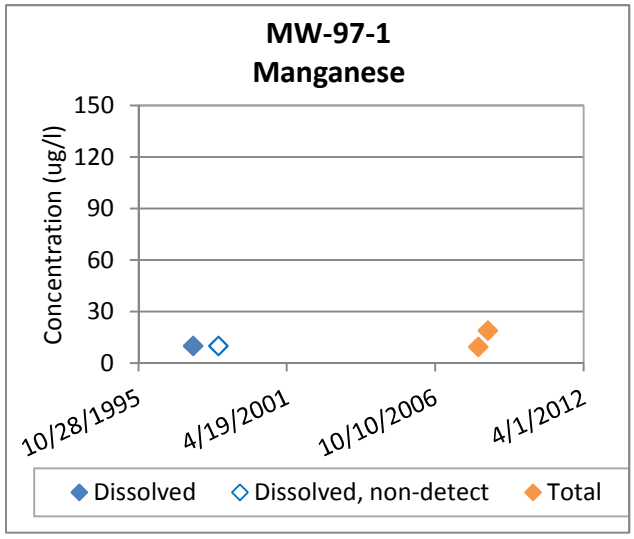
Figure 5.3-40m
Time Series Plots -Manganese
Groundwater Quality
Rhodia Silver Bow Plant











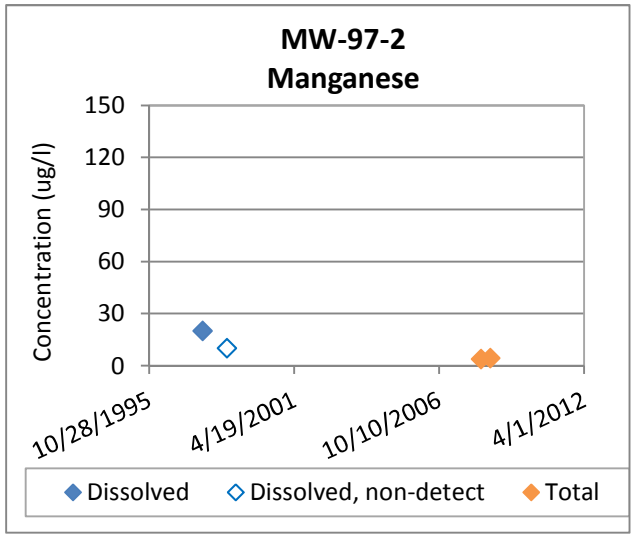
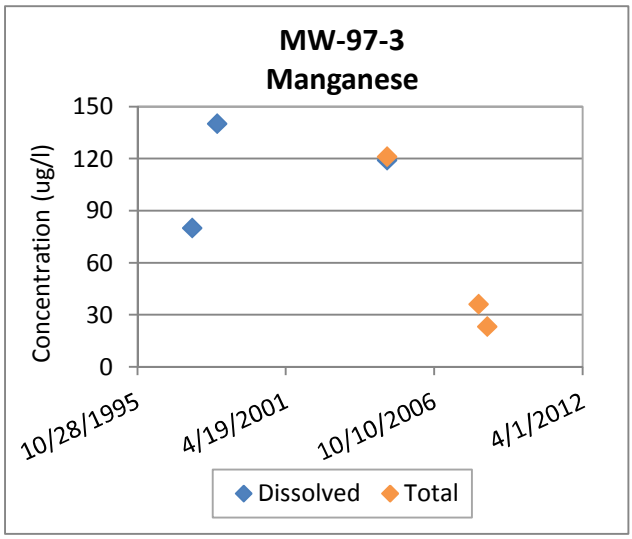
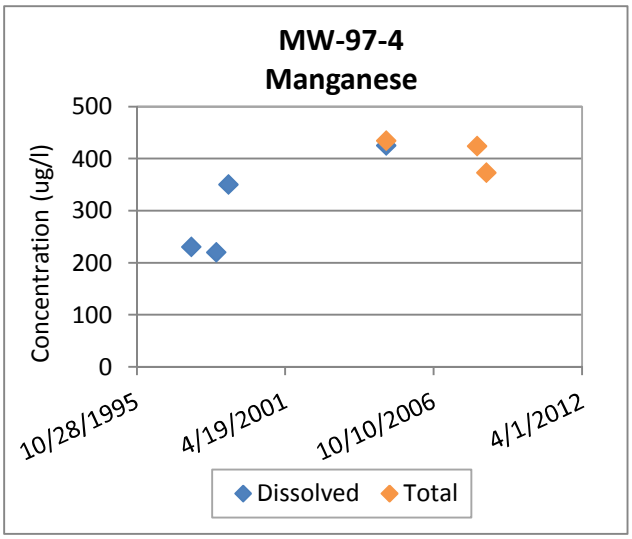
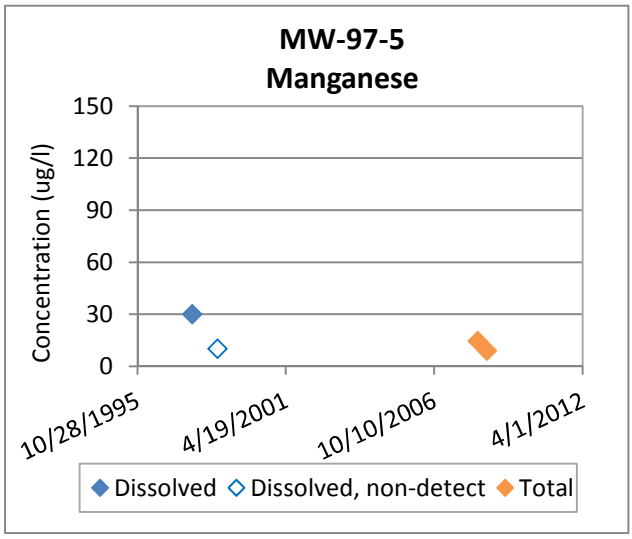
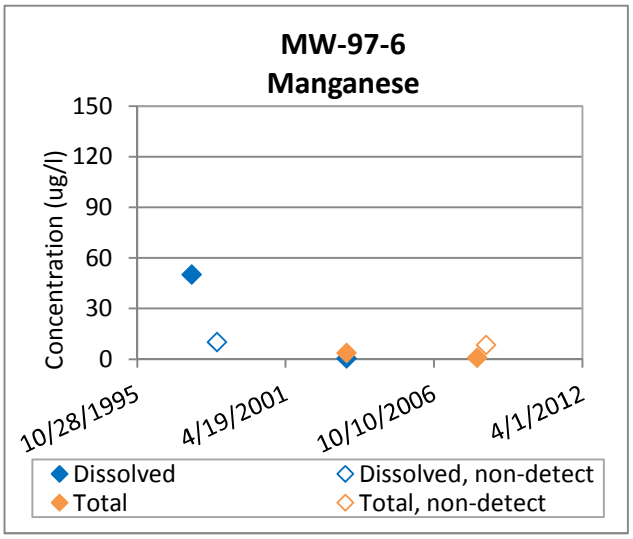


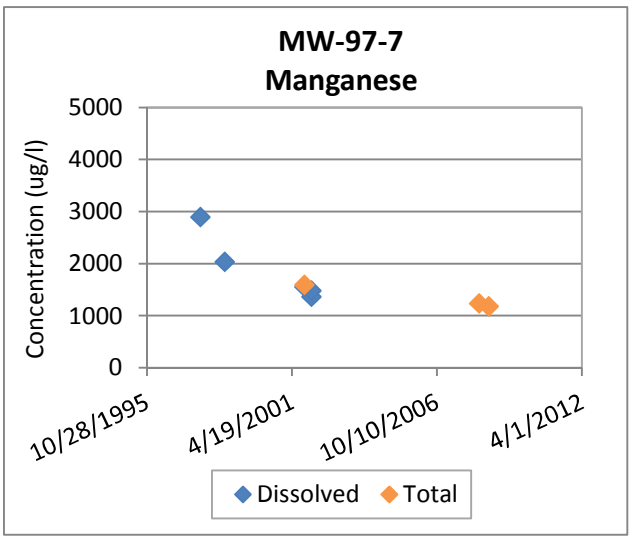
Figure 5.3-40m
Time Series Plots -Manganese
Groundwater Quality
Rhodia Silver Bow Plant

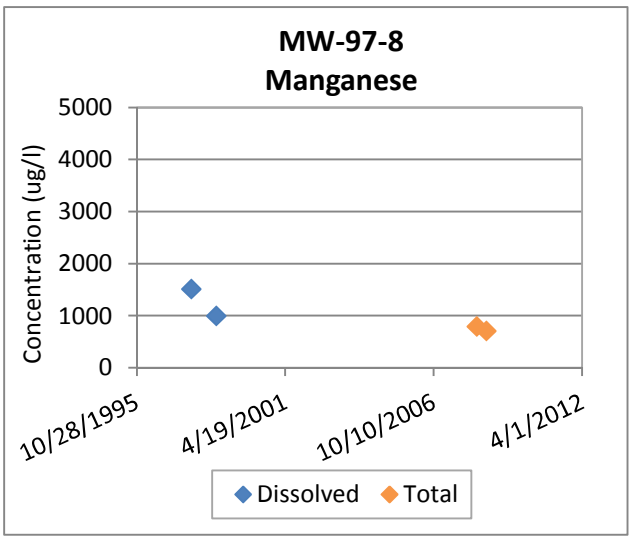






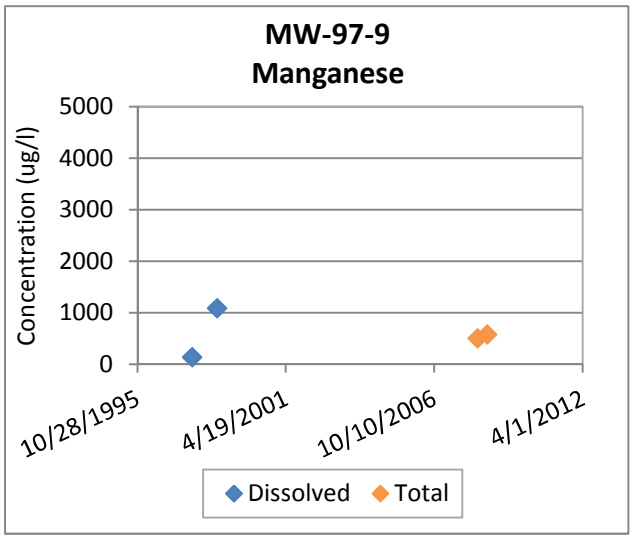


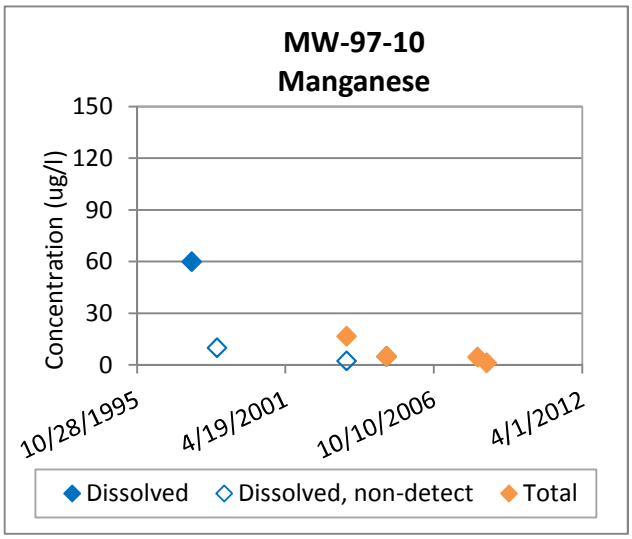


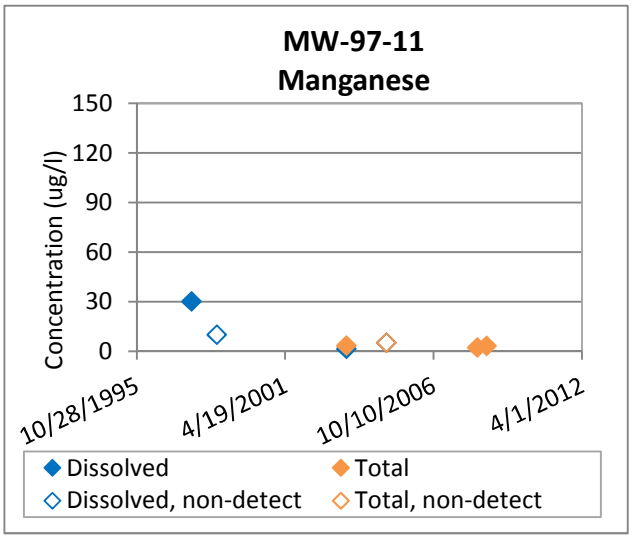


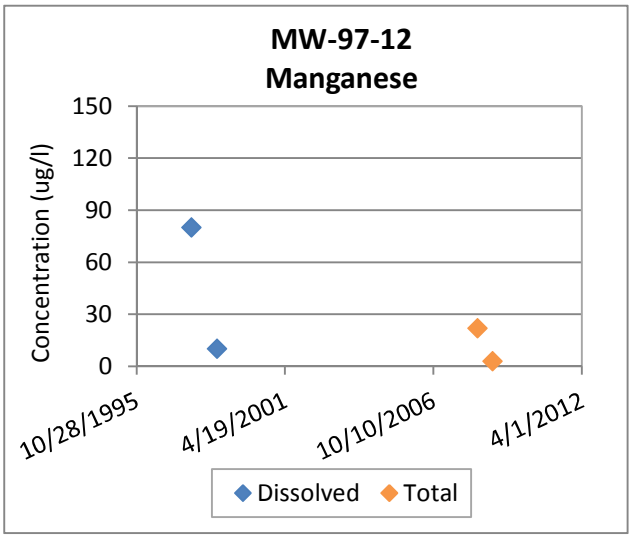
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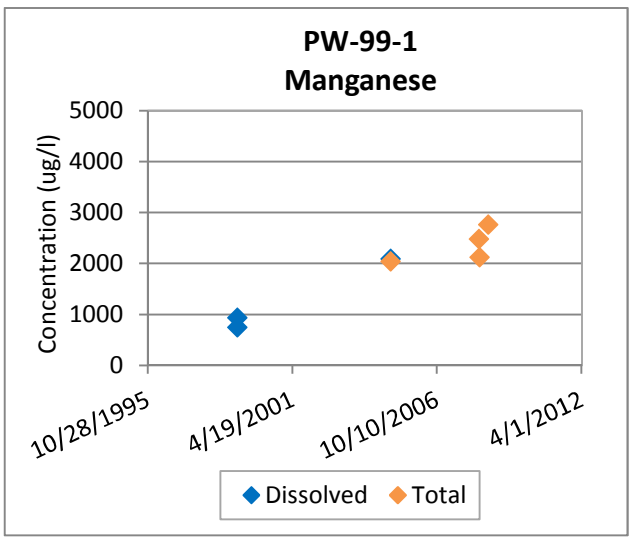
Figure 5.3-40m
Time Series Plots -Manganese
Groundwater Quality
Rhodia Silver Bow Plant

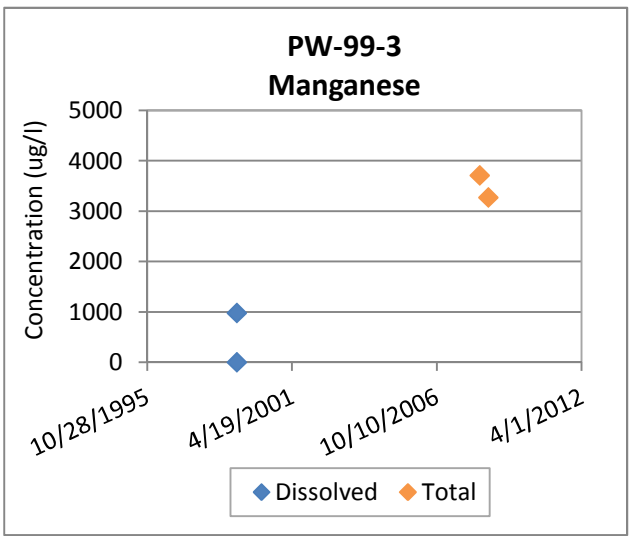






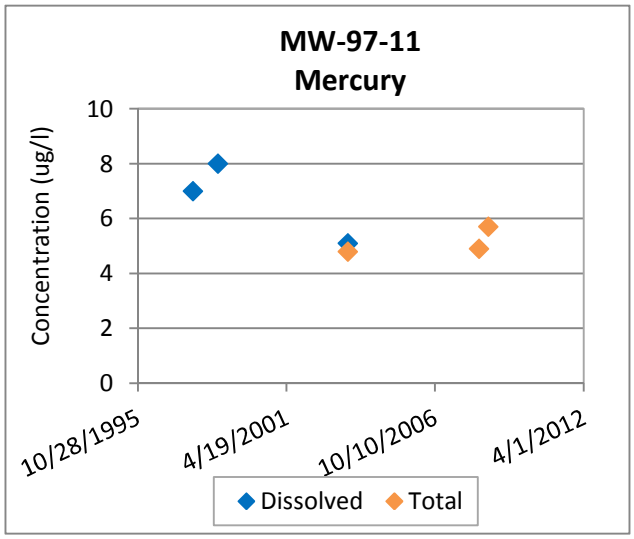






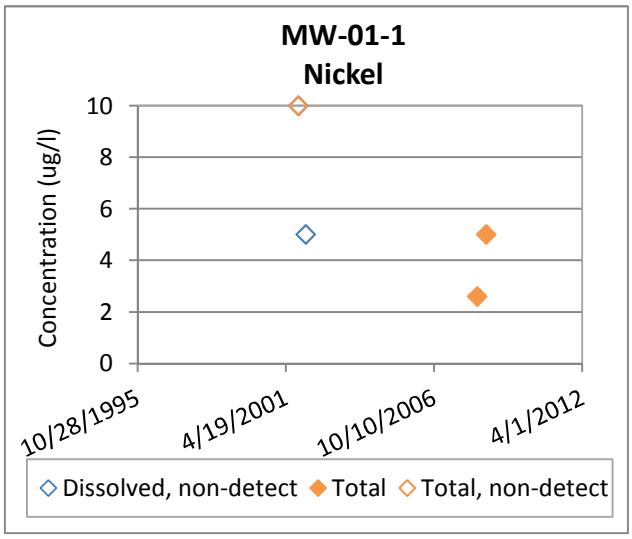
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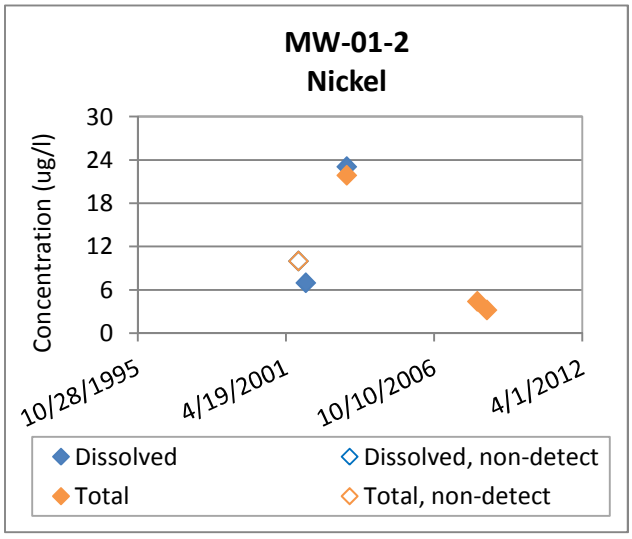
Figure 5.3-40n
Time Series Plots - Mercury
Groundwater Quality
Rhodia Silver Bow Plant

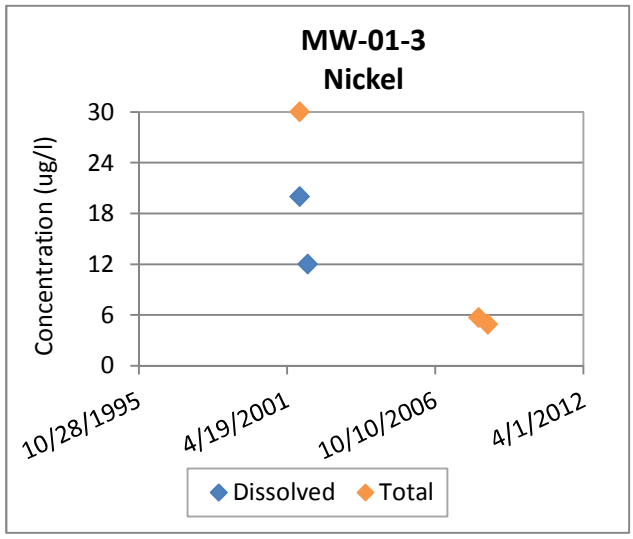


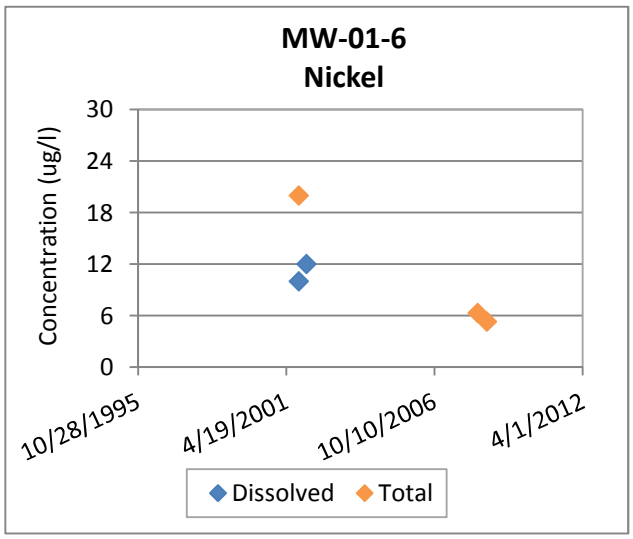
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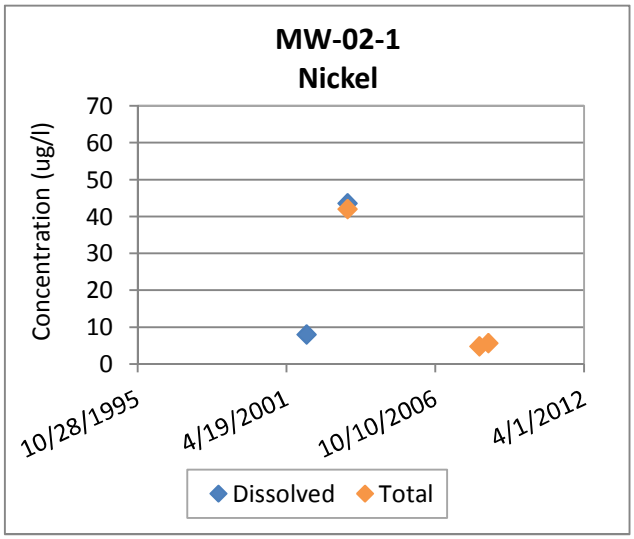
Figure 5.3-40o
Time Series Plots - Nickel
Groundwater Quality
Rhodia Silver Bow Plant

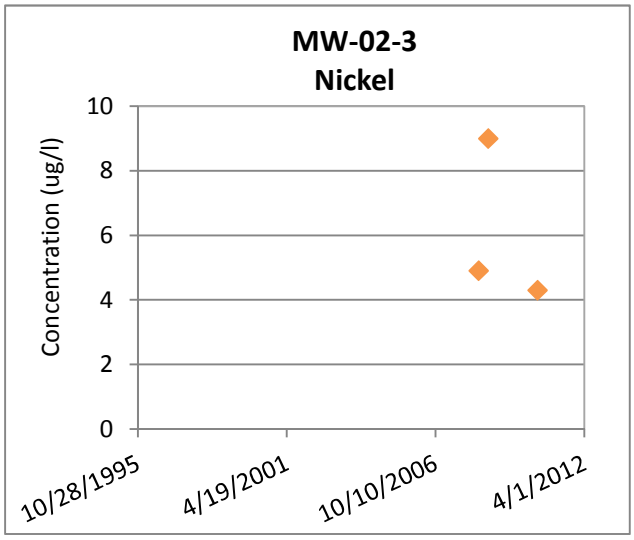






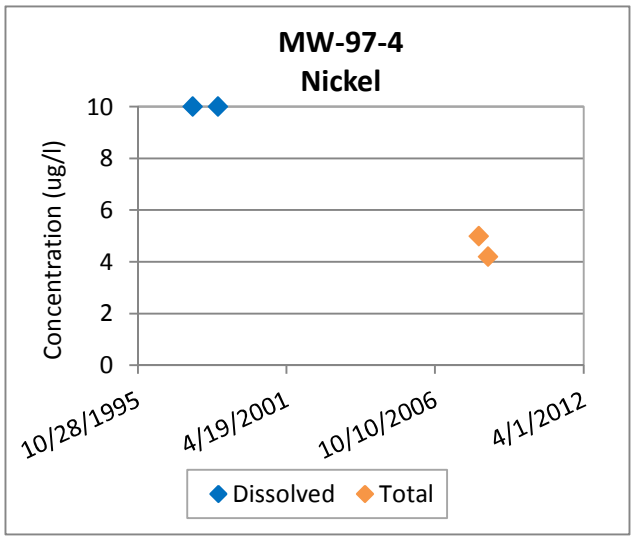


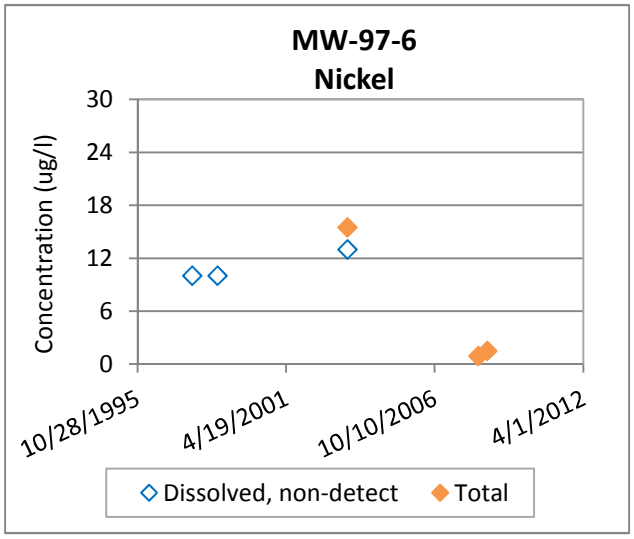


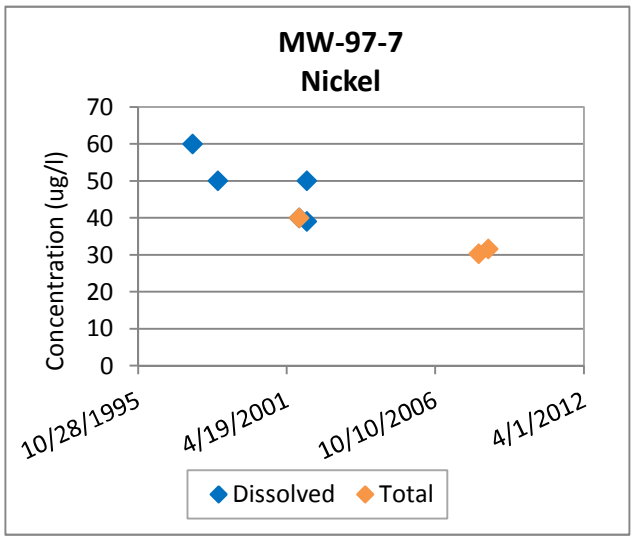


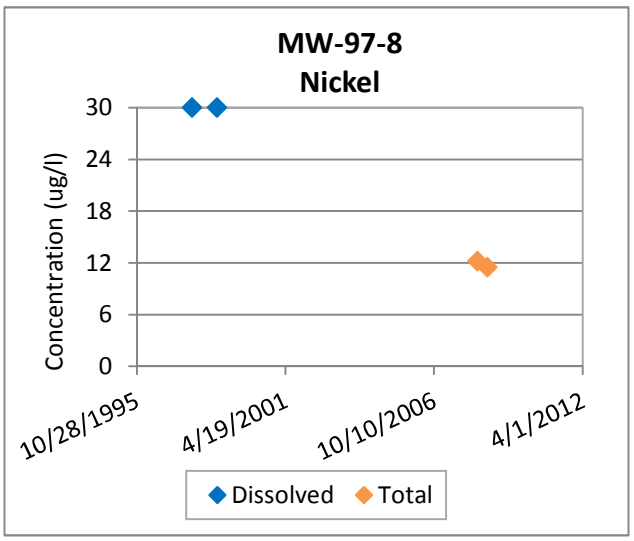
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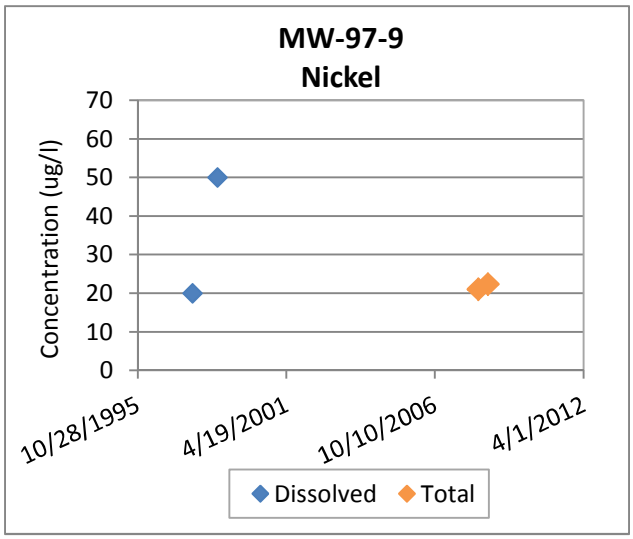
Figure 5.3-40o
Time Series Plots - Nickel
Groundwater Quality
Rhodia Silver Bow Plant

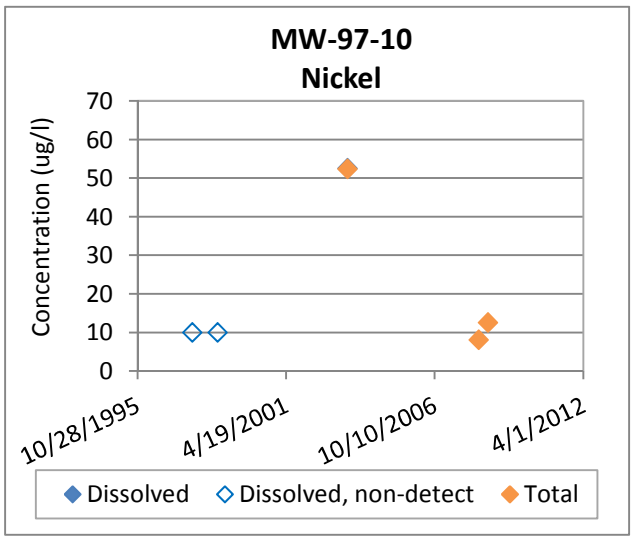












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Figure 5.3-40o
Time Series Plots - Nickel
Groundwater Quality
Rhodia Silver Bow Plant

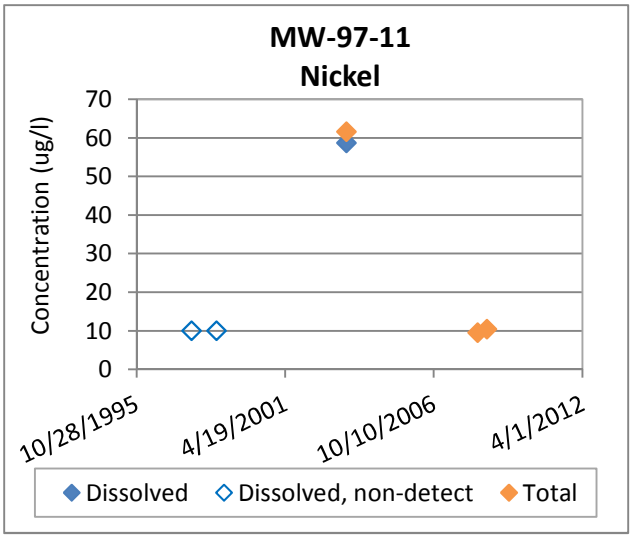
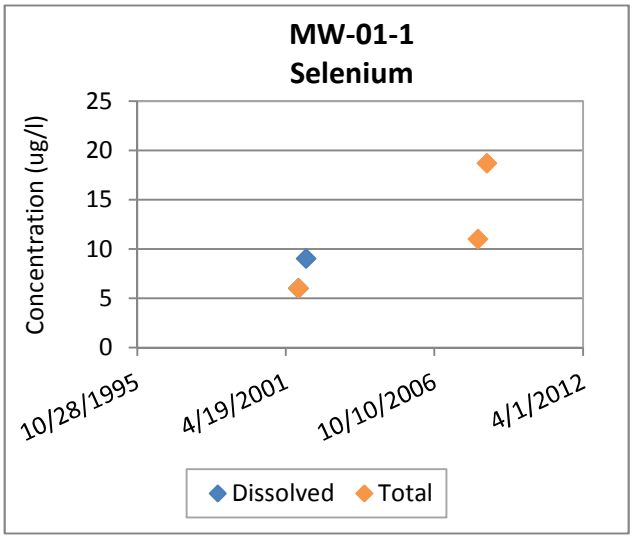
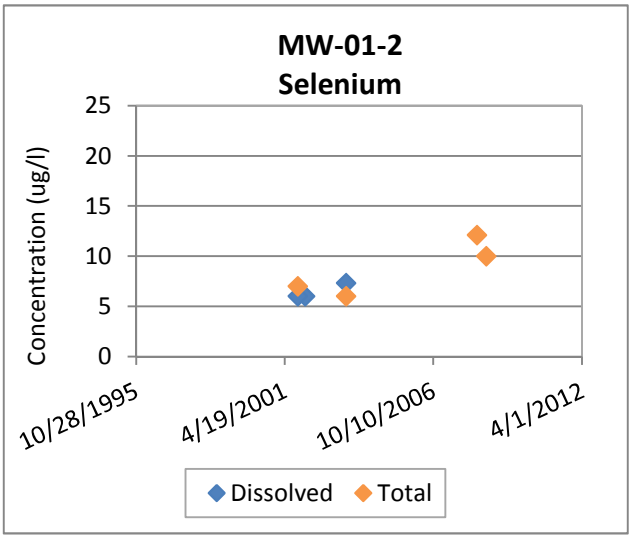
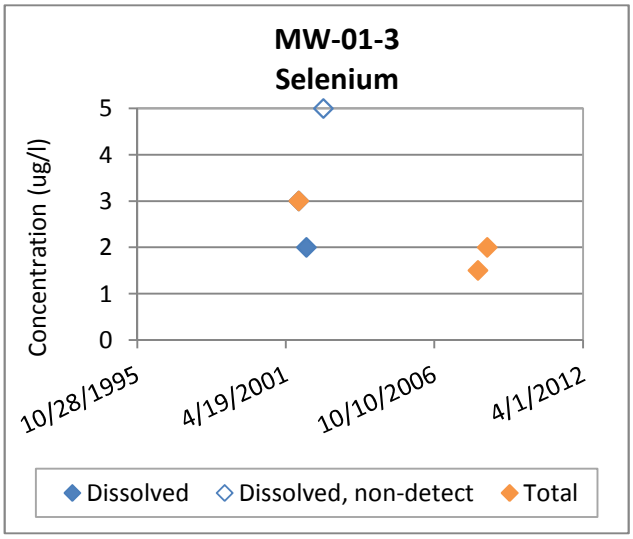
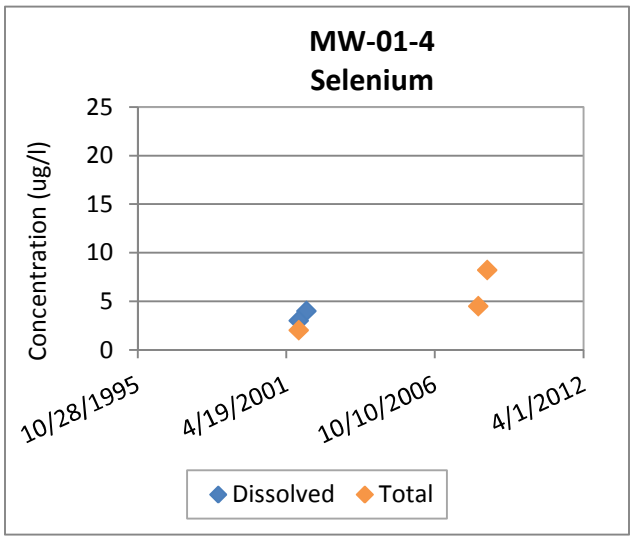


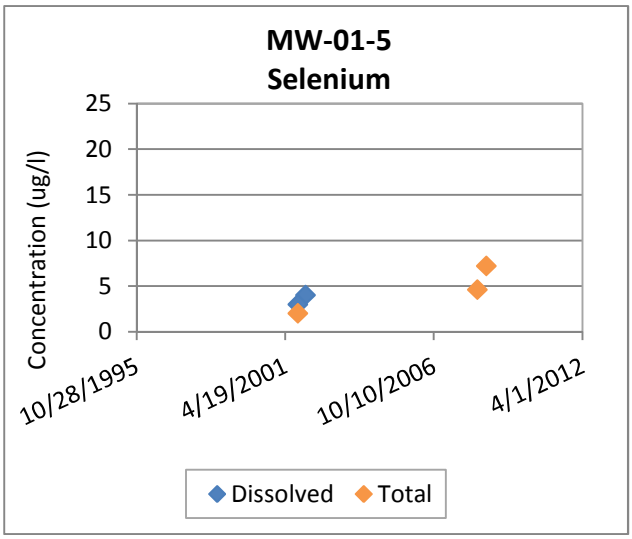
Figure 5.3-40p
Time Series Plots - Selenium
Groundwater Quality
Rhodia Silver Bow Plant

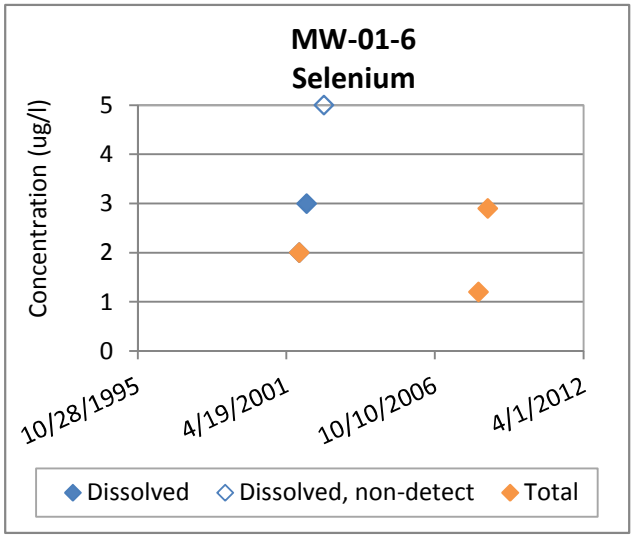






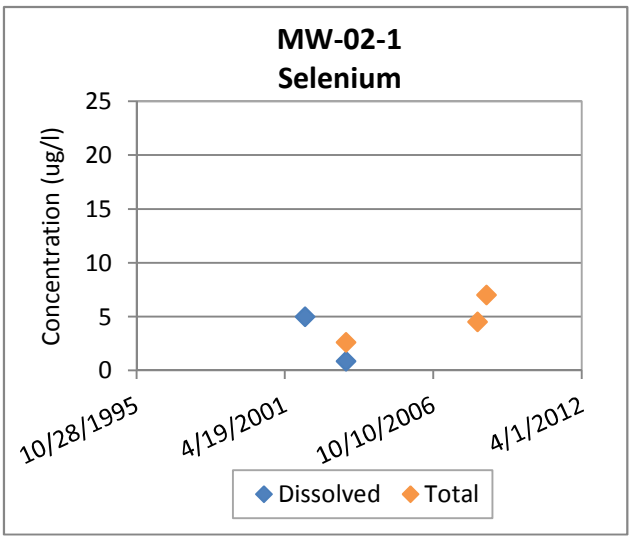


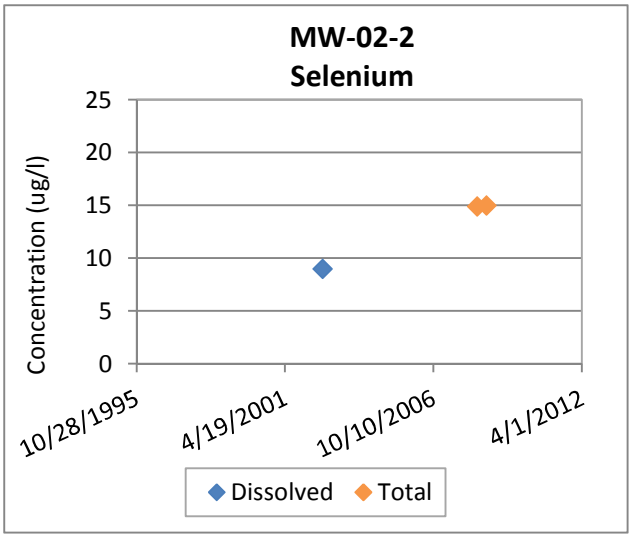


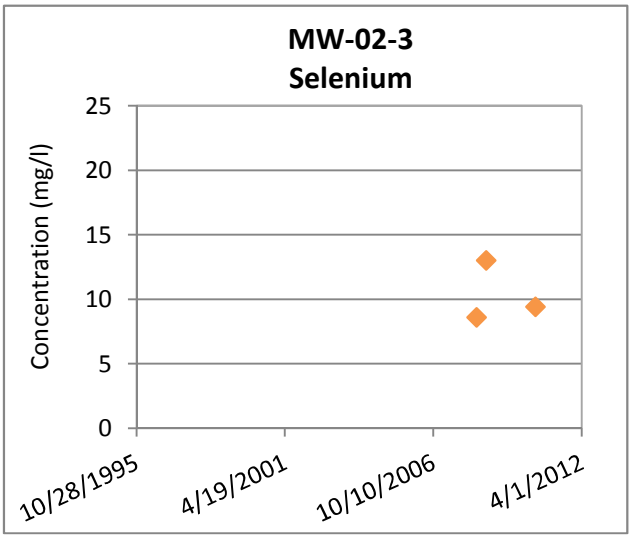


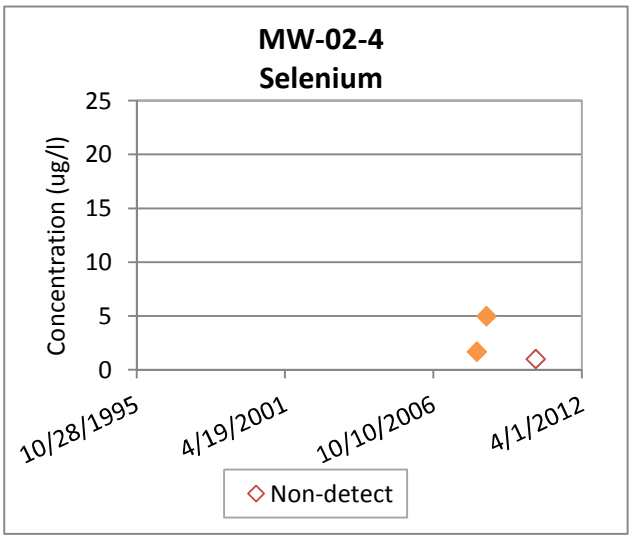
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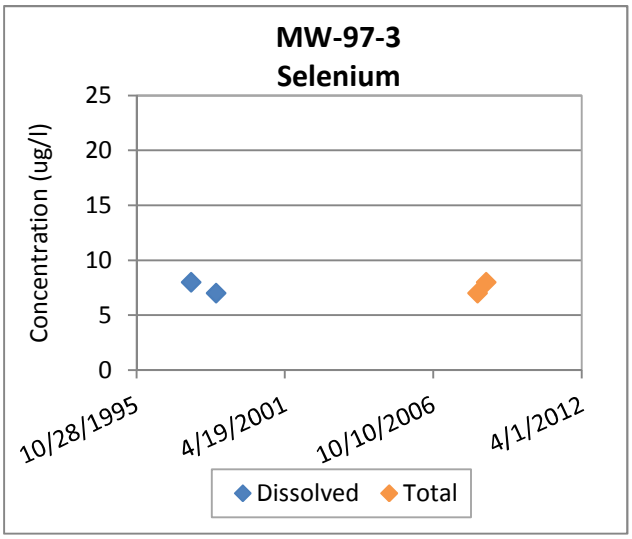
Figure 5.3-40p
Time Series Plots - Selenium
Groundwater Quality
Rhodia Silver Bow Plant











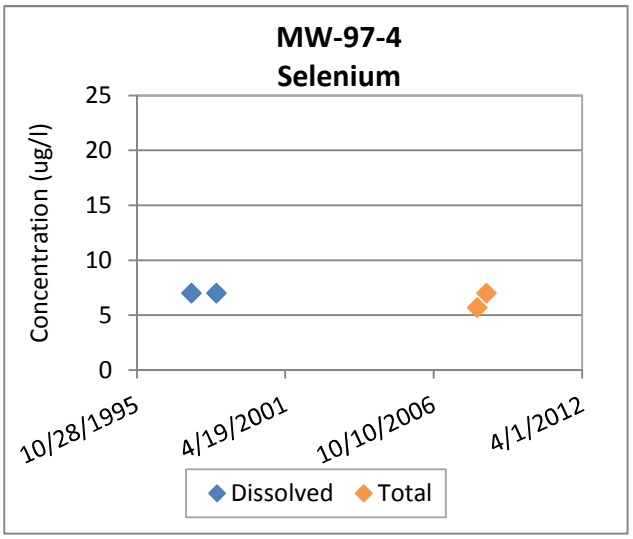
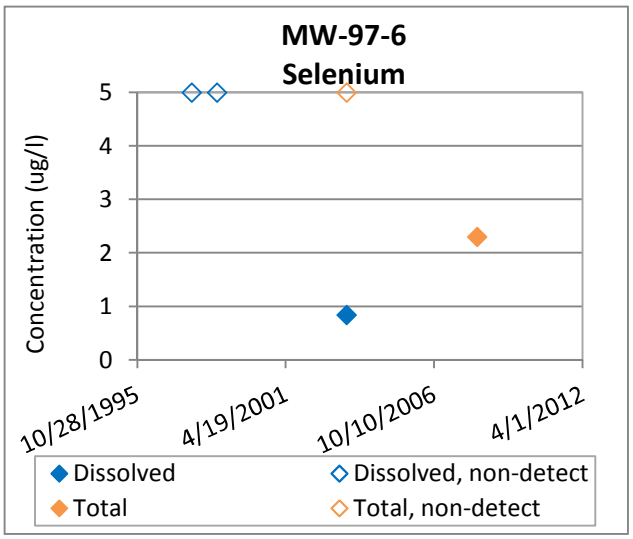
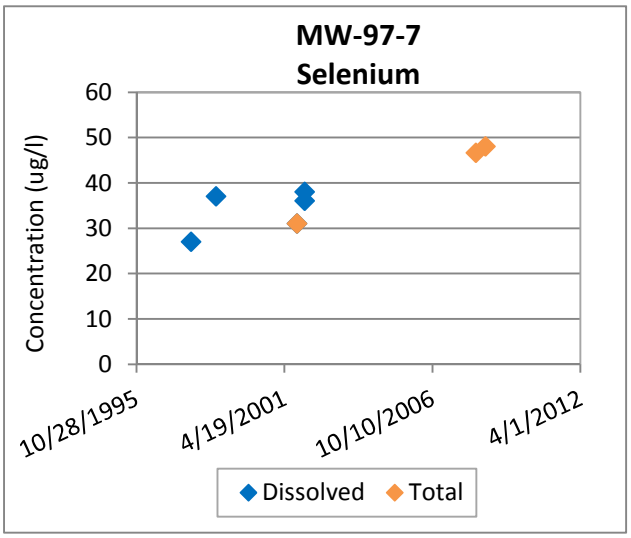
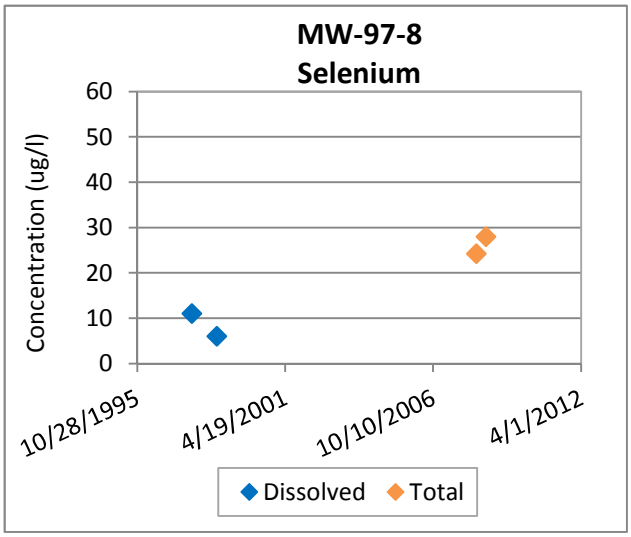
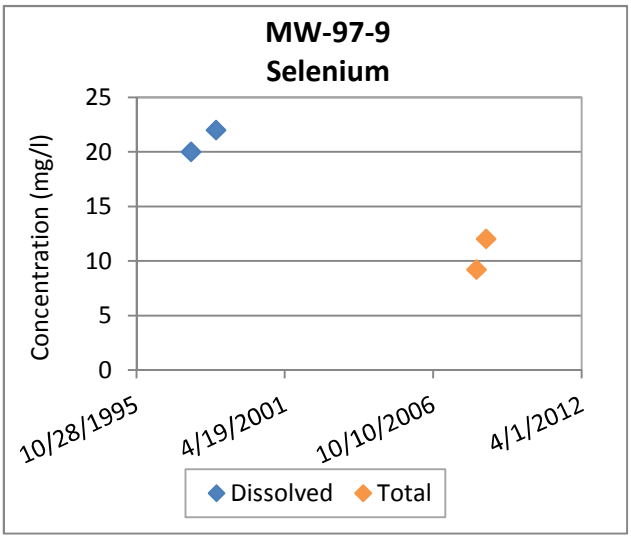


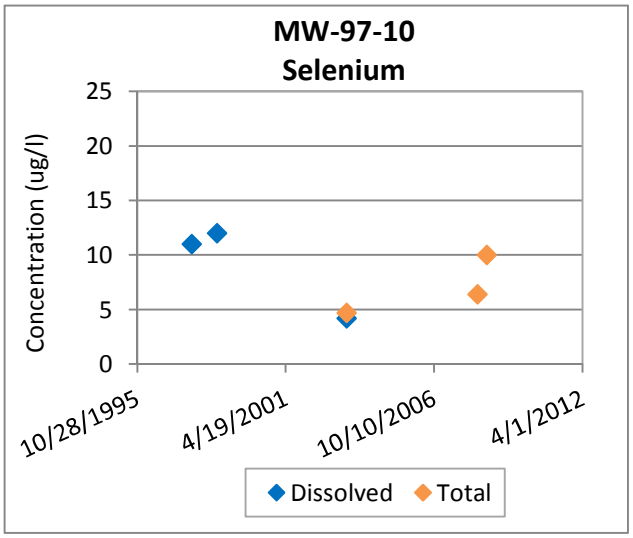
Figure 5.3-40p
Time Series Plots - Selenium
Groundwater Quality
Rhodia Silver Bow Plant











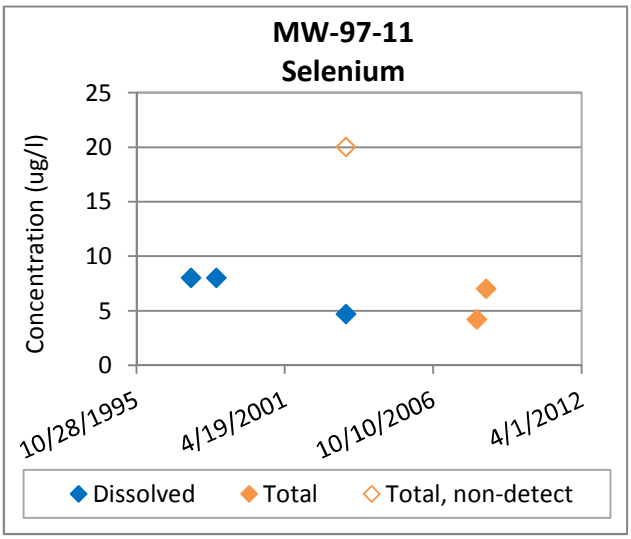


Figure 5.3-40p
Time Series Plots - Selenium
Groundwater Quality
Rhodia Silver Bow Plant

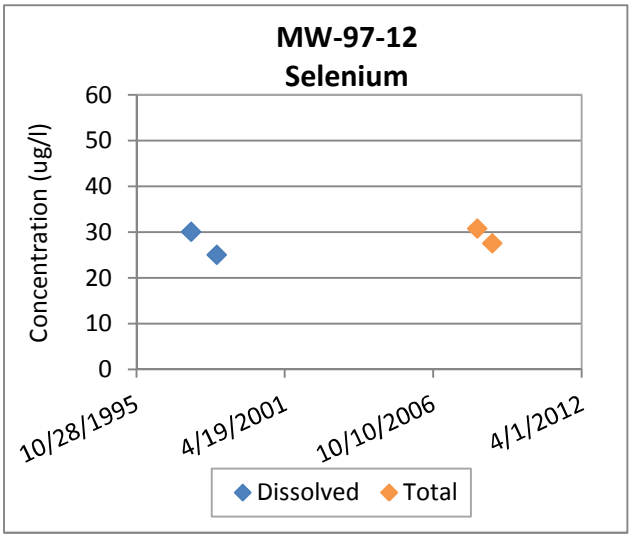
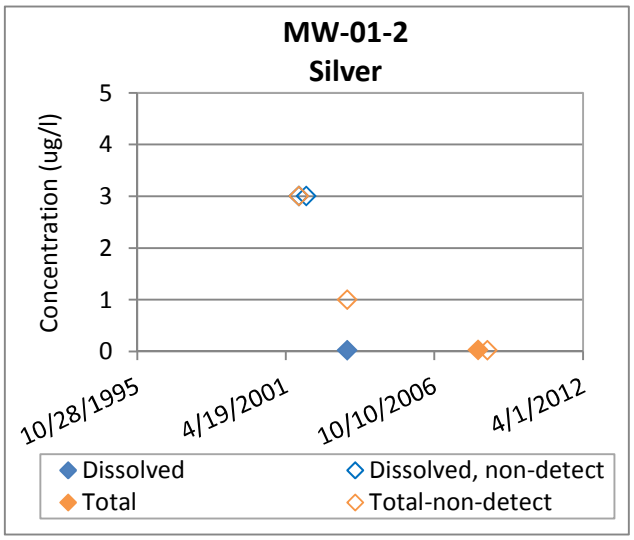
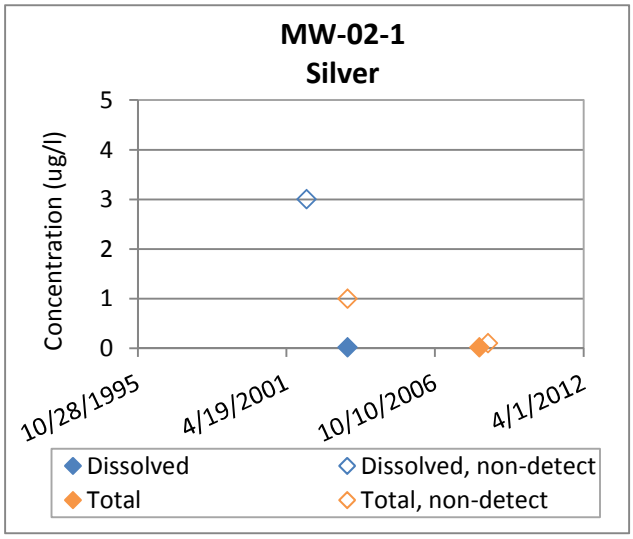
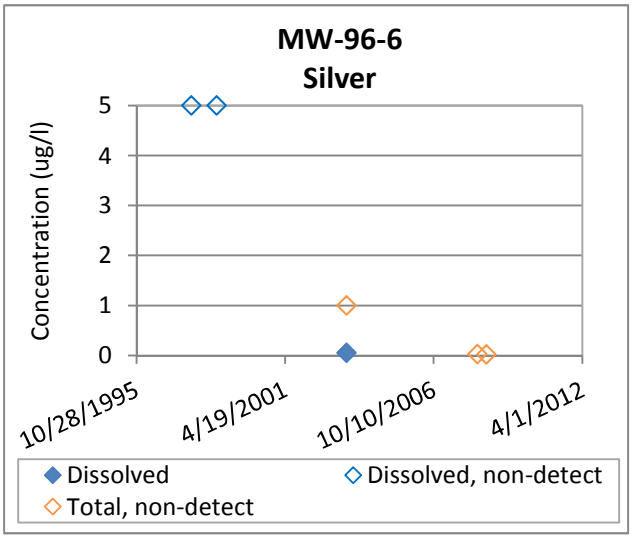
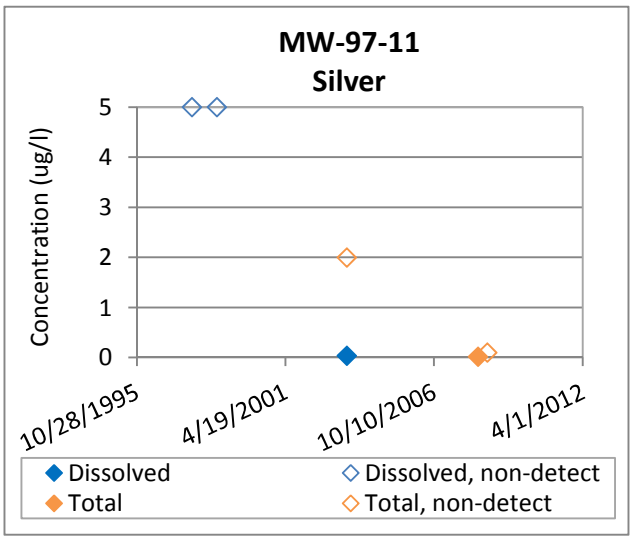


Figure 5.3-40q
Time Series Plots - Silver
Groundwater Quality
Rhodia Silver Bow Plant



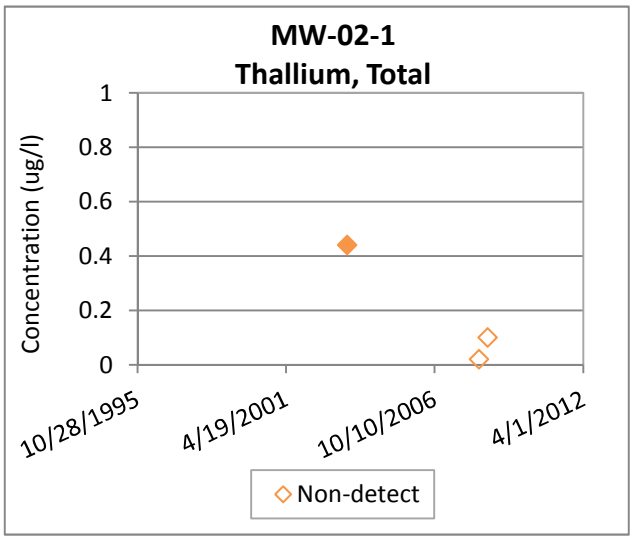






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Figure 5.3-40r
Time Series Plots - Thallium
Groundwater Quality
Rhodia Silver Bow Plant



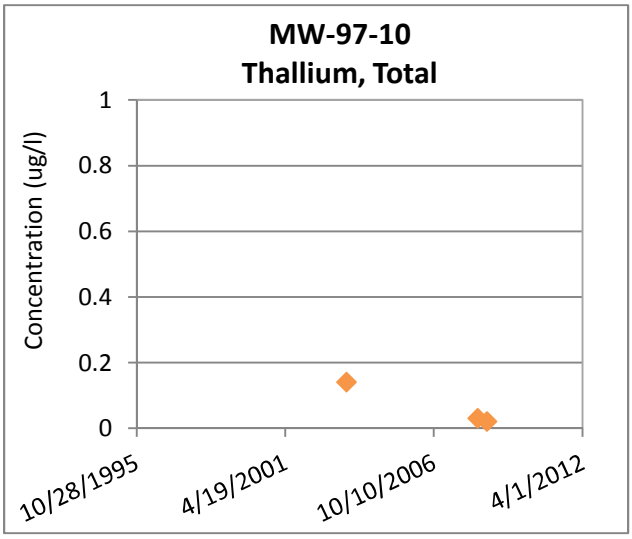
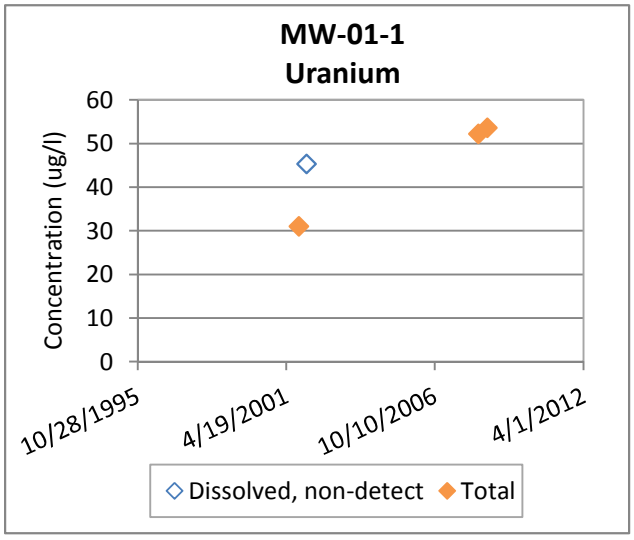
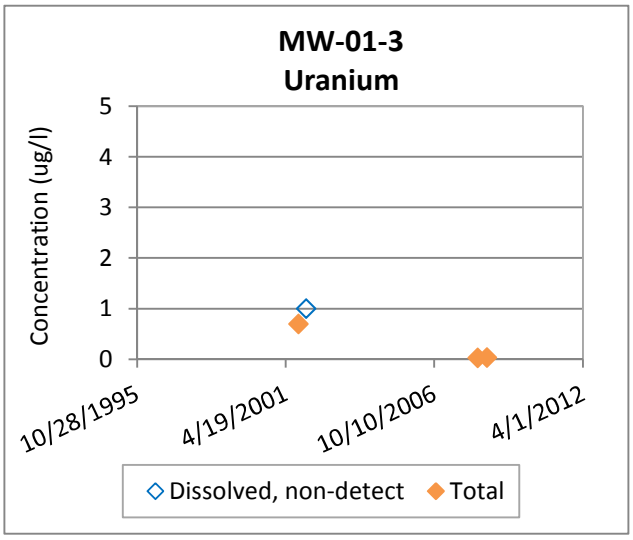
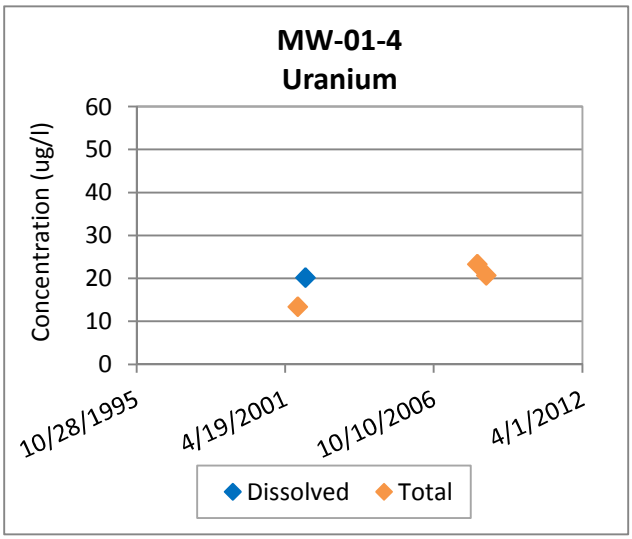
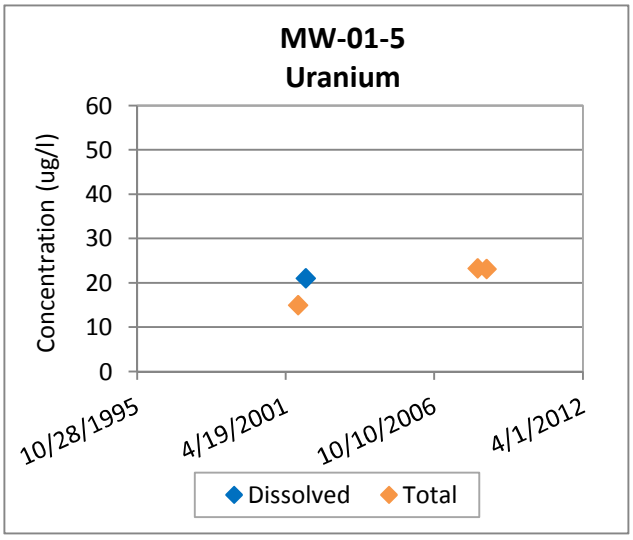


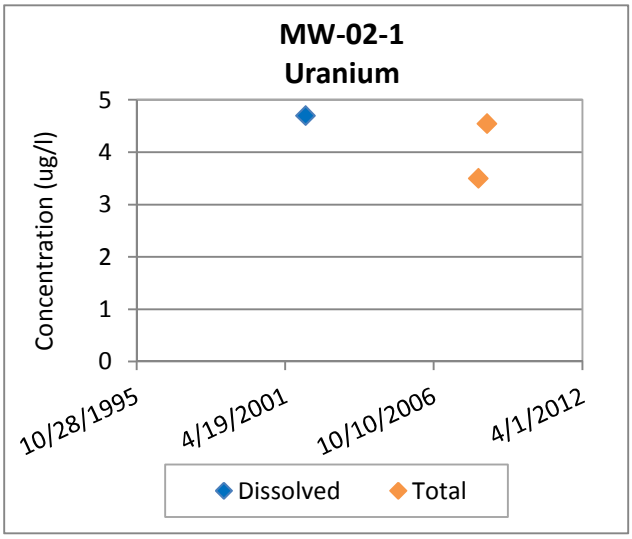
Figure 5.3-40s
Time Series Plots - Uranium
Groundwater Quality
Rhodia Silver Bow Plant











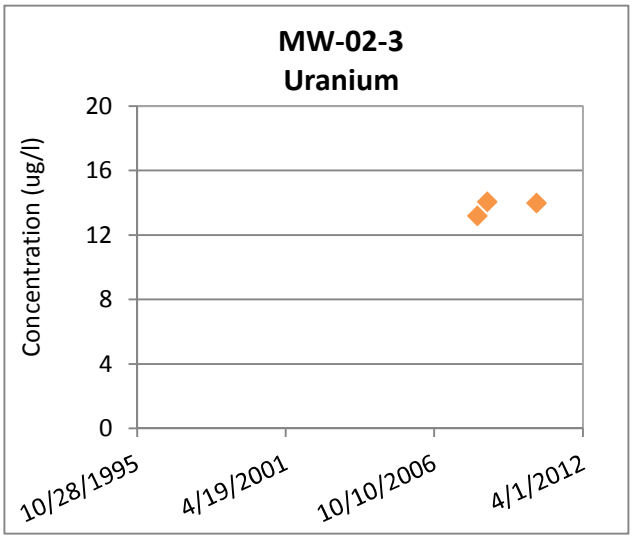
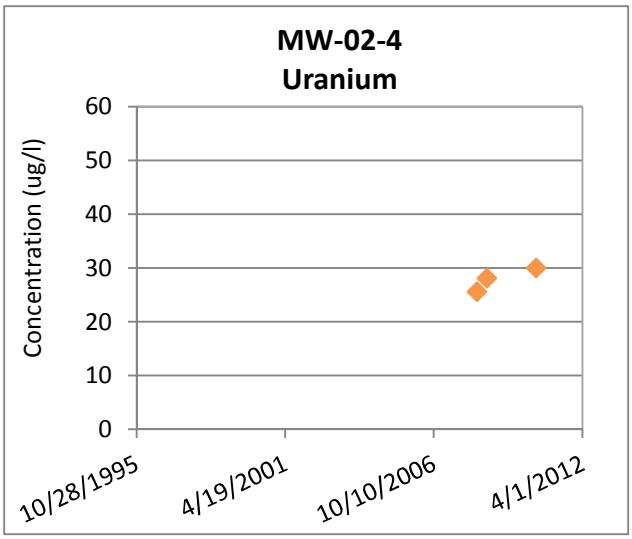
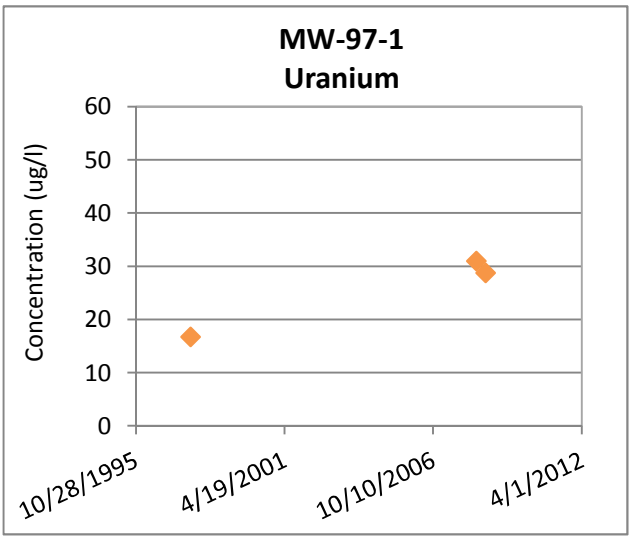
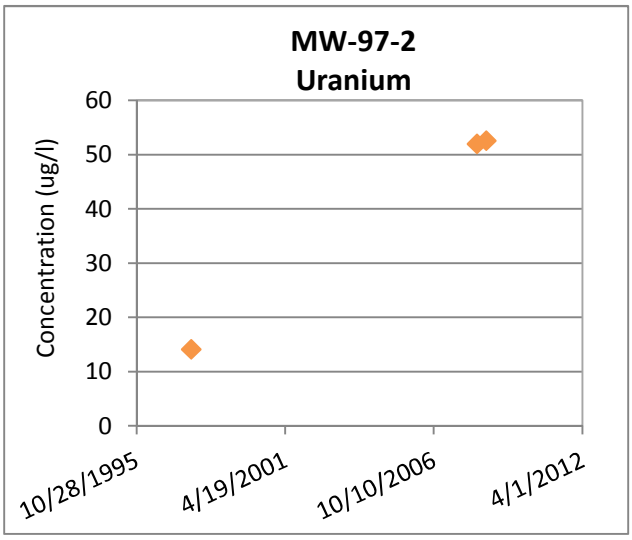
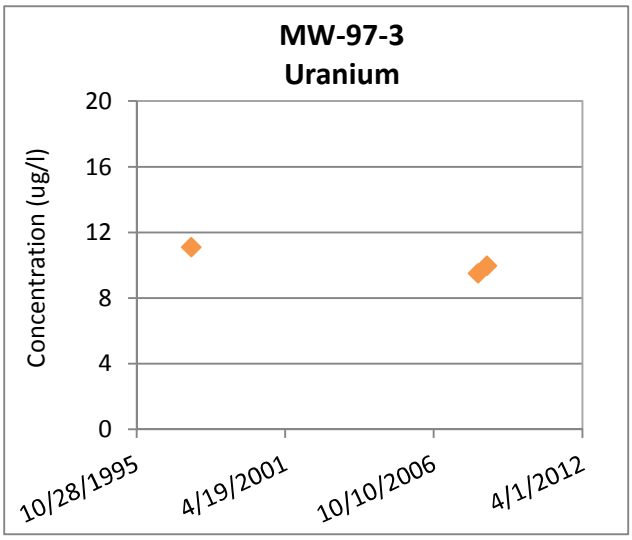


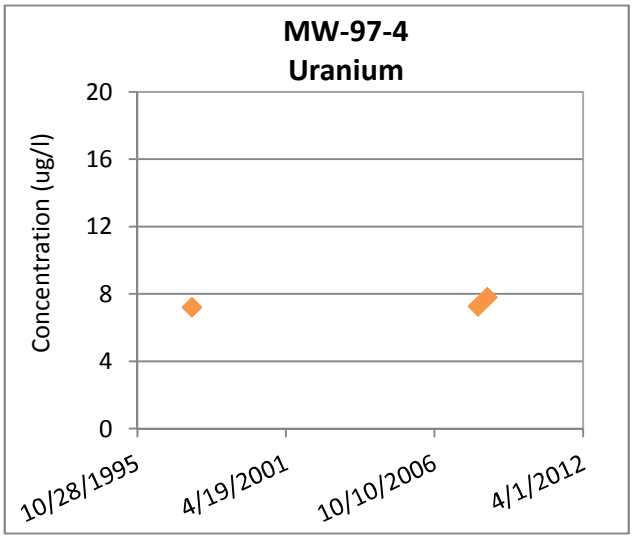
Figure 5.3-40s
Time Series Plots - Uranium
Groundwater Quality
Rhodia Silver Bow Plant











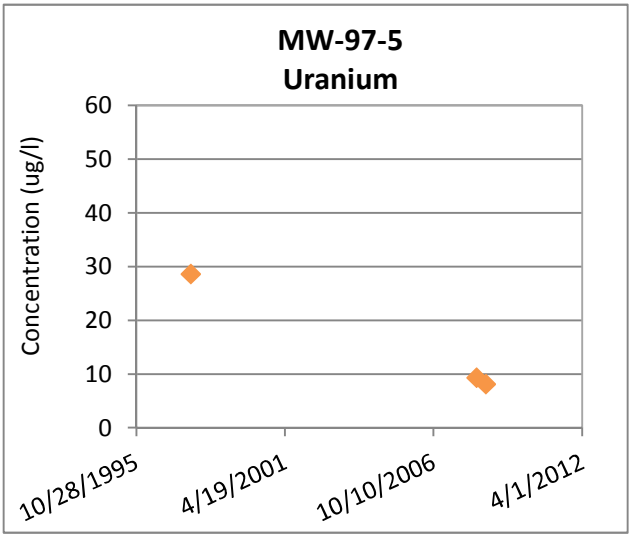
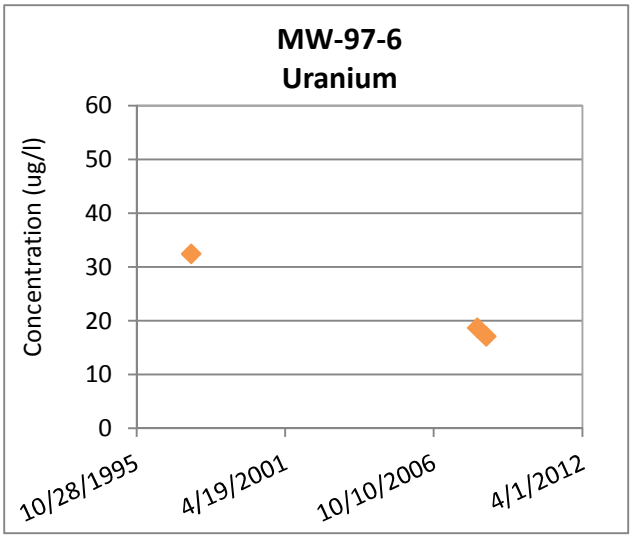
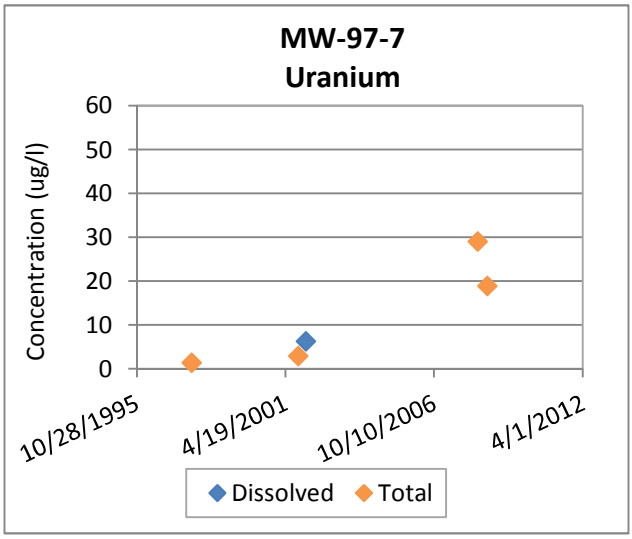
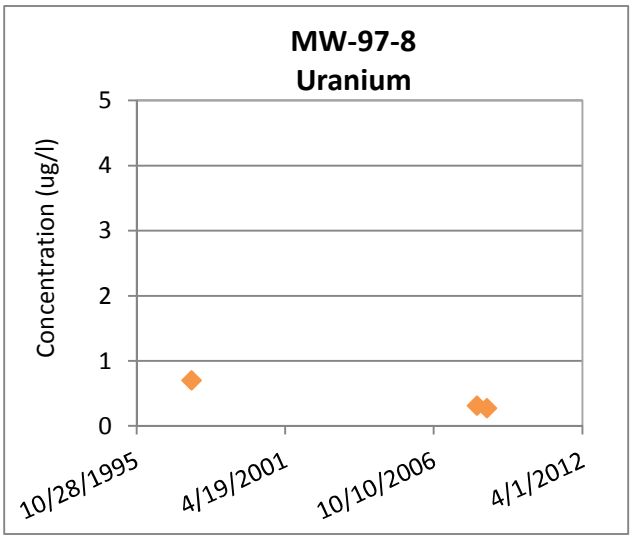
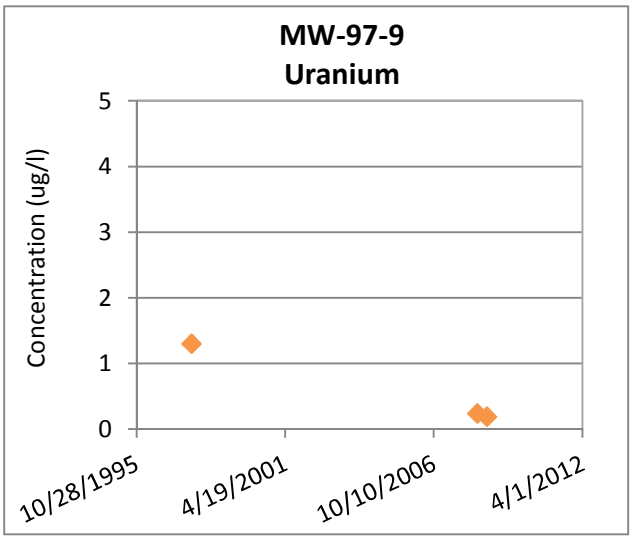


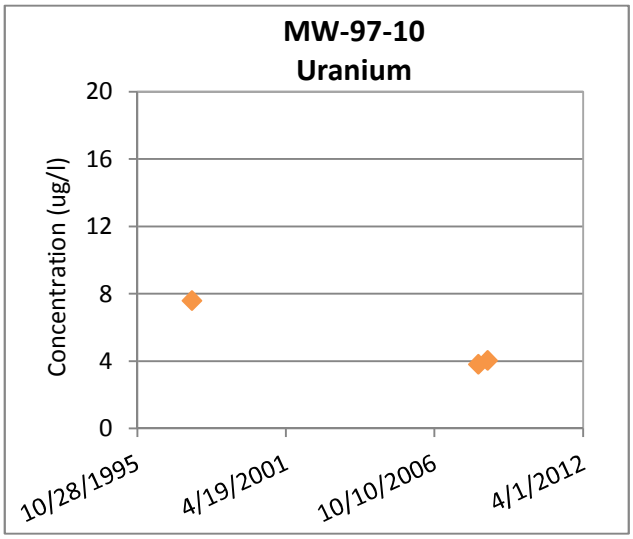
Figure 5.3-40s
Time Series Plots - Uranium
Groundwater Quality
Rhodia Silver Bow Plant











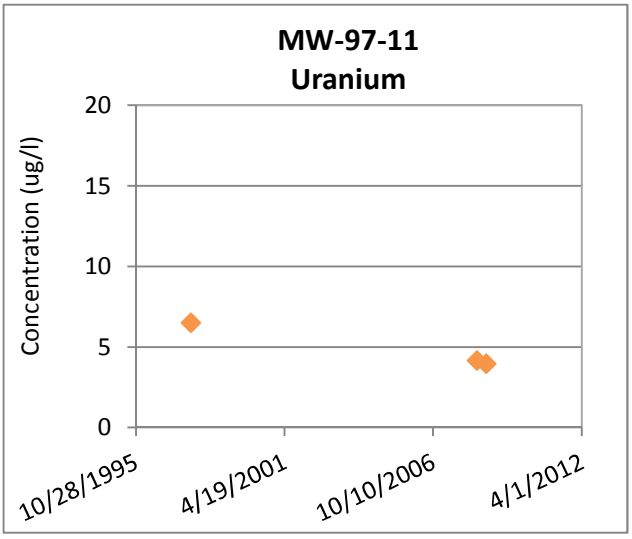
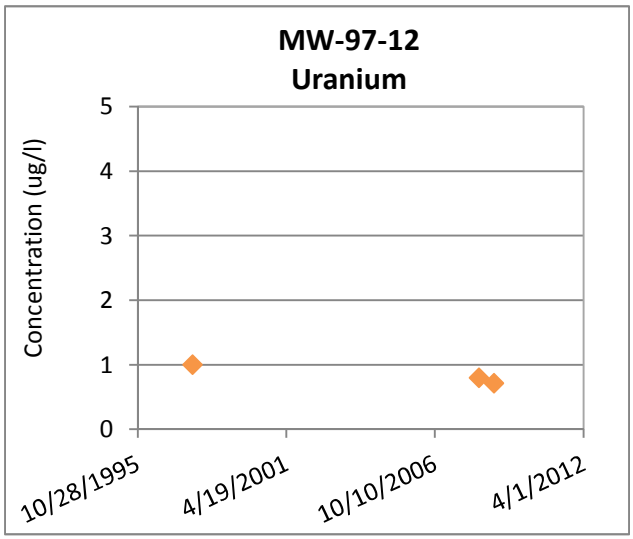
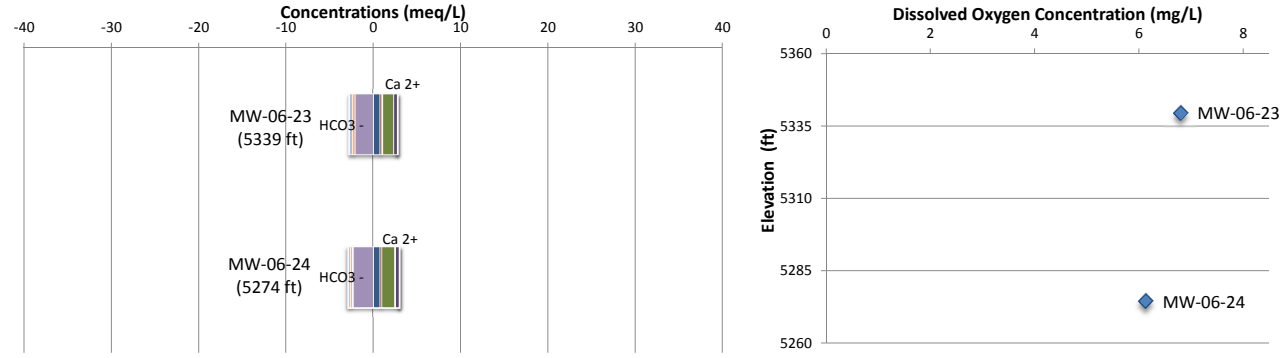


Figure 5.3-40s
Time Series Plots - Uranium
Groundwater Quality
Rhodia Silver Bow Plant



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16 September 2008:

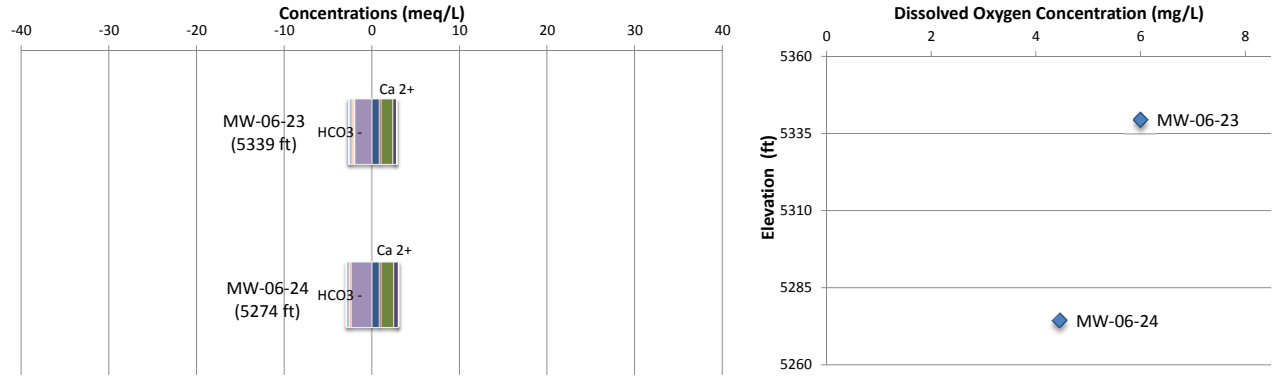
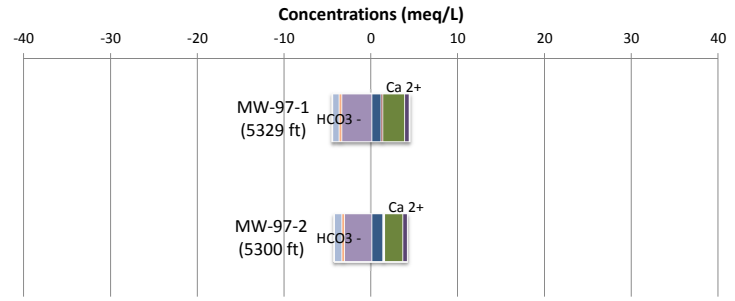


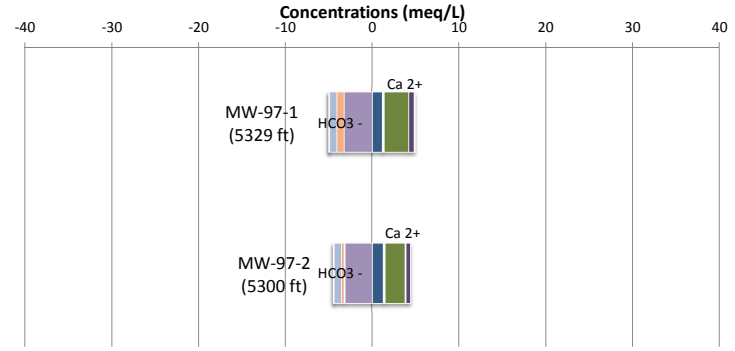
Figure 5.3-41a. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-23 and MW-06-24. In general, the groundwater in both wells is low in total dissolved solids, and is Ca-HCO_3 type water.

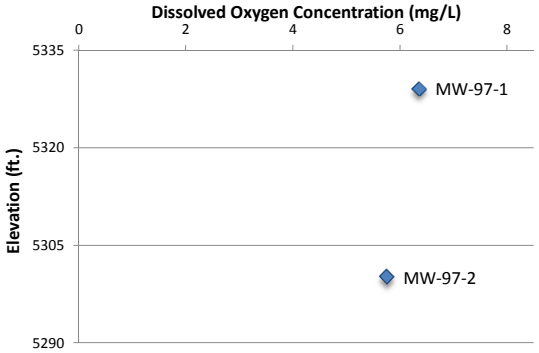
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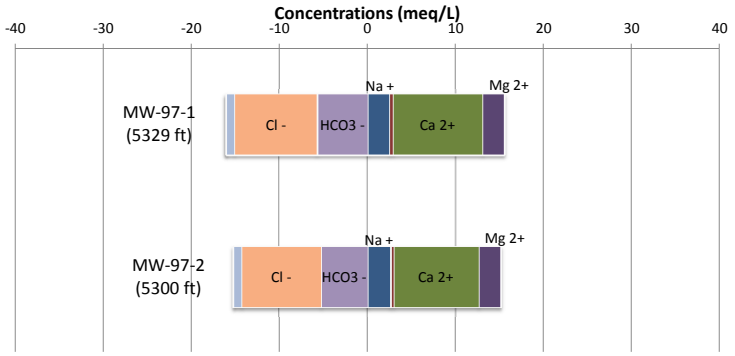
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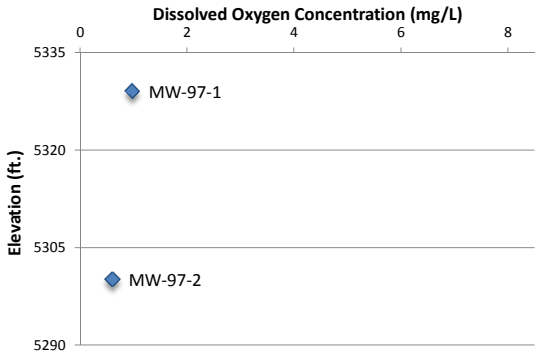
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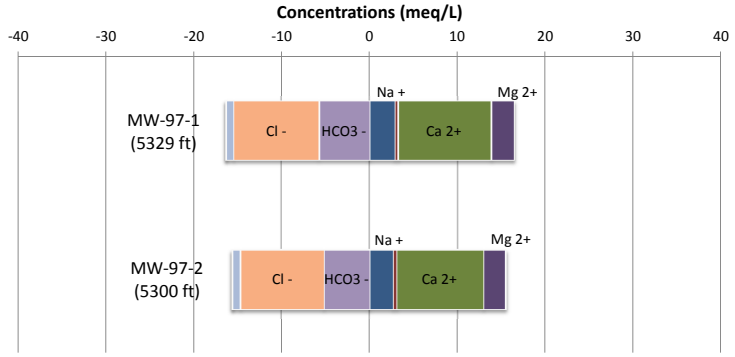


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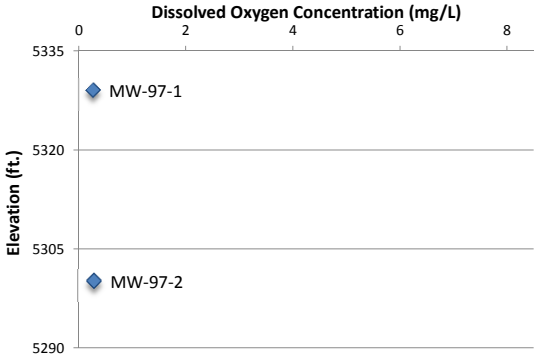
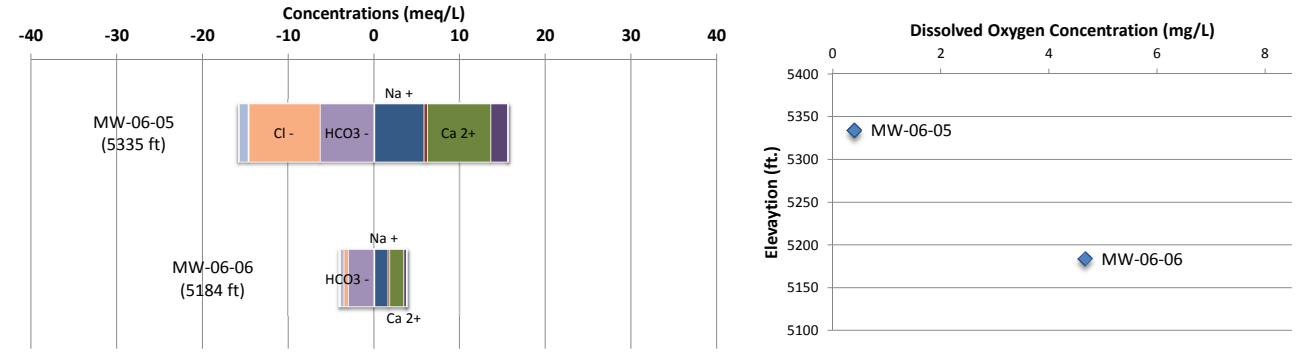


Figure 5.3-41b. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-97-1 and MW-97-2. In 1997 and 1998, groundwater quality in both wells is low in total dissolved solids, and is Ca-HCO_3 type water; however, in 2008, the groundwater quality in both wells is lower in dissolved oxygen, and higher in total dissolved solids. The groundwater in 2008 is generally a Ca-Cl-HCO_3 type water.

14 May 2008:



September 2008:

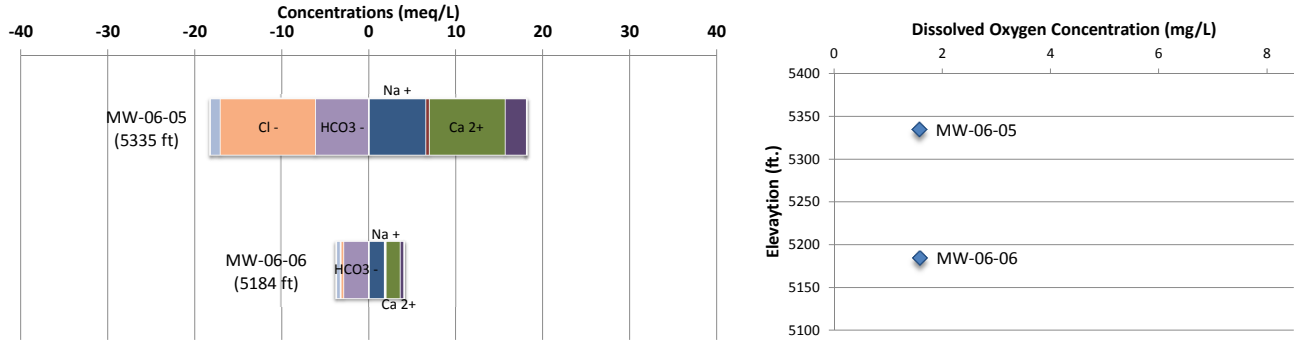
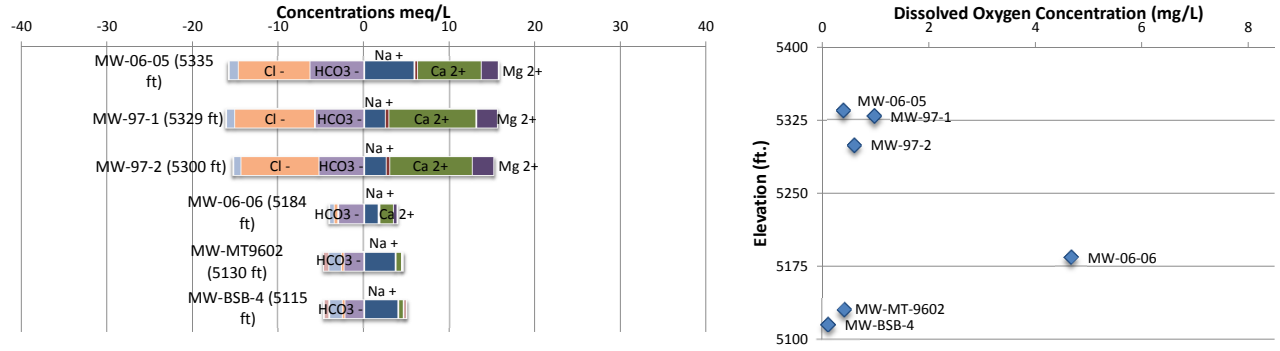


Figure 5.3-41c. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-5 and MW-06-6. These are unique water quality signatures: groundwater in MW-06-5 is relatively high in total dissolved solids, and is Ca-Na-Cl-HCO_3 type water; however, in MW-06-6, groundwater is lower in total dissolved solids, and is a Ca-Na-HCO_3 type water.

May 2008:



September 2008:

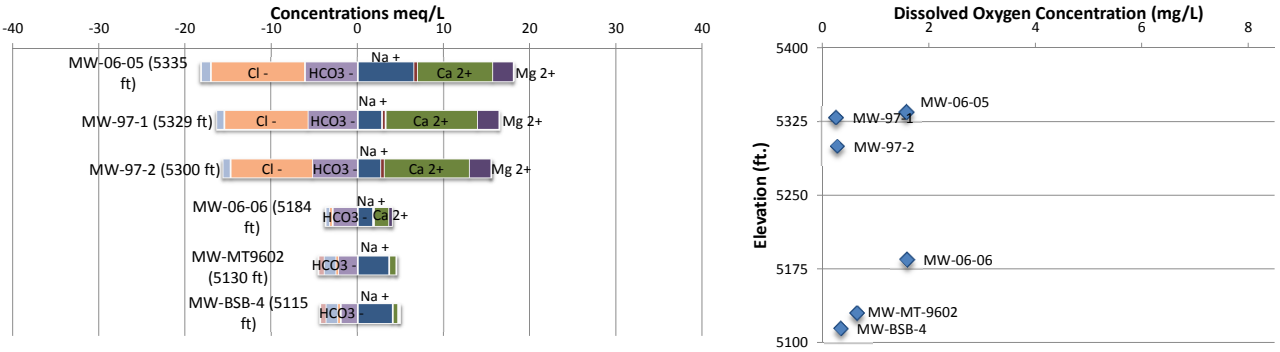
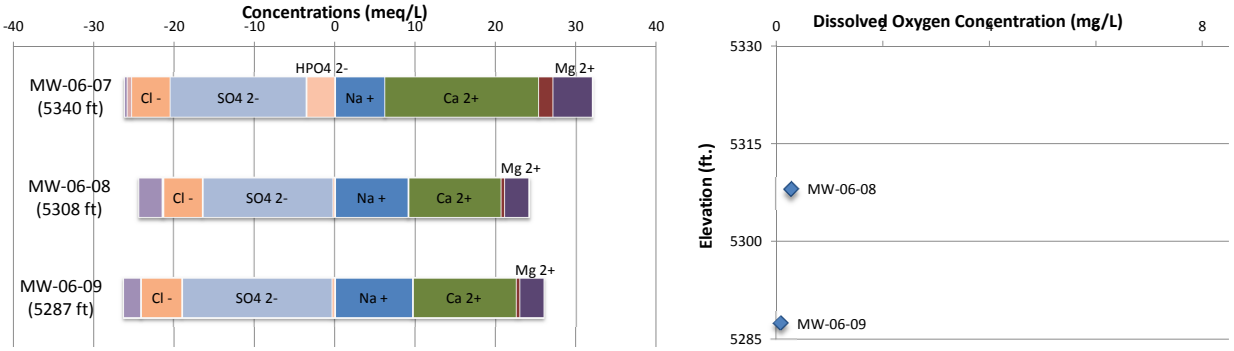


Figure 5.3-41d. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-5, MW-97-1, MW-97-2, MW-06-6, MW-MT96-2, and MW-BSB-4. Groundwater quality in the upper three wells is unique from groundwater in the deeper three wells. Shallower groundwater tends to have higher total dissolved solids and is a Ca-Na-Cl-HCO_3 type water, while deeper groundwater is lower in total dissolved solids, and is a Ca-Na-HCO_3 type water.

17-29 May 2008:



23-25 September 2008:

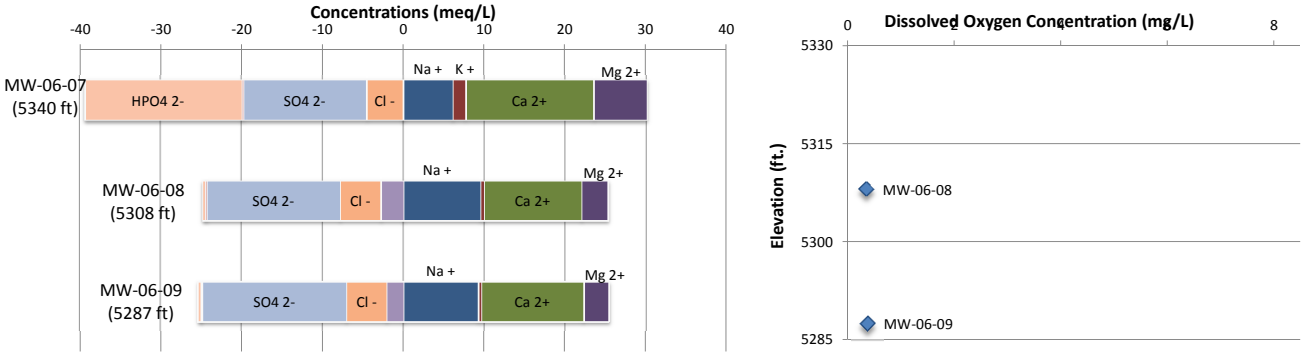


Figure 5.3-41e. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-7, MW-06-8, and MW-06-9. MW-06-7 is screened within tailings. In general, the groundwater in all the wells is relatively high in total dissolved solids, and is Ca-Na-SO_4-Cl type water. Phosphate may make up a significant part of the ion concentration within the Tailing Basin.

September 2008:

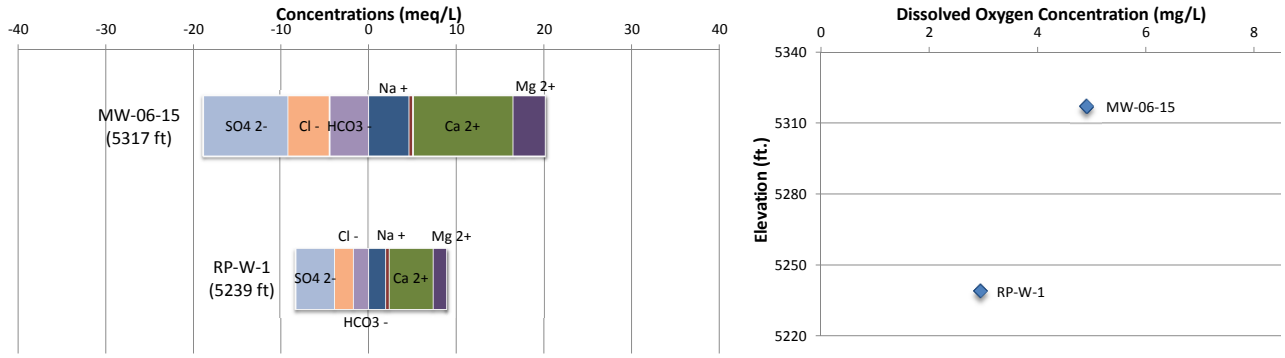
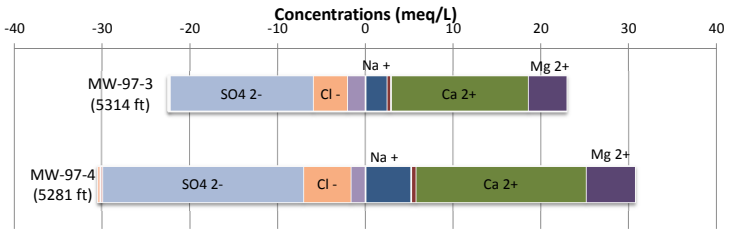


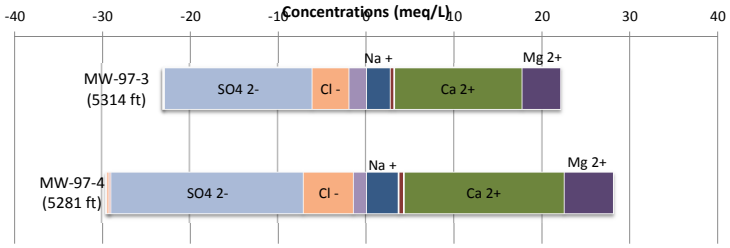
Figure 5.3-41f. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-15 and RP-W-1. Groundwater in MW-06-15 is higher in dissolved solids and dissolved oxygen, but groundwater in both wells is generally a Ca-SO_4 type water.

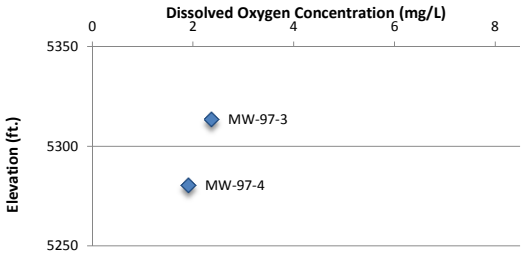
4 November 1997:



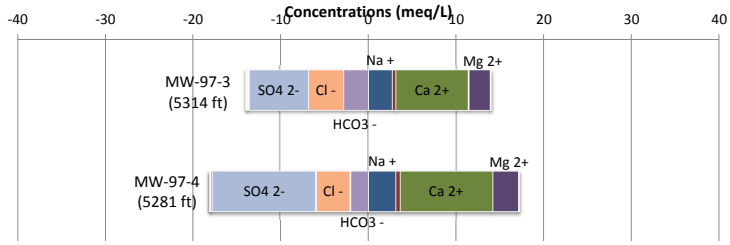
No data

7-8 October 1998:



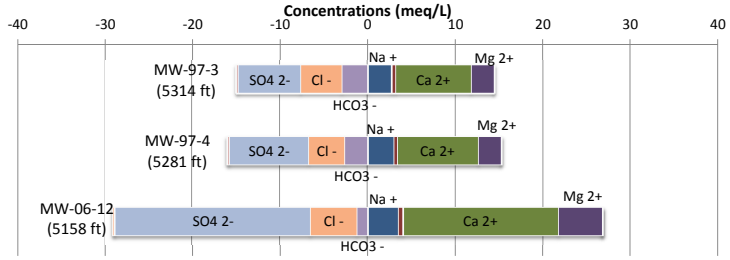


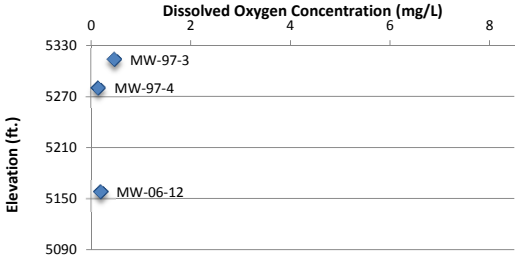
1 October 2005:



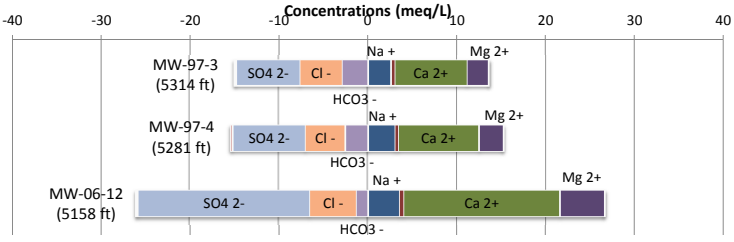
No data

15-28 May 2008:





17-23 September 2008:



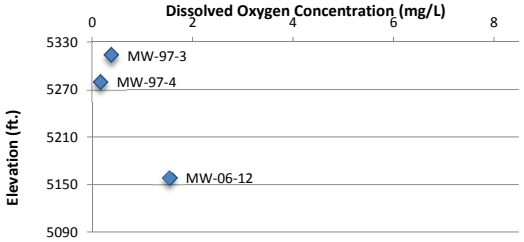
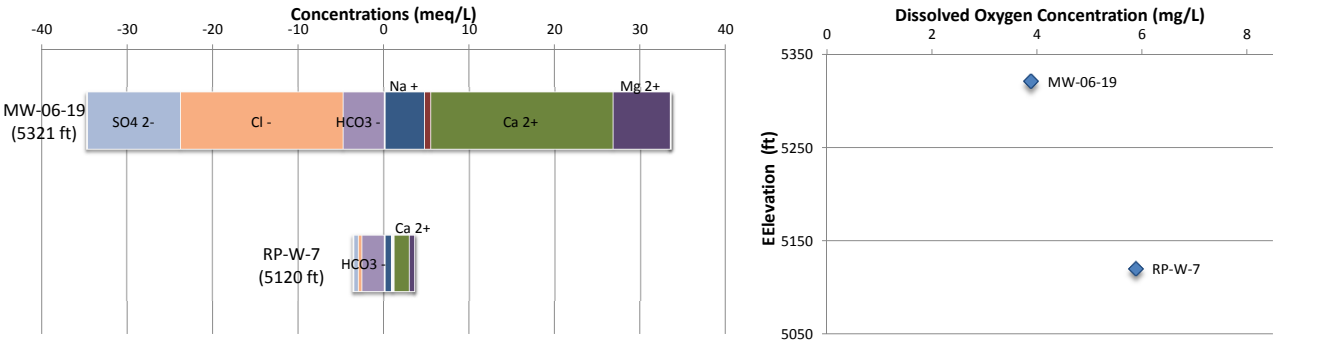


Figure 5.3-41h. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-97-3, MW-97-4, and MW-06-12. In general, the groundwater quality in all the wells is relatively high in total dissolved solids, and is Ca-SO_4-Cl type water.

May 2008:



September 2008:

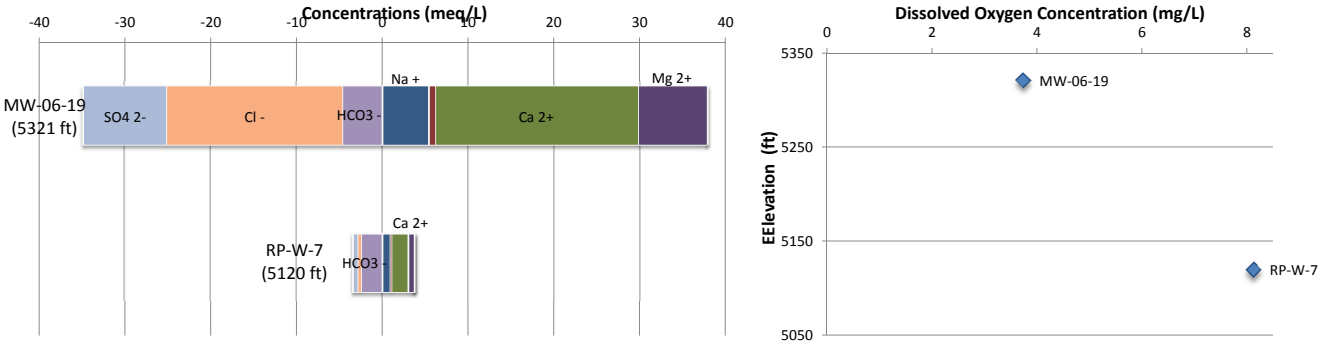
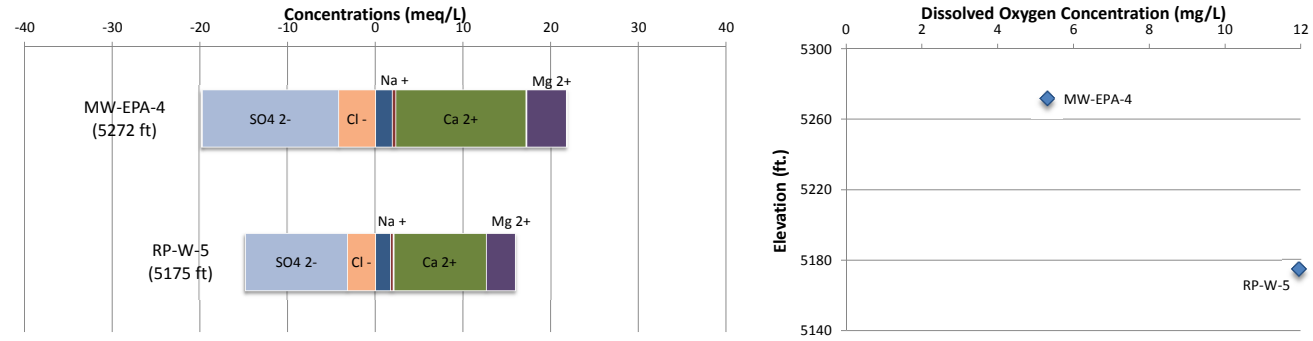
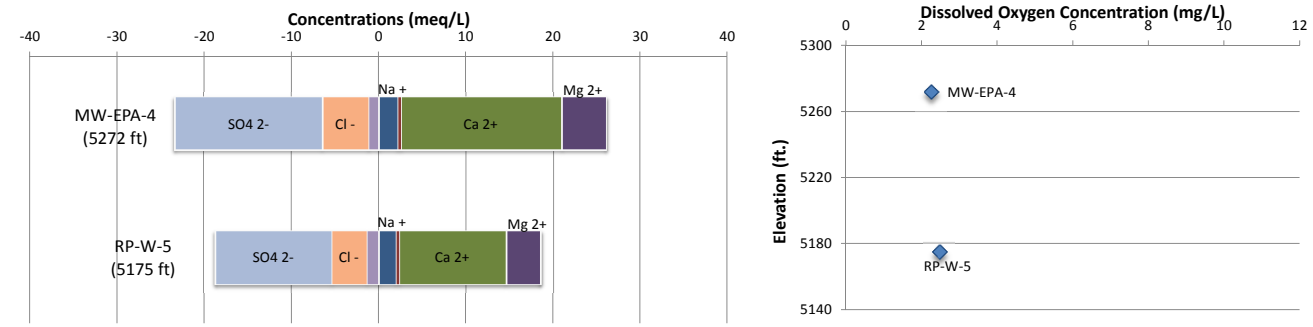


Figure 5.3-41g. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-19 and RP-W-7. These are unique water quality signatures: groundwater quality in MW-06-19 is high in total dissolved solids, and is Ca-Mg-Cl-SO_4 type water; however, in RP-W-7, the groundwater quality is low in total dissolved solids, and is a Ca-HCO_3 type water.

October 1998:



May 2008:



September 2008:

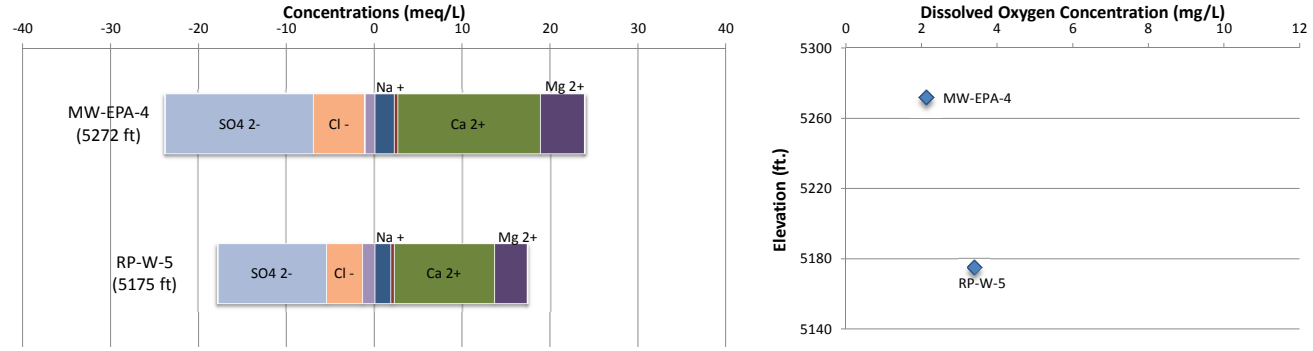
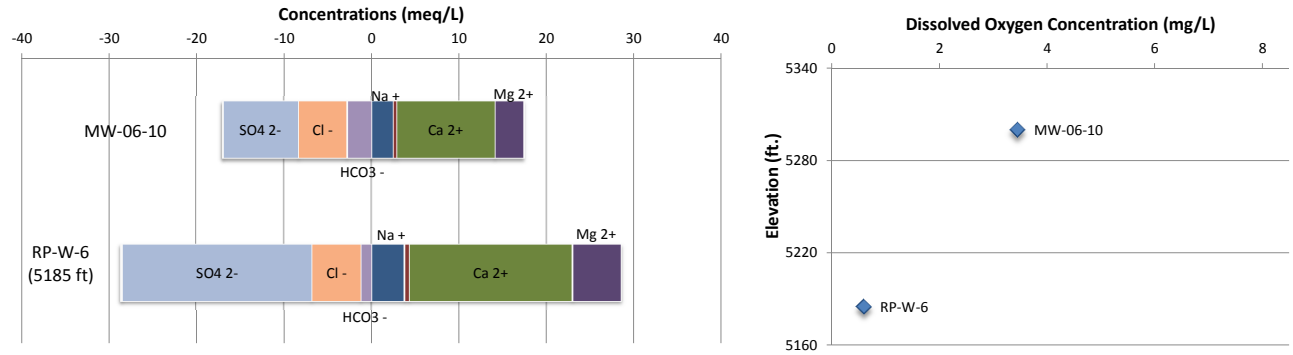


Figure 5.3-41i. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-EPA-4 and RP-W-5. In general, the groundwater in both wells is relatively high in total dissolved solids, and is a Ca-SO_4-Cl type water.

May 2008:



September 2008:

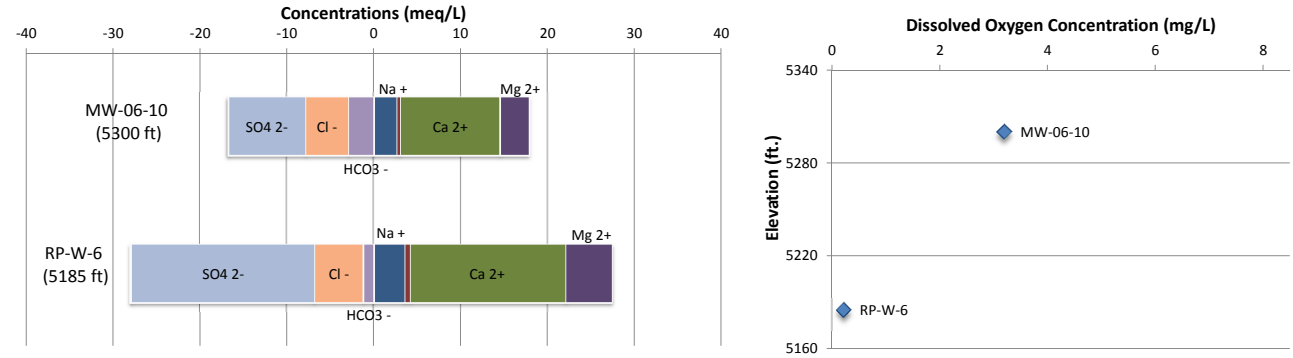
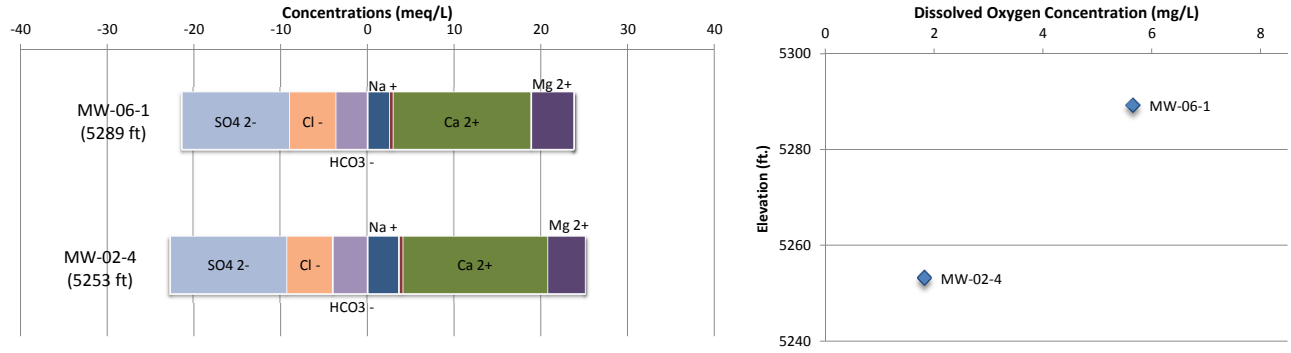
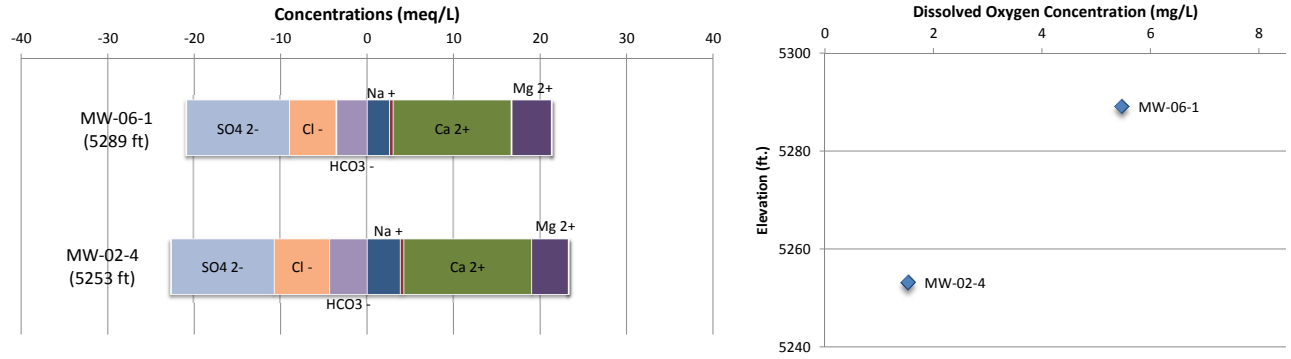


Figure 5.3-41j. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-10 and RP-W-6. In general, the groundwater in both wells is relatively high in total dissolved solids, and is a Ca-SO_4-Cl type water.

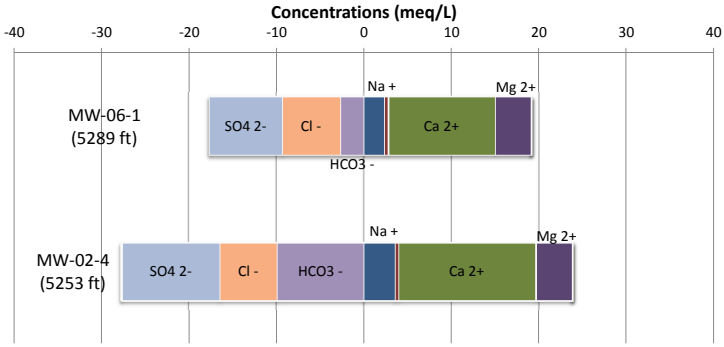
May 2008:



September 2008:



July 2010:



No data

Figure 5.3-41k. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-1 and MW-02-4. In general, the groundwater in both wells is relatively high in total dissolved solids, and is a Ca-SO_4-Cl type water.

November 2012:

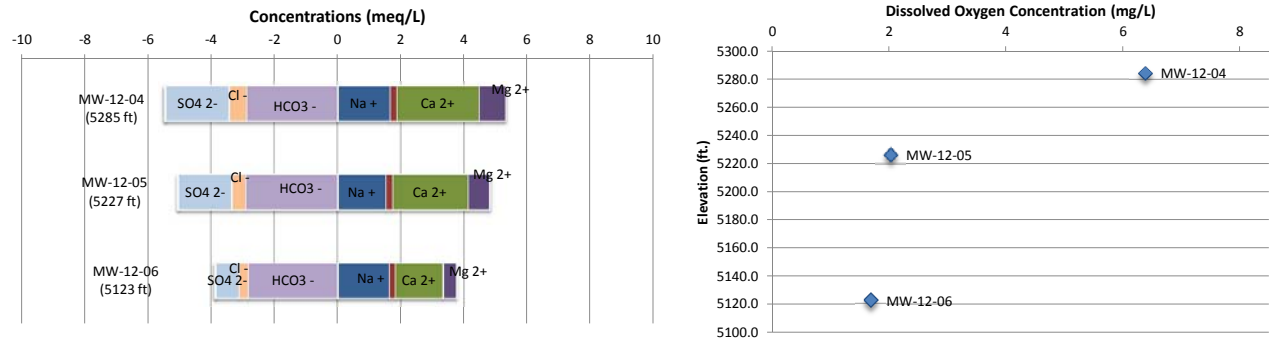


Figure 5.3-41l. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-12-04, MW-12-05 and MW-12-06. In general, the groundwater in both wells is relatively high in total dissolved solids, and is a Ca-Na-SO_4-HCO_3 type water.

November 2012:

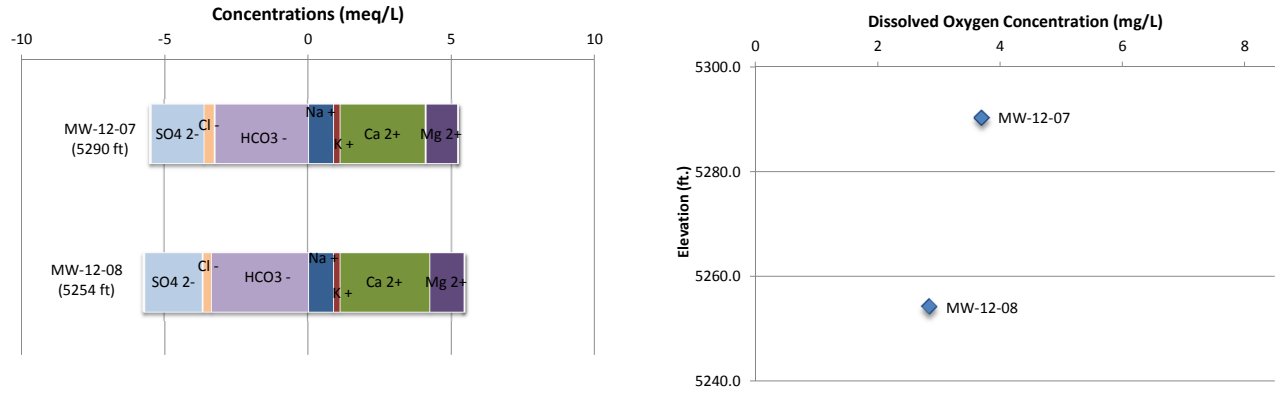


Figure 5.3-41m. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-12-07 and MW-12-08. In general, the groundwater in both wells is relatively high in total dissolved solids, and is a Ca-Mg-SO_4-HCO_3 type water.

September 2008 w/ November 2012:

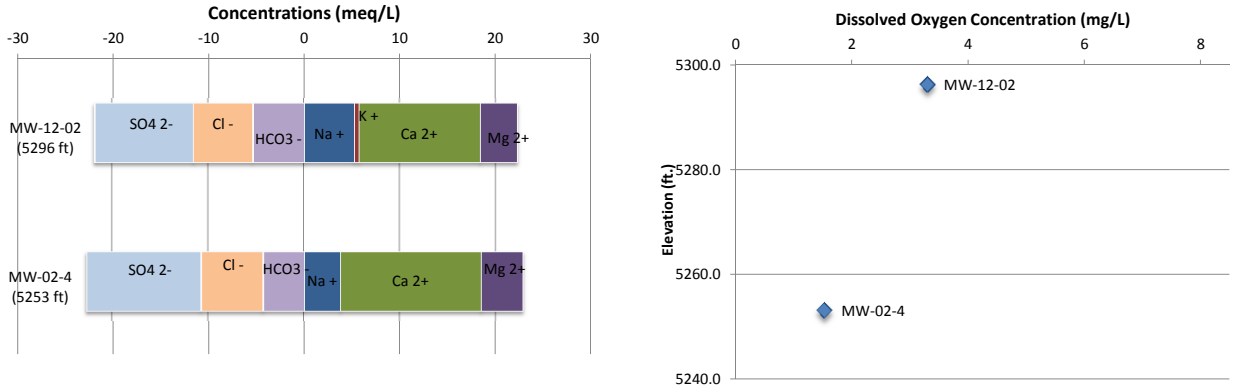


Figure 5.3-41n. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-12-02 and MW-02-04. In general, the groundwater in both wells is relatively high in total dissolved solids, and is a Ca-Na-SO_4-Cl type water.

September 2008 w/ November 2012:

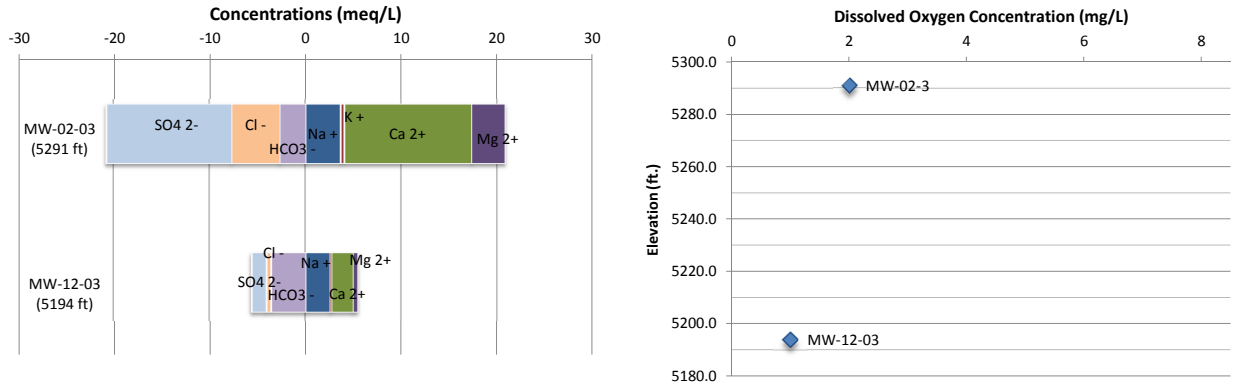


Figure 5.3-41o. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-02-03 and MW-12-03. The groundwater in well MW-02-03 is higher in total dissolved solids, and is generally a Ca-Na-SO_4-HCO_3 type water.

September 2008 w/ November 2012:

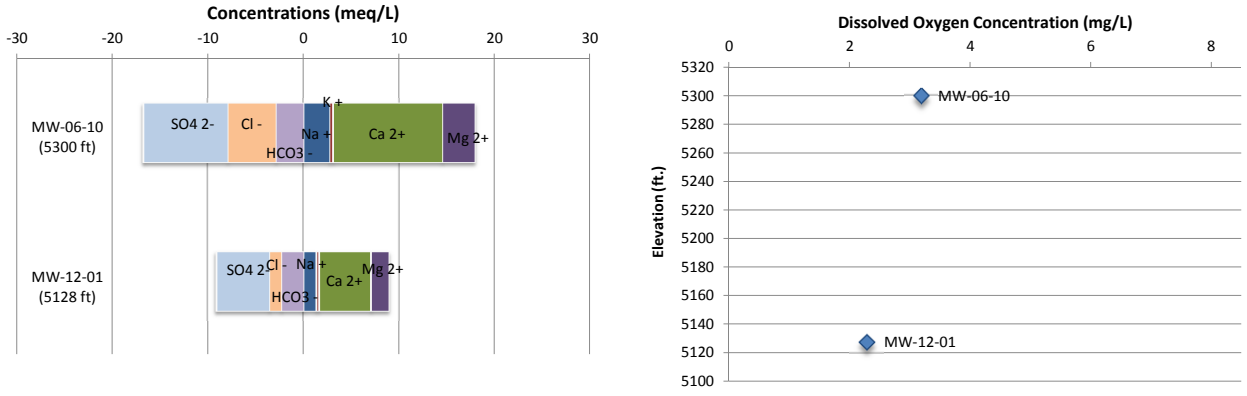


Figure 5.3-41p. Vertical comparison of major ion composition (left) and dissolved oxygen (right) at MW-06-10 and MW-12-01. In general, the groundwater in both wells is relatively high in total dissolved solids, and is a Ca-Na-SO_4-Cl type water.

MW-12-01
11/6/2012: < 0.40 mg/l

MW-06-10
5/14/2008: 0.30 mg/l
9/18/2008: 0.30 mg/l

MW-97-3
5/28/2008: 3.6 mg/l
9/23/2008: 3.4 mg/l

MW-06-12
5/20/2008: 1.8 mg/l
9/25/2008: 1.5 mg/l

MW-97-4
5/20/2008: 4.0 mg/l
9/22/2008: 4.0 mg/l

PW-99-1
5/18/2008: 2.3 mg/l
5/29/2008: 2.6 mg/l
9/25/2008: 2.6 mg/l

MW-06-1
5/15/2008: 0.30 mg/l
9/18/2008: 0.396 mg/l J
7/17/2010: 0.43 mg/l

MW-12-02
11/8/2012: 0.88 mg/l

MW-02-4
5/15/2008: 0.5 mg/l
9/23/2008: 0.30 mg/l
7/18/2010: < 1.0 mg/l

MW-12-05
11/7/2012: < 0.40 mg/l

MW-12-04
11/7/2012: 0.44 mg/l

MW-12-06
11/7/2012: < 0.40 mg/l

MW-12-07
11/6/2012: < 0.40 mg/l

MW-12-08
11/6/2012: < 0.40 mg/l

MW-06-2
5/15/2008: 0.5 mg/l
9/23/2008: < 1.0 mg/l
7/18/2010: < 0.40 mg/l

MW-02-3
5/15/2008: 0.4 mg/l
9/23/2008: 0.4 mg/l
7/17/2010: 0.49 mg/l

MW-12-03
11/7/2012: 0.67 mg/l

MW-97-10
5/21/2008: 1.3 mg/l
9/23/2008: 1.2 mg/l

MW-06-3
5/14/2008: 0.30 mg/l
9/19/2008: 0.4 mg/l
7/16/2010: < 0.40 mg/l

MW-06-9
5/17/2008: 2.8 mg/l
9/25/2008: 3.0 mg/l

MW-06-8
5/18/2008: 3.4 mg/l
9/25/2008: 4.1 mg/l

MW-06-7 *
5/29/2008: < 10 mg/l
9/23/2008: < 4.0 mg/l

MW-97-11
5/21/2008: 3.5 mg/l
9/25/2008: 3.6 mg/l

MW-EPA-1
5/14/2008: 0.30 mg/l
9/17/2008: 0.4 mg/l

PW-99-3
5/28/2008: 7.1 mg/l
9/22/2008: 7.1 mg/l

MW-06-21
5/17/2008: 3.4 mg/l
9/24/2008: 4.1 mg/l

MW-97-2
5/13/2008: < 0.2 mg/l
9/17/2008: 0.146 mg/l J

MW-97-1
5/13/2008: < 0.2 mg/l
9/17/2008: 0.154 mg/l J

MW-06-4
5/15/2008: 0.5 mg/l
9/18/2008: 0.5 mg/l

MW-06-5
5/14/2008: 0.30 mg/l
9/19/2008: 0.30 mg/l

MW-GW-3
5/20/2008: 0.30 mg/l
9/17/2008: 0.30 mg/l

RP-W-6
5/30/2008: 2.8 mg/l
9/24/2008: 2.6 mg/l

MW-EPA-4
5/15/2008: 0.30 mg/l
9/20/2008: < 1.0 mg/l

MW-06-11
5/28/2008: < 1.0 mg/l
9/23/2008: < 1.0 mg/l

RP-W-5
5/30/2008: < 1.0 mg/l
9/24/2008: < 0.2 mg/l

MW-97-9
5/16/2008: 11.3 mg/l
9/24/2008: 11.1 mg/l

MW-06-13
5/27/2008: 0.30 mg/l
9/19/2008: 0.30 mg/l

RP-W-4
5/28/2008: < 1.0 mg/l
9/24/2008: < 1.0 mg/l

MW-EPA-3
5/15/2008: 0.2 mg/l
9/16/2008: 0.30 mg/l

MW-06-16
5/21/2008: < 1.0 mg/l
9/20/2008: < 0.2 mg/l

MW-06-14
5/27/2008: < 0.2 mg/l
9/18/2008: 0.081 mg/l J

MW-97-12
5/27/2008: 7.8 mg/l
9/23/2008: 7.9 mg/l

MW-06-15
5/21/2008: < 0.2 mg/l
9/17/2008: 0.114 mg/l J

RP-W-1
5/30/2008: 0.30 mg/l
9/25/2008: 0.4 mg/l

MW-06-17
5/27/2008: 0.2 mg/l
9/20/2008: 0.30 mg/l

MW-06-18
5/21/2008: < 1.0 mg/l
9/25/2008: 0.30 mg/l

MW-06-20
5/20/2008: < 1.0 mg/l
9/20/2008: 0.5 mg/l

MW-06-19
5/20/2008: < 1.0 mg/l
9/18/2008: 0.151 mg/l J

MW-97-8
5/15/2008: 2.7 mg/l
9/24/2008: 2.9 mg/l

MW-02-1
5/29/2008: < 1.0 mg/l
9/26/2008: < 1.0 mg/l

MW-01-6
5/19/2008: < 10 mg/l
9/18/2008: 2.2 mg/l

MW-02-2
5/19/2008: 7.9 mg/l
9/22/2008: 7.6 mg/l

MW-97-6
5/17/2008: < 0.2 mg/l
9/16/2008: 0.160 mg/l J

MW-01-3
5/19/2008: 1.1 mg/l
9/19/2008: 1.2 mg/l

MW-01-2
5/19/2008: 10.5 mg/l
9/22/2008: 7.8 mg/l

MW-01-5
5/17/2008: < 0.2 mg/l
9/16/2008: 0.142 mg/l J

MW-01-4
5/16/2008: < 0.2 mg/l
9/16/2008: 0.160 mg/l J

MW-97-7
5/20/2008: 3.1 mg/l
9/26/2008: 2.7 mg/l

MW-01-1
5/16/2008: < 0.2 mg/l
9/17/2008: < 0.010 mg/l

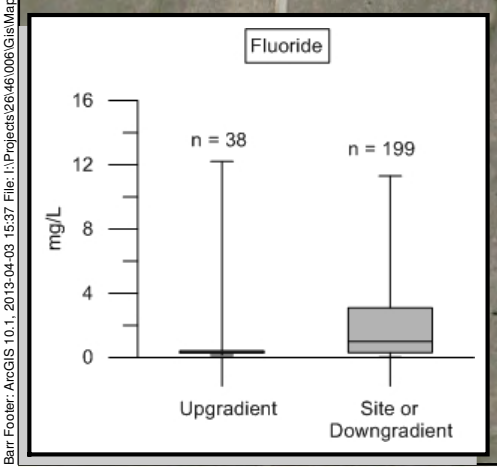
MW-06-22
5/21/2008: 5.6 mg/l
9/26/2008: 6.2 mg/l

MW-06-25
5/20/2008: 5.8 mg/l
9/26/2008: 5.0 mg/l

MW-97-5
5/15/2008: 0.30 mg/l
9/17/2008: 0.30 mg/l

MW-06-24
5/13/2008: 0.30 mg/l
9/16/2008: 0.30 mg/l

MW-06-23
5/13/2008: 0.2 mg/l
9/16/2008: 0.2 mg/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-03 15:37 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42a GW SW Data Fluoride Isocontour Base.mxd User: sal2

Sample Location

Isocontour

1 mg/l (Dashed where inferred)

4 mg/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Box-Whisker Plot Legend

n = Number of Samples

Maximum

75th Percentile

Median

25th Percentile

Minimum

N

Feet

800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42a

ANALYTICAL GROUNDWATER DATA:
FLUORIDE ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 0.120 mg/l

MW-06-10
5/14/2008: 0.23 mg/l
9/18/2008: 0.20 mg/l

MW-97-3
5/28/2008: 0.17 mg/l
9/23/2008: 0.15 mg/l

MW-06-12
5/20/2008: 3.86 mg/l
9/25/2008: 3.10 mg/l

MW-97-4
5/20/2008: 0.12 mg/l
9/22/2008: 0.13 mg/l

PW-99-1
5/18/2008: 0.81 mg/l
5/29/2008: < 0.82 mg/l
9/25/2008: 0.75 mg/l

MW-12-02
11/8/2012: 0.800 mg/l

MW-02-4
5/15/2008: 0.59 mg/l
9/23/2008: 0.58 mg/l
7/18/2010: 0.521 mg/l

MW-06-1
5/15/2008: 0.21 mg/l
9/18/2008: 0.20 mg/l
7/17/2010: 0.200 mg/l

MW-12-04
11/7/2012: 0.120 mg/l

MW-12-05
11/7/2012: 0.088 mg/l

MW-12-06
11/7/2012: 0.124 mg/l

MW-12-07
11/6/2012: 0.132 mg/l

MW-12-08
11/6/2012: 0.107 mg/l

MW-06-2
5/15/2008: 0.22 mg/l
9/23/2008: 0.19 mg/l
7/18/2010: 0.224 mg/l

MW-12-03
11/7/2012: 0.107 mg/l

MW-02-3
5/15/2008: 0.19 mg/l
9/23/2008: 0.21 mg/l
7/17/2010: 0.187 mg/l

MW-06-21
5/17/2008: 0.55 mg/l
9/24/2008: 0.55 mg/l

MW-97-10
5/21/2008: 0.20 mg/l
9/23/2008: 0.21 mg/l

MW-06-3
5/14/2008: 0.11 mg/l
9/19/2008: 0.07 mg/l
7/16/2010: 0.084 mg/l

MW-06-9
5/17/2008: 6.05 mg/l
9/25/2008: 5.75 mg/l

MW-06-8
5/18/2008: 5.33 mg/l
9/25/2008: 4.65 mg/l

MW-06-7 *
5/29/2008: 55.1 mg/l
9/23/2008: 300 mg/l

MW-97-11
5/21/2008: 0.31 mg/l
9/25/2008: 0.19 mg/l

MW-EPA-1
5/14/2008: 0.05 mg/l
9/17/2008: 0.05 mg/l

PW-99-3
5/28/2008: 0.70 mg/l
9/22/2008: 1.79 mg/l

MW-97-2
5/13/2008: 0.11 mg/l
9/17/2008: 0.14 mg/l

MW-97-1
5/13/2008: 0.15 mg/l
9/17/2008: 0.18 mg/l

MW-06-4
5/15/2008: 0.04 mg/l
9/18/2008: 0.06 mg/l

MW-06-5
5/14/2008: 0.29 mg/l
9/19/2008: 0.25 mg/l

MW-GW-3
5/20/2008: 0.22 mg/l
9/17/2008: 0.14 mg/l

RP-W-6
5/30/2008: < 0.48 mg/l
9/24/2008: 0.60 mg/l

MW-EPA-4
5/15/2008: 0.17 mg/l
9/20/2008: 0.17 mg/l

MW-06-11
5/28/2008: 0.55 mg/l
9/23/2008: 0.43 mg/l

RP-W-5
5/30/2008: < 0.23 mg/l
9/24/2008: 0.24 mg/l

MW-97-9
5/16/2008: 5.70 mg/l
9/24/2008: 7.12 mg/l

MW-06-13
5/27/2008: 0.49 mg/l
9/19/2008: 0.40 mg/l

RP-W-4
5/28/2008: 0.71 mg/l
9/24/2008: 0.35 mg/l

MW-EPA-3
5/15/2008: 0.05 mg/l
9/16/2008: 0.05 mg/l

MW-06-16
5/21/2008: 0.28 mg/l
9/20/2008: 0.30 mg/l

MW-06-14
5/27/2008: 0.16 mg/l
9/18/2008: 0.14 mg/l

MW-97-12
5/27/2008: 3.97 mg/l
9/23/2008: 8.44 mg/l

MW-06-15
5/21/2008: 0.11 mg/l
9/17/2008: 0.10 mg/l

RP-W-1
5/30/2008: < 0.50 mg/l
9/25/2008: 0.55 mg/l

MW-06-17
5/27/2008: 8.07 mg/l
9/20/2008: 8.64 mg/l

MW-06-18
5/21/2008: 51.3 mg/l
9/25/2008: 49.0 mg/l

MW-06-20
5/20/2008: 41.3 mg/l
9/20/2008: 31.3 mg/l

MW-06-19
5/20/2008: 0.13 mg/l
9/18/2008: 0.13 mg/l

MW-97-8
5/15/2008: 0.49 mg/l
9/24/2008: 0.48 mg/l

MW-02-1
5/29/2008: 4.56 mg/l
9/26/2008: 1.30 mg/l

MW-01-6
5/19/2008: 169 mg/l
9/18/2008: 91.4 mg/l

MW-02-2
5/19/2008: 42.1 mg/l
9/22/2008: 54.5 mg/l

MW-97-6
5/17/2008: 0.04 mg/l
9/16/2008: 0.11 mg/l

MW-01-3
5/19/2008: 94.5 mg/l
9/19/2008: 68.6 mg/l

MW-01-2
5/19/2008: 18.7 mg/l
9/22/2008: 17.0 mg/l

MW-01-5
5/17/2008: 0.05 mg/l
9/16/2008: 0.05 mg/l

MW-01-4
5/16/2008: 0.05 mg/l
9/16/2008: 0.03 mg/l

MW-97-7
5/20/2008: 2.70 mg/l
9/26/2008: 2.58 mg/l

MW-01-1
5/16/2008: 0.05 mg/l
9/17/2008: 0.04 mg/l

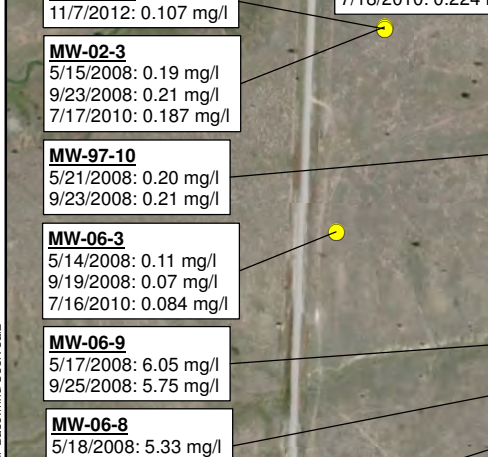
MW-06-22
5/21/2008: 0.88 mg/l
9/26/2008: 1.30 mg/l

MW-06-25
5/20/2008: 2.59 mg/l
9/26/2008: 2.43 mg/l

MW-97-5
5/15/2008: 0.18 mg/l
9/17/2008: 0.09 mg/l

MW-06-24
5/13/2008: 0.06 mg/l
9/16/2008: 0.04 mg/l

MW-06-23
5/13/2008: 0.06 mg/l
9/16/2008: 0.04 mg/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-03 16:04 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42b GW SW Data Phosphorus Total Isocontour Base.mxd User: sal2

Sample Location

Isocontours

1 mg/l (Dashed where inferred)

50 mg/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42b

ANALYTICAL GROUNDWATER DATA:
TOTAL PHOSPHORUS ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 270 mg/l

MW-06-10
5/14/2008: 414 mg/l
9/18/2008: 425 mg/l

MW-97-3
5/28/2008: 343 mg/l
9/23/2008: 344 mg/l

MW-06-12
5/20/2008: 1070 mg/l
9/25/2008: 928 mg/l

MW-97-4
5/20/2008: 432 mg/l
9/22/2008: 392 mg/l

PW-99-1
5/18/2008: 670 mg/l
5/29/2008: 660 mg/l
9/25/2008: 679 mg/l

MW-12-02
11/8/2012: 492 mg/l

MW-02-4
5/15/2008: 645 mg/l
9/23/2008: 571 mg/l
7/18/2010: 537 mg/l

MW-06-1
5/15/2008: 591 mg/l
9/18/2008: 568 mg/l
7/17/2010: 401 mg/l

MW-12-05
11/7/2012: 80.4 mg/l

MW-12-04
11/7/2012: 96.5 mg/l

MW-12-06
11/7/2012: 35.9 mg/l

MW-12-08
11/6/2012: 97.4 mg/l

MW-12-07
11/6/2012: 88.8 mg/l

MW-12-03
11/7/2012: 73.8 mg/l

MW-02-3
5/15/2008: 641 mg/l
9/23/2008: 628 mg/l
7/17/2010: 632 mg/l

MW-97-10
5/21/2008: 652 mg/l
9/23/2008: 607 mg/l

MW-06-3
5/14/2008: 445 mg/l
9/19/2008: 454 mg/l
7/16/2010: 468 mg/l

MW-06-9
5/17/2008: 894 mg/l
9/25/2008: 860 mg/l

MW-06-8
5/18/2008: 774 mg/l
9/25/2008: 790 mg/l

MW-06-7 *
5/29/2008: 813 mg/l
9/23/2008: 732 mg/l

MW-97-11
5/21/2008: 1010 mg/l
9/25/2008: 1290 mg/l

MW-EPA-1
5/14/2008: 33.4 mg/l
9/17/2008: 32.6 mg/l

PW-99-3
5/28/2008: 64.4 mg/l
9/22/2008: 65 mg/l

MW-06-4
5/15/2008: 26.7 mg/l
9/18/2008: 25.6 mg/l

MW-06-2
5/15/2008: 693 mg/l
9/23/2008: 835 mg/l
7/18/2010: 796 mg/l

MW-06-21
5/17/2008: 471 mg/l
9/24/2008: 461 mg/l

MW-97-2
5/13/2008: 42.6 mg/l
9/17/2008: 43.3 mg/l

MW-97-1
5/13/2008: 44.9 mg/l
9/17/2008: 41.2 mg/l

MW-06-5
5/14/2008: 53.6 mg/l
9/19/2008: 53 mg/l

MW-GW-3
5/20/2008: 58 mg/l
9/17/2008: 57.6 mg/l

RP-W-6
5/30/2008: 1040 mg/l
9/24/2008: 1010 mg/l

MW-EPA-4
5/15/2008: 811 mg/l
9/20/2008: 805 mg/l

MW-06-11
5/28/2008: 1130 mg/l
9/23/2008: 900 mg/l

RP-W-5
5/30/2008: 637 mg/l
9/24/2008: 591 mg/l

MW-97-9
5/16/2008: 464 mg/l
9/24/2008: 478 mg/l

MW-06-13
5/27/2008: 471 mg/l
9/19/2008: 446 mg/l

RP-W-4
5/28/2008: 785 mg/l
9/24/2008: 784 mg/l

MW-EPA-3
5/15/2008: 133 mg/l
9/16/2008: 117 mg/l

MW-06-16
5/21/2008: 703 mg/l
9/20/2008: 710 mg/l

MW-06-14
5/27/2008: 558 mg/l
9/18/2008: 487 mg/l

MW-97-12
5/27/2008: 236 mg/l
9/23/2008: 245 mg/l

MW-06-15
5/21/2008: 429 mg/l
9/17/2008: 461 mg/l

RP-W-1
5/30/2008: 239 mg/l
9/25/2008: 209 mg/l

MW-06-17
5/27/2008: 575 mg/l
9/20/2008: 489 mg/l

MW-06-18
5/21/2008: 647 mg/l
9/25/2008: 601 mg/l

MW-06-20
5/20/2008: 557 mg/l
9/20/2008: 528 mg/l

MW-06-19
5/20/2008: 525 mg/l
9/18/2008: 465 mg/l

MW-97-8
5/15/2008: 485 mg/l
9/24/2008: 493 mg/l

MW-02-1
5/29/2008: 1200 mg/l
9/26/2008: 1350 mg/l

MW-01-6
5/19/2008: 249 mg/l
9/18/2008: 271 mg/l

MW-02-2
5/19/2008: 240 mg/l
9/22/2008: 240 mg/l

MW-97-6
5/17/2008: 86.0 mg/l
9/16/2008: 87.4 mg/l

MW-01-3
5/19/2008: 227 mg/l
9/19/2008: 246 mg/l

MW-01-2
5/19/2008: 257 mg/l
9/22/2008: 238 mg/l

MW-01-5
5/17/2008: 153 mg/l
9/16/2008: 155 mg/l

MW-01-4
5/16/2008: 147 mg/l
9/16/2008: 147 mg/l

MW-97-7
5/20/2008: 620 mg/l
9/26/2008: 595 mg/l

MW-01-1
5/16/2008: 457 mg/l
9/17/2008: 441 mg/l

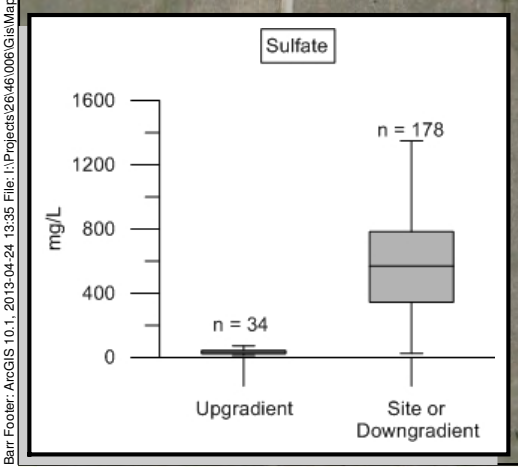
MW-06-22
5/21/2008: 601 mg/l
9/26/2008: 579 mg/l

MW-06-25
5/20/2008: 657 mg/l
9/26/2008: 619 mg/l

MW-97-5
5/15/2008: 17.6 mg/l
9/17/2008: 17.7 mg/l

MW-06-24
5/13/2008: 13.6 mg/l
9/16/2008: 13.7 mg/l

MW-06-23
5/13/2008: 15.4 mg/l
9/16/2008: 15.4 mg/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-24 13:35 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42c GW SW Data Sulfate Isocontour Base.mxd User: jwk

- Sample Location

Isocontours

- 600 mg/l (Dashed where inferred)
- 1000 mg/l (Dashed where inferred)

Solid Wate Management Areas

- Tailings Basin and Water Recirculation

Box-Whisker Plot Legend

n = Number of Samples

- Maximum
- 75th Percentile
- Median
- 25th Percentile
- Minimum

N

Feet

800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Hatches toward lower concentrations.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42c

ANALYTICAL GROUNDWATER DATA:
SULFATE ISOCONCENTRATION CONTOURS*
Rhodia Silver Bow Plant
Montana

*MW-12 well series concentrations are from the November 2012 sampling event.

MW-12-01
11/6/2012: 0.12 ug/l

MW-06-10
5/14/2008: 0.15 ug/l
9/18/2008: 0.15 ug/l

MW-97-3
5/28/2008: 0.43 ug/l
9/23/2008: 0.41 ug/l

MW-06-12
5/20/2008: 0.21 ug/l
9/25/2008: < 0.25 ug/l

MW-97-4
5/20/2008: 0.61 ug/l
9/22/2008: 0.54 ug/l

PW-99-1
5/18/2008: 0.25 ug/l
5/29/2008: 0.31 ug/l
9/25/2008: 0.29 ug/l

MW-12-02
11/8/2012: 0.19 ug/l

MW-02-4
5/15/2008: 0.15 ug/l
9/23/2008: 0.15 ug/l
7/18/2010: 0.14 ug/l

MW-06-1
5/15/2008: 0.26 ug/l
9/18/2008: 0.27 ug/l
7/17/2010: 0.26 ug/l

MW-12-04
11/7/2012: 0.38 ug/l

MW-12-05
11/7/2012: 0.35 ug/l

MW-12-07
11/6/2012: 0.28 ug/l

MW-12-06
11/7/2012: 0.19 ug/l

MW-06-2
5/15/2008: 0.16 ug/l
9/23/2008: 0.15 ug/l
7/18/2010: 0.15 ug/l

MW-12-08
11/6/2012: 0.26 ug/l

MW-12-03
11/7/2012: 0.54 ug/l

MW-02-3
5/15/2008: 0.17 ug/l
9/23/2008: 0.17 ug/l
7/17/2010: 0.16 ug/l

MW-06-21
5/17/2008: 0.52 ug/l
9/24/2008: 0.54 ug/l

MW-97-10
5/21/2008: 0.24 ug/l
9/23/2008: 0.25 ug/l

MW-06-3
5/14/2008: 0.19 ug/l
9/19/2008: 0.2 ug/l
7/16/2010: 0.19 ug/l

MW-06-9
5/17/2008: 0.23 ug/l
9/25/2008: < 0.25 ug/l

MW-06-8
5/18/2008: 0.22 ug/l
9/25/2008: < 0.25 ug/l

MW-06-7 *
5/29/2008: 0.85 ug/l
9/23/2008: 0.89 ug/l

MW-97-11
5/21/2008: 0.41 ug/l
9/25/2008: 0.35 ug/l

MW-EPA-1
5/14/2008: 0.26 ug/l
9/17/2008: 0.26 ug/l

PW-99-3
5/28/2008: 0.6 ug/l
9/22/2008: 0.75 ug/l

MW-97-2
5/13/2008: 0.12 ug/l
9/17/2008: 0.13 ug/l

MW-97-1
5/13/2008: 0.17 ug/l
9/17/2008: 0.15 ug/l

MW-06-4
5/15/2008: 0.42 ug/l
9/18/2008: 0.43 ug/l

MW-06-5
5/14/2008: 0.31 ug/l
9/19/2008: 0.39 ug/l

MW-GW-3
5/20/2008: 0.2 ug/l
9/17/2008: 0.14 ug/l

MW-GW-2
6/30/2008: < 3 ug/l

RP-W-6
5/30/2008: 0.7 ug/l
9/24/2008: 0.58 ug/l

MW-EPA-4
5/15/2008: 0.08 ug/l
9/20/2008: 0.06 ug/l

MW-06-11
5/28/2008: < 0.1 ug/l
9/23/2008: 0.09 ug/l

RP-W-5
5/30/2008: 0.07 ug/l
9/24/2008: < 0.25 ug/l

MW-97-9
5/16/2008: 2.2 ug/l
9/24/2008: 2.5 ug/l

MW-06-13
5/27/2008: < 0.13 ug/l
9/19/2008: 0.1 ug/l

RP-W-4
5/28/2008: < 0.25 ug/l
9/24/2008: < 0.25 ug/l

MW-EPA-3
5/15/2008: 0.05 ug/l
9/16/2008: 0.06 ug/l

MW-06-16
5/21/2008: 0.08 ug/l
9/20/2008: 0.08 ug/l

MW-06-14
5/27/2008: < 0.07 ug/l
9/18/2008: 0.1 ug/l

MW-97-12
5/27/2008: < 0.23 ug/l
12/15/2008: 0.23 ug/l

MW-06-15
5/21/2008: 0.06 ug/l
9/17/2008: 0.07 ug/l

RP-W-1
5/22/2008: 0.07 ug/l
9/25/2008: < 0.25 ug/l

MW-06-17
5/27/2008: < 0.16 ug/l
9/20/2008: 0.15 ug/l

MW-06-18
5/21/2008: 0.11 ug/l
9/25/2008: < 0.25 ug/l

MW-06-20
5/20/2008: 0.11 ug/l
9/20/2008: 0.11 ug/l

MW-06-19
5/20/2008: 0.1 ug/l
9/18/2008: 0.11 ug/l

MW-97-8
5/15/2008: 0.65 ug/l
9/24/2008: 0.7 ug/l

MW-02-1
5/29/2008: < 0.05 ug/l
9/26/2008: < 0.25 ug/l

MW-01-6
5/19/2008: < 0.05 ug/l
9/18/2008: 0.05 ug/l

MW-02-2
5/19/2008: 0.13 ug/l
9/22/2008: 0.12 ug/l

MW-97-6
5/17/2008: 0.05 ug/l
9/16/2008: 0.07 ug/l

MW-01-3
5/19/2008: 0.14 ug/l
9/19/2008: 0.17 ug/l

MW-01-2
5/19/2008: 0.36 ug/l
9/22/2008: 0.26 ug/l

MW-01-5
5/17/2008: 0.07 ug/l
9/16/2008: 0.09 ug/l

MW-01-4
5/16/2008: 0.07 ug/l
9/16/2008: 0.09 ug/l

MW-97-7
5/20/2008: 0.21 ug/l
9/26/2008: < 0.25 ug/l

MW-01-1
5/16/2008: 0.1 ug/l
9/17/2008: 0.09 ug/l

MW-06-22
5/21/2008: 0.74 ug/l
9/26/2008: 0.67 ug/l

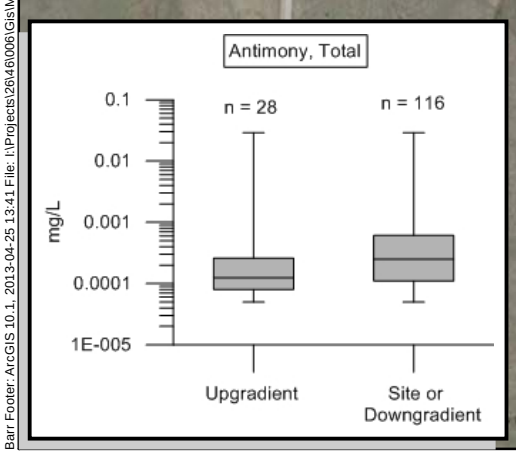
MW-06-25
5/20/2008: 1.4 ug/l
9/26/2008: 1.3 ug/l

MW-97-5
5/15/2008: 0.08 ug/l
9/17/2008: 0.07 ug/l

MW-06-24
5/13/2008: 0.08 ug/l
9/16/2008: 0.1 ug/l

MW-06-23
5/13/2008: 0.09 ug/l
9/16/2008: 0.08 ug/l

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Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-25 13:41 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Isocontours\Figure 5_3-42d GW SW Data Antimony Isocontour Base.mxd User: sal2

Sample Location

Isocontours

0.6 ug/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

CSLIS/Sod Farm

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42d

ANALYTICAL GROUNDWATER DATA:
TOTAL ANTIMONY ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 2.3 ug/l

MW-06-10
5/14/2008: 7.7 ug/l
9/18/2008: 7.9 ug/l

MW-97-3
5/28/2008: 51.7 ug/l
9/23/2008: 50.3 ug/l

MW-06-12
5/20/2008: 22.3 ug/l
9/25/2008: 21.2 ug/l

MW-97-4
5/20/2008: 35.8 ug/l
9/22/2008: 36.8 ug/l

PW-99-1
5/18/2008: 33.3 ug/l
5/29/2008: 33.8 ug/l
9/25/2008: 33.5 ug/l

MW-12-02
11/8/2012: 35.7 ug/l

MW-02-4
5/15/2008: 21.1 ug/l
9/23/2008: 24.5 ug/l
7/18/2010: 20.5 ug/l

MW-06-1
5/15/2008: 4.9 ug/l
9/18/2008: 5.3 ug/l
7/17/2010: 4.9 ug/l

MW-12-04
11/7/2012: 30.1 ug/l

MW-12-06
11/7/2012: 12.2 ug/l

MW-12-05
11/7/2012: 15.3 ug/l

MW-12-08
11/6/2012: 2.3 ug/l

MW-12-07
11/6/2012: 3.8 ug/l

MW-06-2
5/15/2008: 11.2 ug/l
9/23/2008: 14 ug/l
7/18/2010: 11.0 ug/l

MW-06-21
5/17/2008: 48 ug/l
9/24/2008: 56.4 ug/l

MW-12-03
11/7/2012: 33.4 ug/l

MW-02-3
5/15/2008: 12.4 ug/l
9/23/2008: 13.2 ug/l
7/17/2010: 11.2 ug/l

MW-97-10
5/21/2008: 31 ug/l
9/23/2008: 32.8 ug/l

MW-06-3
5/14/2008: 5.2 ug/l
9/19/2008: 5 ug/l
7/16/2010: 4.7 ug/l

MW-06-9
5/17/2008: 45.1 ug/l
9/25/2008: 46.8 ug/l

MW-06-8
5/18/2008: 64.8 ug/l
9/25/2008: 64.3 ug/l

MW-06-7 *
5/29/2008: 14.2 ug/l
9/23/2008: 27.4 ug/l

MW-97-11
5/21/2008: 14.3 ug/l
9/25/2008: 14.8 ug/l

MW-EPA-1
5/14/2008: 8 ug/l
9/17/2008: 8 ug/l

PW-99-3
5/28/2008: 129 ug/l
9/22/2008: 138.9 ug/l

MW-97-2
5/13/2008: 9 ug/l
9/17/2008: 9.7 ug/l

MW-97-1
5/13/2008: 13.7 ug/l
9/17/2008: 19.5 ug/l

MW-06-4
5/15/2008: 27.6 ug/l
9/18/2008: 25.3 ug/l

MW-06-5
5/14/2008: 45 ug/l
9/19/2008: 59.4 ug/l

MW-GW-3
5/20/2008: 24.1 ug/l
9/17/2008: 19.2 ug/l

MW-GW-2
6/30/2008: 19 ug/l

RP-W-6
5/30/2008: 31 ug/l
9/24/2008: 30.3 ug/l

MW-EPA-4
5/15/2008: 4.6 ug/l
9/20/2008: 5 ug/l

MW-06-11
5/28/2008: 20.4 ug/l
9/23/2008: 21.8 ug/l

RP-W-5
5/30/2008: 6.8 ug/l
9/24/2008: 6.6 ug/l

MW-97-9
5/16/2008: 57.9 ug/l
9/24/2008: 63.1 ug/l

MW-06-13
5/27/2008: 10.3 ug/l
9/19/2008: 10.4 ug/l

RP-W-4
5/28/2008: 30.6 ug/l
9/24/2008: 33.6 ug/l

MW-EPA-3
5/15/2008: 3.5 ug/l
9/16/2008: 3.9 ug/l

MW-06-16
5/21/2008: 6 ug/l
9/20/2008: 8.3 ug/l

MW-06-14
5/27/2008: 4.2 ug/l
9/18/2008: 4 ug/l

MW-97-12
5/27/2008: 68.8 ug/l
12/15/2008: 61.8 ug/l

MW-06-15
5/21/2008: 3.2 ug/l
9/17/2008: 3.7 ug/l

RP-W-1
5/22/2008: 6.8 ug/l
9/25/2008: 7.7 ug/l

MW-06-17
5/27/2008: 21.6 ug/l
9/20/2008: 25 ug/l

MW-06-18
5/21/2008: 69.8 ug/l
9/25/2008: 69.5 ug/l

MW-06-20
5/20/2008: 17.7 ug/l
9/20/2008: 18.7 ug/l

MW-06-19
5/20/2008: 4.9 ug/l
9/18/2008: 8.4 ug/l

MW-97-8
5/15/2008: 73.7 ug/l
9/24/2008: 74.5 ug/l

MW-02-1
5/29/2008: 4.4 ug/l
9/26/2008: 5.5 ug/l

MW-01-6
5/19/2008: 11.2 ug/l
9/18/2008: 11.5 ug/l

MW-02-2
5/19/2008: 45.3 ug/l
9/22/2008: 51.5 ug/l

MW-97-6
5/17/2008: 3.2 ug/l
9/16/2008: 3.8 ug/l

MW-01-3
5/19/2008: 16.6 ug/l
9/19/2008: 17.7 ug/l

MW-01-2
5/19/2008: 20.6 ug/l
9/22/2008: 19.1 ug/l

MW-01-5
5/17/2008: 3 ug/l
9/16/2008: 3.5 ug/l

MW-01-4
5/16/2008: 2.9 ug/l
9/16/2008: 3.7 ug/l

MW-97-7
5/20/2008: 59.3 ug/l
9/26/2008: 59.4 ug/l

MW-01-1
5/16/2008: 3.1 ug/l
9/17/2008: 4.7 ug/l

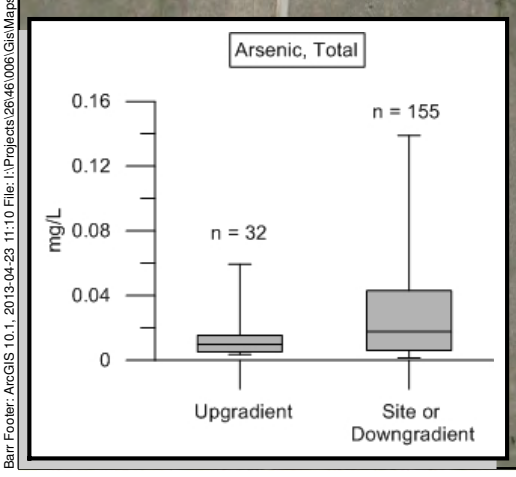
MW-06-22
5/21/2008: 59.8 ug/l
9/26/2008: 86.4 ug/l

MW-06-25
5/20/2008: 45.5 ug/l
9/26/2008: 46.7 ug/l

MW-97-5
5/15/2008: 5.1 ug/l
9/17/2008: 4.6 ug/l

MW-06-24
5/13/2008: 3.9 ug/l
9/16/2008: 3.6 ug/l

MW-06-23
5/13/2008: 4 ug/l
9/16/2008: 3.8 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Sample Location

Isocontours

30 ug/l (Dashed where inferred)

50 ug/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Sheep Gulch Area

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42e

ANALYTICAL GROUNDWATER DATA:
TOTAL ARSENIC ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-23 11:10 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42e GW SW Data Arsenic Isocontour Base.mxd User: jwk

MW-12-01
11/6/2012: 0.13448 mg/l

MW-06-10
5/14/2008: 0.0318 mg/l
9/18/2008: 0.0382 mg/l

MW-97-3
5/28/2008: 0.0334 mg/l
9/23/2008: 0.036 mg/l

MW-06-12
5/20/2008: 0.0348 mg/l
9/25/2008: 0.0293 mg/l

MW-97-4
5/20/2008: 0.0270 mg/l
9/22/2008: 0.02492 mg/l

PW-99-1
5/18/2008: 0.0638 mg/l
5/29/2008: 0.0645 mg/l
9/25/2008: 0.0654 mg/l

MW-12-02
11/8/2012: 0.04703 mg/l

MW-02-4
5/15/2008: 0.0363 mg/l
9/23/2008: 0.036 mg/l
7/18/2010: 0.0340 mg/l

MW-06-1
5/15/2008: 0.0659 mg/l
9/18/2008: 0.0782 mg/l
7/17/2010: 0.0639 mg/l

MW-12-04
11/7/2012: 0.06080 mg/l

MW-12-05
11/7/2012: 0.03843 mg/l

MW-12-06
11/7/2012: 0.04538 mg/l

MW-12-08
11/6/2012: 0.05271 mg/l

MW-12-07
11/6/2012: 0.07523 mg/l

MW-02-3
5/15/2008: 0.0301 mg/l
9/23/2008: 0.02724 mg/l
7/17/2010: 0.0251 mg/l

MW-12-03
11/7/2012: 0.03652 mg/l

MW-06-3
5/14/2008: 0.0739 mg/l
9/19/2008: 0.0698 mg/l
7/16/2010: 0.0537 mg/l

MW-06-9
5/17/2008: 0.0425 mg/l
9/25/2008: 0.0376 mg/l

MW-06-8
5/18/2008: 0.168 mg/l
9/25/2008: 0.152 mg/l

MW-06-7 *
5/29/2008: 0.0651 mg/l
9/23/2008: 0.05552 mg/l

MW-97-11
5/21/2008: 0.0316 mg/l
9/25/2008: 0.0310 mg/l

MW-EPA-1
5/14/2008: 0.00520 mg/l
9/17/2008: 0.0092 mg/l

PW-99-3
5/28/2008: 0.152 mg/l
9/22/2008: 0.1581 mg/l

MW-06-4
5/15/2008: 0.0557 mg/l
9/18/2008: 0.0195 mg/l

MW-06-2
5/15/2008: 0.0392 mg/l
9/23/2008: 0.03455 mg/l
7/18/2010: 0.0329 mg/l

MW-06-21
5/17/2008: 0.0318 mg/l
9/24/2008: 0.0238 mg/l

MW-97-10
5/21/2008: 0.0233 mg/l
9/23/2008: 0.02227 mg/l

MW-97-2
5/13/2008: 0.0300 mg/l
9/17/2008: 0.0325 mg/l

MW-97-1
5/13/2008: 0.0409 mg/l
9/17/2008: 0.0435 mg/l

MW-06-5
5/14/2008: 0.0614 mg/l
9/19/2008: 0.0842 mg/l

MW-GW-3
5/20/2008: 0.0714 mg/l
9/17/2008: 0.0651 mg/l

RP-W-6
5/30/2008: 0.0315 mg/l
9/24/2008: 0.0299 mg/l

MW-EPA-4
5/15/2008: 0.0404 mg/l
9/20/2008: 0.04292 mg/l

MW-06-11
5/28/2008: 0.0312 mg/l
9/23/2008: 0.03174 mg/l

RP-W-5
5/30/2008: 0.0335 mg/l
9/24/2008: 0.0333 mg/l

MW-97-9
5/16/2008: 0.0568 mg/l
9/24/2008: 0.0593 mg/l

MW-06-13
5/27/2008: 0.0382 mg/l
9/19/2008: 0.04017 mg/l

RP-W-4
5/28/2008: 0.0253 mg/l
9/24/2008: 0.0243 mg/l

MW-EPA-3
5/15/2008: 0.0592 mg/l
9/16/2008: < 0.0628 mg/l

MW-06-16
5/21/2008: 0.0274 mg/l
9/20/2008: 0.03035 mg/l

MW-06-14
5/27/2008: 0.0279 mg/l
9/18/2008: 0.0513 mg/l

MW-97-12
5/27/2008: 0.0466 mg/l
12/15/2008: 0.0296 mg/l

MW-06-15
5/21/2008: 0.0248 mg/l
9/17/2008: 0.0222 mg/l

RP-W-1
5/22/2008: 0.0273 mg/l
9/25/2008: 0.0262 mg/l

MW-06-17
5/27/2008: 0.0474 mg/l
9/20/2008: 0.04283 mg/l

MW-06-18
5/21/2008: 0.0625 mg/l
9/25/2008: 0.0635 mg/l

MW-06-20
5/20/2008: 0.0312 mg/l
9/20/2008: 0.03777 mg/l

MW-06-19
5/20/2008: 0.0444 mg/l
9/18/2008: 0.0508 mg/l

MW-97-8
5/15/2008: 0.0313 mg/l
9/24/2008: 0.0191 mg/l

MW-02-1
5/29/2008: 0.0293 mg/l
9/26/2008: 0.0339 mg/l

MW-01-6
5/19/2008: 0.00980 mg/l
9/18/2008: 0.0166 mg/l

MW-02-2
5/19/2008: 0.0186 mg/l
9/22/2008: 0.02268 mg/l

MW-97-6
5/17/2008: 0.118 mg/l
9/16/2008: 0.129 mg/l

MW-01-3
5/19/2008: 0.0339 mg/l
9/19/2008: 0.0305 mg/l

MW-01-2
5/19/2008: 0.0145 mg/l
9/22/2008: 0.01892 mg/l

MW-01-5
5/17/2008: 0.113 mg/l
9/16/2008: 0.124 mg/l

MW-01-4
5/16/2008: 0.116 mg/l
9/16/2008: 0.113 mg/l

MW-97-7
5/20/2008: 0.0494 mg/l
9/26/2008: 0.0259 mg/l

MW-01-1
5/16/2008: 0.0863 mg/l
9/17/2008: 0.0900 mg/l

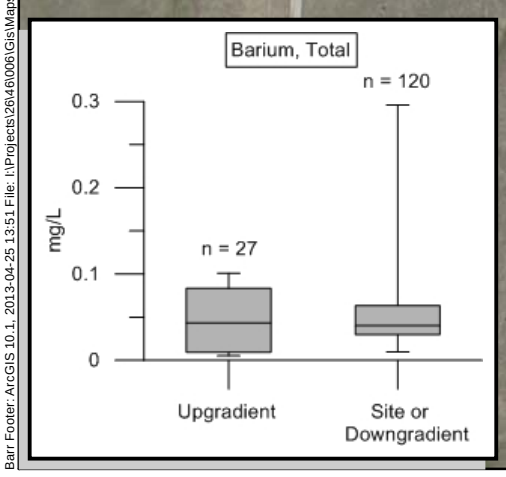
MW-06-22
5/21/2008: 0.0197 mg/l
9/26/2008: 0.0184 mg/l

MW-06-25
5/20/2008: 0.0579 mg/l
9/26/2008: 0.0469 mg/l

MW-97-5
5/15/2008: 0.101 mg/l
9/17/2008: 0.0923 mg/l

MW-06-24
5/13/2008: 0.0837 mg/l
9/16/2008: 0.0894 mg/l

MW-06-23
5/13/2008: 0.0909 mg/l
9/16/2008: 0.0791 mg/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-25 13:51 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_20125_3_Groundwater\Isocontours\Figure 5_3-42f GW SW Data Barium Isocontour Base.mxd User: sal2

Concentrations

- <0.05 mg/l
- 0.05 - 0.10 mg/l
- > 0.10 mg/l

Box-Whisker Plot Legend

n = Number of Samples

- Maximum
- 75th Percentile
- Median
- 25th Percentile
- Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
**** Screened within tailings basin***

Figure 5.3-42f

ANALYTICAL GROUNDWATER DATA:
TOTAL BARIUM ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: < 0.020 ug/l

MW-06-10
5/14/2008: 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-97-3
5/28/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l

MW-06-12
5/20/2008: 0.03 ug/l
9/25/2008: < 0.1 ug/l

MW-97-4
5/20/2008: < 0.02 ug/l
9/22/2008: < 0.02 ug/l

PW-99-1
5/18/2008: < 0.02 ug/l
5/29/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-1
5/15/2008: < 0.02 ug/l
9/18/2008: < 0.029 ug/l
7/17/2010: < 0.02 ug/l

MW-02-4
5/15/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/18/2010: < 0.02 ug/l

MW-12-02
11/8/2012: < 0.020 ug/l

MW-12-04
11/7/2012: < 0.020 ug/l

MW-12-05
11/7/2012: < 0.020 ug/l

MW-12-06
11/7/2012: < 0.020 ug/l

MW-12-08
11/6/2012: < 0.020 ug/l

MW-12-07
11/6/2012: < 0.020 ug/l

MW-12-03
11/7/2012: < 0.020 ug/l

MW-02-3
5/15/2008: 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/17/2010: < 0.02 ug/l

MW-06-3
5/14/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l
7/16/2010: < 0.02 ug/l

MW-06-9
5/17/2008: 0.06 ug/l
9/25/2008: < 0.1 ug/l

MW-06-8
5/18/2008: 0.07 ug/l
9/25/2008: < 0.1 ug/l

MW-06-7 *
5/29/2008: < 0.02 ug/l
9/23/2008: 0.03 ug/l

MW-97-11
5/21/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-EPA-1
5/14/2008: < 0.02 ug/l
9/17/2008: < 4.3 ug/l

PW-99-3
5/28/2008: 0.02 ug/l
9/22/2008: 0.02 ug/l

MW-06-2
5/15/2008: 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/18/2010: < 0.02 ug/l

MW-06-21
5/17/2008: 0.08 ug/l
9/24/2008: < 0.1 ug/l

MW-97-10
5/21/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l

MW-97-2
5/13/2008: < 0.02 ug/l
9/17/2008: < 0.076 ug/l

MW-97-1
5/13/2008: < 0.02 ug/l
9/17/2008: < 0.026 ug/l

MW-06-4
5/15/2008: 0.04 ug/l
9/18/2008: < 0.02 ug/l

MW-06-5
5/14/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l

MW-GW-3
5/20/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

RP-W-6
5/30/2008: < 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-EPA-4
5/15/2008: < 0.02 ug/l
9/20/2008: 0.02 ug/l

MW-06-11
5/28/2008: 0.03 ug/l
9/23/2008: < 0.02 ug/l

RP-W-5
5/30/2008: < 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-97-9
5/16/2008: 0.57 ug/l
9/24/2008: 0.78 ug/l

MW-06-13
5/27/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l

RP-W-4
5/28/2008: 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-EPA-3
5/15/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-16
5/21/2008: < 0.02 ug/l
9/20/2008: < 0.02 ug/l

MW-06-14
5/27/2008: < 0.02 ug/l
9/18/2008: < 0.064 ug/l

MW-97-12
5/27/2008: 0.12 ug/l
12/15/2008: 0.06 ug/l

MW-06-15
5/21/2008: < 0.02 ug/l
9/17/2008: < 3.6 ug/l

RP-W-1
5/22/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-17
5/27/2008: 0.02 ug/l
9/20/2008: < 0.02 ug/l

MW-06-18
5/21/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-20
5/20/2008: 0.02 ug/l
9/20/2008: 0.03 ug/l

MW-06-19
5/20/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-97-8
5/15/2008: 0.08 ug/l
9/24/2008: < 0.1 ug/l

MW-02-1
5/29/2008: 0.04 ug/l
9/26/2008: < 0.1 ug/l

MW-01-6
5/19/2008: 0.06 ug/l
9/18/2008: 0.176 ug/l

MW-02-2
5/19/2008: 0.39 ug/l
9/22/2008: 0.34 ug/l

MW-97-6
5/17/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-01-3
5/19/2008: 0.06 ug/l
9/19/2008: 0.099 ug/l

MW-01-2
5/19/2008: 0.61 ug/l
9/22/2008: 0.36 ug/l

MW-01-5
5/17/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-01-4
5/16/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-97-7
5/20/2008: 0.43 ug/l
9/26/2008: < 0.1 ug/l

MW-01-1
5/16/2008: < 0.02 ug/l
9/17/2008: < 0.025 ug/l

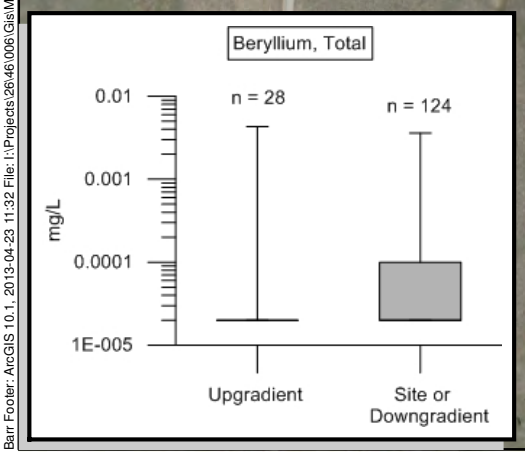
MW-06-22
5/21/2008: 0.07 ug/l
9/26/2008: < 0.1 ug/l

MW-06-25
5/20/2008: 0.29 ug/l
9/26/2008: 0.24 ug/l

MW-97-5
5/15/2008: 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-06-24
5/13/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-23
5/13/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Bar Footer: ArcGIS 10.1 2013-04-23 11:32 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42g GW SW Data Beryllium Isocontour Base.mxd User: jwk

Sample Location

Isocontours

0.1 ug/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42g

ANALYTICAL GROUNDWATER DATA:
TOTAL BERYLLIUM ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 0.047 ug/l

MW-06-10
5/14/2008: < 0.02 ug/l
9/18/2008: 0.03 ug/l

MW-97-3
5/28/2008: 0.06 ug/l
9/23/2008: 0.06 ug/l

MW-06-12
5/20/2008: 0.04 ug/l
9/25/2008: 0.19 ug/l

MW-97-4
5/20/2008: 0.11 ug/l
9/22/2008: 0.1 ug/l

PW-99-1
5/18/2008: 0.15 ug/l
5/29/2008: 0.17 ug/l
9/25/2008: 0.24 ug/l

MW-06-1
5/15/2008: 0.05 ug/l
9/18/2008: 0.06 ug/l
7/17/2010: 0.04 ug/l

MW-12-02
11/8/2012: 0.036 ug/l

MW-02-4
5/15/2008: 0.04 ug/l
9/23/2008: 0.04 ug/l
7/18/2010: 0.02 ug/l

MW-12-05
11/7/2012: 0.041 ug/l

MW-12-04
11/7/2012: < 0.020 ug/l

MW-12-06
11/7/2012: 0.021 ug/l

MW-06-2
5/15/2008: 0.04 ug/l
9/23/2008: 0.04 ug/l
7/18/2010: < 0.02 ug/l

MW-12-08
11/6/2012: 0.039 ug/l

MW-12-07
11/6/2012: 0.044 ug/l

MW-02-3
5/15/2008: 0.03 ug/l
9/23/2008: 0.02 ug/l
7/17/2010: < 0.02 ug/l

MW-12-03
11/7/2012: 0.037 ug/l

MW-06-3
5/14/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l
7/16/2010: < 0.02 ug/l

MW-06-9
5/17/2008: 0.31 ug/l
9/25/2008: 0.12 ug/l

MW-06-8
5/18/2008: 0.27 ug/l
9/25/2008: 0.13 ug/l

MW-06-7 *
5/29/2008: 0.25 ug/l
9/23/2008: 0.04 ug/l

MW-97-11
5/21/2008: 0.06 ug/l
9/25/2008: < 0.1 ug/l

MW-EPA-1
5/14/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

PW-99-3
5/28/2008: 0.23 ug/l
9/22/2008: 0.29 ug/l

MW-06-21
5/17/2008: 0.56 ug/l
9/24/2008: 0.59 ug/l

MW-97-10
5/21/2008: 0.03 ug/l
9/23/2008: 0.03 ug/l

MW-97-2
5/13/2008: 0.07 ug/l
9/17/2008: 0.09 ug/l

MW-97-1
5/13/2008: 0.09 ug/l
9/17/2008: 0.1 ug/l

MW-06-4
5/15/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-06-5
5/14/2008: 0.06 ug/l
9/19/2008: 0.04 ug/l

MW-GW-3
5/20/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-GW-2
6/30/2008: < 0.1 ug/l

RP-W-6
5/30/2008: 1.46 ug/l
9/24/2008: 1 ug/l

MW-EPA-4
5/15/2008: 0.04 ug/l
9/20/2008: 0.03 ug/l

MW-06-11
5/28/2008: 0.05 ug/l
9/23/2008: 0.06 ug/l

RP-W-5
5/30/2008: 0.02 ug/l
9/24/2008: 0.11 ug/l

MW-97-9
5/16/2008: 69.7 ug/l
9/24/2008: 90.3 ug/l

MW-06-13
5/27/2008: 0.04 ug/l
9/19/2008: 0.05 ug/l

RP-W-4
5/28/2008: 1.61 ug/l
9/24/2008: 1.6 ug/l

MW-EPA-3
5/15/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-16
5/21/2008: 0.04 ug/l
9/20/2008: 0.04 ug/l

MW-06-14
5/27/2008: 0.03 ug/l
9/18/2008: 0.04 ug/l

MW-97-12
5/27/2008: 0.05 ug/l
12/15/2008: < 0.02 ug/l

MW-06-15
5/21/2008: < 0.02 ug/l
9/17/2008: 0.03 ug/l

MW-06-17
5/27/2008: 1.44 ug/l
9/20/2008: 1.16 ug/l

RP-W-1
5/22/2008: 0.06 ug/l
9/25/2008: 0.1 ug/l

MW-06-18
5/21/2008: 40.5 ug/l
9/25/2008: 46.5 ug/l

MW-06-20
5/20/2008: 0.49 ug/l
9/20/2008: 0.5 ug/l

MW-06-19
5/20/2008: 0.09 ug/l
9/18/2008: 0.08 ug/l

MW-97-8
5/15/2008: 4.08 ug/l
9/24/2008: 4.1 ug/l

MW-02-1
5/29/2008: 0.03 ug/l
9/26/2008: < 0.1 ug/l

MW-01-6
5/19/2008: < 0.02 ug/l
9/18/2008: 0.02 ug/l

MW-02-2
5/19/2008: 3.71 ug/l
9/22/2008: 3.53 ug/l

MW-97-6
5/17/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-01-3
5/19/2008: 0.2 ug/l
9/19/2008: 0.18 ug/l

MW-01-2
5/19/2008: 1.01 ug/l
9/22/2008: 1.38 ug/l

MW-01-5
5/17/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-01-4
5/16/2008: < 0.02 ug/l
9/16/2008: 0.03 ug/l

MW-97-7
5/20/2008: 53.5 ug/l
9/26/2008: 46.1 ug/l

MW-01-1
5/16/2008: < 0.02 ug/l
9/17/2008: 0.02 ug/l

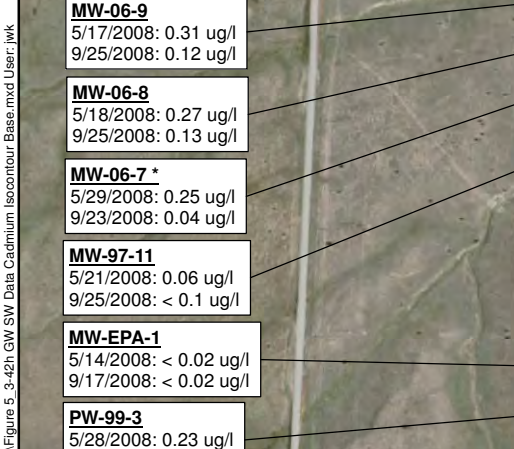
MW-06-22
5/21/2008: 12.8 ug/l
9/26/2008: 14.3 ug/l

MW-06-25
5/20/2008: 213 ug/l
9/26/2008: 177 ug/l

MW-97-5
5/15/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-06-24
5/13/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-23
5/13/2008: 0.04 ug/l
9/16/2008: < 0.02 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-23 11:34 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_2012\5_3_Groundwater\Isocontours\Figure 5_3-42h GW SW Data Cadmium Isocontour Base.mxd User: jwk

Sample Location

Isocontours

0.1 ug/l (Dashed where inferred)

1.0 ug/l (Dashed where inferred)

5 ug/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Sheep Gulch Area

Box-Whisker Plot Legend

n = Number of Samples

Maximum

75th Percentile

Median

25th Percentile

Minimum

N

Feet

800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42h

ANALYTICAL GROUNDWATER DATA:
TOTAL CADMIUM ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: < 1.1 ug/l

MW-06-10
5/14/2008: 0.4 ug/l
9/18/2008: < 0.33 ug/l

MW-97-3
5/28/2008: < 0.2 ug/l
9/23/2008: < 0.2 ug/l

MW-06-12
5/20/2008: 0.2 ug/l
9/25/2008: < 1 ug/l

MW-97-4
5/20/2008: 0.2 ug/l
9/22/2008: < 0.2 ug/l

PW-99-1
5/18/2008: < 0.2 ug/l
5/29/2008: < 0.2 ug/l
9/25/2008: < 1 ug/l

MW-12-02
11/8/2012: < 0.20 ug/l

MW-02-4
5/15/2008: 0.4 ug/l
9/23/2008: < 0.2 ug/l
7/18/2010: < 0.2 ug/l

MW-06-1
5/15/2008: < 0.2 ug/l
9/18/2008: < 0.35 ug/l
7/17/2010: 0.2 ug/l

MW-12-04
11/7/2012: < 0.20 ug/l

MW-12-06
11/7/2012: < 0.65 ug/l

MW-12-05
11/7/2012: < 0.85 ug/l

MW-06-2
5/15/2008: 4 ug/l
9/23/2008: < 0.2 ug/l
7/18/2010: 0.30 ug/l

MW-12-08
11/6/2012: < 0.28 ug/l

MW-12-07
11/6/2012: < 0.42 ug/l

MW-02-3
5/15/2008: 0.6 ug/l
9/23/2008: < 0.2 ug/l
7/17/2010: 0.30 ug/l

MW-12-03
11/7/2012: < 0.26 ug/l

MW-06-3
5/14/2008: 6.5 ug/l
9/19/2008: 3.1 ug/l
7/16/2010: 2.1 ug/l

MW-06-9
5/17/2008: 1.1 ug/l
9/25/2008: < 1 ug/l

MW-06-8
5/18/2008: 2.8 ug/l
9/25/2008: < 1 ug/l

MW-06-7 *
5/29/2008: < 0.2 ug/l
9/23/2008: 0.6 ug/l

MW-97-11
5/21/2008: 0.7 ug/l
9/25/2008: < 1 ug/l

MW-EPA-1
5/14/2008: < 0.2 ug/l
9/17/2008: < 0.44 ug/l

PW-99-3
5/28/2008: < 0.3 ug/l
9/22/2008: 0.2 ug/l

MW-06-21
5/17/2008: 1.6 ug/l
9/24/2008: < 1 ug/l

MW-97-10
5/21/2008: < 0.2 ug/l
9/23/2008: < 0.2 ug/l

MW-97-2
5/13/2008: < 0.2 ug/l
9/17/2008: < 0.2 ug/l

MW-97-1
5/13/2008: 0.3 ug/l
9/17/2008: < 0.2 ug/l

MW-06-4
5/15/2008: 0.4 ug/l
9/18/2008: < 0.22 ug/l

MW-06-5
5/14/2008: 0.2 ug/l
9/19/2008: < 0.2 ug/l

MW-GW-3
5/20/2008: 0.3 ug/l
9/17/2008: < 0.2 ug/l

RP-W-6
5/30/2008: 0.5 ug/l
9/24/2008: < 1 ug/l

MW-EPA-4
5/15/2008: < 0.2 ug/l
9/20/2008: < 0.2 ug/l

MW-06-11
5/28/2008: < 0.5 ug/l
9/23/2008: < 0.2 ug/l

RP-W-5
5/30/2008: 0.2 ug/l
9/24/2008: < 1 ug/l

MW-97-9
5/16/2008: 0.5 ug/l
9/24/2008: < 1 ug/l

MW-06-13
5/27/2008: < 0.3 ug/l
9/19/2008: 0.3 ug/l

RP-W-4
5/28/2008: < 0.6 ug/l
9/24/2008: < 1 ug/l

MW-EPA-3
5/15/2008: 0.2 ug/l
9/16/2008: < 0.36 ug/l

MW-06-16
5/21/2008: 0.5 ug/l
9/20/2008: 0.5 ug/l

MW-06-14
5/27/2008: < 0.6 ug/l
9/18/2008: < 0.7 ug/l

MW-97-12
5/27/2008: 1 ug/l
12/15/2008: 0.43 ug/l

MW-06-15
5/21/2008: 0.5 ug/l
9/17/2008: < 0.63 ug/l

RP-W-1
5/22/2008: < 0.2 ug/l
9/25/2008: < 1 ug/l

MW-06-17
5/27/2008: 1.1 ug/l
9/20/2008: 1.1 ug/l

MW-06-18
5/21/2008: 0.4 ug/l
9/25/2008: < 1 ug/l

MW-06-20
5/20/2008: 0.4 ug/l
9/20/2008: 0.4 ug/l

MW-06-19
5/20/2008: 3.8 ug/l
9/18/2008: 3.4 ug/l

MW-97-8
5/15/2008: 0.8 ug/l
9/24/2008: < 1 ug/l

MW-02-1
5/29/2008: < 0.2 ug/l
9/26/2008: < 1 ug/l

MW-01-6
5/19/2008: < 0.2 ug/l
9/18/2008: < 0.31 ug/l

MW-02-2
5/19/2008: 0.3 ug/l
9/22/2008: 0.3 ug/l

MW-97-6
5/17/2008: 0.4 ug/l
9/16/2008: < 0.64 ug/l

MW-01-3
5/19/2008: 0.2 ug/l
9/19/2008: < 0.2 ug/l

MW-01-2
5/19/2008: < 0.2 ug/l
9/22/2008: 0.3 ug/l

MW-01-5
5/17/2008: 0.2 ug/l
9/16/2008: < 0.37 ug/l

MW-01-4
5/16/2008: 0.2 ug/l
9/16/2008: < 0.83 ug/l

MW-97-7
5/20/2008: 0.8 ug/l
9/26/2008: < 1 ug/l

MW-01-1
5/16/2008: 0.2 ug/l
9/17/2008: < 0.56 ug/l

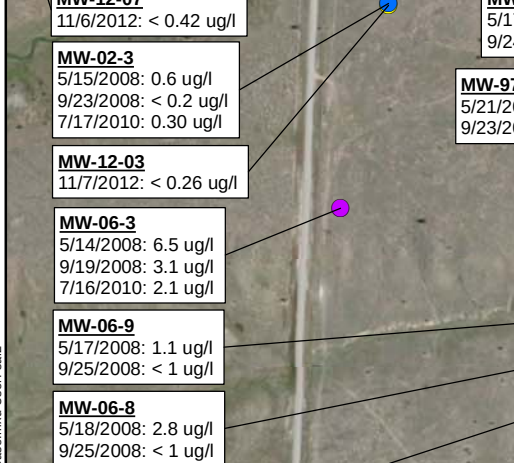
MW-06-22
5/21/2008: 1.2 ug/l
9/26/2008: < 1 ug/l

MW-06-25
5/20/2008: 1.2 ug/l
9/26/2008: < 1 ug/l

MW-97-5
5/15/2008: 1.1 ug/l
9/17/2008: < 0.64 ug/l

MW-06-24
5/13/2008: 0.2 ug/l
9/16/2008: < 0.2 ug/l

MW-06-23
5/13/2008: 2.1 ug/l
9/16/2008: < 0.47 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-29 11:43 File: I:\Projects\26\46\006\GIs\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42i GW SW Data Chromium Isocontour Base.mxd User: sal2

Concentrations

- < 0.5 ug/l
- 0.5 - 1 ug/l
- > 1 ug/l

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42i

ANALYTICAL GROUNDWATER DATA:
TOTAL CHROMIUM ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 0.269 ug/l

MW-06-10
5/14/2008: 0.75 ug/l
9/18/2008: < 0.468 ug/l

MW-97-3
5/28/2008: < 0.11 ug/l
9/23/2008: 0.04 ug/l

MW-06-12
5/20/2008: 0.09 ug/l
9/25/2008: 0.27 ug/l

MW-97-4
5/20/2008: 0.16 ug/l
9/22/2008: 0.2 ug/l

PW-99-1
5/18/2008: 0.14 ug/l
5/29/2008: 1.65 ug/l
9/25/2008: < 0.25 ug/l

MW-06-1
5/15/2008: < 0.16 ug/l
9/18/2008: < 0.504 ug/l
7/17/2010: 0.16 ug/l

MW-02-4
5/15/2008: < 0.24 ug/l
9/23/2008: 0.13 ug/l
7/18/2010: 0.18 ug/l

MW-12-02
11/8/2012: 0.129 ug/l

MW-12-04
11/7/2012: 0.025 ug/l

MW-12-06
11/7/2012: 0.027 ug/l

MW-12-05
11/7/2012: 0.037 ug/l

MW-12-08
11/6/2012: 0.034 ug/l

MW-12-07
11/6/2012: 0.021 ug/l

MW-06-2
5/15/2008: 0.49 ug/l
9/23/2008: 0.09 ug/l
7/18/2010: 0.14 ug/l

MW-02-3
5/15/2008: < 0.29 ug/l
9/23/2008: 0.04 ug/l
7/17/2010: 0.20 ug/l

MW-12-03
11/7/2012: 0.054 ug/l

MW-97-10
5/21/2008: 0.2 ug/l
9/23/2008: 0.09 ug/l

MW-06-21
5/17/2008: 0.54 ug/l
9/24/2008: < 0.25 ug/l

MW-06-3
5/14/2008: < 0.27 ug/l
9/19/2008: 0.065 ug/l
7/16/2010: 0.10 ug/l

MW-06-9
5/17/2008: 0.24 ug/l
9/25/2008: 0.27 ug/l

MW-06-8
5/18/2008: 0.22 ug/l
9/25/2008: 0.31 ug/l

MW-06-7 *
5/29/2008: < 0.51 ug/l
9/23/2008: 0.21 ug/l

MW-97-11
5/21/2008: 0.63 ug/l
9/25/2008: 0.96 ug/l

MW-EPA-1
5/14/2008: < 0.05 ug/l
9/17/2008: < 1.28 ug/l R
12/11/2008: 0.14 ug/l

PW-99-3
5/28/2008: < 0.12 ug/l
9/22/2008: 0.29 ug/l

MW-97-2
5/13/2008: 0.54 ug/l
9/17/2008: < 0.887 ug/l

MW-97-1
5/13/2008: 0.95 ug/l
9/17/2008: < 0.88 ug/l

MW-06-4
5/15/2008: 0.41 ug/l
9/18/2008: 0.157 ug/l

MW-06-5
5/14/2008: < 0.26 ug/l
9/19/2008: 0.296 ug/l

MW-GW-3
5/20/2008: 0.1 ug/l
9/17/2008: 0.08 ug/l

MW-GW-2
6/30/2008: < 2 ug/l

RP-W-6
5/30/2008: < 0.21 ug/l
9/24/2008: 0.56 ug/l

MW-EPA-4
5/15/2008: < 0.25 ug/l
9/20/2008: 0.4 ug/l

MW-06-11
5/28/2008: < 0.35 ug/l
9/23/2008: 0.17 ug/l

RP-W-5
5/30/2008: < 0.07 ug/l
9/24/2008: 0.79 ug/l J

MW-97-9
5/16/2008: < 0.09 ug/l
9/24/2008: 0.36 ug/l

MW-06-13
5/27/2008: < 0.13 ug/l
9/19/2008: 0.31 ug/l

RP-W-4
5/28/2008: < 0.45 ug/l
9/24/2008: 0.62 ug/l

MW-EPA-3
5/15/2008: < 0.21 ug/l
9/16/2008: < 0.216 ug/l

MW-06-16
5/21/2008: 0.05 ug/l
9/20/2008: 0.26 ug/l

MW-06-14
5/27/2008: < 0.22 ug/l
9/18/2008: < 1.228 ug/l

MW-97-12
5/27/2008: < 0.91 ug/l
12/15/2008: < 0.05 ug/l

MW-06-15
5/21/2008: 0.12 ug/l
9/17/2008: < 2.258 ug/l

RP-W-1
5/22/2008: < 0.02 ug/l
9/25/2008: < 0.25 ug/l

MW-06-17
5/27/2008: < 0.4 ug/l
9/20/2008: 0.16 ug/l

MW-06-18
5/21/2008: 0.09 ug/l
9/25/2008: 0.26 ug/l

MW-06-20
5/20/2008: 0.09 ug/l
9/20/2008: 0.49 ug/l

MW-06-19
5/20/2008: 0.78 ug/l
9/18/2008: < 0.508 ug/l

MW-97-8
5/15/2008: 0.63 ug/l
9/24/2008: 0.3 ug/l

MW-02-1
5/29/2008: < 0.3 ug/l
9/26/2008: 0.82 ug/l

MW-01-6
5/19/2008: 0.11 ug/l
9/18/2008: 0.707 ug/l

MW-02-2
5/19/2008: 0.42 ug/l
9/22/2008: 0.75 ug/l

MW-97-6
5/17/2008: 0.15 ug/l
9/16/2008: < 0.706 ug/l

MW-01-3
5/19/2008: 0.13 ug/l
9/19/2008: 0.423 ug/l

MW-01-2
5/19/2008: 0.14 ug/l
9/22/2008: 0.28 ug/l

MW-01-5
5/17/2008: 0.43 ug/l
9/16/2008: < 0.742 ug/l

MW-01-4
5/16/2008: < 0.14 ug/l
9/16/2008: < 0.414 ug/l

MW-97-7
5/20/2008: 0.31 ug/l
9/26/2008: < 0.25 ug/l

MW-01-1
5/16/2008: < 0.36 ug/l
9/17/2008: < 0.219 ug/l

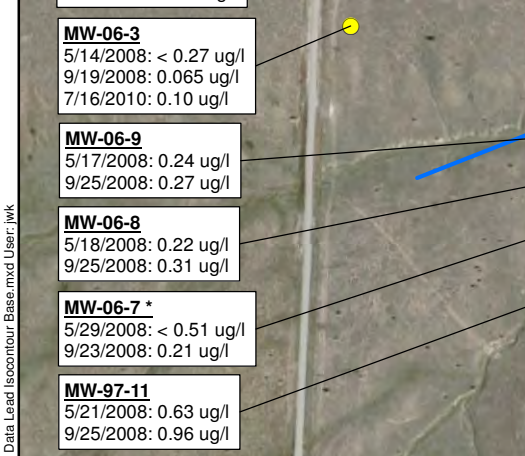
MW-06-22
5/21/2008: 0.1 ug/l
9/26/2008: 0.4 ug/l

MW-06-25
5/20/2008: 0.05 ug/l
9/26/2008: 0.37 ug/l

MW-97-5
5/15/2008: < 0.38 ug/l
9/17/2008: 0.285 ug/l

MW-06-24
5/13/2008: < 0.02 ug/l
9/16/2008: 0.06 ug/l

MW-06-23
5/13/2008: < 0.21 ug/l
9/16/2008: 0.105 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-23 11:41 File: I:\Projects\2646\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42j GW SW Data Lead Isocontour Base.mxd User: jwk

- Sample Location

Isocontours
- 0.5 ug/l (Dashed where inferred)
- 0.8 ug/l (Dashed where inferred)

Solid Wate Management Areas
- Tailings Basin and Water Recirculation
- Sheep Gulch Area

Box-Whisker Plot Legend

n = Number of Samples
- Maximum
- 75th Percentile
- Median
- 25th Percentile
- Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42j

ANALYTICAL GROUNDWATER DATA:
TOTAL LEAD ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 263 ug/l

MW-06-10
5/14/2008: 17.8 ug/l
9/18/2008: 21.5 ug/l

MW-97-3
5/28/2008: 36 ug/l
9/23/2008: 23.17 ug/l

MW-06-12
5/20/2008: 347 ug/l
9/25/2008: 292 ug/l

MW-97-4
5/20/2008: 424 ug/l
9/22/2008: 373 ug/l

PW-99-1
5/18/2008: 2480 ug/l
5/29/2008: 2120 ug/l
9/25/2008: 2760 ug/l

MW-06-1
5/15/2008: 1.37 ug/l
9/18/2008: 10.9 ug/l
7/17/2010: 1.91 ug/l

MW-12-04
11/7/2012: 33.7 ug/l

MW-12-05
11/7/2012: 175 ug/l

MW-12-06
11/7/2012: 184 ug/l

MW-12-07
11/6/2012: 142 ug/l

MW-12-08
11/6/2012: 52.8 ug/l

MW-06-2
5/15/2008: 11.8 ug/l
9/23/2008: 1.57 ug/l
7/18/2010: 0.99 ug/l

MW-12-03
11/7/2012: 182 ug/l

MW-02-3
5/15/2008: 4.45 ug/l
9/23/2008: 0.71 ug/l
7/17/2010: 1.83 ug/l

MW-06-3
5/14/2008: 11 ug/l
9/19/2008: 1.3 ug/l
7/16/2010: 2.67 ug/l

MW-06-9
5/17/2008: 1990 ug/l
9/25/2008: 2120 ug/l

MW-06-8
5/18/2008: 6180 ug/l
9/25/2008: 6350 ug/l

MW-06-7 *
5/29/2008: 200 ug/l
9/23/2008: 482 ug/l

MW-97-11
5/21/2008: 2.11 ug/l
9/25/2008: 3.1 ug/l

MW-EPA-1
5/14/2008: 0.46 ug/l
9/17/2008: 5.4 ug/l

PW-99-3
5/28/2008: 3710 ug/l
9/22/2008: 3270 ug/l

MW-06-4
5/15/2008: 7.76 ug/l
9/18/2008: 3.6 ug/l

MW-12-02
11/8/2012: 8.4 ug/l J

MW-02-4
5/15/2008: 2.71 ug/l
9/23/2008: 2.65 ug/l
7/18/2010: 2.07 ug/l

MW-97-10
5/21/2008: 4.52 ug/l
9/23/2008: 1.31 ug/l

MW-06-21
5/17/2008: 372 ug/l
9/24/2008: 377 ug/l

MW-97-2
5/13/2008: 3.86 ug/l
9/17/2008: 4.3 ug/l

MW-97-1
5/13/2008: 9.26 ug/l
9/17/2008: 18.8 ug/l

MW-06-5
5/14/2008: 13.5 ug/l
9/19/2008: 14 ug/l

MW-GW-3
5/20/2008: 0.21 ug/l
9/17/2008: < 0.05 ug/l

RP-W-6
5/30/2008: 883 ug/l
9/24/2008: 879 ug/l

MW-EPA-4
5/15/2008: 3.92 ug/l
9/20/2008: 7.6 ug/l

MW-06-11
5/28/2008: 70.4 ug/l
9/23/2008: 54.97 ug/l

RP-W-5
5/30/2008: 15.7 ug/l
9/24/2008: 15.8 ug/l

MW-97-9
5/16/2008: 499 ug/l
9/24/2008: 573 ug/l

MW-06-13
5/27/2008: 2.84 ug/l
9/19/2008: 5.26 ug/l

RP-W-4
5/28/2008: 725 ug/l
9/24/2008: 726 ug/l

MW-EPA-3
5/15/2008: 1.71 ug/l
9/16/2008: 6.9 ug/l

MW-06-16
5/21/2008: 2.04 ug/l
9/20/2008: 3.94 ug/l

MW-06-14
5/27/2008: 8.53 ug/l
9/18/2008: 25 ug/l

MW-97-12
5/27/2008: 21.8 ug/l
12/15/2008: 2.9 ug/l

MW-06-15
5/21/2008: 2.87 ug/l
9/17/2008: < 5 ug/l

RP-W-1
5/22/2008: 8.72 ug/l
9/25/2008: 6.2 ug/l

MW-06-17
5/27/2008: 927 ug/l
9/20/2008: 719 ug/l

MW-06-18
5/21/2008: 906 ug/l
9/25/2008: 854 ug/l

MW-06-20
5/20/2008: 4360 ug/l
9/20/2008: 4290 ug/l

MW-06-19
5/20/2008: 4.68 ug/l
9/18/2008: 6.5 ug/l

MW-97-8
5/15/2008: 789 ug/l
9/24/2008: 706 ug/l

MW-02-1
5/29/2008: 2150 ug/l
9/26/2008: 2140 ug/l

MW-01-6
5/19/2008: 1240 ug/l
9/18/2008: 965 ug/l

MW-02-2
5/19/2008: 1030 ug/l
9/22/2008: 1140 ug/l

MW-97-6
5/17/2008: 0.85 ug/l
9/16/2008: < 8.3 ug/l

MW-01-3
5/19/2008: 8470 ug/l
9/19/2008: 8360 ug/l

MW-01-2
5/19/2008: 1550 ug/l
9/22/2008: 1180 ug/l

MW-01-5
5/17/2008: 1.68 ug/l
9/16/2008: < 3.8 ug/l

MW-01-4
5/16/2008: 0.54 ug/l
9/16/2008: < 0.658 ug/l

MW-97-7
5/20/2008: 1230 ug/l
9/26/2008: 1180 ug/l

MW-01-1
5/16/2008: 2.55 ug/l
9/17/2008: < 0.625 ug/l

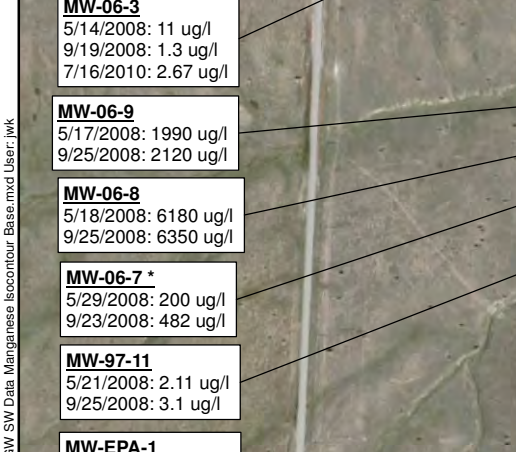
MW-06-22
5/21/2008: 1730 ug/l
9/26/2008: 2440 ug/l

MW-06-25
5/20/2008: 657 ug/l
9/26/2008: 501 ug/l

MW-97-5
5/15/2008: 14.4 ug/l
9/17/2008: 9 ug/l

MW-06-24
5/13/2008: 25.6 ug/l
9/16/2008: 57.8 ug/l

MW-06-23
5/13/2008: 63.1 ug/l
9/16/2008: 8.6 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-23 11:57 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42k GW SW Data Manganese Isocontour Base.mxd User: jwk

- Sample Location

Isocontours

- 100 ug/l (Dashed where inferred)
- 500 ug/l (Dashed where inferred)

Solid Wate Management Areas

- Tailings Basin and Water Recirculation

Box-Whisker Plot Legend

n = Number of Samples

- Maximum
- 75th Percentile
- Median
- 25th Percentile
- Minimum

N

Feet

800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Hatches toward lower concentrations.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42k

ANALYTICAL GROUNDWATER DATA:
TOTAL MANGANESE ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 2.9 ug/l

MW-06-10
5/14/2008: 4.6 ug/l
9/18/2008: 4.3 ug/l

MW-97-3
5/28/2008: 3.7 ug/l
9/23/2008: 6 ug/l

MW-06-12
5/20/2008: 7.3 ug/l
9/25/2008: 8.5 ug/l

MW-97-4
5/20/2008: 5 ug/l
9/22/2008: 4.2 ug/l

PW-99-1
5/18/2008: 8.3 ug/l
5/29/2008: 7.9 ug/l
9/25/2008: 8.7 ug/l

MW-06-1
5/15/2008: 5.1 ug/l
9/18/2008: 6.1 ug/l
7/17/2010: 3.7 ug/l

MW-02-4
5/15/2008: 5.3 ug/l
9/23/2008: 10.5 ug/l
7/18/2010: 4.0 ug/l

MW-12-02
11/8/2012: 4.3 ug/l

MW-12-04
11/7/2012: 0.46 ug/l

MW-12-06
11/7/2012: 1.0 ug/l

MW-12-05
11/7/2012: 1.1 ug/l

MW-12-07
11/6/2012: 0.84 ug/l

MW-12-08
11/6/2012: 0.91 ug/l

MW-12-03
11/7/2012: 0.96 ug/l

MW-02-3
5/15/2008: 4.9 ug/l
9/23/2008: 9 ug/l
7/17/2010: 4.3 ug/l

MW-06-3
5/14/2008: 6.1 ug/l
9/19/2008: 2.7 ug/l
7/16/2010: 1.4 ug/l

MW-06-9
5/17/2008: 4.2 ug/l
9/25/2008: 4.6 ug/l

MW-06-8
5/18/2008: 5.9 ug/l
9/25/2008: 6.5 ug/l

MW-06-7 *
5/29/2008: 3.1 ug/l
9/23/2008: 9.8 ug/l

MW-97-11
5/21/2008: 9.5 ug/l
9/25/2008: 10.4 ug/l

MW-EPA-1
5/14/2008: 0.5 ug/l
9/17/2008: 1.1 ug/l

PW-99-3
5/28/2008: 3.5 ug/l
9/22/2008: 2.7 ug/l

MW-06-4
5/15/2008: 0.4 ug/l
9/18/2008: 0.4 ug/l

MW-06-2
5/15/2008: 12.1 ug/l
9/23/2008: 13.9 ug/l
7/18/2010: 7.7 ug/l

MW-97-10
5/21/2008: 8.1 ug/l
9/23/2008: 12.6 ug/l

MW-06-21
5/17/2008: 10 ug/l
9/24/2008: 9.3 ug/l

MW-97-2
5/13/2008: 1.4 ug/l
9/17/2008: 2.4 ug/l

MW-97-1
5/13/2008: 1.7 ug/l
9/17/2008: 3.9 ug/l

MW-06-5
5/14/2008: 1.7 ug/l
9/19/2008: 1.8 ug/l

MW-GW-3
5/20/2008: 1.2 ug/l
9/17/2008: 2.8 ug/l

MW-GW-2
6/30/2008: < 5 ug/l

RP-W-6
5/30/2008: 15.2 ug/l
9/24/2008: 13.8 ug/l

MW-EPA-4
5/15/2008: 10 ug/l
9/20/2008: 8.4 ug/l

MW-06-11
5/28/2008: 10.1 ug/l
9/23/2008: 14.4 ug/l

RP-W-5
5/30/2008: 5.6 ug/l
9/24/2008: 5.7 ug/l

MW-97-9
5/16/2008: 21 ug/l
9/24/2008: 22.4 ug/l

MW-06-13
5/27/2008: 3.6 ug/l
9/19/2008: 3.8 ug/l

RP-W-4
5/28/2008: 8.4 ug/l
9/24/2008: 8.4 ug/l

MW-EPA-3
5/15/2008: 0.8 ug/l
9/16/2008: 1 ug/l

MW-06-16
5/21/2008: 12.7 ug/l
9/20/2008: 18.7 ug/l

MW-06-14
5/27/2008: 2.6 ug/l
9/18/2008: 3.2 ug/l

MW-97-12
5/27/2008: 1.7 ug/l
12/15/2008: 1.4 ug/l

MW-06-15
5/21/2008: 1.4 ug/l
9/17/2008: 2.3 ug/l

RP-W-1
5/22/2008: 1.5 ug/l
9/25/2008: 1.6 ug/l

MW-06-17
5/27/2008: 6.5 ug/l
9/20/2008: 5.3 ug/l

MW-06-18
5/21/2008: 30.2 ug/l
9/25/2008: 33.3 ug/l

MW-06-20
5/20/2008: 34.6 ug/l
9/20/2008: 29 ug/l

MW-06-19
5/20/2008: 3.3 ug/l
9/18/2008: 5.5 ug/l

MW-97-8
5/15/2008: 12.2 ug/l
9/24/2008: 11.5 ug/l

MW-02-1
5/29/2008: 4.8 ug/l
9/26/2008: 5.7 ug/l

MW-01-6
5/19/2008: 6.3 ug/l
9/18/2008: 5.3 ug/l

MW-02-2
5/19/2008: 27.1 ug/l
9/22/2008: 23.9 ug/l

MW-97-6
5/17/2008: 0.9 ug/l
9/16/2008: 1.5 ug/l

MW-01-3
5/19/2008: 5.7 ug/l
9/19/2008: 4.9 ug/l

MW-01-2
5/19/2008: 4.4 ug/l
9/22/2008: 3.2 ug/l

MW-01-5
5/17/2008: 1.1 ug/l
9/16/2008: 1.7 ug/l

MW-01-4
5/16/2008: 1.2 ug/l
9/16/2008: 1.9 ug/l

MW-97-7
5/20/2008: 30.3 ug/l
9/26/2008: 31.6 ug/l

MW-01-1
5/16/2008: 2.6 ug/l
9/17/2008: 5 ug/l

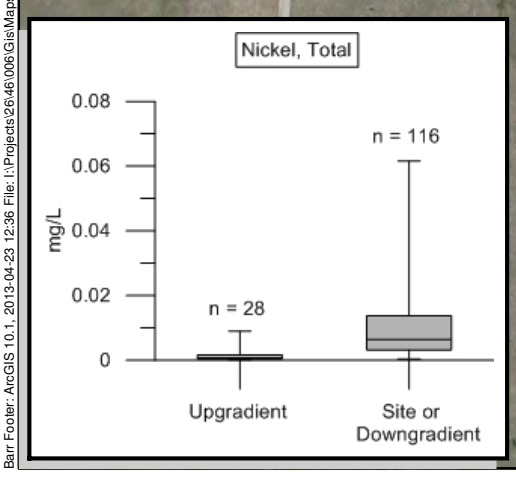
MW-06-22
5/21/2008: 19 ug/l
9/26/2008: 23.4 ug/l

MW-06-25
5/20/2008: 26.5 ug/l
9/26/2008: 25.8 ug/l

MW-97-5
5/15/2008: 1.4 ug/l
9/17/2008: 1.2 ug/l

MW-06-24
5/13/2008: 0.4 ug/l
9/16/2008: 0.6 ug/l

MW-06-23
5/13/2008: 2.1 ug/l
9/16/2008: 0.4 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-23 12:36 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42l GW SW Data Nickel Isocontour Base.mxd User: jwk

Sample Location

Isocontours

10 ug/l (Dashed where inferred)

20 ug/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Sheep Gulch Area

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42l

ANALYTICAL GROUNDWATER DATA:
TOTAL NICKEL ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 1.6 ug/l

MW-06-10
5/14/2008: 7.8 ug/l
9/18/2008: 9.3 ug/l

MW-97-3
5/28/2008: 7 ug/l
9/23/2008: 8 ug/l

MW-06-12
5/20/2008: 2.7 ug/l
9/25/2008: < 5 ug/l

MW-97-4
5/20/2008: 5.7 ug/l
9/22/2008: 7 ug/l

PW-99-1
5/18/2008: 1.2 ug/l
5/29/2008: 1.3 ug/l
9/25/2008: < 5 ug/l

MW-06-1
5/15/2008: 2.1 ug/l
9/18/2008: 4.4 ug/l
7/17/2010: 1.4 ug/l

MW-02-4
5/15/2008: 1.7 ug/l
9/23/2008: 5 ug/l
7/18/2010: < 1.0 ug/l

MW-12-02
11/8/2012: 1.8 ug/l

MW-12-06
11/7/2012: < 1.0 ug/l

MW-12-04
11/7/2012: 1.3 ug/l

MW-12-07
11/6/2012: < 1.0 ug/l

MW-12-05
11/7/2012: < 1.0 ug/l

MW-12-08
11/6/2012: < 1.0 ug/l

MW-06-2
5/15/2008: 21.4 ug/l
9/23/2008: 28 ug/l
7/18/2010: 17.4 ug/l

MW-12-03
11/7/2012: < 1.0 ug/l

MW-02-3
5/15/2008: 8.6 ug/l
9/23/2008: 13 ug/l
7/17/2010: 9.4 ug/l

MW-06-3
5/14/2008: 2.2 ug/l
9/19/2008: 4.3 ug/l
7/16/2010: 1.4 ug/l

MW-06-9
5/17/2008: < 2 ug/l
9/25/2008: < 5 ug/l

MW-06-8
5/18/2008: 2.1 ug/l
9/25/2008: < 5 ug/l

MW-06-7 *
5/29/2008: 5.4 ug/l
9/23/2008: 15 ug/l

MW-97-11
5/21/2008: 4.2 ug/l
9/25/2008: 7 ug/l

MW-EPA-1
5/14/2008: < 1 ug/l
9/17/2008: 1.3 ug/l

PW-99-3
5/28/2008: < 1 ug/l
9/22/2008: < 2 ug/l

MW-06-4
5/15/2008: < 1 ug/l
9/18/2008: 1.1 ug/l

MW-97-2
5/13/2008: < 1 ug/l
9/17/2008: < 1 ug/l

MW-97-1
5/13/2008: < 1 ug/l
9/17/2008: < 1 ug/l

MW-06-5
5/14/2008: < 1 ug/l
9/19/2008: < 1 ug/l

MW-GW-3
5/20/2008: < 1 ug/l
9/17/2008: < 1 ug/l

MW-06-21
5/17/2008: 11.3 ug/l
9/24/2008: 15 ug/l

MW-97-10
5/21/2008: 6.4 ug/l
9/23/2008: 10 ug/l

MW-GW-2
6/30/2008: < 1 ug/l

RP-W-6
5/30/2008: 2.8 ug/l
9/24/2008: 6 ug/l

MW-EPA-4
5/15/2008: 3.7 ug/l
9/20/2008: 6 ug/l

MW-06-11
5/28/2008: 4.6 ug/l
9/23/2008: 11 ug/l

RP-W-5
5/30/2008: 4.4 ug/l
9/24/2008: 6 ug/l

MW-97-9
5/16/2008: 9.2 ug/l
9/24/2008: 12 ug/l

MW-06-13
5/27/2008: 6 ug/l
9/19/2008: 9 ug/l

RP-W-4
5/28/2008: 4 ug/l
9/24/2008: 6 ug/l

MW-EPA-3
5/15/2008: 4.4 ug/l
9/16/2008: 5.6 ug/l

MW-06-16
5/21/2008: 9.4 ug/l
9/20/2008: 17 ug/l

MW-06-14
5/27/2008: 9 ug/l
9/18/2008: 10.8 ug/l

MW-97-12
5/27/2008: 30.7 ug/l
12/15/2008: 27.5 ug/l

MW-06-15
5/21/2008: 8.3 ug/l
9/17/2008: 10.7 ug/l

RP-W-1
5/22/2008: 2.9 ug/l
9/25/2008: < 5 ug/l

MW-06-17
5/27/2008: 9.5 ug/l
9/20/2008: 15 ug/l

MW-06-18
5/21/2008: 32.8 ug/l
9/25/2008: 38 ug/l

MW-06-20
5/20/2008: 3.4 ug/l
9/20/2008: 5 ug/l

MW-06-19
5/20/2008: 17.4 ug/l
9/18/2008: 34.2 ug/l

MW-97-8
5/15/2008: 24.2 ug/l
9/24/2008: 28 ug/l

MW-02-1
5/29/2008: 4.5 ug/l
9/26/2008: 7 ug/l

MW-01-6
5/19/2008: 1.2 ug/l
9/18/2008: 2.9 ug/l

MW-02-2
5/19/2008: 14.9 ug/l
9/22/2008: 15 ug/l

MW-97-6
5/17/2008: 2.3 ug/l
9/16/2008: 5.2 ug/l

MW-01-3
5/19/2008: 1.5 ug/l
9/19/2008: 2 ug/l

MW-01-2
5/19/2008: 12.1 ug/l
9/22/2008: 10 ug/l

MW-01-5
5/17/2008: 4.6 ug/l
9/16/2008: 7.2 ug/l

MW-01-4
5/16/2008: 4.5 ug/l
9/16/2008: 8.2 ug/l

MW-97-7
5/20/2008: 46.6 ug/l
9/26/2008: 48 ug/l

MW-01-1
5/16/2008: 11 ug/l
9/17/2008: 18.7 ug/l

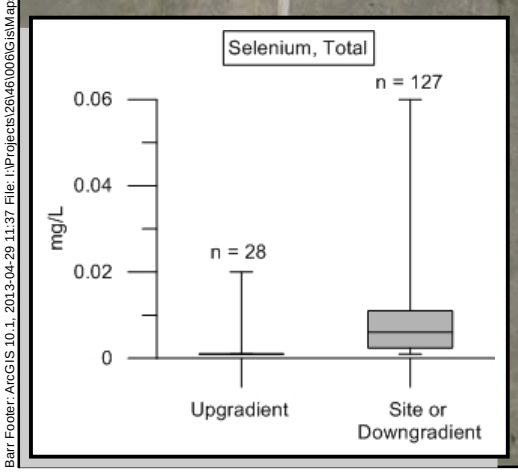
MW-06-22
5/21/2008: 34 ug/l
9/26/2008: 41 ug/l

MW-06-25
5/20/2008: 47.4 ug/l
9/26/2008: 60 ug/l

MW-97-5
5/15/2008: < 1 ug/l
9/17/2008: < 1 ug/l

MW-06-24
5/13/2008: < 1 ug/l
9/16/2008: < 1 ug/l

MW-06-23
5/13/2008: < 1 ug/l
9/16/2008: < 1 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-29 11:37 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42m GW SW Data Selenium Isocontour Base.mxd User: sal2

Concentrations

- < 10 ug/l
- 10 - 25 ug/l
- > 25 ug/l

Box-Whisker Plot Legend

n = Number of Samples

- Maximum
- 75th Percentile
- Median
- 25th Percentile
- Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42m

ANALYTICAL GROUNDWATER DATA:
TOTAL SELENIUM ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: < 0.020 ug/l

MW-06-10
5/14/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-97-3
5/28/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l

MW-06-12
5/20/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-97-4
5/20/2008: < 0.02 ug/l
9/22/2008: < 0.02 ug/l

PW-99-1
5/18/2008: < 0.03 ug/l
5/29/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-1
5/15/2008: < 0.02 ug/l
9/18/2008: < 0.026 ug/l
7/17/2010: < 0.02 ug/l

MW-02-4
5/15/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/18/2010: < 0.02 ug/l

MW-12-02
11/8/2012: < 0.020 ug/l

MW-12-04
11/7/2012: < 0.020 ug/l

MW-12-06
11/7/2012: < 0.020 ug/l

MW-12-05
11/7/2012: < 0.020 ug/l

MW-12-07
11/6/2012: < 0.020 ug/l

MW-12-08
11/6/2012: < 0.020 ug/l

MW-02-3
5/15/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/17/2010: < 0.02 ug/l

MW-12-03
11/7/2012: < 0.020 ug/l

MW-06-3
5/14/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l
7/16/2010: < 0.02 ug/l

MW-06-9
5/17/2008: < 0.06 ug/l
9/25/2008: < 0.1 ug/l

MW-06-8
5/18/2008: < 0.03 ug/l
9/25/2008: < 0.1 ug/l

MW-06-7 *
5/29/2008: < 0.02 ug/l
9/23/2008: 0.16 ug/l

MW-97-11
5/21/2008: 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-EPA-1
5/14/2008: < 0.02 ug/l
9/17/2008: < 0.216 ug/l

PW-99-3
5/28/2008: < 0.02 ug/l
9/22/2008: 0.02 ug/l

MW-06-4
5/15/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-06-2
5/15/2008: < 0.02 ug/l
9/23/2008: 0.02 ug/l
7/18/2010: < 0.02 ug/l

MW-97-10
5/21/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l

MW-06-21
5/17/2008: < 0.03 ug/l
9/24/2008: < 0.1 ug/l

MW-97-2
5/13/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-97-1
5/13/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-06-5
5/14/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l

MW-GW-3
5/20/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

RP-W-6
5/30/2008: < 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-EPA-4
5/15/2008: < 0.02 ug/l
9/20/2008: < 0.02 ug/l

MW-06-11
5/28/2008: < 0.02 ug/l
9/23/2008: 0.03 ug/l

RP-W-5
5/30/2008: < 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-97-9
5/16/2008: < 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-06-13
5/27/2008: 0.05 ug/l
9/19/2008: 0.02 ug/l

RP-W-4
5/28/2008: < 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-EPA-3
5/15/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-16
5/21/2008: < 0.02 ug/l
9/20/2008: 0.03 ug/l

MW-06-14
5/27/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-97-12
5/27/2008: < 0.02 ug/l
12/15/2008: < 0.05 ug/l

MW-06-15
5/21/2008: < 0.02 ug/l
9/17/2008: < 0.206 ug/l

RP-W-1
5/22/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-17
5/27/2008: < 0.02 ug/l
9/20/2008: < 0.02 ug/l

MW-06-18
5/21/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-20
5/20/2008: 0.03 ug/l
9/20/2008: < 0.02 ug/l

MW-06-19
5/20/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-97-8
5/15/2008: 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-02-1
5/29/2008: 0.02 ug/l
9/26/2008: < 0.1 ug/l

MW-01-6
5/19/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-02-2
5/19/2008: 0.1 ug/l
9/22/2008: 0.05 ug/l

MW-97-6
5/17/2008: < 0.03 ug/l
9/16/2008: < 0.02 ug/l

MW-01-3
5/19/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l

MW-01-2
5/19/2008: 0.03 ug/l
9/22/2008: < 0.02 ug/l

MW-01-5
5/17/2008: < 0.03 ug/l
9/16/2008: < 0.02 ug/l

MW-01-4
5/16/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-97-7
5/20/2008: 0.02 ug/l
9/26/2008: < 0.1 ug/l

MW-01-1
5/16/2008: 0.03 ug/l
9/17/2008: < 0.02 ug/l

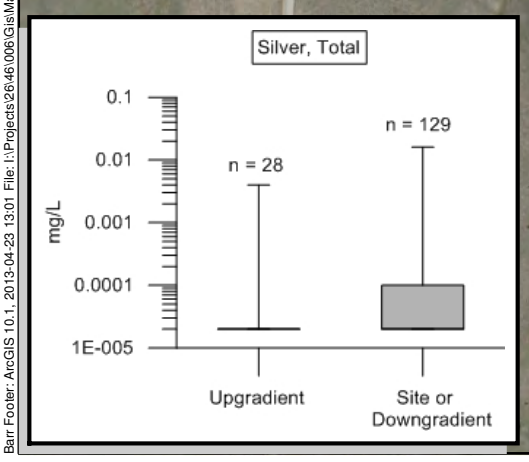
MW-06-22
5/21/2008: < 0.02 ug/l
9/26/2008: < 0.1 ug/l

MW-06-25
5/20/2008: < 0.02 ug/l
9/26/2008: < 0.1 ug/l

MW-97-5
5/15/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-06-24
5/13/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-23
5/13/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-23 13:01 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42n GW SW Data Silver Isocontour Base.mxd User: jwk

Sample Location

Concentrations

0.01 - 0.09 ug/l

≥ 0.10 ug/l

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Box-Whisker Plot Legend

n = Number of Samples

Maximum

75th Percentile

Median

25th Percentile

Minimum

N

Feet

800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42n

ANALYTICAL GROUNDWATER DATA:
TOTAL SILVER ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 0.059 ug/l

MW-06-10
5/14/2008: < 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-97-3
5/28/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l

MW-06-12
5/20/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-97-4
5/20/2008: < 0.02 ug/l
9/22/2008: < 0.02 ug/l

PW-99-1
5/18/2008: 0.03 ug/l
5/29/2008: < 0.04 ug/l
9/25/2008: < 0.1 ug/l

MW-06-1
5/15/2008: < 0.02 ug/l
9/18/2008: 0.032 ug/l
7/17/2010: < 0.02 ug/l

MW-02-4
5/15/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/18/2010: < 0.02 ug/l

MW-12-02
11/8/2012: 0.022 ug/l

MW-12-04
11/7/2012: 0.023 ug/l

MW-12-06
11/7/2012: 0.047 ug/l

MW-12-05
11/7/2012: 0.039 ug/l

MW-12-07
11/6/2012: 0.022 ug/l

MW-12-08
11/6/2012: < 0.020 ug/l

MW-12-03
11/7/2012: 0.041 ug/l

MW-02-3
5/15/2008: < 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/17/2010: < 0.02 ug/l

MW-06-3
5/14/2008: 0.03 ug/l
9/19/2008: 0.027 ug/l
7/16/2010: < 0.02 ug/l

MW-06-9
5/17/2008: 0.14 ug/l
9/25/2008: < 0.1 ug/l

MW-06-8
5/18/2008: 0.06 ug/l
9/25/2008: < 0.1 ug/l

MW-06-7 *
5/29/2008: 18.6 ug/l
9/23/2008: 2.51 ug/l

MW-97-11
5/21/2008: 0.07 ug/l
9/25/2008: < 0.1 ug/l

MW-EPA-1
5/14/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

PW-99-3
5/28/2008: 0.06 ug/l
9/22/2008: 0.05 ug/l

MW-06-4
5/15/2008: 0.02 ug/l
9/18/2008: < 0.02 ug/l

MW-06-5
5/14/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l

MW-GW-3
5/20/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-97-2
5/13/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-97-1
5/13/2008: < 0.02 ug/l
9/17/2008: 0.022 ug/l

MW-06-2
5/15/2008: 0.02 ug/l
9/23/2008: < 0.02 ug/l
7/18/2010: < 0.02 ug/l

MW-06-21
5/17/2008: 0.06 ug/l
9/24/2008: < 0.1 ug/l

MW-97-10
5/21/2008: 0.03 ug/l
9/23/2008: 0.02 ug/l

RP-W-6
5/30/2008: < 0.06 ug/l
9/24/2008: < 0.1 ug/l

MW-EPA-4
5/15/2008: < 0.02 ug/l
9/20/2008: < 0.02 ug/l

MW-06-11
5/28/2008: 0.04 ug/l
9/23/2008: 0.03 ug/l

RP-W-5
5/30/2008: < 0.02 ug/l
9/24/2008: < 0.1 ug/l

MW-97-9
5/16/2008: 0.31 ug/l
9/24/2008: 0.39 ug/l

MW-06-13
5/27/2008: < 0.02 ug/l
9/19/2008: < 0.02 ug/l

RP-W-4
5/28/2008: 0.05 ug/l
9/24/2008: < 0.1 ug/l

MW-EPA-3
5/15/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-16
5/21/2008: < 0.02 ug/l
9/20/2008: < 0.02 ug/l

MW-06-14
5/27/2008: 0.02 ug/l
9/18/2008: 0.03 ug/l

MW-97-12
5/27/2008: 0.03 ug/l
12/15/2008: < 0.02 ug/l

MW-06-15
5/21/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

RP-W-1
5/22/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-17
5/27/2008: 0.02 ug/l
9/20/2008: < 0.02 ug/l

MW-06-18
5/21/2008: < 0.02 ug/l
9/25/2008: < 0.1 ug/l

MW-06-20
5/20/2008: 0.05 ug/l
9/20/2008: 0.06 ug/l

MW-06-19
5/20/2008: < 0.02 ug/l
9/18/2008: 0.02 ug/l

MW-97-8
5/15/2008: 0.06 ug/l
9/24/2008: < 0.1 ug/l

MW-02-1
5/29/2008: < 0.02 ug/l
9/26/2008: < 0.1 ug/l

MW-01-6
5/19/2008: 0.1 ug/l
9/18/2008: 0.098 ug/l

MW-02-2
5/19/2008: 0.03 ug/l
9/22/2008: 0.03 ug/l

MW-97-6
5/17/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-01-3
5/19/2008: 0.05 ug/l
9/19/2008: 0.06 ug/l

MW-01-2
5/19/2008: 0.04 ug/l
9/22/2008: 0.04 ug/l

MW-01-5
5/17/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-01-4
5/16/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-97-7
5/20/2008: 0.03 ug/l
9/26/2008: < 0.1 ug/l

MW-01-1
5/16/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

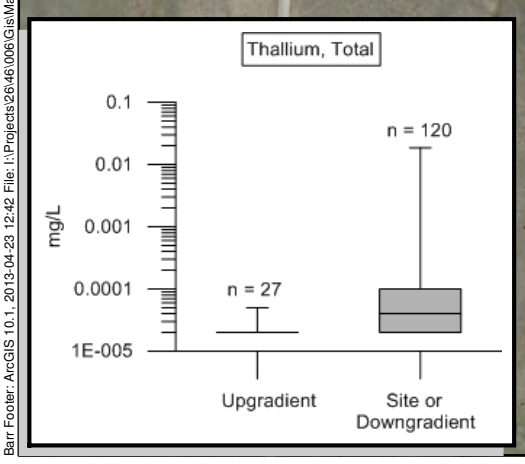
MW-06-22
5/21/2008: 0.05 ug/l
9/26/2008: < 0.1 ug/l

MW-06-25
5/20/2008: 0.12 ug/l
9/26/2008: 0.14 ug/l

MW-97-5
5/15/2008: < 0.02 ug/l
9/17/2008: < 0.02 ug/l

MW-06-24
5/13/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l

MW-06-23
5/13/2008: < 0.02 ug/l
9/16/2008: < 0.02 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-23 12:42 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_2012\5_3_Groundwater\Isocontours\Figure 5_3-42o GW SW Data Thallium Isocontour Base.mxd User: jwk

Sample Location

Isocontours

0.05 ug/l (Dashed where inferred)

0.20 ug/l (Dashed where inferred)

Solid Wate Management Areas

Tailings Basin and Water Recirculation

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42o

ANALYTICAL GROUNDWATER DATA:
TOTAL THALLIUM ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 12.2 ug/l

MW-06-10
5/14/2008: 20.7 ug/l
9/18/2008: 22.226 ug/l

MW-97-3
5/28/2008: 9.5 ug/l
9/23/2008: 9.96 ug/l

MW-06-12
5/20/2008: 1.81 ug/l
9/25/2008: 2 ug/l

MW-97-4
5/20/2008: 7.26 ug/l
9/22/2008: 7.78 ug/l

PW-99-1
5/18/2008: 11.2 ug/l
5/29/2008: 11.4 ug/l
9/25/2008: 8.49 ug/l

MW-06-1
5/15/2008: 31.9 ug/l
9/18/2008: 32.374 ug/l
7/17/2010: 39.6 ug/l

MW-02-4
5/15/2008: 25.6 ug/l
9/23/2008: 28.05 ug/l
7/18/2010: 30.0 ug/l

MW-12-02
11/8/2012: 32.2 ug/l

MW-12-04
11/7/2012: 6.3 ug/l

MW-12-06
11/7/2012: 9.4 ug/l

MW-12-05
11/7/2012: 10.8 ug/l

MW-12-07
11/6/2012: 14.3 ug/l

MW-12-08
11/6/2012: 17.6 ug/l

MW-12-03
11/7/2012: 7.9 ug/l

MW-02-3
5/15/2008: 13.2 ug/l
9/23/2008: 14.08 ug/l
7/17/2010: 14.0 ug/l

MW-06-3
5/14/2008: 7.1 ug/l
9/19/2008: 6.575 ug/l
7/16/2010: 7.370 ug/l

MW-06-9
5/17/2008: 4.1 ug/l
9/25/2008: 3.92 ug/l

MW-06-8
5/18/2008: 0.68 ug/l
9/25/2008: 0.44 ug/l

MW-06-7 *
5/29/2008: 2.71 ug/l
9/23/2008: 4.17 ug/l

MW-97-11
5/21/2008: 4.16 ug/l
9/25/2008: 3.96 ug/l

MW-EPA-1
5/14/2008: 9.5 ug/l
9/17/2008: 9.785 ug/l

PW-99-3
5/28/2008: 17.3 ug/l
9/22/2008: 12.03 ug/l

MW-06-4
5/15/2008: 4.5 ug/l
9/18/2008: 4.817 ug/l

MW-06-2
5/15/2008: 8.1 ug/l
9/23/2008: 9.14 ug/l
7/18/2010: 9.950 ug/l

MW-97-10
5/21/2008: 3.82 ug/l
9/23/2008: 4.04 ug/l

MW-06-21
5/17/2008: 4.6 ug/l
9/24/2008: 2.66 ug/l

MW-97-2
5/13/2008: 52 ug/l
9/17/2008: 52.58 ug/l

MW-97-1
5/13/2008: 31 ug/l
9/17/2008: 28.72 ug/l

MW-06-5
5/14/2008: 6.8 ug/l
9/19/2008: 6.23 ug/l

MW-GW-3
5/20/2008: 6.24 ug/l
9/17/2008: 14.717 ug/l

RP-W-6
5/30/2008: 3.4 ug/l
9/24/2008: 3.01 ug/l

MW-EPA-4
5/15/2008: 4.6 ug/l
9/20/2008: 4.72 ug/l

MW-06-11
5/28/2008: 1.66 ug/l
9/23/2008: 1.79 ug/l

RP-W-5
5/30/2008: 5 ug/l
9/24/2008: 4.89 ug/l

MW-97-9
5/16/2008: 0.24 ug/l
9/24/2008: 0.19 ug/l

MW-06-13
5/27/2008: 9.86 ug/l
9/19/2008: 11.3 ug/l

RP-W-4
5/28/2008: 2.06 ug/l
9/24/2008: 2.17 ug/l

MW-EPA-3
5/15/2008: 14 ug/l
9/16/2008: 14.702 ug/l

MW-06-16
5/21/2008: 44 ug/l
9/20/2008: 42.79 ug/l

MW-06-14
5/27/2008: 9.02 ug/l
9/18/2008: 8.372 ug/l

MW-97-12
5/27/2008: 0.797 ug/l
12/15/2008: 0.712 ug/l

MW-06-15
5/21/2008: 21.6 ug/l
9/17/2008: 24.377 ug/l

RP-W-1
5/22/2008: 5.8 ug/l
9/25/2008: 2.8 ug/l

MW-06-17
5/27/2008: 5.49 ug/l
9/20/2008: 4.86 ug/l

MW-06-18
5/21/2008: 0.103 ug/l
9/25/2008: 0.1 ug/l

MW-06-19
5/20/2008: 80.9 ug/l
9/18/2008: 84.038 ug/l

MW-06-20
5/20/2008: < 0.02 ug/l
9/20/2008: 0.08 ug/l

MW-97-8
5/15/2008: 0.31 ug/l
9/24/2008: 0.27 ug/l

MW-02-1
5/29/2008: 3.5 ug/l
9/26/2008: 4.55 ug/l

MW-01-6
5/19/2008: < 0.02 ug/l
9/18/2008: 0.096 ug/l

MW-02-2
5/19/2008: 0.059 ug/l
9/22/2008: 0.08 ug/l

MW-97-6
5/17/2008: 18.7 ug/l
9/16/2008: 17.047 ug/l

MW-01-3
5/19/2008: 0.027 ug/l
9/19/2008: 0.036 ug/l

MW-01-2
5/19/2008: 0.022 ug/l
9/22/2008: 0.04 ug/l

MW-01-5
5/17/2008: 23.3 ug/l
9/16/2008: 23.122 ug/l

MW-01-4
5/16/2008: 23.3 ug/l
9/16/2008: 20.712 ug/l

MW-97-7
5/20/2008: 29 ug/l
9/26/2008: 18.88 ug/l

MW-01-1
5/16/2008: 52.2 ug/l
9/17/2008: 53.602 ug/l

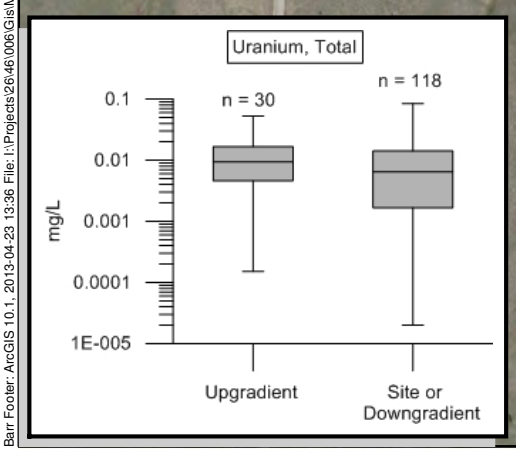
MW-06-22
5/21/2008: 1.11 ug/l
9/26/2008: 0.82 ug/l

MW-06-25
5/20/2008: 14.7 ug/l
9/26/2008: 18.36 ug/l

MW-97-5
5/15/2008: 9.3 ug/l
9/17/2008: 8.115 ug/l

MW-06-24
5/13/2008: 4.8 ug/l
9/16/2008: 4.599 ug/l

MW-06-23
5/13/2008: 3.4 ug/l
9/16/2008: 3.388 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-23 13:36 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42p GW SW Data Uranium Isocontour Base.mxd User: jwk

Sample Location

Isocontours
- 10 ug/l (Dashed where inferred)
- 30 ug/l (Dashed where inferred)
- 50 ug/l (Dashed where inferred)

Solid Wate Management Areas
- Slag and Roaster Solids
- Septic Drain Field
- Sheep Gulch Area
- CSLIS/Sod Farm

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

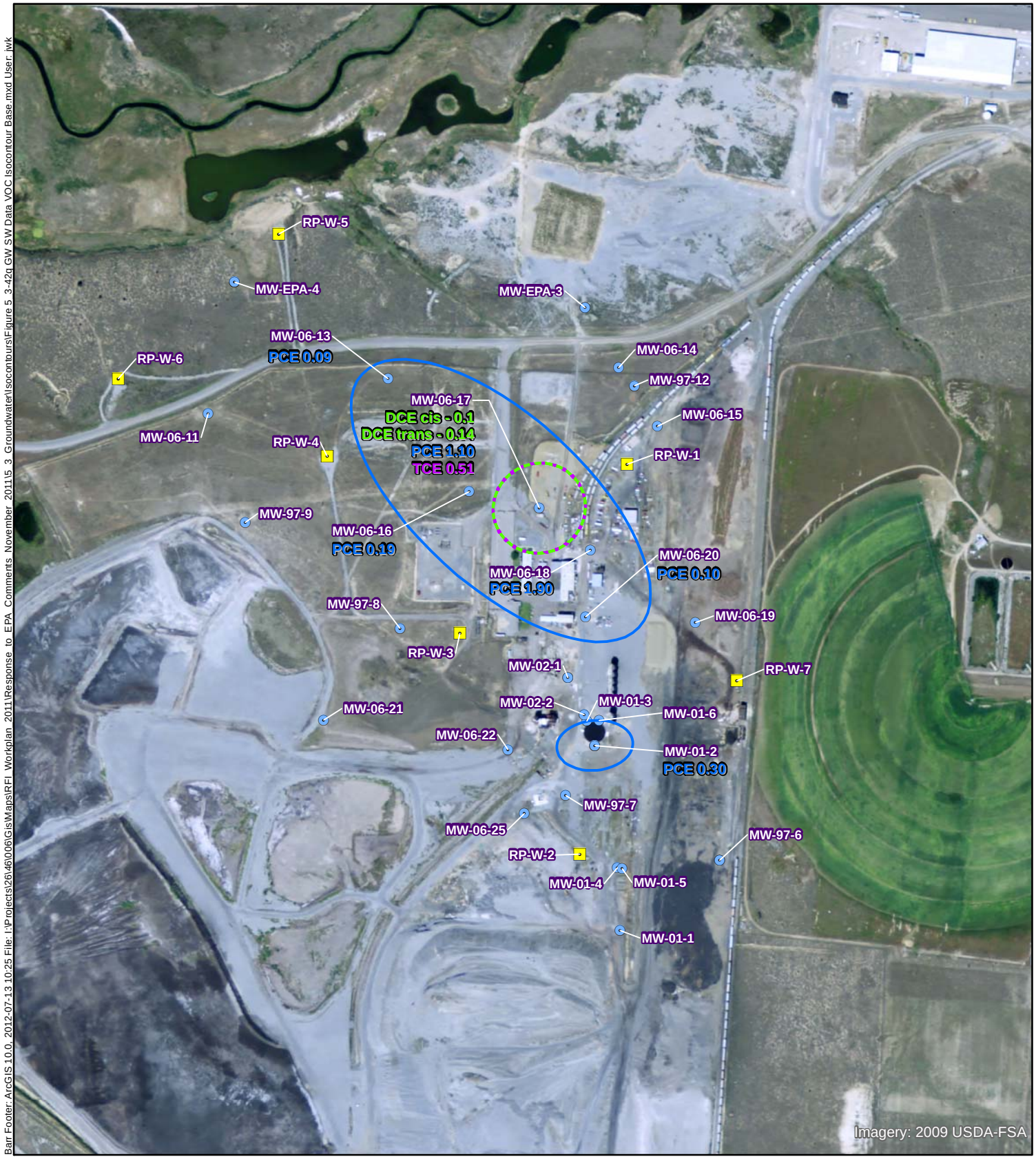
N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts <u>all</u> data.
Hatches toward lower concentrations.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42p

ANALYTICAL GROUNDWATER DATA:
TOTAL URANIUM ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana



Bar Footer: ArcGIS 10.0, 2012-07-13 10:25 File: I:\Projects\26\46\006\GisMaps\RFI Workplan 2011\Response to EPA Comments November 2011\5 3 Groundwater\Isocontours\Figure 5 3-42q GW SW Data VOC Isocontour Base.mxd User: jwk

- Monitoring Well
- Production Well
- REC Plant Monitoring Well
- Label Denotes Downgradient Wells

Isocontours

- cis/trans 1,2 Dichloroethylene (DCE) - ug/l
- Tetrachloroethylene (PCE) - ug/l
- Trichloroethylene (TCE) - ug/l

N

Feet

600 0 600

Figure 5.3-42q

ANALYTICAL GROUNDWATER DATA:
2008 VOC ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 8.8 pCi/l

MW-06-10
5/14/2008: 14 pCi/l
9/18/2008: 21 pCi/l

MW-97-3
5/28/2008: 5.7 pCi/l
9/23/2008: 11 pCi/l

MW-06-12
5/20/2008: < 5 pCi/l
9/25/2008: 11 pCi/l

MW-97-4
5/20/2008: 10 pCi/l
9/22/2008: 5.8 pCi/l

PW-99-1
5/18/2008: 16 pCi/l
5/29/2008: 6.5 pCi/l
9/25/2008: 8.2 pCi/l

MW-06-1
5/15/2008: 17 pCi/l
9/18/2008: 20 pCi/l
7/17/2010: 21 pCi/l

MW-02-4
5/15/2008: 6.8 pCi/l
9/23/2008: 24 pCi/l
7/18/2010: 14 pCi/l

MW-12-02
11/8/2012: 17 pCi/l

MW-12-04
11/7/2012: 5.6 pCi/l

MW-12-06
11/7/2012: 9.1 pCi/l

MW-12-05
11/7/2012: 13 pCi/l

MW-12-08
11/6/2012: 11 pCi/l

MW-12-07
11/6/2012: 13 pCi/l

MW-02-3
5/15/2008: 13 pCi/l
9/23/2008: 14 pCi/l
7/17/2010: 16 pCi/l

MW-12-03
11/7/2012: 13 pCi/l

MW-97-10
5/21/2008: 7.5 pCi/l
9/23/2008: < 3.7 pCi/l

MW-06-3
5/14/2008: 6.5 pCi/l
9/19/2008: 6.2 pCi/l
7/16/2010: 3.5 pCi/l

MW-06-9
5/17/2008: < 5 pCi/l
9/25/2008: 20 pCi/l

MW-06-8
5/18/2008: < 5.1 pCi/l J

MW-06-7 *
5/29/2008: 6.3 pCi/l
9/23/2008: 14 pCi/l

MW-97-11
5/21/2008: 8.4 pCi/l
9/25/2008: 19 pCi/l

MW-EPA-1
5/14/2008: 5.6 pCi/l
9/17/2008: 7.7 pCi/l

PW-99-3
5/28/2008: 6.5 pCi/l
9/22/2008: 14 pCi/l

MW-06-2
5/15/2008: 12 pCi/l
9/23/2008: 17 pCi/l
7/18/2010: 9.1 pCi/l

MW-06-21
5/17/2008: 7 pCi/l J
9/24/2008: < 2.7 pCi/l

MW-97-2
5/13/2008: 26 pCi/l
9/17/2008: 26 pCi/l

MW-97-1
5/13/2008: 22 pCi/l
9/17/2008: 16 pCi/l

MW-06-4
5/15/2008: 5.6 pCi/l
9/18/2008: 4.8 pCi/l

MW-06-5
5/14/2008: < 3.5 pCi/l
9/19/2008: < 4.6 pCi/l

MW-GW-3
5/20/2008: < 3.5 pCi/l
9/17/2008: 16 pCi/l

RP-W-6
5/30/2008: < 4.8 pCi/l
9/24/2008: < 4.4 pCi/l

MW-EPA-4
5/15/2008: < 4.4 pCi/l
9/20/2008: 6.7 pCi/l

MW-06-11
6/3/2008: < 4.3 pCi/l
9/23/2008: 7.8 pCi/l

RP-W-5
5/30/2008: < 3.8 pCi/l
9/24/2008: 10 pCi/l

MW-97-9
5/16/2008: < 2.7 pCi/l
9/24/2008: < 3.9 pCi/l

MW-06-13
5/27/2008: 5.8 pCi/l
9/19/2008: 7.7 pCi/l

RP-W-4
9/24/2008: 8.8 pCi/l

MW-EPA-3
5/15/2008: 7.4 pCi/l
9/17/2008: 7.1 pCi/l

MW-06-16
5/21/2008: 28 pCi/l
9/20/2008: 25 pCi/l

MW-06-14
5/27/2008: 4 pCi/l
9/18/2008: 7.9 pCi/l

MW-97-12
5/27/2008: < 2.2 pCi/l
9/23/2008: 4.9 pCi/l

MW-06-15
5/21/2008: 27 pCi/l
9/17/2008: 19 pCi/l

RP-W-1
5/22/2008: 12 pCi/l
9/25/2008: 9.4 pCi/l

MW-06-17
5/27/2008: < 3.7 pCi/l
9/20/2008: 6.4 pCi/l

MW-06-18
5/21/2008: 7.5 pCi/l
9/25/2008: 12 pCi/l

MW-06-20
5/20/2008: < 3.6 pCi/l
9/20/2008: 5 pCi/l

MW-06-19
5/20/2008: 54 pCi/l
9/18/2008: 42 pCi/l

MW-97-8
5/15/2008: 3.3 pCi/l J
9/24/2008: 8.7 pCi/l

MW-02-1
5/29/2008: < 6.3 pCi/l
9/26/2008: < 7.6 pCi/l

MW-01-6
5/19/2008: < 3.3 pCi/l
9/16/2008: < 2.7 pCi/l

MW-02-2
5/19/2008: < 2 pCi/l
9/22/2008: 4.9 pCi/l

MW-97-6
5/17/2008: 30 pCi/l
9/16/2008: 13 pCi/l

MW-01-3
5/19/2008: 2.7 pCi/l
9/19/2008: < 2.1 pCi/l

MW-01-2
5/19/2008: < 2.3 pCi/l
9/22/2008: 2.1 pCi/l

MW-01-5
5/17/2008: 29 pCi/l
9/16/2008: 15 pCi/l

MW-01-4
5/16/2008: 14 pCi/l
9/16/2008: 16 pCi/l

MW-97-7
5/20/2008: 34 pCi/l
9/26/2008: 33 pCi/l

MW-01-1
5/16/2008: 24 pCi/l
9/17/2008: 33 pCi/l

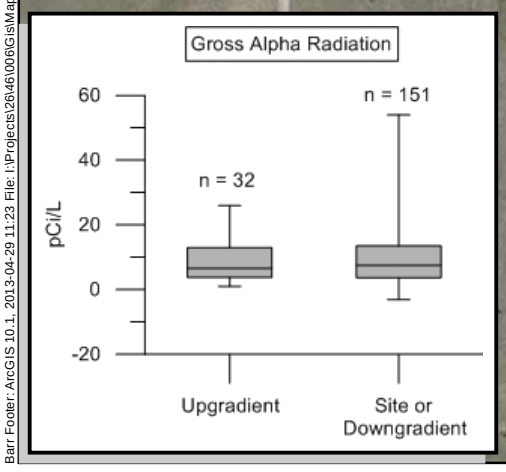
MW-06-22
5/21/2008: < 4.4 pCi/l J
9/26/2008: 17 pCi/l

MW-06-25
5/20/2008: 14 pCi/l
9/26/2008: 30 pCi/l

MW-97-5
5/15/2008: 11 pCi/l
9/17/2008: 9.6 pCi/l

MW-06-24
5/13/2008: 5.6 pCi/l
9/16/2008: 3.8 pCi/l

MW-06-23
5/13/2008: 6.4 pCi/l
9/16/2008: 2 pCi/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

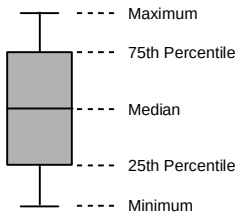
Barr Footer: ArcGIS 10.1, 2013-04-29 11:23 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Workplan_2012\5_3_Groundwater\Isocontours\Figure 5_3-42r GW SW Data Gross Alpha Isocontour Base.mxd User: sal2

Concentrations

- < 5 pCi/l
- 5 - 10 pCi/l
- 10 - 15 pCi/l
- > 15 pCi/l

Box-Whisker Plot Legend

n = Number of Samples



N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Hatches toward lower concentrations.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42r

ANALYTICAL GROUNDWATER DATA:
GROSS ALPHA ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 11 pCi/l

MW-06-10
5/14/2008: 27 pCi/l
9/18/2008: 26 pCi/l

MW-97-3
5/28/2008: 20 pCi/l
9/23/2008: 30 pCi/l

MW-06-12
5/20/2008: 24 pCi/l
9/25/2008: 32 pCi/l

MW-97-4
5/20/2008: 16 pCi/l
9/22/2008: 26 pCi/l

PW-99-1
5/18/2008: 18 pCi/l
5/29/2008: 19 pCi/l
9/25/2008: 23 pCi/l

MW-06-1
5/15/2008: 27 pCi/l
9/18/2008: 25 pCi/l
7/17/2010: 21 pCi/l

MW-12-02
11/8/2012: 25 pCi/l

MW-02-4
5/15/2008: 24 pCi/l
9/23/2008: 31 pCi/l
7/18/2010: 22 pCi/l

MW-12-04
11/7/2012: 8.8 pCi/l

MW-12-05
11/7/2012: 14 pCi/l

MW-12-06
11/7/2012: 8.4 pCi/l

MW-12-07
11/6/2012: 16 pCi/l

MW-12-08
11/6/2012: 13 pCi/l

MW-02-3
5/15/2008: 21 pCi/l
9/23/2008: 20 pCi/l
7/17/2010: 16 pCi/l

MW-12-03
11/7/2012: 7.7 pCi/l

MW-06-3
5/14/2008: 20 pCi/l
9/19/2008: 16 pCi/l
7/16/2010: 12 pCi/l

MW-06-9
5/17/2008: 23 pCi/l
9/25/2008: 30 pCi/l

MW-06-8
5/18/2008: 29 pCi/l
9/25/2008: 37 pCi/l

MW-06-7 *
5/29/2008: 79 pCi/l
9/23/2008: 70 pCi/l

MW-97-11
5/21/2008: 20 pCi/l
9/25/2008: 47 pCi/l

MW-EPA-1
5/14/2008: 7 pCi/l
9/17/2008: 13 pCi/l

PW-99-3
5/28/2008: 26 pCi/l
9/22/2008: 23 pCi/l

MW-06-2
5/15/2008: 24 pCi/l
9/23/2008: 24 pCi/l
7/18/2010: 22 pCi/l

MW-06-21
5/17/2008: 24 pCi/l
9/24/2008: 27 pCi/l

MW-97-10
5/21/2008: 17 pCi/l
9/23/2008: 25 pCi/l

MW-97-2
5/13/2008: 22 pCi/l
9/17/2008: 30 pCi/l

MW-97-1
5/13/2008: 24 pCi/l
9/17/2008: 22 pCi/l

MW-06-4
5/15/2008: 7.4 pCi/l
9/18/2008: 7.6 pCi/l

MW-06-5
5/14/2008: 18 pCi/l
9/19/2008: 29 pCi/l

MW-GW-3
5/20/2008: 9.2 pCi/l
9/17/2008: 24 pCi/l

RP-W-6
5/30/2008: 21 pCi/l
9/24/2008: 17 pCi/l

MW-EPA-4
5/15/2008: 16 pCi/l
9/20/2008: 17 pCi/l

MW-06-11
6/3/2008: 20 pCi/l
9/23/2008: 30 pCi/l

RP-W-5
5/30/2008: 17 pCi/l
9/24/2008: 19 pCi/l

MW-97-9
5/16/2008: 33 pCi/l
9/24/2008: 30 pCi/l

MW-06-13
5/27/2008: 20 pCi/l
9/19/2008: 19 pCi/l

RP-W-4
5/28/2008: 21 pCi/l
9/24/2008: 21 pCi/l

MW-EPA-3
5/15/2008: 18 pCi/l
9/17/2008: 15 pCi/l

MW-06-16
5/21/2008: 26 pCi/l
9/20/2008: 28 pCi/l

MW-06-14
5/27/2008: 21 pCi/l
9/18/2008: 23 pCi/l

MW-97-12
5/27/2008: 24 pCi/l
9/23/2008: 35 pCi/l

MW-06-15
5/21/2008: 30 pCi/l
9/17/2008: 28 pCi/l

RP-W-1
5/22/2008: 23 pCi/l
9/25/2008: 30 pCi/l

MW-06-17
5/27/2008: 21 pCi/l
9/20/2008: 26 pCi/l

MW-06-18
5/21/2008: 43 pCi/l
9/25/2008: 43 pCi/l

MW-06-20
5/20/2008: 36 pCi/l
9/20/2008: 51 pCi/l

MW-06-19
5/20/2008: 47 pCi/l
9/18/2008: 57 pCi/l

MW-97-8
5/15/2008: 30 pCi/l
9/24/2008: 36 pCi/l

MW-02-1
5/29/2008: 24 pCi/l
9/26/2008: 37 pCi/l

MW-01-6
5/19/2008: 41 pCi/l
9/16/2008: 39 pCi/l

MW-02-2
5/19/2008: 25 pCi/l
9/22/2008: 21 pCi/l

MW-97-6
5/17/2008: 19 pCi/l
9/16/2008: 16 pCi/l

MW-01-3
5/19/2008: 35 pCi/l
9/19/2008: 33 pCi/l

MW-01-2
5/19/2008: 24 pCi/l
9/22/2008: 27 pCi/l

MW-01-5
5/17/2008: 17 pCi/l
9/16/2008: 18 pCi/l

MW-01-4
5/16/2008: 19 pCi/l
9/16/2008: 16 pCi/l

MW-97-7
5/20/2008: 32 pCi/l
9/26/2008: 68 pCi/l

MW-01-1
5/16/2008: 37 pCi/l
9/17/2008: 22 pCi/l

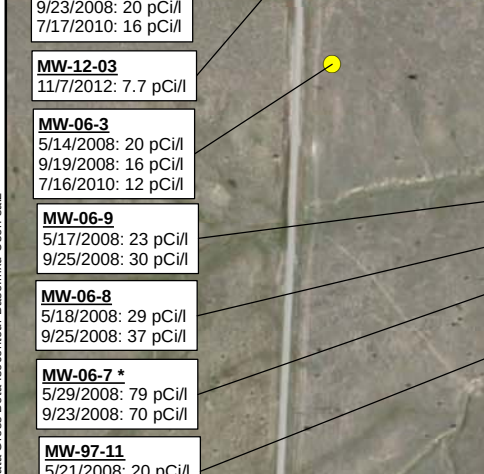
MW-06-22
5/21/2008: 42 pCi/l
9/26/2008: 68 pCi/l

MW-06-25
5/20/2008: 32 pCi/l
9/26/2008: 70 pCi/l

MW-97-5
5/15/2008: 12 pCi/l
9/17/2008: 12 pCi/l

MW-06-24
5/13/2008: 8.4 pCi/l
9/16/2008: 7.5 pCi/l

MW-06-23
5/13/2008: 8.4 pCi/l
9/16/2008: 5.7 pCi/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Concentrations

- < 50 pCi/l
- > 50 pCi/l

Box-Whisker Plot Legend

n = Number of Samples

- Maximum
- 75th Percentile
- Median
- 25th Percentile
- Minimum

N

Feet
800 0 800

Highest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Hatches toward lower concentrations.
Potential source areas highlighted for emphasis.
**** Screened within tailings basin***

Figure 5.3-42s

ANALYTICAL GROUNDWATER DATA:
GROSS BETA ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

Barr Footer: ArcGIS 10.1, 2013-04-29 10:53 File: I:\Projects\2646\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42s GW SW Data Gross Beta Isocontour Base.mxd User: sal2

MW-12-01
11/6/2012: 2.29 mg/l

MW-06-10
5/14/2008: 3.45 mg/l
9/18/2008: 3.19 mg/l

MW-97-3
5/28/2008: 0.45 mg/l
9/23/2008: 0.38 mg/l

MW-06-12
5/20/2008: 0.18 mg/l
9/25/2008: 1.54 mg/l

MW-97-4
5/20/2008: 0.14 mg/l
9/22/2008: 0.17 mg/l

PW-99-1
5/18/2008: 0.34 mg/l
5/29/2008: 0.63 mg/l
9/25/2008: 0.17 mg/l

MW-06-1
5/15/2008: 5.65 mg/l
9/18/2008: 5.47 mg/l
7/17/2010: 5.92 mg/l

MW-02-4
5/15/2008: 1.82 mg/l
9/23/2008: 1.53 mg/l
7/18/2010: 1.41 mg/l

MW-12-06
11/7/2012: 1.69 mg/l

MW-12-05
11/7/2012: 2.03 mg/l

MW-12-04
11/7/2012: 6.38 mg/l

MW-12-08
11/6/2012: 2.84 mg/l

MW-12-07
11/6/2012: 3.69 mg/l

MW-02-3
5/15/2008: 5.36 mg/l
9/23/2008: 4.53 mg/l
7/17/2010: 5.80 mg/l

MW-97-10
5/21/2008: 0.54 mg/l
9/23/2008: 0.53 mg/l

MW-06-3
5/14/2008: 5.08 mg/l
9/19/2008: 4.33 mg/l
7/16/2010: 4.75 mg/l

MW-06-9
5/17/2008: 0.08 mg/l
9/25/2008: 0.37 mg/l

MW-06-8
5/18/2008: 0.27 mg/l
9/25/2008: 0.35 mg/l

MW-06-7 *
5/28/2008: 1.03 mg/l
9/22/2008: 2.91 mg/l

MW-97-11
5/21/2008: 6.98 mg/l
9/25/2008: 2.98 mg/l

MW-EPA-1
5/14/2008: 8.37 mg/l
9/17/2008: 7.70 mg/l

PW-99-3
5/28/2008: 0.31 mg/l
9/22/2008: 0.16 mg/l

MW-12-02
11/8/2012: 3.29 mg/l

MW-06-2
5/15/2008: 3.78 mg/l
9/23/2008: 3.35 mg/l
7/18/2010: 3.38 mg/l

MW-12-03
11/7/2012: 1.28 mg/l

MW-06-21
5/17/2008: 1.12 mg/l
9/24/2008: 1.57 mg/l

MW-97-2
5/13/2008: 0.60 mg/l
9/17/2008: 0.28 mg/l

MW-97-1
5/13/2008: 0.97 mg/l
9/17/2008: 0.26 mg/l

MW-06-4
5/15/2008: 2.99 mg/l
9/18/2008: 2.52 mg/l

MW-06-5
5/14/2008: 0.40 mg/l
9/19/2008: 1.58 mg/l

MW-GW-3
5/20/2008: 6.38 mg/l
9/17/2008: 6.48 mg/l

RP-W-6
5/30/2008: 0.59 mg/l
9/24/2008: 0.21 mg/l

MW-EPA-4
5/15/2008: 2.25 mg/l
9/20/2008: 2.13 mg/l

MW-06-11
5/28/2008: 0.25 mg/l
9/23/2008: 0.14 mg/l

RP-W-5
5/30/2008: 2.48 mg/l
9/24/2008: 3.39 mg/l

MW-97-9
5/16/2008: 0.60 mg/l
9/24/2008: 0.36 mg/l

MW-06-13
5/27/2008: 6.81 mg/l
6/9/2008: 5.61 mg/l
9/19/2008: 4.08 mg/l

RP-W-4
5/28/2008: 0.57 mg/l
9/24/2008: 0.12 mg/l

MW-EPA-3
5/15/2008: 6.68 mg/l
9/16/2008: 5.69 mg/l

MW-06-16
5/21/2008: 3.21 mg/l
9/20/2008: 2.79 mg/l

MW-06-14
5/27/2008: 9.03 mg/l
6/9/2008: 6.62 mg/l
9/18/2008: 7.14 mg/l

MW-97-12
5/27/2008: 6.69 mg/l
6/9/2008: 5.70 mg/l
9/23/2008: 5.33 mg/l

MW-06-15
5/21/2008: 6.51 mg/l
9/17/2008: 4.90 mg/l

RP-W-1
5/22/2008: 3.76 mg/l
5/30/2008: 2.13 mg/l
9/25/2008: 2.94 mg/l

MW-06-17
5/27/2008: 0.72 mg/l
6/9/2008: 0.48 mg/l
9/20/2008: 0.47 mg/l

MW-06-18
5/21/2008: 0.23 mg/l
9/25/2008: 0.33 mg/l

MW-06-20
5/20/2008: 0.25 mg/l
9/20/2008: 0.17 mg/l

MW-06-19
5/20/2008: 3.89 mg/l
9/18/2008: 3.73 mg/l

MW-97-8
5/15/2008: 0.06 mg/l
9/24/2008: 0.15 mg/l

MW-02-1
5/29/2008: 0.32 mg/l
9/26/2008: 0.35 mg/l

MW-01-6
5/19/2008: 1.59 mg/l
9/18/2008: 0.30 mg/l

MW-02-2
5/19/2008: 2.20 mg/l
9/22/2008: 1.80 mg/l

MW-97-6
5/17/2008: 7.03 mg/l
9/16/2008: 6.22 mg/l

MW-01-3
5/19/2008: 0.61 mg/l
9/19/2008: 0.39 mg/l

MW-01-2
5/19/2008: 0.62 mg/l
9/22/2008: 0.33 mg/l

MW-01-5
5/17/2008: 6.21 mg/l
9/16/2008: 5.91 mg/l

MW-01-4
5/16/2008: 6.90 mg/l
9/16/2008: 6.70 mg/l

MW-97-7
5/20/2008: 0.08 mg/l
9/26/2008: 0.63 mg/l

MW-01-1
5/16/2008: 6.40 mg/l
9/17/2008: 6.47 mg/l

MW-06-22
5/21/2008: 0.12 mg/l
9/26/2008: 0.25 mg/l

MW-06-25
5/20/2008: 0.56 mg/l
9/26/2008: 0.81 mg/l

MW-97-5
5/15/2008: 7.49 mg/l
9/17/2008: 7.63 mg/l

MW-06-24
5/13/2008: 6.13 mg/l
9/16/2008: 4.45 mg/l

MW-06-23
5/13/2008: 6.80 mg/l
9/16/2008: 5.99 mg/l

Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1 2013-04-24 13:47 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_2012\5_3_Groundwater\Isocontours\Figure 5_3-42t GW SW Data Dissolved Oxygen Isocontour Base.mxd User: jwk

Sample Location

Isocontour

3 mg/l (Dashed where inferred)

N

Feet
800 0 800

Lowest concentration used for contouring.
Rejected data are not considered for contouring.
Hatches toward lower concentrations.
**** Screened within tailings basin***

Figure 5.3-42t

ANALYTICAL GROUNDWATER DATA:
DISSOLVED OXYGEN ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

MW-12-01
11/6/2012: 2.3 ug/l

MW-06-10
5/14/2008: 0.87 ug/l
9/18/2008: < 0.819 ug/l

MW-97-3
5/28/2008: 0.66 ug/l
9/23/2008: 0.64 ug/l

MW-06-12
5/20/2008: 1.5 ug/l
9/25/2008: 1.8 ug/l

MW-97-4
5/20/2008: 1.09 ug/l
9/22/2008: 0.88 ug/l

PW-99-1
5/18/2008: 1.5 ug/l
5/29/2008: 1.4 ug/l
9/25/2008: 1.5 ug/l

MW-12-02
11/8/2012: 0.660 ug/l

MW-02-4
5/15/2008: 0.92 ug/l
9/23/2008: 0.7 ug/l
7/18/2010: 0.52 ug/l

MW-06-1
5/15/2008: 0.74 ug/l
9/18/2008: < 0.921 ug/l
7/17/2010: 0.29 ug/l

MW-12-04
11/7/2012: 0.402 ug/l

MW-12-06
11/7/2012: 0.806 ug/l

MW-12-05
11/7/2012: 0.694 ug/l

MW-12-08
11/6/2012: 0.283 ug/l

MW-12-07
11/6/2012: 0.501 ug/l

MW-12-03
11/7/2012: 0.835 ug/l

MW-02-3
5/15/2008: 1.59 ug/l
9/23/2008: 1.27 ug/l
7/17/2010: 1.17 ug/l

MW-06-3
5/14/2008: 2.11 ug/l
9/19/2008: 1.8 ug/l
7/16/2010: 1.70 ug/l

MW-06-9
5/17/2008: 0.51 ug/l
9/25/2008: 0.68 ug/l

MW-06-8
5/18/2008: 2.04 ug/l
9/25/2008: 2.4 ug/l

MW-06-7 *
5/29/2008: 0.38 ug/l
9/23/2008: 0.68 ug/l

MW-97-11
5/21/2008: 2.11 ug/l
9/25/2008: 2.4 ug/l

MW-EPA-1
5/14/2008: 0.09 ug/l
9/17/2008: < 0.754 ug/l

PW-99-3
5/28/2008: 4.21 ug/l
9/22/2008: 3.81 ug/l

MW-06-4
5/15/2008: 0.19 ug/l
9/18/2008: 0.087 ug/l

MW-06-5
5/14/2008: 0.34 ug/l
9/19/2008: 0.346 ug/l

MW-GW-3
5/20/2008: 0.18 ug/l
9/17/2008: 0.384 ug/l

MW-06-2
5/15/2008: 1.8 ug/l
9/23/2008: 1.35 ug/l
7/18/2010: 1.00 ug/l

MW-06-21
5/17/2008: 1.78 ug/l
9/24/2008: 1.3 ug/l

MW-97-10
5/21/2008: 0.67 ug/l
9/23/2008: 0.7 ug/l

MW-97-2
5/13/2008: 0.29 ug/l
9/17/2008: < 0.382 ug/l

MW-97-1
5/13/2008: 0.37 ug/l
9/17/2008: < 0.547 ug/l

RP-W-6
5/30/2008: 6.96 ug/l
9/24/2008: 5.7 ug/l

MW-EPA-4
5/15/2008: 3.93 ug/l
9/20/2008: 3.06 ug/l

MW-06-11
5/28/2008: 4.83 ug/l
9/23/2008: 4.24 ug/l

RP-W-5
5/30/2008: 2.96 ug/l
9/24/2008: 2.9 ug/l

MW-97-9
5/16/2008: 2.37 ug/l
9/24/2008: 2.9 ug/l

MW-06-13
5/27/2008: 1.99 ug/l
9/19/2008: 1.91 ug/l

RP-W-4
5/28/2008: 4.83 ug/l
9/24/2008: 4.4 ug/l

MW-EPA-3
5/15/2008: 0.39 ug/l
9/16/2008: < 0.371 ug/l

MW-06-16
5/21/2008: 5.93 ug/l
9/20/2008: 6.08 ug/l

MW-06-14
5/27/2008: 1.7 ug/l
9/18/2008: < 1.8 ug/l

MW-97-12
5/27/2008: 0.91 ug/l
12/15/2008: 0.493 ug/l

MW-06-15
5/21/2008: 0.95 ug/l
9/17/2008: < 1.6 ug/l

RP-W-1
5/22/2008: 1.2 ug/l
9/25/2008: 1.2 ug/l

MW-06-17
5/27/2008: 3.14 ug/l
9/20/2008: 2.34 ug/l

MW-06-18
5/21/2008: 8.02 ug/l
9/25/2008: 8.1 ug/l

MW-06-20
5/20/2008: 10 ug/l
9/20/2008: 8.62 ug/l

MW-06-19
5/20/2008: 2.1 ug/l
9/18/2008: 2.1 ug/l

MW-97-8
5/15/2008: 4.88 ug/l
9/24/2008: 4.3 ug/l

MW-02-1
5/29/2008: 1.85 ug/l
9/26/2008: 2.5 ug/l

MW-01-6
5/19/2008: 11.6 ug/l
9/18/2008: 8.7 ug/l

MW-02-2
5/19/2008: 7.53 ug/l
9/22/2008: 7.05 ug/l

MW-97-6
5/17/2008: 0.27 ug/l
9/16/2008: < 0.443 ug/l

MW-01-3
5/19/2008: 18.8 ug/l
9/19/2008: 15.4 ug/l

MW-01-2
5/19/2008: 2.61 ug/l
9/22/2008: 2.17 ug/l

MW-01-5
5/17/2008: 0.33 ug/l
9/16/2008: < 0.414 ug/l

MW-01-4
5/16/2008: 0.37 ug/l
9/16/2008: < 0.369 ug/l

MW-97-7
5/20/2008: 6.75 ug/l
9/26/2008: 6.5 ug/l

MW-01-1
5/16/2008: 0.7 ug/l
9/17/2008: < 0.847 ug/l

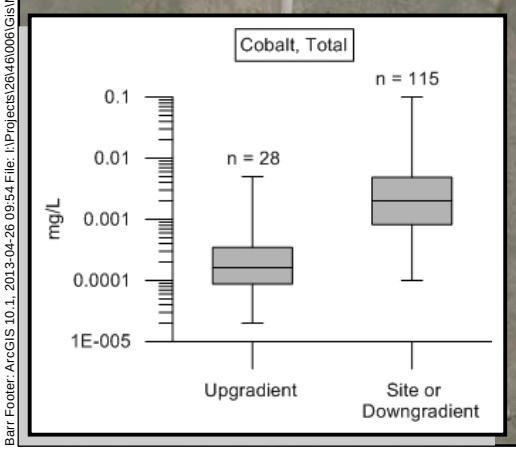
MW-06-22
5/21/2008: 10.8 ug/l
9/26/2008: 13.1 ug/l

MW-06-25
5/20/2008: 6.11 ug/l
9/26/2008: 5.5 ug/l

MW-97-5
5/15/2008: 0.29 ug/l
9/17/2008: 0.217 ug/l

MW-06-24
5/13/2008: 0.11 ug/l
9/16/2008: 0.142 ug/l

MW-06-23
5/13/2008: 0.22 ug/l
9/16/2008: 0.064 ug/l



Aerial Photography: 2011 imagery from Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Barr Footer: ArcGIS 10.1, 2013-04-26 09:54 File: I:\Projects\26\46\006\Gis\Maps\RFI_Workplan_2012\RFI_Data_Gaps_Report_201205_3_Groundwater\Isocontour\sFigure 5_3-42u GW SW Data Cobalt Isocontour Base.mxd User: sal2

Concentrations

- < 1 ug/l
- 1 - 5 ug/l
- > 5 ug/l

Box-Whisker Plot Legend

n = Number of Samples

Maximum
75th Percentile
Median
25th Percentile
Minimum

N

Feet
800 0 800

Lowest concentration used for contouring.
Rejected data are not considered for contouring.
Box-Whisker Plots depicts all data.
Hatches toward lower concentrations.
**** Screened within tailings basin***

Figure 5.3-42u

ANALYTICAL GROUNDWATER DATA:
TOTAL COBALT
ISOCONCENTRATION CONTOURS
Rhodia Silver Bow Plant
Montana

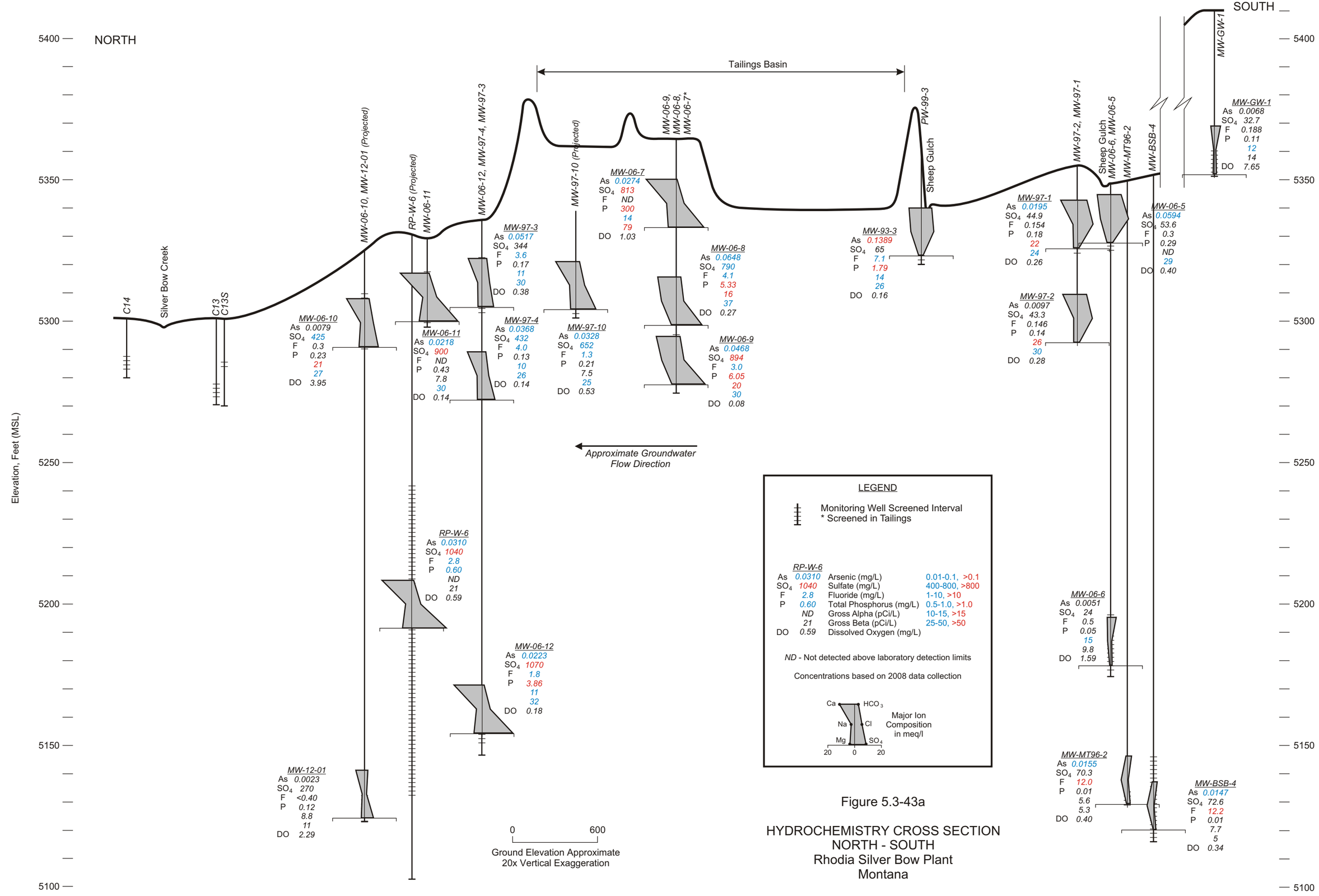


Figure 5.3-43a

HYDROCHEMISTRY CROSS SECTION
NORTH - SOUTH
Rhodia Silver Bow Plant
Montana

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WEST-NORTHWEST

EAST-SOUTHEAST

Elevation, Feet (MSL)

5350
5300
5250
5200
5150
5100

MW-12-06, MW-12-05, MW-12-04 (Projected)
MW-06-1
MW-02-4, MW-12-02
MW-06-2 (Projected)
PW-99-1
RP-W-6 (Projected)
MW-06-12, MW-97-4, MW-97-3
MW-97-9
RP-W-4 (Projected)
MW-97-8
MW-02-1
MW-06-20
MW-06-22
MW-02-1
MW-02-2 Clarifier
MW-01-3 Clarifier
MW-06-19 (Projected)
RP-W-7 (Projected)

MW-12-04
As 0.0301
SO_4 96.5
F 0.44
P 0.120
5.6
8.8
DO 6.38

MW-06-1
As No data
SO_4 591
F 0.396
P 0.21
20
27
DO 5.65

MW-12-02
As 0.0357
SO_4 492
F 0.88
P 0.80
17
25
DO 3.29

MW-06-02
As 0.014
SO_4 835
F 0.5
P 0.22
17
24
DO 3.78

PW-99-1
As 0.0338
SO_4 679
F 2.6
P 0.82
16
23
DO 0.63

MW-97-3
As 0.0517
SO_4 344
F 3.6
P 0.17
11
30
DO 0.45

MW-97-4
As 0.0368
SO_4 432
F 4.0
P 0.13
10
26
DO 0.17

MW-97-9
As 0.0631
SO_4 478
F 11.3
P 7.12
ND
33
DO 0.60

MW-97-8
As 0.0745
SO_4 493
F 2.9
P 0.49
8.7
36
DO 0.15

MW-02-1
As 0.0055
SO_4 1350
F ND
P 4.56
ND
37
DO 0.35

MW-06-20
As 0.0187
SO_4 557
F 0.5
P 41.3
5
51
DO 0.25

MW-06-22
As 0.0864
SO_4 601
F 6.2
P 1.3
17
68
DO 0.25

MW-02-2
As 0.0515
SO_4 240
F 7.9
P 54.5
4.9
25
DO 2.2

MW-01-3
As 0.0177
SO_4 246
F 1.2
P 94.5
2.7
35
DO 0.61

MW-06-19
As 0.0084
SO_4 525
F 0.151
P 0.13
54
57
DO 3.89

MW-12-05
As 0.0153
SO_4 80.4
F <0.40
P 0.088
13
14
DO 2.03

MW-02-4
As No data
SO_4 645
F 0.5
P 0.59
24
31
DO 1.82

RP-W-4
As 0.0336
SO_4 785
F ND
P 0.71
8.8
21
DO 0.57

RP-W-6
As 0.0310
SO_4 1040
F 2.8
P 0.60
ND
21
DO 0.59

MW-06-12
As 0.0223
SO_4 1070
F 1.8
P 3.86
11
32
DO 1.54

MW-12-06
As 0.0122
SO_4 35.9
F <0.40
P 0.124
9.1
8.4
DO 1.69

RP-W-7
As 0.0039
SO_4 25.6
F ND
P 0.19
11
15
DO 8.12

Approximate Groundwater Flow Direction

El. 5047

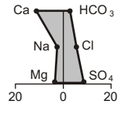
LEGEND

Monitoring Well Screened Interval
* Screened in Tailings

RP-W-6		
As 0.0310	Arsenic (mg/L)	0.01-0.1, >0.1
SO_4 1040	Sulfate (mg/L)	400-800, >800
F 2.8	Fluoride (mg/L)	1-10, >10
P 0.60	Total Phosphorus (mg/L)	0.5-1.0, >1.0
ND	Gross Alpha (pCi/L)	10-15, >15
21	Gross Beta (pCi/L)	25-50, >50
DO 0.59	Dissolved Oxygen (mg/L)	

ND - Not detected above laboratory detection limits

Concentrations based on 2008 data collection



Major Ion Composition in meq/l

0 500

Ground Elevation Approximate
16.66x Vertical Exaggeration

Figure 5.3-43b

HYDROCHEMISTRY CROSS SECTION
WEST - EAST
Rhodia Silver Bow Plant
Montana

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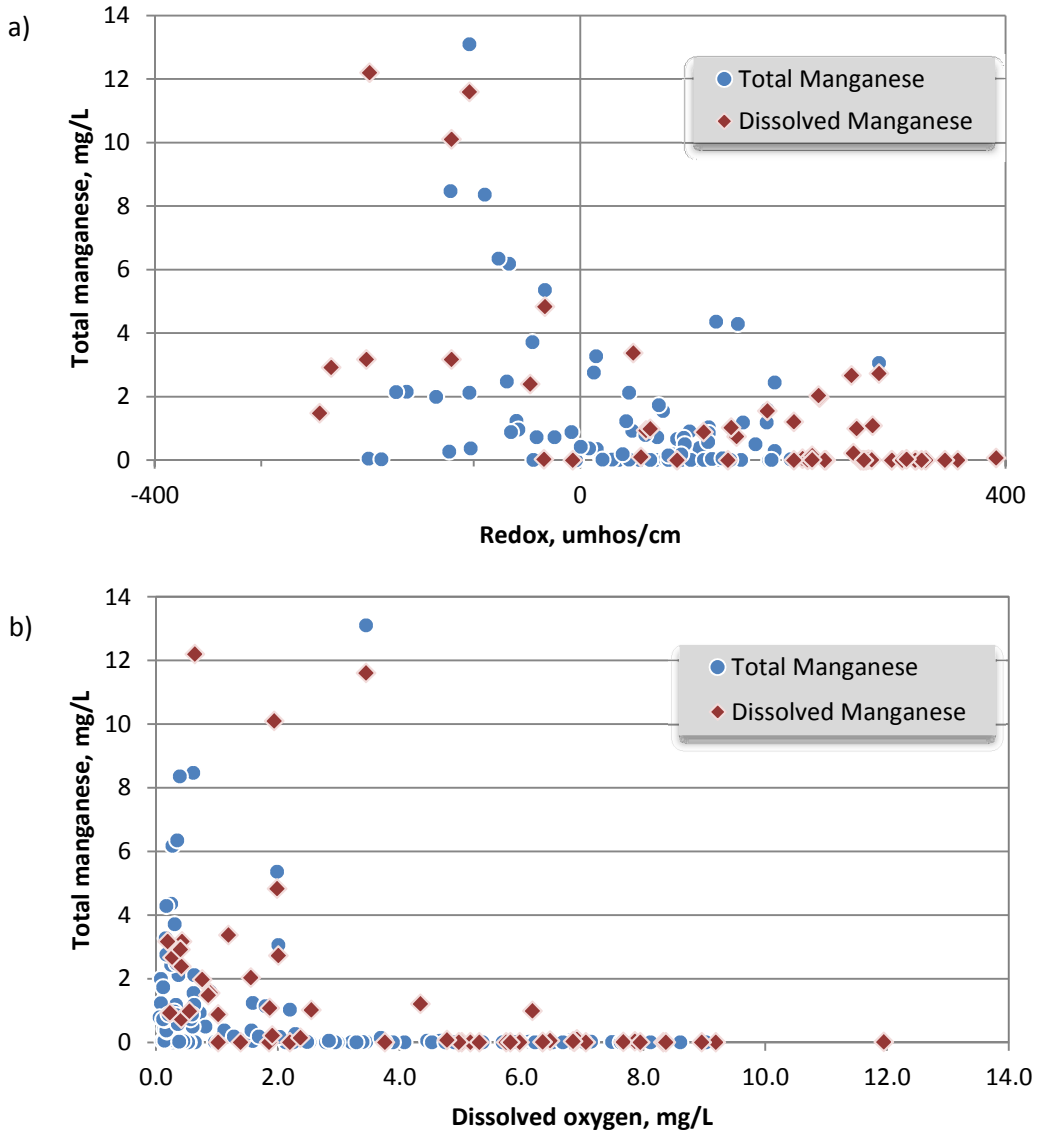


Figure 5.3-44. Manganese concentrations in groundwater versus a) field redox measurements, and b) field dissolved oxygen measurements. The relationships suggest that manganese mobility in groundwater is higher in samples depleted in oxygen at the Rhodia site.

Appendices

Appendix 5.3-A

Final Phase I RFI Groundwater Work Plan & Comprehensive Groundwater Monitoring Program

Barr Engineering Company
4700 West 77th Street • Minneapolis, MN 55435-4803
Phone: 952-832-2600 • Fax: 952-832-2601 • www.barr.com *An EEO Employer*

Minneapolis, MN • Hibbing, MN • Duluth, MN • Ann Arbor, MI • Jefferson City, MO

July 7, 2010

Sara Sparks
RCRA Project Manager for Rhodia Inc., Silver Bow Plant
U.S. EPA Region 8, Butte Office
Butte/Silver Bow Courthouse
155 W. Granite
Butte, MT 59701

Re: Notice of Sampling Activities
Corrective Action Order on Consent
Docket No. RCRA-08-2004-0001
Rhodia Silver Bow Plant

Dear Ms. Sparks:

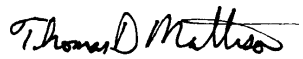
This letter serves as notice of sampling activities pursuant to Section XV.B. of the above-referenced Corrective Action Order on Consent. Barr Engineering Company (Barr), Rhodia's designated contractor, will continue the soil investigation activities as detailed in the Phase 1 RFI Work Plan dated March 25, 2009 on July 13, 2010. Specifically, the geophysical investigation at SWMU 16 - Buried Precipitator Dust Pan Area and the phosphine soil gas monitoring program at SWMU 15 - Buried Precipitator Dust Area. In addition, Rhodia will collect additional groundwater samples from the following monitoring wells in the northwest corner of the plant:

- MW-06-1
- MW-06-2
- MW-06-3
- MW-02-3
- MW-02-4

These samples will be analyzed for the same parameters listed in Table 5-5, Groundwater Parameter List (as modified for the fall 2008 sampling event), of the Final Phase I RFI Work Plan: general and site-specific chemical analytes; total metals; radionuclides; and field parameters.

If you have any questions concerning this information, please call Dan Bersanti at (406)496-2230, Jim Langseth at (952)832-2731, or me at (952)832-2876.

Sincerely,



Thomas D. Mattison
Barr Project Manager

cc: Richard Opper- MDEQ
Rebecca Holmes - MDEQ

Appendix L

Comprehensive Groundwater Monitoring Program

Silver Bow Plant
P.O. Box 3146
Butte, MT 59702
406-782-1215
406-782-4498 (FAX)

April 24, 2008

Via Hand Delivery

Sara Sparks
RCRA Project Manager for Rhodia Inc., Silver Bow Plant
U.S. EPA, Region 8, Butte Office
Butte-Silver Bow Courthouse
155 W. Granite
Butte, MT 59701

Re: Comprehensive Groundwater Monitoring Plan – 2008
RFI Work Plan
Rhodia Silver Bow Plan

Dear Ms. Sparks:

This letter outlines the comprehensive groundwater sampling plan and residential well sampling plan requested by EPA in the March 28, 2008 letter. In addition, Rhodia proposes to collect surface water samples concurrent with the groundwater sampling effort.

Groundwater Sampling Plan

Rhodia will conduct two rounds of groundwater sampling at the monitoring wells specified in the August 11, 2006 RFI Groundwater Monitoring Work Plan (Groundwater Work Plan) that was approved by the EPA in a letter dated November 7, 2006. The station identifiers and sampling rationale are listed in Table 1, and the well locations are shown on Figure 1. To accommodate EPA's request for samples collected at the seasonally high and seasonally low groundwater level, groundwater samples will be collected beginning May 12, 2008 and September 15, 2008. We expect each sampling event to require three to four weeks. As is typical, the seasonally higher groundwater elevations are seen in the spring (2nd quarter). Although seasonal effects on groundwater levels are generally not strong at this site, the lowest groundwater levels are generally observed in the winter, and the second lowest are groundwater levels are in the fall. Winter sampling is impractical, so a fall season was selected for the second sampling event.

We expect to receive the analytical data for the May event by mid-July. Upon receipt, the data will be reviewed and validated as specified in the available Quality Assurance Project Plan and qualifiers will be applied to the final data set as necessary. The final data set and list of parameters for the September event will be submitted to the EPA on or before August 29, 2008.

The samples collected during the May event will be analyzed for the parameters specified in the Work Plan (*see* Table 2, attached). The samples will be analyzed by Columbia Analytical Services Inc, ACZ Laboratories Inc. and DataChem Laboratories in accordance with the Quality Assurance Project Plan contained in the Revised Phase 1 RFI Work Plan dated March 16, 2007 (2007 Revised RFI Work Plan), or the final approved Quality Assurance Project Plan for the Phase 1 RFI Work Plan, whichever is available at the time the samples are collected. The August 24, 2007 letter did not provide any comments related to the groundwater monitoring activities and therefore no revisions to the groundwater analytical program will be included in the revised QAPP. Data collected under either version of the QAPP will be usable.

The approved Work Plan provides for reevaluation of the monitoring network, sampling frequency, and analytes after the first round of sampling. EPA has established that two rounds of groundwater sampling will be conducted at the established monitoring network during 2008. The analytes will be reevaluated after the first round of sampling. The parameter list for the September event will include the general, site-specific, radiological and metal parameters identified in the Groundwater Work Plan. Minor adjustments to parameters or analytical methods may be proposed by Rhodia if there are compelling reasons

Surface Water Sampling Plan

Surface water samples specified in the 2007 Revised RFI Work Plan will be collected concurrent with the groundwater samples, to the extent practicable. The station identifier and rationale are summarized in Table 1 and locations are shown on Figure 2. Five stations have been added at the following locations, if water is flowing at these locations:

- SW-16 – Primary flow channel of Silver Bow Creek, upstream of confluence with secondary flow channel.
- SW-17 - Secondary flow channel of Silver Bow Creek created by SSTOU remedy
- SW-18 - Up stream of ASiMI to evaluate the water quality of Sheep Gulch upstream of influence of the ASiMI Plant, which obtains its process water from Silver Lake and discharges its wastewater to Sheep Gulch under NPDES permit no. MT0030350.
- SW-20 - Downstream of ASiMI and upstream of confluence with tributary channel.
- SW-19 - upstream of tributary channel prior to confluence with Sheep Gulch

Surface water samples will be analyzed for the parameters listed in Table 1. The parameter list for the September event will include the general, site-specific, radiological and metal parameters identified in the Work Plan. Minor adjustments to parameters or analytical methods may be proposed by Rhodia if there are compelling reasons.

Residential Well Sampling Plan

EPA requested that the nearest residential wells be sampled in the comprehensive groundwater well monitoring plan. Rhodia revised the comprehensive groundwater monitoring plan to include sampling of the nearest residential wells according to the following approach, which was discussed with you on April 17, 2008.

The December 3, 2004 Interim Groundwater Quality Monitoring Work Plan contemplated sampling the nearest off-site residential wells (i.e., Hess property) as there were no additional monitoring wells between MW-02-4 and the off-site residential wells at that time. Rhodia developed a comprehensive site-wide groundwater quality monitoring network that was installed during fall 2006. An integral part of this network is MW-06-1, which was installed to evaluate groundwater quality between MW-02-4 and the residential property. Given the estimated groundwater velocity (presented below), analytical data from

samples collected from MW-06-1 will be evaluated before Rhodia performs residential well sampling. Rhodia will collect samples from the nearest residential wells during the September sampling event according to the following criteria: (1) data from samples collected at MW-06-1 exceed upgradient (i.e., background/reference area) concentrations and applicable Montana or Federal drinking water standards; and (2) the property owner allows the samples to be collected.

Groundwater Velocity

To put the groundwater situation at the northwest quadrant of the Rhodia property in context, the hydraulic properties of the water table unit were used to estimate the velocity of groundwater traveling northwest of the Silver Bow Plant. Slug tests were conducted at the site monitoring wells after installation in fall 2006 and groundwater levels have been measured on a quarterly basis. This data was used to estimate hydraulic conductivity at MW-02-4 (5.35 ft/day) and MW-06-1 (0.83 ft/day). The gradient between MW-02-4 and MW-06-1 from November 2006 to February 2008 ranged between 0.00158 and 0.00223 ft/ft based on groundwater level measurements. Descriptions of the soils in the screened interval (i.e., silty sand, clayey sand, silty sand, silt with sand, clayey silt, sandy clay) were used to identify a range of porosity of 0.20 to 0.35 ft^3/ft^3 (Fetter, page 75)[1]. The velocity of groundwater traveling northwest of the Silver Bow Plant was calculated based on these parameters and the following standard formula for velocity in groundwater flow:

$$V = \frac{K x i}{\Theta}$$

Where: V = Groundwater velocity [ft/day]
K = Hydraulic conductivity [0.83 to 5.35 ft/day]
i = Gradient [0.00158 to 0.00223 ft/ft]
Θ = Porosity [0.20 to 0.35 ft^3/ft^3]

The calculated velocity is 0.0037 to 0.060 ft/day, which equates to 1.4 to 22 ft/yr. Assuming the groundwater were flowing continuously in the direction from MW-02-4 toward MW-06-1, the amount of time for groundwater to travel the 834 feet between MW-02-4 and MW-06-1 is estimated at 39 to 610 years. The amount of time for groundwater to travel the 1,560 feet between MW-02-4 and the nearest off-site residential well is approximately 72 to 1,140 years. Since arsenic is subject to retardation and attenuation, it would migrate more slowly than groundwater.

Existing Residential Well Water Quality Information

As detailed in a November 20, 2006 letter from Dan Bersanti of Rhodia to Sara Sparks of EPA , a sample from a nearby residential well (i.e., Banks property) was reported to have been analyzed for arsenic, cadmium and fluoride. Rhodia concluded that the water quality reported for the sample from this well is within the range of water quality identified for monitoring stations upgradient of the Silver Bow Plant (Appendix BB, Current Conditions/Release Assessment Report, February 9, 2006) and the background groundwater quality presented for the Streamside Tailings Operable Unit (Final 1993 Data Summary Report, January 1995 and Record of Decision, Silver Bow Creek/Butte Area, EPA ID: MTD980502777).

Arsenic Concentration – Samples from MW-02-4

While we concur with the rationale for conducting additional sampling in the northwest area, we would like to point out that the third paragraph in the March 28, 2008 letter does not identify the correct arsenic concentration for the October 2004 sample. The arsenic concentration in the October 2004 sample

[1] Applied Hydrogeology, 4th Edition by C.W. Fetter. Published 2001 by Prentice Hall, Inc, Upper Saddle River, New Jersey.

collected at MW-02-4 was 0.021 mg/L, not 0.013 mg/L as stated in the letter. The arsenic concentrations in samples from MW-02-4 have fluctuated over time as presented in the Interim Groundwater Quality Monitoring Report for Sentinel Wells – November '07. The November '07 arsenic concentration is the first analytical data point outside the analytical accuracy interval for October 2004 data.

If you have any questions concerning this information, please call Tom Mattison at 952-832-2876 or me at 406-496-2230.

Sincerely,

Dan Bersanti

cc: Charles Figure; EPA
John Wardell; EPA
Julie DalSolglio; EPA
Rebecca Holmes; MT DEQ
Mark Hall; MT DEQ
Phebe Davol; BAH

Table 1

Groundwater and Surface Water Monitoring Stations
RFI - Silver Bow Plant

Station ID	Rationale	Parameter List(s)
Rhodia Silver Bow Plant		
MW-EPA-1	Up gradient water quality data	Common List[1]
MW-EPA-3	Down gradient water quality data	Common List[1]
MW-EPA-4	Down gradient water quality data	Common List[1]
MW-97-1	Up gradient water quality data	Common List[1]
MW-97-2	Up gradient water quality data	Common List[1]
MW-97-3	Down gradient water quality data	Common List[1]
MW-97-4	Down gradient water quality data	Common List[1]
MW-97-5	Up gradient water quality data	Common List[1]
MW-97-6	Side gradient water quality data	Common List[1]
MW-97-7	Down gradient water quality data	Common List[1]
MW-97-8	Down gradient water quality data	Common List[1]
MW-97-9	Down gradient water quality data	Common List[1]
MW-97-10	Down gradient water quality data	Common List[1]
MW-97-11	Side gradient water quality data	Common List[1]
MW-97-12	Down gradient water quality data	Common List[1]
PW-99-1	Down gradient water quality data	Common List[1]
PW-99-3	Evaluate water quality at southern limit of tailing basin	Common List[1]
MW-01-1	Upgradient of Used Brick and Furnace Liner Pile	Common List[1]
MW-01-2	Upgradient of Clarifier	Common List[1]
MW-01-3	Down gradient of Clarifier	Common List[1]
MW-01-4	Down gradient of Used Brick and Furnace Liner Pile	Common List[1]
MW-01-5	Down gradient of Used Brick and Furnace Liner Pile	Common List[1]
MW-01-6	Down gradient of Clarifier	Common List[1]
MW-02-1	Down gradient of Clarifier	Common List[1]
MW-02-2	Down gradient of Clarifier	Common List[1]
MW-02-3	Down gradient water quality data	Common List[1]
MW-02-4	Down gradient water quality data	Common List[1]
MW-06-1	Sentinel well down gradient of MW-02-4	Common List[1]
MW-06-2	To further define flow and water quality in the northwest portion of the site	Common List[1]
MW-06-3	To further define flow and water quality in the northwest portion of the site	Common List[1]
MW-06-4	Shallow groundwater background monitoring point outside of Sheep Gulch Influence	Common List[1]
MW-06-5	Shallow and deep groundwater background monitoring point	Common List[1]
MW-06-6	Shallow and deep groundwater background monitoring point	Common List[1]
MW-06-7	To measure dissipation of water table mound beneath tailing basin (tailing, channel, native)	Common List[1]
MW-06-8	To measure dissipation of water table mound beneath tailing basin (tailing, channel, native)	Common List[1]
MW-06-9	To measure dissipation of water table mound beneath tailing basin (tailing, channel, native)	Common List[1]
MW-06-10	To further define flow and water quality down gradient of the tailing basin	Common List[1]
MW-06-11	Down gradient of tailing basin and refuse disposal area	Common List[1]
MW-06-12	Down gradient of tailing basin and refuse disposal area	Common List[1]
MW-06-13	Down gradient of septic system drain field area	Common List[1], PCBs
MW-06-14	To confirm that the MW-97-12 data is the result of a localized source	Common List[1]
MW-06-15	Down gradient of Raw Material Storage Area and up gradient of MW97-12	Common List[1], PCBs
MW-06-16	Up gradient of septic system drain field area/down gradient of plant area	Common List[1]
MW-06-17	Down gradient of plant area and final pump station	Common List[1]
MW-06-18	Down gradient of the former acid plant	Common List[1], PCBs
MW-06-19	Down gradient of raw materials unloading area	Common List[1]
MW-06-20	Down gradient of P4 production area of the Plant	Common List[1]
MW-06-21	Down gradient of launder/entrance to tailing basin	Common List[1]
MW-06-22	Down gradient of launder	Common List[1]
MW-06-23	Shallow and deep groundwater background monitoring point up gradient of MW-97-5	Common List[1]
MW-06-24	Shallow and deep groundwater background monitoring point up gradient of MW-97-5	Common List[1]
MW-06-25	Downgradient of Precipitator Dust Burial Area.	Common List[1]

Table 1

Groundwater and Surface Water Monitoring Stations
RFI - Silver Bow Plant

Station ID	Rationale	Parameter List(s)
RP-W-1	Evaluate deep groundwater quality	Common List[1]
RP-W-4	Evaluate deep groundwater quality	Common List[1]
RP-W-5	Evaluate deep groundwater quality	Common List[1]
RP-W-6	Evaluate deep groundwater quality	Common List[1]
RP-W-7	Evaluate deep groundwater quality	Common List[1]
ASiMI Plant (if access is granted)		
GW-1	Up gradient water quality data	Common List[1]
GW-2	Up gradient water quality data	Common List[1]
GW-3	Up gradient water quality data	Common List[1]
BSB-4	Up gradient water quality data	Common List[1]
MW-MT96-2	Up gradient water quality data	Common List[1]
Surface Water - Sheep Gulch		
SW-1	Evaluate surface water quality, sediment quality and flow at southern extent of the tailing basin where Sheep Gulch Water is diverted west.	Common List[1]
SW-2	Evaluate sediment quality (and water quality if present) in tributary gulch.	Common List[1]
SW-3	Evaluate surface water quality, sediment quality and flow before Sheep Gulch combines with other gulch and immediately west of dry tailing stockpile.	Common List[1]
SW-4	Evaluate surface water quality, sediment quality and flow before Sheep Gulch flow combines with Beaver Pond outflow.	Common List[1]
SW-5	Evaluate surface water quality, sediment quality and stage at the Beaver Pond (i.e., groundwater to surface water discharge area).	Common List[1]
SW-6	Evaluate surface water quality, sediment quality and flow at furthest downstream, on-site location.	Common List[1]
SW-8	Evaluate surface water quality, sediment quality and flow upstream of the tailing basin & impacts of ASiMI wastewater.	Common List[1]
SW-9	Evaluate sediment quality (and water quality if present) in tributary gulch.	Common List[1]
SW-10	Evaluate surface water quality and stage at Site pond (i.e., groundwater to surface water discharge area).	Common List[1]
SW-11	Evaluate surface water quality and stage at Site pond (i.e., groundwater to surface water discharge area).	Common List[1]
SW-12	Evaluate surface water quality and stage at Site pond (i.e., groundwater to surface water discharge area).	Common List[1]
SW-13	Evaluate surface water quality at location furthest downstream that has not been altered by the SSTOU remedy.	Common List[1]
SW-18	Evaluate surface water quality and flow at location upstream of the ASiMi Plant, if water is flowing in the channel.	Common List[1]
SW-19	Evaluate surface water quality and flow of tributary channel	Common List[1]
SW-20	Evaluate surface water quality and flow at location down stream of the ASiMi Plant and upstream of confluence with tributary channel	Common List[1]
SW-18	Evaluate surface water quality at location upstream of the ASiMi Plant, if water is flowing in the channel.	Common List[1]
Surface Water - Silver Bow Creek		
SW-14	Evaluate surface water quality and flow upstream of Silver Bow Plant.	Common List[1]
SW-15	Evaluate surface water quality and flow down stream of Silver Bow Plant.	Common List[1]
SW-16	Evaluate surface water quality and flow in primary flow channel created by SSTOU remedy adjacent to Silver Bow Plant.	Common List[1]
SW-17	Evaluate surface water quality and flow in secondary flow channel created by SSTOU remedy adjacent to Silver Bow Plant.	Common List[1]

Notes:

[1] Common List includes Site-Specific, Metals, VOCs, SVOCs, General, Radionuclides (Table 2)

Table 2

Groundwater and Surface Water Parameter Lists
RFI - Silver Bow Plant

Site-Specific Parameters	Method
Elemental Phosphorus	7580 mod.
Total Phosphorus	EPA 365.3
Fluoride	340.2/SW9056

Metal Parameters	Method
Antimony	6020
Arsenic	6020
Barium	6020
Beryllium	6020
Cadmium	6020
Chromium	6020
Cobalt	6020
Copper	6020
Lead	6020
Mercury	7470
Nickel	6020
Selenium	6020
Silver	6020
Thallium	6020
Uranium	6020
Vanadium	6020
Zinc	6020

Parameter Group	Method
VOCs	8260
SVOCs	8270
PCBs[2]	8082

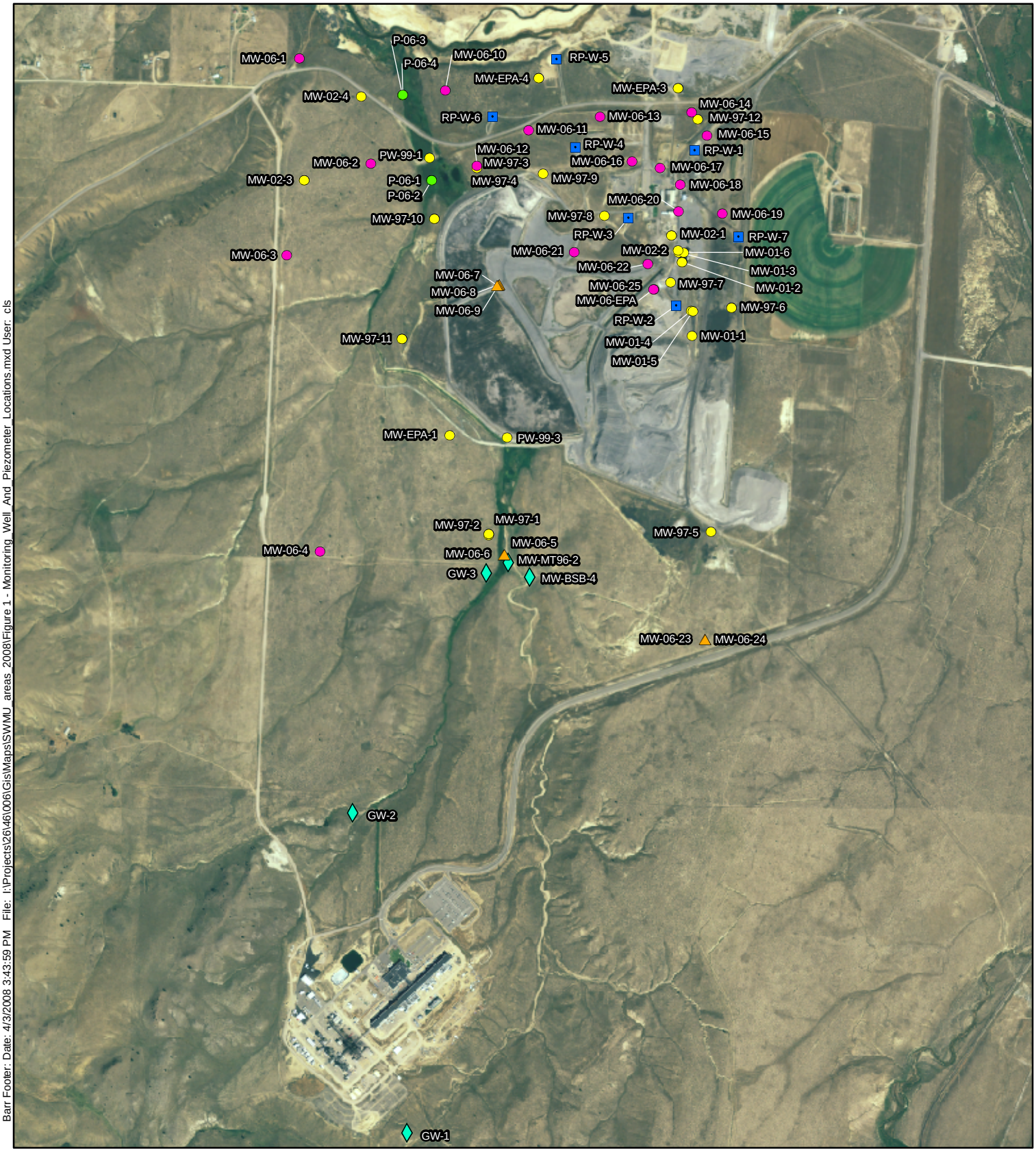
General Parameters	Method
Ammonia	EPA 350.1
Calcium	6020
Iron	6020
Magnesium	6020
Manganese	6020
Potassium	6020
Sodium	6020
Bicarbonate	EPA 310.1/SM 2320B
Carbonate	EPA 310.1/SM 2320B
Chloride	EPA 300
Nitrate/Nitrite	EPA 353.2/SW 9056
Sulfate	EPA 300

Radiological Parameters	Method
Gross Alpha/Beta	9310
Ra-226	9315
Ra-228	9320

Note:

Common List includes Site-Specific, Metals, VOCs, SVOCs, General, and Radiological Parameters

[2] PCBs will be analyzed at monitoring wells identified in Table 1. PCBs will not be analyzed at surface water stations.



Barr Footer: Date: 4/3/2008 3:43:59 PM File: I:\Projects\2614\006\Gis\Maps\SWMU_areas_2008\Figure 1 - Monitoring_Well_And_Piezometer_Locations.mxd User: cls

2006 Monitoring Wells & Piezometers
- Monitoring Well
- Piezometer Nest
- Well Nest

Existing Wells
- Monitoring Well
- Production Well
- ASiMI Monitoring Wells

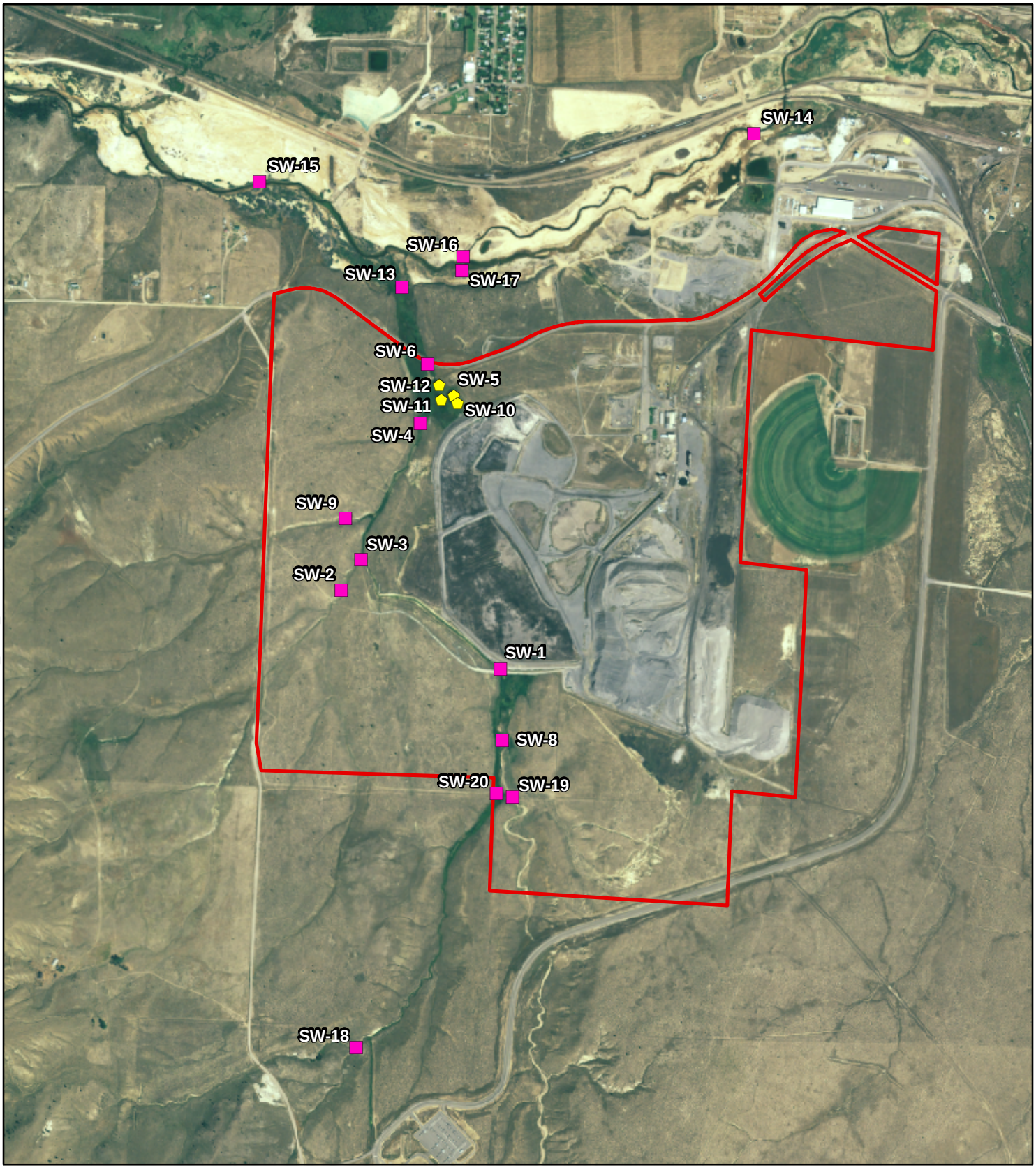
N

Feet
1,500 0 1,500 3,000

Meters
200 0 200 400 600 800 1,000

Figure 1

MONITORING WELL AND PIEZOMETER LOCATIONS
Rhodia Silver Bow Plant
Montana



Barr Footer: Date: 4/21/2008 3:48:43 PM File: I:\Projects\26\46\006\Gis\Maps\SWMU_areas_2008\Figure 2 - SWInvestAreas.mxd User: ksw

Proposed Monitoring Locations

- Flow, Water Quality
- Water Quality, Stage
- Property Boundary

N

Feet
1,500 0 1,500

Meters
200 0 200 400 600

Figure 2
SURFACE WATER
INVESTIGATION AREAS
Rhodia Silve Bow Plant
Montana

RFI Groundwater Monitoring Work Plan
Corrective Action Order on Consent
Docket No. RCRA-08-2004-0001

Rhodia Silver Bow Plant
Butte, Montana

July 14, 2006

Revised: August 11, 2006

RFI Groundwater Monitoring Work Plan
Corrective Action Order on Consent
Docket No. RCRA-08-2004-0001
Rhodia Silver Bow Plant

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1.0 Introduction

This RCRA Facility Investigation (RFI) Groundwater Monitoring Work Plan documents the methods and procedures Rhodia Inc. (Rhodia) will use in conducting the groundwater monitoring investigation in connection with Rhodia's inactive Silver Bow plant near Butte, Montana. Rhodia has prepared this RFI Groundwater Monitoring Work Plan to fulfill the requirements of Section VIII.D. of the Corrective Action Order on Consent (3008(h) Order) issued to Rhodia pursuant to Section 3008(h) of the Resource Conservation and Recovery Act ("RCRA") (42 U.S.C. § 6928(h)) by the U.S. Environmental Protection Agency (EPA) with an effective date of April 29, 2004. The RFI Groundwater Monitoring Work Plan was developed consistent with the RCRA Corrective Action Plan (CAP) and other relevant EPA guidance identified in the 3008(h) Order. The objective of the proposed work is to address data gaps related to the groundwater monitoring network that were identified in the Current Conditions/Release Assessment Report (CCRA) (Barr, 2006) and approved by EPA on April 26, 2006. This Groundwater Monitoring Work Plan is part of the comprehensive Phase 1 RFI Work Plan that was submitted to EPA on August 4, 2006.

1.1 Background Information

Rhodia's former phosphorus production plant (Silver Bow Plant) occupies approximately 1.25 square miles in Silver Bow County, Montana. The Plant is located at 112º 41' W longitude and 45º 49' N latitude approximately seven miles west of Butte, Montana and one mile south of Ramsey, Montana (Figure 1). The property, owned by Rhodia Inc., is located in Sections 23, 24, 25, and 26, Township 3 North, Range 9 West (Figure 2). As shown on Figure 2, the Silver Bow Plant is not bound by natural features (e.g., rivers). German Gulch Road abuts the northern boundary of the facility. The remaining property is bounded by industrial and agricultural lands.

A number of environmental investigations have been conducted at the Silver Bow Plant since 1988. These investigations have been summarized in previous reports, including the Current Conditions/Release Assessment Report (Barr, 2006). Characterization of the site groundwater has been a major emphasis of previous site investigations. There have been 27 monitoring wells installed at the site; each well has been sampled one or more times, most with an extensive parameter list. There have been another four wells installed by others immediately up gradient (south) of the site, with ongoing sampling of two of the wells. The five production wells at the site have also been sampled. There were also a number of wells associated with the Streamside Tailings Operable Unit

(SSTOU) wells north of the site along Silver Bow Creek, which have been sampled as part of the SSTOU investigation. The groundwater characterization provided by the monitoring well network and site surface water information formed the basis for development of the hydrogeologic conceptual site model.

1.2 Purpose and Objectives

The general purpose of the RCRA Facility Investigation is to evaluate the nature and extent of releases of hazardous waste or hazardous constituents from SWMUs or AOCs at the Silver Bow Plant and to gather all necessary data to support a Corrective Measures Study (CMS). The specific objective of this Groundwater Monitoring Work Plan is to address identified data gaps in the groundwater monitoring network that were approved by EPA in the CCRA. The proposed work will collect information needed to refine or confirm the conceptual site model and will collect data to further evaluate groundwater contamination distribution.

The proposed additional groundwater monitoring wells will be used to collect the following additional information:

- Groundwater flow patterns and quality trends in the northwest portion of the site.
- Groundwater flow patterns and quality trends in the Sheep Gulch valley north of German Gulch Road.
- Upgradient groundwater quality related to both deep and shallow zone background groundwater concentrations.
- The vertical distribution of water quality in the general area where there has been site influence.
- Hydraulic conductivity of the shallow and deep zone of the aquifer on site.
- Groundwater geochemistry and concentration trends in the groundwater monitoring network.
- Deep zone groundwater quality status and trends.
- Evaluate groundwater quality downgradient of the following areas: furnace, roaster and process water handling areas of the former Plant; the former acid plant area; the temporary

retention ditch near MW-97-12; the raw materials unloading area; the septic system drainfield area; and the launder and entrance to the tailing basin.

The locations of proposed wells have been selected to address the above data gaps, enhance the site conceptual model and provide appropriate water quality information.

1.3 Supporting Documents

The following supporting documents have been prepared for use in conjunction with the RFI Groundwater Monitoring Work Plan: Quality Assurance Project Plan; Field Sampling Plan and Project Health and Safety Plan. These plans were included as appendices to the Phase 1 RFI Work Plan submitted to the EPA on August 4, 2006.

2.0 Scope of Work

Data gaps were identified in the February 9, 2006 Current Conditions/Release Assessment Report (approved by EPA on April 26, 2006) and are also discussed above. The scope of work described in this section addresses the identified data gaps in the site groundwater monitoring network and collection and analysis of native soil samples from each location where monitoring wells are installed. In addition, a soil quality investigation will also be conducted. The proposed monitoring well locations and construction details were presented during a meeting with EPA Region 8 and Montana Department of Environmental Quality personnel held at the Silver Bow Plant on June 28, 2006. In general, these additional wells are located downgradient of the major operations at the Silver Bow Plant. Additional wells will also be installed upgradient of the Silver Bow Plant to provide additional background/reference area groundwater quality information.

2.1 Monitoring Well Locations and Rationale

Currently there are 27 monitoring wells on-site, another 4 wells immediately upgradient of the site, and 5 production wells on-site, all of which have been sampled one or more times. The proposed additional monitoring well locations are presented in Figure 3. A total of 19 additional water table monitoring wells, 4 additional piezometers, and 5 additional deeper wells, nested with newly-installed or previously-existing water table wells, will be installed across the site. The rationale for each monitoring well location is summarized on Table 1 and includes obtaining upgradient and downgradient groundwater quality information and further defining groundwater flow. In addition, piezometer transects will be installed at two locations across Sheep Gulch to evaluate lateral and vertical gradients. The precise locations of wells will be finalized in the field and minor adjustments (up to 50 feet, which is less than the diameter of the well location marks on Figure 3) may be needed to avoid existing utilities or provide better access.

Tables 1 and 2 list the following information: general monitoring well location; well depth; the Solid Waste Management Unit (SWMU) or Area of Concern (AOC) being monitored; the rationale for the placement of the monitoring well; and the list of parameters that will be analyzed at the well. The placement of the wells addresses the objectives outlined in Section 1.2.

2.2 Soil Quality Investigation

During monitoring well installation activities, standard penetration tests and split-barrel sampling of soils will be performed according to ASTM D-1586 Standard Methods for Penetration Test and Split-Barrel Sampling of Soils and logged according to ASTM D-2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). The split-barrel sampler with drive shoe will be 2-inch diameter and of sufficient length to allow routine sample drives of 24 inches. Samples will be taken continuously to a depth of 20 feet below ground surface. From twenty feet below ground surface to the design depth of boring, one split spoon sample will be collected every five feet. Soil samples will be analyzed from the 0- to 12-inch interval and the 8- to 10-feet interval of native soil encountered in each boring. These sample intervals were selected to characterize surface and subsurface conditions across the Silver Bow Plant and provide data to evaluate potential leaching from the surficial material. The surficial interval is also appropriate to evaluate current and future exposure scenarios under industrial land use scenarios.

Soil samples collection will conform to the SOP for Soil Sample Collection. SOPs are contained within the Field Sampling Plan is included as an appendix to the Phase 1 RFI Work Plan. Native soil samples will be analyzed for the parameters listed in Table 3, except VOCs will not be analyzed in the 0- to 12-inch interval since any such contaminants would have volatilized.

The exception to the above sampling plan will be at the location of the well nest to be installed in the tailing basin. The initial boring installed at this location will be sampled every 5 feet to the approximate depth of Sheep Gulch, after which it will be sampled continuously to just below Sheep Gulch and then sampled every 5 feet after penetrating Sheep Gulch. Subsequent borings at this location will be blind drilled except where continuous sampling will be needed in order to best identify the target interval (water table and Sheep Gulch sediments).

Selected samples will be analyzed for the parameters listed in Table 3. Soil samples will be analyzed from the 0- to 12-inch interval of native soil encountered in each boring (this means, for instance, that slag fill at the ground surface will not be sampled for this analysis). Soil sample collection will conform to the SOP for Soil Sample Collection. SOPs are contained within the Field Sampling Plan that is included as an appendix to the Phase 1 RFI Work Plan. Native soil samples will be analyzed for the parameters listed in Table 3, except VOCs will not be analyzed in the 0- to 12-inch interval since any such contaminants would have volatilized.

In addition to samples being collected as described above, the field observer will also collect samples for analysis from intervals that have an oily appearance, strong odor, unusual color or obvious staining. These samples will be analyzed for the parameters listed in Table 3.

Additional soil investigation tasks are described in the comprehensive Phase 1 RFI Work Plan that was submitted to EPA on August 4, 2006.

2.3 Monitoring Well Design and Installation

The monitoring wells will be installed using hollow stem auger rotary drilling methodology. Water table monitoring wells will be constructed with polyvinyl chloride (PVC), 20-feet long, 2-inch inner diameter (I.D.) pipe size, continuous No. 10 slot screens fitted with a flat base plate and threaded female flush coupling. Riser pipe will be 2-inch diameter, Schedule 40 PVC pipe. Nested deep wells will be constructed in the same manner as the water table wells but with a 10-foot long screen. A 20-foot long screen has been selected for water table wells due to the site-wide fluctuations in the water table elevation. Since 1997, when water table elevations began being monitored at the site, groundwater elevations have varied by up to approximately nine feet, as shown on Figure 4. It is not necessary to have the additional screen length for the deeper wells screened below the water table, therefore nested deep wells will have 10-foot long screens installed.

Monitoring wells located in the tailing basin will have shorter screens to optimize the evaluation of vertical gradient between the water elevation in the tailing basin and the underlying Sheep Gulch sediments. MW-06-7 will have a 5-foot screen positioned such that the top of the screen is approximately 1-foot below the current water table elevation at that location as the water table elevation in the tailing basin is expected to decrease. MW-06-8 will have a 5-foot screen positioned within the buried Sheep Gulch sediment, which are estimated to be approximately 10 feet thick at this location. MW-06-9 will be constructed in the same manner as the other deep wells (i.e., 10-foot screen).

The proposed monitoring well construction for water table wells is presented on Figure 5 and discussed below. Water table wells will be set so that the screen intersects the water table with approximately 7 feet above the water table and 13 feet below the water table. Deeper nested wells will have completely submerged screens.

Upon completion of the borehole, the well screen and riser pipe, including an adequate number of centering guides, will be assembled without solvent or joint dressing and installed so that the screen

is at the design depth, and the riser pipe extends 2 to 3 feet above ground surface. If drilling fluid other than water has been used during borehole advancement, the drilling fluid will then be flushed from the hole by pumping potable water through the riser pipe and well screen until the return water is clear. The sand pack will be installed in a manner that will minimize segregation and ensure that the sand pack fills, as nearly as practicable, the annular space between the well screen and the borehole wall to a depth of 2 feet above the top of the screen. The sand pack used will be uniformly graded natural sand with approximately 96% passing a US mesh 20 sieve and approximately 96% retained on a US mesh 45 sieve. Approximately two feet of bentonite chips will be added above the sandpack and hydrated. Neat cement grout shall be placed above the bentonite seal by pumping under pressure through a tremie pipe. After 6 inches of grout have been placed in the borehole, the discharge point of the tremie pipe shall be maintained at 3 inches or more below the grout surface. Full strength grout shall be placed to a depth of 5 feet from the ground surface. Down hole equipment will be withdrawn as necessary during the grouting process.

Each well will be finished above grade with a protective casing and a locking cap. In trafficked areas, two to three protective posts shall be placed 2 feet from the protective casing, symmetrically spaced approximately 3 feet apart.

Well logs will include well construction schematics and pertinent field observations.

The monitoring wells (top of riser, top of casing and ground surface) will be surveyed using the same elevation datum as the existing wells at the site. Locations will be determined by a GPS survey, which will be conducted with the use of a real-time differential GPS unit with internal averaging features.

2.4 Piezometer Design and Installation

Two transects of piezometers will be installed across Sheep Gulch to evaluate lateral and vertical gradients along Sheep Gulch both north and south of German Gulch Road. The locations of the transects are shown on Figure 3 as piezometer nests P-06-1/P-06-2 and P-06-3/P-06-4. Piezometer nest P-06-1/P-06-2 is located south of German Gulch Road and piezometer nest P-06-3/P-06-4 is located north of German Gulch Road. Cross sections of the transects are provided on Figure 6.

Piezometers will be a ¾-inch diameter and at least one-foot long stainless steel screen advanced with a shield to prevent smearing along the screen while being driven. The screen will be flush threaded

to National Pipe Thread (NPT) ¾-inch steel drive pipe. The piezometer will be advanced using either a vibrating power hammer or a slide hammer.

Based on the water levels identified at P-06-3/P-06-4, north of German Gulch Road, a third piezometer (shown as "tentative" on Figure 6), may or may not be installed. The third piezometer will be installed if it is deemed necessary to evaluate groundwater gradients into or out of Sheep Gulch.

2.5 Monitoring Well Development

Monitoring wells will be developed by water jetting, surging and bailing, pumping, or a combination of methods. The objective of development will be to produce water that is clear and free of turbidity. The goal of the well development activities is to produce low turbidity water (i.e., < 5 NTU). This criterion may not be attainable for monitoring wells screened in a silty sand unit as is often the case at the Silver Bow site. In any event, well development will be considered complete by the time the volume of water removed reaches 500 gallons. These are the same criteria used for the Pre-closure Groundwater Monitoring Program approved by EPA in the September 6, 2001 letter to Mr. Dan Bersanti of Rhodia.

A stabilization test will be conducted on each monitoring well after the well appears to be fully developed. Development will be considered complete when three successive readings (pH, redox, turbidity, dissolved oxygen, temperature, and specific conductance) have met the stabilization criteria specified in Section 2.6 below. Water-quality parameters will be measured for stabilization after each water-column volume is purged.

2.6 Stabilization Test

Prior to sampling, a stabilization test will be performed at each well. The stabilization test will also be performed as part of the well development protocol.

Stabilization is achieved when all parameters show three consecutive equivalent values within the range shown on the table below. Water-quality parameters will be measured for stabilization after each water-column volume is purged.

Parameter (Typical unit of measurement)	**Criteria**
Specific Conductance [corrected to 25 °C] (ohms/cm)	±5%
Redox (mV)	±10%
Turbidity (NTU)	< 5; if practicable otherwise ±10%
Dissolved Oxygen (mg/L)	±5%
pH (unit less)	±5%
Temperature (° C)	±5%

A maximum of five well volumes will be removed from the well during a stabilization test. Pumps and other downhole equipment will be equipped with check valves to prevent water from re-entering the well.

Well stabilization will conform to the SOP for Well Stabilization. SOPs are contained within the Field Sampling Plan that is included as an appendix to the RFI Work Plan. A well stabilization record form is included on the Field Log Data Sheet provided in the Field Sampling Plan.

2.7 Water Level Monitoring

Water levels in the monitoring wells will be measured using an electric water level indicator. Water level measurement methods will conform to the SOP for Measuring Water Levels in Wells. SOPs are contained within the Field Sampling Plan that is included as an appendix to the RFI Work Plan. Water level measurements will be recorded on the Water Level Data Sheet. Water level measurements will be taken as needed during the course of the work to meet the objective of collecting representative samples.

2.8 Groundwater Sample Collection and Analysis

Approximately one month after construction and development of the monitoring wells or as weather conditions allow, groundwater samples will be collected from the new and existing monitoring wells using the procedures specified in the Field Sampling Plan. Each well will be purged prior to sample collection. Stabilization tests will be conducted during purging as described in Section 2.6. If there

are wells that do not produce enough water to meet the stabilization criteria, those wells will be bailed dry, allowed to recover a minimum of 1 hour, and sampled as soon as sufficient water is present in the well.

The groundwater samples will be analyzed for the common list parameters in Table 2. In addition, certain samples will be analyzed for PCBs as identified in Table 1.

One round of groundwater sampling is proposed for the first year. After the first round of sampling, the monitoring network, sampling frequency and analytes will be reevaluated.

2.9 Investigation-derived Waste Management

The anticipated investigation-derived wastes (IDW) are soil cuttings, well development and stabilization test water or other sampling- and cleaning-related water, disposable personal protective equipment (PPE), and disposable sampling equipment.

Used PPE and disposable sampling equipment generated will be air-dried and discarded with the normal refuse from the Silver Bow Plant as the known concentrations of parameters in samples from site monitoring wells do not support the need for more rigorous management. As described below, the management of soil and water IDW will depend on the area from which the material is generated.

2.9.1 IDW from Sampling Existing Wells

Water quality at existing wells does not exceed the relevant thresholds for hazardous waste. Therefore, the developing or sampling these wells will be discharged to the ground surface near each well. This practice was approved by EPA for the Preclosure Groundwater Monitoring Program in the December 20, 2001 letter to Dan Bersanti of Rhodia.

2.9.2 IDW from New Wells Installed within Designated Areas

Proposed monitoring wells located within or down gradient of the production area and septic drain field are: MW-06-13, MW-06-16, MW-06-17, MW-06-18, MW-06-20, MW-06-21, and MW-06-22, and the location of these wells will be considered within the “designated areas.” Soil cuttings and any associated non-water drilling fluid (i.e., solids) generated from the installation of these monitoring wells in the designated areas will be placed in drums.

For health and safety reasons, any soil cuttings that smoke or flame will be containerized with water pending further evaluation.

Each drum will be labeled with the material source and date that the material was placed in the drum. A single composite sample from the drill cuttings of each monitoring well will be collected and will be analyzed for TCLP metals. The cuttings from monitoring well MW-06-3 located down gradient of the septic drain field area will also be analyzed for TCLP VOCs and SVOCs. If the samples indicate the material is not a characteristic hazardous waste, the soil cuttings will be disposed of at a designated location at the Silver Bow Plant or disposed of off-site at a licensed facility. Otherwise, the solids will be disposed of in accordance with hazardous waste requirements for solids that exceed the pertinent toxicity threshold(s).

Potentially impacted water from the wells near the production area and the well downgradient of the septic drain field such as development water and purge water, will be discharged to the ground. There is no basis for expecting inferior water quality from these wells than what has previously been encountered in site wells (including those adjacent to the clarifier, within the designated areas). Based on previous groundwater quality data at the site, no site groundwater has exceeded pertinent toxicity thresholds of the hazardous waste requirements. Note that this approach to IDW management was approved by EPA for the Preclosure Groundwater Monitoring Program in the December 20, 2001 letter to Dan Bersanti of Rhodia.

Soil cuttings and other solid materials generated during installation of the monitoring wells in the tailing basin (i.e., MW-06-7, MW-06-8 and MW-06-9) will be thinspread within the tailing basin. Water generated from installation, developing or sampling these wells in the tailing basin will be discharged within the tailing basin near each well.

2.9.3 IDW from New Wells Installed Outside of Designated Areas

Soil cuttings and any associated non-water drilling fluid (i.e., solids) generated from the installation of monitoring wells outside the designated areas will be thin spread near the respective well, unless either smoke or flame are encountered in the soil. If smoke or flame is encountered, the soil will be containerized with water pending further evaluation, as discussed in Section 2.9.2 above. The exception to this will be within the tailing basin, where all material will be redeposited within the tailing basin.

2.10 Slug Test

Slug tests will be conducted in all site monitoring wells. Tests will be conducted by simulating the removal or addition of a known volume, or “slug” of water from or into the well and recording the

rate of water level change in the well with respect to time. Water level changes will be measured with a pressure transducer and recorded with an In-Situ environmental data logger.

The water level in the well will be measured manually prior to any disturbance and also after the installation of the pressure transducer. If the water level has changed from introducing the pressure transducer, it will be monitored until it recovers to the initial measurement. A solid 5-foot long PVC rod ("slug") will be rapidly lowered as far as possible below the water level in the well. Changes in water level will be measured and recorded by the pressure transducer and data logger. This is known as a slug-in or falling head test. After the water level in the well returns to equilibrium with the formation, the slug will be rapidly removed and the changes in water level will again be measured and recorded. This is known as a slug-out or rising head test.

If the water level in the well recovers within one hour of initial perturbation, an additional slug-in/slug-out test pair will be conducted to provide data for evaluating the appropriateness of the data analysis method to be used (e.g., Butler, 1997). As recommended by Butler (1997), in the second slug-in test, the volume of the slug placed below the water level will be reduced by a factor of two.

A qualified hydrogeologist will analyze the water level data from the slug tests to estimate the hydraulic conductivity of the unconsolidated materials. For wells with a partially submerged screen, only the slug-out test results will be analyzed. Data will be analyzed using the software AQTESOLV with industry standard solution methods.

2.11 Schedule

Rhodia prepared this RFI Groundwater Monitoring Work Plan in an effort to expedite field work during the summer/fall of 2006. The preliminary schedule for the RFI Work Plan was submitted to EPA on May 11, 2006. This preliminary schedule was revised to accommodate the expedited groundwater investigation activities and is shown on Figure 7.

3.0 Reporting

Within 90 days of completion of all work specified in the RFI Groundwater Monitoring Work Plan and receipt of laboratory analytical data, Rhodia will provide EPA and MDEQ with a written RFI Groundwater Monitoring Report explaining the details and confirming the completion of the work pursuant to this Work Plan.

The RFI Groundwater Monitoring Report will include a summary of field tasks and analytical data collected during the groundwater investigation. Summary figures and tables will clearly show the results of the study. The report will also include laboratory data summary tables, maps and updated figures, geologic cross sections and groundwater contour maps. Laboratory data will be verified and validated. This validation will include a review of quality control data and a confirmation that all data has been analyzed and reported properly.

4.0 References

Barr Engineering Co. 2006. Current Conditions/Release Assessment Report Corrective Action Order on Consent Docket No. RCRA-08-2004-0001., Rhodia Silver Bow Plant, February 2006.

Butler, J.J., Jr., 1997. The Design, Performance, and Analysis of Slug Tests, Lewis Publishers, Boca Raton, Florida, 252 p.

Tables

Table 1
Proposed Monitoring Well Piezometer Locations
RFI Groundwater Monitoring Work Plan
Rhodia Silver Bow Plant, Montana

Station ID	Well Depth	SWMU/AOC	Rational	Parameter List(s)
Northwest Area				
P-06-1 P-06-2	Nest of deep and shallow piezometers	1	To determine lateral and vertical gradients and water quality along Sheep Gulch near the Beaver Pond	--
P-06-3 P-06-4	Nest of deep and shallow piezometers	1	To determine lateral and vertical gradients and water quality along Sheep Gulch north of German Gulch Road	--
MW-06-1	Water Table	1	Sentinel well down gradient of MW-02-4	Common List[1]
MW-06-2	Water Table	1	To further define flow and water quality in the northwest portion of the site	Common List[1]
MW-06-3	Water Table	1	To further define flow and water quality in the northwest portion of the site	Common List[1]
MW-06-10	Water Table	1	To further define flow and water quality down gradient of the tailing basin	Common List[1]
Up Gradient Groundwater				
MW-06-4	Water Table	Background	Shallow groundwater background monitoring point outside of Sheep Gulch Influence	Common List[1]
MW-06-5 MW-06-6	Nest of deep and shallow wells[2]	Background	Shallow and deep groundwater background monitoring point	Common List[1]
MW-06-23 MW-06-24	Nest of deep and shallow wells[2]	Background	Shallow and deep groundwater background monitoring point up gradient of MW-97-5	Common List[1]
Vertical COPC Distribution				
MW-06-7 MW-06-8 MW-06-9	Nest of deep and shallow wells[3]	1	To measure dissipation of water table mound beneath tailing basin (tailing, channel, native)	Common List[1]
Conceptual Site Model				
MW-06-11	Water Table	1,19,20	Down gradient of tailing basin and refuse disposal area	Common List[1]
MW-06-12	Deep Well[4]			
MW97-12 Area				
MW-06-15	Water Table	22,6,21	Down gradient of Raw Material Storage Area and up gradient of MW97-12	Common List[1], PCBs
MW-06-14	Water Table	22,6	To confirm that the MW-97-12 data is the result of a localized source	Common List[1]
Down Gradient of Furnace/Roaster/Process Water Handling Area				
MW-06-16	Water Table	23,2,3,4,5,6,7,10, 11,13	Up gradient of septic system drain field area/down gradient of plant area	Common List[1]
MW-06-17	Water Table	27,2,3,4,5,6,7,10,11,18,21, 24,A	Down gradient of plant area and final pump station	Common List[1]
MW-06-20	Water Table	7,2,3,4,5,11,13, 14,18,A	Down gradient of P4 production area of the Plant	Common List[1]
Down Gradient of Acid Plant Area				
MW-06-18	Water Table	7,2,3,4,6,11,13, 14,18,21,A,B	Down gradient of the former acid plant	Common List[1], PCBs
Down Gradient of Raw Material Unloading Area				
MW-06-19	Water Table	6,13,14	Down gradient of raw materials unloading area	Common List[1]
Down Gradient of Septic System				
MW-06-13	Water Table	23,2,3,4,5,6, 20,24,27	Down gradient of septic system drain field area	Common List[1], PCBs
Chanels and Piping Connecting the Process and Tailing Areas				
MW-06-21	Water Table	1,8,15,12	Down gradient of launder/entrance to tailing basin	Common List[1]
MW-06-22	Water Table	1,8,12,13,14, 15,16,25	Down gradient of launder	Common List[1]

[1] Common List includes Site-Specific, Metals, VOCs, SVOCs, General, Radionuclides

[2] One water table well and one well screened 80-90 feet below the water table

[3] One water table well, one well screened within the buried Sheep Gulch sediment, and one well screened 20-30 feet below the buried Sheep Gulch sediment

[4] One deep well screened 80-90 feet below the water table and nested with existing wells MW-97-3 and MW-97-4.

Table 2
Groundwater Parameter Lists
RFI Groundwater Monitoring Work Plan
Rhodia Silver Bow Plant, Montana

Site-Specific Parameters	Method
Elemental Phosphorus	7580 mod.
Total Phosphorus	EPA 365.3
Fluoride	340.2/SW9056

Metal Parameters	Method
Antimony	6020
Arsenic	6020
Barium	6020
Beryllium	6020
Cadmium	6020
Chromium	6020
Cobalt	6020
Copper	6020
Lead	6020
Mercury	7470
Nickel	6020
Selenium	6020
Silver	6020
Thallium	6020
Uranium	6020
Vanadium	6020
Zinc	6020

Parameter Group	Method
VOCs	8260
SVOCs	8270
PCBs	8082

General Parameters	Method
Ammonia	EPA 350.1
Calcium	6020
Iron	6020
Magnesium	6020
Manganese	6020
Potassium	6020
Sodium	6020
Bicarbonate	EPA 310.1/SM 2320B
Carbonate	EPA 310.1/SM 2320B
Chloride	EPA 300
Nitrate/Nitrite	EPA 353.2/SW 9056
Sulfate	EPA 300

Radiological Parameters	Method
Gross Alpha/Beta	9310
Ra-226	9315
Ra-228	9320

Note:

Common List includes Site-Specific, Metals, VOCs, SVOCs, General, and Radiological Parameters

Table 3
Native Soil Parameter Lists
RFI Groundwater Monitoring Work Plan
Rhodia Silver Bow Plant, Montana

Site-Specific Parameters	Method
Elemental Phosphorus	7580 mod.
Total Phosphorus	EPA 365.3/6010
Fluoride	340.2/SW9056

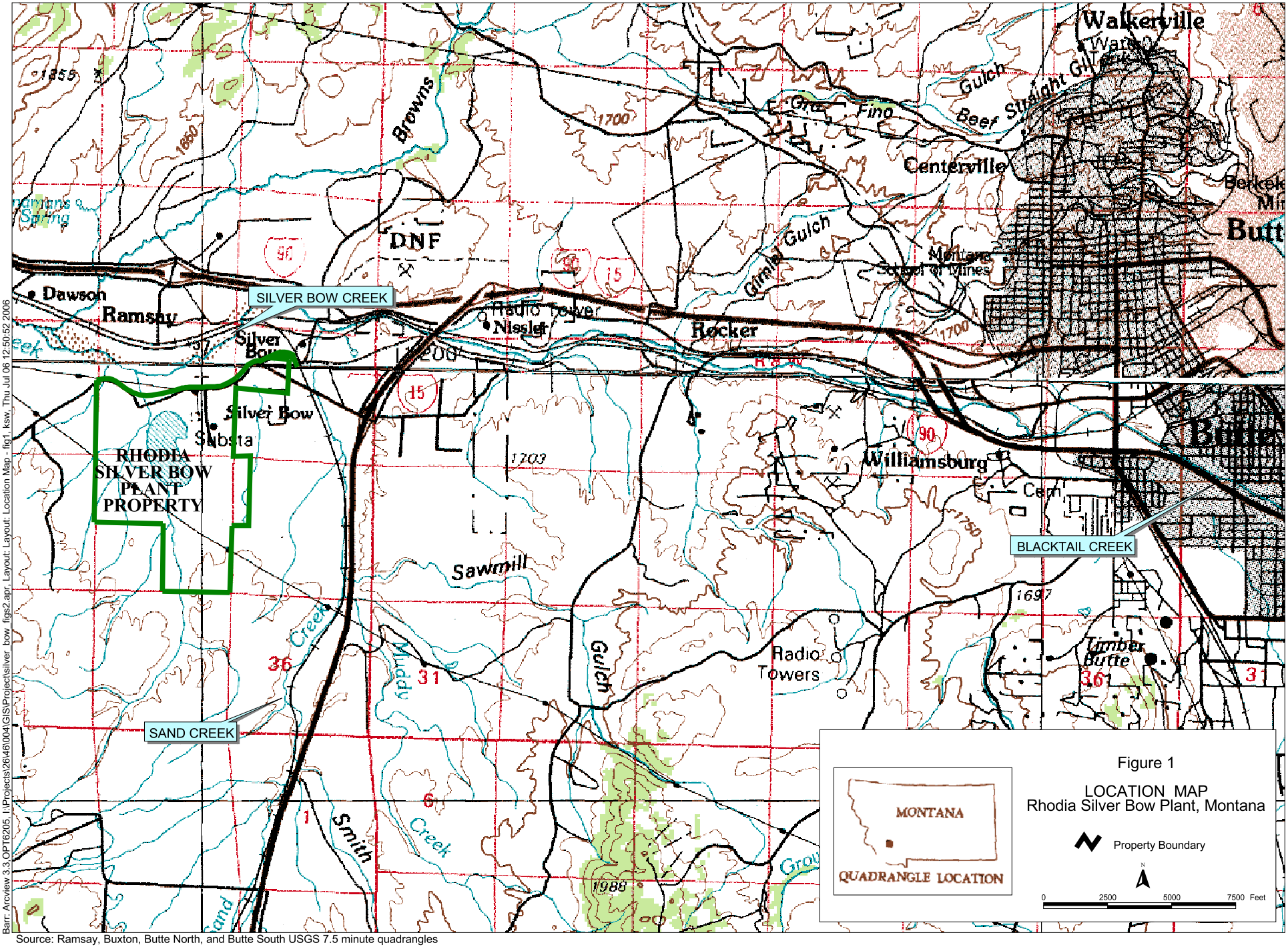
Parameter Group	Method
VOCs [1]	8260
SVOCs	8270

Metal Parameters	Method
Antimony	6010/6020
Arsenic	6010/6020
Barium	6010/6020
Beryllium	6010/6020
Cadmium	6010/6020
Chromium	6010/6020
Cobalt	6010/6020
Copper	6010/6020
Iron	6010/6020
Lead	6010/6020
Manganese	6010/6020
Mercury	7471
Nickel	6010/6020
Selenium	6010/6020
Silver	6010/6020
Thallium	6010/6020
Uranium	6010/6020
Vanadium	6010/6020
Zinc	6010/6020

Radiological Parameters	Method
U-238	DOE A-01-R
U-234	DOE A-01-R
Th-230	DOE A-01-R
Ra-226	9315
Pb-210	Eichrom/ LSC

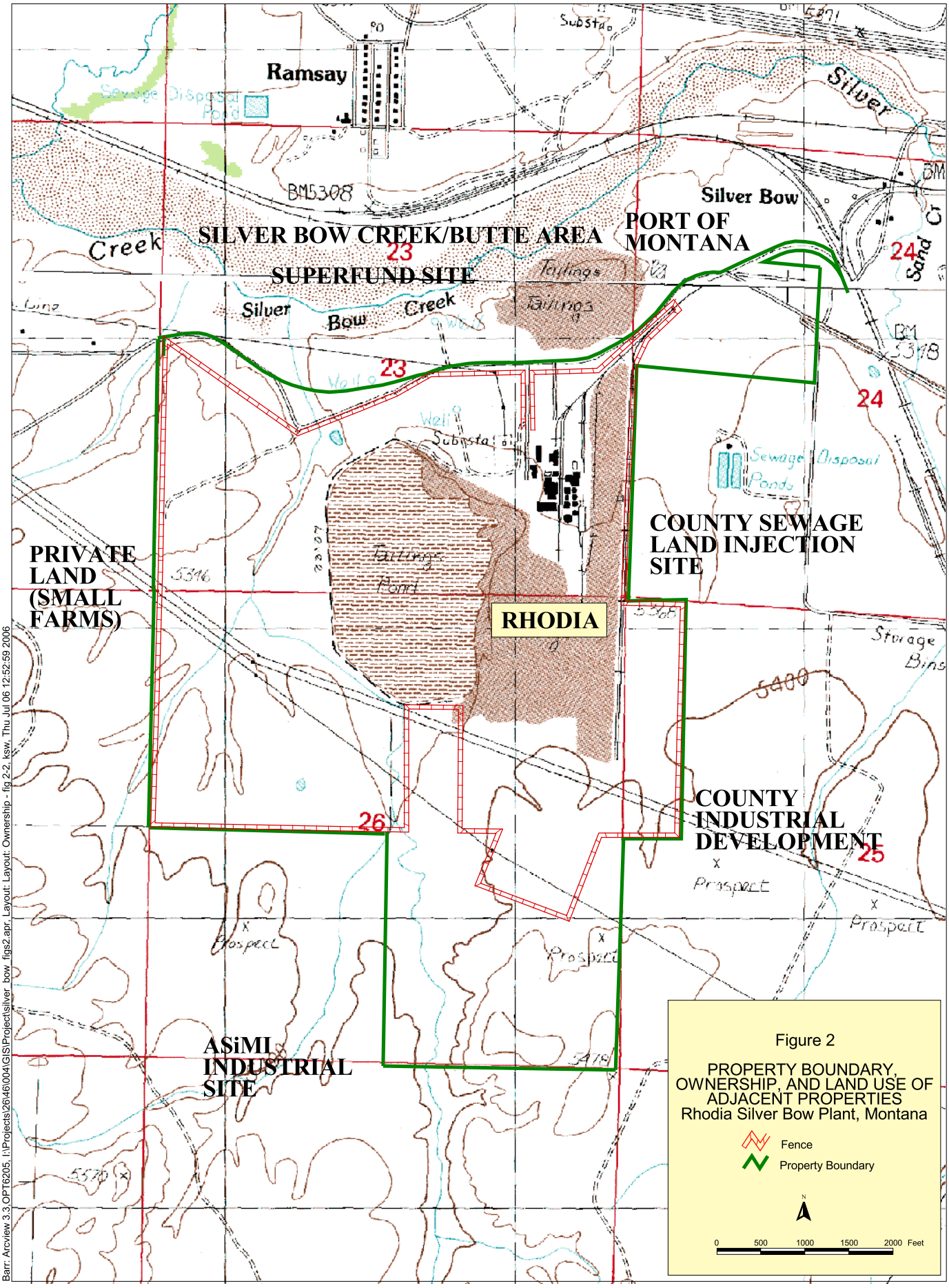
Note:
[1] Only, native soil samples from the deeper interval (i.e, 8 to 10 feet bgs) will be analyzed for VOCs

Figures



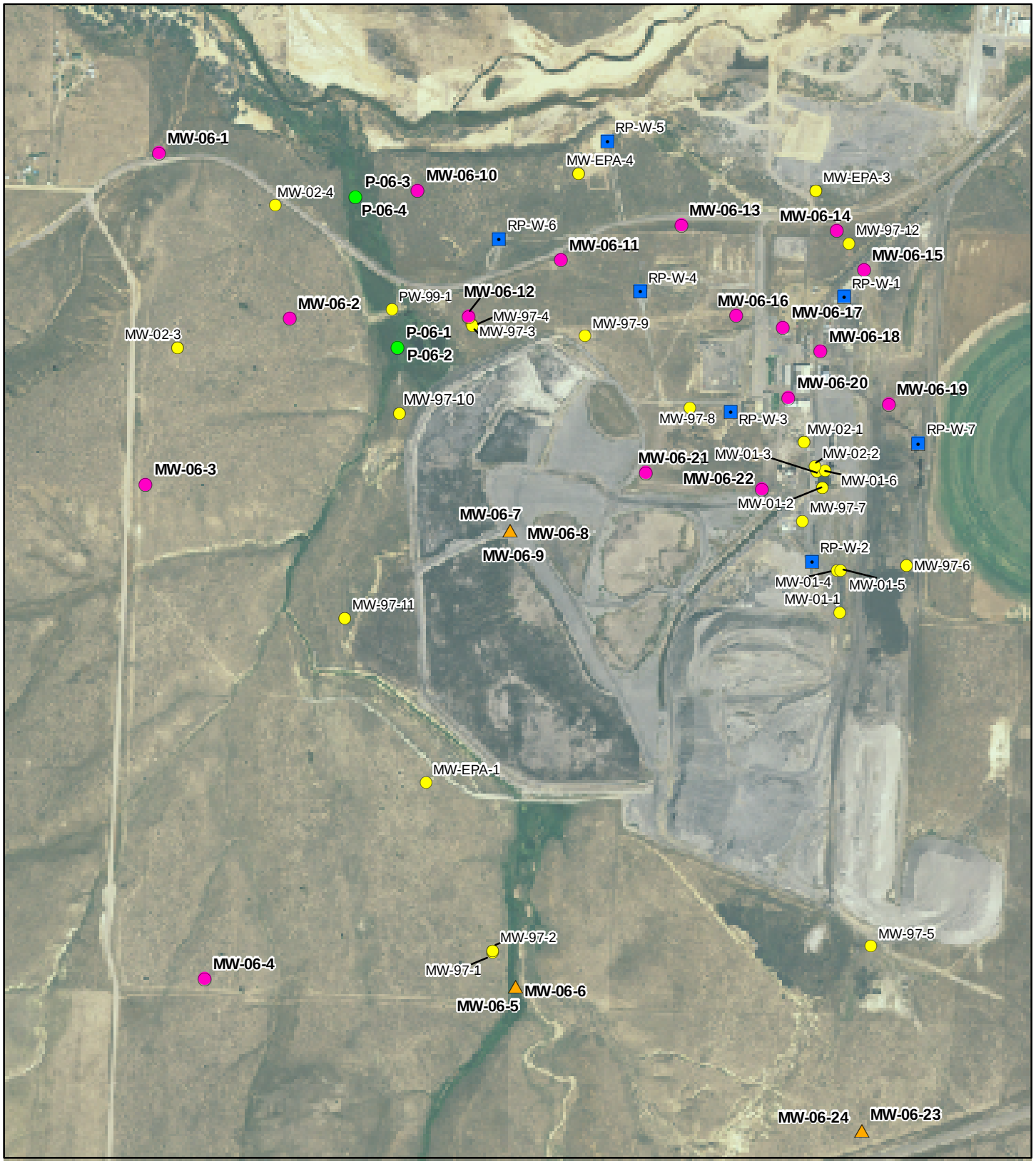
Source: Ramsay, Buxton, Butte North, and Butte South USGS 7.5 minute quadrangles

Barr: Arcview 3.3,OPT6205, I:\Projects\26\46004\GIS\Projects\silver_bow_figs2.apr, Layout: Layout: Location Map - fig1, ksw, Thu Jul 06 12:50:52 2006



Barr: Arcview 3.3,OPT6205, I:\Projects\26\46\0041\GIS\Project\silver_bow_figs2.apr, Layout: Layout: Ownership - fig 2-2, ksw, Thu Jul 06 12:52:59 2006

Source: Buxton and Ramsay, Montana, Quadrangles, USGS 1989



Barr Footer: Date: 7/7/2006 1:46:33 PM File: I:\Projects\26\46\006\GisMaps\RI Report\Proposed Well Locations for GW WP.mxd User: cdp

Proposed Locations

- Monitoring Well
- Piezometer Nest
- Well Nest

Existing Wells

- Monitoring Well
- Production Well

N

Feet
500 0 500

Meters
250 0 250

Figure 3

PROPOSED MONITORING WELL AND PIEZOMETER LOCATIONS
Rhodia Silver Bow Plant
Montana

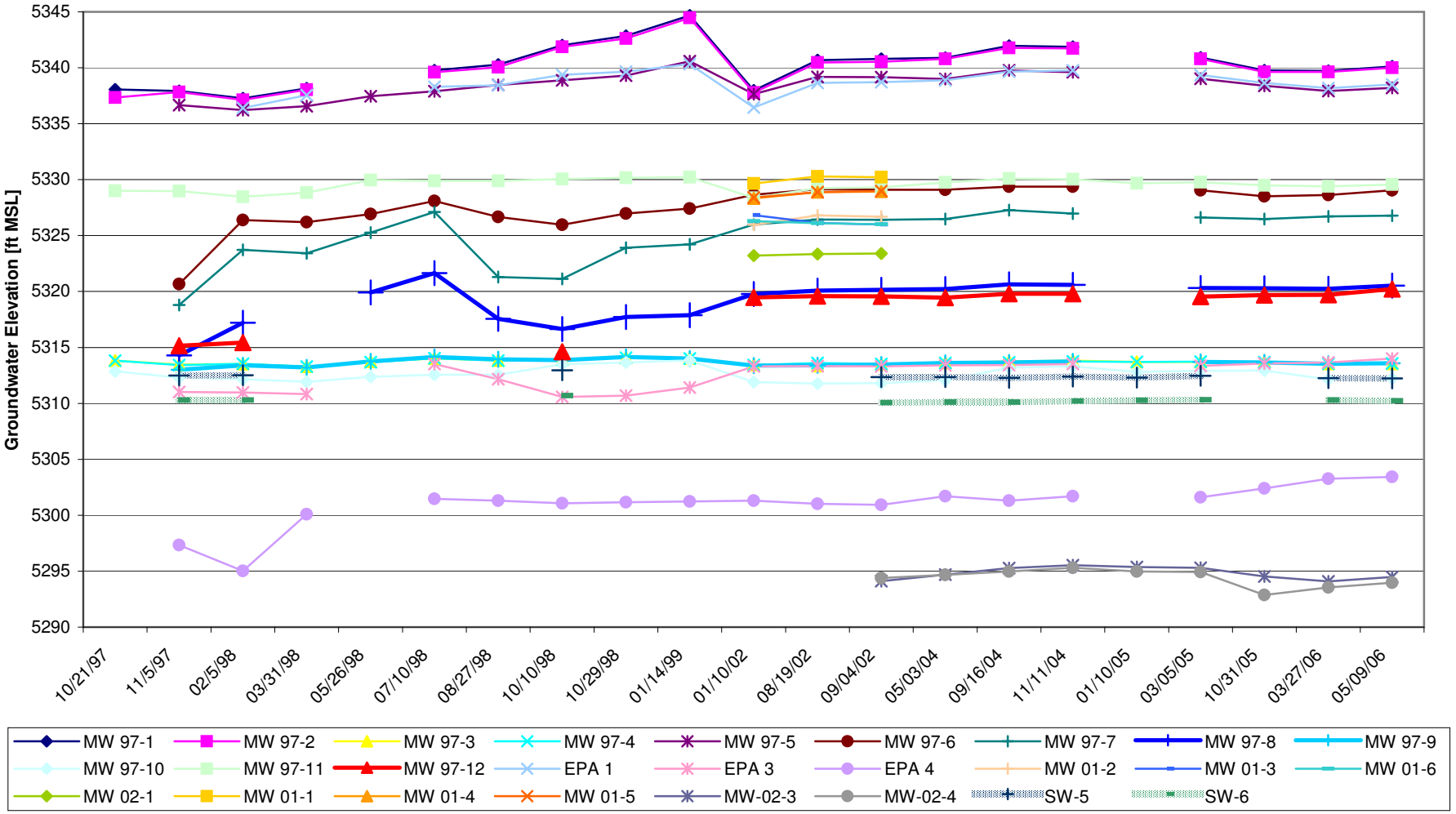
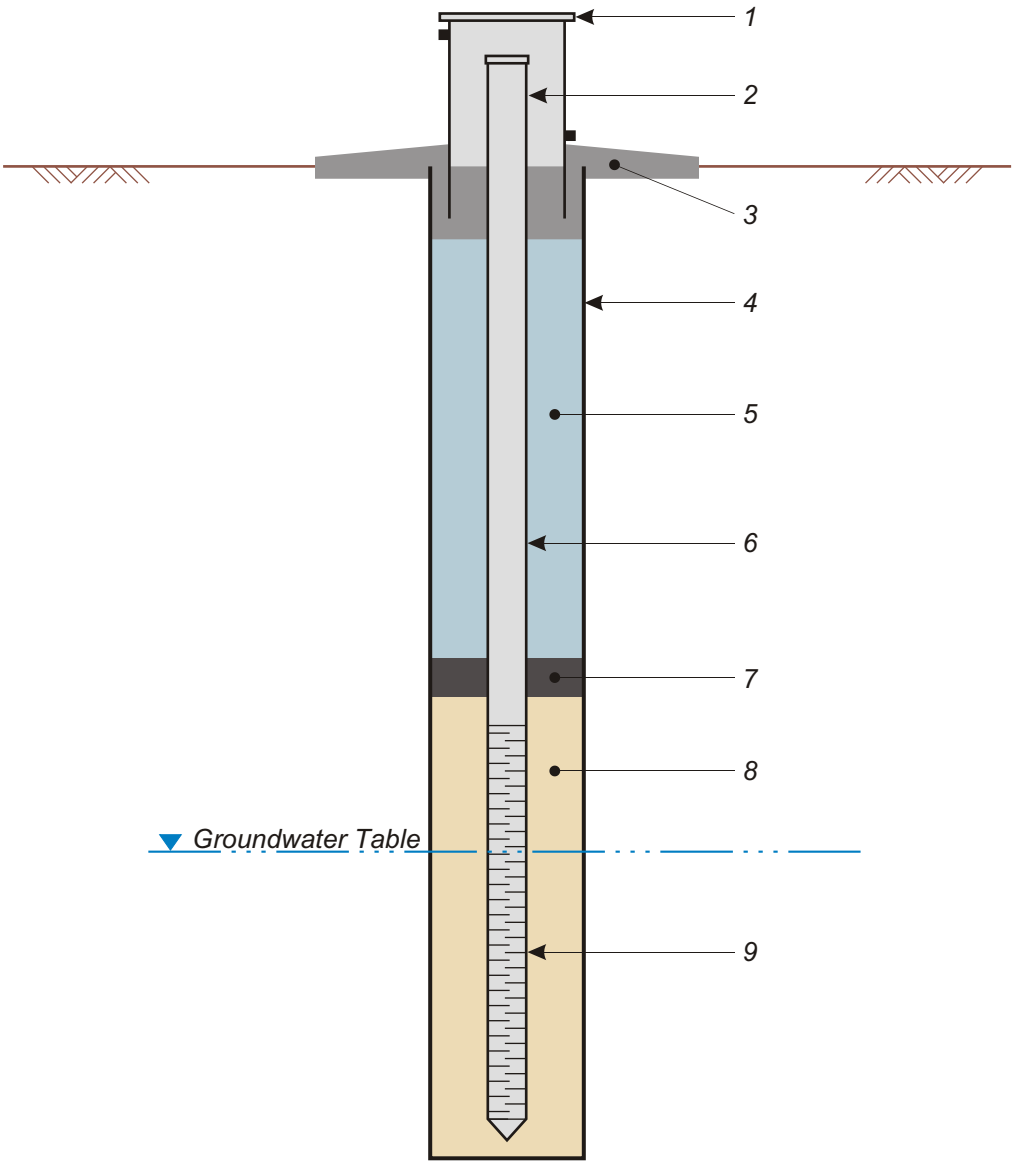


Figure 4
Rhodia Groundwater Elevations, Site Monitoring Wells
Rhodia Silver Bow Plant
Montana

P:\26\46\006\RFI Workplan\Groundwater Monitoring Plan\Figure 4 Water Elevations



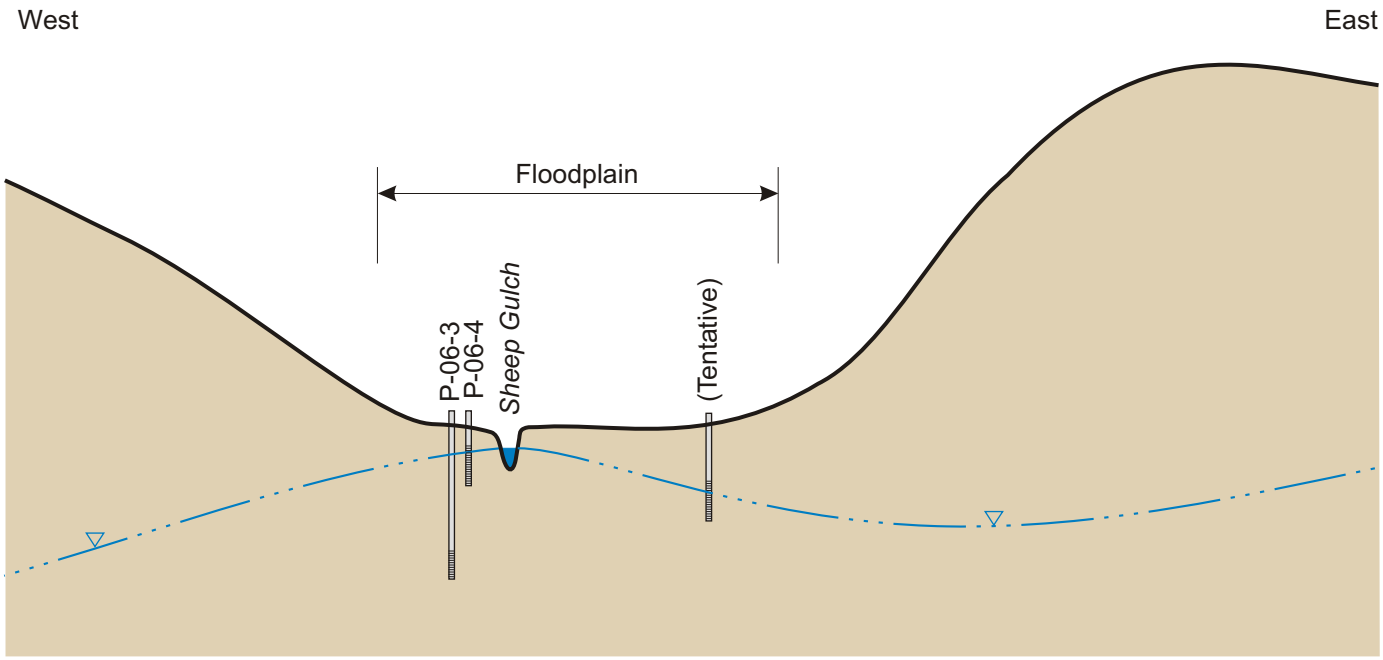
(Not to Scale)

1. Locked protective casing with vent and drain hole.
2. Compression cap.
3. Concrete pad.
4. 8.25' diameter borehole installed by advancing 4.25" inside diameter hollow stem augers.
5. Neat cement grout.
6. Schedule 40, flush-threaded, PVC riser (2" diameter).
7. Bentonite chips. Two feet of bentonite chips will be placed above sand pack and hydrated.
8. Uniformly graded natural sand with approximately 96% passing US mesh 20 sieve and approximately 96% retained on US mesh 45 sieve. Sand pack will be placed two feet above top of screen.
9. Schedule 40, no. 10 slot (0.010 inch) 20' long, flush-threaded PVC riser (2" diameter). Screen will be installed to intersect the water table with ~13' saturated and ~7' unsaturated.

Figure 5

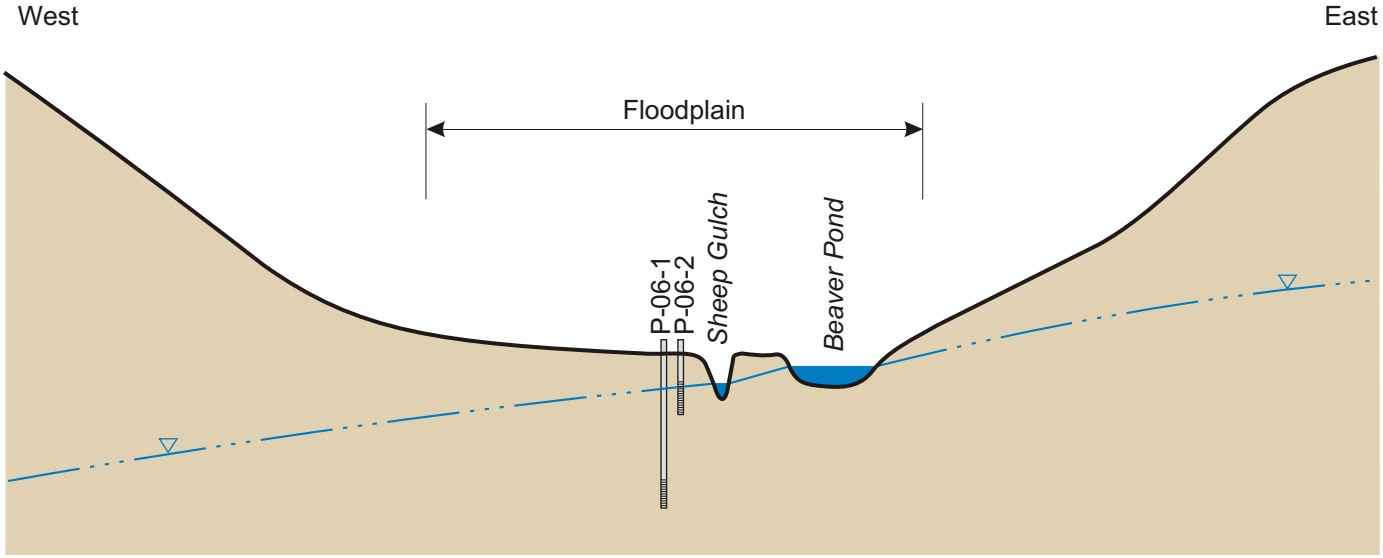
PROPOSED
MONITORING WELL CONSTRUCTION
FOR WATER TABLE WELLS
Rhodia Silver Bow Plant
Montana

P:\26\46\006\Figures_Graphics\MW Construction Schematic.CDR RLG 08-08-06



NORTH OF GERMAN GULCH ROAD

(Not to Scale)



SOUTH OF GERMAN GULCH ROAD

(Not to Scale)

Figure 6

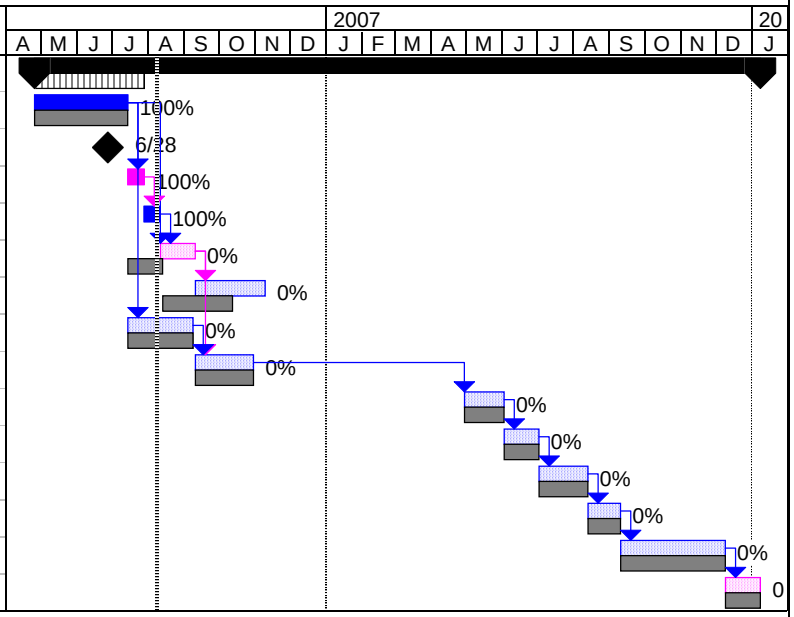
PROPOSED
PIEZOMETER TRANSECTS
Rhodia Silver Bow Plant
Montana

P:\26\46\006\Figures_Graphics\Cross Section N-S German Gulch Road.CDR RLG 08-08-06

Figure 7

RFI Groundwater Monitoring Work Plan
Rhodia Silver Bow Plant

ID	Task Name	Start	Finish	Duration
1	**RFI Groundwater Monitoring Work Plan**	**4/26/06**	**1/8/08**	**623 days**
2	RFI GW Monitoring Work Plan	4/26/06	7/14/06	80 days
3	Meet with EPA (GW & COPC)	6/28/06	6/28/06	0 days
4	EPA Review & Comment	7/15/06	7/28/06	14 days
5	Revise RFI GW Monitoring Work Plan	7/29/06	8/11/06	14 days
6	RFI GW Work Plan Approval	8/12/06	9/10/06	30 days
7	Demonstrate Financial Assurance	9/11/06	11/9/06	60 days
8	Specifications/Contracting	7/15/06	9/8/06	56 days
9	Begin Monitoring Well Installation	9/11/06	10/30/06	50 days
10	Complete Monitoring Well Installation	4/30/07	6/2/07	34 days
11	Well Recovery	6/3/07	7/2/07	30 days
12	Groundwater Sample Collection	7/3/07	8/13/07	42 days
13	Groundwater Sample Analysis	8/14/07	9/10/07	28 days
14	RFI Groundwater Monitoring Report	9/11/07	12/9/07	90 days
15	EPA Review & Approval	12/10/07	1/8/08	30 days



Appendix 5.3-B

Groundwater Re-Sampling Plan & Approval Email

Barr Engineering Company
4700 West 77th Street • Minneapolis, MN 55435-4803
Phone: 952-832-2600 • Fax: 952-832-2601 • www.barr.com *An EEO Employer*

Minneapolis, MN • Hibbing, MN • Duluth, MN • Ann Arbor, MI • Jefferson City, MO • Bismarck, ND

December 2, 2008

Dan Bersanti
Plant Manager
Rhodia, Inc.
Silver Bow Plant
P.O. Box 3146
Butte-Silver Bow, MT 59750

Re: Recollection of Groundwater Samples
Phase 1 RFI
Silver Bow Plant

Dear Dan:

The analytical data from the fall 2008 sampling event has been received and reviewed on a preliminary basis. Barr has identified data quality issues that require corrective action (i.e., resampling and analysis, at no cost to Rhodia) as detailed in this letter.

Elemental Phosphorus

Our initial review of the elemental phosphorus data indicated that elemental phosphorus was detected in twenty-one groundwater samples, including samples from an upgradient well, its duplicate (i.e., MW-06-5) and a rinsate blank collected after MW-06-13. The analytical results are summarized in the order of sample collection.

Monitoring Well	Date	Time	Concentration [µg/L]	
MW-01-4	9/16/2008	12:49	0.0234	U
MW-97-6	9/16/2008	14:54	0.0234	U
MW-01-5	9/16/2008	16:55	0.0234	U
MW-EPA-3	9/16/2008	18:46	0.0234	U
MW-06-15	9/17/2008	10:51	0.0234	U
MW-EPA-1	9/17/2008	12:50	0.0234	U
MW-97-2	9/17/2008	15:05	0.0234	U
MW-97-2 (RB)	9/17/2008	15:05	0.0234	U
MW-01-1	9/17/2008	17:10	0.0234	U
MW-97-1	9/17/2008	18:51	0.0234	U
MW-06-14	9/18/2008	10:24	0.0234	U
MW-06-19	9/18/2008	12:29	0.0234	U
MW-01-6	9/18/2008	14:36	0.0234	U
MW-06-10	9/18/2008	16:59	0.0234	U
MW-06-1	9/18/2008	18:37	0.0234	U
MW-01-3	9/19/2008	11:04	290	
MW-06-5	9/19/2008	14:02	3.58	

Monitoring Well	Date	Time	Concentration [µg/L]	
MW-06-5 (Dup)	9/19/2008	14:02	4.23	
MW-06-13	9/19/2008	17:36	1.68	
MW-60-86 (RB)	9/19/2008	18:56	1.77	
MW-EPA-4	9/20/2008	10:51	1.53	
MW-06-16	9/20/2008	12:51	1.19	
MW-06-20	9/20/2008	15:06	0.805	
MW-06-17	9/20/2008	17:04	0.946	
MW-01-2	9/22/2008	11:20	0.441	
MW-97-4	9/22/2008	14:27	0.228	
MW-02-2	9/22/2008	17:00	0.382	
PW-99-3	9/22/2008	18:44	0.329	
MW-06-7	9/23/2008	9:28	0.326	
MW-97-3	9/23/2008	11:06	0.24	
MW-06-11	9/23/2008	12:55	0.201	
MW-02-3	9/23/2008	13:15	0.0234	U
MW-97-10	9/23/2008	15:12	0.115	
MW-97-12	9/23/2008	18:06	0.112	
MW-06-21	9/24/2008	15:00	0.0234	U
MW-06-18	9/25/2008	18:15	0.0562	
MW-06-12	9/25/2008	20:10	0.0234	U
MW-86-12 (Dup)	9/25/2008	20:10	0.0234	U
MW-97-7	9/26/2008	8:30	0.0606	
MW-06-22	9/26/2008	10:10	0.0566	

It appears that elemental phosphorus was retained in the submersible pump, which contaminated the samples collected after MW-01-3. Resampling and analysis is required to verify that the samples were contaminated by the sampling equipment. The detected concentrations will be qualified as rejected "R" if the data from the resampling effort demonstrates concentrations consistent with the spring data set (i.e., not detected). The detected concentrations will not be qualified as rejected "R" if the data from the resampling effort demonstrates concentrations consistent with the September data set.

Elemental phosphorus has repeatedly been detected at MW-01-3 and MW-01-6, which are located on the north side of the clarifier. Elemental phosphorus has also been detected at very low levels (less than 0.5 µg/L) in samples from MW-02-2, and MW-02-1, which are downgradient of MW-01-3 and MW-97-7. Elemental phosphorus was also detected (likely anomalous) in the furthest upgradient well MW-GW-1, which is located at the southern on the REC plant. No other wells are expected to have detections of elemental phosphorus.

Review of Sample Collection Activities

Upon discovery of elemental phosphorus, we convened a conference call with the field staff to discuss the sample collection activities. My field staff reported that they followed the Barr Standard Operating Procedure for cleaning reusable sampling equipment (same procedures as the spring 2008 sampling event). The pump is placed in a cylinder and about 2 gallons of water with Liquinox is poured into the cylinder. This soap solution is pumped through the pump and tubing. Distilled water (about 3 gallons) is then added to the cylinder and is pumped through the pump and tubing. This decontamination procedure is one of Barr's Standard Operating Procedures and is appropriate for decontaminating these submersible pumps.

My field staff also reported that a new dual pumping system was used during this sampling event. The dual pumping system has a higher lift capacity than the single pump system used during the

spring 2008 event. However, two of these new dual pumps failed during the sampling event. One of these pumps failed during sampling at MW-01-3 and a different pump was used to collect the sample at MW-01-3 and subsequent monitoring wells. The failed pumps were returned to the supplier who replaced the pumps. The supplier also reported that there was a defect in the two stage pumps. If the lower pump failed (as was the case), there was a potential that water could remain trapped in the lower pump, even if the upper pump was operating. We are pursuing this matter with the vendor that supplied us with defective equipment. These dual pumps will no longer be used at the Silver Bow Plant.

Data Quality Review

Barr reviewed the other analytical parameters (generals, radionuclides, metals, VOCs and SVOCs) and a similar cross contamination trend is not observed. The data are consistent with the spring 2008 data set with a few exceptions. An annotated copy of the preliminary metals data set is attached for your review.

There are a few samples with inconsistent copper, iron, lead and zinc concentrations when compared to the spring 2008 data. Elevated copper (0.74 mg/L), iron (0.14 mg/L), zinc (0.12 mg/l) and arguably lead (0.001 mg/l) concentrations were reported in the rinsate blank collected after decontaminating the sample collection equipment at MW-97-2. Similar concentrations were not reported in the rinsate blank collected after MW-06-13, which was the next location for a rinsate blank. The rinsate samples were prepared using analyte-free water supplied by the laboratory. Detection of elevated concentrations in rinsate blank indicates that the sampling equipment likely added certain metals to the samples.

The pump that failed during sampling at MW-01-3 was also used to collect samples from all wells prior to MW-01-3 including the rinsate sample collected after MW-97-2. I speculate that the pump was intermittently failing prior to its complete failure at MW-01-3. The pump could have added these metals to the water as it passed through the failed workings.

Data validation rules provide that detected concentrations less than five times the concentration reported in the rinsate blank be qualified as not detected at the reported concentration. As such, the data validation routine will result in two copper concentrations being qualified not detected at a concentration greater than the EPA's Regional Screening Levels for tap water (HQ = 0.1). None of the iron or zinc concentrations exceed the EPA's Regional Screening Levels for tap water (HQ = 0.1). None of the lead concentrations exceed the MCL.

Corrective Action

The following corrective actions will be applied:

1. MW-01-3 and MW-01-6 will be the last wells sampled during any future sampling event. Barr attempts to collect samples in order of lowest concentrations to highest concentrations across a site. The sample order for the fall 2008 event was established based on arsenic, fluoride and sulfate concentrations from the spring 2008 event. Elemental phosphorus was only present in samples from three of the sixty-one wells and was not included in the ordering algorithm. The presence of elemental phosphorus should have placed these wells at the end of the sample collection event.

2. Barr will recollect and analyze samples from the wells where elemental phosphorus was detected in the fall 2008 samples and at wells where the fall 2008 qualified copper data exceed the EPA's Regional Screening Levels for tap water (HQ = 0.1). We have also

identified a limited number of samples where a metal was detected at a relatively higher concentration than the spring data set. The recollection and analysis will be provided at no cost to Rhodia.

The wells will be sampled in the order listed and will be analyzed for the identified parameters:

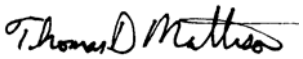
Sample Order	Monitoring Well	Analytical Parameters				
		P4	Cu	Fe	Zn	Pb
1	MW-97-6			√		
2	MW-06-15		√	√	√	
3	MW-EPA-1		√	√	√	√
4	MW-06-14			√		
5	MW-EPA-4	√				
6	MW-06-16	√				
7	MW-06-13	√				
8	MW-06-20	√		√		
9	MW-06-11	√				
10	MW-06-17	√				
11	MW-06-5	√				
12	MW-97-10	√				
13	MW-06-18	√				
14	MW-97-4	√				
15	MW-97-3	√				
16	MW-97-7	√				
17	MW-02-2	√				
18	MW-06-22	√				
19	MW-97-12	√	All Metals			
20	MW-06-7	√				
21	PW-99-3	√				
22	MW-01-2	√				
23	MW-01-3	√				

The analytical data for the sample from MW-97-12 is higher for most metals compared to the spring 2008 data. Therefore, this sample will be analyzed for all metals.

3. A dedicated pump will be installed in MW-01-3. This pump will be decontaminated after each sample collection event and returned to the well casing. For the rest of the wells, we will no longer use the dual pumping system. The single pump system will be used during sample collection events.

We would like to implement this sampling effort in December 2008. We will of course need to advise the EPA of the resampling work. I apologize for any inconvenience this may cause. If you have any questions please email or call me.

Sincerely,



Thomas D. Mattison
Principal In Charge

Attachment

P:\Mpls\26 MT\46\2646006\WorkFiles\RFI\RFI Workplan\Recollection - Fall 2008\Scope of Work (12_2_2008).doc

Station ID		MW-01-4		MW-01-4		MW-97-6		MW-97-6		MW-01-5	
Sample Date		5/15/2008		9/16/2008		5/17/2008		9/16/2008		5/17/2008	
Sample ID	**PRG**	MW-01-4		MW-01-4		MW97-6		MW-97-6		MW-01-5	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008	
Antimony	0.0015	0.00007	mg/L	0.00009	mg/L	0.00005	mg/L	0.00007	mg/L	0.00007	mg/L
Arsenic	0.000045	0.0029	mg/L	0.0037	mg/L	0.0032	mg/L	0.0038	mg/L	0.003	mg/L
Barium	0.73	0.116	mg/L	0.113	mg/L	0.118	mg/L	0.129	mg/L	0.113	mg/L
Beryllium	0.0073	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Cadmium	0.0018	0.00002 U	mg/L	0.00003	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Calcium	--	146	mg/L	139	mg/L	113	mg/L	112	mg/L	137	mg/L
Chromium	0.0011	0.0002	mg/L	0.00083 U	mg/L	0.0004	mg/L	0.00064 U	mg/L	0.0002	mg/L
Cobalt	--	0.00037	mg/L	0.00037 U	mg/L	0.00027	mg/L	0.00044 U	mg/L	0.00033	mg/L
Copper	0.15	0.0019 U	mg/L	0.00116 U	mg/L	0.0016	mg/L	0.00112 U	mg/L	0.0028	mg/L
Iron	2.6	0.032	mg/L	0.05 U	mg/L	0.043	mg/L	0.61 U	mg/L	0.135	mg/L
Lead	0.015	0.00014 U	mg/L	0.00041 U	mg/L	0.00015	mg/L	0.00071 U	mg/L	0.00043	mg/L
Magnesium	--	29.1	mg/L	28.2	mg/L	23.1	mg/L	23	mg/L	27.9	mg/L
Manganese	0.088	0.00054	mg/L	0.00066	mg/L	0.00085	mg/L	0.0083	mg/L	0.00168	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0012	mg/L	0.0019	mg/L	0.0009	mg/L	0.0015	mg/L	0.0011	mg/L
Potassium	--	12.4	mg/L	12.3	mg/L	13.1	mg/L	12.9	mg/L	12.6	mg/L
Selenium	0.018	0.0045	mg/L	0.0082	mg/L	0.0023	mg/L	0.0052	mg/L	0.0046	mg/L
Silver	0.018	0.00002 U	mg/L	0.00002 U	mg/L	0.00003 U	mg/L	0.00002 U	mg/L	0.00003 U	mg/L
Sodium	--	29.4	mg/L	29.3	mg/L	31.1	mg/L	30.9	mg/L	29.2	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Uranium	0.011	0.0233	mg/L	0.02071	mg/L	0.0187	mg/L	0.01705	mg/L	0.0233	mg/L
Vanadium	0.018	0.0046	mg/L	0.0038	mg/L	0.005	mg/L	0.0046	mg/L	0.0045	mg/L
Zinc	1.1	0.0012 U	mg/L	0.003 U	mg/L	0.0011	mg/L	0.0028 U	mg/L	0.0015	mg/L
Hazard Index		**3.E-01**		**3.E-01**		**3.E-01**		**2.E-01**		**3.E-01**	
Cancer Risk		**6.E-05**		**8.E-05**		**7.E-05**		**8.E-05**		**7.E-05**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-01-5		MW-EPA-3		MW-EPA-3		MW-06-15		MW-06-15	
Sample Date		9/16/2008		5/15/2008		9/16/2008		5/21/2008		9/16/2008	
Sample ID	**PRG**	MW-01-5		MW-EPA-3		MW-EPA-3		MW-06-15		MW-06-15	
Report	**HQ=0.1**	RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F	
Antimony	0.0015	0.00009	mg/L	0.00005	mg/L	0.00006	mg/L	0.00006	mg/L	0.00007	mg/L
Arsenic	0.000045	0.00353	mg/L	0.0035	mg/L	0.0039	mg/L	0.0032	mg/L	0.0037	mg/L
Barium	0.73	0.124	mg/L	0.0592	mg/L	0.063	mg/L	0.0248	mg/L	0.022	mg/L
Beryllium	0.0073	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.0036 U	mg/L
Cadmium	0.0018	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00003	mg/L
Calcium	--	141	mg/L	86.6	mg/L	89	mg/L	198	mg/L	227	mg/L
Chromium	0.0011	0.00037 U	mg/L	0.0002	mg/L	0.00036 U	mg/L	0.0005	mg/L	0.00063 U	mg/L
Cobalt	--	0.00041 U	mg/L	0.00039	mg/L	0.00037 U	mg/L	0.00095	mg/L	0.0016 U	mg/L
Copper	0.15	0.00309 U	mg/L	0.002 U	mg/L	0.00103 U	mg/L	0.0019 J	mg/L	0.85945 U	mg/L
Iron	2.6	0.4 U	mg/L	0.043	mg/L	0.16 U	mg/L	0.024	mg/L	0.22 U	mg/L
Lead	0.015	0.00074 U	mg/L	0.00021 U	mg/L	0.00022 U	mg/L	0.00012	mg/L	0.00226 U	mg/L
Magnesium	--	28.4	mg/L	17.2	mg/L	17.7	mg/L	38 R	mg/L	44.5	mg/L
Manganese	0.088	0.0038	mg/L	0.00171	mg/L	0.0069	mg/L	0.00287	mg/L	0.005	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0017	mg/L	0.0008	mg/L	0.001	mg/L	0.0014	mg/L	0.0023	mg/L
Potassium	--	12.8	mg/L	11.6	mg/L	12.2	mg/L	17.4	mg/L	19	mg/L
Selenium	0.018	0.0072	mg/L	0.0044	mg/L	0.0056	mg/L	0.0083	mg/L	0.0107	mg/L
Silver	0.018	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00021 U	mg/L
Sodium	--	30.2	mg/L	33.6	mg/L	36.4	mg/L	86.6	mg/L	104	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Uranium	0.011	0.02312	mg/L	0.014	mg/L	0.0147	mg/L	0.0216	mg/L	0.02438	mg/L
Vanadium	0.018	0.0041	mg/L	0.0062	mg/L	0.0053	mg/L	0.004	mg/L	0.0033	mg/L
Zinc	1.1	0.0037 U	mg/L	0.0023 U	mg/L	0.002 U	mg/L	0.0016	mg/L	0.0972 U	mg/L
Hazard Index		**3.E-01**		**2.E-01**		**2.E-01**		**3.E-01**		**3.E-01**	
Cancer Risk		**8.E-05**		**8.E-05**		**9.E-05**		**7.E-05**		**8.E-05**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-EPA-1		MW-EPA-1		MW-97-2		MW-97-2 (Field Blank)		MW-97-2	
Sample Date		5/14/2008		9/16/2008		5/13/2008		9/16/2008		9/16/2008	
Sample ID	**PRG**	MW-EPA-1		MW-EPA-1		MW97-2		MW-60-6		MW-97-2	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008-F	
Antimony	0.0015	0.00026	mg/L	0.00026	mg/L	0.00012	mg/L	0.00005 U	mg/L	0.00013	mg/L
Arsenic	0.000045	0.008	mg/L	0.008	mg/L	0.009	mg/L	0.0005 U	mg/L	0.0097	mg/L
Barium	0.73	0.0052	mg/L	0.009	mg/L	0.03	mg/L	0.00017	mg/L	0.033	mg/L
Beryllium	0.0073	0.00002 U	mg/L	0.0043 U	mg/L	0.00002 U	mg/L	0.0041	mg/L	7.6E-05 U	mg/L
Cadmium	0.0018	0.00002 U	mg/L	0.00002 U	mg/L	0.00007	mg/L	0.00002 U	mg/L	0.00009	mg/L
Calcium	--	68.1	mg/L	70	mg/L	193	mg/L	0.06	mg/L	197	mg/L
Chromium	0.0011	0.0002 U	mg/L	0.00044 U	mg/L	0.0002 U	mg/L	0.00029	mg/L	0.0002 U	mg/L
Cobalt	--	0.00009	mg/L	0.00075 U	mg/L	0.00029	mg/L	0.0004	mg/L	0.00038 U	mg/L
Copper	0.15	0.0003 U	mg/L	0.89411 U	mg/L	0.0016 U	mg/L	0.7385	mg/L	0.01603 U	mg/L
Iron	2.6	0.038	mg/L	0.54 U	mg/L	0.02 U	mg/L	0.14	mg/L	0.03 U	mg/L
Lead	0.015	0.00005 U	mg/L	0.00128 U	mg/L	0.00054	mg/L	0.00105	mg/L	0.00089 U	mg/L
Magnesium	--	6.4	mg/L	6.5	mg/L	29.9	mg/L	0.02 U	mg/L	30.6	mg/L
Manganese	0.088	0.00046	mg/L	0.0054	mg/L	0.00386	mg/L	0.00036	mg/L	0.0043	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0005	mg/L	0.0011	mg/L	0.0014	mg/L	0.0002 U	mg/L	0.0024	mg/L
Potassium	--	6.93	mg/L	7.3	mg/L	14.3	mg/L	2 U	mg/L	14.8	mg/L
Selenium	0.018	0.001 U	mg/L	0.0013	mg/L	0.001 U	mg/L	0.001 U	mg/L	0.001 U	mg/L
Silver	0.018	0.00002 U	mg/L	0.00022	mg/L	0.00002 U	mg/L	0.00013	mg/L	0.00002 U	mg/L
Sodium	--	50	mg/L	51.9	mg/L	59.3	mg/L	0.1 U	mg/L	61.2	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Uranium	0.011	0.0095	mg/L	0.00979	mg/L	0.052	mg/L	0.00003	mg/L	0.05258	mg/L
Vanadium	0.018	0.0063	mg/L	0.0059	mg/L	0.004	mg/L	0.0002 U	mg/L	0.0035	mg/L
Zinc	1.1	0.0005 U	mg/L	0.1281 U	mg/L	0.0007 U	mg/L	0.1166	mg/L	0.004 U	mg/L
Hazard Index		**1.E-01**		**2.E-01**		**5.E-01**		**6.E-01**		**5.E-01**	
Cancer Risk		**2.E-04**		**2.E-04**		**2.E-04**		**1.E-05**		**2.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

FB-1

Station ID		MW-01-1		MW-01-1		MW-97-1		MW-97-1		MW-06-14	
Sample Date		5/15/2008		9/16/2008		5/13/2008		9/16/2008		5/27/2008	
Sample ID	**PRG**	MW-01-1		MW-01-1		MW97-1		MW-97-1		MW-06-14	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008	
Antimony	0.0015	0.0001	mg/L	0.00009	mg/L	0.00017	mg/L	0.00015	mg/L	0.00007 U	mg/L
Arsenic	0.000045	0.0031	mg/L	0.0047	mg/L	0.0137	mg/L	0.0195	mg/L	0.0042	mg/L
Barium	0.73	0.0863	mg/L	0.09	mg/L	0.0409	mg/L	0.044	mg/L	0.0279	mg/L
Beryllium	0.0073	0.00002 U	mg/L	2.5E-05 U	mg/L	0.00002 U	mg/L	2.6E-05 U	mg/L	0.00002 U	mg/L
Cadmium	0.0018	0.00002 U	mg/L	0.00002	mg/L	0.00009	mg/L	0.0001	mg/L	0.00003	mg/L
Calcium	--	354	mg/L	318	mg/L	204	mg/L	212	mg/L	216	mg/L
Chromium	0.0011	0.0002	mg/L	0.00056 U	mg/L	0.0003	mg/L	0.0002 U	mg/L	0.0006 U	mg/L
Cobalt	--	0.0007	mg/L	0.00085 U	mg/L	0.00037	mg/L	0.00055 U	mg/L	0.0017	mg/L
Copper	0.15	0.0045	mg/L	0.00823 U	mg/L	0.002 U	mg/L	0.0057 U	mg/L	0.0019 U	mg/L
Iron	2.6	0.079	mg/L	0.02 U	mg/L	0.02	mg/L	0.02 U	mg/L	0.242	mg/L
Lead	0.015	0.00036 U	mg/L	0.00022 U	mg/L	0.00095	mg/L	0.00088 U	mg/L	0.00022 U	mg/L
Magnesium	--	63.8	mg/L	62.6	mg/L	29.4	mg/L	30.7	mg/L	42.4	mg/L
Manganese	0.088	0.00255	mg/L	0.00063 U	mg/L	0.00926	mg/L	0.0188	mg/L	0.00853	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0026	mg/L	0.005	mg/L	0.0017	mg/L	0.0039	mg/L	0.0026	mg/L
Potassium	--	17.2	mg/L	17.6	mg/L	14.4	mg/L	15.5	mg/L	16.6	mg/L
Selenium	0.018	0.011	mg/L	0.0187	mg/L	0.001 U	mg/L	0.001 U	mg/L	0.009	mg/L
Silver	0.018	0.00003	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Sodium	--	42.4	mg/L	43.4	mg/L	56.9	mg/L	64.6	mg/L	63.4	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	2.2E-05	mg/L	0.00002	mg/L
Uranium	0.011	0.0522	mg/L	0.0536	mg/L	0.031	mg/L	0.02872	mg/L	0.00902	mg/L
Vanadium	0.018	0.0034	mg/L	0.0029	mg/L	0.0044	mg/L	0.004	mg/L	0.0033	mg/L
Zinc	1.1	0.0039 U	mg/L	0.0055 U	mg/L	0.0009 U	mg/L	0.0022 U	mg/L	0.0022 U	mg/L
Hazard Index		**6.E-01**		**6.E-01**		**4.E-01**		**3.E-01**		**2.E-01**	
Cancer Risk		**7.E-05**		**1.E-04**		**3.E-04**		**4.E-04**		**9.E-05**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-06-14		MW-06-19		MW-06-19		MW-01-6		MW-01-6	
Sample Date		9/16/2008		5/20/2008		9/16/2008		5/19/2008		9/16/2008	
Sample ID	**PRG**	MW-06-14		MW-06-19		MW-06-19		MW-01-6		MW-01-6	
Report	**HQ=0.1**	RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F	
Antimony	0.0015	0.0001	mg/L	0.0001	mg/L	0.00011	mg/L	0.00005 U	mg/L	0.00005	mg/L
Arsenic	0.000045	0.004	mg/L	0.0049	mg/L	0.0084	mg/L	0.0112	mg/L	0.0115	mg/L
Barium	0.73	0.051	mg/L	0.0444	mg/L	0.051	mg/L	0.0098	mg/L	0.017	mg/L
Beryllium	0.0073	6.4E-05 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00006	mg/L	0.00018	mg/L
Cadmium	0.0018	0.00004	mg/L	0.00009	mg/L	0.00008	mg/L	0.00002 U	mg/L	0.00002	mg/L
Calcium	--	208	mg/L	427	mg/L	473	mg/L	134	mg/L	127	mg/L
Chromium	0.0011	0.0007 U	mg/L	0.0038	mg/L	0.0034	mg/L	0.0002 U	mg/L	0.00031 U	mg/L
Cobalt	--	0.0018 U	mg/L	0.0021	mg/L	0.0021	mg/L	0.0116	mg/L	0.0087	mg/L
Copper	0.15	0.00899 U	mg/L	0.003 J	mg/L	0.00825 U	mg/L	0.0086 J	mg/L	0.06145	mg/L
Iron	2.6	1.53	mg/L	0.054	mg/L	0.34 U	mg/L	23.2	mg/L	23.4	mg/L
Lead	0.015	0.00123 U	mg/L	0.00078	mg/L	0.00051 U	mg/L	0.00011	mg/L	0.00071	mg/L
Magnesium	--	41.5	mg/L	82 R	mg/L	97.5	mg/L	22.5 R	mg/L	21	mg/L
Manganese	0.088	0.025	mg/L	0.00468	mg/L	0.0065	mg/L	1.24	mg/L	0.965	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0032	mg/L	0.0033	mg/L	0.0055	mg/L	0.0063	mg/L	0.0053	mg/L
Potassium	--	17.9	mg/L	25.8	mg/L	29	mg/L	42.2	mg/L	41.6	mg/L
Selenium	0.018	0.0108	mg/L	0.0174	mg/L	0.0342	mg/L	0.0012	mg/L	0.0029	mg/L
Silver	0.018	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Sodium	--	67.7	mg/L	108	mg/L	124	mg/L	52.2	mg/L	53.9	mg/L
Thallium	0.00024	0.00003	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.0001	mg/L	9.8E-05	mg/L
Uranium	0.011	0.00837	mg/L	0.0809	mg/L	0.08404	mg/L	0.00002 U	mg/L	9.6E-05	mg/L
Vanadium	0.018	0.0039	mg/L	0.0048	mg/L	0.0043	mg/L	0.0002 U	mg/L	0.0005	mg/L
Zinc	1.1	0.0081 U	mg/L	0.0042	mg/L	0.004 U	mg/L	0.902	mg/L	0.6957	mg/L
Hazard Index		**3.E-01**		**1.E+00**		**1.E+00**		**2.E+00**		**2.E+00**	
Cancer Risk		**9.E-05**		**1.E-04**		**2.E-04**		**2.E-04**		**3.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

FB-2

Station ID		MW-06-10		MW-06-10		MW-06-1		MW-06-1		MW-01-3	
Sample Date		5/14/2008		9/16/2008		5/15/2008		9/16/2008		5/19/2008	
Sample ID	**PRG**	MW-06-10		MW-06-10		MW-06-1		MW-06-1		MW-01-3	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008	
Antimony	0.0015	0.00015	mg/L	0.00015	mg/L	0.00026	mg/L	0.00027	mg/L	0.00014	mg/L
Arsenic	0.000045	0.0077	mg/L	0.0079	mg/L	0.0049	mg/L	0.0053	mg/L	0.0166	mg/L
Barium	0.73	0.0318	mg/L	0.038	mg/L	0.0659	mg/L	0.078	mg/L	0.0339	mg/L
Beryllium	0.0073	0.00002	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	2.9E-05	mg/L	0.00006	mg/L
Cadmium	0.0018	0.00002 U	mg/L	0.00003	mg/L	0.00005	mg/L	0.00006	mg/L	0.0002	mg/L
Calcium	--	225	mg/L	229	mg/L	319	mg/L	274	mg/L	107	mg/L
Chromium	0.0011	0.0004	mg/L	0.00033 U	mg/L	0.0002 U	mg/L	0.00035 U	mg/L	0.0002	mg/L
Cobalt	--	0.00087	mg/L	0.00082	mg/L	0.00074	mg/L	0.00092	mg/L	0.0188	mg/L
Copper	0.15	0.0014 U	mg/L	0.00183	mg/L	0.0026 U	mg/L	0.0052	mg/L	0.0034 J	mg/L
Iron	2.6	0.277	mg/L	0.46	mg/L	0.059	mg/L	0.54	mg/L	1.02	mg/L
Lead	0.015	0.00075	mg/L	0.00047	mg/L	0.00016 U	mg/L	0.0005	mg/L	0.00013	mg/L
Magnesium	--	40.2	mg/L	40.8	mg/L	59.7	mg/L	56.7	mg/L	29.1 R	mg/L
Manganese	0.088	0.0178	mg/L	0.0215	mg/L	0.00137	mg/L	0.0109	mg/L	8.47	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0046	mg/L	0.0043	mg/L	0.0051	mg/L	0.0061	mg/L	0.0057	mg/L
Potassium	--	14.7	mg/L	15.6	mg/L	17.5	mg/L	17.9	mg/L	33.7	mg/L
Selenium	0.018	0.0078	mg/L	0.0093	mg/L	0.0021	mg/L	0.0044	mg/L	0.0015	mg/L
Silver	0.018	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	2.6E-05	mg/L	0.00002 U	mg/L
Sodium	--	56.6	mg/L	61.5	mg/L	56.8	mg/L	57.7	mg/L	42.7	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	3.2E-05	mg/L	0.00005	mg/L
Uranium	0.011	0.0207	mg/L	0.02223	mg/L	0.0319	mg/L	0.03237	mg/L	2.7E-05	mg/L
Vanadium	0.018	0.0053	mg/L	0.0047	mg/L	0.0031	mg/L	0.0034	mg/L	0.0011	mg/L
Zinc	1.1	0.0021 U	mg/L	0.0038 U	mg/L	0.0014 U	mg/L	0.005 U	mg/L	0.008	mg/L
Hazard Index		**3.E-01**		**3.E-01**		**4.E-01**		**4.E-01**		**1.E+01**	
Cancer Risk		**2.E-04**		**2.E-04**		**1.E-04**		**1.E-04**		**4.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-01-3		MW-06-5		MW-06-5		MW-06-5		MW-06-13	
Sample Date		9/16/2008		5/14/2008		9/16/2008		9/16/2008		5/27/2008	
Sample ID	**PRG**	MW-01-3		MW-06-5		MW-06-5		MW-86-5		MW-06-13	
Report	**HQ=0.1**	RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F	
Antimony	0.0015	0.00017	mg/L	0.00031	mg/L	0.00039	mg/L	0.00038	mg/L	0.00013 U	mg/L
Arsenic	0.000045	0.0177	mg/L	0.045	mg/L	0.0594	mg/L	0.059	mg/L	0.0103	mg/L
Barium	0.73	0.0305	mg/L	0.0614	mg/L	0.084	mg/L	0.08	mg/L	0.0382	mg/L
Beryllium	0.0073	9.9E-05	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Cadmium	0.0018	0.00018	mg/L	0.00006	mg/L	0.00004	mg/L	0.00003	mg/L	0.00004	mg/L
Calcium	--	103	mg/L	148	mg/L	174	mg/L	180	mg/L	188	mg/L
Chromium	0.0011	0.0002 U	mg/L	0.0002	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0003 U	mg/L
Cobalt	--	0.0154	mg/L	0.00034	mg/L	0.00346	mg/L	0.00037	mg/L	0.00199	mg/L
Copper	0.15	0.01554	mg/L	0.0018 U	mg/L	0.00182	mg/L	0.00178	mg/L	0.0021 U	mg/L
Iron	2.6	0.67	mg/L	0.02 U	mg/L	0.23	mg/L	0.26	mg/L	0.068	mg/L
Lead	0.015	0.00042	mg/L	0.00026 U	mg/L	0.0003	mg/L	0.00028	mg/L	0.00013 U	mg/L
Magnesium	--	28.3	mg/L	24.5	mg/L	28.9	mg/L	29.8	mg/L	36.4	mg/L
Manganese	0.088	8.36	mg/L	0.0135	mg/L	0.014	mg/L	0.015	mg/L	0.00284	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0049	mg/L	0.0017	mg/L	0.0018	mg/L	0.0021	mg/L	0.0036	mg/L
Potassium	--	34.2	mg/L	13.7	mg/L	16.1	mg/L	16.7	mg/L	16.4	mg/L
Selenium	0.018	0.002	mg/L	0.001 U	mg/L	0.001 U	mg/L	0.001 U	mg/L	0.006	mg/L
Silver	0.018	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00005	mg/L
Sodium	--	44	mg/L	134	mg/L	149	mg/L	151	mg/L	80.5	mg/L
Thallium	0.00024	0.00006	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Uranium	0.011	3.6E-05	mg/L	0.0068	mg/L	0.00684	mg/L	0.00671	mg/L	0.00986	mg/L
Vanadium	0.018	0.0009	mg/L	0.0093	mg/L	0.0078	mg/L	0.0076	mg/L	0.006	mg/L
Zinc	1.1	0.0129	mg/L	0.0013 U	mg/L	0.0033	mg/L	0.0023 U	mg/L	0.0016 U	mg/L
Hazard Index		**1.E+01**		**2.E-01**		**2.E-01**		**2.E-01**		**2.E-01**	
Cancer Risk		**4.E-04**		**1.E-03**		**1.E-03**		**1.E-03**		**2.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-06-13		MW-06-13		MW-06-13 (RB)		MW-EPA-4		MW-EPA-4	
Sample Date		5/27/2008		9/16/2008		9/16/2008		5/15/2008		9/16/2008	
Sample ID	**PRG**	MW-86-13		MW-06-13		MW-60-86		MW-EPA-4		MW-EPA-4	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008-F		RFI-2008		RFI-2008-F	
Antimony	0.0015	0.00014 U	mg/L	0.0001	mg/L	0.00005 U	mg/L	0.00008	mg/L	0.00006	mg/L
Arsenic	0.000045	0.0106	mg/L	0.0104	mg/L	0.0005 U	mg/L	0.0046	mg/L	0.005	mg/L
Barium	0.73	0.0387	mg/L	0.04	mg/L	0.00009	mg/L	0.0404	mg/L	0.043	mg/L
Beryllium	0.0073	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002	mg/L
Cadmium	0.0018	0.00004	mg/L	0.00005	mg/L	0.00002 U	mg/L	0.00004	mg/L	0.00003	mg/L
Calcium	--	185	mg/L	191	mg/L	0.05 U	mg/L	368	mg/L	324	mg/L
Chromium	0.0011	0.0003 U	mg/L	0.0003	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Cobalt	--	0.00201	mg/L	0.00191	mg/L	0.00002 U	mg/L	0.00393	mg/L	0.00306	mg/L
Copper	0.15	0.0026 U	mg/L	0.0012	mg/L	0.0002	mg/L	0.0015 U	mg/L	0.0009	mg/L
Iron	2.6	0.069	mg/L	0.26	mg/L	0.02 U	mg/L	0.198	mg/L	0.47	mg/L
Lead	0.015	0.00014 U	mg/L	0.00031	mg/L	0.00002 U	mg/L	0.00025 U	mg/L	0.0004	mg/L
Magnesium	--	35.7	mg/L	37.2	mg/L	0.02 U	mg/L	61.6	mg/L	60.6	mg/L
Manganese	0.088	0.00236	mg/L	0.007	mg/L	0.005 U	mg/L	0.00392	mg/L	0.014	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0035	mg/L	0.0038	mg/L	0.0002 U	mg/L	0.01	mg/L	0.0084	mg/L
Potassium	--	16.2	mg/L	16.9	mg/L	0.4 U	mg/L	15.9	mg/L	15.8	mg/L
Selenium	0.018	0.0068	mg/L	0.006	mg/L	0.005 U	mg/L	0.0037	mg/L	0.005 U	mg/L
Silver	0.018	0.00005	mg/L	0.00002	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Sodium	--	79.9	mg/L	81.3	mg/L	0.2 U	mg/L	49.2	mg/L	50.6	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Uranium	0.011	0.00993	mg/L	0.0113	mg/L	0.00002 U	mg/L	0.0046	mg/L	0.00472	mg/L
Vanadium	0.018	0.0061	mg/L	0.0058	mg/L	0.0002 U	mg/L	0.0039	mg/L	0.0036	mg/L
Zinc	1.1	0.0019 U	mg/L	0.003	mg/L	0.002	mg/L	0.0012 U	mg/L	0.0023	mg/L
Hazard Index		**2.E-01**		**2.E-01**		**3.E-04**		**1.E-01**		**1.E-01**	
Cancer Risk		**2.E-04**		**2.E-04**		**1.E-05**		**1.E-04**		**1.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-06-16		MW-06-16		MW-06-20		MW-06-20		MW-06-17	
Sample Date		5/21/2008		9/16/2008		5/20/2008		9/16/2008		5/27/2008	
Sample ID	**PRG**	MW-06-16		MW-06-16		MW-06-20		MW-06-20		MW-06-17	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008	
Antimony	0.0015	0.00008	mg/L	0.00008	mg/L	0.00011	mg/L	0.00011	mg/L	0.00016 U	mg/L
Arsenic	0.000045	0.006	mg/L	0.0083	mg/L	0.0177	mg/L	0.0187	mg/L	0.0216	mg/L
Barium	0.73	0.0274	mg/L	0.03	mg/L	0.0312	mg/L	0.038	mg/L	0.0474	mg/L
Beryllium	0.0073	0.00002 U	mg/L	0.00002 U	mg/L	0.00002	mg/L	0.00003	mg/L	0.00002	mg/L
Cadmium	0.0018	0.00004	mg/L	0.00004	mg/L	0.00049	mg/L	0.0005	mg/L	0.00144	mg/L
Calcium	--	335	mg/L	318	mg/L	220	mg/L	207	mg/L	228	mg/L
Chromium	0.0011	0.0005	mg/L	0.0005	mg/L	0.0004	mg/L	0.0004	mg/L	0.0011	mg/L
Cobalt	--	0.00593	mg/L	0.00608	mg/L	0.01	mg/L	0.00862	mg/L	0.00314	mg/L
Copper	0.15	0.0017 J	mg/L	0.0018	mg/L	0.0038 J	mg/L	0.0021	mg/L	0.002 U	mg/L
Iron	2.6	0.031	mg/L	0.14	mg/L	0.02 U	mg/L	0.84	mg/L	0.224	mg/L
Lead	0.015	0.00005	mg/L	0.00026	mg/L	0.00009	mg/L	0.00049	mg/L	0.0004 U	mg/L
Magnesium	--	64 R	mg/L	62.8	mg/L	46.5 R	mg/L	45.3	mg/L	45.8	mg/L
Manganese	0.088	0.00204	mg/L	0.005 U	mg/L	4.36	mg/L	4.29	mg/L	0.927	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0127	mg/L	0.0187	mg/L	0.0346	mg/L	0.029	mg/L	0.0065	mg/L
Potassium	--	19.7	mg/L	19.1	mg/L	42.6	mg/L	41.2	mg/L	22.1	mg/L
Selenium	0.018	0.0094	mg/L	0.008	mg/L	0.0034	mg/L	0.005 U	mg/L	0.0095	mg/L
Silver	0.018	0.00002 U	mg/L	0.00003	mg/L	0.00003	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Sodium	--	65.4	mg/L	66	mg/L	77.5	mg/L	75.8	mg/L	93.3	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00005	mg/L	0.00006	mg/L	0.00002	mg/L
Uranium	0.011	0.044	mg/L	0.04279	mg/L	0.00002 U	mg/L	0.00008	mg/L	0.00549	mg/L
Vanadium	0.018	0.0045	mg/L	0.0042	mg/L	0.007	mg/L	0.0067	mg/L	0.0099	mg/L
Zinc	1.1	0.0014	mg/L	0.0051	mg/L	0.0286	mg/L	0.0258	mg/L	0.0236	mg/L
Hazard Index		**6.E-01**		**5.E-01**		**5.E+00**		**5.E+00**		**1.E+00**	
Cancer Risk		**1.E-04**		**2.E-04**		**4.E-04**		**4.E-04**		**5.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-06-17		MW-01-2		MW-01-2		MW-97-4		MW-97-4	
Sample Date		9/16/2008		5/19/2008		9/16/2008		5/20/2008		9/16/2008	
Sample ID	**PRG**	MW-06-17		MW-01-2		MW-01-2		MW97-4		MW-97-4	
Report	**HQ=0.1**	RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F	
Antimony	0.0015	0.00015	mg/L	0.00036	mg/L	0.00026	mg/L	0.00061	mg/L	0.00054	mg/L
Arsenic	0.000045	0.025	mg/L	0.0206	mg/L	0.0191	mg/L	0.0358	mg/L	0.0368	mg/L
Barium	0.73	0.043	mg/L	0.0145	mg/L	0.019	mg/L	0.027	mg/L	0.025	mg/L
Beryllium	0.0073	0.00002 U	mg/L	0.00061	mg/L	0.00036	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Cadmium	0.0018	0.00116	mg/L	0.00101	mg/L	0.00138	mg/L	0.00011	mg/L	0.0001	mg/L
Calcium	--	209	mg/L	104	mg/L	103	mg/L	184	mg/L	181	mg/L
Chromium	0.0011	0.0011	mg/L	0.0002 U	mg/L	0.0003	mg/L	0.0002	mg/L	0.0002 U	mg/L
Cobalt	--	0.00234	mg/L	0.00261	mg/L	0.00217	mg/L	0.00109	mg/L	0.00088	mg/L
Copper	0.15	0.0013	mg/L	0.003 J	mg/L	0.0026	mg/L	0.0011 J	mg/L	0.0008	mg/L
Iron	2.6	0.1	mg/L	0.02	mg/L	0.32	mg/L	0.034	mg/L	0.02 U	mg/L
Lead	0.015	0.00016	mg/L	0.00014	mg/L	0.00028	mg/L	0.00016	mg/L	0.0002	mg/L
Magnesium	--	43.7	mg/L	19 R	mg/L	19.2	mg/L	32 R	mg/L	32.7	mg/L
Manganese	0.088	0.719	mg/L	1.55	mg/L	1.18	mg/L	0.424	mg/L	0.373	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0053	mg/L	0.0044	mg/L	0.0032	mg/L	0.005	mg/L	0.0042	mg/L
Potassium	--	21.9	mg/L	23.9	mg/L	28.9	mg/L	18	mg/L	17.8	mg/L
Selenium	0.018	0.012	mg/L	0.0121	mg/L	0.008	mg/L	0.0057	mg/L	0.007	mg/L
Silver	0.018	0.00002 U	mg/L	0.00003	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Sodium	--	86.5	mg/L	46.9	mg/L	51.8	mg/L	67.3	mg/L	68.7	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00004	mg/L	0.00004	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Uranium	0.011	0.00486	mg/L	2.2E-05	mg/L	0.00004	mg/L	0.00726	mg/L	0.00778	mg/L
Vanadium	0.018	0.0089	mg/L	0.0064	mg/L	0.0062	mg/L	0.0074	mg/L	0.0063	mg/L
Zinc	1.1	0.0218	mg/L	0.222	mg/L	0.2124	mg/L	0.0014	mg/L	0.0025	mg/L
Hazard Index		**1.E+00**		**2.E+00**		**2.E+00**		**7.E-01**		**6.E-01**	
Cancer Risk		**6.E-04**		**5.E-04**		**4.E-04**		**8.E-04**		**8.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-02-2		MW-02-2		PW-99-3		PW-99-3		MW-06-7	
Sample Date		5/19/2008		9/16/2008		5/28/2008		9/16/2008		5/29/2008	
Sample ID	**PRG**	MW-02-2		MW-02-2		PW99-3		PW-99-3		MW-06-7	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008	
Antimony	0.0015	0.00013	mg/L	0.00012	mg/L	0.0006	mg/L	0.00075	mg/L	0.00085	mg/L
Arsenic	0.000045	0.0453	mg/L	0.0515	mg/L	0.129	mg/L	0.1389	mg/L	0.0142	mg/L
Barium	0.73	0.0186	mg/L	0.023	mg/L	0.152	mg/L	0.158	mg/L	0.0651	mg/L
Beryllium	0.0073	0.00039	mg/L	0.00034	mg/L	0.00002	mg/L	0.00002	mg/L	0.00002 U	mg/L
Cadmium	0.0018	0.00371	mg/L	0.00353	mg/L	0.00023	mg/L	0.00029	mg/L	0.00025	mg/L
Calcium	--	102	mg/L	111	mg/L	153	mg/L	119	mg/L	382	mg/L
Chromium	0.0011	0.0003	mg/L	0.0003	mg/L	0.0003 U	mg/L	0.0002	mg/L	0.0002 U	mg/L
Cobalt	--	0.00753	mg/L	0.00705	mg/L	0.00421	mg/L	0.00381	mg/L	0.00038	mg/L
Copper	0.15	0.0016 J	mg/L	0.0021	mg/L	0.0019 U	mg/L	0.0031	mg/L	0.0049 U	mg/L
Iron	2.6	0.527	mg/L	0.91	mg/L	0.184	mg/L	0.72	mg/L	0.041	mg/L
Lead	0.015	0.00042	mg/L	0.00075	mg/L	0.00012 U	mg/L	0.00029	mg/L	0.00051 U	mg/L
Magnesium	--	18.8 R	mg/L	20.9	mg/L	17	mg/L	14.8	mg/L	60.5	mg/L
Manganese	0.088	1.03	mg/L	1.14	mg/L	3.71	mg/L	3.27	mg/L	0.2	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0271	mg/L	0.0239	mg/L	0.0035	mg/L	0.0027	mg/L	0.0031	mg/L
Potassium	--	18.3	mg/L	19.6	mg/L	15.2	mg/L	15.3	mg/L	67.8	mg/L
Selenium	0.018	0.0149	mg/L	0.015	mg/L	0.001 U	mg/L	0.005 U	mg/L	0.0054	mg/L
Silver	0.018	0.0001	mg/L	0.0005	mg/L	0.00002 U	mg/L	0.00002	mg/L	0.00002 U	mg/L
Sodium	--	44.6	mg/L	47.8	mg/L	145	mg/L	164	mg/L	142	mg/L
Thallium	0.00024	0.00003	mg/L	0.00003	mg/L	0.00006	mg/L	0.00005	mg/L	0.0186	mg/L
Uranium	0.011	5.9E-05	mg/L	0.00008	mg/L	0.0173	mg/L	0.01203	mg/L	0.00271	mg/L
Vanadium	0.018	0.0045	mg/L	0.0042	mg/L	0.0036	mg/L	0.0051	mg/L	0.0418	mg/L
Zinc	1.1	0.524	mg/L	0.4973	mg/L	0.0013 U	mg/L	0.0014	mg/L	0.0028 U	mg/L
Hazard Index		**2.E+00**		**2.E+00**		**5.E+00**		**4.E+00**		**8.E+00**	
Cancer Risk		**1.E-03**		**1.E-03**		**3.E-03**		**3.E-03**		**3.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-06-7		MW-97-3		MW-97-3		MW-06-11		MW-06-11	
Sample Date		9/16/2008		5/28/2008		9/16/2008		5/28/2008		9/16/2008	
Sample ID	**PRG**	MW-06-7		MW97-3		MW-97-3		MW-06-11		MW-06-11	
Report	**HQ=0.1**	RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F	
Antimony	0.0015	0.00089	mg/L	0.00043	mg/L	0.00041	mg/L	0.0001 U	mg/L	0.00009	mg/L
Arsenic	0.000045	0.0274	mg/L	0.0517	mg/L	0.0503	mg/L	0.0204	mg/L	0.0218	mg/L
Barium	0.73	0.056	mg/L	0.0334	mg/L	0.036	mg/L	0.0312	mg/L	0.032	mg/L
Beryllium	0.0073	0.00003	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00003	mg/L	0.00002 U	mg/L
Cadmium	0.0018	0.00004	mg/L	0.00006	mg/L	0.00006	mg/L	0.00005	mg/L	0.00006	mg/L
Calcium	--	317	mg/L	173	mg/L	162	mg/L	399	mg/L	343	mg/L
Chromium	0.0011	0.0006	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0005 U	mg/L	0.0002 U	mg/L
Cobalt	--	0.00068	mg/L	0.00066	mg/L	0.00064	mg/L	0.00483	mg/L	0.00424	mg/L
Copper	0.15	0.0071	mg/L	0.0016 U	mg/L	0.0014	mg/L	0.0014 U	mg/L	0.0012	mg/L
Iron	2.6	0.04	mg/L	0.02 U	mg/L	0.02 U	mg/L	0.46	mg/L	0.17	mg/L
Lead	0.015	0.00021	mg/L	0.00011 U	mg/L	0.00004	mg/L	0.00035 U	mg/L	0.00017	mg/L
Magnesium	--	79.6	mg/L	31.2	mg/L	29.6	mg/L	63.9	mg/L	62	mg/L
Manganese	0.088	0.482	mg/L	0.036	mg/L	0.027	mg/L	0.0704	mg/L	0.064	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0098	mg/L	0.0037	mg/L	0.006	mg/L	0.0101	mg/L	0.0144	mg/L
Potassium	--	62	mg/L	17	mg/L	16.7	mg/L	17.3	mg/L	17.6	mg/L
Selenium	0.018	0.005 U	mg/L	0.007	mg/L	0.007	mg/L	0.0046	mg/L	0.005	mg/L
Silver	0.018	0.00016	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00003	mg/L
Sodium	--	140	mg/L	62.9	mg/L	60.1	mg/L	72.6	mg/L	72.1	mg/L
Thallium	0.00024	0.00251	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00004	mg/L	0.00003	mg/L
Uranium	0.011	0.00417	mg/L	0.0095	mg/L	0.00996	mg/L	0.00166	mg/L	0.00179	mg/L
Vanadium	0.018	0.0163	mg/L	0.0082	mg/L	0.0075	mg/L	0.0051	mg/L	0.0044	mg/L
Zinc	1.1	0.006	mg/L	0.0012 U	mg/L	0.005	mg/L	0.0019 U	mg/L	0.0037	mg/L
Hazard Index		**2.E+00**		**3.E-01**		**2.E-01**		**2.E-01**		**2.E-01**	
Cancer Risk		**6.E-04**		**1.E-03**		**1.E-03**		**5.E-04**		**5.E-04**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-02-3		MW-02-3		MW-97-10		MW-97-10		MW-97-12	
Sample Date		5/15/2008		9/16/2008		5/21/2008		9/16/2008		5/27/2008	
Sample ID	**PRG**	MW-02-3		MW-02-3		MW97-10		MW-97-10		MW97-12	
Report	**HQ=0.1**	RFI-2008		RFI-2008-F		RFI-2008		RFI-2008-F		RFI-2008	
Antimony	0.0015	0.00017	mg/L	0.00017	mg/L	0.00024	mg/L	0.00025	mg/L	0.00023 U	mg/L
Arsenic	0.000045	0.0124	mg/L	0.0132	mg/L	0.031	mg/L	0.0328	mg/L	0.0688	mg/L
Barium	0.73	0.0301	mg/L	0.027	mg/L	0.0233	mg/L	0.022	mg/L	0.0466	mg/L
Beryllium	0.0073	0.00002	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00012	mg/L
Cadmium	0.0018	0.00003	mg/L	0.00002	mg/L	0.00003	mg/L	0.00003	mg/L	0.00005	mg/L
Calcium	--	306	mg/L	266	mg/L	264	mg/L	254	mg/L	136	mg/L
Chromium	0.0011	0.0006	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.001	mg/L
Cobalt	--	0.00159	mg/L	0.00127	mg/L	0.00067	mg/L	0.0007	mg/L	0.00091	mg/L
Copper	0.15	0.0012 U	mg/L	0.0009	mg/L	0.0014 J	mg/L	0.0031	mg/L	0.0026 U	mg/L
Iron	2.6	0.5	mg/L	0.03	mg/L	0.175	mg/L	0.07	mg/L	1.39	mg/L
Lead	0.015	0.00029 U	mg/L	0.00004	mg/L	0.0002	mg/L	0.00009	mg/L	0.00091 U	mg/L
Magnesium	--	43	mg/L	42.7	mg/L	39.9 R	mg/L	39	mg/L	16.6	mg/L
Manganese	0.088	0.00445	mg/L	0.005 U	mg/L	0.00452	mg/L	0.005 U	mg/L	0.0218	mg/L
Mercury	0.0011	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L	0.0002 U	mg/L
Nickel	0.073	0.0049	mg/L	0.009	mg/L	0.0081	mg/L	0.0126	mg/L	0.0017	mg/L
Potassium	--	14.7	mg/L	14.9	mg/L	18.4	mg/L	18	mg/L	29.1	mg/L
Selenium	0.018	0.0086	mg/L	0.009	mg/L	0.0064	mg/L	0.007	mg/L	0.0307	mg/L
Silver	0.018	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L	0.00002 U	mg/L
Sodium	--	81.2	mg/L	83.5	mg/L	92.1	mg/L	92.2	mg/L	76	mg/L
Thallium	0.00024	0.00002 U	mg/L	0.00002 U	mg/L	0.00003	mg/L	0.00002	mg/L	0.00003	mg/L
Uranium	0.011	0.0132	mg/L	0.01408	mg/L	0.00382	mg/L	0.00404	mg/L	0.0008	mg/L
Vanadium	0.018	0.0051	mg/L	0.0038	mg/L	0.0044	mg/L	0.0042	mg/L	0.0094	mg/L
Zinc	1.1	0.0026 U	mg/L	0.0084	mg/L	0.0015	mg/L	0.0013	mg/L	0.0035 U	mg/L
Hazard Index		**3.E-01**		**2.E-01**		**2.E-01**		**2.E-01**		**4.E-01**	
Cancer Risk		**3.E-04**		**3.E-04**		**7.E-04**		**7.E-04**		**2.E-03**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

Station ID		MW-97-12	
Sample Date		9/16/2008	
Sample ID	**PRG**	MW-97-12	
Report	**HQ=0.1**	RFI-2008-F	
Antimony	0.0015	0.00223	mg/L
Arsenic	0.000045	0.0681	mg/L
Barium	0.73	0.056	mg/L
Beryllium	0.0073	0.00479	mg/L
Cadmium	0.0018	0.00588	mg/L
Calcium	--	140	mg/L
Chromium	0.0011	0.0072	mg/L
Cobalt	--	0.00808	mg/L
Copper	0.15	3.18	mg/L
Iron	2.6	1.65	mg/L
Lead	0.015	0.00272	mg/L
Magnesium	--	18.1	mg/L
Manganese	0.088	0.041	mg/L
Mercury	0.0011	0.0002 U	mg/L
Nickel	0.073	0.0107	mg/L
Potassium	--	31.1	mg/L
Selenium	0.018	0.03	mg/L
Silver	0.018	0.00089	mg/L
Sodium	--	78.9	mg/L
Thallium	0.00024	0.00098	mg/L
Uranium	0.011	0.00016	mg/L
Vanadium	0.018	0.0112	mg/L
Zinc	1.1	0.485	mg/L
Hazard Index		**4.E+00**	
Cancer Risk		**2.E-03**	

Arsenic is a carcinogen, Lead is the MCL.
Concentration > PRG
Concentration different than spring - higher
Concentration different than spring - lower
based on detection in rinsate blank

From: Tom Mattison
Sent: Thursday, December 04, 2008 12:30 PM
To: Kim Johannessen; Andrea A. Nord; Karma Hughes
Cc: 'FloydBalentine'; Jim Langseth
Subject: FW: Preliminary Review of Fall 2008 Groundwater Quality Data - Silver Bow Plant

-----Original Message-----
From: Sparks.Sara@epamail.epa.gov [mailto:Sparks.Sara@epamail.epa.gov]
Sent: Thursday, December 04, 2008 10:31 AM
To: Tom Mattison
Cc: Bersanti, Dan
Subject: Re: Preliminary Review of Fall 2008 Groundwater Quality Data - Silver Bow Plant

Dan and Tom: The Agency approves the resampling of groundwater wells at the Rhodia site. The Agency looks forward to seeing the results of the next round of sampling. Thanks Sara

Sara Weinstock Sparks
Remedial Project Manager
US EPA
155 W. Granite Street
Butte, MT 59701
(406) 782-7415
Fax (406) 782-3838

Appendix 5.3-C

Fate and Transport Section of Final Pre-Closure Groundwater Monitoring Report

Final

Pre-closure Groundwater Monitoring Report

Rhodia Silver Bow Plant
Butte, Montana

December 2002

Pre-closure Groundwater Monitoring Report
Rhodia Silver Bow Plant
Butte, Montana

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Figure 11 Steady State Attenuation: Elemental Phosphorus

4.0 Fate and Transport of Elemental Phosphorus

Migration models predict the movement of a chemical over time in media such as soil, groundwater, or air through application of a mathematical equation to represent a site-specific fluid flow system. Most models focus on specific transport and attenuation mechanisms and vary in complexity depending of the assumptions incorporated in the model development. A screening level model is presented here for the purpose evaluating the extent to which dissolved elemental phosphorus could migrate from its source area.

4.1 Transport and Attenuation Mechanisms

4.1.1 Advection

Advection is the process by which dissolved constituents are transported by the flowing groundwater. Groundwater flows from areas of high water level to areas of lower water level. Hydraulic gradient, i, is the term used to describe the magnitude of this driving force. Hydraulic conductivity, k, is a measure of how freely water flows in the medium. Porosity, $\Theta_{s,}$ is the percentage void space through which the water can be transmitted. The average linear velocity of groundwater flow is calculated by the following equation:

$$u = k*i/\Theta_s$$

The average linear groundwater flow velocity at the Silver Bow plant is on the order of 0.42 ft/day based on k = 25 ft/day; i = 0.005ft/ft and $\Theta_s = 0.3$ ft^3/ft^3.

4.1.2 Dispersion

Dispersion is the mixing of the chemical with uncontaminated groundwater as the dissolved phase plume spreads out. This process results from two processes, molecular diffusion and mechanical mixing. Molecular diffusion is the spread of dissolved constituents from areas of high concentration to areas of low concentrations. Mechanical mixing results from variations in groundwater velocity with in the groundwater unit. Simplistic models incorporate dispersion as a proportion to the flow rate.

4.1.3 Decay

Decay is the reduction in chemical concentration through chemical or biological processes. Spanggord et al., 1985 conducted experiments to evaluate chemical transformations of white phosphorus in water and concluded that both oxidation and hydrolysis occur.

4.1.3.1 Hydrolysis

Hydrolysis reactions would be favored in groundwater depleted of its dissolved oxygen content. Hydrolysis reactions would produce reduced phosphorus species along with phosphorus oxides (H_3PO_2, H_3PO_3, H_3PO_4). The reduced species that result from phosphorus hydrolysis are hydrogen and phosphine (PH_3). The experimental data indicated that a small percentage of the P_4 lost was converted to phosphine. One possible hydrolysis reaction (unbalanced) is shown below (Spanggord, et al., 1985):

$$P_4 + 5H_2O \longrightarrow PH_3 + 2H_2POH + H_3PO_3$$

4.1.3.2 Oxidation

Oxidation reactions would be favored where oxygen is available (i.e., edge of a dissolved plume). Oxidation of elemental phosphorus produces a complex mixture of phosphorus oxides. An overall oxidation reaction (unbalanced) is shown below (Spanggord, et.al.,1985):

$$P_4 + O_2 + H_2O \longrightarrow H_3PO_4 + P_4O_{10} + P_4O_6 + H_3PO_3 + PH_3 + \text{polyphosphates}$$

This partial list indicates that many forms of phosphorus could be present in the groundwater depending on the availability of oxygen. Orthophosphoric acid (H_3PO_4) is the final end product should sufficient oxygen be available. The phosphoric acid produced would deprotonate in solution decreasing the pH and buffering the groundwater at less than neutral pH. The phosphoric acid in solution could react with ferric iron in solution and precipitate. Due to the fact that the redox potential is negative downgradient of the clarifier, the iron in solution would likely be ferrous and thus iron phosphate precipitation may not be a significant removal mechanism. Ortho-phosphate would also react with iron in the soil matrix and therefore be removed. Reaction of ortho-phosphate with soil iron is a well-documented removal mechanism in wastewater soil infiltration systems (EPA, 1981) and would be a phosphate removal mechanism affecting the phosphate plume.

4.1.3.3 First-order Degradation Constants

Additional studies described by Spanggord et al., 1985 concluded that the experimental data showed good correlation for a first-order degradation relationship and suggested that both hydrolysis and oxidation occur in water. A first-order degradation relationship can be represented by the following equation:

$$C(t) = C_o\, e^{(-\lambda t)}$$

Where: C(t) = Concentration at time (t) [µg/L]
Co = Concentration at time (t_0) [µg/L]
λ = First-order degradation constant [/day]
t = time [day]

Spanggord et al., 1985 reports the first-order degradation constants for elemental phosphorus as follows:

- λ_{H2O} [/day] = 1.98E-01 (Hydrolysis only)
- $\lambda_{H2O + OX}$ [/day] = 3.98E-01 (Hydrolysis plus oxidation)
- λ_{OX} [/day] = 2.00E-01 (Oxidation only)

4.2 Steady-State Attenuation Model

A screening level model focusing on groundwater transport of dissolved phase elemental phosphorus is presented here. This screening level model was obtained from ATSM E-1739-95 and incorporates the transport and attenuation mechanisms described above. The mathematical equation is as follows (Table X3.1, ASTM E-1739):

$$\frac{C_{(x)}}{C_o} = \exp\left\{\frac{X}{2\alpha_x}\left[1-\sqrt{1+\frac{4\lambda\alpha_x}{u}}\right]\right\} \bullet \left(\operatorname{erf}\left[\frac{Sw}{4\sqrt{\alpha_y X}}\right]\right)\left(\operatorname{erf}\left[\frac{Sd}{4\sqrt{\alpha_z X}}\right]\right)$$

Parameter	Units	Values[1]	Definition
C(x)	[µg/L]	Calculated	Dissolved concentration along centerline of dissolved plume
C_o	[µg/L]	1,600	Maximum concentration reported at MW-01-3.

Parameter	Units	Values[1]	Definition
X	[cm]	Variable	Distance along centerline from downgradient edge of dissolved plume.
Λ	[/day]	1.98E-01	First-order degradation constant (hydrolysis only)
U	[cm/day]	Calculated	Specific discharge. $u = (k * i)/ \Theta_s$
K	[cm/day]	762	Saturated hydraulic conductivity (25 ft/day)
I	[cm/cm]	0.005	Groundwater gradient
Θ_s	[cm^3/cm^3]	0.3	Volumetric water content of saturated soil
A_x	[cm]	Calculated	Longitudinal dispersivity ~ 0.10(X)
A_y	[cm]	Calculated	Traverse dispersivity ~ $\alpha_x/3$
A_z	[cm]	Calculated	Vertical dispersivity ~ $\alpha_x/20$
S_w	[cm]	3,048	Source width (perpendicular to flow in the horizontal plane: 100 ft.
S_d	[cm]	213	Source width (perpendicular to flow in the vertical plane: 7 ft.
erf(η)	[unitless]	Calculated	Error function evaluated for value η.

[1] Listed values are for the expected case.

The steady-state attenuation equation was used to estimate the dissolved phase concentration at 10-foot intervals downgradient of the clarifier. The concentration/distance relationship is shown on Figure11. These calculations indicate a rapid reduction in P_4 concentration with distance due to the relatively high first-order degradation constant and slow groundwater velocity. The steady state equation indicates that an initial elemental phosphorus concentration of 1,600 µg/L would be reduced to 0.5 µg/L in a relatively short distance (assuming first-order degradation constant based on hydrolysis only). The pre-closure monitoring data demonstrate that the elemental phosphorus concentration approximately 30 feet downgradient of MW-01-3 is less than 0.5 µg/L. The September 2002 data indicate that the elemental phosphorus concentration decreased from 1,200 µg/L at MW-01-3 to approximately 0.19j µg/L at MW-02-2 over this 30-foot distance. The first order degradation constant based on these concentrations is approximately 0.12 /day.

This screening level model does not account for other attenuation mechanisms that could reduce the migration distance even further. Retardation is the reduction in contaminant velocity due to interactions between the aquifer and the chemical. The property is commonly quantified by a retardation factor (R_d) that reflects the relative velocity of the groundwater compared to the effective transport velocity of the adsorbed constituent (Freeze and Cherry, 1979). R_d values are computed

based on aquifer bulk density (Δ_b), porosity (Θ_s), and on a compound-specific value for soil sorption partition coefficient (K_p) according to the following equation:

$$R_d = 1 + [\rho_b * (K_p)/(\Theta_s)]$$

Spanggord et al.,1985 reported K_p values of 20 to 25 mL/g. The calculated retardation factors for elemental phosphorus using these K_p values are 120 to 160, assuming Δ_b = 1.9 g/cm^3 and Θ_s = 0.3 cm^3/cm^3. These data indicate that for every 100 feet of groundwater travel, dissolved elemental phosphorus would be transported less than 1 foot.

4.3 Sensitivity Evaluation

The sensitivity of this model was evaluated by changing one input parameter and evaluating change in distance at which C(x) = 0.5 µg/L. The parameters and value range are summarized below. The source of the information is also listed.

Parameter	Range			Units	Source	Relationship
K	14 (-50%)	to	37 (+50%)	Ft/day	Hydraulic conductivity of groundwater unit. Slug test conducted at site monitoring wells and calibrated groundwater flow model.	Direct (-50%) to (+43%)
I	0.004 (-20%)	to	0.006 (+20%)	ft/ft	Calculated from groundwater level measurements at site monitoring wells.	Direct (-20%) to (+17%)
Θ_s	0.2 (-33%)	to	0.4 (+33%)	Ft^3/ft^3	Assumed porosity of site soils.	Inverse (+40%) to (-23%)
Λ	0.169 (-15%)	to	0.228 (+15%)	/day	First-order degradation constant	Inverse (+13%) to (-13%)

The relationships between changes in input parameter and model output are summarized above. An increase in k or i results in an increase in distance while an increase in Θ_s or λ results in a decrease in distance, X. The hydraulic parameters (k, i and Θ_s) are based on site-specific measurements. The first-order degradation constant is based on a laboratory study that reported the first-order degradation constant of 8.27 ±1.21 x 10^{-3}/hr. The calculated transport of dissolved elemental phosphorus is not highly sensitive to variations in the transport parameters. Calculations indicates that for elemental phosphorus migrating from the clarifier to be detectable at MW-02-1, the first-order degradation constant would need to be more than an order of magnitude lower than that reported by Spanggord et al., 1985.

The first order degradation constant based on these September 2002 data is approximately 0.12 /day.

The September 2002 sampling data show that the model provided a reasonable estimate of the attenuation of elemental phosphorus with distance in a natural groundwater setting.

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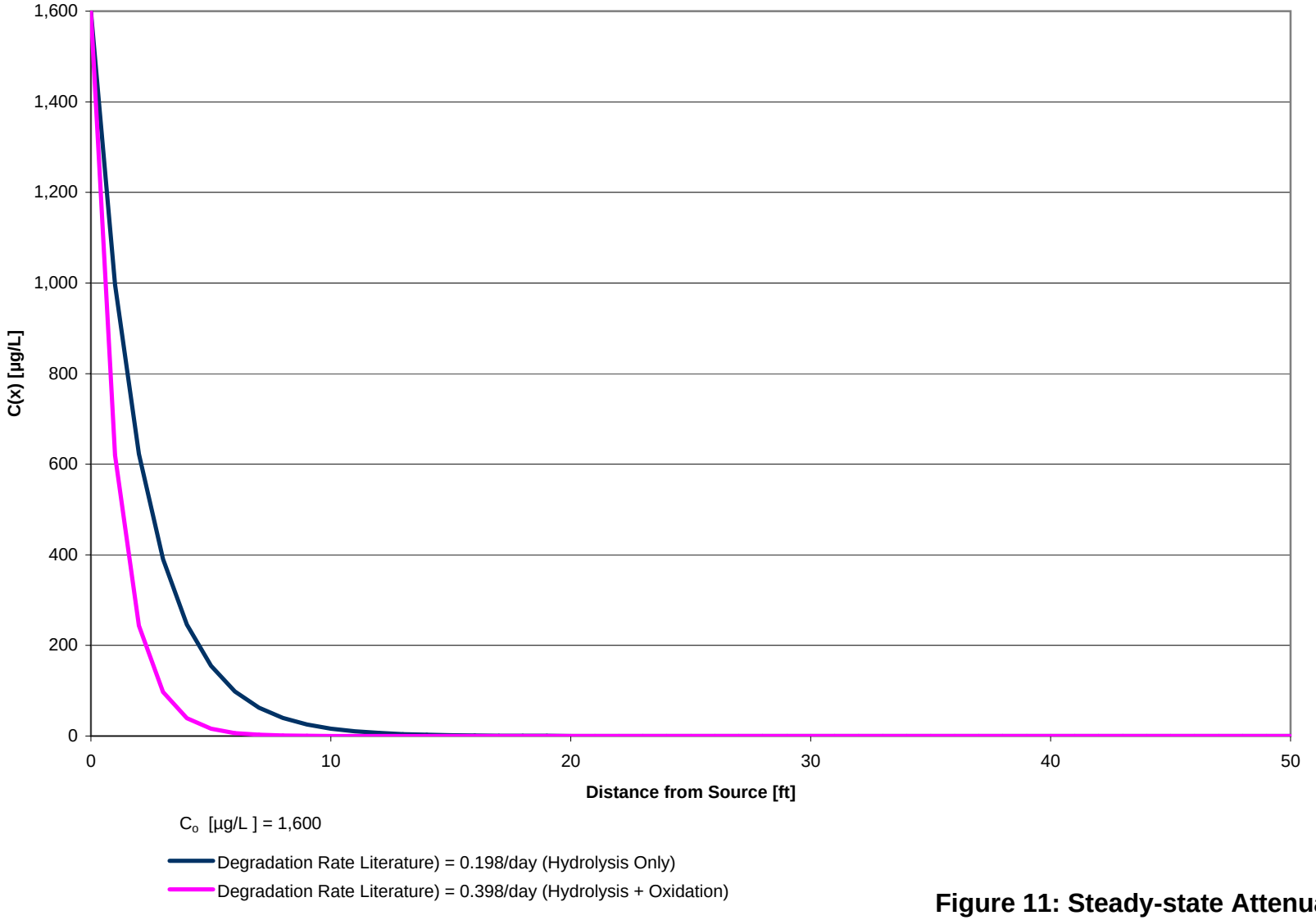


Figure 11: Steady-state Attenuation Elemental Phosphorus

Appendix 5.3-D

Mann-Kendall Test Results

Mann Kendall Trend Evaluation

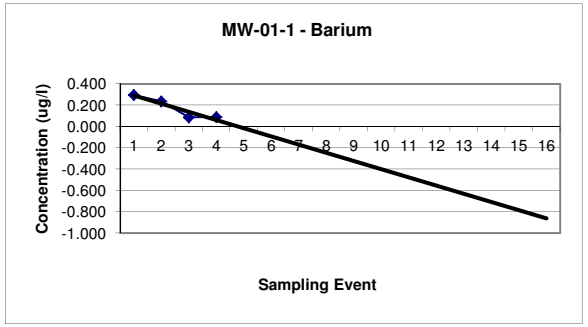
Constituent: Barium

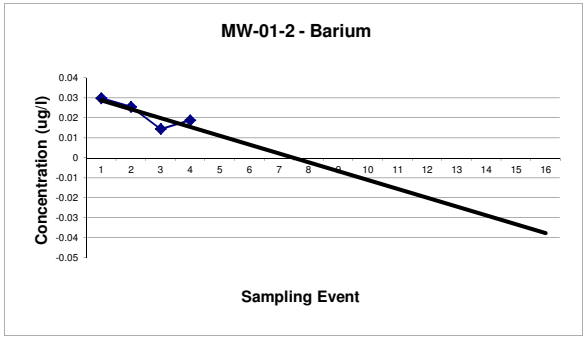
Monitoring Inputs

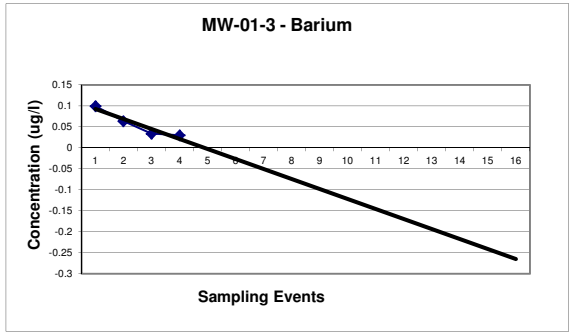
Event	MW-01-1	MW-01-2	MW-01-3	MW-01-4	MW-01-6
	ug/l	ug/l	ug/l	ug/l	ug/l
1	0.296	0.03	0.1	0.251	0.017
2	0.237	0.0256	0.064	0.26	0.008
3	0.0863	0.0145	0.0339	0.116	0.0098
4	0.0900	0.01892	0.0305	0.113	0.0166

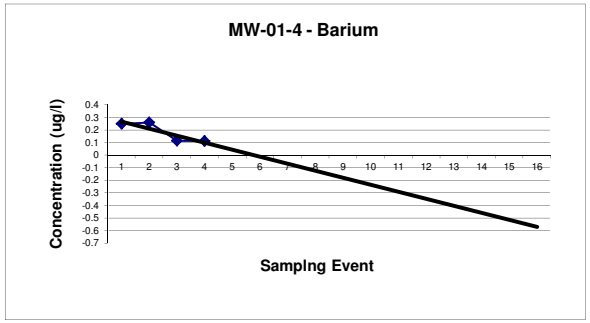
Mann-Kendall Results

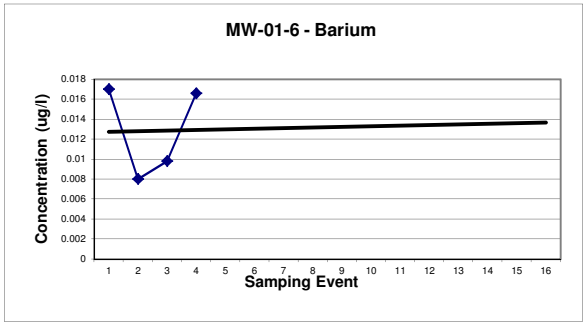
MW-01-1	Decreasing
MW-01-2	Decreasing
MW-01-3	Decreasing
MW-01-4	Decreasing
MW-01-6	Decreasing











Mann Kendall Trend Evaluation

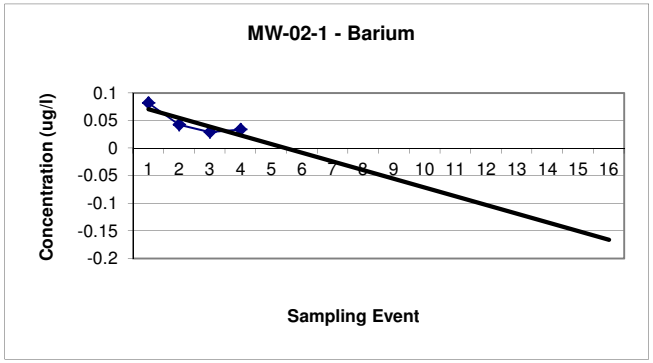
Constituent: Barium

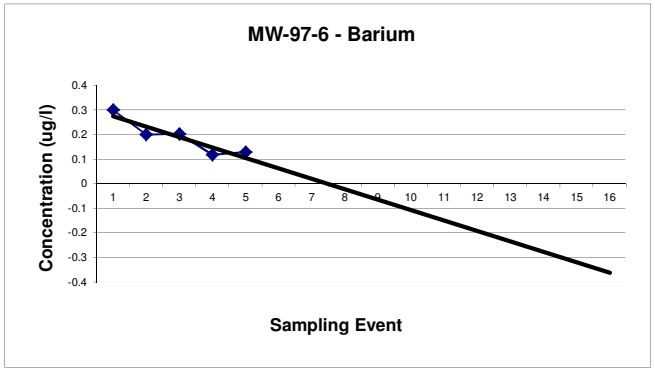
Monitoring Inputs

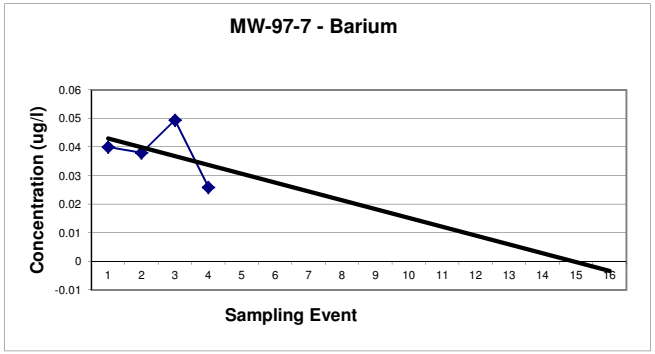
Event	MW-02-1	MW-97-6	MW-97-7	RP-W-6	
	ug/l	ug/l	ug/l	ug/l	ug/l
1	0.082	0.3	0.04	0.051	
2	0.0425	0.2	0.038	0.05	
3	0.0293	0.203	0.0494	0.052	
4	0.0339	0.118	0.0259	0.0431	
5		0.129		0.0315	
6				0.0299	

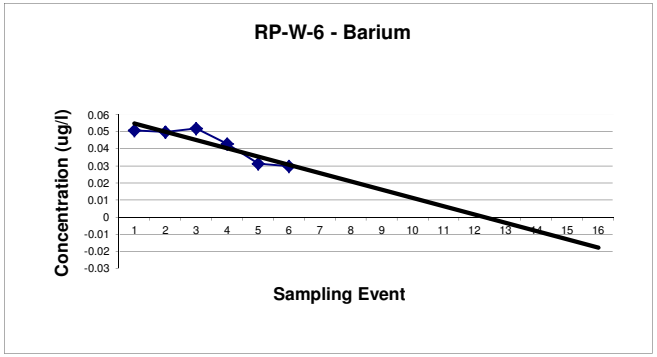
Mann-Kendall Results

MW-02-1	Decreasing
MW-97-6	Decreasing
MW-97-7	Decreasing
RP-W-6	Decreasing





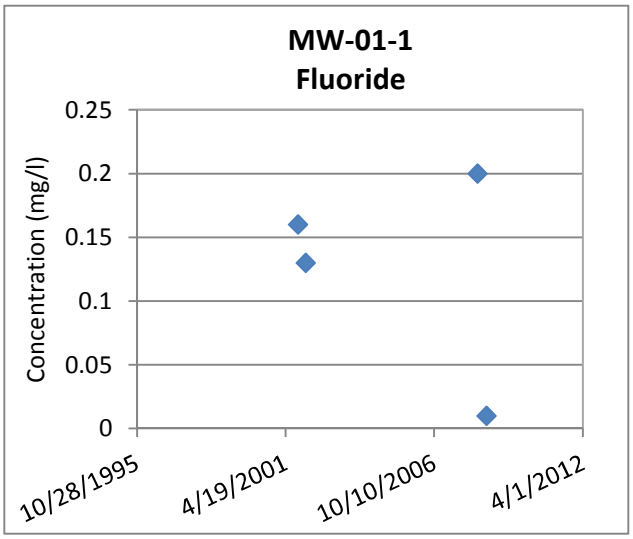


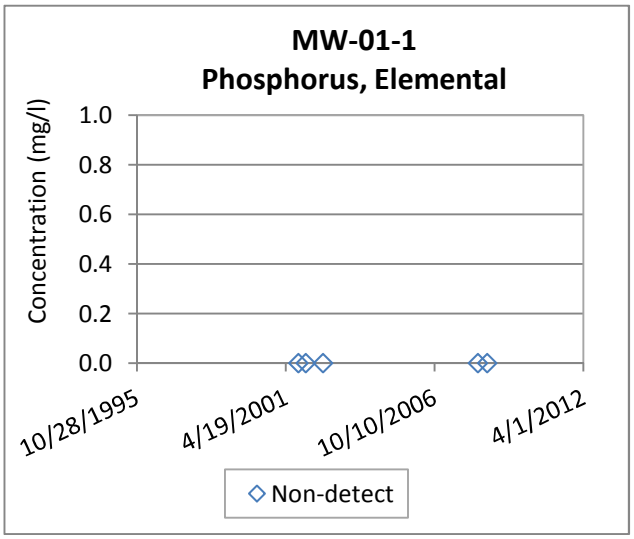


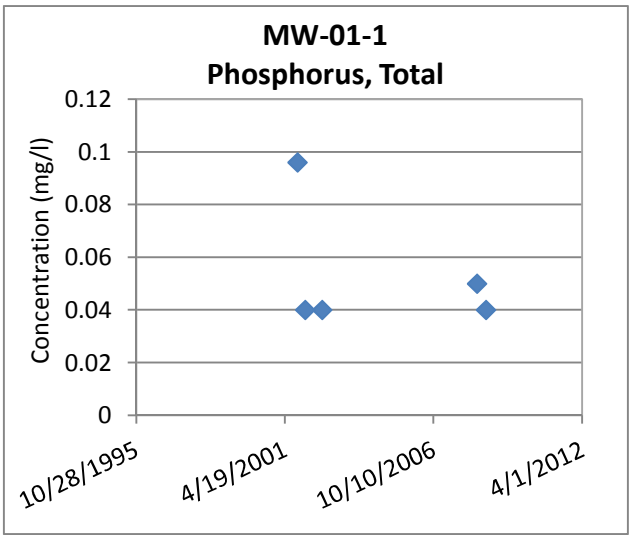
Appendix 5.3-E

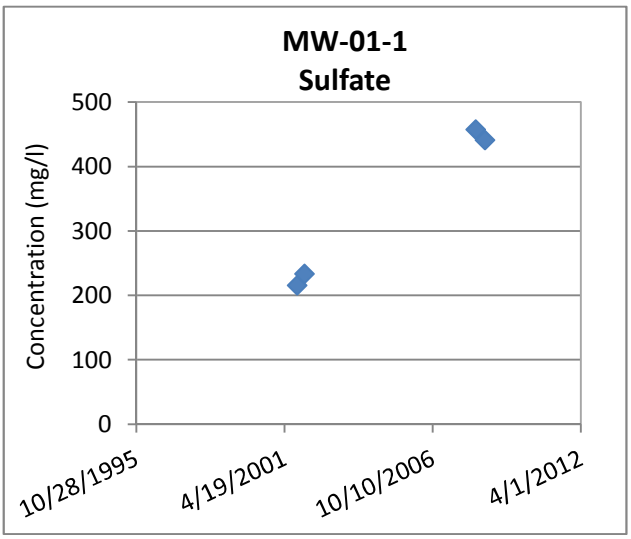
Groundwater Quality Time Series

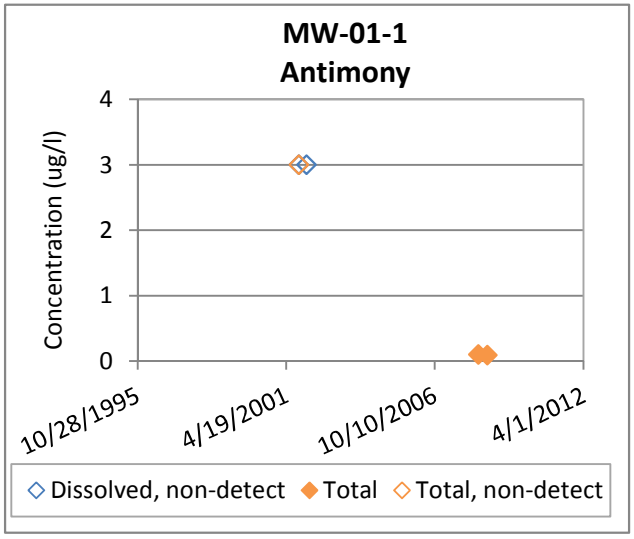
Time Series Plots - MW-01-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

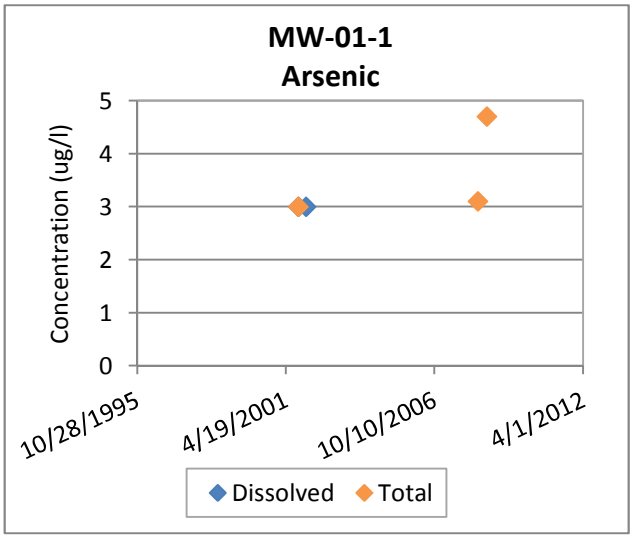






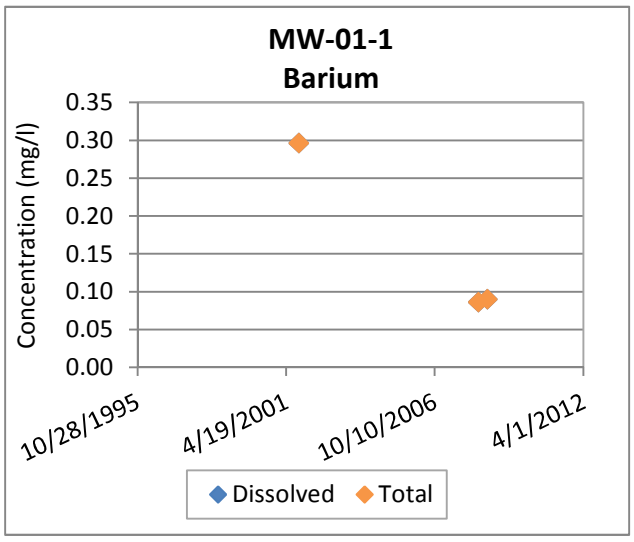


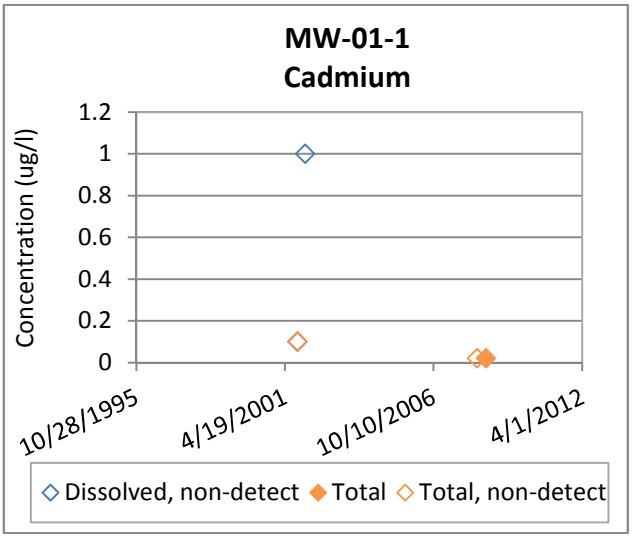


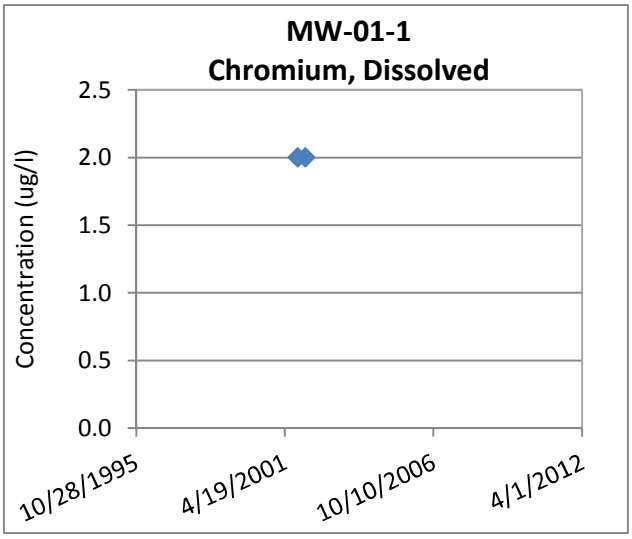


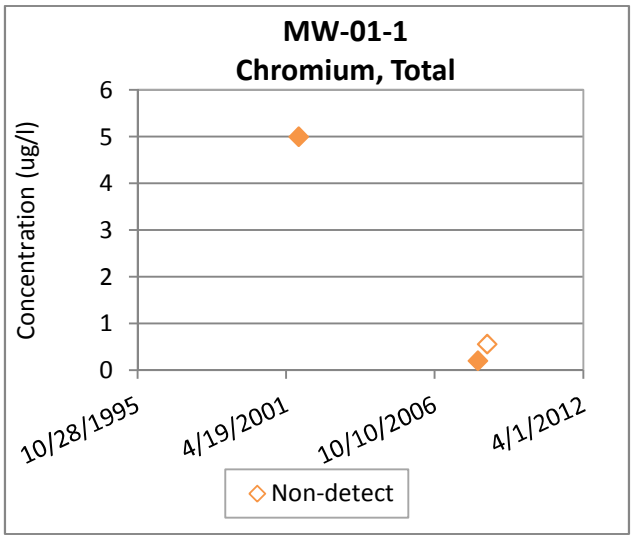
7/16/2012
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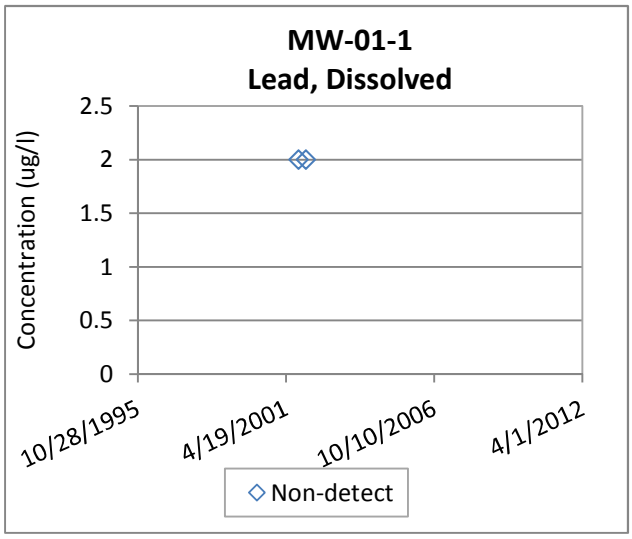
Time Series Plots - MW-01-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

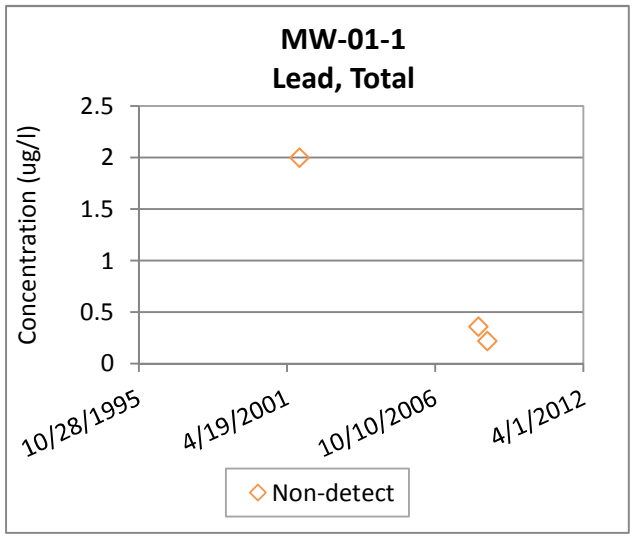




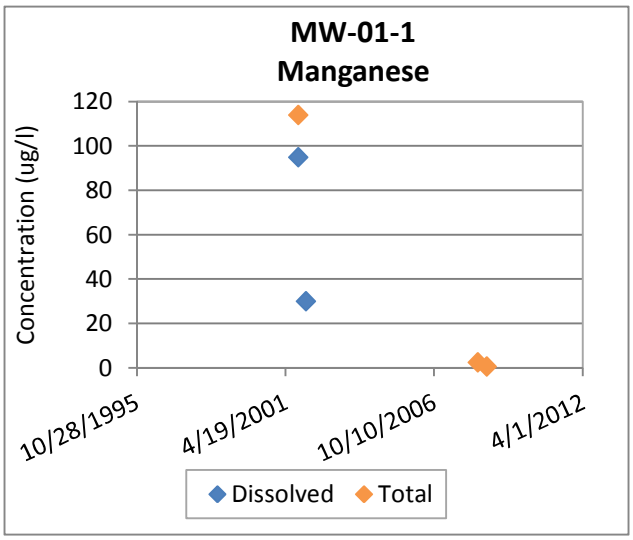


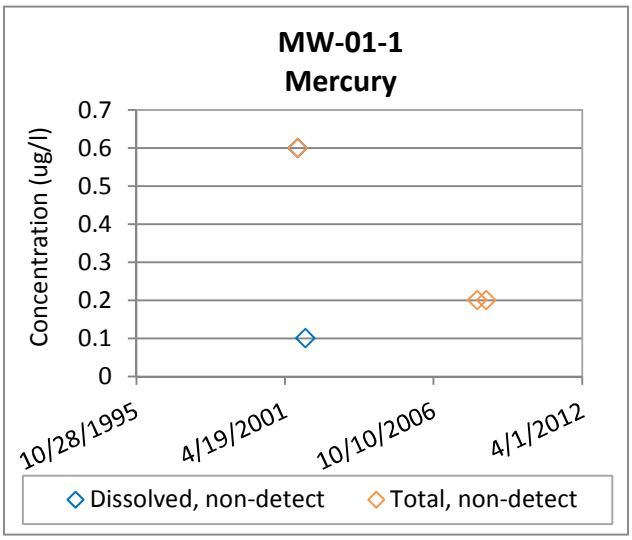


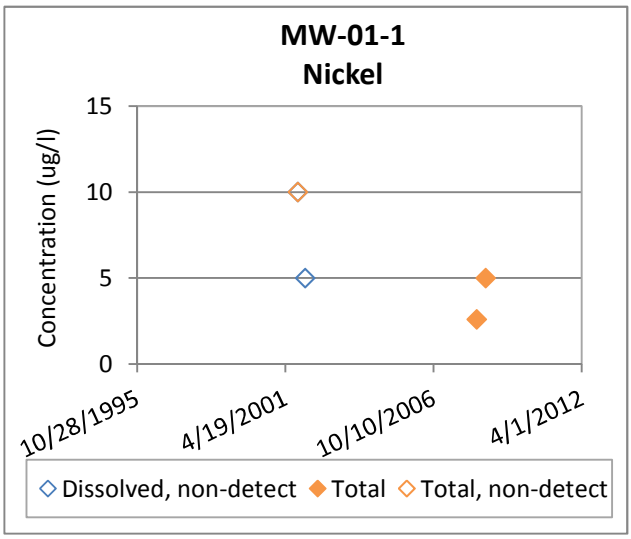


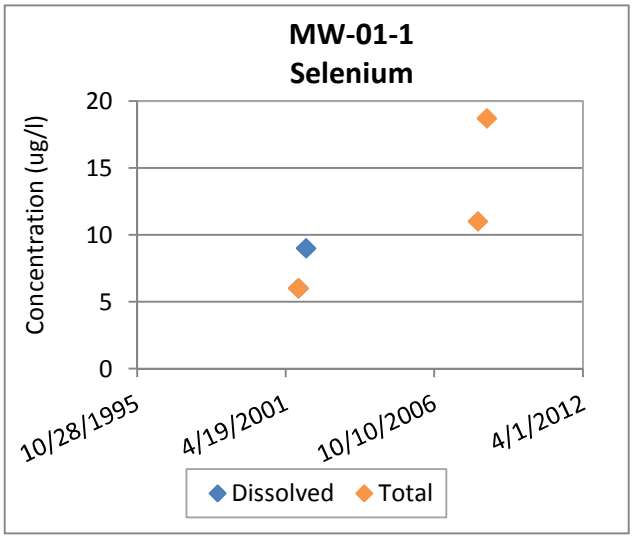


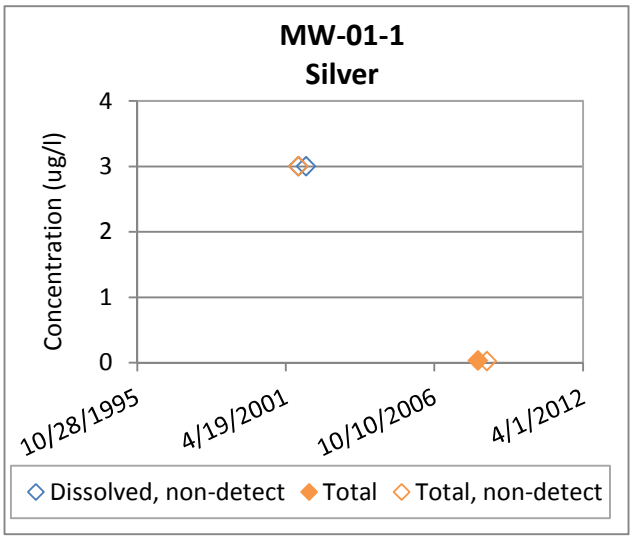
Time Series Plots - MW-01-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

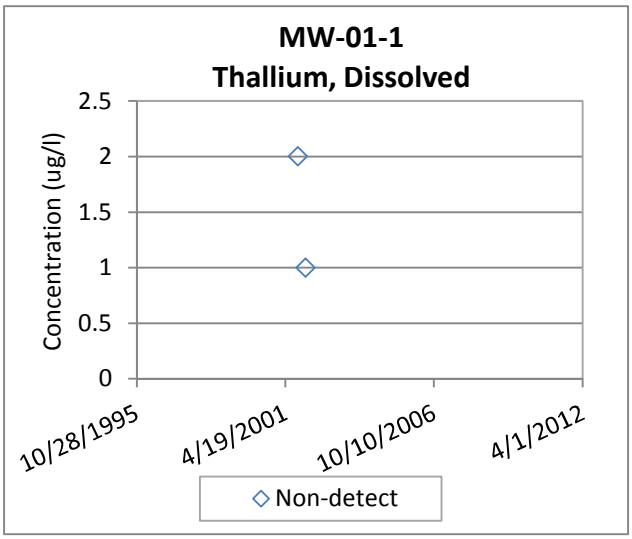




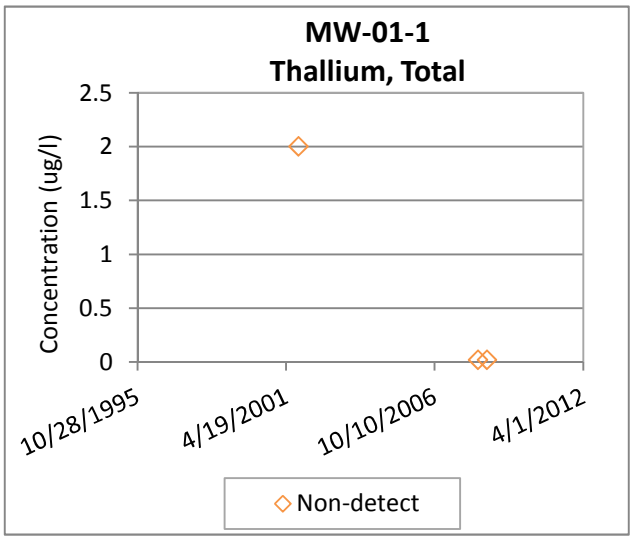


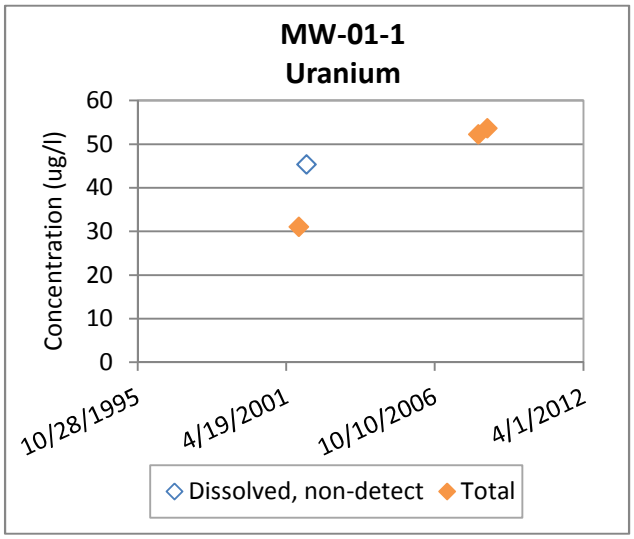




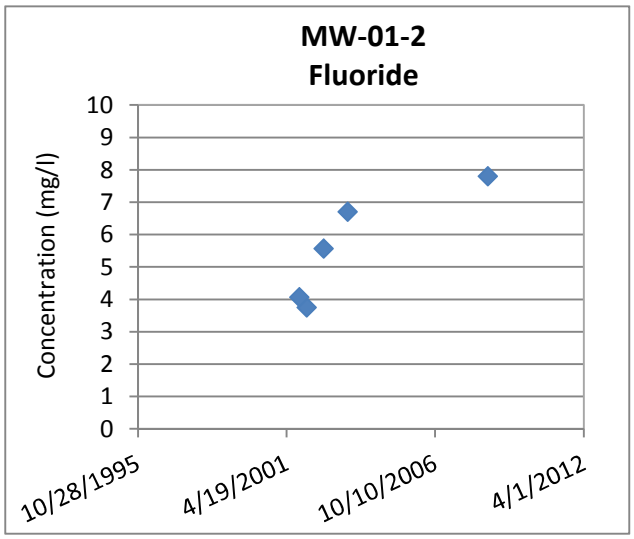


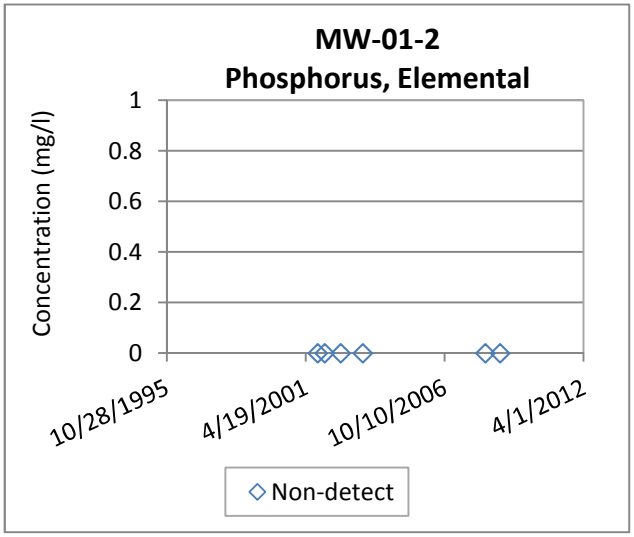
Time Series Plots - MW-01-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

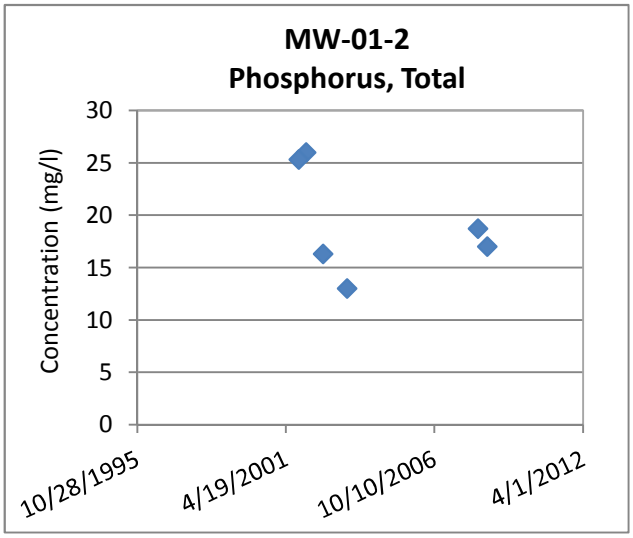


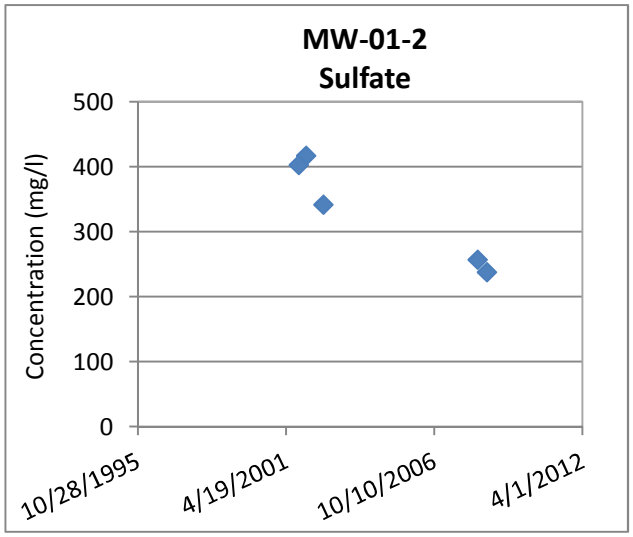


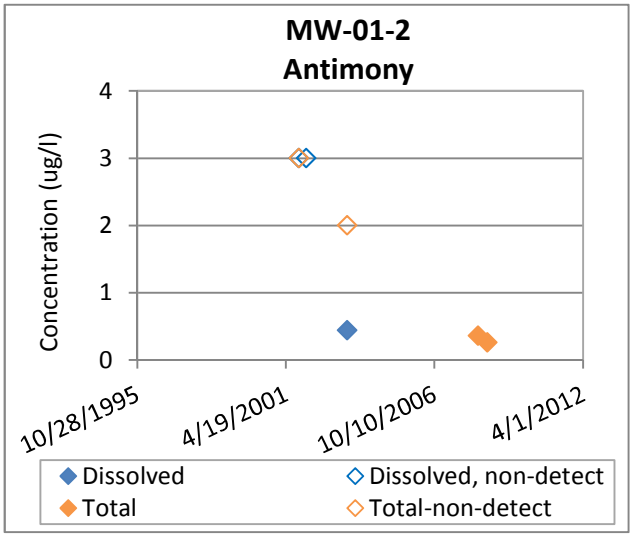
Time Series Plots - MW-01-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

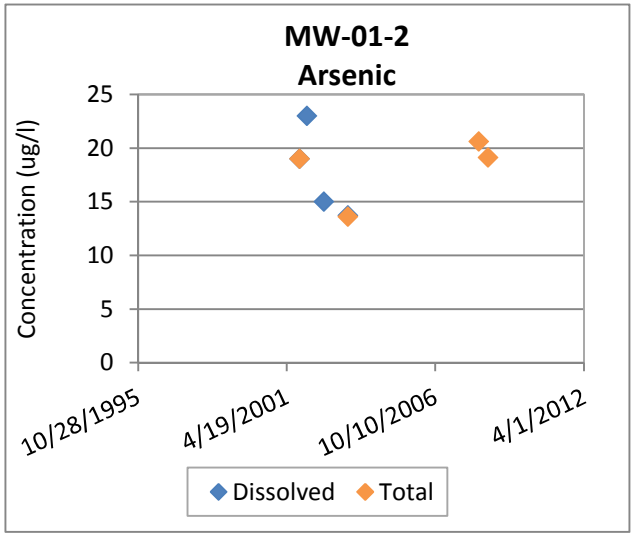




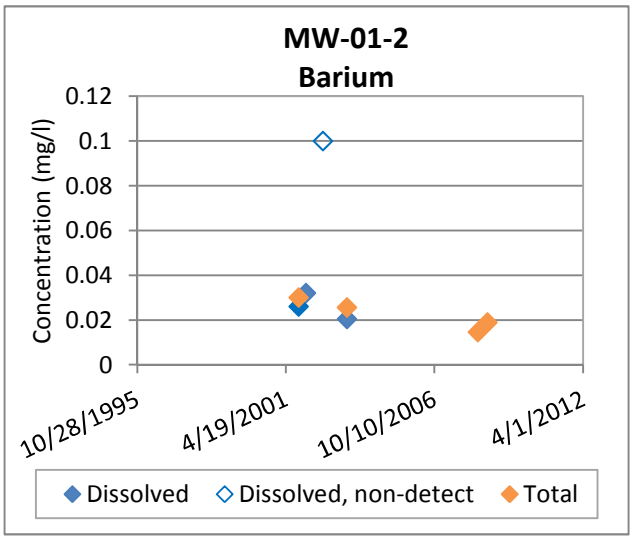


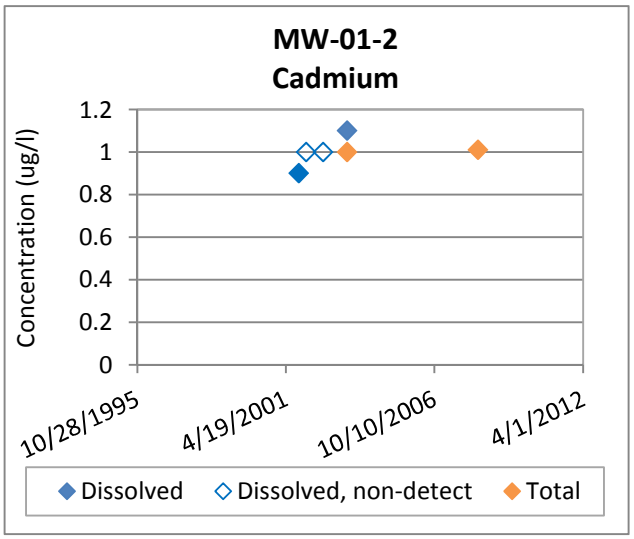


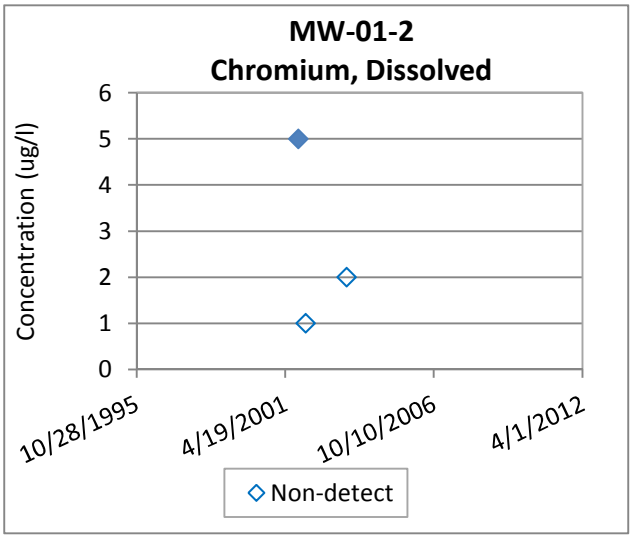


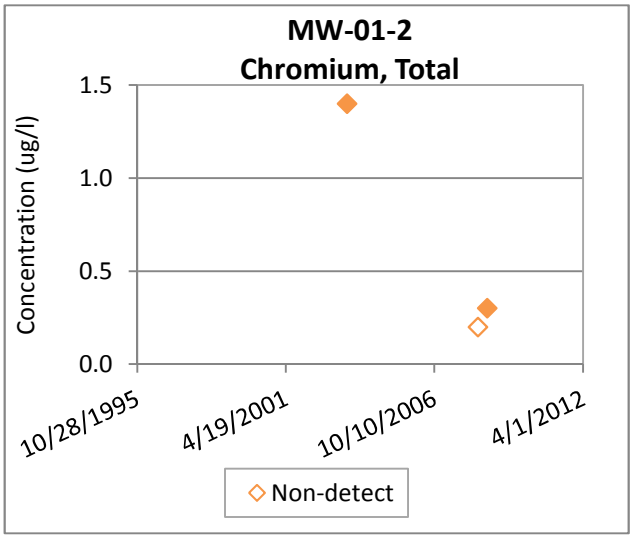


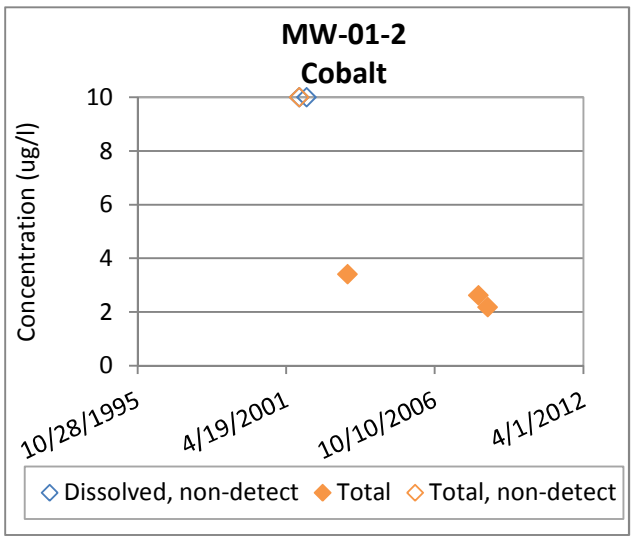
Time Series Plots - MW-01-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

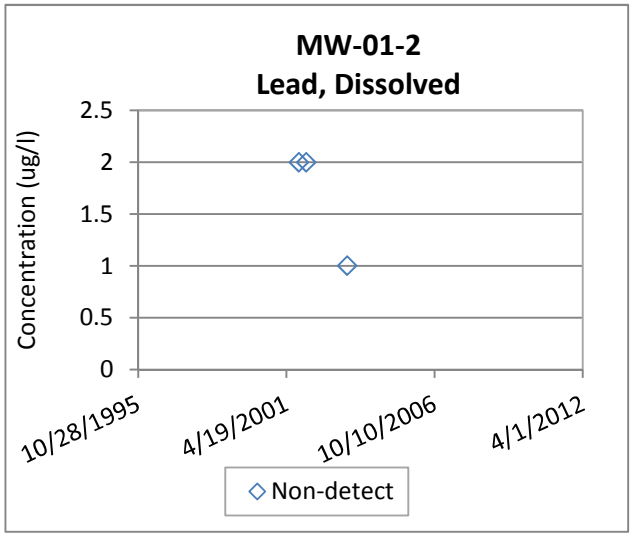




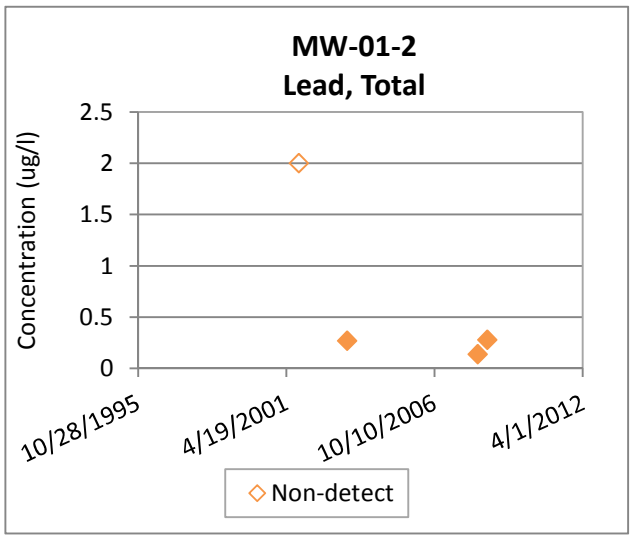


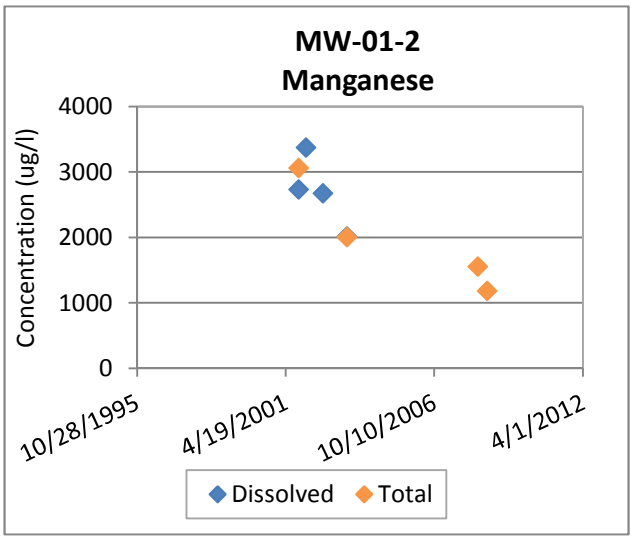


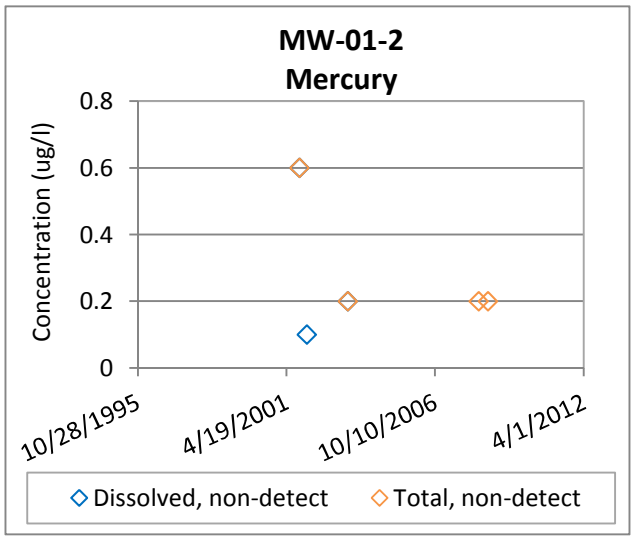


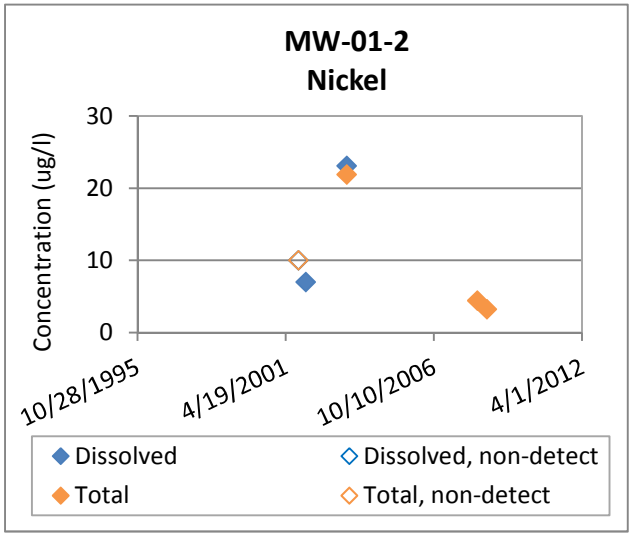


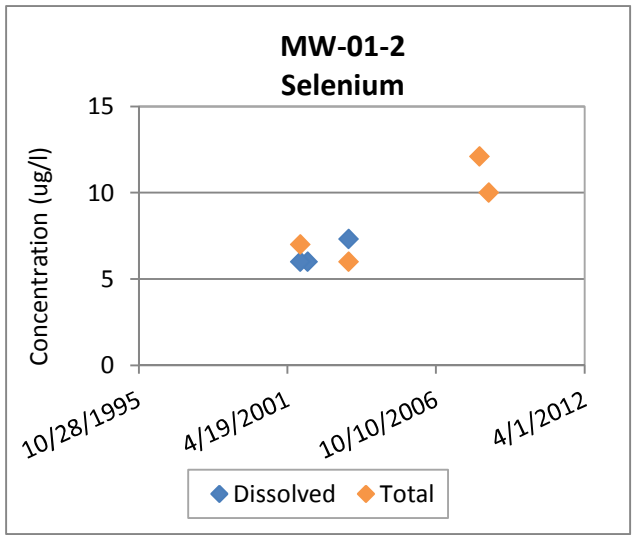
Time Series Plots - MW-01-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

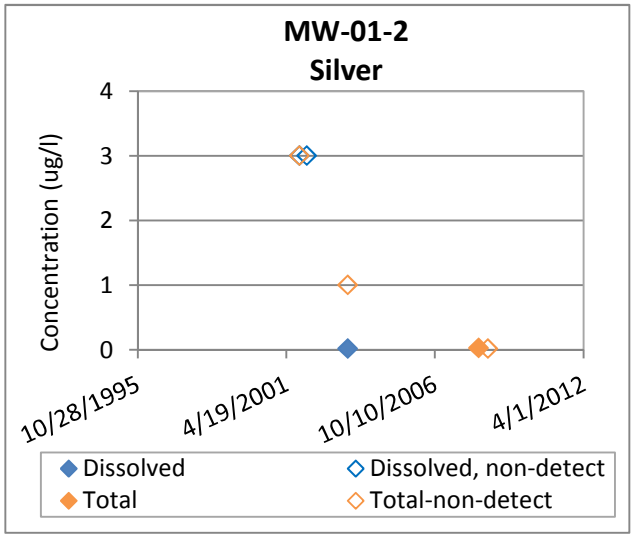




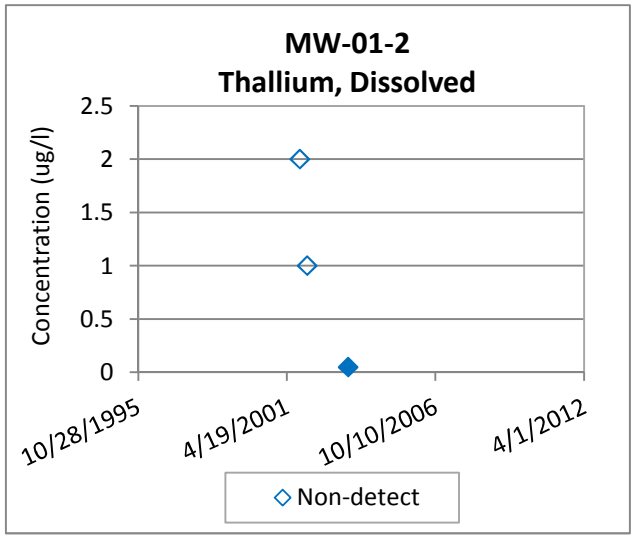


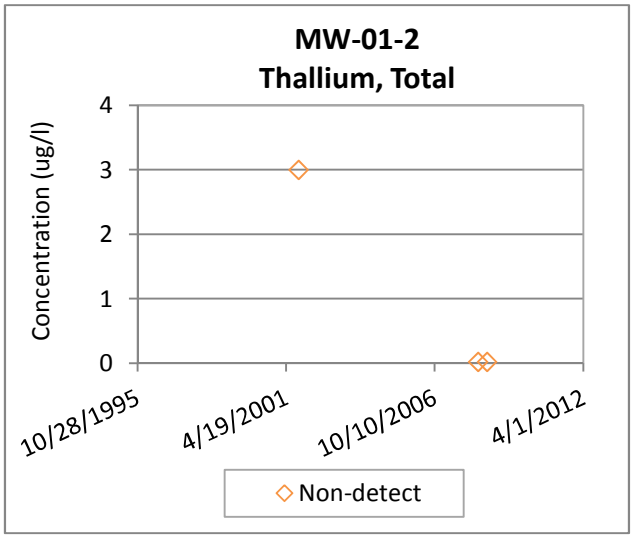


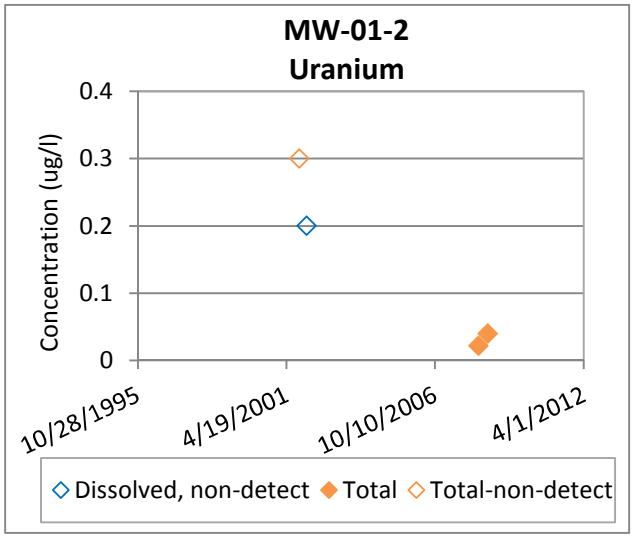




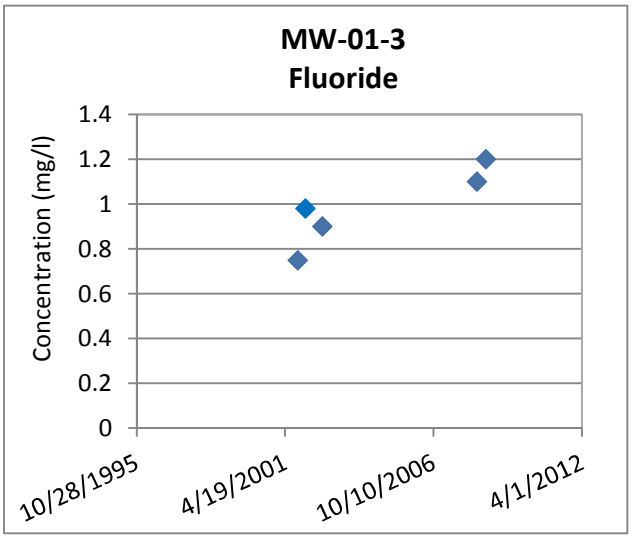
Time Series Plots - MW-01-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

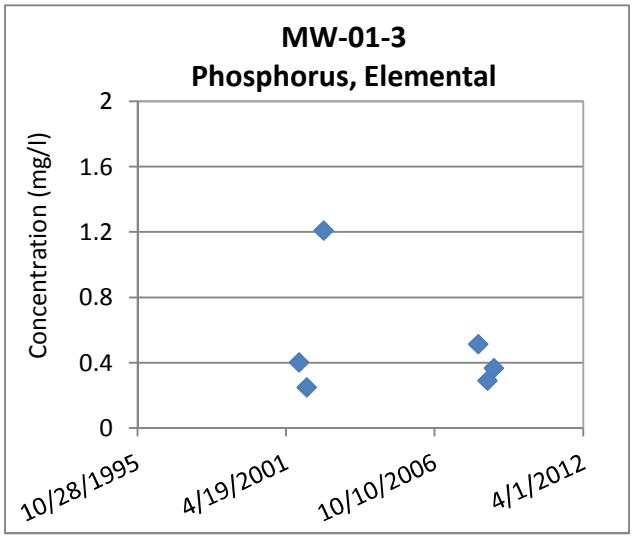


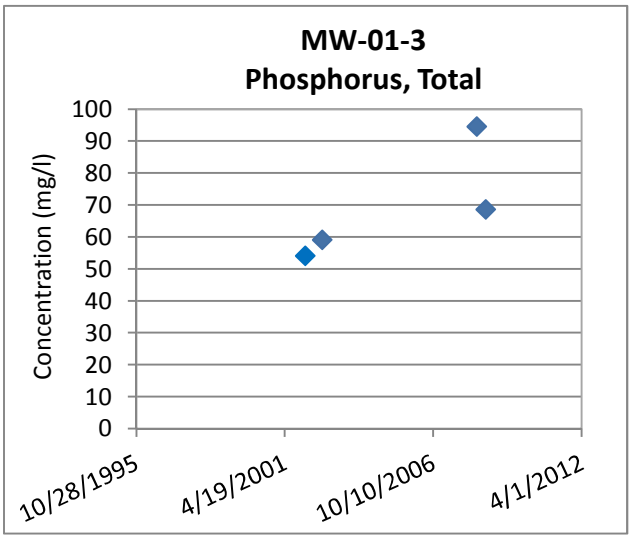


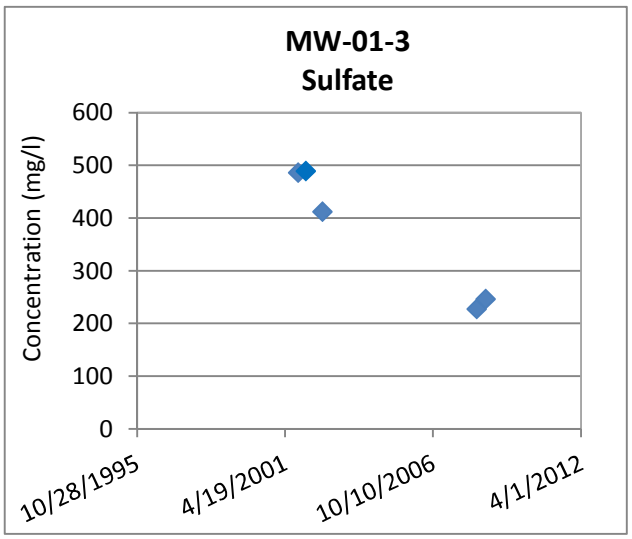


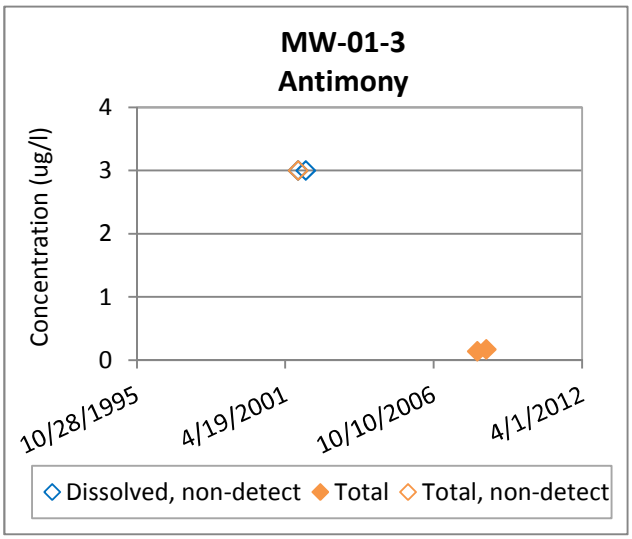
Time Series Plots - MW-01-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

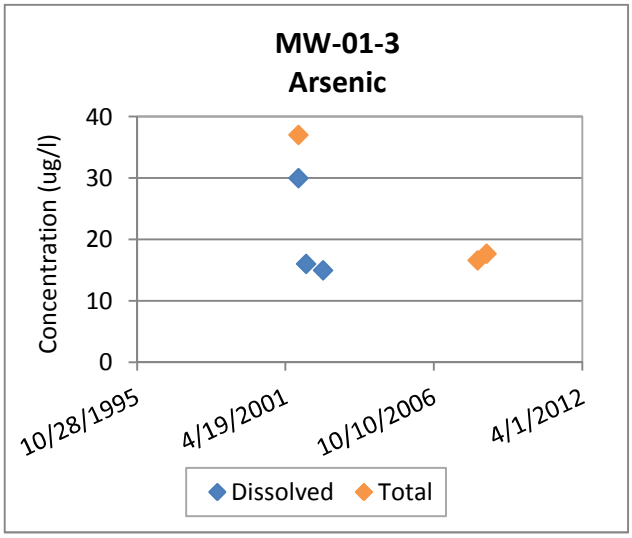




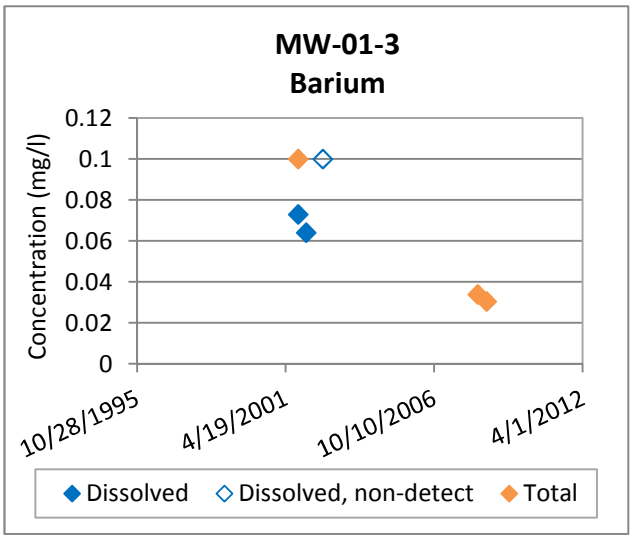


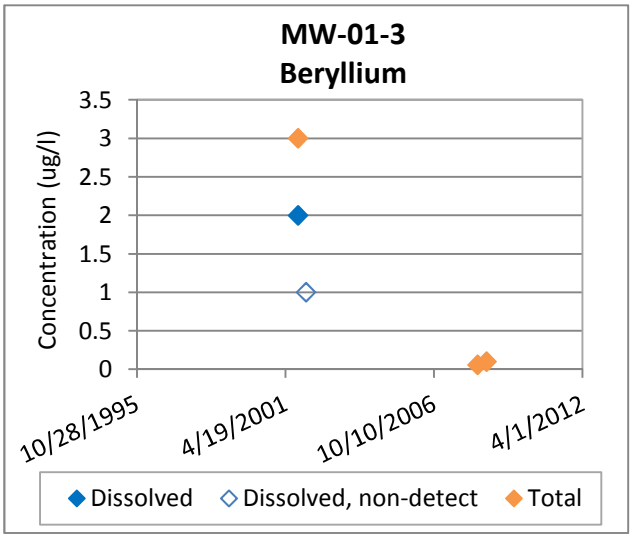


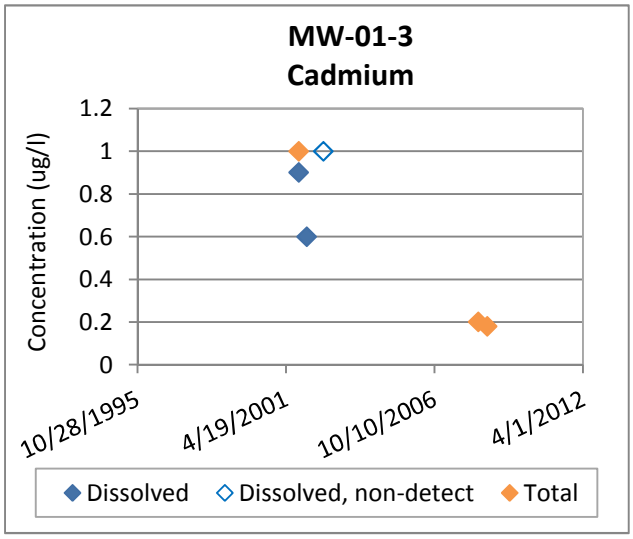


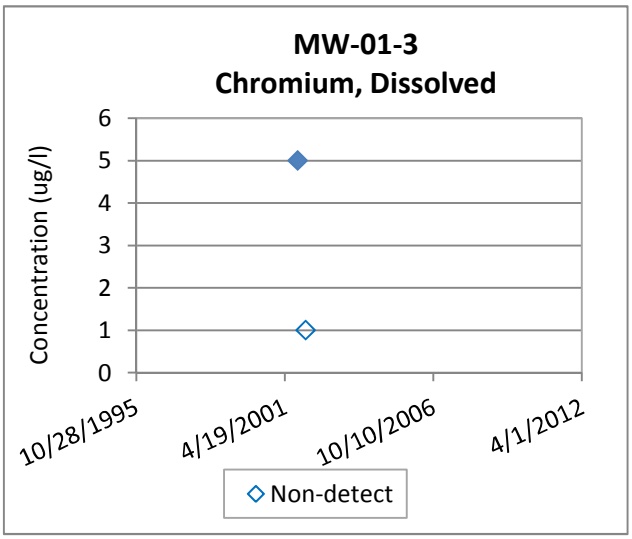


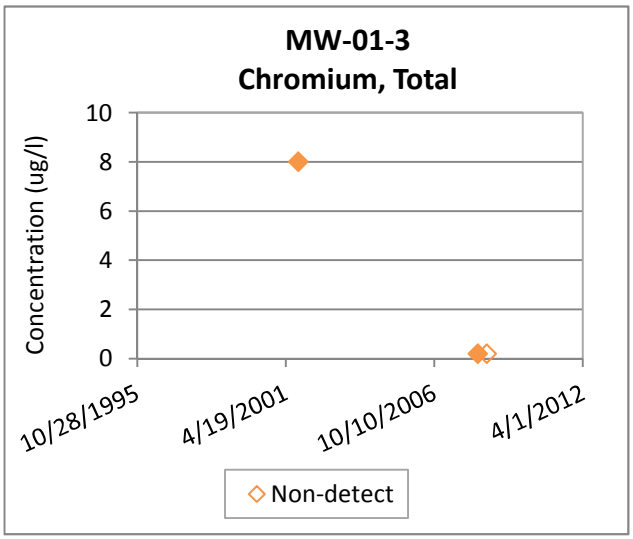
Time Series Plots - MW-01-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

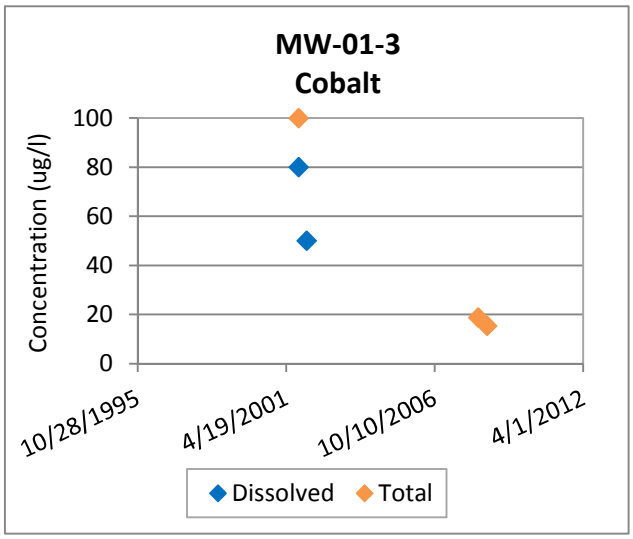




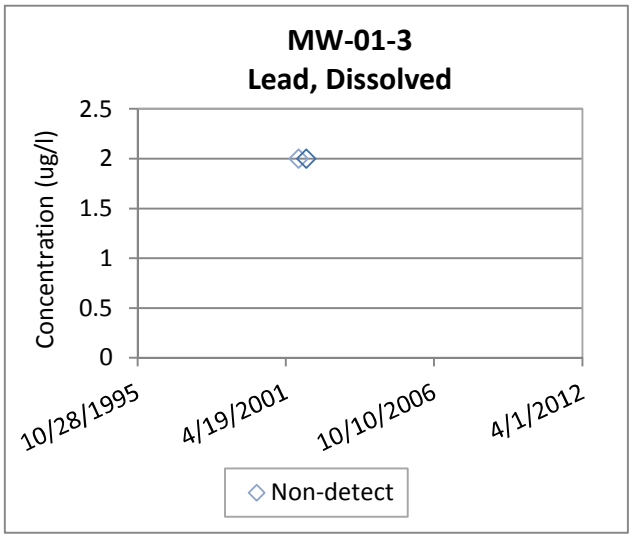


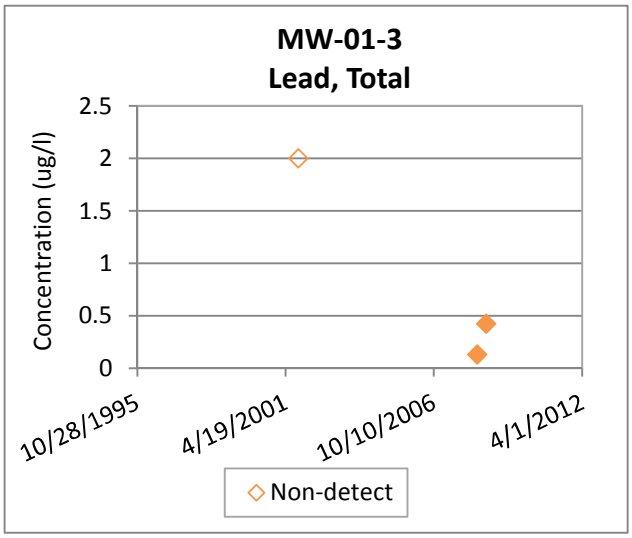


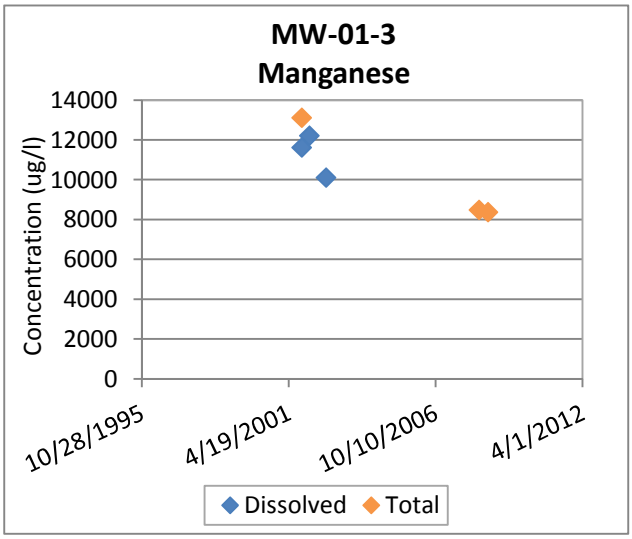


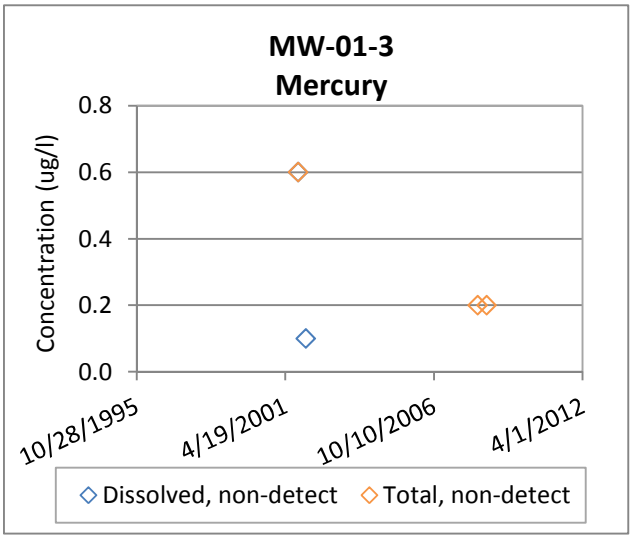


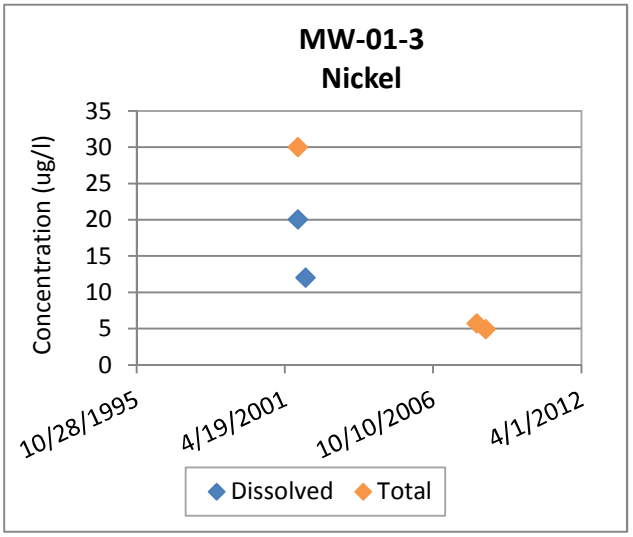
Time Series Plots - MW-01-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

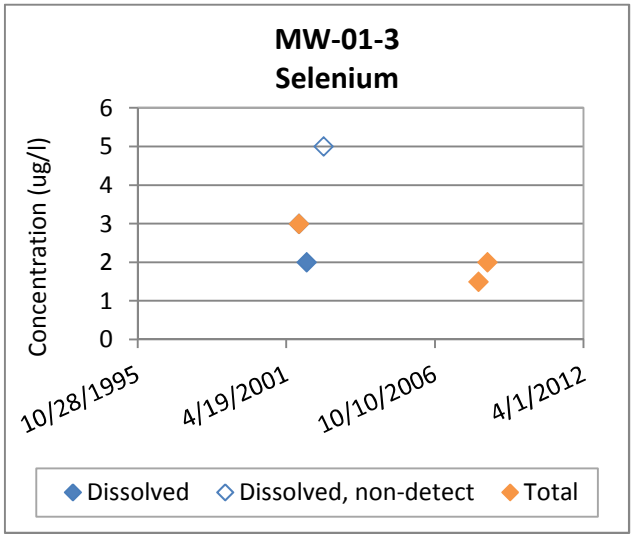




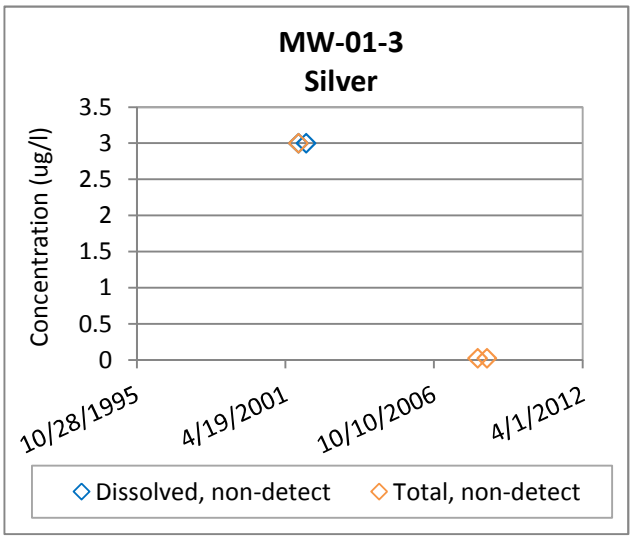


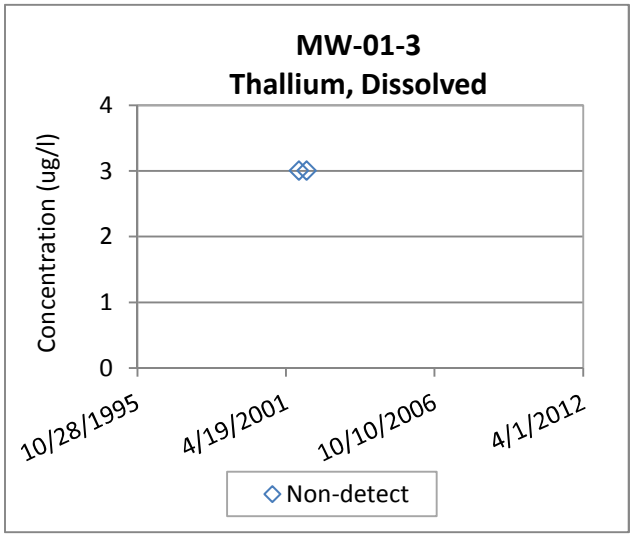


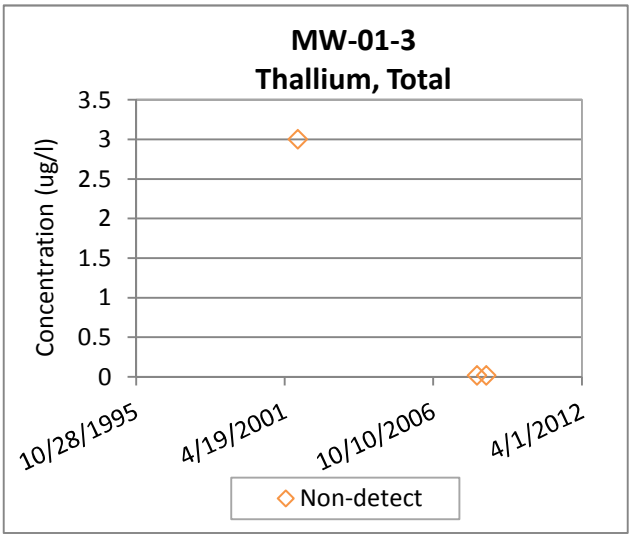


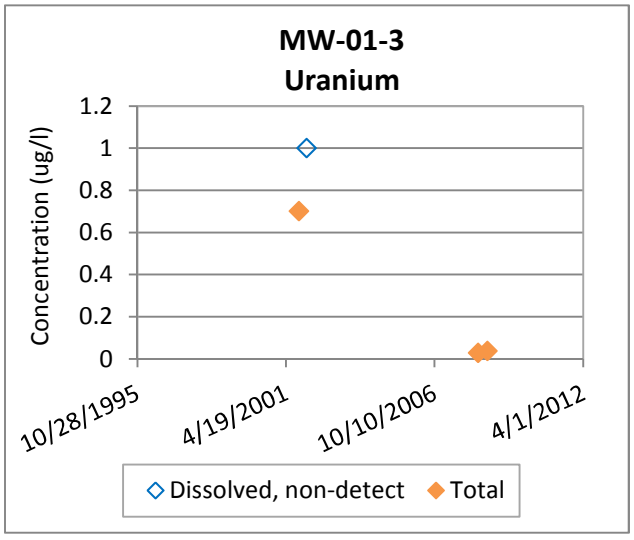


Time Series Plots - MW-01-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

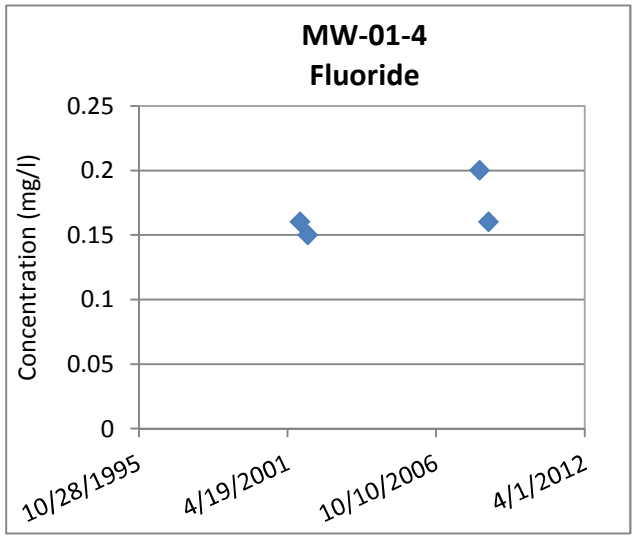


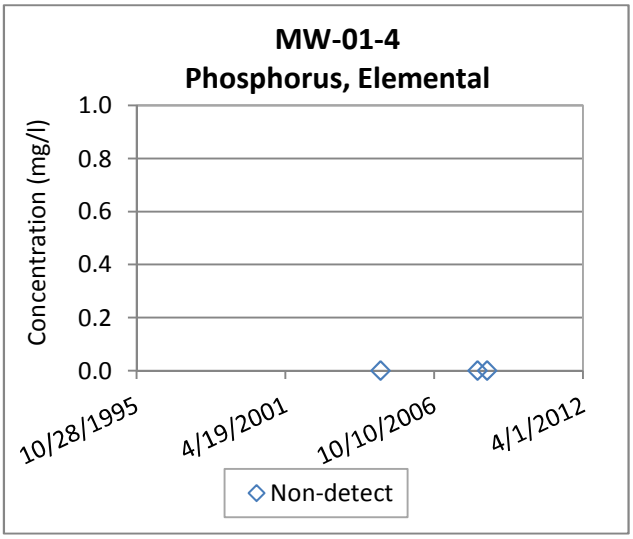


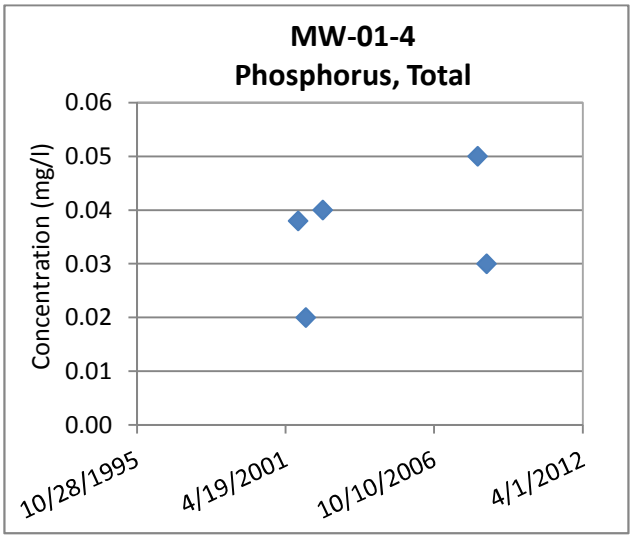


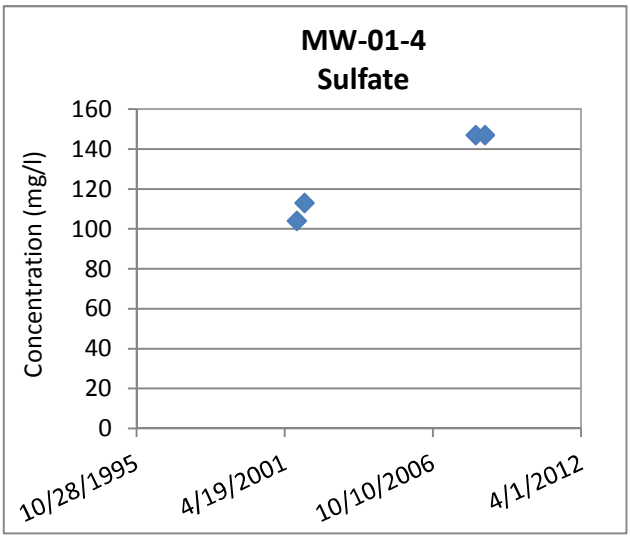


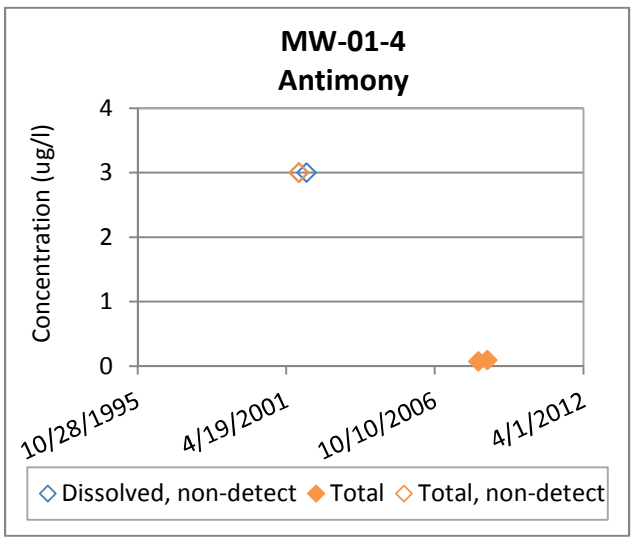
Time Series Plots - MW-01-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

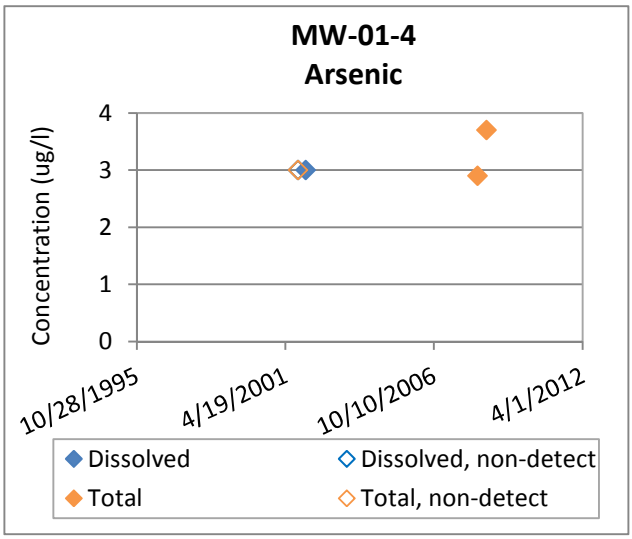




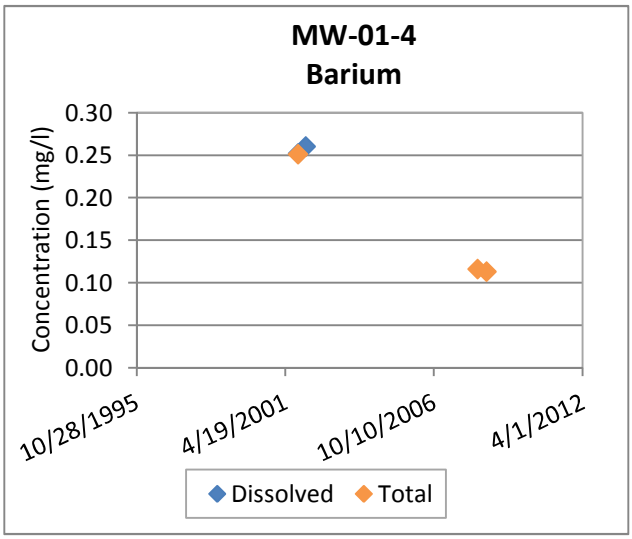


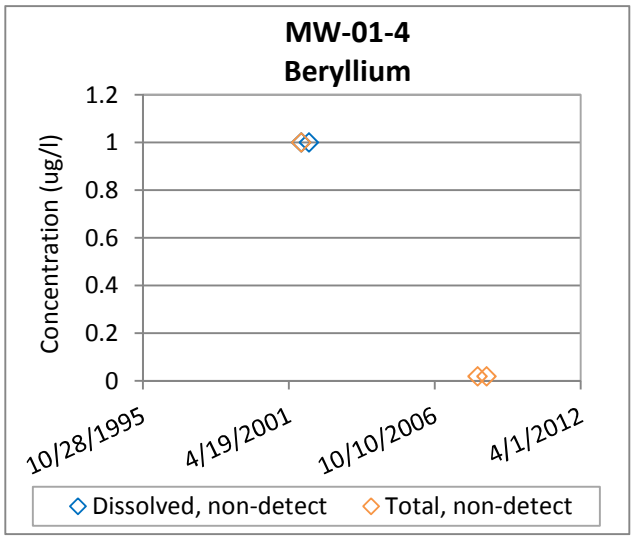


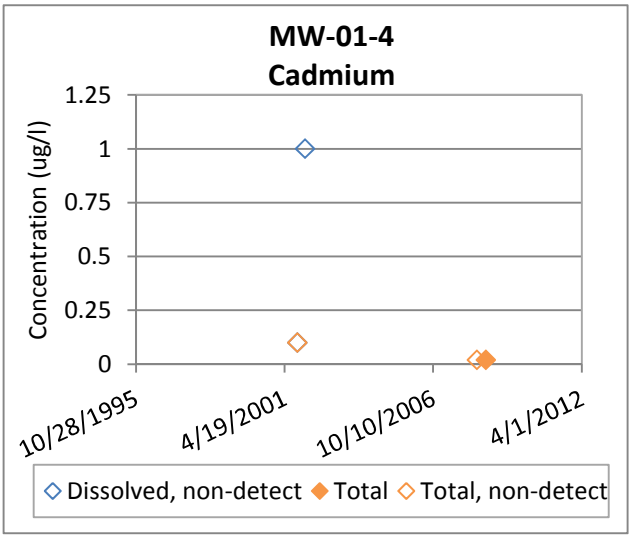


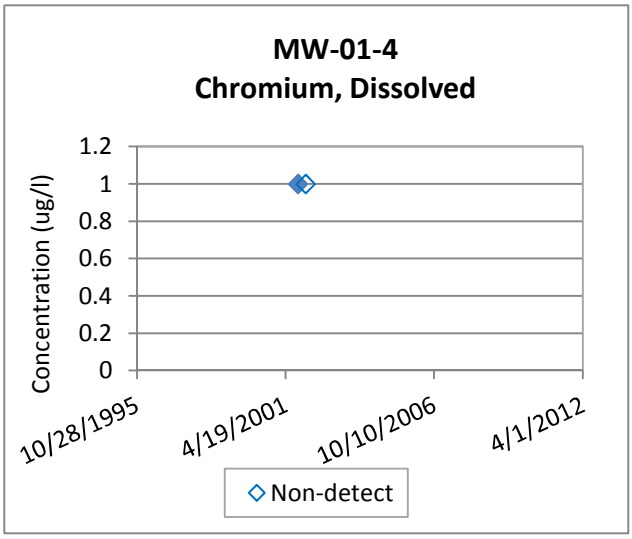


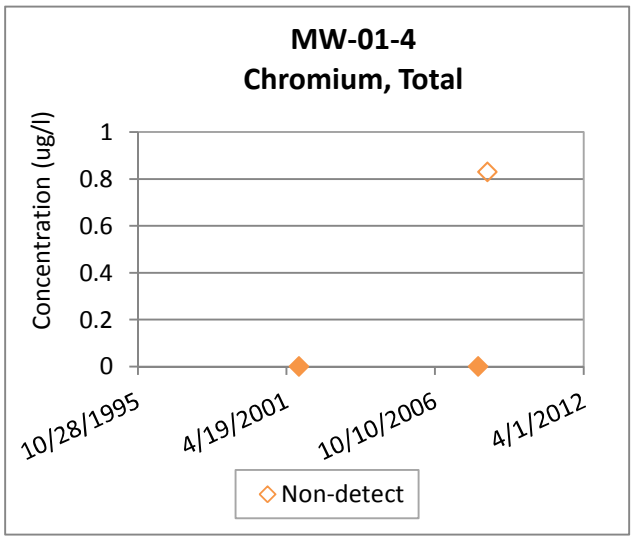
Time Series Plots - MW-01-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

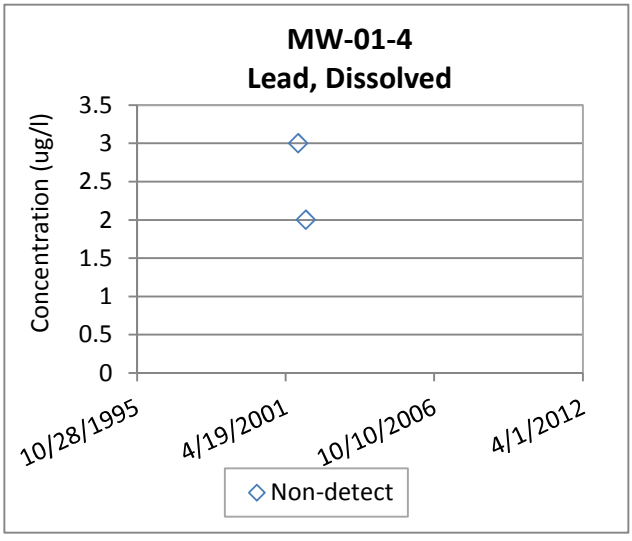




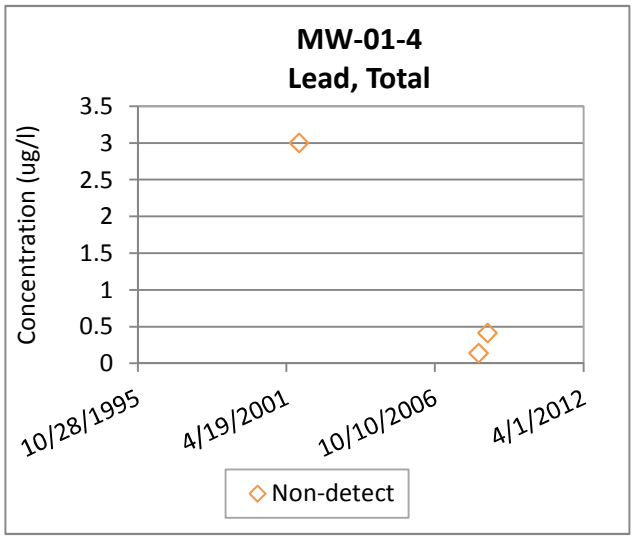


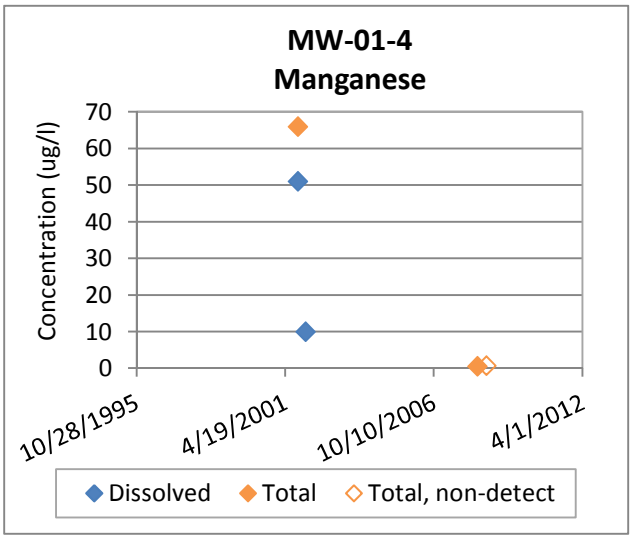


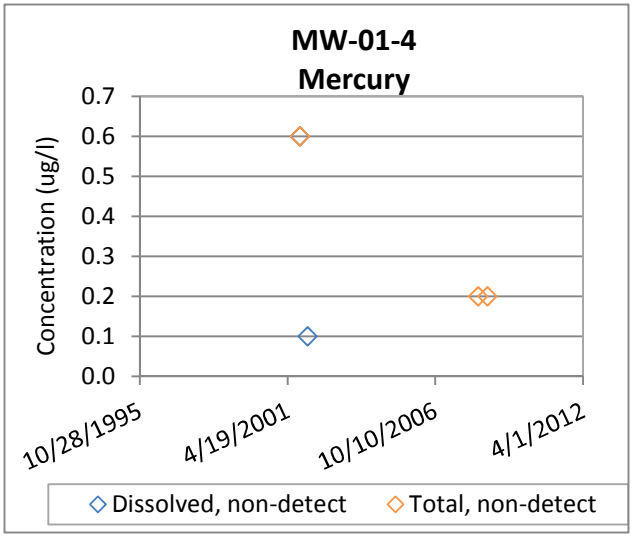


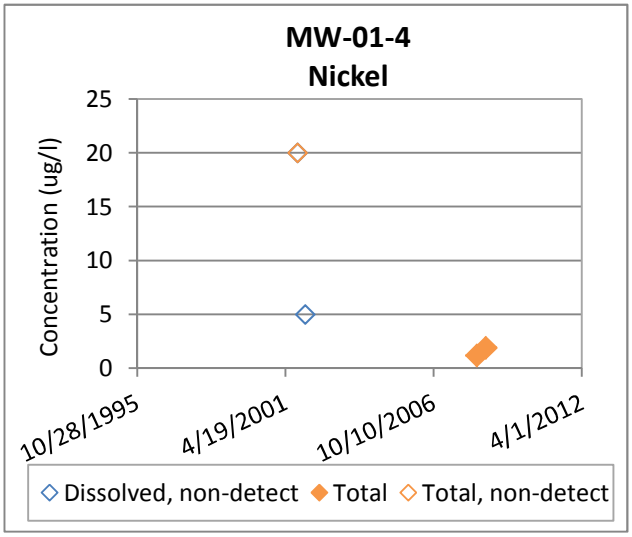


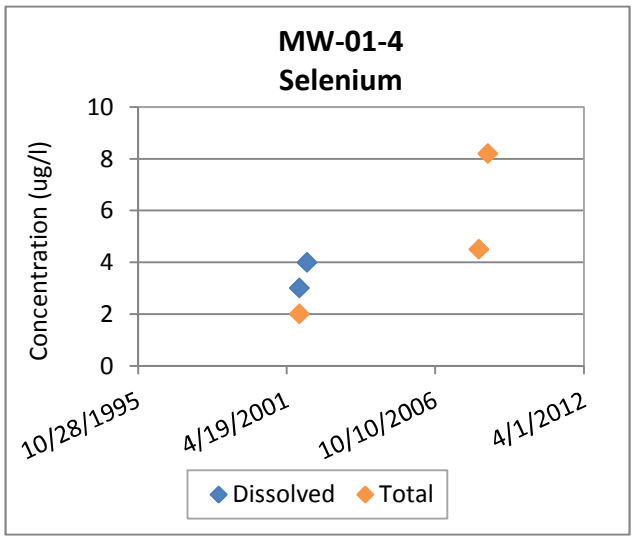
Time Series Plots - MW-01-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

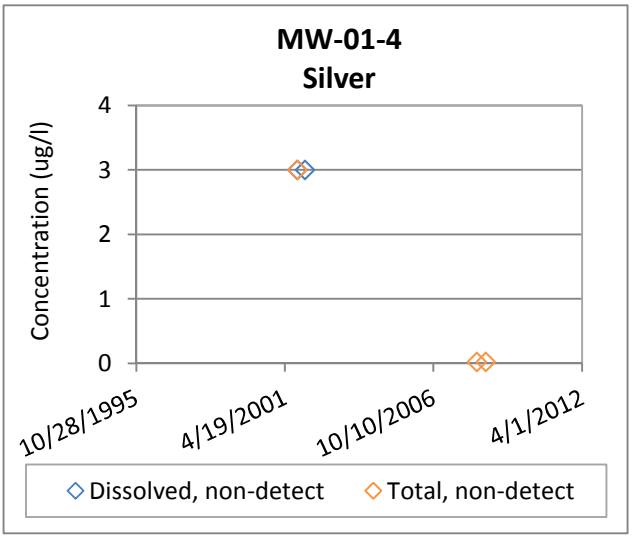






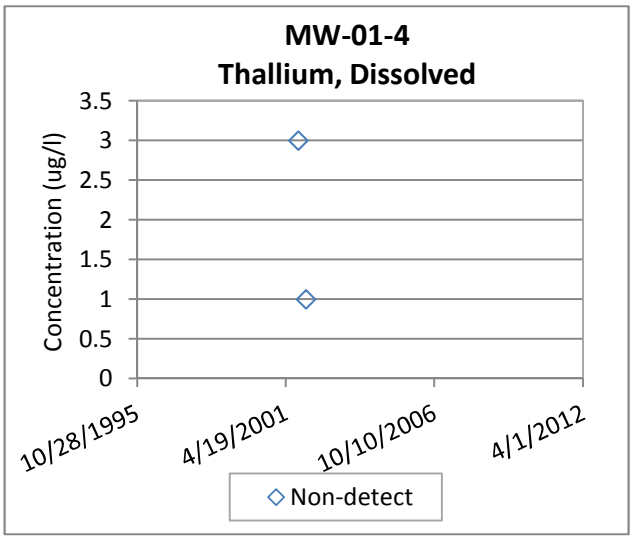


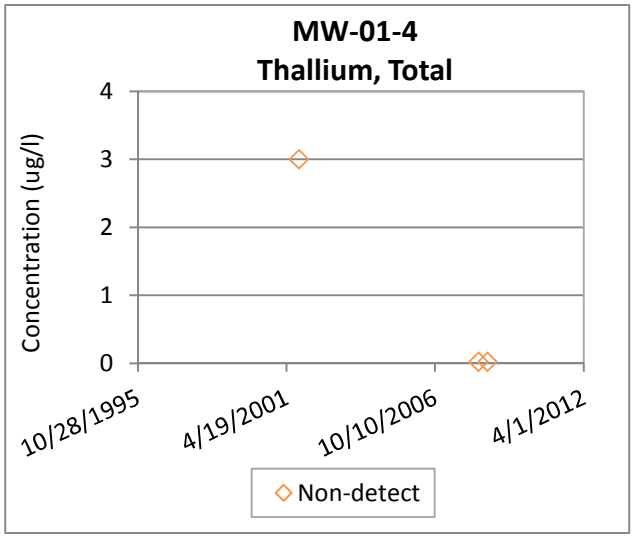


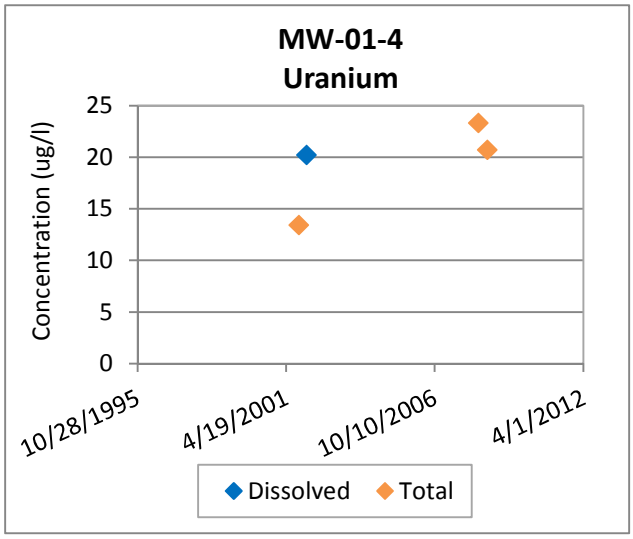


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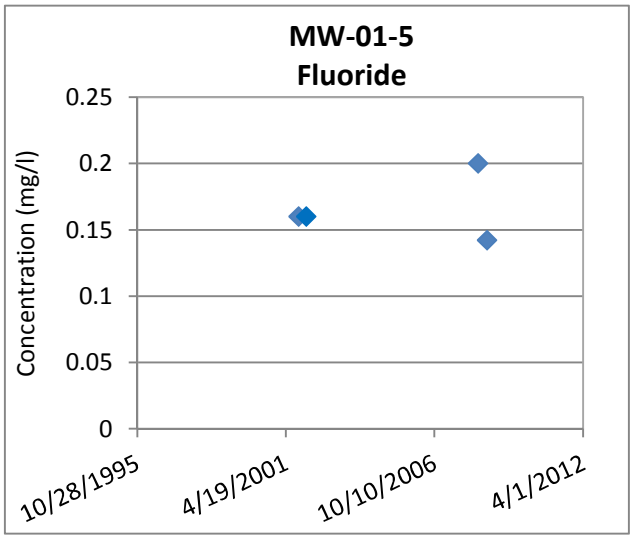
Time Series Plots - MW-01-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

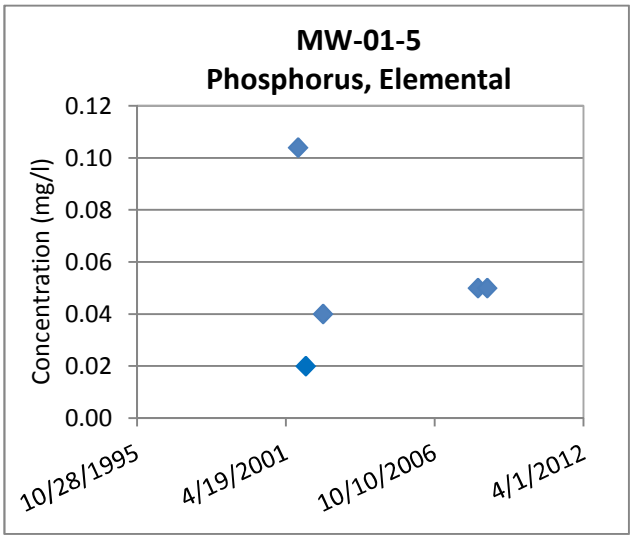


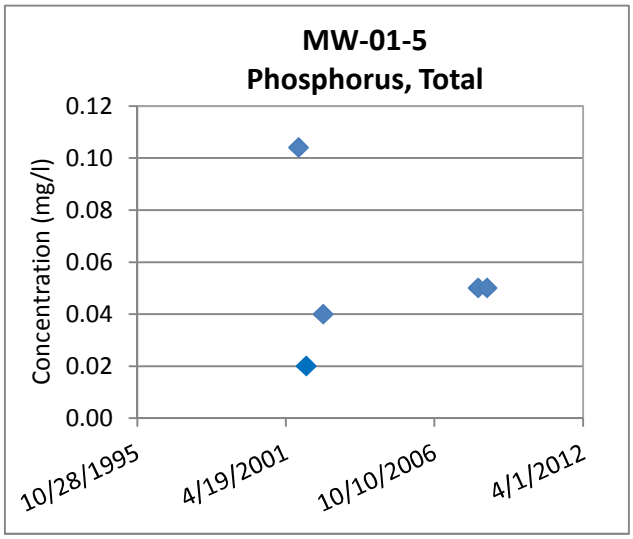


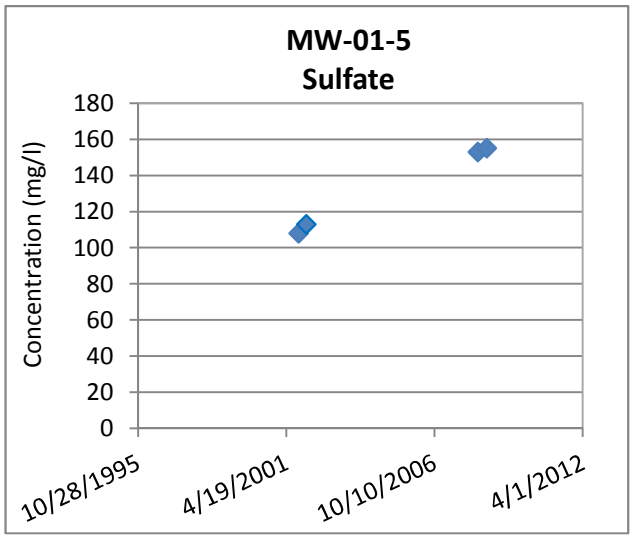


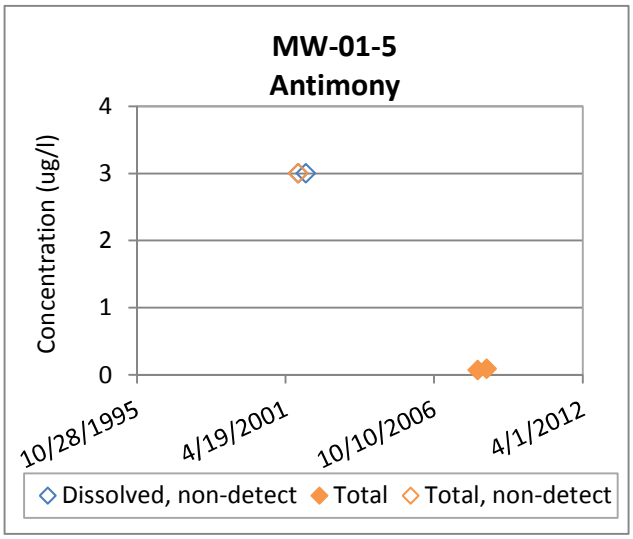
Time Series Plots - MW-01-5
Groundwater Quality TIme Series for Selected Locations
Rhodia Silver Bow Plant

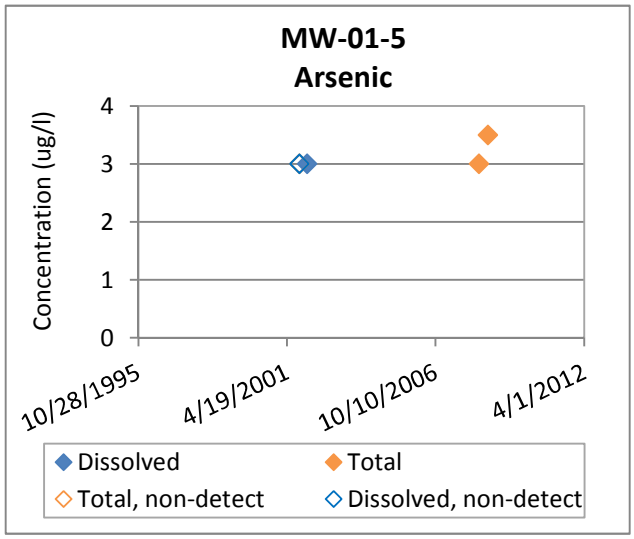




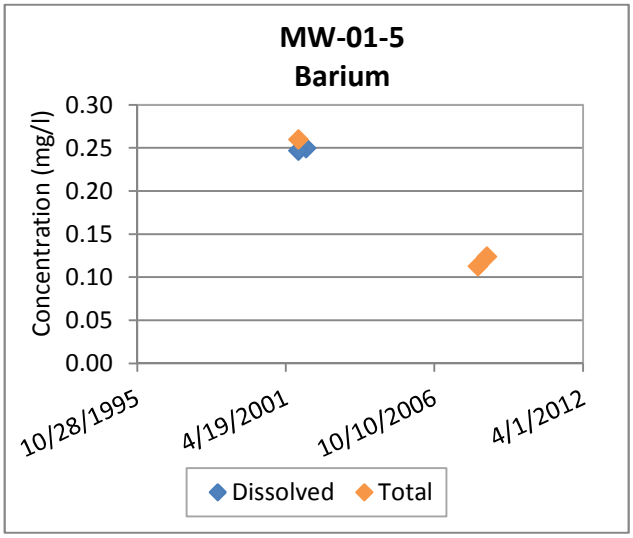


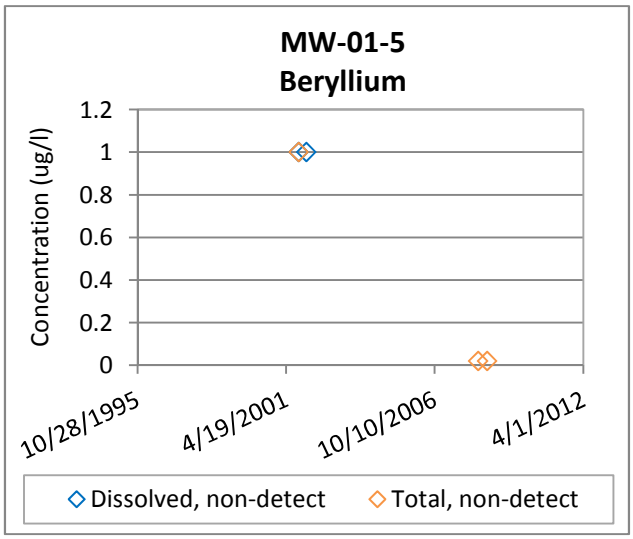


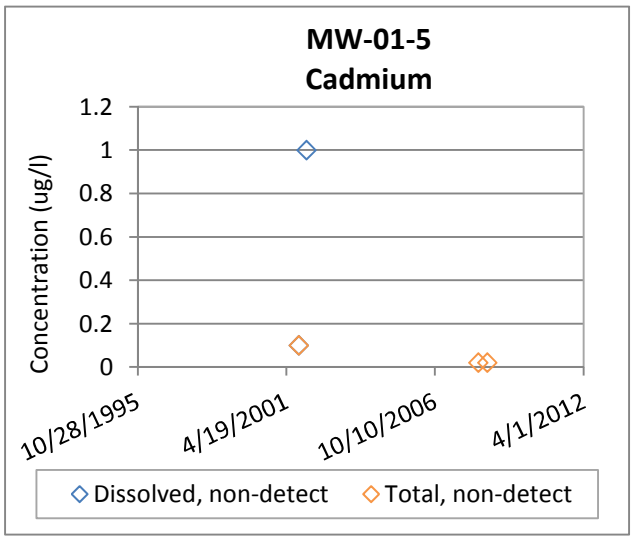


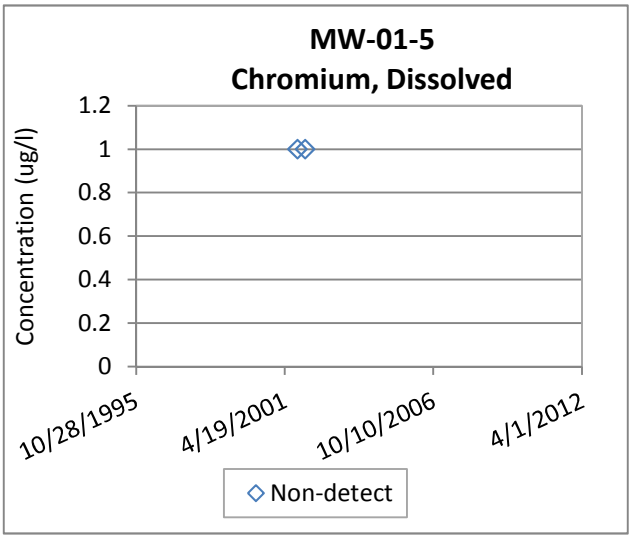


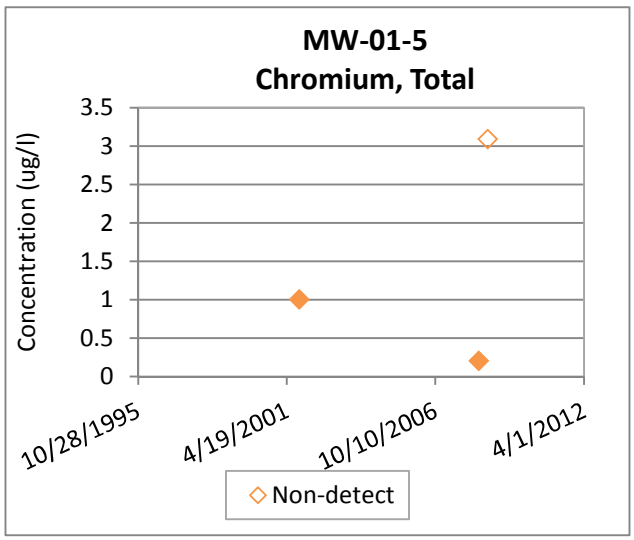
Time Series Plots - MW-01-5
Groundwater Quality TIme Series for Selected Locations
Rhodia Silver Bow Plant

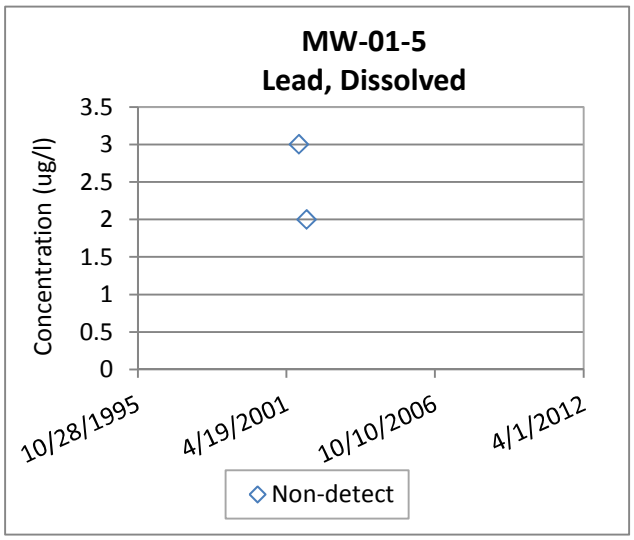




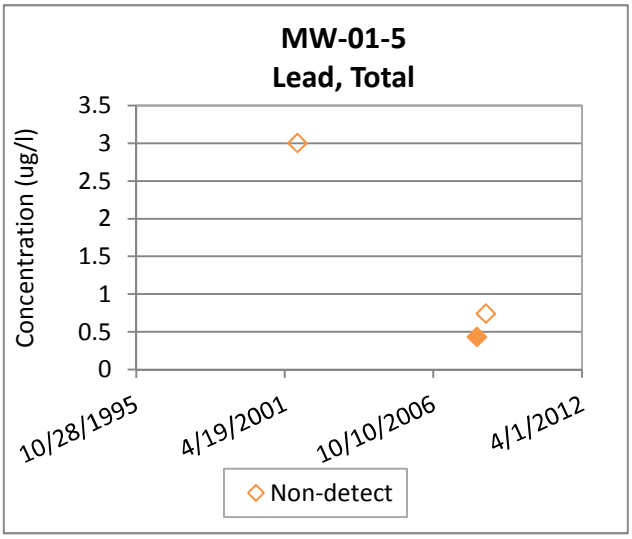


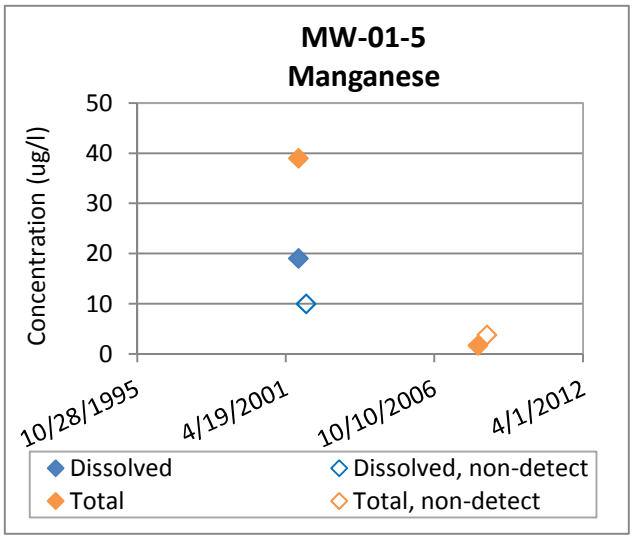


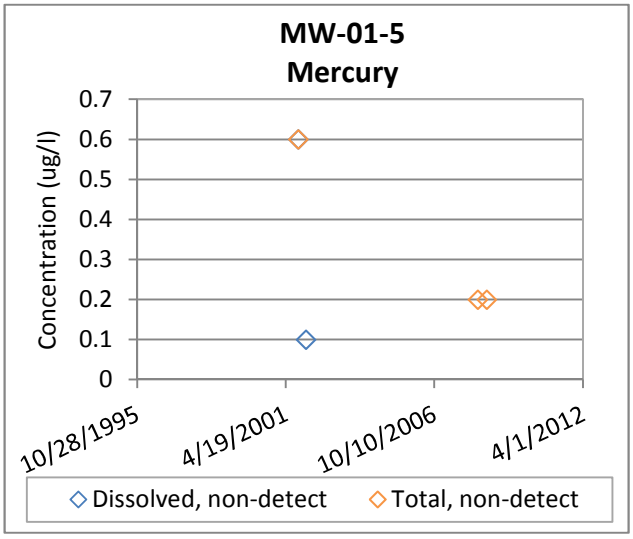


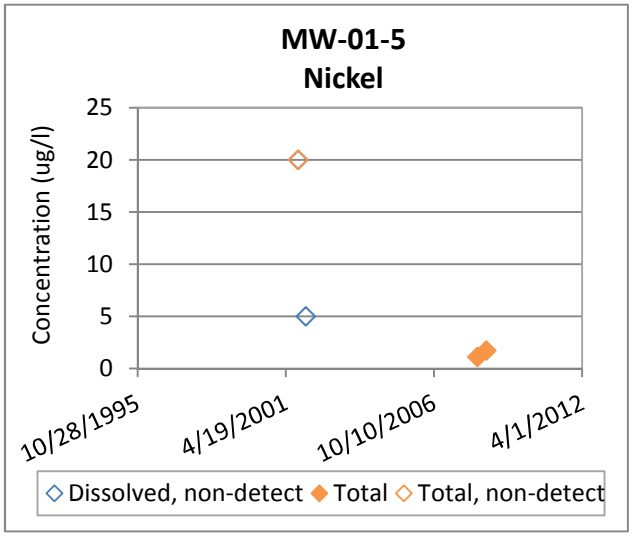


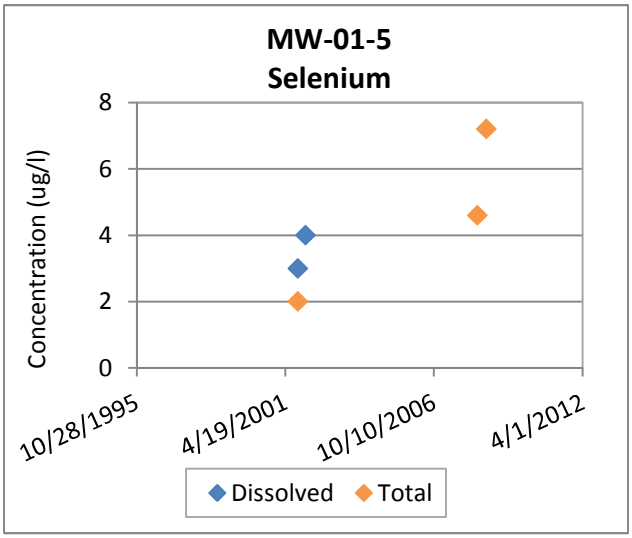
Time Series Plots - MW-01-5
Groundwater Quality TIme Series for Selected Locations
Rhodia Silver Bow Plant

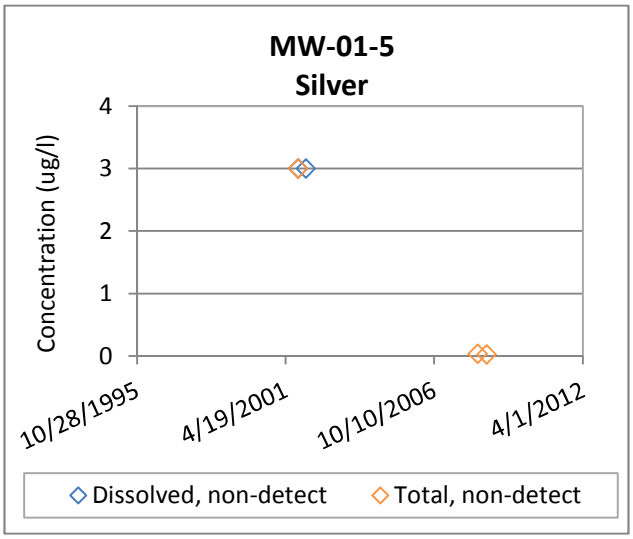




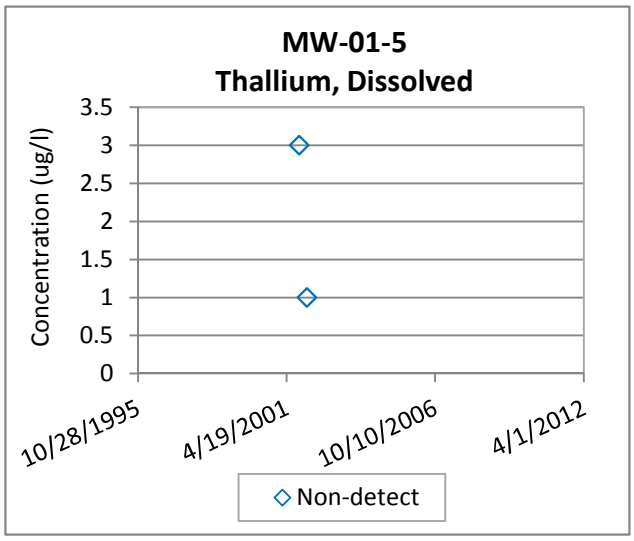


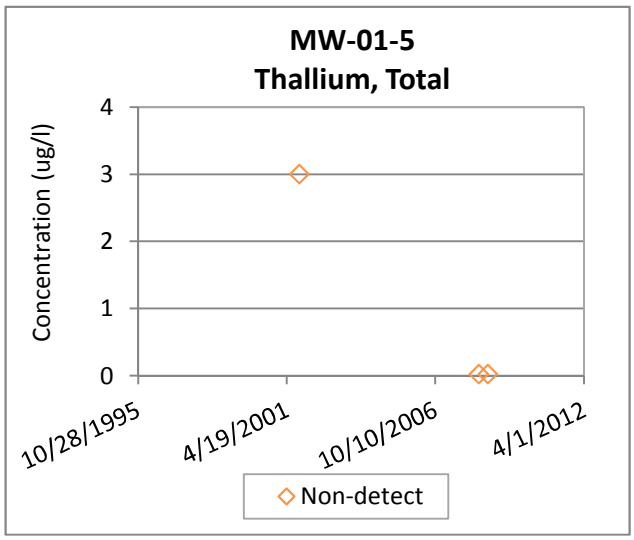


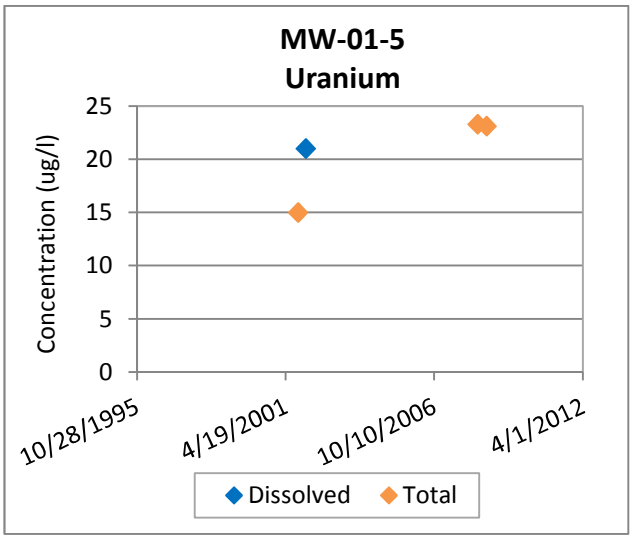




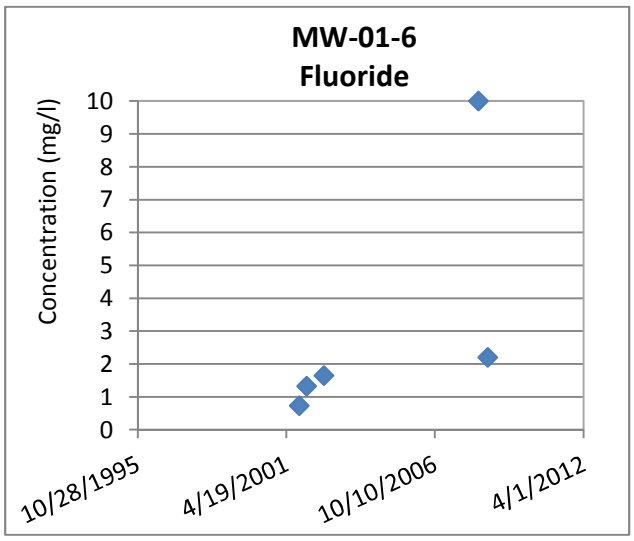
Time Series Plots - MW-01-5
Groundwater Quality TIme Series for Selected Locations
Rhodia Silver Bow Plant

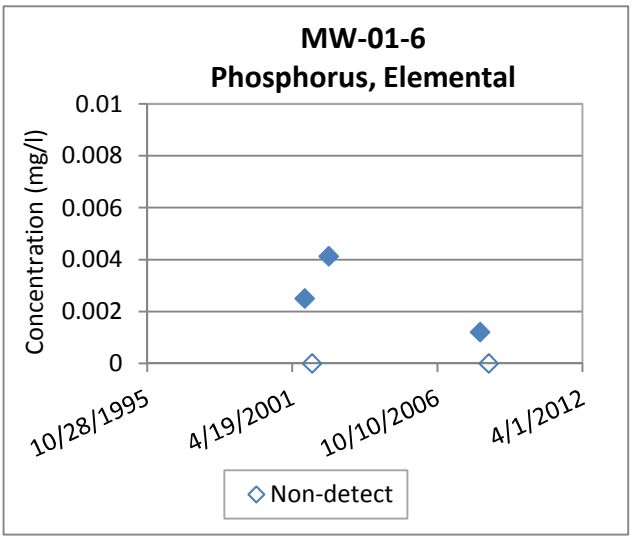


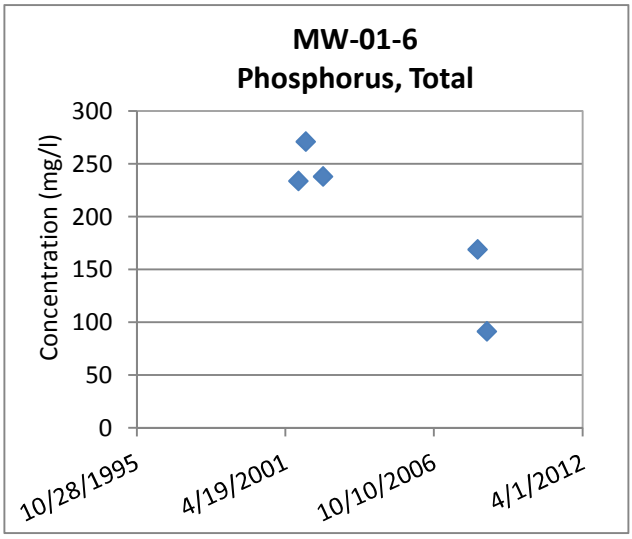


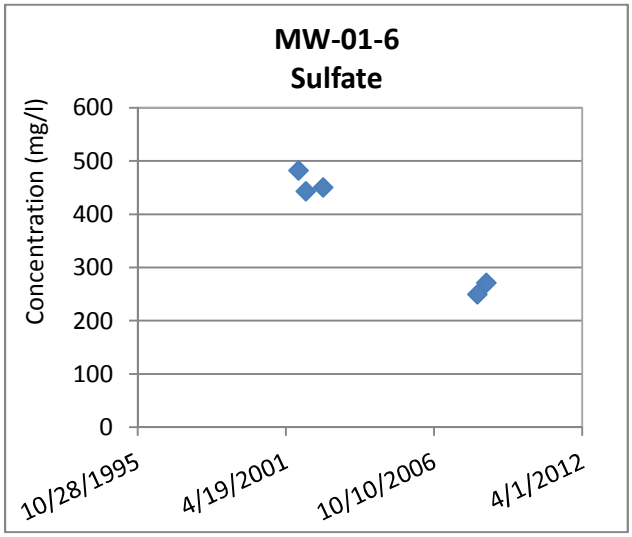


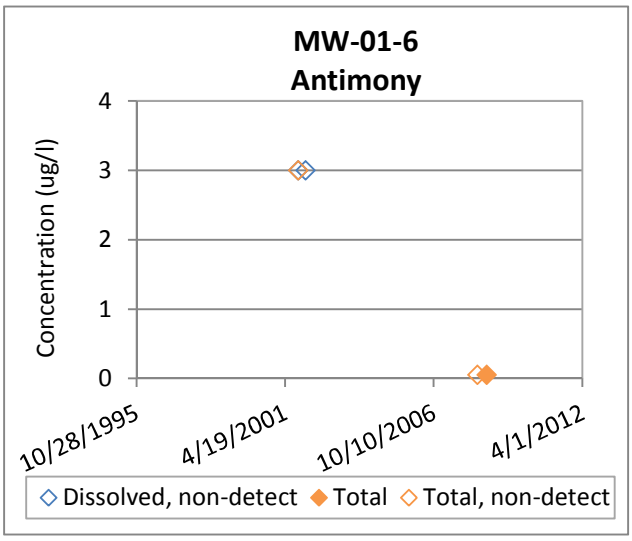
Time Series Plots - MW-01-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

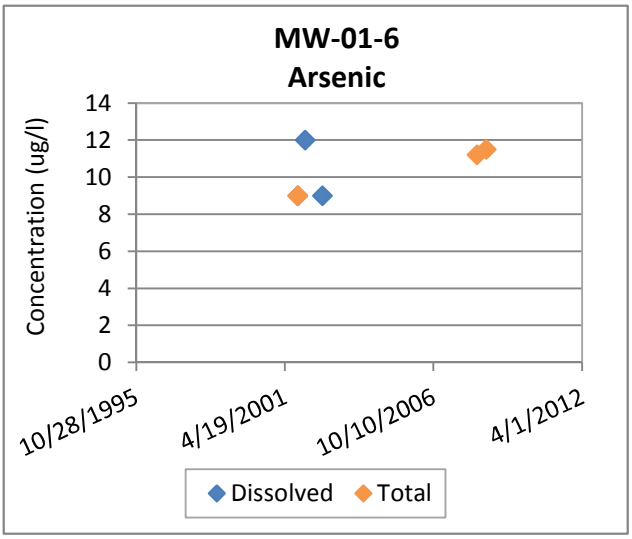






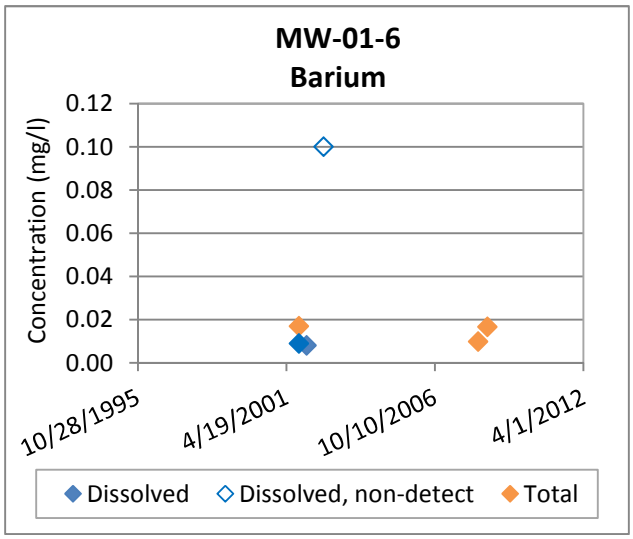


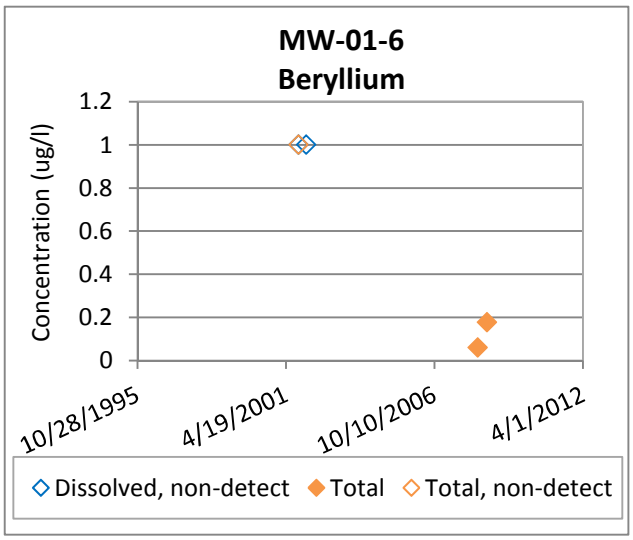


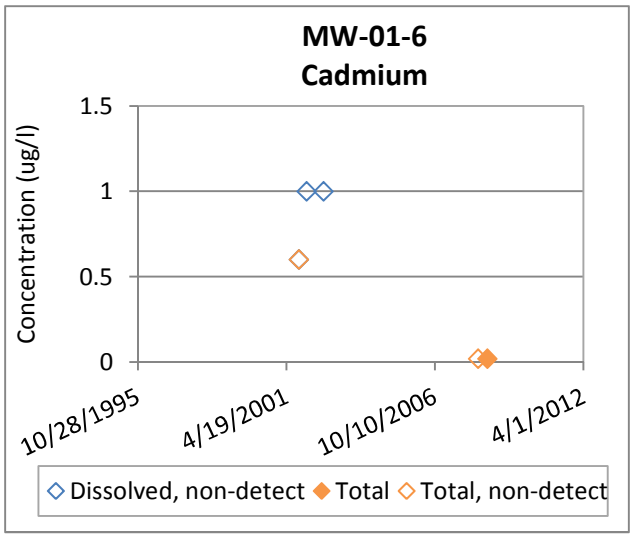


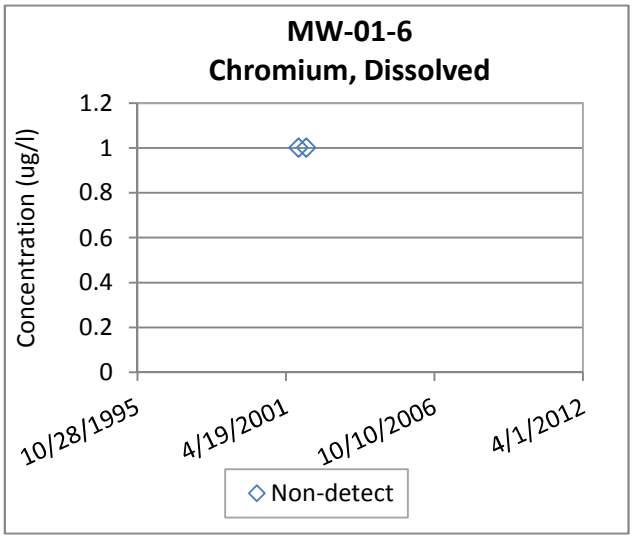
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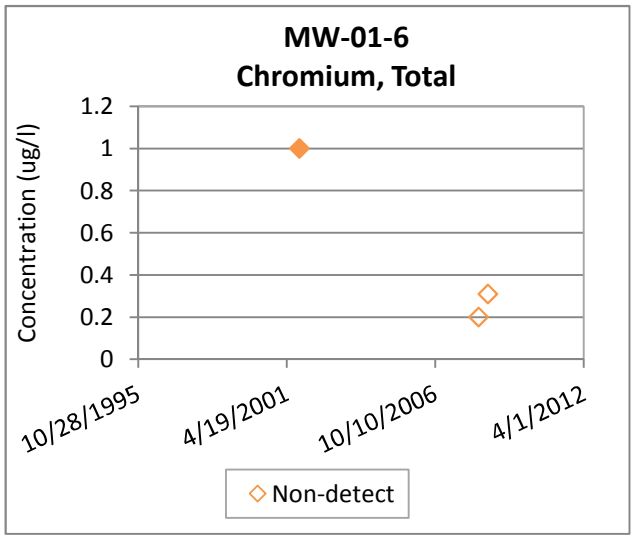
Time Series Plots - MW-01-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

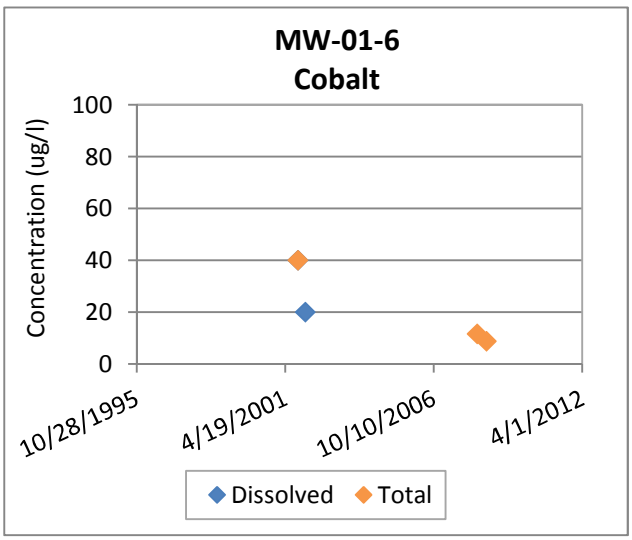




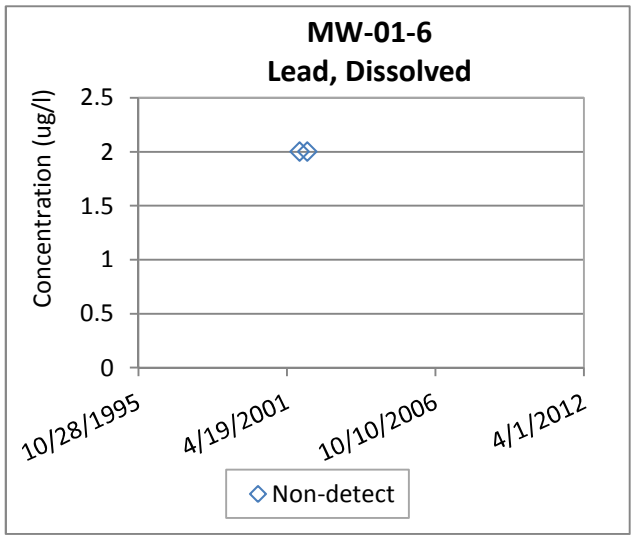


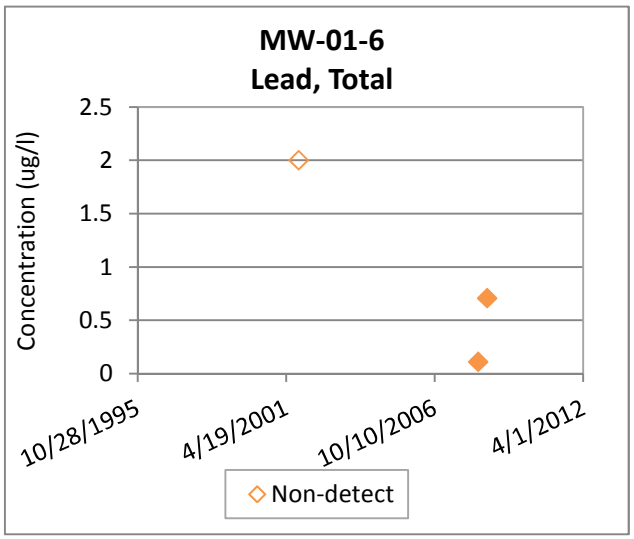


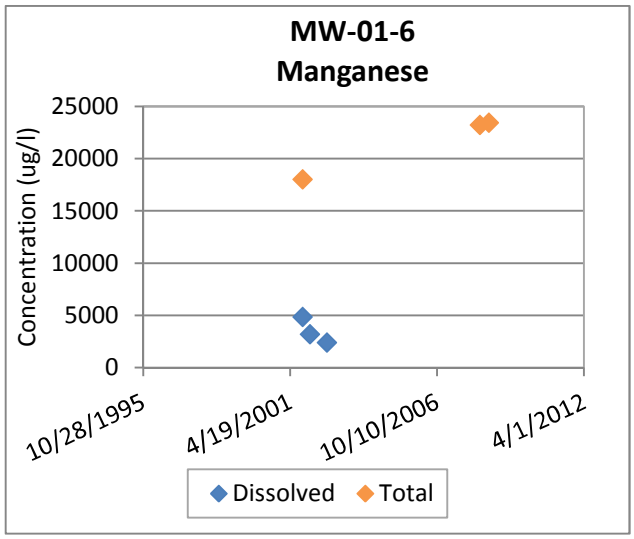


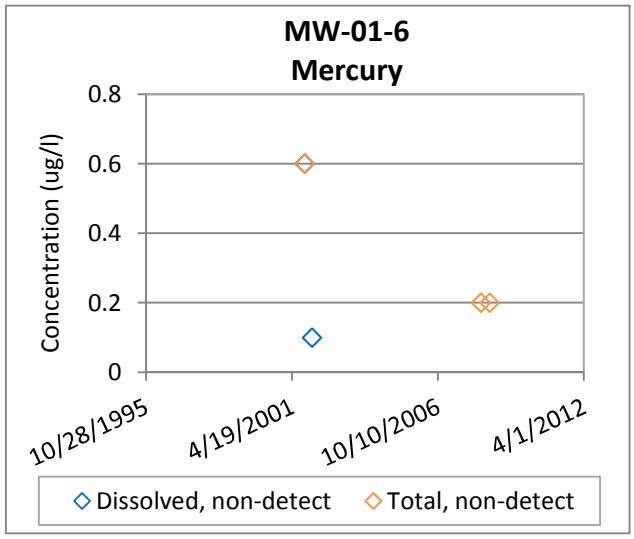


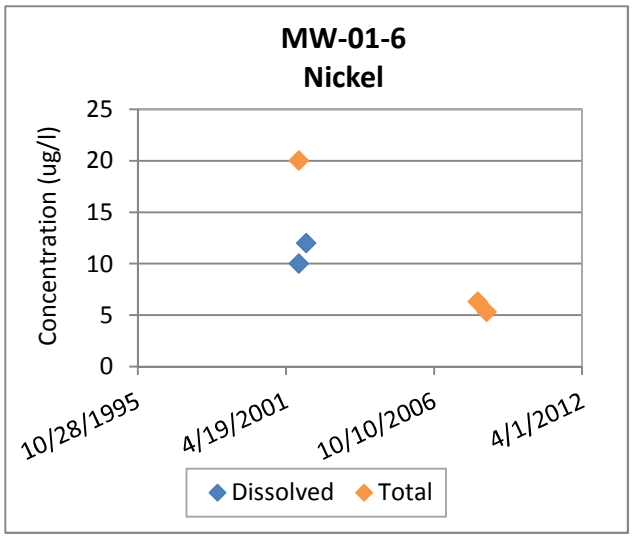
Time Series Plots - MW-01-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

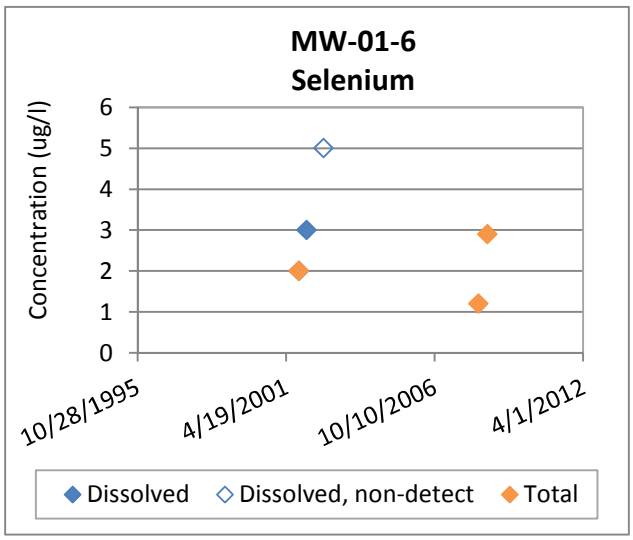




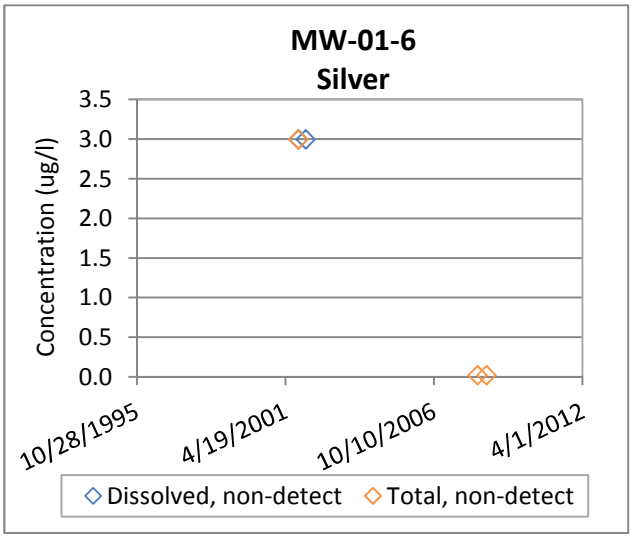


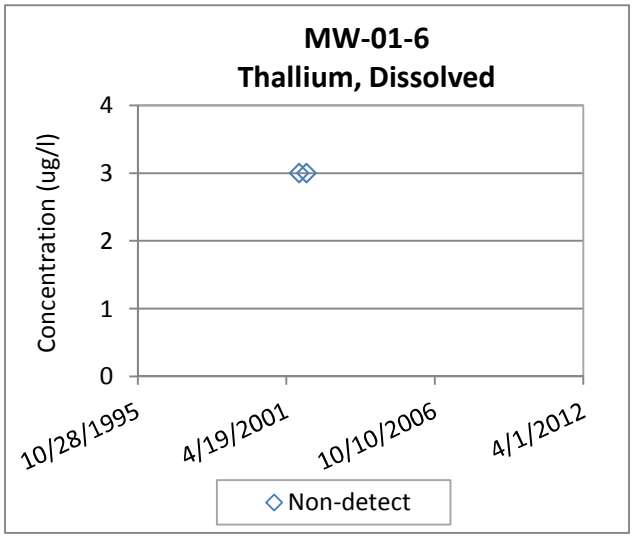


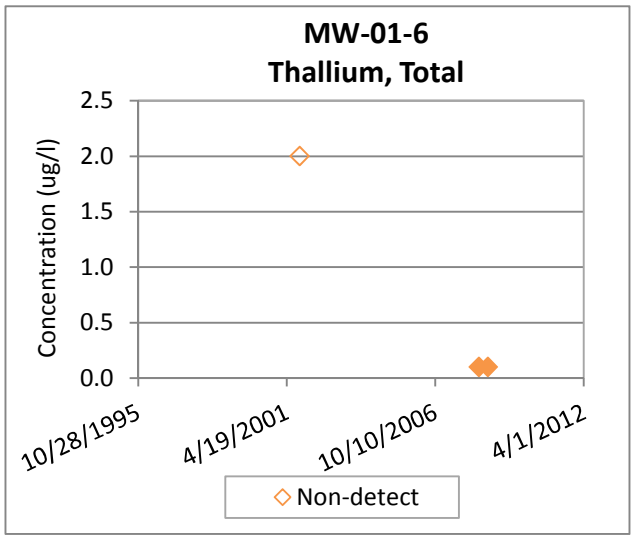


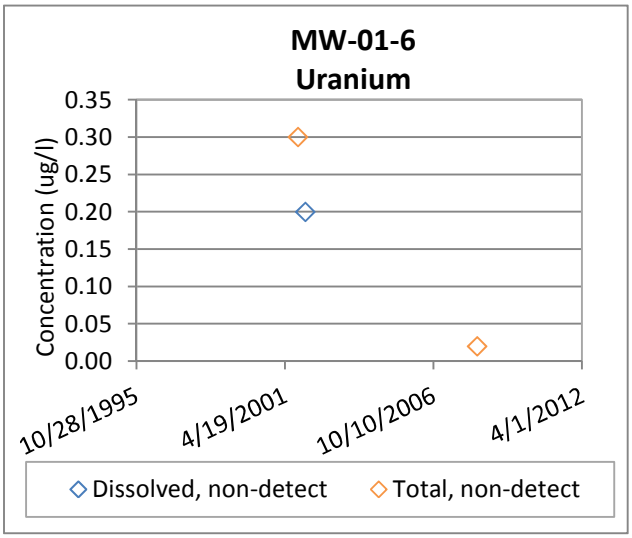


Time Series Plots - MW-01-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

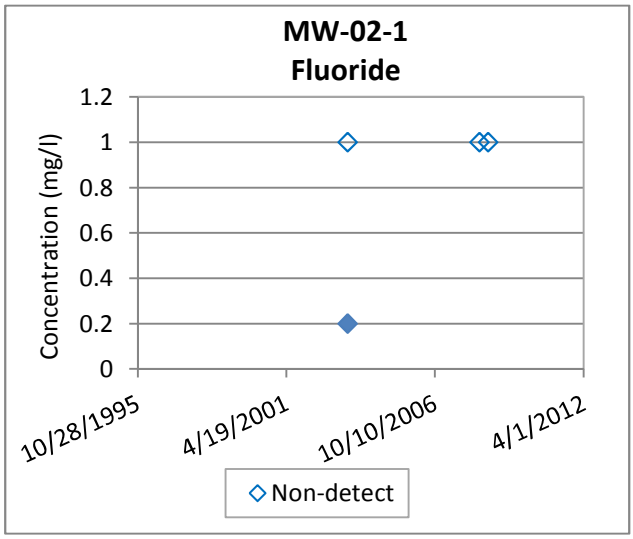


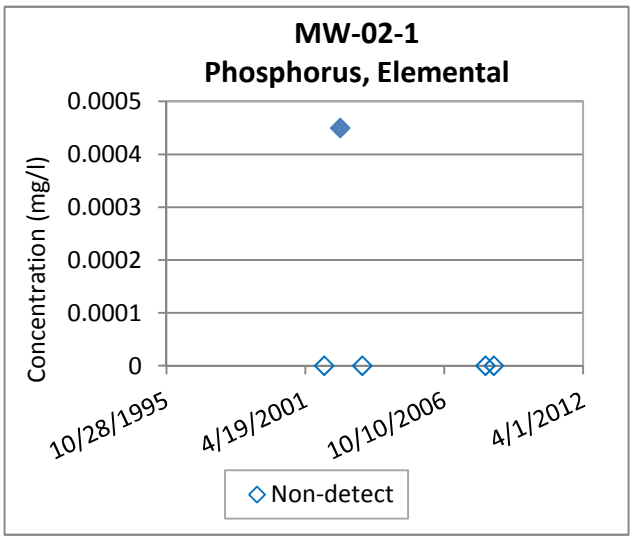


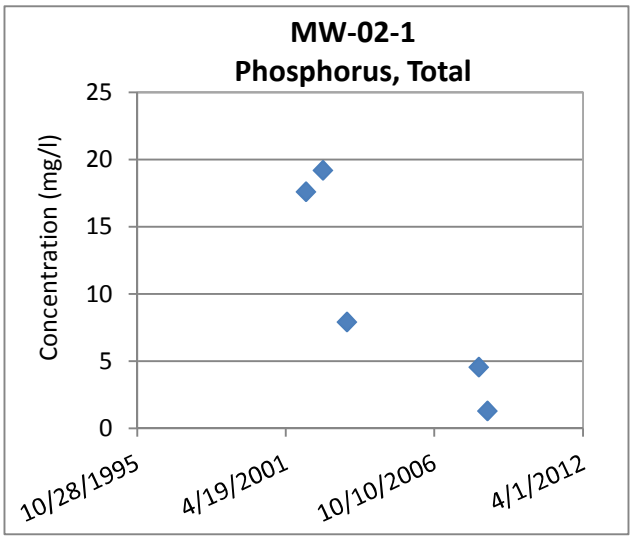


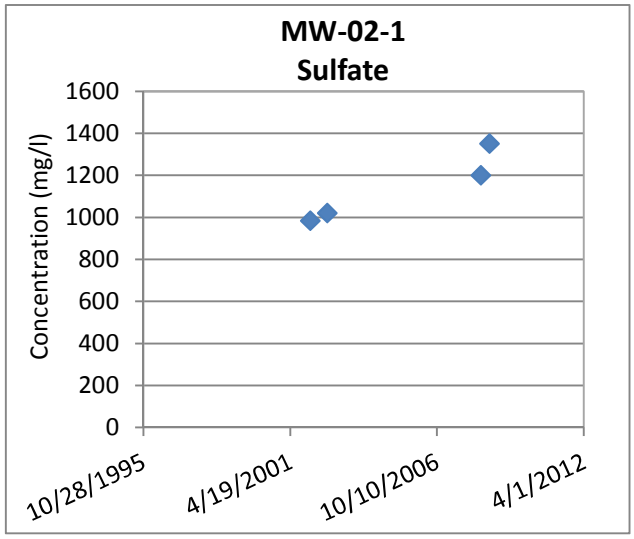


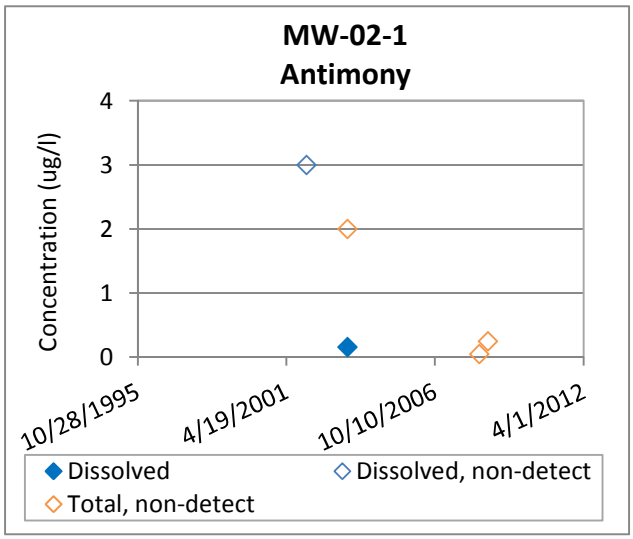
Time Series Plots - MW-02-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

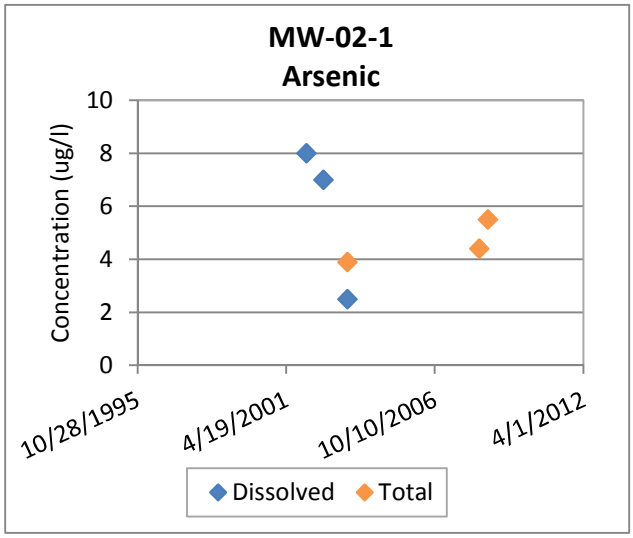






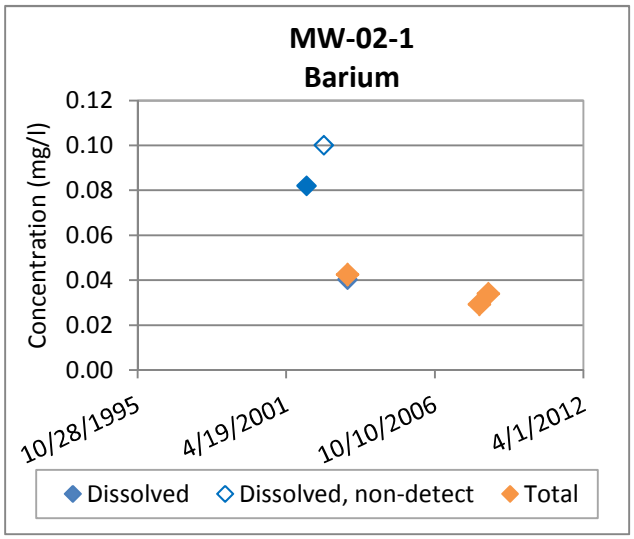


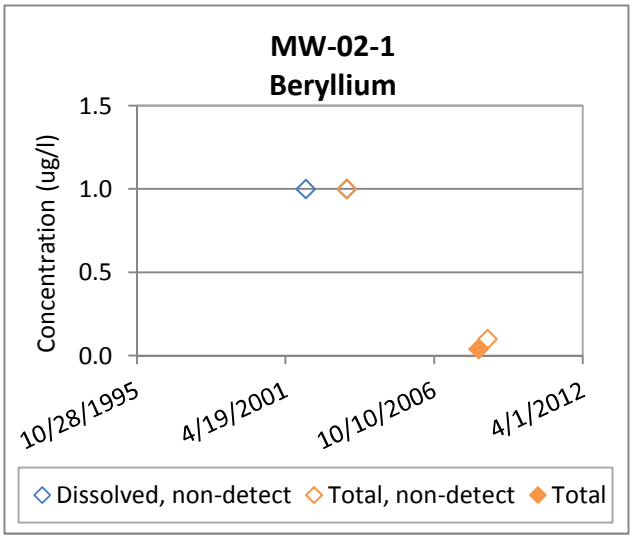


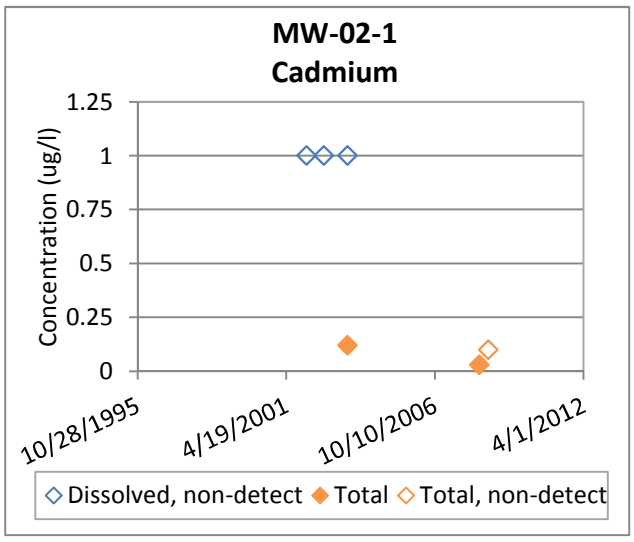


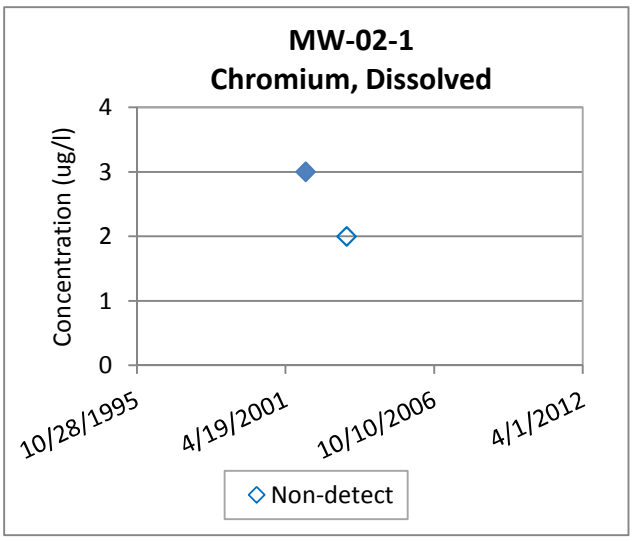
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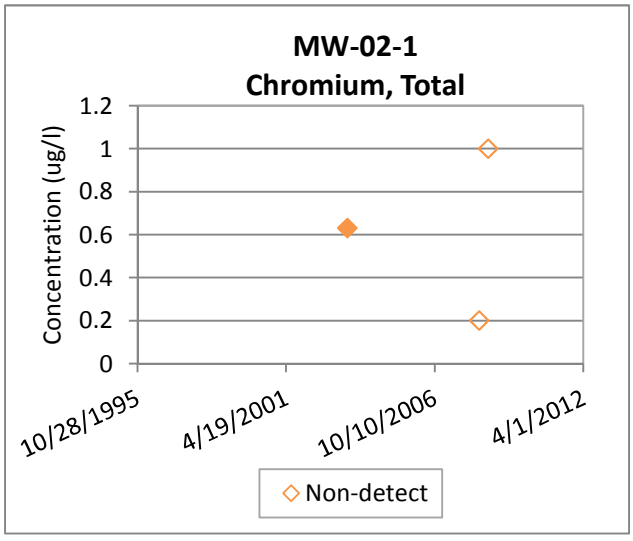
Time Series Plots - MW-02-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

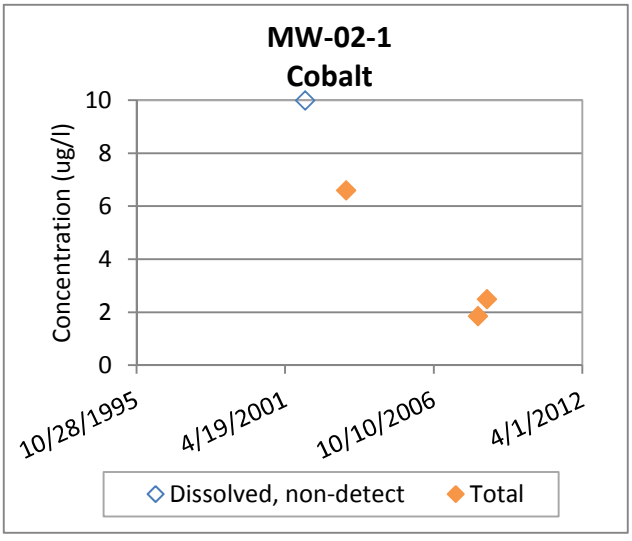




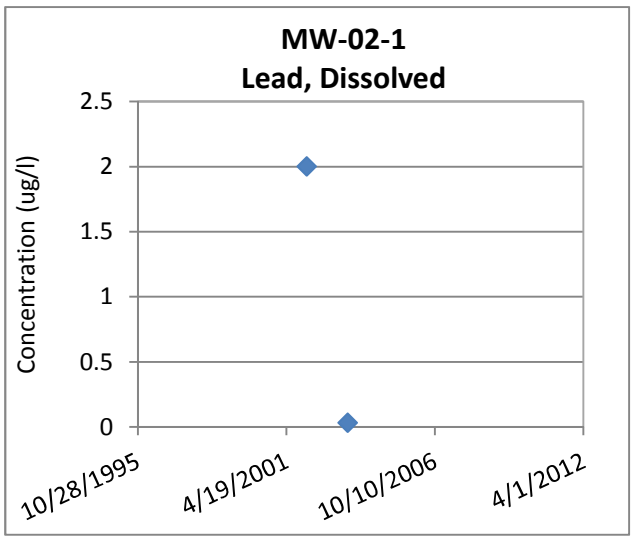


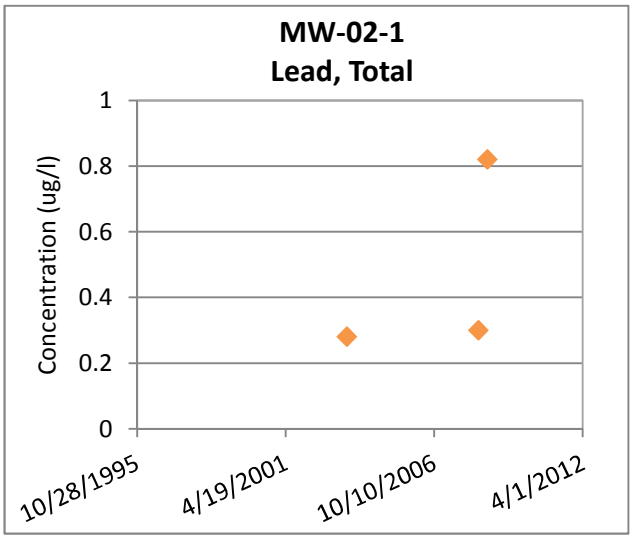


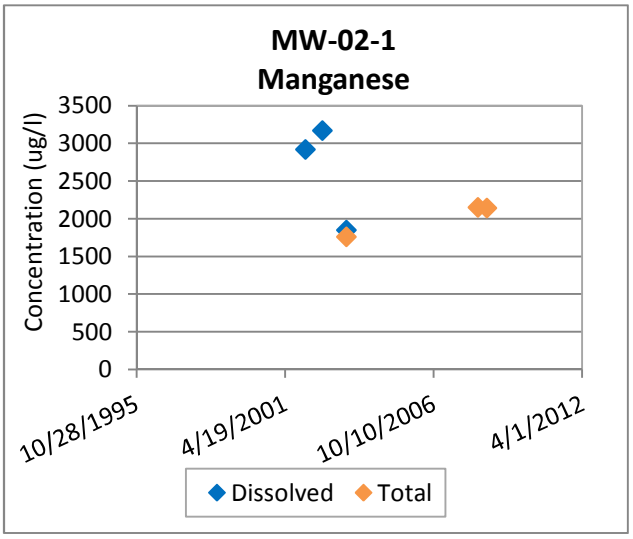


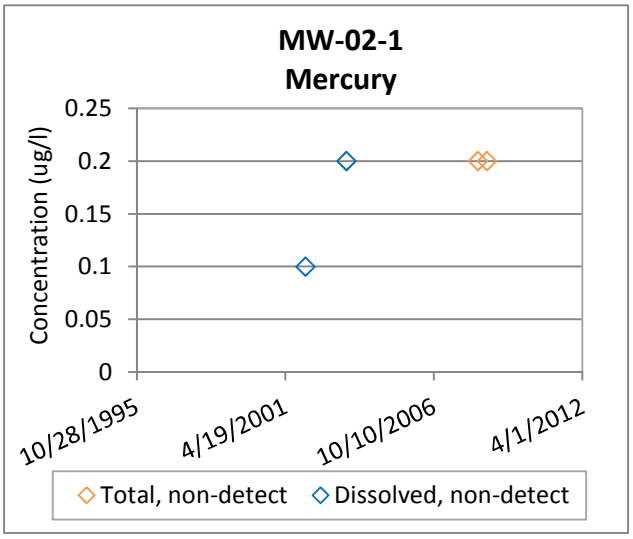


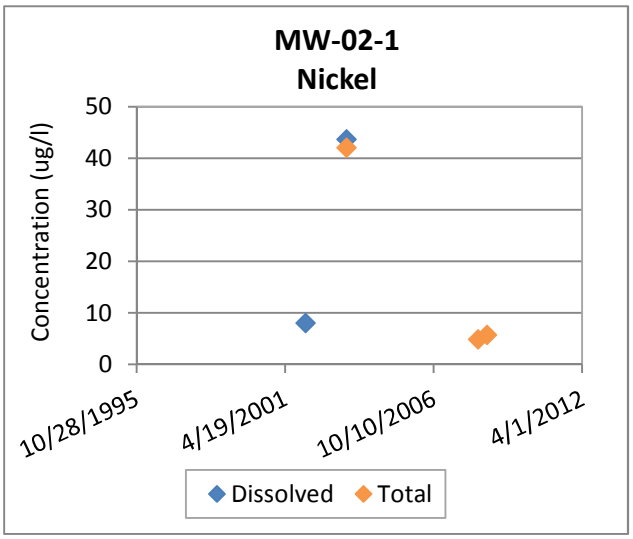
Time Series Plots - MW-02-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

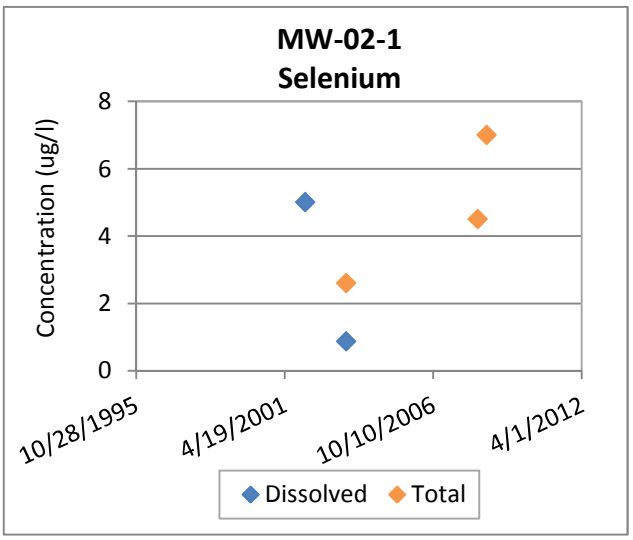




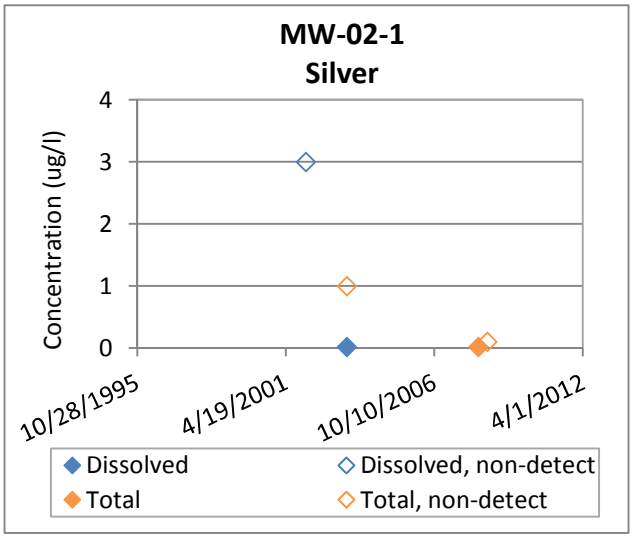


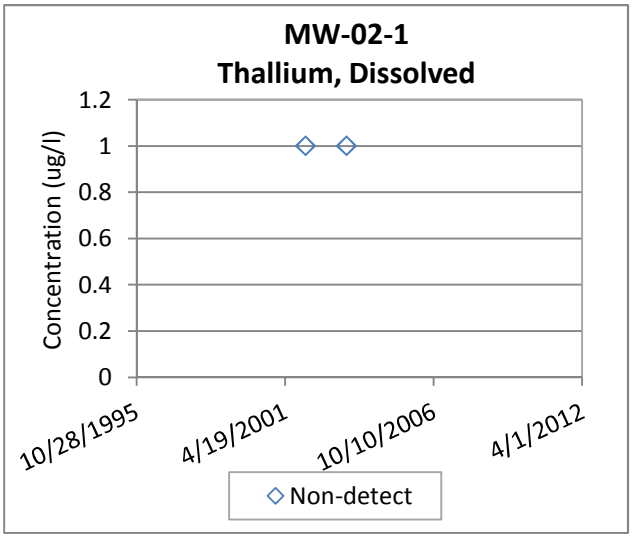


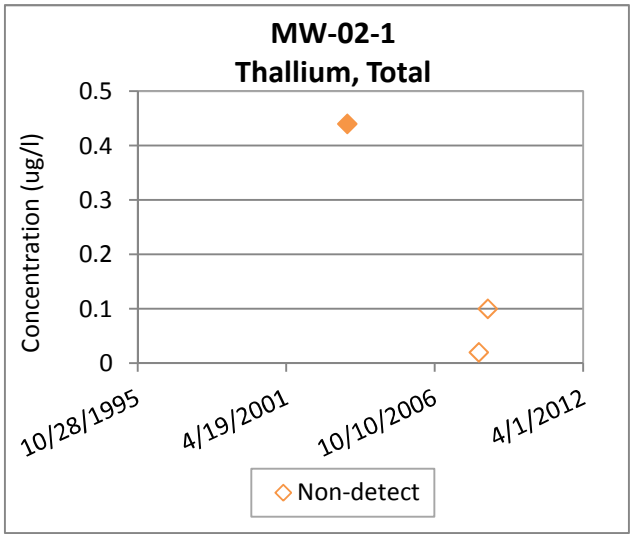


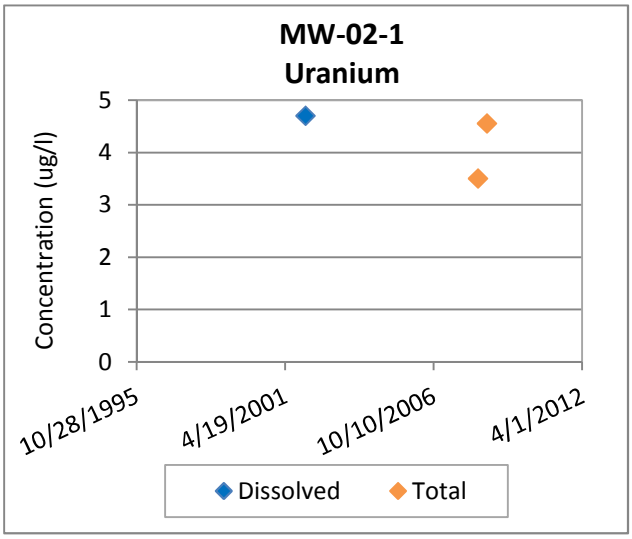


Time Series Plots - MW-02-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant



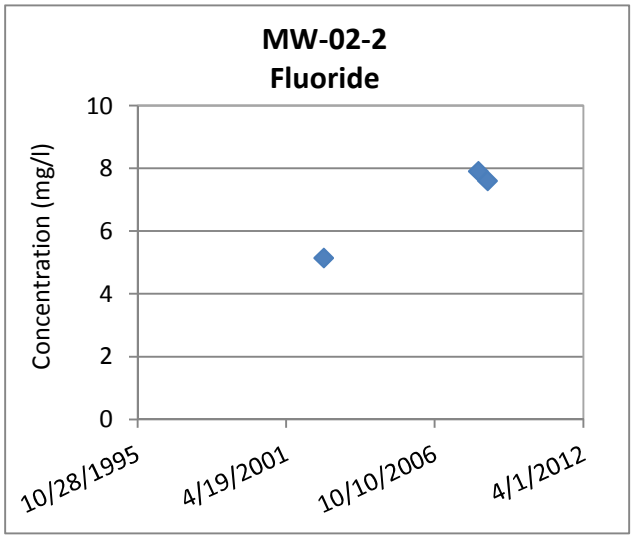


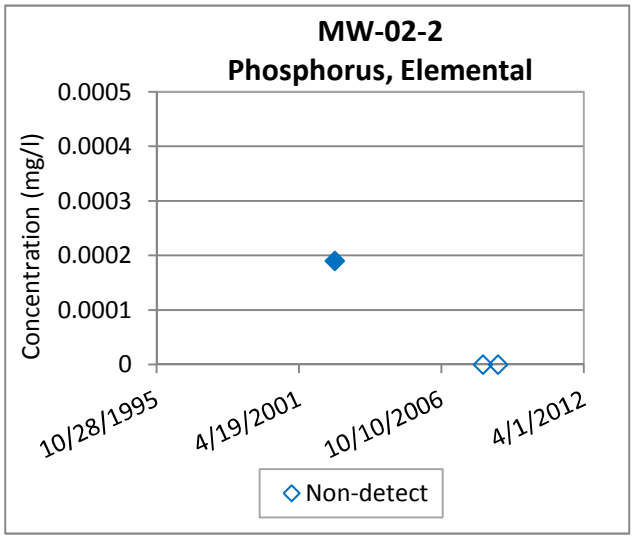


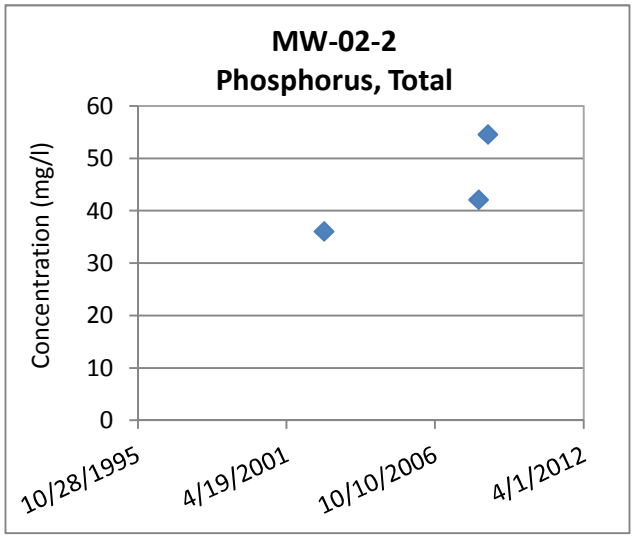


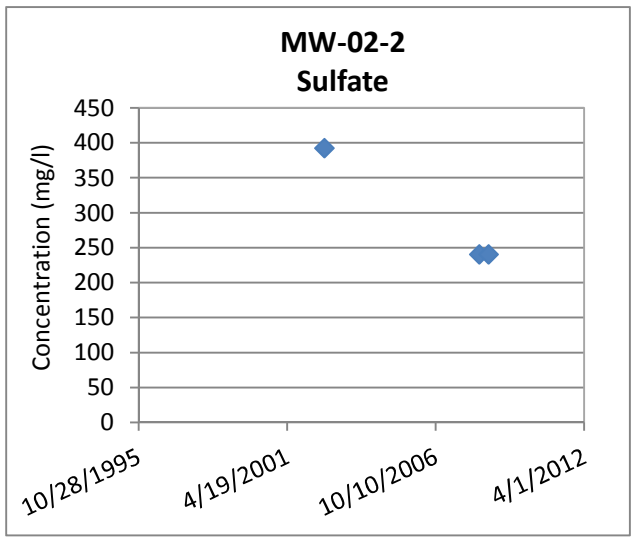
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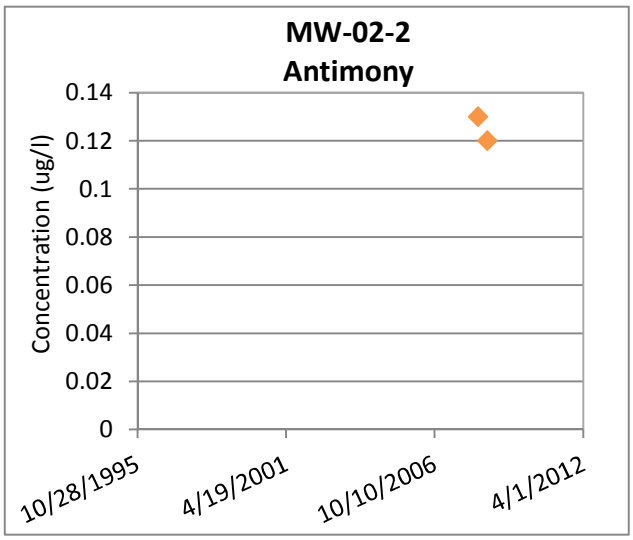
Time Series Plots - MW-02-2
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Rhodia Silver Bow Plant

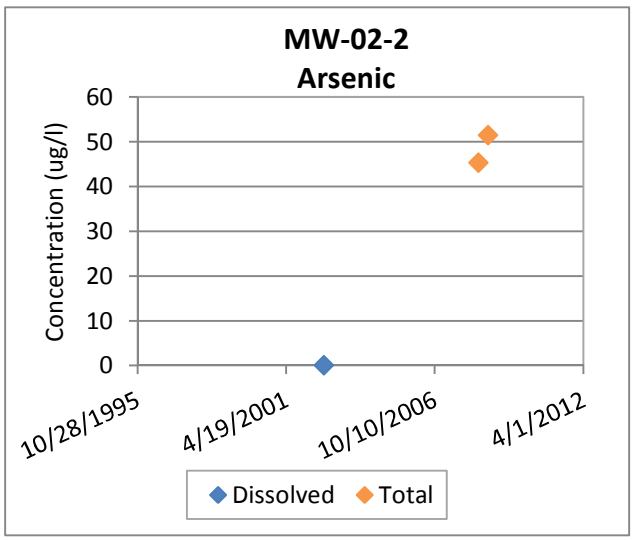






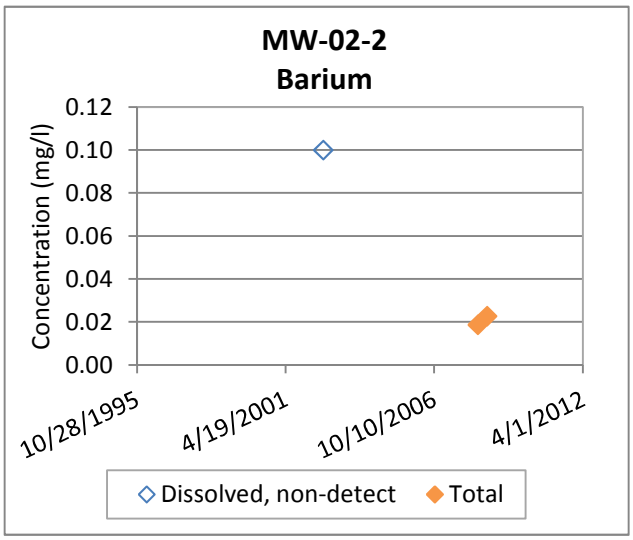


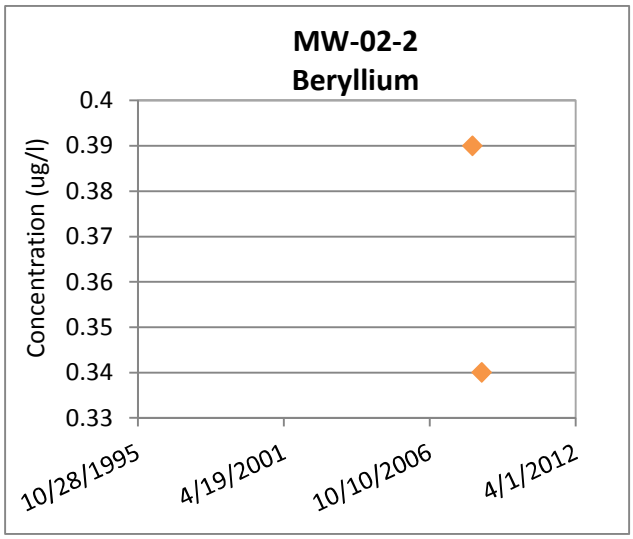


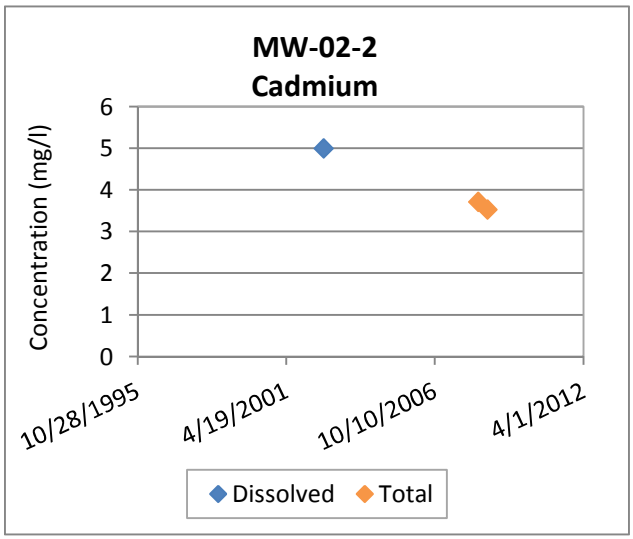


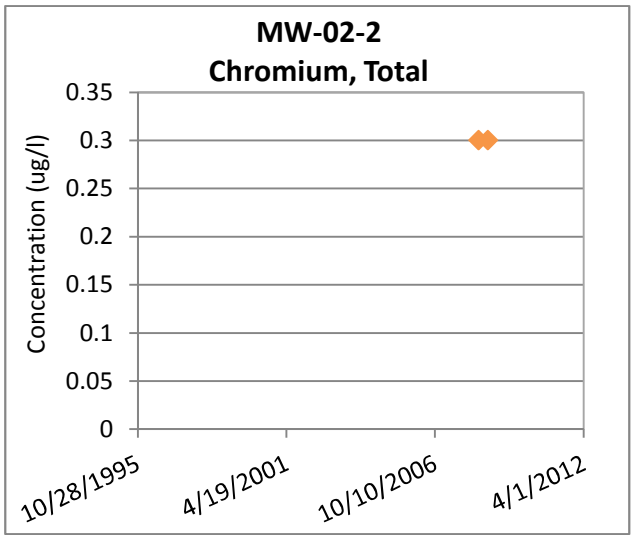
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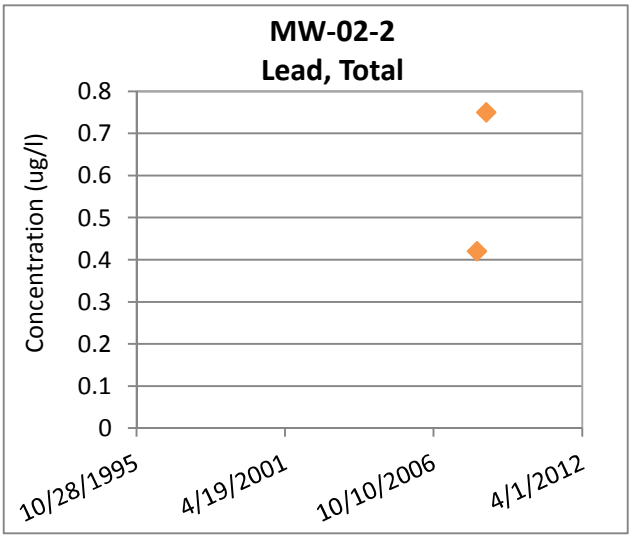
Time Series Plots - MW-02-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

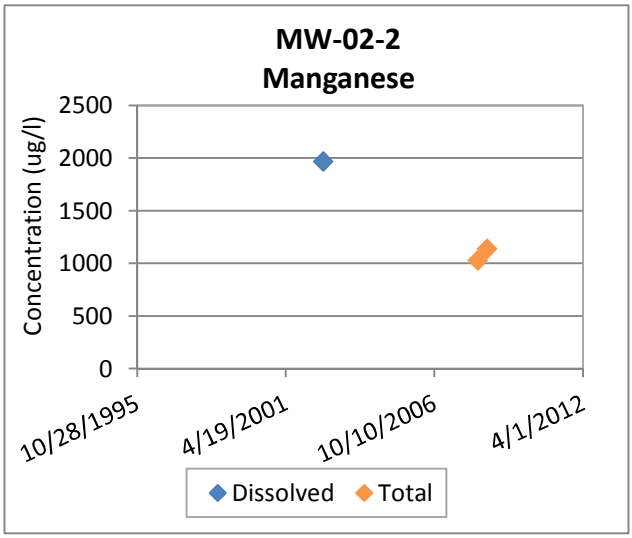




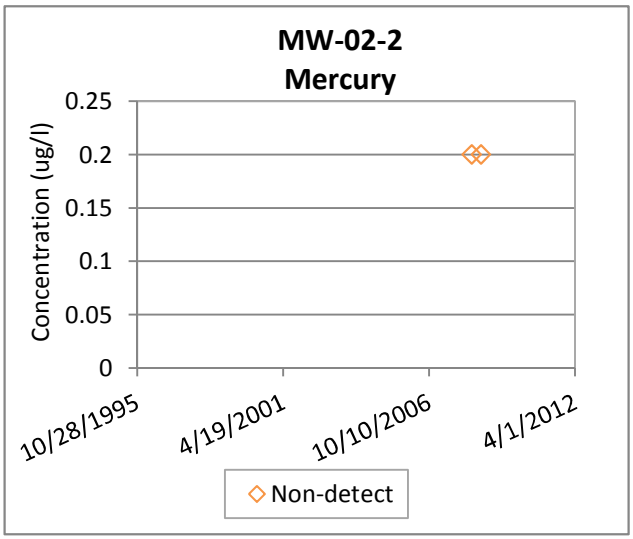


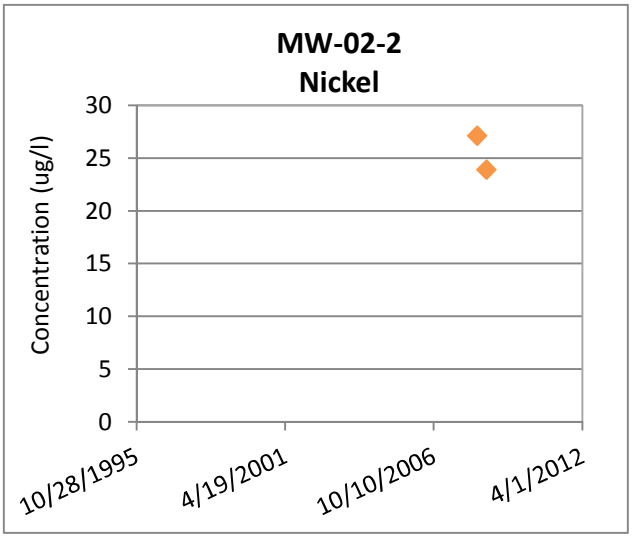


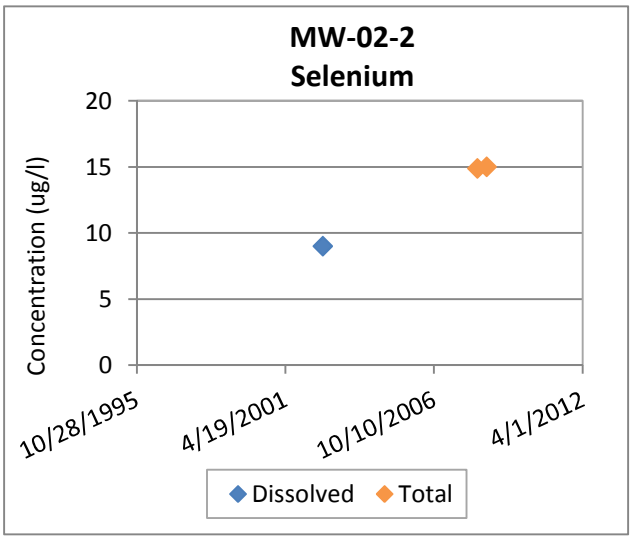


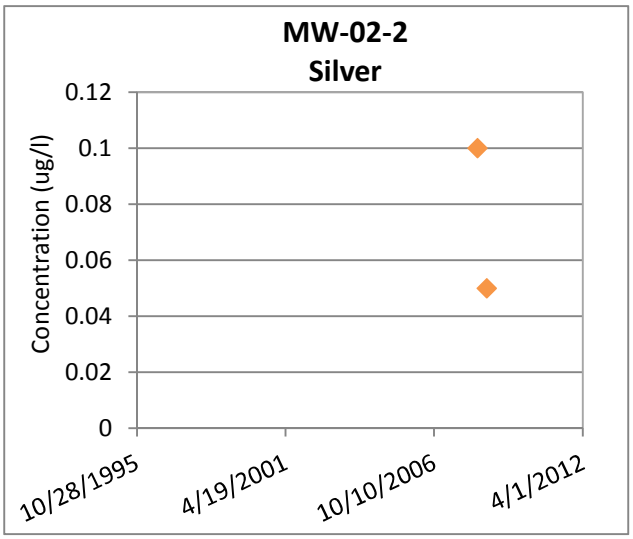


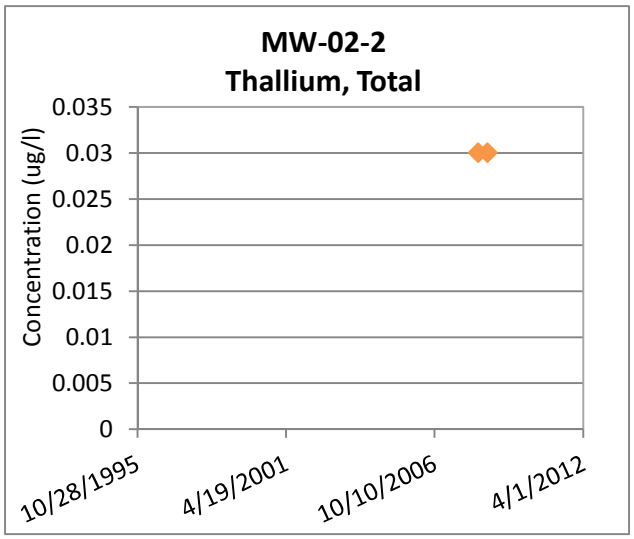
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Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

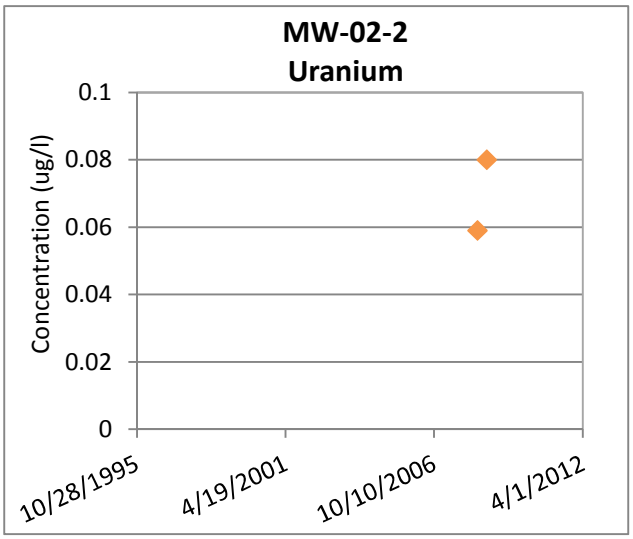




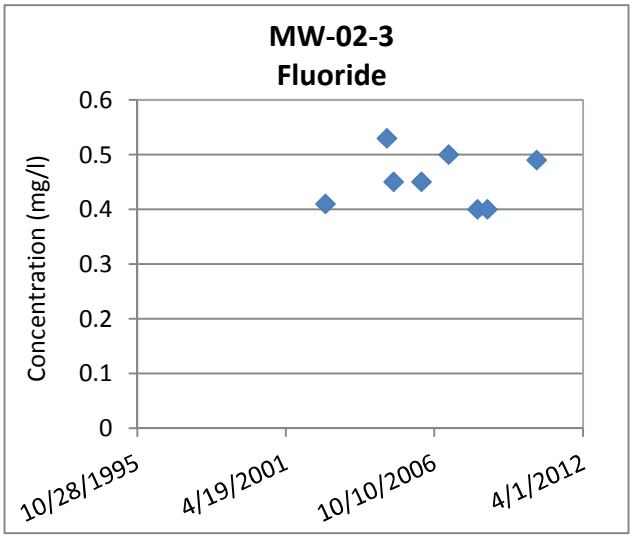


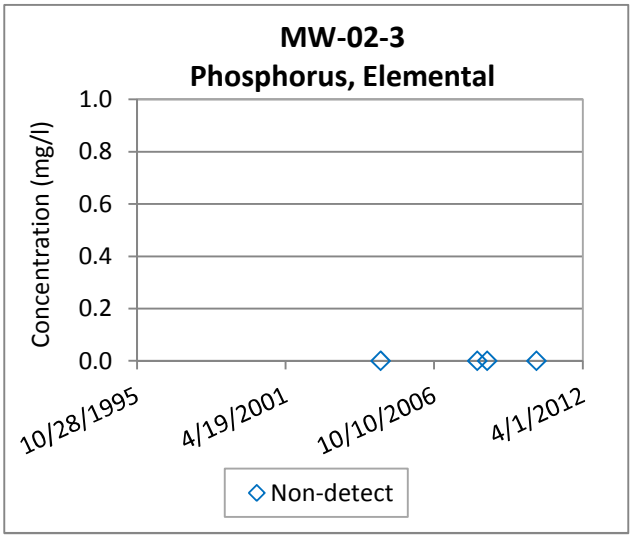


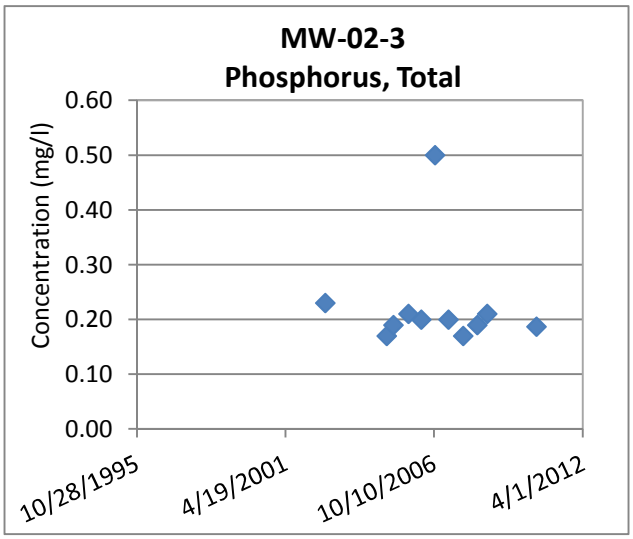


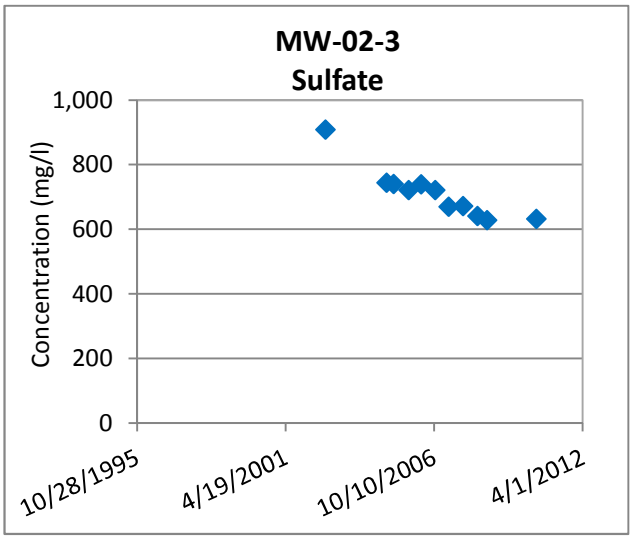


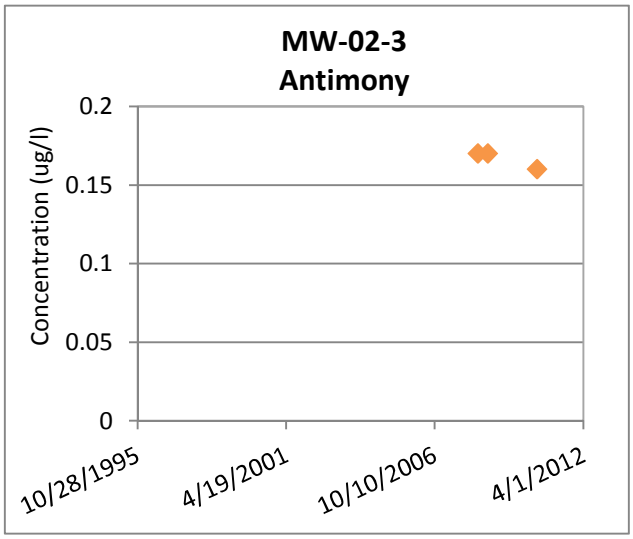
Time Series Plots - MW-02-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

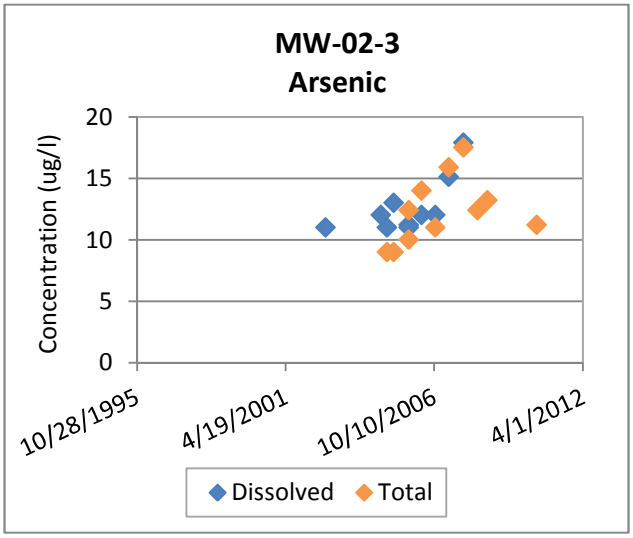




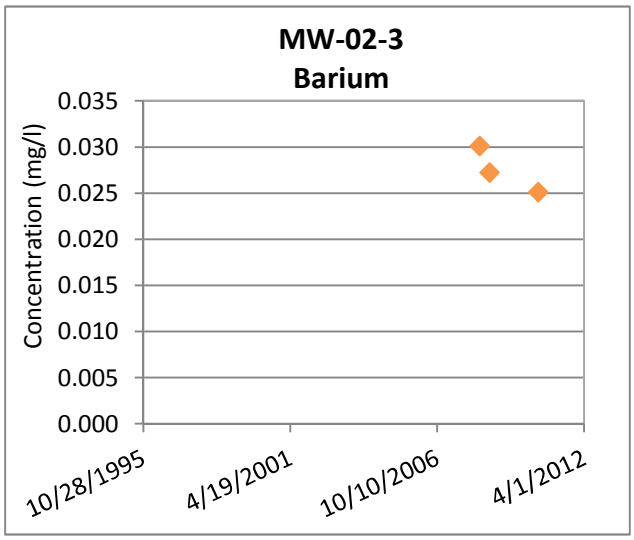


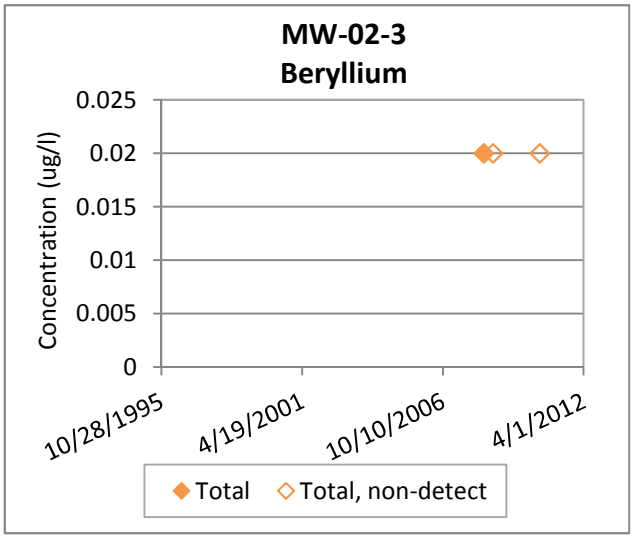


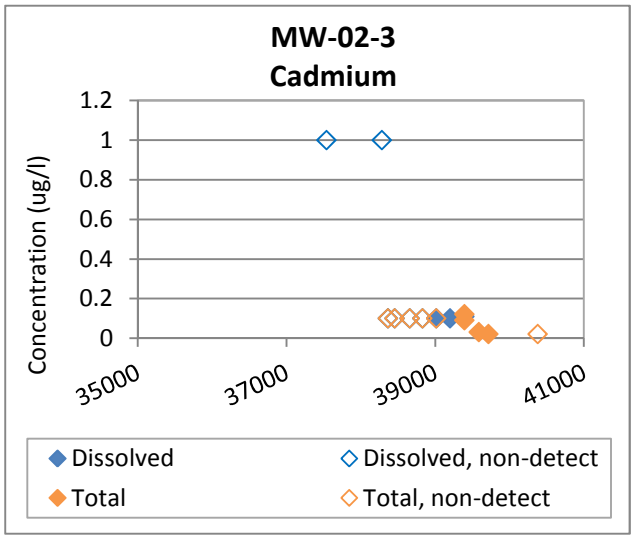


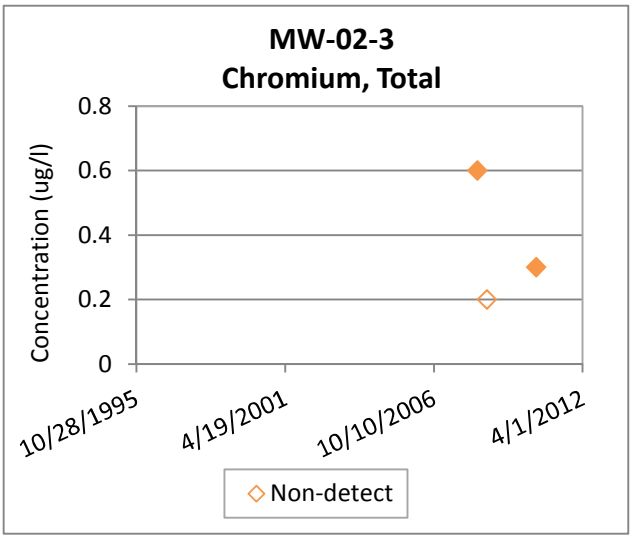


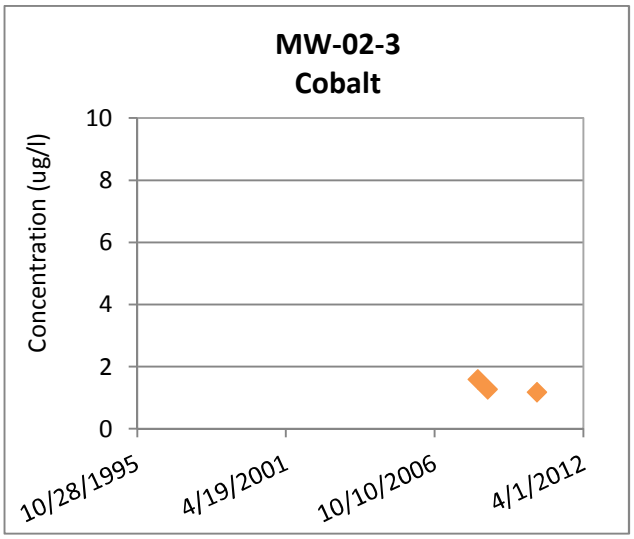
Time Series Plots - MW-02-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

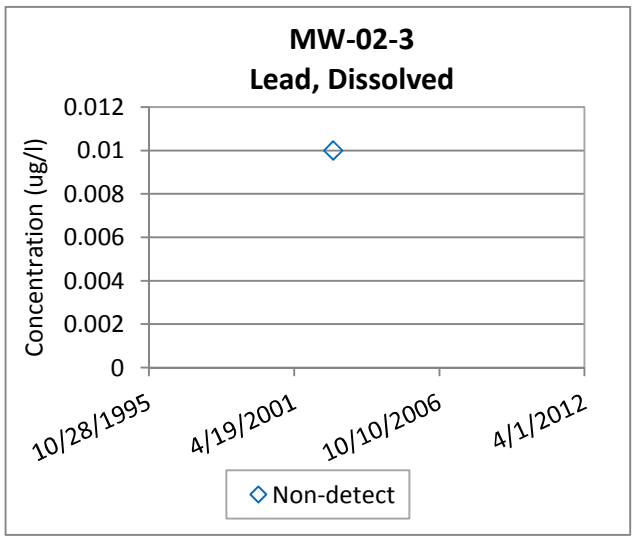




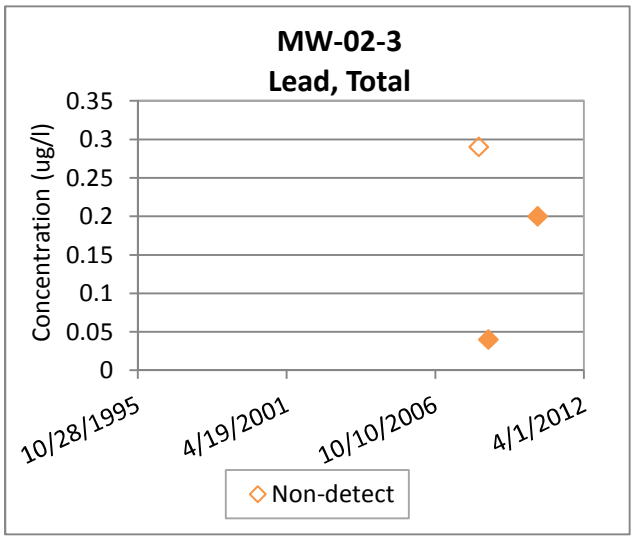


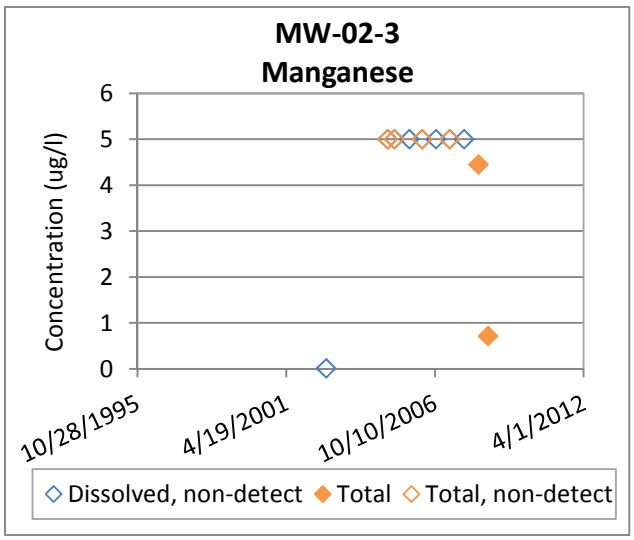


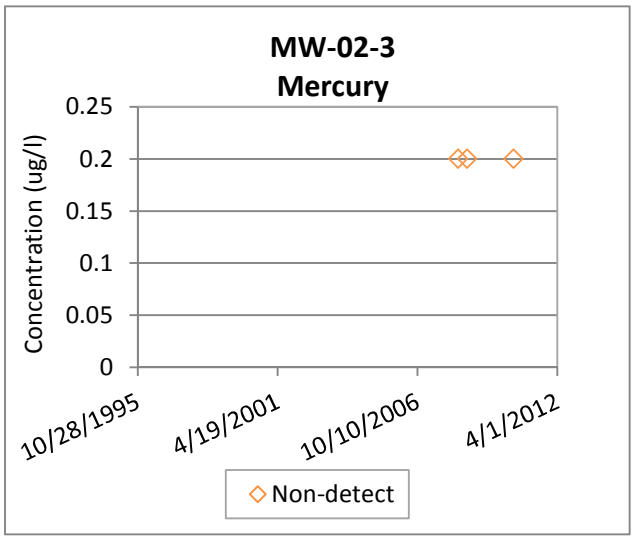


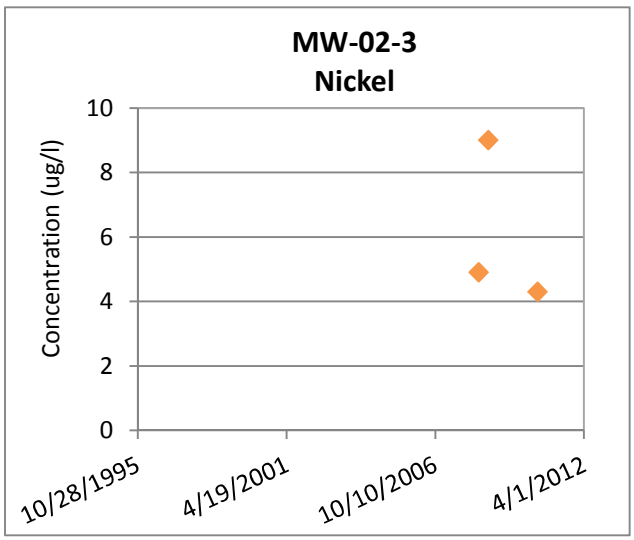


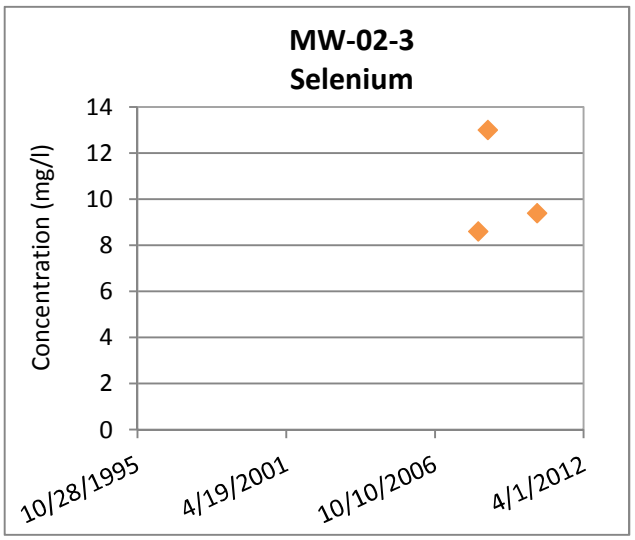
Time Series Plots - MW-02-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

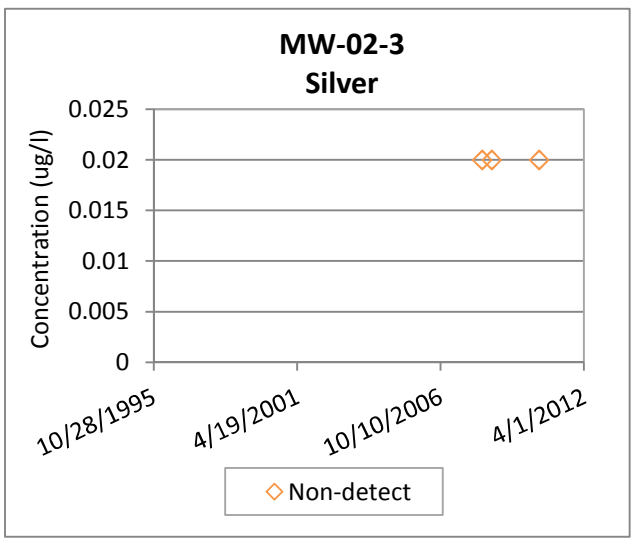




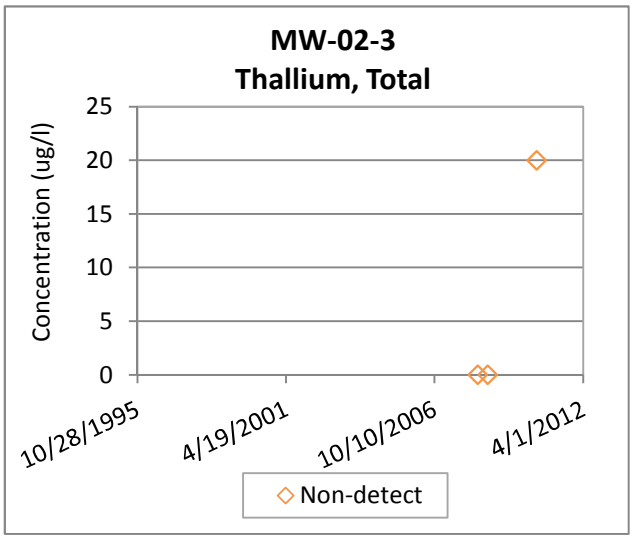


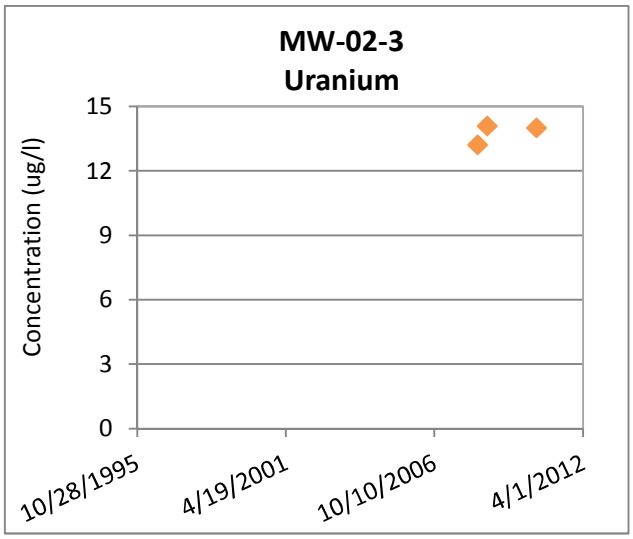




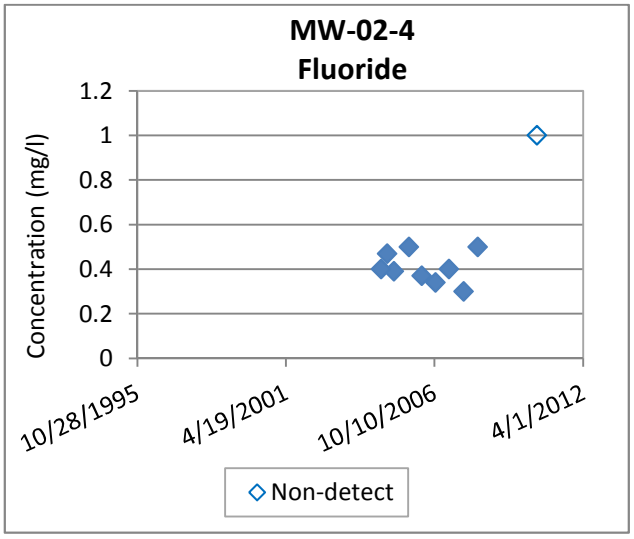


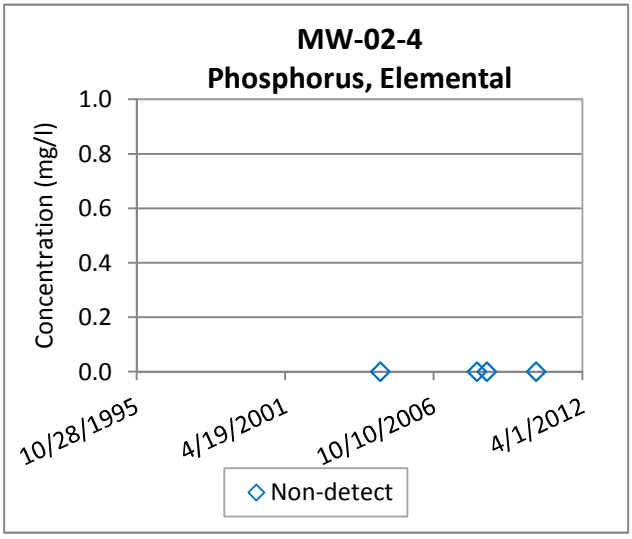
Time Series Plots - MW-02-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

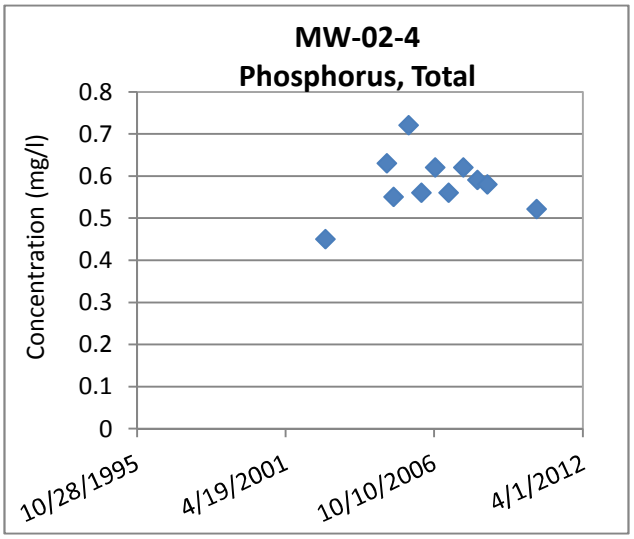


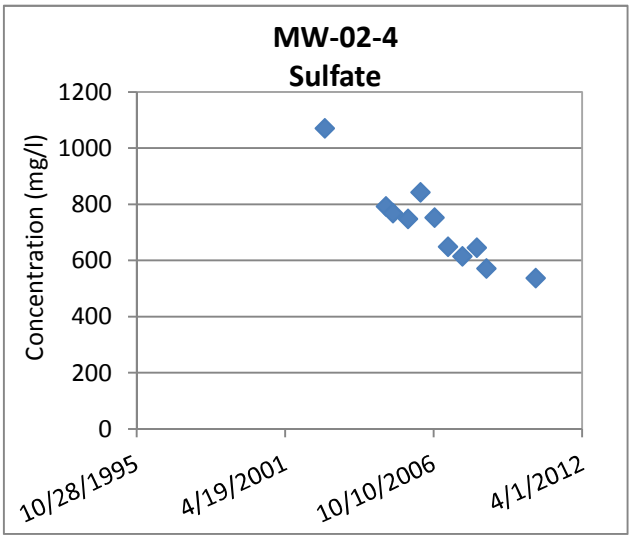


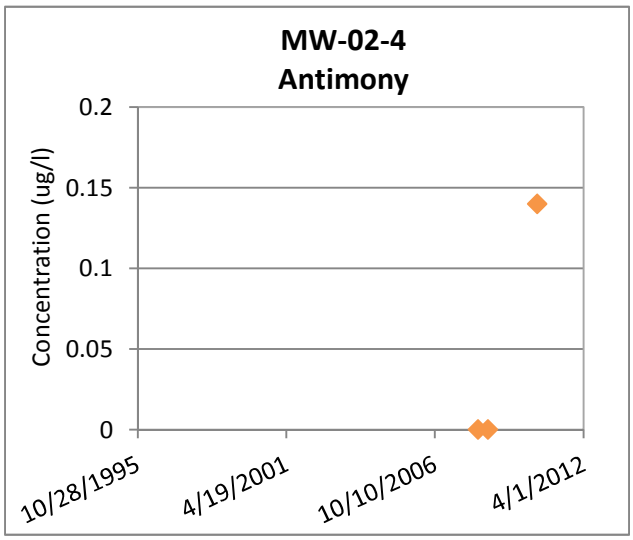
Time Series Plots - MW-02-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

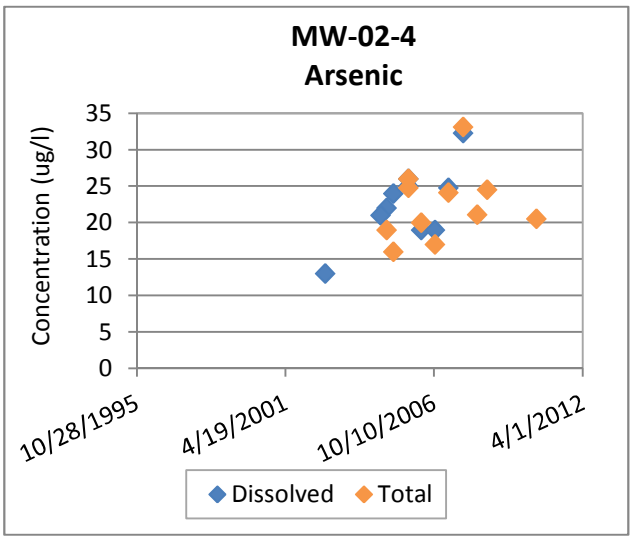




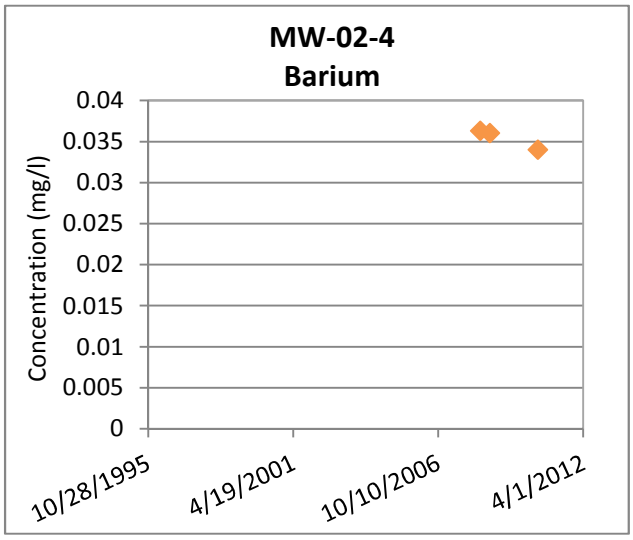


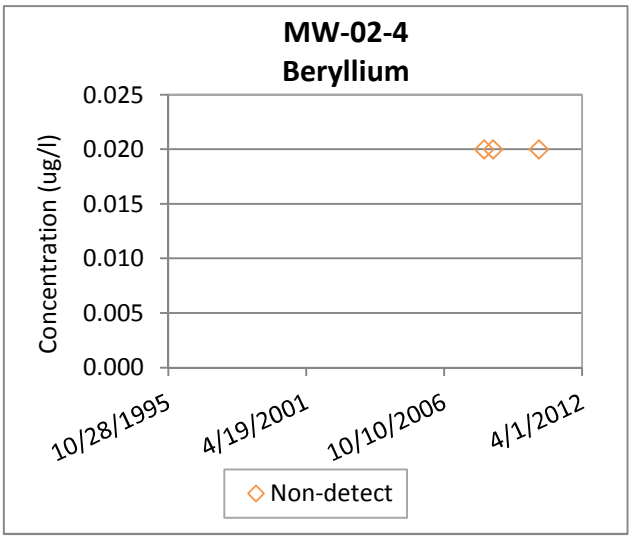


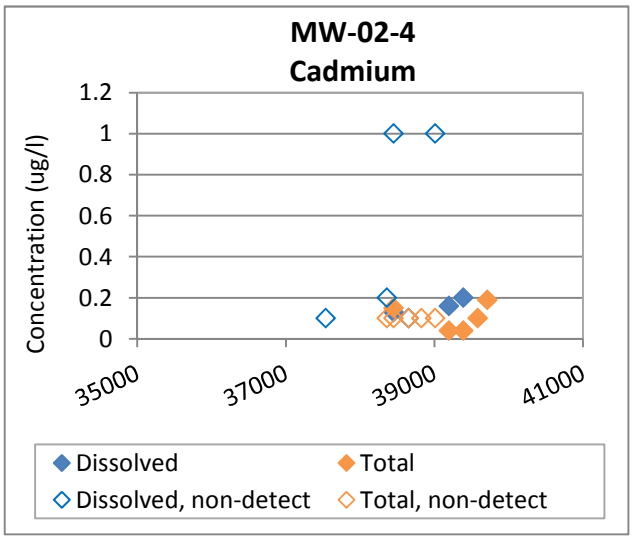


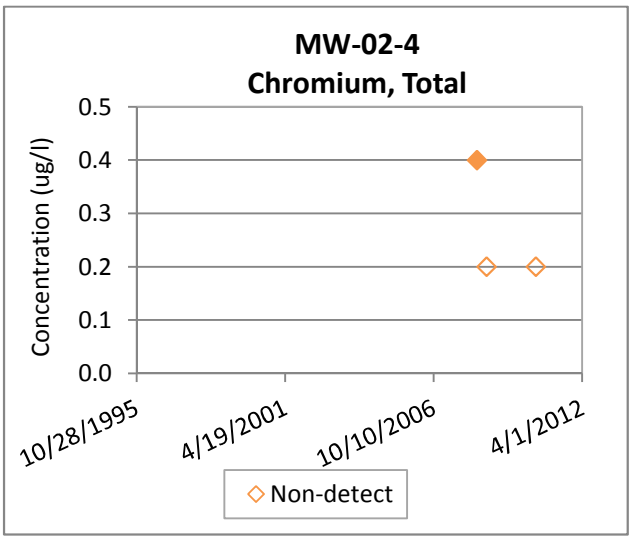


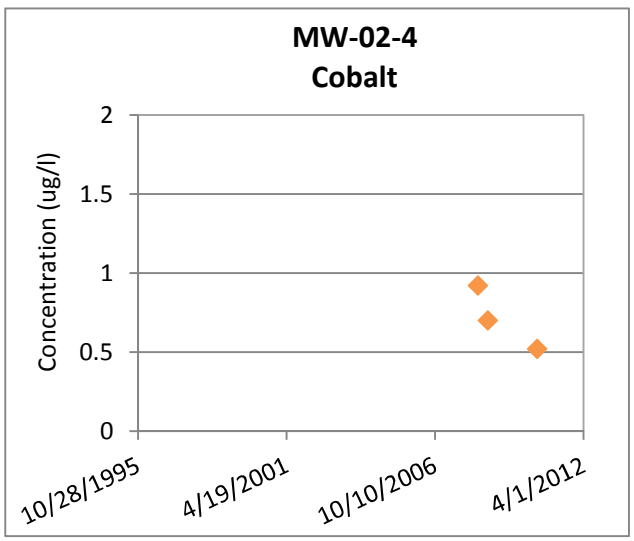
Time Series Plots - MW-02-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

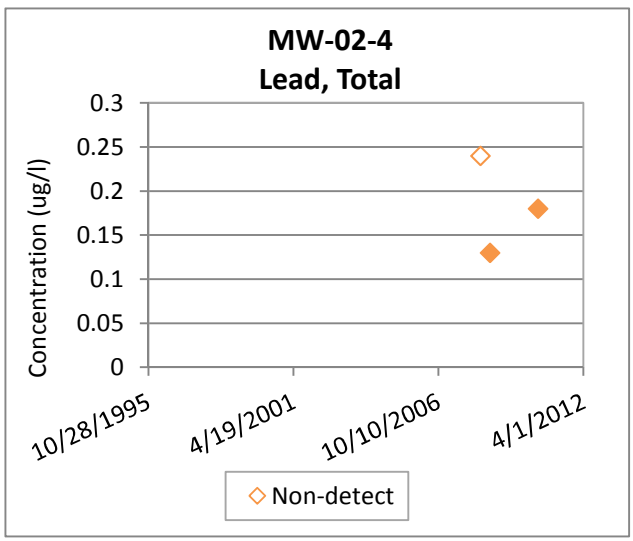




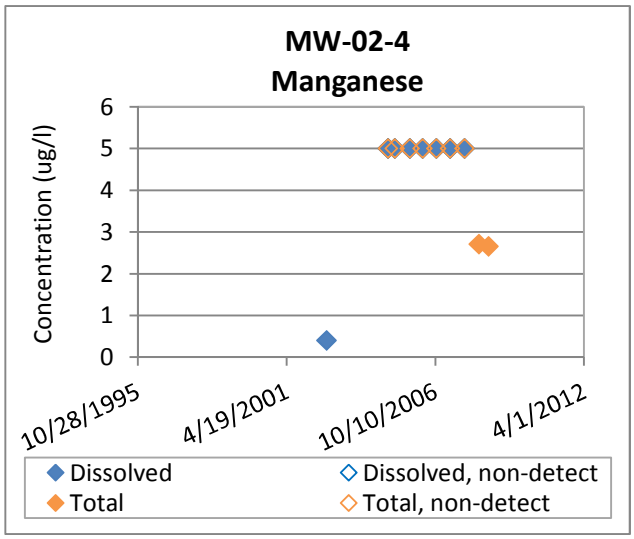


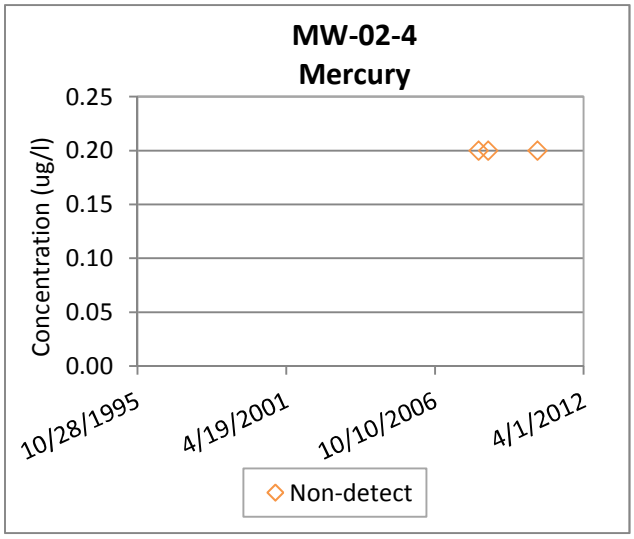


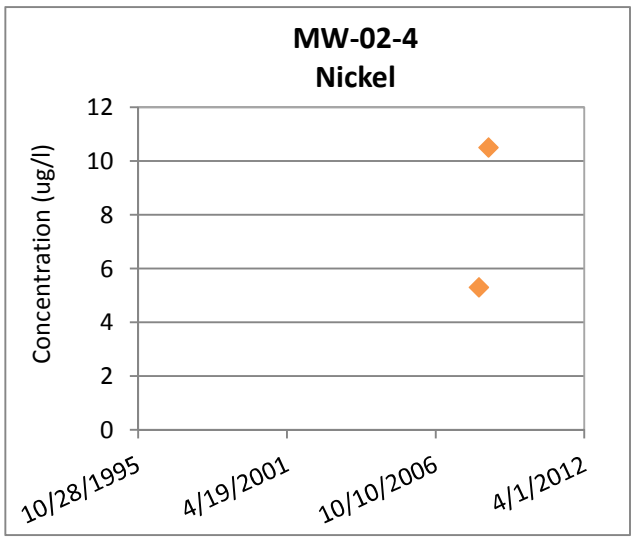


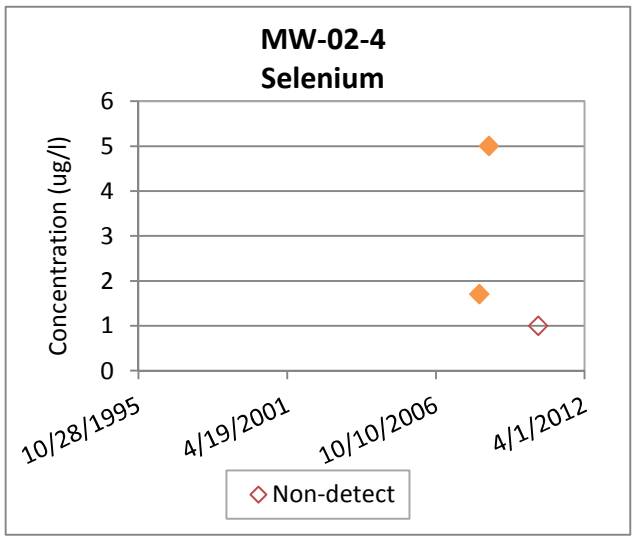


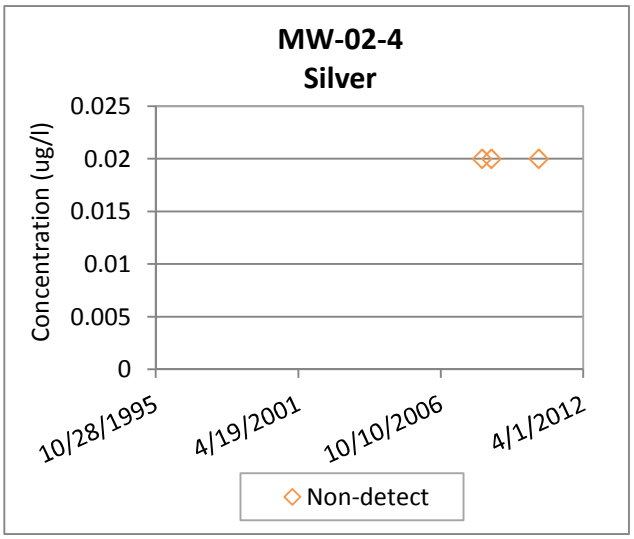
Time Series Plots - MW-02-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

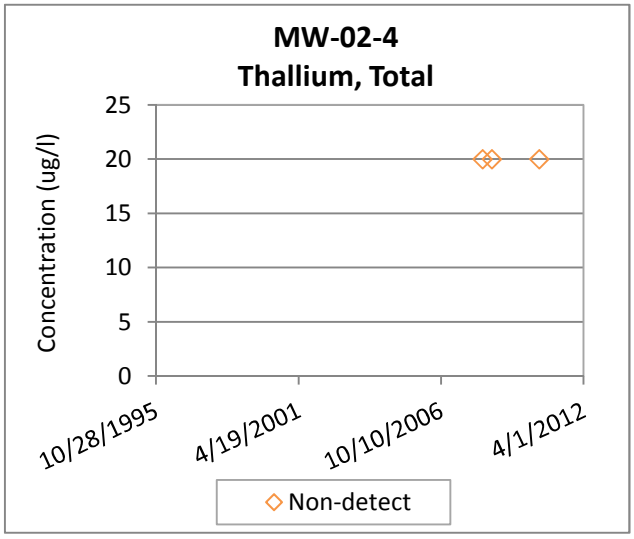




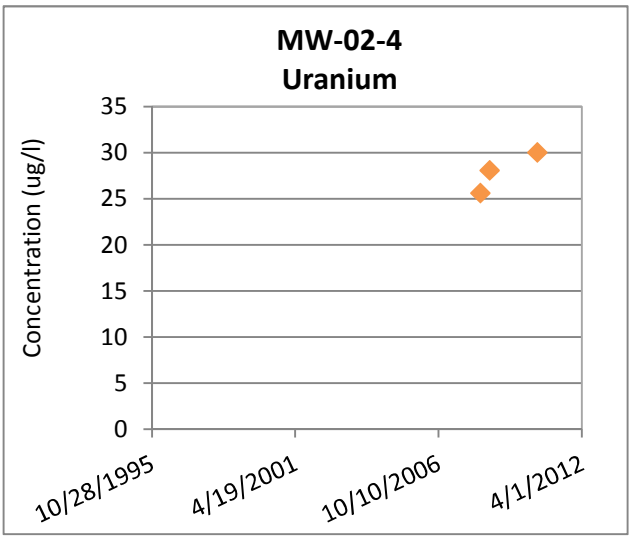




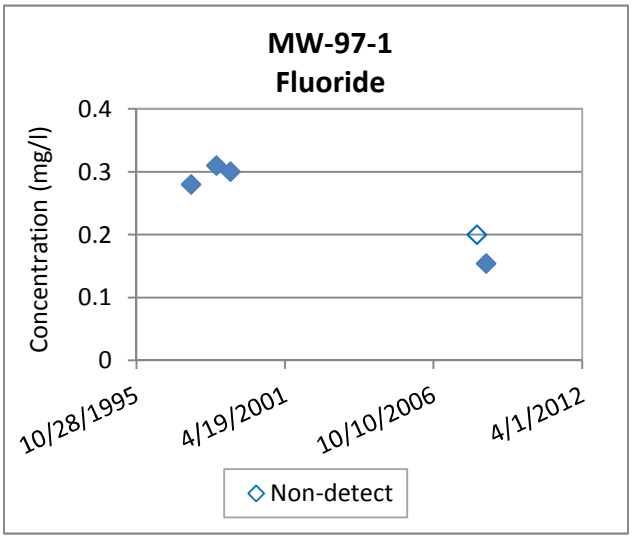


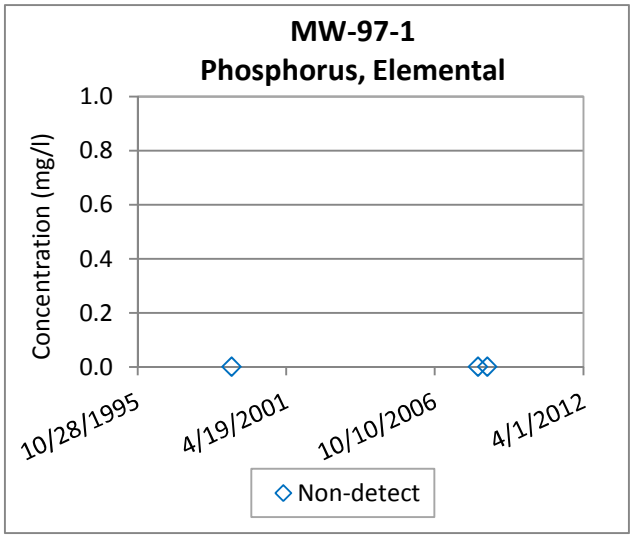


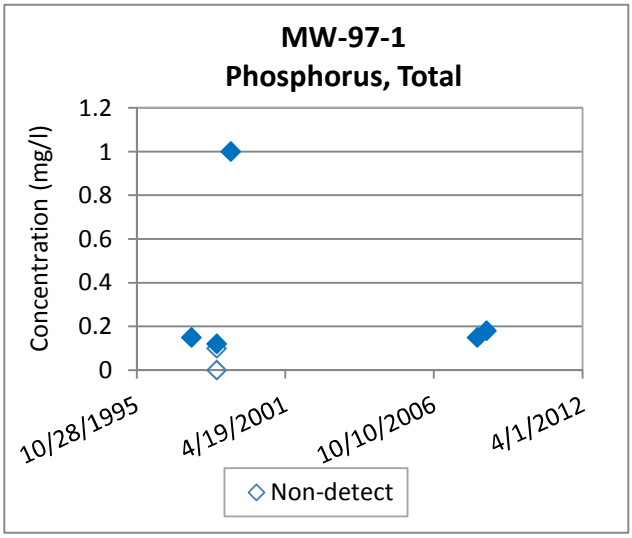
Time Series Plots - MW-02-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

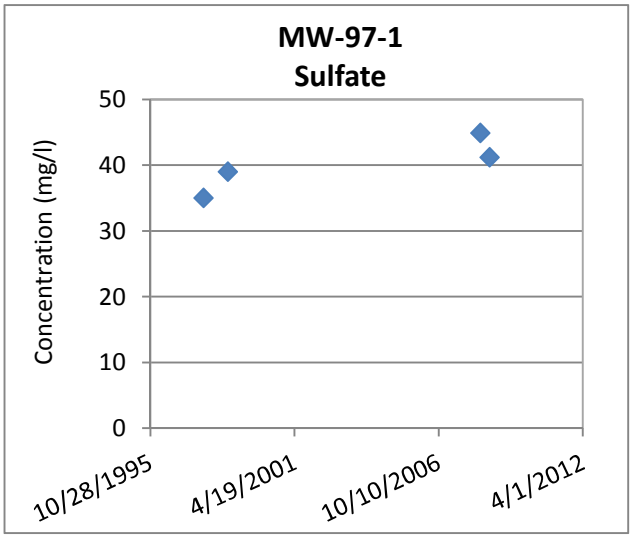


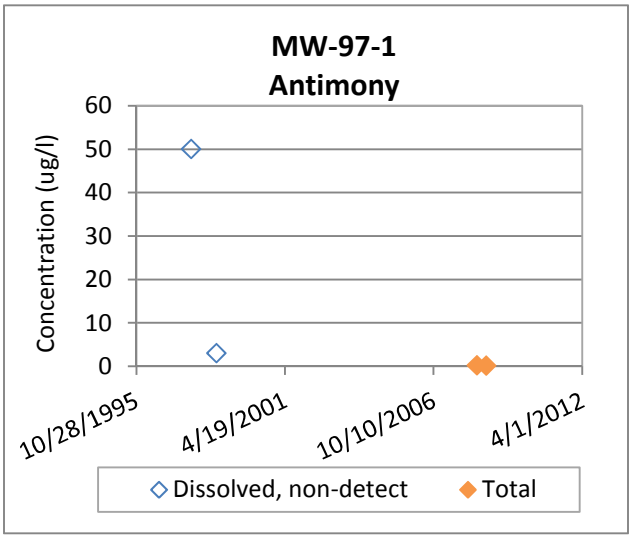
Time Series Plots - MW-97-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

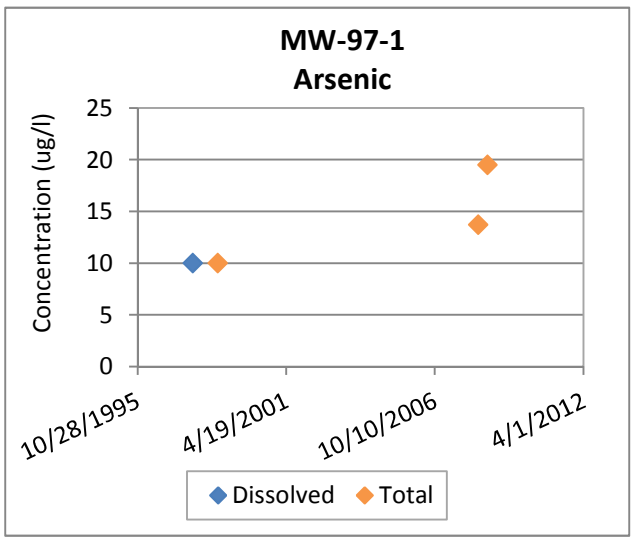






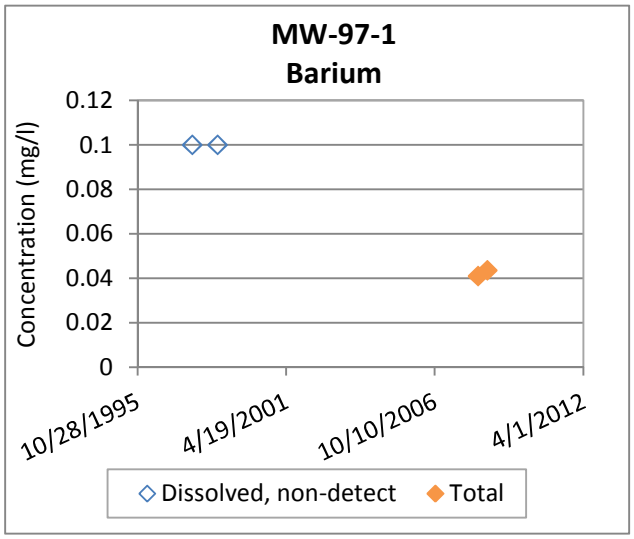


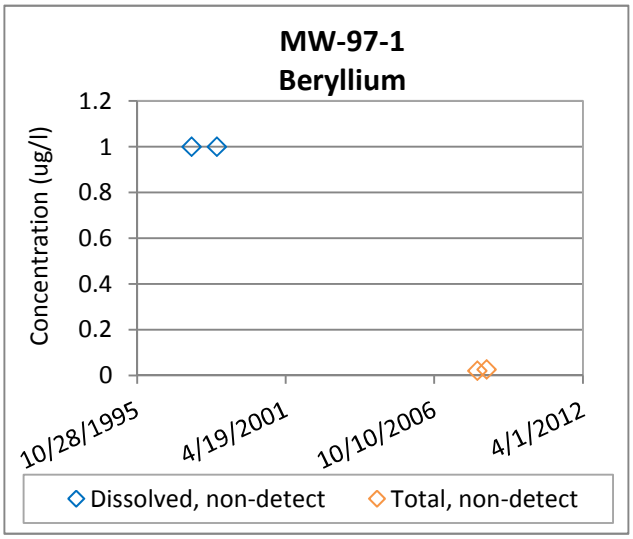


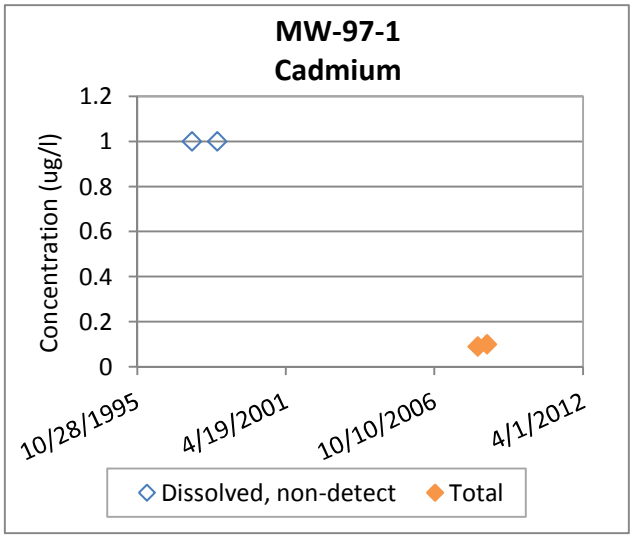


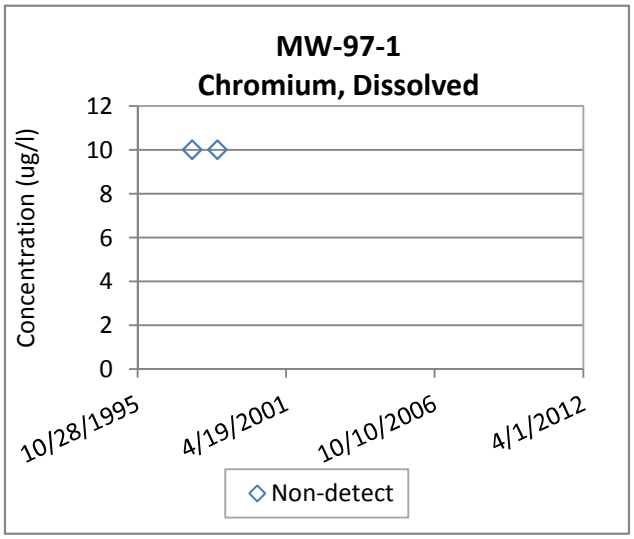
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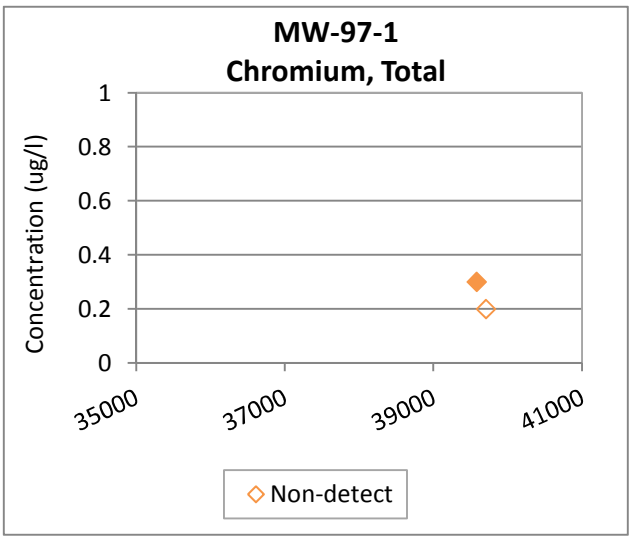
Time Series Plots - MW-97-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

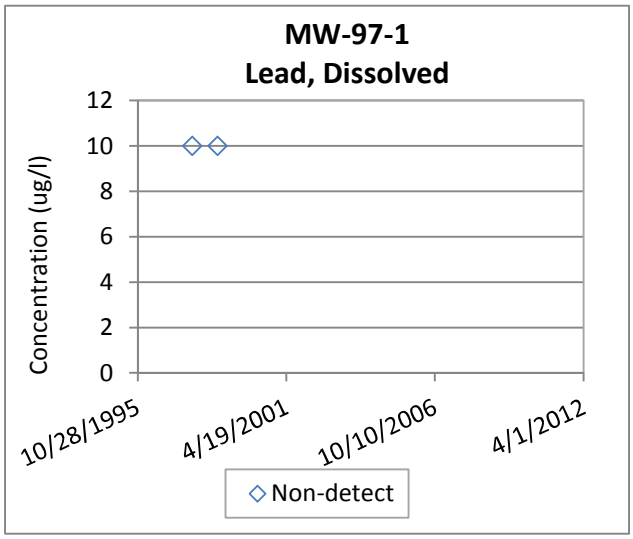




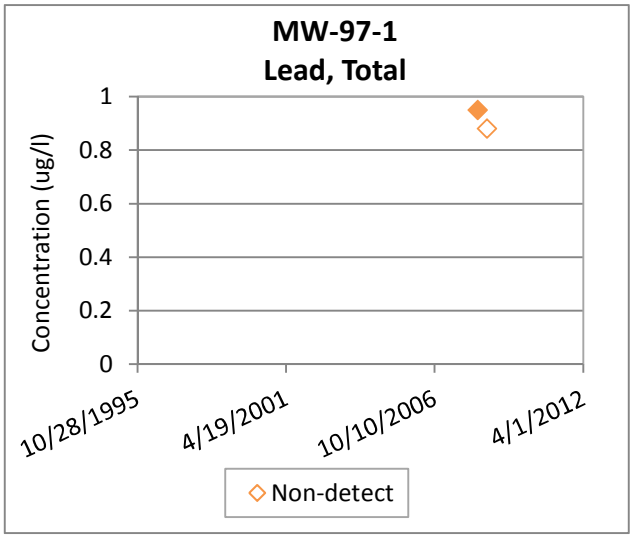


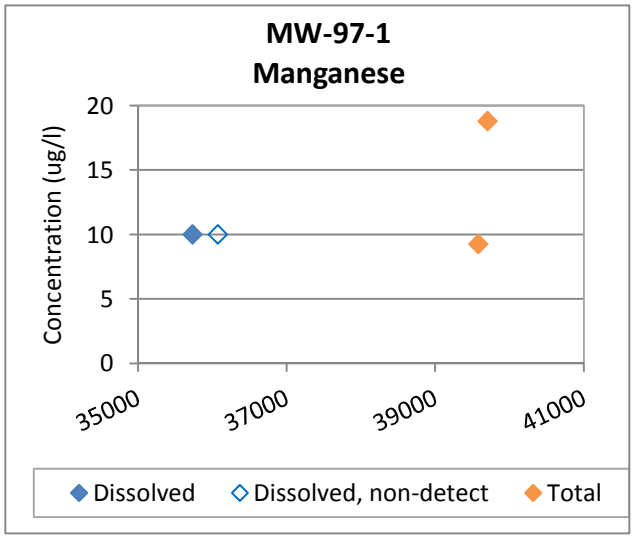


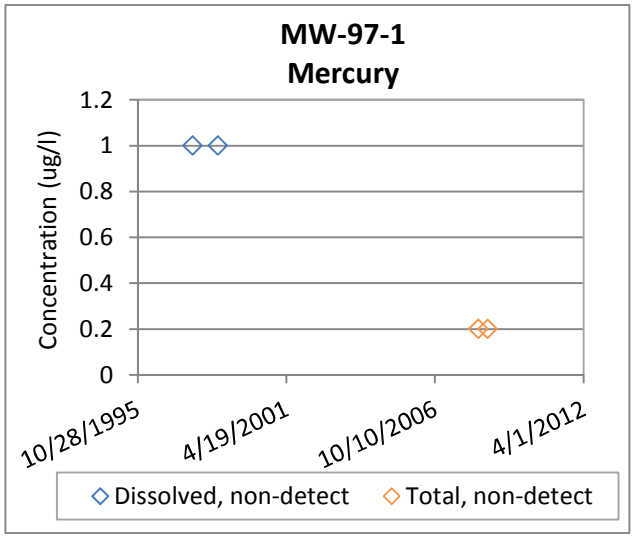


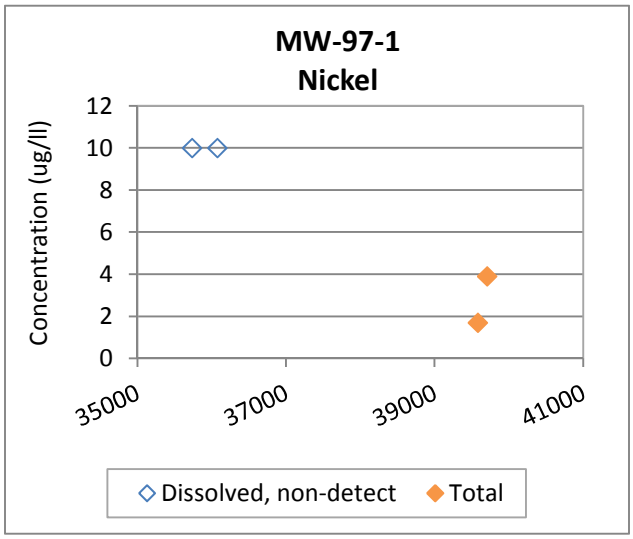


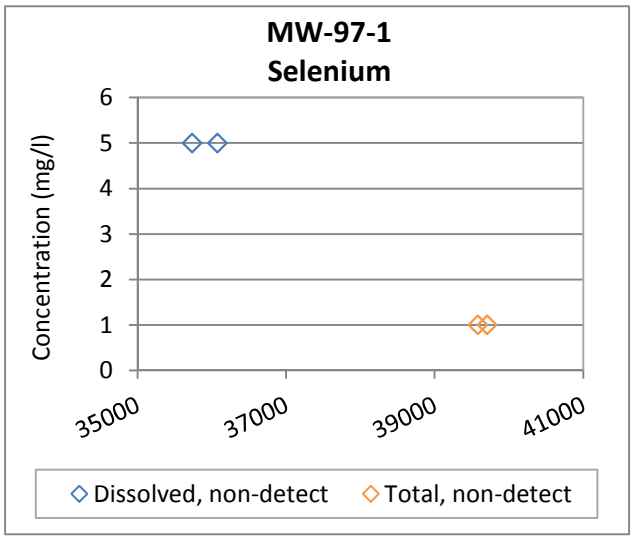
Time Series Plots - MW-97-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

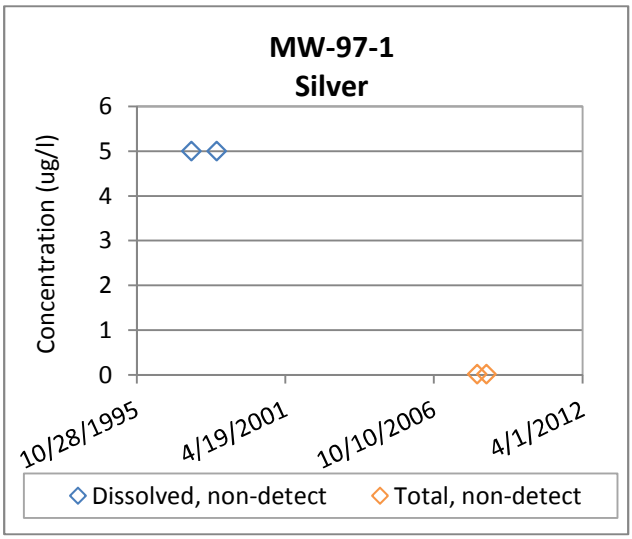




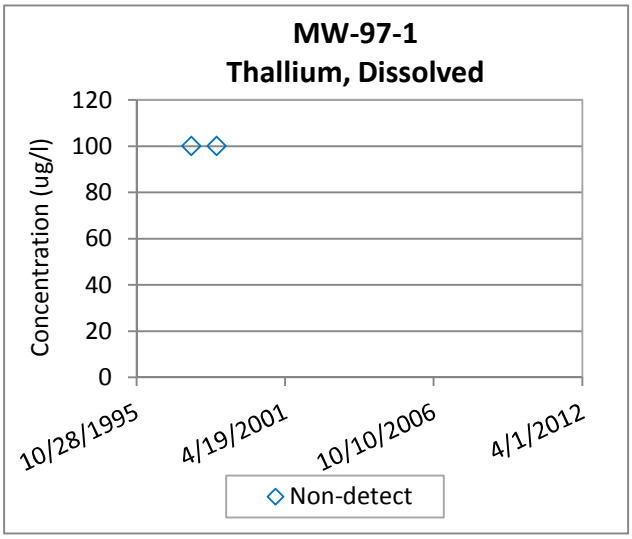


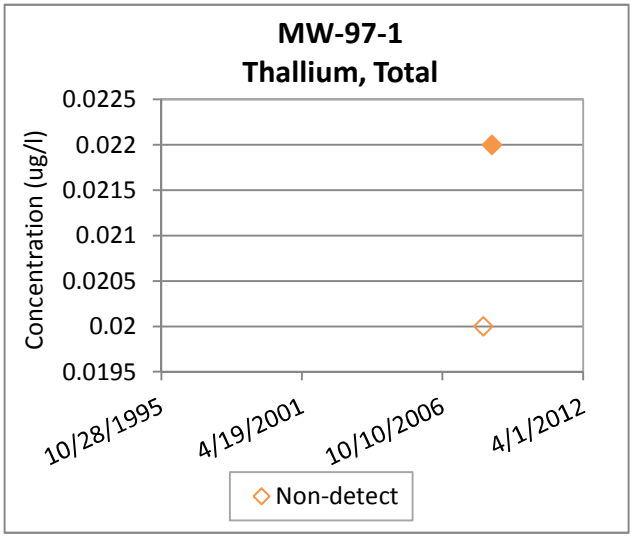


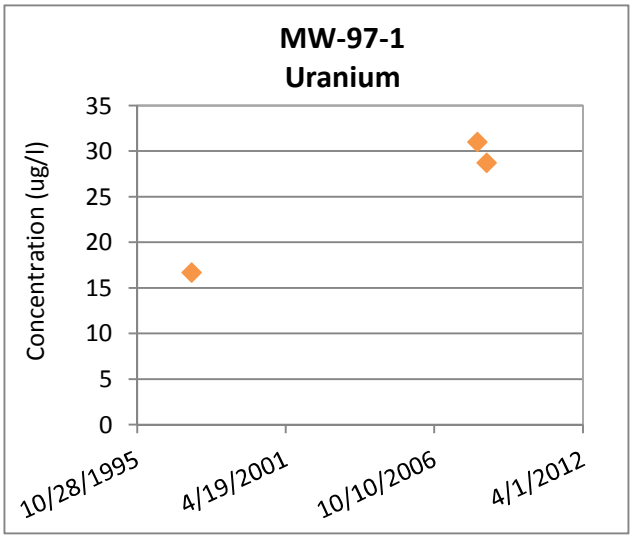




Time Series Plots - MW-97-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

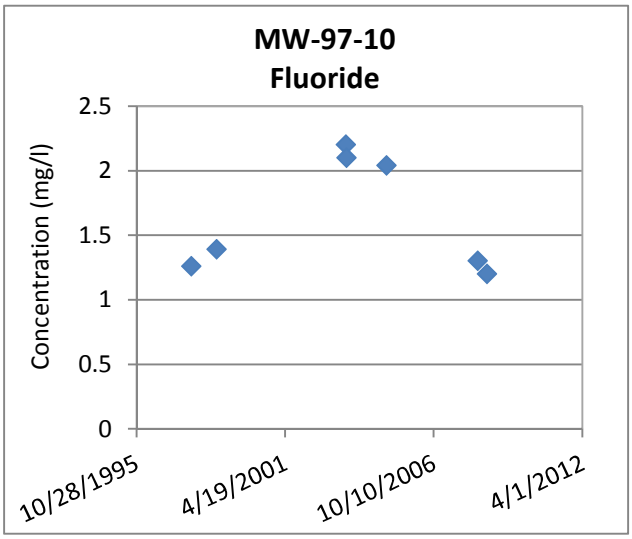


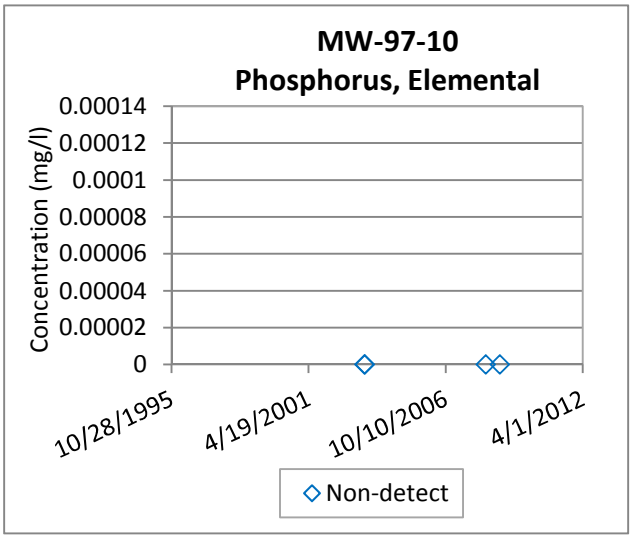


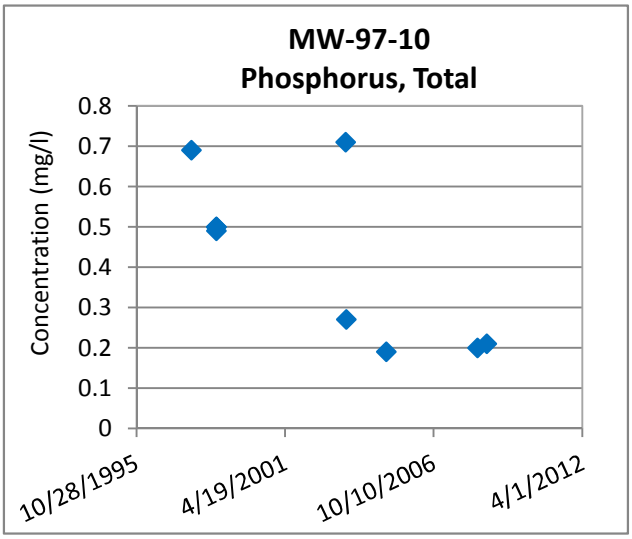


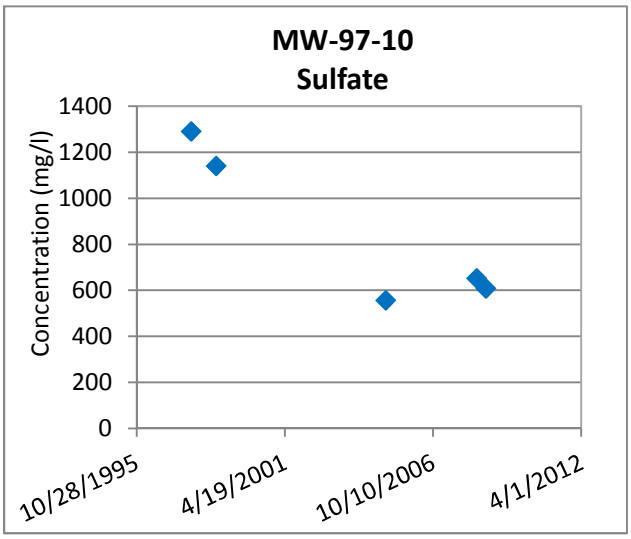
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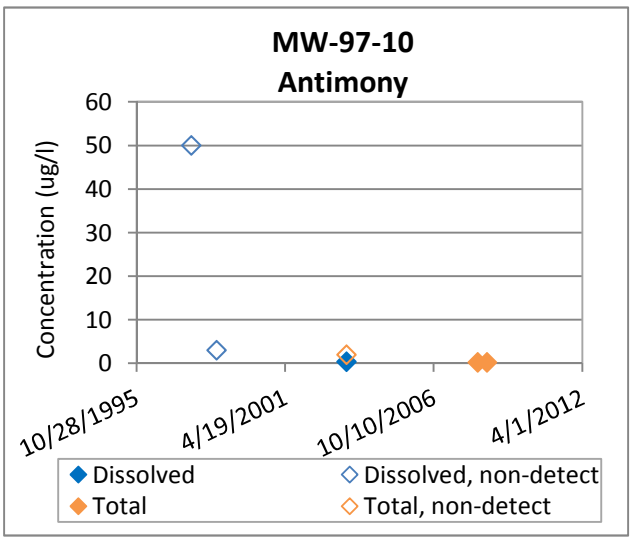
Time Series Plots - MW-97-10
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Rhodia Silver Bow Plant

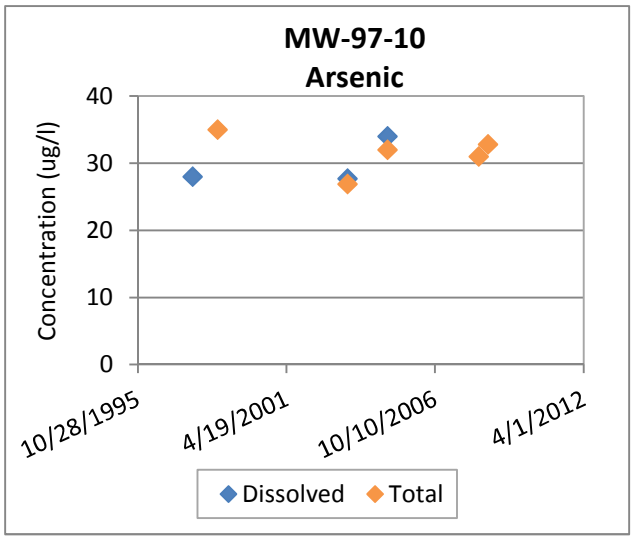




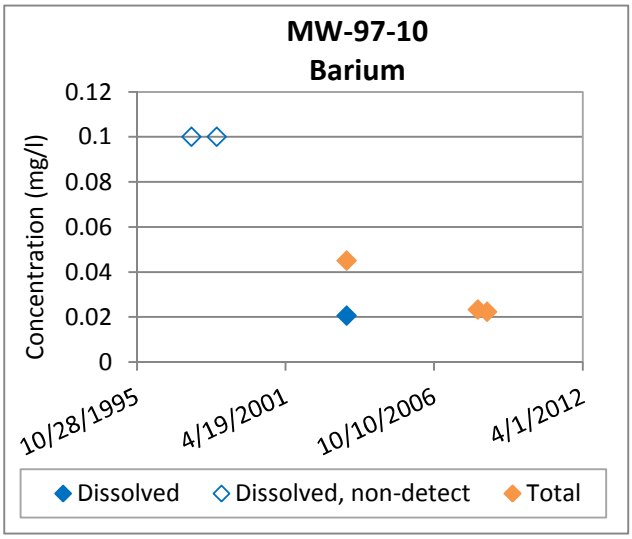


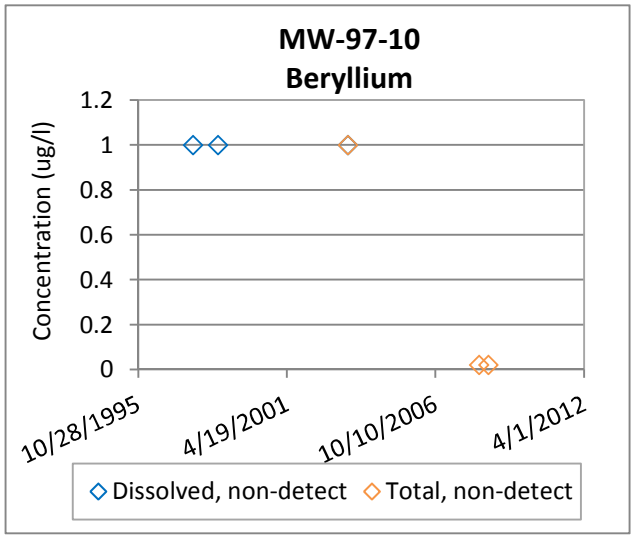


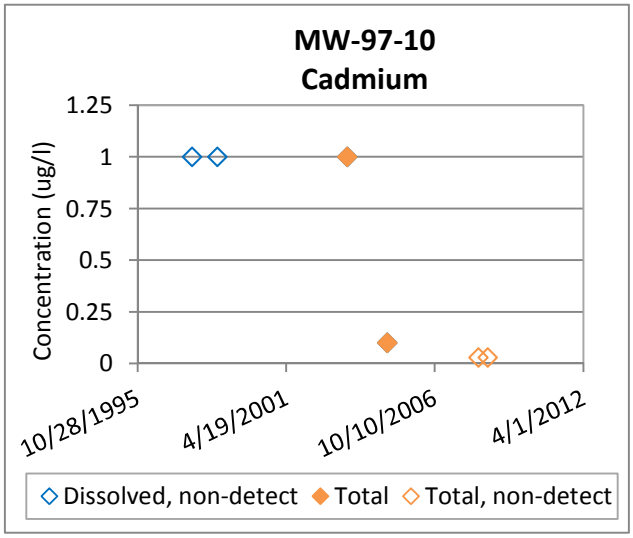


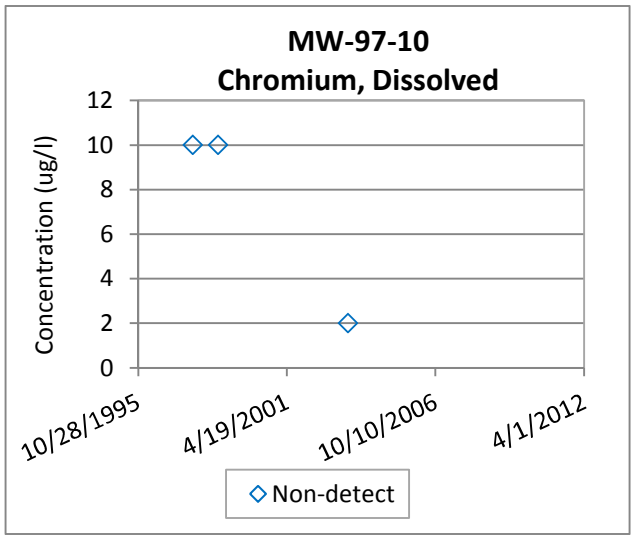


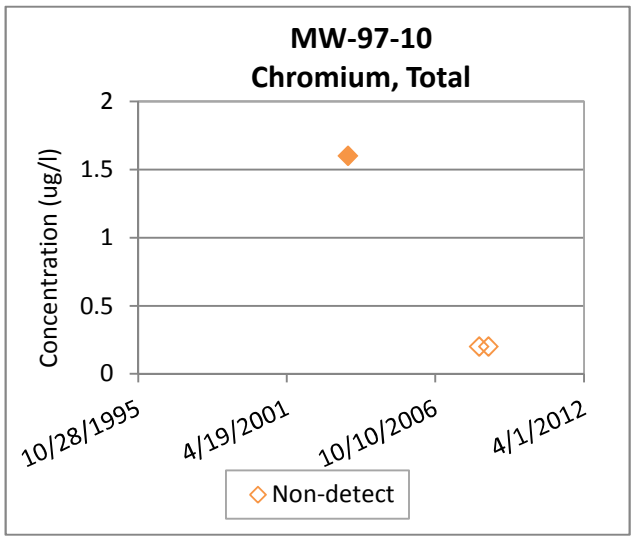
Time Series Plots - MW-97-10
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

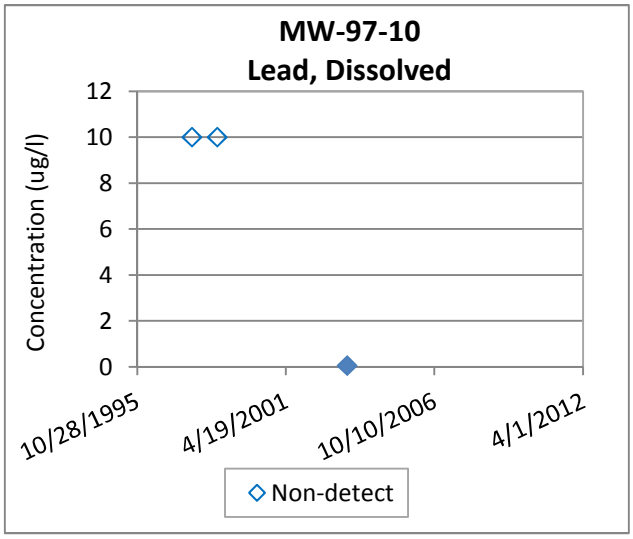




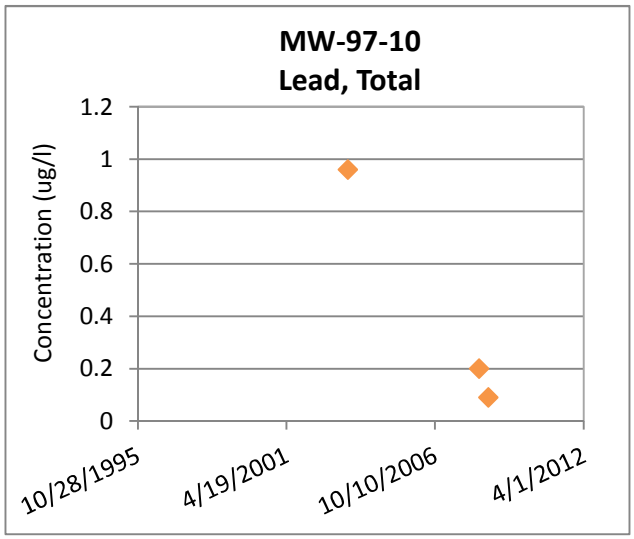


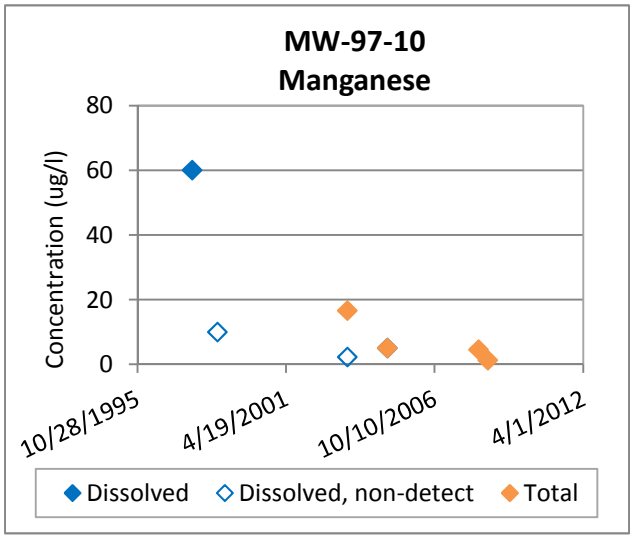


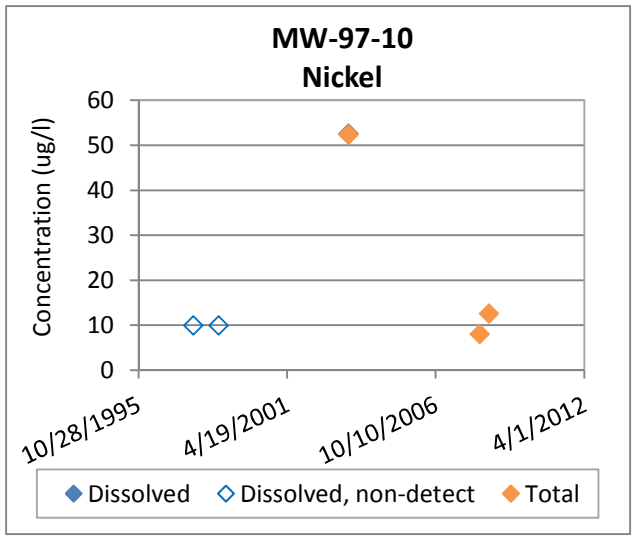


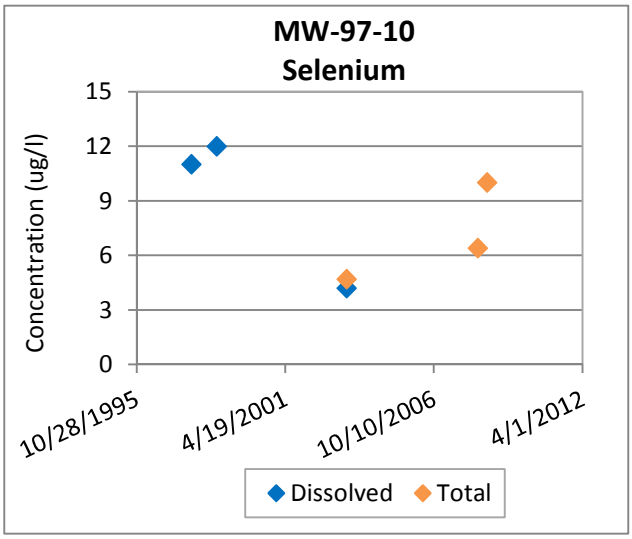


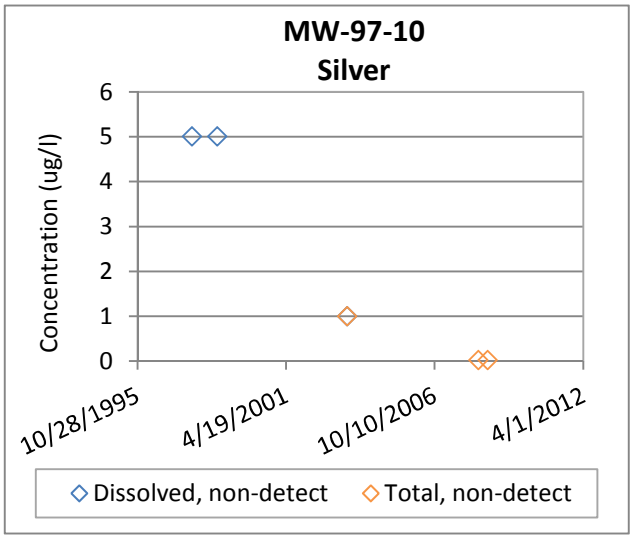
Time Series Plots - MW-97-10
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

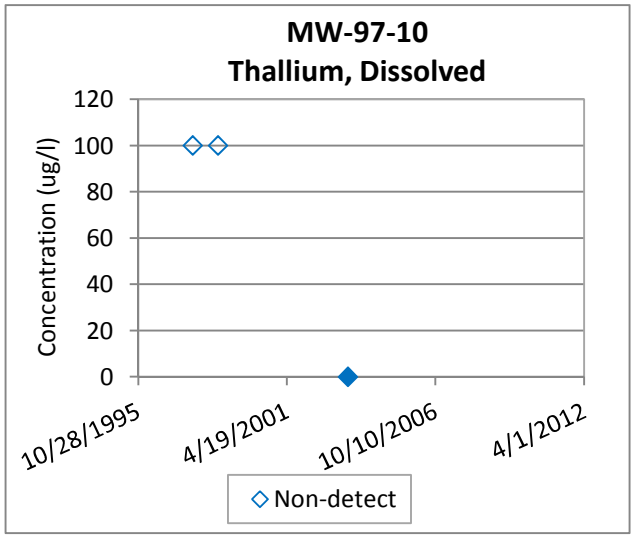




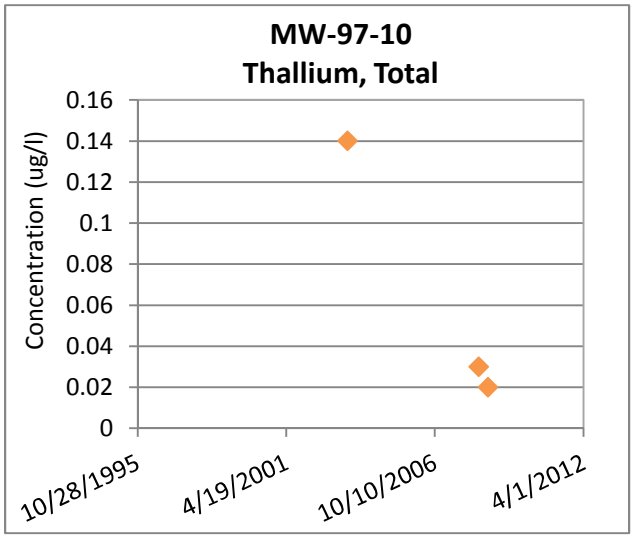


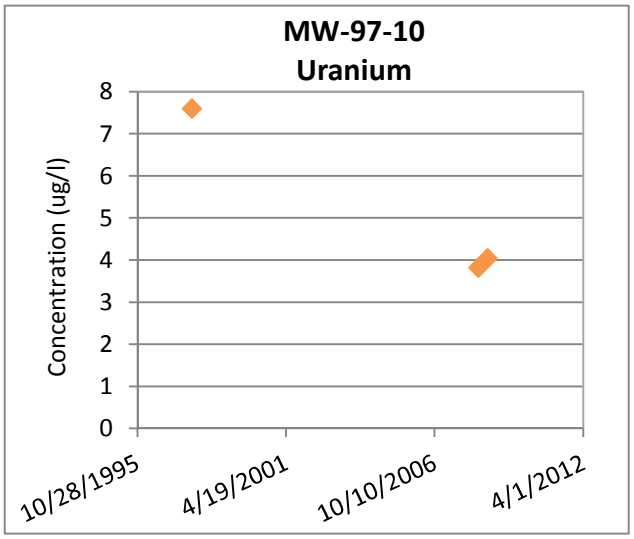




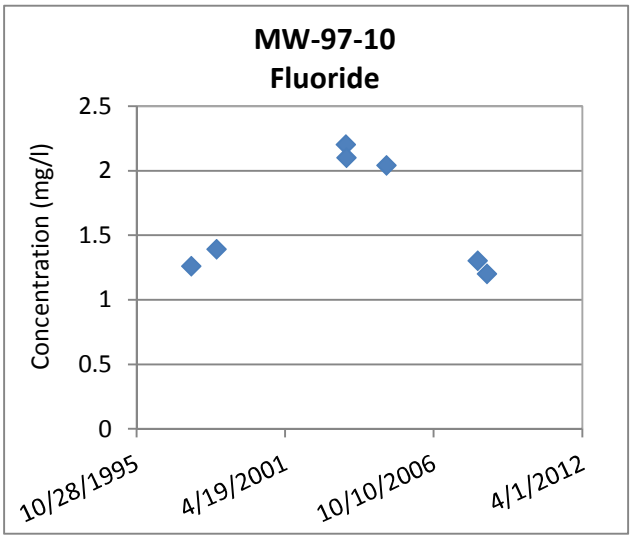


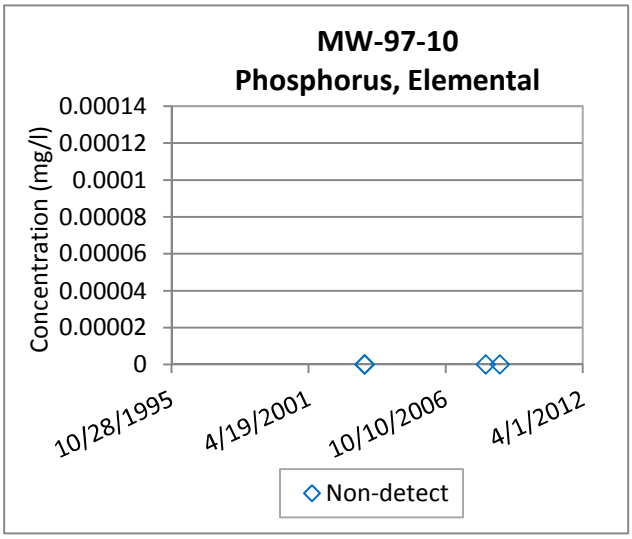
Time Series Plots - MW-97-10
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

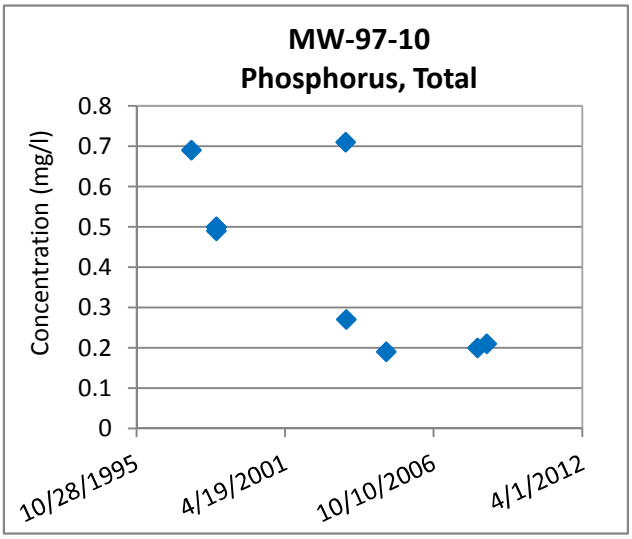


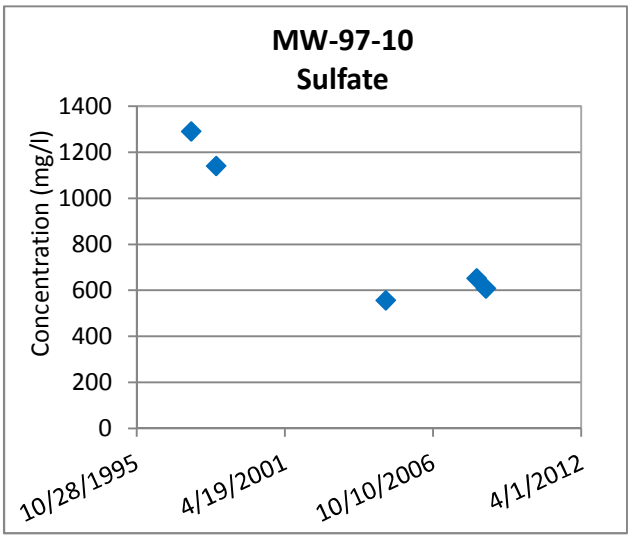


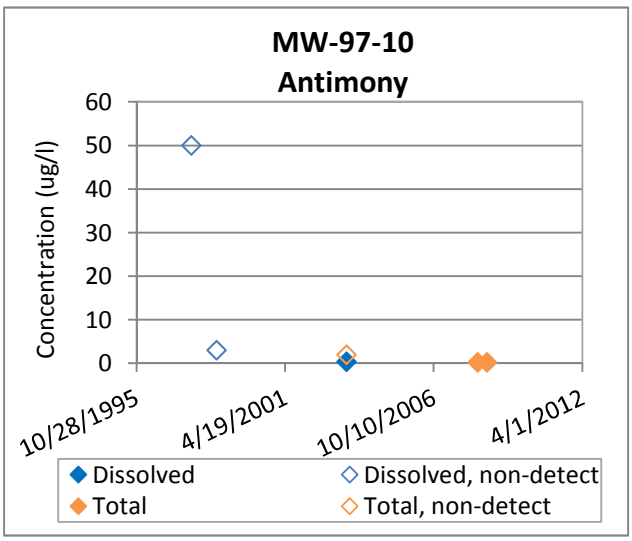
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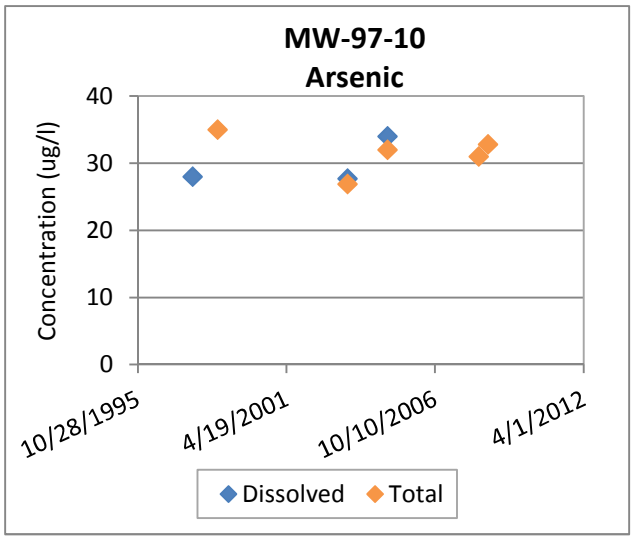




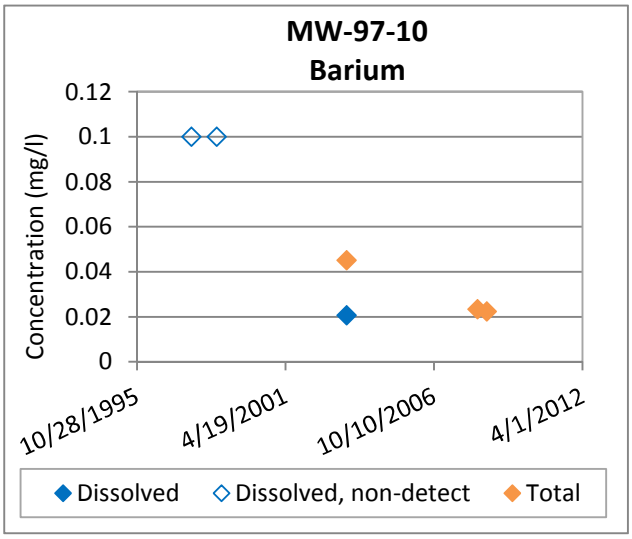


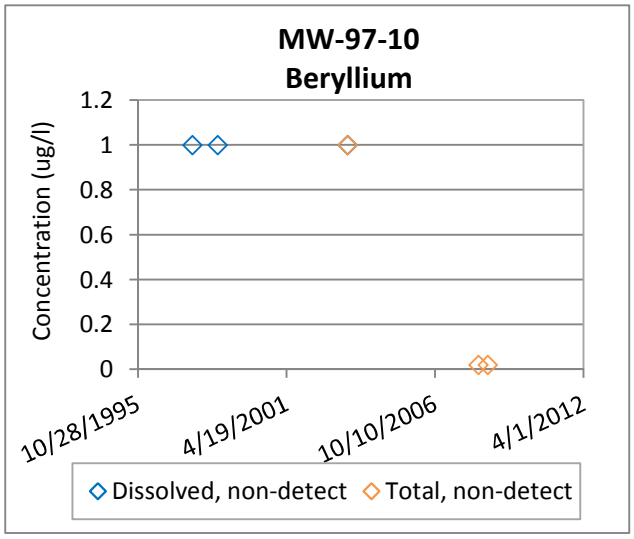


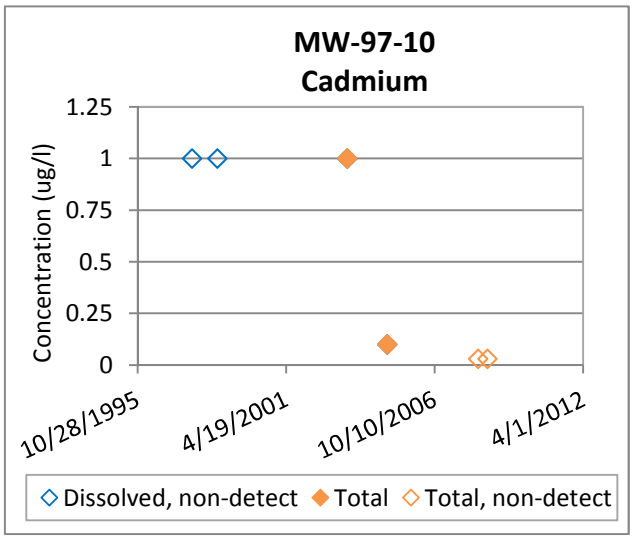


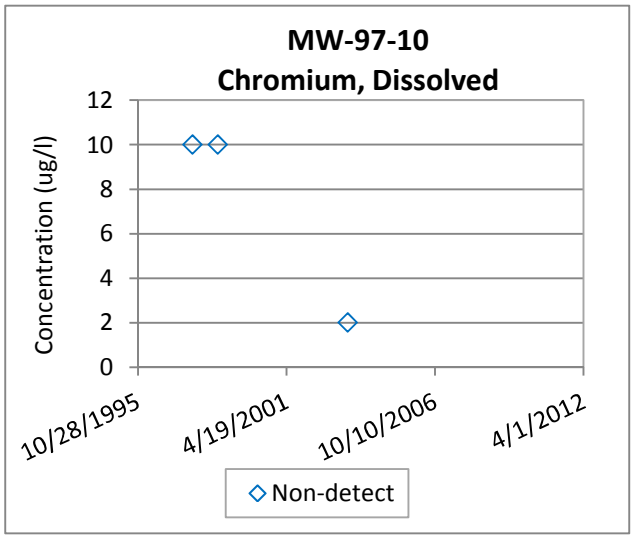


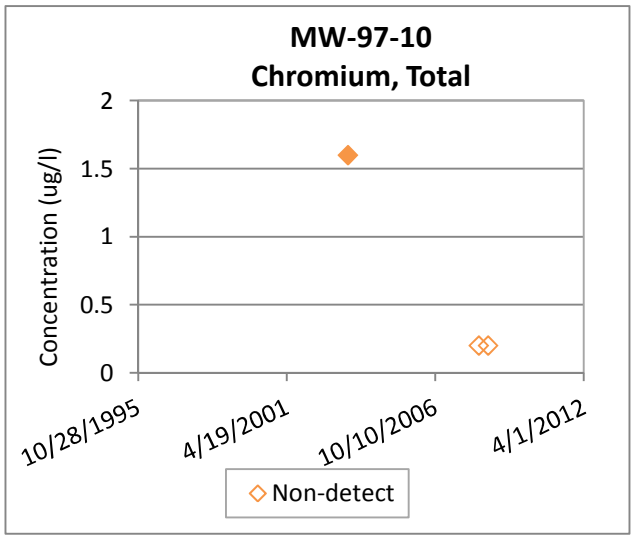
Time Series Plots - MW-97-10
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

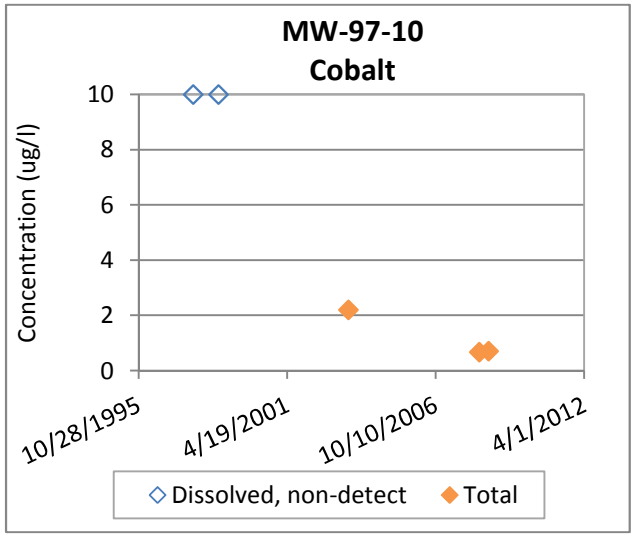




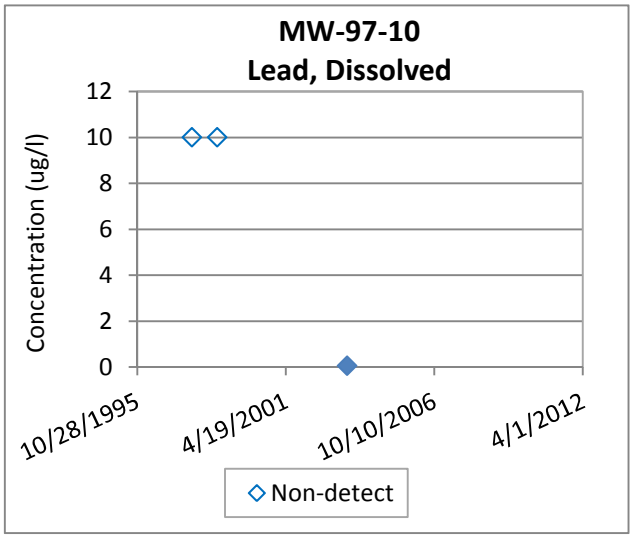


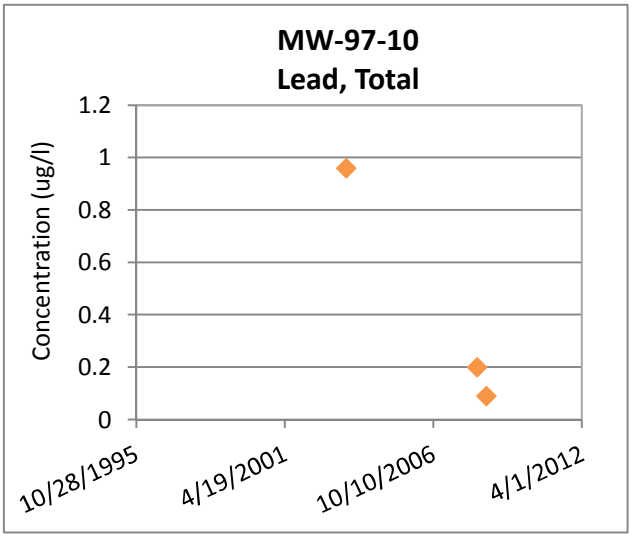


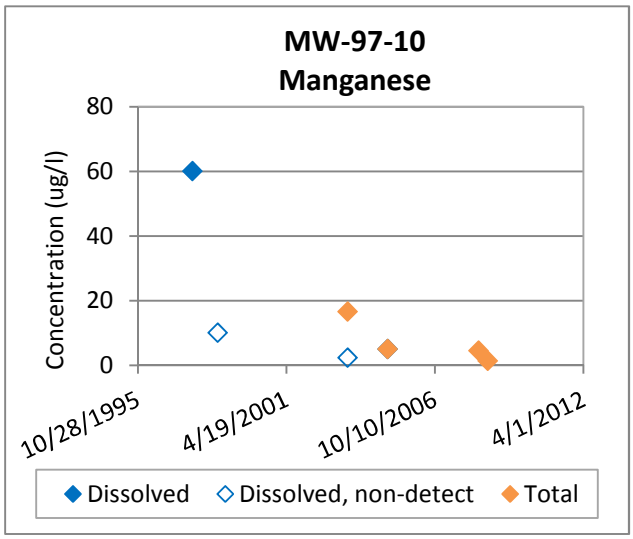


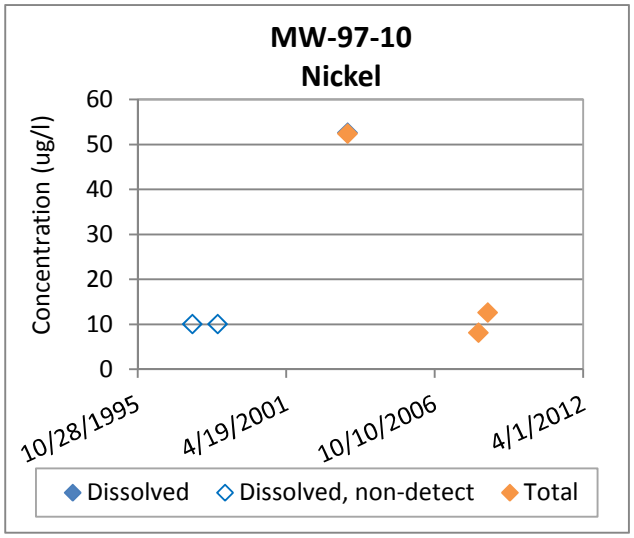


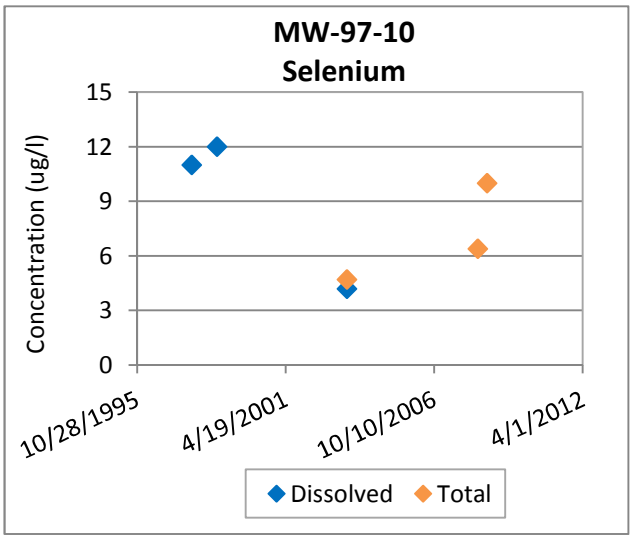
Time Series Plots - MW-97-10
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

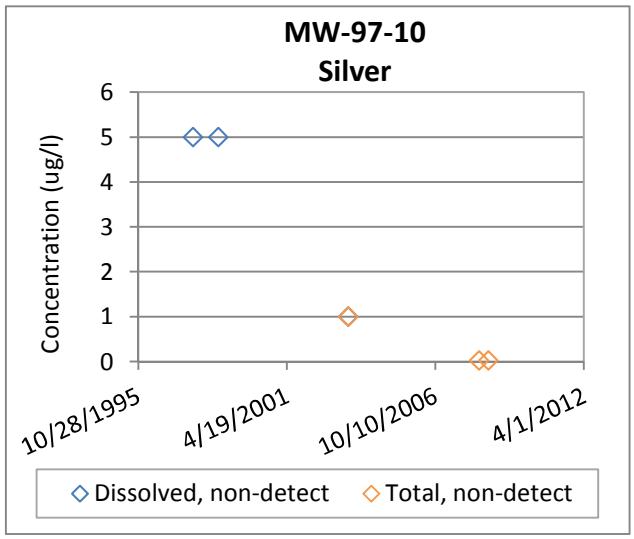




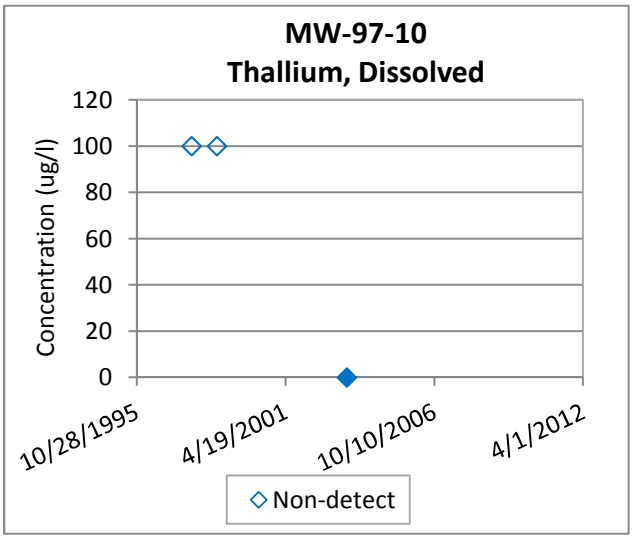


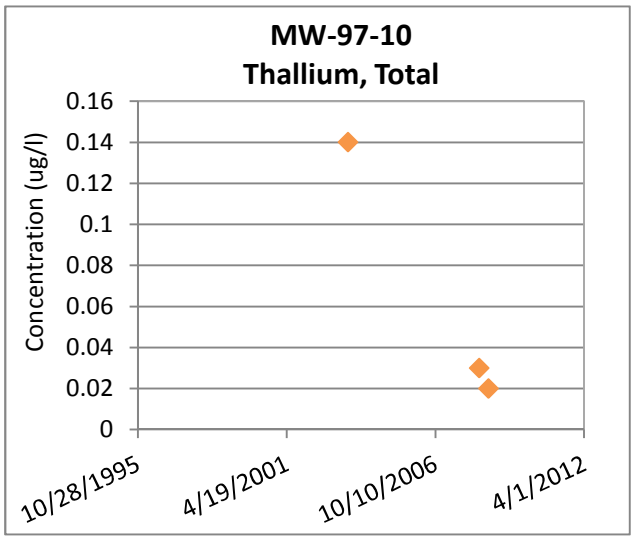


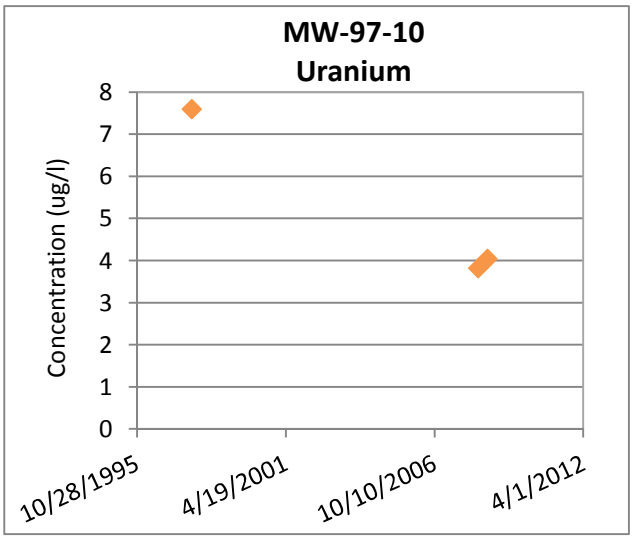




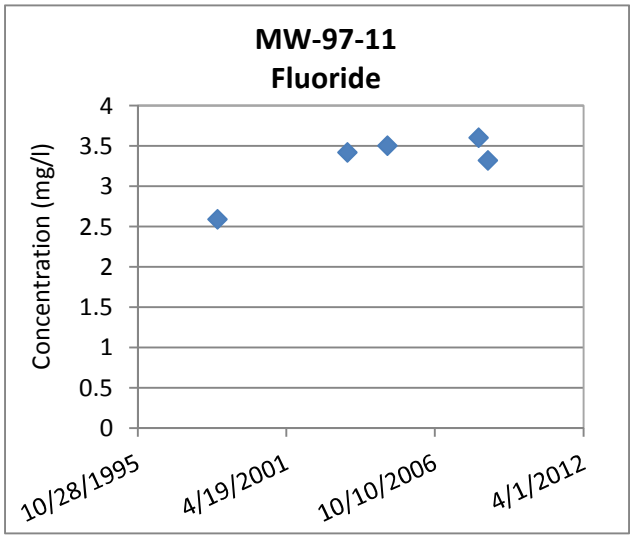
Time Series Plots - MW-97-10
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

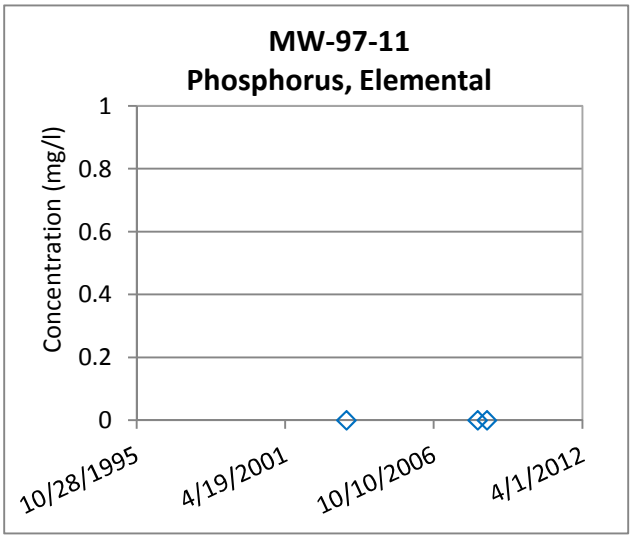


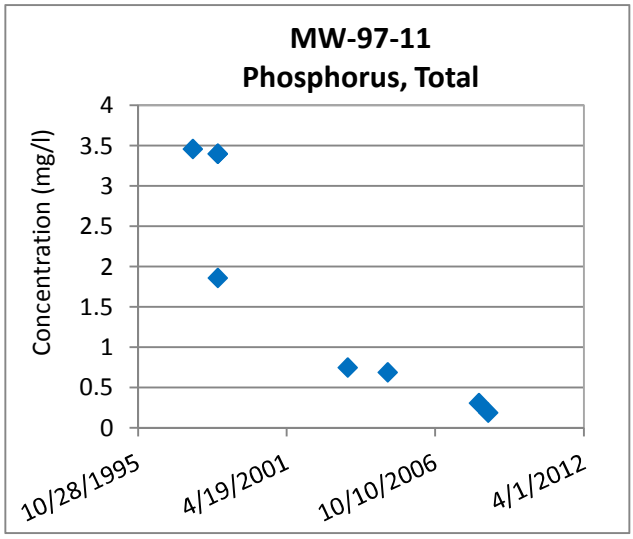


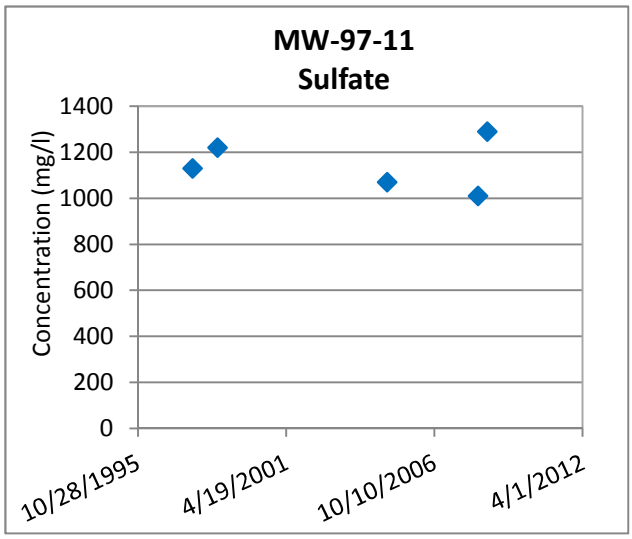


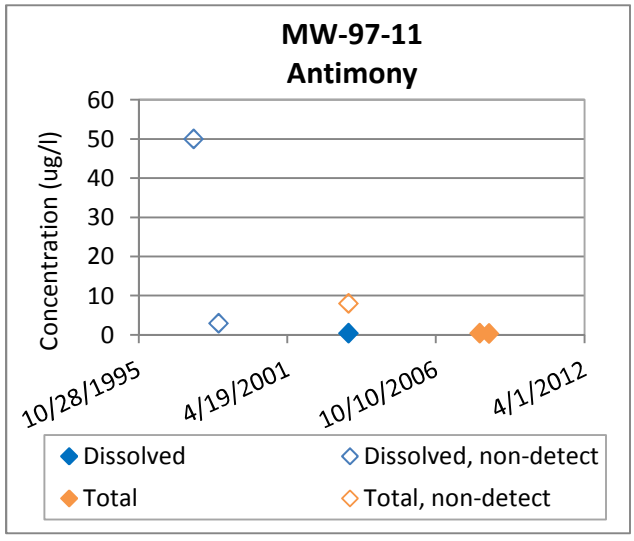
Time Series Plots - MW-97-11
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

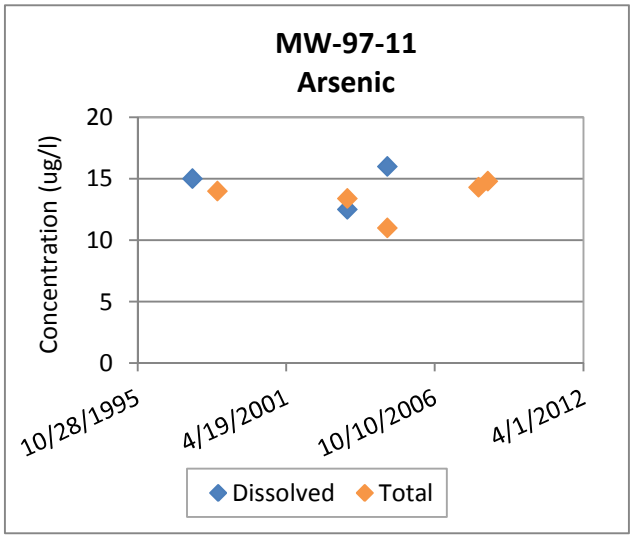




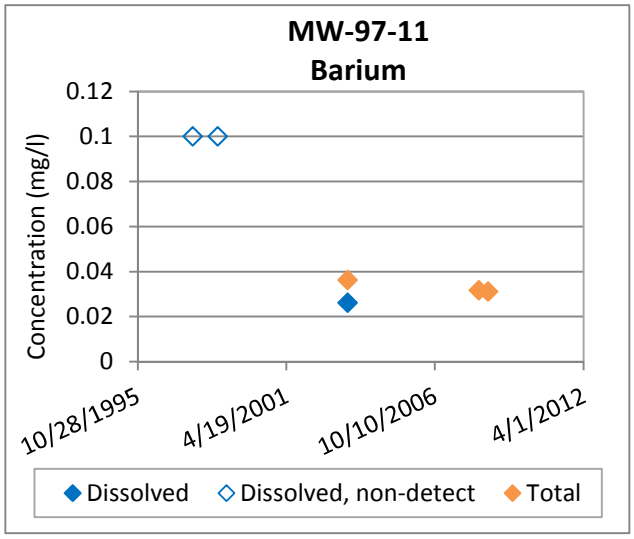


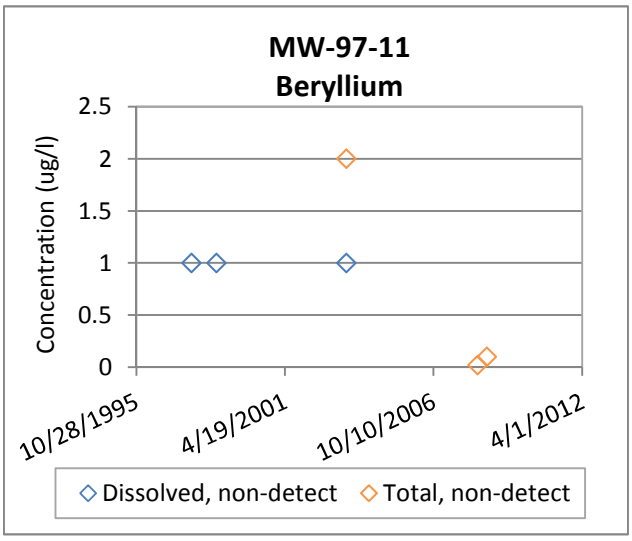


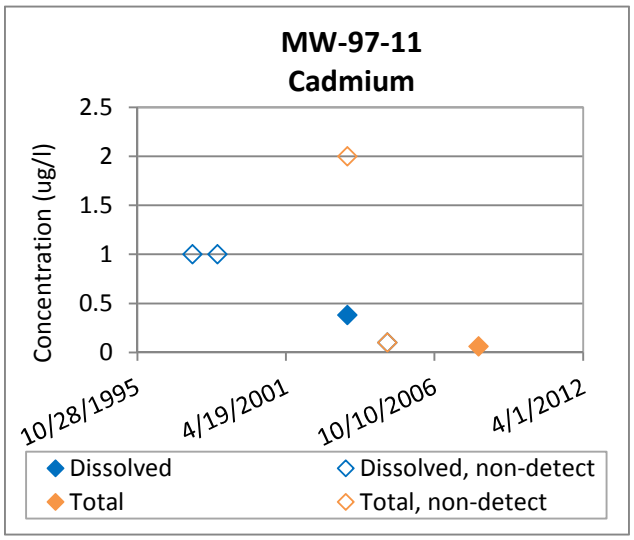


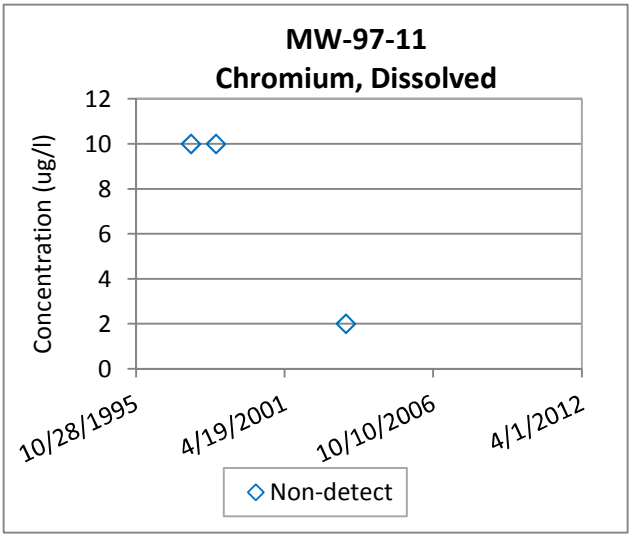


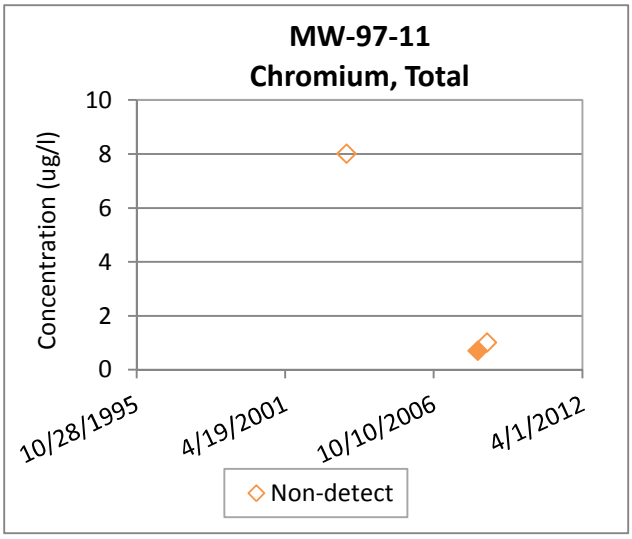
Time Series Plots - MW-97-11
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

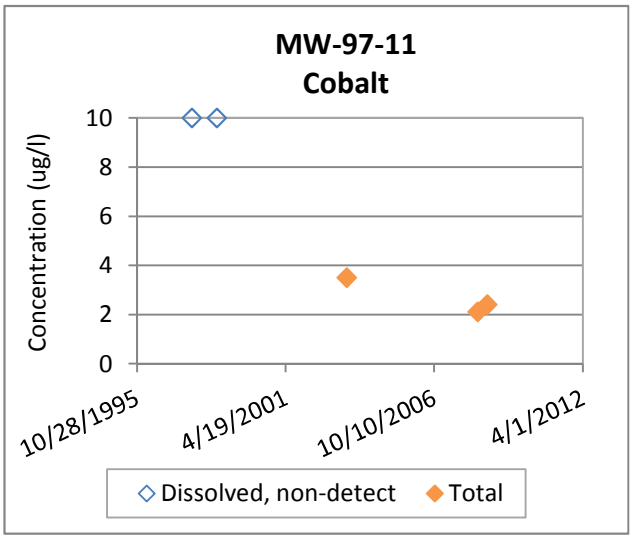




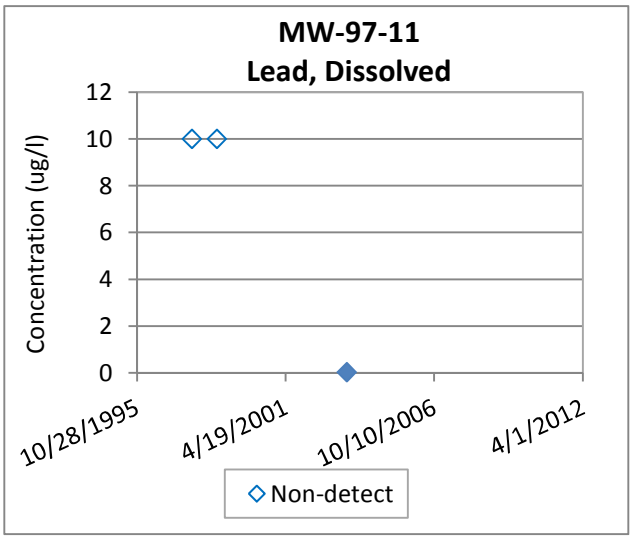


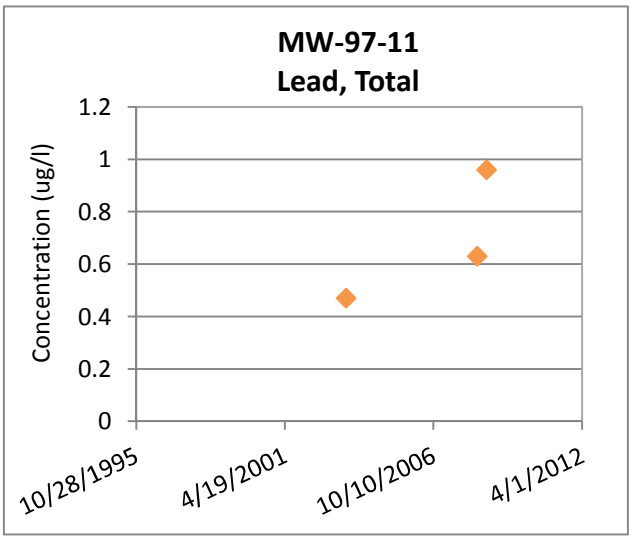


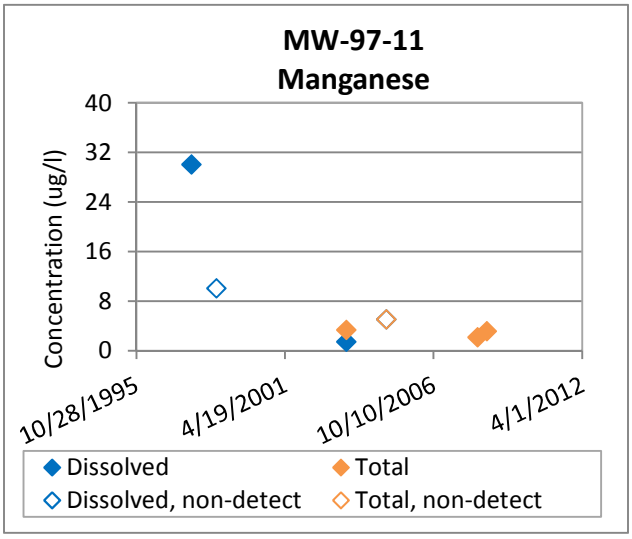


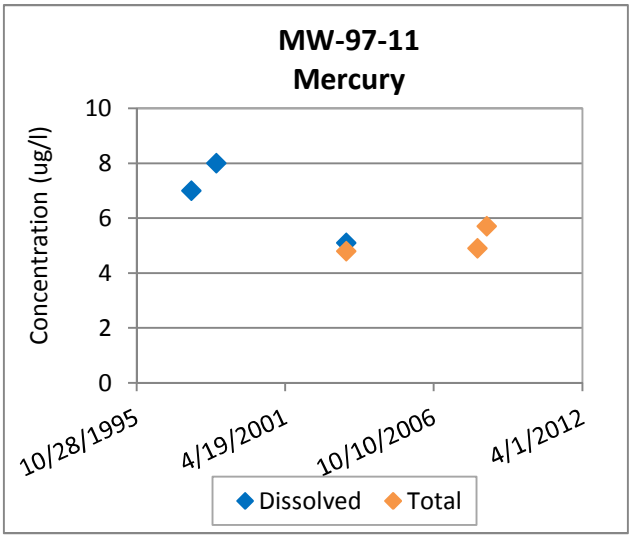


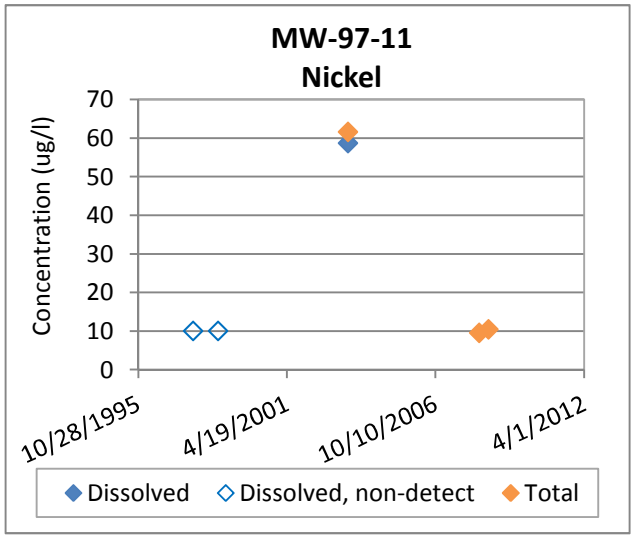
Time Series Plots - MW-97-11
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

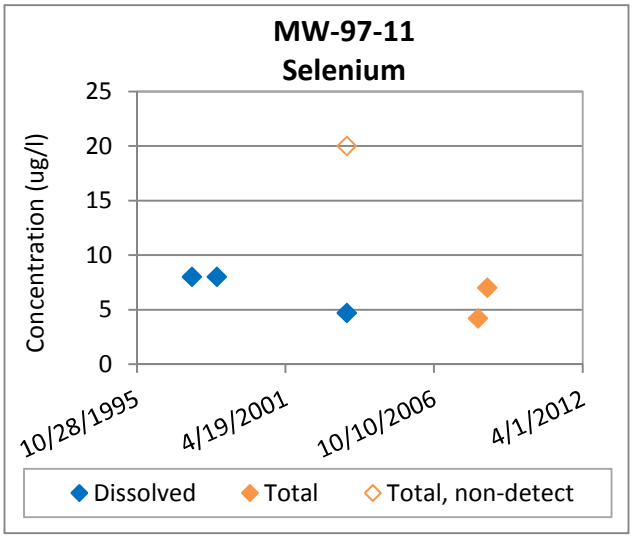




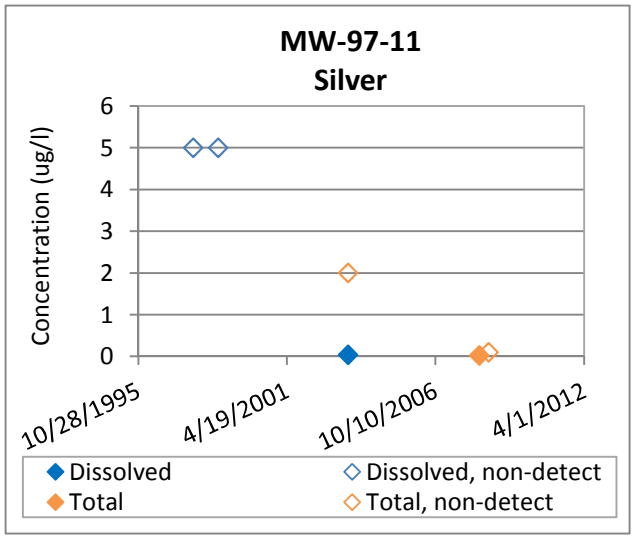


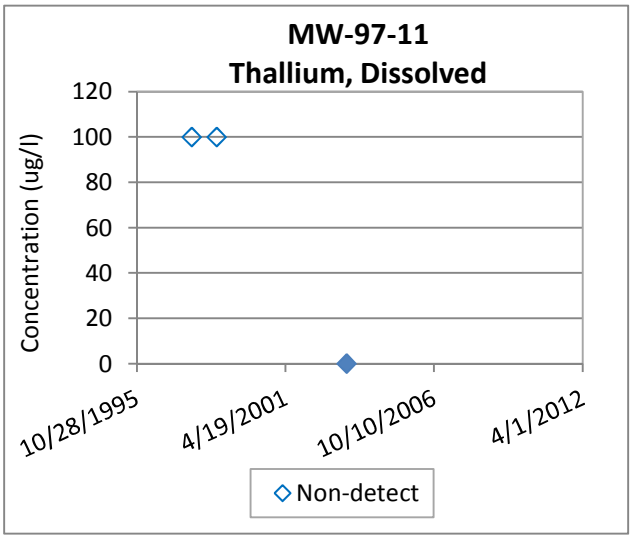


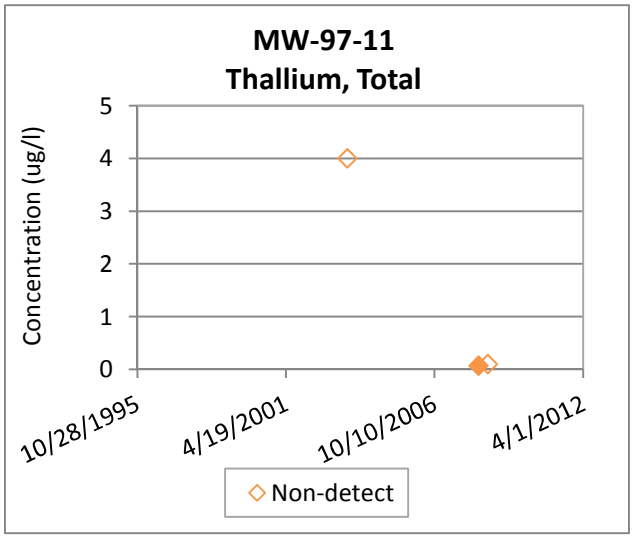


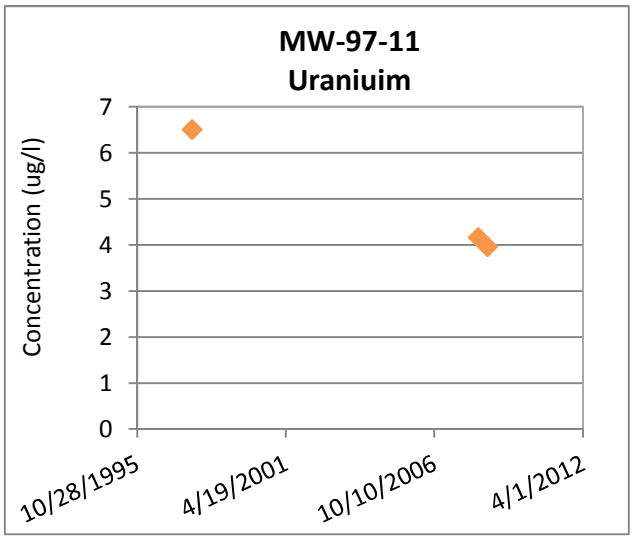


Time Series Plots - MW-97-11
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

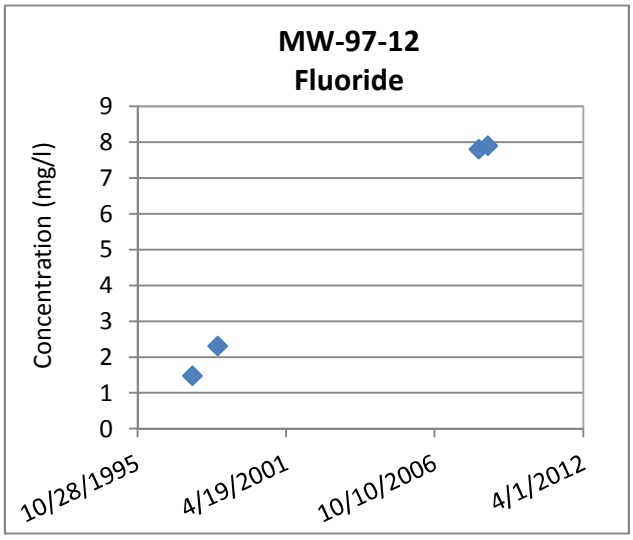


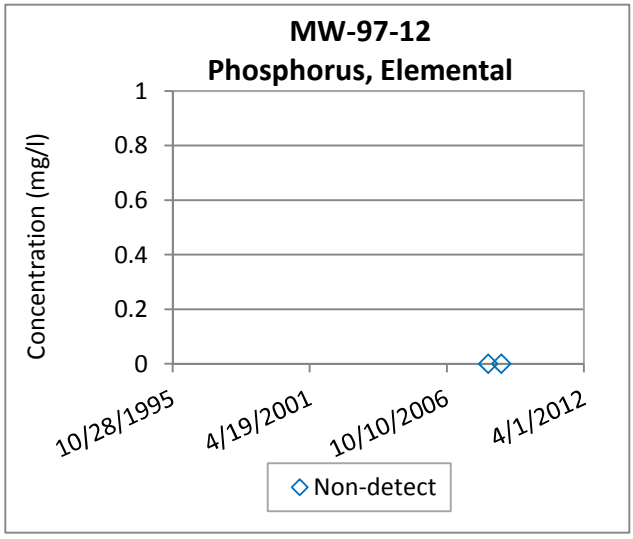


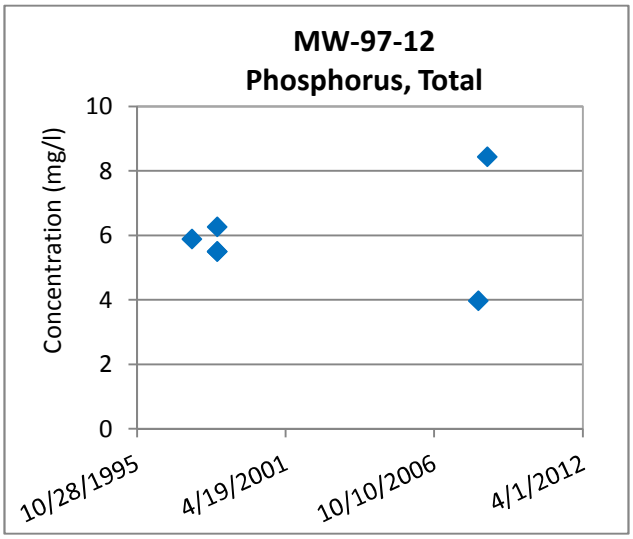


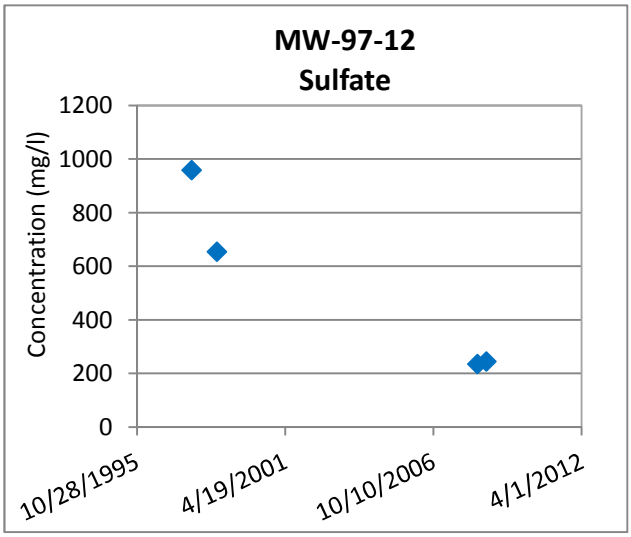


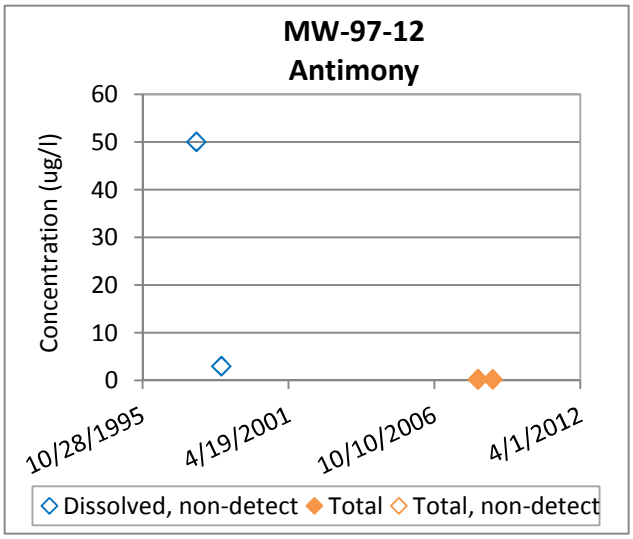
Time Series Plots - MW-97-12
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

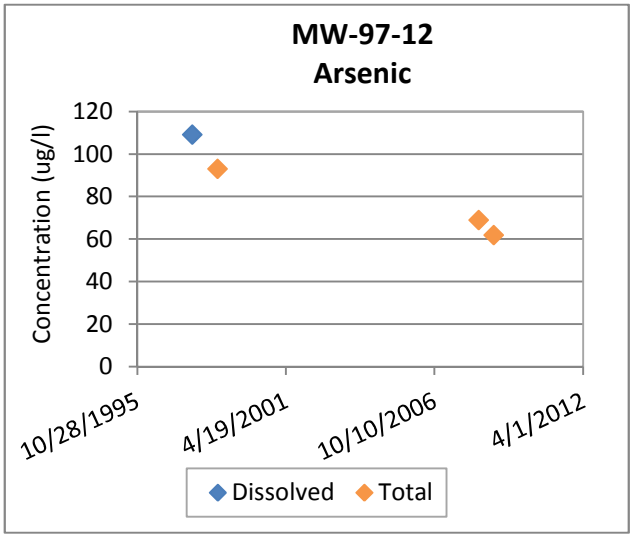




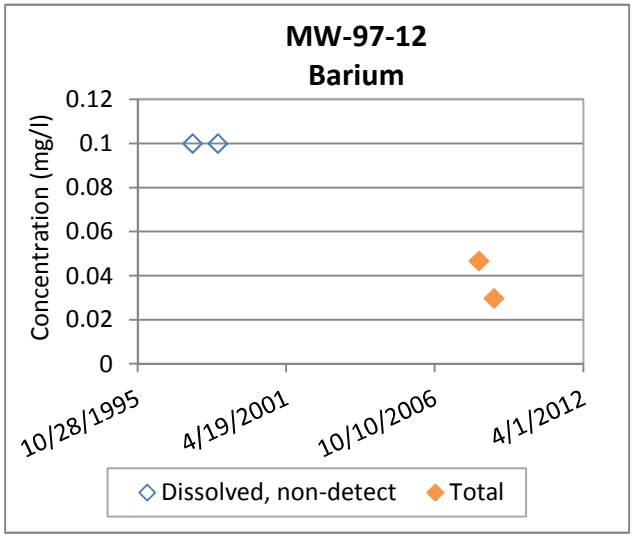


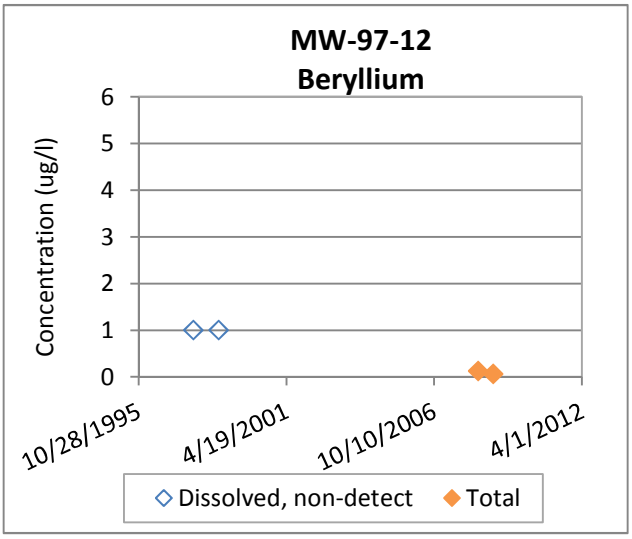


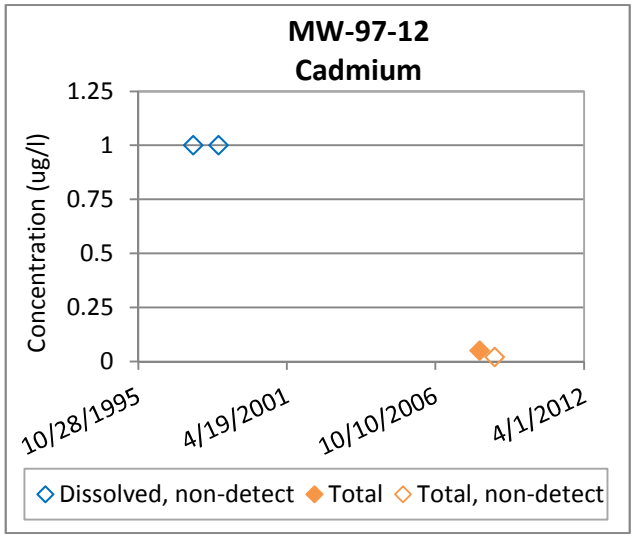


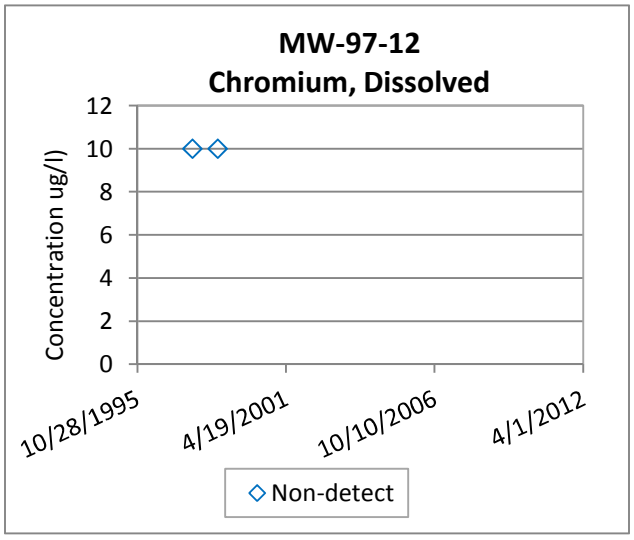


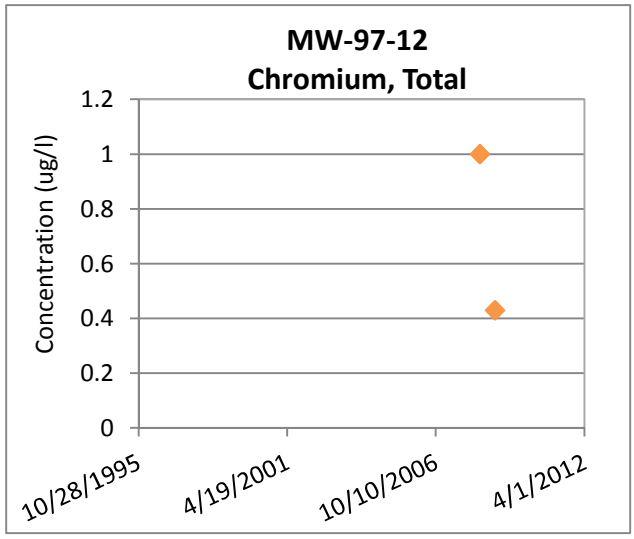
Time Series Plots - MW-97-12
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

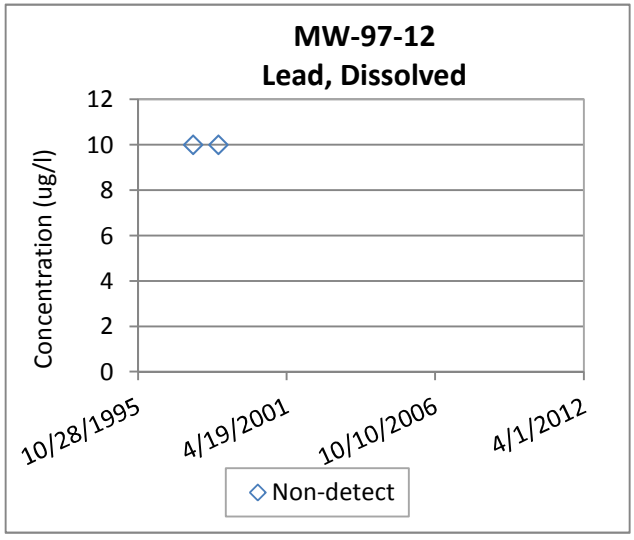




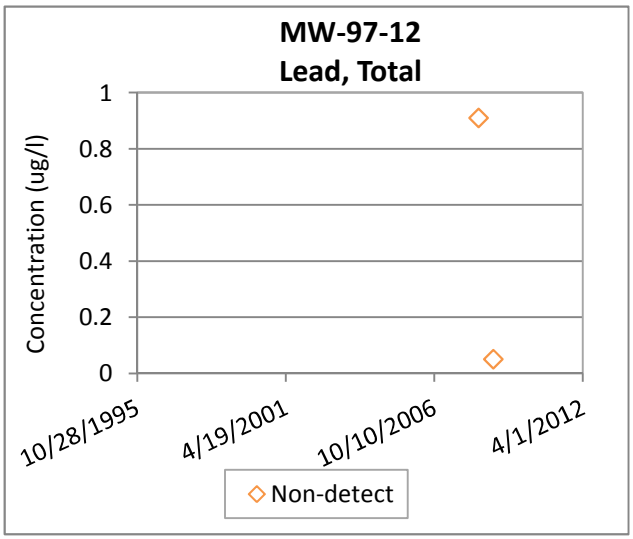


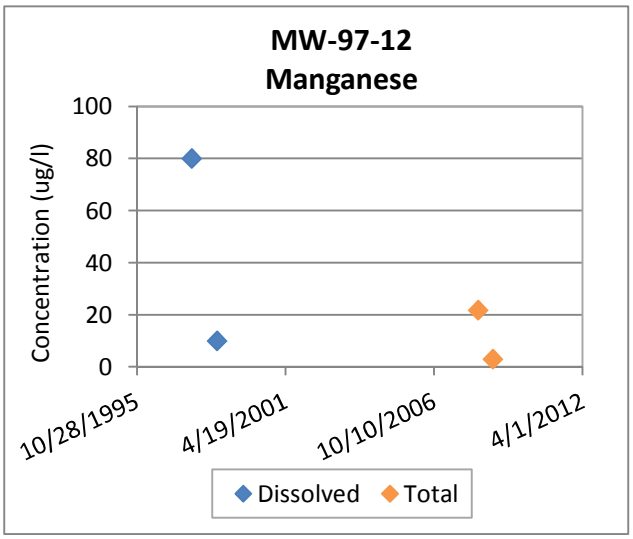


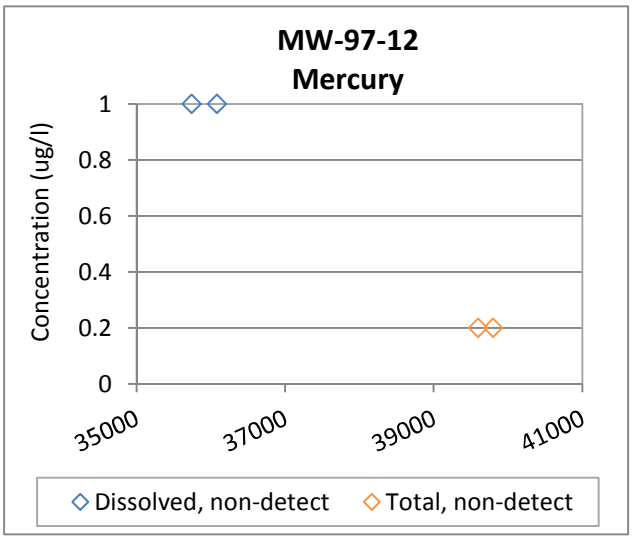


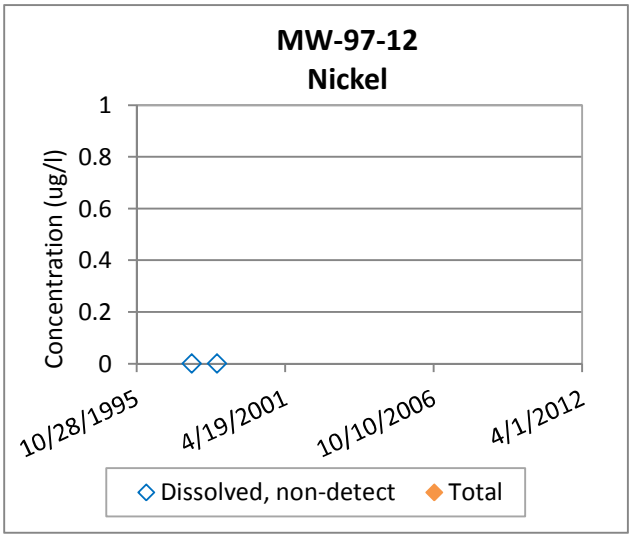


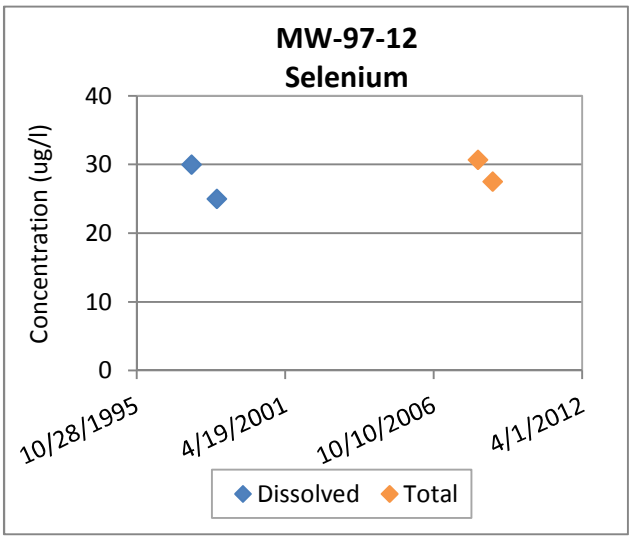
Time Series Plots - MW-97-12
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

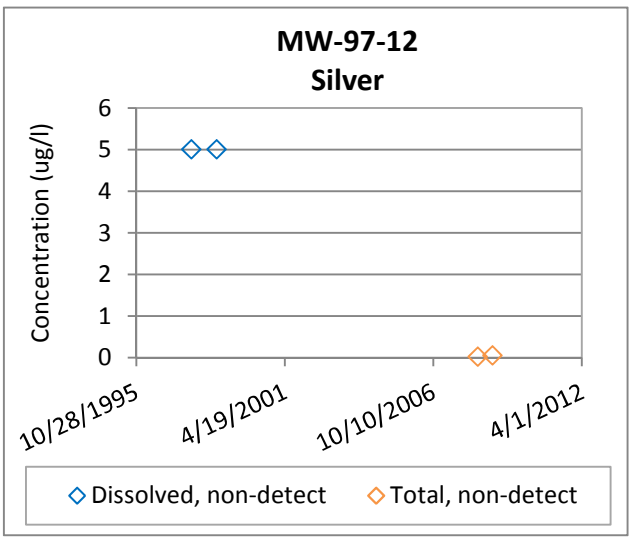






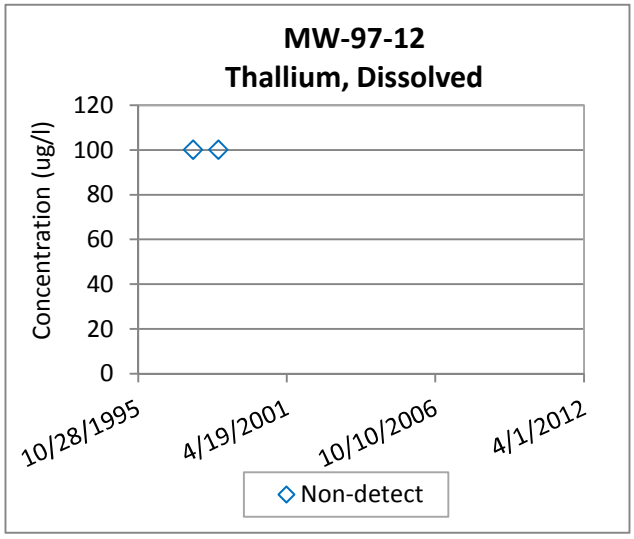


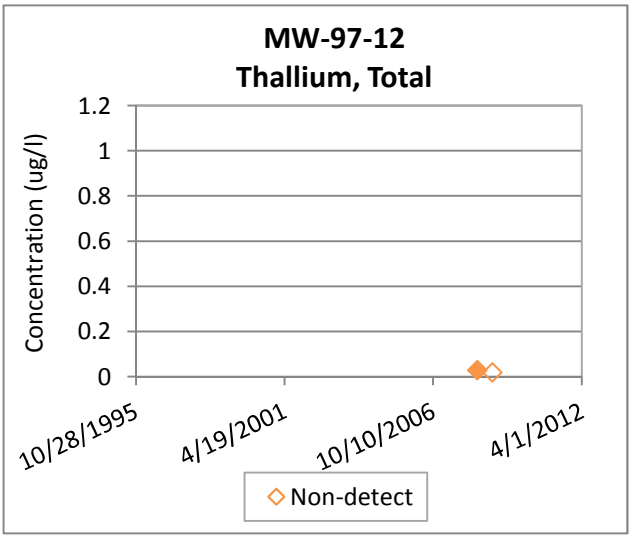


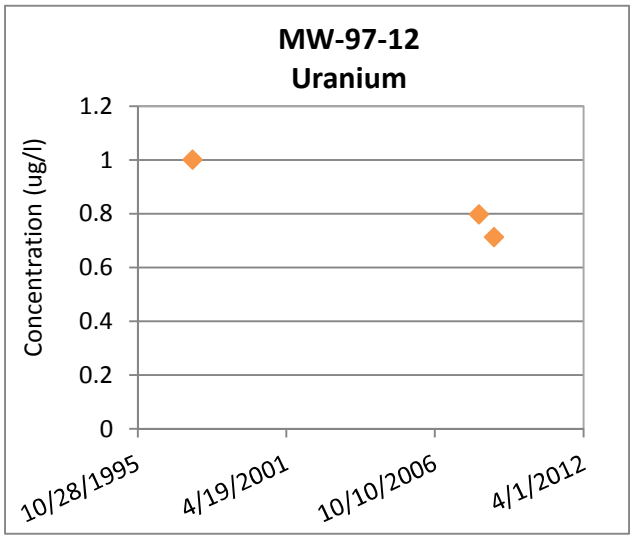


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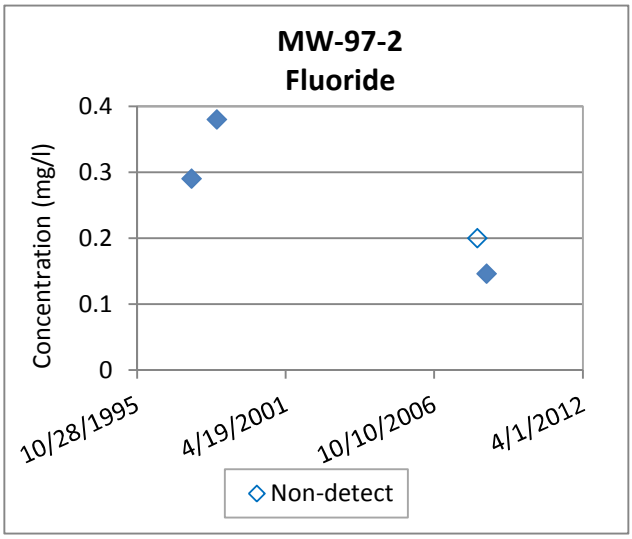
Time Series Plots - MW-97-12
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

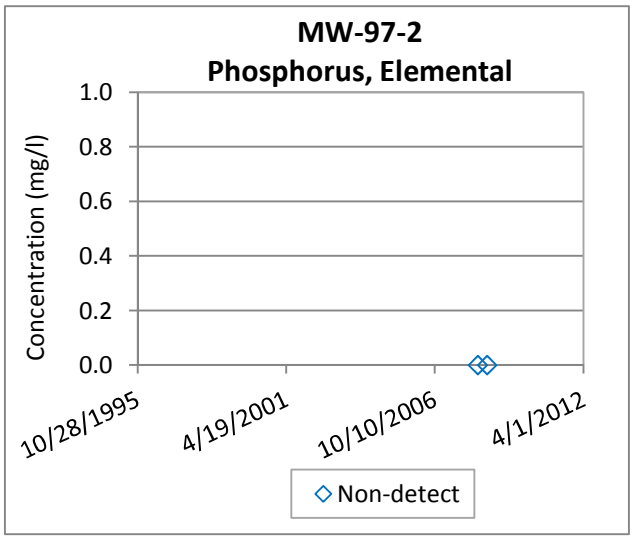


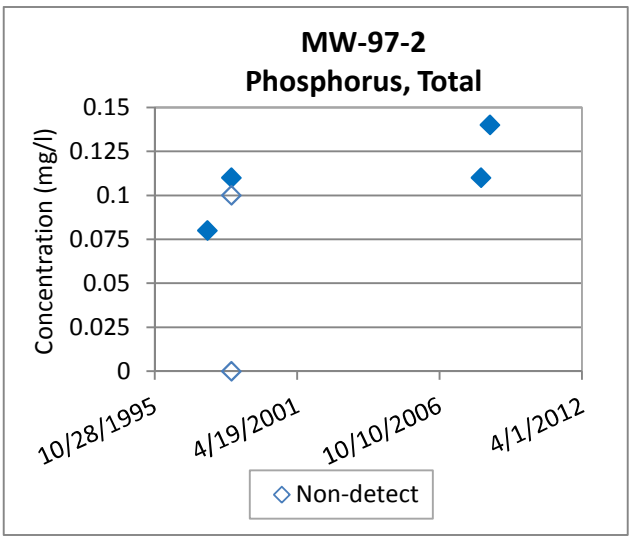


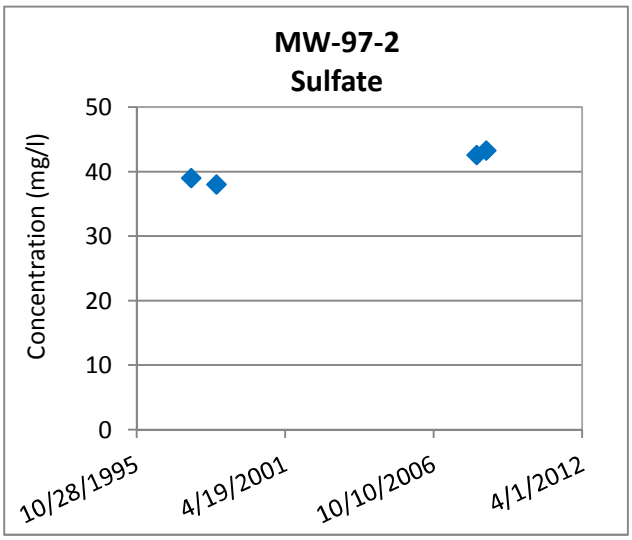


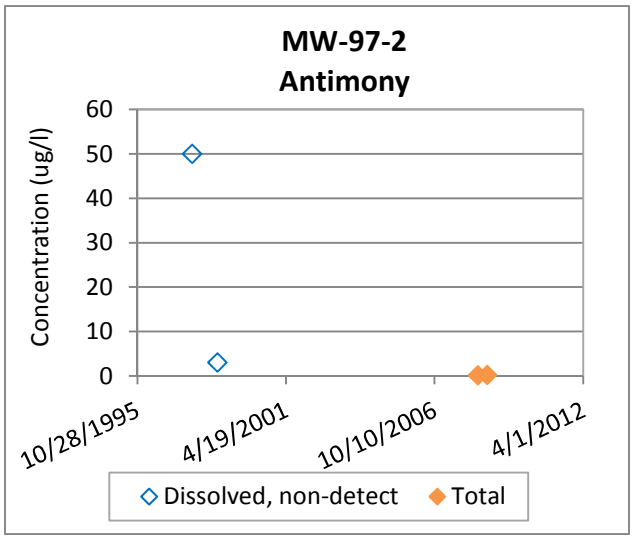
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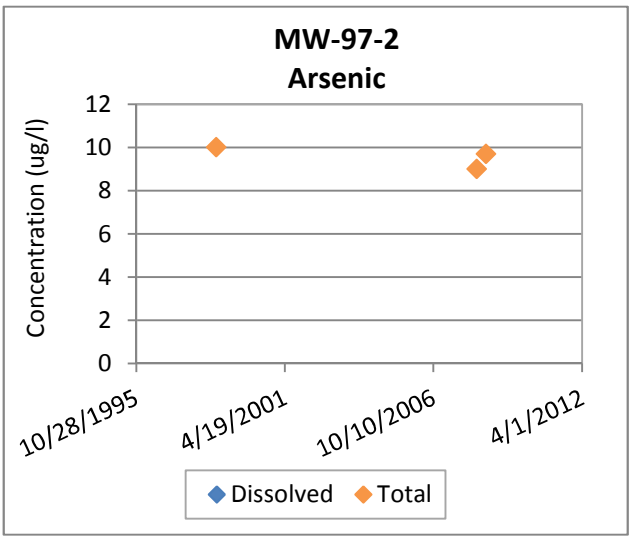




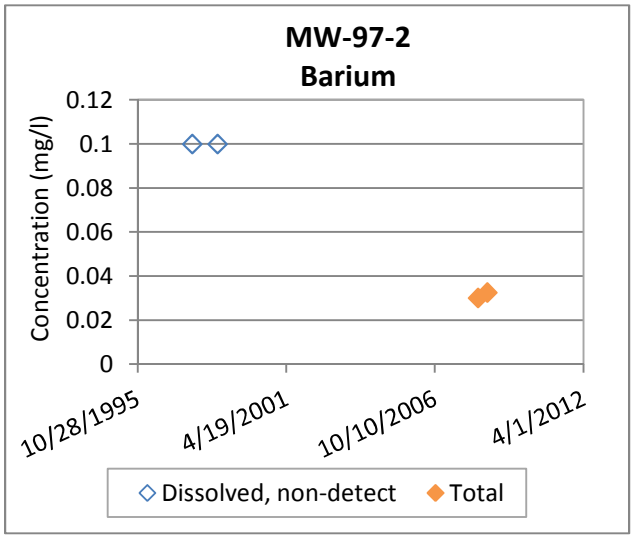


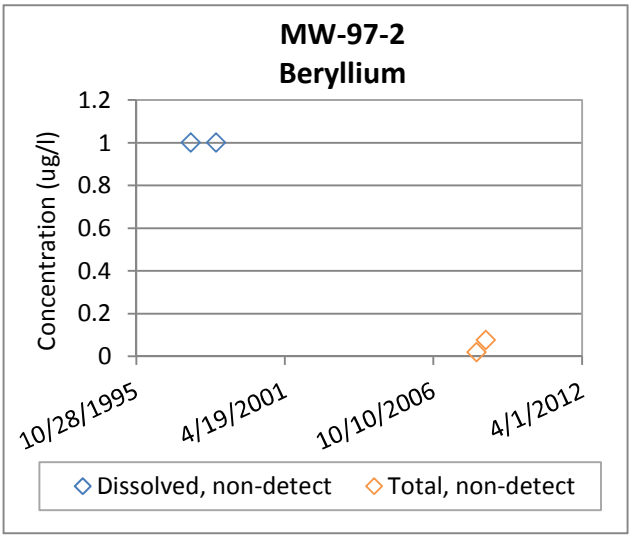


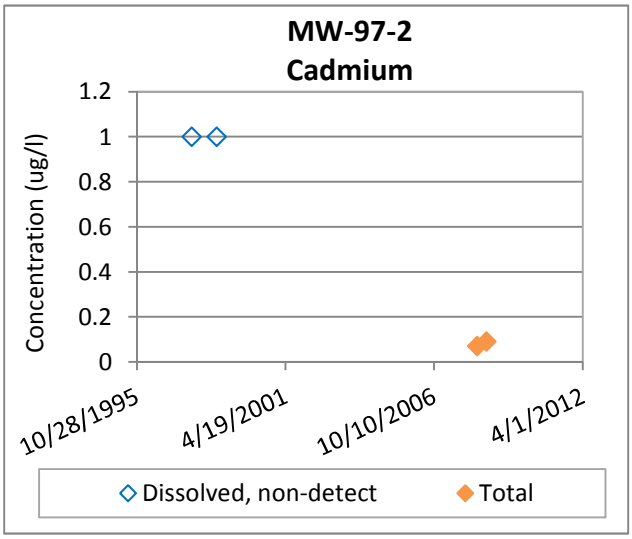


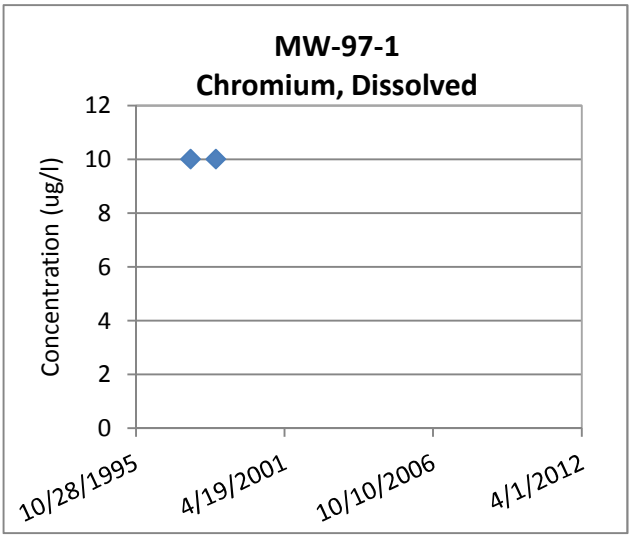


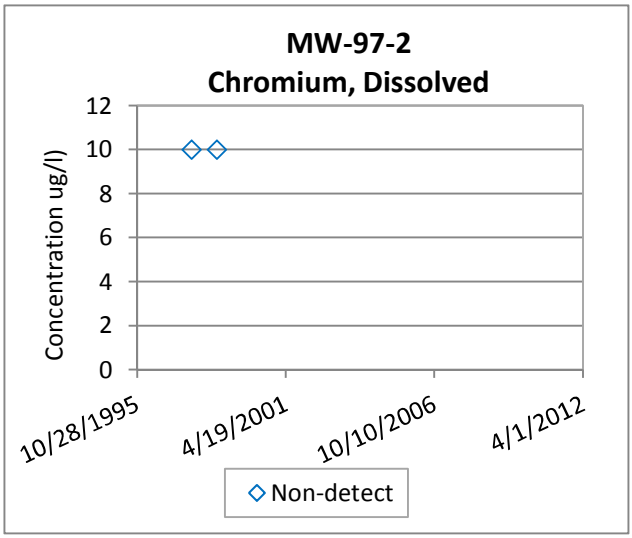
Time Series Plots - MW-97-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

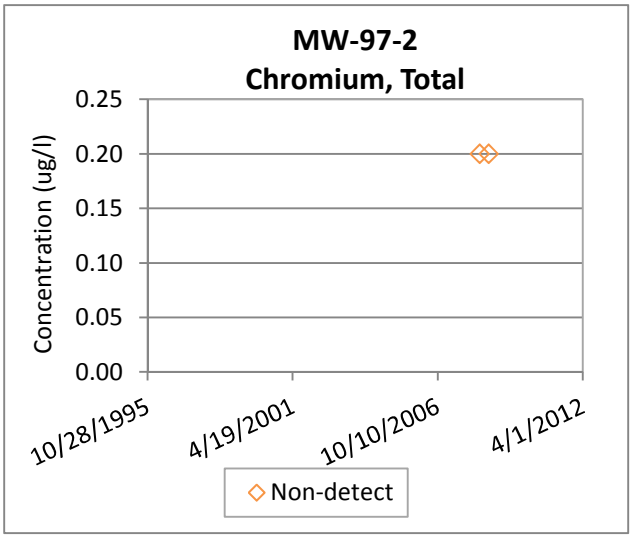




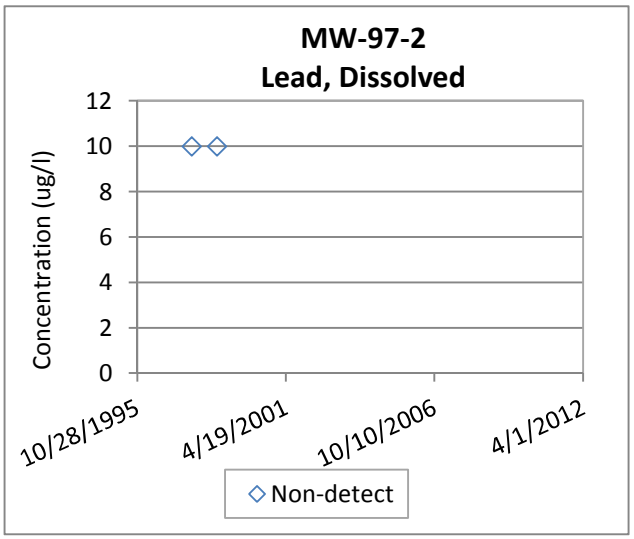


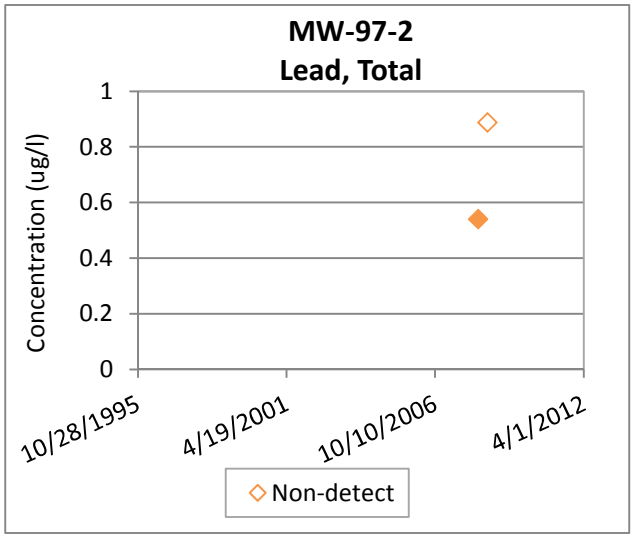


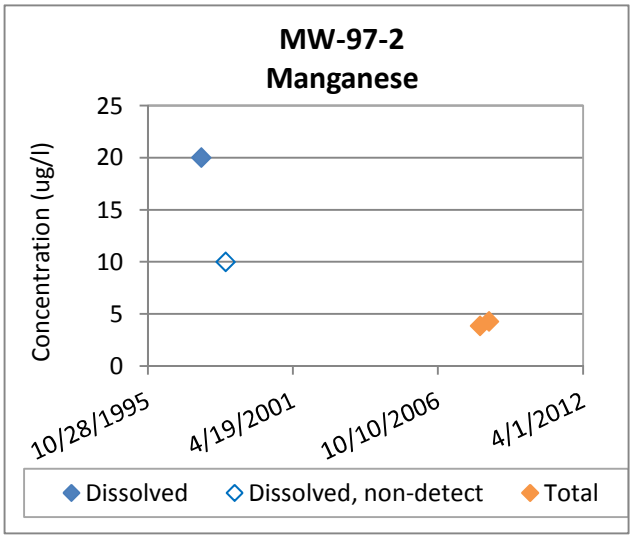


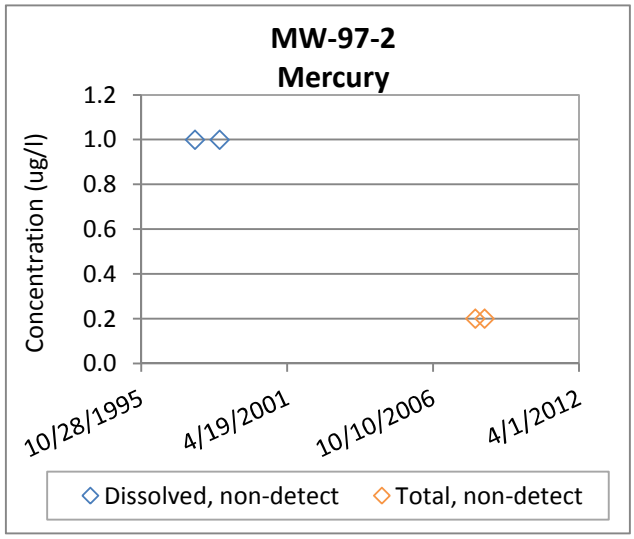


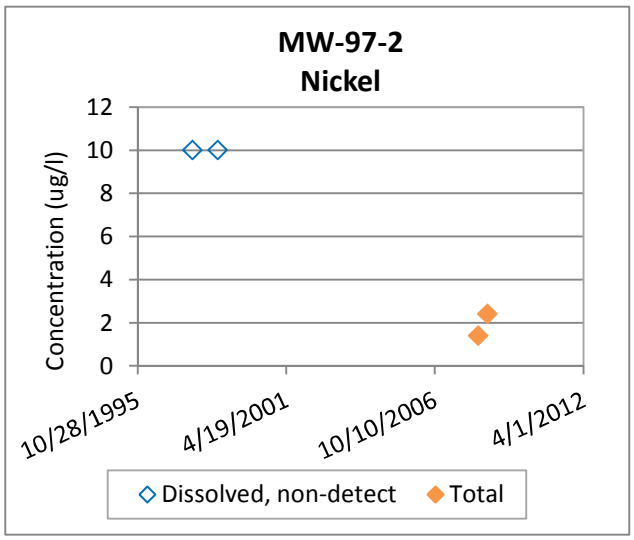
Time Series Plots - MW-97-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

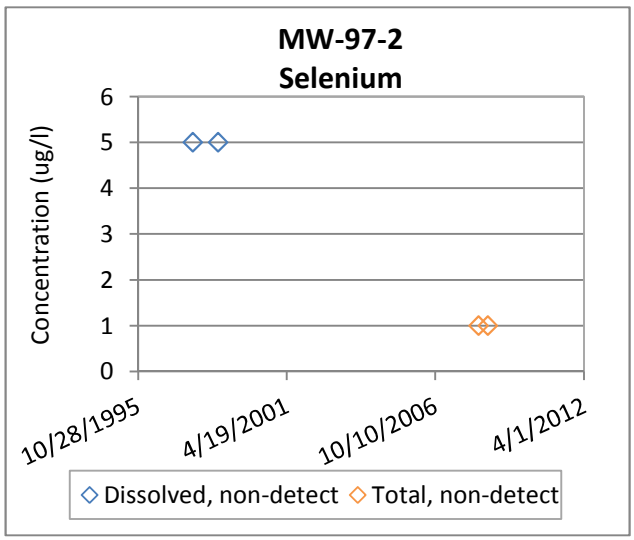




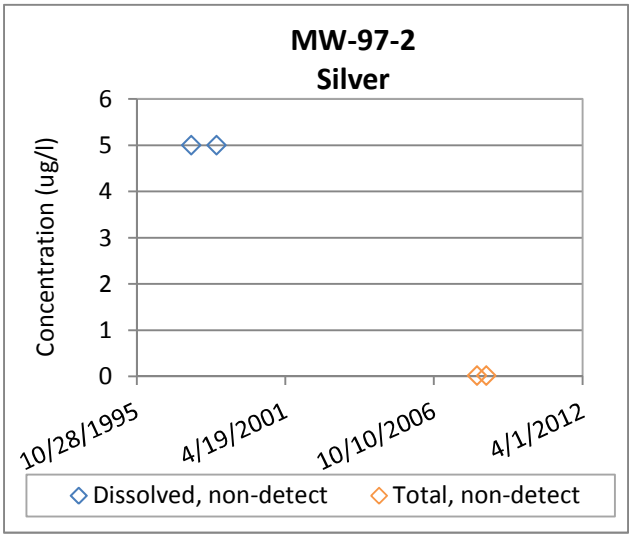


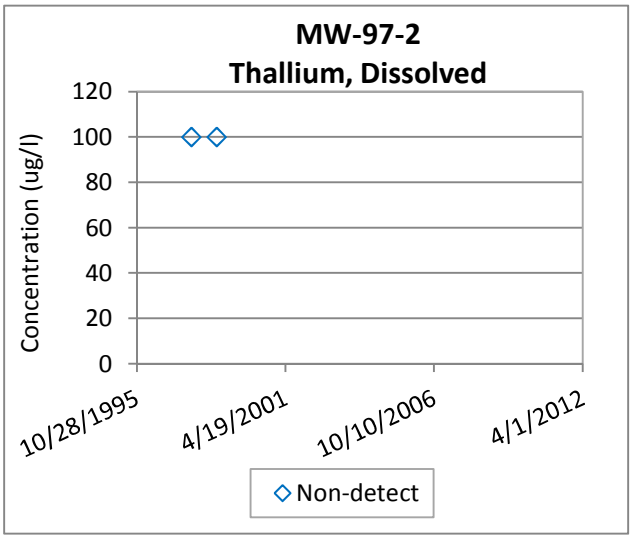


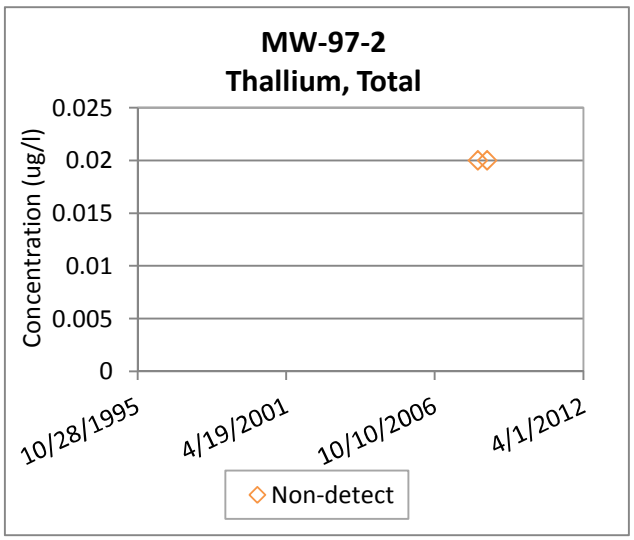


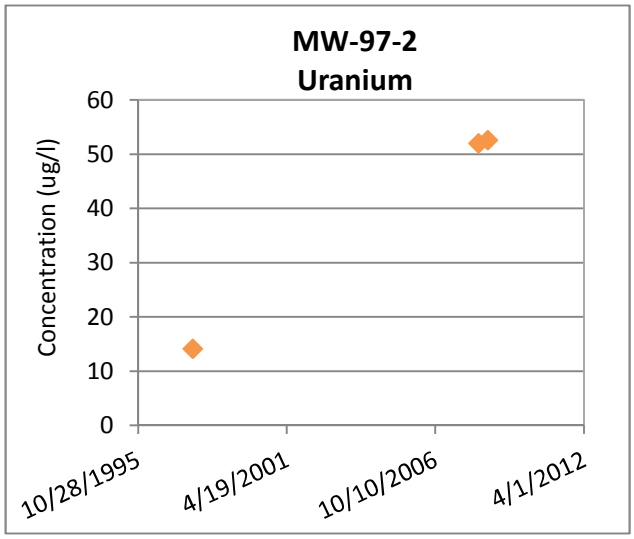


Time Series Plots - MW-97-2
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

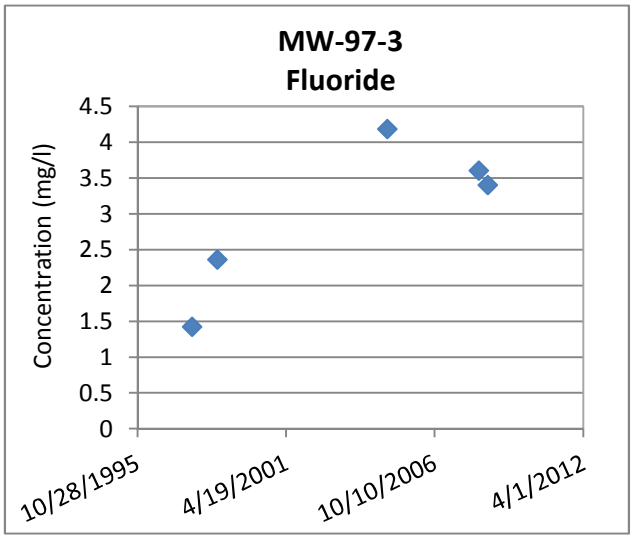


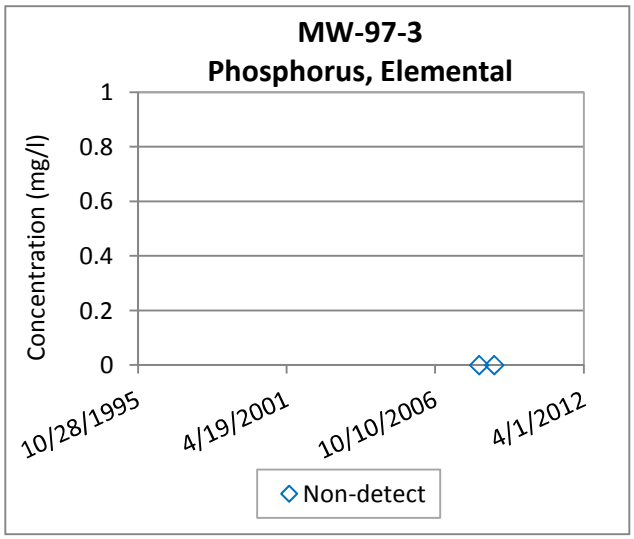


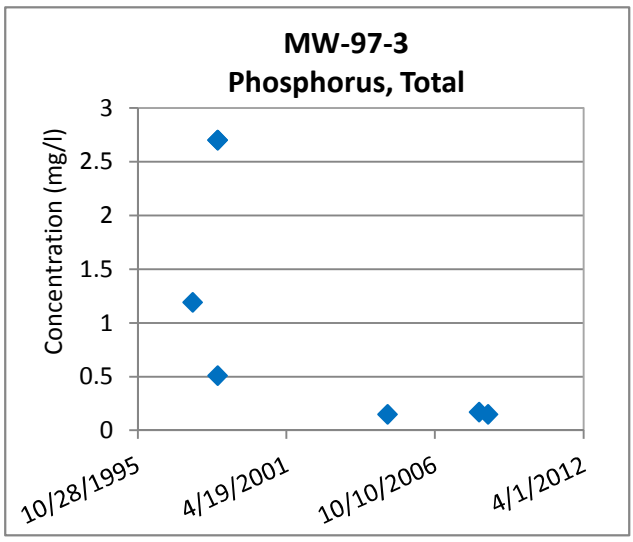


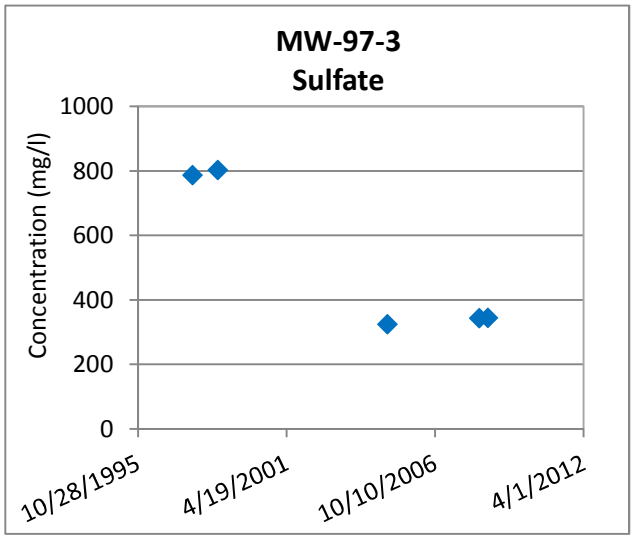


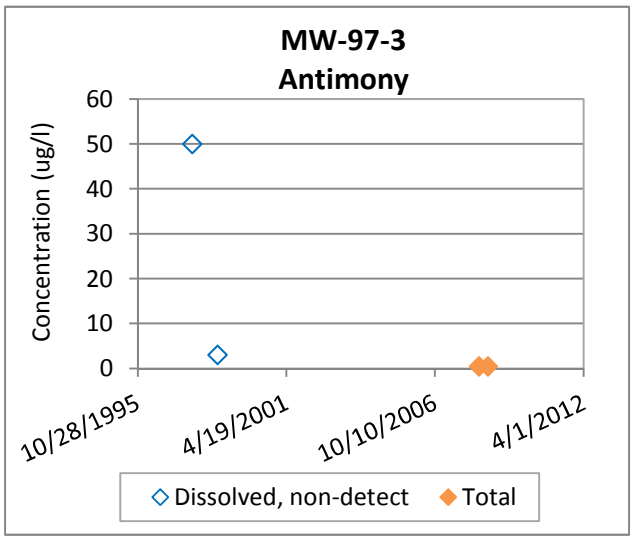
Time Series Plots - MW-97-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

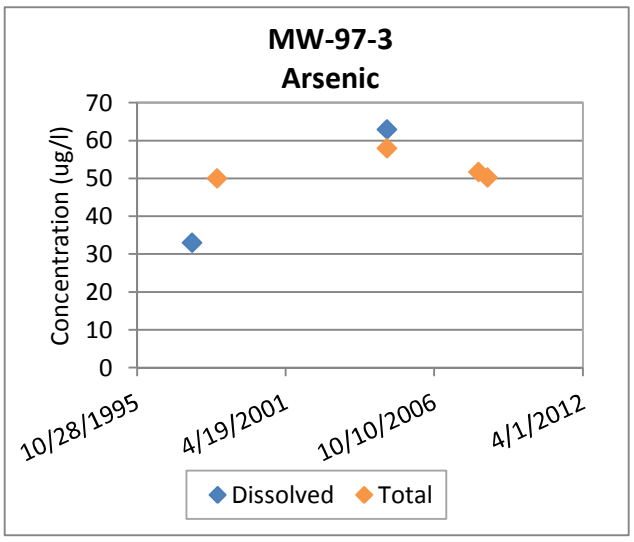




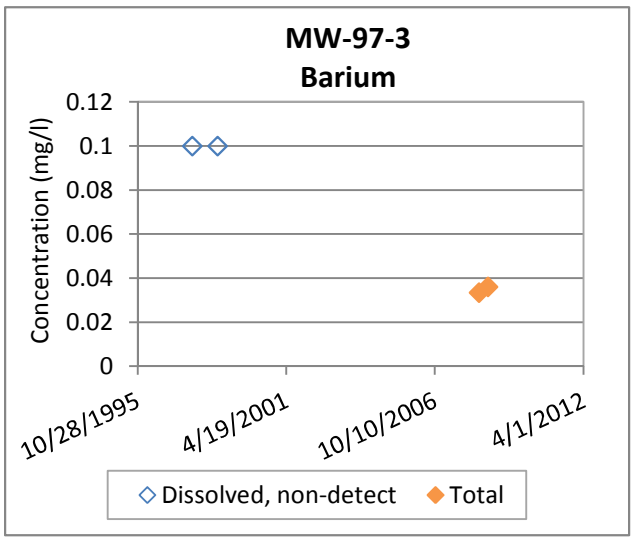


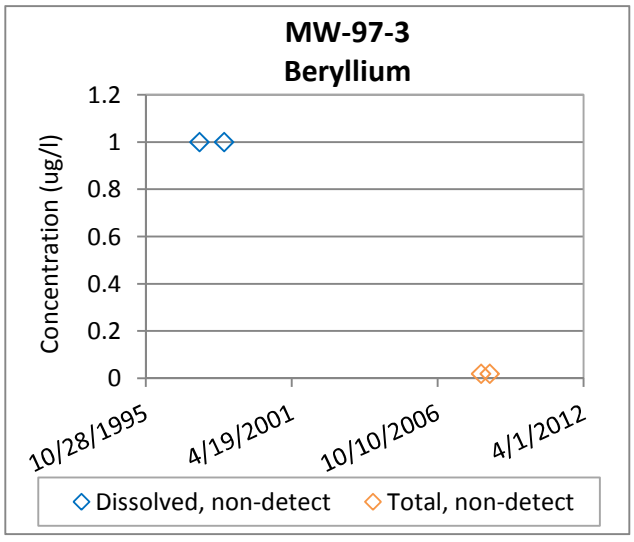


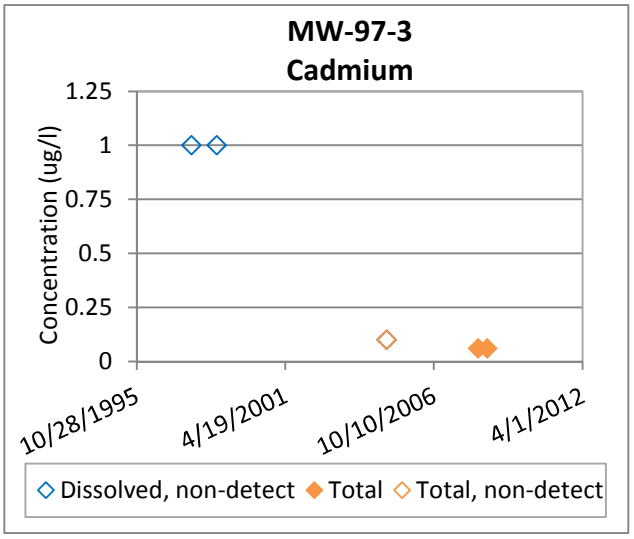


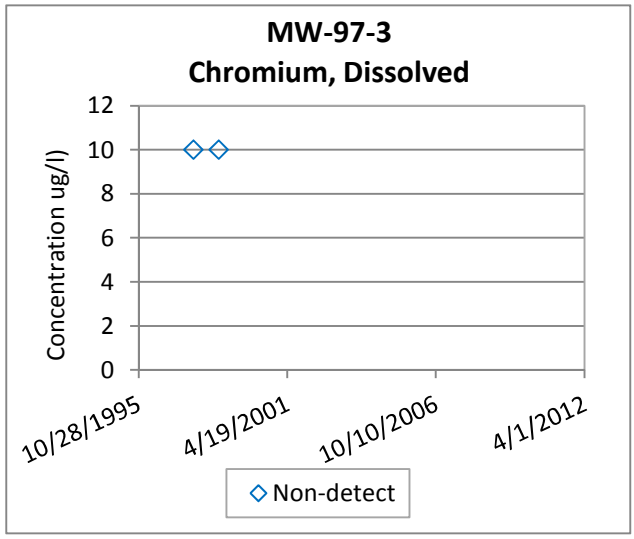


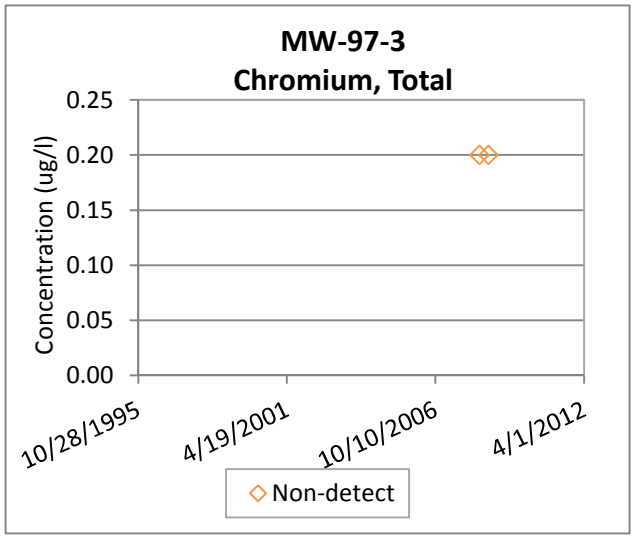
Time Series Plots - MW-97-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

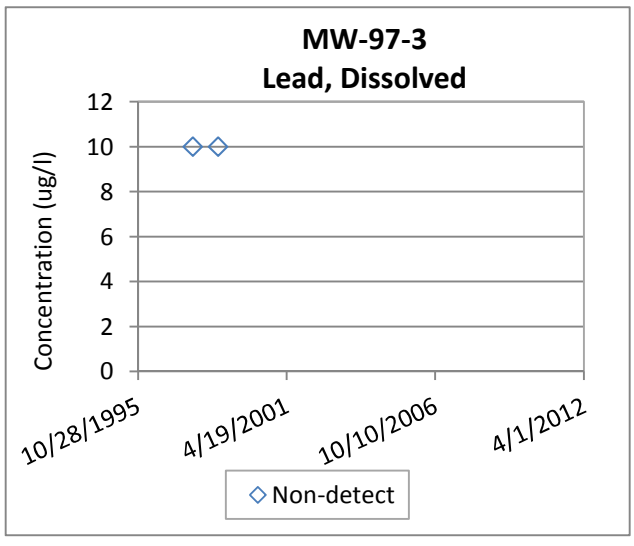




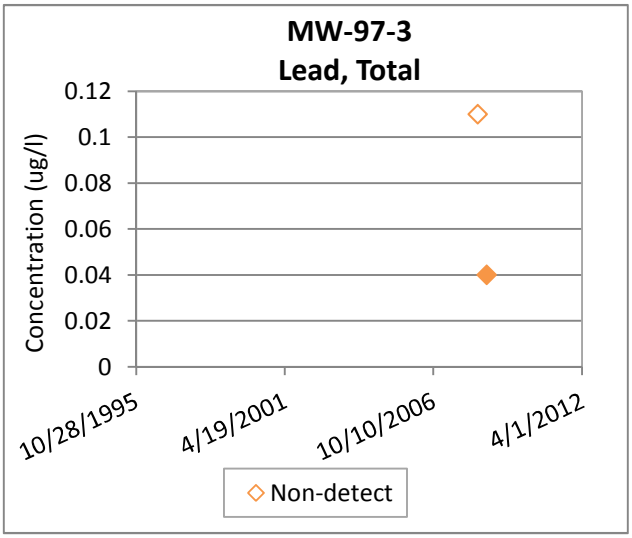


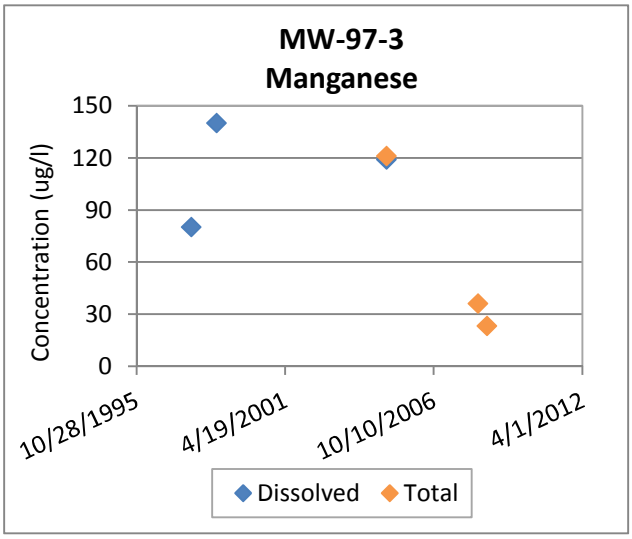


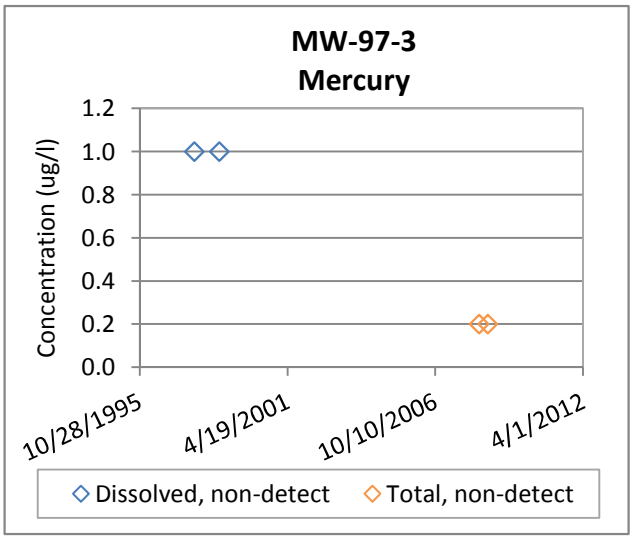


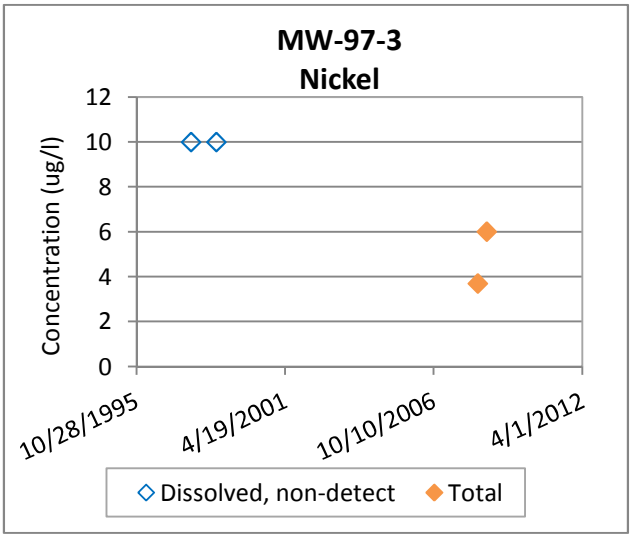


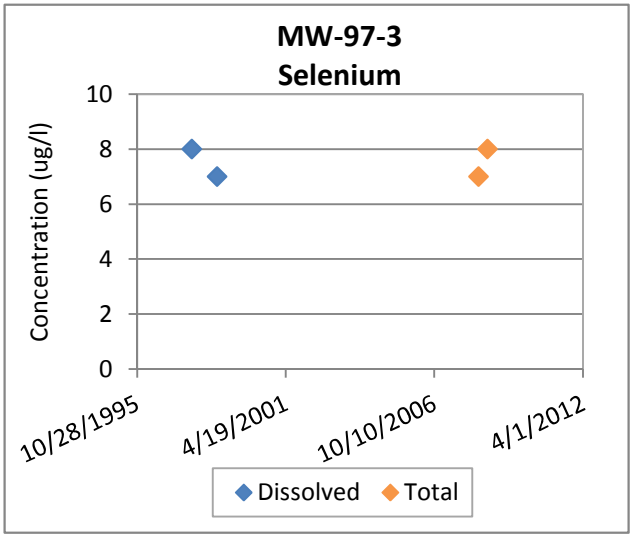
Time Series Plots - MW-97-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

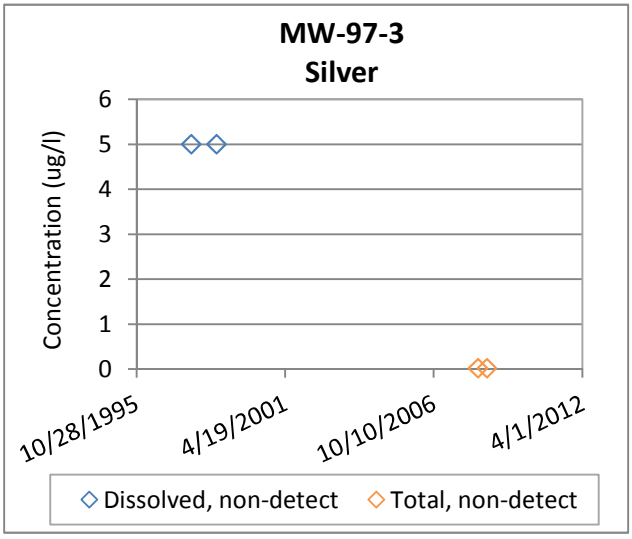




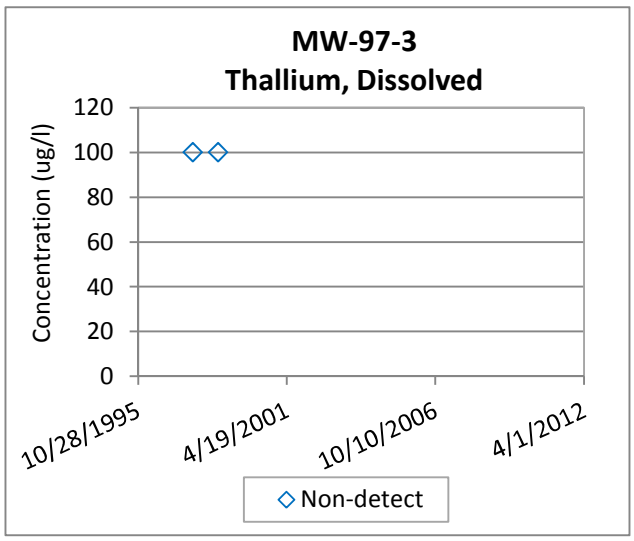


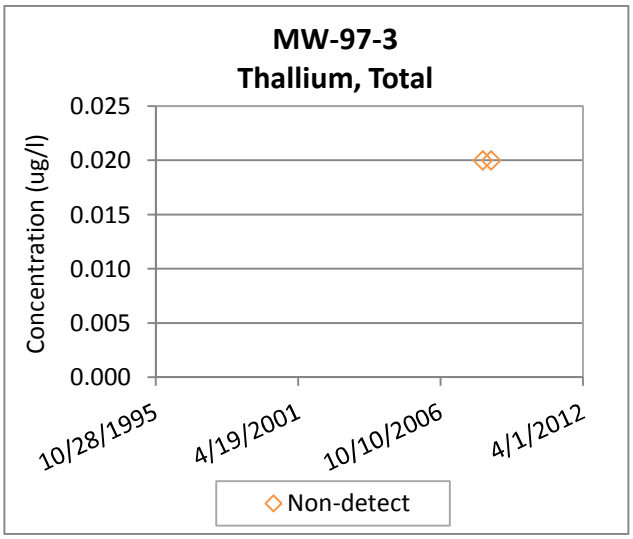


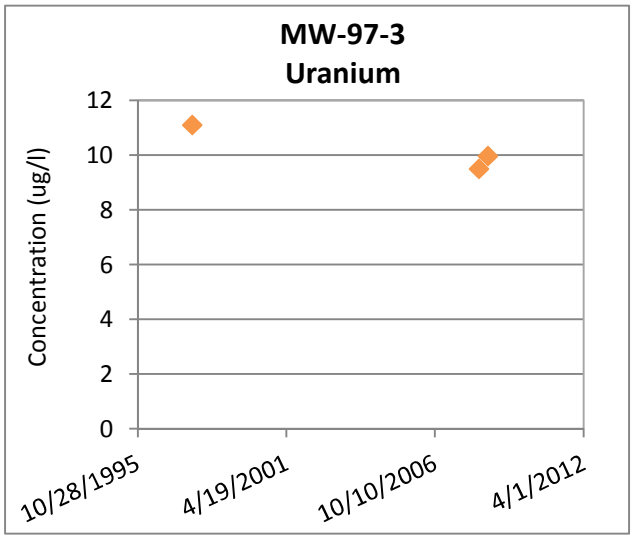




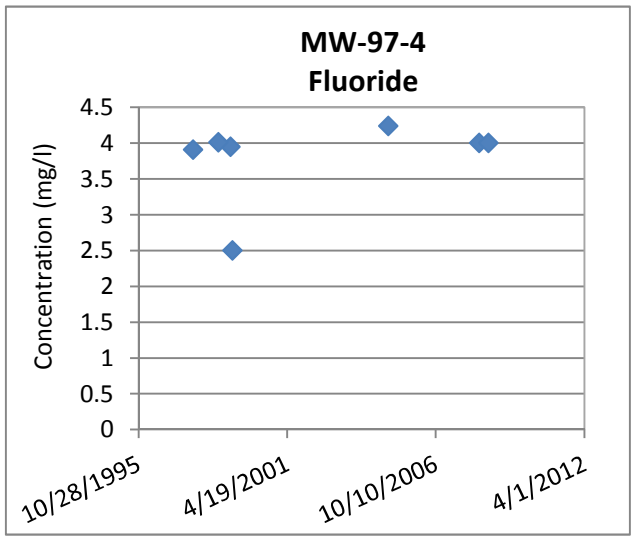
Time Series Plots - MW-97-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

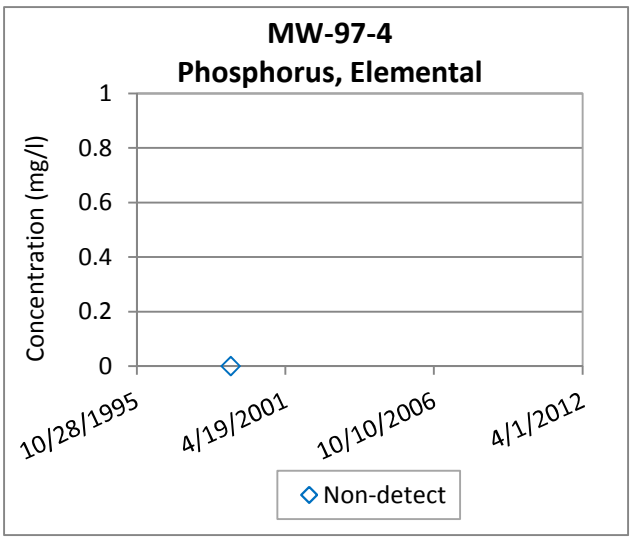


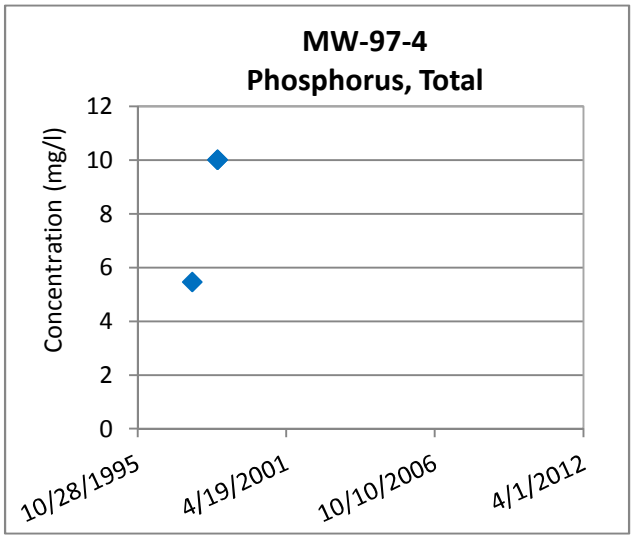


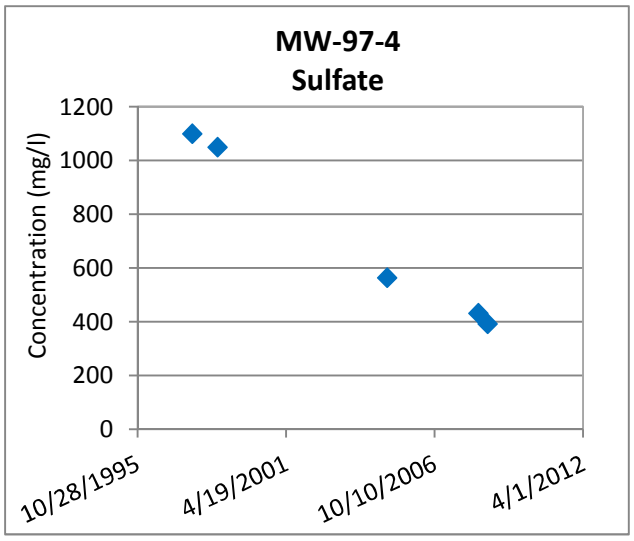


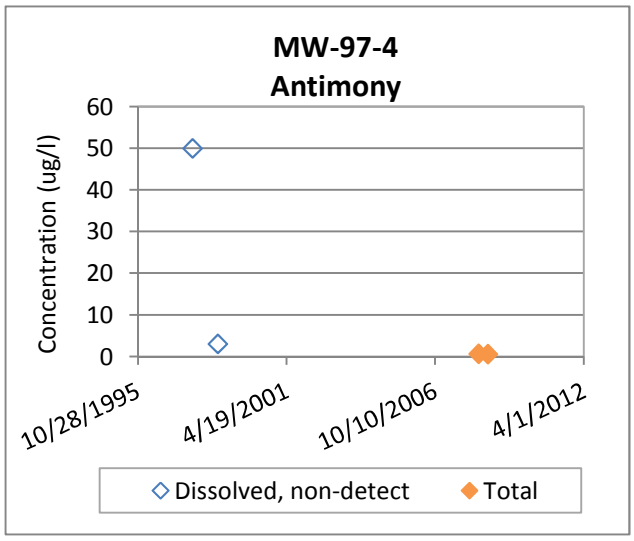
Time Series Plots - MW-97-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

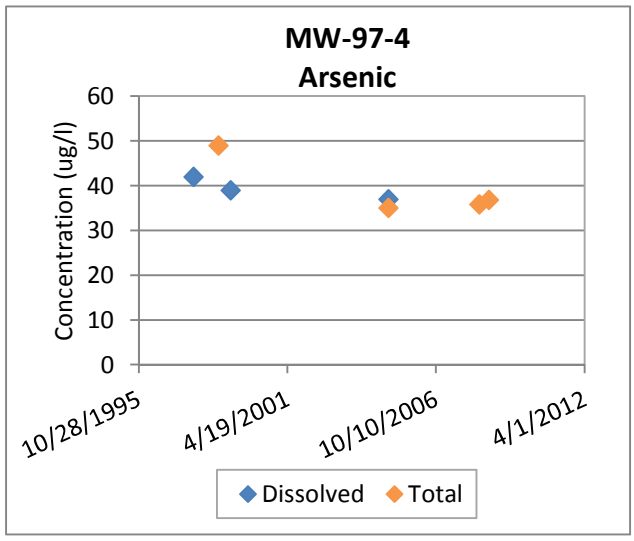






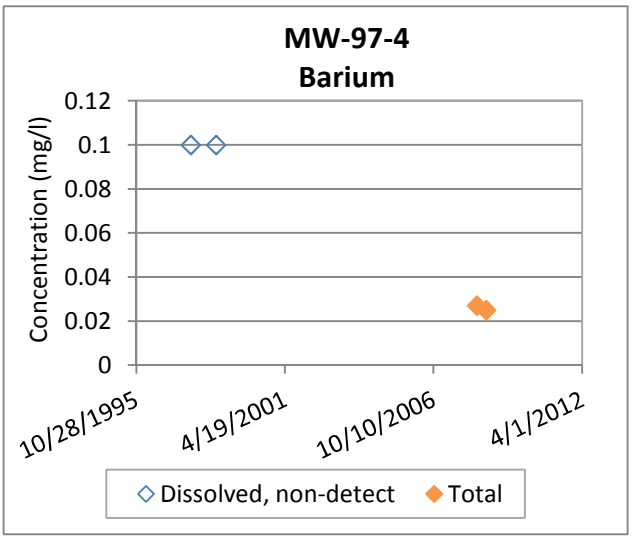


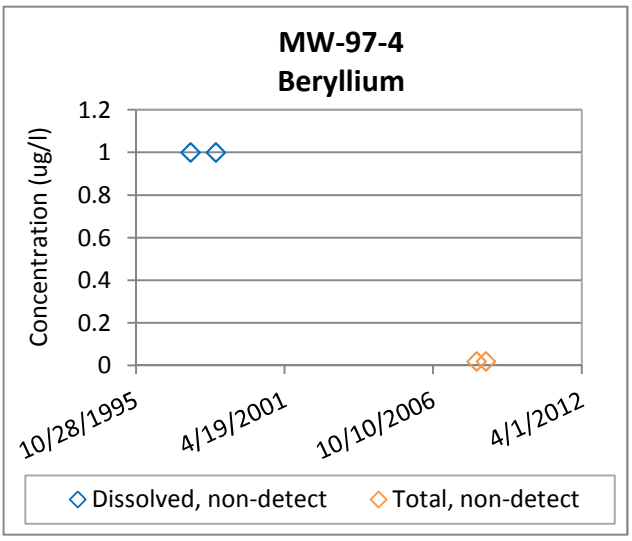


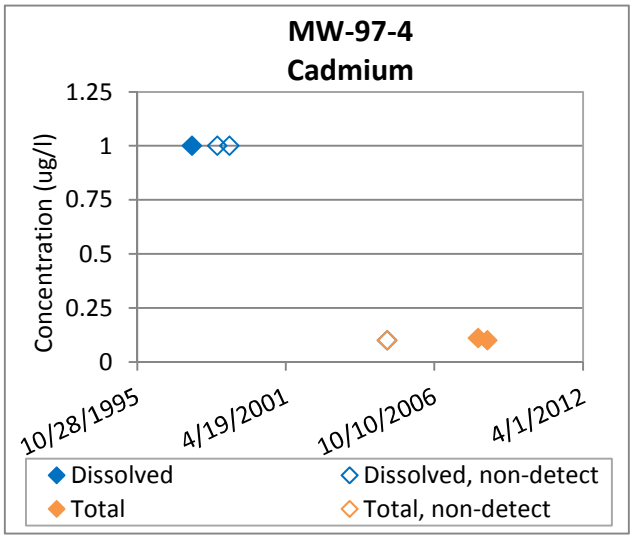


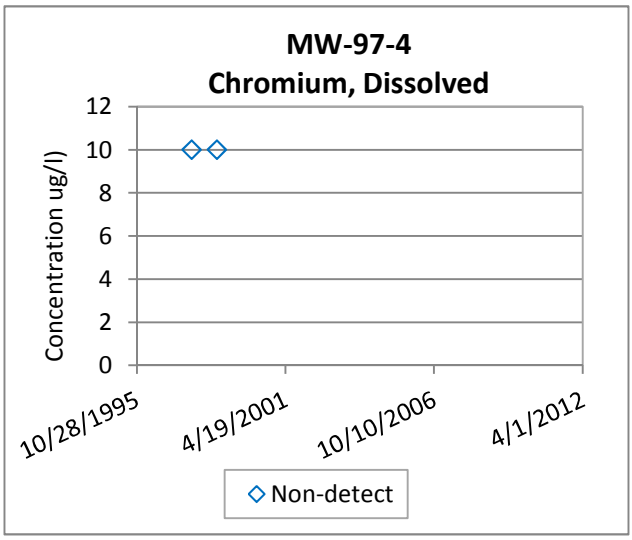
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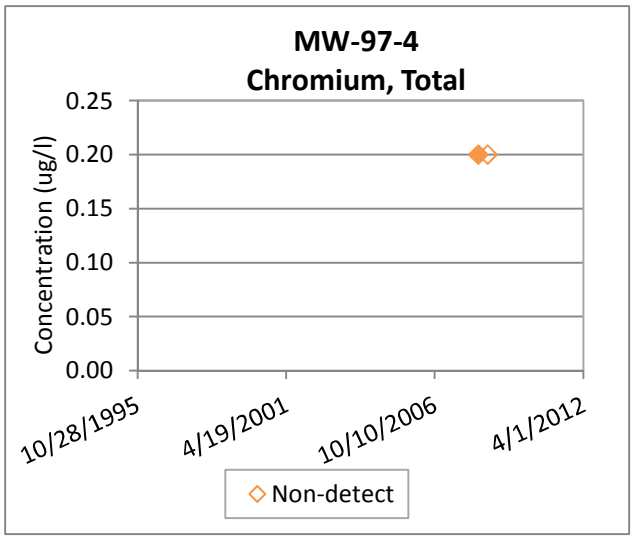
Time Series Plots - MW-97-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

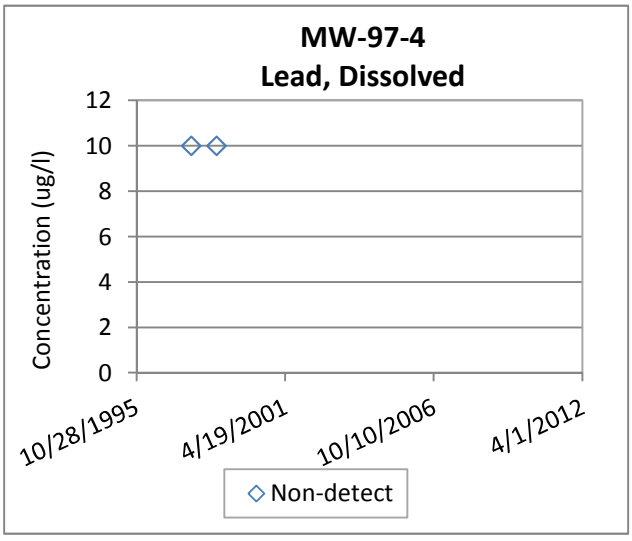




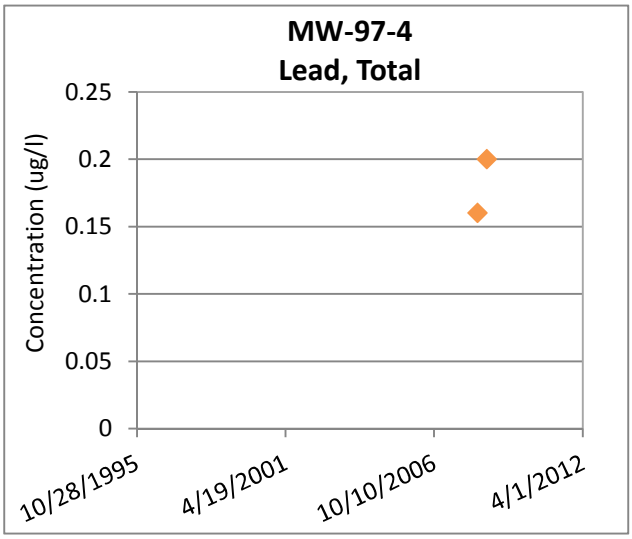


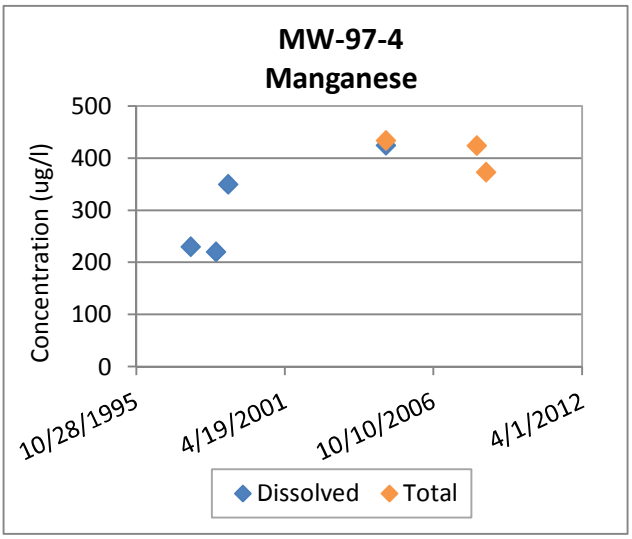


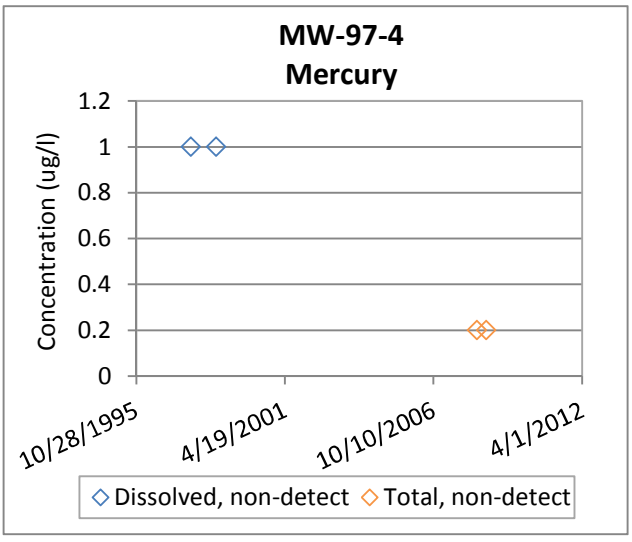


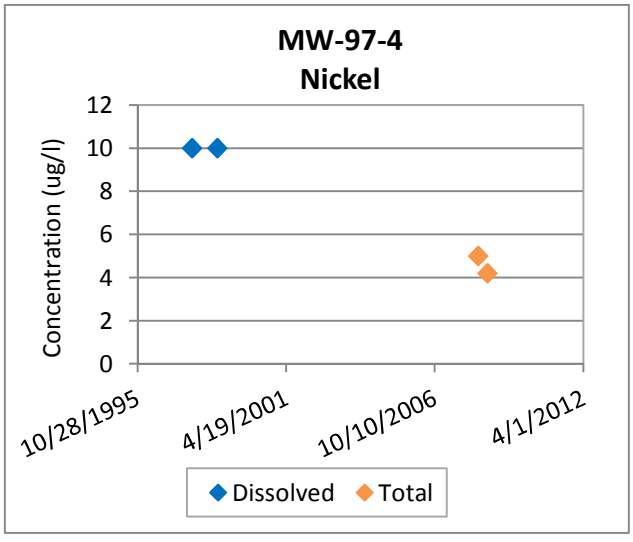


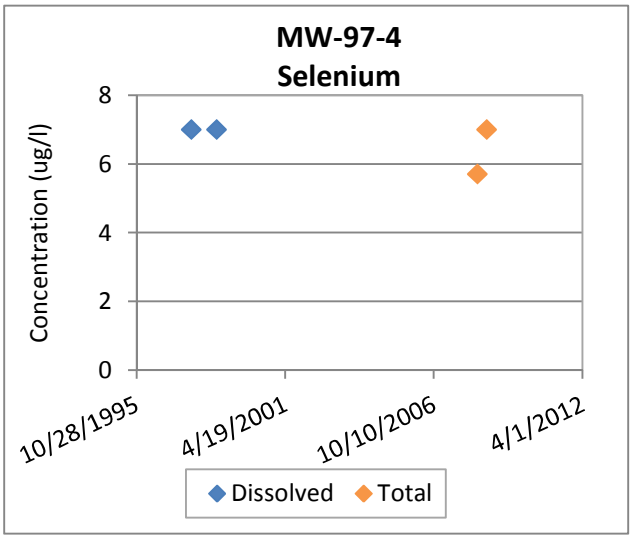
Time Series Plots - MW-97-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

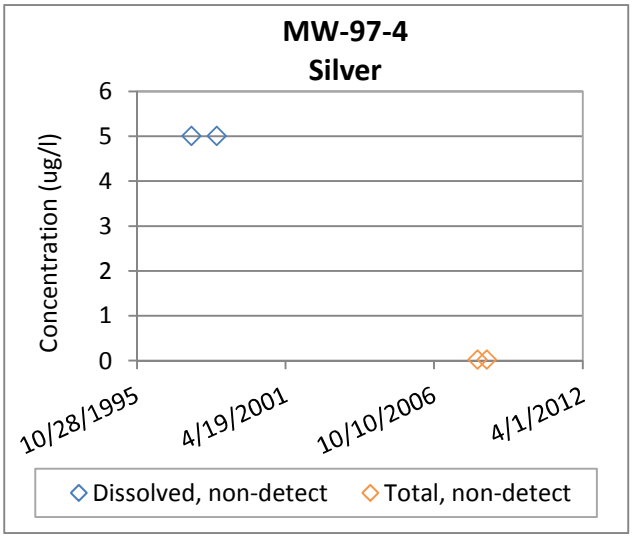




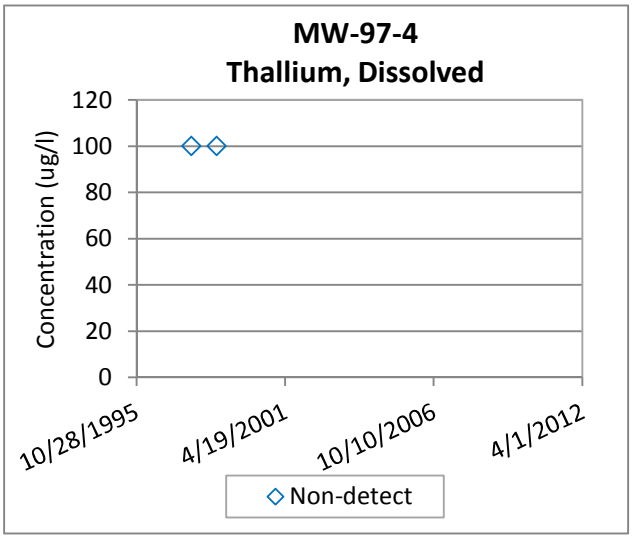


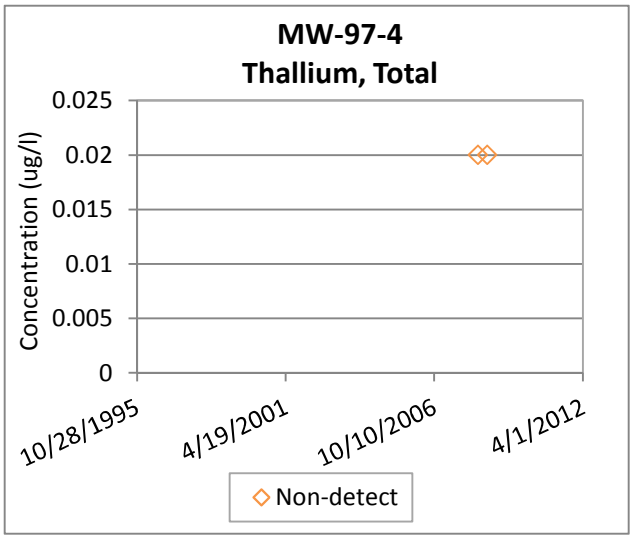


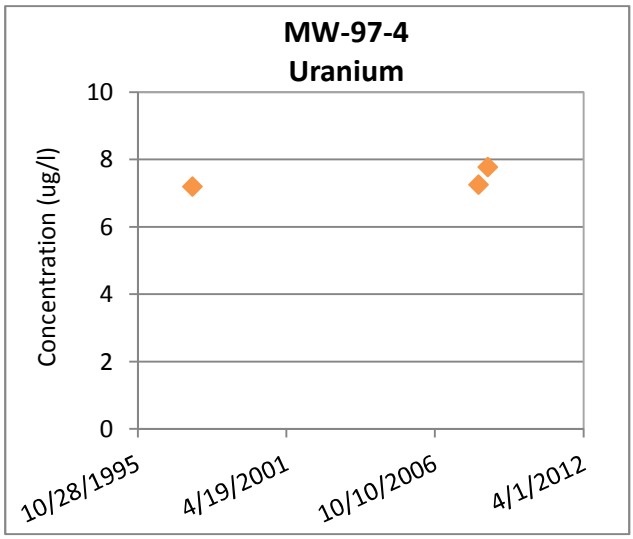




Time Series Plots - MW-97-4
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

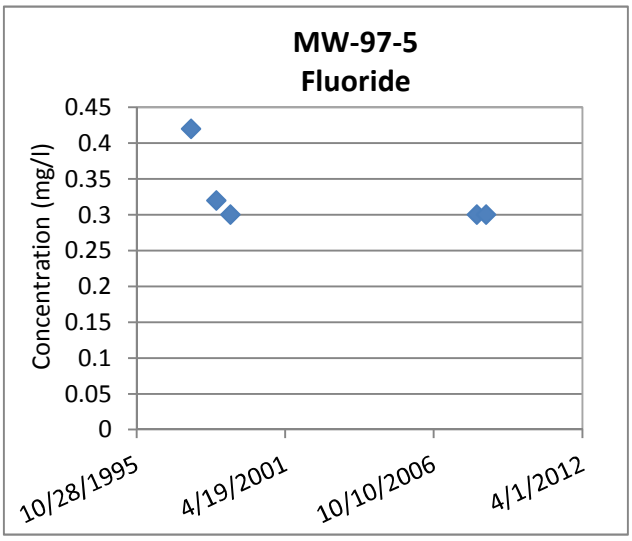


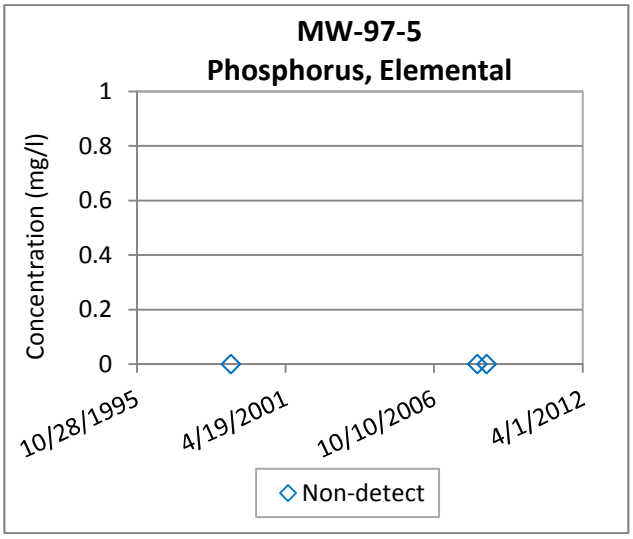


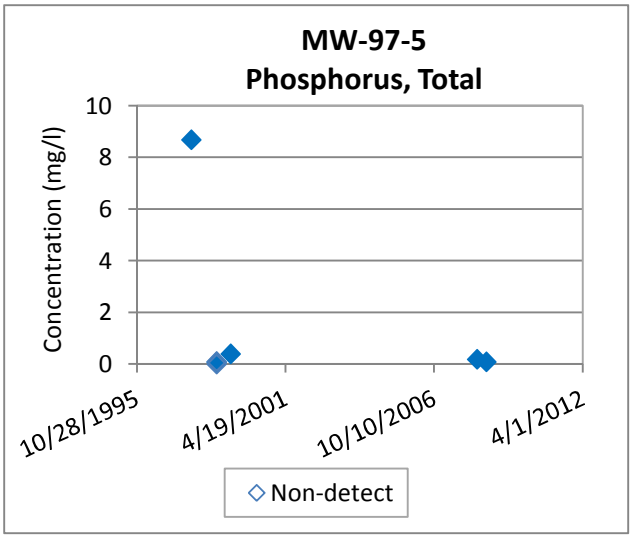


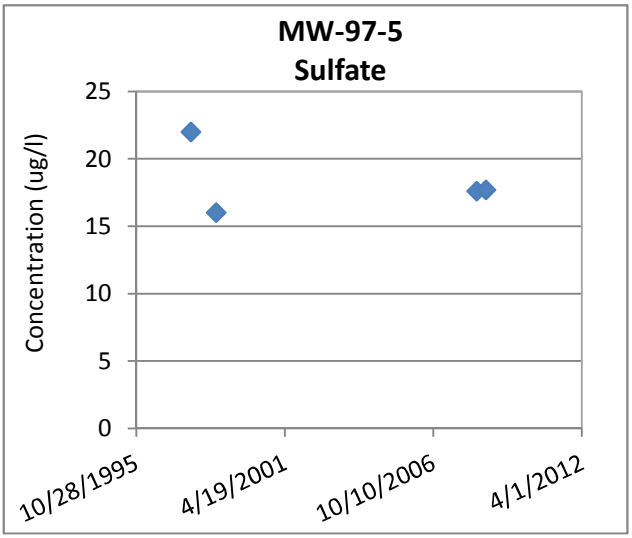
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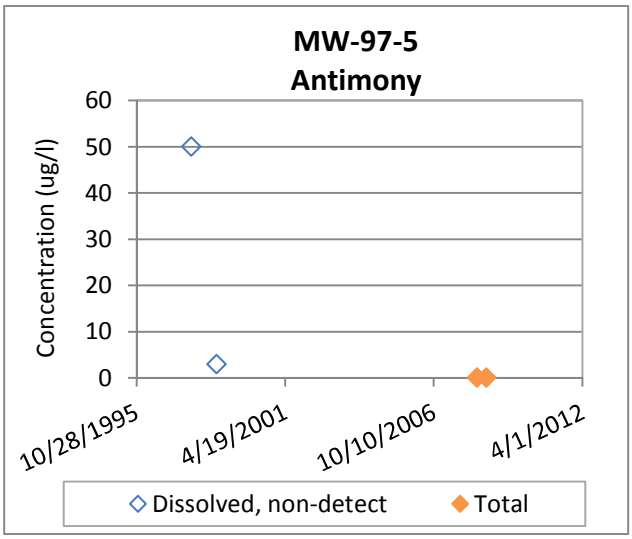
Time Series Plots - MW-97-5
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

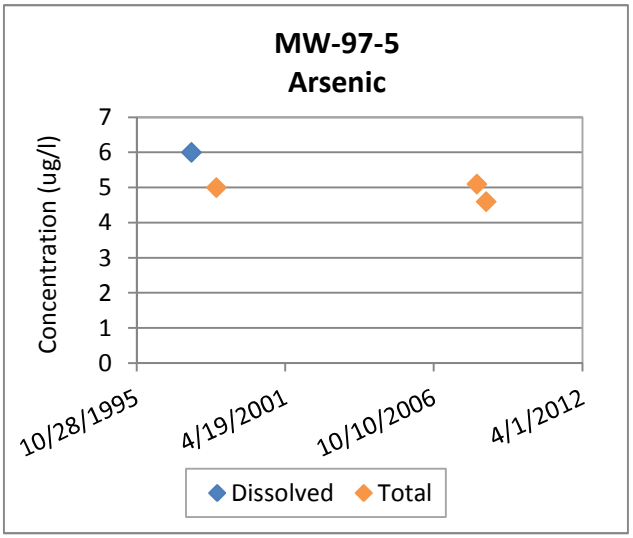




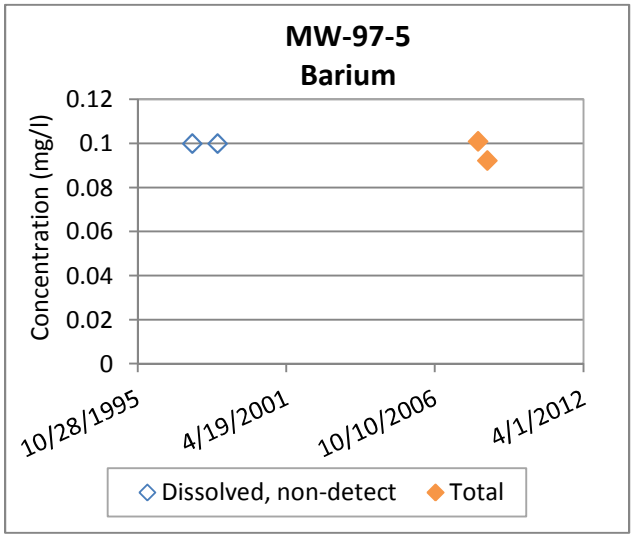


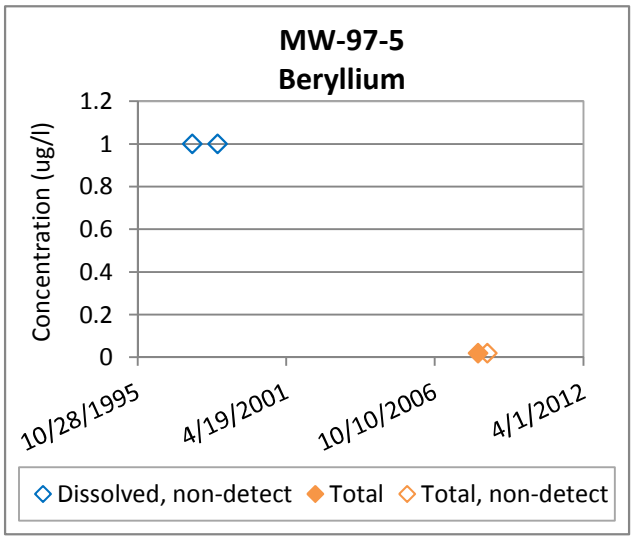


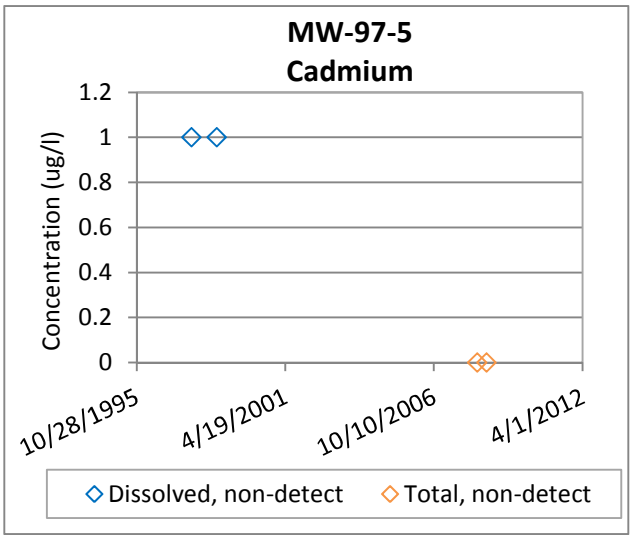


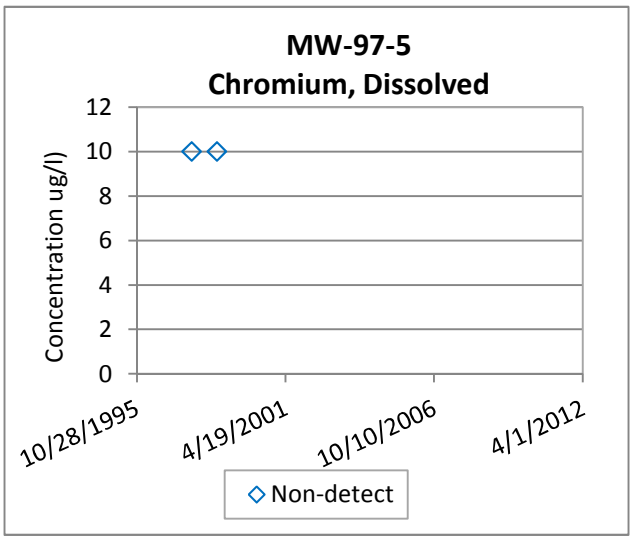


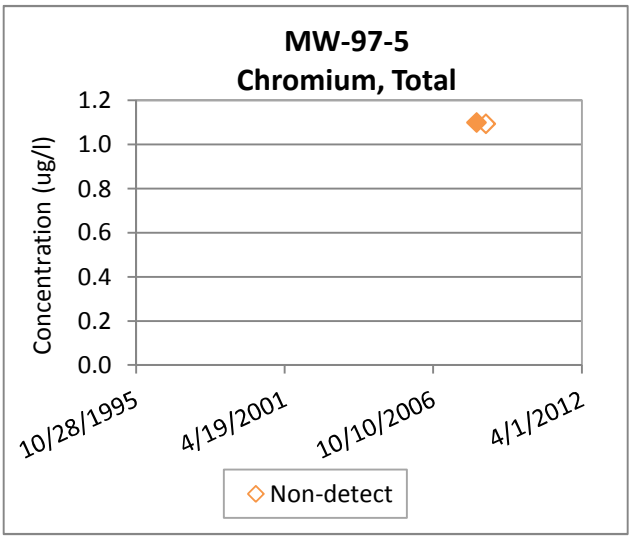
Time Series Plots - MW-97-5
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

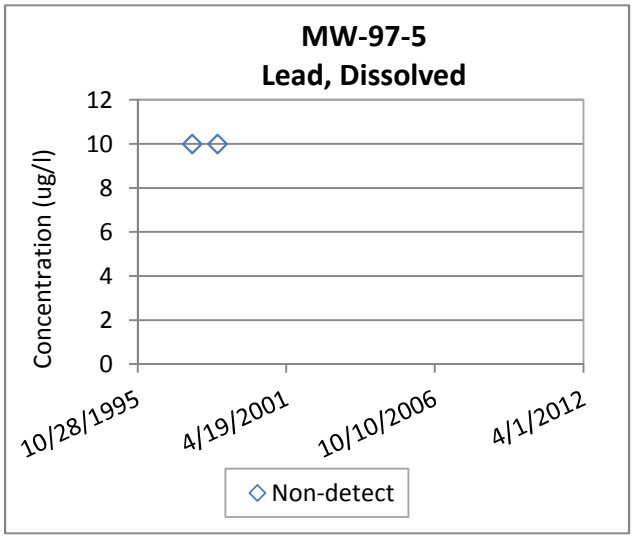




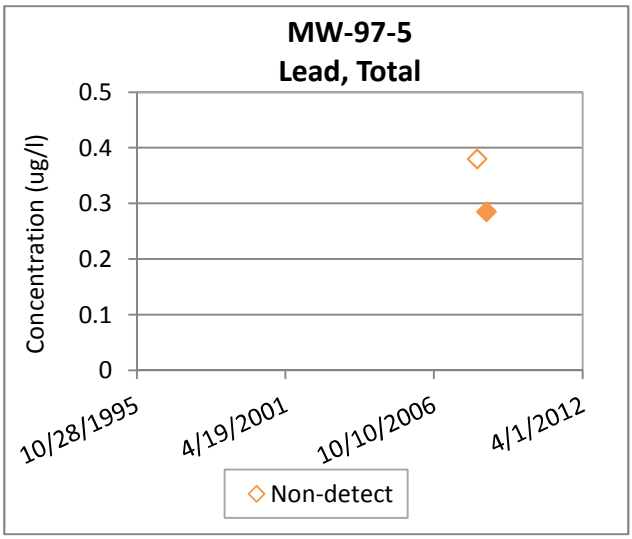


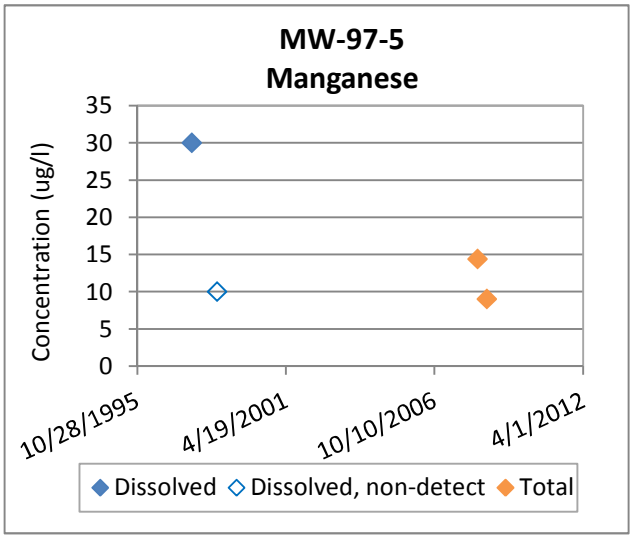


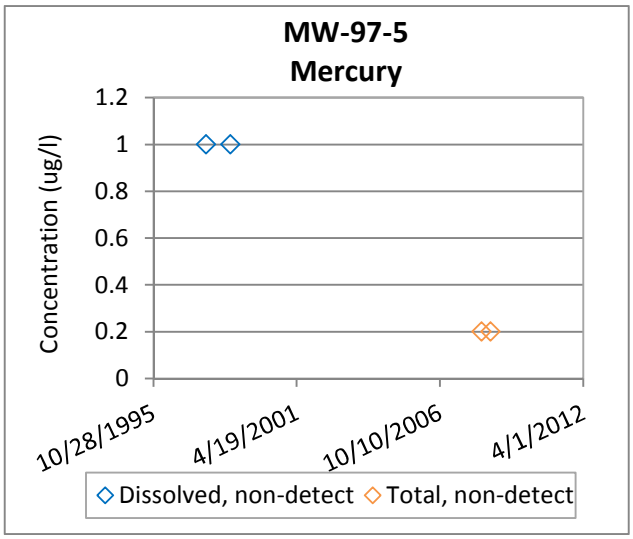


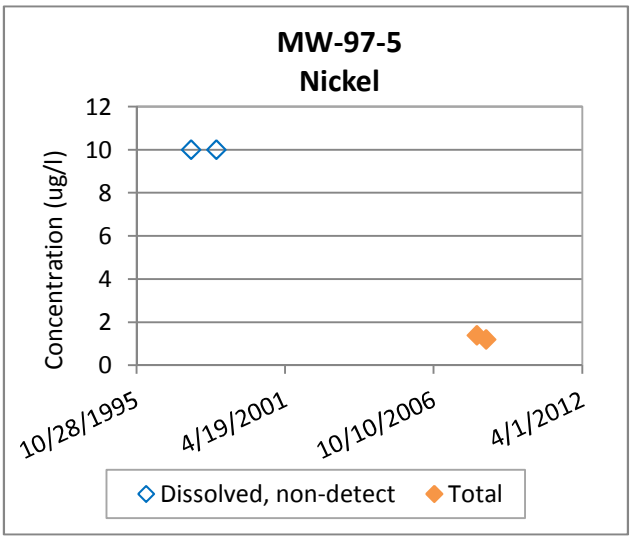


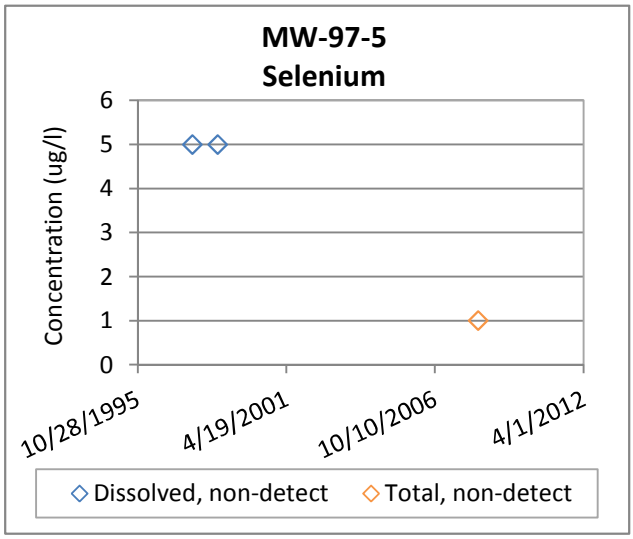
Time Series Plots - MW-97-5
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

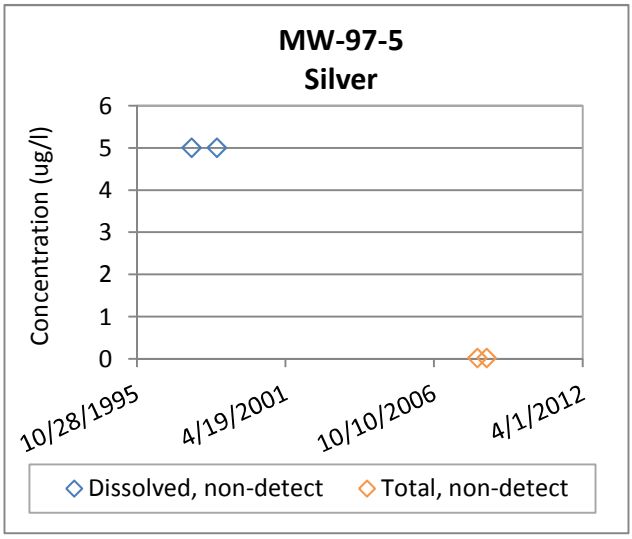




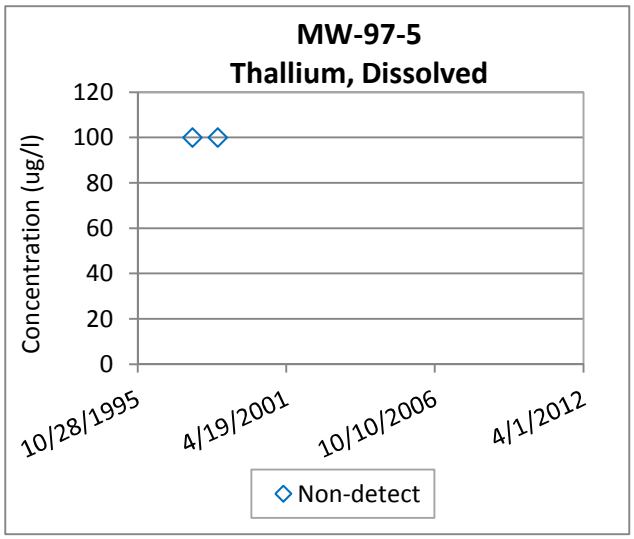


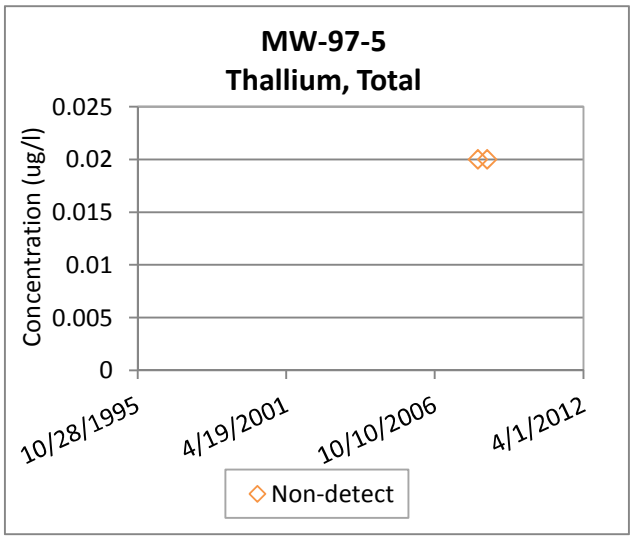


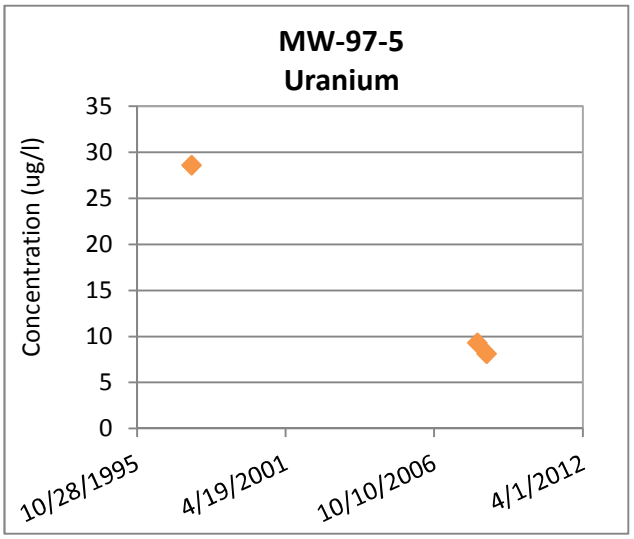




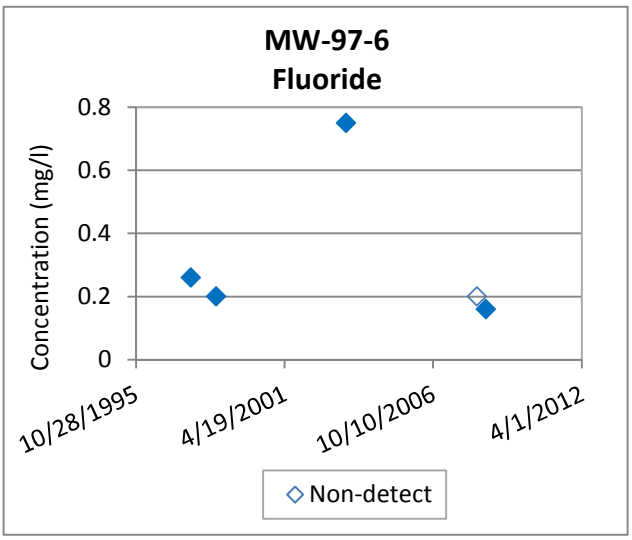
Time Series Plots - MW-97-5
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

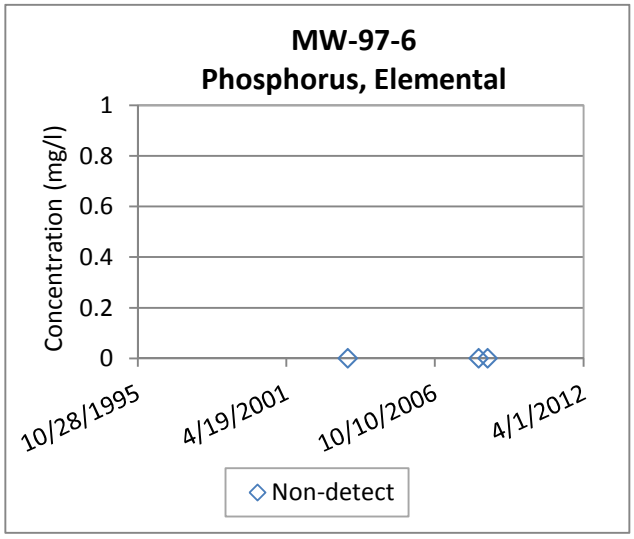


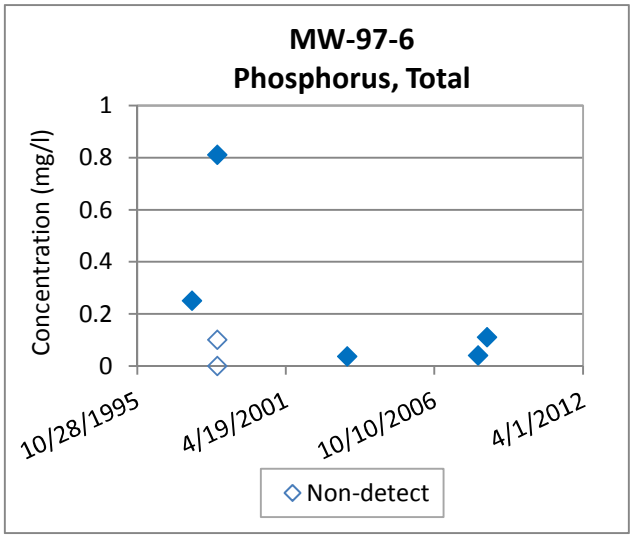


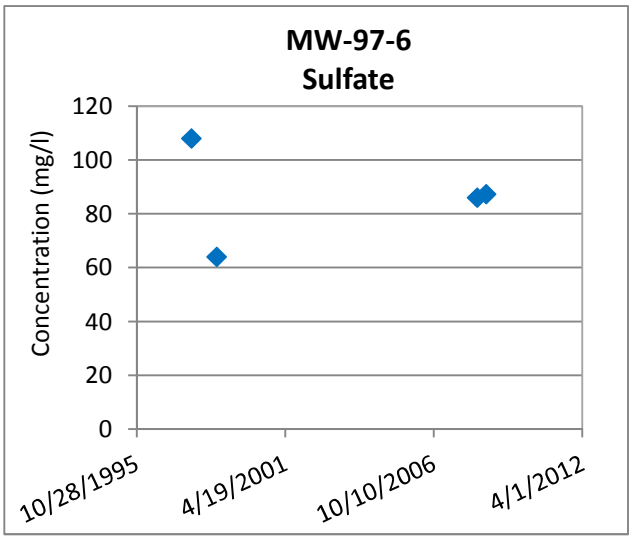


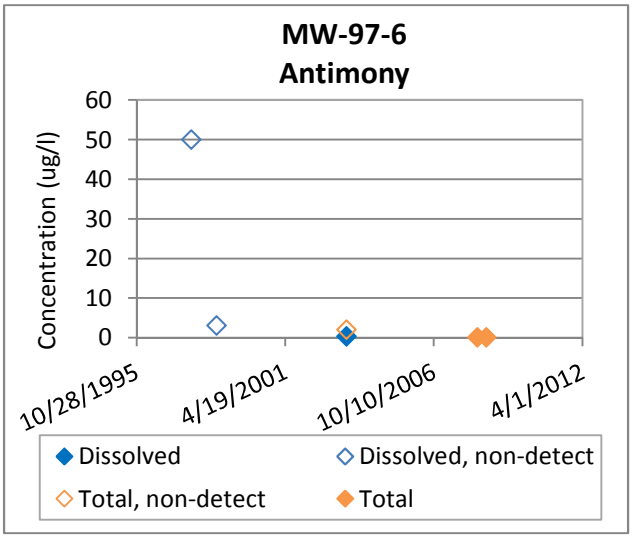
Time Series Plots - MW-97-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

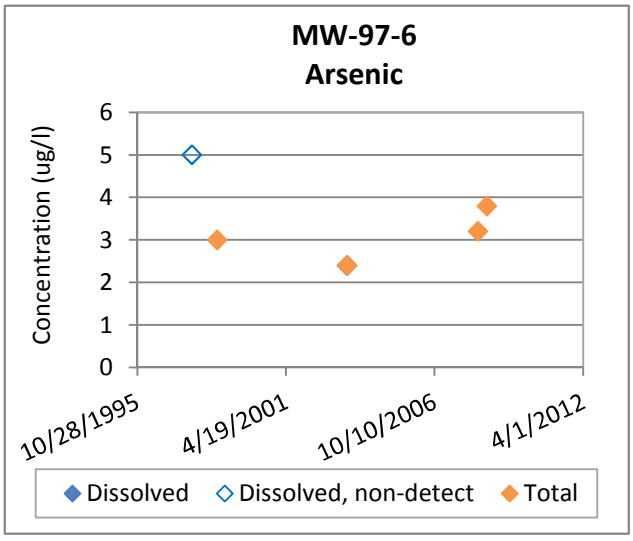




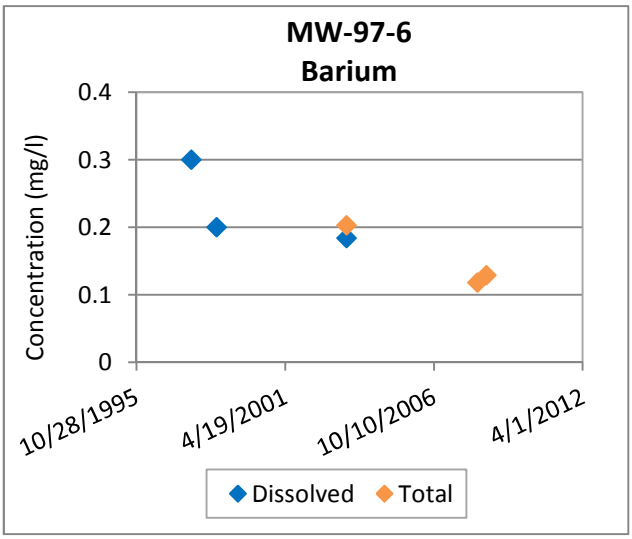


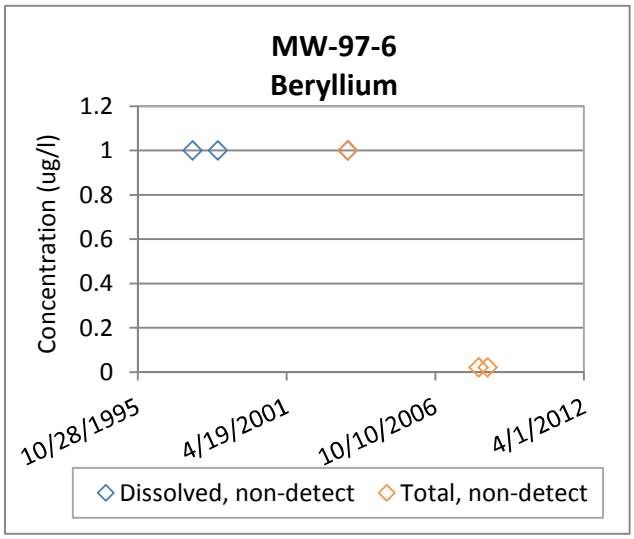


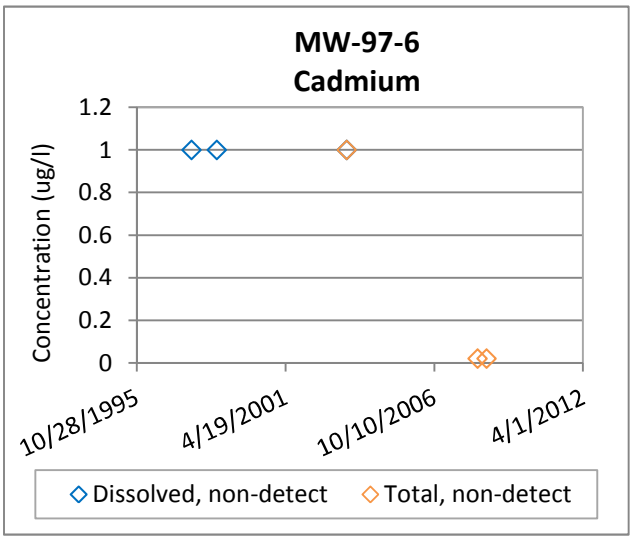


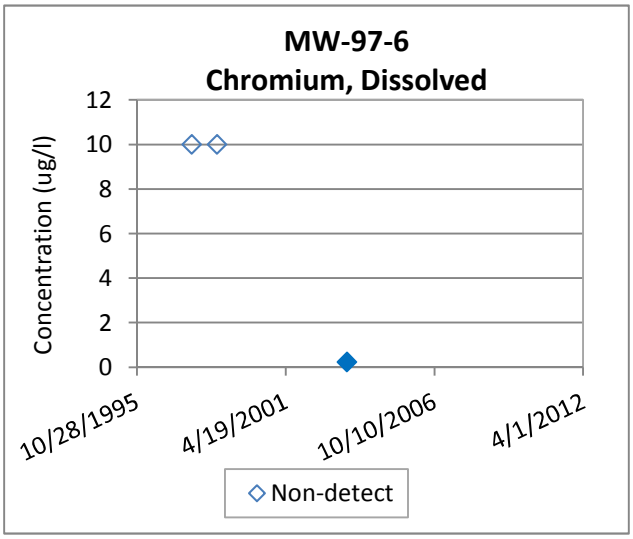


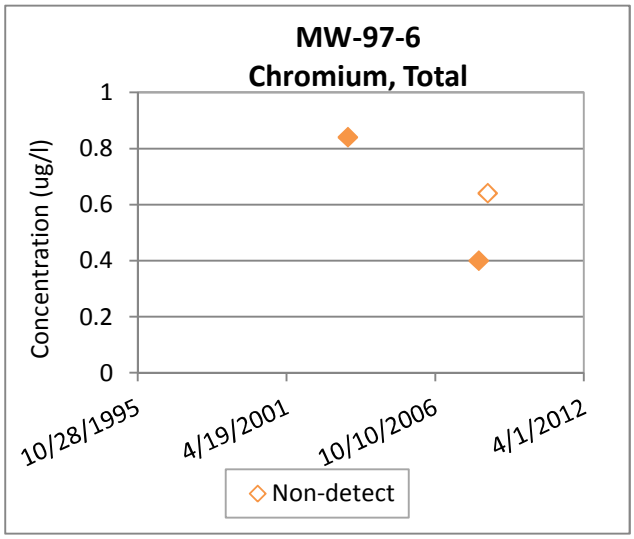
Time Series Plots - MW-97-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

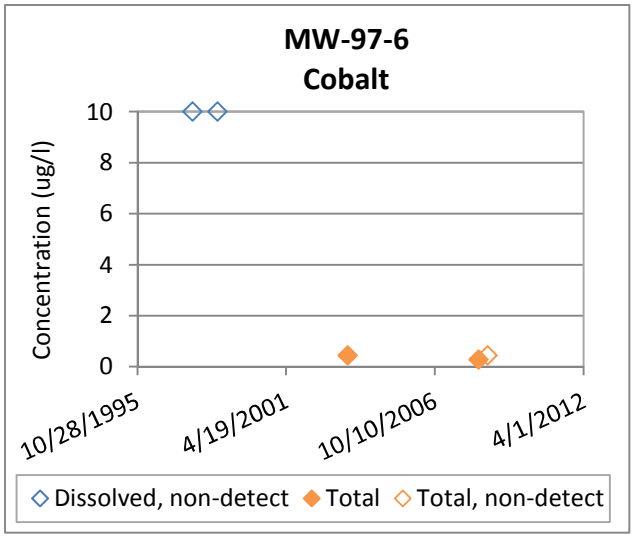




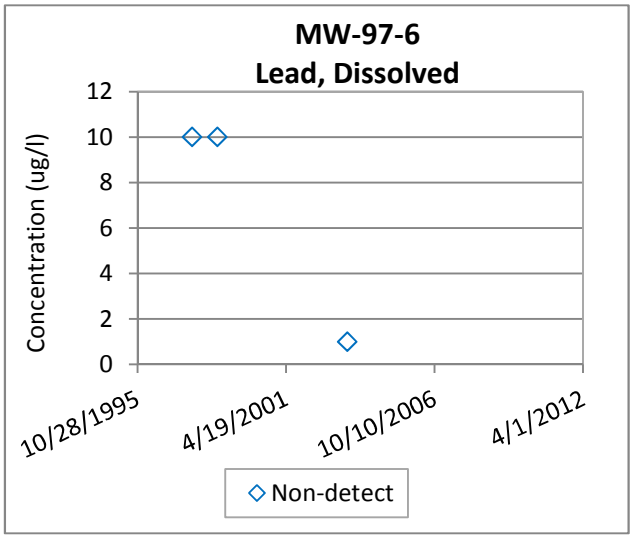


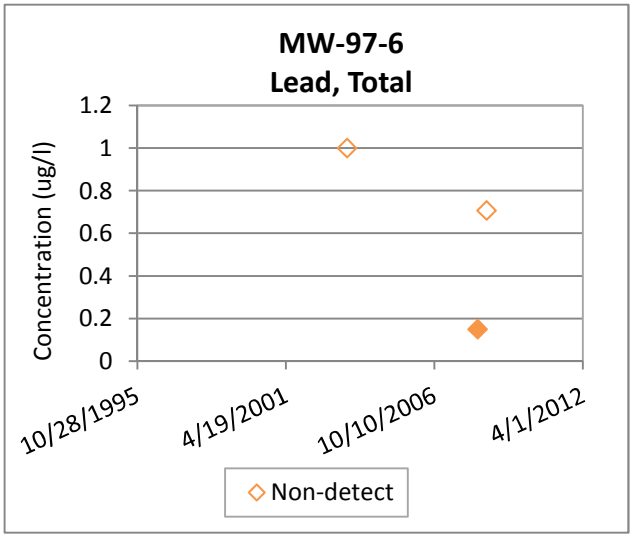


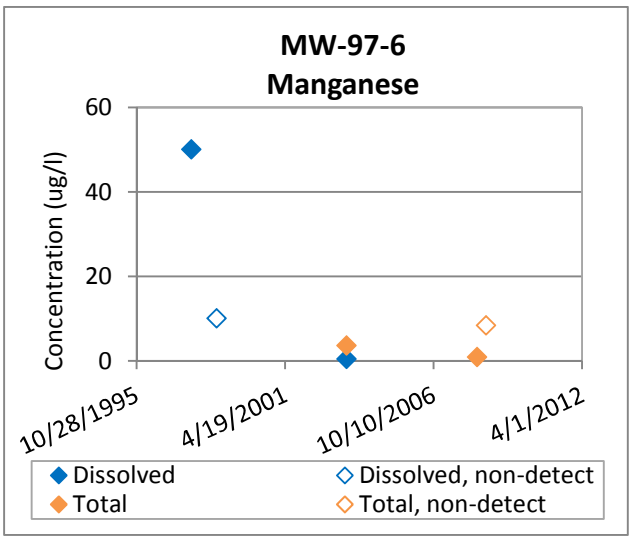


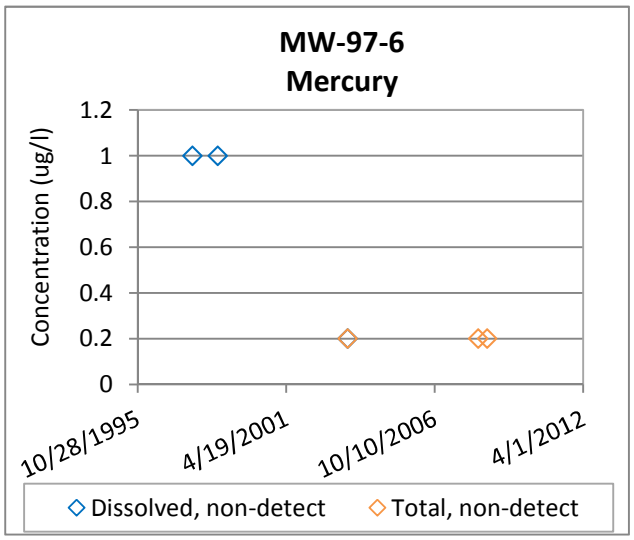


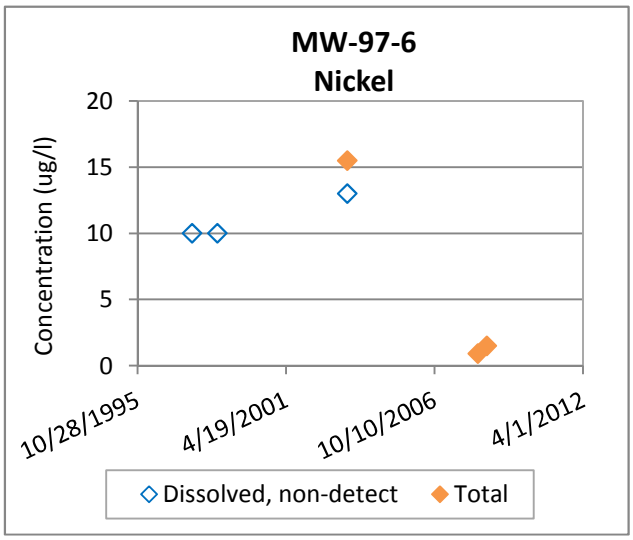
Time Series Plots - MW-97-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

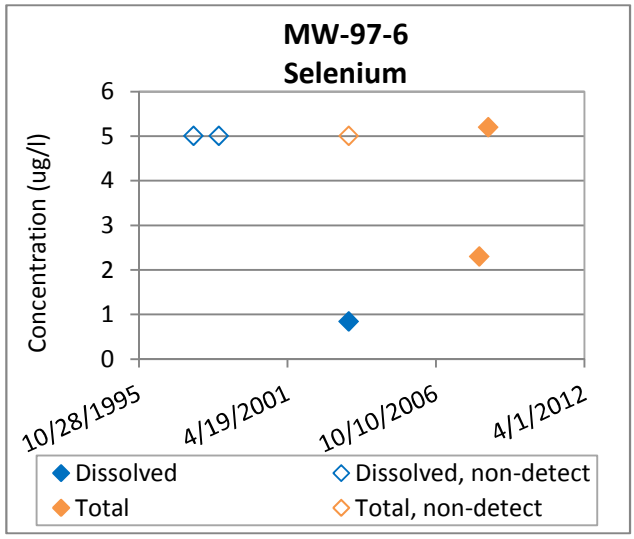




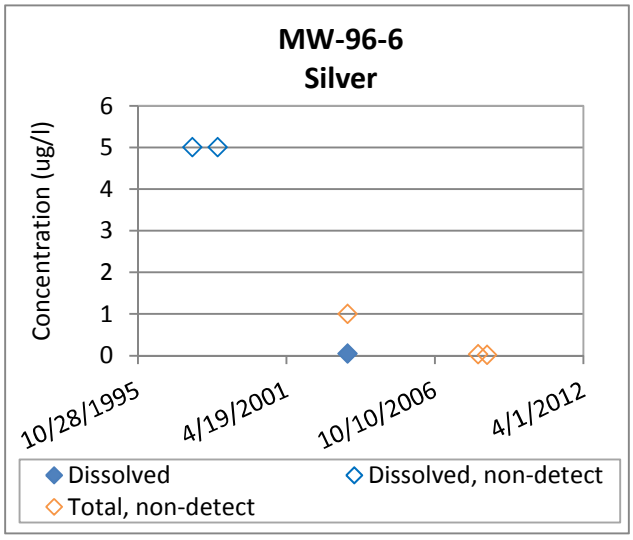


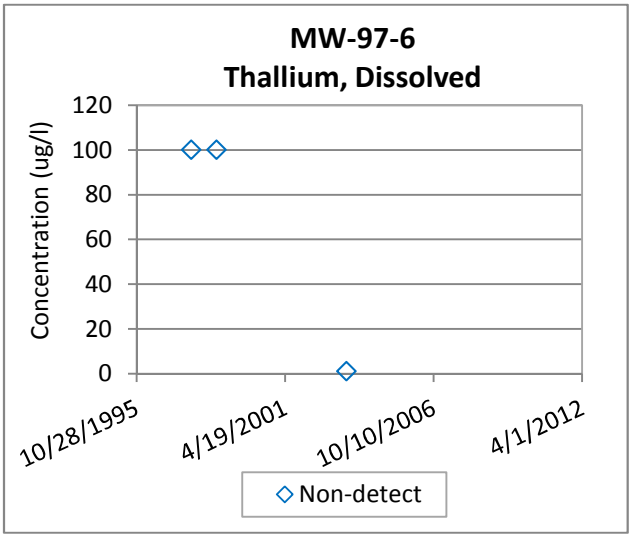


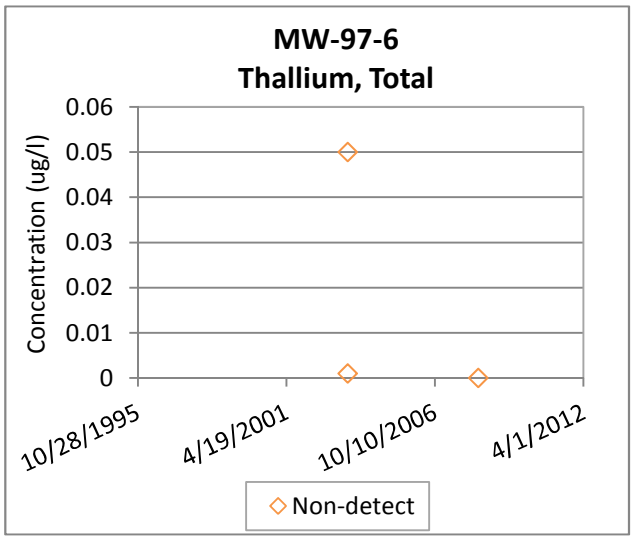


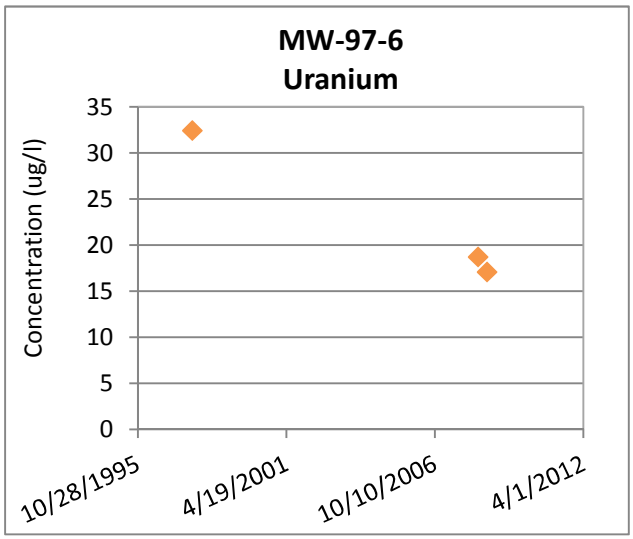


Time Series Plots - MW-97-6
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

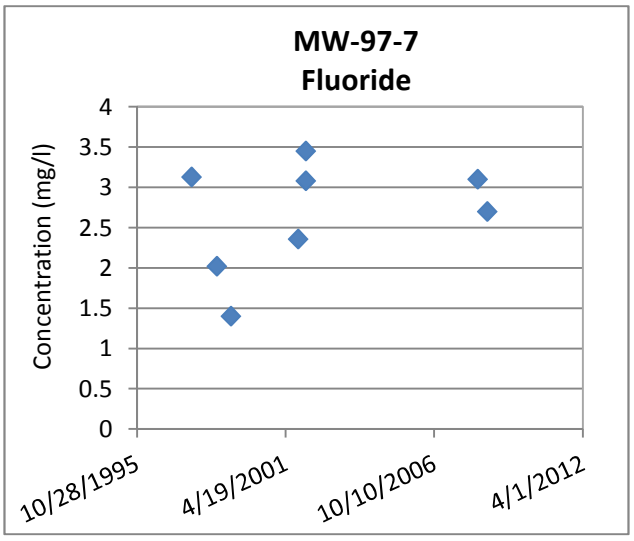


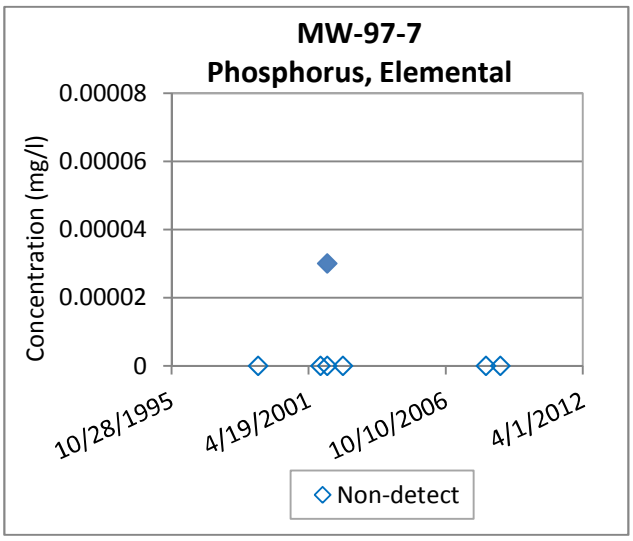


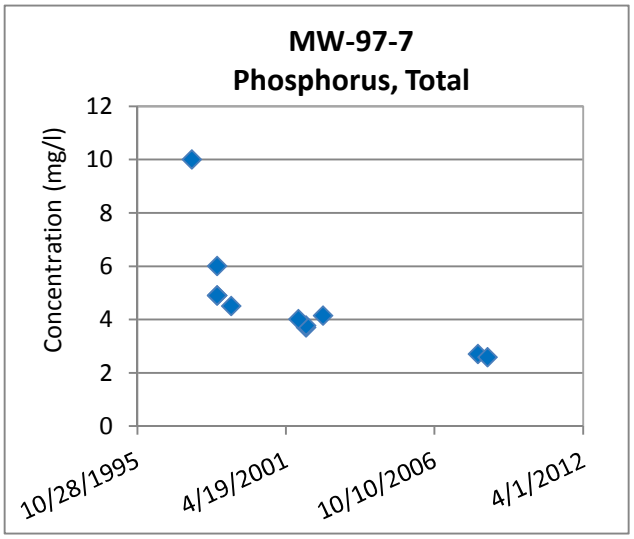


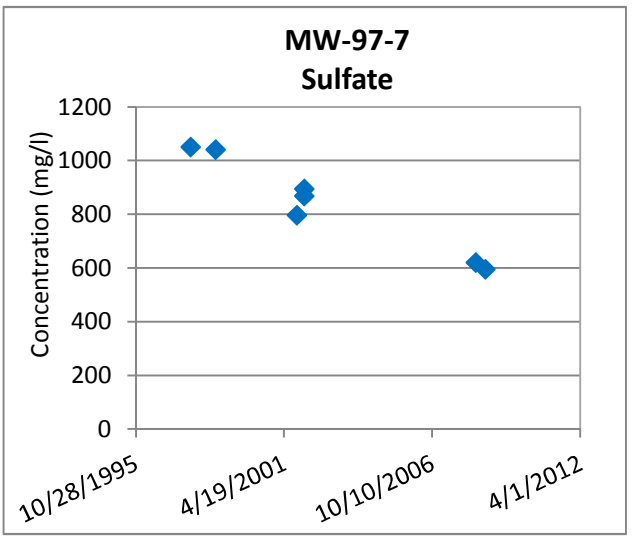


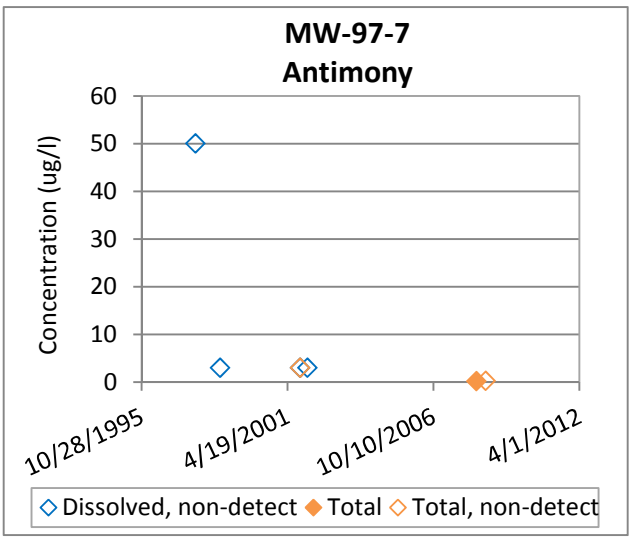
Time Series Plots - MW-97-7
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

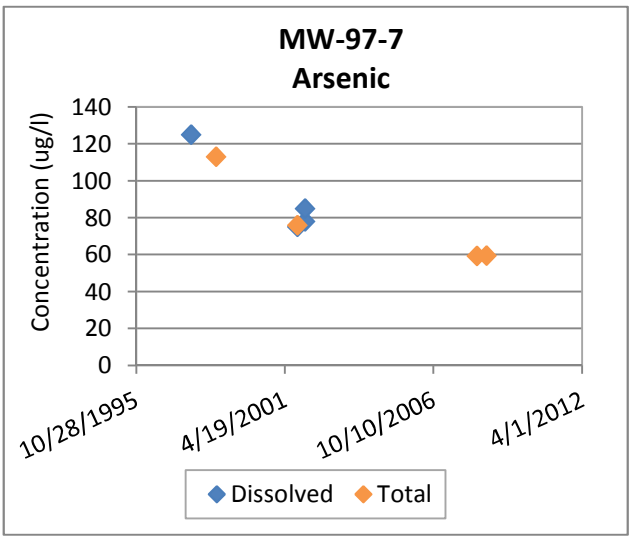






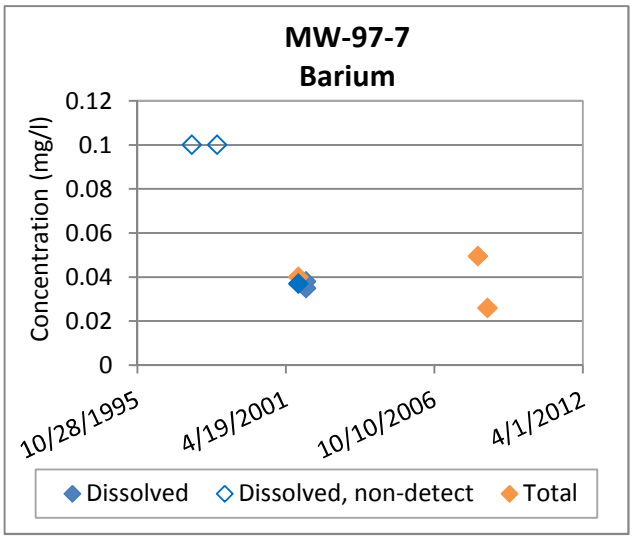


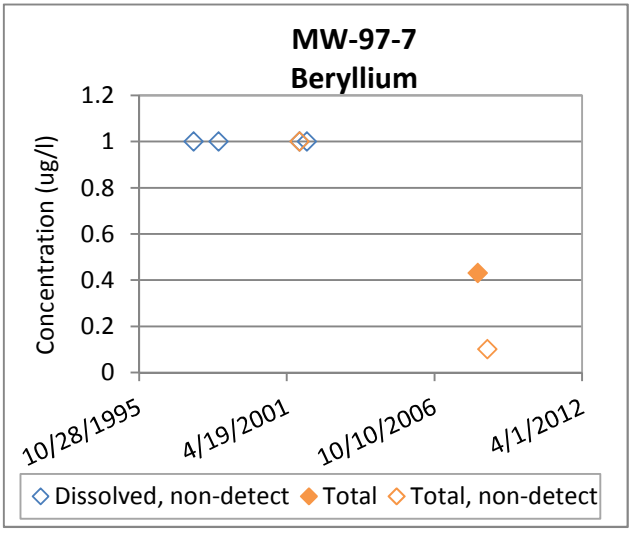


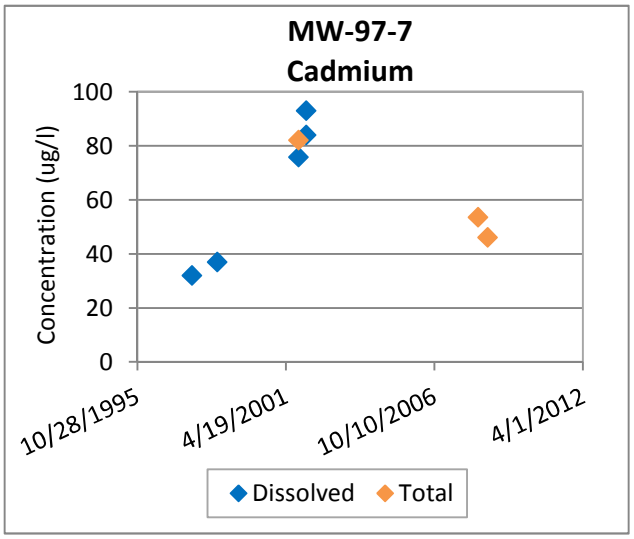


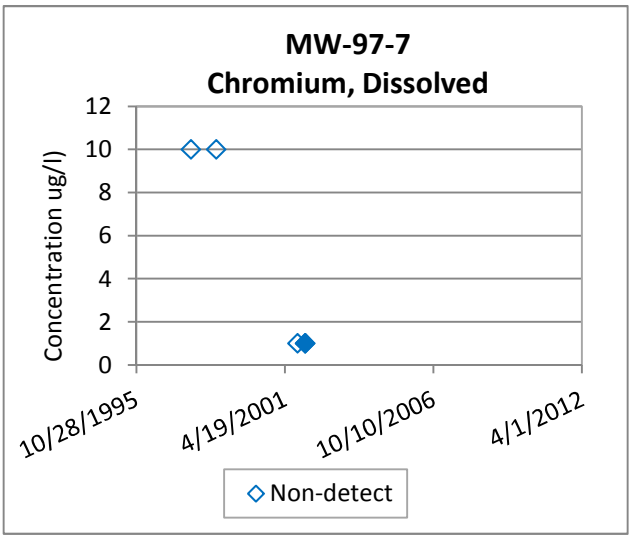
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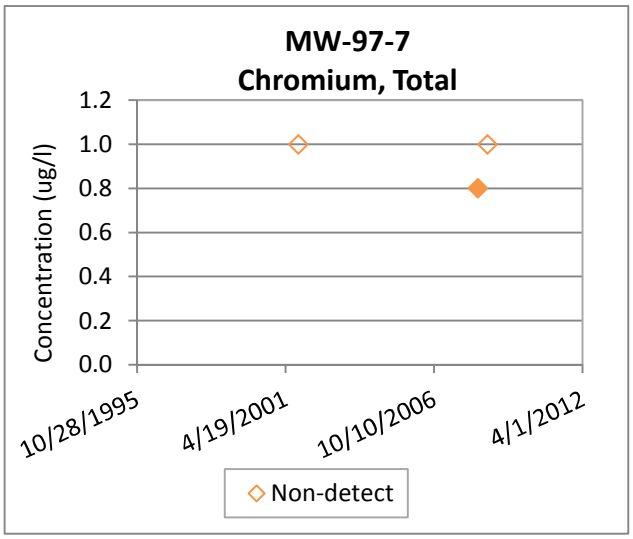
Time Series Plots - MW-97-7
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

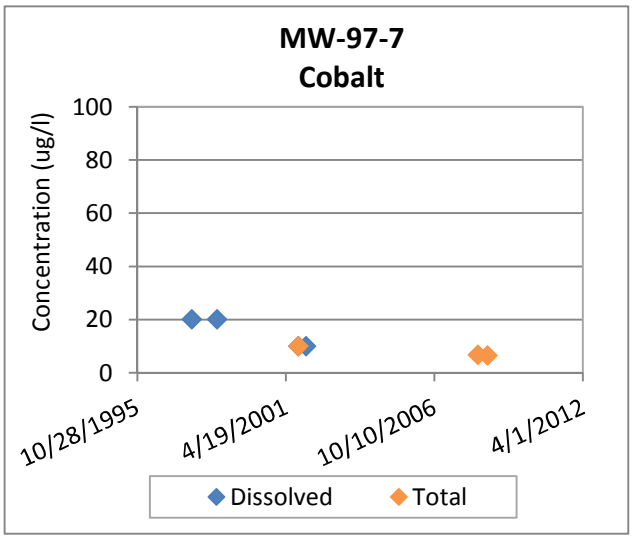




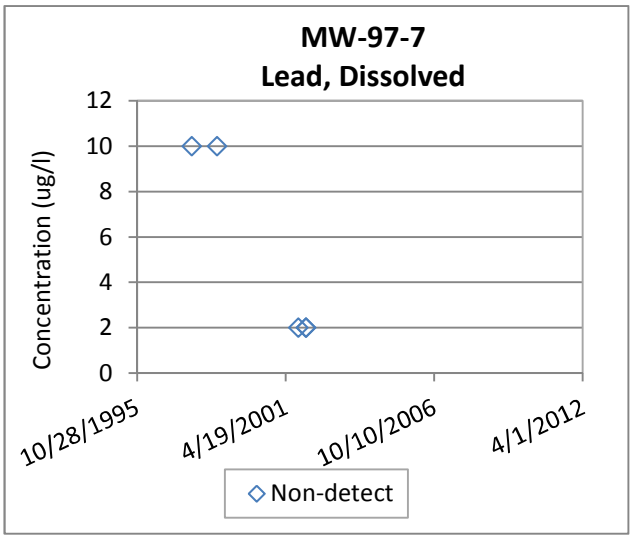


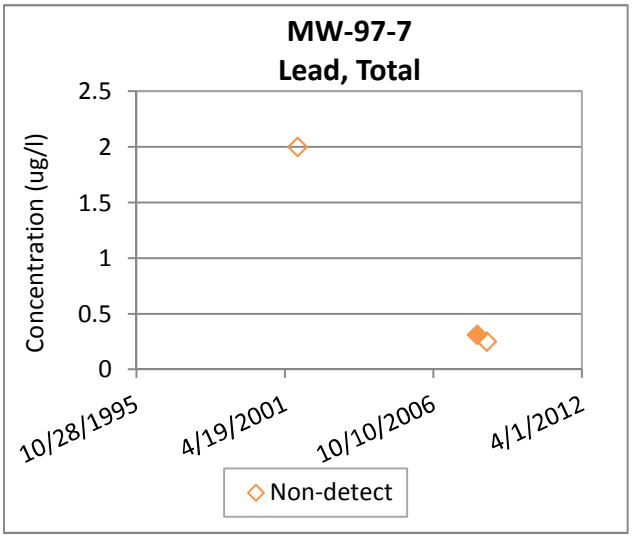


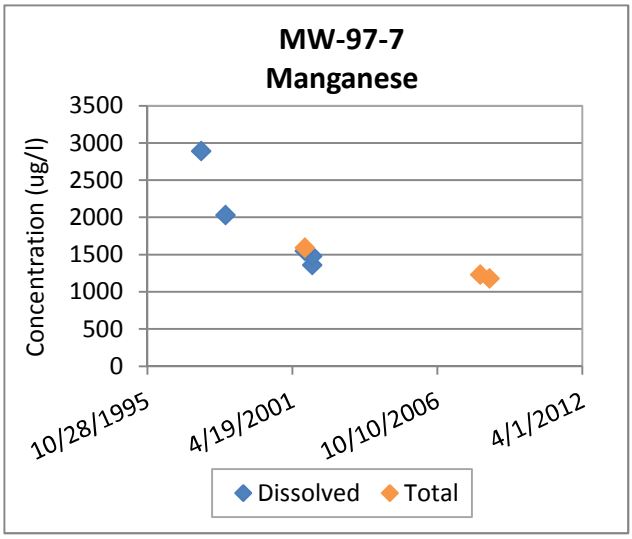


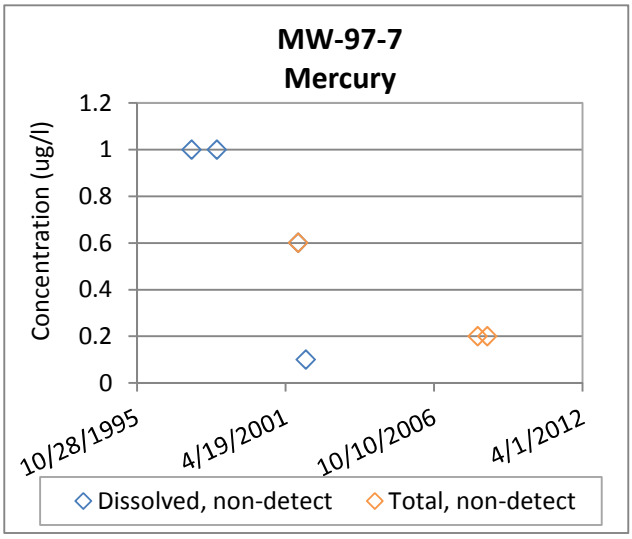


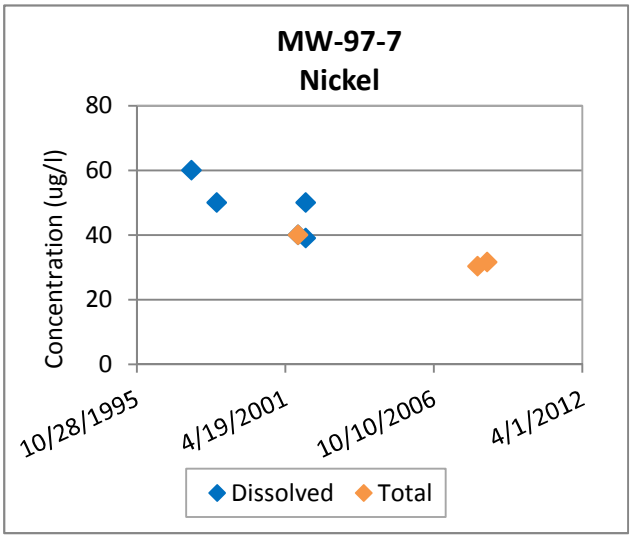
Time Series Plots - MW-97-7
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

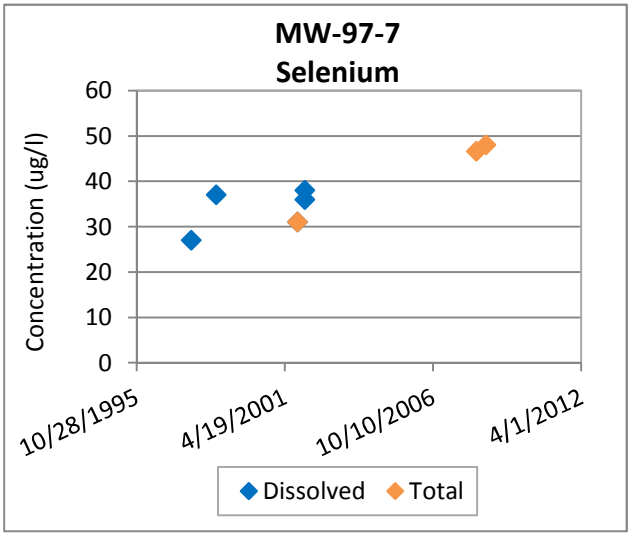




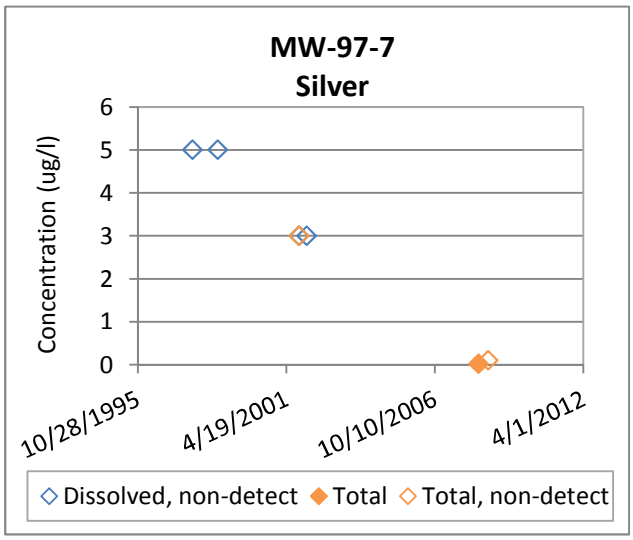


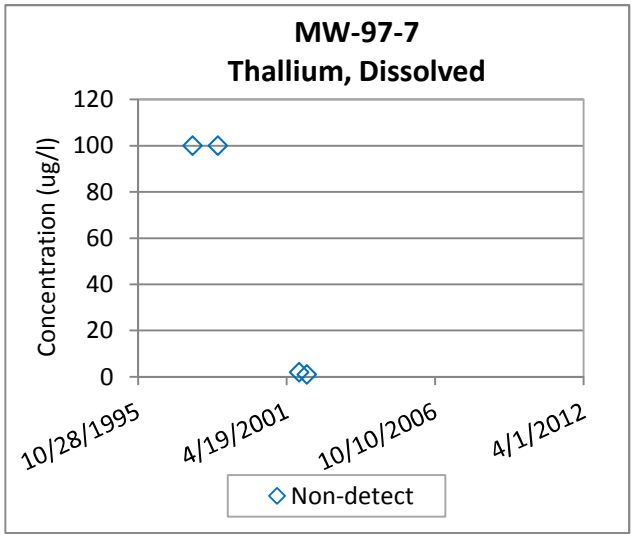


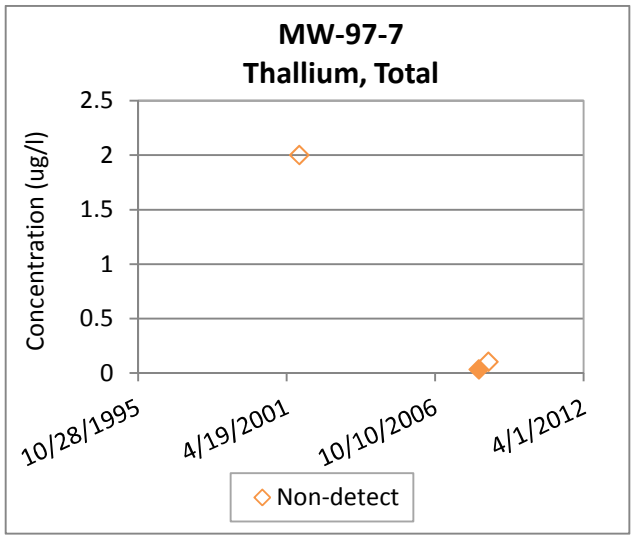


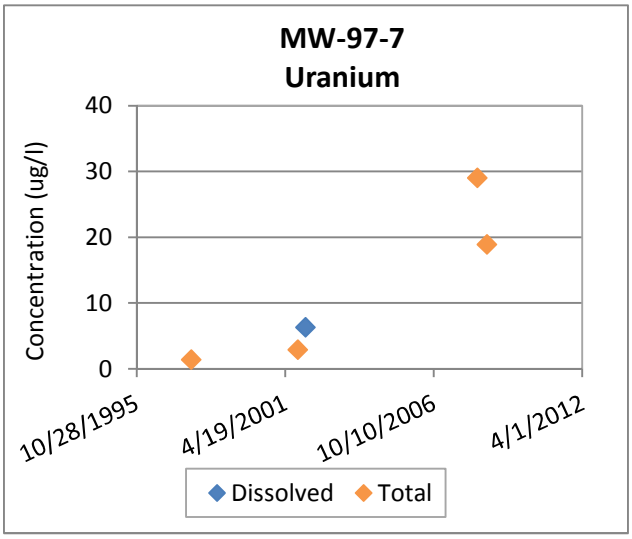


Time Series Plots - MW-97-7
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

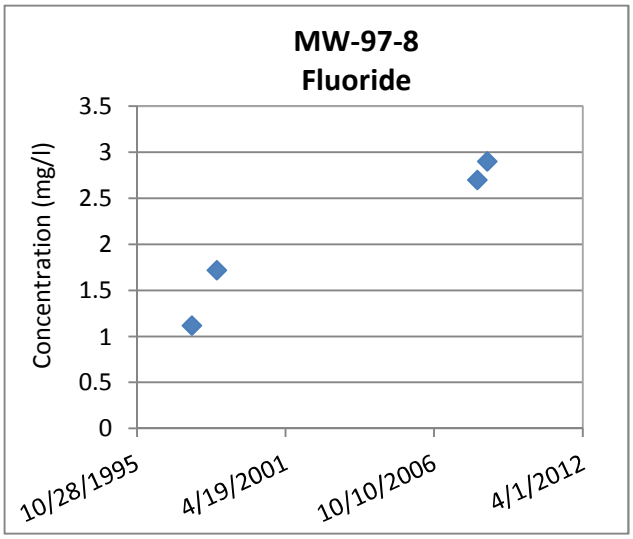


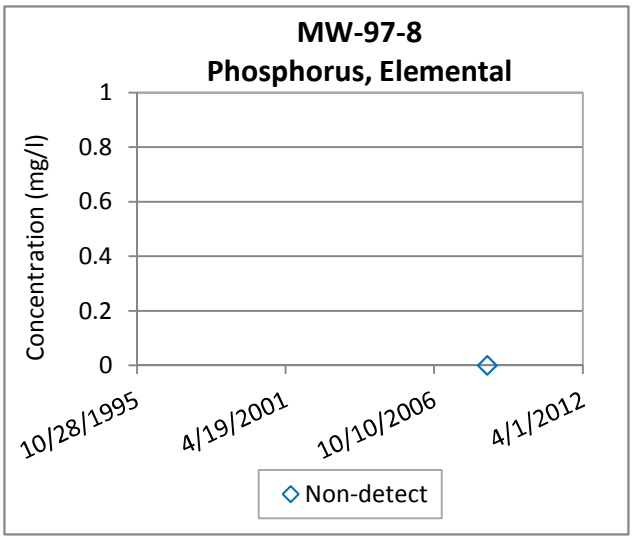


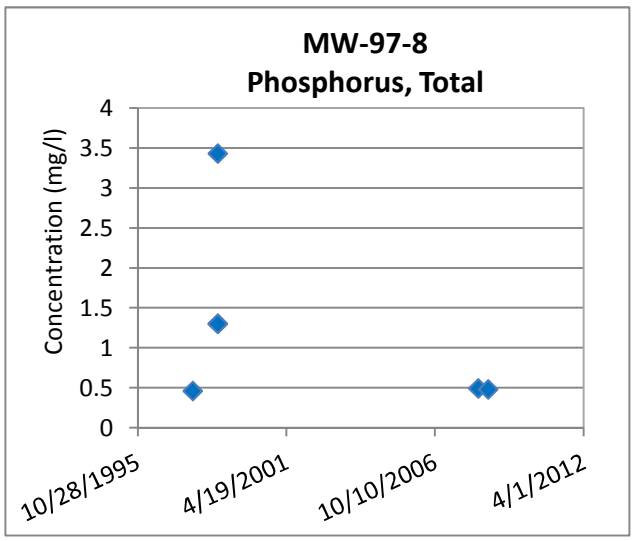


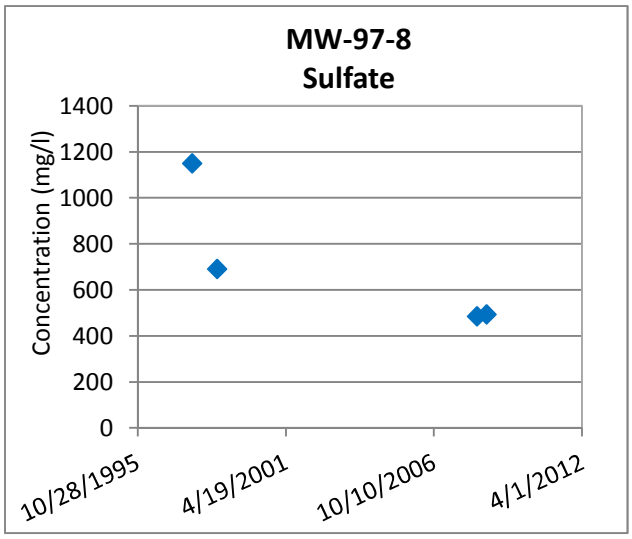


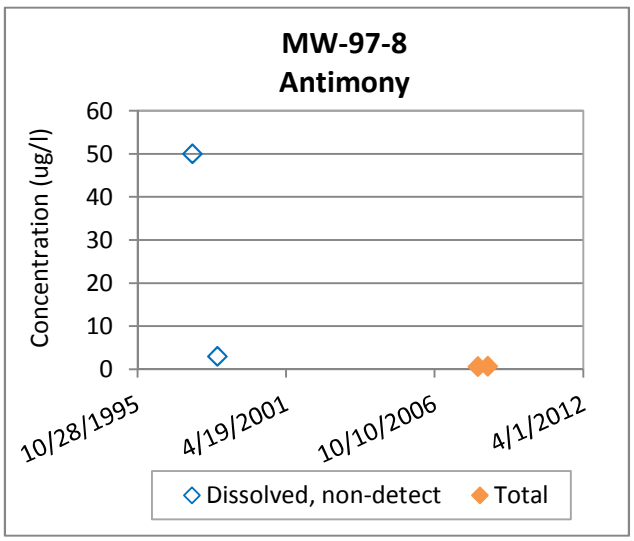
Time Series Plots - MW-97-8
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

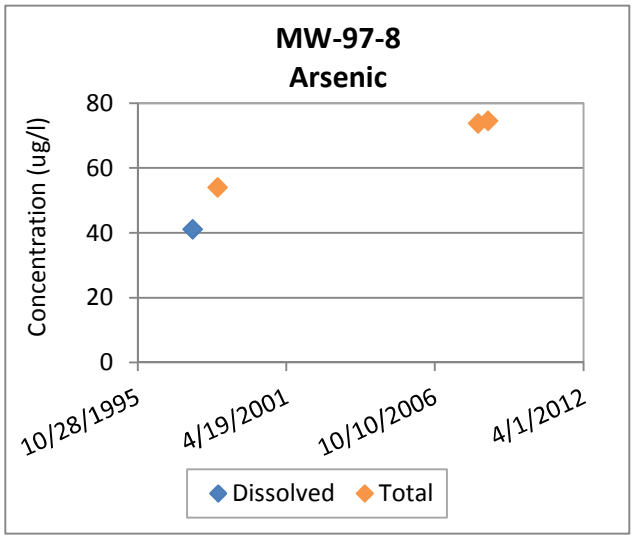






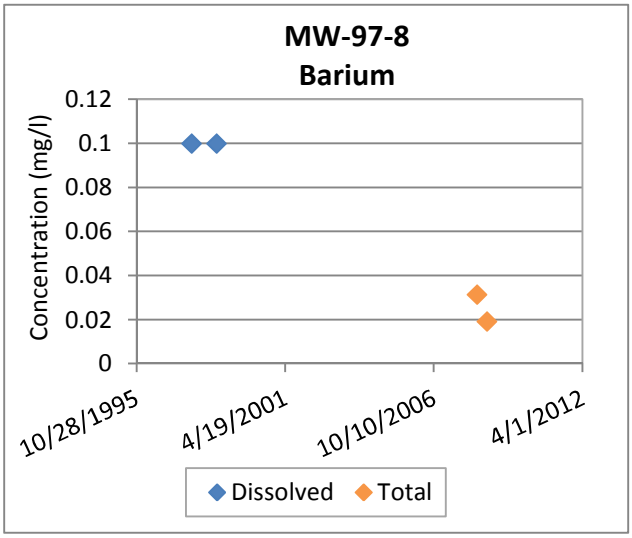


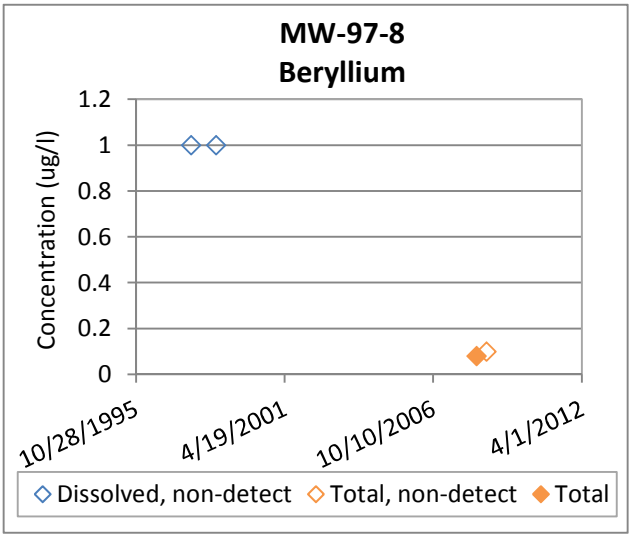


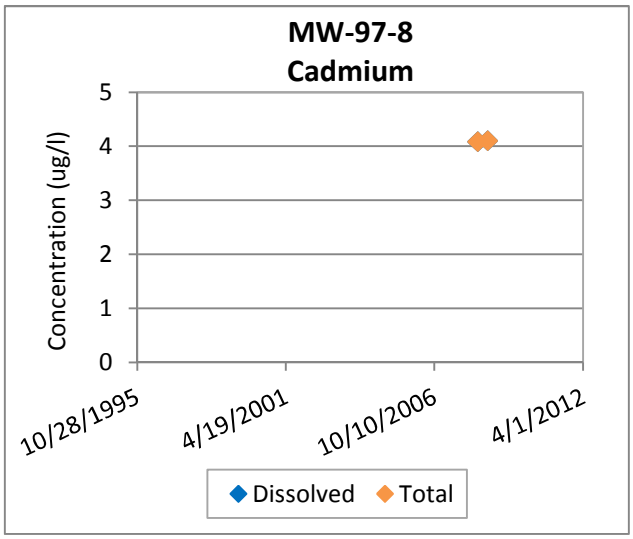


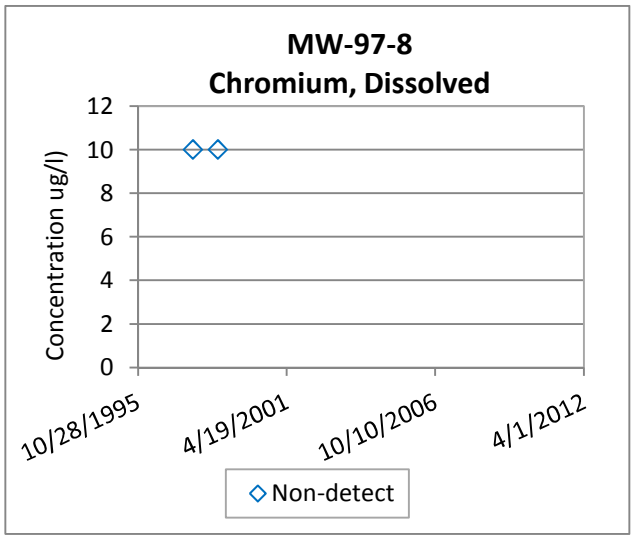
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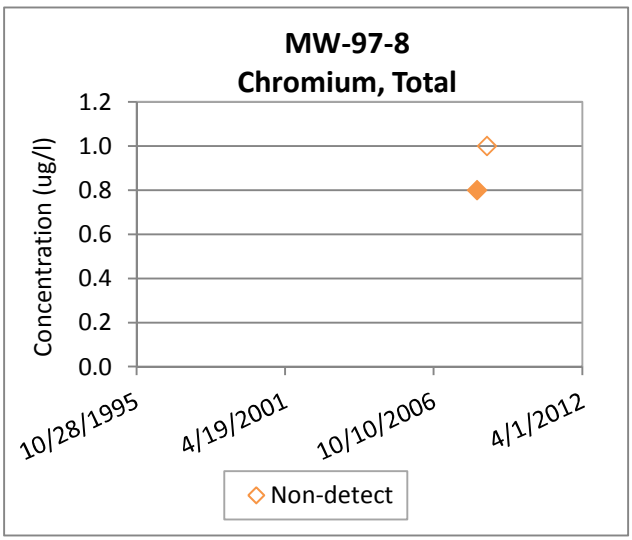
Time Series Plots - MW-97-8
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

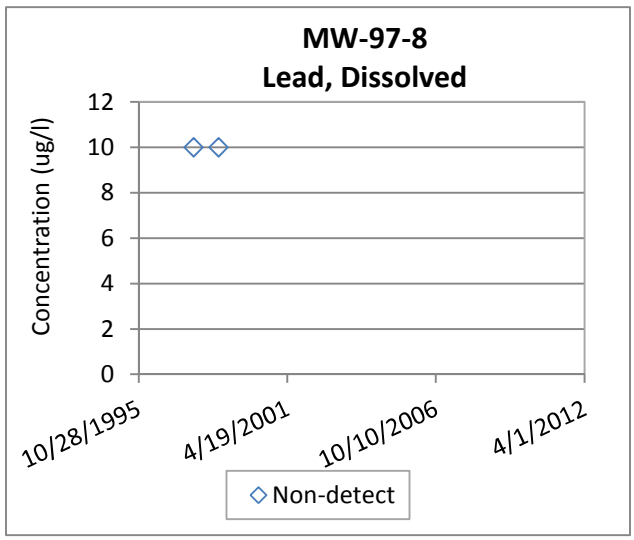




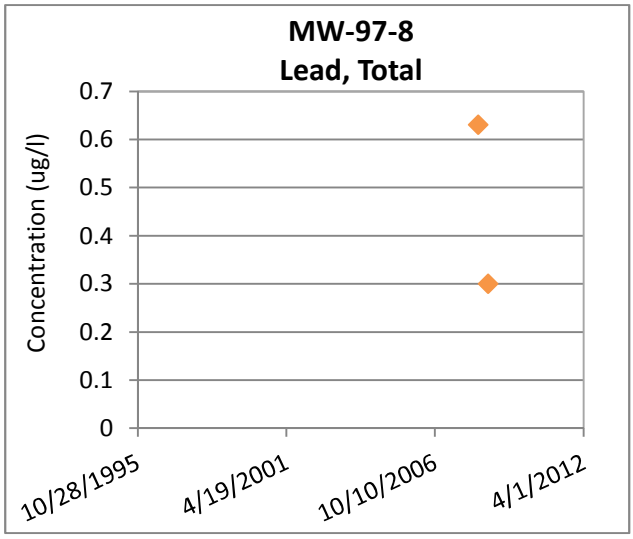


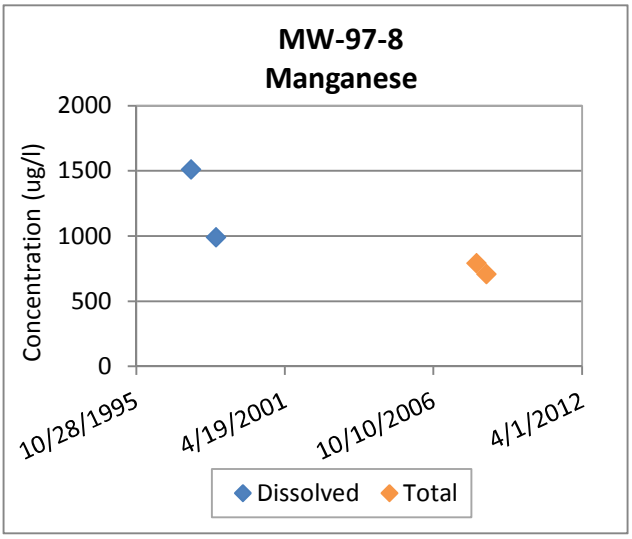


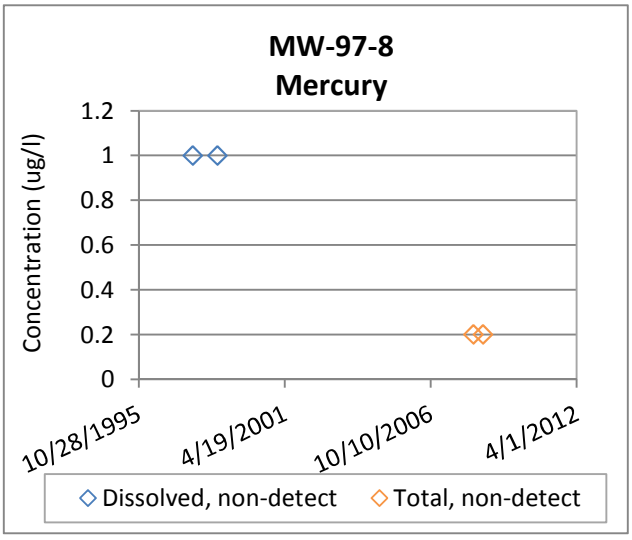


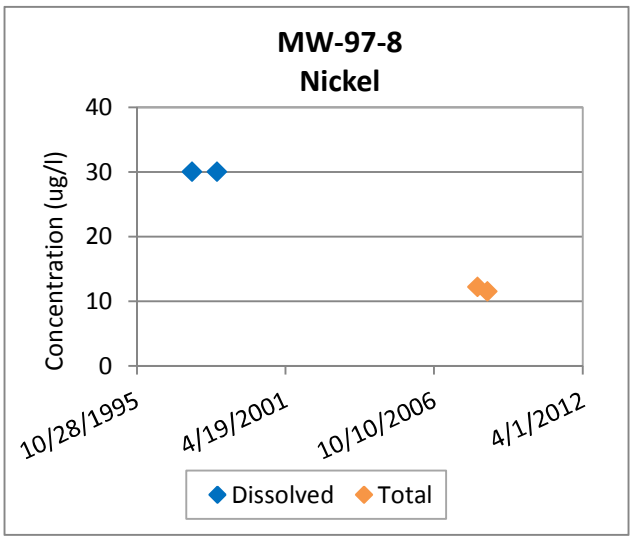


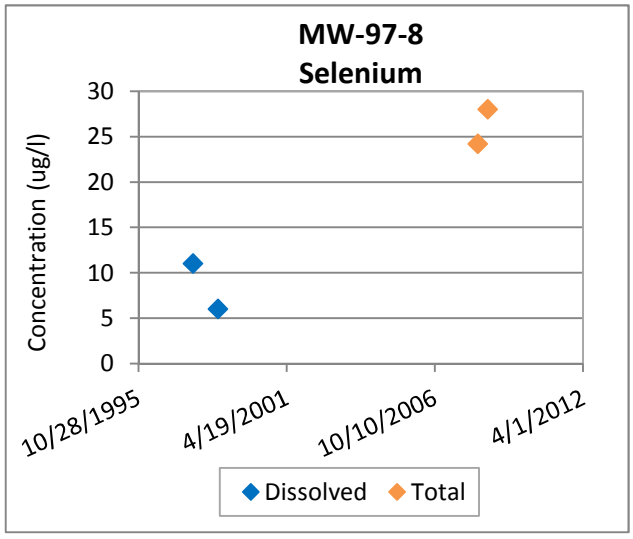
Time Series Plots - MW-97-8
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

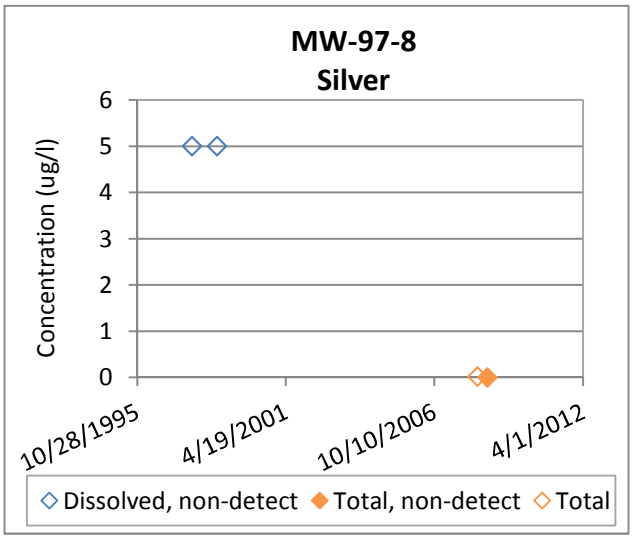




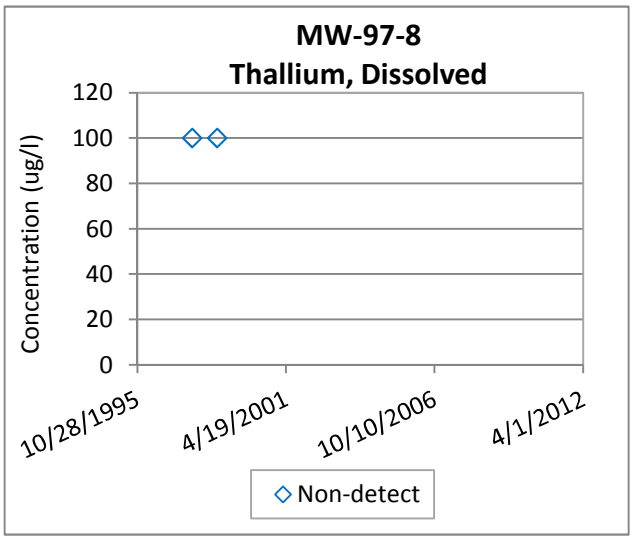


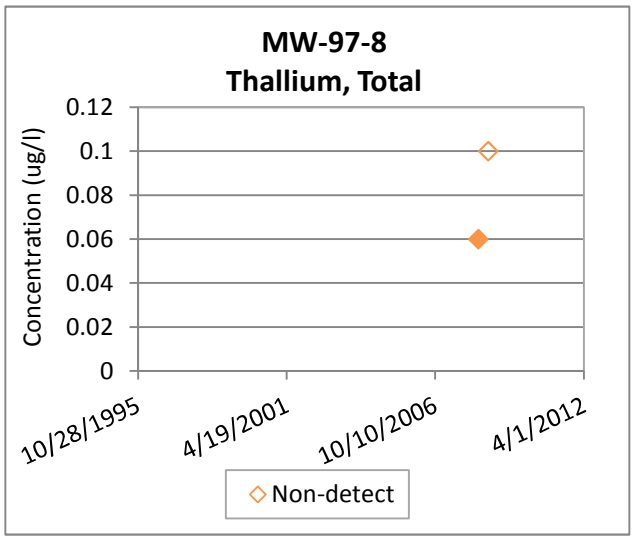


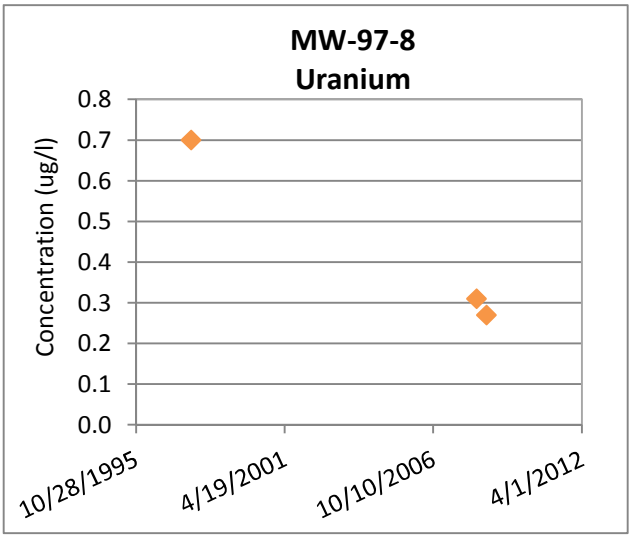




Time Series Plots - MW-97-8
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

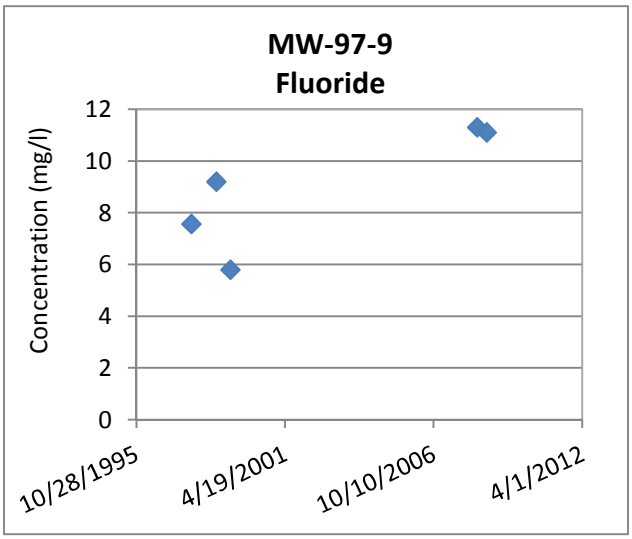


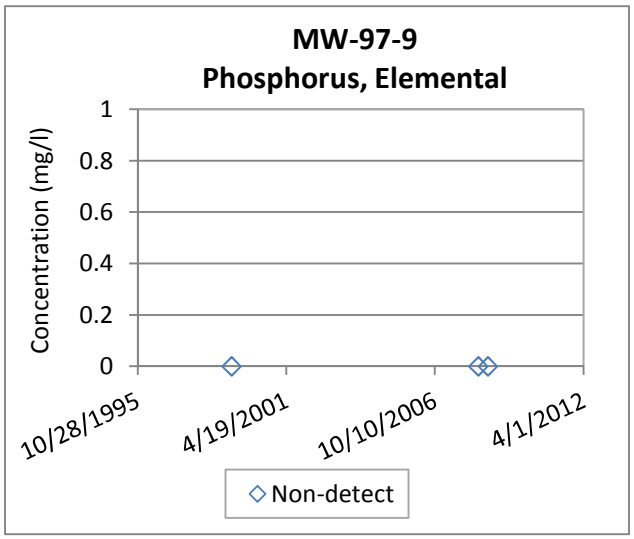


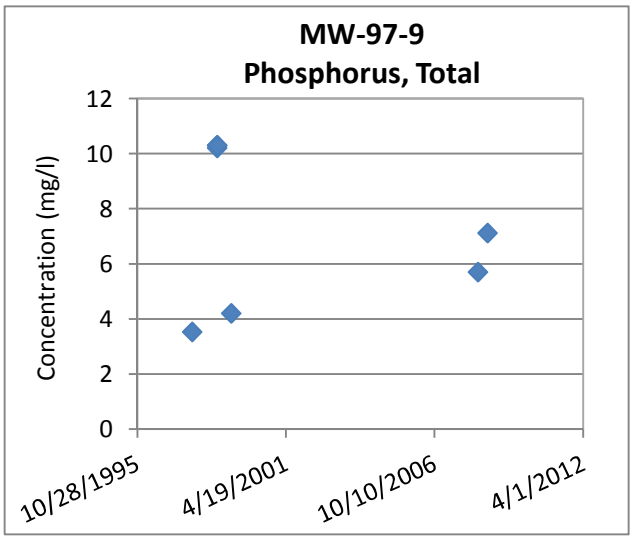


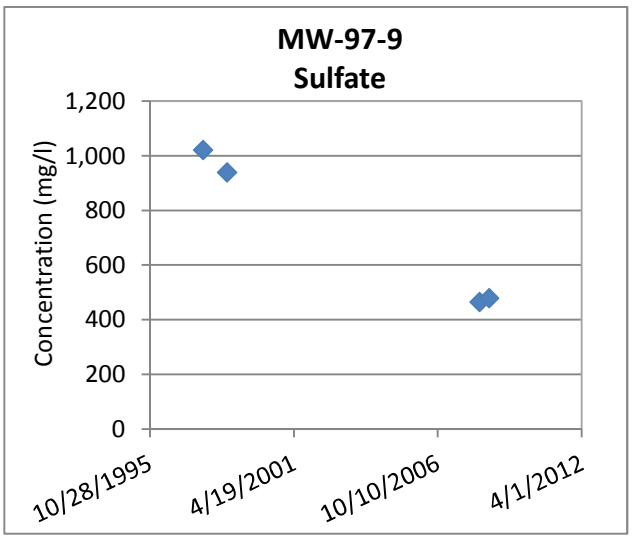
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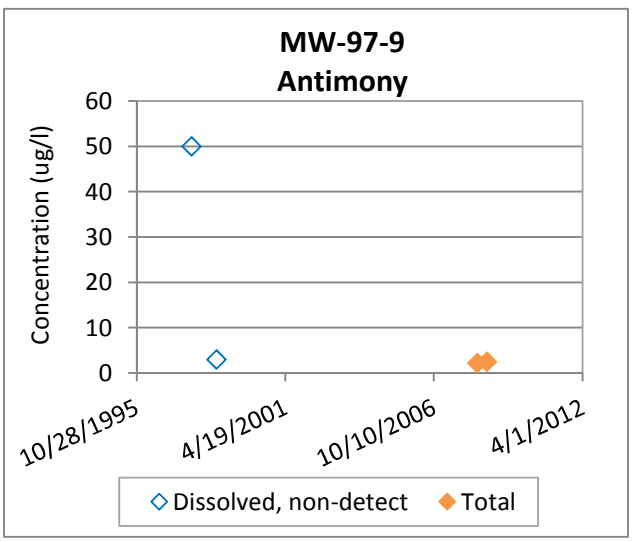
Time Series Plots - MW-97-9
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

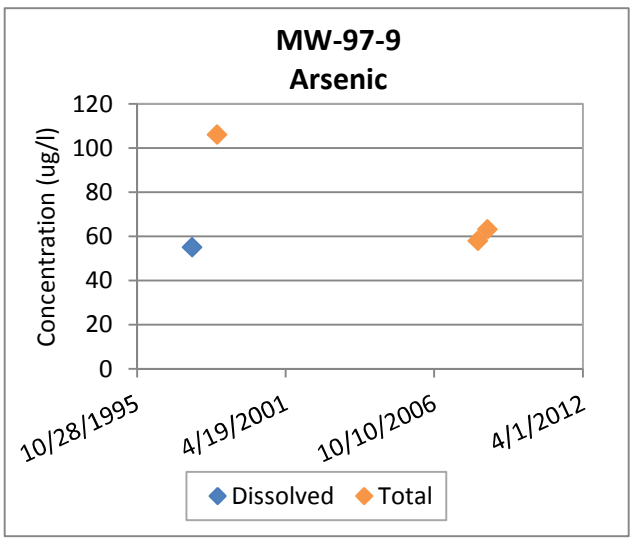






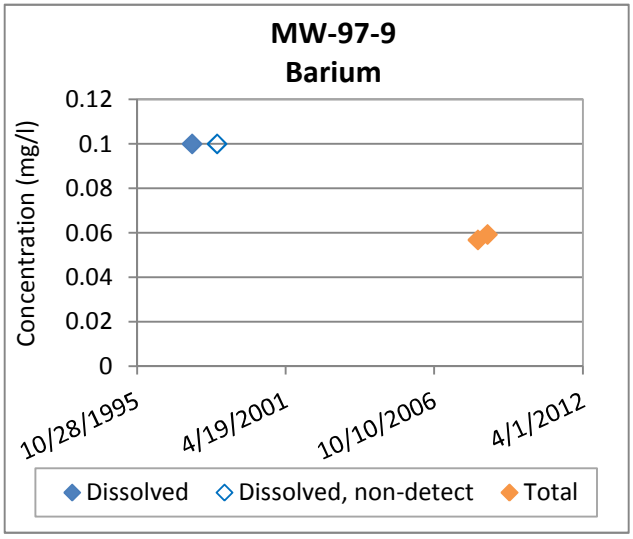


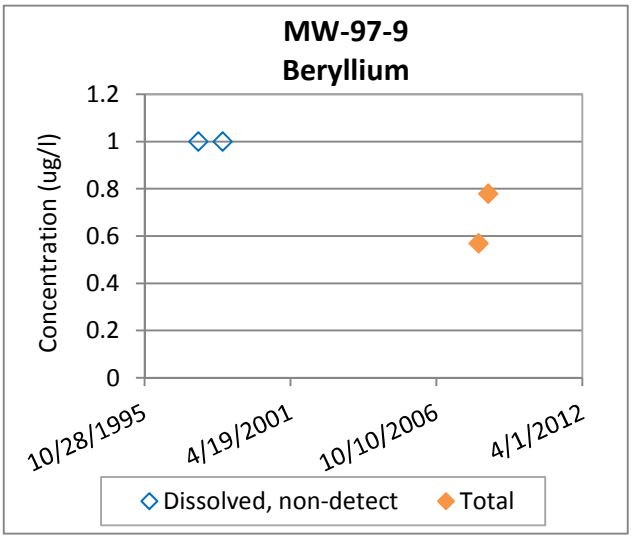


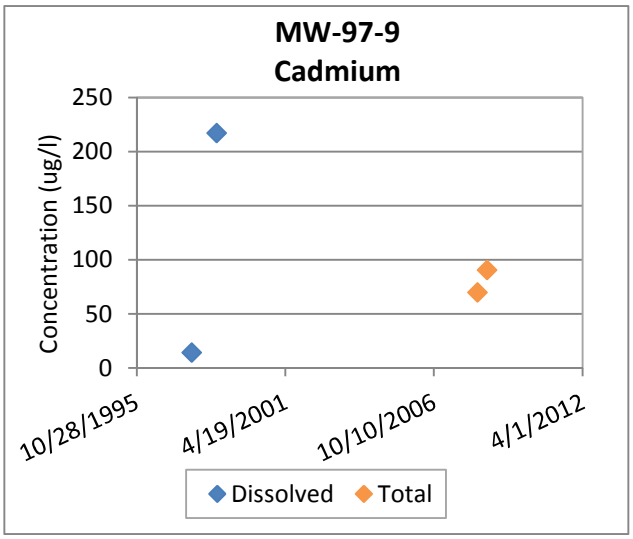


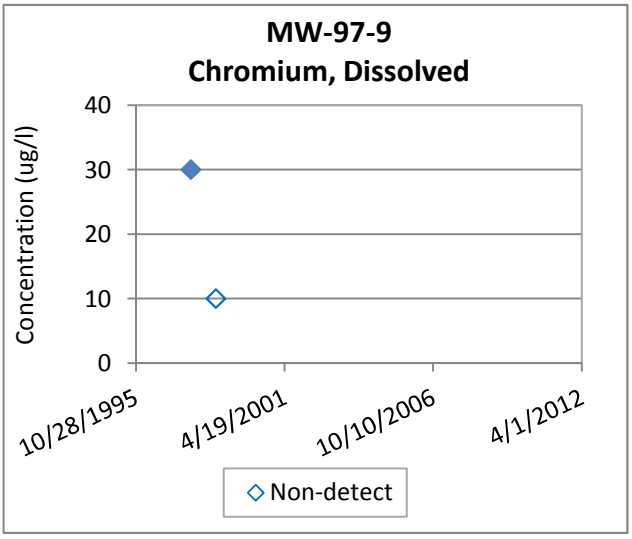
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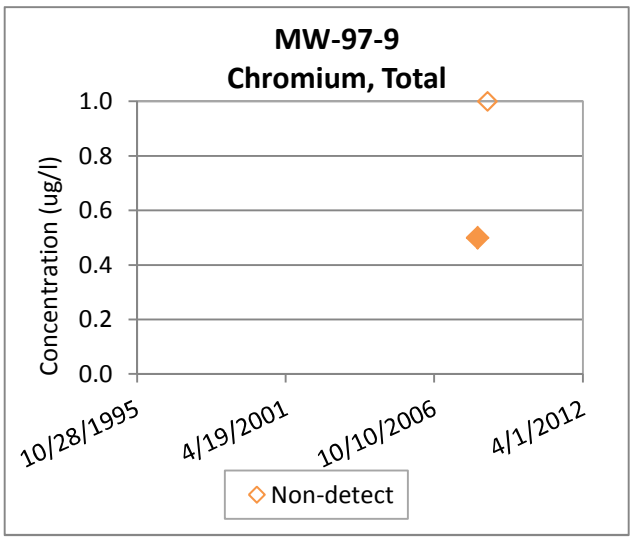
Time Series Plots - MW-97-9
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

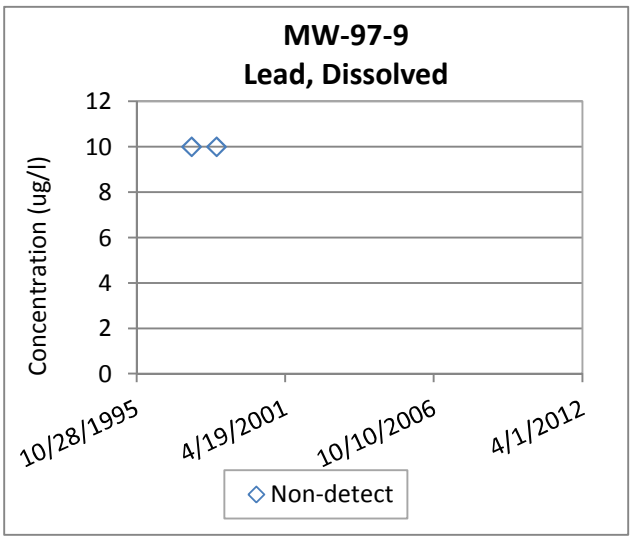




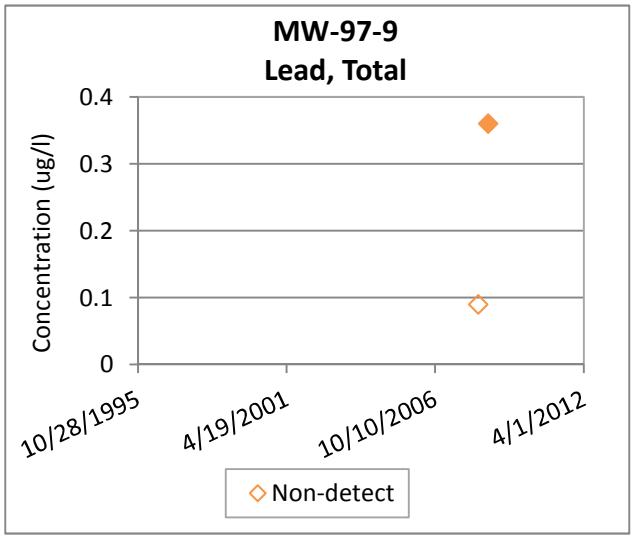


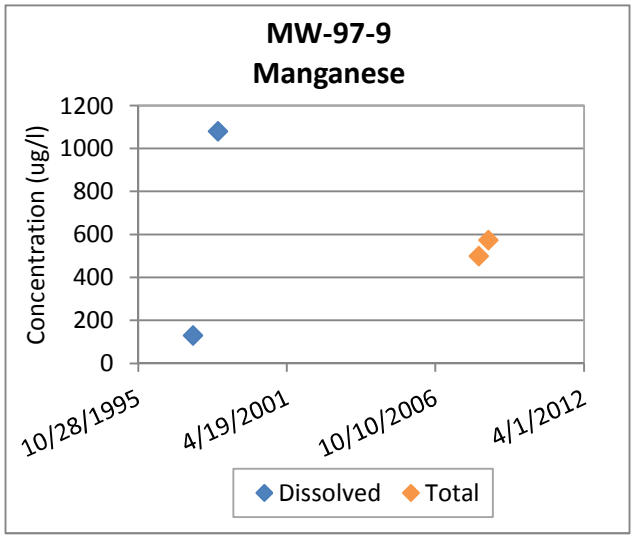


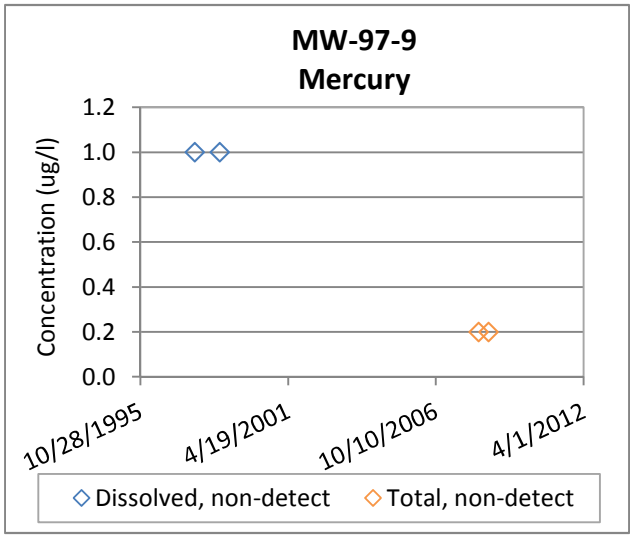


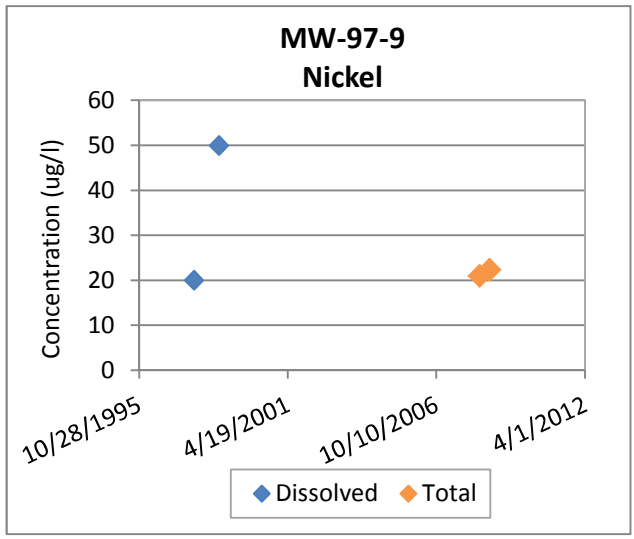


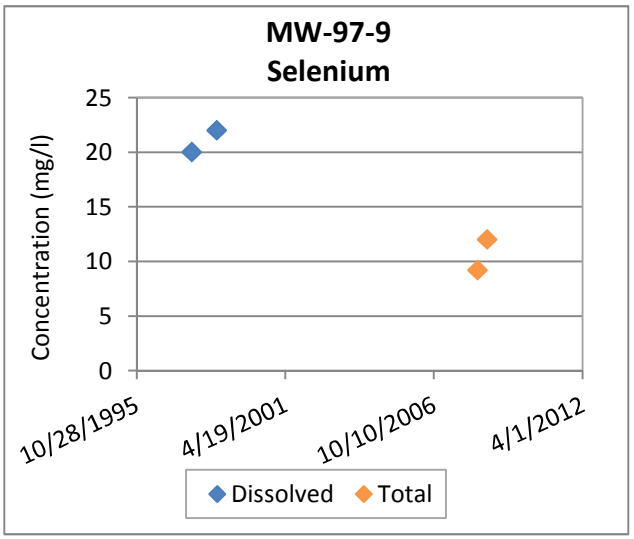
Time Series Plots - MW-97-9
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

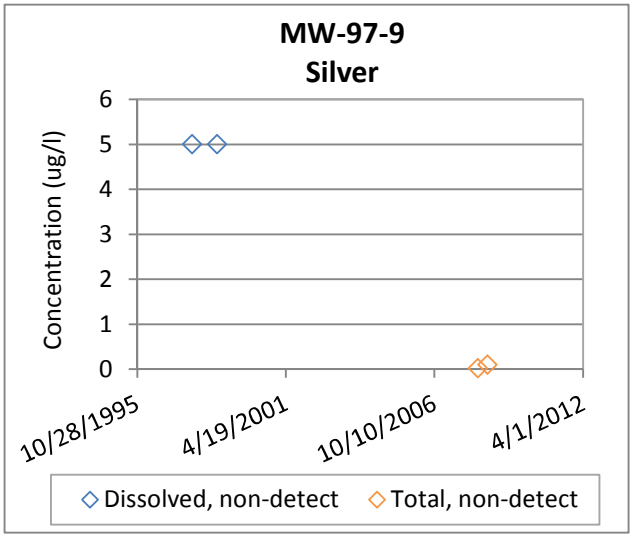




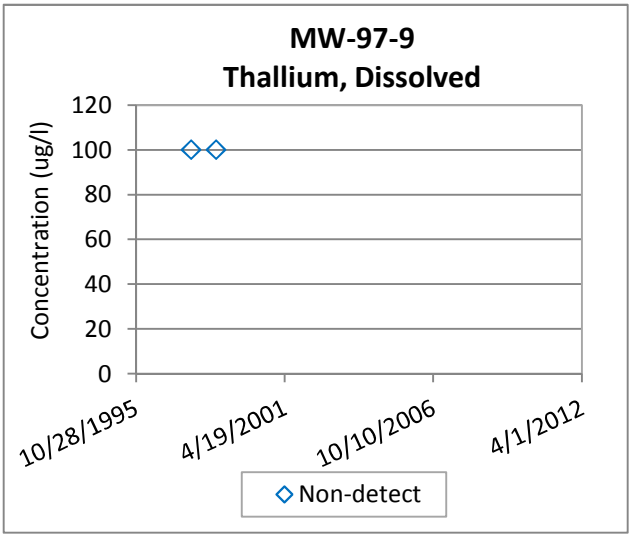


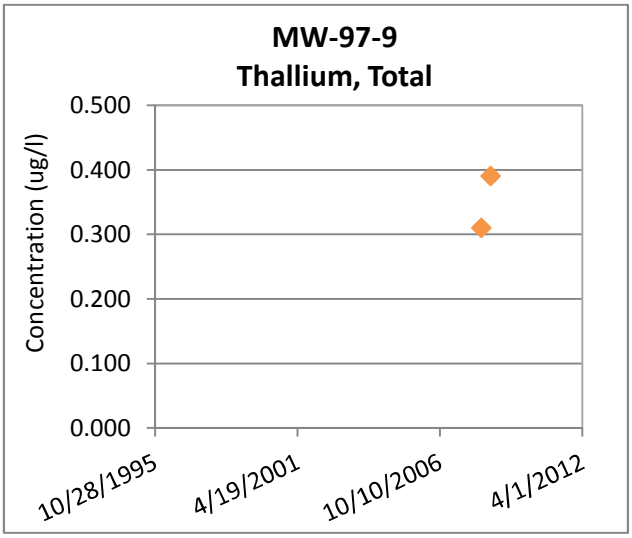


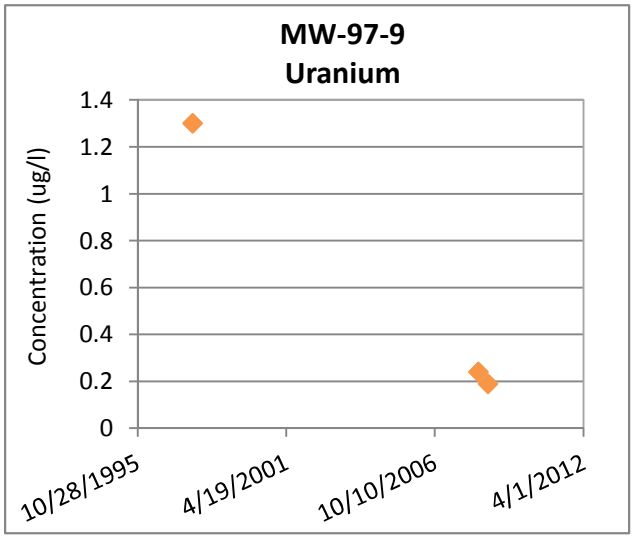




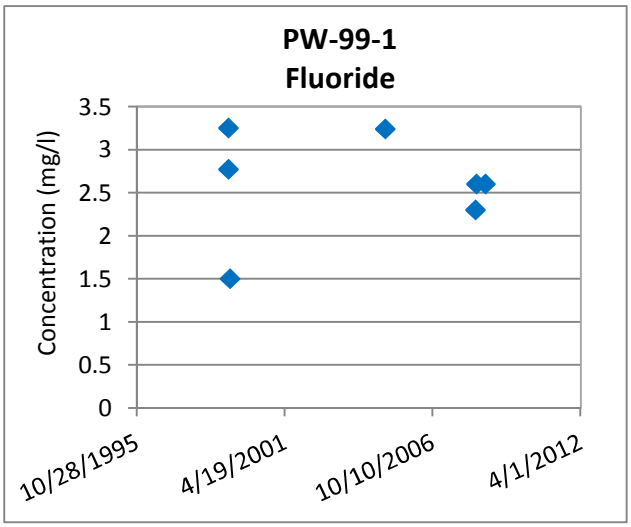
Time Series Plots - MW-97-9
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

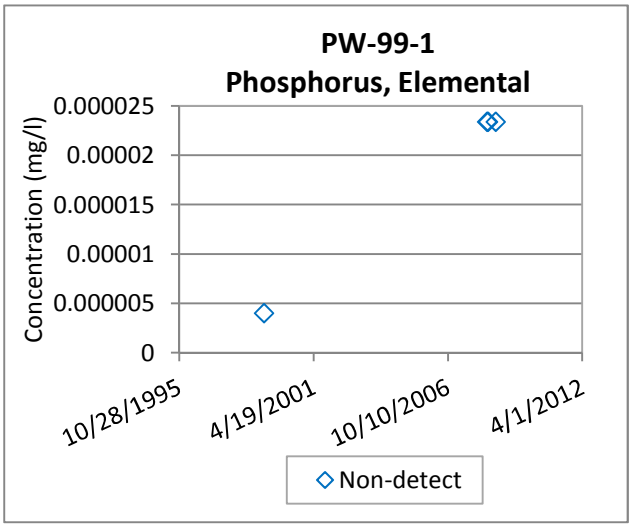


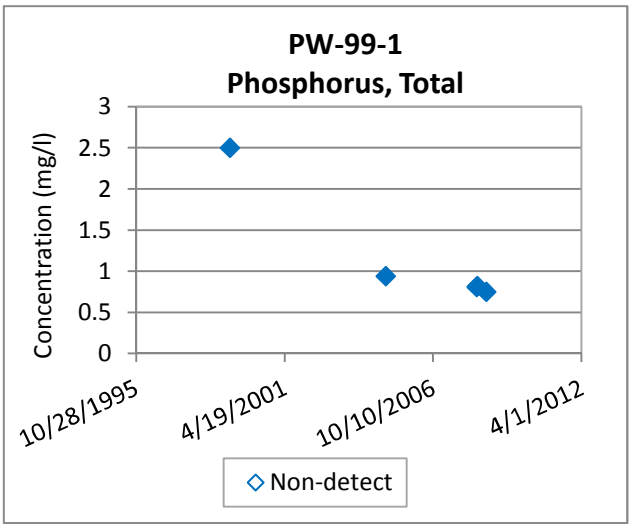


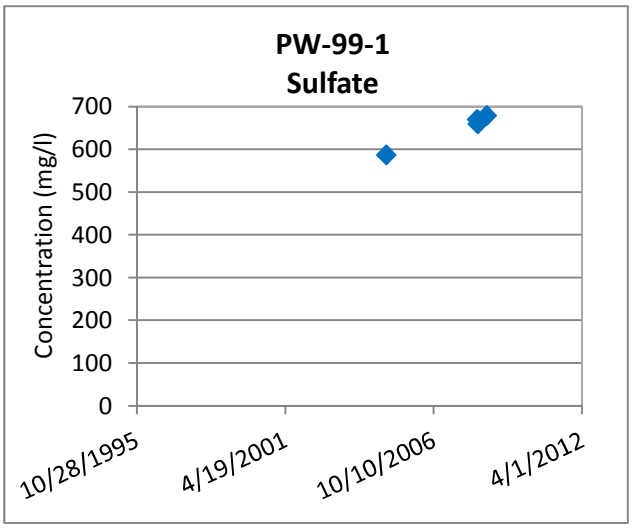


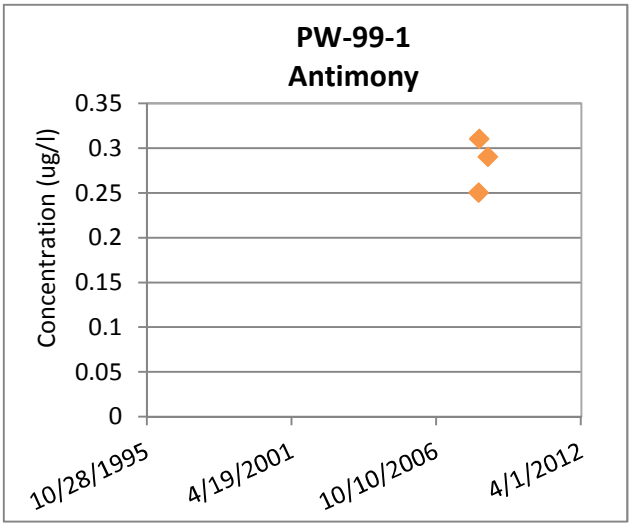
Time Series Plots - PW-99-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

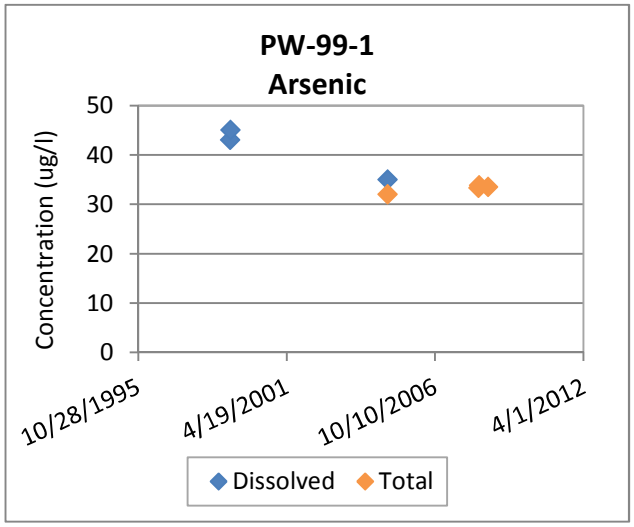






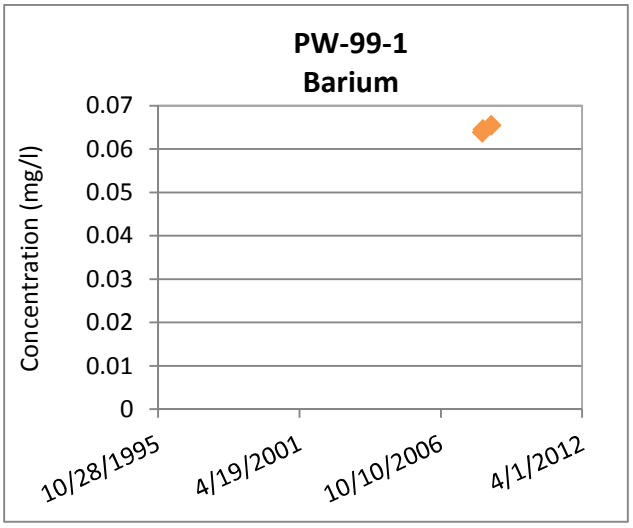


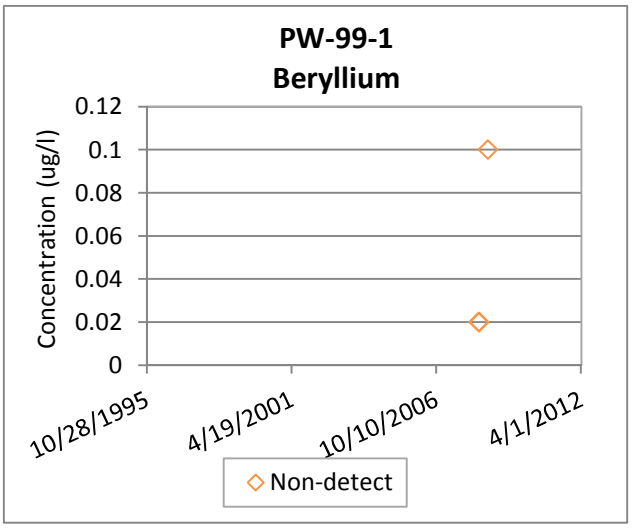


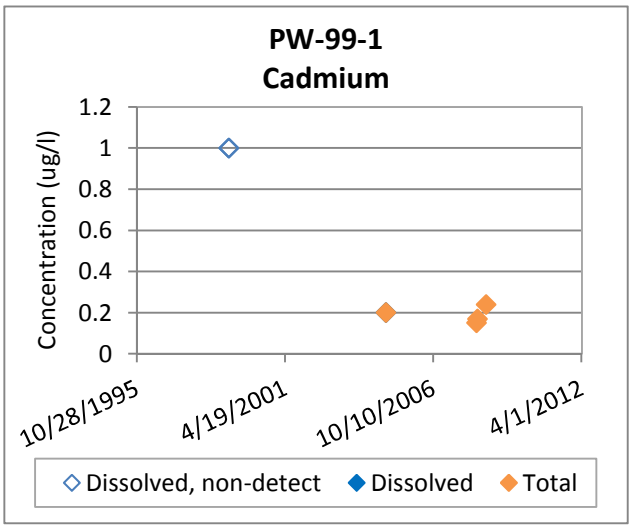


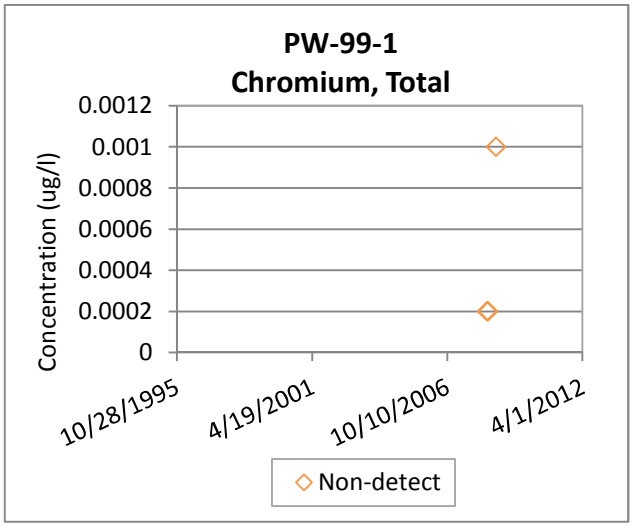
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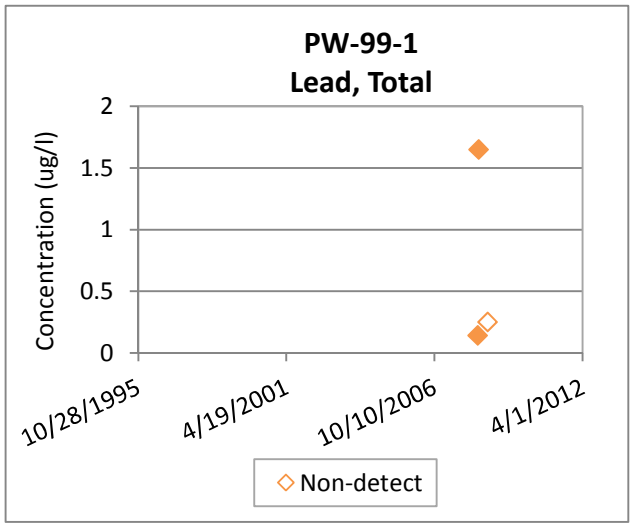
Time Series Plots - PW-99-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

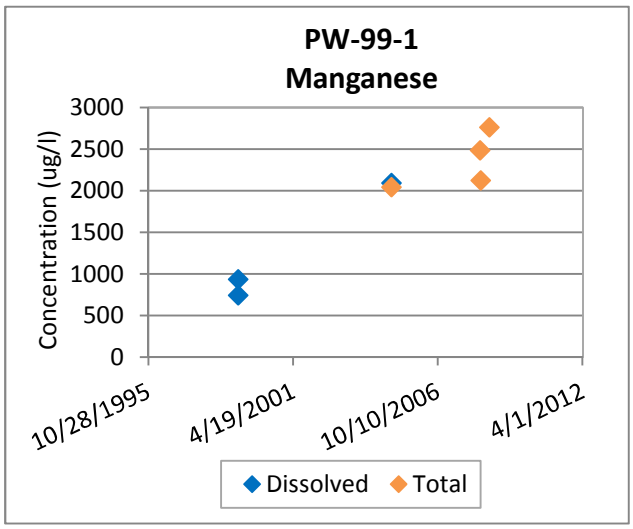




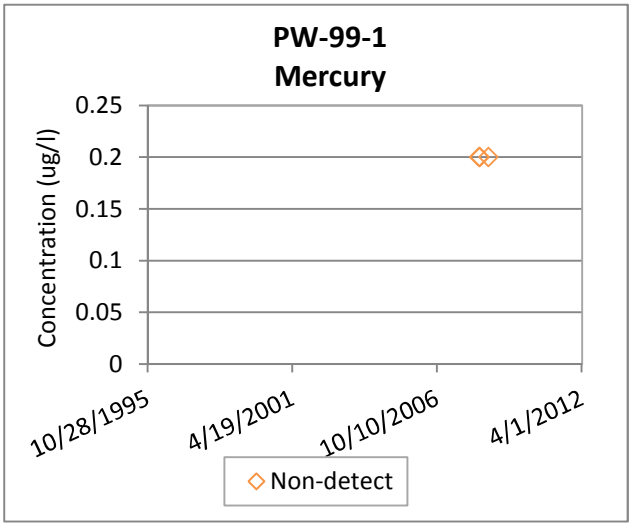


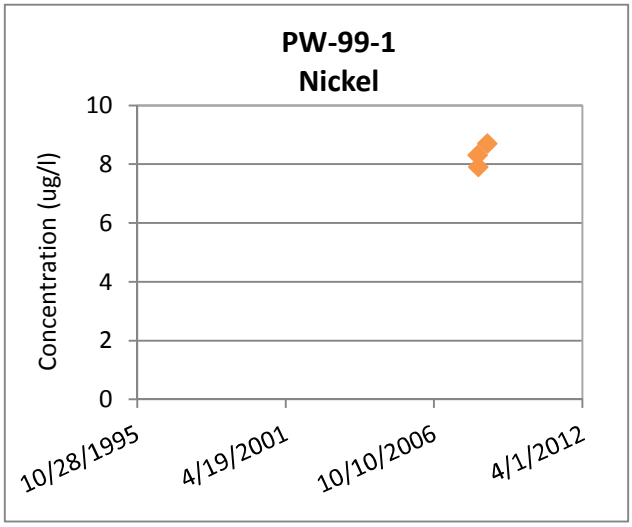


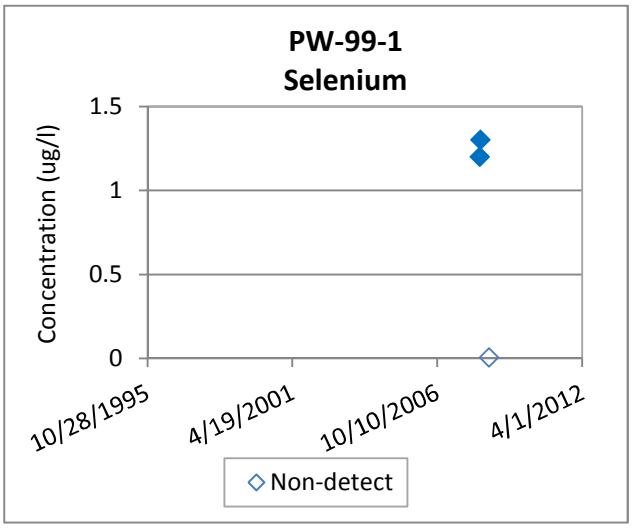


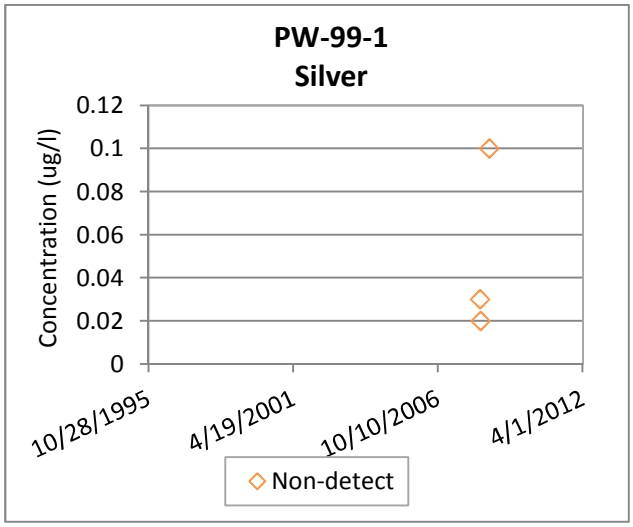


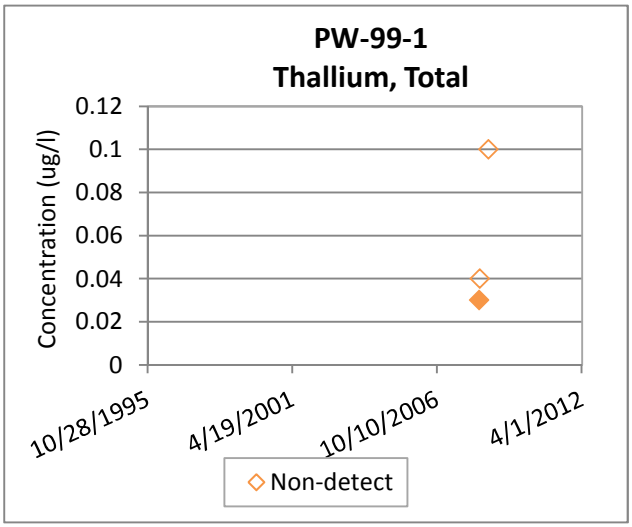
Time Series Plots - PW-99-1
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

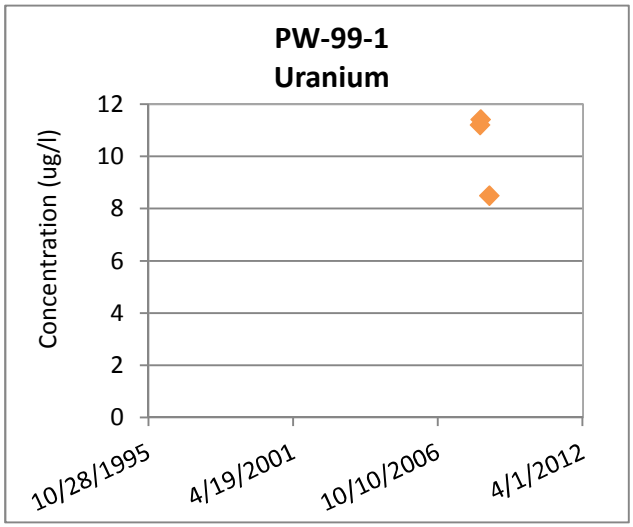






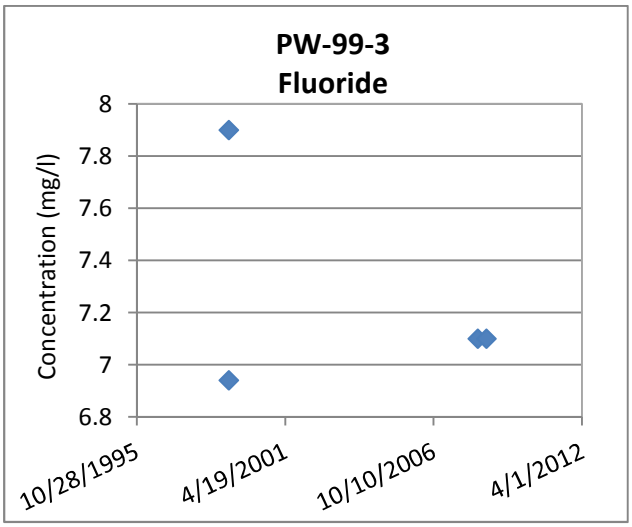


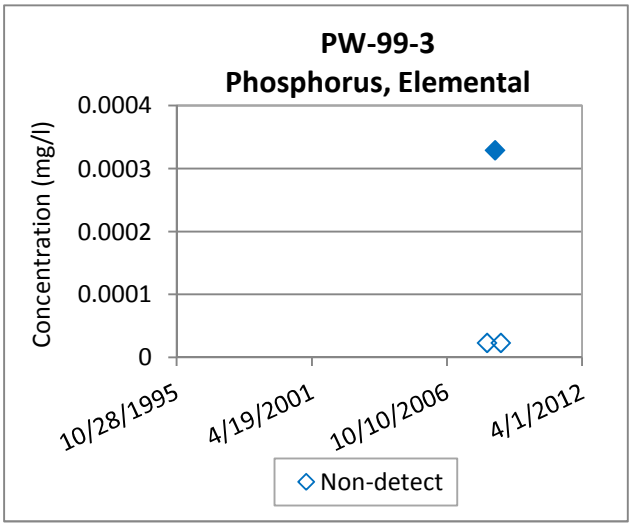


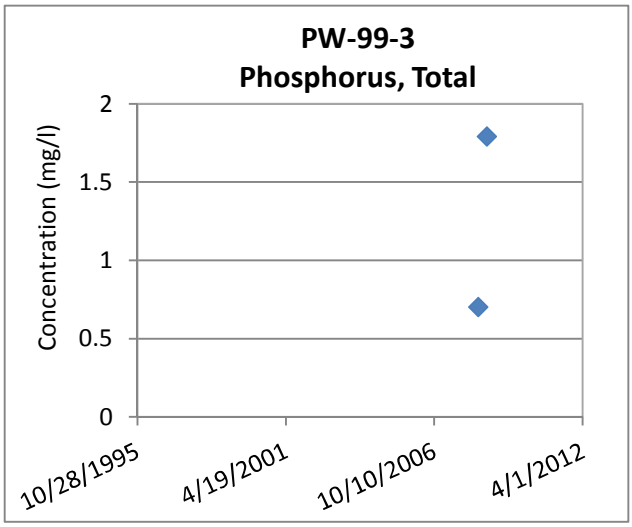


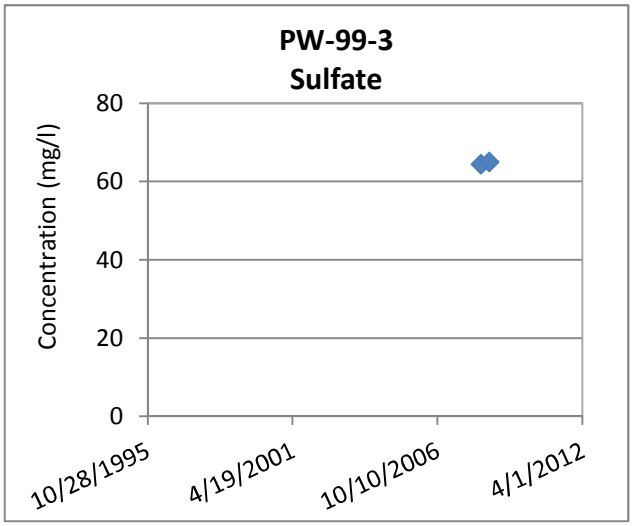
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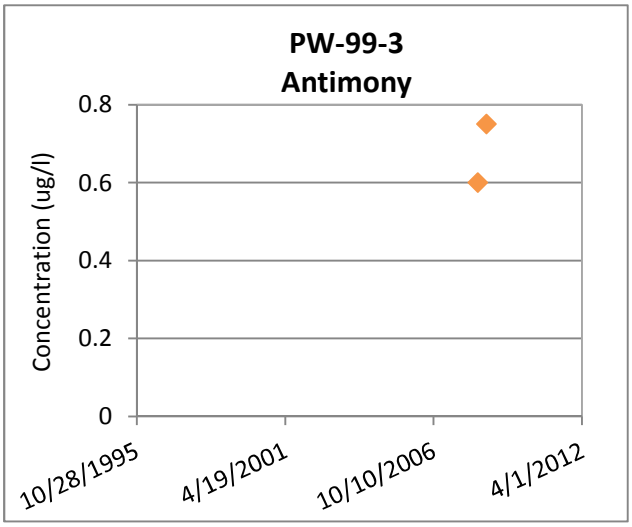
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Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

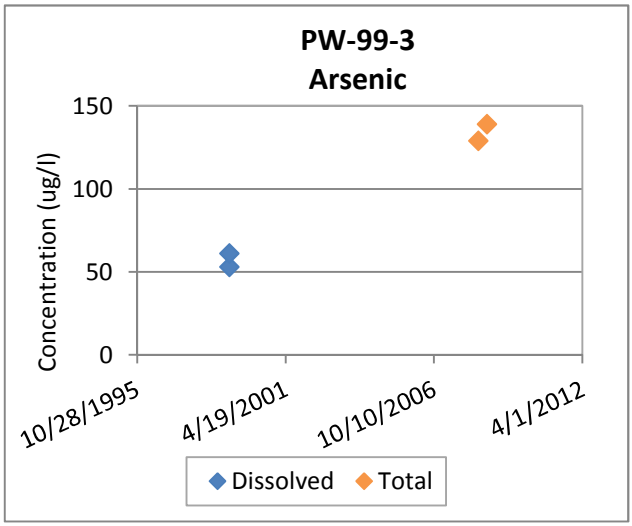




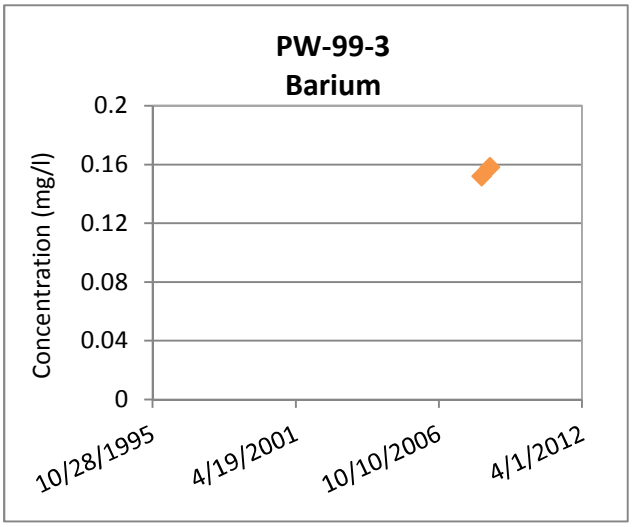


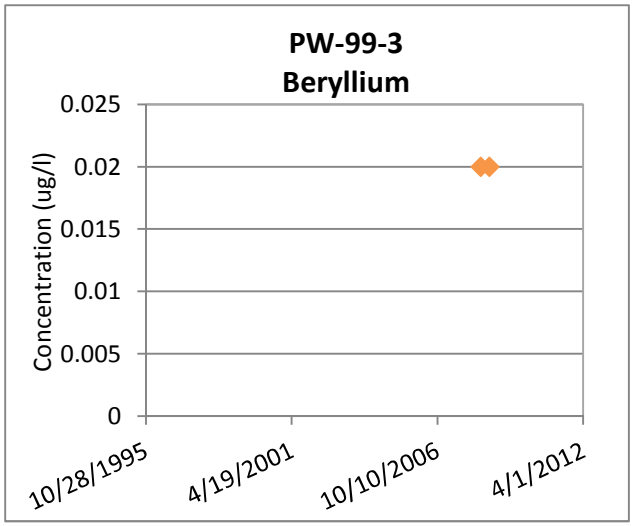


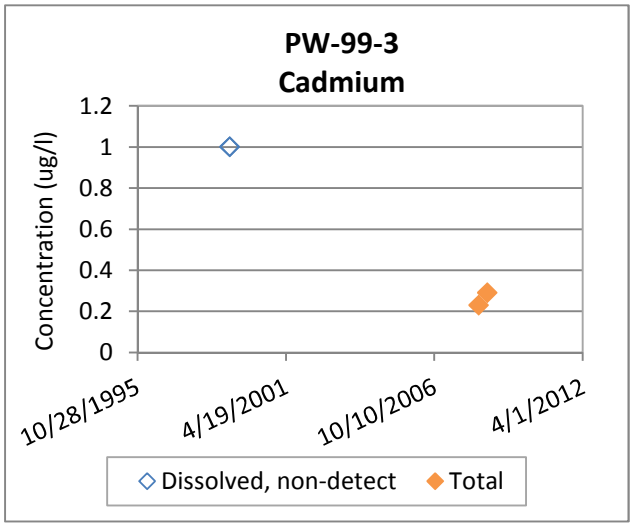


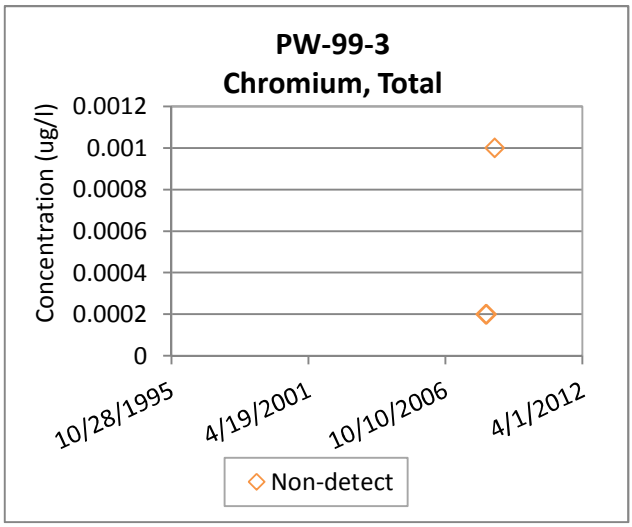


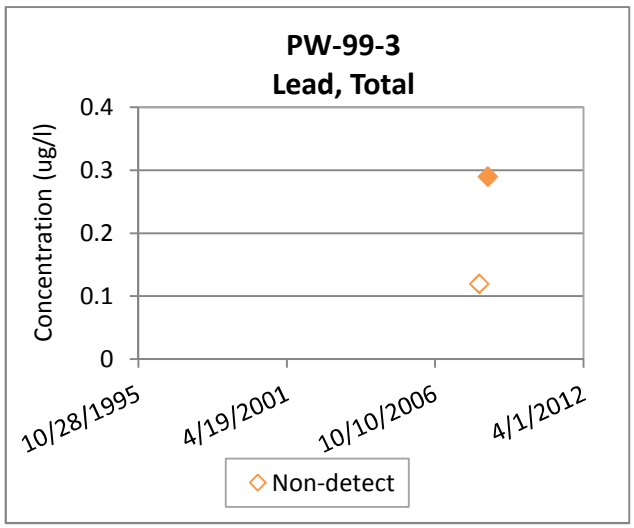
Time Series Plots - PW-99-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

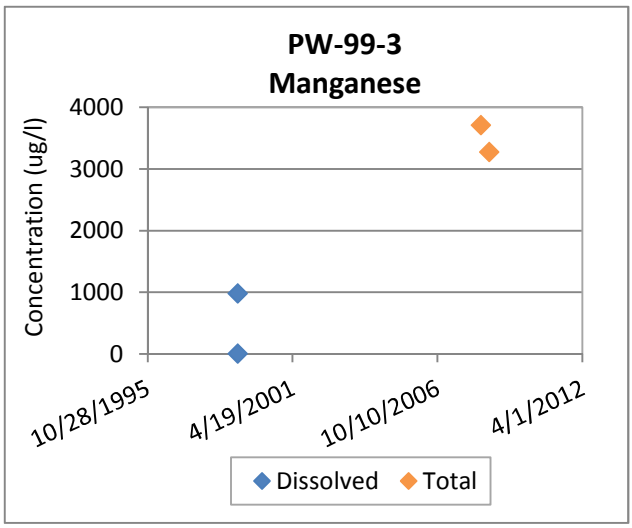






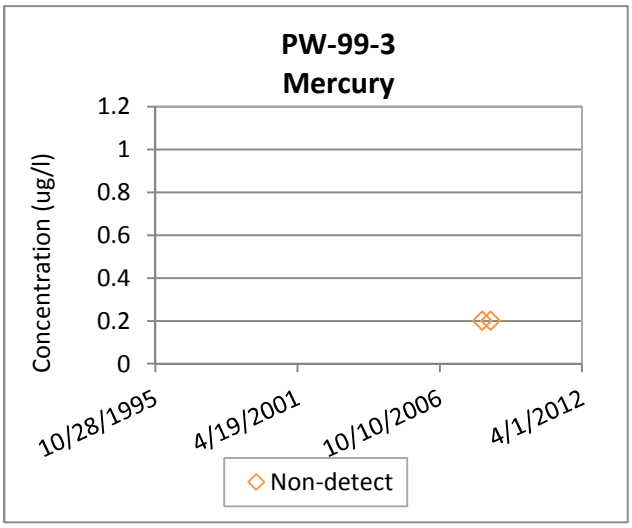


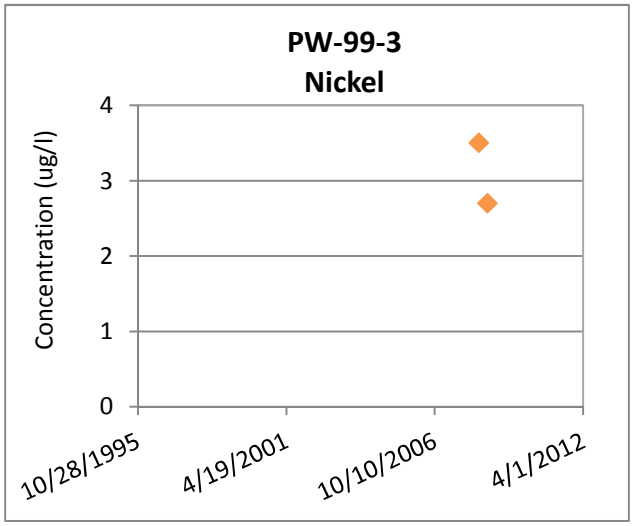


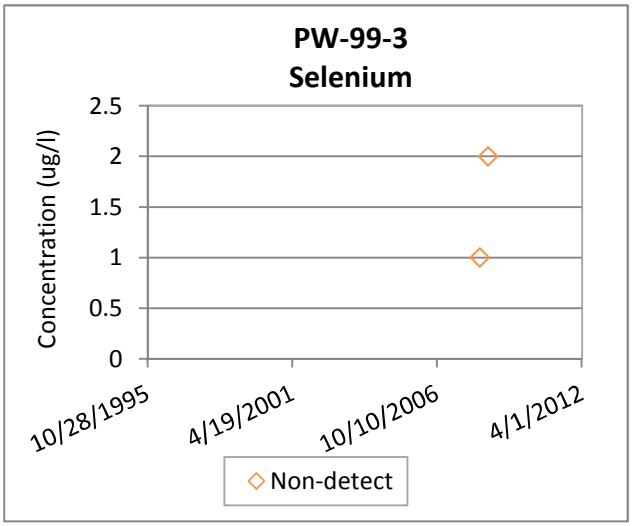


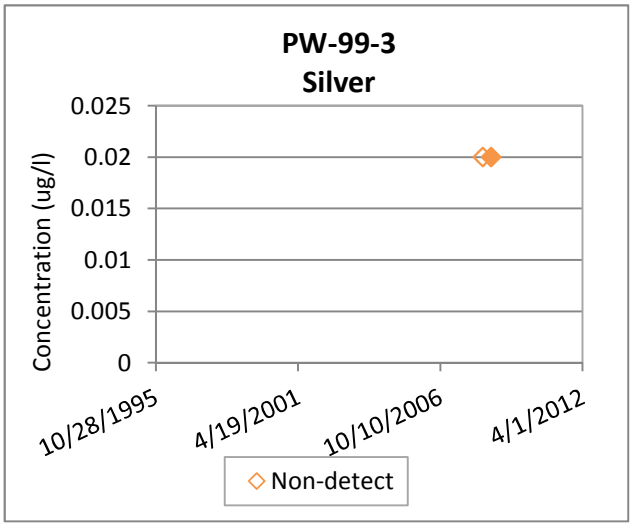
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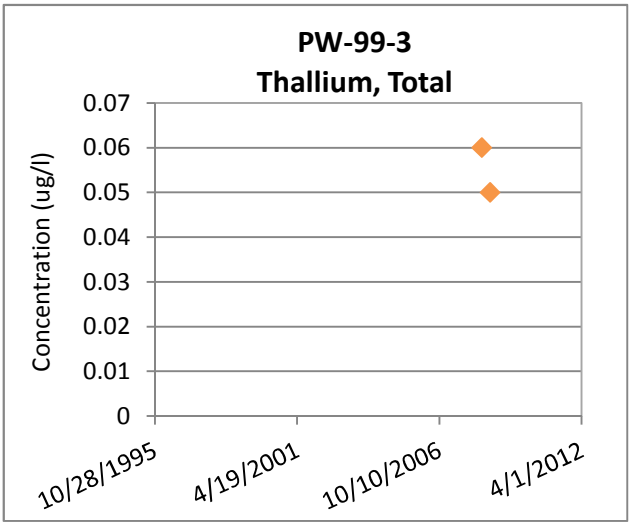
Time Series Plots - PW-99-3
Groundwater Quality Time Series for Selected Locations
Rhodia Silver Bow Plant

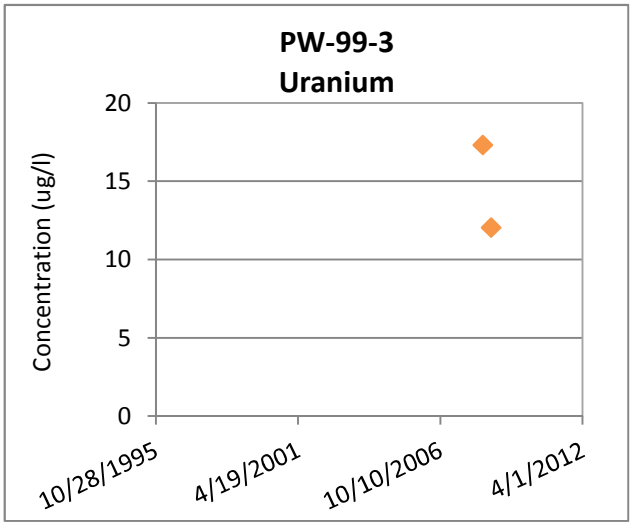












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