DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action

Environmental Indicator (EI) RCRIS code (CA750)

Migration of Contaminated Groundwater Under Control

WATER PROTECTION AND LAND REUSE
AUG - 5 2008
REMEDIATION DIVISION

Facility Name: Waterbury Rolling Mills, Inc.
Facility Address: 240 East Aurora Street, Waterbury, Connecticut 06708
Facility EPA ID #: CTD001164607

1. Has all available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination?

__X__ If yes - check here and continue with #2 below.

____ If no- re-evaluate existing data, or

____ If data are not available, skip to #8 and enter" IN" (more information needed) status code.

RDMS DocID 107212

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated. Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration /Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

RCRA RECORDS CENTER
FACILITY Waterbury Rolling Mills
I.D. NO. CTD001164607
FILE LOC. R-13
OTHER # 107212

2. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

__X__ If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

____ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

____ If unknown- skip to #8 and enter "IN" status code.

Rationale and Reference(s):

BACKGROUND

The WRM facility has agreed to complete this RCRA Corrective Action Environmental Indicator Evaluation voluntarily. WRM has completed the CA-725 for human exposures within this program and it was approved by the USEPA (finalized in September of 2005). Since the CA-725, the WRM facility was closed in 2006, no active manufacturing operations remain and all sources of contaminants – metals and oils – have been removed from the site. The facility is currently in the process of being decommissioned.

A RCRA groundwater monitoring program (9 wells) has been in place since 1991 as part of the Closure/ Post-Closure Plan for the former metal hydroxide sludge lagoon at WRM (north end of site). Results indicate the presence of copper, nickel, zinc, and trichloroethene (TCE) in the shallow aquifer up- and down-gradient of the RCRA unit. Chromium and tetrachloroethene (PCE), present in deep groundwater, are thought to originate from upgradient, offsite source/s.

Phase I and Phase II Environmental Site Assessments (ESA) were completed for this property in November 1999 and February 2000, respectively. Following the Phase II Site Assessment, Monarch Brass and Copper Corporation (the certifying party for the sale and transfer of WRM) filed a Form III and an Environmental Conditions and Assessment Form (ECAF) dated June 2001 and agreed to investigate and remediate areas of concern (AOC) as necessary. A Phase III ESA was performed at the WRM property in 2002 in accordance with the Connecticut Property Transfer Program and the Final Report was published in March, 2003. Comprehensive investigations were conducted from 2003 to 2007 to more fully characterize the site and fill data gaps. The results of these investigations appear in the Supplemental Phase III Site Assessment Report (2006) and the Data Gap Investigation Results and Remedial Action Plan Report (in final preparation) referenced below.

Groundwater monitoring of 51 site-wide wells has occurred from 2002 through April 2008 to better characterize and determine the presence and extent of groundwater plume(s) on and downgradient of the property, including metals of concern, VOCs, and total petroleum hydrocarbons. The metals of concern are zinc, copper, nickel, cadmium and lead. A shallow groundwater metals plume extends from the central part of the mill to the southern site boundary. An LNAPL footprint and associated dissolved ETPH, naphthalene, and BTEX, is present beneath the eastern portion of the mill that extends south across the central portion of the site. The site is located in a GB classified area for groundwater. A surface water protection criteria (SWPC) is not established for dissolved total petroleum hydrocarbons in a GB classified area.

The groundwater flow direction across the WRM property, based on all available well data, is to the south and parallel to Steele Brook and toward the Naugatuck River. However, the flow of groundwater beneath East Aurora Street at the southern boundary of the site may be locally affected by utility trench bedding that appears on historic city utility maps.

References:

Sound Environmental Solutions, 2007 Annual Summary Report, RCRA Groundwater Monitoring Program, Waterbury Rolling Mills, Waterbury, Connecticut, February 2008.

Malcolm Pirnie, Supplemental Phase III Site Assessment Report, Waterbury Rolling Mills, Waterbury, Connecticut, September 2006.

Malcolm Pirnie, Data Gap Investigation Waterbury Rolling Mills Results and Remedial Action Plan for LNAPL and Groundwater, April 2008 (draft).

Footnotes:

[1] "`Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

3. Has the migration of contaminated groundwater stabilized (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater" [2] as defined by the monitoring locations designated at the time of this determination)?

__X__ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination").

____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"') - skip to #8 and enter "NO" status code, after providing an explanation.

____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

The nine wells associated with the RCRA Groundwater Monitoring Program (MW-1 through MW-10, except MW-3) have been monitored approximately 40 times since 1991. Time-series plots of each constituent of concern (COC) are presented for each well for the full period of record in Appendix C of the annual summary report for the RCRA Groundwater Monitoring Program. As noted in the graphical analyses of the most recent (2007) RCRA Groundwater Monitoring Program report, with the slight exception of concentrations of nickel and TCE in well MW-2 located in the north section of the site, concentrations of COCs have declined over time significantly or are stable since the sludge lagoon was closed. The nickel and TCE concentrations in this core section of the plume at MW-2 have not decreased over time but are generally stable in concentration over the last few years. The concentrations of nickel in MW-2 have a slight increasing trend over the period of record, but this is not a significant upward trend that would warrant action. Nickel in MW-9, located downgradient of MW-2, shows a decreasing concentration trend. The concentration of TCE is not detected in shallow wells down gradient of the landfill area.

Fifty-one other wells have been sampled one to twelve times from 2002 through 2008. Groundwater data collected by Malcolm Pirnie from wells located within identified plume areas and along the site boundary are summarized for arsenic, cadmium, chromium, copper, lead, nickel, zinc, ETPH, BTEX, naphthalene, trans-1,2-dichloroethene, TCE, PCE, and vinyl chloride in Tables 1 through 4. The data show that in wells where there is a wide range of concentrations, particularly for the metals, the most recent values are generally lower or do not exceed historic values. In all areas where groundwater is contaminated by one or more COC, particularly along the downgradient edge, the overall trend is that the concentrations are stable or decreasing. Because copper and zinc are the COCs most indicative of the metals plume, their concentration trends in groundwater along the southern site boundary and Steele Brook are presented graphically in Figures 1 through 4. A comparison of concentrations to applicable criteria is presented under Item 5.

The two metals plumes and the LNAPL footprint appear to remain in the existing areas of contaminated groundwater. The former metals hydroxide sludge lagoon has been capped and closed for 18 years; materials from the baghouse and mill have been removed since the mill closed in 2006; and three recovery wells have been removing LNAPL free product from beneath the mill since 2007. Therefore, based on absence of manufacturing operations, current land use and patterns of exposure at the site, the onsite sources of all plumes have been controlled or eliminated.

The dissolved phase LNAPL is associated with the footprint of the LNAPL, mostly within the southern and eastern portion of the WRM property. Periodic monitoring shows that the dissolved concentrations are greatest where LNAPL is present and has remained steady state or declined in concentration. Except for a local area at the northeast corner of the AREV property 300 feet from Steele Brook, dissolved LNAPL constituents are below detection limits south of East Aurora Street.

References:

Sound Environmental Solutions, 2007 Annual Summary Report, RCRA Groundwater Monitoring Program, Waterbury Rolling Mills, Waterbury, Connecticut, February 2008.

Malcolm Pirnie, Supplemental Phase III Site Assessment Report, Waterbury Rolling Mills, Waterbury, Connecticut, September 2006.

Malcolm Pirnie, Data Gap Investigation Waterbury Rolling Mills Results and Remedial Action Plan for LNAPL and Groundwater, April 2008 (draft).

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does "contaminated" groundwater **discharge** into **surface water** bodies?

__X__ If yes - continue after identifying potentially affected surface water bodies.

____ If no - skip to #7 (and enter a "YE" status code in #8, if #7 =yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

The 12-acre WRM site is located on a flat to gently sloping triangular river terrace north of the confluence of Steele Brook and the Naugatuck River. These two watercourses flow generally southward in the site area and form the southeastern and southwestern sides of the terrace, which is about three-quarters of a mile wide at its north end. The terrace elevation is approximately 280 to 300 feet above mean sea level (msl). The north side of the terrace and the opposite sides of the brook and river are bounded by hills rising to over 550 feet above msl. Elevations on-site range from about 275 to 280 feet above msl. Steele Brook, the lesser stream, transects the site at elevations of approximately 270 feet above msl and the Naugatuck River, the greater watercourse to the east, lies at approximately 260-265 feet above msl.

Sand and gravel underlie the terrace. Beneath the extreme northern part of the site, there is a 5-foot-thick layer of dark brown sand and ash fill near the river. At most locations beneath the fill are roughly 65 feet of fine-grained sand and silt with traces of gravel. Groundwater is present in the overburden at depths of about 12 to 15 feet below grade (fbg) at the eastern site boundary to 7 to 8 fbg near Steele Brook. Steele Brook lies in a channel that is about eight feet deep and flows over a dam that is located due west of the Mill. The present Steele Brook channel varies from its historic alignment through the site. Historic site mapping indicates a former meandering stream alignment that traversed both the northern and southern yard areas which now form part of the contiguous site area.

Shallow and deep groundwater flow across the entire site is southeast toward the Naugatuck River and not to the southwest toward Steele Brook. Steele Brook is considered to represent a minor hydrogeologic feature and not the local hydraulic boundary and the discharge point for site groundwater. The apparent hydraulic gradient of the shallow groundwater table at the facility is estimated to be 0.007 and the inferred direction of flow is substantially toward the southeast. Steele Brook appears to be only slightly incised below the water table, if at all. A portion of groundwater flow from the south boundary of the site appears to be affected by deep utility bedding present below East Aurora Street that apparently diverts some groundwater toward the west, as evidenced by metals concentrations in shallow screened monitoring wells MW-43S and MW-21. Except for a local area at the northeast corner of the AREV property 300 feet from Steele Brook, dissolved LNAPL has not been detected south of East Aurora Street.

Groundwater migrates roughly 1500 feet (460 m) beyond the property boundary of the WRM site (to the south) prior to discharging to the Naugatuck River at the confluence of the Naugatuck River and Steele Brook. At an average velocity for silty sand of 10^{-7} m/s, groundwater leaving the WRM site would travel slightly less than 150 years before discharging into the Naugatuck River. However, the plumes will travel at slower rates because of adsorption/desorption and attenuation. The concentrations of metals in groundwater downgradient of WRM at the point of discharge to the Naugatuck River has not been established due to an absence of wells that far downgradient. Dissolved contaminant concentrations will undergo additional attenuation prior to reaching their discharge point at the Naugatuck River.

References:

Malcolm Pirnie, Supplemental Phase III Site Assessment Report, Waterbury Rolling Mills, Waterbury, Connecticut, September 2006.

Malcolm Pirnie, Data Gap Investigation Waterbury Rolling Mills Results and Remedial Action Plan for LNAPL and Groundwater, April 2008 (draft).

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 =yes), after documenting: 1) the maximum known or reasonably suspected concentration' of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgment/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

__X__ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

According to the State of Connecticut Remediation Standard Regulations (RSR), default Surface Water Protection Criteria (SWPC) were established to regulate groundwater discharges to surface water bodies. Compliance is determined by the concentrations of these constituents in wells closest to the receiving surface water body. The metals groundwater plumes that were identified on the site have been evaluated for protection of surface waters from discharging groundwater. The shallow metals plumes have been delineated across the site to determine conditions near the leading edge of the plume. As stated previously, the concentrations of metals in groundwater at the point of discharge to the Naugatuck River has not been established due to an absence of wells that far downgradient. In lieu of these data, the maximum concentrations closest to the discharge point were used for comparison to SWPC, even though the metal concentrations will undergo additional attenuation prior to reaching their discharge point at the Naugatuck River.

Tables 1 to 4 compare groundwater data for the period of record to 10 times the SWPC listed in the RSR. Concentration contours for the May 2007 samples are shown in Sheets 1 and 2. Historically, wells HA1-MW, MP-17, MP-18, MP-19, MP-21, MP-34, MP-39, and MP-47S (wells near the site's southern boundary and along Steele Brook) had copper and/or zinc concentrations that exceeded 100X the SWPC for at least one round. However, the tables and trend charts on Figures 1 through 4 show that, except for well MW-17 (located in the metals plume core), the concentrations have decreased to <100X, some to <10X. Of these wells, only well MP-21 is located in the discharge zone of the metals plume where East Aurora Street meets Steele Brook. The copper concentrations there have always been <100X and have only episodically been >10X. The maximum zinc concentration there was 16.6 mg/L in April 2004; but it has since deceased to 2.53 mg/L in December 2007, which is still >10X the zinc SWPC of 0.123 mg/L.

LNAPL (free product) has been occasionally detected at thicknesses of less than one inch in some shallow monitoring wells on the southern end of the WRM property along East Aurora Street, but is not increasing. On most occasions, free product is not observed in these wells, particularly MW-18, MW-19, MW-20, and MW-21. The source/s of this free product is not clearly understood; much thicker measurements of free product have been observed on the downgradient property at 237 East Aurora Street, which has a long history as an industrial site.

The discharge of dissolved phase LNAPL into surface water is likely to be insignificant because it has not been detected near Steele Brook south of East Aurora St.. None of the dissolved LNAPL COCs currently or historically exceed SWPC.

References:

Malcolm Pirnie, Supplemental Phase III Site Assessment Report, Waterbury Rolling Mills, Waterbury, Connecticut, September 2006.

Malcolm Pirnie, Data Gap Investigation Waterbury Rolling Mills Results and Remedial Action Plan for LNAPL and Groundwater, April 2008 (draft).

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be **"currently acceptable"** (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

__X__ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR

2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the El determination.

____ If no - (the discharge of "contaminated" groundwater can not be shown to be "currently acceptable") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

____ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s):

A remedial action plan (referenced below) has been prepared in accordance with CT DEP requirements. The plan incorporates conditions that groundwater quality at the site complies with the CT RSR. Alternative SWPC have been established for metals and two remedial actions have been installed to remove and control the migration of LNAPL.

Alternative SWPC have been calculated in accordance with the RSRs for the groundwater at the estimated locations of groundwater discharge (Naugatuck River, Steele Brook). While overall groundwater flow is parallel to Steele Brook a portion of groundwater flow from the south boundary of the site appears to be affected by deep utility bedding present below East Aurora Street that apparently diverts some groundwater toward Steele Brook to the west. Therefore, alternative SWPC calculations were performed for discharges to both the Naugatuck River and Steele Brook. The alternative SWPC calculations reported in the Supplemental Phase III Site Assessment Report are shown below. **In all cases, based on the calculated alternative SWPC, the groundwater plumes are shown to be protective of both Steele Brook and the Naugatuck River.**

Discharge:	NAUGATUCK RIVER			STEELE BROOK		
Metal	Alternative SWPC (µg/l)	Historic Max. Conc. Nearest Discharge (µg/l) (B11/17-MW or MW-2)	April 2008 Concentration Nearest Discharge (µg/l) (B11-MW or MW-2)	Alternative SWPC (µg/l)	Historic Max. Concentration Nearest Discharge (µg/l) (MP-21)	April 2008 Concentration Nearest Discharge (µg/l) (MP-21)
Zinc	3,700,000	994	301	42,000	16,600	1,490
Copper	1,000,000	398	4	3,100	962	7
Nickel	1,600,000	135	44	19,000	3,260	595
Cadmium	76,000	15	6	870	55	13
Lead	68,000	14	<2	780	12	<2

To address the presence of LNAPL in the northeast portion of the WRM property, a free product recovery system was installed beneath the interior part of the mill. Five recovery wells have been removing LNAPL free product from beneath the mill since 2007.

WRM has also installed an offsite LNAPL recovery barrier wall (funnel and gate system) downgradient of the site at 237 East Aurora Street and has installed a set of recovery wells to remediate free product that is present at the northeast corner of that property and the 225 East Aurora Street property.

The barrier wall and recovery wells are designed to mitigate the potential for migration of free product to either Steele Brook or the Naugatuck River (approximately 1200 feet to the south). Although the system is operational and capable of recovering LANPL, it more importantly serves as an engineered control mechanism to preclude LNAPL from moving beyond the spatial limits of the wall.

The discharge of dissolved phase LNAPL into surface water does not have unacceptable impacts to surface water, sediments or the eco-system because it has not been detected south of East Aurora Street near Steele Brook and the concentrations do not exceed SWPC.

In addition, the screening level ecological risk assessment prepared for the site (referenced below) concludes that, "ecological risks are negligible and no further ecological evaluation is warranted for the WRM site."

References:

Malcolm Pirnie, Data Gap Investigation Waterbury Rolling Mills Results and Remedial Action Plan for LNAPL and Groundwater, April 2008 (draft).

Malcolm Pirnie, Screening-Level Ecological Risk Assessment for the Waterbury Rolling Mills Site, April 2008 (draft).

[4] Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

[5] The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

__X__ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

____ If no - enter "NO" status code in #8.

____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

A total of 60 monitoring wells (41 onsite; 19 offsite) will be sampled semi-annually for the 2008 groundwater monitoring program. The onsite wells include the 9 wells in the north area of the property associated with the former metals sludge impoundment closure area monitored by Sound Environmental Solutions (SES) as part of the RCRA Groundwater Monitoring Program. Malcolm Pirnie will monitor 32 additional wells on the WRM property and 19 wells on the offsite downgradient property (AREV). The selected wells are screened at various depth intervals and are located on the lateral edges, leading edges, downgradient, and in the core of the two identified plumes. The lateral edge and leading edge wells selected for monitoring are typically low in constituent of concern (metals) concentrations and are critical for determining plume stability and/or rates of migration.

The selected wells will be analyzed for the total metals arsenic, cadmium, chromium, copper, lead, nickel and zinc by low flow sampling methods. Field parameters that will be measured for all wells consist of pH, specific conductance, temperature, dissolved oxygen, oxidation reduction potential, and turbidity. The intermediate (I) screened wells and the deep (D) wells will also be analyzed for volatile organic compounds by USEPA Method # 8260. The specific wells proposed for sampling under this program for 2008 are as follows:

1. RCRA Groundwater Monitoring Program (9 wells by SES): MW-1, MW-2, MW-4, MW-5, MW-6 (I), MW-7 (D), MW-8, MW-9, MW-10 (D).

2. Other WRM Property (32 wells by Malcolm Pirnie): HA1-MW, HA2-MW, HA4-MW, MP-1, MW-3, MP-7, MP-9, MP-10, MP-11D, MP-12, MP-13D, MP-16, MP-17, MP-19, MP-21, MP-22, MP-23, MP-30, MP-34, MP-35, MP-37, MP-38, MP-41, MP-42, MP-43S, MP-43I, MP-44I, MP-45, MP-46, MP-47S, MP-47I, and MP-48

3. AREV Properties (19 wells): MW-A, MW-5A, MW-14, B1-MW, B5-MW, B10-MW, B28-MW, B29-MW, B30-MW, B15-MW, B16-MW, B7-MW, B11-MW, B13-MW, MW-8, B26I-MW, MW-15, B27I-MW, and MW-10.

The sampling results will be reported annually. The annual report for groundwater will also include a schedule for continued monitoring and or changes to the 2008 program.

References:

Malcolm Pirnie, Data Gap Investigation Waterbury Rolling Mills Results and Remedial Action Plan for LNAPL and Groundwater, April 2008 (draft).

8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

_X_ YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Waterbury Rolling Mills facility, EPA ID # CTD001164607, located at 240 East Aurora Street, Waterbury, CT. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

____ IN - More information is needed to make a determination.

Completed by (signature) Harold Bobowicz Date 8/11/2008
(print) Harold Bobowicz
(title) Sanitary Engineer 2

Supervisor (signature) Date 8/18/08
(print) Pat DeRosa
(title) Supervising Envtl Analyst
(EPA Region or State) Connecticut

Locations where References may be found:

Malcolm Pirnie, Inc.
Suite 100
100 Roscommon Drive
Middletown, CT 06457

Contact telephone and e-mail numbers

(name) Mark Barmasse, Malcolm Pirnie Inc.
(phone #) 860-635-3400
(e-mail) mbarmasse@pirnie.com

Table 1. WRM Groundwater Data for Analytes of Interest
Wells at north end of site.

Sample ID	Sample Date	Arsenic, mg/L	Cadmium, mg/L	Chromium, mg/L	Copper, mg/L	Lead, mg/L	Nickel, mg/L	Zinc, mg/L	ETPH, mg/L	trans-1,2-Dichloroethene, µg/L	Trichloroethene, µg/L	Tetrachloroethene, µg/L	Vinyl chloride, µg/L	Benzene, µg/L	Ethylbenzene, µg/L	m&p-Xylene, µg/L	Naphthalene, µg/L	o-Xylene, µg/L	Toluene, µg/L	Total Xylenes, µg/L
	10 x SWPC	0.040	0.060	1.100	0.480	0.130	8.800	1.230	NE	NE	23,400	880	157,500	710	580,000	NE	NE	NE	4,000,000	NE
	100x SWPC	0.400	0.600	11.000	4.800	1.300	88.000	12.300	NE	NE	234,000	8,800	1,575,000	7,100	5,800,000	NE	NE	NE	40,000,000	NE
MP-41	5/30/2007	< 0.004	0.021	< 0.001	0.13	< 0.001	0.381	**3.31**												
MP-41	7/24/2007	< 0.004	0.02	< 0.001	0.124	< 0.001	0.312	**2.63**												
MP-41	9/25/2007	< 0.004	0.033	< 0.001	0.181	< 0.001	0.457	**4.17**												
MP-41	12/12/2007	< 0.004	0.027	< 0.001	0.146	< 0.001	0.385	**4**												
MW-1	7/15/2002		0.0063		**0.81**	BDL	0.33	**2.2**	0.10	BDL	24	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MW-1	9/17/2002		BDL	BDL	**0.84**	BDL	0.25	**1.6**	BDL	BDL	9.1	BDL	3.3	BDL	BDL		BDL	BDL	BDL	
MW-1	12/2/2002		BDL		**1.1**	BDL	0.28	**1.5**	BDL	BDL	17	BDL	3.3							
MW-2	9/17/2002		BDL	BDL	0.29	BDL	0.12	0.61												
MW-4	7/15/2002		BDL		0.14	BDL	0.02	0.07	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MW-4	9/17/2002		BDL	BDL	0.13	BDL	BDL	0.082	0.12	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MW-4	12/2/2002		BDL		0.16	BDL	0.033	0.10	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MW-5	7/15/2002		0.018		0.072	0.005	0.42	**2.0**	BDL	BDL	0.57	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MW-5	9/17/2002		BDL	BDL	0.067	BDL	0.42	**2.1**	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MW-5	12/2/2002		0.018		0.055	BDL	0.37	**1.9**	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MW-6	9/17/2002		BDL	BDL	BDL	BDL	BDL	0.042												
MW-7	9/17/2002		BDL	**3.3**	BDL	BDL	1.1	0.02												
MW-8	9/17/2002		BDL	BDL	BDL	BDL	0.024	0.14												
MW-9	9/17/2002		BDL	BDL	**1.1**	BDL	0.18	0.96												
MW-10	9/17/2002		BDL	**1.2**	BDL	BDL	0.18	0.015												

Bold = value > 10 x SWPC

value > 100 SWPC NE = Criterion not established.

Data collected by Malcolm Pirnie.

Refer to annual summary reports by Sound Environmental Solutions for data collected under RCRA Groundwater Monitoring Program.

Table 2. WRM Groundwater Data for Analytes of Interest *
Wells mid-site and along Steele Brook.

Sample ID	Sample Date	Arsenic, mg/L	Cadmium, mg/L	Chromium, mg/L	Copper, mg/L	Lead, mg/L	Nickel, mg/L	Zinc, mg/L	ETPH, mg/L	trans-1,2-Dichloroethene, µg/L	Trichloroethene, µg/L	Tetrachloroethene, µg/L	Vinyl chloride, µg/L	Benzene, µg/L	Ethylbenzene, µg/L	m&p-Xylene, µg/L	Naphthalene, µg/L	o-Xylene, µg/L	Toluene, µg/L	Total Xylenes, µg/L
	10 x SWPC	0.040	0.060	1.100	0.480	0.130	8.800	1.230	NE	NE	23,400	880	157,500	710	580,000	NE	NE	NE	4,000,000	NE
	100x SWPC	0.400	0.600	11.000	4.800	1.300	88.000	12.300	NE	NE	234,000	8,800	1,575,000	7,100	5,800,000	NE	NE	NE	40,000,000	NE
MP-8	7/15/2002		BDL		0.043	BDL	0.12	**1.3**	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-8	9/18/2002		BDL		0.031	BDL	0.044	0.56	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-8	12/2/2002		BDL		0.06	BDL	0.036	0.46	BDL	BDL	BDL	BDL	BDL	BDL	BDL		0.94	BDL	BDL	
MP-8	4/15/2005	<0.004		<0.001	0.029	<0.001	0.124	**1.31**	<0.1											
MP-8	7/18/2005	<0.004	0.002	<0.001	0.059	<0.001	0.065	0.688	<0.1											
MP-8	10/26/2005	<0.004	0.004	<0.001	0.044	<0.002	0.125	**1.29**	<0.1											
MP-8	1/18/2006	<0.004	0.003	0.002	0.027	<0.001	0.086	0.907	<0.1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-9	7/15/2002		BDL		0.022	BDL	0.095	0.14	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-9	9/18/2002		BDL		0.017	BDL	0.12	0.21	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-9	12/2/2002		BDL		0.018	BDL	0.062	0.14	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-9	4/15/2005	<0.004		<0.001	0.003	<0.001	0.005	0.016	<0.1											
MP-9	7/18/2005	<0.004	0.003	0.004	0.007	<0.001	0.066	0.12	<0.1											
MP-9	10/24/2005	<0.004	0.002	<0.001	0.006	<0.002	0.024	0.051	<0.1											
MP-9	1/18/2006	<0.004	<0.001	0.003	0.005	<0.001	0.009	0.018	<0.1	<1	1.5	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-9	4/4/2008	<0.004	0.002	<0.001	0.014	<0.002	0.023	0.066												
MP-10	7/15/2002		0.013		0.51	BDL	0.16	0.57	BDL	BDL	5.5	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-10	9/18/2002		0.014		0.32	BDL	0.14	0.52	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-10	12/2/2002		BDL		0.21	BDL	0.18	0.44	BDL	BDL	0.53	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-10	4/15/2005	<0.004		<0.001	0.197	<0.001	0.025	0.151	<0.1											
MP-10	7/18/2005	<0.004	0.001	<0.001	0.191	<0.001	0.027	0.154	<0.1											
MP-10	10/24/2005	<0.004	0.002	0.001	0.11	<0.002	0.025	0.108	<0.1											
MP-10	1/19/2006	<0.004	0.002	0.002	0.266	<0.001	0.035	0.203	<0.1	<1	22	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-10	4/4/2008	<0.004	0.001	<0.001	0.254	<0.002	0.021	0.134												
MP-11	7/16/2002		BDL		BDL	BDL	BDL	0.02	0.49	BDL	38	0.71	BDL	BDL	BDL		BDL	BDL	BDL	
MP-11	9/18/2002		BDL		BDL	BDL	BDL	0.018	BDL	BDL	35	0.65	BDL	BDL	BDL		BDL	BDL	BDL	
MP-11	12/3/2002		BDL		BDL	BDL	BDL	0.026	BDL	BDL	38	0.71	BDL	BDL	BDL		BDL	BDL	BDL	
MP-11	4/4/2008	<0.004	<0.001	<0.001	0.004	<0.002	0.002	0.006		<1		<1	<1	<1		<1	<1		<1	<0.5
MP-12	7/16/2002		BDL		0.068	BDL	0.035	0.029	0.64	BDL	BDL	4.3	BDL	BDL	BDL		BDL	BDL	BDL	
MP-12	9/19/2002		BDL		0.06	BDL	0.029	0.025	0.55	BDL	BDL	0.78	BDL	BDL	BDL		BDL	BDL	BDL	
MP-12	12/3/2002		BDL		0.072	BDL	0.039	0.098	0.21	BDL	BDL	0.54	BDL	BDL	BDL		BDL	BDL	BDL	
MP-12	4/15/2005	<0.004		0.022	0.064	<0.001	0.029	0.011	0.72											
MP-12	7/18/2005	0.011	<0.001	0.013	0.044	<0.001	0.029	0.013	<0.1											
MP-12	10/26/2005	0.01	<0.001	0.017	0.069	<0.002	0.041	0.016	<0.1											
MP-12	1/19/2006	0.006	<0.001	0.025	0.098	<0.001	0.041	0.015	<0.1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-12	4/4/2008	0.012	<0.001	0.031	0.081	<0.002	0.024	0.008												
MP-17	12/9/2003								30											
MP-17	2/26/2004								240											
MP-17	4/27/2004	<0.004	0.034	0.272	**20.8**	0.02	3.35	**19.9**		<5	<5	<5	<5	<5	<5	<5	11	<5	<5	<5
MP-17	4/15/2005	<0.004		0.292	**44.2**	0.02	2.7	**16.1**												
MP-17	7/20/2005	<0.004	0.054	0.19	**7.77**	0.012	2.87	**17.7**	11											
MP-17	10/24/2005	0.004	0.06	0.329	**35**	0.042	2.44	**15.9**	120											
MP-17	1/17/2006	<0.004	**0.071**	0.38	**40.4**	0.04	3.97	**25.7**	38	<1	<1	<1	<1	<1	<1	<0.5	2.8	<1	<1	<0.5
MP-17	5/30/2007	< 0.004	**0.064**	0.407	**50.2**	0.052	4.54	**23.4**												
MP-17	7/24/2007	< 0.04	**0.063**	0.38	**28.1**	0.034	3.58	**21.1**												
MP-17	9/25/2007	< 0.004	**0.08**	0.229	**8.2**	0.022	2.27	**13.7**												
MP-17	12/13/2007	< 0.004	0.006	0.048	**0.931**	0.003	0.331	**1.28**												
MP-17	4/4/2008	<0.004	0.024	0.183	**18.4**	0.023	1.12	**6.44**												
MP-34	4/15/2005	<0.004		0.004	<0.001	<0.001	0.033	0.573	22	<1	<1	<1	<1	1.2	5	3.6	85	2.1	<1	3.6
MP-34	7/20/2005	<0.004	**0.827**	0.056	0.052	0.002	0.113	**5.34**	25	<20	<20	<20	<20	<20	<20	<10	210	<20	<20	<10
MP-34	10/25/2005	0.005	**0.43**	0.005	0.007	<0.002	0.069	**3.14**	10	<10	<10	<10	<10	<10	<10	<5	110	<10	<10	<5
MP-34	1/18/2006	<0.004	**3.96**	0.011	0.053	0.002	0.469	**26**	17	<1	<1	<1	<1	1.4	4.8	1.1	130	1.1	<1	1.1
MP-34	5/31/2007	< 0.004	0.024	0.002	0.003	< 0.001	0.005	0.153												
MP-34	7/24/2007	< 0.004	0.019	0.011	0.039	0.002	0.006	0.131												
MP-34	9/25/2007	< 0.04	**0.078**	0.141	0.604	0.034	0.117	1.14												
MP-34	12/13/2007	< 0.004	0.048	0.017	0.009	< 0.001	0.008	0.337												
MP-34	4/4/2008	<0.004	0.006	0.002	0.007	<0.002	0.002	0.044												
MP-36	4/15/2005	<0.004		<0.001	0.403	<0.001	0.044	0.192	<0.1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-36	7/20/2005	<0.004	<0.001	<0.001	0.396	<0.001	0.044	0.188	<0.1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-36	10/26/2005	<0.004	0.002	<0.001	**0.716**	<0.002	0.088	0.398	0.5	<1	<1	<1	<1	1.4	<1	<0.5	2.9	<1	<1	<0.5
MP-36	1/18/2006	<0.004	0.001	0.004	**0.495**	<0.001	0.05	0.223	<0.1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-38	4/15/2005	<0.004		0.003	<0.001	<0.001	0.011	0.012	15	<5	<5	<5	<5	<5	<5	<2.5	9.2	<5	<5	<2.5
MP-38	7/20/2005	0.007	<0.001	0.002	<0.001	<0.001	0.008	0.007	9.9	<1	<1	<1	<1	<1	1.8	1	7.6	<1	<1	1
MP-38	10/24/2005	0.004	<0.001	0.002	<0.001	<0.001	0.021	0.014	81	<10	<10	<10	<10	<10	<10	<5	<10	<10	<10	<5
MP-38	1/17/2006	<0.004	<0.001	0.001	<0.001	<0.005	0.006	0.003	8.3	<1	<1	<1	<1	<1	2	3.5	2.4	1.6	1.1	3.5
MP-38	4/4/2008	<0.004	<0.001	0.003	0.009	<0.002	0.022	0.017												
MP-39	4/15/2005	<0.004		0.006	**5.23**	0.006	3.76	**16.7**	11	<1	<1	<1	<1	<1	<1	<0.5	14	<1	<1	<0.5
MP-39	7/20/2005	0.007	0.045	0.008	**10.5**	0.005	6.7	**28.7**	<0.1	<1	<1	<1	<1	<1	<1	<0.5	19	<1	<1	<0.5
MP-39	10/24/2005	0.004	0.013	0.006	**3.67**	0.018	2.21	**7.06**	8.5	<1	<1	<1	<1	<1	<1	<0.5	4.2	<1	<1	<0.5
MP-39	1/19/2006	0.005	0.025	0.002	**20.5**	0.017	3.36	**10.1**	4.2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-45	5/30/2007	< 0.004	0.009	< 0.001	0.045	< 0.001	0.089	0.478												
MP-45	7/24/2007	< 0.004	0.008	< 0.001	0.053	< 0.001	0.096	0.427												
MP-45	9/26/2007	< 0.004	0.008	< 0.001	0.064	< 0.001	0.105	0.434												
MP-45	12/12/2007	< 0.004	0.009	< 0.001	0.083	< 0.001	0.123	0.517												
MP-45	4/4/2008	<0.004	0.01	< 0.001	0.065	<0.002	0.105	0.541												
MP-46	5/31/2007	< 0.004	0.003	0.005	0.075	< 0.001	0.025	0.2												
MP-46	7/25/2007	< 0.004	0.004	0.023	0.09	0.002	0.035	0.296												
MP-46	9/26/2007	< 0.004	0.005	0.042	0.187	0.004	0.051	0.399												
MP-46	12/13/2007	< 0.004	0.004	0.005	0.1	< 0.001	0.041	0.355												
MP-46	4/4/2008	< 0.004	0.002	0.08	0.143	0.007	0.033	0.268												
MP-47I	5/31/2007	< 0.004	< 0.001	0.007	0.013	0.002	0.011	0.038		< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.3	< 1	< 1	< 1
MP-47I	7/25/2007	< 0.004	< 0.001	0.003	0.002	< 0.001	0.006	0.004		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-47I	9/26/2007	< 0.004	< 0.001	0.003	0.005	< 0.001	0.009	0.01		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-47I	12/11/2007	< 0.004	< 0.001	0.005	0.006	< 0.001	0.013	0.015		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-47I	4/4/2008	<0.004	<0.001	0.004	0.007	<0.002	0.011	0.031		<1		<1	<1	<1		<1	<1		<1	<0.5
MP-47S	5/31/2007	< 0.004	0.046	0.131	**26.1**	0.002	4.51	**14**												
MP-47S	7/25/2007	< 0.004	0.005	0.049	**1.45**	< 0.001	0.491	1.09												
MP-47S	9/26/2007	< 0.004	0.002	0.063	**0.787**	< 0.001	0.156	0.181												
MP-47S	12/11/2007	< 0.004	0.001	0.057	**0.551**	< 0.001	0.093	0.1												
MP-48	5/31/2007	< 0.004	0.001	< 0.001	**0.745**	0.002	0.076	0.406												
MP-48	7/25/2007	< 0.004	0.001	< 0.001	**0.969**	< 0.001	0.097	0.498												
MP-48	9/26/2007	< 0.004	< 0.001	< 0.001	**0.653**	< 0.001	0.118	0.572												
MP-48	12/13/2007	< 0.004	0.002	< 0.001	**0.848**	< 0.001	0.117	0.615												
MP-48	4/4/2008	<0.004	0.002	<0.001	**0.841**	<0.002	0.143	0.693												

Bold = value > 10 x SWPC NE = Criterion not established.
value > 100 SWPC

Table 3. WRM Groundwater Data for Analytes of Interest
Wells along southern site boundary.

Sample ID	Sample Date	Arsenic, mg/L	Cadmium, mg/L	Chromium, mg/L	Copper, mg/L	Lead, mg/L	Nickel, mg/L	Zinc, mg/L	ETPH, mg/L	trans-1,2-Dichloroethene, µg/L	Trichloroethene, µg/L	Tetrachloroethene, µg/L	Vinyl chloride, µg/L	Benzene, µg/L	Ethylbenzene, µg/L	m&p-Xylene, µg/L	Naphthalene, µg/L	o-Xylene, µg/L	Toluene, µg/L	Total Xylenes, µg/L
	10 x SWPC	0.040	0.060	1.100	0.480	0.130	8.800	1.230	NE	NE	23,400	880	157,500	710	580,000	NE	NE	NE	4,000,000	NE
	100x SWPC	0.400	0.600	11.000	4.800	1.300	88.000	12.300			234,000	8,800	1,575,000	7,100	5,800,000				40,000,000	
HA1-MW	7/16/2002		BDL		0.44	BDL	0.23	**2**	5.9	BDL	BDL	BDL	BDL	0.51	BDL		110	BDL	BDL	
HA1-MW	9/18/2002		0.036		**2.2**	BDL	1.1	**8.1**	3.8	BDL	BDL	BDL	BDL	BDL	BDL		63	0.62	BDL	
HA1-MW	12/3/2002		0.027		**2.4**	BDL	1.1	**7.2**	4.6	BDL	BDL	BDL	BDL	BDL	BDL		49	0.55	BDL	
HA1-MW	4/15/2005	<0.004		0.009	**42.1**	<0.001	6.2	**38.1**												
HA1-MW	7/20/2005	<0.004	0.003	<0.001	**0.484**	<0.001	0.477	**1.57**	18											
HA1-MW	10/24/2005	0.017	**0.106**	0.014	**55.4**	0.008	8	**53.3**	14											
HA1-MW	1/19/2006	<0.004	0.055	0.008	**33.5**	0.003	3.86	**23.8**	15	<1	<1	<1	<1	<1	<1	<0.5	65	<1	<1	<0.5
HA1-MW	5/30/2007	< 0.004	0.008	0.002	**3.02**	< 0.001	1	**5.76**												
HA1-MW	7/24/2007	< 0.004	< 0.001	0.002	0.383	< 0.001	0.137	0.524												
HA1-MW	9/25/2007	< 0.004	< 0.001	0.001	0.272	< 0.001	0.086	0.298												
HA1-MW	12/12/2007	< 0.004	0.001	0.002	0.2	< 0.001	0.084	0.311												
HA1-MW	4/42008	<0.004	0.006	0.002	1.62	<0.002	0.559	2.47												
HA2-MW	7/16/2002		BDL		BDL	BDL	0.023	0.16	4.3	BDL	BDL	BDL	BDL	BDL	BDL		1.9	BDL	BDL	
HA2-MW	9/18/2002		BDL		BDL	BDL	BDL	0.18	5	BDL	BDL	BDL	BDL	BDL	BDL		1.5	BDL	BDL	
HA2-MW	12/3/2002		BDL		BDL	BDL	BDL	0.11	4.4	BDL	BDL	BDL	BDL	BDL	BDL		4.5	BDL	BDL	
HA2-MW	4/15/2005	<0.004		0.049	0.003	<0.001	0.04	0.126	5.7											
HA2-MW	7/18/2005	<0.004	<0.001	0.046	<0.001	<0.001	0.026	0.04	2.5											
HA2-MW	10/26/2005	<0.004	<0.001	0.076	0.017	<0.002	0.016	0.014	2.1											
HA2-MW	1/19/2006	<0.004	<0.001	0.076	0.03	0.009	0.049	0.14	4.3	<1	<1	<1	<1	<1	<1	<0.5	11	<1	<1	<0.5
HA2-MW	4/4/2008	<0.002	<0.001	0.07	0.037	<0.002	0.064	0.175												
HA3-MW	7/16/2002		0.015		BDL	BDL	BDL	0.019	20	BDL	BDL	BDL	BDL	3.3	10		39	7.6	BDL	
HA3-MW	9/18/2002		0.016		BDL	BDL	BDL	0.026	11.6	BDL	BDL	BDL	BDL	4.1	11		24	5.4	BDL	
HA3-MW	12/3/2002		0.016		BDL	BDL	BDL	0.025	14	BDL	BDL	BDL	BDL	3.6	9.6		23	5.7	BDL	
HA3-MW	2/26/2004	<0.004	<0.001	<0.001	0.001	0.002	0.003	0.011												
HA3-MW	4/27/2004	<0.004	<0.001	<0.001	<0.001	<0.001	0.006	0.005		<5	<5	<5	<5	<5	<5	8.3	39	<5	<5	8.3
HA3-MW	7/19/2005	0.014	<0.001	<0.001	<0.001	<0.001	0.01	0.022	110											
HA3-MW	10/24/2005	0.008	<0.001	<0.001	0.002	<0.001	0.023	0.015	36											
HA3-MW	1/17/2006	<0.004	<0.001	<0.001	0.002	<0.001	0.08	0.237	85	<50	<50	<50	<50	<50	<50	<25	180	<50	<50	<25
HA4-MW	7/16/2002		BDL		0.22	BDL	0.048	0.36	2.1	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
HA4-MW	9/19/2002		BDL		0.15	BDL	0.032	0.3	0.43	BDL	BDL	BDL	BDL	BDL	BDL		0.60	BDL	BDL	
HA4-MW	12/3/2002		BDL		0.22	BDL	0.037	0.34	0.75	BDL	BDL	BDL	BDL	BDL	BDL		1.0	BDL	BDL	
HA4-MW	2/25/2004	<0.004	0.003	0.02	0.251	<0.001	0.066	0.425												
HA4-MW	4/21/2004	<0.004	0.003	0.018	0.355	<0.001	0.078	0.474		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
HA4-MW	4/15/2005	<0.004		0.031	**0.755**	<0.001	0.129	0.713	5.3											
HA4-MW	7/18/2005	0.005	0.004	0.013	0.388	<0.001	0.119	0.74	1.3											
HA4-MW	10/26/2005	<0.004	0.004	0.028	**0.573**	<0.002	0.124	0.615	1.7											
HA4-MW	1/19/2006	<0.004	0.005	0.019	**0.926**	<0.001	0.188	0.986	1.8	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
HA4-MW	4/4/2008	<0.004	0.005	0.027																
MP-13	7/16/2002		BDL		BDL	BDL	0.07	0.079		BDL	110	BDL	BDL	BDL	BDL		0.64	BDL	BDL	
MP-13	7/24/2002								BDL											
MP-13	9/19/2002		BDL		BDL	BDL	0.05	0.076	BDL	BDL	120	2.5	BDL	BDL	BDL		BDL	BDL	BDL	
MP-13	12/3/2002		BDL		BDL	BDL	0.045	0.089	BDL	BDL	110	2.7	BDL	BDL	BDL		BDL	BDL	BDL	
MP-13	5/30/2007	< 0.004	< 0.001	< 0.001	0.009	< 0.001	0.027	0.134		< 1	58	1.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-13	7/25/2007	< 0.004	< 0.001	< 0.001	0.006	< 0.001	0.027	0.036		< 1	26	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-13	9/25/2007	< 0.004	< 0.001	< 0.001	0.006	< 0.001	0.023	0.022		< 1	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1
MP-13	12/12/2007	< 0.004	< 0.001	0.002	0.032	0.015	0.006	0.082		< 1	7.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-13	4/4/2008	<0.004	<0.001	<0.001	0.028	0.006	0.011	0.102		<1		<1	<1	<1		<1	<1		<1	<0.5
MP-16	9/19/2002		BDL		BDL	BDL	0.061	0.19	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-16	12/3/2002		BDL		BDL	BDL	0.087	0.34	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	
MP-16	4/15/2005	<0.004		<0.001	0.001	<0.001	0.073	0.272	<0.1											
MP-16	7/19/2005	0.006	0.004	<0.001	<0.001	<0.001	0.123	0.464	<0.1											
MP-16	10/25/2005	<0.004	0.001	<0.001	<0.001	<0.002	0.043	0.168												
MP-16	1/19/2006	0.007	0.003	<0.001	<0.001	<0.001	0.085	0.291	<0.1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-16	4/4/2008	<0.004	0.003	<0.001	0.006	<0.002	0.092	0.307												
MP-18	12/9/2003								360											
MP-18	2/26/2004	<0.004	<0.001	0.016	0.003	<0.001	0.11	0.401	6.5											
MP-18	4/27/2004	<0.004	0.006	0.027	0.057	<0.001	4.87	**30.6**		<5	<5	<5	<5	<5	<5	<5	22	<5	<5	<5
MP-18	4/15/2005	<0.004		0.012	0.348	<0.001	4.16	**18.3**	9.2											
MP-18	7/20/2005	0.006	0.002	0.023	0.12	<0.001	1.4	**9.57**	3.2											
MP-18	10/26/2005	0.012	0.023	0.008	0.347	<0.001	4.26	**18**	14											
MP-18	1/19/2006	<0.004	0.004	0.005	0.04	<0.001	0.438	0.944	2.4	<1	<1	<1	<1	<1	<1	<0.5	8.2	<1	<1	<0.5
MP-19	12/9/2003								14											
MP-19	2/26/2004								250											
MP-19	4/21/2004	<0.004	0.058	0.029	**6.66**	<0.001	1.64	**14.8**		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
MP-19	4/15/2005	<0.004		0.021	**3.12**	<0.001	0.876	**4.63**	16											
MP-19	7/20/2005	<0.004	0.002	0.039	0.354	<0.001	0.17	0.683	6											
MP-19	10/26/2005	0.006	0.011	0.027	**2.15**	<0.002	0.698	**3.53**	7.2											
MP-19	1/19/2006	0.006	0.02	0.019	**7.94**	<0.001	0.81	**2.88**	11	<1	<1	<1	<1	<1	<1	<0.5	3.5	<1	<1	<0.5
MP-19	4/4/2008	<0.004	0.005	0.02	0.788	<0.002	0.427	**2.01**												
MP-20	12/9/2003								2.2											
MP-20	2/26/2004	<0.004	0.005	0.027	0.209	0.005	0.168	1.23	2											
MP-20	4/21/2004	<0.004	0.01	0.084	**1.2**	0.033	0.141	**1.3**		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
MP-20	4/15/2005	<0.004		<0.001	0.126	<0.001	0.126	1.08	<0.1											
MP-20	7/18/2005	0.005	0.01	<0.001	0.223	<0.001	0.168	**1.36**	<0.1											
MP-20	10/26/2005	<0.004	0.006	<0.001	0.165	<0.002	0.119	1.01	<0.1											
MP-20	1/19/2006	<0.004	0.006	0.009	0.111	<0.001	0.112	1.04	<0.1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-21	12/9/2003								6.7											
MP-21	2/25/2004	<0.004	<0.001	0.003	<0.001	<0.001	0.116	0.683	4.3											
MP-21	4/21/2004	<0.004	0.029	0.007	0.106	0.005	3.26	**16.6**		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
MP-21	4/15/2005	<0.004		0.001	0.18	<0.001	1.14	**4.04**	6.3											
MP-21	7/20/2005	0.005	0.014	0.004	0.139	<0.001	1.34	**6.76**	2.6											
MP-21	10/26/2005	0.007	0.055	0.008	**0.962**	0.005	1.12	**6.21**	3.8											
MP-21	1/19/2006	0.004	0.021	0.006	**0.494**	0.006	0.405	**2.18**	3.4	<1	<1	1.2	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-21	5/30/2007	< 0.004	0.014	0.003	0.136	0.003	0.694	**2.25**												
MP-21	7/24/2007	< 0.004	0.029	0.009	0.422	0.012	1.19	**4.71**												
MP-21	9/25/2007	< 0.004	0.001	0.006	0.078	0.005	0.336	0.518												
MP-21	12/11/2007	< 0.004	0.008	0.006	**0.556**	0.001	1.08	**2.53**												
MP-21	4/4/2008	<0.004	0.013	0.002	0.007	<0.002	0.595	**1.49**												
MP-37	4/15/2005	<0.004		<0.001	0.014	<0.001	0.026	0.229	11	<1	<1	<1	<1	9.6	<1	3.6	15	3.6	<1	3.6
MP-37	7/20/2005	0.005	0.003	<0.001	0.006	<0.001	0.012	0.145	1.2	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<0.5
MP-37	10/25/2005	0.006	0.005	0.001	0.019	<0.002	0.034	0.243	5.3	<1	<1	<1	<1	12	<1	4.1	18	4.1	<1	4.1
MP-37	1/18/2006	<0.004	0.004	0.002	0.01	<0.001	0.019	0.17	4	<1	<1	<1	<1	7.9	<1	2.9	12	2.9	<1	2.9
MP-37	4/4/2008	<0.004	0.003	<0.001	0.009	<0.002	0.017	0.106												
MP-43I	5/30/2007	< 0.004	< 0.001	< 0.001	0.003	0.002	0.004	0.022		< 1	61	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-43I	7/24/2007	< 0.004	< 0.001	0.001	< 0.001	< 0.001	0.002	0.008		< 1	12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-43I	9/25/2007	< 0.01	< 0.001	< 0.001	0.002	< 0.001	0.004	0.006		< 1	46	1.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-43I	12/11/2007	0.004	< 0.001	0.008	0.01	0.003	0.008	0.025		< 1	49	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MP-43I	4/4/2008	<0.004	<0.001	<0.001	<0.001	<0.002	0.002	0.009				1	<1	<1		<1	<1		<1	<0.5
MP-43S	5/30/2007	< 0.004	0.003	0.052	**1.63**	0.002	0.172	1.17												
MP-43S	7/24/2007	< 0.004	0.003	0.017	**1.02**	0.001	0.212	1.22												
MP-43S	9/25/2007	< 0.004	0.002	0.019	0.318	< 0.001	0.162	0.614												
MP-43S	12/11/2007	< 0.004	0.002	0.016	0.251	< 0.001	0.193	0.736												
MP-43S	4/4/2008	<0.004	0.003	0.042	**2.36**	<0.002	0.182	1.2												
MP-44	5/30/2007	0.005	0.001	0.004	0.053	< 0.001	2.68	**9.62**		< 1	< 1	< 1	< 1	1.4	< 1	< 1	11	< 1	< 1	< 1
MP-44	7/25/2007	< 0.004	0.003	0.004	0.117	< 0.001	2.11	**8.47**		< 1	< 1	< 1	< 1	< 1	< 1	< 1	11	< 1	< 1	< 1
MP-44	9/25/2007	< 0.004	0.003	0.004	0.12	< 0.001	2.22	**7.66**		< 1	< 1	< 1	< 1	1.1	< 1	< 1	12	< 1	< 1	< 1
MP-44	12/12/2007	0.006	0.003	0.003	0.119	< 0.001	2.08	**7.91**		< 1	< 1	< 1	< 1	< 1	< 1	< 1	10	< 1	< 1	< 1
MP-44	4/4/2008	<0.004	0.003	0.005	0.165	<0.002	1.9	**6.71**		<1		<1	<1	<1		<1	15		<1	<0.5

Bold = value > 10 x SWPC NE = Criterion not established.
value > 100 SWPC

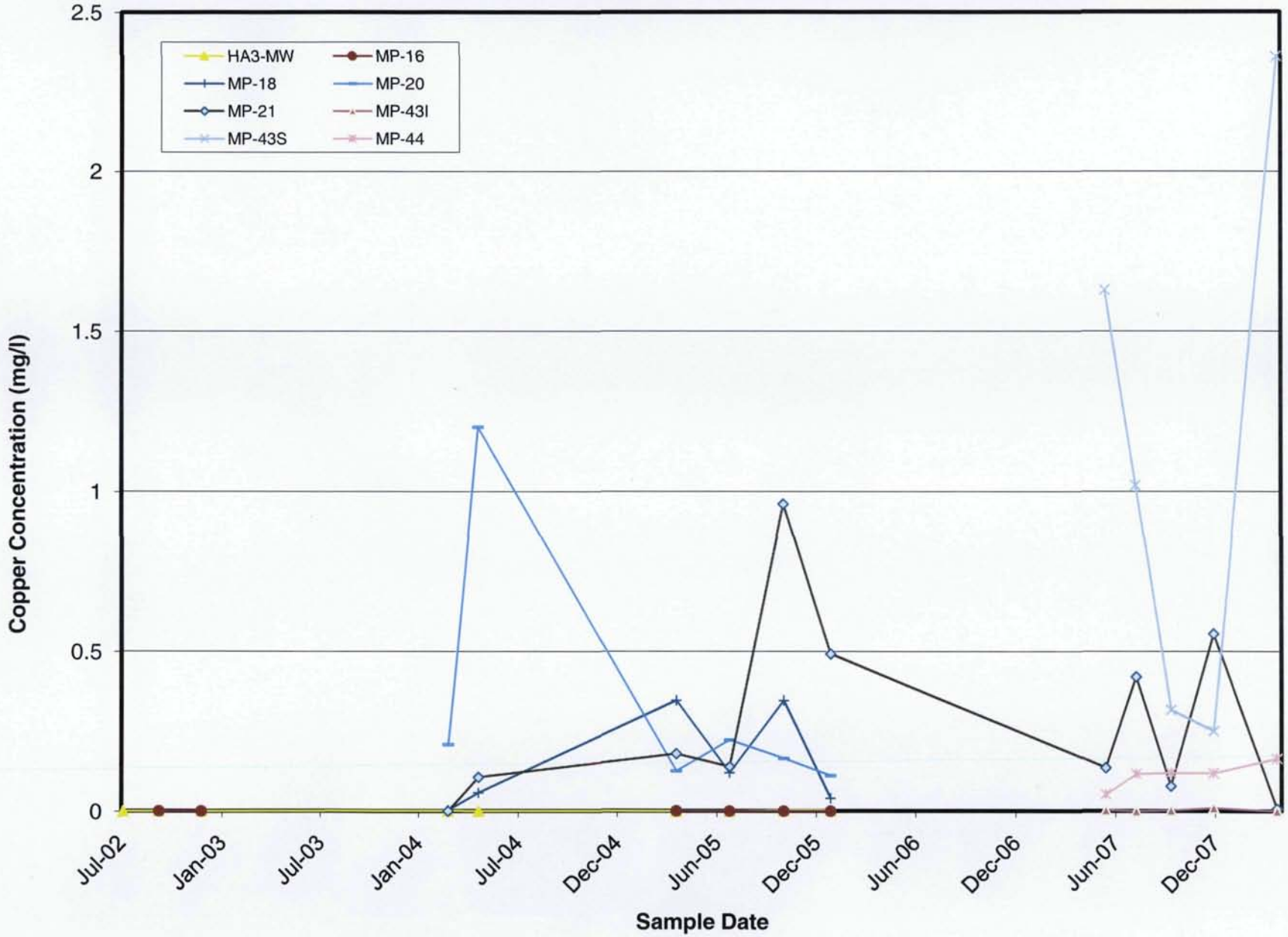
Table 4. AREV Groundwater Data for Analytes of Interest *
Wells off-site.

Sample ID	Sample Date	Arsenic, mg/L	Cadmium, mg/L	Chromium, mg/L	Copper, mg/L	Lead, mg/L	Nickel, mg/L	Zinc, mg/L	ETPH, mg/L	trans-1,2-Dichloroethene, µg/L	Trichloroethene, µg/L	Tetrachloroethene, µg/L	Vinyl chloride, µg/L	Benzene, µg/L	Ethylbenzene, µg/L	m&p-Xylene, µg/L	Naphthalene, µg/L	o-Xylene, µg/L	Toluene, µg/L	Total Xylenes, µg/L
	10 x SWPC	0.040	0.060	1.100	0.480	0.130	8.800	1.230	NE	NE	23,400	880	157,500	710	580,000	NE	NE	NE	4,000,000	NE
	100x SWPC	0.400	0.600	11.000	4.800	1.300	88.000	12.300	NE	NE	234,000	8,800	1,575,000	7,100	5,800,000	NE	NE	NE	40,000,000	NE
B10-MW	16-Dec-03	<0.004	<0.001	<0.001	<0.001	<0.001	0.007	0.023	30	<1.0			<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
B10-MW	26-Feb-04	<0.004	<0.001	0.006	0.015	0.005	0.033	0.058	310	<20			<20	<20	<20				<20	
B10-MW	21-Apr-04	<0.004	<0.001	<0.001	0.005	<0.001	0.063	0.117		<1			<1	<1	<1				<1	
B10-MW	01-Mar-05				0.005		0.046	0.026	54	<5			<5	<5	<5	<5		<5	<5	
B10-MW	23-Jun-05				0.007		0.071	0.017 B	46	<5			<5	<5	<5	<5		<5	<5	
B10-MW	03-Apr-08	< 0.004	< 0.001	0.003	0.017	< 0.002	0.019	0.018												
B11-MW	16-Dec-03	<0.004	0.003	<0.001	0.004	<0.001	0.029	0.2	<0.1	<1.0			<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
B11-MW	25-Feb-04	<0.004	0.006	<0.001	0.002	<0.001	0.111	0.537	<0.1	<1			<1	<1	<1				<1	
B11-MW	23-Apr-04	<0.004	0.015	0.001	0.006	<0.001	0.118	0.791		<1			<1	<1	<1				<1	
B11-MW	01-Mar-05				0.007		0.135	0.994	<0.1	<5			<5	<5	<5	<5		<5	<5	
B11-MW	23-Jun-05				0.005		0.078	0.544	48	<5			<5	<5	<5	<5		<5	<5	
B11-MW	03-Apr-08	< 0.004	0.006	< 0.001	0.004	< 0.002	0.044	0.301												
B13-MW	16-Dec-03	<0.004	<0.001	<0.001	<0.001	<0.001	0.009	0.006	<0.1	<1.0			<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
B13-MW	24-Feb-04	<0.004	<0.001	<0.001	<0.001	<0.001	0.011	0.043	<0.1	<1.0			<1.0	<1.0	<1.0				<1.0	
B13-MW	21-Apr-04	<0.004	<0.001	<0.001	0.004	<0.001	0.016	0.025		<1			<1	<1	<1				<1	
B13-MW	01-Mar-05				0.039		0.028	0.183	<0.1	<5			<5	<5	<5	<5		<5	<5	
B13-MW	23-Jun-05				0.006		0.028	0.115 B	58	<5			<5	<5	<5	<5		<5	<5	
B13-MW	03-Apr-08	< 0.004	< 0.001	< 0.001	0.004	< 0.002	0.010	0.053												
B13-MW-D	01-Mar-05				0.036		0.027	0.186	<0.1	<5			<5	<5	<5	<5		<5	<5	
B14-MW	16-Dec-03	0.004	<0.001	<0.001	<0.001	<0.001	0.022	0.09	4.9	<1.0			<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
B14-MW	25-Feb-04	<0.004	<0.001	<0.001	<0.001	<0.001	0.018	0.056	5	<1			<1	<1	<1				<1	
B14-MW	21-Apr-04	<0.004	<0.001	<0.001	0.003	<0.001	0.018	0.044		<1			<1	<1	<1				<1	
B14-MW	01-Mar-05				0.027		0.032	0.181	4.2	<5			<5	<5	<5	<5		<5	<5	
B14-MW	23-Jun-05				0.002		0.023	0.051 B	30	<5			<5	<5	<5	<5		<5	<5	
B15-MW	01-Mar-05				0.144		0.036	0.157	0.63	<5			<5	<5	<5	<5		<5	<5	
B15-MW	23-Jun-05				0.004		0.008	0.017 B	56	<5			<5	<5	<5	<5		<5	<5	
B15-MW	03-Apr-08	< 0.004	0.002	0.001	0.060	0.003	0.029	0.150												
B16-MW	01-Mar-05				**0.722**		0.162	0.576	0.13	<5			<5	<5	<5	<5		<5	<5	
B16-MW	23-Jun-05				0.016		0.039	0.097 B	58	<5			<5	<5	<5	<5		<5	<5	
B16-MW	03-Apr-08	< 0.004	< 0.001	0.004	0.089	< 0.002	0.034	0.090												
B17-MW	01-Mar-05				0.398		0.073	0.244	<0.1	<5			<5	<5	<5	<5		<5	<5	
B17-MW	23-Jun-05				0.149		0.012	0.072 B	58	<5			<5	<5	<5	<5		<5	<5	
B1-MW	16-Dec-03	<0.004	0.035	<0.001	0.03	<0.001	0.218	**4.44**	6.1	<1.0			<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
B1-MW	24-Feb-04	<0.004	0.011	0.001	0.069	<0.001	0.511	**7.64**	5.2	<1.0			<1.0	<1.0	<1.0				<1.0	
B1-MW	21-Apr-04	<0.004	0.021	0.002	0.16	0.002	0.363	**6.93**		<1			<1	<1	<1				<1	
B1-MW	01-Mar-05				**1.92**		0.355	**6.7**	7.9	<5			<5	<5	<5	<5		<5	<5	
B1-MW	23-Jun-05				0.056		0.101	0.733	50	<5			<5	<5	<5	<5		<5	<5	
B1-MW	03-Apr-08	< 0.004	0.003	0.006	0.100	0.004	0.142	**1.37**												
B1-MWD	23-Jun-05				0.058		0.102	0.738	52	<5			<5	<5	<5	<5		<5	<5	
B26-MW	31-May-07	< 0.004	< 0.001	< 0.001	0.005		0.008	0.015		< 1	47	1.3	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B26-MW	25-Jul-07	< 0.004	< 0.001	< 0.001	0.002		0.005	0.002		< 1	42	1.1	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B26-MW	26-Sep-07	< 0.004	< 0.001	< 0.001	0.001		0.006	< 0.002		< 1	48	1.2	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B26-MW	12-Dec-07	< 0.004	< 0.001	0.01	0.02		0.014	0.03		1	40	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B26-MW	03-Apr-08	< 0.004	< 0.001	0.001	0.005	< 0.002	0.006	0.005		< 1	51	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5
B27-MW	31-May-07	< 0.004	< 0.001	0.002	0.006		0.023	0.048		< 1	44	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B27-MW	25-Jul-07	< 0.004	< 0.001	< 0.001	0.001		0.019	0.004		< 1	38	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B27-MW	26-Sep-07	< 0.04	< 0.001	0.003	0.003		0.022	0.029		< 1	47	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B27-MW	11-Dec-07	< 0.004	< 0.001	0.003	0.005		0.026	0.039		< 1	40	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 0.5
B27-MW	03-Apr-08	< 0.004	< 0.001	< 0.001	< 0.001	0.004	0.019	0.006		< 1	43	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5
B28-MW	03-Apr-08	< 0.004	< 0.001	< 0.001	0.002	< 0.002	< 0.001	0.003												
B29-MW	03-Apr-08	< 0.004	< 0.001	0.001	0.003	< 0.002	0.004	0.009												
B30-MW	03-Apr-08	< 0.004	< 0.001	< 0.001	< 0.001	< 0.002	0.001	0.018												
B5-MW	16-Dec-03	<0.004	<0.001	0.003	0.001	<0.001	0.041	0.417	250	<50			<50	<50	<50	<50		<50	<50	
B5-MW	26-Feb-04	<0.004	<0.001	0.003	<0.001	0.003	0.024	0.145	170	<40			<40	<40	<40				<40	
B5-MW	23-Apr-04	<0.004	<0.001	0.003	<0.001	<0.001	0.037	0.202		<1			<1	<1	1				<1	
B5-MW	01-Mar-05				0.038		0.067	0.163	73	<5			<5	<5	<5	<5		<5	<5	
B5-MW	03-Apr-08	< 0.004	< 0.001	0.007	0.01	< 0.002	0.035	0.073												
B7-MW	16-Dec-03	<0.004	<0.001	<0.001	<0.001	<0.001	0.063	0.363	86	<10			<10	<10	<10	<10		<10	<10	
B7-MW	26-Feb-04	<0.004	<0.001	0.003	<0.001	0.002	0.052	0.247	88	<5			<5	<5	<5				<5	
B7-MW	21-Apr-04	<0.004	<0.001	0.001	0.007	<0.001	0.05	0.261		<10			<10	<10	<10				<10	
B7-MW	01-Mar-05				0.014		0.057	0.997	9.8	<5			<5	<5	<5	<5		<5	<5	
B7-MW	23-Jun-05				0.002		0.052	0.294	64	<5			<5	<5	<5	<5		<5	<5	
MW-1					ND			ND						ND	ND					
MW-1	02-Jan-98	ND	ND	ND	ND	ND		ND		ND			ND	ND	ND			ND	ND	
MW-1	02-Oct-98	ND	ND	ND	0.02	ND		0.15					ND	ND	ND			ND	ND	
MW-1	07-Jan-99	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-1	15-Apr-99	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-1	04-Aug-99	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-1	10-Jan-00	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-1	26-Apr-00	ND	ND	ND	0.02	ND		0.07					ND	ND	ND			ND	ND	
MW-1	05-Jul-00	ND	ND	ND	0.02	ND		0.07					ND	ND	ND			ND	ND	
MW-1	21-Apr-04	<0.004	<0.001	<0.001	0.005	<0.001	0.007	0.04	0.64	<1			<1	<1	<1				<1	
MW-10	15-Oct-02								1				ND	ND	ND			ND	ND	
MW-10	24-Feb-04	<0.004	<0.001	0.004	<0.001	<0.001	0.246	0.463	5.2	<1.0			<1.0	<1.0	<1.0				<1.0	
MW-10	21-Apr-04	<0.004	<0.001	0.016	0.029	<0.001	0.079	0.317		<10			<10	<10	<10				<10	
MW-10	01-Mar-05				0.003		0.029	0.092	5	<5			<5	<5	<5	<5		<5	<5	
MW-10	31-May-07	< 0.004	< 0.001	0.003	0.015		0.317	**1.49**												
MW-10	24-Jul-07	< 0.004	< 0.001	0.004	0.005		0.238	0.722												
MW-10	26-Sep-07	< 0.004	< 0.001	0.003	0.006		0.225	0.357												
MW-10	11-Dec-07	< 0.004	< 0.001	0.003	0.006		0.221	0.299												
MW-103	10-Jan-00	ND	ND	ND	0.01	ND		ND					ND	ND	ND			ND	ND	
MW-106	05-Jul-00	ND	ND	ND	0.23	ND		0.05					ND	ND	2			ND	ND	
MW-109	15-Oct-02								0.9				ND	ND	ND			ND	ND	
MW-11	15-Oct-02								0.9				ND	2	1			ND	ND	
MW-11	24-Feb-04	<0.004	0.006	<0.001	0.217	<0.001	0.071	0.315	0.86	<1.0			<1.0	2	<1.0				<1.0	
MW-11	23-Apr-04	<0.004	0.006	<0.001	0.06	<0.001	0.069	0.328		<1			<1	<1	<1				<1	
MW-12	15-Oct-02								2				ND	ND	7			1	ND	
MW-12	24-Feb-04	<0.004	0.002	0.014	0.207	0.003	0.011	0.065	68	<2.0			2.2	<2.0	6.8				<2.0	
MW-12	23-Apr-04	<0.004	<0.001	0.008	<0.001	<0.001	0.004	0.007		<5			<5	<5	<5				<5	
MW-13	15-Oct-02								ND				ND	ND	ND			ND	ND	
MW-13	24-Feb-04	<0.004	<0.001	0.003	0.005	0.005	0.016	0.107	<0.1	<1.0			<1.0	<1.0	<1.0				<1.0	
MW-13	21-Apr-04	0.026	<0.001	<0.001	0.005	<0.001	0.013	0.033		<1			<1	<1	<1				<1	
MW-14	15-Oct-02								0.3				ND	ND	1			ND	ND	
MW-14	25-Feb-04	<0.004	0.004	<0.001	0.196	<0.001	0.046	0.422	75	<1			<1	<1	<1				<1	
MW-14	23-Apr-04	<0.004	0.007	0.001	**0.553**	<0.001	0.046	0.738		<1			<1	<1	<1				<1	
MW-14	01-Mar-05				0.143		0.034	0.434	2.3	<5			<5	<5	<5	<5		<5	<5	
MW-14	23-Jun-05				0.428		0.023	0.126 B	Diluted out	<5			<5	<5	<5	<5		<5	<5	
MW-14	03-Apr-08	< 0.004	0.003	0.002	0.252	< 0.002	0.019	0.344												
MW-14A	23-Apr-04	<0.004	0.007	0.002	0.546	<0.001	0.044	0.727		<1			<1	<1	<1				<1	
MW-15	15-Oct-02								21.4				ND	ND	ND			ND	ND	
MW-15	25-Feb-04	<0.004	0.001	0.025	0.01	<0.001	0.012	0.053	75	<1			<1	<1	<1				<1	
MW-15	21-Apr-04	<0.004	<0.001	0.021	0.03	<0.001	0.011	0.047		<20			<20	<20	<20				<20	
MW-15	01-Mar-05				0.438		0.015	0.086	44	<5			<5							
MW-15	23-Jun-05				**0.763**		0.02	0.212	Diluted out	<5			<5							
MW-15	31-May-07	< 0.004	< 0.001	0.03	0.071		0.01	0.04												
MW-15	24-Jul-07	< 0.004	< 0.001	0.037	0.053		0.01	0.042												
MW-15	26-Sep-07	< 0.004	< 0.001	0.039	0.048		0.014	0.03						<5	<5	<5		<5	<5	
MW-15	12-Dec-07	< 0.004	< 0.001	0.038	0.045		0.01	0.038						<5	<5	<5		<5	<5	
MW-15	03-Apr-08	< 0.004	< 0.001	0.020	0.234	< 0.002	0.006	0.033												
MW-16	15-Oct-02								0.3				ND	ND	ND			ND	ND	
MW-16	24-Feb-04	<0.004	<0.001	<0.001	<0.001	<0.001	0.006	0.022	2.1	<1.0			<1.0	<1.0	<1.0				<1.0	
MW-16	23-Apr-04	<0.004	<0.001	0.002	<0.001	<0.001	0.006	0.016		<1			<1	<1	<1				<1	
MW-17	15-Oct-02								0.4				ND	ND	ND			ND	ND	
MW-17	24-Feb-04	<0.004	<0.001	0.013	<0.001	<0.001	0.01	0.206	3.7	<1.0			<1.0	<1.0	<1.0				<1.0	
MW-17	23-Apr-04	<0.004	0.016	0.003	<0.001	<0.001	0.02	1.12		<5			<5	<5	<5				<5	
MW-1A	17-Apr-02								0.7											
MW-1A	04-Apr-03								ND				ND	ND	ND			ND	ND	
MW-1A	03-Apr-08	< 0.004	< 0.001	< 0.001	0.038	< 0.002	0.024	0.046												
MW-2					ND			ND						ND	ND					
MW-2	02-Jan-98	ND	ND	ND	ND	ND		ND		ND			ND	ND	ND			ND	ND	
MW-2	14-Sep-98	ND	ND	ND	0.09	0.007		0.05					ND	ND	ND			ND	ND	
MW-2	07-Jan-99	ND	ND	ND	0.01	ND		ND					ND	ND	ND			ND	ND	
MW-2	15-Apr-99	ND	ND	ND	0.02	ND		ND					ND	ND	ND			ND	ND	
MW-2	04-Aug-99	ND	ND	ND	0.09	0.014		ND					ND	ND	ND			ND	ND	
MW-2	10-Jan-00	ND	0.006	ND	0.04	ND		0.14					ND	ND	ND			ND	ND	
MW-2	24-Feb-04	<0.004	0.005	<0.001	0.002	0.001	0.013	0.046	<0.1	<1.0			<1.0	<1.0	<1.0				<1.0	
MW-2	21-Apr-04	<0.004	0.008	<0.001	0.009	<0.001	0.014	0.071		<1			<1	<1	<1				<1	
MW-2A	04-Apr-03								ND				ND	ND	ND			ND	ND	
MW-2A	25-Feb-04	<0.004	0.001	0.001	0.008	<0.001	0.086	0.212	1.3	<1			<1	1.1	<1				<1	
MW-2A	23-Apr-04	<0.004	0.003	0.002	0.088	<0.001	0.056	0.172		<1			<1	<1	<1				<1	

Sample ID	Sample Date	Arsenic, mg/L	Cadmium, mg/L	Chromium, mg/L	Copper, mg/L	Lead, mg/L	Nickel, mg/L	Zinc, mg/L	ETPH, mg/L	trans-1,2-Dichloroethene, µg/L	Trichloroethene, µg/L	Tetrachloroethene, µg/L	Vinyl chloride, µg/L	Benzene, µg/L	Ethylbenzene, µg/L	m&p-Xylene, µg/L	Naphthalene, µg/L	o-Xylene, µg/L	Toluene, µg/L	Total Xylenes, µg/L
	10 x SWPC	0.040	0.060	1.100	0.480	0.130	8.800	1.230	NE	NE	23,400	880	157,500	710	580,000	NE	NE	NE	4,000,000	NE
	100x SWPC	0.400	0.600	11.000	4.800	1.300	88.000	12.300	NE	NE	234,000	8,800	1,575,000	7,100	5,800,000	NE	NE	NE	40,000,000	NE
MW-3					ND			ND						ND	5					
MW-3	02-Jan-98	ND	ND	ND	ND	ND		ND		ND			ND	ND	5			1	ND	
MW-3	36049	ND	ND	ND	0.01	ND		0.14						3	8			1	ND	
MW-3	14-Sep-98												ND	ND	17			2	ND	
MW-3	07-Jan-99	ND	ND	ND	0.01	ND		ND					ND	ND	8			1	ND	
MW-3	15-Apr-99	ND	ND	ND	ND	ND		ND					ND	ND	165			ND	ND	
MW-3	04-Aug-99	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-3	10-Jan-00	ND	ND	ND	ND	ND		ND						ND	6			ND	ND	
MW-3	26-Apr-00	ND	ND	ND	0.03	ND		ND					ND	ND	5			ND	ND	
MW-3	05-Jul-00	ND	ND	ND	ND	ND		ND					ND	<1.0	9.5				<1.0	
MW-3	15-Oct-02								1.2				ND	<5	11				<5	
MW-3	24-Feb-04	<0.004	<0.001	0.023	0.001	<0.001	<0.002	<0.002	3.8	<1.0			<1.0							
MW-3	23-Apr-04	<0.004	<0.001	0.022	<0.001	<0.001	0.002	0.005		<5			<5							
MW-3A	04-Apr-03				-				63				ND	ND	ND			ND	ND	
MW-3A	25-Feb-04	<0.004	<0.001	0.01	0.073	0.003	0.019	0.107	38	<1			<1	<1	<1				<1	
MW-3A	23-Apr-04	<0.004	<0.001	0.003	<0.001	<0.001	0.012	0.01		<1			<1	<1	<1				<1	
MW-3A	03-Apr-08	< 0.004	0.001	0.002	0.157	< 0.002	0.022	0.086												
MW-4					ND			ND						ND	ND					
MW-4	02-Jan-98	ND	ND	ND	0.01	ND		ND		ND			ND	ND	ND			ND	ND	
MW-4	14-Sep-98	ND	ND	ND	0.05	ND		1.09					ND	ND	ND			ND	ND	
MW-4	07-Jan-99	ND	ND	ND	0.03	ND		ND					ND	ND	ND			ND	ND	
MW-4	15-Apr-99	ND	ND	ND	0.03	ND		ND					ND	ND	ND			ND	ND	
MW-4	04-Aug-99	ND	ND	ND	0.11	0.01		ND					ND	ND	ND			ND	ND	
MW-4	10-Jan-00	ND	ND	ND	0.01	ND		ND					ND	ND	ND			ND	ND	
MW-4	26-Apr-00	ND	ND	ND	0.02	ND		ND					ND	ND	ND			ND	ND	
MW-4	05-Jul-00	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-4	21-Apr-04	<0.004	<0.001	<0.001	0.052	<0.001	0.006	0.02	<0.1	<1			<1	<1	<1				<1	
MW-4A	04-Apr-03								115				ND	ND	ND			ND	ND	
MW-4A	25-Feb-04	<0.004	<0.001	0.016	0.013	0.001	0.005	0.026	43	<1			<1	<1	<1				<1	
MW-4A	23-Apr-04	<0.004	<0.001	0.014	0.007	<0.001	0.014	0.036		<5			<5	<5	<5				<5	
MW-5					ND			ND						ND	ND					
MW-5	02-Jan-98	ND	ND	ND	ND	ND		ND		ND			ND	ND	ND			ND	ND	
MW-5	14-Sep-98	ND	ND	ND	ND	ND		0.12					ND	ND	ND			ND	ND	
MW-5	07-Jan-99	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-5	15-Apr-99	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-5	04-Aug-99	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-5	10-Jan-00	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-5	26-Apr-00	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-5	05-Jul-00	ND	ND	ND	ND	ND		ND					ND	ND	ND			ND	ND	
MW-5	21-Apr-04	<0.004	0.004	0.002	0.008	<0.001	0.01	0.032	<0.1	<1			<1	<1	<1				<1	
MW-5	23-Jun-05				0.02		0.036	0.083 B	Diluted out	<5			<5	<5	<5	<5		<5	<5	
MW-5A	04-Apr-03								5.9				ND	ND	ND			ND	ND	
MW-5A	25-Feb-04	<0.004	<0.001	0.004	0.014	0.001	0.028	0.095	81	<1			<1	<1	3.1				<1	
MW-5A	23-Apr-04	<0.004	<0.001	0.002	<0.001	<0.001	0.012	0.011		<5			<5	<5	<5				<5	
MW-6					0.35			0.06						6	11					
MW-6	02-Jan-98	ND	ND	ND	0.35	ND		0.06							11			ND		
MW-6	14-Sep-98	ND	ND	ND	0.21	ND		0.27					ND	5	4			ND	ND	
MW-6	07-Jan-99	ND	ND	ND	0.1	ND		ND					ND	4	3			ND	ND	
MW-6	15-Apr-99	ND	ND	ND	0.05	ND		0.05					ND	ND	3			ND	ND	
MW-6	04-Aug-99	ND	ND	ND	**0.56**	ND		0.05					ND	3	3			ND	ND	
MW-6	10-Jan-00	ND	ND	ND	**0.63**	ND		0.05					ND	1	3			ND	ND	
MW-6	26-Apr-00	ND	ND	ND	0.21	ND		0.05					ND	ND	ND			ND	ND	
MW-6	05-Jul-00	ND	ND	ND	0.27	ND		0.06					ND	ND	ND			ND	ND	
MW-6	15-Oct-02								0.8				ND	ND	ND			ND	ND	
MW-6	24-Feb-04	<0.004	0.003	0.004	0.176	<0.001	0.015	0.087	2.2	<1.0			<1.0	1	<1.0				<1.0	
MW-6	23-Apr-04	<0.004	0.001	0.003	0.241	<0.001	0.013	0.067		<1			<1	<1	<1				<1	
MW-7					0.16			0.06						4	13					
MW-7	02-Jan-98	ND	ND	ND	0.16	ND		0.06		ND			ND	4	13			ND	ND	
MW-7	11-Sep-98	ND	ND	ND	0.02	ND		0.05												
MW-7	14-Sep-98												ND	4	33			ND	ND	
MW-7	07-Jan-99	ND	ND	ND	0.03	ND		ND					ND	ND	8			ND	ND	
MW-7	15-Apr-99	ND	ND	ND	0.03	ND		ND					ND	1	8			ND	ND	
MW-7	04-Aug-99	ND	ND	ND	0.09	ND		ND					ND	ND	365			ND	ND	
MW-7	10-Jan-00	ND	ND	ND	0.09	ND		ND						ND	11			ND	ND	
MW-7	26-Apr-00	ND	ND	ND	0.06	ND		ND					ND	1	2			ND	ND	
MW-7	05-Jul-00	ND	ND	ND	0.03	ND		ND					ND							
MW-7	15-Oct-02								1.2				ND	ND	ND			ND	ND	
MW-7	24-Feb-04	<0.004	<0.001	0.005	0.001	<0.001	0.003	0.005	16	<1.0			<1.0	1	<1.0				<1.0	
MW-7	23-Apr-04	<0.004	<0.001	0.002	<0.001	<0.001	0.003	0.007		<1			<1	<1	<1				<1	
MW-8					0.04			ND						1	1					
MW-8	02-Jan-98	ND	ND	ND	0.04	ND		ND		ND			ND	1	1			ND	ND	
MW-8	11-Sep-98	ND	ND	ND	0.06	ND		0.18												
MW-8	14-Sep-98												ND	2	4			ND	ND	
MW-8	07-Jan-99	ND	ND	ND	0.02	ND		ND					ND	ND	1			ND	ND	
MW-8	15-Apr-99	ND	ND	ND	ND	ND		ND					ND	3	ND			ND	ND	
MW-8	04-Aug-99	ND	ND	ND	0.04	ND		ND					ND	ND	ND			ND	ND	
MW-8	10-Jan-00	ND	ND	ND	0.15	ND		0.06					ND	ND	ND			ND	ND	
MW-8	26-Apr-00	ND	ND	ND	0.1	ND		ND					ND	ND	ND			ND	ND	
MW-8	05-Jul-00	ND	ND	ND	0.04	ND		ND					ND	ND	ND			ND	ND	
MW-8	15-Oct-02								14.6				ND	ND	ND			ND	ND	
MW-8	25-Feb-04	<0.004	<0.001	0.018	<0.001	<0.001	0.011	0.009	71	<1			<1	<1	<1				<1	
MW-8	23-Apr-04	<0.004	<0.001	0.013	<0.001	<0.001	0.005	0.003		<1			<1	<1	<1				<1	
MW-8	31-May-07	< 0.004	< 0.001	0.026	0.01		0.019	0.018												
MW-8	25-Jul-07	< 0.004	< 0.001	0.03	0.008		0.017	0.021												
MW-8	26-Sep-07	< 0.004	< 0.001	0.022	0.003		0.012	0.003												
MW-8	12-Dec-07	< 0.004	< 0.001	0.017	0.005		0.006	0.002												
MW-8	03-Apr-08	< 0.004	< 0.001	0.014	0.003	< 0.002	0.007	0.014												
MW-8 Dup	26-Apr-00	ND	ND	ND	0.08	ND		ND					ND	ND	ND			ND	ND	
MW-9	14-Sep-98	ND	ND	ND	0.02	ND		0.46					ND	3	1			ND	ND	
MW-9	07-Jan-99	ND	ND	ND	0.09	ND		0.07					ND	2	ND			ND	ND	
MW-9	15-Apr-99	ND	ND	ND	ND	ND		ND					ND	2	ND			ND	ND	
MW-9	04-Aug-99	ND	ND	ND	0.01	ND		1.02					ND	ND	ND			ND	ND	
MW-9	10-Jan-00	ND	ND	ND	ND	ND		0.07					ND	2	ND			4	ND	
MW-9	26-Apr-00	ND	ND	ND	0.02	ND		ND					ND	ND	ND			ND	ND	
MW-9	05-Jul-00	ND	ND	ND	ND	ND		0.05					ND	1	ND			ND	ND	
MW-9	15-Oct-02								1				ND	ND	ND			ND	ND	
MW-9	25-Feb-04	<0.004	<0.001	0.014	<0.001	<0.001	0.013	0.006	160	<1			<1	1.4	<1				<1	
MW-9	23-Apr-04	<0.004	<0.001	0.014	<0.001	<0.001	0.002	0.044		<1			<1	1	<1				<1	
MW-9	23-Jun-05				0.006		0.18	2.53	Diluted out	<5			<5	<5	<5	<5		<5	<5	
MW-A	15-Oct-02								0.4				ND	2	ND			ND	ND	
MW-A	24-Feb-04	<0.004	0.001	<0.001	0.147	<0.001	0.039	0.127	0.93	<1.0			<1.0	1.9	<1.0				<1.0	
MW-A	23-Apr-04	<0.004	0.001	<0.001	0.094	<0.001	0.032	0.083		<1			<1	<1	<1				<1	

Waterbury Rolling Mills
EI CA 750

Figure 1. Time-series plots of Copper in wells along southern site boundary.



O:\TECH\0284316\CA 750\Cu Graph.xls\Figure 1

Figure 2. Time-series plots of Copper in wells along Steele Brook.

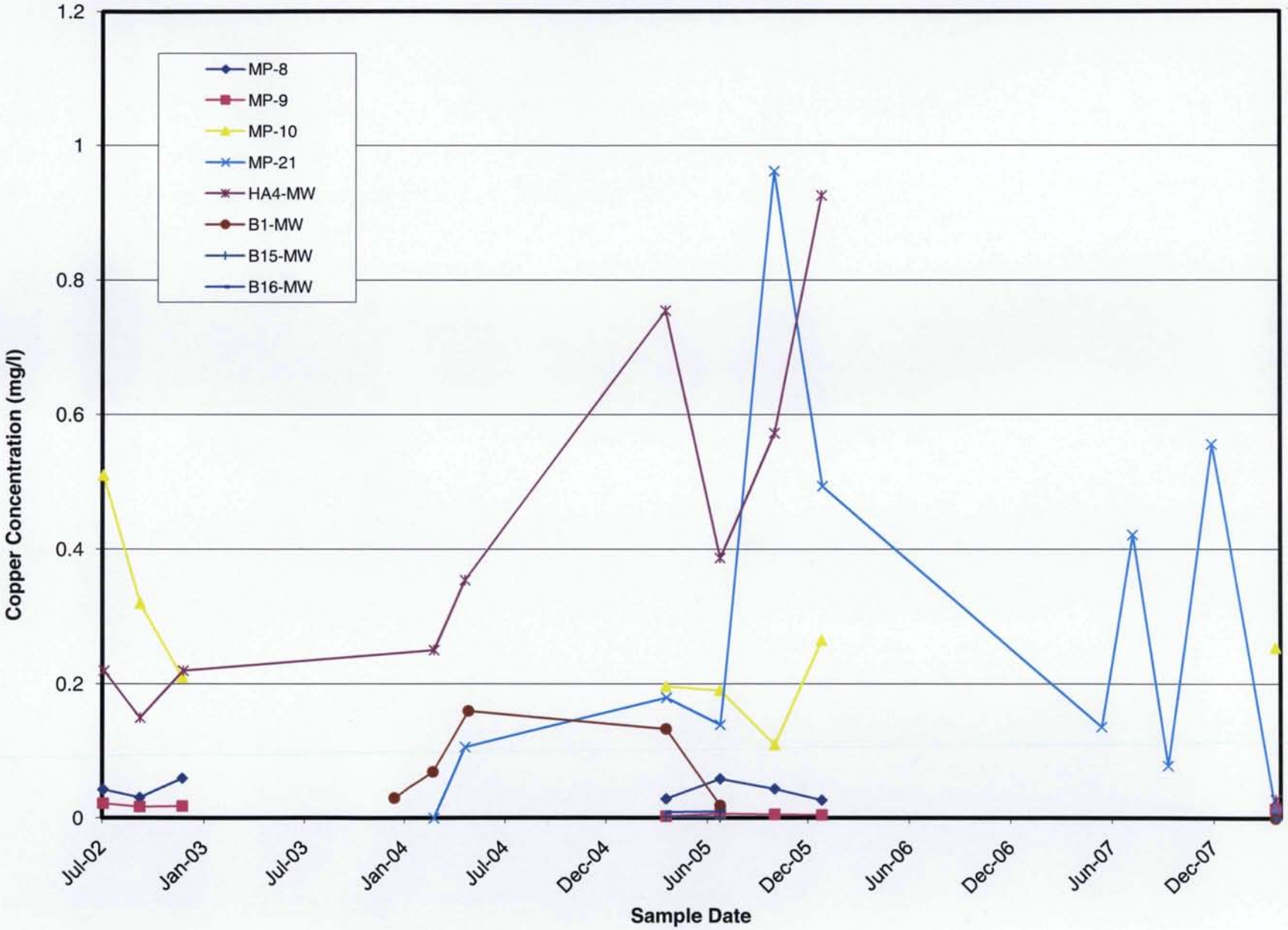


Figure 3. Time-series plots of Zinc in wells along southern site boundary.

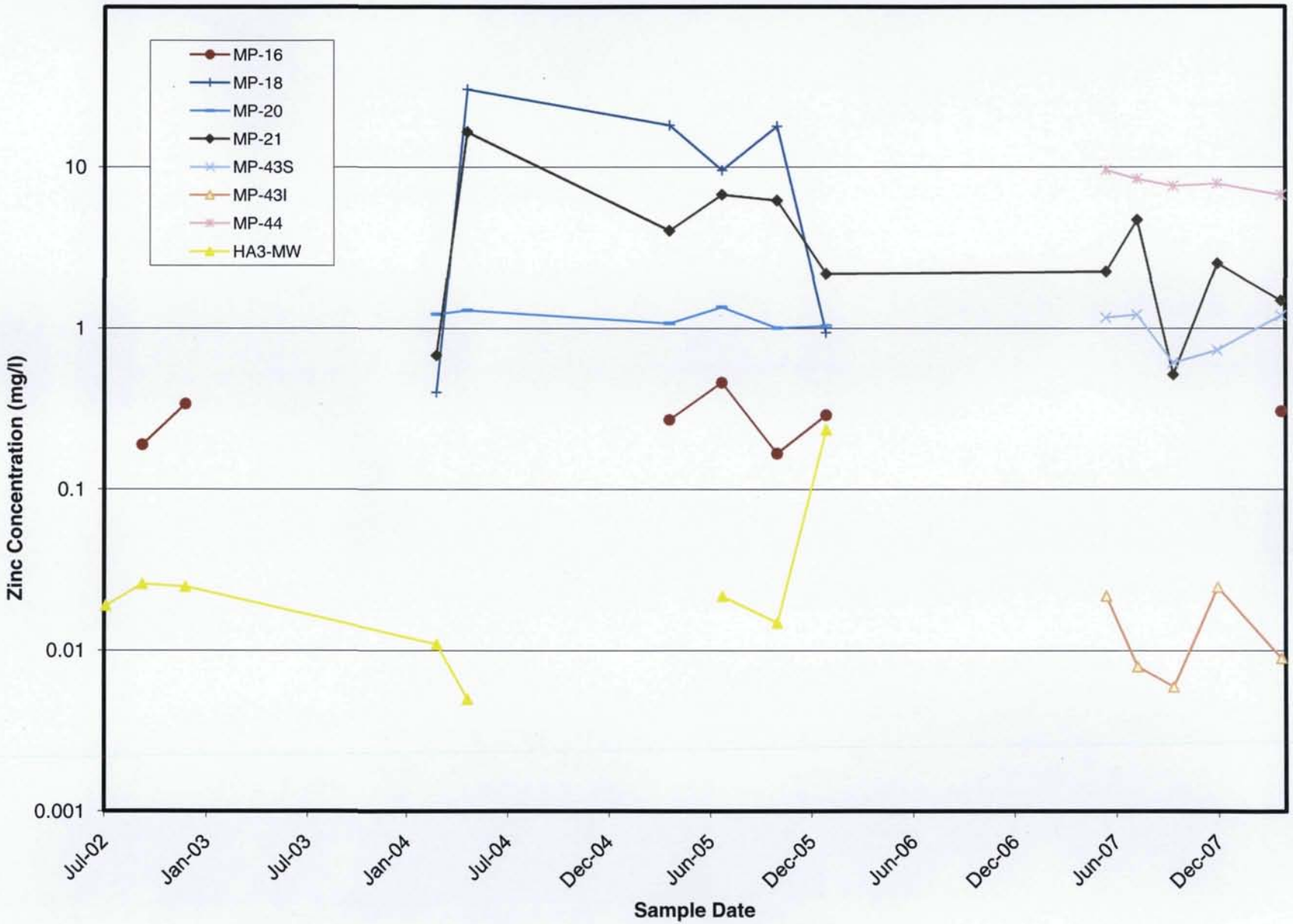
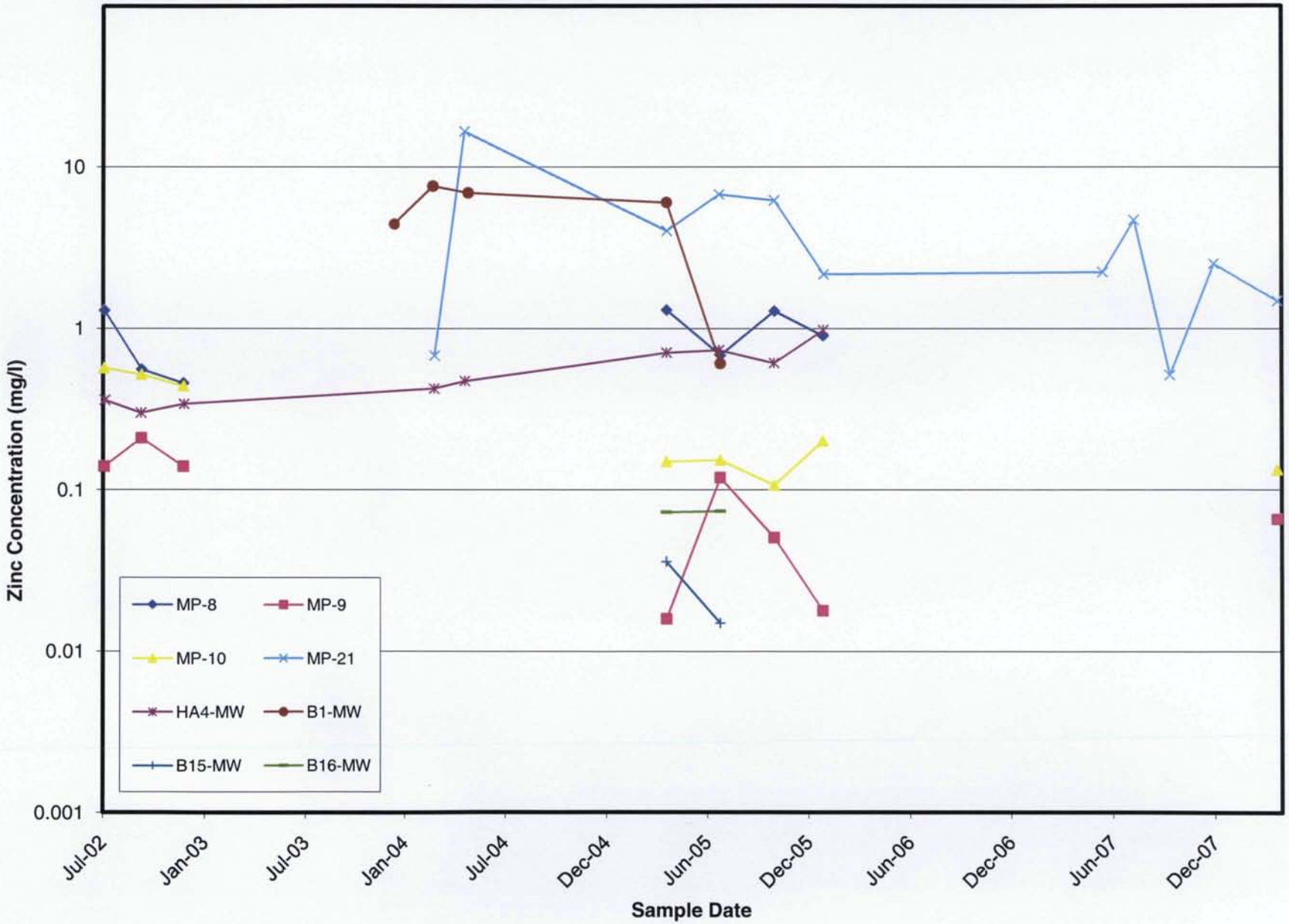
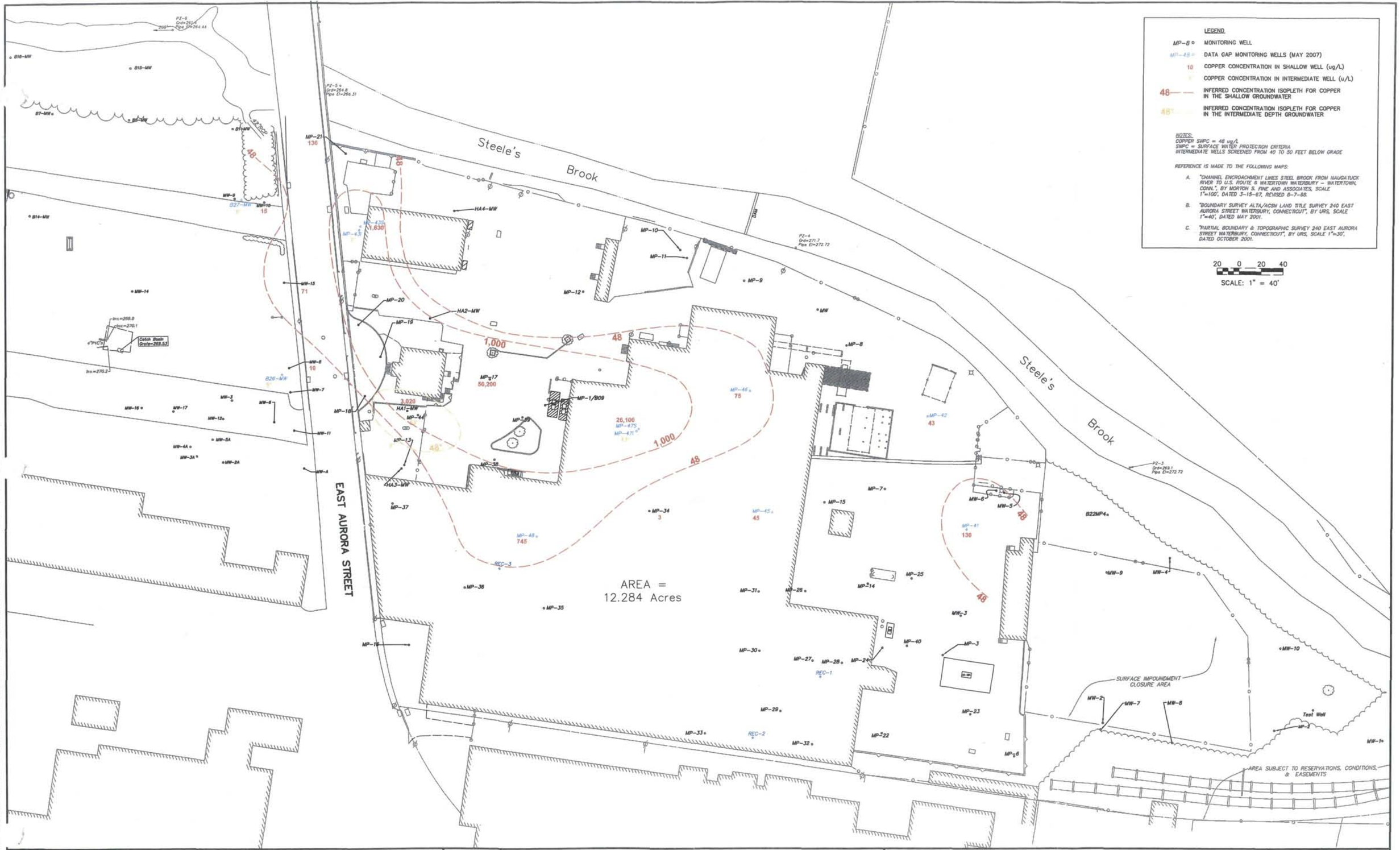


Figure 4. Time-series plots of Zinc in wells along Steele Brook.





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REVISIONS			
NO.	BY	DATE	REMARKS

DES DB
DWN DB
CKD BMC

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WATERBURY, CONNECTICUT

CA 750

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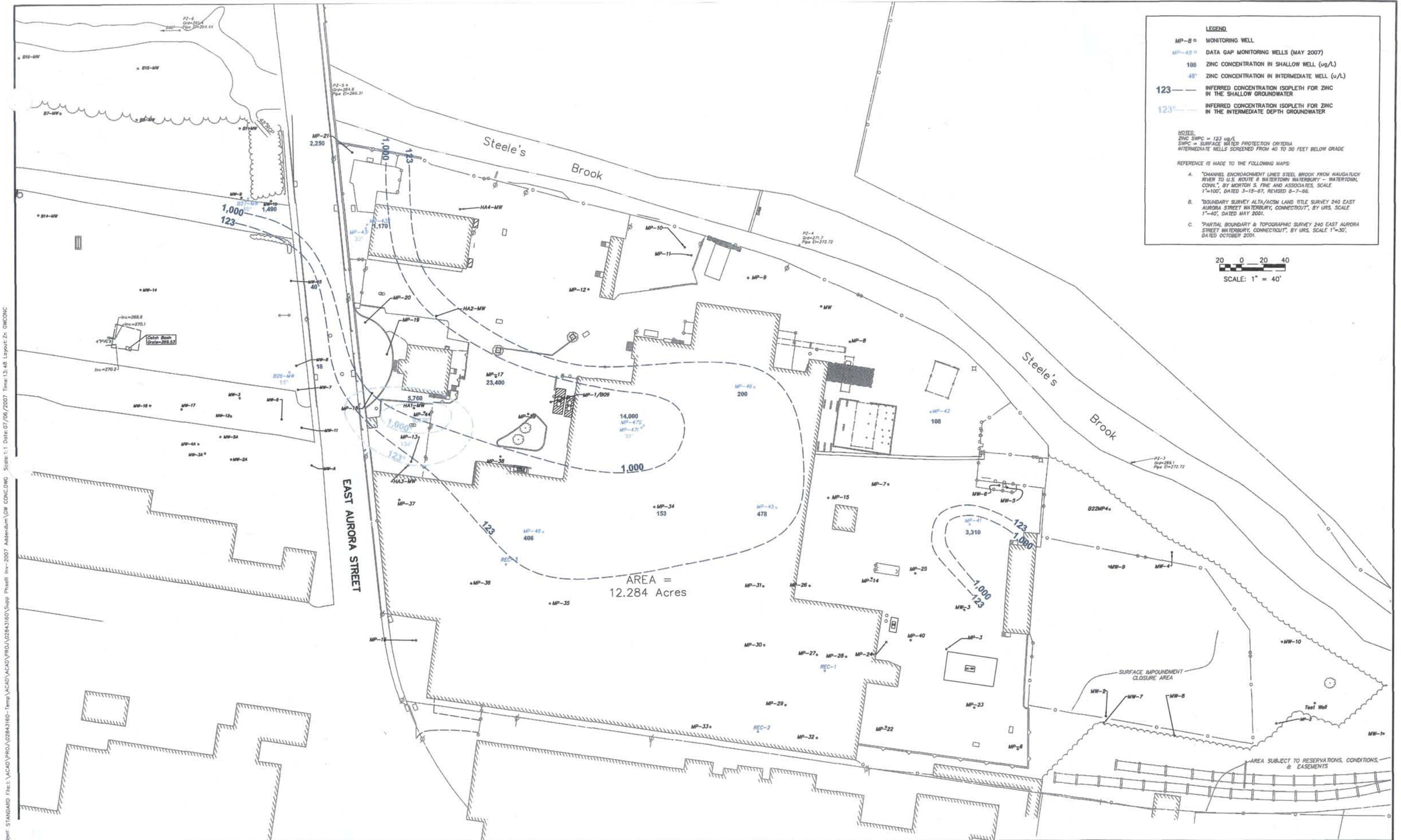

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REVISIONS			
NO.	BY	DATE	REMARKS

DES DB
DWN DB
CKD BMC

WATERBURY ROLLING MILLS
WATERBURY, CONNECTICUT

CA 750

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