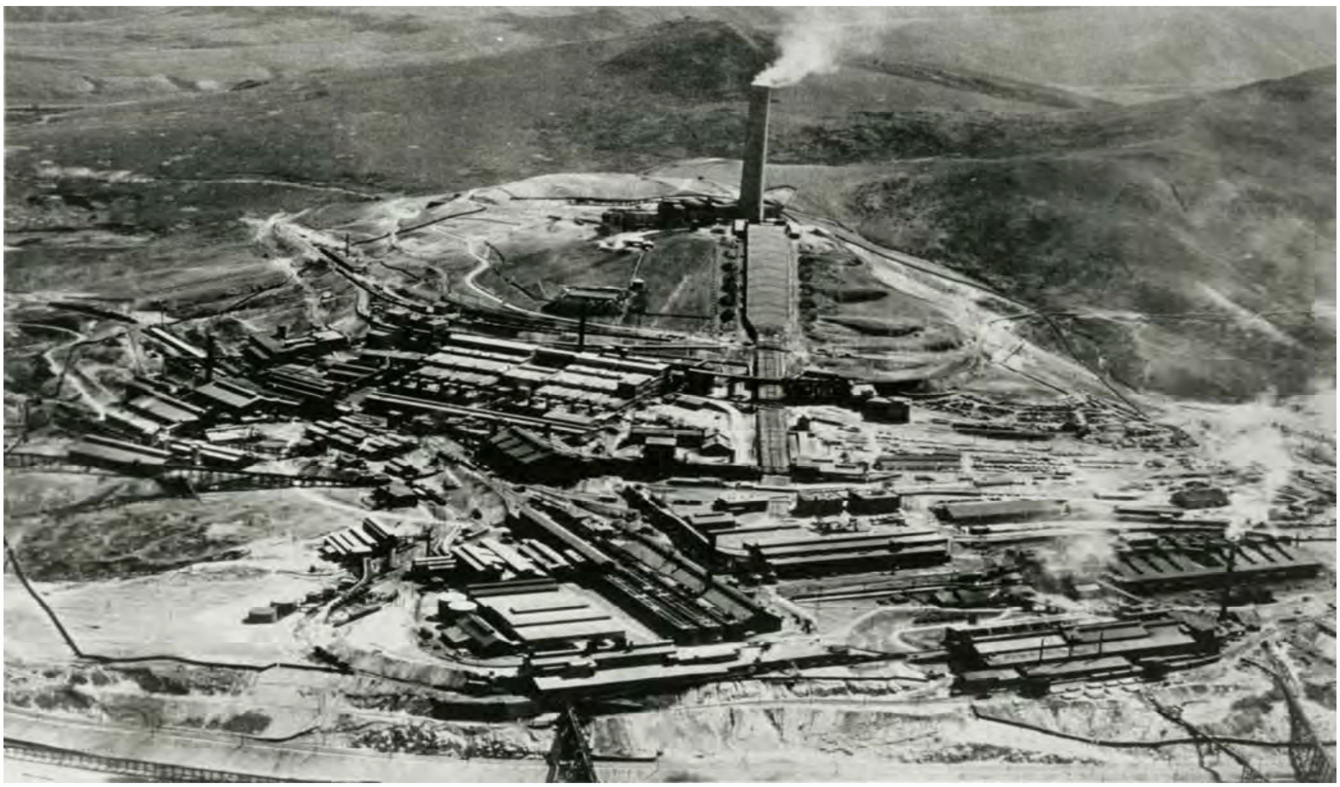
ANACONDA SMELTER NPL SITE
ANACONDA REGIONAL WATER, WASTE, AND SOILS OPERABLE UNIT

2014 GROUNDWATER MONITORING PROGRAM
5-YEAR REVIEW (2010-2014) - SAMPLING UPDATE

Prepared for:
Atlantic Richfield Company
U.S. Environmental Protection Agency
Montana Department of Environmental Quality



(Photo courtesy of World Museum of Mining, Butte, MT)

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LIST OF ACRONYMS

ACM	Anaconda Copper Mining Company
ADLC	Anaconda–Deer Lodge County
AOC	Area of Concern
ARARs	Applicable or Relevant and Appropriate Requirements
AR	Atlantic Richfield Company
ARWWS	Anaconda Regional Water, Waste, and Soils
CGWA	Controlled Groundwater Area
COCs	Contaminants of Concern
DAR	Data Analysis Report
DEQ	Montana Department of Environmental Quality
DO	Dissolved Oxygen
DSR	Data Summary Report
EPA	U.S. Environmental Protection Agency
FS	Feasibility Study
GWIC	Groundwater Information Center
HAA	High Arsenic Area
IC	Institutional Control
LTGWMP	Long-Term Groundwater Monitoring Program
MBMG	Montana Bureau of Mines and Geology
mg/L	Milligrams per Liter
NPL	National Priorities List
ORP	Oxidation-Reduction Potential
OU	Operable Unit
POC	Points of Compliance
PPOC	Potential Points of Compliance
%RSD	Percent Relative Standard Deviation
RA	Remedial Action
RD	Remedial Design
RDU	Remedial Design Unit
RDWP	Remedial Design Work Plan
RI	Remedial Investigation
RO	Reverse Osmosis
ROD	Record of Decision
RPD	Relative Percent Difference
SAP	Sampling and Analysis Plan
SC	Specific Conductance
SEP	Statistical Evaluation Plan
STGWMP	Short-Term Groundwater Monitoring Program
TI	Technical Impracticability
μg/L	Micrograms per Liter
WMA	Waste Management Area

ABSTRACT

The 2014 Anaconda Regional Water, Waste, and Soils (ARWWS) Groundwater Monitoring Program continued the transition from the Record of Decision-implemented Short-Term Groundwater Monitoring and Sampling Program (STGWMP) toward the Long-Term Groundwater Monitoring and Sampling Program that began in 2009. The 2014 program also provided data for the Superfund required 5-year review of the ARWWS Operable Unit (OU); it was the second 5-yr review sample event conducted under the STGWMP.

The U.S. Environmental Protection Agency (EPA), in consultation and concurrence with Montana Department of Environmental Quality (DEQ), released a Record of Decision (ROD) Amendment in September 2011. Contained in the amendment were changes to the water-quality standards contained in the 1998 ROD, bringing ARWWS site contaminant of concern (COC) standards into compliance with current Montana DEQ-7 standards.

The defined domestic well sampling program was continued based upon U.S. Environmental Protection Agency and Montana Department of Environmental Quality boundaries, as identified in the 2011 ROD amendment.

Arsenic is the primary contaminant of concern (COC) throughout this OU, while cadmium, copper, lead, and zinc are also of concern in three of the seven areas that constitute the OU. Listed below are the seven geographical areas within the OU and the number of wells, springs, and COC exceedances during the 2014 sampling:

ARWWS Geographical Areas	No. Wells	No. Springs	No. Arsenic Exceedances (Wells/Springs)	No. Other Exceedances
Stuckey Ridge/Lost Creek	4	9	1/6 = 7	6
Mount Haggin/Smelter Hill	11	14	7/6 = 13	10
Smelter Hill/ Opportunity Ponds	44	0	13/0 =13	25
Old Works	20	0	0/0 = 0	5
South Opportunity/Yellow Ditch	14	1	1/0 = 1	2
Blue Lagoon	2	0	0/0 =0	2
Dutchman Creek	2	3	0/3 = 3	0
Totals	97	27	22/15 = 37	50

A majority of the water-quality COC exceedances occur adjacent to the historic processing facilities (Smelter Hill) and areas where smelter wastes were disposed (Smelter Hill and Opportunity Ponds). The highest arsenic concentrations in monitoring wells and springs were from sites on Smelter Hill, 4,605 µg/L and 1,546 µg/L, respectively.

Twenty-five points of compliance (POC) or potential points of compliance (PPOC) monitoring wells are distributed throughout the ARWWS monitoring area to ensure that no groundwater contamination migrates offsite from any of the primary source areas: 24 of the POC wells were sampled twice during 2014; 1 PPOC well was dry during low water sampling. No COC exceedances were observed in the POC wells or PPOC wells. Based upon the 2014 water-quality results, there are

no indications that the area of historic contamination is spreading, or that contaminants are leaving the site; concentrations decreased or remain steady in these wells.

In 2014 the Montana Bureau of Mines and Geology (MBMG) attempted to contact the 183 property owners with wells that had not been previously sampled, had three contact attempts, or declined sampling. Attempts to contact the owners included a variety of methods including postcards (130 sent), site visits (175), and phone calls (37). During the site visits postcards in plastic bags were left in conspicuous places. Ninety property owners declined (directly or indirectly) to have their wells sampled for this project in 2014. An additional 30 properties either didn’t have a well or were abandoned (not in use).

In 2014, 63 new domestic wells (not previously sampled by MBMG) were sampled. Arsenic concentrations were less than 5 µg/L in 59 of these samples. The arsenic concentration was between 5 µg/L and 10 µg/L in one of the new wells sampled; this well was in the Mill Creek area. Arsenic concentrations were greater than 10 µg/L in 3 new domestic wells. These 3 wells were in the Powell Vista, Mill Creek, and Opportunity areas. The dissolved confirmation sample confirmed one of the wells as having arsenic concentrations greater than 10 µg/L.

In addition to the new well samples, 82 wells that had been sampled in 2009 were resampled in 2014. Two of the 2009 resample wells had arsenic concentrations above 5 µg/L and one was above 10 µg/L (table 5.3-1). The 2009 arsenic concentrations from both of these wells were below 5 µg/L. The confirmation samples from the well with the higher arsenic concentration were between 5 µg/L and 10 µg/L. Both wells are in the Lost Creek area.

Twenty-five wells with prior concentrations between 5 and 10 µg/L were resampled in 2014. Seven of these samples had arsenic concentrations less than 5 µg/L in 2014. The other 18 sites continued to have total recoverable arsenic concentrations between 5 and 10 µg/L.

Twenty-one wells with previous arsenic concentrations greater than 10 µg/L were resampled in 2014 (table 5.4-2). Two of these samples (Connors–246960; McKay–197463) had arsenic concentrations less than 10 µg/L in 2014. The other 19 wells continued to have arsenic concentrations greater than 10 µg/L.

ANACONDA SMELTER NPL SITE

1.0 Introduction

The 2009 Groundwater Monitoring and Sampling Program was a transition from the Short-Term Groundwater Monitoring and Sampling Program (STGWMP) toward the Long-Term Monitoring and Sampling Program (LTGWMP). The 1998 Record of Decision (ROD) specified the establishment of an interim groundwater program, which had been conducted by ARCO seasonally since 2000. Results were presented in semi-annual Data Summary Reports (DSR), followed by an annual Data Analysis Report (DAR). A complete listing of the reports can be found in the Draft Final—2008 Short-Term Groundwater Monitoring, Low-Water Table Event, Data Summary Report (DSR) (Atlantic Richfield Company, 2009a).

The monitoring conducted from 2000 through 2008 followed the objectives contained in the 2000 Anaconda Regional Water, Waste, and Soils (ARWWS) Operable Unit (OU) Short-Term Groundwater Monitoring Sampling and Analysis Plan (SAP). The objectives stated in this SAP were:

1. Assess current groundwater quality in areas where water quality must comply with the appropriate standards as specified in the ROD;
2. Assess current groundwater quality in plumes in areas of concern (AOC) identified in the ROD;
3. Monitor effectiveness of Remedial Actions (RAs) including reclamation and natural attenuation;
4. Evaluate changes in hydrologic conditions since the remedial investigation (RI) that may affect design of a long-term groundwater monitoring plan; and
5. For wells drilled in the past several years, provide data that will supplement the RI for developing a long-term groundwater monitoring plan.

To make the transition from the Short-Term Program to the Long-Term Program, Addendum No. 1 was prepared for the Short-Term SAP. The objectives of SAP Addendum No. 1 (Atlantic Richfield Company, 2009b) were:

1. Modify the current monitoring well network (Short-Term Program, 2000) to be more consistent with the anticipated LTGWMP well network;
2. Add monitoring of domestic wells to the network;
3. Add installation of new monitoring wells anticipated in the LTGWMP, so that monitoring can begin in 2009; and
4. Add replacement of domestic wells that exceed action levels contained in the 2000 SAP to the established monitoring program.

The 2014 monitoring program included all monitoring sites and coincided with the U.S. Environmental Protection Agency (EPA) 5-yr site review (table 1.0-1). [EPA issued an ROD amendment in 2011 changing two wells in the South Opportunity/Yellow Ditch Area to point of compliance (POC) wells; these changes have been made in table 1.01. Changes in newly installed well names occurred also; the old and new well names are both shown on table 1.0.1.] Since 2009, the monitoring program has been conducted by the Montana Bureau of Mines and Geology (MBMG). Sample site information is contained in the MBMG online database, the Groundwater Information Center (GWIC). Information for a particular site can be accessed using the site's unique identifier, referred to as the GWIC ID. The web address for GWIC is: http://mbmggwic.mtech.edu. The 2014 monitoring program contained all wells and springs in table 1.0-1. Table 1.0-1 also contains the GWIC identifier and the sampling frequency. The sites are broken out into categories based upon Remedial Design Units (RDU) established for the ARWWS-OU.

Table 1.0-1. Summary of 2014 monitoring sites, sample frequency, and location.

Well ID	New ID	GWIC ID	Type	Purpose	New Well	Frequency[1]	Location
STUCKY RIDGE/LOST CREEK EXPANSION AREA TI ZONE							
FH-2		121004	Well	5-year Review		2 seasons each 5 years	Stucky Ridge
MW-248d		250004	Well	5-year Review		2 seasons each 5 years	Stucky Ridge
MW-248e		250031	Well	5-year Review		2 seasons each 5 years	Stucky Ridge
MW-248s		250007	Well	5-year Review		2 seasons each 5 years	Stucky Ridge
SP97-20		249915	Spring	5-year Review		1 season each 5 years	Stucky Ridge
SP98-26		249920	Spring	5-year Review		1 season each 5 years	Lost Creek Expansion Area
SP98-27		249921	Spring	5-year Review		1 season each 5 years	Lost Creek Expansion Area
SP98-28		249922	Spring	5-year Review		1 season each 5 years	Stucky Ridge
SP98-30		249923	Spring	5-year Review		1 season each 5 years	Lost Creek Expansion Area
SP98-31		249924	Spring	5-year Review		1 season each 5 years	Lost Creek Expansion Area
SP98-32		249925	Spring	5-year Review		1 season each 5 years	Stucky Ridge
SP98-34		249926	Spring	5-year Review		1 season each 5 years	Stucky Ridge
SP99-01		249930	Spring	5-year Review		1 season each 5 years	Stucky Ridge
MOUNT HAGGIN/SMELTER HILL HAA TI ZONE							
F2-BR		51388	Well	5-year Review		2 seasons each 5 years	Smelter Hill Loop Track
MW-233		138016	Well	5-year Review		2 seasons each 5 years	Smelter Hill – Mill Creek
MW-245d		249966	Well	5-year Review		2 seasons each 5 years	Weather Hill - Lost Horse Cr
MW-245e		250050	Well	5-year Review		2 seasons each 5 years	Weather Hill - Lost Horse Cr
MW-245s		250003	Well	5-year Review		2 seasons each 5 years	Weather Hill - Lost Horse Cr
MW-249d		250008	Well	5-year Review		2 seasons each 5 years	Mill Creek - Cabbage Gulch
MW-249s		250009	Well	5-year Review		2 seasons each 5 years	Mill Creek - Cabbage Gulch
MW-250d		249958	Well	5-year Review		2 seasons each 5 years	Mill Creek - Joyner Gulch
MW-250s		249957	Well	5-year Review		2 seasons each 5 years	Mill Creek - Joyner Gulch
NGP-1		250017	Well	5-year Review		2 seasons each 5 years	Mt. Haggin/Smelter Hill TI Zone
WGP-1		250053	Well	5-year Review		2 seasons each 5 years	Mt. Haggin/Smelter Hill TI Zone
SH-3		250052	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP97-12		249913	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP97-19		249914	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP97-31		249916	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP98-16		249917	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP98-20		249918	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP98-23		249919	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP98-36		249927	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP98-37		249928	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SP98-8		249929	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SST-1		249931	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SST-26		249932	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SST-29		249933	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone
SST-30		249934	Spring	5-year Review		1 season each 5 years	Mt. Haggin/Smelter Hill TI Zone

Table 1.0-1. Summary of 2014 monitoring sites, sample frequency, and location (*continued*).

Well ID	New ID	GWIC ID	Type	Purpose	New Well	Frequency[1]	Location
OPPORTUNITY PONDS/SMELTER HILL WMA							
A1-BR2		51384	Well	5-year Review		2 seasons each 5 years	Smelter Hill
A2-BR		51383	Well	5-year Review		2 seasons each 5 years	Smelter Hill
B4-BR		51382	Well	5-year Review		2 seasons each 5 years	Smelter Hill
C2-AL1		249864	Well	5-year Review		2 seasons each 5 years	Smelter Hill
D3-AL1		249866	Well	5-year Review		2 seasons each 5 years	Smelter Hill
E2-AL1		249961	Well	5-year Review		2 seasons each 5 years	Smelter Hill (northeast)
MW-210		138024	Well	5-year Review		2 seasons each 5 years	Anaconda Ponds Northwest Toe
MW-211		138028	Well	5-year Review		2 seasons each 5 years	Anaconda Ponds Northwest Toe
MW-212		**138007**	**Well**	**POC**		**Semi-Annually**	**North of Triangle Waste**
MW-214		**138065**	**Well**	**POC**		**Semi-Annually**	**North toe of Opportunity Ponds**
MW-216		**137957**	**Well**	**POC**		**Semi-Annually**	**East toe of Opportunity Ponds**
MW-218d		138013	Well	5-year Review		2 seasons each 5 years	Anaconda Ponds Middle Toe
MW-218s		138011	Well	5-year Review		2 seasons each 5 years	Anaconda Ponds Middle Toe
MW-219		138015	Well	5-year Review		2 seasons each 5 years	Anaconda Ponds Northeast Toe
MW-220		249963	Well	5-year Review		2 seasons each 5 years	Anaconda Ponds - Toe East
NW-6s	**MW-258**	**249909**	**Well**	**POC**	**2009**	**Semi-Annually**	**Anaconda Ponds - Toe East**
MW-227		138026	Well	5-year Review		2 seasons each 5 years	East corner of Smelter Hill WMA
MW-244		249795	Well	5-year Review		2 seasons each 5 years	Smelter Hill (northwest)
MW-247		249806	Well	5-year Review		2 seasons each 5 years	Smelter Hill (northwest)
MW-243		249965	Well	5-year Review		2 seasons each 5 years	Triangle Waste Area
MW-253		249847	Well	5-year Review		2 seasons each 5 years	Triangle Waste Area
MW-254		249798	Well	5-year Review		2 seasons each 5 years	Triangle Waste Area
MW-256		249851	Well	5-year Review		Semi-Annually	Triangle Waste Area
MW-26		**249793**	**Well**	**POC**		**Semi-Annually**	**Northeast toe of Opportunity Ponds**
MW-26M		**249790**	**Well**	**POC**		**Semi-Annually**	**Northeast toe of Opportunity Ponds**
MW-31		**249794**	**Well**	**5-year Review**		**semi-annual first 5 years after cover installed**	**East toe of Opportunity Ponds**
MW-31M		**249785**	**Well**	**5-year Review**		**semi-annual first 5 years after cover installed**	**East toe of Opportunity Ponds**
MW-82		**249840**	**Well**	**5-year Review**		**semi-annual first 5 years after cover installed**	**Inside East toe of Opportunity Ponds**
MW-82M		**249896**	**Well**	**5-year Review**	**2011**	**semi-annual first 5 years after cover installed**	**Inside East toe of Opportunity Ponds**
MW-85		**249843**	**Well**	**5-year Review**		**semi-annual first 5 years after cover installed**	**Interior of Opportunity Ponds**
MW-85M		**249897**	**Well**	**5-year Review**	**2011**	**semi-annual first 5 years after cover installed**	**Interior of Opportunity Ponds**
MW-90		**249844**	**Well**	**5-year Review**		**semi-annual first 5 years after cover installed**	**Interior of Opportunity Ponds**
MW-90M		**249899**	**Well**	**5-year Review**	**2011**	**semi-annual first 5 years after cover installed**	**Interior of Opportunity Ponds**
MW-10R/NW-5s	**MW-273**	**249942**	**Well**	**POC**	**2011**	**Semi-Annually**	**Opportunity Ponds South Flank**
NW-1-OPd	**MW-266**	**249901**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
NW-1-OPs	**MW-265**	**249900**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
NW-2-OPd	**MW-267**	**249903**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
NW-2-OPs	**MW-268**	**249904**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
NW-3-OPd	**MW-269**	**249905**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
NW-3-OPs	**MW-270**	**249906**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
NW-4-OPd	**MW-271**	**249907**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
NW-4-OPs	**MW-272**	**249908**	**Well**	**POC**	**2011**	**Semi-Annually**	**East toe of Opportunity Ponds**
MW-24		249791	Well	5-year Review		2 seasons each 5 years	North toe of Opportunity Ponds
MW-25		249792	Well	5-year Review		2 seasons each 5 years	North toe of Opportunity Ponds

Table 1.0-1. Summary of 2014 monitoring sites, sample frequency, and location (*continued*).

Well ID	New ID	GWIC ID	Type	Purpose	New Well	Frequency[1]	Location
OLD WORKS WMA							
IW-01		**250038**	**Well**	**Event Driven**		**Event Driven**	**NE Quarter Section 2**
IW-05		250039	Well	5-year Review		2 seasons each 5 years	NE Quarter Section 2
LF-4		249800	Well	5-year Review		2 seasons each 5 years	NW Quarter Section 1
MW-201		249804	Well	5-year Review		2 seasons each 5 years	NE Quarter Section 2
MW-204		**250041**	**Well**	**Event Driven**		**Event Driven**	**Old Works Red Sands**
MW-205		249803	Well	5-year Review		2 seasons each 5 years	NE Quarter Section 1
MW-206		**250042**	**Well**	**Event Driven**		**Event Driven**	**Section 1 west of sewer lagoons**
MW-206d		**250054**	**Well**	**Event Driven**		**Event Driven**	**Section 1 west of sewer lagoons**
MW-207		**250043**	**Well**	**POC/Event Driven**		**Semi-Annually/Event Driven**	**SE corner of Old Works WMA**
MW-208		**250044**	**Well**	**Event Driven**		**Event Driven**	**SE Quarter Section 31**
MW-209		**250045**	**Well**	**Event Driven**		**Event Driven**	**SE Quarter Section 31**
MW-213		**138022**	**Well**	**Event Driven**		**Event Driven**	**Old Works Red Sands**
MW-240		**250047**	**Well**	**Event Driven**		**Event Driven**	**SE Quarter Section 32**
MW-241		**250048**	**Well**	**Event Driven**		**Event Driven**	**SE Quarter Section 31**
MW-242		**250049**	**Well**	**Event Driven**		**Event Driven**	**West of Old Works WMA**
MW-251		**250014**	**Well**	**POC/Event Driven**		**Semi-Annually/Event Driven**	**NE corner of Old Works WMA**
MW-252		**249797**	**Well**	**POC/Event Driven**		**Semi-Annually/Event Driven**	**West of Old Works WMA**
MW-255		**250055**	**Well**	**POC/Event Driven**		**Semi-Annually/Event Driven**	**West of Old Works WMA**
MW-72		250051	Well	5-year Review		2 seasons each 5 years	SW Quarter Section 31
TI-A		249801	Well	5-year Review		2 seasons each 5 years	NW Quarter Section 2
SOUTH OPPORTUNITY/YELLOW DITCH AREA OF CONCERN							
LTW-1-SOd	**MW-263**	**249936**	**Well**	**POC**	**2009**	**Semi-Annually**	**North of Hwy. 1, NE Section 16**
LTW-1-SOs	**MW-264**	**249937**	**Well**	**POC**	**2009**	**Semi-Annually**	**North of Hwy. 1, NE Section 16**
LTW-3-SOd	**MW-261**	**249938**	**Well**	**POC**	**2009**	**Semi-Annually**	**North of Hwy. 1, Section 15**
LTW-3-SOs	**MW-262**	**249939**	**Well**	**POC**	**2009**	**Semi-Annually**	**North of Hwy. 1, Section 15**
MW-225		249940	Well	5-year Review		2 seasons each 5 years	SW Quarter Section 14
MW-232		249941	Well	5-year Review		2 seasons each 5 years	Mount Haggin Ranch
MW-231		138061	Well	5-year Review		2 seasons each 5 years	Willow Creek
MW-9 (Lab)		**138020**	**Well**	**Town of Opportunity**		**Semi-Annually**	**West of Highway 1 and Fairmont Rd.**
LTW-4-SOd	**MW-260**	**138017**	**Well**	**POC**	**2009**	**Semi-Annually**	**Section 16 - Hwy 1**
LTW-4-SOs	**MW-259**	**249898**	**Well**	**Replaced by MW-274**	**2009**	**Semi-Annually**	**Section 16 - Hwy 1**
LTW-4-SOsR	**MW-274**	**264393**	**Well**	**POC, Replaces MW-259**	**2011**	**Semi-Annually**	**Section 16 - Hwy 1**
OD-2D		249778	Well	Town of Opportunity		2 seasons each 5 years	Northeast of Opportunity
OD-2S		249799	Well	Town of Opportunity		2 seasons each 5 years	Northeast of Opportunity
OD-3D		249781	Well	Town of Opportunity		2 seasons each 5 years	East Opportunity near Willow Creek
OD-3S		249782	Well	Town of Opportunity		2 seasons each 5 years	East Opportunity near Willow Creek
WCT-27		249935	Surface expression of groundwater	Town of Opportunity		2 seasons each 5 years	South of Highway 1 at Opportunity
BLUE LAGOON AOC							
MW-235		250046	Well	5-year Review		2 seasons each 5 years	Blue Lagoon
MW-257		250015	Well	5-year Review		2 seasons each 5 years	Blue Lagoon
DUTCHMAN CREEK HIGH ARSENIC AREA							
SP-07-01		249910	Spring	5-year Review		1 season each 5 years	North Opportunity
SP-07-02		249911	Spring	5-year Review		1 season each 5 years	North Opportunity
SP-07-03		249912	Spring	5-year Review		1 season each 5 years	North Opportunity
MW-224		138068	Well	5-year Review		2 seasons each 5 years	North Opportunity
MW-230		128740	Well	5-year Review		2 seasons each 5 years	North Opportunity

1. New wells in new cover areas will be sampled semi-annually for 5 years, then semi-annually once each 5 years. New Town of Opportunity wells will be sampled semi-annually perpetually.

2.0 Historical Background

The town of Anaconda, Montana was founded by Marcus Daly on June 25, 1883 for the purpose of constructing a smelter to process ore being mined by Daly and his partners in Butte, 26 miles to the east (Morris, 1997). Daly chose this location due to the abundant supply of water from Warm Springs Creek. The mining company [Anaconda Copper Mining Company (ACM)] operated by Daly and his partners began construction of the first concentrator and smelter on the north side of Warm Springs Creek in 1883, with the facility put into operation in 1884. This facility was known as the Upper Works and consisted of the following facilities: concentrator, smelter buildings including roasters, reverberatory furnaces, long masonry flues, and two smokestacks measuring 115 and 175 ft in height (Shovers and others, 1991).

As ore production increased from ACM mines in Butte, Daly built an additional smelter in 1897, which became known as the Lower Works. The Lower Works was located 1 mi east of the Upper Works facilities, again located adjacent to Warm Springs Creek (fig. 2.0-1).

ACM continued to add facilities at both the Upper and Lower Works to handle increased ore production from its Butte mines. In 1902, ACM moved their processing facilities to the south side of Warm Springs Creek with the construction of the Washoe Reduction Works. The Washoe facility was designed so that processing facilities could expand as needed. In 1902, when it was put into operation, it had a capacity of 4,800 tons per day, producing 600,000 pounds of copper in 1908; increases in capacity led to the production of 1,000,000 pounds of copper per day in 1933 (Shovers and others, 1991). Figure 2.0-2 shows the general layout of the Washoe Reduction Works, while figure 2.0-3 is a picture of the facility from the 1950s. Figure 2.0-4 shows the locations of the three smelter facilities and their proximity to the town of Anaconda.

Byproducts of the smelting process were slimes, slag, tailings, and airborne emissions of gases from the smelter stack. Tailings were sluiced to a series of ponds north of the town of Opportunity (which became known as the Opportunity Ponds), and beginning in 1947, to two ponds just below the concentrator, known as the Anaconda Ponds (Shovers and others, 1991).

Residual arsenic was one of the primary waste byproducts, with large concentrations emitted from the stack. Originally, the Washoe Reduction Works had four small stacks, which were replaced by one larger 300-ft stack in 1904. This stack was replaced by a 585-ft stack in 1918. In addition to the new stack, which measured 75 ft at the base and 65 ft at the top, ACM constructed an electrostatic plant at the base of the stack to more efficiently remove flue dust and the associated arsenic from leaving the stack. According to Shovers and others (1991), this plant removed 90 percent of the dust leaving the plant. ACM continued to make modifications to the smelter operations through the 1970s until the plant closed in 1980.

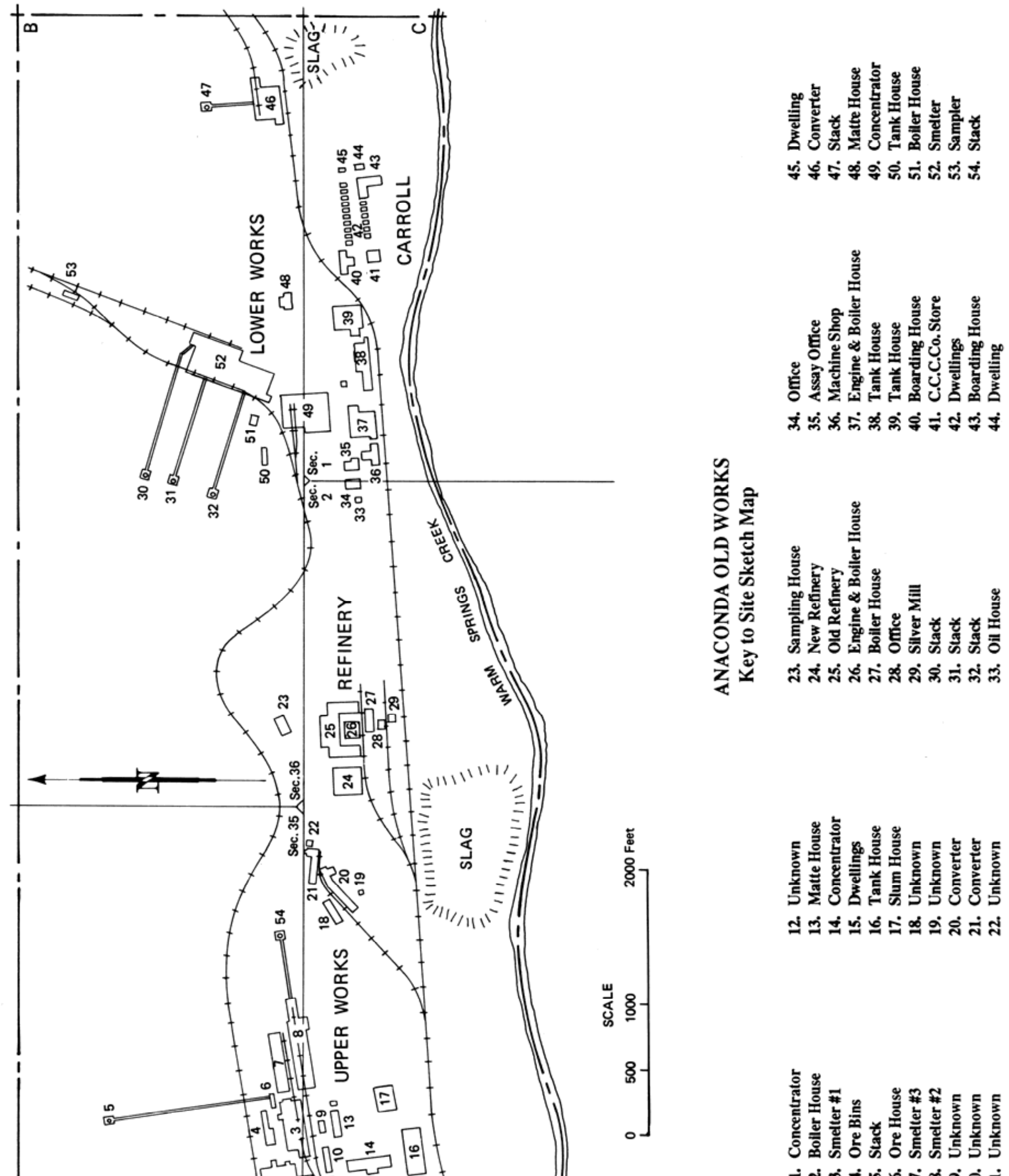


Figure 2.0-1. Location of Upper Works and Lower Works facilities that make up the Old Works Smelter Complex. Modified with permission from Shovers and others, 1991.

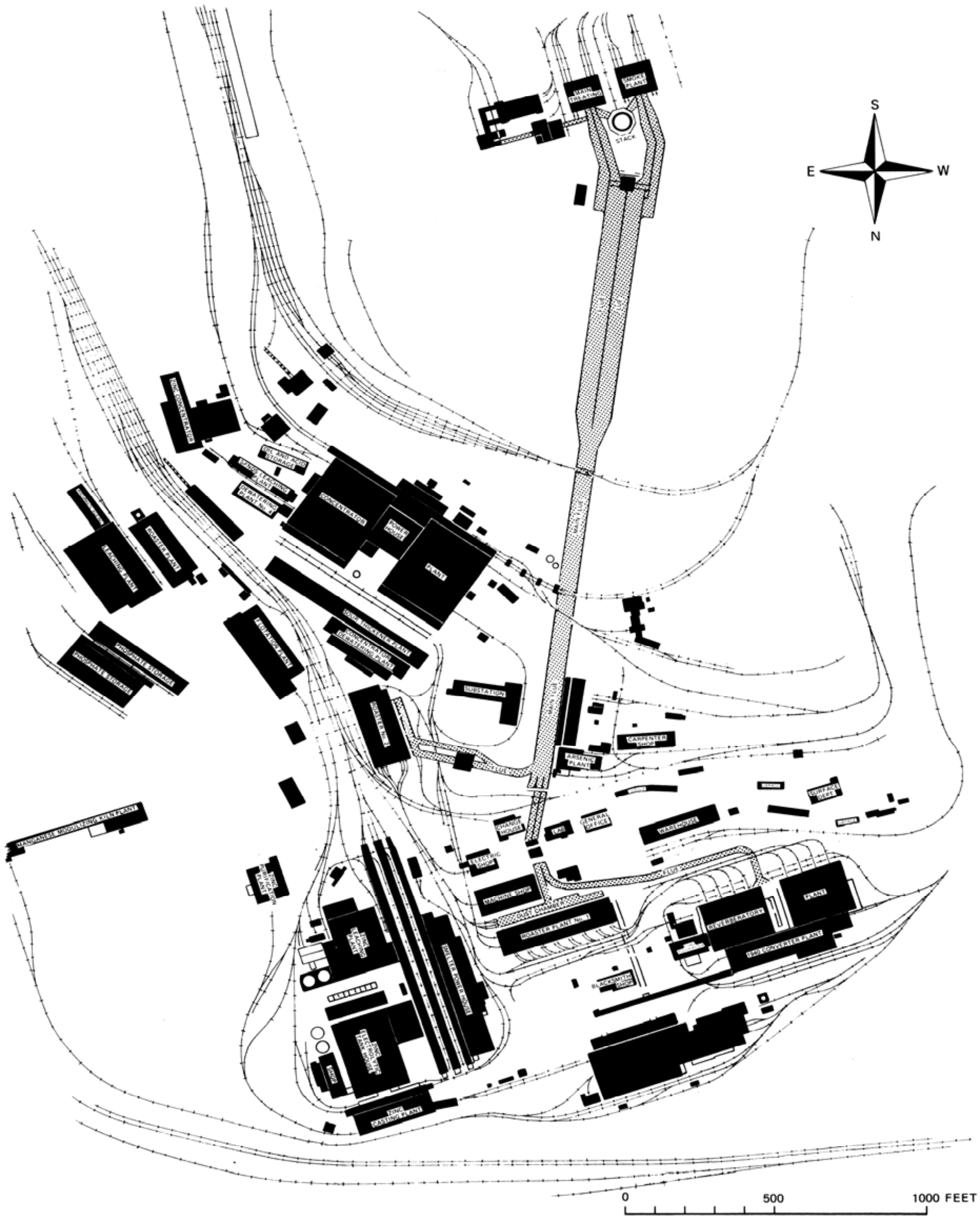


Figure 2.0-2. General layout of the Washoe Smelter facilities. Modified with permission from Shovers and others, 1991.

Figure 2.0-3. View looking south towards the Washoe Smelter and associated facilities, circa 1950s. Photo courtesy of the World Museum of Mining.

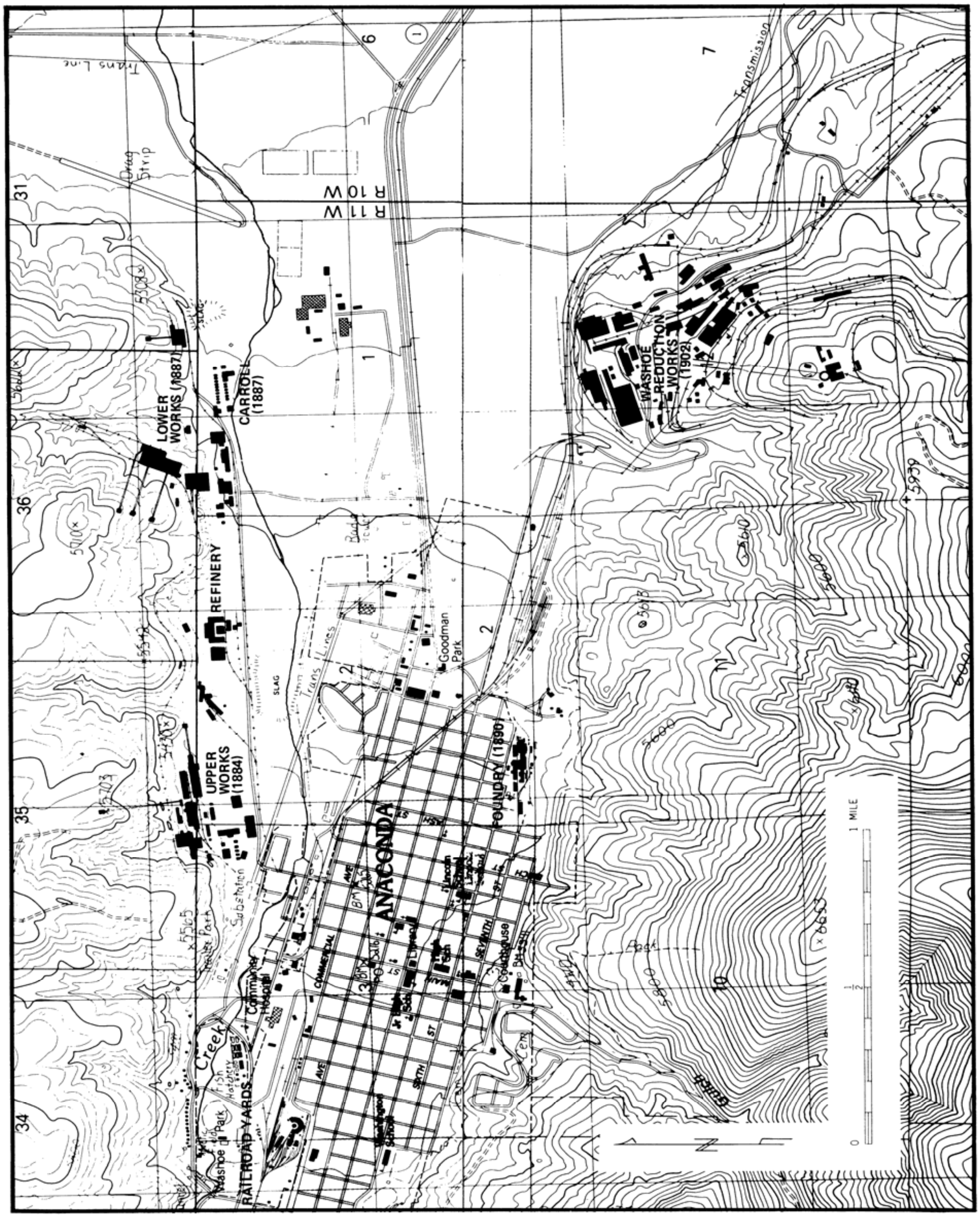


Figure 2.0-4. Locations of Upper Works, Lower Works, and Washoe Smelter in relationship to the town of Anaconda. Modified with permission from Shovers and others, 1991.

Areas around the Washoe Reduction Works and other historic smelting facilities were placed on the EPA's National Priorities List (NPL) in September 1983. Since that time, AR has been actively involved with EPA and the Montana Department of Environmental Quality (DEQ) in conducting investigations to determine the extent of contamination from historic smelting and associated processes. Numerous response actions have taken place to limit exposure, i.e., the 1984 and 1986 Administrative Orders on Consent relating to the demolition of the Washoe Reduction Works and Mill Creek resident relocation activities (U.S. EPA 1984, 1986). Upon completion of numerous investigations and several RI and Feasibility Study Reports, EPA issued the ROD for the Anaconda Regional Water, Waste, and Soils Operable Unit, Anaconda Smelter NPL site, in 1998 (U.S. EPA, 1998). The ROD contained water-quality standards for groundwater and surface-water sites. Groundwater standards are based upon the dissolved portion of the sample, while surface-water standards are based upon the total recoverable concentration. EPA, in consultation and concurrence with DEQ, released a Record of Decision Amendment in September 2011. Contained in the amendment were changes to the water-quality standards contained in the 1998 ROD, bringing ARWWS site contaminant of concern (COC) standards into compliance with current Montana DEQ-7 standards (Montana DEQ, 2012).

Groundwater COC standards listed in the 1998 ROD and 2011 ROD Amendment, based upon Circular DEQ-7 limits, are shown below:

COC	**DEQ-7 Standard Drinking Water (1998 ROD)**	**DEQ-7 Standard Drinking Water (2011 ROD Amendment)**
Arsenic	18 μg/L	10 μg/L
Beryllium	4 μg/L	4 μg/L
Cadmium	5 μg/L	5 μg/L
Copper	1,000 μg/L	1,000 μg/L
Iron	300 μg/L	NA
Lead	15 μg/L	15 μg/L
Zinc	5,000 μg/L	2,000 μg/L

The 2011 ROD Amendment arsenic and zinc standards are more stringent than those contained in the 1998 ROD; the arsenic human health standard was waived for groundwater within Technical Impracticability (TI) zones. The iron standard is no longer applicable.

The 1998 ROD surface-water COCs and their respective water-quality standards were also modified in the 2011 ROD Amendment. The arsenic human health standard was waived for surface water within TI zones identified in the ROD amendment. The Aquatic Life-Acute and Aquatic Life-Chronic standards remain performance standards for surface-water TI reaches (U.S. EPA, September 2011). The 1998 and 2011 COC surface-water human health standards are shown below:

COC	DEQ-7 Standard Surface-Water (1998 ROD) Human Health Standard	DEQ-7 Standard Surface-Water (2011 ROD Amendment) Human Health Standard
Arsenic	18 µg/L	10 µg/L
Beryllium	4 µg/L	4 µg/L
Cadmium	1.1 µg/L	5 µg/L
Copper	12.0 µg/L	1,000 µg/L
Iron	300 µg /L	300 µg/L
Lead	3.2 µg/L	15 µg/L
Zinc	100 µg/L	2,000 µg/L

The DEQ-7 Aquatic Life standards contained in the 2011 ROD Amendment are listed below:

COC	DEQ-7 Standard Surface-Water Aquatic Life-Acute Standard	DEQ-7 Standard Surface-Water Aquatic Life-Chronic Standard
Arsenic	340 µg/L	150 µg/L
Beryllium	None	None
Cadmium[1]	2.13 µg/L	0.27 µg/L
Copper[1]	14.0 µg/L	9.33 µg/L
Iron	none	1,000 µg/L
Lead[1]	81.65 µg/L	3.18 µg/L
Zinc[1]	120 µg/L	110 µg/L

[1]Cadmium, copper, lead, and zinc concentrations are calculated at a hardness of 100 mg/L $CaCO_3$ equivalent.

Water-quality concentrations for surface-water COCs are based upon total recoverable concentration.

3.0 Description of 2014 Monitoring Program

The Monitoring Program described in the STGWM- SAP Addendum No. 1 (Atlantic Richfield, 2009b) consisted of the following components:

1. Groundwater-Well Monitoring;
2. Groundwater-Expression (Springs) Sampling; and
3. Domestic Well Program.

Table 1.0-1 contains the groundwater monitoring wells and groundwater expression sites and their sampling frequency. Plate 1 shows the locations of the 2014 monitoring sites. Prior to water-quality sampling, a synoptic series of water levels were measured from each well location. Plates 2 and 3 show groundwater contours and flow direction based upon water-level monitoring during each sampling event; plate 2 is based on information from the low-flow event, while plate 3 is based on the high-flow event monitoring.

The following field parameters were measured during monitoring well sampling:

1. water level
2. pH
3. specific conductance (SC)
4. temperature
5. oxidation-reduction potential (ORP)
6. dissolved oxygen (DO)

Water-quality samples were collected from monitoring wells during both low-water and high-water conditions, with the exception of 10 wells that were sampled when groundwater levels exceeded a pre-determined elevation. Groundwater expression (spring) samples were collected during high-water sampling only. Water-quality samples were submitted to the MBMG analytical lab for analysis. Sample results from 2014 activities and previous sampling events are available through GWIC.

Low-water samples were timed to be collected during the period of lowest water levels, while high-water samples were collected during periods of peak, or maximum water levels. Based upon historic water-level data, it was determined that low-water conditions occur from February through April, while high-water conditions occur from June through August (Atlantic Richfield Company, 2009b).

The 2014 sampling program coincided with the 5-year program review cycle, meaning that water-quality samples were collected from all the sites listed in table 1.0-1.

4.0 Monitoring Program—2014 5-Year Review

The 2014 groundwater sites were divided into seven different geographical areas. The seven areas and the number of wells and springs in each area are shown in table 4.0-1. The geographic areas correspond to RDU's Waste Management Areas (WMAs) or Technical Impracticability (TI) Zones. In contrast to the groundwater monitoring well program, not all of the ARWWS subunits contain spring sample sites. Sample site WCT-27, which is a tributary of Willow Creek, was sampled twice as described in the SAP Addendum No. 1. Monitoring results are discussed based upon their geographical area.

Table 4.0-1. Breakdown of monitoring wells and springs by geographic area.

Geographic Area	No. of Wells	No. of Springs
Stuckey Ridge/Lost Creek Expansion Area TI Zone	4	9
Mount Haggin/Smelter Hill High Arsenic Area (HAA) TI Zone	11	14
Opportunity Ponds/Smelter Hill WMA	44	0
Old Works WMA	20	0
South Opportunity/ Yellow Ditch Area of Concern (AOC)	14	1
Blue Lagoon AOC	2	0
Dutchman Creek HAA	2	3
Total Number	97	27

4.1 Stuckey Ridge/Lost Creek Expansion Area TI Zone

The Stuckey Ridge/Lost Creek Expansion Area TI Zone encompasses approximately 10 mi^2 and is located primarily within the Remedial Design Unit 1 (RDU-1) boundary. It contains four monitoring wells and nine springs (fig. 4.1-1). One well is located in Anaconda's West Valley and a nested group of three wells is located on Stuckey Ridge. Table 4.1-1 lists well information and water-quality COC for monitoring wells. Arsenic is the only COC for the springs. Physical parameters and water-quality samples were collected from monitoring wells during both low- and high-water sampling events, while water-quality samples were collected from springs during the high-water sampling event only. The flow rate of the spring was measured when possible.

Table 4.1-1. Stuckey Ridge/Lost Creek Expansion Area TI Zone monitoring-well summary and water-quality analytes for 2014 activities.

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Water-Quality Analytes
FH-2	121004	18	7–17	As, Ca, Mg, Na, K, Fe, HCO_3, CO_3, Cl, SO_4, pH, SC, Hardness, TDS
MW-248S	250007	57	34–54	As, Ca, Mg, Na, K, Fe, HCO_3, CO_3, Cl, SO_4, pH, SC, Hardness, TDS
MW-248D	250004	115	90–110	As, Ca, Mg, Na, K, Fe, HCO_3, CO_3, Cl, SO_4, pH, SC, Hardness, TDS
MW-248E	250031	183	160–180	As, Ca, Mg, Na, K, Fe, HCO_3, CO_3, Cl, SO_4, pH, SC, Hardness, TDS

4.1.1 Water-Quality Results

Arsenic is the principal COC for this group of wells; however, the 5-yr review list was expanded to include all the analytes shown in table 4.1-1. A summary of water-quality results for monitoring wells is contained in table 4.1-2, and complete analytical results are contained in appendix A.

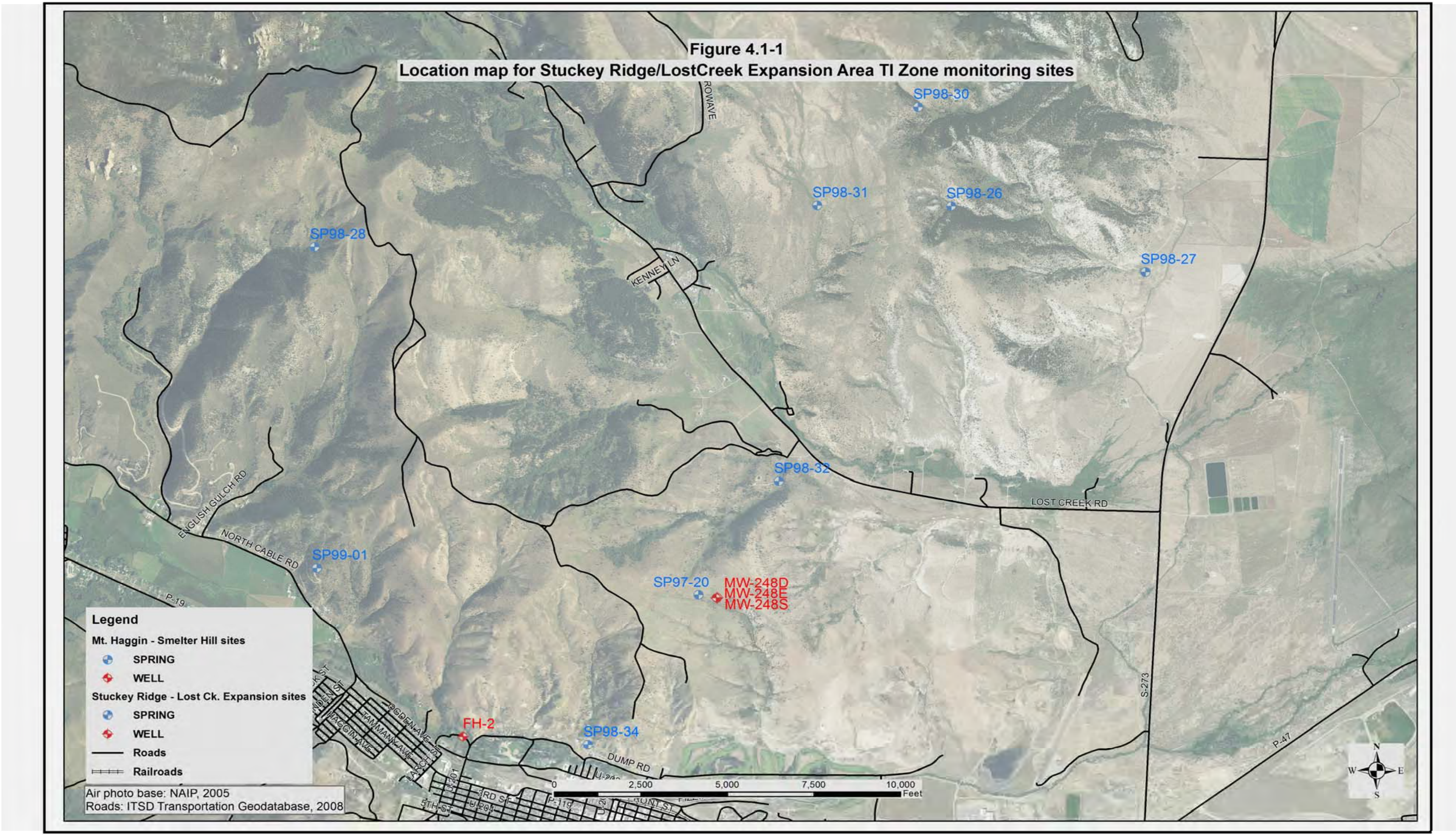


Figure 4.1-1. Location map for Stuckey Ridge/Lost Creek Expansion Area TI Zone monitoring sites.

Table 4.1-2. Water-quality summary for Stuckey Ridge/Lost Creek Expansion Area TI Zone.

Well ID	GWIC ID	Screen Interval (ft)	Water Type	Arsenic 2014 Low Water (µg/L)	Arsenic 2014 High Water (µg/L)	Arsenic Long-Term Average	Comment
FH-2	121004	7–17	$Ca\text{-}HCO_3$	11.8	11.0	12.82	As exceeded DEQ-7 STD; seasonal variation; has slight downward trend.
MW-248S	250007	34–54	$Ca\text{-}HCO_3\text{-}SO_4$	1.23	1.27	1.37	Minor variations since fall 2000; below DEQ-7 STD.
MW-248D	250004	90–110	$Na\text{-}HCO_3$	3.74	2.71	10.12	Mean As exceeds DEQ-7 STD; long-term trend downward.
MW-248E	250031	160–180	$Na\text{-}HCO_3$	1.12	0.82	4.36	As trend variable.

Well FH-2 is a shallow well (18 ft deep) located on the south side of Warm Springs Creek and the west end of Washoe Park (fig. 4.1-1). It is completed in valley-fill coarse-grain material. The primary COC for this site is arsenic, which exceeded concentration levels contained in Circular DEQ-7, Numeric Water-Quality Standards, 2008. Figure 4.1-2 shows arsenic concentrations over time, which appear to have a slight downward trend since 2000. Samples were collected semi-annually from 1991 to 1993 and from 2000 through 2009; current sampling schedule is during 5-yr review. None of the other 5-yr review COCs exceeded DEQ-7 standards.

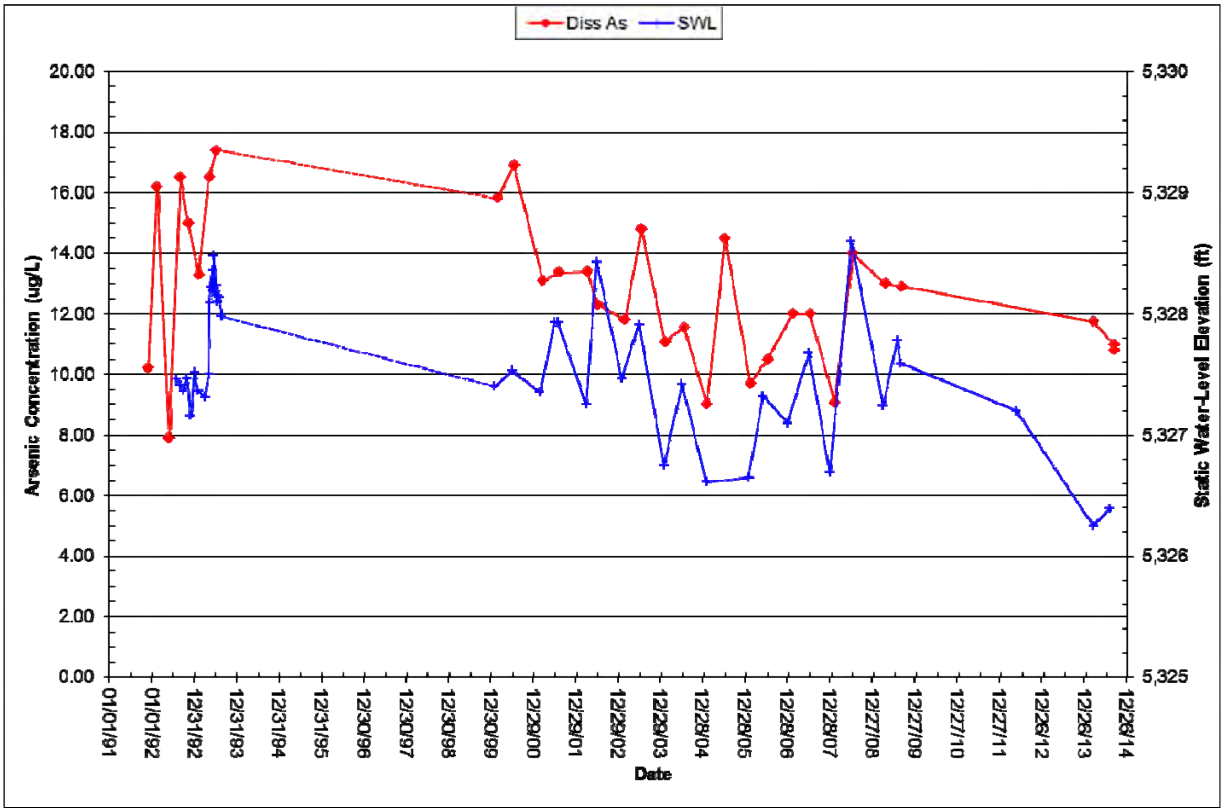


Figure 4.1-2. Arsenic concentration versus static water-level over time, well FH-2.

A group of three wells, each well completed at a different depth in the bedrock aquifer, was installed at the MW-248 site. MW-248S is the shallowest of the three wells (57 ft deep). Arsenic concentrations have been very consistent over time and were well below the DEQ-7 standard (fig. 4.1-3); all other 5-yr review COCs are also below DEQ-7 standards. Samples were collected annually in 1997 and 1998 and semi-annually from 2000 through 2009, with the exception of 2007, when only one sample was collected. Current sample schedule is during the 5-yr review.

Well MW-248D is the intermediate-depth well (115 ft deep). Arsenic concentrations have decreased considerably over time from a high of 28.9 micrograms per liter (µg/L) in 1997 to a low of 2.7 µg/L in the high-water 2014 sample (fig. 4.1-4). The arsenic concentrations in the 2014 5-yr review samples were below the DEQ-7 standard; however, the long-term average (10.12) is just above the DEQ-7 standard (table 4.1-2). Annual samples were collected in 1997 and 1998. Semi-annual samples were collected from 2000 through 2006 and again in 2009. No samples were collected in 2007 or 2008 due to poor recovery in the well when purged for sampling. Current sample schedule is during the 5-yr review.

Well MW-248E is the deepest of the three wells (183 ft deep) at this site. Arsenic concentrations have decreased over time, from a high of 13.5 µg/L in 1999, when the well was first sampled, to 0.82 µg/L in the 2014 high-water sample (fig. 4.1-5). The long-term arsenic concentration and the concentrations in the 2014 5-yr review samples are below the DEQ-7 standard. Samples were collected once in 1999 and semi-annually from 2000 through 2006. Only one sample was collected in 2007, while semi-annual samples were collected in 2008–2009. Samples are currently collected twice per year to coincide with the 5-yr sampling event.

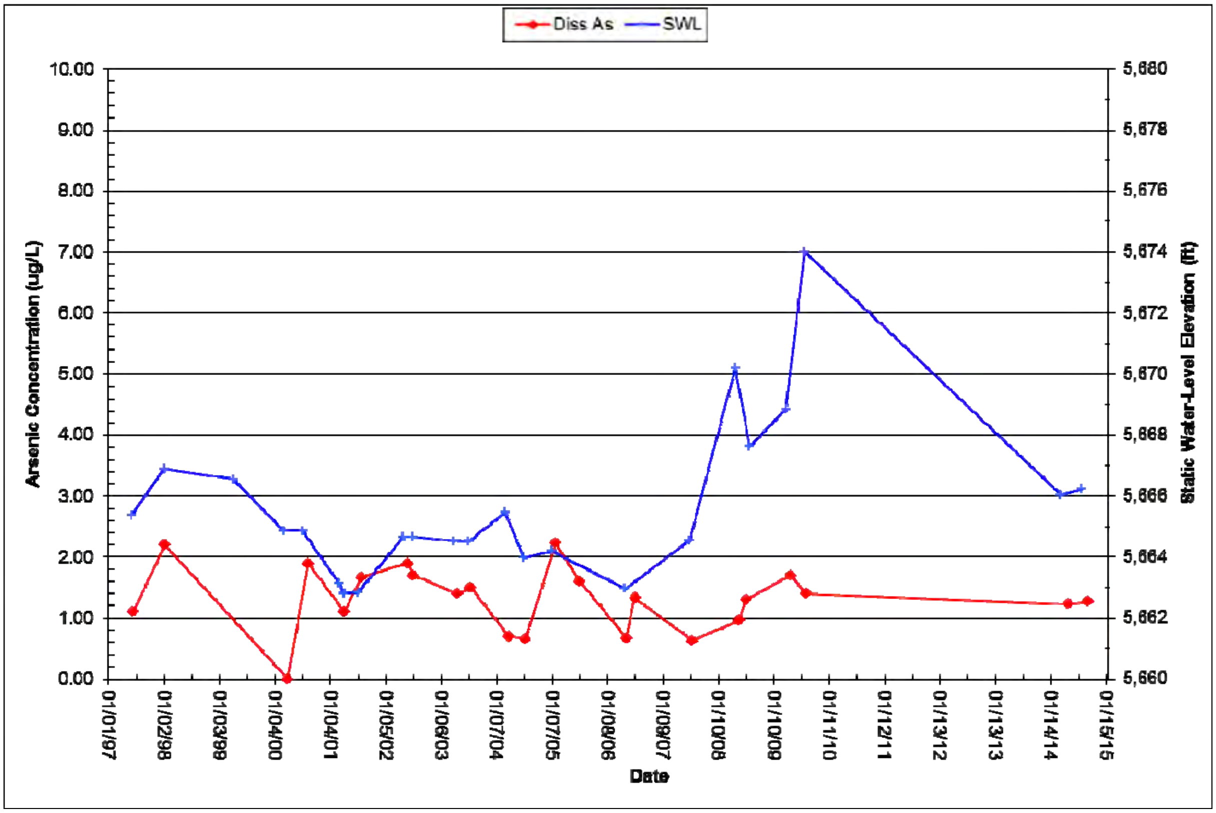


Figure 4.1-3. Well MW-248S arsenic concentrations and static water levels over time.

Figure 4.1-4. Well MW-248D arsenic concentrations and static water levels over time.

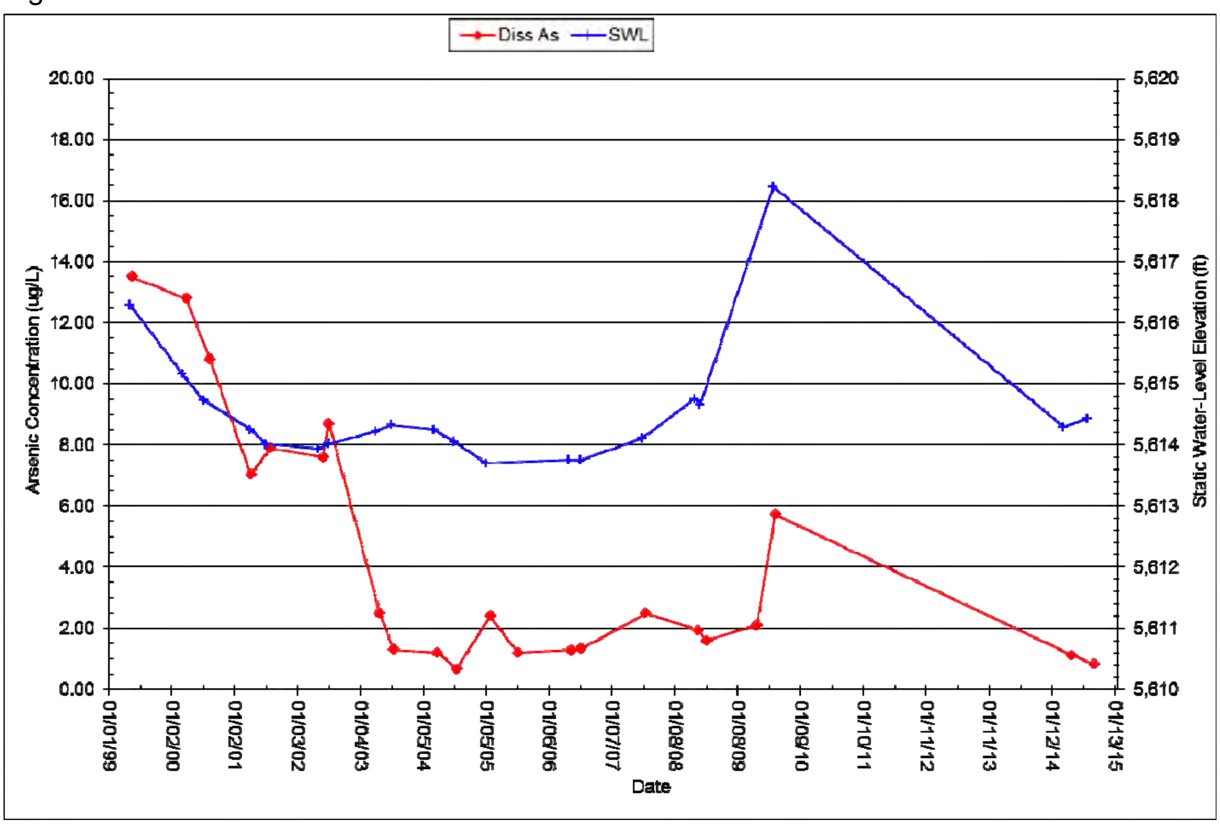


Figure 4.1-5. Well MW-248E arsenic concentrations and static water levels over time.

Arsenic concentrations for the nested MW-248 wells are shown in figure 4.1-6 for comparison purposes. The decreasing trends discussed above are apparent in wells MW-248D and MW-248E. The highest concentrations have occurred in the middle completion well (115 ft); however, the 2014 high-water concentrations in the shallow and deep zones were similar.

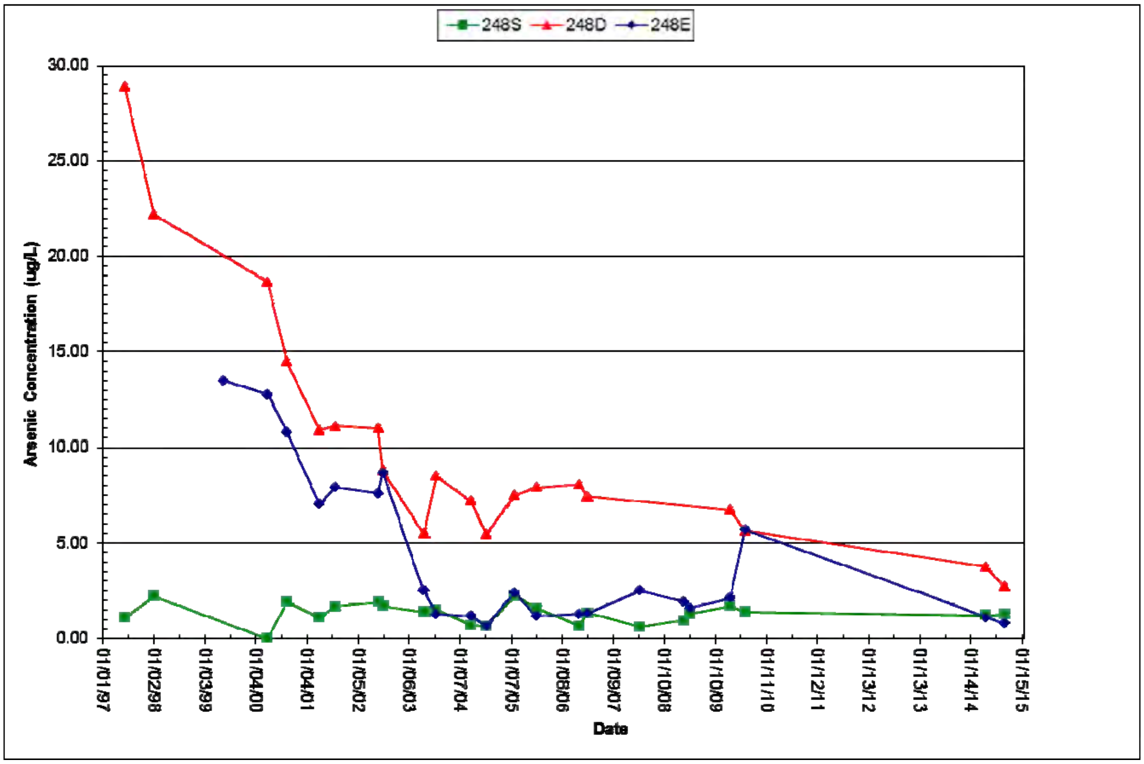


Figure 4.1-6. A comparison of arsenic concentrations over time for the MW-248 nested wells.

4.1.2 Groundwater-Level Observations

Warm Springs Creek and Lost Creek are the two major hydrologic features in this area. Warm Springs Creek forms the southern boundary of this site, while Lost Creek forms the northern boundary. Plates 2 and 3 show the general groundwater flow direction (southwest to northeast) for the spring low-water and summer high-water sampling events, respectively. The static water levels (depth to water) were measured prior to the collection of water-quality samples during each sample event and are shown in figures 4.1-7 and 4.1-8 for the four wells within this area. A summary of the aquifer each well is completed in and net water-level changes are contained in table 4.1-3.

Well FH-2 is a shallow alluvial well located on the west end of Washoe Park and adjacent to Warm Springs Creek. It has seasonal variations relating to changes in stream stage. Over the 23-yr period of monitoring, water levels have a net decline of -0.15 ft (fig. 4.1-7).

Table 4.1-3. Summary of Stuckey Ridge/Lost Creek Expansion Area TI Zone monitoring well aquifer material and net water-level change.

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Aquifer	Net Water-Level Change (ft)
FH-2	121004	18	7–17	Valley Fill Coarse	-0.15
MW-248S	250007	57	34–54	Bedrock	2.65
MW-248D	250004	115	90–110	Bedrock	2.90
MW-248E	250031	183	160–180	Bedrock	0.99

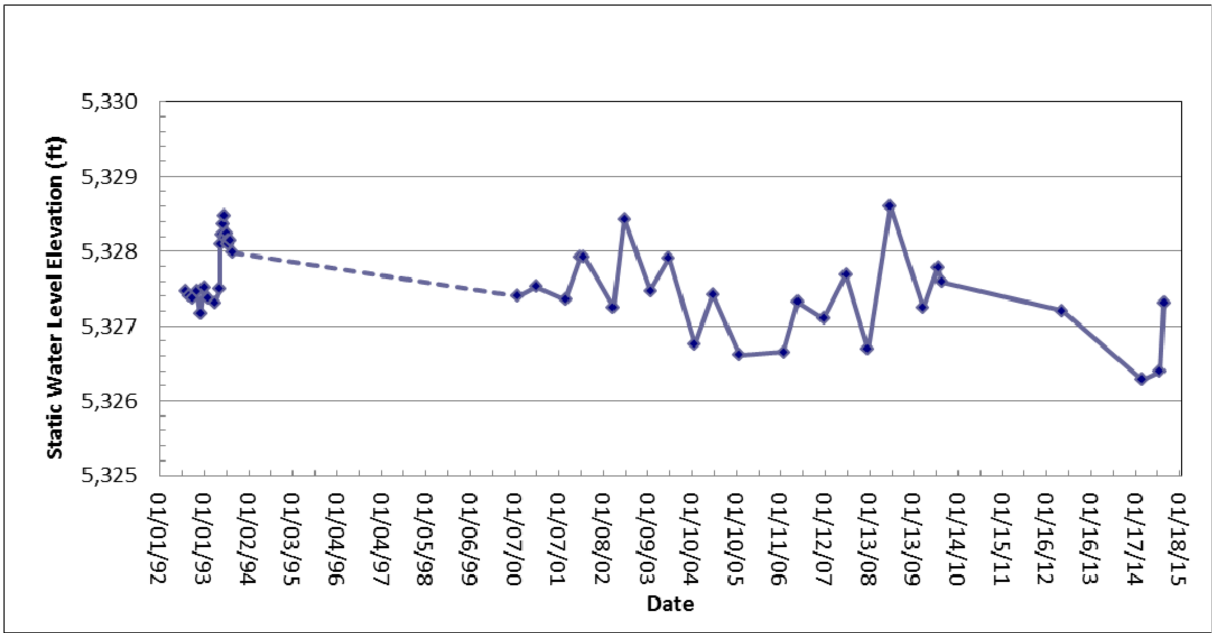


Figure 4.1-7. Hydrograph for shallow well FH-2, located in Washoe Park.

The MW-248 series monitoring wells located on Stuckey Ridge are completed in the bedrock aquifer, which has low permeability (table 4.1-3). Water levels in the Stuckey Ridge wells declined slightly between 1998 and 2007 before rising in 2008, 2009, and 2014. Water-level changes varied between a decline of 0.86 ft and a rise of 1.98 ft in these three wells in 2014. All three wells have a net water-level increase, varying between 0.9 and 2.9 ft for the period of record. Water-level elevations are highest in the shallow well (fig. 4.1-8), reflecting a downward gradient.

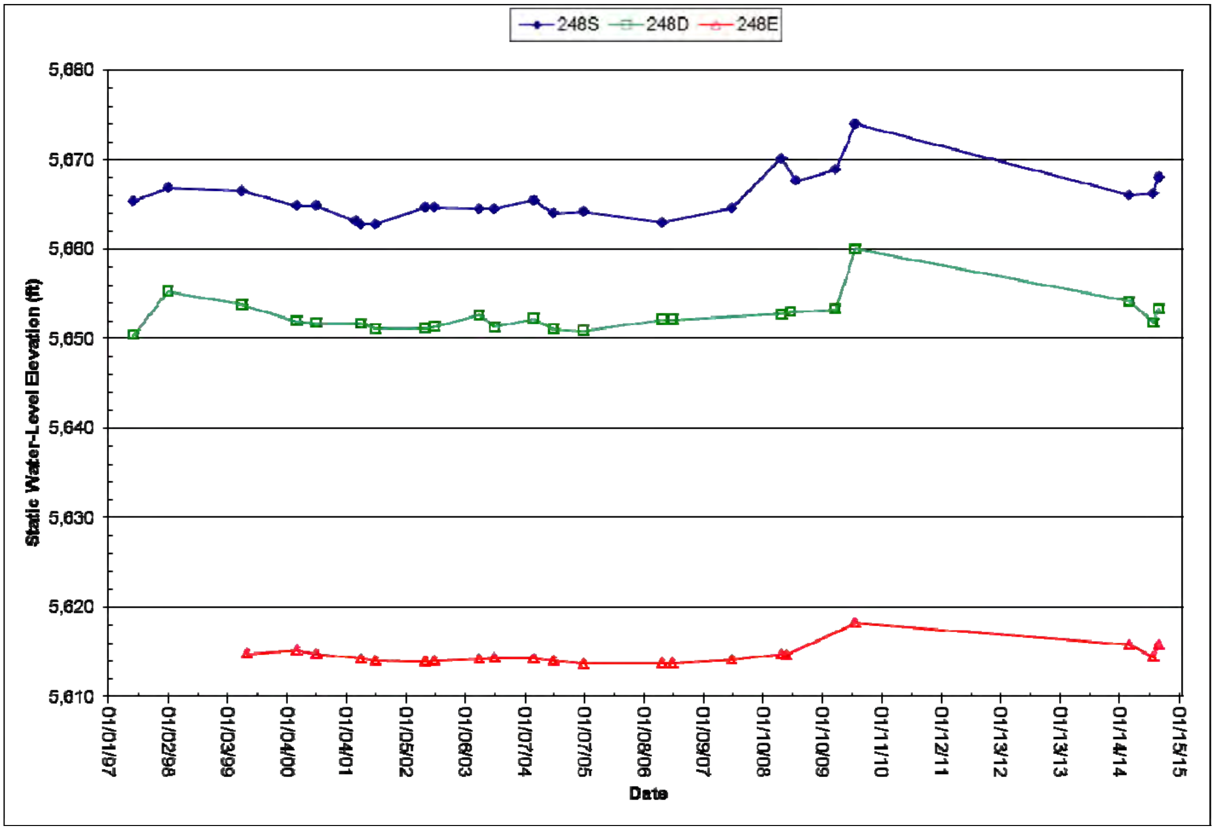


Figure 4.1-8. Hydrographs for nested bedrock wells (MW-248 series) located on Stuckey Ridge.

4.1.3 Spring Monitoring and Water-Quality Results

The Stuckey Ridge/Lost Creek Expansion Area T1 Zone contains nine springs (fig. 4.1-1). Water samples for dissolved arsenic concentrations were collected during mid- to late July and are summarized in table 4.1-4; results of previous sampling events are also shown. Arsenic concentrations ranged from 7.5 µg/L to 131 µg/L, with concentrations exceeding the DEQ-7 standard of 10 µg/L in six of the nine 2014 samples.

The lowest arsenic concentrations occurred in springs farther to the north, northeast, and northwest, while springs within the central and southern portion of the TI Zone exhibited the highest arsenic concentrations (fig. 4.1-1). The highest arsenic concentrations occurred at site SP97-20 (131 µg/L), which is upgradient of monitoring well group MW-248 (s, d, e). The arsenic concentration in the spring is over 10 times higher than concentrations in the monitoring wells during the high-water sample event and is over 12 times the highest long-term average concentrations for these wells. Arsenic concentrations in the other 2014 spring samples were similar to slightly lower to the 2009 concentrations at most sites, and were comparable to previous samples collected in 1998. Flow rates were very low, ranging from 0.25 gallons per minute (gpm) to 5 gpm.

Table 4.1-4. Summary of water-quality conditions for Stuckey Ridge/Lost Creek spring sites.

Station ID	GWIC ID	Date Sampled	Time	Flow (gpm)	Field pH	2014 As (µg/L)	2009 As (µg/L)	1998 As (µg/L)	1997 As (µg/L)
SP97-20	249915	7/21/14	12:23	NA	6.83	131	285	35.6	95.4
SP98-26	249920	7/22/14	13:30	0.40	7.49	20.8	18.7	12.5	NA
SP98-27	249921	7/23/14	14:25	<1	7.98	19.0	30.2	15.5	NA
SP98-28	249922	7/24/14	14:43	1.50	7.06	9.0	4.87	10.3	NA
SP98-30	249923	7/23/14	11:35	0.60	7.05	12.6	8.97	6.75	NA
SP98-31	249924	7/22/14	11:55	0.90	7.70	7.5	3.58	6.70	NA
SP98-32	249925	7/21/14	14:06	0.50	6.89	24.5	38.4	44.7	NA
SP98-34	249926	7/10/14	15:35	5.00	7.71	17.0	12.7	24.0	NA
SP99-01	249930	7/18/14	14:40	0.25	6.56	8.1	18.6	NA	NA

4.2 Mount Haggin/Smelter Hill HAA/TI Zone

The Mount Haggin/Smelter Hill High Arsenic Area/Technical Impracticability (HAA/TI) Zone encompasses 35 mi^2 and is composed of Smelter Hill, a portion of Aspen Hills, and a portion of the Mount Haggin Wildlife Management Area. It contains 11 monitoring wells and 14 springs (fig. 4.2-1). Three of the monitoring wells are nested groups.

Physical parameters and water-quality samples were collected from monitoring wells during both low- and high-water sampling events, while water-quality samples were collected from springs during the high-water sampling event only. Appendix B contains water-quality results from the 2014 sampling events. The flow rate of the springs was measured when possible.

4.2.1 Water-Quality Results

Arsenic is the main COC for this group of wells, with the 5-yr review sampling containing an expanded list of analytes (table 4.2-1), similar to the Stuckey Ridge/Lost Creek group of wells. A summary of water-quality conditions and 2014 arsenic concentrations is contained in table 4.2-2.

Well F2-BR is a moderately deep well (94 ft deep), completed in the bedrock aquifer, and is located on the east side of Smelter Hill in the Mill Creek drainage (fig. 4.2-1). The long-term average arsenic concentration and both the 5-yr low- and high-water concentrations were below the DEQ-7 standard (fig. 4.2-2). None of the other 5-yr review COCs exceeded DEQ-7 standards. Samples were first collected in 1991 and were collected three times per year during 1992 and 1993. Samples were collected twice per year from 2000 to 2009; samples were collected twice during 2014.

Well MW-233 is located northeast of well F2-BR adjacent to Mill Creek and is considered to be a shallow well (table 4.2-1), with a total depth of 19 ft, completed in the coarse valley-fill material. The 5-yr low-water sample was below the DEQ-7 standard for arsenic; however, the high-water sample was above the DEQ-7 standard (table 4.2-2). The long-term arsenic average concentration is below the DEQ-7 standard. Arsenic concentrations over the last three sampling events have been trending upward (fig. 4.2-3). No DEQ-7 exceedances were observed in any of the other 5-yr review COCs. Samples were first collected from this well in 1992 and 1993 (five events); semi-annual sampling began in 2000 and continued through 2009; semi-annual samples were collected during 2014.

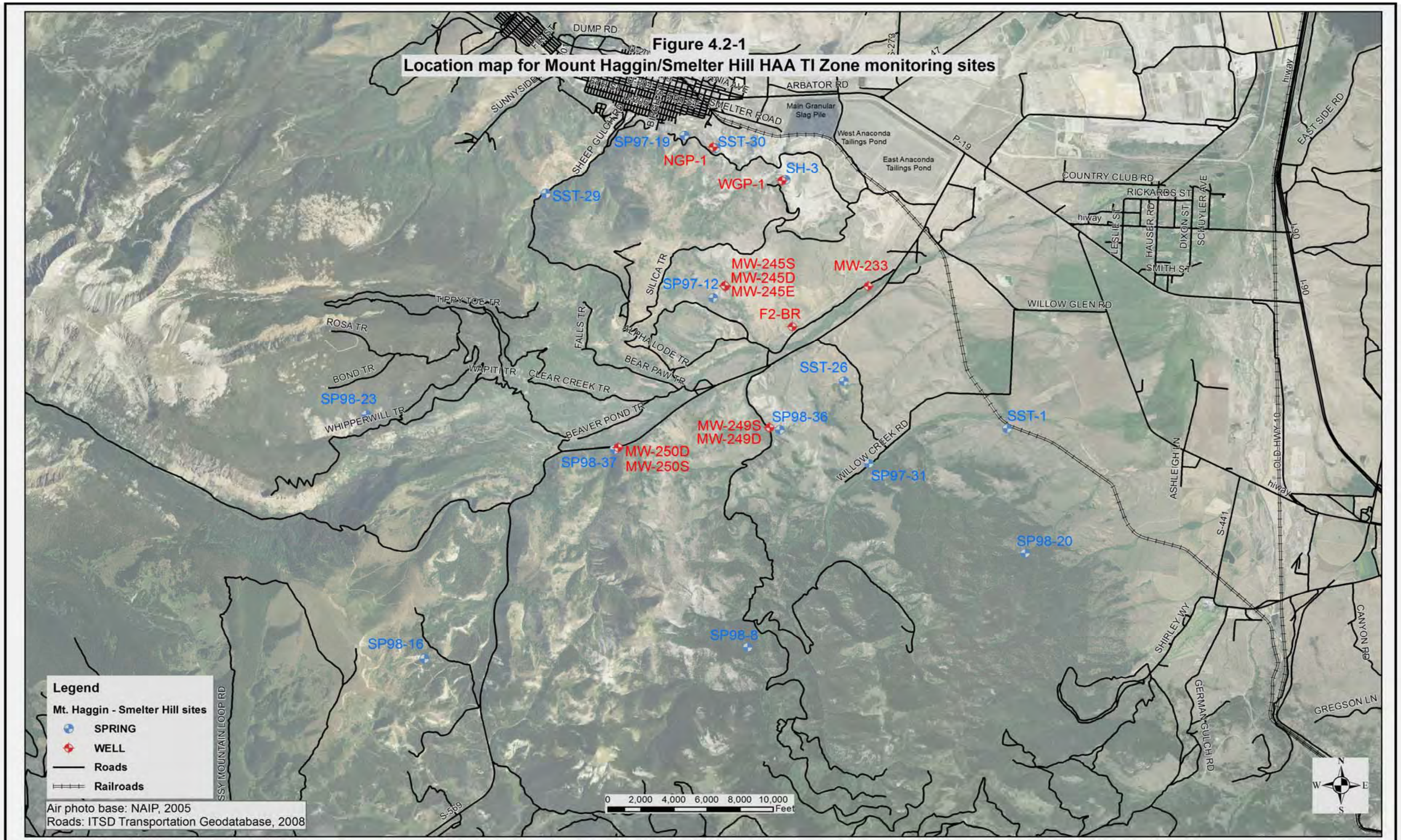


Figure 4.2-1. Location map for Mount Haggin/Smelter Hill HAA TI Zone.

Table 4.2-1. Mount Haggin/Smelter Hill HAA TI Zone monitoring well summary.

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Water-Quality Analytes
F2-BR	51388	94	71–91	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-233	138016	19.7	9.6–19	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-245S	250003	125	104–124	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-245D	249966	165	154–164	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-245E	250050	241	214–234	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-249S	250009	18.7	8.3–17.8	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-249D	250008	404	184-201	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-250S	249957	24	6.7–16.2	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-250D	249958	84	63–83	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
NGP-1	250017	17	NR	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
WGP-1	250053	NR	NR	As, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness

NR, Not reported.

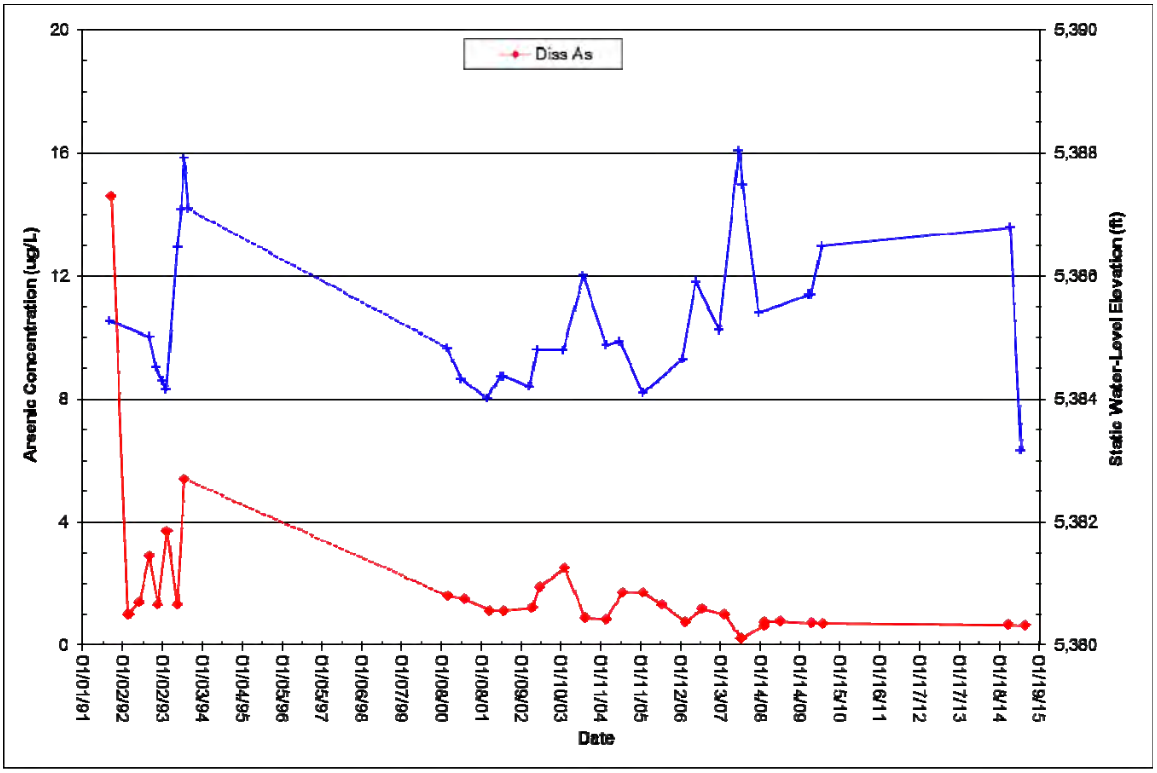


Figure 4.2-2. Well F2-BR, located on Smelter Hill: arsenic concentrations and static water levels.

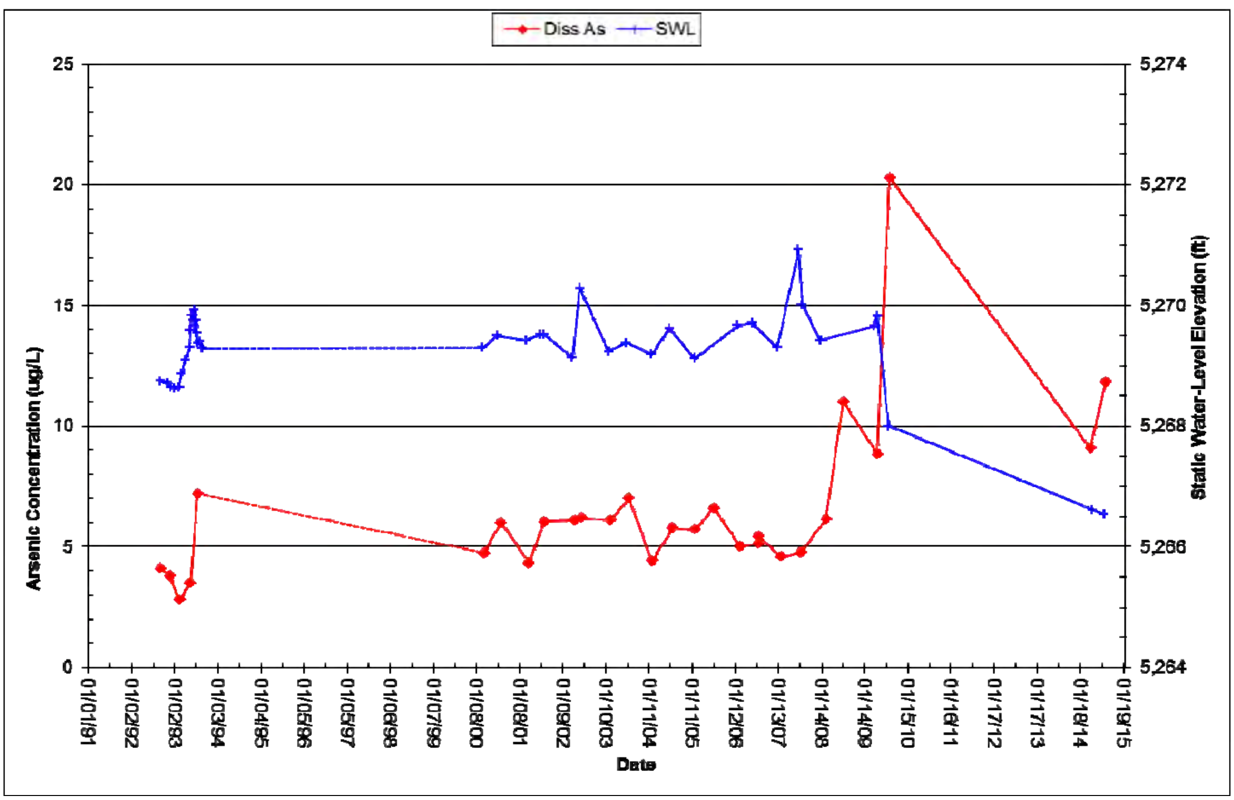


Figure 4.2-3. Well MW-233, located on Smelter Hill: arsenic concentrations and static water levels.

Table 4.2-2. Summary of water-quality conditions in Mount Haggin/Smelter Hill HAA TI Zone monitoring wells.

Well ID	GWIC ID	Screen Interval (ft)	Water Type	2014 Low-Water (µg/L)	2014 High-Water (µg/L)	Long-Term Average (µg/L)	Comment
F2-BR	51388	71–91	Ca-HCO_3	0.67	0.64	1.88	As trend downward.
MW-233	138016	9.6–13	Ca-HCO_3	9.07	11.82	6.52	As seasonal changes, trending upward.
MW-245S	250003	104–124	Na-HCO_3	1281	1009	840	As seasonal changes, variable trend. Fe exceeded DEQ-7 standards in 2014 samples.
MW-245D	249966	154–164	Na-HCO_3	12.01	8.40	19.16	First samples since 2006, poor recovery after purging. High pH water.
MW-245E	250050	214–234	Na-NO_3/HCO_3	2.82	2.81	11.52	As trend variable. High pH water.
MW-249S	250009	8.3–17.8	Ca/Na-HCO_3	64.6	81.9	45.55	As concentrations variable.
MW-249D	250008	184–201	Na-HCO_3/SO_4	5.62	3.4	6.50	As downward trend, seasonal changes. High pH water.
MW-250S	249957	6.7–16.2	Mg/Ca-HCO_3	42.8	54.1	48.29	As upward trend.
MW-250D	249958	63–83	Mg-HCO_3	1.31	1.36	1.85	As concentrations vary; usually highest during low water.
NGP-1	250017	NR	Ca/Na-HCO_3	126	148	182	As trend upward, seasonal trends vary
WGP-1	250053	NR	Ca-SO_4	510	627	287	Limited data.

NR, not reported; NS, not sampled.

Table 4.2-3. Mt. Haggin monitoring well water-level changes.

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Aquifer	Net Water-Level Change
F2-BR	51388	94	71–91	Bedrock	5.15
MW-233	138016	19.7	9.6–19	Valley Fill-Coarse	-2.21
MW-245S	250003	125	104–124	Bedrock	-8.51
MW-245D	249966	165	154–164	Bedrock	21.04
MW-245E	250050	241	214–234	Bedrock	-3.17
MW-249S	250009	18.7	8.3–17.8	Bedrock	-2.85
MW-249D	250008	404	184–201	Bedrock	94.39
MW-250S	249957	24	6.7–16.2	Valley Fill-Coarse	-1.47
MW-250D	249958	84	63–83	Bedrock	-2.20
NGP-1	250017	17	NR	NR	1.00
WGP-1	250053	23	NR	NR	-0.91

NR, not reported.

The MW-245 series of wells is located on the southeast (backside) of Smelter Hill (fig. 4.2-1). It consists of three wells completed in the bedrock aquifer at depths ranging from 125 to 241 ft (table 4.2-2). Wells MW-245D and 245E have poor yields, and water-level recovery is not always sufficient to collect water-quality samples. Due to the poor recovery rate in well MW-245D, water-quality samples were not collected from 2007–2009, semi-annual samples were collected in 2014.

Well MW-245S is the shallowest (125 ft deep) of the three wells in the group and has the poorest water quality. The long-term average arsenic concentration is over 800 (µg/L, which is 80 times the DEQ-7 standard of 10 µg/L. Both 5-yr review water samples exceeded the DEQ-7 standard, with concentrations ranging between 1000 and 1,300 µg/L. The long-term arsenic concentrations are variable (fig. 4.2-4); however, arsenic concentrations have always been elevated above the DEQ-7 standard. Iron was the only additional exceedance noted in any of the other 5-yr COCs during 2014 sampling. Water-quality samples were collected four times during 1997 and 1998; samples were collected semi-annually from 2000 to 2009. Semi-annual samples were collected in 2014 as part of the 5-yr review.

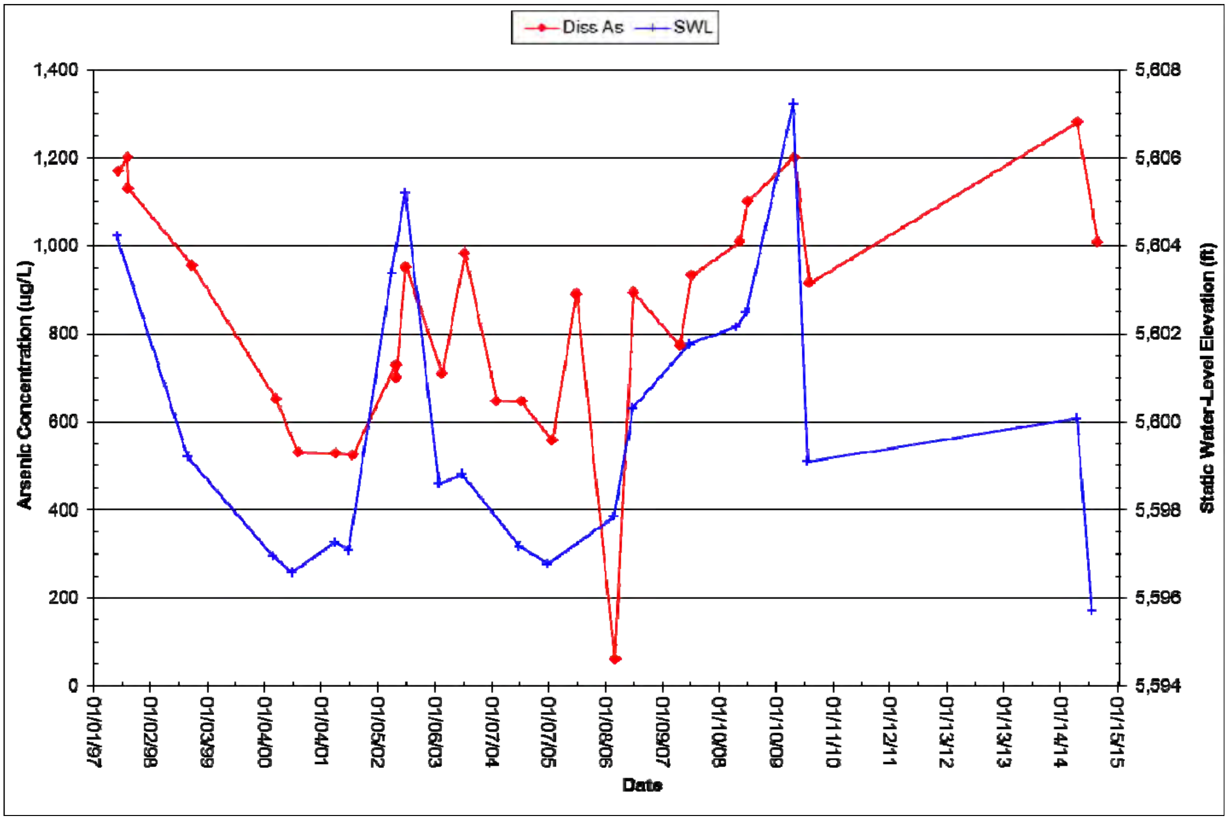


Figure 4.2-4. Well MW-245S, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

In contrast to the three previous sample events, water samples were obtained from well MW-245D during 2014 sampling activities. The long-term average arsenic concentration is almost twice the DEQ-7 standard. Concentrations had increased the past several years that samples were collected; however, the 2014 concentrations declined to previous levels (fig. 4.2-5). Water-quality samples were collected once in 1998 and semi-annually from 2000 through 2006; semi-annual samples were collected in 2014.

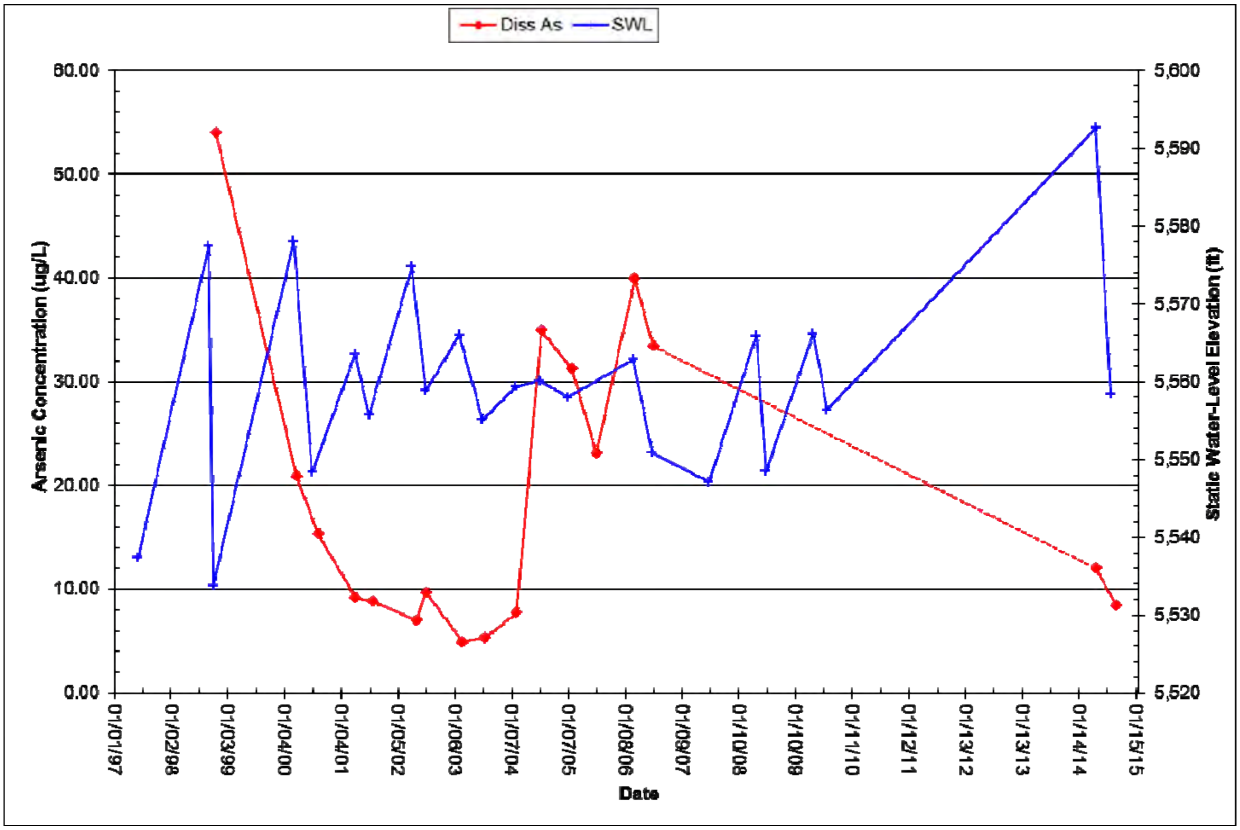


Figure 4.2-5. Well MW-245D, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

Well MW-245E is the deepest of the three wells, with a total depth of 241 ft. This well produces less than 3 gpm and is slow to recover from pumping. The long-term average arsenic concentration exceeds the DEQ-7 standard (fig. 4.2-6); both samples collected in 2014 for the 5-yr review were below the DEQ-7 standard (table 4.2-2). The long-term arsenic trend is variable, decreasing and then stabilizing for a number of years, then increasing in the latter part of 2008. Water-quality samples were collected once in 1999 and semi-annually from 2000 to 2009; semi-annual samples were collected in 2014.

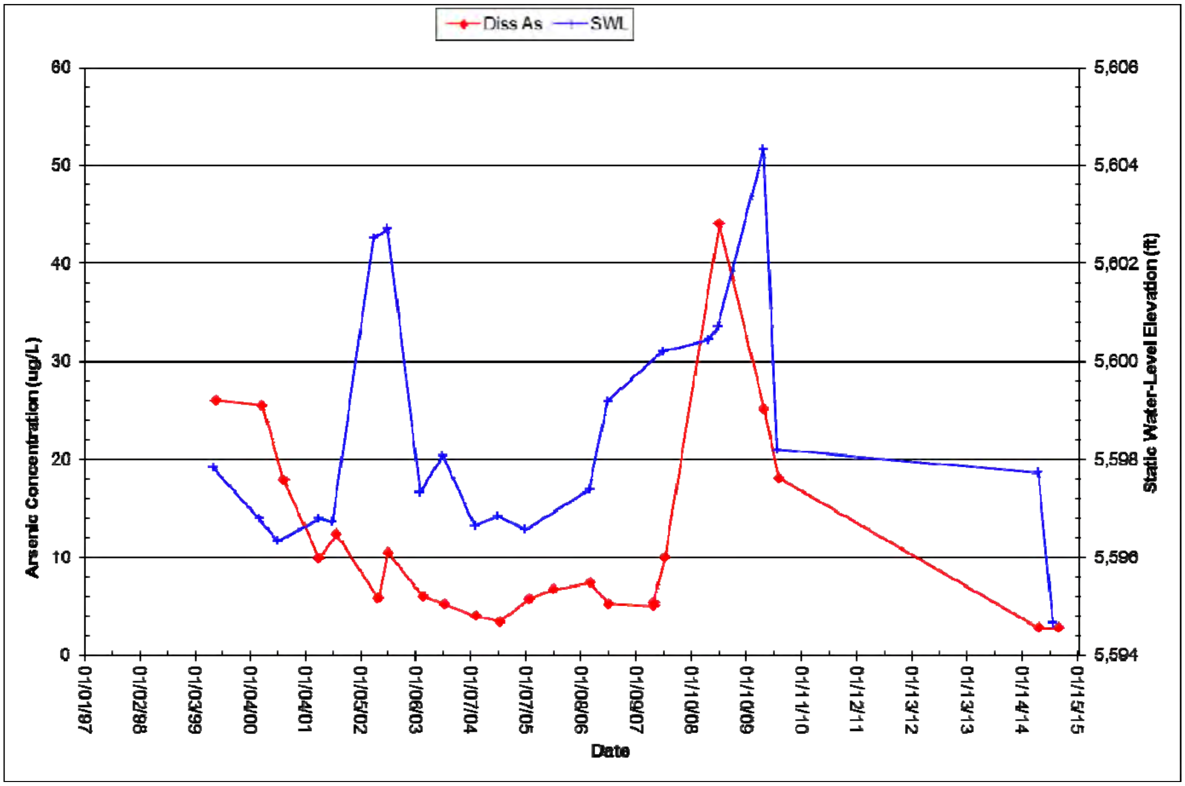


Figure 4.2-6. Well MW-245E, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

Well series MW-249 consists of two nested wells located in the Mount Haggin area south of Mill Creek. Both wells are completed in the bedrock aquifer, with well MW-249S completed at a depth of 18.7 ft and well MW-249D completed at 205 ft.

MW-249S long-term average arsenic concentration is over four times the DEQ-7 standard; the highest arsenic concentrations usually occur during the low-water sampling event (fig. 4.2-7). Arsenic (low water only) exceeded DEQ-7 standards in 5-yr review samples. Single water-quality samples were collected from this well in 1998 and 1999, while semi-annual samples were collected from 2000 through 2009; semi-annual samples were collected in 2014.

Well MW-249D long-term arsenic average concentration is below the DEQ-7 standard with a downward trend over time (fig. 4.2-8); concentrations were similar between 2009 and 2014. Iron concentrations exceeded DEQ-7 concentrations in both the low- and high- water 5-yr review samples; however, none of the other COCs exceeded standards. Water-quality samples were collected once in 1999 and semi-annually from 2000 to 2006, and semi-annually during the 2009 and 2014 5-yr reviews. No samples were collected in 2007 or 2008.

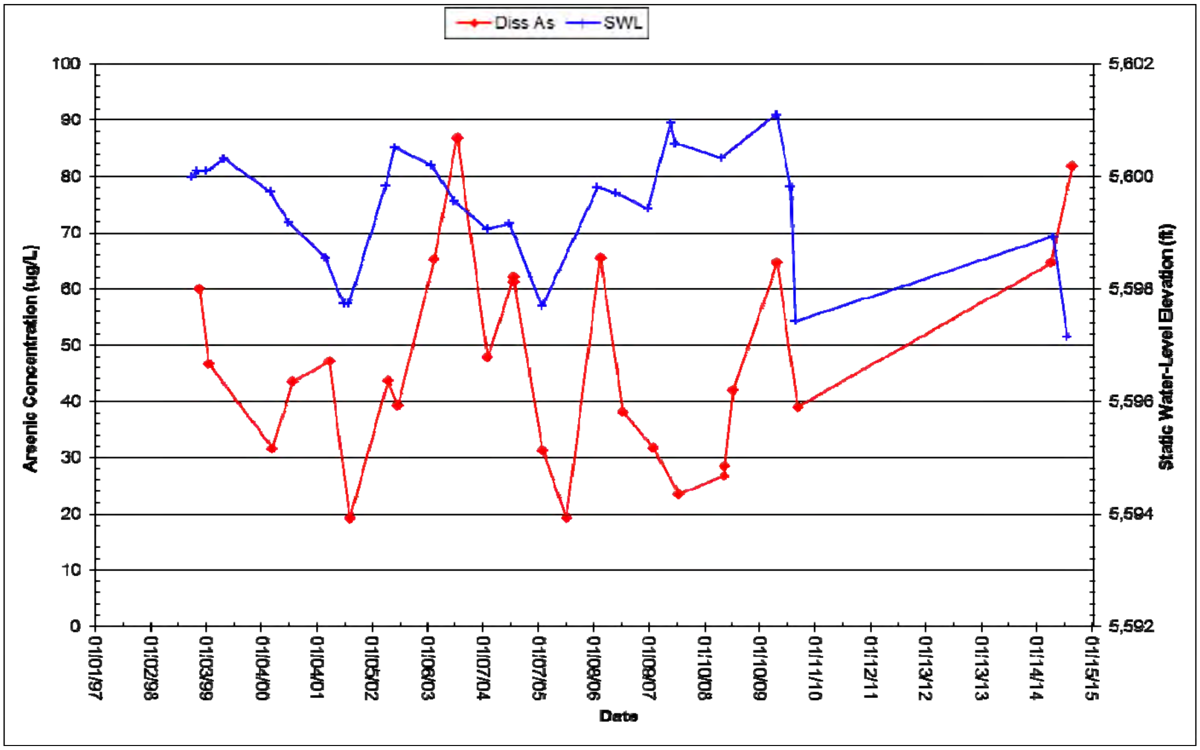


Figure 4.2-7. Well MW-249S, located in the Mount Haggin area: arsenic concentrations and static water-level elevations over time.

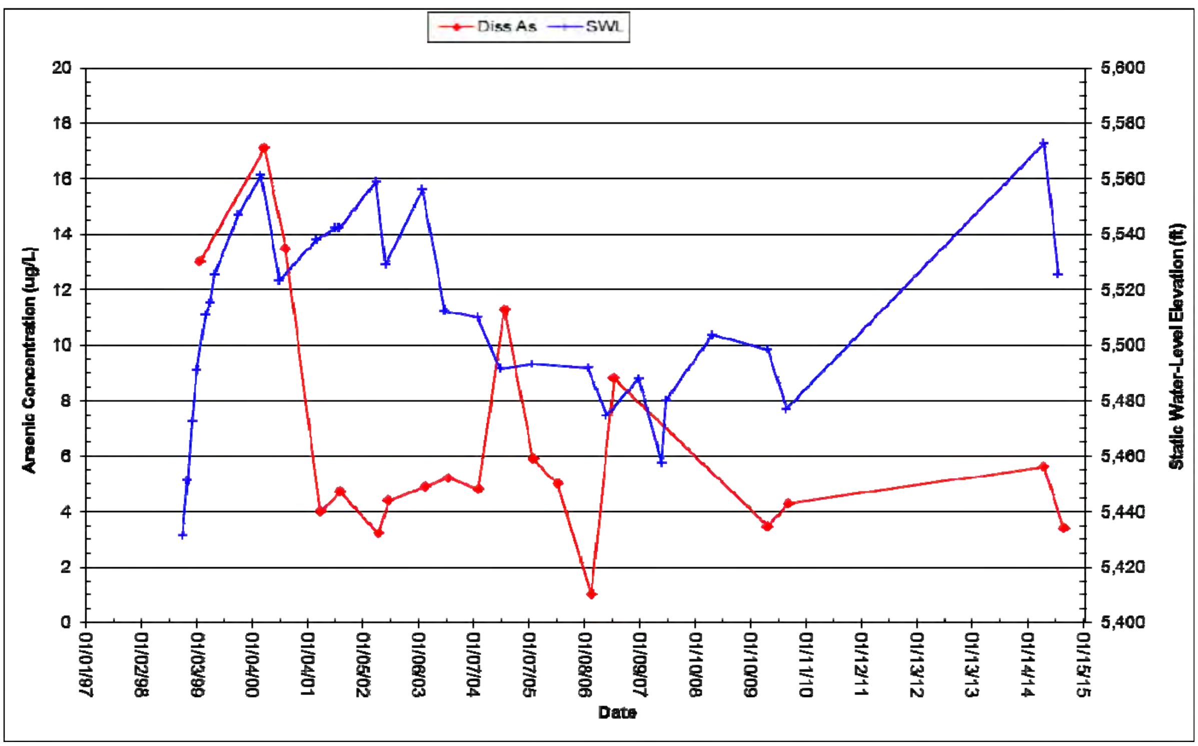


Figure 4.2-8. Well MW-249D, located in the Mount Haggin area: arsenic concentrations and static water-level elevations over time.

Well series MW-250 is another nested pair of wells. The shallow well (MW-250S) is completed in coarse, valley-fill material at a depth of 24 ft while the deep well (MW-250D) is completed in the bedrock aquifer at a depth of 84 ft. These wells are also located to the southeast of Mill Creek, adjacent to the Mount Haggin area.

Well MW-250S has a long-term arsenic average concentration of 48 µg/L, or over four times the DEQ-7 standard of 10 µg/L. Samples collected during the 2014 5-yr sampling exceeded the DEQ-7 arsenic standard (table 4.2-2); none of the other 5-yr COCs were exceeded in the 2014 samples. Figure 4.2-9 shows the long-term arsenic trend, which increased from 2002 to 2005 and decreased from 2006 to 2014. Single samples were collected in 1998 and 1999, while samples were collected at least semi-annually from 2000 to 2009. Semi-annual samples were collected during the 2014 5-yr review.

The long-term average arsenic concentration in well MW-250D is well below (1.85 µg/L) the DEQ-7 standard, as were both the 2014 5-yr review samples. Arsenic concentrations in the past were usually the highest during low-water sampling events; very little difference occurred between events in 2014 (fig. 4.2-10). None of the other 5-yr COCs exceeded standards. Water-quality samples were collected once in 1998 and 1999 and semi-annually from 2000 to 2006. No samples were collected in 2007 or 2008. Semi-annual 5-yr review samples were collected in 2009 and 2014.

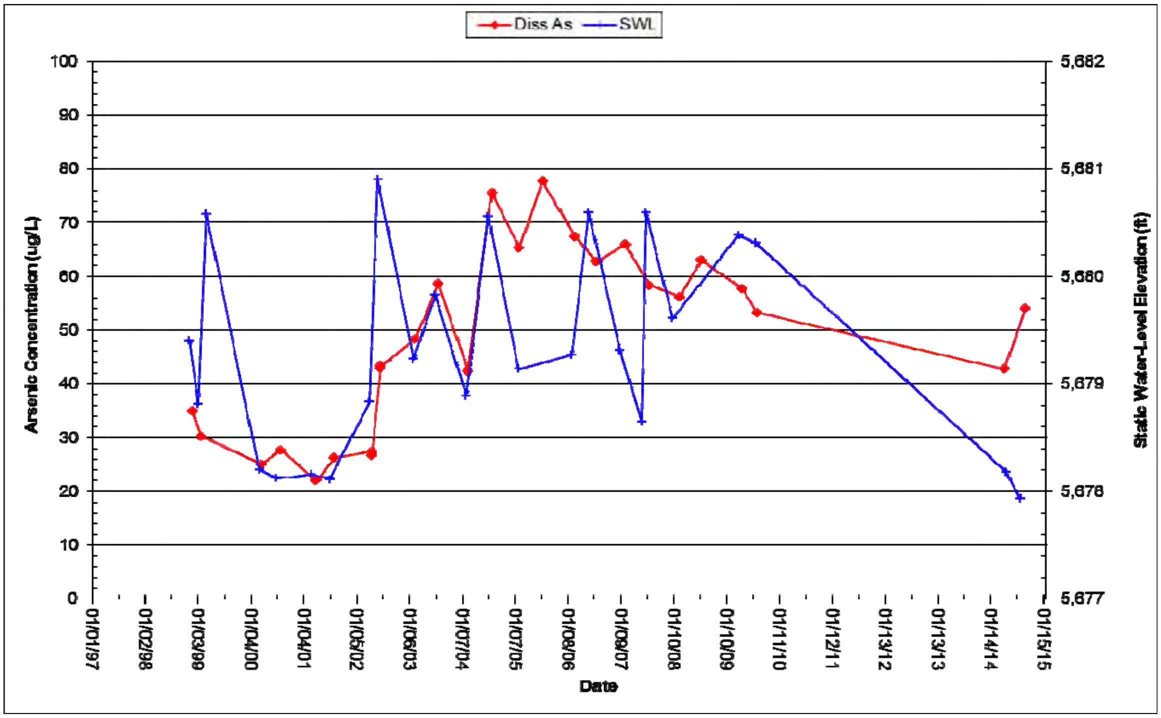


Figure 4.2-9. Well MW-250S, located in the Mount Haggin area: arsenic concentrations and static water-level elevations over time.

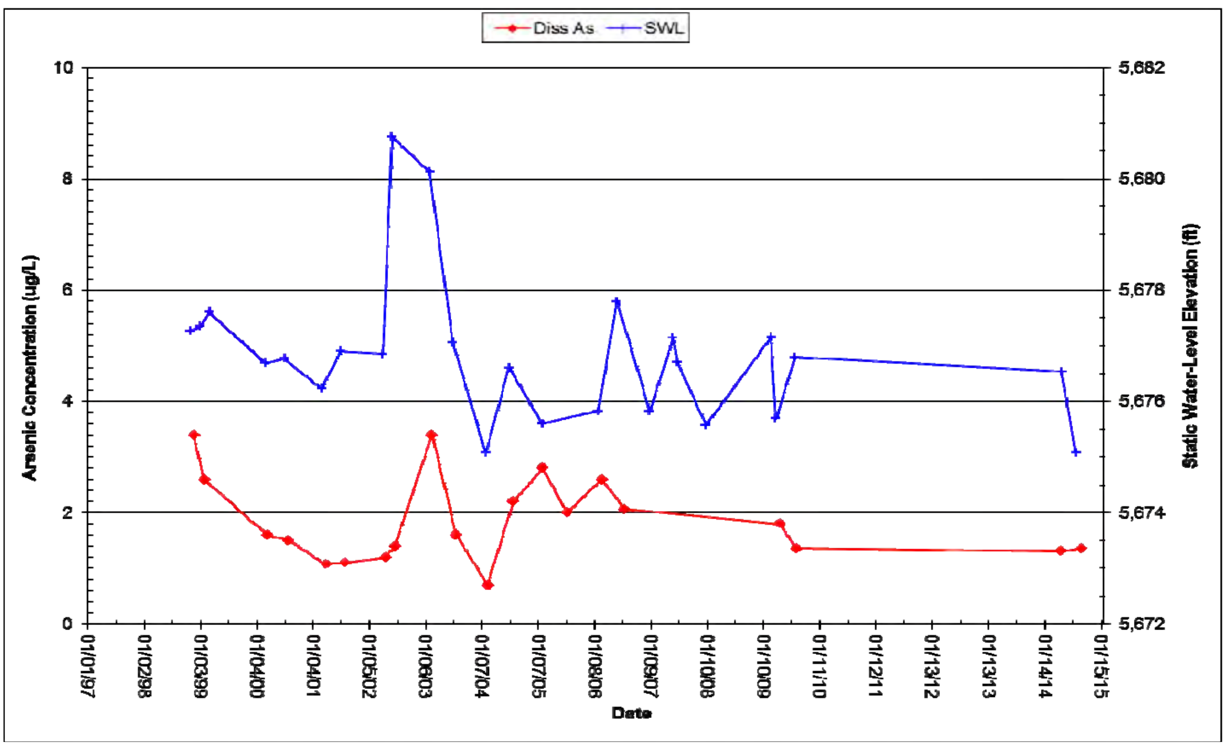


Figure 4.2-10. Well MW-250D, located in the Mount Haggin area: arsenic concentrations and static water-level elevations over time.

Well NGP-1 is located on the bottom of Smelter Hill, to the northwest of the Stack. It is a shallow well (17 ft deep; table 4.2-1) and has a high long-term average arsenic concentration that is almost 20 times the DEQ standard (fig. 4.2-11). (No well log or completion information is available for this well; however, it is probable the well was completed in the valley-fill material, due to its shallow depth.) Both 2014 samples had arsenic concentrations in the 120–150 µg/L range. None of the other 5-yr COCs exceeded DEQ-7 standards. Single samples were collected in 1993 and 1997; semi-annual samples were collected from 2000-2009. Semi-annual samples were collected in 2014 as part of the 5-yr review process.

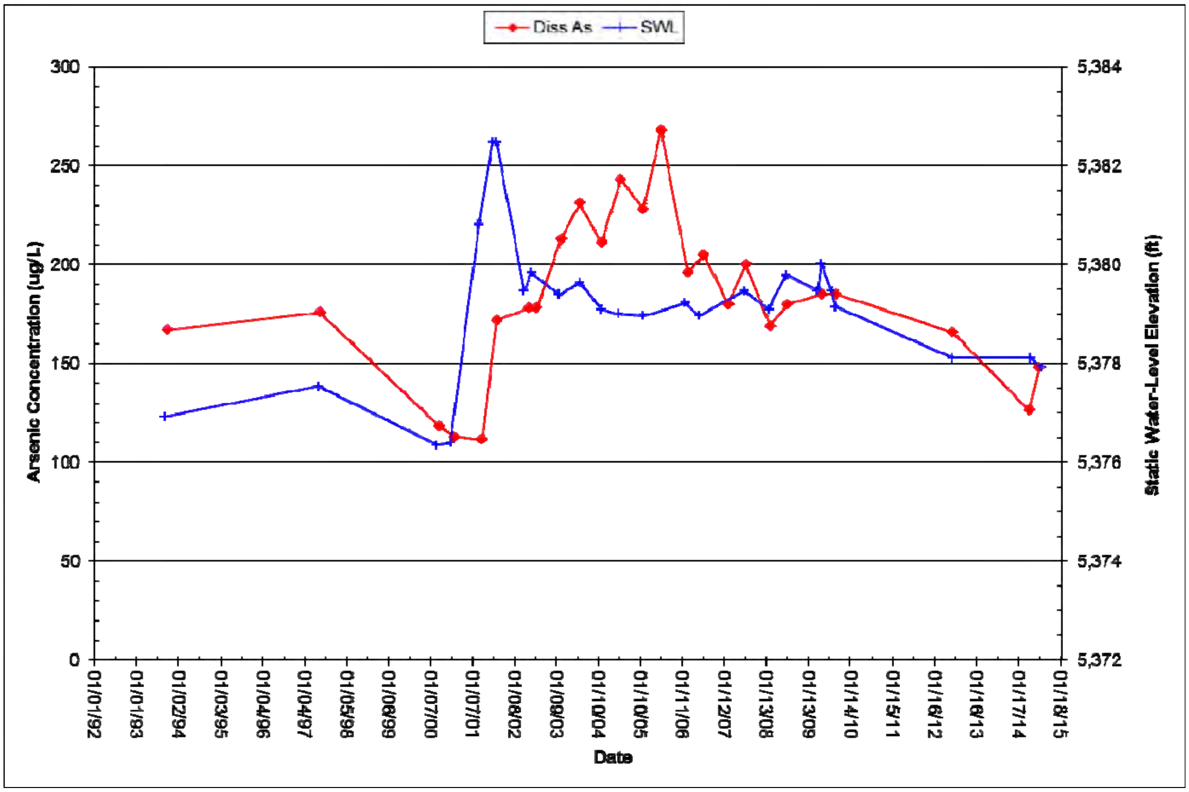


Figure 4.2-11. Well NGP-1, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

Well WGP-1 is located southeast of NGP-1, about midway up the hill toward the Smelter Stack. Its total depth is 23 ft; however, no additional completion information is available, so the aquifer is unknown. Due to its depth and location it may be completed in the upper portion of the bedrock aquifer. No water-quality data prior to 2009 are available for this site. Arsenic concentrations in the 2009 5-yr review samples were below the DEQ-7 standard; however, the 2014 samples were two orders of magnitude higher (510 µg/L and 627 µg/L in the low and high water samples respectively). These changes in concentrations were significant and unexplained. The 2014 water levels were about on-half ft to one-ft less than those in 2009 and would most likely not account for such a dramatic change. Unfortunately, the 2009 and 20014 samples are the only results for this site. (A laboratory review of the data for both 2009 and 2014 was performed and nothing was found to be in error. Concentrations were similar from samples run on both the ICP and ICP-MS.)

Arsenic concentrations in groundwater show considerable variation throughout the Mount Haggin/Smelter Hill HAA/TI area. The highest concentrations occur in wells on the southeast side of Smelter Hill and at the base of Smelter Hill to the northwest. The long-term average arsenic concentration exceeded the DEQ-7 MCL in 7 of the 11 wells in this area. Due to the location of these monitoring wells near historic smelting operations and facilities, the presence of elevated arsenic concentrations is reasonable. This area has received a Technical Impracticability Waiver due to the occurrence of elevated arsenic concentrations in groundwater.

4.2.2 Mount Haggin/Smelter Hill Groundwater-Level Observations

Mill Creek and its tributaries are the major hydrologic features in the area. Plates 2 and 3 show the general groundwater flow direction during low-water (spring) and high-water (summer) sampling events. Groundwater flow direction from the backside of Smelter Hill is from the northwest to the southeast toward Mill Creek, while groundwater in the Mount Haggin portion of the site flows from the west to the east, paralleling Mill Creek. Table 4.2-3 shows net water-level change for the 11 wells that constitute this portion of the ARWWS. Six of the 11 wells are completed in the bedrock aquifer, which is characterized by low permeability. The low permeability is depicted in the magnitude of the water-level changes seen in several of the bedrock wells, as it is not unusual to see 10- to 20-ft water-level changes seasonally. The greatest water-level change during the monitoring period was observed in MW-249D (fig. 4.2-12), while relatively little change was observed in the shallow well pair MW-249S. Seasonal water-level changes between 1 and 2 ft are common in the shallow well, whereas the seasonal changes are closer to 10–20 ft in the deep well. (Water-level variations in 2014 in well MW-249D were much greater than those seen in the past and 2009. Both the 2014 water levels (low and high water level) were considerably higher.) There is a downward vertical gradient in the bedrock aquifer in this area.

All three wells in the MW-245 group were completed in the bedrock system at depths ranging from 125 ft to 241 ft. Seasonal water-level variations typically range from 2 ft in the shallowest and deepest wells to 10 ft in the intermediate depth well (fig. 4.2-13). The upper and deeper bedrock aquifers have similar water levels and seasonal fluctuations. The middle bedrock aquifer has much greater seasonal fluctuations, indicating lower storage. Its water levels are 20 or more feet lower than those in the other two wells. It should be noted that water-level monitoring occurred usually just twice per year, to coincide with water-quality sampling; therefore, the range of seasonal water-level changes may be greater than shown on the hydrographs. Hydrographs for all wells within this area are contained in appendix C.

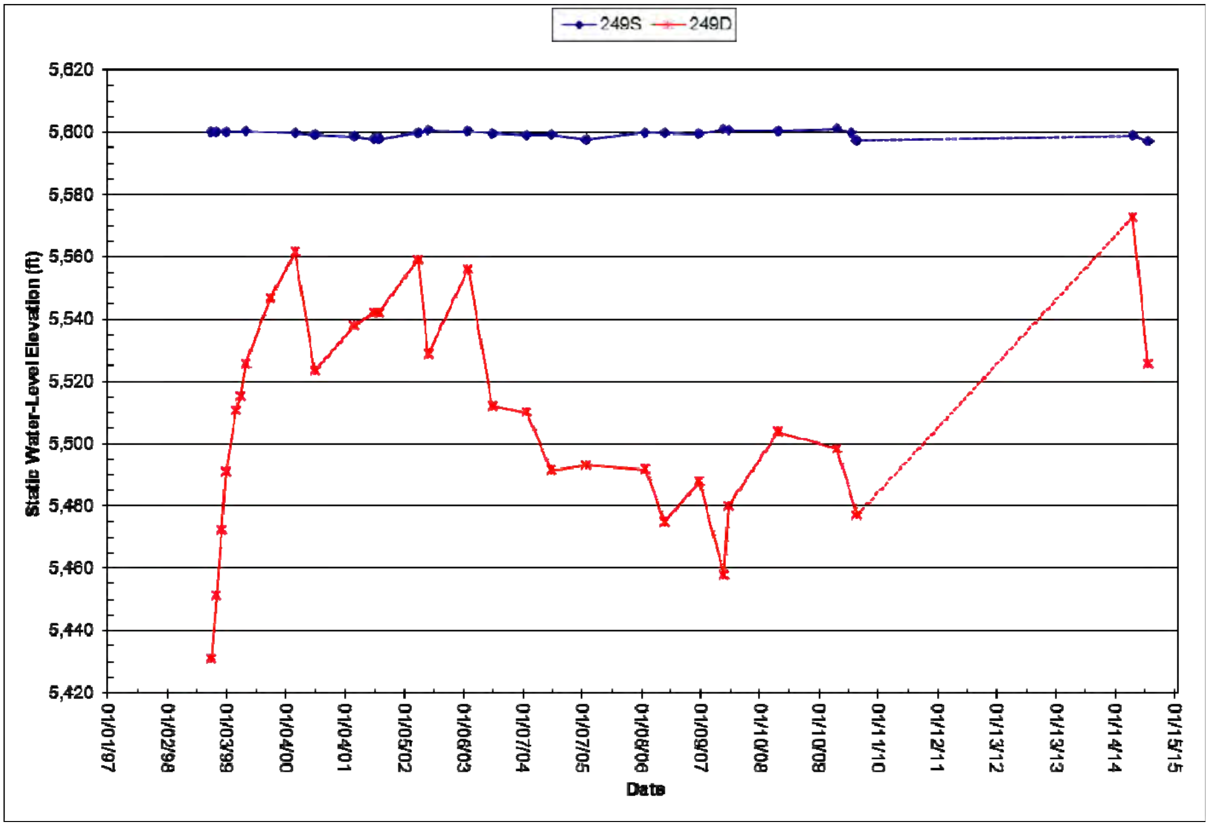


Figure 4.2-12. Hydrographs for nested wells MW-249S and WM-249D.

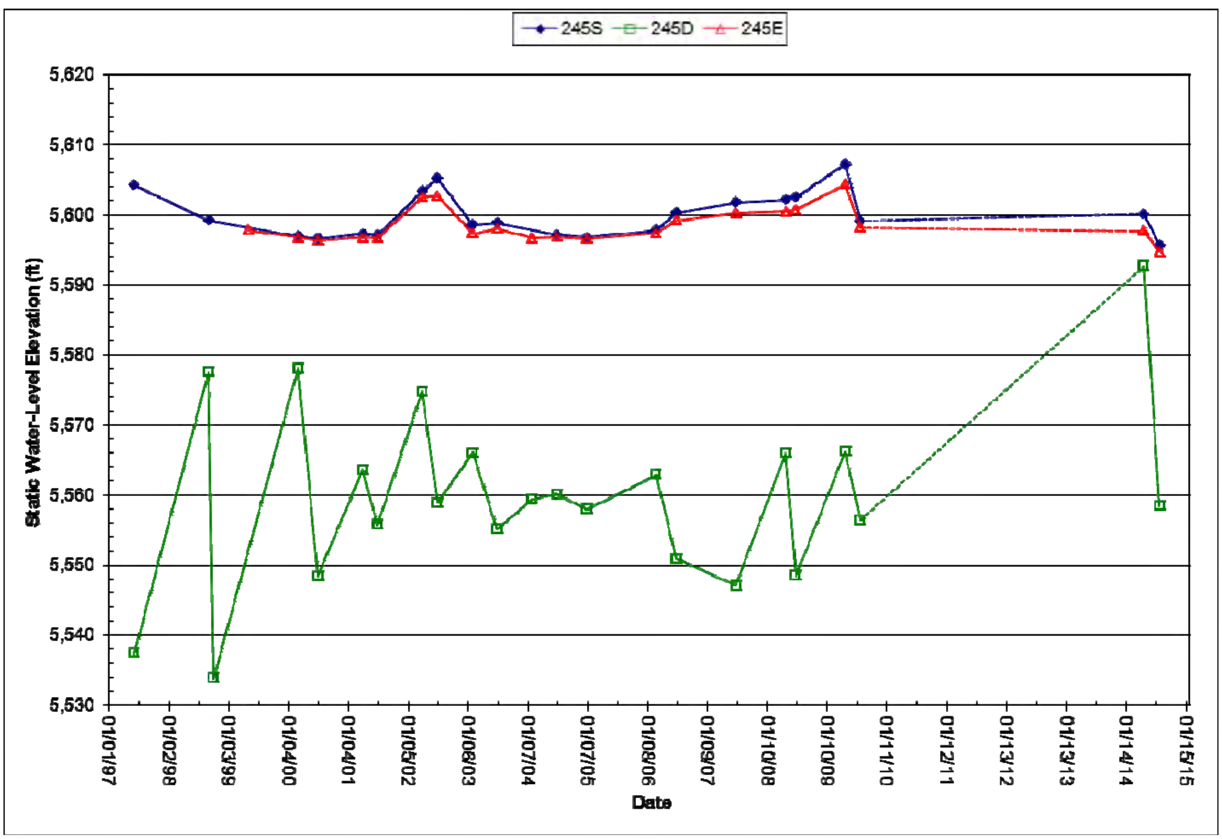


Figure 4.2-13. Hydrographs for nested wells MW-245S, MW-245D, and MW-245E.

4.2.3 Spring Monitoring and Water-Quality Results

Fourteen springs are located within the Mount Haggin/Smelter Hill HAA portion of the site (fig. 4.1-1). Water-quality samples were collected from mid-August through early September, and results are shown in table 4.2-4. Arsenic concentrations ranged from less than 0.10 µg/L to 1,546 µg/L; the DEQ-7 standard was exceeded in 6 of the 13 samples. One spring site was dry; therefore, no sample was collected at that location. Arsenic concentrations in the 2014 samples were mostly comparable to those from previous sampling events in 1997, 1998, and 2009 (table 4.2-4), with two exceptions. The 2014 arsenic concentration from spring SH-3 was one-fourth that of the 2009 sample and the 2014 concentration in spring SP97-12 was over three times the 2009 concentration. The 2009 and 2014 concentrations were well above the DEQ-7 arsenic standard.

Table 4.2-4. Arsenic results for springs located in the Mount Haggin/Smelter Hill HAA/TI Zone.

Station ID	GWIC ID	Date Sampled	Time	Flow (gpm)	Field pH	2014 As (µg/L)	2009 As (µg/L)	1998 As (µg/L)	1997 As (µg/L)
SH-3	250052	7/16/14	13:14	5.5	7.85	69.8	283	158	NA
SP97-12	249913	7/17/14	14:10	7.7	7.21	1546	455	NA	482
SP97-19	249914	7/9/14	15:00	18.4	7.72	2.27	2.30	2.92	2.7
SP97-31	249916	Dry		NA	NA	NA	NA	NA	74.8
SP98-16	249917	7/24/14	11:14	67.0	7.29	7.55	6.01	5.71	NA
SP98-20	249918	7/18/14	11:45	12.0	6.47	7.30	3.89	5.50	NA
SP98-23	249919	7/10/14	11:58	14.4	5.82	<0.10U	0.46	1.64	NA
SP98-36	249927	10/2/14	14:50	NA	6.43	63.8	49.7	38.9	NA
SP98-37	249928	7/16/14	11:40	10.0	6.32	97.0	89.2	136	NA
SP98-8	249929	7/25/14	12:35	5.7	6.15	4.54	3.21	4.33	NA
SST-1	249931	7/7/14	15:00	0.5	6.53	43.9	28.4	NA	NA
SST-26	249932	7/9/14	11:12	0.4	7.49	2.34	13.3	NA	NA
SST-29	249933	7/15/14	14:10	55.2	7.04	8.87	6.37	NA	NA
SST-30	249934	7/15/14	11:47	9.0	7.30	225	250	NA	NA

NA, no data available.

The lowest arsenic concentrations occurred in springs on the periphery of Smelter Hill, with the highest concentrations occurring on Smelter Hill near historic smelting facilities and on the backside of Smelter Hill (SP97-12).

Six of the spring sites are near groundwater monitoring wells, allowing a comparison of arsenic concentrations between the two systems (table 4.2-5). Three of the six sites have nested wells, and the arsenic concentrations in the shallow wells (high-water sample event) within each group are similar to arsenic concentrations from the nearby spring.

Table 4.2-5. Arsenic comparisons between springs and adjacent monitoring wells, 2014.

Site ID	As
SST-30	255
NGP-1	148
SH-3	69.8
WGP-1	627
SP97-12	1546
MW-245s	1009
MW-245d	8.40
MW-245e	2.81
SP98-37	97.0
MW-250s	54.1
MW-250d	1.36
SP98-36	63.8
MW-249s	81.9
MW-249d	3.40
SST-1	43.9
MW-231	0.82

4.3 Smelter Hill /Opportunity Ponds Waste Management Area

The Smelter Hill/Opportunity Ponds Waste Management Area (WMA) contains 44 monitoring wells (fig. 4.3-1). Currently there are nine pairs of nested wells within this WMA. Table 4.3-1 lists well information and COCs for this group of wells. Wells within this WMA have a broader list of primary COCs, including cadmium (Cd), copper (Cu), lead (Pb), and zinc (Zn). Table 4.3-2 contains a summary of water type, 2014 arsenic concentrations, and general water-quality conditions for wells in this WMA; appendix D contains water-quality results for 2014 sampling activities.

Sixteen wells within this WMA are located on Smelter Hill, while the other 28 wells are located throughout the Opportunity Ponds area (fig. 4.3-1). Monitoring results from Smelter Hill sites will be discussed first, followed by Opportunity Pond sites. There are no springs located within this WMA.

4.3.1 Smelter Hill Wells Water-Quality Results

Arsenic exceeded the DEQ-7 standard in 9 of the 16 Smelter Hill wells sampled during the 2014 5-yr review; the highest concentration exceeded 4,500 µg/L (table 4.3-2). This portion of the NPL site contains the smelter facility and ancillary building areas and remnant waste streams from the smelting process. Considerable tailings and slag from the smelter waste exists in this area. Cadmium exceeded the DEQ-7 standard in 1 well, while zinc exceeded standards in 1 additional well. The additional COCs were exceeded in the wells near smelter facilities and waste streams.

Well A1-BR2 is located near the top of Smelter Hill, to the north of the smelter stack. It is completed in the bedrock aquifer at a depth of 183 ft, with the screen interval between 160 and 180 ft. The long-term arsenic average of 4,887 µg/L is the highest of all sites within this WMA (table 4.3-2). Figure 4.3-2 shows arsenic concentrations over time. No other COCs had concentrations in the 5-yr review samples that exceeded DEQ-7 standards in this well.

Well A2-BR is located on the lower portion of Smelter Hill and west of the Main Granular Slag pile. It is completed in the bedrock aquifer, with the screen interval between 60 and 80 ft. Arsenic is the only COC whose concentrations exceed DEQ-7 standards in 5-yr review samples. Figure 4.3-3 shows the long-term arsenic trend. The long-term average arsenic concentration is 1,175 µg/L. During many years, arsenic concentrations are highest during summer (high-water) sampling events; however, this was not reflected in 2009 or 2014 sample results.

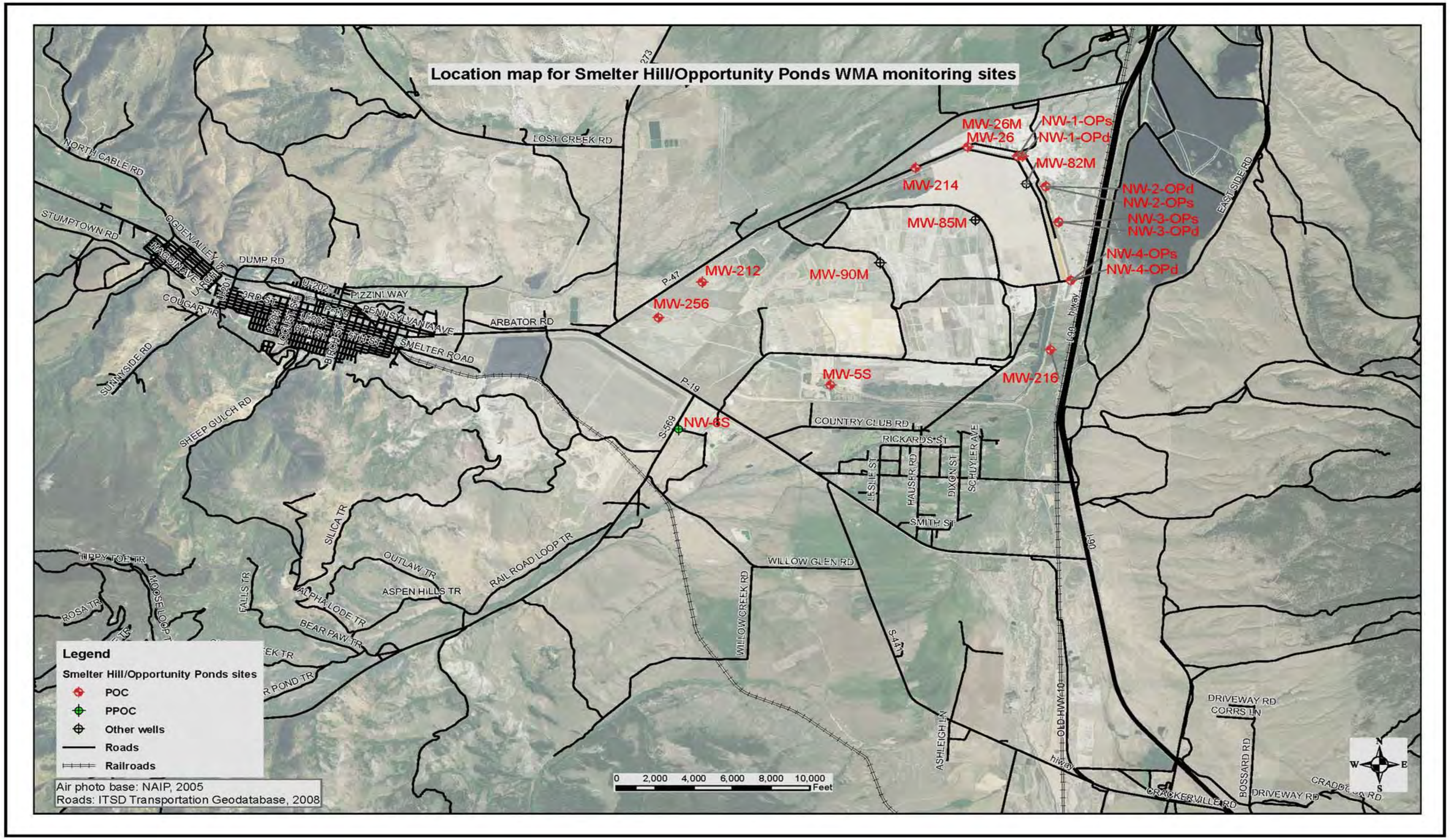


Figure 4.3-1. Location map for Smelter Hill/Opportunity Ponds WMA.

Table 4.3.1. Smelter Hill/Opportunity Ponds Waste Management Area monitoring wells.

Monitoring Well Summary

Well ID	Total Depth (ft)	Screen Interval (ft)	Water Quality Analytes
Smelter Hill Sites			
A1-BR2	183	160-180	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
A2-BR	83	60-80	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
B4-BR	88	65-85	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
C2-AL1	76	52-72	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
D3-AL1	46	22-42	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
E2-AL1	43	19-39	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-210	46.7	36.7-46.1	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-211	118	103.5-118	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-218S	85.4	70.4-85	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-218D	249	238.7-248.3	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-219	75	59.6-74.2	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-220	102	85-95	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
NW-6S	98	78-98	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-227	38	27.1-36.4	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-244	41	30.6-40.6	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-247	85	65.5-84	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness

Table 4.3.1 Smelter Hill/Opportunity Ponds Waste Management Area monitoring wells (*continued*).

Monitoring Well Summary

Well ID	Total Depth (ft)	Screen Interval (ft)	Water Quality Analytes
Opportunity Ponds Sites			
MW-212	62	39.3-53.7	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-214	15	5.6-15	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-216	15	5-14.3	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-243	50.3	40-50	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-253	89	66.8-86.8	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-254	77	56.4-76.4	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-256	95	75-94.7	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-26	15	5-15	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-26M	71	60.5-70.5	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-31	15	5-15	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-31M	88.5	78-88	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-82	50	40-50	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-82M	110	100-110	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-85	56	45-55	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-85M	155	136-146	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-90	66	56-66	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-90M	135	125-135	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
NW-5S	18	5-15	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-266	20	9-19	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-265	77	67-77	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-268	20	8-18	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-267	74.5	64-74	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-270	25	12-22	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-269	76	62.5-72-5	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-272	21	10.5-20.5	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-271	81.5	71.5-81.5	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-24	20	8-18	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-25	14	4-14	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness

Table 4.3-2. Smelter Hill/Opportunity Ponds Waste Management Area monitoring well summary.

Smelter Hill Sites

Well ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (µg/L)	2014 High-Water Arsenic (µg/L)	Long-Term Average Arsenic (µg/L)	Comment
A1-BR2	160–180	Mg/Ca-SO_4	4,605	4,367	4,887	As only 5-yr COC that exceeded DEQ-7 standard. No seasonal trend.
A2-BR	60–80	Ca-SO_4	1,031	1,014	1,175	As only 5-yr COC that exceeded DEQ-7 standard. Seasonal trend; As highest in summer-high-water samples.
B4-BR	65–85	Na-SO_4	1,173	1,217	1,182	As and Cd only 5-yr COCs that exceed standards. As has no seasonal trend; Cd has seasonal trend with concentrations increasing.
C2-AL1	52–72	Ca-SO_4	1,312	1,355	1,397	No samples prior to 2009. As, and Zn exceed DEQ-7 standards.
D3-AL1	22–42	Ca-SO_4	78.0	64.2	68.4	As only 5-yr COC that exceeded DEQ-7 standard. No consistent seasonal trend.
E2-AL1	19–39	Ca-SO_4	1.27	1.13	2.18	No consistent seasonal trend.
MW-210	36.7–46.1	Ca-HCO_3	44.3	56.4	71.4	As only 5-yr COC that exceeded DEQ-7 standard. Seasonal trend; As typically highest in winter–spring low-water samples.
MW-211	103.5–118	Ca-HCO_3	46.0	45.3	49.6	As only 5-yr COC that exceeded DEQ-7 standard. Seasonal trend since 2005: As highest in summer high-water samples.
MW-218S	70.4–85	Ca-SO_4	39.3	38.5	36.6	As only 5-yr COC that exceeded DEQ-7 standard. No seasonal trend.
MW-218D	238.7–248.3	Ca-SO_4	0.55	2.07	1.57	No seasonal trend.
MW-219	59.6–74.2	Ca-SO_4	0.53	0.44	1.53	No COC exceedances; slight As decline over time.
MW-220	85-95	Ca-HCO_3	0.87	0.92	2.92	No COC exceedances.

Table 4.3-2 Smelter Hill/Opportunity Ponds Waste Management Area monitoring well summary (*continued*).

Well ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (μg/L)	2014 High-Water Arsenic (μg/L)	Long-Term Average Arsenic (μg/L)	Comment
MW-258	78–98	Ca-HCO_3	0.67	0.61	0.69	Well installed spring 2009. No DEQ-7 exceedances.
MW-227	27.1–36.4	Ca-HCO_3	38.0	29.2	51.7	As only 5-yr COC that exceeded DEQ-7 standard. As concentrations decreasing over time, no seasonal trend.
MW-244	30.6–40.6	Ca-HCO_3	6.40	5.40	6.22	No COC exceedances or seasonal trends.
MW-247	65.5–84	Na-HCO_3	<0.25U	<0.25U	1.42	No COC exceedances or seasonal trends.
Opportunity Ponds Sites						
MW-212	39.3–53.7	Ca-HCO_3	0.58	0.62	1.02	No COC exceedances; slight As decline over time.
MW-214	5.6–15	Ca-SO_4	0.92	1.39	1.42	No COC exceedances; slight As decline over time.
MW-216	5–14.3	Ca-SO_4	1.89	2.22	3.32	
MW-243	40–50	Ca-SO_4	0.85	0.71	1.10	No COC exceedances.
MW-253	66.8–86.8	Ca-SO_4	28.5	8.19	26.8	As only 5-yr COC that exceeded DEQ-7 standard. No seasonal trend.
MW-254	56.4–76.4	Ca-SO_4	1.17	0.87	1.62	No COC exceedances or seasonal trends.
MW-256	75–94.7	Ca-HCO_3	0.47	0.43	0.72	No COC exceedances; slight As decline over time.
MW-26	5–15	Ca-SO_4	<0.25U	1.24	1.19	Slight As decrease over time; no seasonal trend.
MW-26M	60.5–70.5	Ca-SO_4	0.51J	0.63J	1.07	Highest As concentrations usually during high-water sampling events.

Table 4.3-2 Smelter Hill/Opportunity Ponds Waste Management Area monitoring well summary (*continued*).

Well ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (μg/L)	2014 High-Water Arsenic (μg/L)	Long-Term Average Arsenic (μg/L)	Comment
MW-31	5–15	Ca-SO_4	4.82	12.2	3.04	As exceeded DEQ-7 standard for the 1st time in 2014 high-water sample. No other COCs exceed standards.
MW-31M	78–88	Ca-SO_4	1.75	1.77	1.76	No COCs exceed standards. Long-term As concentration decreasing, no seasonal trend.
MW-82	40-50	Ca-SO_4	0.88J	0.84J	2.21	Slight As decrease over time.
MW-82M	100-110	Ca-SO_4	1.04	1.17	1.20	Well installed 2011. No COCs exceed standards.
MW-85	45–55	Ca-SO_4	69.4	74.1	65.7	As exceeded DEQ-7 standards.
MW-85M	136-146	Ca-SO_4	0.92	1.04	0.78	Well installed 2011. No COCs exceed standards.
MW-90	56–66	Ca-SO_4	171	154	222	As exceed DEQ-7 standards. Slight As decrease over time; no seasonal trend.
MW-90M	125-135	Ca-SO_4	<0.25U	<0.25U	0.33	Well installed 2011.
MW-273	5-15	Ca-HCO_3	0.31J	0.46	0.40	Well installed 2011. No COCs exceed standards.
MW-266	9-19	Ca-SO_4	1.82	2.63	2.18	Well installed 2011.
MW-265	67-77	Ca-SO_4	1.38	1.48	1.33	Well installed 2011. No COCs exceed standards.
MW-268	8-18	Ca-SO_4	<0.25U	0.66J	0.49	Well installed 2011. No COCs exceed standards.
MW-267	64-74	Ca-SO_4	1.27	1.42	1.31	Well installed 2011. No COCs exceed standards.
MW-270	12-22	Ca-SO_4	0.16J	0.92J	0.96	Well installed 2011.

Table 4.3-2 Smelter Hill/Opportunity Ponds Waste Management Area monitoring well summary (*continued*).

Well ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (µg/L)	2014 High-Water Arsenic (µg/L)	Long-Term Average Arsenic (µg/L)	Comment
MW-269	62.5-72.5	Ca-SO_4	1.24	1.46	1.31	Well installed 2011. No COCs exceed standards.
MW-272	10.5-20.5	Ca-SO_4	<0.25U	0.75J	0.58	Well installed 2011. No COCs exceed standards.
MW-271	71.5-81.5	Ca-SO_4	1.39	1.49	1.42	Well installed 2011. No COCs exceed standards.
MW-24	8–18	Ca-SO_4	<0.25U	0.62	2.03	Limited data.
MW-25	4–14	Ca-SO_4	0.59	0.51J	0.54	No samples prior to 2009

NR, not reported.

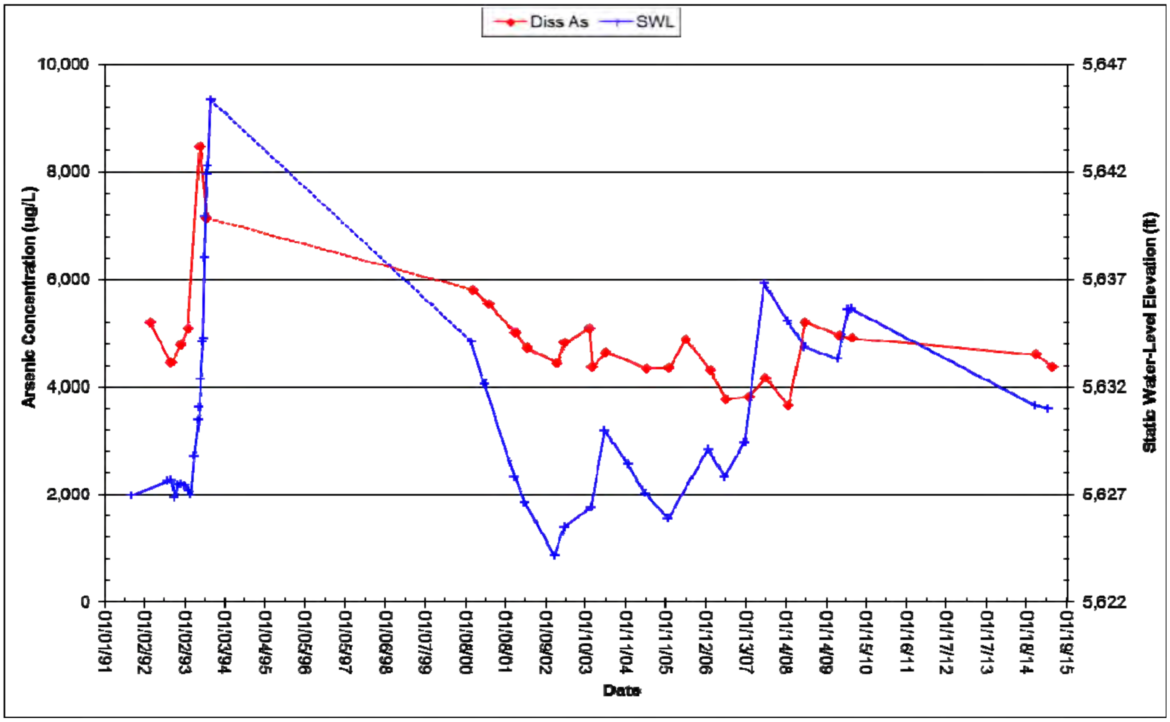


Figure 4.3-2. Well A1-BR2, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

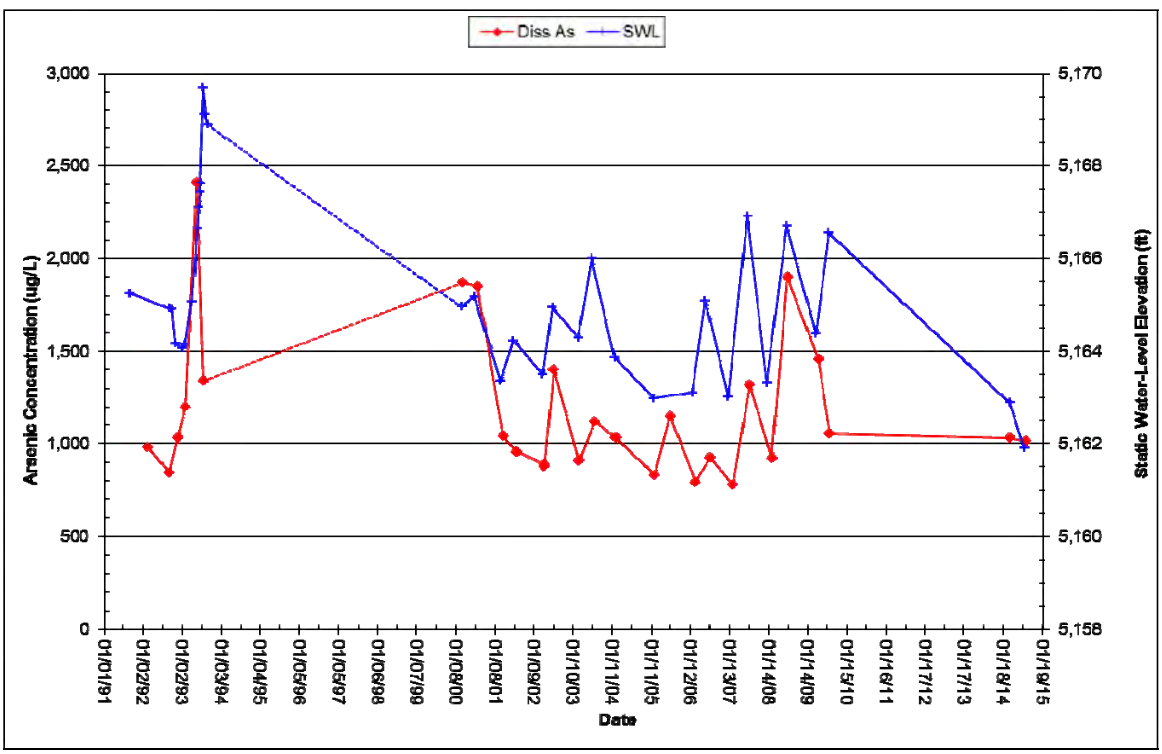


Figure 4.3-3. Well A2-BR, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

Well B4-BR is located east of well A2-BR at the top of the Main Granular Slag pile. The well was drilled to a total depth of 88 ft in the bedrock aquifer with the screen interval between 65 and 85 ft. Arsenic and cadmium concentrations exceeded DEQ-7 standards in 2014 samples. The long-term arsenic concentration is over two orders of magnitude above the standard; the cadmium average concentration is an order of magnitude above the standard (57 µg/L vs. 5 µg/L). Figure 4.3-4 shows arsenic and cadmium concentrations over time. Arsenic has no consistent seasonal trend, while cadmium concentrations are typically the highest during summer (high-water) sampling events. Cadmium concentrations have increased slightly over time.

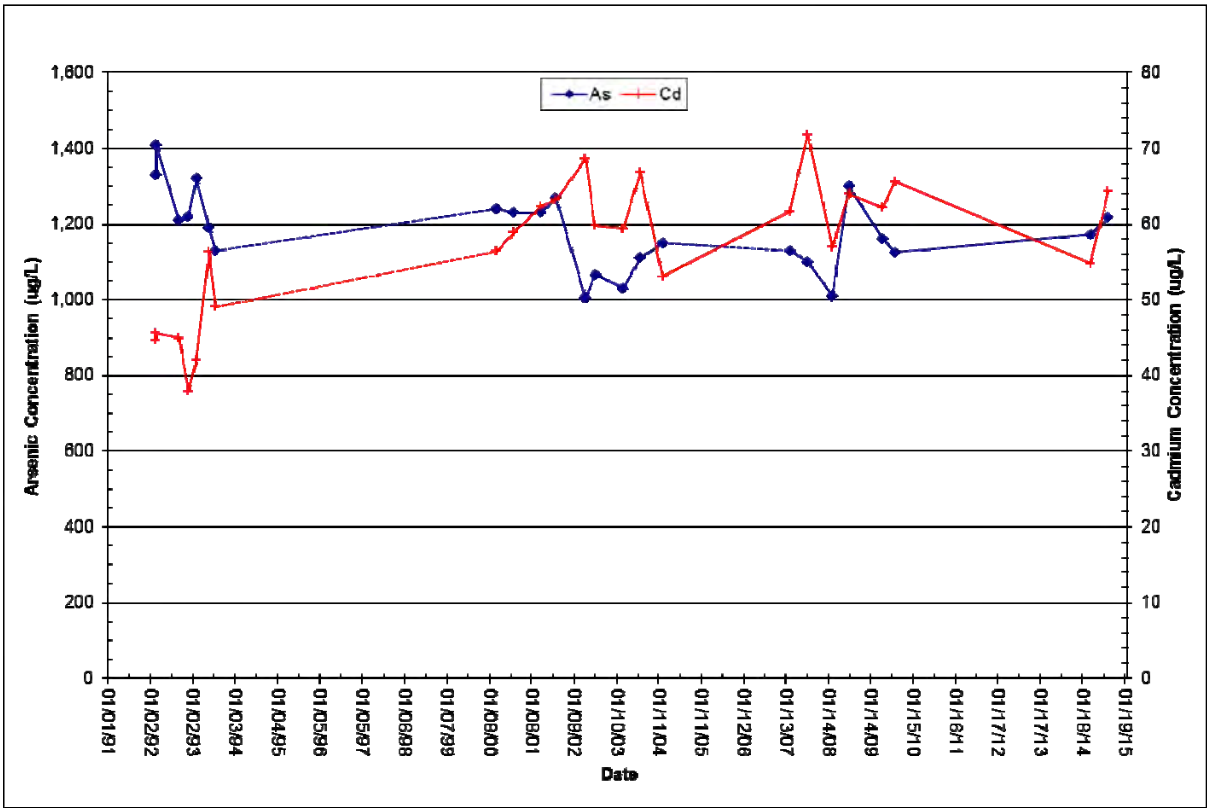


Figure 4.3-4. Well B4-BR arsenic and cadmium concentrations over time.

Well C2-AL1 is located southeast of well B4-BR above West Anaconda Tailings Pond. It was completed in the bedrock aquifer at a depth of 76 ft, with the screen interval between 52 and 72 ft. Only sample data from 2009 and 2014 are available for this site; therefore, no graph was prepared. Arsenic and zinc concentrations all exceeded DEQ-7 standards. Arsenic concentrations were over 1,300 µg/L in 2014 sample results. Concentrations of the other three COCs were also considerably above standards; an almost 5-fold increase for zinc.

Well D3-AL1 is located on the east side of Smelter Hill, above the East Anaconda Tailings Pond. It is almost due east of the smelter stack. It is a moderately shallow well completed in the coarse valley-fill, with a screen interval of between 22 and 42 ft. Arsenic concentrations are the only COC that exceed standards, with a long-term average of 68 µg/L. No consistent seasonal trend is apparent in the data. While concentrations have varied over time, current concentrations are similar to those obtained in 1992 when the well was first sampled (fig. 4.3-5). Groundwater samples were collected three times each during 1992 and 1993; semi-annual samples were collected from 2000 to 2009; a single sample was collected in

2012 in support of the natural arsenic source study. Semi-annual samples were collected in 2014.

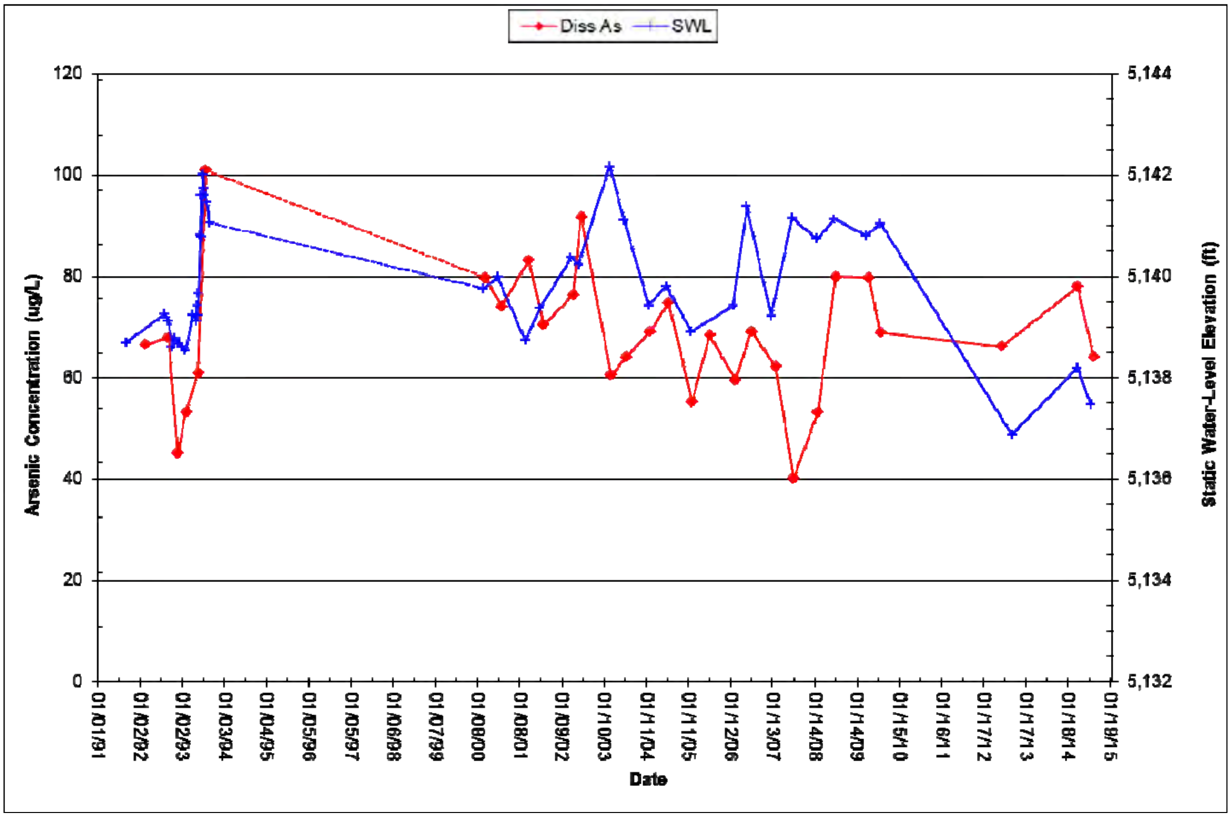


Figure 4.3-5. Well D3-AL1, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

Well E2-AL1 is located on the southeast side of Smelter Hill and is completed in coarse valley-fill material with the screened interval between 19 and 39 ft. None of the COCs exceeded DEQ-7 standards in the 5-yr review samples, and the long-term average arsenic concentration of 2.18 µg/L is well below the standard. Figure 4.3-6 shows arsenic concentrations over time. A single sample was collected in 1991, followed by three samples per year in 1992 and 1993. Semi-annual samples were collected from 2000 to 2009; semi-annual samples were collected in 2014.

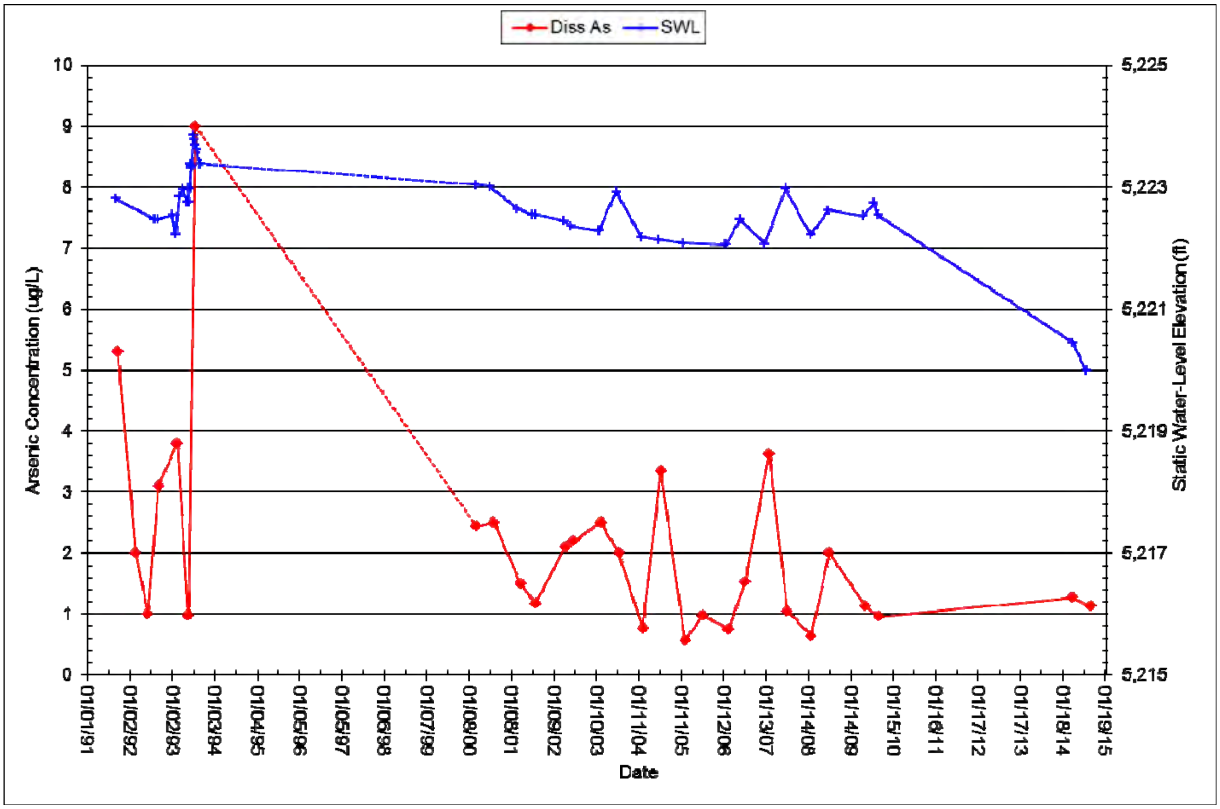


Figure 4.3-6. Well E2-AL1, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

Whereas the 6 previously discussed wells were located near the top to mid-level on Smelter Hill and above the slag pile and tailings ponds, a majority of the next 10 wells are located near the base of Smelter Hill and along the toe of the slag pile and tailings ponds.

Well MW-210 is located near the base of Smelter Hill, to the west of the Main Granular Slag Pile. It is downgradient (north) of well A2-BR. The well is in coarse valley-fill material at a depth of 46.7 ft, with the screen interval between 36 and 46 ft below ground surface. Arsenic was the only COC that exceeded DEQ-7 standards in the 5-yr review samples (fig. 4.3-7); the long-term average arsenic concentration is seven times the standard. Concentrations are historically highest during low-water sampling events and lowest during summer high-water events; 2014 sample results did not follow this pattern. Water samples were collected three times each during 1992 and 1993, followed by a single sample in 1995. Semi-annual samples were collected from 2000 to 2009; a single sample was collected in 2012 in support of the natural arsenic source study. Semi-annual samples were collected in 2014.

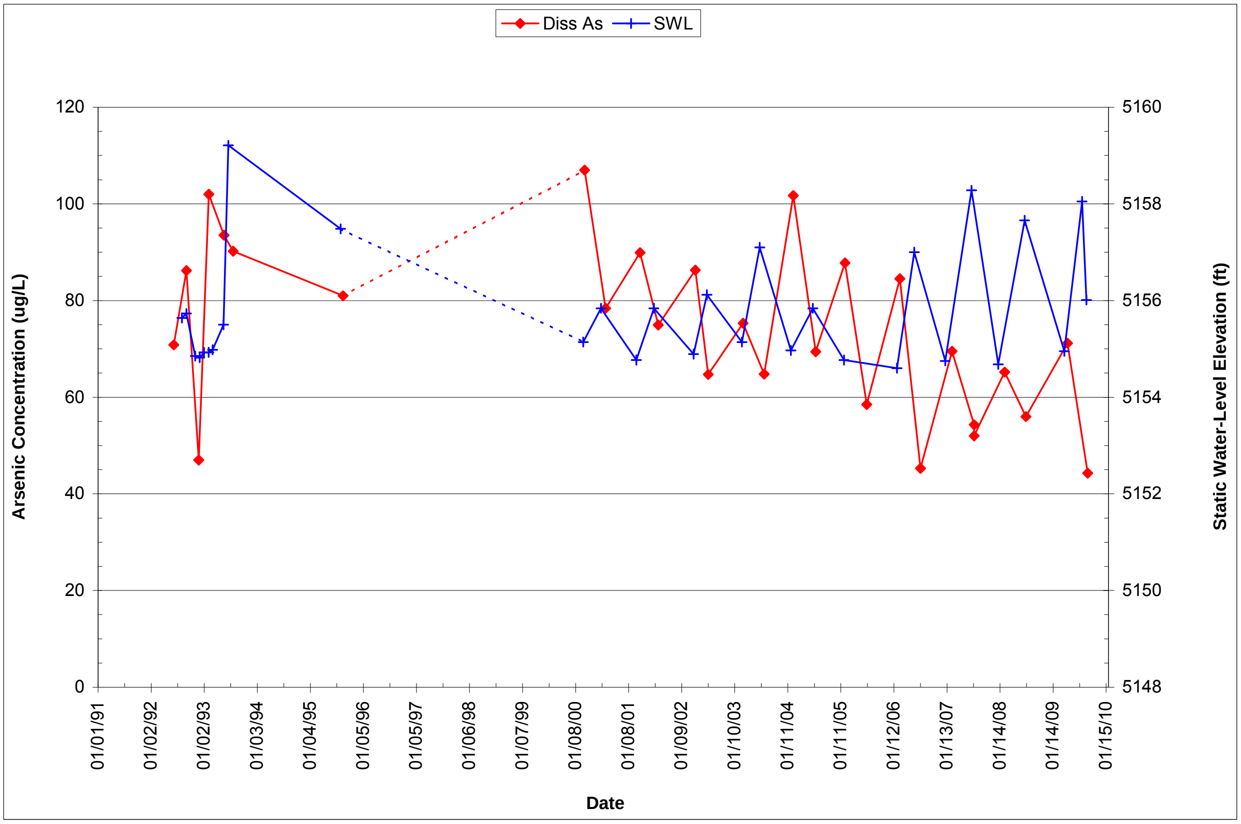


Figure 4.3-7. Well MW-210, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

Well MW-211 is located east of well MW-210, near the northwest toe of the West Anaconda Tailings Pond. The well is deeper than MW-210 and is completed in medium-fine valley-fill at a depth of 118 ft, with the screen interval between 103 and 118 ft below ground surface. A seasonal trend exists with arsenic concentrations being the highest during high-water sampling events since 2006 (fig. 4.3-8); 2014 concentrations did not follow this trend. Arsenic is the only 5-yr COC that exceeded DEQ-7 standards in the 2014 samples and long-term average (table 4.3-2). Groundwater samples were collected three times each in 1992 and 1993; samples were collected semi-annually 2000–2009; semi-annual samples were collected in 2014.

Wells MW-218S and 218D are a nested pair of wells, with well 218S screened moderately deep (70–85 ft) in coarse valley-fill and well 218D screened much deeper (238–248 ft) in medium to fine valley-fill material (table 4.3-1). These wells are east of well MW-211 and are located at the northwest toe of the East Anaconda Tailings Pond. The long-term average arsenic concentration is much higher in the shallow well and is above the DEQ-7 standard (36 µg/L). The arsenic concentration is much less in the deeper well (1.57 µg/L). Figure 4.3-9 shows the long-term arsenic trend for both wells. No consistent seasonal trend occurs in either well, nor is there a trend in concentration changes between wells. Samples were collected three times in 1992 and 1993 and semi-annually from 2000 to 2009 in both wells; semi-annual samples were collected in 2014.

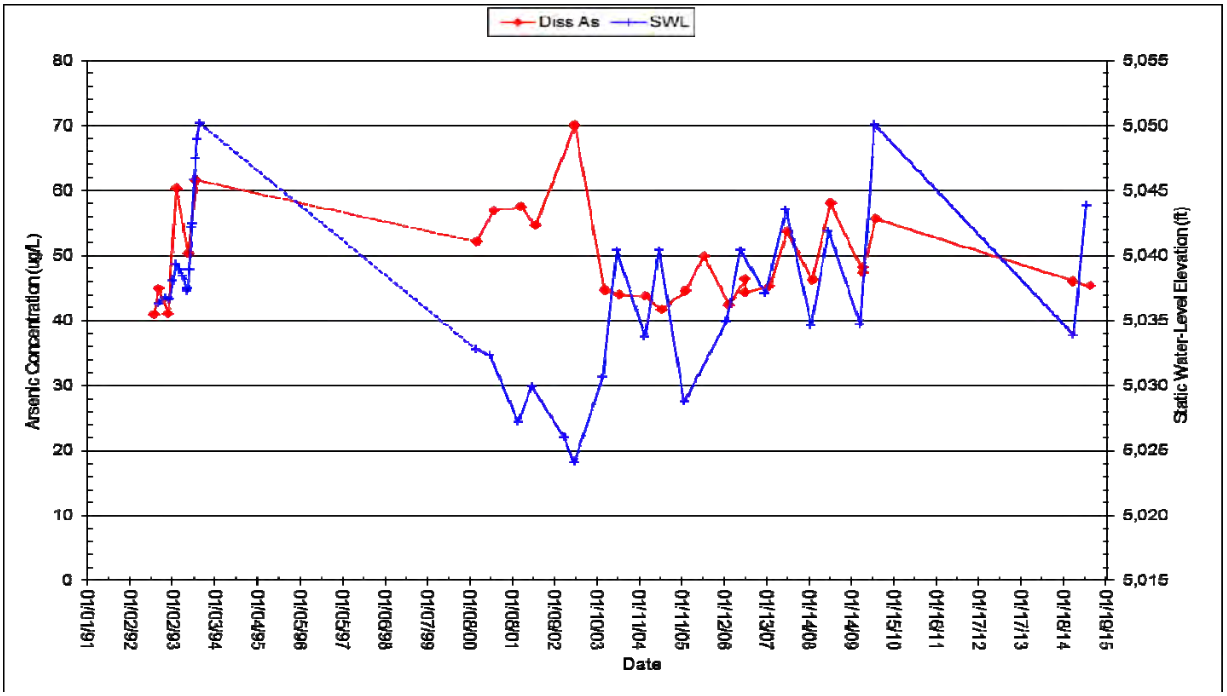


Figure 4.3-8. Well MW-211, located on Smelter Hill: arsenic concentrations and static water-level elevations over time.

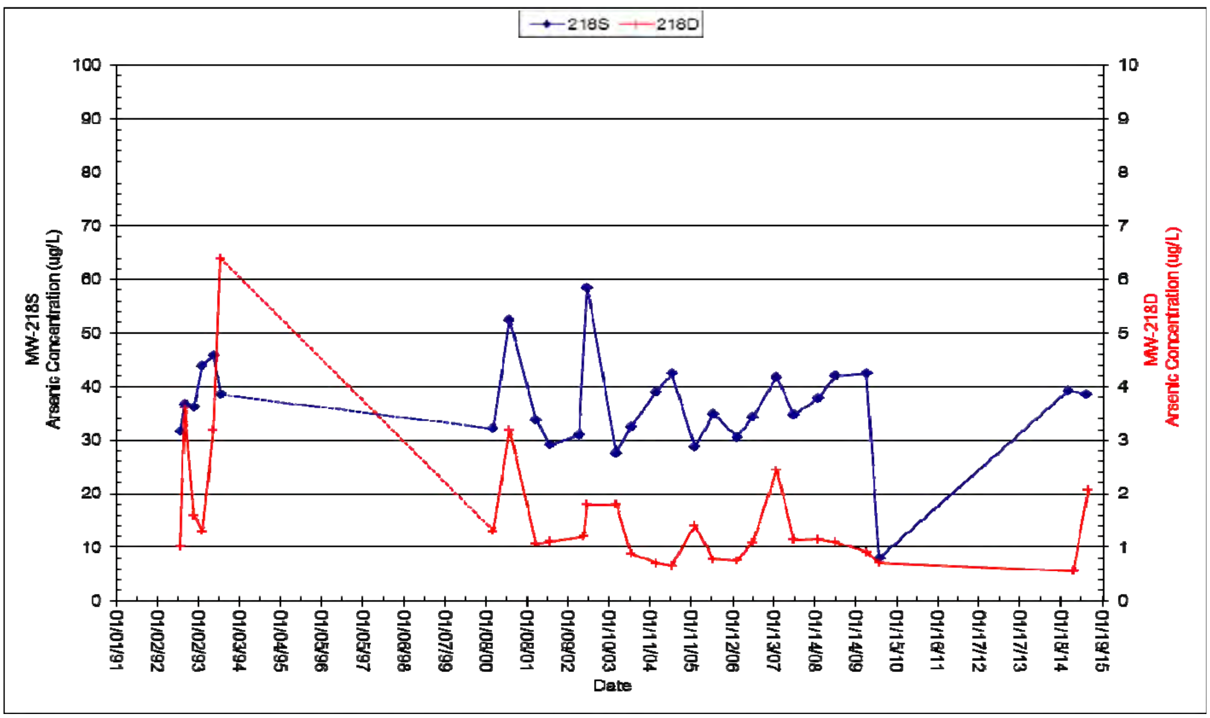


Figure 4.3-9. Arsenic concentrations over time for nested wells MW-218S and MW-218D.

Wells MW-219 and MW-220 are located along the east side of Smelter Hill, adjacent to the East Anaconda Tailings Pond, with moderately deep completion depths in medium fine-grained, valley-fill material. The screened intervals in each well are 60–74 ft and 85–95 ft, respectively. The long-term arsenic concentrations in both wells are well below the standard (table 4.3-2). Arsenic concentrations over time for both wells are shown in figure 4.3-10. None of the other COCs exceeded DEQ-7 standards in the 2014 5-yr review sampling events. Water-quality samples were collected three times in 1992 and 1993 and semi-annually from 2000 to 2009 in well MW-219; the frequency was similar in well MW-220, with the exception of 2001–2003, when single samples were collected each year. Semi-annual samples were collected from both wells during the 2014 5-yr review sampling.

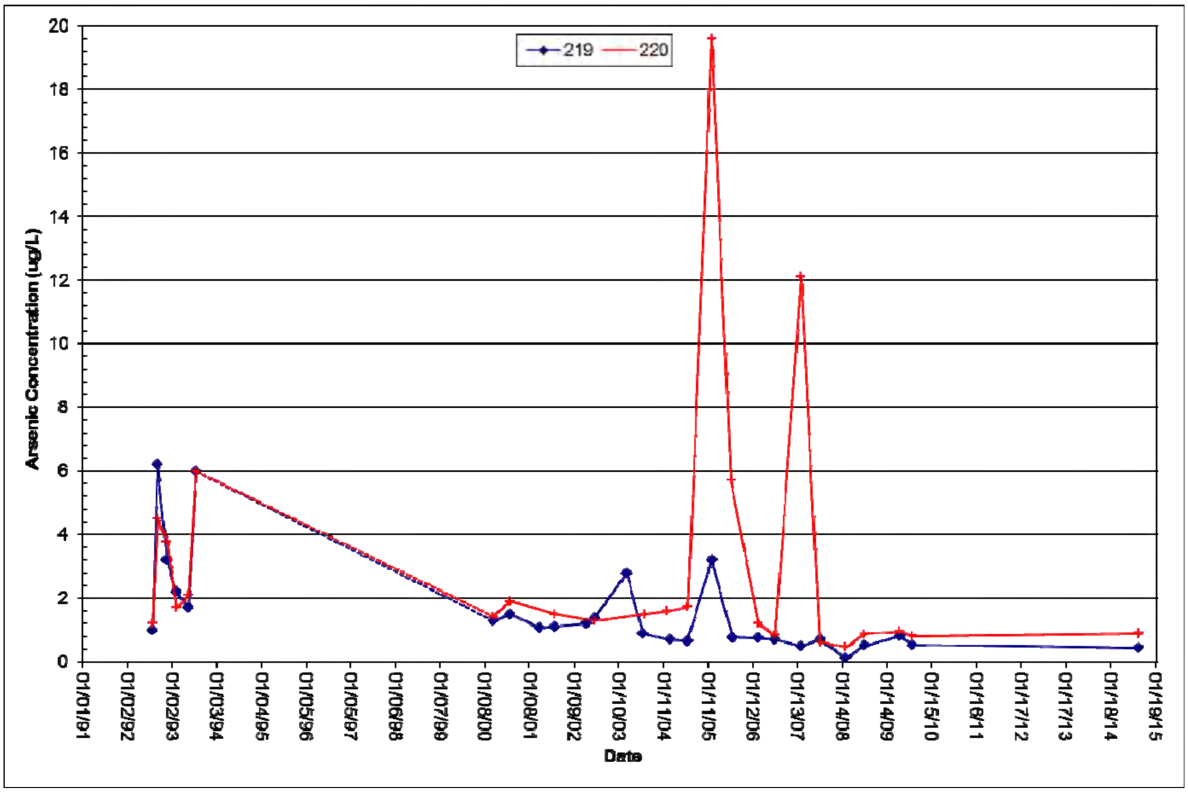


Figure 4.3-10. Arsenic concentrations over time for wells MW-219 and MW-220.

Well MW-258 was installed in the spring of 2009 and was sampled only during the summer high-water sampling event; semi-annual samples were collected from 2010 to 2014. This well is located on the east side of the Mill Creek road, across from wells MW-219 and MW-220. It was completed at a moderate depth (78–98 ft) in coarse valley-fill material, similar to well MW-220. Concentrations of all the COCs are very low and well below DEQ-7 standards. Arsenic concentrations are less than 1 µg/L (table 4.3-2).

Monitoring well MW-227 is located on the northwest side of Smelter Hill, near the base of the hill. This well is completed at a depth of 38 ft in coarse valley fill, with the screen interval between 27 and 36 ft. Arsenic is the only COC that exceeded DEQ-7 standards in both the 5-yr review samples and long-term average (table 4.3-2). Figure 4.3-11 shows arsenic concentrations over time. Groundwater samples were collected twice in 1992, thrice in 1993, and semi-annually from 2000 to 2009; semi-annual samples were collected in 2014. Concentrations have shown a gradual decrease over time.

Well MW-244 is located west of MW-227 and is completed at a similar depth (41 ft deep), in coarse valley-fill material. It has a water type similar to well MW-227; however, arsenic concentrations are much lower. Both the long-term average arsenic concentration and 2014 sample concentrations are below the DEQ-7 standards. Figure 4.3-11 shows arsenic concentrations over time. None of the other COCs had concentrations that exceeded DEQ-7 standards in the 2014 samples.

Well MW-247 lies to the south (upgradient) of wells MW-227 and MW-244. It has a deeper completion (85 ft deep) in the bedrock aquifer, with a screen interval from 65 to 84 ft. It has a different water type (Na-HCO_3) than wells MW-227 and MW-240 (Ca-HCO_3); arsenic concentrations are the lowest of the three wells (fig. 4.3-11). Both the 2014 samples and the long-term average arsenic concentration are well below DEQ-7 standards. None of the other COCs had concentrations above standards. Water-quality samples were collected once in 1997 and 1999, and semi-annually from 1999 to 2009; semi-annual samples were collected in 2014.

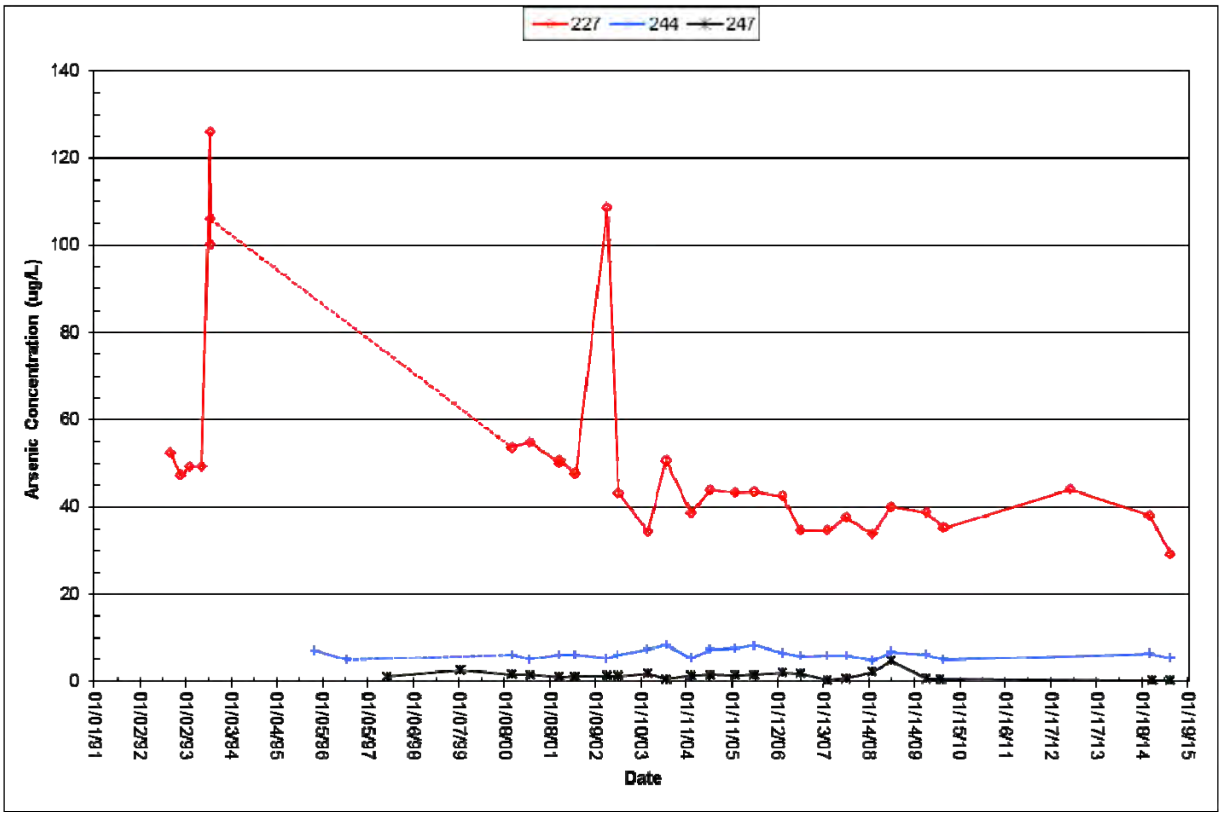


Figure 4.3-11. Arsenic concentrations over time in wells MW-227, MW-244, and MW-247, located on the northwest side of Smelter Hill.

4.3.2 Opportunity Ponds Well Water-Quality Results

The Opportunity Ponds portion of this WMA contains 28 monitoring wells; 11 of the wells were installed in 2011. All of the wells were installed in valley-fill material. During the 2014 5-yr review sampling program, samples were collected from all 28 wells. Arsenic exceeded DEQ-7 standards in 4 wells.

Wells MW-253 and MW-254 are at the far south end of the Opportunity Ponds area and downgradient of the nearby Smelter Hill well MW-218S (fig. 4.3-1). Wells MW-253 and MW-254 are completed at depths of 89 and 77 ft, respectively, depths that are similar to MW-218S. All three wells have a similar water type (Ca-SO_4). Arsenic exceeded DEQ-7 standards in well MW-

253, with concentrations slightly lower than those seen in MW- 218S (table 4.3-2), and arsenic concentrations are below standards in well MW-254 (fig. 4.3-12). None of the other COCs exceeded standards in either well. Water-quality samples were first collected in 2002 and have been collected at least semi-annually in each well from 2000 to 2009; semi-annual samples were collected in 2014..

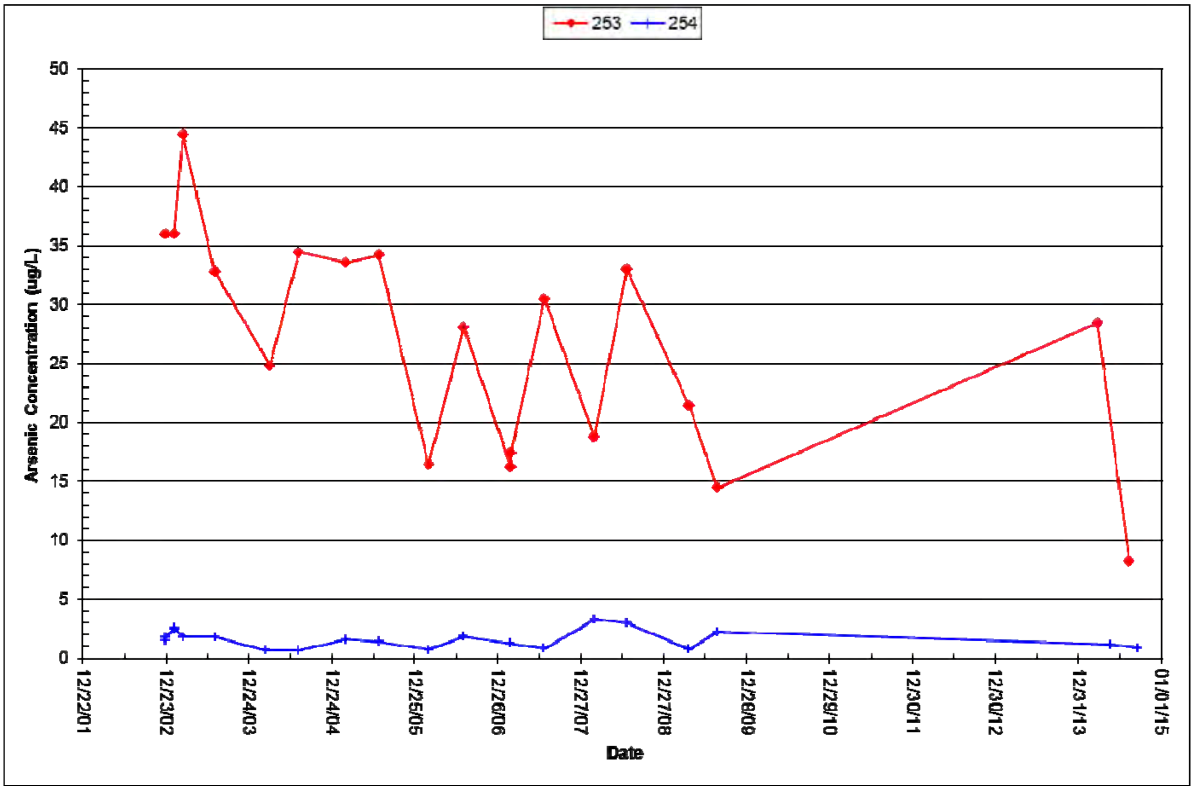


Figure 4.3-12. Arsenic concentrations over time for wells MW-253 and MW-254, located in the Opportunity Ponds.

Wells MW-243, MW-256, and MW-212 are located north of wells MW-253 and MW-254 and are upgradient of current reclamation activities. Well depths vary from 50 to 90 ft within the valley-fill material (table 4.3-1). The long-term average and 5-yr review sample arsenic concentrations are well below DEQ-7 standards (fig. 4.3-13). None of the other COCs were exceeded in the 2014 5-yr review samples for these three wells.

Groundwater samples were collected three times each in 1992 and 1993 and once in 1995 from well MW-212. Samples were collected semi-annually from 2000 to 2009 from this well; semi-annual samples were collected in 2014. Groundwater samples were collected once in 1995 and 1996 from MW-243 and semi-annually from 2000 through 2009; semi-annual samples were collected in 2014. MW-256 has a shorter period of record, with the first sample collected in 2004 and semi-annually from 2005 to 2009; semi-annual samples were collected in 2014.

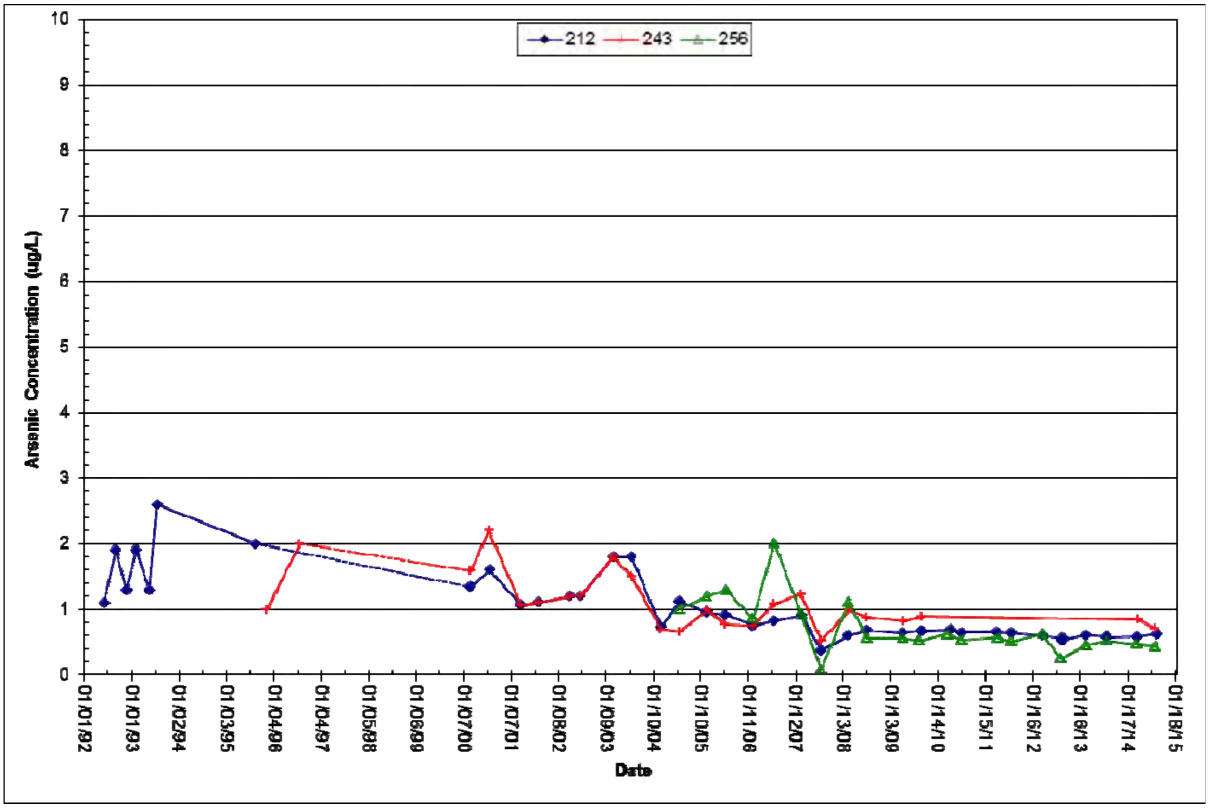


Figure 4.3-13 Arsenic concentrations over time for wells MW-212, MW-243, and MW-256, located in the Opportunity Ponds.

Wells MW-24, MW-25, and MW-214 are located along the northwest boundary of the Opportunity Ponds WMA at depths varying from 14 to 20 ft (fig. 4.3-1). Limited data are available for wells MW-24 and MW-25. A total of six samples were collected from well MW-24, two each in 1985, 2009, and 2014, while MW-25 only has data for 2009 and 2014. Water-quality samples were collected three times each in 1992 and 1993 and semi-annually since 2000 from well MW-214, which is a point of compliance. Arsenic concentrations are well below DEQ-7 standards in all samples from these wells (fig. 4.3-14). All additional COC concentrations are below standards for these three wells..

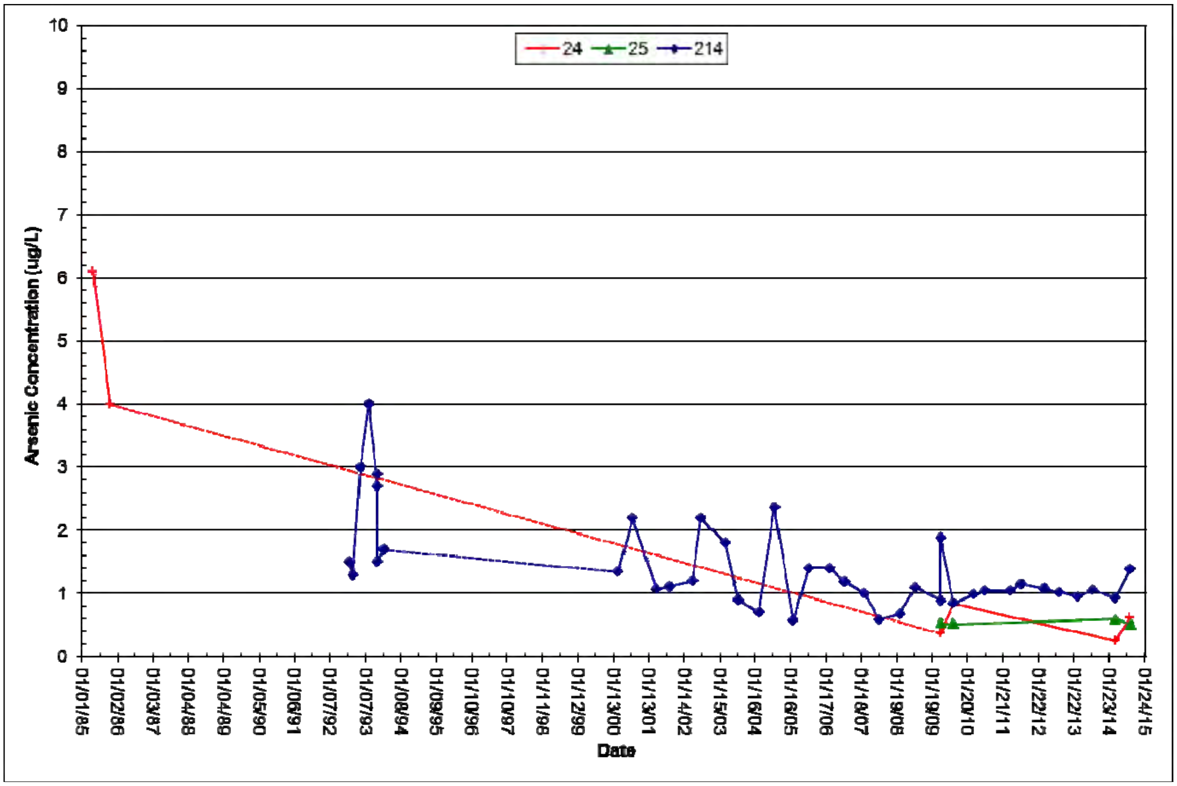


Figure 4.3-14. Arsenic concentrations over time for wells MW-24, MW-25, MW-214, located in the Opportunity Ponds.

Wells MW-26 and MW-26M are nested wells, located in the far northwest corner of the WMA (fig. 4.3-1). Well MW-26 is a shallow well (screened interval from 5 to 15 ft), while MW-26M was completed moderately deep (screened interval 60–70 ft; table 4.3-2). Both wells have a similar water type (Ca-SO_4), with arsenic concentrations below DEQ-7 standards (fig. 4.3-15). Groundwater samples were first collected in 1985 (twice) and semi-annually from 2000 to 2014 in well MW-26; the first samples were collected in 1995 (twice) from well MW-26M, followed by semi-annual samples since 2000.

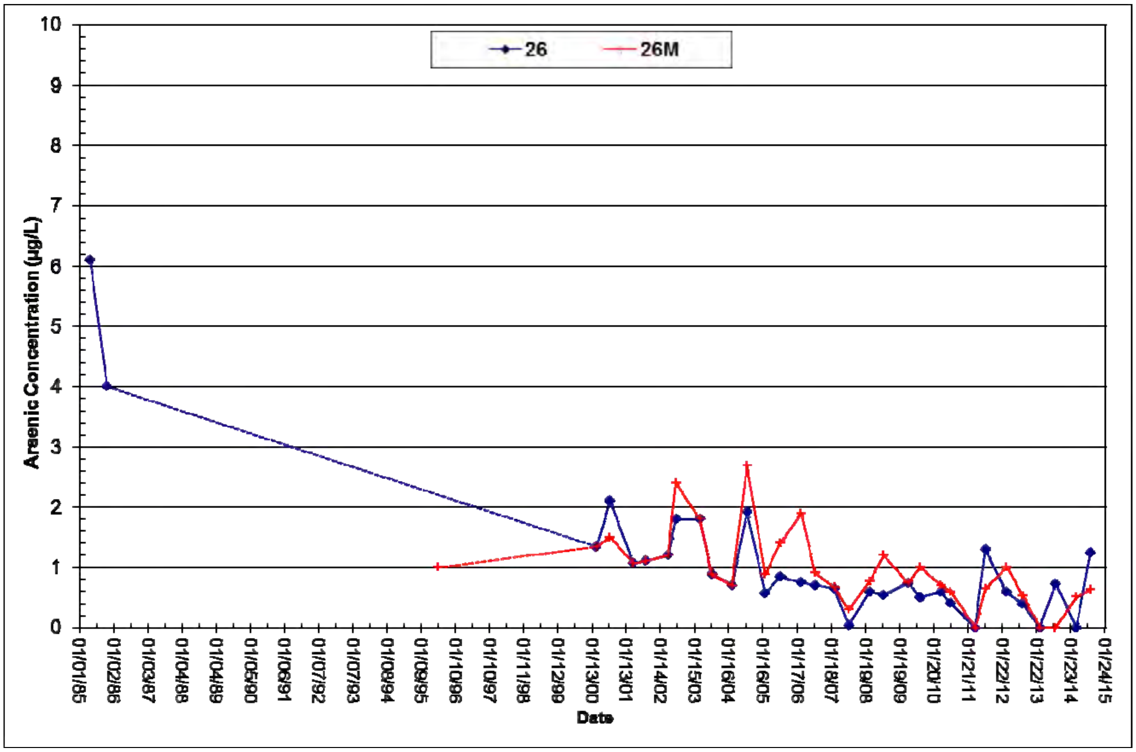


Figure 4.3-15. Arsenic concentrations over time for nested wells MW-26 and MW-26M, located in the Opportunity Ponds.

Well pairs MW-90, MW-95M, and MW-85 and MW-85M are located in the north-central area of the Opportunity Ponds WMA, at the toe of dikes separating different reclaimed cells (fig. 4.3-1). The shallow wells were completed (screened) in the 45- to 65-ft range and the deep (M) wells were completed at depths ranging from 125 to 146 ft. All four wells have a similar water type ($Ca\text{-}SO_4$; table 4.3-2). Arsenic concentrations exceed DEQ-7 standards in both the long-term average and 5-yr review samples in both MW-90 and MW-85; the arsenic concentrations are well below the DEQ-7 standard in the long-term average and 2014 5-yr review samples for wells MW-90M and MW-85M. Wells MW-90M and MW-85M were installed in 2011.

Well MW-90 has a noticeable downward trend in arsenic concentrations, while there are too few samples from well MW-85 to determine a trend (fig. 4.3-16). Well MW-85 was sampled twice in 1985 and 2009–2014, while well MW-90 was sampled twice in 1985, three times in 1991, four times in 1992, three times in 1993, and semi-annually from 2000 to 2014.

Arsenic concentrations have an upward trend in well MW-85M; however, concentrations are less than 2 µg/L. Arsenic concentrations were below the instrument detection limit in the 2014 5-yr review samples for well MW-90M, consistent with previous results (fig. 4.3-16).

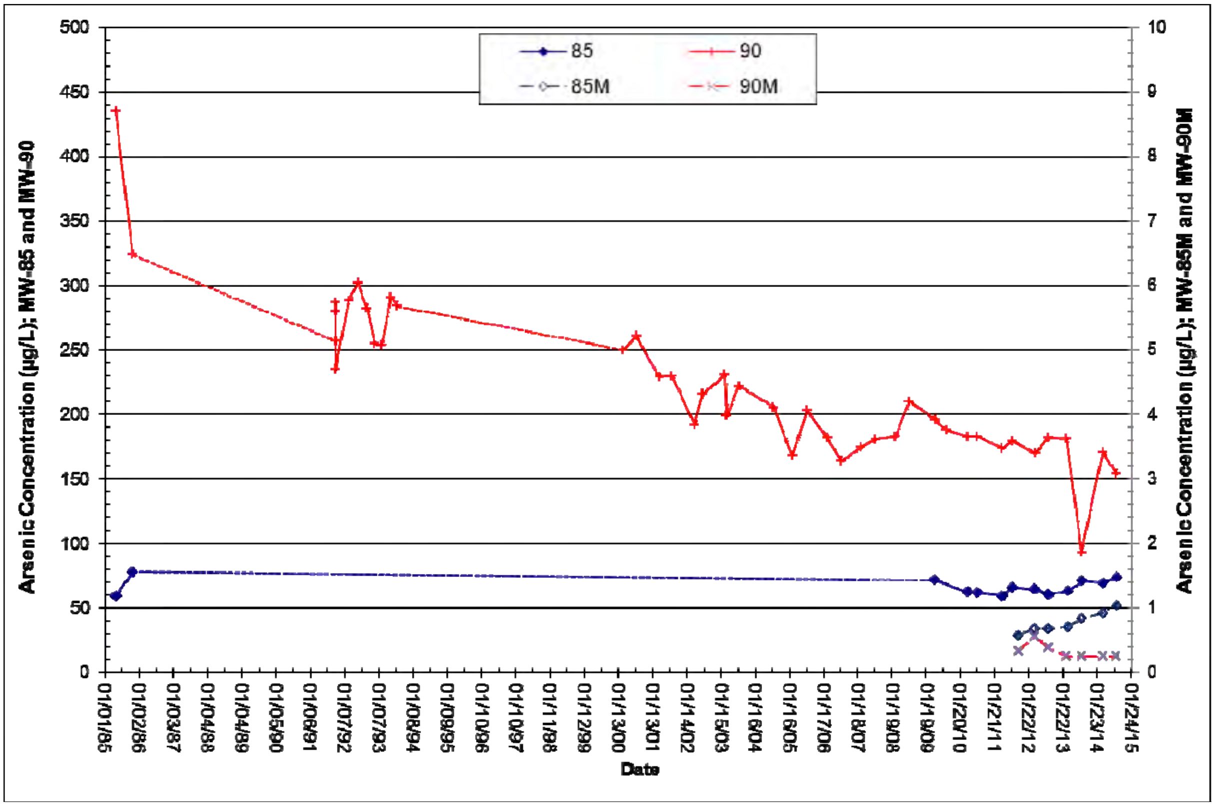


Figure 4.3-16. Arsenic concentrations over time for nested wells MW-85, MW-85M and MW-90 , and MW-90M, located in the Opportunity Ponds.

Wells MW-82, MW-82M, MW-31, MW-31M, and MW-216 are located on the north and northeast end of the ponds at the base of containment dikes. Wells MW-31 and MW-216 are shallow-completed wells, with screen intervals between 5 and 15 ft; wells MW-82, and MW-31M are completed at depths from 40 to 50 ft and 78 to 88 ft, respectively (table 4.3-2). Well MW-82M was installed in 2011 as a nested well adjacent to MW-82; it is completed at a depth of 110 ft with a screen interval from 100 to 110 ft. Wells MW-31 and MW-31M are a nested pair also. All five wells have a similar water type, Ca-SO_4. Arsenic concentrations in the high-water sample for well MW-31 exceeded the DEQ-7 standard; none of the COCs were exceeded in the 5-yr review samples for the other four wells. Long-term arsenic concentrations are shown in figures 4.3-17 and 4.3-18. With one exception, groundwater samples have been collected with the same frequency in wells MW-31 and MW-82: two samples in 1985 and semi-annually since 2000. Well MW-31M had semi-annual samples collected in 1995 and from 2000 through 2014, while well MW-216 had three samples collected in 1992, two in 1993, and twice yearly from 2000 to 2014. Samples have been collected semi-annually from MW-82M from 2012 to 2014; one sample was collected in 2011 following the well’s installation.

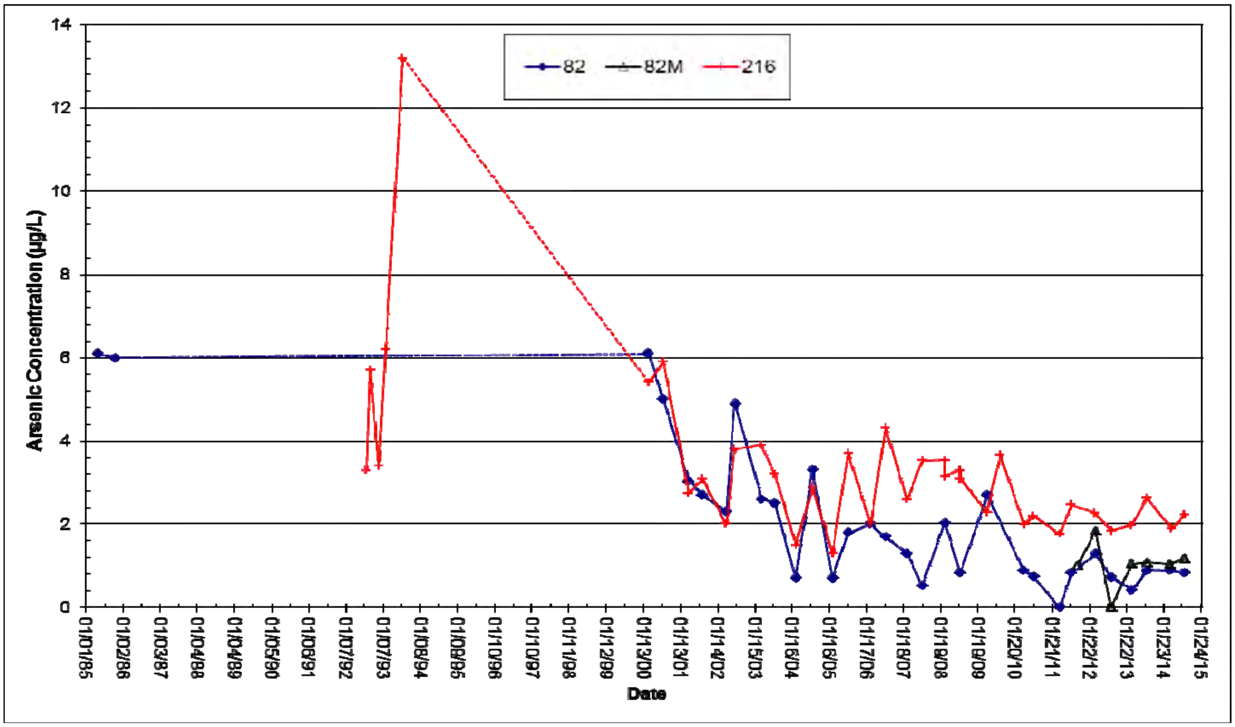


Figure 4.3-17. Arsenic concentrations over time for wells MW-82, MW-82M, and MW-216, located in the Opportunity Ponds.

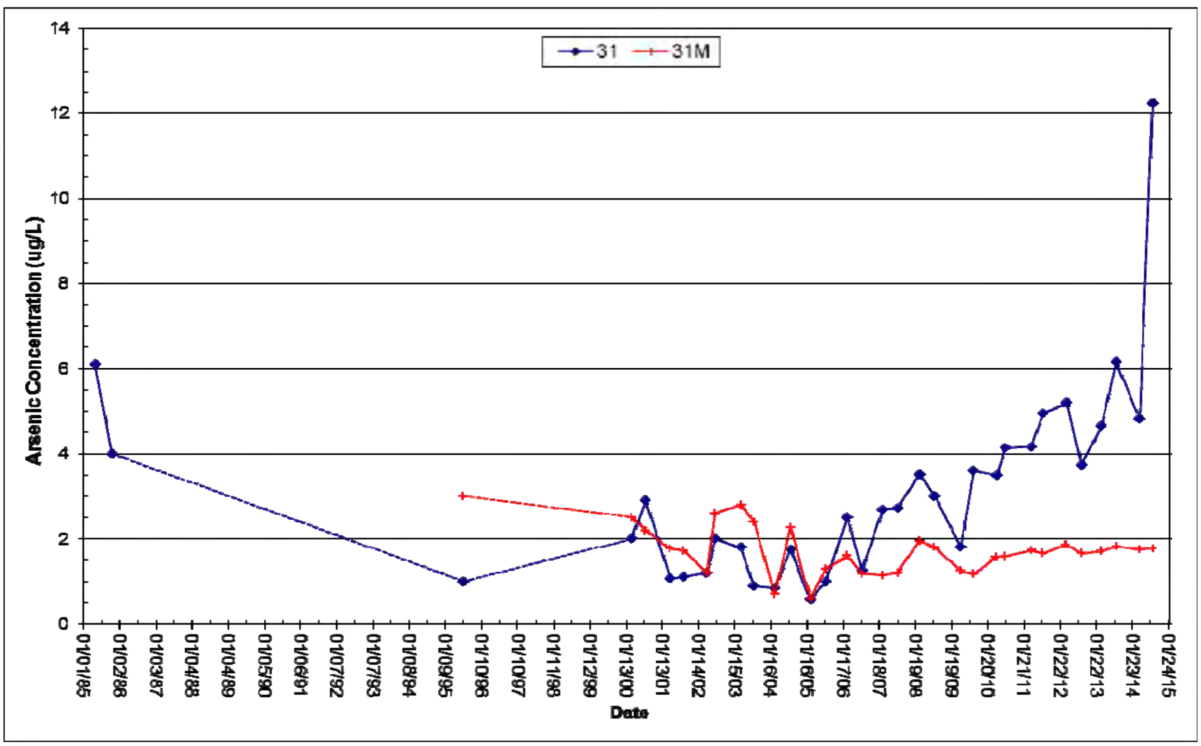


Figure 4.3-18. Arsenic concentrations over time for wells MW-31 and MW-31M, located in the Opportunity Ponds.

Well MW-273 is located on the south side of the Opportunity Ponds WMA, between the ponds and the town of Opportunity; it is also a point of compliance. Water-quality data are only available for the fall of 2011 and semi-annually from 2012 to 2014. All of the COC concentrations were well below DEQ-7 standards. The long-term average arsenic concentration was 0.40 µg/L.

Wells within the Opportunity Ponds portion of the Smelter Hill–Opportunity Ponds WMA have two different water types, Ca-HCO_3 and Ca-SO_4. Three wells that would be considered upgradient of the ponds are characterized as Ca-HCO_3 water and have very low concentrations of arsenic and the other COCs. The other 25 wells are Ca-SO_4 type waters, indicating an influence from mining and smelting wastes. However, arsenic concentrations only exceeded DEQ-7 standards in 4 wells, 2 of which are in the interior of the pond system (MW-85 and MW-90) and one is at the end (toe of the pond system); the fourth well is downgradient of the Smelter Hill portion of the site that has elevated arsenic concentrations. None of the COCs exceeded standards.

4.3.3 Smelter Hill/Opportunity Ponds Groundwater-Level Observations

This site contains the greatest number of monitoring wells, distributed between Smelter Hill to the southwest of Highway 1 and the Opportunity Ponds to the northeast of Highway 1 (fig. 4.3-1). Table 4.3-3 shows the net water-level variations for the wells in this WMA. Changes range from a decline of over 12 ft to a rise of almost 11 ft in the Smelter Hill group of wells, to a decline of over 7 ft to a rise of 10 ft in the Opportunity Ponds wells.

Plates 2 and 3 show the general groundwater flow direction for the spring (low-water) and summer (high-water) sampling events. Groundwater flows from the south to the north on the west side of Smelter Hill and from the southwest to the northeast on the east side of Smelter Hill. Once it reaches the valley floor it takes a more west to east and southwest to northeast flow direction, paralleling Warm Springs Creek.

Since monitoring began, water levels have increased the most in the wells completed in valley-fill, medium fine-grained sediments, along the base of the Anaconda Ponds (MW-211, MW-218S; figure 4.3-19), followed by water-level increases in the wells completed in bedrock on the upper portion of Smelter Hill (A1-BR2; figure 4.3-20).

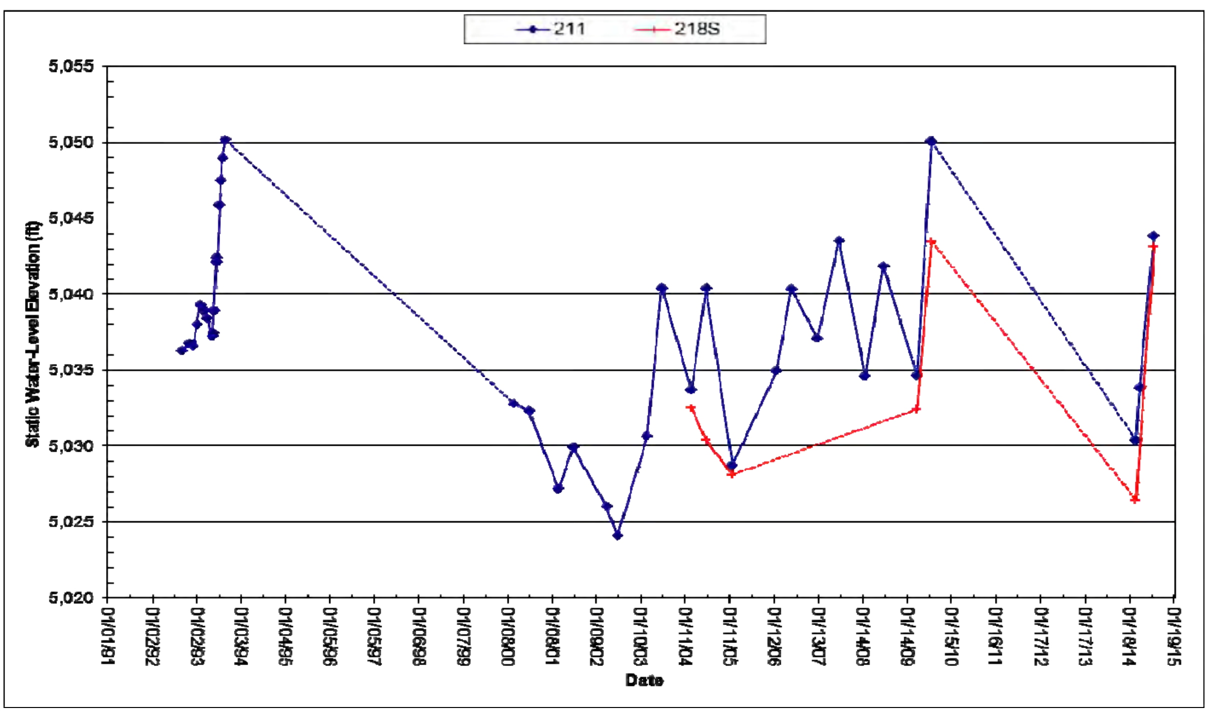


Figure 4.3-19. Water-level hydrographs for wells MW-211 and MW-218D, located at the base of Smelter Hill.

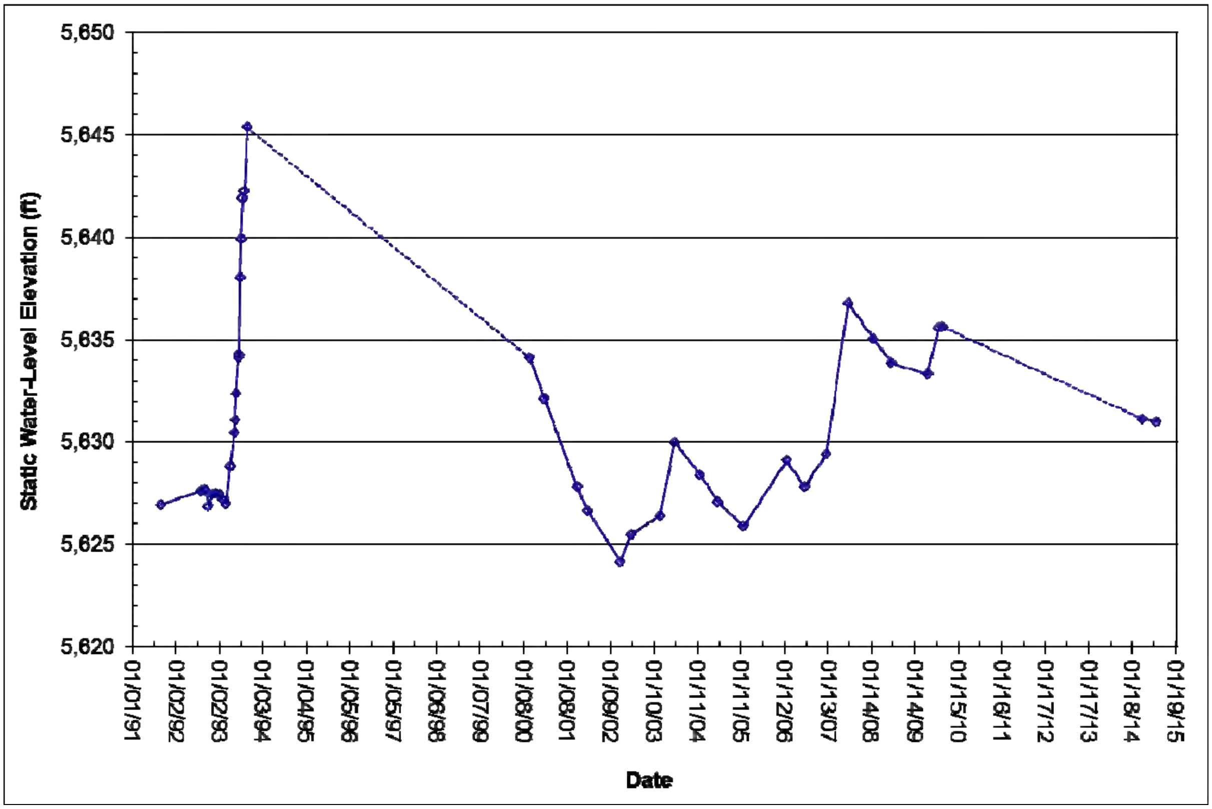


Figure 4.3-20. Water-level hydrograph for well A1-BR2, located on Smelter Hill.

Table 4.3-3. Smelter Hill/Opportunity Ponds monitoring well completion and net water-level change summary.

Smelter Hill Sites

Well ID	Total Depth (ft)	Screen Interval (ft)	Aquifer	Net Water-Level Change (ft)
A1-BR2	183	160–180	Bedrock	4.04
A2-BR	83	60–80	Bedrock	-3.35
B4-BR	88	65–85	Bedrock	-2.36
C2-AL1	76	52–72	Bedrock	-2.34
D3-AL1	46	22–42	Valley-Fill Coarse	-1.22
E2-AL1	43	19–39	Valley-Fill Coarse	-2.82
MW-210	467	36.7–46.1	Valley-Fill Coarse	-2.88
MW-211	118	103.5–118	Valley-Fill Med-Fine	7.55
MW-218S	85.4	70.4–85	Valley-Fill Coarse	10.63
MW-218D	249	238.7–248.3	Valley-Fill Med-Fine	5.73
MW-219	75	59.6–74.2	Valley-Fill Med-Fine	1.38
MW-220	102	85–95	Valley-Fill Med-Fine	-12.67
MW-258	98	78–98	Valley-Fill Coarse	-1.14
MW-227	38	27.1–36.4	Valley-Fill Coarse	-1.51
MW-244	41	30.6–40.6	Valley-Fill Coarse	-3.75
MW-247	85	65.5–84	Bedrock	0.19
Opportunity Ponds Sites				
MW-212	62	39.3–53.7	Valley-Fill Coarse	8.54
MW-214	15	5.6–15	Valley-Fill Coarse	-3.11
MW-216	15	5–14.3	Valley-Fill Coarse	-4.14
MW-243	50.3	40–50	Valley-Fill Coarse	-0.60
MW-253	89	66.8–86.8	Valley-Fill Coarse	7.96
MW-254	77	56.4–76.4	Valley-Fill Coarse	-0.34
MW-256	95	75–94.7	Valley-Fill Med-Fine	10.57
MW-26	15	5–15	Valley-Fill Coarse	-7.24
MW-26M	71	60.5–70.5	Valley-Fill Med-Fine	-2.50
MW-31	15	5–15	Valley-Fill Coarse	-7.05
MW-31M	88.5	78–88	Valley-Fill Med-Fine	-1.97
MW-82	50	40–50	Valley-Fill Coarse	-4.98
MW-82M	110	100-110	Valley-Fill Coarse	0.87
MW-85	56	45–55	Valley-Fill Coarse	-4.07
MW-85M	155	136-146	Valley-Fill Coarse	-0.13
MW-90	66	56–66	Valley-Fill Coarse	-4.24
MW-90M	135	125-135	Valley-Fill Coarse	-1.47
MW-273	18	5-15	Valley-Fill Coarse	0.70
MW-266	20	9-19	Valley-Fill Coarse	0.38
MW-265	77	67-77	Valley-Fill Coarse	Flowing
MW-268	20	8-18	Valley-Fill Coarse	-0.09
MW-267	74.5	64-74	Valley-Fill Coarse	-0.52
MW-270	25	12-22	Valley-Fill Coarse	-0.57
MW-269	76	62.5-72.5	Valley-Fill Coarse	-0.32
MW-272	21	10.5-20.5	Valley-Fill Coarse	-0.20
MW-271	81.5	71.5-81.5	Valley-Fill Coarse	-0.31
MW-24	20	8–18	Valley-Fill Coarse	-3.11
MW-25	14	4–14	Valley-Fill Coarse	-3.94

Several wells have water-level measurements monthly from mid-1992 through mid-1993 that show a representation of the annual water-level cycle that occurs in most of the wells on this site (fig. 4.3-21). Water levels begin to rise in March, reaching their peak in late July, before declining through late summer and winter. This trend is harder to depict in wells with semi-annual measurements.

The Opportunity Ponds are downgradient from the Smelter Hill site and the regional groundwater flow direction is from the west to the northeast (plate 3). Of the 28 existing wells in the pond area, 22 are completed in the coarse valley-fill material, while the others are completed in the medium fine-grained fill. Wells along the southwest side of the ponds have exhibited the largest net water-level increase, ranging between 7 and 11 ft (fig. 4.3-22). Wells located along the toe of various cells within the pond system have exhibited the greatest level of water-level decline, ranging from 4 to 8 ft over time (fig. 4.3-23). This may be reflective of ongoing reclamation and capping activities in this portion of the site.

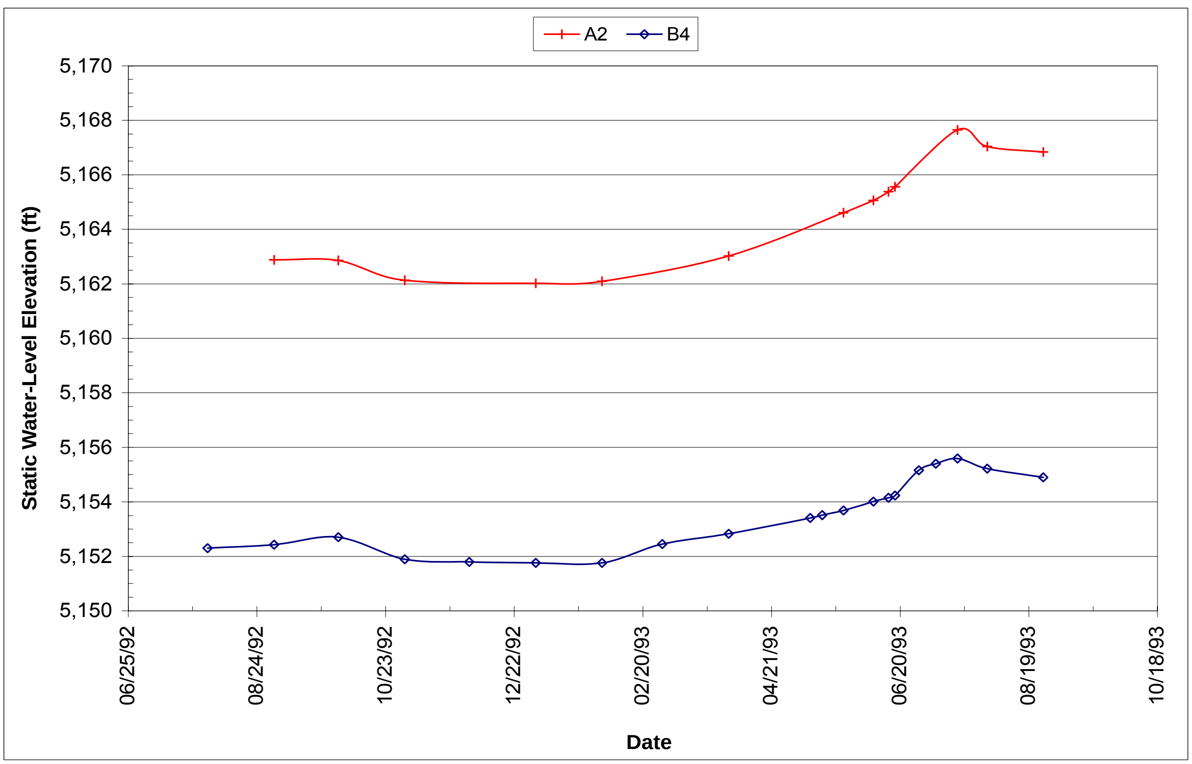


Figure 4.3-21. Water-level hydrographs for wells A2-BR and B4-BR showing seasonal water-level trends based upon monthly water-level measurements, 1992–1993.

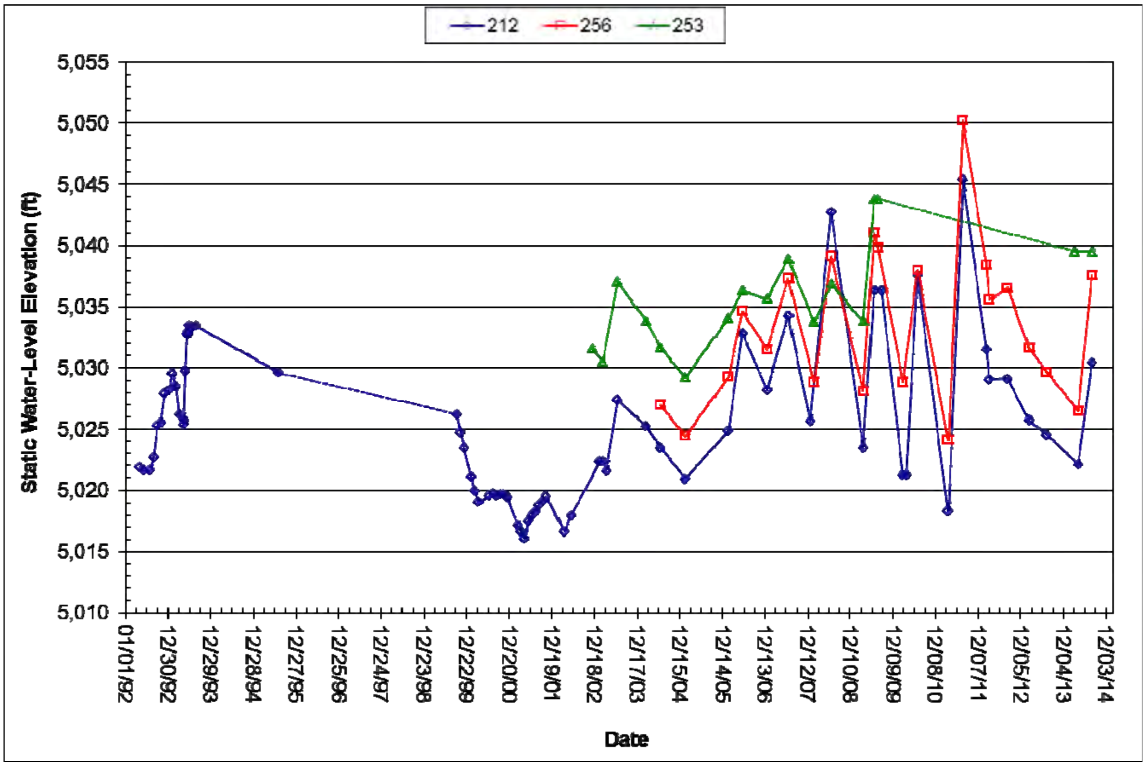


Figure 4.3-22. Water-level hydrographs for wells MW-212, MW-256, and MW-253, located along the southwest side of the Opportunity Ponds.

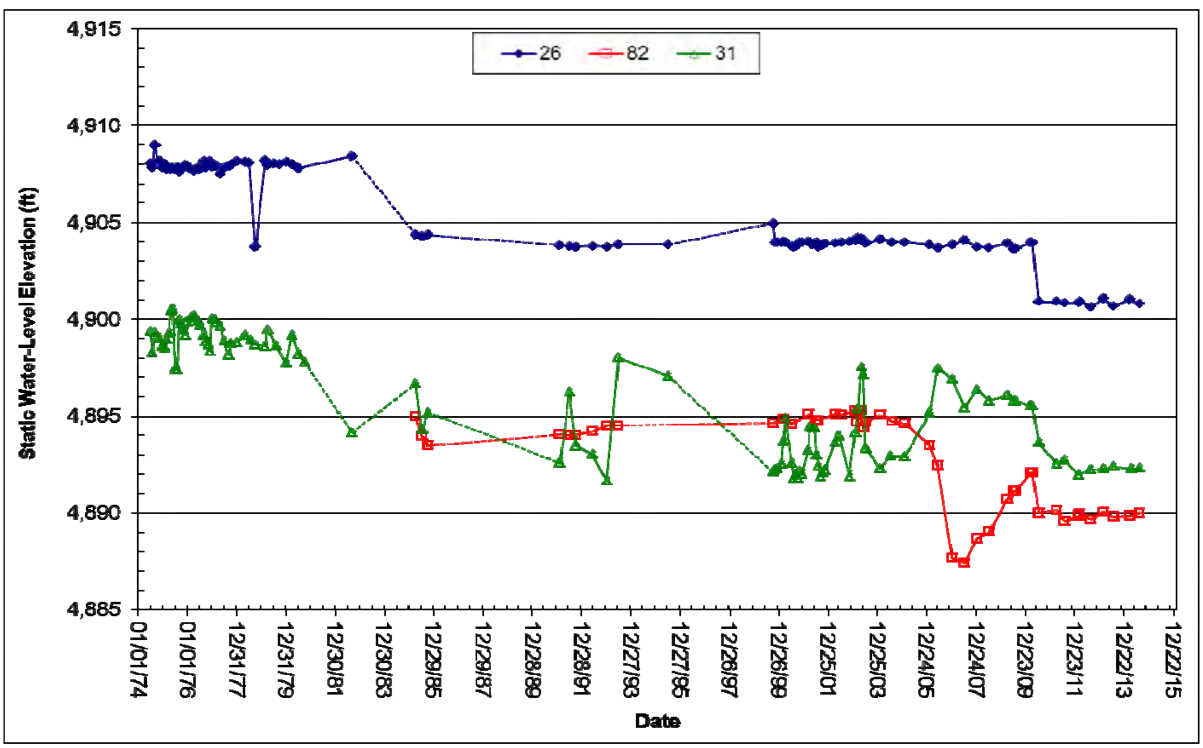


Figure 4.3-23. Water-level hydrographs for wells MW-26, MW-82, and MW-31, located along the northeast toe of the Opportunity Ponds.

4.4 Old Works Waste Management Area

The Old Works WMA contains 20 wells (fig. 4.4-1), all completed in valley-fill. Major features within the WMA are: Old Works Golf Course, former Arbiter Plant, Anaconda–Deer Lodge Landfill, wastewater treatment plant, and Lost Creek Raceway. The site contains waste from the historic Old Works Smelter within the approximate 2.2 mi^2 that constitute the WMA.

Table 4.4-1 contains a listing of wells within the WMA, along with well completion details and a listing of COCs for this group of wells. The COCs for this group of wells is the broader group including Cd, Cu, Pb, and Zn. Due to the nature of waste and historic processing facilities, Cd levels are a concern during periods of increased water levels. Additional sampling of 14 of the site wells is required when the water level reaches a predetermined elevation in monitoring well MW-213. This will be discussed in section 4.4.3.

Table 4.4-2 contains a general summary of water-quality conditions for each of the wells within the WMA. Arsenic concentrations for the 5-yr review sampling are shown, along with the long-term average for each well. COCs that exceeded DEQ-7 water-quality standards are also noted. Appendix E contains 2014 water-quality data for sites in this WMA. The WMA contains one nested pair of wells. No springs are located within this WMA.

4.4.1 Old Works Wells Water-Quality Results

Arsenic concentrations were below DEQ-7 standards in both the 2014 5-yr review samples and long-term average for all wells in this WMA. However, cadmium concentrations exceeded the standard in the long-term average for three wells, while three of the wells had 2014 concentrations above the standard.

Wells IW-1 and IW-5 were installed as irrigation wells for the Old Works Golf Course. Due to concerns about elevated metal concentrations, they are no longer used for that purpose; however, they are used for periodic water-quality monitoring. Figure 4.4-2 shows the long-term arsenic concentrations for both wells. Arsenic concentrations appear to have a slight downward trend. (No 2014 samples were collected from IW-01 due to mechanical/electrical problems.) Both wells are completed at similar shallow depths, with the screen intervals from 21 to 42 ft.

Sample frequency has been sporadic for wells IW-01 and IW-05. Initially, samples were collected semi-annually from 2003 through 2006; however, concerns about confined space entry led to a single sampling event in 2008. Since these wells were installed for irrigation, no hydrants or other sample ports existed with the exception of ports in a vault, which was classified as a confined space. To alleviate this issue, modifications were made during 2009 to the vault, with frost-free hydrants added to the piping system.

Figure 4.4-1. Location map for Old Works Waste Management Area monitoring sites.

Table 4.4-1. Old Works Waste Management Area monitoring wells.

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Water-Quality Analytes
Old Works				
IW-01	250038	46	22–42	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
IW-05	250039	46	23–41	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
LF-4	249800	50	32–42	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-201	249804	30	18–28	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-204	250041	44.5	32–42	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-205	249803	48	26.5–36.5	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-206	250042	50	28–43	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-206d	254054	76	53–73	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-207	250043	103	77–92	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-208	250044	70	47–67	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-209	250045	70	49–69	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-213	138022	42	31–41	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-240	250047	87	77–87	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-241	250048	60	50–60	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-242	250049	67	57–67	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-251	250014	77	55–75	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-252	249797	76	55–75	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-255	250055	95	75–95	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-72	250051	35	25–35	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
TI-A	249801	38	24–34	As, Cd, Cu, Pb, Zn, Ca, Mg, Na, K, Fe, Mn, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness

Table 4.4-2. Old Works Waste Management Area water-quality summary.

Well ID	GWIC ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (µg/L)	2014 High-Water Arsenic (µg/L)	Long-Term Average Arsenic (µg/L)	Comment
Old Works							
IW-01	250038	22–42	$Ca\text{-}SO_4$	—	—	1.07	No 2014 samples due to mechanical/electrical problems.
IW-05	250039	23–41	$Ca\text{-}SO_4$	1.81	<0.10U	0.96	
LF-4	249800	32–42	$Ca\text{-}HCO_3$	4.70	4.36	5.78	
MW-201	249804	18–28	$Ca\text{-}HCO_3$	0.93	0.73	1.38	
MW-204(EDW)	250041	32–42	$Ca\text{-}HCO_3$	—	0.51	1.19	
MW-205	249803	26.5–36.5	$Ca\text{-}HCO_3$	5.54	5.41	5.50	
MW-206(EDW)	250042	28–43	$Ca\text{-}HCO_3$	—	0.56	1.27	Cd exceeded DEQ-7 standards.
MW-206d(EDW)	254054	53–73	$Ca\text{-}HCO_3$	—	0.52	0.95	Cd exceeded DEQ-7 standards.
MW-207	250043	77–92	$Ca\text{-}HCO_3$	0.69	0.67	1.12	
MW-208(EDW)	250044	47–67	$Ca\text{-}HCO_3$	0.69	0.65	1.24	
MW-209(EDW)	250045	49–69	$Ca\text{-}HCO_3$	—	0.28J	1.04	Cd exceeded DEQ-7 standards in 2014 samples and long-term average.
MW-213(EDW)	138022	31–41	$Ca\text{-}SO_4$	—	<0.10U	0.88	Cd, Cu, and Zn long-term average exceeds DEQ-7 standards.
MW-240(EDW)	250047	77–87	$Ca\text{-}HCO_3$	—	0.61	0.85	
MW-241(EDW)	250048	50–60	$Ca\text{-}HCO_3$	—	0.36J	0.74	
MW-242(EDW)	250049	57–67	$Ca\text{-}HCO_3$	—	0.38J	0.80	
MW-251	250014	55–75	$Ca\text{-}SO_4$	0.44	0.42	0.73	
MW-252	249797	55–75	$Ca\text{-}HCO_3$	0.42	0.33J	0.64	
MW-255	250055	75–95	$Ca\text{-}HCO_3$	0.82	0.86	0.77	
MW-72	250051	25–35	$Ca\text{-}HCO_3$	1.55	1.64	2.06	
TI-A	249801	24–34	$Ca\text{-}HCO_3$	1.07	0.71	0.82	Cu average exceeds DEQ-7 standard.

EDW, well sampled when triggered by water-level elevation in MW-213.

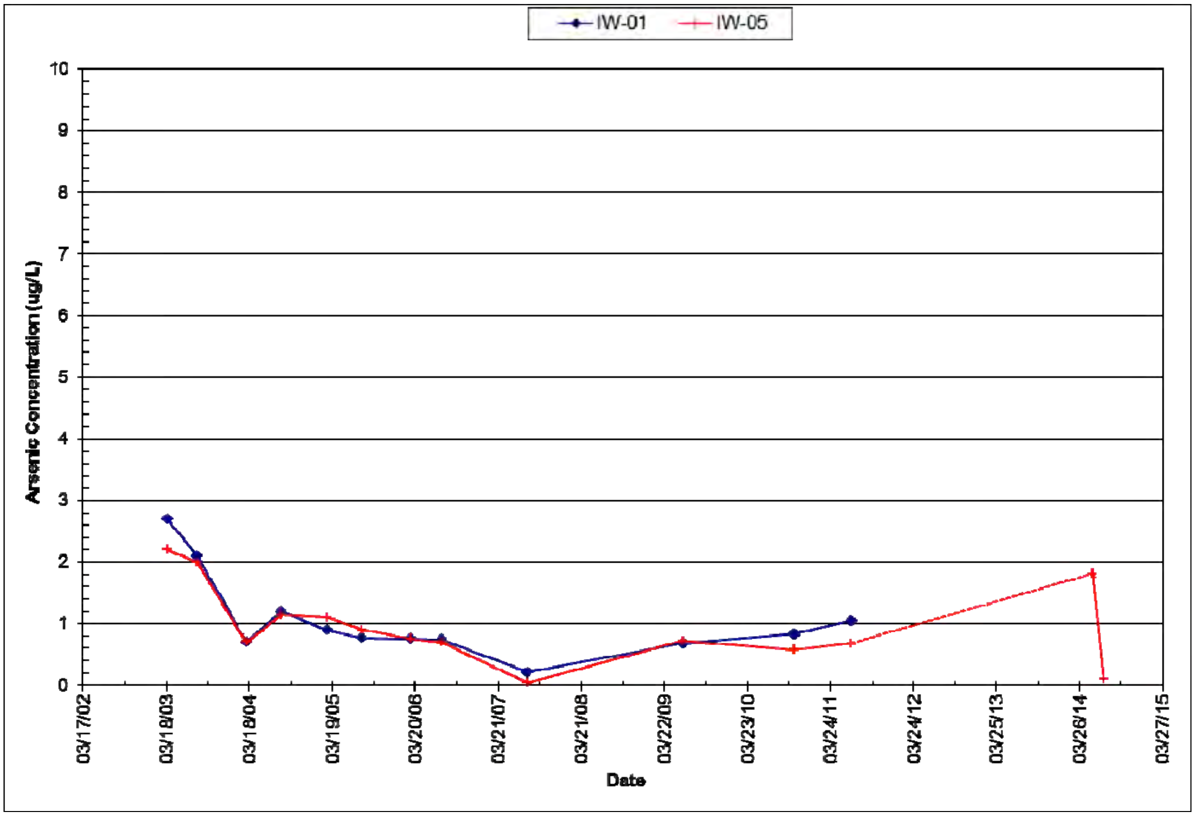


Figure 4.4-2. Arsenic concentrations over time for wells IW-01 and IW-05.

Well T1-A (38 ft deep) is located to the west of the golf course irrigation wells, while well MW-201 (30 ft deep) is just to the south of them. These wells are completed in the same shallow interval between 18 and 34 ft. Figure 4.4-3 shows arsenic concentrations over time for these wells. No COCs exceeded standards in samples for MW-201 or well T1-A. Only five samples exist for well T1-A, with the first sample collected in 1996, followed by two samples in 2009 and 2014. The initial Cd and Cu concentrations were considerably above standards; however, the 2009 and 2014 5-yr review samples had concentrations well below DEQ-7 standards. Well MW-201 has a long history of data, with samples collected anywhere from twice to four times a year between 1990 and 1993, followed by a single sample in 1995. Samples have been collected semi-annually from 2000 to 2009; semi-annual samples were collected in 2014.

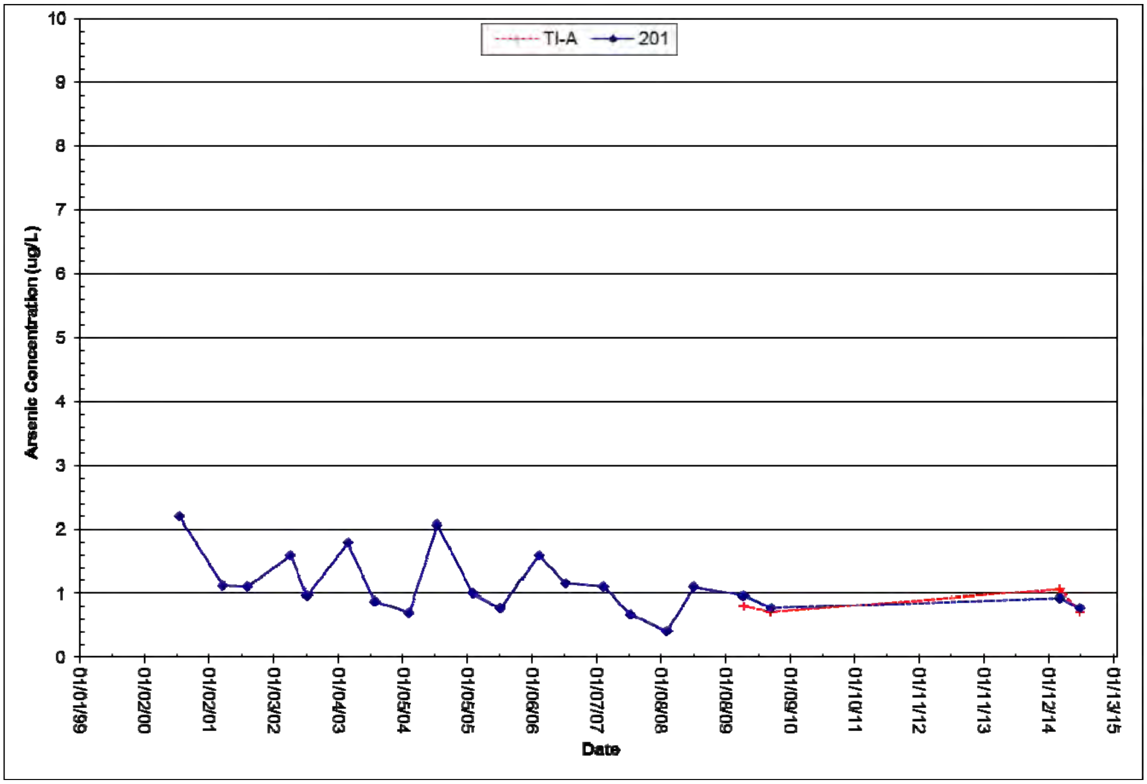


Figure 4.4-3. Arsenic concentrations over time for wells T1-A and MW-201.

Wells MW-204 and MW-213 are located in the Red Sands portion of the site, to the west of the former Arbiter Plant and south of Warm Springs Creek. Both wells were completed in the 30- to 45-ft range. The upgradient well (MW-204) has a Ca-HCO_3 water type, while the downgradient well, MW-213, has a Ca-SO_4 water type, indicative of potential mining waste impact (table 4.4-2). Changes in concentrations appear to follow similar patterns in both wells since 2000 (fig. 4.4-4). None of the COCs exceeded DEQ-7 standards in well MW-204; however, cadmium, copper, and zinc all exceed standards in the average concentrations at well MW-213 (fig. 4.4-5). This is not unexpected, as the 1998 ROD identified cadmium, copper, and zinc as being elevated in groundwater in this portion of the site (Red Sands) and the well is located in the middle of the waste area.

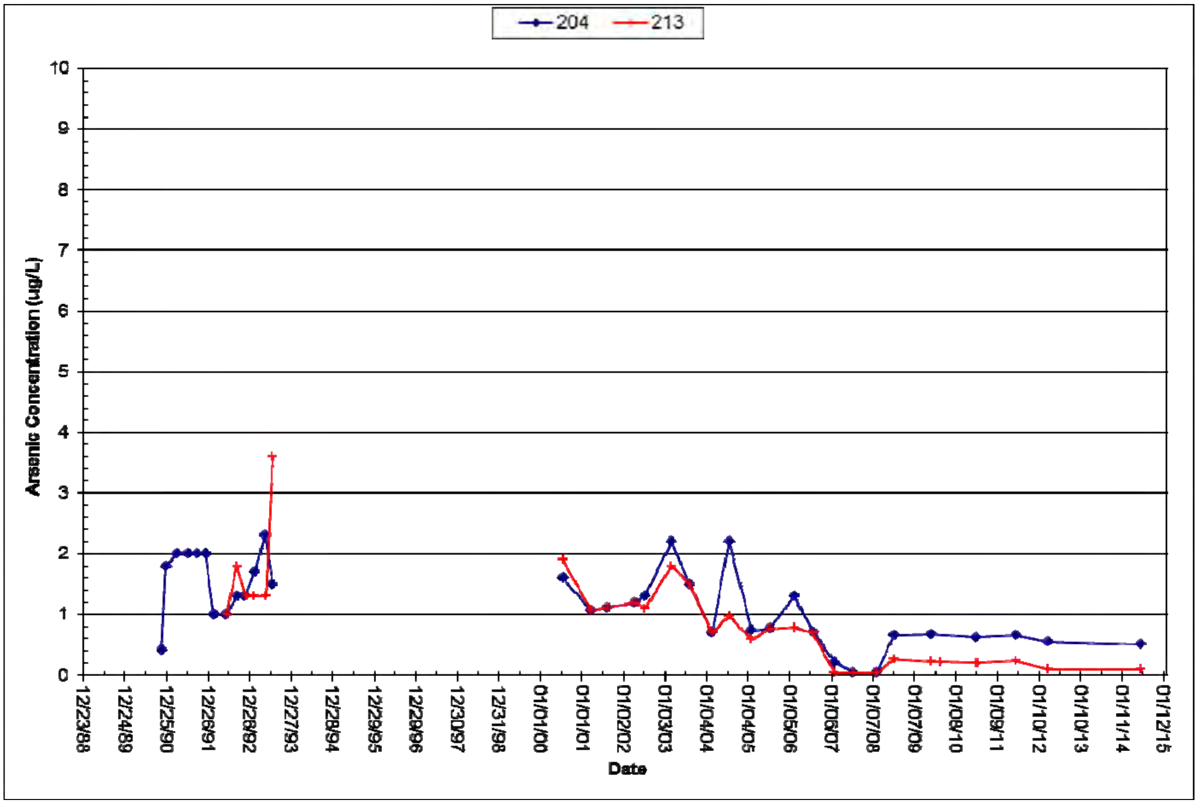


Figure 4.4-4. Arsenic concentrations over time for wells MW-204 and MW-213.

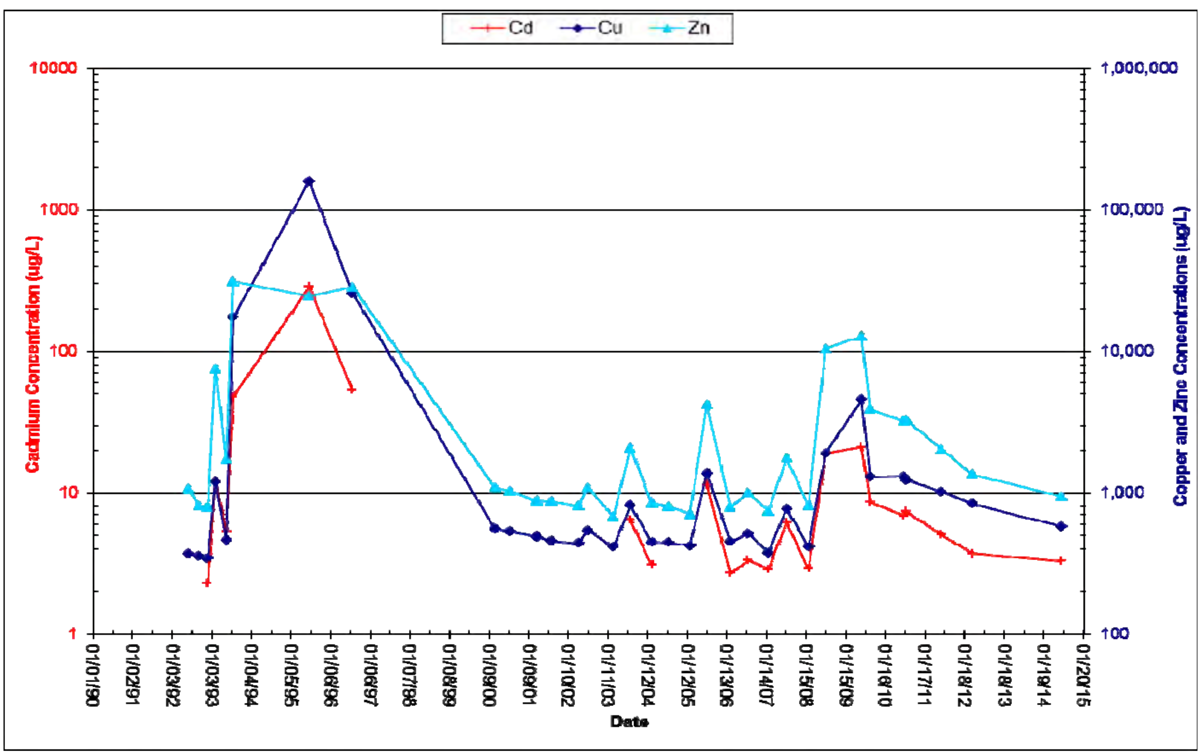


Figure 4.4-5. Long-term cadmium, copper, and zinc concentrations for well MW-213.

Wells LF-4 and MW-205 sit on the north side of Warm Springs Creek, across from the Red Sands area. Both wells are completed at moderately shallow depths, with the screen intervals between 26 and 42 ft, and are a Ca-HCO_3 water type. Concentrations of arsenic and the other COCs are below standards in both the 2014 5-yr review samples and the long-term averages (fig. 4.4-6; table 4.4-2). Water-quality samples were collected two or more times per year from 1990 through 1993 and semi-annually from 2000 to 2009, and semi-annually in 2014 in well LF-4. Sampling frequency was similar in well MW-205 through 1993; single samples were collected in 1995, 1996, and 2000 followed by semi-annual samples from 2001 to 2008 and 2014. Only one sample was collected in 2009 due to changes implemented in the monitoring program.

Wells MW-206 and MW-206D are a nested pair located on the east side of the former Arbiter Plant, in the northeast corner of the current landfill. Well completion (screen interval) is 28–43 ft and 53–73 ft in wells MW-206 and MW-206D, respectively. Both wells are a Ca-HCO_3 water type. Cadmium concentrations exceeded DEQ-7 standards in the 2014 5-yr review sample and the long-term averages for both wells, but no other COC exceeded standards, including arsenic (figs. 4.4-7 and 4.4-8; table 4.4-2). Water-quality samples were first collected in 1991 at well MW-206 and were collected three times each in 1992 and 1993, followed by single samples in 1995 and 1996. Semi-annual samples were collected from 2000 through 2008; a single sample was collected in 2009, 2010, 2011, 2012 and 2014. Four samples were collected in well MW-206D in 2004, followed by semi-annual samples between 2005 and 2008. A single sample was collected in 2009, 2010, 2011, 2012 and 2014.

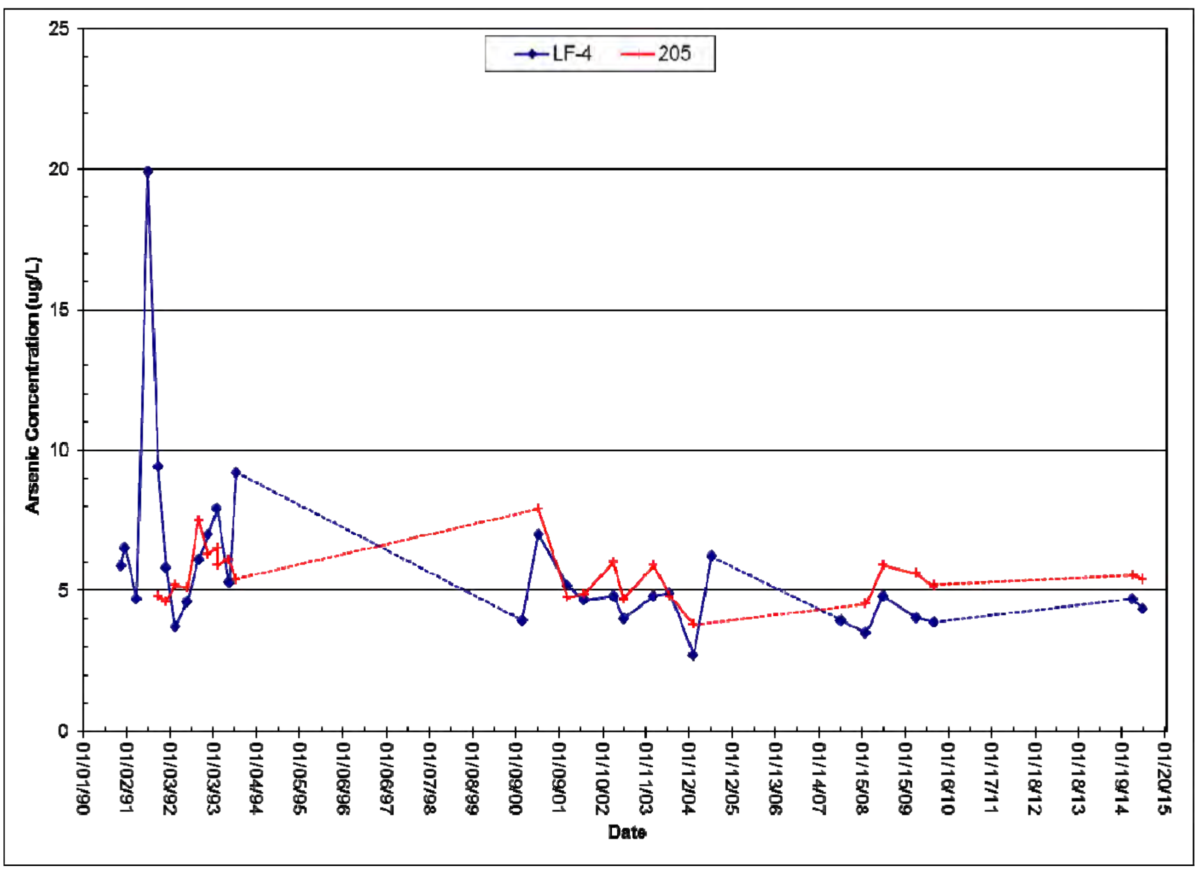


Figure 4.4-6. Arsenic concentrations over time for wells LF-4 and MW-205.

Wells MW-207 and MW-240 are located in the southeast corner of this MWA, while well MW-208 is north of these wells and south of Warm Springs Creek. These wells are completed at intermediate depths with screen intervals between 47 and 92 ft. All three wells are a Ca-HCO_3 water type with no COC exceedances in the 2014 samples or long-term averages. For the most part, arsenic concentration variations are similar between wells (fig. 4.4-9). Samples were collected over a similar schedule in wells MW-207 and MW-208 from 1991 through 1995. Beginning in 2000 through 2014, samples were collected semi-annually in well MW-207; semi-annual sampling began in 2005 and continued through 2008 in well MW-208, and single samples were collected in 2009–2012 and 2014. MW-240 had single samples collected in 1995 and 1996, followed by semi-annual sample collection from 2000 to 2008; single samples were collected in 2009–2012 and 2014.

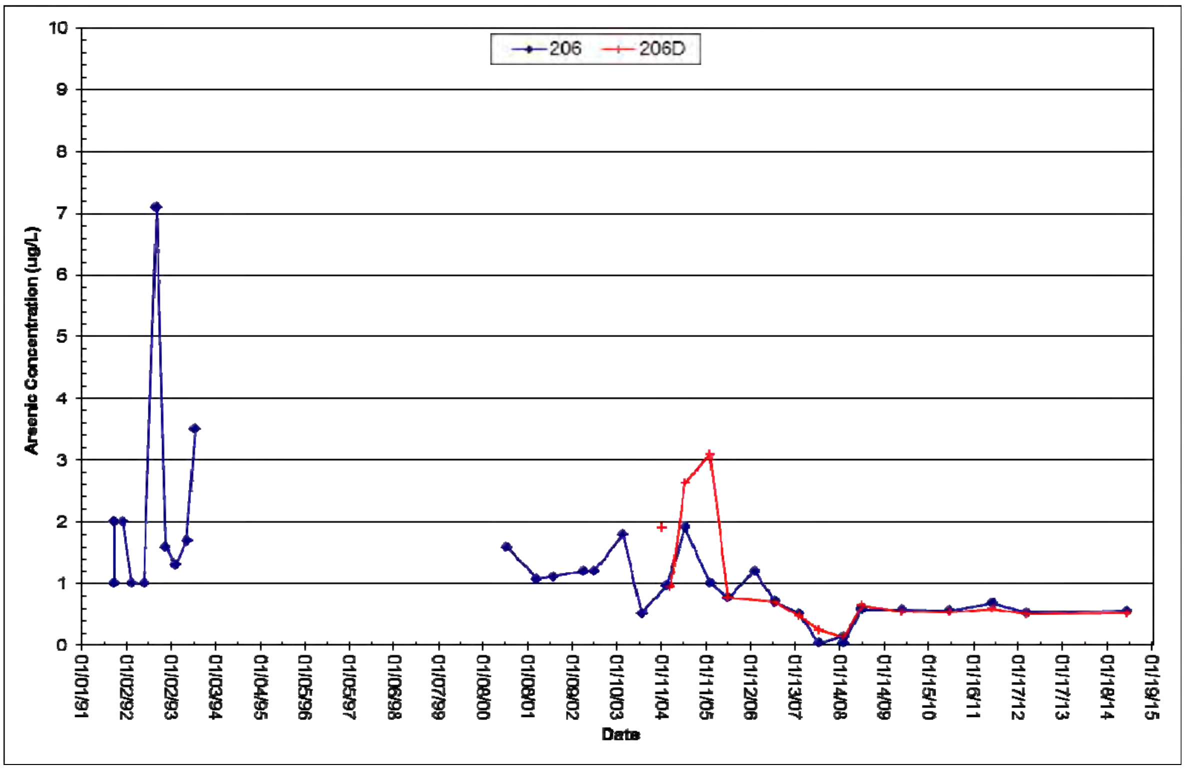


Figure 4.4-7. Arsenic concentrations over time for nested wells MW-206 and MW-206D.

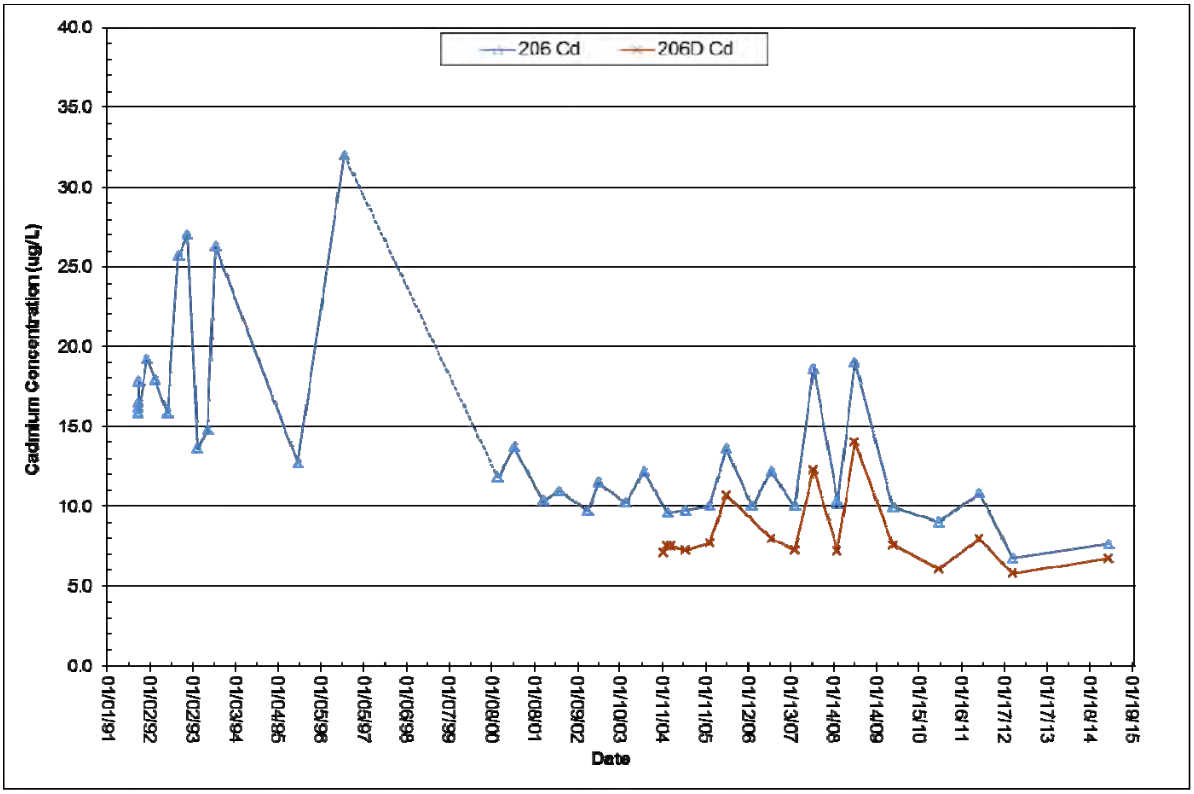


Figure 4.4-8. Cadmium concentrations over time for nested wells MW-206 and MW-206D.

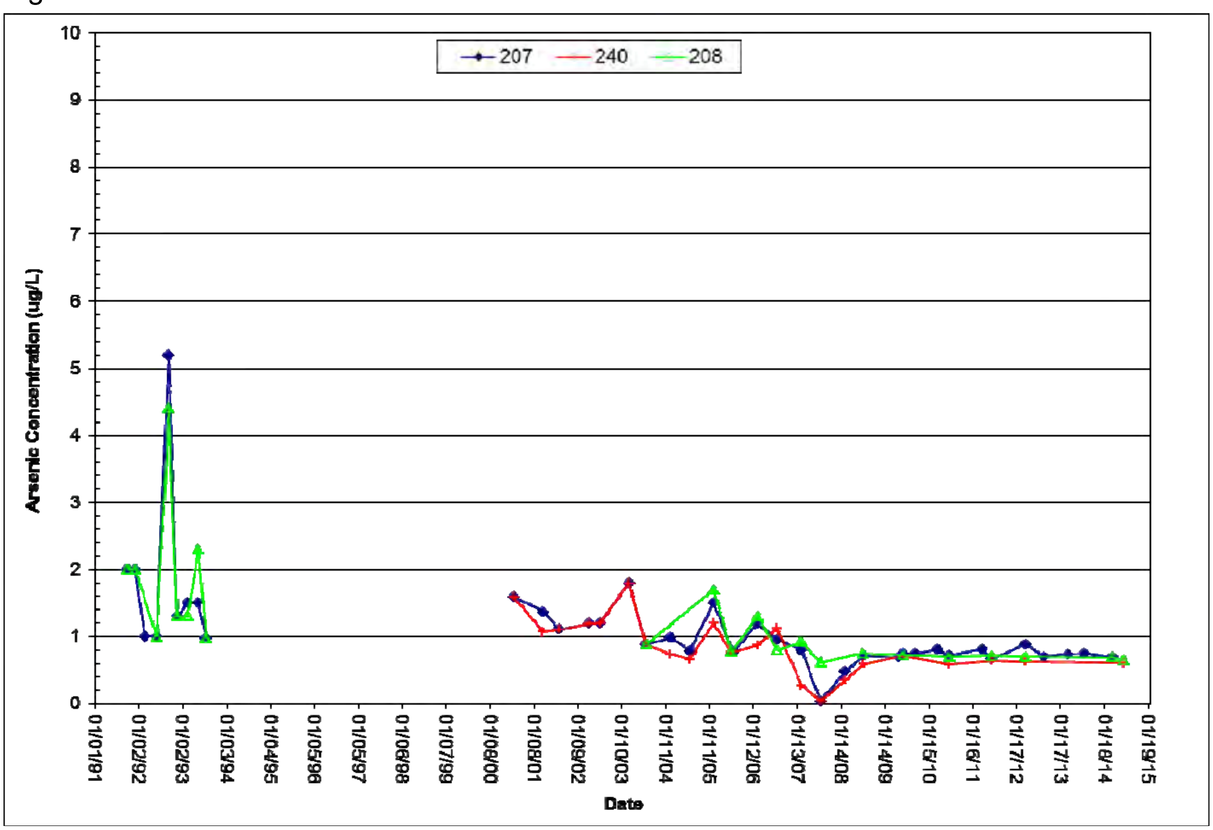


Figure 4.4-9. Arsenic concentrations over time for wells MW-207, MW-208, and MW-240.

Wells MW-241 and MW-72 are located on the north side of Warm Springs Creek, near the Lost Creek Raceway. Well MW-241 is completed at an intermediate depth (50–60 ft), while well MW-72 is moderately shallow (25–35 ft). Both wells are a Ca-HCO_3 water type and have no COCs above DEQ-7 standards. Figure 4.4-10 is a graph of arsenic concentrations for both wells for the period of record. Well MW-72 has a longer record of sample data, with the first sample collected in 1985 (two samples). Samples were collected at least three times yearly from 1991 through 1993. A single sample was collected in 1995 followed by semi-annual samples from 2000 through 2014. Single samples were collected in 1995 and 1996 at well MW-241 followed by semi-annual sampling from 2000 to 2008. Due to changes in the monitoring program, only a single sample was collected in 2009–2012 and 2014.

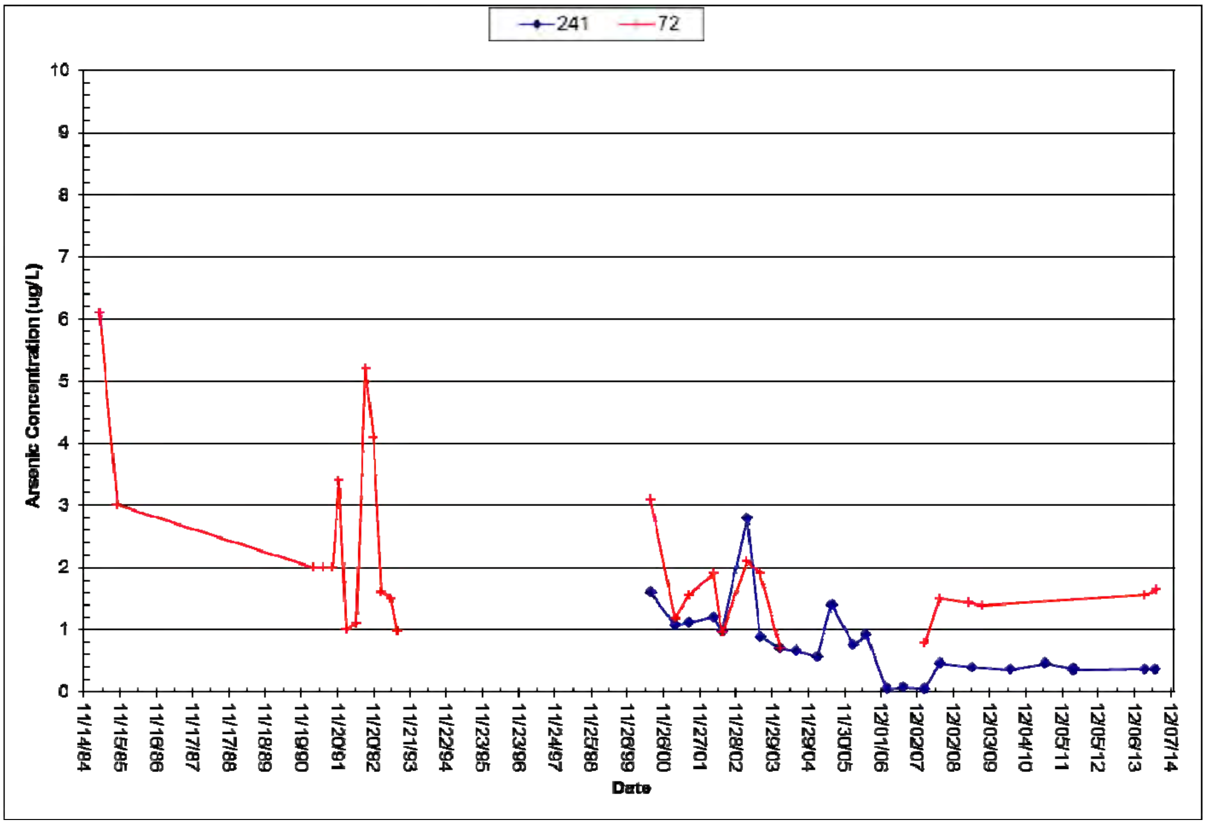


Figure 4.4-10. Arsenic concentrations over time for wells MW-241 and MW-72.

Wells MW-209 and MW-251 are located in the northeast corner of the raceway and are completed at similar depths, between 49 and 69 ft. However, they have different water types, with well MW-209 being a Ca-HCO_3 and well MW-251 being a Ca-SO_4 type water. Cadmium concentrations exceeded DEQ-7 standards in well MW-209 in both the long-term average and 2014 5-yr review sample. Figure 4.4-11 shows cadmium concentrations for both wells for the period of monitoring; figure 4.4-12 shows arsenic concentrations for both wells. Cadmium concentrations are much higher in well MW-209 than in well MW-251; however, arsenic concentrations are similar in both wells. Cadmium is the only COC above standards in well MW-209, while none of the COC concentrations in well MW-251 exceed DEQ-7 standards.

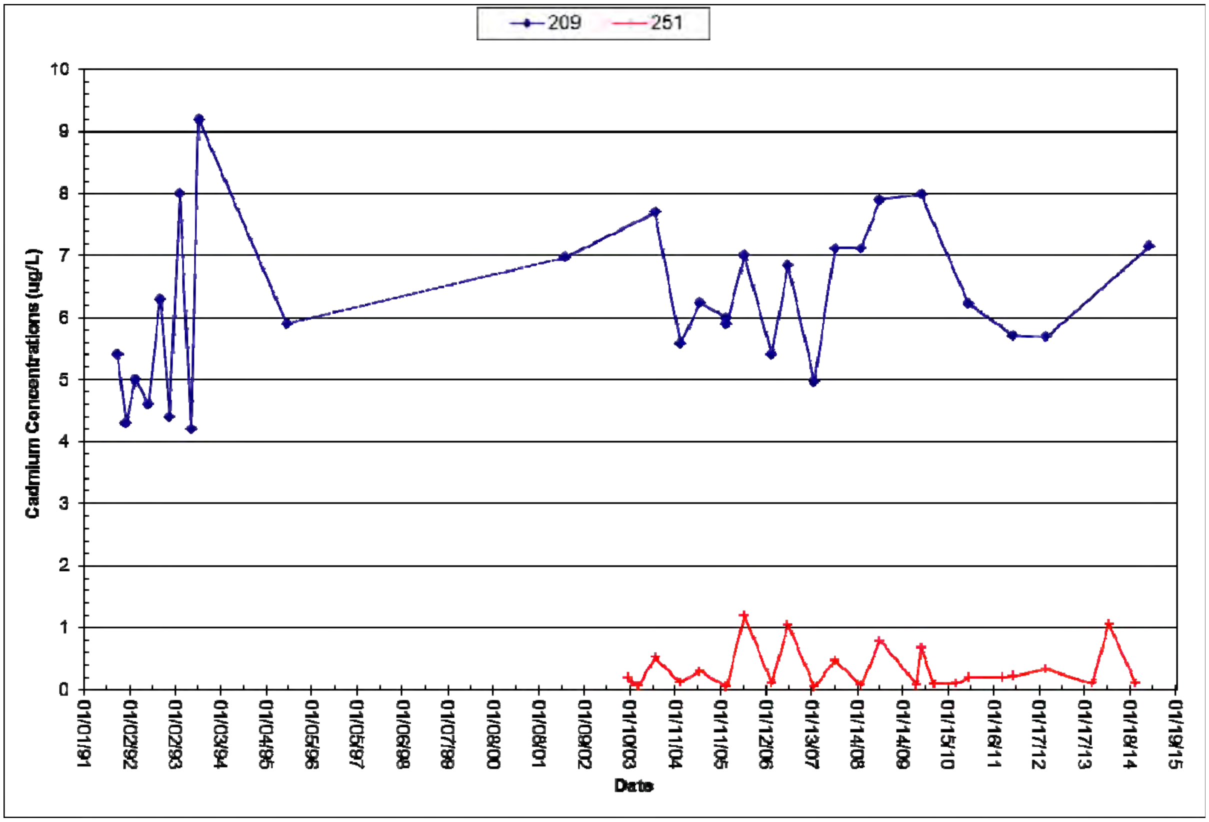


Figure 4.4-11. Cadmium concentrations over time for wells MW-209 and MW-251.

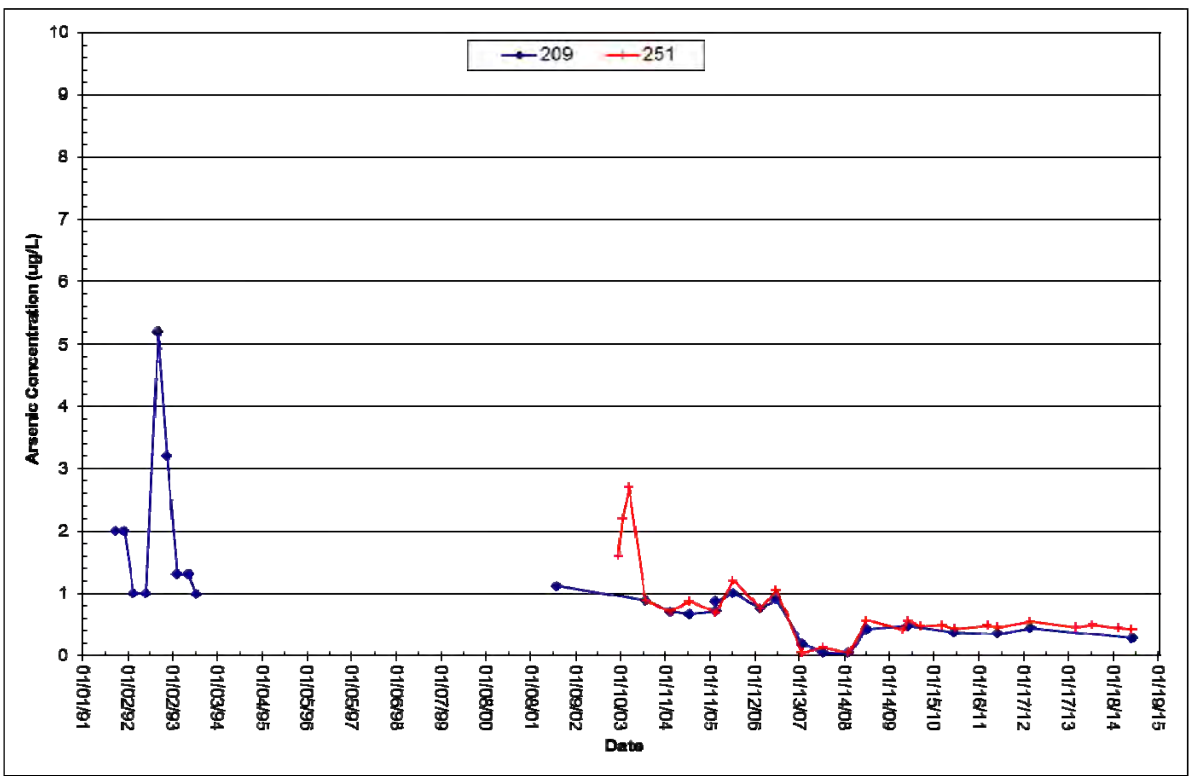


Figure 4.4-12. Arsenic concentrations over time for wells MW-209 and MW-251.

Wells MW-255, MW-242, and MW-252 are located on the far east side of the WMA on the east side of secondary highway 273 (fig. 4.4-1). Wells MW-242 and MW-252 were completed at depths ranging from 55 to 75 ft, while well MW-255 was completed at a deeper level from 75 to 95 ft (table 4.4-2). All three wells are $Ca\text{-}HCO_3$ type water and have no COCs above standards. Figure 4.4-13 shows long-term arsenic concentrations for all three wells. Well MW-242 was sampled once each year in 1995 and 1996, followed by semi-annual sampling from 2000 to 2008, with a single sample collected in 2009–2012 and 2014. Well MW-252 was sampled once in 2002 and semi-annually from 2003 to 2014, while well MW-255 has been sampled semi-annually from 2004 to 2014.

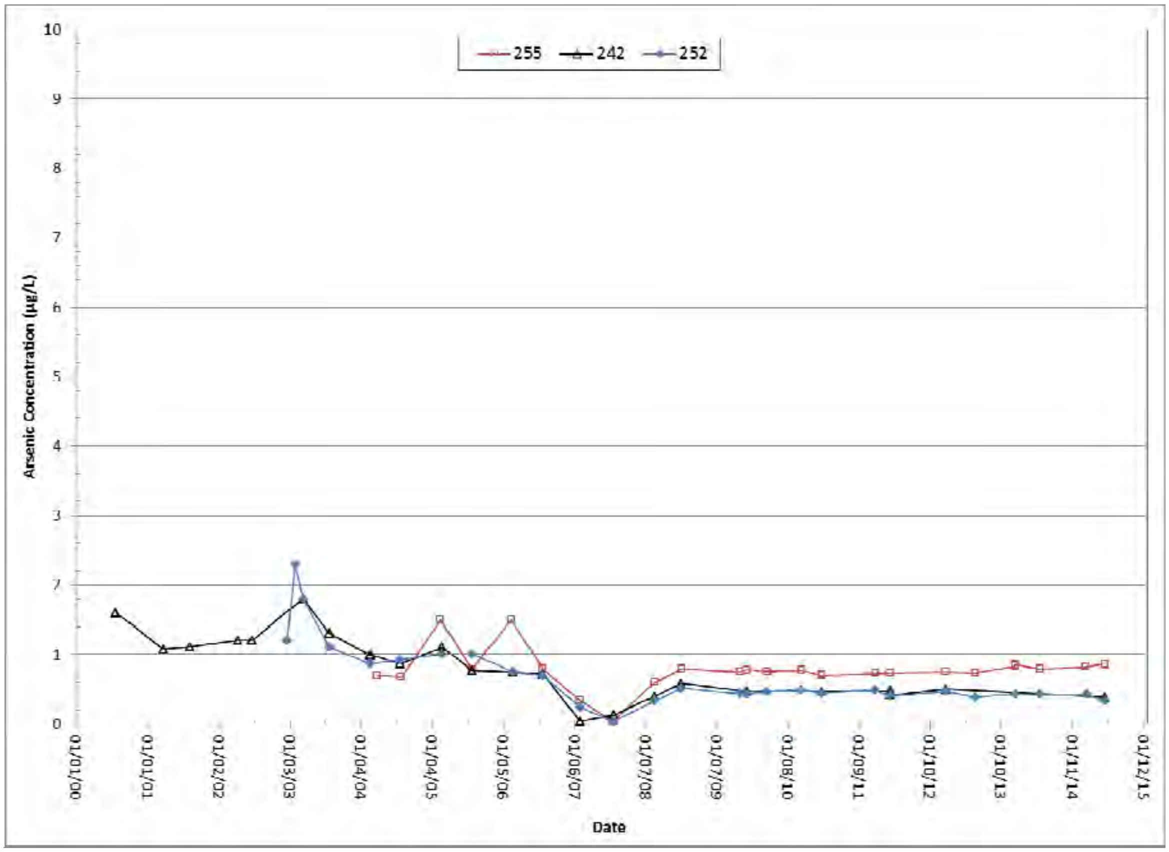


Figure 4.4-13. Arsenic concentrations over time for wells MW-255, MW-242, and MW-252.

Arsenic concentrations in wells throughout the Old Works WMA were well below DEQ-7 standards, with the maximum concentration being 5.54 µg/L (MW-205). Arsenic concentrations were below 2 µg/L in 18 of the 20 wells. Cadmium was the COC that exceeded standards most frequently. The DEQ-7 standard of 5 µg/L was exceeded in 3 wells, with the maximum concentration being 7.6 µg/L in well MW-206, located between the county landfill and waste water treatment facility.

4.4.2 Old Works Groundwater Levels

Warm Springs Creek crosses this WMA and is the major hydrologic fracture. Groundwater flow direction is typically parallel to the creek (west to east) except during periods of high streamflow, when the creek becomes a losing stream from the Red Sands area east (plates 2 and 3).

Water levels have a net increase in at least 14 of the 20 wells within this WMA (table 4.4-3). Four wells have a documented net water-level decline (LF-4, MW-205, MW-213, and MW-72); no long-term water-level data are available for two additional wells. Net water-level increases range from 2.4 ft to more than 21 ft. The largest water-level increases occur in wells on the east and northeast portion of the site.

Figure 4.4-14 shows long-term water-level fluctuations for wells (MW-204 and MW-213) in the Red Sands and Old Works-Washoe Smelter portion of this site. Water levels are highest in wells closest to Warm Springs Creek. On the east side of the WMA water levels are higher in wells closest to Warm Springs Creek (MW-208 and MW-240) than in those farther away (MW-207; figure 4.4-15), indicating recharge from streamflow to groundwater in these areas.

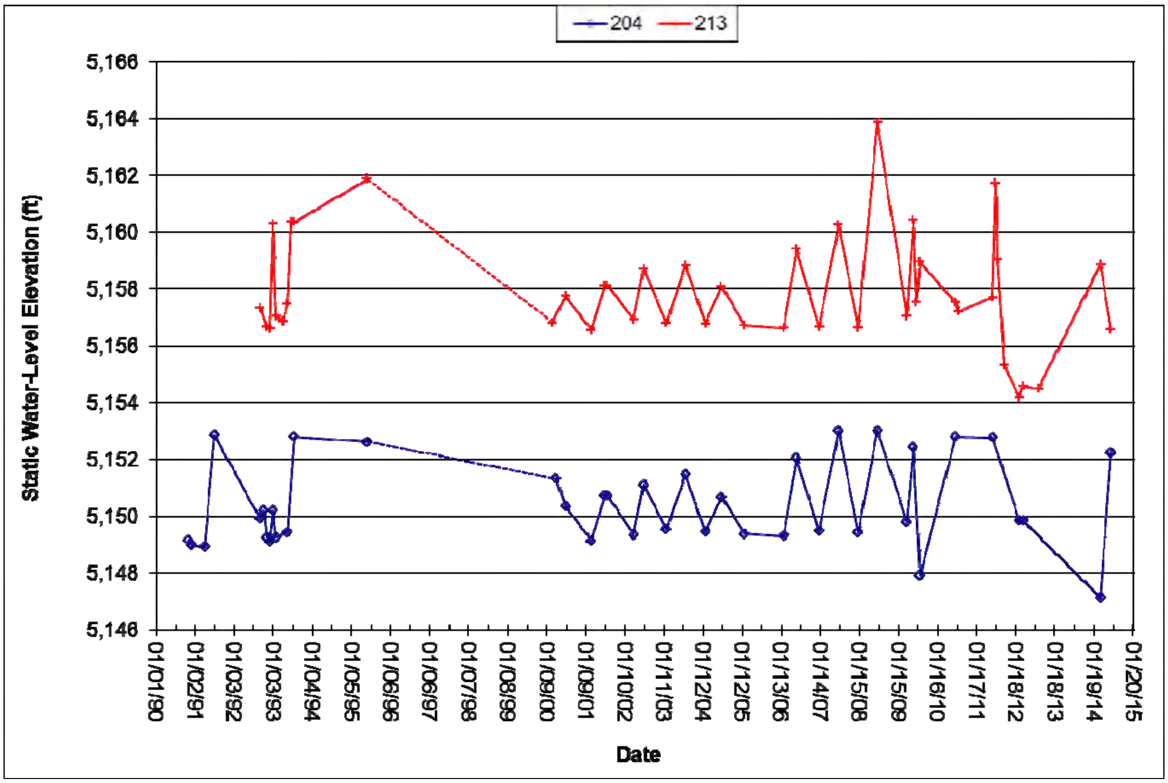


Figure 4.4-14. Water-level hydrographs for wells MW-204 and MW-213, located in the Red Sands–Old Works area.

Table 4.4-3. Net water-level changes for Old Works monitoring wells.

Old Works				
Well ID	**Total Depth (ft)**	**Screen Interval (ft)**	**Aquifer**	**Net Water-Level Change (ft)**
IW-01	46	22–42	Valley-Fill Med-Fine	NA
IW-05	46	23–41	Valley-Fill Med-Fine	NA
LF-4	50	32–42	Valley-Fill	-1.47
MW-201	30	18–28	Valley-Fill Coarse	5.37
MW-204	44.5	32–42	Valley-Fill Coarse	3.08
MW-205	48	26.5–36.5	Valley-Fill Med-Fine	-0.98
MW-206	50	28–43	Valley-Fill Coarse	2.44
MW-206d	76	53–73	Valley-Fill Med-Fine	2.59
MW-207	103	77–92	Valley-Fill Med-Fine	4.95
MW-208	70	47–67	Valley-Fill Coarse	14.48
MW-209	70	49–69	Valley-Fill Med-Fine	11.17
MW-213	42	31–41	Valley-Fill Med-Fine	-1.07
MW-240	87	77–87	Valley-Fill Med-Fine	7.53
MW-241	60	50–60	Valley-Fill Med-Fine	8.19
MW-242	67	57–67	Valley-Fill Coarse	11.17
MW-251	77	55–75	Valley-Fill Coarse	19.44
MW-252	76	55–75	Valley-Fill Coarse	18.35
MW-255	95	75–95	Valley-Fill Coarse	21.03
MW-72	35	25–35	Valley-Fill Med-Fine	-0.02
TI-A	38	24–34	Valley-Fill Coarse	4.80

NA, not available.

One set of nested wells (MW-206 and MW-206D) is located in this WMA near the county landfill. Both wells are completed in valley-fill material. Water levels are highest in the shallow well (fig. 4.4-16), indicating a downward vertical gradient in this portion of the site.

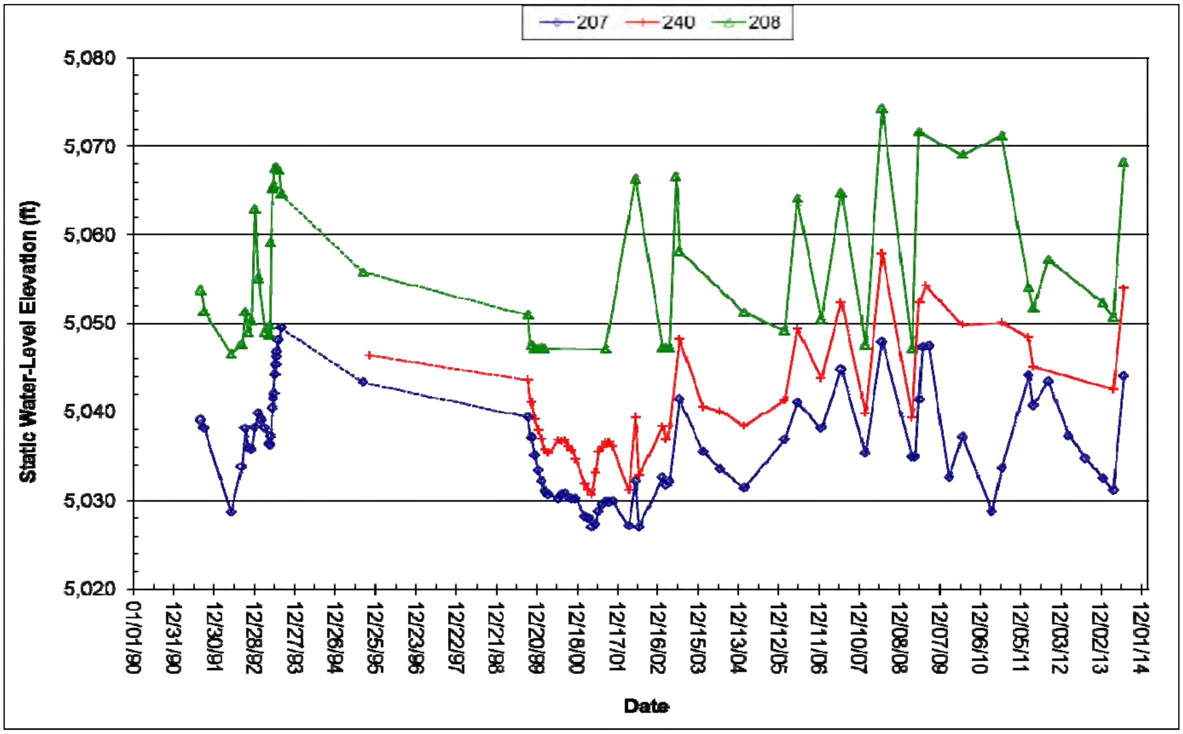


Figure 4.4-15. Water-level hydrographs for wells MW-207, MW-240, and MW-208, located in the southeast portion of the Old Works WMA.

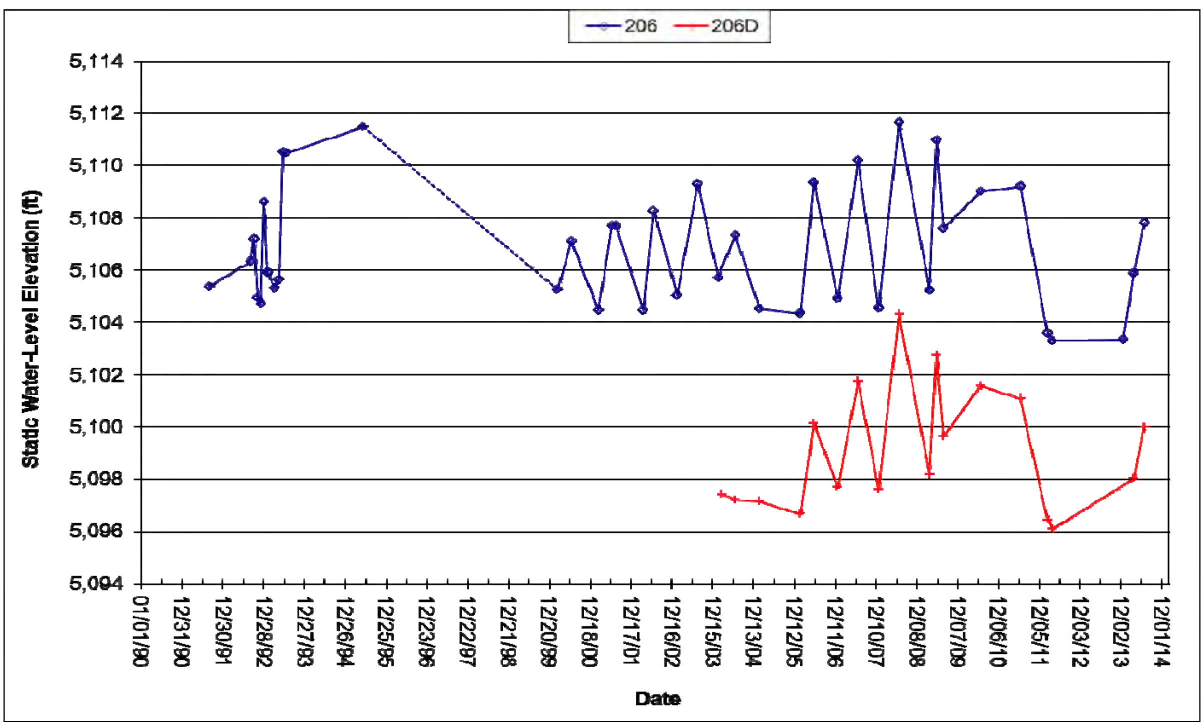


Figure 4.4-16. Water-level hydrographs for nested wells MW-206 and MW-206D.

4.4.3 Event-Driven Monitoring

The 2009 Monitoring Program had an added provision requiring additional groundwater sampling of wells within the Old Works WMA when water levels reached a pre-determined elevation. This provision was continued in the 2014 sampling program. This sampling is specific to cadmium and is based upon the water-level elevation in monitoring well MW-213. EPA and DEQ had determined that once the water level reached an elevation of 5,156.50 ft in MW-213, leaching of cadmium from waste left in place may occur. Fourteen monitoring wells (table 4.4-2) were identified for sampling. It was specified that sampling of the monitoring wells would take place within 2 weeks of the water level reaching the trigger elevation; during 2014 monitoring was based upon changes seen in specific conductance concentrations in wells MW-213 and MW-206.

A pressure transducer was installed in well MW-213 and programmed to record water level every hour. Following installation of the transducer, a remote monitoring telemetry system was installed at the well site. The system was programmed to notify MBMG personnel when the water level reached the trigger elevation, which occurred on June 2, 2014. Groundwater samples were collected between June 24 and July 11, which was outside the 2-week timeframe specified in the 2009 SAP. Problems sampling wells IW-01 and IW-05 extended completion of high-water sampling beyond the 2-week time frame by 6 days.

Figure 4.4-17 shows the hydrograph for well MW-213 based upon transducer data from the date of its installation (4/9/09) through December 2014. Peak water levels occurred between 6/02/14 and 6/26/14 at an elevation over 0.96 ft above the trigger elevation. A recorded peak occurred in March 2014; however, it was caused by dewatering activities and disposal of pumped water in a pond located on the Old Works Golf Course and is not reflective of site-wide recharge conditions. No groundwater samples were collected during this event. Figure 4.4-18 shows the water-level and specific conductance hydrographs for MW-213 From March 2013 through December 2014. The maximum water-level elevations and specific conductance concentrations occurred during the same time interval in March; June data were less consistent.

Table 4.4-4 contains cadmium concentrations for the 14 wells during the event monitoring, along with results from low- and high-water sampling for appropriate wells. Any well with cadmium concentrations above 15 µg/L during event monitoring was required to be monitored semi-annually until concentrations were less than 15 µg/L. Cadmium concentrations did not exceed this level and no further semi-annual sampling is required at this time.

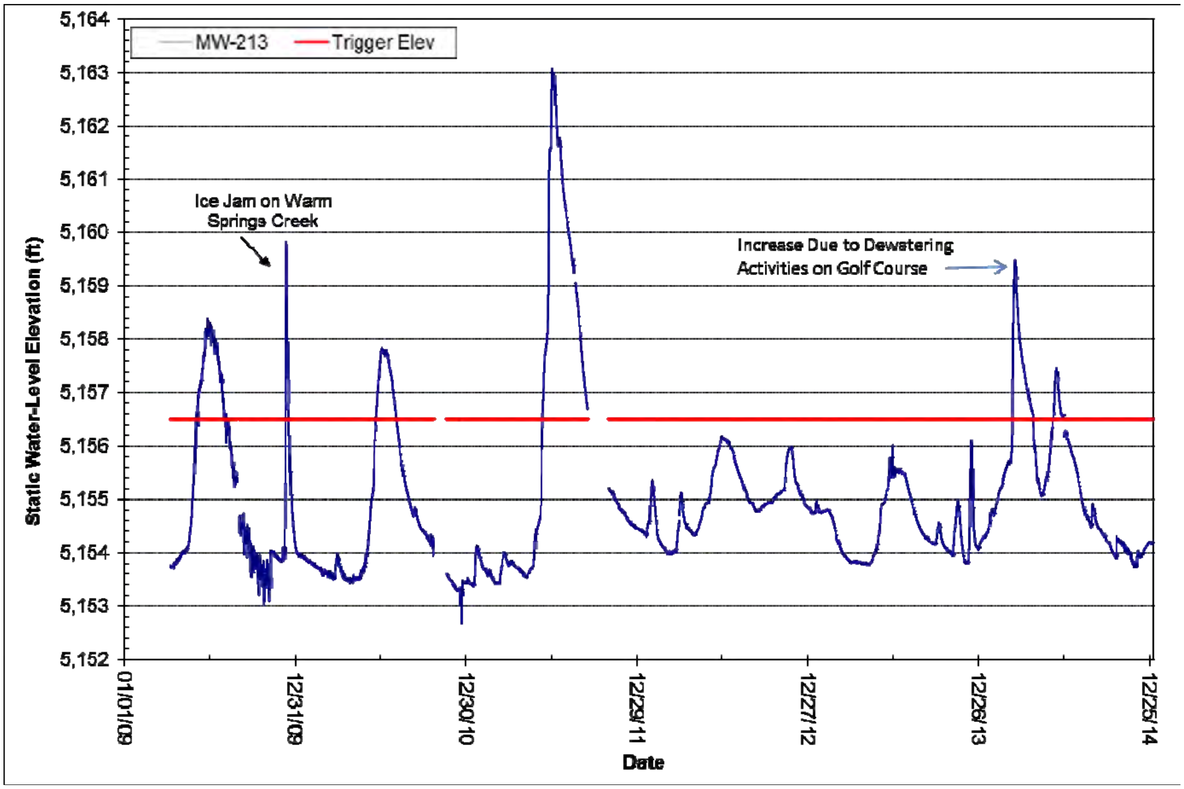


Figure 4.4-17. Water-level hydrograph for MW-213 based upon transducer data.

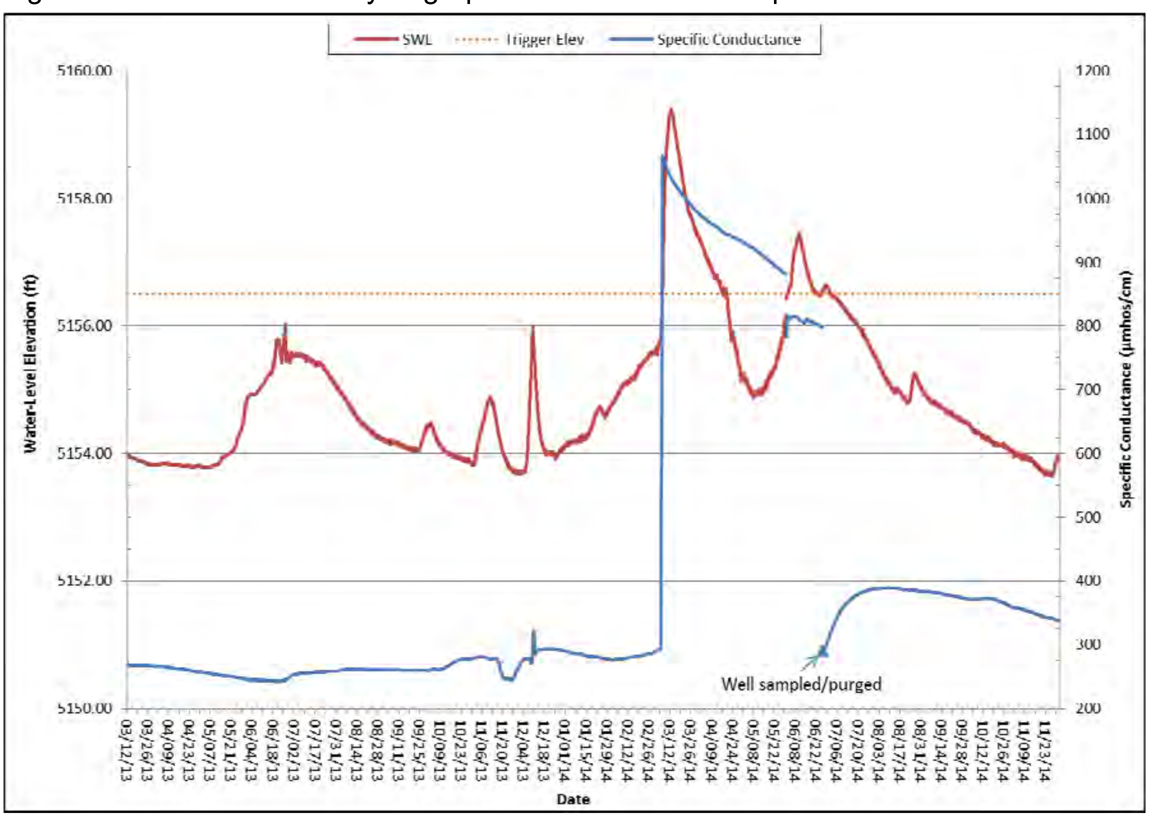


Figure 4.4-18. Water-level and specific conductance hydrographs for MW-213 based upon transducer data.

Table 4.4-4. Cadmium concentrations for event-driven monitoring wells.

Old Works

Well ID	Screen Interval (ft)	Water Type	2014 Low-Water Cadmium (µg/L)	2014 Event-Driven Cadmium (µg/L)	2014 High-Water Cadmium (µg/L)	Comment
IW-01(EDW)	22–42	$Ca\text{-}SO_4$	—	—		No 2014 sample due to pump problem.
MW-204(EDW)	32–42	$Ca\text{-}HCO_3$	1.33	0.84	—	
MW-206(EDW)	28–43	$Ca\text{-}HCO_3$	6.80	7.60	—	Cd exceeded DEQ-7 standards; event-driven results below 15 µg/L; therefore no additional sampling in 2014.
MW-206d(EDW)	53–73	$Ca\text{-}HCO_3$	5.80	6.80	—	Cd exceeded DEQ-7 standards; event-driven results below 15 µg/L; therefore no additional sampling in 2014.
MW-207(POC-EDW)	77–92	$Ca\text{-}HCO_3$	<0.10U	<0.10U	—	
MW-208(EDW)	47–67	$Ca\text{-}HCO_3$	<0.10U	<0.10U	—	
MW-209(EDW)	49–69	$Ca\text{-}HCO_3$	5.69	7.15	—	Cd exceeded DEQ-7 standards; event-driven results below 15 µg/L; therefore no additional sampling in 2014.
MW-213(EDW)	31–41	$Ca\text{-}SO_4$	—	3.30	—	Cd exceeded DEQ-7 standards; event-driven results below 15 µg/L; therefore no additional sampling in 2014.
MW-240(EDW)	77–87	$Ca\text{-}HCO_3$	—	<0.10U	—	
MW-241(EDW)	50–60	$Ca\text{-}HCO_3$	3.32	3.23	—	
MW-242(EDW)	57–67	$Ca\text{-}HCO_3$	—	0.39J	—	
MW-251(POC-EDW)	55–75	$Ca\text{-}SO_4$	<0.10U	0.92	—	

Table 4.4-4. Cadmium concentrations for event-driven monitoring wells (*continued*).

MW-252(POC-EDW)	55–75	Ca-HCO_3	1.94	1.86	—
MW-255(POC-EDW)	75–95	Ca-HCO_3	<0.10U	<0.10U	—
Domestic Wells					
East End Town Pump	55–600	Na-HCO_3	—	<0.10U	—
Mike's Sales and Pawn	—	—	—	<0.10U	—

EDW, well sampled when triggered by water-level elevation in MW-213.

4.5 South Opportunity/Yellow Ditch Area of Concern

The South Opportunity/Yellow Ditch Area of Concern (AOC) contains 14 wells and 1 surface-water site (fig. 4.5-1). The wells are all completed in valley-fill material, ranging from coarse to fine sand in the shallower completed wells. All but two of the wells are located south and southwest of the town of Opportunity. The AOC consists of approximately 25 mi^2. Physical parameters and water-quality samples were collected from monitoring wells and the surface-water site during both low- and high-water sampling events. The flow rate of the surface-water site was also measured.

Table 4.5-1 contains a listing of the wells within this AOC, along with completion details and a listing of COCs. The primary COC for this area is arsenic. There are five groups of nested pair wells spread throughout this area, three of which were installed during 2009. Table 4.5-2 contains a summary of water type and arsenic concentrations for 2014 samples, plus the long-term arsenic average. Appendix F contains water-quality data from 2014 samples.

4.5.1 South Opportunity/Yellow Ditch Area of Concern Water Quality

Arsenic concentrations in the 2014 5-yr review sample were below DEQ-7 standards in 13 of the 14 wells that constitute this AOC, with the one exception being well MW-232. Similar occurrences were observed in the long-term arsenic averages. All 14 wells have a Ca-HCO_3 water type.

Six monitoring wells were installed in 2009 as part of the 2009 monitoring program, with wells nested in shallow and deep pairs at three locations (table 4.5-2). A replacement well was drilled for shallow well MW-260 in 2011, with the new well MW-274 completed deeper. However, deepening the well still resulted with the well being dry during the low-water sampling event; wells MW-232 and MW-264 were also dry during the low-water sample event. Arsenic concentrations were considerably higher in the shallow wells than in the deeper nested well pairs MW-264, MW-263 and MW-262, MW-261. Arsenic concentrations were similar in the shallow and deep wells in the nested well pair MW-274 and MW-259. All six of these wells are located to the south and southwest of Opportunity.

Well MW-9 (55 ft deep) is located southeast of wells MW-259 and MW-274 and has very low arsenic concentrations in both 5-yr review samples. Water-quality data only exist for the period between 2009 and 2014.

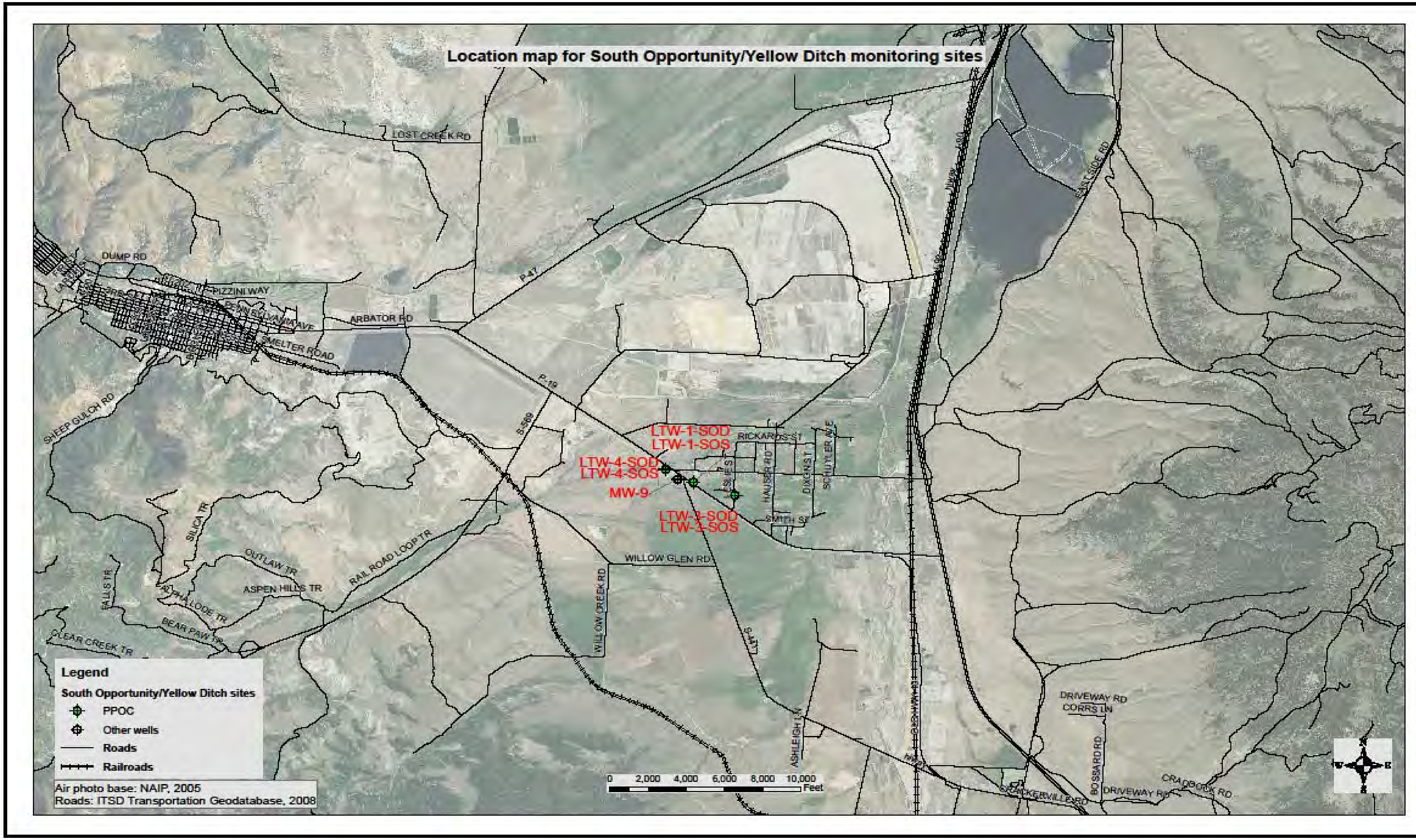


Figure 4.5-1. Location map for South Opportunity/Yellow Ditch Area of Concern (AOC) monitoring sites.

Table 4.5-1. South Opportunity/Yellow Ditch Area of Concern water-quality COC.

South Opportunity/Yellow Ditch AOC			
Well ID	**Total Depth (ft)**	**Screen Interval (ft)**	**Water-Quality Analytes**
MW-264	23	13–23	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-263	40	30–40	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-262	19	9–19	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-261	40	30–40	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-225	17.5	7.4–16.8	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-232	16	6–15.4	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-231	17	5.8–15.2	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-9 (lab)	55	41–46	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-274	22	7.5–17.5	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
MW-259	38	28–38	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
OD-2D	40	29–34	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
OD-2S	10.9	NR	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
OD-3D	40	30–37	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
OD-3S	18.3	9–14	As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness
WCT-27[(1)]			As, Fe, Ca, Mg, Na, K, HCO_3, CO3, Cl, SO_4, pH, SC, TDS, Hardness

NR, not reported.
[(1)]WCT-27 surface-water site.

Table 4.5-2. South Opportunity/Yellow Ditch Area of Concern water-quality summary.

South Opportunity/Yellow Ditch AOC

Well ID	GWIC ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (µg/L)	2014 High-Water Arsenic (µg/L)	Long-Term Arsenic Average (µg/L)	Comment
MW-264	249937	13–23	$Ca\text{-}HCO_3$	Dry	5.54	3.88	Well installed spring 2009.
MW-263	249936	30–40	$Ca\text{-}HCO_3$	0.43	0.38	0.43	Well installed spring 2009.
MW-262	249939	9–19	$Ca\text{-}HCO_3$	2.92	4.44	3.07	Well installed spring 2009.
MW-261	249938	30–40	$Ca\text{-}HCO_3$	0.40	0.39	0.39	Well installed spring 2009.
MW-225	138061	7.4–16.8	$Ca\text{-}HCO_3$	7.26	7.64	9.53	
MW-232	138017	6–15.4	$Ca\text{-}HCO_3$	Dry	98.3	138.6	
MW-231	138020	5.8–15.2	$Ca\text{-}HCO_3$	0.75	0.82	1.62	
MW-9 (lab)	249898	41–46	$Ca\text{-}HCO_3$	<0.10 U	0.24 J	0.24	
MW-274	264393	7.5–17.5	$Ca\text{-}HCO_3$	Dry	0.58	0.57	Well installed spring 2011.
MW-259	249940	28–38	$Ca\text{-}HCO_3$	0.47	0.50	0.47	Well installed spring 2009.
OD-2D	249778	29–34	$Ca\text{-}HCO_3$	0.29	0.28 J	0.60	
OD-2S	249799	NR	$Ca\text{-}HCO_3$	3.97	5.74	5.70	
OD-3D	249781	30–37	$Ca\text{-}HCO_3$	0.84	0.88	1.27	
OD-3S	249782	9–14	$Ca\text{-}HCO_3$	0.54	0.53	1.07	
WCT-27(1)	249935	—	$Ca\text{-}HCO_3$	3.36	4.32	15.1	Only six samples.

(1)Surface-water site.

Well MW-225 (17.5 ft deep) is located southwest of Opportunity, adjacent to Willow Creek. Arsenic concentrations based upon the long-term average and 2014 5-yr review samples are below the DEQ-7 standards; however, they are the second highest in monitoring wells in this AOC. Water samples were collected three times each in 1992 and 1993, once in 1995, semi-annually from 2000 through 2009, once in 2012 and twice in 2014. There is no seasonal trend in arsenic concentrations; however, concentrations have been below the standard since the fall of 2000 (fig. 4.5-2).

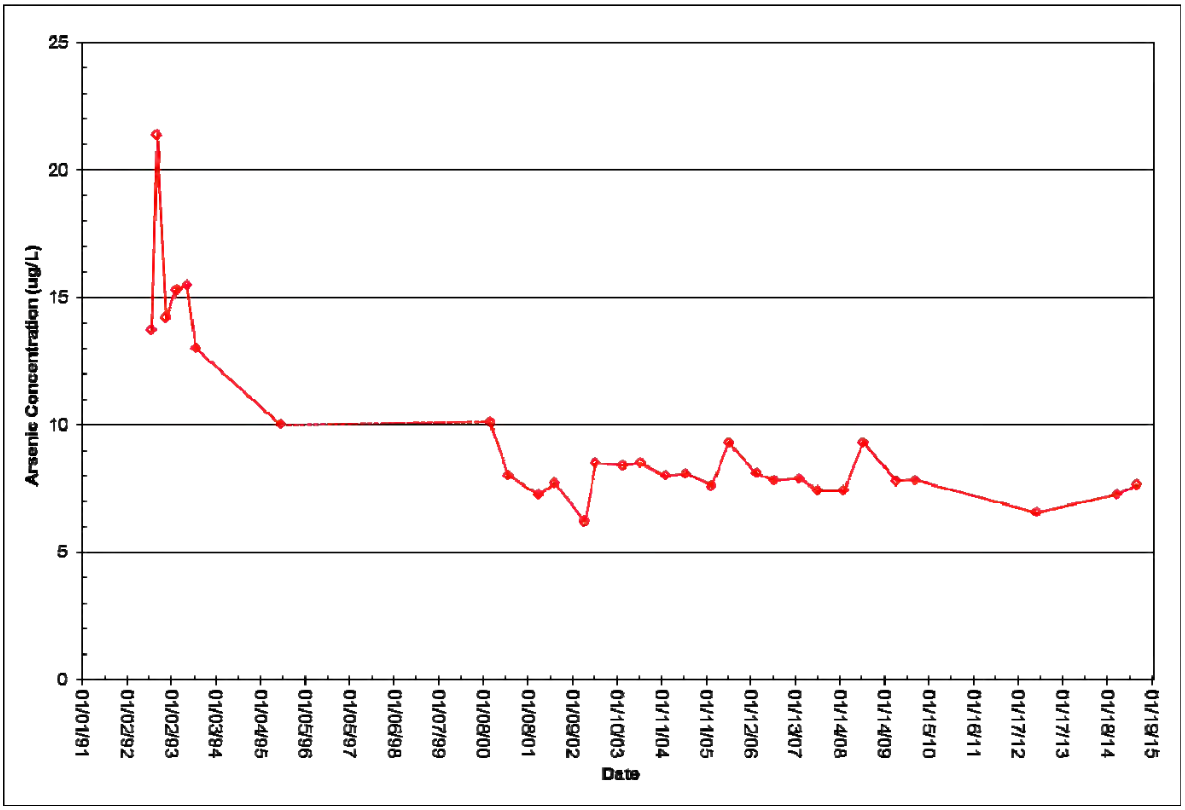


Figure 4.5-2. Arsenic concentrations over time for well MW-225.

Well MW-231 (17 ft deep) is the furthest south of the wells in this AOC and is associated with the Yellow Ditch portion of the site. Arsenic concentrations are shown in figure 4.5-3 for well MW-231. Arsenic concentrations in the 2014 samples were well below DEQ-7 standards, showing a slight decline over time. Water-quality samples were collected annually from 1992 to 1995 and semi-annually from 2000 through 2009, with one exception in 2004 when one sample was collected. Semi-annual samples were collected in 2014 for the EPA 5-yr review.

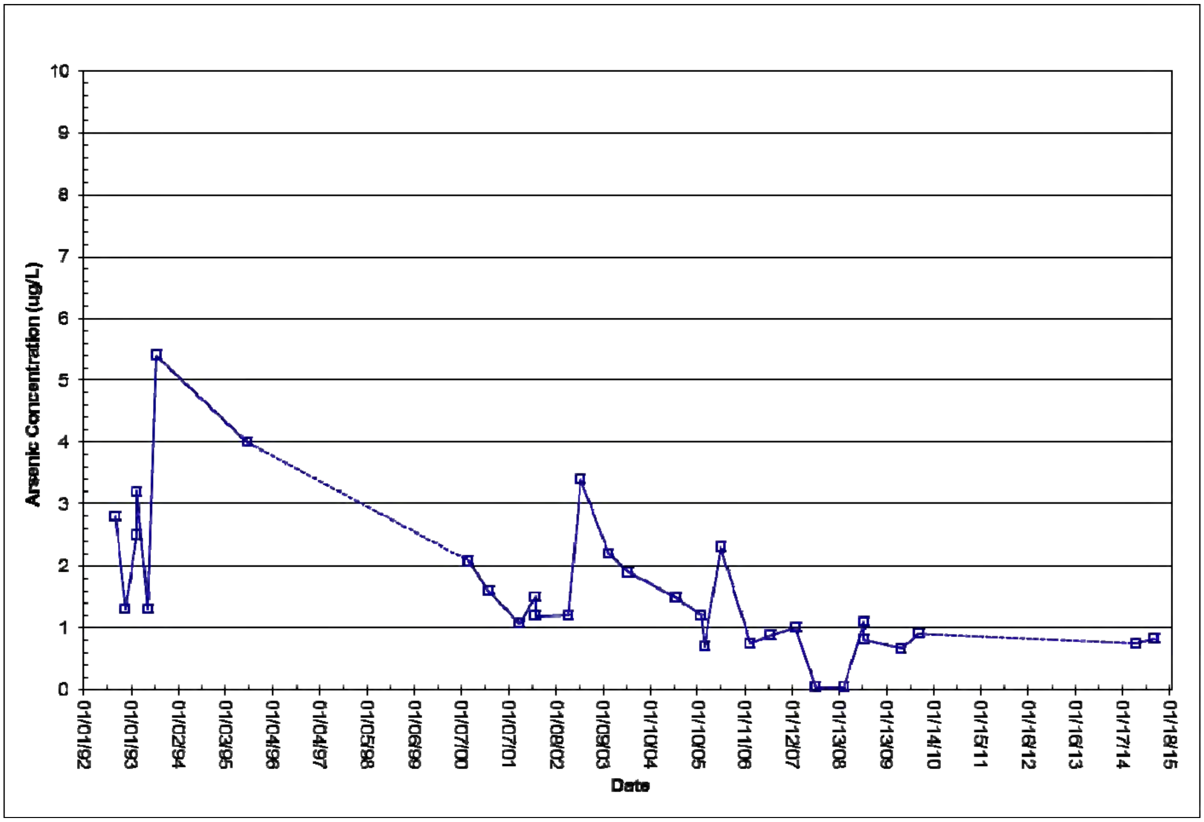


Figure 4.5-3. Arsenic concentrations over time for well MW-231.

Well MW-232 is also in the southern portion of the site near Yellow Ditch and has the highest arsenic concentration in the AOC. The long-term average (138 µg/L) and 2014 5-yr review samples are all considerably above standards. The highest concentrations usually occur during high-water sampling events (fig. 4.5-4); however, no low-water samples were collected in 2014 because the well was dry. Water-quality samples have been collected on a schedule similar to that of well MW-231.

Wells OD-3S and OD-3D are a nested pair located on the southeast side of Opportunity. Well OD-3S is screened from 9 to 14 ft, while well OD-3D is screened from 30 to 37 ft. Arsenic concentrations were below 1 µg/L in all the 2014 samples from both wells (fig. 4.5-5), while the long-term averages for OD-3S and OD-3D are 1.07 µg/L and 1.27 µg/L, respectively. Arsenic concentrations have been 1 µg/L or less in OD-3S since 2004. Only five samples have been collected in OD-3D, in 1993, 2009 (two samples), and 2014 (two samples). Well OD-3S was sampled twice in 1993 and semi-annually from 2000 to 2009; semi-annual samples were collected in 2014.

Wells OD-2S and OD-2D are a nested pair located on the northeast end of Opportunity (fig. 4.5-1). No screen interval was reported on the well log for well OD-2S; however, its total depth is 10 ft. Therefore, the screen interval in well OD-2S is probably 5–10 ft. The screen interval for OD-2D is 29–34 ft. Arsenic concentrations are considerably higher in the shallow well (OD-2S) than those seen in the deep well (fig. 4.5-6). Arsenic concentrations are usually the highest during the high-water sampling events. Arsenic concentrations in the 5-yr review samples collected in well OD-2S are similar to the long-term average (5.7 µg/L) for this well. Well OD-2D has been sampled only five times, once in 1993 and twice in 2009 and 2014, while OD-2S was sampled twice in 1993 and semi-annually from 2000-2009 and semi-annually in 2014.

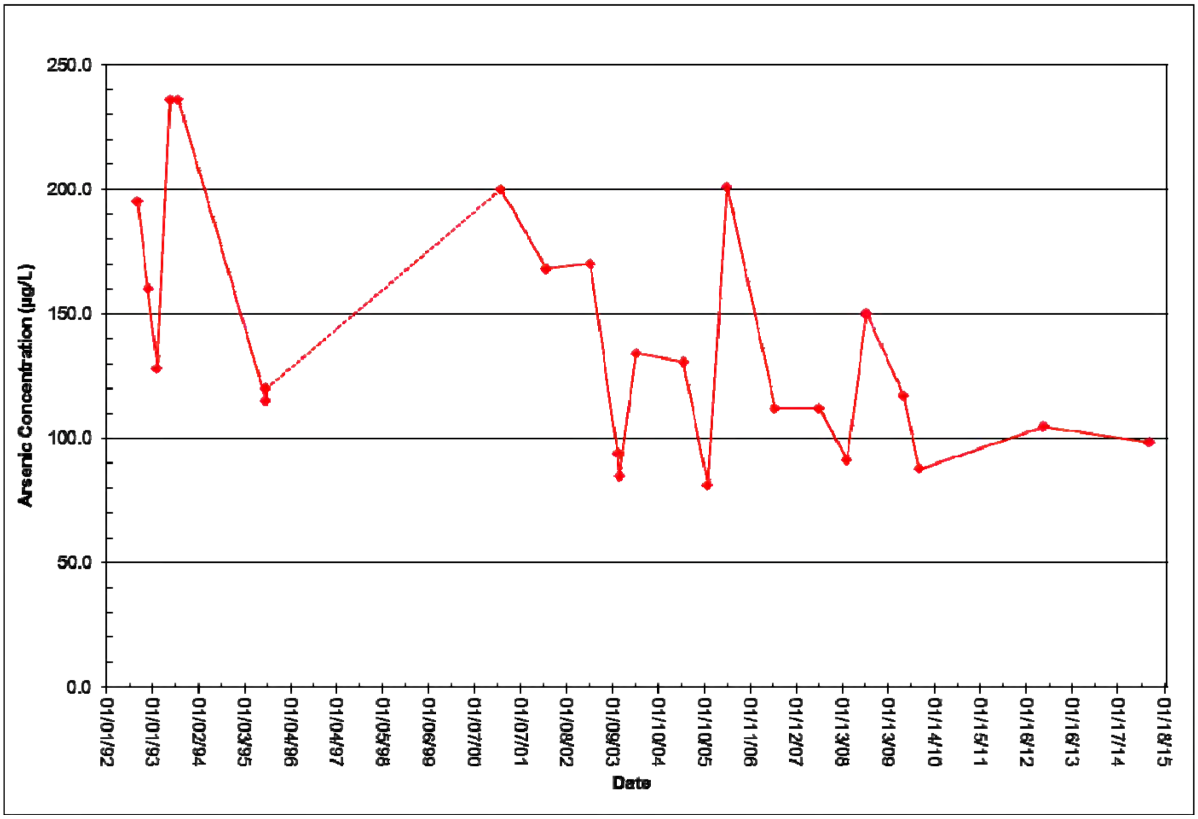


Figure 4.5-4. Arsenic concentrations over time for well MW-232.

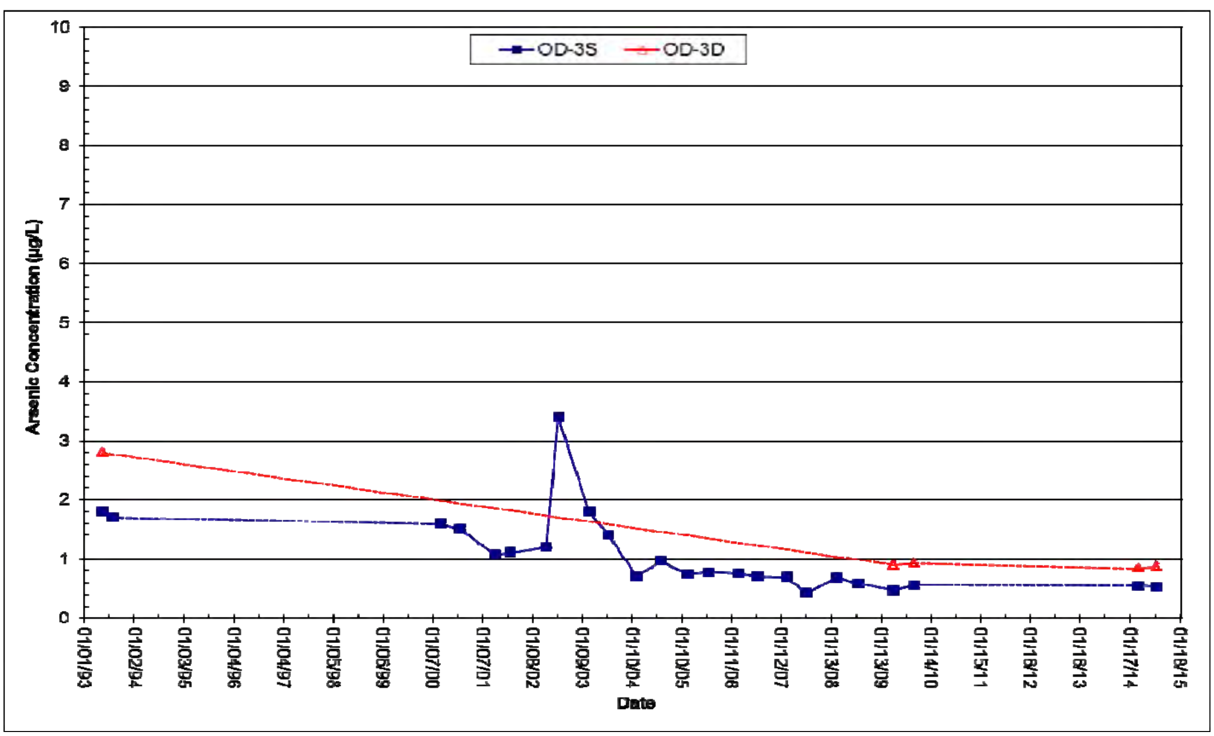


Figure 4.5-5. Arsenic concentrations over time for nested wells OD-3S and OD-3D.

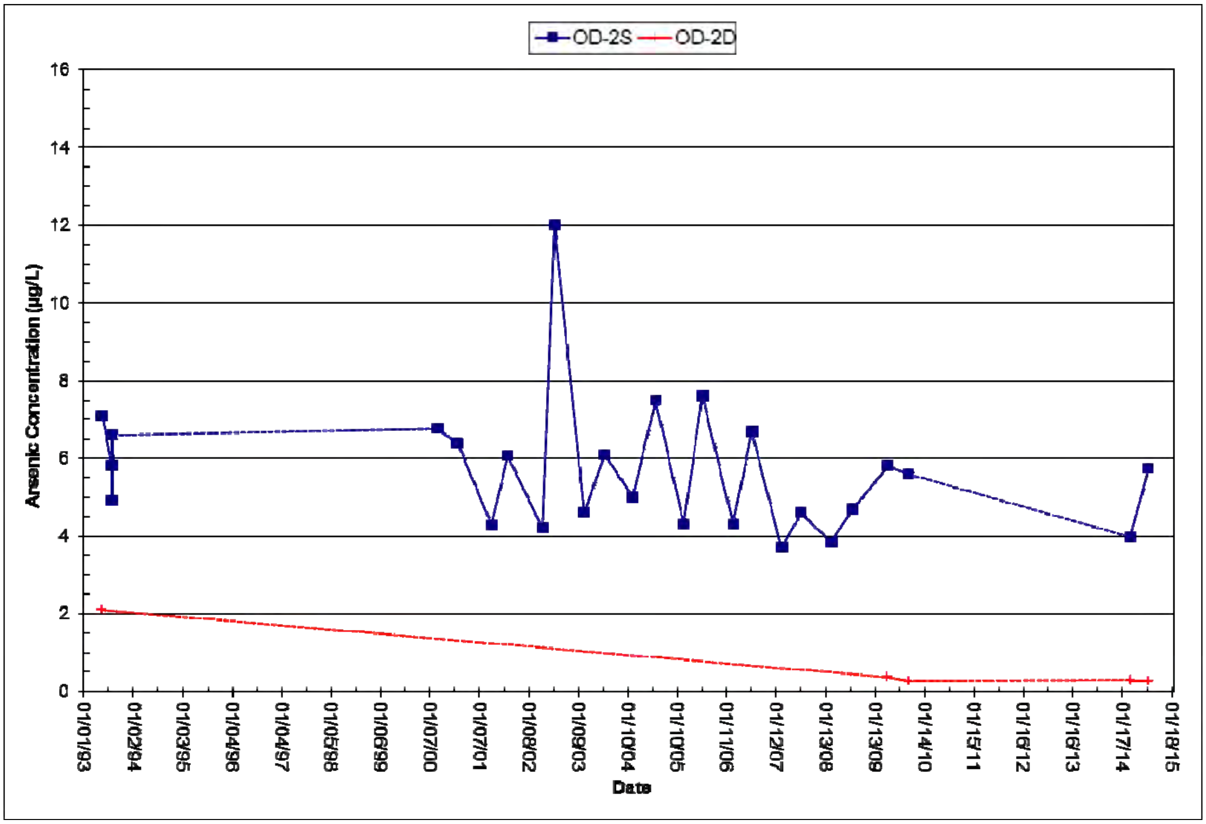


Figure 4.5-6. Arsenic concentrations over time for nested wells OD-2S and OD-2D.

One surface-water site (WCT-27) on a tributary of Willow Creek is included in the monitoring network in this AOC (fig. 4.5-1), and is located to the south of Opportunity. Sample results from 2014 monitoring show arsenic concentrations were below the DEQ-7 standard in 2014. Five samples are available for this site (2009 and 2014 data), resulting in an average arsenic concentration of 15.1 µg/L.

Arsenic concentrations were exceeded in well MW-232, located near the Yellow Ditch portion of this AOC, during the 2014 5-yr review sampling; the long-term average also exceeded the standard. Arsenic concentrations were highest in the shallow wells at a majority (4 of 5) of the nested pair well locations. This is consistent with previous trends noted in RI/FS and ROD, where it was noted that arsenic concentrations were higher in the shallow portion of the aquifer.

4.5.2 South Opportunity/Yellow Ditch Water-Level Observations

Six of the 14 monitoring wells in this portion of the ARWWS site were installed in 2009 and have a shorter period of record. Table 4.5-3 shows net water-level change and general aquifer characteristics for each well. Water-level variations range from a decline of 10 ft to a rise of just over 10 ft; 12 of the 14 wells have a net water-level decline through 2014.

Mill Creek bounds this AOC on the west, while Willow Creek bounds the site on the east. Groundwater flow direction is from the southwest to the northeast (plates 2 and 3). The shallow aquifer is comprised of coarse sand valley-fill, while the deeper aquifer contains some medium- to fine-grained sand valley-fill material.

Large water-level fluctuations can occur in wells adjacent to streams or stream tributaries. Figures 4.5-7, 4.5-8, and 4.5-9 show water-level hydrographs for wells MW-231 and MW-232 in the upgradient portion of the site and nested wells OD-2S and OD-2D located in the northeast (downgradient) portion of the AOC. Water levels can vary almost 15 ft in upgradient wells, whereas variations of 1 to 2 ft are more common in downgradient wells.

Table 4.5-3. Net water-level changes for wells in the South Opportunity/ Yellow Ditch AOC.

South Opportunity/Yellow Ditch AOC

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Aquifer	Net Water-Level Change (ft)
MW-264	249937	23	13–23	Valley-Fill Coarse	-2.61
MW-263	249936	40	30–40	Valley-Fill Coarse	-3.58
MW-262	249939	19	9–19	Valley-Fill Coarse	-0.29
MW-261	249938	40	30–40	Valley-Fill Coarse	-0.45
MW-225	138061	17.5	7.4–16.8	Valley-Fill Coarse	-3.66
MW-232	138017	16	6–15.4	Valley-Fill Coarse	-2.34
MW-231	138020	17	5.8–15.2	Valley-Fill Coarse	-2.40
MW-9 (lab)	249898	55	41–46	NR	9.61
MW-274	264393	22	7.5–17.5	Valley-Fill Coarse	10.37
MW-259	249940	38	28–38	Valley-Fill Coarse	-10.23
OD-2D	249778	40	29–34	Valley-Fill Med-Fine	-1.98
OD-2S	249799	10.9	NR	Valley-Fill Coarse	-2.13
OD-3D	249781	40	30–37	Valley-Fill Coarse	-2.57
OD-3S	249782	18.3	9–14	Valley-Fill Coarse	-2.15

NR, not reported.

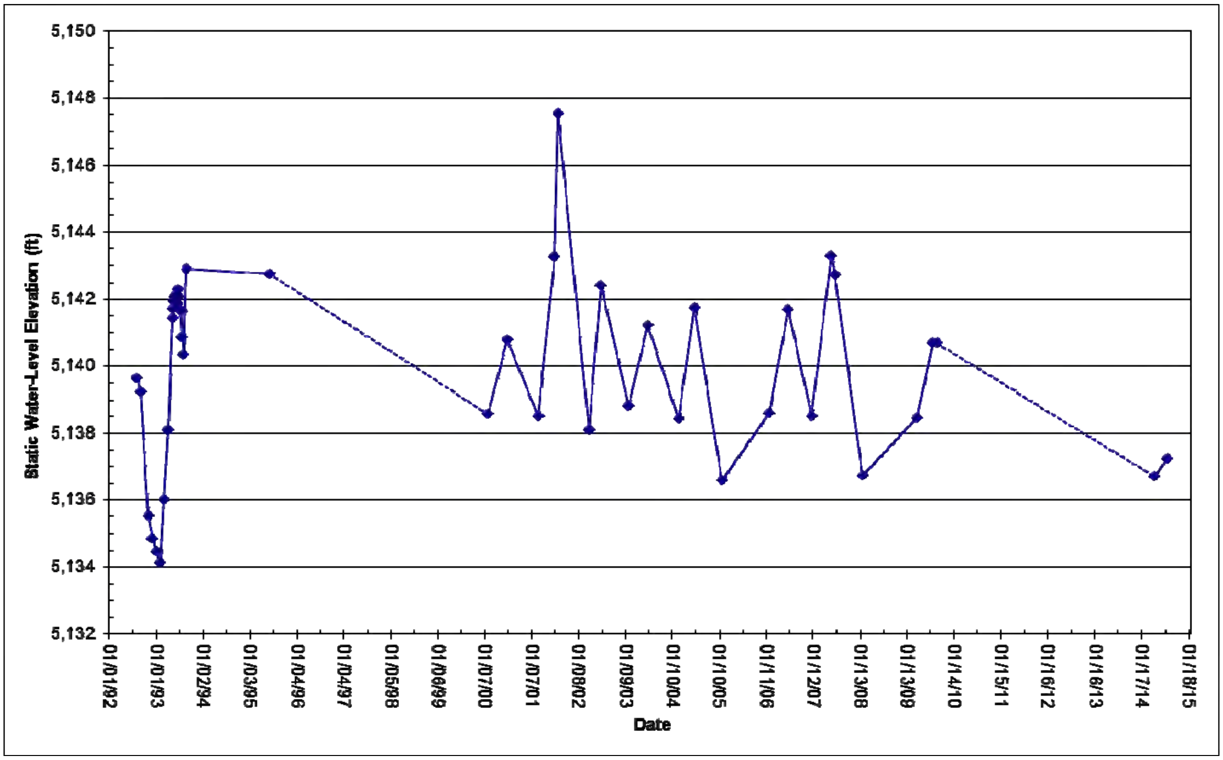


Figure 4.5-7. Water-level hydrograph for well MW-231, Yellow Ditch area.

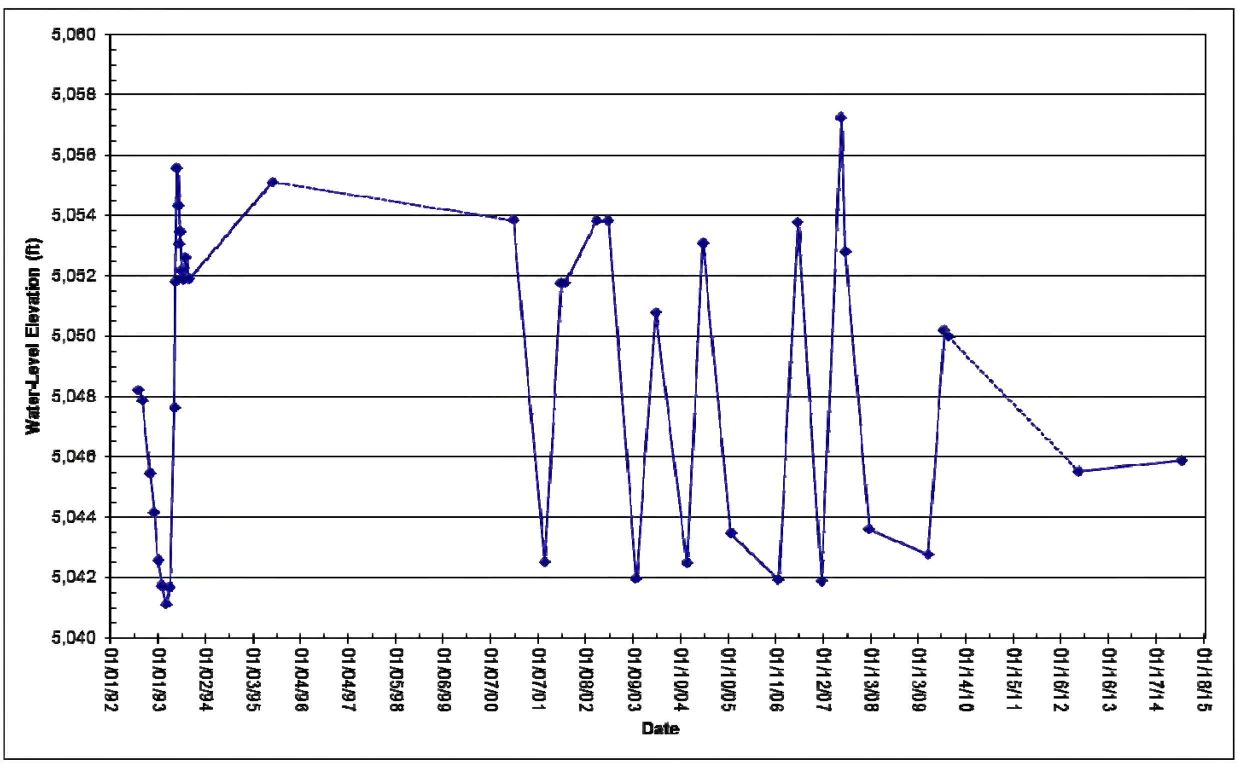


Figure 4.5-8. Water-level hydrograph for well MW-232, Yellow Ditch area.

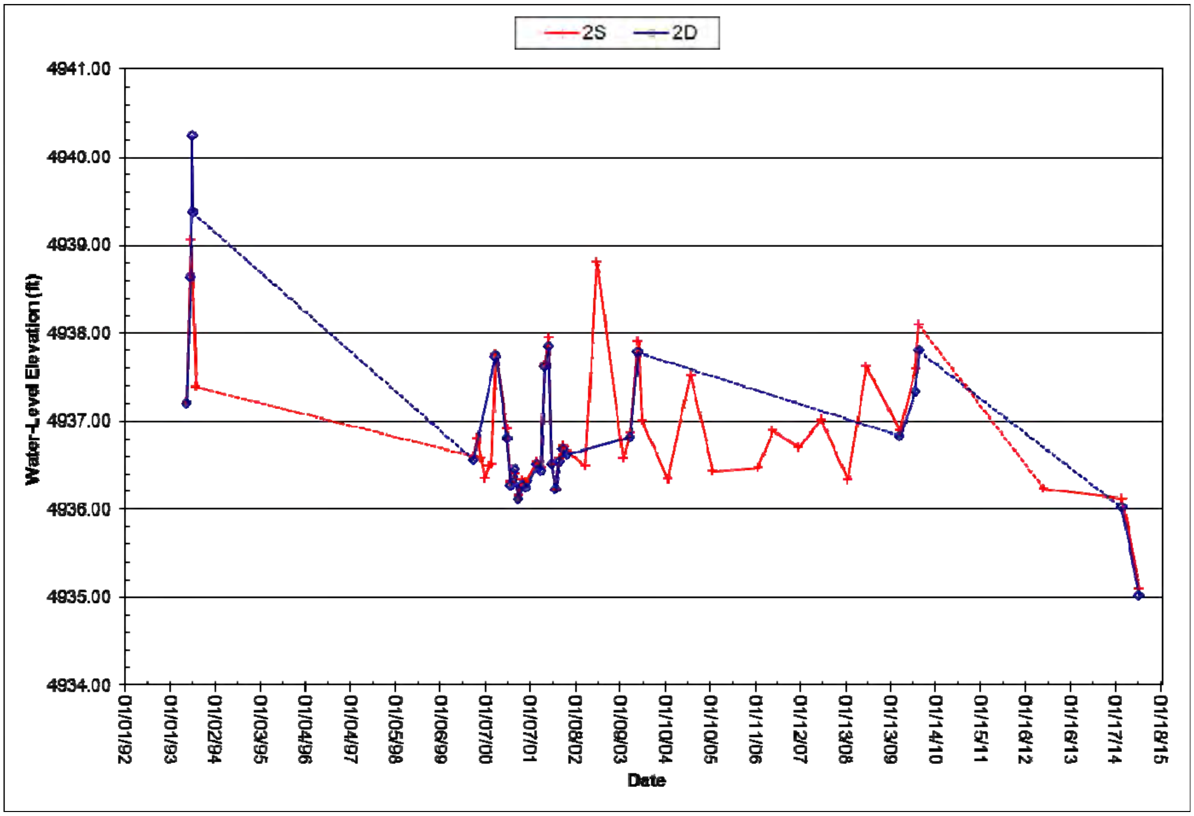


Figure 4.5-9. Water-level hydrographs for nested wells OD-2S and OD-2D, located in the northwest portion of South Opportunity AOC.

Water-level hydrographs based upon semi-annual measurements do not provide an accurate representation of water-level changes throughout the year. Pressure transducers that record water levels every hour were installed in the three nested well pairs; figures 4.3-10 through 4.3-12 show the daily average water level for these sites. Water levels reached their peak in mid-July each year, before declining the remainder of the year in wells MW-264 and MW-263. Well pair MW-262 and MW-261 shows a different trend (figure 4.3-11) throughout the summer and early fall, which may be related to operation of the irrigation ditch system located near these wells. From mid-May through early September, frequent spikes in water levels occur, which appear to correspond to periods of flow in the irrigation ditches, flood irrigation occurring, or both. Water levels respond in a similar fashion in both the shallow and deep well at each well pair.

The shallow well (MW-260) in the nested well pair MW-260 and MW-259 went dry the summer of 2011, and a replacement well was installed the fall of 2011 (MW-274) in an attempt to track changes in the shallow water system. The replacement well was drilled to a depth of 27 ft and screened between 7 and 27 ft. The water levels for this well are shown in green in figure 4.5-12. Well MW-260 was dry throughout 2013 and a large portion of 2014, while the replacement well (MW-274) had water from June through December each year.

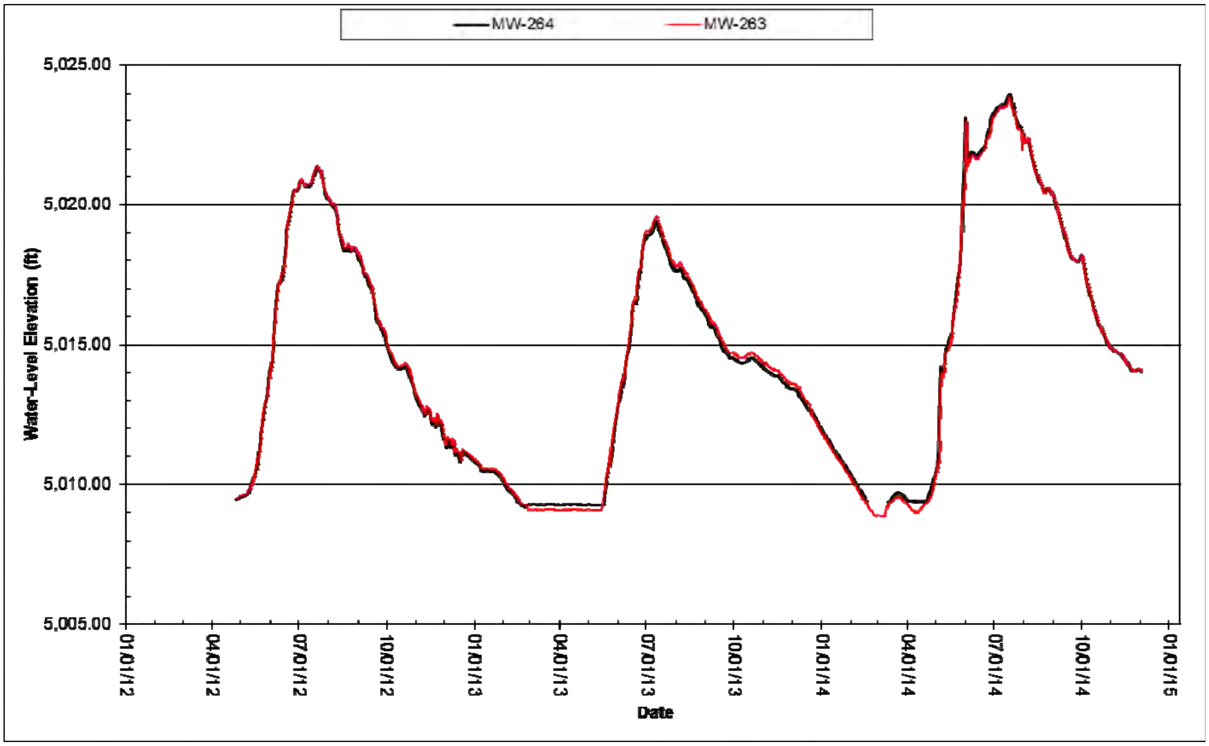


Figure 4.5-10. Daily average water-level hydrograph for nested wells MW-264 and MW-263.

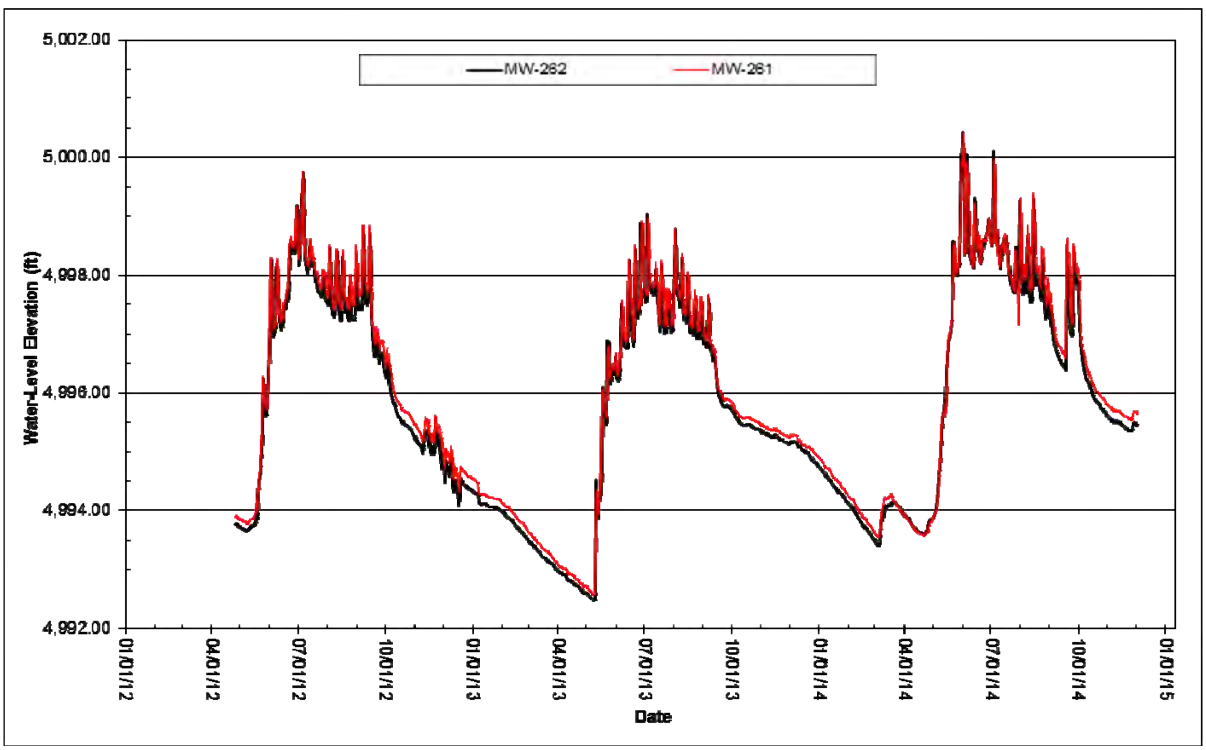


Figure 4.5-11. Daily average water-level hydrograph for nested wells MW-262 and MW-261.

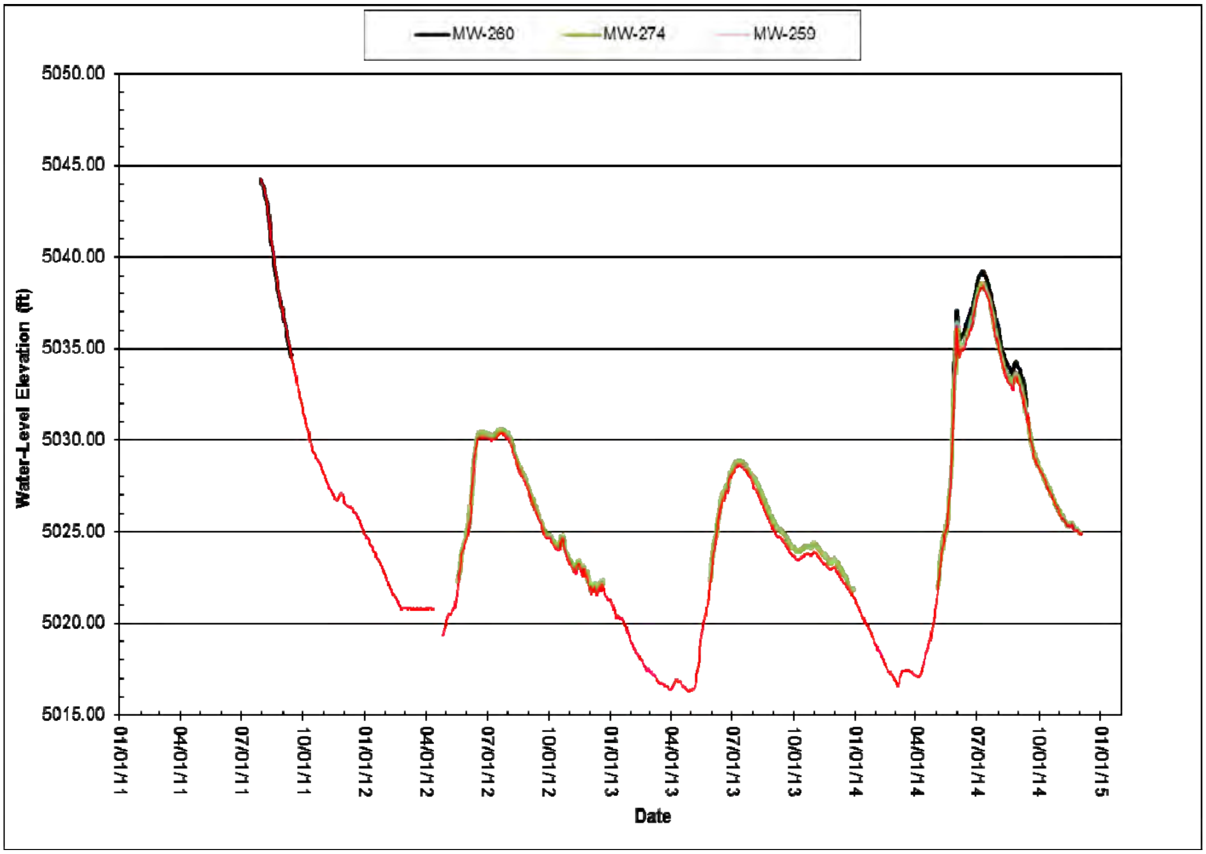


Figure 4.5-12. Daily average water-level hydrograph for nested wells MW-260, MW-274, and MW-259.

4.6 Blue Lagoon Area of Concern

The Blue Lagoon AOC is located in the southeast portion of the ARWWS site and contains two monitoring wells both completed in the valley-fill (fig. 4.6-1). The area contains roughly 12.6 acres. Tables 4.6-1 and 4.6-2 contain well completion and water-quality summaries for both wells. Appendix G contains water-quality data for 2014 sampling events. No springs are contained in this AOC.

4.6.1 Blue Lagoon Water-Quality Results

Well MW-235 is very shallow, with the screen interval from 3 to 12 ft. Cadmium, copper, and zinc long-term average concentrations exceed DEQ-7 standards; cadmium and zinc concentrations in both the 2014 low- and high-water samples exceeded standards. Figures 4.6-2 and 4.6-3 show arsenic, cadmium, copper, and zinc concentrations over time. A very distinct seasonal trend is noticeable in figure 4.6-3, with copper and zinc having their highest concentrations during low-water sampling events. Water-quality samples were collected once each in 1993 and 1995, followed by semi-annual sampling from 2000 to 2009; semi-annual samples were collected in 2014.

Well MW-257 is moderately shallow, with the screen interval between 15.7 and 25.7 ft. None of the COCs were exceeded in the 2014 5-yr review samples, or long-term average for this well. Figure 4.6-4 shows arsenic and zinc concentrations over time. Zinc concentrations, while elevated, show a downward trend the past 2 years. Water-quality samples were first collected in 2004 and were collected semi-annually from 2005 to 2009; semi-annual samples were collected in 2014.

4.6.2 Blue Lagoon AOC—Groundwater-Level Observations

Willow Creek and an unnamed tributary to Willow Creek are the major hydrologic features in this AOC. Both wells are located adjacent to the tributary stream. Groundwater flow is from the west to east, paralleling the surface-water drainage in the area (plates 2 and 3). Well MW-235 has a much longer period of record; well MW-257 data are more limited since the well was installed in 2004. Well MW-235 has large seasonal fluctuations (fig. 4.6-5; top); however, the net water-level change is a decline of about 6 ft (table 4.6-3). Well MW-257 does not have the same consistent seasonal change; however, large seasonal variations occurred in both 2007 and 2009 (fig. 4.6-5; bottom). Water levels have increased over 3 ft in this well since its installation (table 4.6-3).

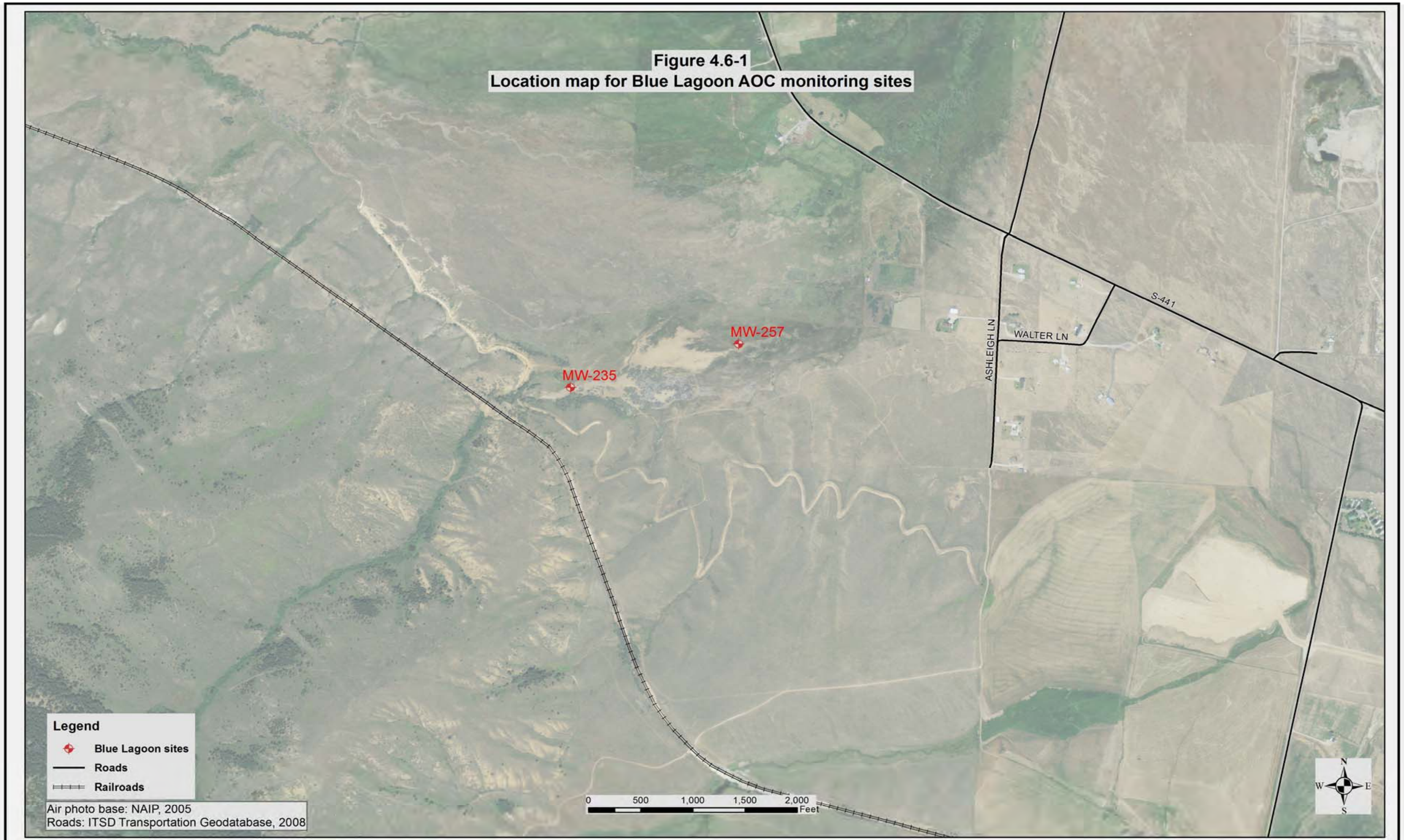


Figure 4.6-1. Location map for Blue Lagoon monitoring station.

Table 4.6-1. Blue Lagoon well summary.

Blue Lagoon AOC				
Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Water-Quality Analytes
MW-235	250046	13	3–12	As, Cd, Cu, Pb, Zn, Fe, Mn, SO_4, Ca, Mg, K, HCO_3, CO_3, Cl, pH, SC, TDS, Hardness
MW-257	250015	26.5	15.7–25.7	As, Cd, Cu, Pb, Zn, Fe, Mn, SO_4, Ca, Mg, K, CO_3, CO_3, Cl, pH, SC, TDS, Hardness

Table 4.6-2. Blue Lagoon water-quality summary.

Blue Lagoon AOC							
Well ID	GWIC ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (µg/L)	2014 High-Water Arsenic (µg/L)	Long-Term Arsenic Average (µg/L)	Comment
MW-235	250046	3–12	Ca-HCO_3	0.39 J	0.62	1.06	Cd and Zn exceeded std. in both 2014 samples. Cu and Zn have similar seasonal trends with highest concentrations during low-water events.
MW-257	250015	15.7–25.7	Ca-HCO_3	1.53	2.52	0.99	No COC concentrations exceeded in 2014 samples.

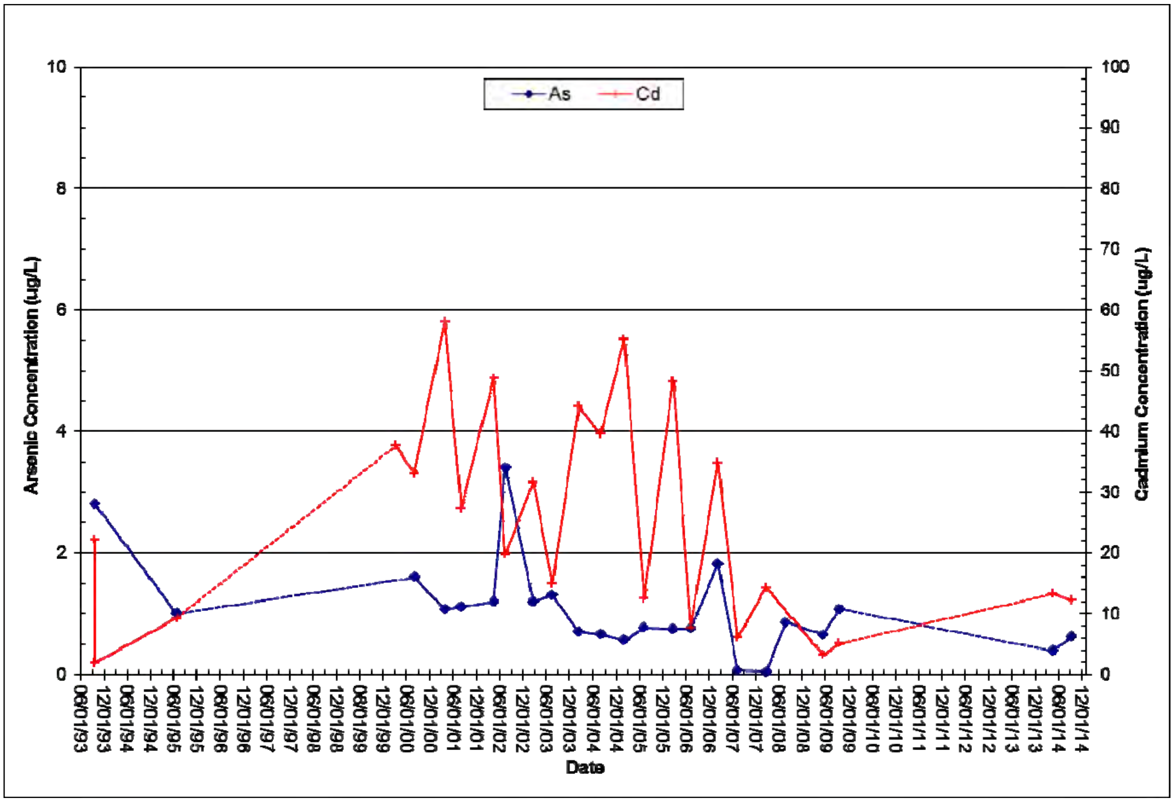


Figure 4.6-2. Arsenic and cadmium concentrations over time in well MW-235, Blue Lagoon area.

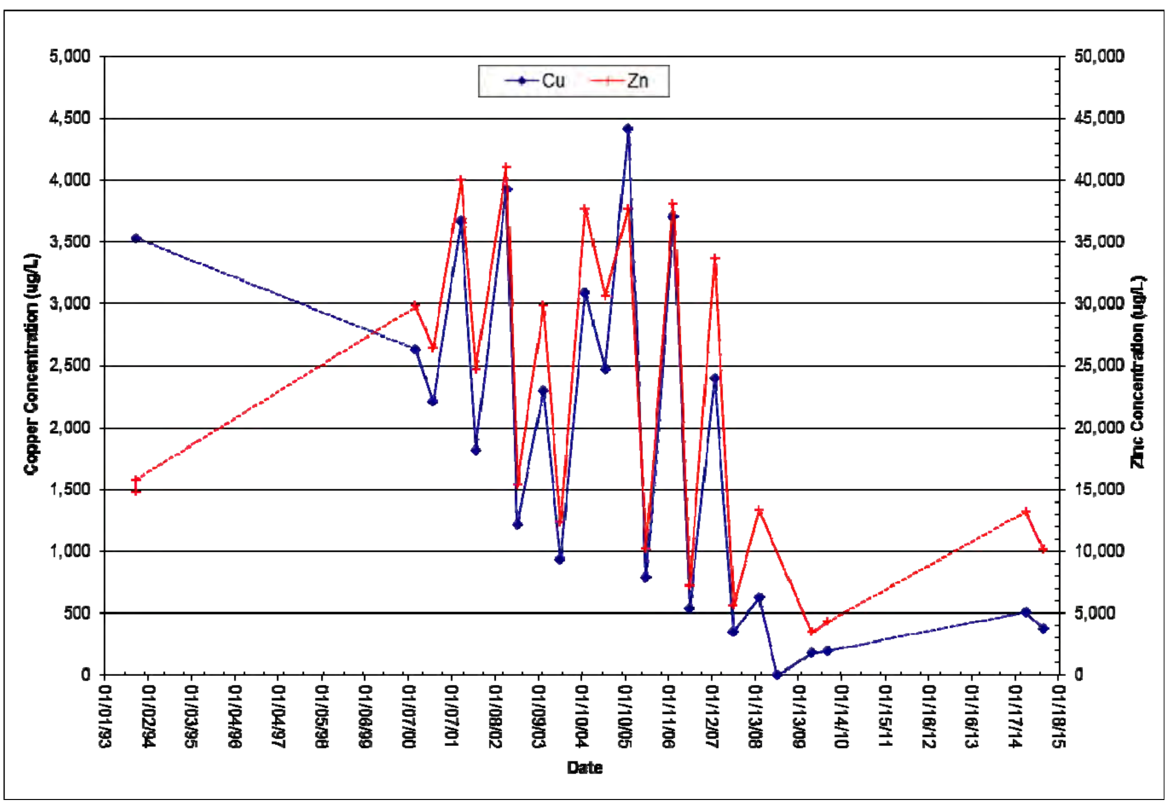


Figure 4.6-3. Copper and zinc concentrations over time in well MW-235, Blue Lagoon area.

Table 4.6-3. Blue Lagoon net water-level change summary.

Blue Lagoon AOC

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Aquifer	Net Water-Level Change (ft)
MW-235	250046	13	3-12	Valley-Fill Coarse	-6.02
MW-257	250015	26.5	15.7-25.7	Valley-Fill Coarse-Medium	3.63

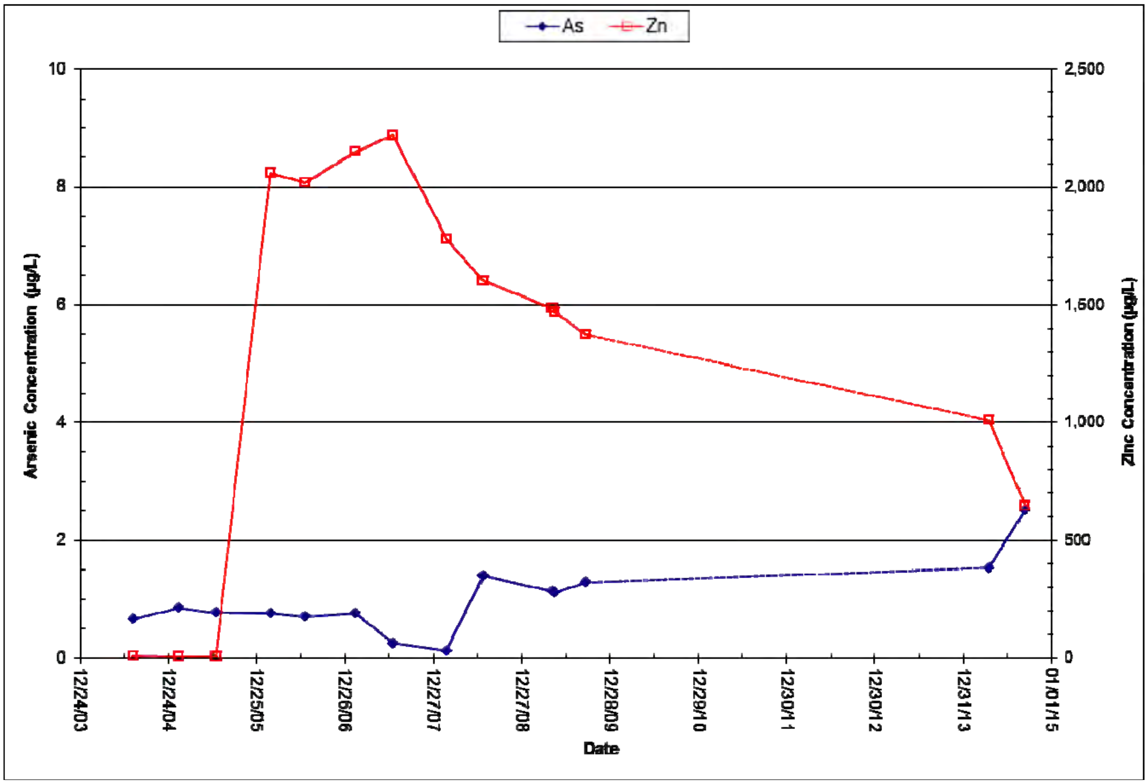
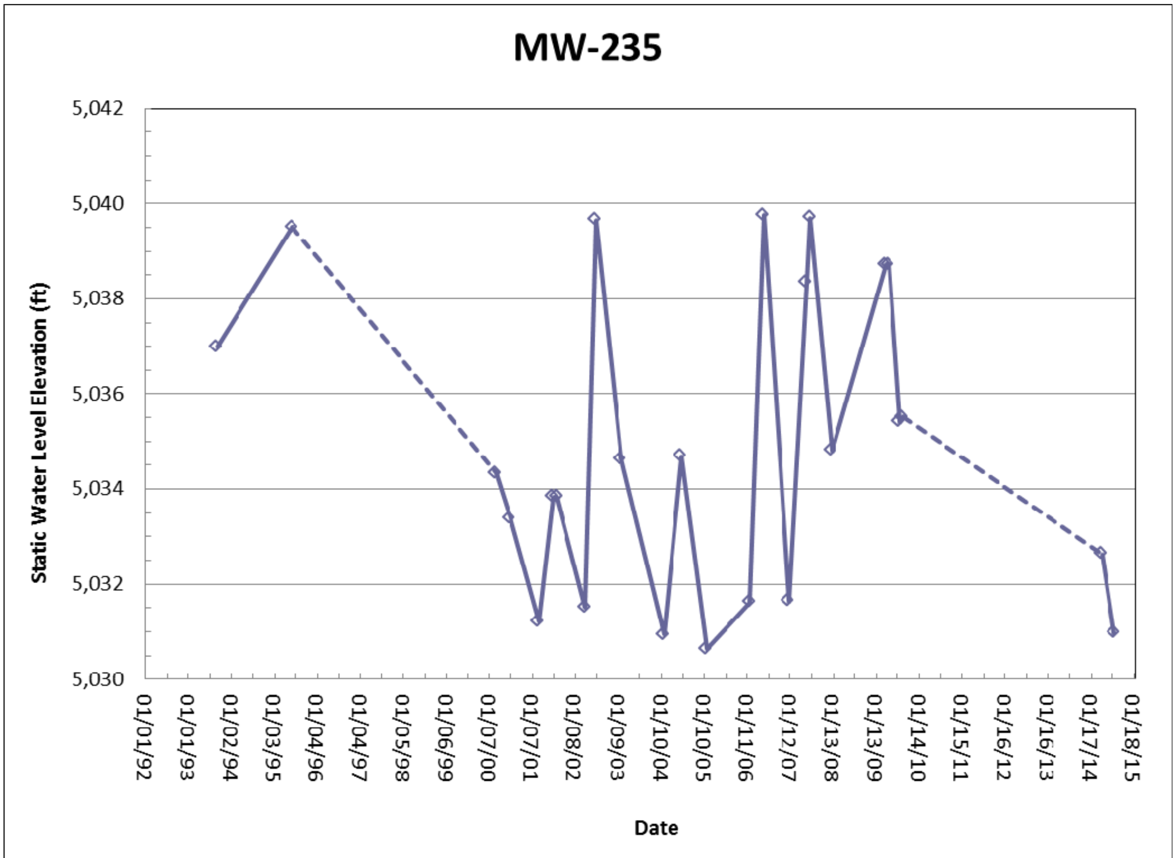


Figure 4.6-4. Arsenic and zinc concentrations over time in well MW-257, Blue Lagoon area.



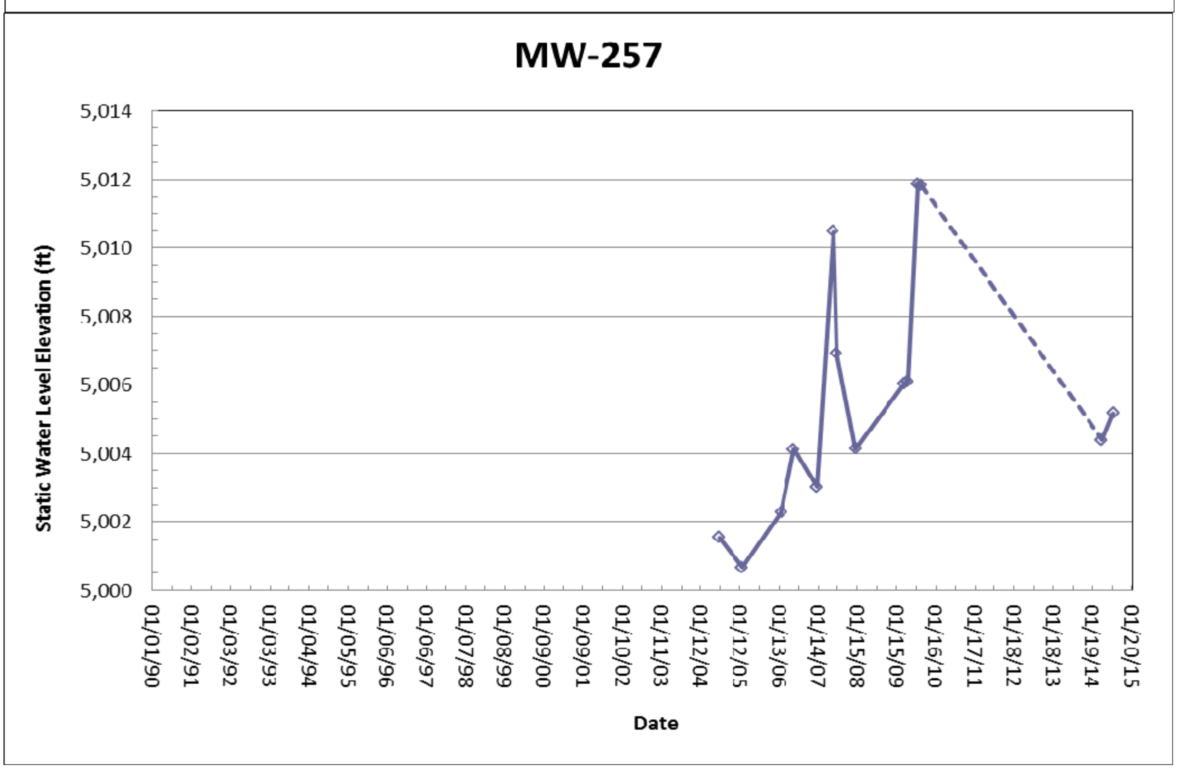


Figure 4.6-5. Water-level hydrographs for wells MW-235 (top) and MW-257 (bottom), Blue Lagoon area.

4.7 Dutchman Creek High Arsenic Area

The Dutchman Creek High Arsenic Area (HAA) is located in the northeast portion of the ARWWS site (fig. 4.7-1) and contains two wells and three springs. Both wells are completed in the valley-fill material. Arsenic is the only COC in groundwater samples for this area. Table 4.7-1 contains a brief summary of well completions; table 4.7-2 contains a summary of water-quality conditions. Appendix H contains water-quality results from 2014 sampling events for all sites in this area.

Table 4.7-1. Dutchman Creek well summary.

Dutchman Creek High Arsenic Area

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Water-Quality Analytes
MW-224	138068	22	12.3–21.7	As
MW-230	128740	15.6	5.6–15	As

Table 4.7-2. Dutchman Creek water-quality summary.

Dutchman Creek High Arsenic Area

Well ID	GWIC ID	Screen Interval (ft)	Water Type	2014 Low-Water Arsenic (µg/L)	2014 High-Water Arsenic (µg/L)	Long-Term Arsenic Average (µg/L)	Comment
MW-224	138068	12.3–21.7	Ca-HCO_3	0.63	0.66	1.19	
MW-230	128740	5.6–15	Ca-HCO_3	1.04	1.01	1.36	

4.7.1 Water-Quality Results

Both wells (MW-224 and MW-230) in this area are shallow completions with screen intervals between 5 and 22 ft. Arsenic concentrations vary in a similar manner between wells; however, there is no consistent seasonal trend (fig. 4.7-2). Arsenic concentrations are well below the DEQ-7 standard in samples collected from both wells, including the 2014, 5-yr review samples.

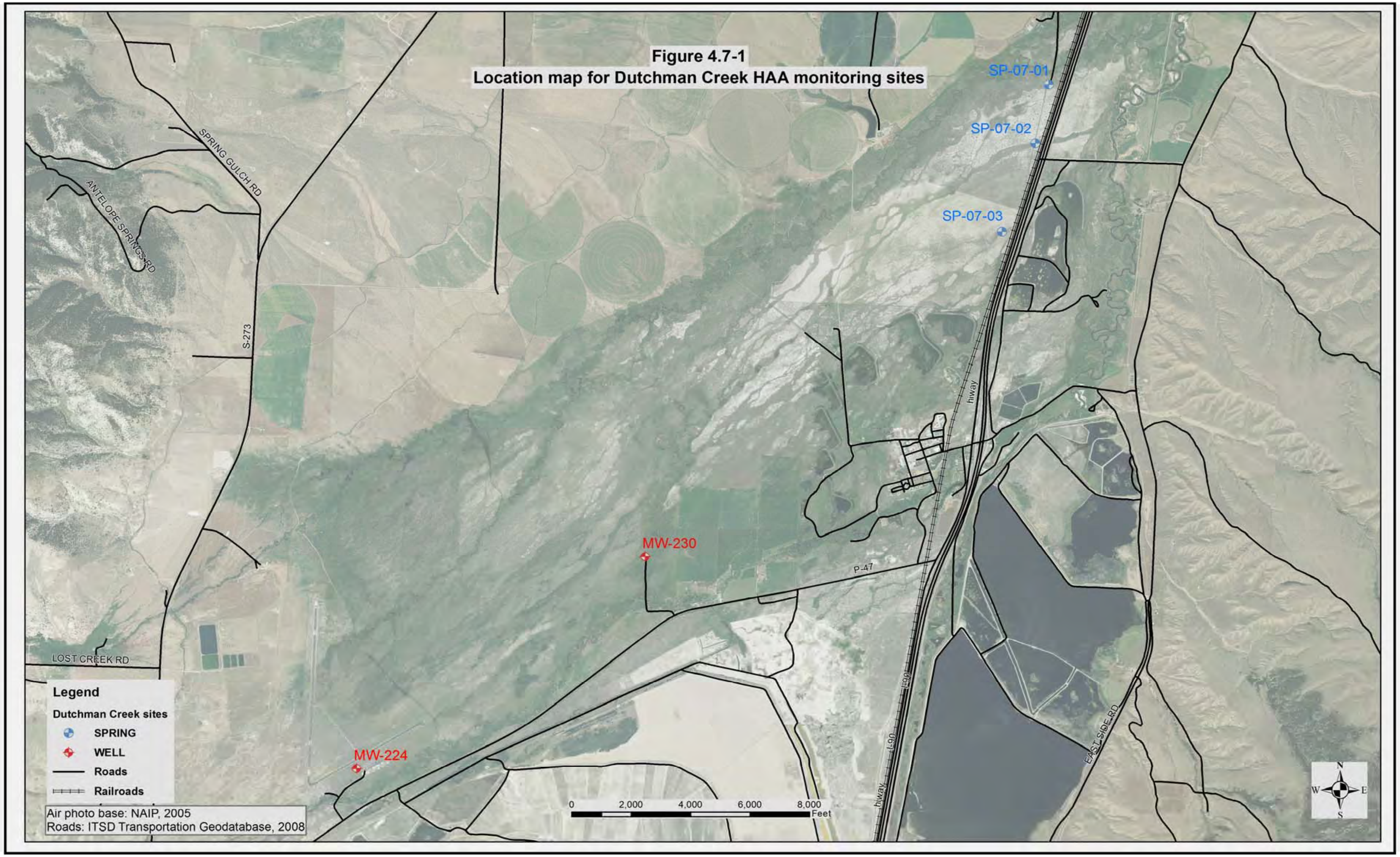


Figure 4.7-1. Location map for Dutchman Creek monitoring sites.

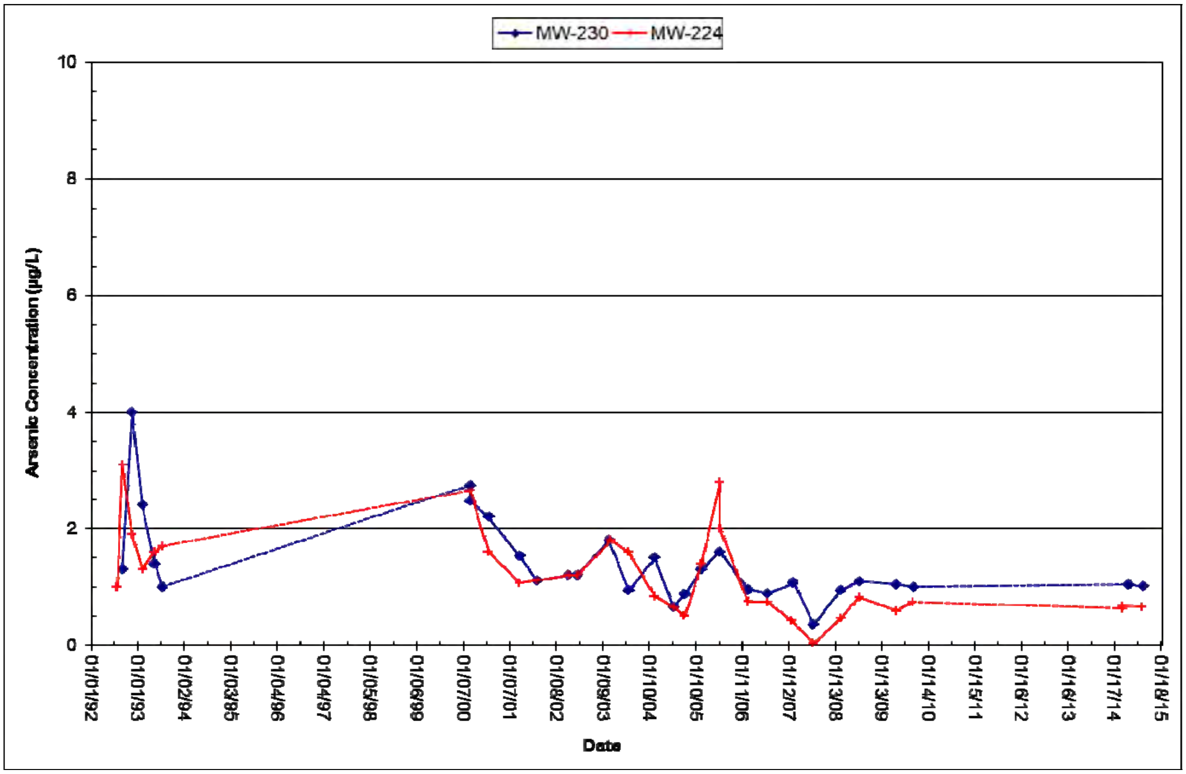


Figure 4.7-2. Arsenic concentrations over time in wells MW-224 and MW-230, Dutchman Creek area.

4.7.2 Groundwater-Level Observations

Dutchman Creek dissects this area on the north, while Warm Springs Creek forms the south boundary of the site. Groundwater flow direction is from the southwest to the northeast, following the two surface-water drainages (plates 2 and 3). Both monitoring wells in this area are completed in the coarse-medium valley-fill at relatively shallow depths (table 4.7-3). Figure 4.7-3 contains hydrographs showing long-term water-level fluctuations for both wells. Net water-level increases vary between 2 and 6 ft in wells MW-230 and MW-224, respectively. Several variations range between 2 ft in well MW-230 and 8 ft in well MW-224.

Table 4.7-3. Dutchman Creek net water-level change summary.

Dutchman Creek High Arsenic Area

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Aquifer	Net Water-Level Change (ft)
MW-224	138068	22	12.3-21.7	Valley-Fill Coarse-Medium	5.94
MW-230	128740	15.6	5.6-15	Valley-Fill Coarse-Medium	2.44

4.7.3 Springs Water-Quality Results

The Dutchman Creek High Arsenic Area contains three spring sites, shown in figure 4.7-1. All three sites are located in the northeast portion of this site and were visited for sampling in July and October 2014 (table 4.7-4); two of the sites were dry when first visited in the summer; they were visited in the fall after late summer rains and samples were collected. Arsenic concentrations exceeded the DEQ-7 standard at all three sites. No historic information exists for SP-07-01 and SP-07-02, while site SP-07-03 has data for 2009 and 2012. The flow rate of 264 gpm at SP-07-03 was the highest measured throughout the ARWWS site.

Table 4.7-4. Dutchman Creek 2014 Arsenic Concentrations.

Site ID	GWIC ID	2014 Concentration (µg/L)
SP-07-01	249910	92.0
SP-07-02	249911	102
SP-07-03	249912	80.7

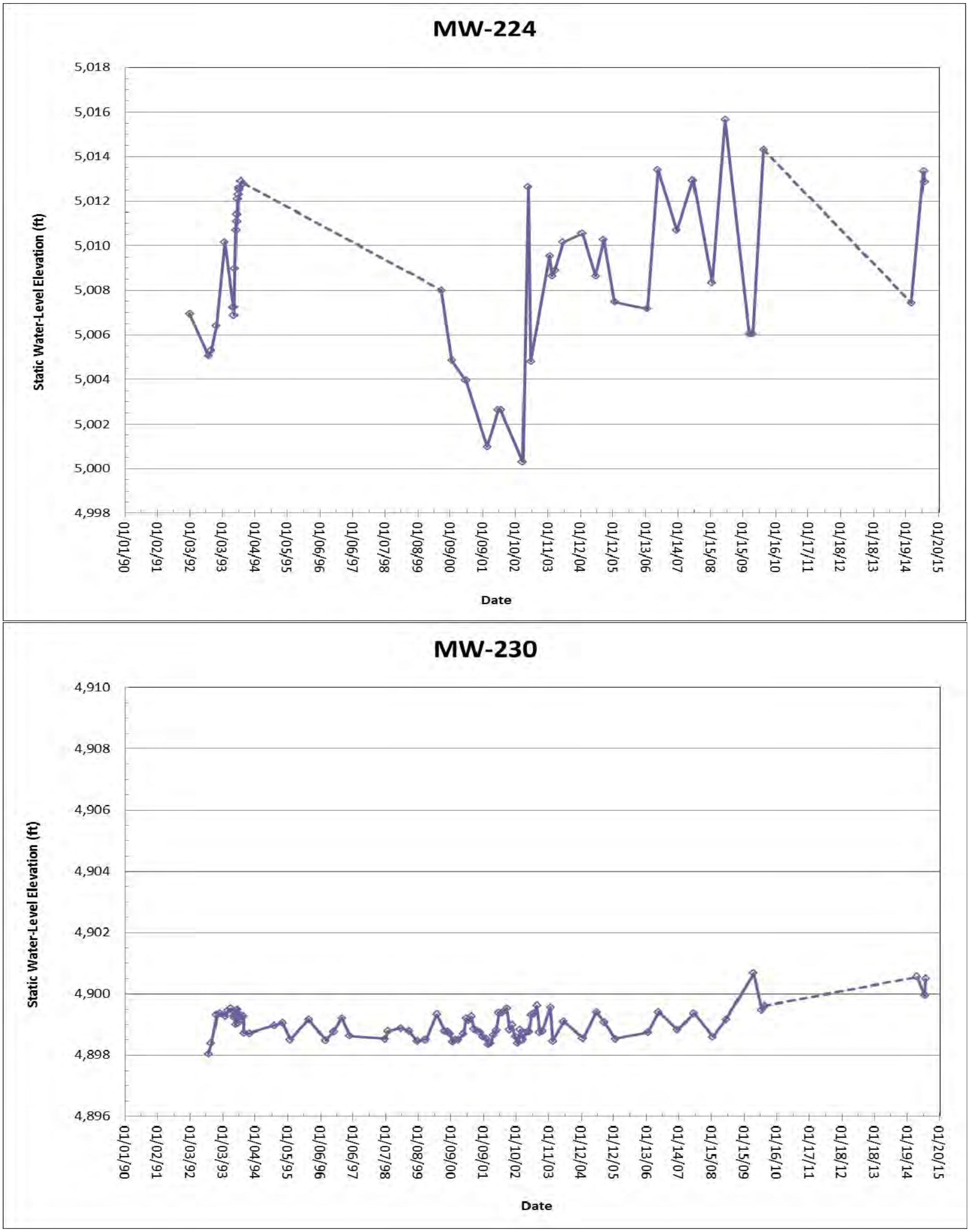


Figure 4.7-3. Water-level hydrographs for wells MW-224 (top) and MW-230 (bottom), Dutchman Creek area.

4.8 Water-Quality Trends in Point of Compliance Monitoring Wells

The long-term monitoring program may require a statistical evaluation of water-quality trends in the POC/ PPOC wells. This evaluation may be performed using the software program Monitoring and Remediation Optimization System (MAROS) and may consist of both a 4-yr (minimum of six sample events) Mann–Kendall Trend Test and long-term linear regression trend analysis. The evaluation may include all five COCs (As, Cd, Cu, Pb, and Zn) for the ARWWS site. Table 4.8-1 lists the POC/PPOC wells and their locations (WMA/AOC); their locations are also shown in figure 4.8-1. One well is still considered a PPOC well due to the lack of the minimum required number of sample events to evaluate its adequacy as a POC well. While it remains uncertain if a statistical analysis will be required in the long-term monitoring program, the data presented are for informational purposes only.

Table 4.8-1 Point of compliance monitoring wells.

Well ID	New Well ID	GWIC ID	Status
SMELTER HILL/OPPORTUNITY PONDS WMA			
MW-212		138007	POC
MW-214		138065	POC
MW-216		137957	POC
NW-6s	**MW-258**	249909	POC
MW-26		249793	POC
MW-26M		249790	POC
NW-5s	**MW-273**	249942	POC
NW-1-OPd	**MW-266**	249900	POC
NW-1-OPs	**MW-265**	249901	POC
NW-2-OPd	**MW-267**	249903	POC
NW-2-OPs	**MW-268**	249904	POC
NW-3-OPd	**MW-269**	249905	POC
NW-3-OPs	**MW-270**	249906	POC
NW-4-OPd	**MW-271**	249907	POC
NW-4-OPs	**MW-272**	249908	POC
OLD WORKS WMA			
MW-207		250043	
MW-251		250014	POC
MW-252		249797	POC
MW-255		250055	POC
SOUTH OPPORTUNITY/YELLOW DITCH AREA OF CONCERN			
LTW-1-SOS	**MW-264**	249937	POC
LTW-1-SOD	**MW-263**	249936	POC
LTW-3-SOS	**MW-262**	249939	POC
LTW-3-SOD	**MW-261**	249938	POC
LTW-4-SOS-R	**MW-274**	264393	PPOC
LTW-4-SOD	**MW-260**	249940	POC

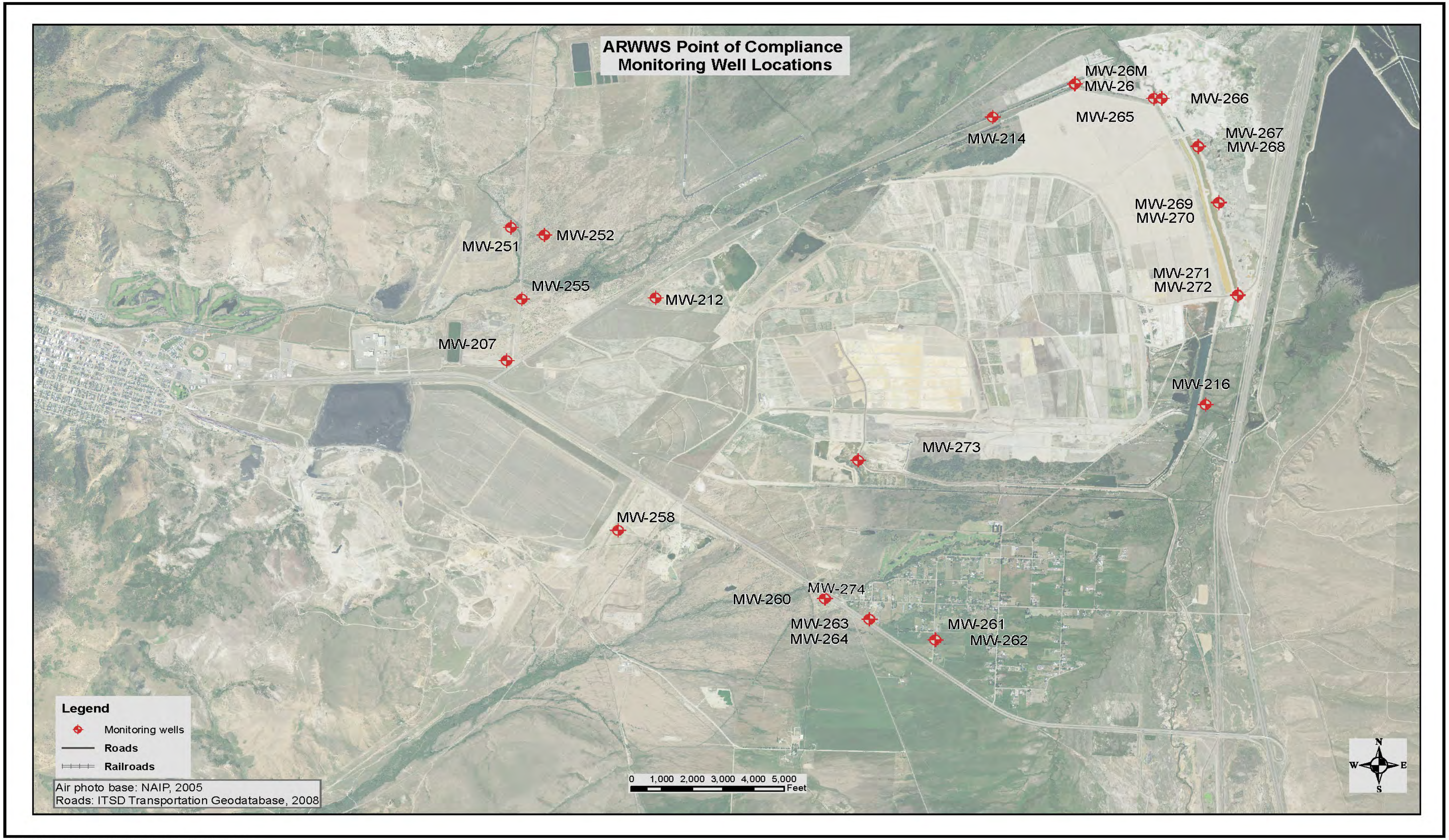


Figure 4.8-1 ARWWS point of compliance monitoring well locations.

The final Statistical Evaluation Plan (SEP) may require a statistical evaluation only when water-quality concentrations in the most recent sample results exceed one-half the performance standard or maximum contaminant level (MCL). None of the POC/PPOC wells had concentrations that met this requirement in 2014; therefore, no evaluation would have been necessary under the anticipated SEP. Tables 4.8-2 and 4.8-3 show the COC water-quality results from the low-water and high-water sample events, respectively.

Table 4.8-2. 2014 Low-water COC water quality.

Well ID	New Well ID	GWIC ID	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)
OPPORTUNITY PONDS/SMELTER HILL WMA							
MW-212		138007	0.58	<0.10 U	<0.50 U	<0.06 U	<0.50 U
MW-214		138065	0.92	<0.10 U	<0.50 U	<0.06 U	<0.50 U
MW-216		137957	1.89	<0.10 U	<0.50 U	<0.06 U	<0.50 U
NW-6s	MW-258	249909	0.67	<0.10 U	<0.50 U	<0.06 U	<0.50 U
MW-26		249793	<0.25 U	<0.25 U	5.35	<0.15 U	<1.25 U
MW-26M		249790	0.51 J	<0.25 U	5.00	<0.15 U	<1.25 U
NW-1-OPd	MW-265	249900	1.38	<0.25 U	<1.25 U	<0.15 U	1.38 J
NW-1-OPs	MW-266	249901	1.82	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-2-OPd	MW-267	249903	1.27	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-2-OPs	MW-268	249904	<0.25 U	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-3-OPd	MW-269	249905	1.25	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-3-OPd-Dup	MW-269	249905	1.24	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-3-OPs	MW-270	249906	0.61 J	<0.25 U	1.33 J	<0.15 U	1.71 J
NW-4-OPd	MW-271	249907	1.39	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-4-OPs	MW-272	249908	<0.25 U	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-5s	MW-273	249942	0.31 J	<0.10 U	<0.50 U	<0.06 U	0.53 J
OLD WORKS WMA							
MW-207		250043	0.69	<0.10 U	<0.50 U	<0.06 U	<0.50 U
MW-251		250014	0.44	<0.10 U	<0.50 U	<0.06 U	4.08
MW-252		249797	0.42	1.94	<0.50 U	<0.06 U	210.45
MW-255		250055	0.82	<0.10 U	<0.50 U	<0.06 U	<0.50 U
SOUTH OPPORTUNITY/YELLOW DITCH AREA OF CONCERN							
LTW-1-SOd	MW-263	249936	0.43	<0.10U	<0.50 U	<0.06 U	<0.50 U
LTW-1-SOs	MW-264	249937	NS				
LTW-3-SOd	MW-261	249938	0.40 J	<0.10 U	<0.50 U	<0.06 U	<0.50 U
LTW-3-SOs	MW-262	249939	2.92	<0.10 U	0.51 J	<0.06 U	<0.50 U
LTW-4-SOd	MW-259	249940	0.47	<0.100 U	<0.50 U	<0.06 U	35.21
LTW-4-SOs-R	MW-274	249941	NS				

Note. NS, no sample, well dry; U, undetected, quantity below detection limit; J, estimated, quantity above detection limit but below reporting limit.

Table 4.8-3. 2014 High-water COC water quality.

Well ID	New Well ID	GWIC ID	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)
OPPORTUNITY PONDS/SMELTER HILL WMA							
MW-212		138007	0.62	<0.10 U	<0.50 U	<0.06 U	<0.50 U
MW-214		138065	1.39	<0.25 U	<1.25 U	<0.15 U	<1.25 U
MW-216		137957	2.23	<0.10 U	<0.50 U	<0.06 U	<0.50 U
NW-6s	MW-258	249909	0.61	<0.10 U	0.95 J	<0.06 U	3.40
MW-26		249793	1.24	0.54 J	7.10	<0.15 U	<1.25 U
MW-26M		249790	0.63 J	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-1-OPd	MW-265	249900	1.48	<0.25 U	3.65 J	<0.15 U	1.63 J
NW-1-OPs	MW-266	249901	2.63	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-2-OPd	MW-267	249903	1.42	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-2-OPs	MW-268	249904	0.66 J	<0.25 U	7.00	<0.15 U	<1.25 U
NW-3-OPd	MW-269	249905	1.46	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-3-OPs	MW-270	249906	0.92 J	<0.25 U	8.10	0.63 J	<1.25 U
NW-4-OPd	MW-271	249907	1.49	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-4-OPs	MW-272	249908	0.75J	<0.25 U	<1.25 U	<0.15 U	<1.25 U
NW-5s	MW-273	249942	0.46	<0.10 U	0.94 J	<0.06 U	<0.50 U
OLD WORKS WMA							
MW-207		250043	0.67	<0.10 U	<0.50 U	<0.06 U	<0.78 J
MW-251		250014	0.42	0.92	<0.50 U	<0.06 U	108.56
MW-252		249797	0.33 J	1.86	<0.50 U	<0.06 U	186.69
MW-255		250055	0.86	<0.10 U	<0.50 U	<0.06 U	<0.50 U
SOUTH OPPORTUNITY/YELLOW DITCH AREA OF CONCERN							
LTW-1-SOd	MW-263	249936	0.38 J	<0.10 U	<0.50 U	<0.06 U	0.82 J
LTW-1-SOs	MW-264	249937	5.54	<0.10 U	<0.50 U	<0.60 U	1.10 J
LTW-3-SOd	MW-261	249938	0.39 J	<0.10 U	<0.50 U	<0.06 U	0.85 J
LTW-3-SOs	MW-262	249939	4.44	<0.10 U	0.93 J	<0.06 U	1.26 J
LTW-4-SOd	MW-259	249940	0.50	<0.100 U	0.55 J	<0.06 U	41.50
LTW-4-SOs-R	MW-274	249941	0.58	<0.100 U	0.96 J	<0.06 U	74.50

4.9 Smelter Hill Repository Complex

Several waste repositories are located on Smelter Hill, with five monitoring wells located adjacent to them for water-level and water-quality monitoring (figure 4.9-1). These wells are monitored and sampled once per year during high-water sampling. The COCs for this site include the same five described earlier for other ARWWS sites and beryllium due to the presence of beryllium waste. Table 4.9-1 contains well completion information for these wells.

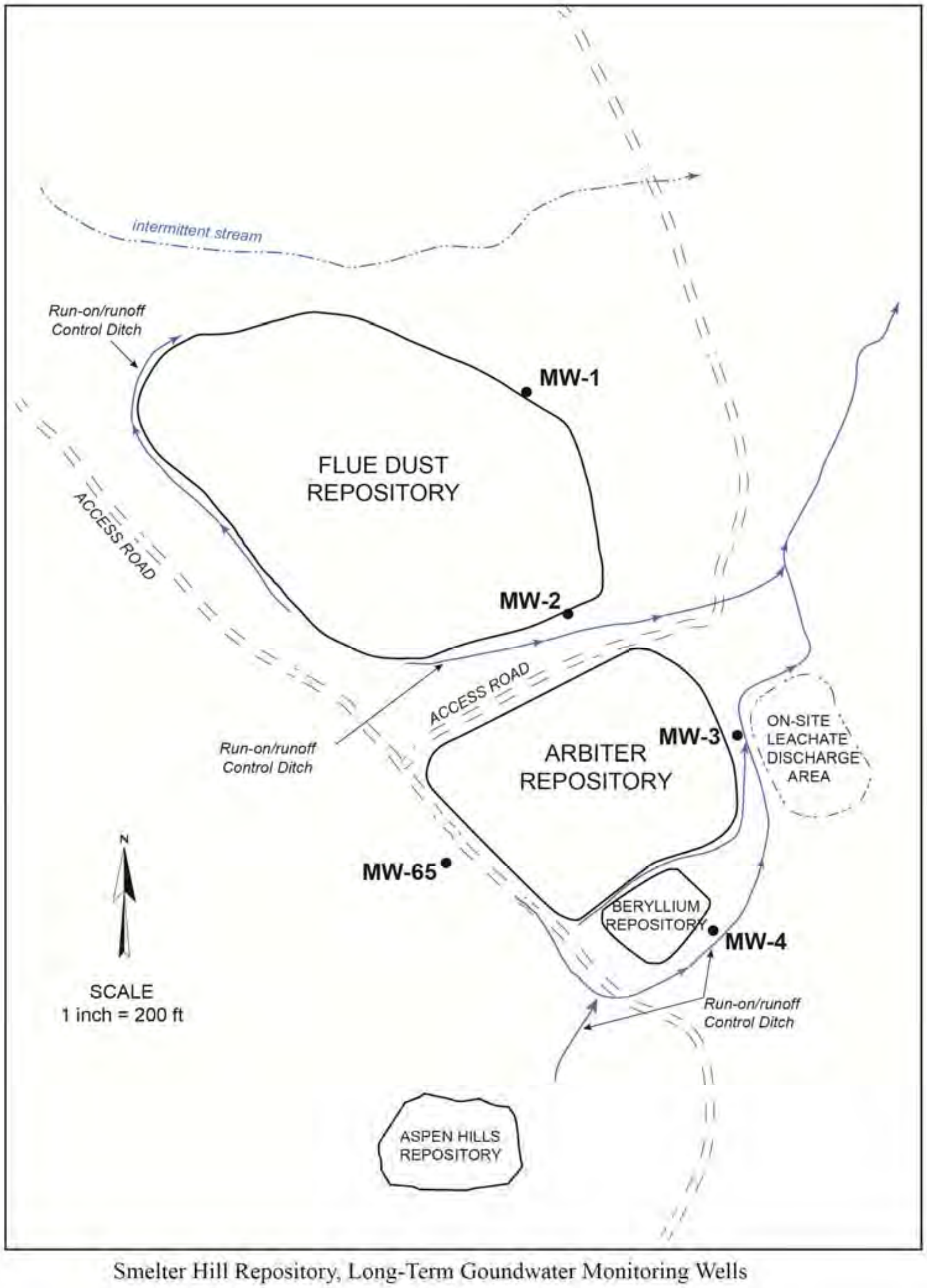


Figure 4.9-1. Location map for Smelter Hill Complex monitoring wells.

Table 4.9-1. Smelter Hill Complex monitoring well summary.

Well ID	GWIC ID	Total Depth (ft)	Screen Interval (ft)	Aquifer
MW-01	257104	150	126-146	Valley-Fill Coarse
MW-02	257100	140	114-134	Valley-Fill Coarse
MW-03	250307	160	NA	Valley-Fill Coarse
MW-04	250306	170	NA	Valley-Fill Coarse
MW-65	250224	1123	108-118	Valley-Fill Med-Fine

COC concentrations in these five wells are low, with the exception of arsenic in MW-03 and occasionally in the past in well MW-65. All other analyte concentrations are well below their respective DEQ-7 MCL. Figure 4.9-2 shows arsenic concentrations for all five wells since monitoring began in 1999 (note that arsenic concentrations are shown in log scale). Results of all water-quality samples for these wells are contained in appendix I.

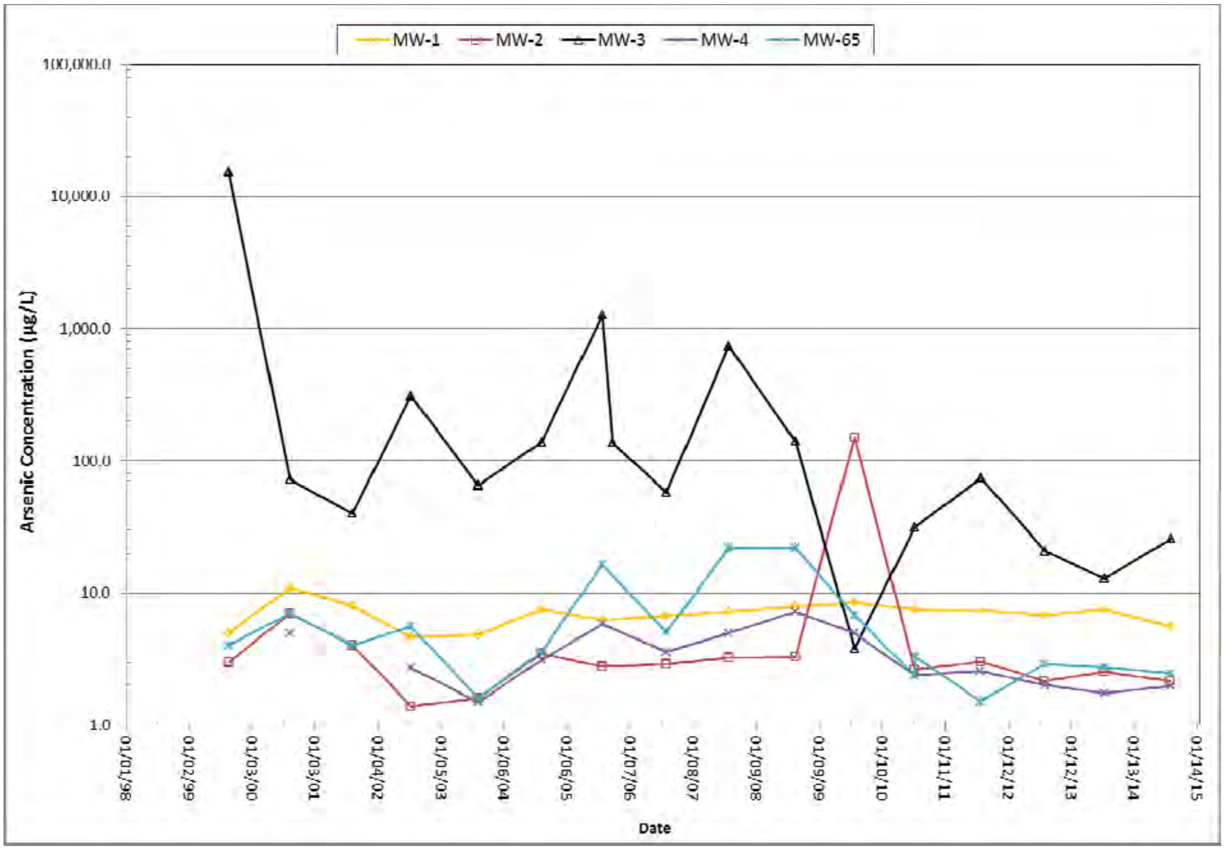


Figure 4.9-2. Arsenic concentrations in Smelter Hill Complex monitoring wells.

5.0 Domestic Well Monitoring Program

5.1 Description of the Sampling Area

The boundary for domestic well sampling was defined in the U.S. EPA 2011 Record of Decision Modification (fig. 5.1-1). Typically the annual goal of the domestic well sampling effort was to sample 20% of the wells not previously sampled within the EPA-proposed Domestic Well Monitoring Area. The domestic wells are to be resampled every 5 years, and therefore in 2014 we resampled the wells originally sampled in 2009. In addition to resampling the 2009 wells, we also concentrated on sampling any wells that had not previously been sampled.

5.2 New Domestic Well Sampling

A list of potential wells was generated using the Montana Cadastral Database, which includes tax-related data such as information on utilities and construction. All the cadastral parcels in the sampling area were downloaded into an ArcMap file and filtered to remove parcels served by community water and sewer. Although there are cadastral data categories for other useful screening criteria, such as wells, septic systems, and residences, these data are often inconsistently or inaccurately documented in the cadastral database and were not used in the filtering process. Therefore, aerial photos of each of the remaining parcels were then examined to identify structures or likely building sites. Building sites were identified by having a road ending in a cleared area. All of the parcels that had buildings or likely building sites were assumed to have a domestic well. Using this method we estimated there were 734 properties that potentially had a domestic well within the sampling area.

In 2014, we attempted to contact approximately 183 home owners that had not previously been sampled, had not refused sampling, or we had not attempted to contact at least three times. We attempted to contact the owners using a variety of methods including postcards (130 sent), site visits (175), and phone calls (37). During the site visits postcards in plastic bags were left in conspicuous places. After at least three contact attempts (including two site visits for local owners), it was assumed that the owners were not interested in having their wells sampled; these properties were labeled as “failed contacts.” In 2014, 7 owners verbally declined to have their well sampled and 84 owners were listed as failed contacts. There were also a number of properties that were removed from the contact list for other reasons, including no well or house (23), clearly abandoned (4), and serviced by city water (2). In all, 120 properties were removed from the contact attempt list in 2014.

A total of 63 new domestic wells were sampled in 2014 (fig. 5.1-1). Only one new well had an arsenic concentration between 5 µg/L and 10 µg/L (table 5.2-1). This well was in the Powell Vista area. Two of the wells with arsenic concentrations greater than 5 µg/L were in the Mill Creek area, approximately 2.3 mi southwest of the smoke stack on Smelter Hill.

Table 5.2-1. New sites with arsenic concentrations greater than 5 µg/L and less than 10 µg/L.

Owner	GWIC ID	As (µg/L)	Area
Zwygert, Dan	271506	7.59	Mill Creek

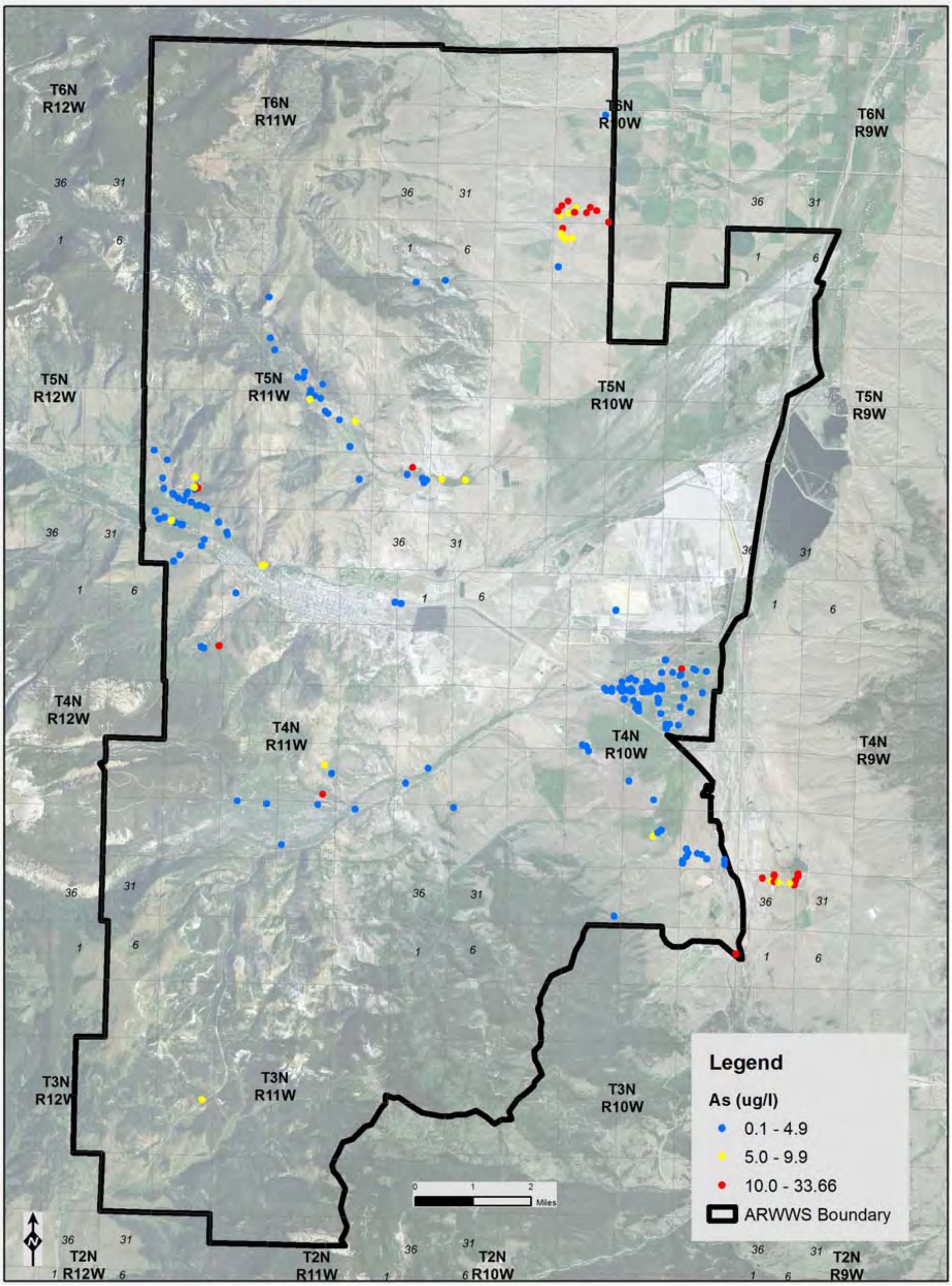


Figure 5.1-1. All wells sampled in 2014 are shown as dots, with the color indicating arsenic concentrations and the sampling area boundary outlined in black.

Arsenic concentrations were greater than 10 µg/L in three new domestic wells (table 5.2-2). One well (GWIC ID 165756) was in in the Powell Vista area and was the last well along Obsidian Road that the MBMG had not previously sampled. The confirmation sample from 1655756 was also greater than 10 µg/L. One well was from the Mill Creek area, approximately 2.7 mi southwest of the smoke stack on Smelter Hill. The other well was in the town of Opportunity. Neither the Mill Creek area well nor the Opportunity well had confirmation concentrations above 10 µg/L.

Table 5.2-2. New sites with arsenic concentrations greater than 10 µg/L and dissolved confirmation samples.

Owner	GWIC ID	Initial Total Recoverable As (µg/L)	Dissolved As (µg/L)	Total Recoverable As (µg/L)	Area
Poffenberger, Jim	51142	20.69	7.50	9.97	Opportunity
Morgan, Paul	271485	29.38	5.79	5.84	Mill Creek
Reich, Randy	165756	10.67	11.68	10.74	Powell Vista

5.3 Previously Sampled Wells: 2009 Resample Wells

The resampling of domestic wells on the 5-year rotation began in 2014, and 82 of the domestic wells originally sampled in 2009 were resampled in 2014. The owners of three wells could not be contacted. Thirty-four wells originally sampled in 2009 had been sampled again prior to 2014 and were not resampled in 2014. One well previously sampled in 2009 was no longer within the ARWWS boundary and was also not resampled in 2014. Two properties were vacant and the owner declined sampling and one other property owner declined sampling.

Two of the 2009 resample wells had arsenic concentrations above 5 µg/L and one was above 10 µg/L (table 5.3-1). The 2009 arsenic concentrations from both of these wells were below 5 µg/L. The confirmation samples from the well with the higher arsenic concentration were between 5 µg/L and 10 µg/L. Both wells are in the Lost Creek area.

Table 5.3-1. 2009 resample sites with arsenic concentrations greater than 5 µg/L and confirmation samples.

Owner	GWIC ID	Initial Total Recoverable As (µg/L)	Dissolved As (µg/L)	Total Recoverable As (µg/L)	Area
Reiter Foundation	184524	5.13			Lost Creek
Pesanti, Stacie & Ryan	189209	11.13	7.52	6.59	Lost Creek

5.4 Previously Sampled Wells: Greater than 5 µg/L

In addition to the new well samples and the 2009 resample wells, 25 wells with prior concentrations between 5 and 10 µg/L were resampled in 2014 (table 5.4-1). Seven of these samples (Catalanello–174778; Swanson–264544; Varelia–264545; Norton–122659; Nelson–250642; Johnson–166679; Clark–275482) had arsenic concentrations less than 5 µg/L in 2014. The other 18 sites continued to have total recoverable arsenic concentrations between 5 and 10 µg/L. One well (Catalanello–217906) was not sampled, because the well was not in use and the owners declined to have it sampled.

Twenty one wells with previous arsenic concentrations greater than 10 µg/L were resampled in 2014 (table 5.4-2). Two of these samples (Connors–246960; McKay–197463) had arsenic concentrations less than 10 µg/L in 2014. The other 19 wells continued to have arsenic concentrations greater than 10 µg/L. Arsenic concentrations greater than 10 µg/L are concentrated in three areas: Crackerville, English Gulch, and Powell Vista (table 5.3-1). Bottled water was provided to these residences upon the owner's request in 2014.

Table 5.4-1. Summary of sites with previous total recoverable arsenic concentrations greater than 5 μg/L and less than 10 μg/L, including arsenic concentrations from all years sampled.

Well Owner	GWIC ID	2014 Arsenic (μg/L)	2013 Arsenic (μg/L)	2012 Arsenic (μg/L)	2011 Arsenic (μg/L)	2010 Arsenic (μg/L)	2009 Arsenic (μg/L)	Area
Faught, Stanley	51327	7.82	7.86	7.59	7.5	6.85	6.26	Crackerville
Jenrich, Tracy	252926	9.56	9.18	9.44	8.74	9.31	6.64	Crackerville
Swanson, Mark	5330	8.15	7.74	8.40	7.79	8.28	5.54	Crackerville
Norton, Lou	122659	2.69	2.01	6.10				English Gulch
Salle, Ron	258964	9.70	10.01*	8.8**	8.30	8.45	10.6	English Gulch
Galle, Cliff Jr.	5377	7.77	7.66	7.53	6.51	5.43		Lost Creek
Galle, Tyke	51790	8.17	7.27	7.27	4.45	6.49		Lost Creek
Galle, Jeff	230299	6.91	5.77	7.86	7.15	2.55	6.68	Lost Creek
Catalenello, Mark	174778	<0.25	<0.25	5.83				Mill Creek
Catalenello, Mark	217906			9.45				Mill Creek
Rankin, Keith	198928	5.71	5.35	5.81	5.38			Mill Creek
Blom, Lorin	238047	7.77	6.59	6.15	5.40	5.43		Powell Vista
Dinsdale, Jeffery	158808	8.67	9.19	9.98				Powell Vista
Flachmeyer, Dan	241972	6.70	6.12	6.38	8.83			Powell Vista
Hansen, Deb	156248	8.19	7.57					Powell Vista
Johnson, Wade	166679	2.83	5.72					Powell Vista
Mitchell, Harold	260549	6.40	5.45	5.21	5.23			Powell Vista
Nelson, Jason	250642	4.65	6.9					Powell Vista
Stewart, John	256622	6.61	6.40	6.25	5.62	6.48		Powell Vista
Stock-Jones, Charlene	153592	8.62	7.84	7.77	8.04	8.22	7.35	Powell Vista
Clark, Herb	275482	2.50	6.29					Opportunity
Swanson, Ron	264544	0.95	1.150 J	7.85				Opportunity
Vauthier, Tom	264545	1.15	0.550 J	7.14				Opportunity
Blotkamp, Mary	266770	6.33	8.39	5.24				Anaconda
Pentilla, Mike	267423	6.32	6.41	8.32				Anaconda

*Dissolved concentration collected at the same time was 5.25 μg/L; **Dissolved concentration.

Table 5.4-2. Summary of sites with previous arsenic concentrations greater than 10 μg/L, including arsenic concentrations from all years sampled.

Well Owner	GWIC ID	2014 Arsenic (μg/L)	2013 Arsenic (μg/L)	2012 Arsenic (μg/L)	2011 Arsenic (μg/L)	2010 Arsenic (μg/L)	2009 Arsenic (μg/L)	Area
Bailey, Don	254433	11.27	10.37	16.11	8.37	10.10*	2.26	Crackerville
Fresh, Elden***	51333	13.93	13.12	13.33		11.6	11.8	Crackerville
McKay, Robert	197463	9.91	12.02	14.31				Crackerville
Keele, Don	221430	20.55	12.17	15.52	12	7.97	6.74	Crackerville
Maccioli, Joe***	252623	15.69	16.4	13.41	13.22	14.2	12.3	Crackerville
Scherman, Rental	51328	16.08	14.23	15.68	12.52	14.5	7.22	Crackerville
Scherman, Russ***	226130	33.66	38.75	29.7	28.73	30.4	23.9	Crackerville
Whitaker, Ray	181457	11.31	10.8	10.49	9.33			Crackerville
Shyba, Lori***	256874	32.03	21.33	29.92	30.61	28.3		Fairmont
Garrels, Lloyd	51363	26.47	22.62					Sunnyside
Connors, Ken	246960	9.16	7.54	14.14	12.9	6.68		English Gulch
Lussy, Jerry	244470	14.70	13.73	13.0	15.58	13.3	9.38	English Gulch
Walter, Richard	51874	14.58	15.08	40.34	32.38	13.2	5.73	English Gulch
Arentz, Ivan	155393	15.83	7.89	11.34**	13.3			Powell Vista
Gessele, Edwin	259949	13.68	12.76	13.23	12.4			Powell Vista
Loehr, Jamie	153591	12.50	14.16	13.67				Powell Vista
McQueary, Cam	250294	11.40	12.14	12.47	10.4			Powell Vista
Pierce, Colt	266861	12.91	10.67	10.77				Powell Vista
Ruegamer, Anthony	53591	13.65	13.21	12.06	11.4	13.2		Powell Vista
Smith, Monty	256447	21.53	34.36	20.6	19.2**	19.9	18.6	Powell Vista
Waymire, Edward	156249	13.93	13.16	13.91	12.3			Powell Vista

*Replacement well not currently in use.
**Dissolved concentration.
***Residence with a reverse osmosis unit

5.5 Reverse Osmosis Units

Five samples were collected from reverse osmosis (RO) units in 2014. The Shyba property has a main residence and an apartment serviced by one well; both RO units were sampled in 2014. All of the arsenic concentrations from the RO units were below the detection limit of 0.250 µg/L (table 5.5-1). All of the RO systems sampled were point-of-use units installed under the kitchen sink. Two of these RO units were installed by the homeowner (Scherman and Dinsdale). The other three RO units were installed as part of this project. Similar to the previous data, the RO units sampled in 2014 appear to effectively remove arsenic from the water.

Table 5.5-1. A summary of the arsenic concentrations in well water and well water treated with a reverse osmosis system (RO).

Well Owner	GWIC ID	Dissolved Arsenic (µg/L)	Total Recoverable Arsenic (µg/L)	RO Arsenic (µg/L)	Area
Dinsdale, Jeffery	158808	8.76	8.67	<0.250	Powell Vista
Fresh, Elden	51333	13.27	13.93	<0.250	Crackerville
Maccioli, Joe	252623	16.18	15.69	<0.250	Crackerville
Shyba, Lori	256874	32.98	32.03	<0.250*	Fairmont

*There were two RO units on the property and both were below detection.

5.6 Work and Sampling Plan for 2015

Starting in 2015, the MBMG will no longer be the primary agency monitoring the ARWWS site. We will install as many RO systems as possible in homes with arsenic concentrations exceeding 10 µg/L before our contract ends on 5/30/15. We will also sample the installed RO systems once for total recoverable and dissolved constituents. We will also collect domestic-well samples as requested by Atlantic Richfield. The 2015 samples will be collected under the 2009 Sampling and Analysis Plan and the results will be included in the 2015 report discussion.

6.0 Data Quality Objectives and Assessment

6.1 Data Quality Objectives

Specific data quality objectives for the Short-Term Groundwater Monitoring Plan were not presented in the ARWWS OU Final Short-Term Groundwater Monitoring Plan or the 2009 SAP Addendum (AERL, 2000 and AERL, 2009b). However, it was assumed that the Short-Term Groundwater Monitoring Plan and the subsequent 2009 SAP addendum data quality objectives were to collect data of sufficient quality to meet the objectives listed in Section 1.0.

6.1.2 Data Quality Assessment

The sampling plan entailed the collection of groundwater samples from monitoring wells identified in table 1.0.1 and selected domestic wells throughout the ARWWS OU domestic well AOC boundary (figure 5.1-1). Depth to groundwater was measured in all monitoring wells and domestic wells when possible. In addition, physical parameters including pH, SC, temperature, ORP, and DO were measured during well purging and sampling.

Duplicate samples from monitoring and domestic wells were collected to assess data quality for this project. The duplicate data were evaluated by calculating the relative percent differences (RPD) between the two samples. An RPD value less than 20 percent is considered acceptable data quality for data that exceed the reporting limit. A total of 10 duplicate samples were collected from the monitoring wells (table 6.1.2-1). The monitoring well arsenic concentration RPDs were below 9 percent for all the samples. All of the arsenic concentrations were above the detection limit, but samples from three sites were below the reporting limit. Most of the dissolved Cd, Cu, Pb, and Zn concentrations were all below the detection limit in the replicate samples, and RPDs could be calculated on three samples for Cd, Cu, and/or Zn (nine RPDs). Eight of these RPDs had values of 6 percent or less. The Zn RPD for well OD-2D was 37.41 percent, which indicates the Zn data for OD-2D are suspect. The As RPD for well OD-2D was 3.39 percent, which indicates that only the Zn data are suspect. The Cd and Pb data for MW-220 were also suspect because the Cd and Pb concentrations in the duplicate sample were below detection while the sample concentrations were above detection. The detectable Cd and Pb concentrations for MW-220 were both below 1 µg/L.

Two dissolved domestic well samples were collected in duplicate and six total recoverable domestic well samples were collected in duplicate (table 6.1.2-2). All of the RPD values were less than 10 percent for the domestic well duplicate samples.

Table 6.1.2-1. Replicate data with relative percent differences for duplicate samples collected from monitoring wells.

Gwic Id	Well Id	As (µg/l)	Cd (µg/l)	Cu (µg/l)	Pb (µg/l)	Zn (µg/l)
Dissolved						
137957	MW-216	2.22	<0.100 U	<0.500 U	<0.060 U	<0.500 U
137957	MW-216 Duplicate	2.23	<0.100 U	<0.500 U	<0.060 U	<0.500 U
	Relative % Difference	**0.45**	**NA**	**NA**	**NA**	**NA**
138013	MW-218D	0.560 J	<0.250 U	<1.250 U	<0.150 U	<1.250 U
138013	MW-218D Duplicate	0.550 J	<0.250 U	<1.250 U	<0.150 U	<1.250 U
	Relative % Difference	**1.80**	**NA**	**NA**	**NA**	**NA**
249963	MW-220	0.87	0.98	<0.500 U	0.36	<0.500 U
249963	MW-220 Duplicate	0.92	<0.100 U	<0.500 U	<0.060 U	<0.500 U
	Relative % Difference	**5.59**	**NA**	**NA**	**NA**	**NA**
249778	OD-2D	0.300 J	<0.100 U	<0.500 U	<0.060 U	5.87
249778	OD-2D Duplicate	0.290 J	<0.100 U	<0.500 U	<0.060 U	4.02
	Relative % Difference	**3.39**	**NA**	**NA**	**NA**	**37.41**
249935	WCT-27	4.32	<0.100 U	0.640 J	<0.060 U	0.670 J
249935	WCT-27 Duplicate	4.22	<0.100 U	0.670 J	<0.060 U	0.710 J
	Relative % Difference	**2.34**	**NA**	**4.58**	**NA**	**5.80**
249800	LF-04	4.7	2.62	120.09	<0.060 U	597.04
249800	LF-04 Duplicate	4.67	2.56	121.64	<0.060 U	595.53
	Relative % Difference	**0.64**	**2.32**	**1.28**	**NA**	**0.25**
121004	FH-2	11.75	<0.100 U	<0.500 U	<0.060 U	<0.500 U
121004	FH-2 Duplicate	10.8	<0.100 U	<0.500 U	<0.060 U	<0.500 U
	Relative % Difference	**8.43**	**NA**	**NA**	**NA**	**NA**
250048	MW-241	0.360 J	3.27	178.75	<0.060 U	933
250048	MW-241 Duplicate	0.360 J	3.23	177.62	<0.060 U	932.23
	Relative % Difference	**0**	**1.23**	**0.63**	**NA**	**0.08**
138068	MW-224	0.67	<0.100 U	<0.500 U	<0.060 U	<0.500 U
138068	MW-224 Duplicate	0.63	<0.100 U	<0.500 U	<0.060 U	<0.500 U
	Relative % Difference	**6.15**	**NA**	**NA**	**NA**	**NA**
249905	MW-269	1.25	<0.250 U	<1.250 U	<0.150 U	<1.250 U
249905	MW-269 Duplicate	1.24	<0.250 U	<1.250 U	<0.150 U	<1.250 U
	Relative % Difference	**0.80**	**NA**	**NA**	**NA**	**NA**

Note. J, indicates the concentration is below the reporting limit but above the detection limit; U, indicates the concentration is below the detection limit; NA indicates a RPD calculation is not possible.

Table 6.1.2-2. Replicate data with relative percent differences for duplicate and triplicate samples collected from domestic wells. The triplicate samples were collected as part of the Arsenic Source Evaluation Project.

Site Name	Gwic Id	As (µg/l)	Duplicate As (µg/l)	Triplicate As (µg/l)	Relative % Difference
Dissolved					
Arentz, Ivan	153593	16.27	16.20		**0.4**
Pierce, Colt	266861	11.29	10.92		**3.3**
Total Recoverable					
Arentz, Ivan	153593	15.83	16.19		**2.2**
Pierce, Colt	266861	12.91	12.53		**3.0**
Community Center	51151	<0.250 U	<0.250 U		**0**
Derzey, John	180515	2.02	1.83		**9.9**
Ueland Ranches	227300	1.77	1.89		**6.6**
Morgan, Paul	271485	29.38	28.86		**1.8**

*Percent Relative Standard Deviation.

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APPENDICES

Appendix A

Stuckey Ridge/Lost Creek expansion Area TI Zone

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Stucky Ridge/Lost Creek Expansion Area TI Zone

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)
DISSOLVED	121004	FH-2	04/20/09	15:05	6.30	7.48	485	7.32	516	60.7	22.1	23.0	2.3	0.004	0.079	11.8	221.1	0.0	109.0
DISSOLVED	121004	FH-2	09/10/09	13:22	8.22	7.57	566	7.65	545	63.4	22.0	24.0	2.3	<0.003	0.080	11.3	231.1	0.0	110.0
DISSOLVED	121004	FH-2	05/23/12	10:50	6.47	6.82	568	7.43	633	57.9	22.7	24.3	2.4	<0.005 U	0.082	10.5	201.0	0.0	106.6
DISSOLVED	121004	FH-2	03/18/14	12:30	5.40	7.24	595	7.54	619	61.2	22.6	24.3	2.1	<0.015 U	0.074	10.8	241.6	0.0	125.9
DISSOLVED	121004	FH-2	09/15/14	0:00	9.10	6.95	590	7.69	568	64.5	23.4	27.0	2.3	<0.015 U	0.087	11.2	243.4	0.0	129.7
DISSOLVED	121004	FH-2	09/15/14	14:15	9.10	6.95	590	7.67	560	65.4	24.0	26.8	2.4	<0.015 U	0.088	11.3	242.9	0.0	130.1
DISSOLVED	250004	MW-248D	04/27/09	14:25	10.56	7.85	475	8.03	491	5.7	0.7	106.0	1.1	0.014	<0.001	7.7	211.1	0.0	31.3
DISSOLVED	250004	MW-248D	08/12/09	15:30	12.16	8.41	517	8.29	528	4.8	0.5	117.0	1.0	0.054	0.004	6.3	229.4	0.0	32.2
DISSOLVED	250004	MW-248D	05/05/14	13:13	10.90	8.22	595	8.16	596	4.4	0.4	124.9	0.8	0.025 J	<0.002 U	6.3	236.9	0.6	39.0
DISSOLVED	250004	MW-248D	09/11/14	13:25	11.70	7.91	595	8.07	562	6.4	0.7	136.9	1.4	<0.015 U	<0.002 U	6.4	225.9	0.0	42.4
DISSOLVED	250031	MW-248E	04/27/09	17:52	10.92	8.57	743	8.03	620	5.6	0.5	186.0	1.7	1.530	0.009	17.9	289.5	0.0	103.8
DISSOLVED	250031	MW-248E	08/12/09	14:31	15.36	8.40	814	8.59	838	4.2	0.4	200.0	1.5	1.000	0.017	18.6	348.0	8.7	115.1
DISSOLVED	250031	MW-248E	05/05/14	16:31	12.50	8.67	855	8.55	884	2.8	0.2	209.6	0.4	<0.015 U	<0.002 U	7.5	379.6	9.3	126.9
DISSOLVED	250031	MW-248E	09/11/14	13:50	12.70	8.76	845	8.79	796	2.8	0.2	209.2	0.5	<0.015 U	<0.002 U	7.8	366.4	11.6	125.8
DISSOLVED	250007	MW-248S	04/27/09	14:50	10.05	7.49	490	7.47	489	58.3	12.1	27.1	1.9	0.006	<0.001	28.3	122.7	0.0	97.4
DISSOLVED	250007	MW-248S	08/12/09	15:20	11.57	8.59	521	7.61	528	61.4	11.4	24.6	2.2	<0.002	<0.001	26.8	126.4	0.0	92.2
DISSOLVED	250007	MW-248S	05/05/14	12:00	9.50	7.18	490	7.32	547	54.0	11.1	22.4	1.4	<0.015 U	<0.002 U	25.7	125.8	0.0	94.3
DISSOLVED	250007	MW-248S	09/11/14	9:55	8.80	7.00	510	7.19	394	61.9	12.5	23.9	1.6	0.037 J	<0.002 U	27.0	103.9	0.0	113.0
DISSOLVED	249920	SP98-26	09/14/09	14:26	12.67	7.14	656	7.49	648	75.7	13.5	32.3	1.1	0.004	0.009	17.8	183.0	0.0	133.5
DISSOLVED	249920	SP98-26	07/22/14	13:30	17.24	7.49	670	7.29	634	83.2	14.9	36.9	1.2	0.036 J	0.025 J	18.7	183.6	0.0	161.4
DISSOLVED	249921	SP98-27	08/13/09	11:36	13.41	7.49	477	7.56	551	35.0	2.2	77.1	1.6	0.048	0.034	15.3	180.3	0.0	68.9
DISSOLVED	249921	SP98-27	03/14/13	14:45	9.30	8.48	476	9.00	500	28.8	2.0	75.0	1.2	<0.015 U	<0.002 U	12.5	124.2	22.6	69.6
DISSOLVED	249921	SP98-27	07/23/14	14:25	24.54	7.98	484	7.88	455	32.6	1.9	71.1	0.8	0.092	0.016 J	10.9	195.2	0.0	69.8
DISSOLVED	249923	SP98-30	09/14/09	13:10	16.66	7.01	341	7.40	362	45.7	13.4	5.9	1.1	0.014	0.013	10.2	175.2	0.0	42.7
DISSOLVED	249923	SP98-30	07/23/14	11:35	16.39	7.05	357	7.94	337	48.6	13.8	6.1	0.6	0.023 J	0.003 J	10.4	182.4	0.0	42.5

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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Stucky Ridge/Lost Creek Expansion Area TI Zone

Name	Sample Date	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
FH-2	04/20/09	2.6	<0.05	2.0	<0.05	<0.07	<6.08	13.0	18.20	10.00	<0.19	<50	<0.05 U
FH-2	09/10/09	<5.0	<0.5	2.5	<0.5	<0.13	<15.83	12.9	20.00	12.20	<0.14	<500	<0.09
FH-2	05/23/12	2.4	0.1	1.9	<0.020 U	<0.100 U	20.76	11.5	19.96	10.96	<0.100 U	<10.000 U	<0.100 U
FH-2	03/18/14	3.5	0.1	1.9	<0.020 U	<0.100 U	<2.000 U	11.8	14.31	10.85	<0.100 U	<10.000 U	<0.100 U
FH-2	09/15/14	2.8	0.020 J	2.4	<0.020 U	<0.100 U	<2.000 U	10.8	21.20	12.23	<0.100 U	<10.000 U	<0.100 U
FH-2	09/15/14	2.8	<0.010 U	2.4	<0.020 U	<0.100 U	<2.000 U	11.0	24.01	12.99	<0.100 U	<10.000 U	<0.100 U
MW-248D	04/27/09	33.0	0.2	1.1	<0.05	<0.07	16.70	6.73	78.00	17.90	<0.19	188.00	0.45
MW-248D	08/12/09	39.5	<0.5	0.9	<0.5	<0.04	92.70	5.64	78.40	17.90	<0.20	<500	<0.05
MW-248D	05/05/14	40.6	0.1	1.1	<0.020 U	<0.100 U	21.72	3.74	81.67	16.42	<0.100 U	219.00	<0.100 U
MW-248D	09/11/14	61.9	0.6	1.1	<0.020 U	<0.100 U	24.23	2.71	76.19	18.58	<0.100 U	181.00	<0.100 U
MW-248E	04/27/09	<5.0	<0.5	0.9	<0.5	0.18	1792.00	2.11	117.00	70.30	<0.19	<500	<0.05
MW-248E	08/12/09	5.6	<0.5	0.9	<0.5	0.07	2078.00	5.72	111.00	62.60	<0.20	<500	<0.05
MW-248E	05/05/14	5.0	0.1	1.0	<0.020 U	<0.100 U	12.89	1.12	139.30	11.52	<0.100 U	84.00	<0.100 U
MW-248E	09/11/14	4.8	0.2	0.9	<0.020 U	<0.100 U	14.98	0.82	136.66	10.95	<0.100 U	<10.000 U	<0.100 U
MW-248S	04/27/09	11.2	13.9	0.1	<0.05	<0.07	<6.02	1.70	12.90	96.20	<0.19	69.80	0.41
MW-248S	08/12/09	12.5	14.3	<0.5	<0.5	<0.04	<7.60	1.40	11.60	99.60	<0.20	<500	<0.05
MW-248S	05/05/14	10.3	12.1	0.2	0.030 J	<0.100 U	<2.000 U	1.23	12.53	69.42	<0.100 U	101.00	<0.100 U
MW-248S	09/11/14	8.3	12.5	0.1	0.020 J	<0.100 U	79.69	1.27	9.47	74.04	<0.100 U	41.000 J	<0.100 U
SP98-26	09/14/09	26.4	0.8	<0.5	<0.5	<0.04	<7.60	18.7	6.10	49.80	<0.20	<500	<0.05
SP98-26	07/22/14	32.8	0.7	0.1	0.020 J	<0.100 U	54.93	20.8	8.08	58.38	<0.100 U	129.00	<0.100 U
SP98-27	08/13/09	22.2	2.1	0.2	<0.05	<0.04	38.20	30.2	12.60	32.60	<0.20	94.00	0.09
SP98-27	03/14/13	18.5	2.5	0.2	0.030 J	<0.100 U	0.480 J	13.7	12.52	18.58	<0.100 U	115.00	<0.100 U
SP98-27	07/23/14	20.0	0.3	0.2	<0.020 U	<0.100 U	87.81	19.0	13.90	25.31	<0.100 U	74.00	<0.100 U
SP98-30	09/14/09	8.7	0.5	0.3	<0.05	<0.04	<7.60	8.97	6.24	58.20	<0.20	<50	<0.05
SP98-30	07/23/14	5.8	<0.010 U	0.2	<0.020 U	<0.100 U	4.500 J	12.6	6.42	59.26	<0.100 U	<10.000 U	<0.100 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
FH-2	04/20/09	0.06	<0.09	<0.41 U	29.90	7.30	<0.08	<0.20 U	0.07	<0.20	<0.05	569.00	1.04	0.43	5.29	<0.05	<1.30 U
FH-2	09/10/09	0.11	<0.06	<0.22	33.10	8.71	<0.23	<0.11	<0.09	<0.30	<0.10	579.00	1.24	0.63	6.48	<0.06	<0.55
FH-2	05/23/12	<0.100 U	<0.100 U	0.120 J	36.68	8.41	0.88	<0.040 U	<0.100 U	0.180 J	<0.100 U	580.43	1.07	0.290 J	5.83	<0.100 U	<0.200 U
FH-2	03/18/14	<0.100 U	0.200 J	<0.500 U	28.13	7.38	0.490 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	573.77	0.73	0.51	5.52	<0.100 U	<0.500 U
FH-2	09/15/14	<0.100 U	<0.100 U	<0.500 U	38.10	8.05	0.490 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	583.94	49.41	0.65	5.95	<0.100 U	<0.500 U
FH-2	09/15/14	<0.100 U	<0.100 U	<0.500 U	38.23	8.15	0.500 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	586.60	47.71	0.64	6.00	<0.100 U	<0.500 U
MW-248D	04/27/09	0.12	<0.09	0.42	36.70	6.76	0.12	<0.20	0.42	0.66	<0.05	138.00	0.34	<0.03	0.94	0.17	<1.29
MW-248D	08/12/09	1.24	3.19	1.44	34.40	7.53	0.73	<0.15	0.65	0.57	<0.04	181.00	1.68	<0.03	1.57	0.62	<0.90
MW-248D	05/05/14	<0.100 U	<0.100 U	0.720 J	38.06	5.69	0.75	<0.060 U	0.270 J	0.390 J	<0.100 U	108.24	0.99	<0.100 U	1.00	0.300 J	<0.500 U
MW-248D	09/11/14	<0.100 U	<0.100 U	<0.500 U	40.52	4.67	<0.100 U	<0.060 U	0.410 J	0.97	<0.100 U	145.90	5.96	<0.100 U	0.98	0.270 J	<0.500 U
MW-248E	04/27/09	1.07	3.53	4.83	46.20	8.75	4.31	1.64	0.22	<0.20	<0.05	103.00	22.20	<0.03	0.80	1.55	10.00
MW-248E	08/12/09	4.15	6.43	4.02	41.70	13.10	3.41	1.27	0.46	0.24	<0.04	79.60	20.40	<0.03	1.18	1.65	5.87
MW-248E	05/05/14	<0.100 U	0.230 J	<0.500 U	52.63	9.78	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	65.90	1.37	<0.100 U	0.57	<0.100 U	<0.500 U
MW-248E	09/11/14	<0.100 U	<0.100 U	0.600 J	54.31	9.04	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	65.10	7.80	<0.100 U	0.56	<0.100 U	<0.500 U
MW-248S	04/27/09	0.06	<0.09	0.60	18.10	1.00	<0.08	<0.20	0.20	1.16	<0.05	896.00	0.62	<0.03	1.47	0.81	<1.29
MW-248S	08/12/09	<0.10	<0.04	0.61	14.70	0.48	<0.10	<0.15	0.10	0.62	<0.04	812.00	0.88	<0.03	1.15	0.90	<0.90
MW-248S	05/05/14	0.290 J	<0.100 U	<0.500 U	16.52	0.350 J	0.390 J	<0.060 U	<0.100 U	0.50	<0.100 U	761.27	0.99	<0.100 U	0.84	0.71	<0.500 U
MW-248S	09/11/14	0.210 J	<0.100 U	0.700 J	16.75	0.370 J	0.420 J	<0.060 U	<0.100 U	0.85	<0.100 U	801.84	40.66	<0.100 U	1.02	0.81	<0.500 U
SP98-26	09/14/09	0.44	0.14	1.66	3.96	0.54	<0.10	<0.16	0.34	1.47	0.13	1970.00	1.53	<0.03	8.55	2.32	4.84
SP98-26	07/22/14	0.360 J	<0.100 U	8.60	4.410 J	0.64	<0.100 U	0.280 J	0.51	1.43	<0.100 U	2088.24	62.78	<0.100 U	9.56	3.42	2.72
SP98-27	08/13/09	1.31	0.23	5.76	8.21	0.98	0.29	0.58	0.88	1.55	<0.04	82.90	3.31	<0.03	16.00	5.25	14.50
SP98-27	03/14/13	<0.100 U	0.480 J	2.59	7.64	0.88	0.380 J	<0.060 U	0.300 J	1.43	<0.100 U	64.79	0.66	<0.100 U	21.30	7.96	<0.050 U
SP98-27	07/23/14	<0.100 U	0.250 J	9.59	11.28	1.00	2.14	0.89	0.96	1.03	0.57	66.53	26.04	<0.100 U	16.07	6.13	6.29
SP98-30	09/14/09	0.40	0.15	2.18	4.26	0.34	<0.10	<0.16	0.34	0.53	0.09	152.00	0.59	<0.03	0.56	0.26	3.76
SP98-30	07/23/14	<0.100 U	<0.100 U	5.46	3.640 J	0.420 J	1.61	<0.060 U	0.53	<0.100 U	<0.100 U	140.05	37.52	<0.100 U	0.64	0.390 J	2.21

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Montana Bureau of Mines and Geology
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Stucky Ridge/Lost Creek Expansion Area TI Zone

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
FH-2	04/20/09	<0.06	<0.04	2.18	<0.04	<0.05	<0.03	<0.04	0.15	<0.03	9.16	<0.02	0.05	<0.05
FH-2	09/10/09	<0.11	<0.05	3.03	<0.11	<0.05	<0.24	<0.09	0.19	<0.10	11.00	<0.06	<0.14	<0.5
FH-2	05/23/12	<0.100 U	<0.100 U	2.66	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.220 J	<0.100 U	9.87	<0.100 U	<0.100 U	<0.010 U
FH-2	03/18/14	<0.100 U	<0.100 U	2.30	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	9.42	<0.100 U	<0.100 U	<0.010 U
FH-2	09/15/14	<0.100 U	<0.100 U	2.96	0.420 J	<0.100 U	<0.100 U	<0.100 U	0.61	<0.100 U	9.76	<0.100 U	<0.100 U	<0.010 U
FH-2	09/15/14	<0.100 U	<0.100 U	2.95	0.440 J	<0.100 U	0.230 J	<0.100 U	0.61	<0.100 U	9.83	<0.100 U	<0.100 U	<0.010 U
MW-248D	04/27/09	<0.06	0.09	0.11	0.04	<0.05	<0.03	0.04	<0.07	<0.03	2.21	<0.02	0.38	<0.05
MW-248D	08/12/09	0.10	0.32	0.11	0.06	0.15	<0.04	0.14	<0.10	0.04	2.18	<0.02	1.23	<0.5
MW-248D	05/05/14	<0.100 U	0.280 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.80	<0.100 U	0.320 J	<0.010 U
MW-248D	09/11/14	<0.100 U	<0.100 U	<0.100 U	0.68	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.13	<0.100 U	0.240 J	<0.010 U
MW-248E	04/27/09	0.54	5.40	0.42	0.75	2.66	0.06	2.59	<0.07	0.67	5.40	1.05	0.49	<0.5
MW-248E	08/12/09	0.59	6.06	0.39	0.76	2.72	<0.04	2.58	<0.10	0.67	5.64	0.10	0.99	<0.5
MW-248E	05/05/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.48	<0.100 U	0.86	<0.010 U
MW-248E	09/11/14	<0.100 U	<0.100 U	0.210 J	0.54	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.40	<0.100 U	0.88	<0.010 U
MW-248S	04/27/09	<0.06	<0.04	0.23	<0.04	<0.05	<0.03	<0.04	0.22	<0.03	5.77	<0.02	0.05	<0.05
MW-248S	08/12/09	<0.05	<0.02	0.22	<0.05	<0.02	<0.04	<0.05	0.19	<0.02	5.55	<0.02	<0.05	<0.5
MW-248S	05/05/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	4.35	<0.100 U	<0.100 U	<0.010 U
MW-248S	09/11/14	<0.100 U	0.290 J	0.220 J	2.64	<0.100 U	<0.100 U	<0.100 U	0.84	<0.100 U	4.48	<0.100 U	<0.100 U	<0.010 U
SP98-26	09/14/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	0.70	<0.02	1.25	<0.02	<0.05	<0.5
SP98-26	07/22/14	<0.100 U	<0.100 U	<0.100 U	2.71	<0.100 U	<0.100 U	<0.100 U	1.82	<0.100 U	2.05	<0.100 U	<0.100 U	<0.010 U
SP98-27	08/13/09	<0.05	0.08	<0.04	<0.05	0.04	<0.04	<0.05	<0.10	<0.02	0.82	<0.02	0.23	<0.05
SP98-27	03/14/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.490 J	<0.100 U	<0.100 U	<0.010 U
SP98-27	07/23/14	<0.100 U	0.210 J	<0.100 U	1.16	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.79	<0.100 U	0.260 J	0.040 J
SP98-30	09/14/09	<0.05	0.10	<0.04	<0.05	0.06	<0.04	<0.05	<0.10	<0.02	1.94	<0.02	<0.05	<0.05
SP98-30	07/23/14	<0.100 U	<0.100 U	<0.100 U	2.81	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.95	<0.100 U	<0.100 U	<0.010 U

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Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)
DISSOLVED	249924	SP98-31	09/14/09	15:25	14.27	7.08	340	7.75	321	48.6	6.5	8.4	0.9	0.015	0.005	9.0	148.6	0.0	55.5
DISSOLVED	249924	SP98-31	07/22/14	11:55	20.52	7.70	328	7.48	309	50.8	6.6	8.8	0.9	<0.015 U	0.002 J	10.7	141.0	0.0	59.0
DISSOLVED	249915	SP97-20	08/12/09	14:15	25.88	6.43	353	6.97	849	103.0	21.3	49.2	6.0	0.165	1.060	25.6	160.1	0.0	220.3
DISSOLVED	249915	SP97-20	07/21/14	12:23	14.70	6.83	855	7.38	845	96.6	20.9	52.8	3.6	0.046 J	0.078	25.5	146.0	0.0	231.2
DISSOLVED	249922	SP98-28	09/09/09	14:20	16.36	7.73	221	7.53	210	26.8	4.7	6.3	2.7	0.028	0.012	17.8	98.1	0.0	33.5
DISSOLVED	249922	SP98-28	07/24/14	14:43	18.45	7.06	247	7.85	236	35.6	6.1	7.1	3.2	0.707	0.066	20.2	128.5	0.0	33.3
DISSOLVED	249925	SP98-32	08/13/09	10:05	11.81	6.69	799	7.08	818	89.3	18.6	72.2	3.8	0.440	1.210	19.1	256.5	0.0	194.6
DISSOLVED	249925	SP98-32	07/21/14	14:06	16.80	6.89	980	7.53	964	110.4	26.5	67.0	3.4	0.164	0.375	23.3	241.4	0.0	279.6
DISSOLVED	249926	SP98-34	08/17/09	13:38	10.84	7.08	1,899	7.65	1,911	201.0	67.9	152.0	3.3	0.103	0.138	24.4	294.2	0.0	818.5
DISSOLVED	249926	SP98-34	05/31/12	10:50	8.63	7.62	1,829	7.95	1,836	194.2	65.9	126.0	3.2	0.035 J	0.045 J	23.8	276.2	0.0	713.5
DISSOLVED	249926	SP98-34	07/10/14	15:35	14.90	7.71	1,910	8.19	1,900	214.0	72.2	145.6	3.7	<0.038 U	0.075 J	26.6	295.3	3.0	777.3
DISSOLVED	249930	SP99-01	08/17/09	14:40	16.91	7.06	869	7.86	830	129.0	26.0	30.4	2.1	0.046	0.135	11.8	351.1	0.0	218.9
DISSOLVED	249930	SP99-01	07/18/14	14:40	11.10	6.56	845	7.43	836	128.8	25.9	29.0	1.5	0.019 J	0.009 J	10.8	360.3	0.0	205.4

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Name	Sample Date	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
SP98-31	09/14/09	2.8	<0.05	0.2	<0.05	<0.04	<7.60	3.58	9.34	60.90	<0.20	<50	<0.05
SP98-31	07/22/14	2.3	<0.010 U	0.2	<0.020 U	<0.100 U	8.510 J	7.49	9.14	59.24	<0.100 U	<10.000 U	<0.100 U
SP97-20	08/12/09	101.0	<0.05	0.2	0.1	0.06	144.00	285	19.00	96.00	<0.20	436.00	1.77
SP97-20	07/21/14	81.8	<0.010 U	0.2	0.030 J	<0.100 U	3.170 J	131	16.91	59.11	<0.100 U	417.00	0.67
SP98-28	09/09/09	1.4	<0.05	0.2	<0.05	<0.04	11.80	4.87	8.20	27.90	<0.20	<50	<0.05
SP98-28	07/24/14	0.420 J	<0.010 U	0.2	0.020 J	<0.100 U	420.90	8.98	13.37	53.94	<0.100 U	<10.000 U	<0.100 U
SP98-32	08/13/09	49.9	<0.5	<0.5	<0.5	<0.04	10.80	38.4	16.80	65.90	<0.20	<500	0.09
SP98-32	07/21/14	54.9	0.1	0.2	<0.020 U	<0.100 U	<2.000 U	24.5	19.18	39.14	<0.100 U	311.00	<0.100 U
SP98-34	08/17/09	96.5	<0.5	<0.5	<0.5	<0.20	<38.00	12.7	40.50	142.20	<1.00	1390.00	<0.25
SP98-34	05/31/12	71.7	0.1	0.3	<0.020 U	<0.250 U	66.48	18.8	42.75	32.73	<0.250 U	280.00	<0.250 U
SP98-34	07/10/14	86.6	<0.010 U	0.3	<0.020 U	<0.250 U	<5.000 U	17.0	42.68	31.59	<0.250 U	349.00	<0.250 U
SP99-01	08/17/09	5.5	<0.5	<0.5	<0.5	<0.04	11.20	18.6	22.90	42.90	<0.20	<500	0.23
SP99-01	07/18/14	3.1	<0.010 U	0.3	<0.020 U	<0.100 U	<2.000 U	8.12	20.30	30.42	<0.100 U	<10.000 U	<0.100 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
SP98-31	09/14/09	0.71	0.18	1.81	3.77	0.91	0.22	<0.16	0.26	0.22	0.19	145.00	0.70	<0.03	0.49	0.15	4.13
SP98-31	07/22/14	0.240 J	<0.100 U	2.82	3.320 J	1.03	1.79	<0.060 U	0.400 J	<0.100 U	<0.100 U	127.51	34.07	<0.100 U	0.370 J	0.250 J	4.76
SP97-20	08/12/09	4.39	0.18	49.00	7.70	2.47	2.82	1.30	1.81	1.50	<0.04	925.00	5.90	0.04	0.17	0.88	54.40
SP97-20	07/21/14	0.52	<0.100 U	33.71	7.810 J	2.14	1.43	<0.060 U	1.50	1.72		831.68	4.44	<0.100 U		0.91	29.09
SP98-28	09/09/09	1.11	0.05	1.97	7.09	0.45	<0.10	<0.15	0.30	0.15	<0.04	217.00	0.77	<0.03	0.08	0.41	<0.05
SP98-28	07/24/14	0.480 J	0.410 J	4.38	10.61	0.94	2.91	0.79	0.430 J	<0.100 U	<0.100 U	302.71	19.92	<0.100 U	<0.100 U	1.21	5.23
SP98-32	08/13/09	1.66	0.06	4.92	9.03	1.18	0.60	<0.15	0.72	1.35	<0.04	834.00	2.31	<0.03	4.36	0.89	9.40
SP98-32	07/21/14	0.490 J	<0.100 U	8.80	8.030 J	1.90	0.94	<0.060 U	0.76	1.09		1040.30	5.04	<0.100 U		0.390 J	2.70
SP98-34	08/17/09	1.56	<0.20	2.52	119.00	1.50	5.37	<0.76	<0.24	1.22	<0.21	997.00	9.54	<0.17	3.63	<0.50	36.00
SP98-34	05/31/12	<0.250 U	<0.250 U	3.91	110.49	1.29	6.64	<0.100 U	0.320 J	0.670 J	<0.250 U	919.01	6.95	<0.250 U	3.73	<0.250 U	3.75
SP98-34	07/10/14	0.700 J	<0.250 U	4.480 J	107.74	2.16	6.20	<0.150 U	1.71	1.49		1002.82	12.20	<0.250 U		<0.250 U	<1.250 U
SP99-01	08/17/09	0.75	<0.04	3.61	24.50	0.92	0.88	<0.15	0.25	0.21	<0.04	2075.00	2.63	<0.03	1.08	0.11	36.60
SP99-01	07/18/14	0.500 J	<0.100 U	1.770 J	19.44	1.90	2.06	<0.060 U	0.390 J	0.310 J		1644.41	3.02	<0.100 U		<0.100 U	5.76

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
SP98-31	09/14/09	<0.05	0.04	0.09	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.98	<0.02	<0.05	<0.05
SP98-31	07/22/14	<0.100 U	<0.100 U	<0.100 U	2.76	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.72	<0.100 U	<0.100 U	<0.010 U
SP97-20	08/12/09	0.29	0.48	<0.04	0.05	0.24	<0.04	0.26	0.31	0.06	3.58	<0.02	0.27	0.11
SP97-20	07/21/14													<0.010 U
SP98-28	09/09/09	0.06	0.05	0.05	<0.05	0.03	<0.04	<0.05	<0.10	<0.02	1.23	<0.02	<0.05	<0.05
SP98-28	07/24/14	0.240 J	1.07	0.61	2.59	0.54	<0.100 U	0.52	0.270 J	<0.100 U	2.90	<0.100 U	<0.100 U	<0.010 U
SP98-32	08/13/09	0.10	0.09	<0.04	<0.05	0.04	<0.04	0.05	0.22	<0.02	1.34	<0.02	0.21	<0.5
SP98-32	07/21/14													<0.010 U
SP98-34	08/17/09	<0.25	<0.10	1.09	<0.25	<0.11	<0.20	<0.26	<0.50	<0.11	13.40	<0.12	<0.25	<0.5
SP98-34	05/31/12	<0.250 U	<0.250 U	0.830 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.310 J	<0.250 U	10.43	<0.250 U	<0.250 U	<0.010 U
SP98-34	07/10/14													<0.010 U
SP99-01	08/17/09	<0.05	0.03	0.19	<0.05	<0.02	<0.04	<0.05	0.60	<0.02	1.90	<0.02	<0.05	<0.5
SP99-01	07/18/14					<0.100 U								<0.010 U

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Appendix B

Mount Haggin/Smelter Hill Water Quality Data

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	HCO_3 (mg/l)	CO_3 (mg/l)	SO_4 (mg/l)	Cl (mg/l)	NO_3-N (mg/l)	F (mg/l)	OPO_4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
F2-BR	05/02/09	132.0	0.0	68.6	4.4	4.2	0.1	<0.05	<0.07	10.10	0.72	8.88	21.40	<0.19	<50	<0.05
F2-BR	08/09/09	135.9	0.0	54.6	3.6	3.6	0.3	<0.05	<0.04	<7.60	0.71	9.08	20.10	<0.20	<50	<0.05
F2-BR	04/16/14	147.0	0.0	77.7	3.3	3.6	0.2	<0.020 U	<0.100 U	<2.000 U	0.67	8.19	21.67	<0.100 U	<10.000 U	<0.100 U
F2-BR	09/08/14	138.2	0.0	55.5	2.7	2.4	0.2	0.030 J	<0.100 U	<2.000 U	0.64	6.43	18.38	<0.100 U	<10.000 U	<0.100 U
MW-233	05/02/09	95.4	0.0	17.0	0.6	<0.05	0.4	<0.05	<0.04	12.20	8.84	1.82	41.20	<0.18	<50	<0.05
MW-233	08/13/09	85.9	0.0	8.5	<0.5	<0.05	0.6	<0.05	<0.13	<15.10	20	2.17	42.80	<0.14	<50	<0.16
MW-233	04/15/14	96.9	0.0	23.9	1.1	0.1	0.4	0.020 J	<0.100 U	5.460 J	9.07	1.520 J	34.64	<0.100 U	<10.000 U	<0.100 U
MW-233	08/19/14	91.3	0.0	11.3	0.490 J	0.1	0.4	<0.020 U	<0.100 U	112.55	12	1.500 J	35.24	<0.100 U	<10.000 U	<0.100 U
MW-245D	04/30/14	206.8	67.7	21.4	5.3	1.1	0.3	<0.020 U	<0.100 U	168.96	12	12.78	10.08	<0.100 U	<10.000 U	<0.100 U
MW-245D	09/10/14	195.6	70.3	21.8	5.3	1.1	0.3	<0.020 U	<0.100 U	431.03	8.40	12.60	9.50	<0.100 U	<10.000 U	<0.100 U
MW-245E	05/06/09	153.5	71.5	27.5	3.8	0.1	0.2	<0.05	0.11	14282.00	25	6.09	161.00	0.56	<50	1.22
MW-245E	08/10/09	0.0	236.1	33.8	<5.0	<0.5	<0.5	<0.5	<0.04	1125.00	18	8.86	14.90	<0.20	<500	<0.05
MW-245E	04/30/14	199.3	70.0	33.2	4.2	0.050 J	0.2	0.040 J	<0.100 U	52.58	2.82	7.17	1.83	<0.100 U	<10.000 U	<0.100 U
MW-245E	09/10/14	200.8	65.4	35.2	4.0	0.1	0.2	0.020 J	<0.100 U	124.29	2.81	6.77	2.45	<0.100 U	<10.000 U	<0.100 U
MW-245S	05/06/09	123.5	0.0	55.8	1.9	3.2	0.2	0.5	0.04	432.00	1201	10.70	6.61	<0.20	<50	0.70
MW-245S	08/10/09	164.9	0.0	78.0	2.3	4.2	0.3	0.3	<0.04	353.00	915	10.10	7.72	<0.20	<50	<0.05
MW-245S	04/30/14	115.5	0.0	49.5	2.1	2.8	0.3	0.3	<0.100 U	385.42	1281	9.73	6.80	<0.100 U	<10.000 U	<0.100 U
MW-245S	09/10/14	134.6	0.0	56.6	1.7	2.9	0.3	0.2	<0.100 U	1245.25	1009	8.79	8.59	<0.100 U	<10.000 U	<0.100 U
MW-248D	04/27/09	211.1	0.0	31.3	33.0	0.2	1.1	<0.05	<0.07	16.70	6.73	78.00	17.90	<0.19	188.00	0.45
MW-248D	08/12/09	229.4	0.0	32.2	39.5	<0.5	0.9	<0.5	<0.04	92.70	5.64	78.40	17.90	<0.20	<500	<0.05
MW-248D	05/05/14	236.9	0.6	39.0	40.6	0.1	1.1	<0.020 U	<0.100 U	21.72	3.74	81.67	16.42	<0.100 U	219.00	<0.100 U
MW-248D	09/11/14	225.9	0.0	42.4	61.9	0.6	1.1	<0.020 U	<0.100 U	24.23	2.71	76.19	18.58	<0.100 U	181.00	<0.100 U
MW-249D	05/02/09	94.2	44.6	112.9	<5.0	<0.5	4.8	<0.5	<0.07	3559.00	3.47	111.00	96.50	<0.19	<500	<0.05
MW-249D	09/16/09	101.0	39.3	99.0	<5.0	<0.5	4.9	<0.5	<0.04	1080.00	4.30	113.00	21.00	<0.20	<500	<0.05
MW-249D	05/01/14	108.4	44.1	116.0	4.4	0.2	5.0	<0.020 U	<0.100 U	361.76	5.62	134.35	14.08	<0.100 U	92.00	<0.100 U
MW-249D	09/08/14	137.0	7.6	119.9	4.3	8.8	4.2	<0.020 U	<0.100 U	392.00	3.41	136.43	6.30	<0.100 U	84.00	<0.100 U

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
F2-BR	05/02/09	<0.04	0.09	<0.41	6.18	2.84	<0.08	<0.20	0.09	0.77	<0.05	302.00	0.81	<0.03	10.20	2.02	<1.29
F2-BR	08/09/09	<0.10	0.14	<0.40	5.72	2.99	<0.10	0.20	0.05	0.67	0.05	268.00	0.64	<0.03	8.58	2.27	<0.90
F2-BR	04/16/14	<0.100 U	<0.100 U	<0.500 U	4.120 J	2.12	0.500 J	<0.060 U	<0.100 U	0.66	<0.100 U	290.06	0.88	<0.100 U	9.16	1.65	<0.500 U
F2-BR	09/08/14	<0.100 U	<0.100 U	<0.500 U	6.330 J	2.65	0.260 J	<0.060 U	<0.100 U	0.340 J	<0.100 U	228.93	34.17	<0.100 U	7.91	2.12	<0.500 U
MW-233	05/02/09	0.12	<0.04	1.12	3.78	1.95	<0.11	<0.15	0.39	<0.10	<0.04	149.00	0.51	<0.03	1.14	0.55	<0.94
MW-233	08/13/09	0.64	<0.10	1.77	3.68	2.40	<0.24	0.31	0.30	<0.26	<0.16	113.00	0.65	<0.14	0.69	0.78	<0.89
MW-233	04/15/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	1.72	0.240 J	<0.060 U	0.310 J	<0.100 U	<0.100 U	131.60	0.410 J	<0.100 U	2.32	0.390 J	<0.500 U
MW-233	08/19/14	<0.100 U	<0.100 U	0.920 J	3.270 J	1.90	<0.100 U	<0.060 U	0.54	<0.100 U	<0.100 U	106.32	12.86	<0.100 U	1.19	1.01	<0.500 U
MW-245D	04/30/14	<0.100 U	0.71	2.40	45.83	7.32	0.400 J	0.73	0.240 J	1.22	<0.100 U	4.49	2.62	<0.100 U	8.91	30.96	2.14
MW-245D	09/10/14	0.370 J	4.05	6.21	48.31	9.43	2.23	0.73	0.290 J	0.88	<0.100 U	5.01	5.20	<0.100 U	8.87	34.32	1.860 J
MW-245E	05/06/09	8.33	29.80	13.40	41.00	0.47	29.90	10.70	0.21	0.65	0.18	73.90	241.00	0.17	7.23	32.60	62.50
MW-245E	08/10/09	5.10	4.11	2.28	36.70	1.83	3.73	0.67	1.45	0.44	1.45	11.70	19.50	<0.03	3.53	16.00	3.61
MW-245E	04/30/14	<0.100 U	<0.100 U	0.860 J	45.00	0.56	<0.100 U	0.280 J	0.240 J	<0.100 U	<0.100 U	6.95	1.17	<0.100 U	0.71	1.78	<0.500 U
MW-245E	09/10/14	<0.100 U	0.65	2.90	54.50	0.62	0.330 J	0.36	0.200 J	<0.100 U	<0.100 U	7.71	3.83	<0.100 U	0.99	1.50	0.930 J
MW-245S	05/06/09	0.14	1.08	8.99	14.60	0.83	0.65	0.56	1.85	1.83	<0.04	7.03	6.69	<0.03	1.44	8.84	9.54
MW-245S	08/10/09	1.22	2.25	9.90	14.60	0.96	1.43	0.28	1.53	0.93	1.53	12.80	8.17	<0.03	2.16	7.34	1.86
MW-245S	04/30/14	0.300 J	0.460 J	7.45	11.91	0.68	0.410 J	0.58	2.04	0.76	<0.100 U	5.23	15.72	<0.100 U	1.07	7.98	3.22
MW-245S	09/10/14	<0.100 U	1.11	10.54	15.80	0.68	0.66	0.96	2.21	0.89	<0.100 U	7.72	33.47	<0.100 U	1.84	8.45	6.30
MW-248D	04/27/09	0.12	<0.09	0.42	36.70	6.76	0.12	<0.20	0.42	0.66	<0.05	138.00	0.34	<0.03	0.94	0.17	<1.29
MW-248D	08/12/09	1.24	3.19	1.44	34.40	7.53	0.73	<0.15	0.65	0.57	<0.04	181.00	1.68	<0.03	1.57	0.62	<0.90
MW-248D	05/05/14	<0.100 U	<0.100 U	0.720 J	38.06	5.69	0.75	<0.060 U	0.270 J	0.390 J	<0.100 U	108.24	0.99	<0.100 U	1.00	0.300 J	<0.500 U
MW-248D	09/11/14	<0.100 U	<0.100 U	<0.500 U	40.52	4.67	<0.100 U	<0.060 U	0.410 J	0.97	<0.100 U	145.90	5.96	<0.100 U	0.98	0.270 J	<0.500 U
MW-249D	05/02/09	0.54	3.17	2.18	24.40	9.45	2.19	3.71	0.30	0.26	0.09	22.90	43.10	0.03	1.12	3.54	5.94
MW-249D	09/16/09	0.31	1.74	2.05	22.50	9.34	0.93	1.46	0.30	0.36	0.09	5.69	11.10	<0.03	1.57	3.30	2.64
MW-249D	05/01/14	0.230 J	1.03	1.470 J	27.87	9.38	0.54	2.43	0.300 J	0.390 J	<0.100 U	4.19	6.08	<0.100 U	0.95	4.94	4.49
MW-249D	09/08/14	0.290 J	1.24	56.59	27.80	8.63	1.52	23.41	0.270 J	0.410 J	<0.100 U	3.58	8.70	<0.100 U	0.70	3.63	92.01

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Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
F2-BR	05/02/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	0.09	<0.03	0.15	<0.02	0.06	<0.05
F2-BR	08/09/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.14	<0.02	0.06	<0.05
F2-BR	04/16/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
F2-BR	09/08/14	<0.100 U	<0.100 U	<0.100 U	0.66	<0.100 U	<0.100 U	<0.100 U	0.250 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-233	05/02/09	<0.05	0.05	<0.04	<0.05	0.08	<0.04	0.07	<0.06	<0.02	0.28	<0.02	<0.05	<0.05
MW-233	08/13/09	<0.18	<0.10	<0.12	<0.10	0.14	<0.34	<0.13	<0.12	<0.10	0.37	<0.18	<0.13	<0.05
MW-233	04/15/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.220 J	<0.100 U	<0.100 U	<0.010 U
MW-233	08/19/14	<0.100 U	0.220 J	<0.100 U	1.58	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.69	<0.100 U	<0.100 U	<0.010 U
MW-245D	04/30/14	0.130 J	1.06	<0.100 U	0.470 J	0.59	<0.100 U	0.61	<0.100 U	<0.100 U	0.74	<0.100 U	21.71	<0.010 U
MW-245D	09/10/14	0.250 J	1.54	<0.100 U	0.77	0.78	<0.100 U	0.68	<0.100 U	<0.100 U	0.99	0.210 J	15.37	<0.010 U
MW-245E	05/06/09	0.72	26.20	5.64	8.64	11.60	0.08	11.30	0.17	2.98	30.70	0.41	0.42	<0.05
MW-245E	08/10/09	0.25	2.19	0.27	0.99	1.03	0.05	0.87	<0.10	0.24	3.24	<0.02	23.70	<0.5
MW-245E	04/30/14	<0.100 U	0.67	<0.100 U	0.210 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.03	<0.100 U	0.460 J	<0.010 U
MW-245E	09/10/14	<0.100 U	0.77	<0.100 U	0.270 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.04	<0.100 U	0.250 J	<0.010 U
MW-245S	05/06/09	0.44	0.51	0.19	0.10	0.23	<0.04	0.21	<0.10	0.06	2.14	<0.02	0.16	<0.05
MW-245S	08/10/09	0.52	0.73	0.16	0.12	0.41	0.06	0.28	<0.10	0.09	1.92	<0.02	3.57	<0.05
MW-245S	04/30/14	0.54	0.95	0.320 J	<0.100 U	0.420 J	<0.100 U	0.430 J	<0.100 U	<0.100 U	2.40	<0.100 U	<0.100 U	<0.010 U
MW-245S	09/10/14	0.69	1.17	0.58	0.60	0.53	<0.100 U	0.470 J	<0.100 U	<0.100 U	3.89	<0.100 U	<0.100 U	<0.010 U
MW-248D	04/27/09	<0.06	0.09	0.11	0.04	<0.05	<0.03	0.04	<0.07	<0.03	2.21	<0.02	0.38	<0.05
MW-248D	08/12/09	0.10	0.32	0.11	0.06	0.15	<0.04	0.14	<0.10	0.04	2.18	<0.02	1.23	<0.5
MW-248D	05/05/14	<0.100 U	0.280 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.80	<0.100 U	0.320 J	<0.010 U
MW-248D	09/11/14	<0.100 U	<0.100 U	<0.100 U	0.68	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.13	<0.100 U	0.240 J	<0.010 U
MW-249D	05/02/09	2.96	5.14	0.39	1.40	2.45	0.19	2.25	<0.07	0.59	7.25	1.19	3.95	<0.5
MW-249D	09/16/09	0.86	1.44	0.10	0.75	0.72	0.15	0.60	<0.10	0.16	1.94	0.35	6.21	<0.5
MW-249D	05/01/14	0.340 J	1.04	<0.100 U	0.58	0.54	<0.100 U	0.490 J	<0.100 U	<0.100 U	1.49	0.230 J	3.66	<0.010 U
MW-249D	09/08/14	0.150 J	0.54	<0.100 U	0.67	0.280 J	<0.100 U	0.240 J	<0.100 U	<0.100 U	1.43	<0.100 U	2.67	<0.010 U

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Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Sample Type	Gwic Id	Site Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	250009	MW-249S	05/02/09	17:00	5.18	6.04	458	6.72	457	48.0	6.1	53.5	1.6	0.045	0.127	21.3
DISSOLVED	250009	MW-249S	09/16/09	14:40	9.82	7.82	468	7.22	482	121.0	6.3	64.1	4.7	0.701	0.879	24.2
DISSOLVED	250009	MW-249S	04/18/14	15:37	5.26	6.98	515	7.17	574	49.9	6.2	57.9	1.6	0.036 J	0.119	19.7
DISSOLVED	250009	MW-249S	09/08/14	13:35	11.50	6.36	545	6.67	497	49.6	5.8	64.2	1.8	<0.015 U	0.012 J	22.6
DISSOLVED	249958	MW-250D	04/25/09	18:00				7.64	471	28.8	32.1	24.0	0.9	<0.043 U	<0.031 U	17.1
DISSOLVED	249958	MW-250D	08/09/09	12:15	9.95	7.30	436	8.25	405	31.7	34.2	23.3	1.0	0.361	0.014	19.1
DISSOLVED	249958	MW-250D	04/29/14	13:35	5.80	7.81	475	7.65	532	27.3	32.4	22.2	0.6	<0.015 U	<0.002 U	15.1
DISSOLVED	249958	MW-250D	09/09/14	10:35	17.10	7.96	505	8.05	360	29.3	34.8	21.0	0.6	<0.015 U	<0.002 U	15.6
DISSOLVED	249957	MW-250S	04/25/09	17:35	3.56	6.99	198	6.96	194	13.3	10.9	15.0	0.8	<0.043 U	<0.031 U	25.8
DISSOLVED	249957	MW-250S	08/09/09	10:15	8.43	6.49	251	7.66	245	20.4	14.4	17.4	1.0	<0.002	<0.001	26.5
DISSOLVED	249957	MW-250S	04/16/14	16:05	3.82	7.10	190	7.26	192	10.8	9.8	15.3	0.7	<0.015 U	<0.002 U	23.5
DISSOLVED	249957	MW-250S	09/09/14	9:45	10.30	6.84	180	7.36	144	11.3	9.3	14.5	0.8	<0.015 U	<0.002 U	26.1
DISSOLVED	250017	NGP-1	05/10/09	15:00	10.01	6.85	560	7.22	562	63.5	12.0	65.1	2.5	0.004	0.002	23.0
DISSOLVED	250017	NGP-1	09/08/09	11:35	10.80	7.27	639	7.60	641	65.6	11.7	70.6	2.8	0.006	0.002	23.9
DISSOLVED	250017	NGP-1	06/20/12	14:46	8.18	6.42	682	7.11	794	69.5	12.2	63.7	2.6	<0.015 U	0.018 J	22.0
DISSOLVED	250017	NGP-1	04/21/14	15:26	10.51	7.06	655	7.38	751	65.7	11.7	68.0	2.3	<0.015 U	<0.002 U	21.4
DISSOLVED	250017	NGP-1	07/15/14	11:25	9.20	6.55	660	7.40	656	67.4	12.0	68.7	2.9	0.234	0.013 J	26.0
DISSOLVED	250053	WGP-1	05/27/09	11:35	12.90	7.05	1,331	7.66	1,293	194.0	37.5	52.1	10.9	2.200	0.079	13.1
DISSOLVED	250053	WGP-1	08/11/09	14:30	12.31	6.71	1,359	7.40	1,274	220.0	39.2	56.5	11.3	0.983	0.061	12.0
DISSOLVED	250053	WGP-1	05/22/14	11:44	9.02	7.10	1,300	7.51	1,552	183.7	38.1	51.6	8.3	<0.038 U	0.473	9.7
DISSOLVED	250053	WGP-1	07/17/14	15:40	10.80	6.78	1,245	7.43	1,260	190.0	38.2	52.4	9.2	0.557	0.691	15.7
DISSOLVED	250052	SH-3	08/11/09	14:04	21.14	7.64	1,880	8.05	1,861	312.0	53.3	104.0	14.4	<0.010	0.551	16.2
DISSOLVED	250052	SH-3	07/16/14	13:40	21.80	7.85	2,230	7.96	2,133	335.8	60.1	120.6	14.8	0.396	0.071 J	16.9
DISSOLVED	249913	SP97-12	08/20/09	14:58	14.28	7.09	596	7.68	661	59.0	19.7	40.0	0.8	0.011	0.126	27.2
DISSOLVED	249913	SP97-12	07/17/14	14:10	18.50	7.21	750	7.97	729	75.4	29.5	53.4	2.5	0.228	0.101	32.8
DISSOLVED	249914	SP97-19	08/13/09	14:50		7.40	689	7.81	705	80.1	35.8	25.2	3.1	<0.002	0.007	9.3
DISSOLVED	249914	SP97-19	07/09/14	15:00	11.20	7.72	695	8.25	681	77.5	37.1	23.6	2.9	<0.015 U	<0.002 U	9.5
DISSOLVED	249917	SP98-16	08/26/09	14:50	12.41	7.82	161	8.07	171	25.1	4.1	1.3	1.7	0.009	0.009	19.2
DISSOLVED	249917	SP98-16	07/24/14	11:14	10.70	7.29	167	7.97	162	27.3	4.9	1.2	1.2	0.045 J	0.012 J	15.0
DISSOLVED	249918	SP98-20	09/04/09	13:40	15.56	7.23	195	7.18	196	25.0	3.8	5.7	2.2	<0.002	0.001	24.1
DISSOLVED	249918	SP98-20	07/18/14	11:45	8.10	6.47	175	7.34	179	25.6	3.8	5.9	2.2	<0.015 U	<0.002 U	24.8
DISSOLVED	249919	SP98-23	08/28/09	12:20	8.29	7.00	32	7.02	101	2.6	0.6	2.4	0.4	<0.002	0.001	13.2
DISSOLVED	249919	SP98-23	07/10/14	11:58	6.40	5.82	30	7.16	40	2.7	0.5	2.7	0.5	<0.015 U	<0.002 U	13.9

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Site Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-249S	05/02/09	200.8	0.0	88.6	5.0	<0.5	0.1	<0.05	<0.07	<6.02	65	6.51	18.10	<0.19	<50	<0.05
MW-249S	09/16/09	224.0	0.0	73.3	4.7	0.3	0.2	<0.05	<0.04	297.00	39	13.50	34.20	<0.20	<50	4.45
MW-249S	04/18/14	223.1	0.0	102.7	5.3	<0.010 U	0.2	0.060 J	<0.100 U	4.280 J	65	6.26	15.90	<0.100 U	<10.000 U	<0.100 U
MW-249S	09/08/14	243.4	0.0	82.7	3.5	<0.010 U	0.2	0.100 J	<0.100 U	2.580 J	82	10.07	18.20	<0.100 U	<10.000 U	<0.100 U
MW-250D	04/25/09	248.6	0.0	42.3	1.5	0.5	0.1	<0.05	<0.04	10.51	1.80	4.71	63.60	<0.18	<50	<0.05 U
MW-250D	08/09/09	263.8	0.0	42.5	1.6	0.5	0.2	<0.05	<0.04	400.00	1.36	4.08	71.40	<0.20	<50	0.08
MW-250D	04/29/14	283.0	0.0	47.0	1.9	0.6	0.1	0.020 J	<0.100 U	<2.000 U	1.31	4.69	70.49	<0.100 U	<10.000 U	<0.100 U
MW-250D	09/09/14	223.7	0.0	45.3	1.4	0.6	0.1	<0.020 U	<0.100 U	3.420 J	1.36	3.53	80.07	<0.100 U	<10.000 U	<0.100 U
MW-250S	04/25/09	112.2	0.0	17.6	0.8	<0.05	0.1	0.1	<0.04	<7.64	58	3.92	45.30	<0.18	<50	<0.05 U
MW-250S	08/09/09	164.2	0.0	15.2	0.9	<0.05	0.2	<0.05	<0.04	<7.60	53	5.59	64.50	<0.20	<50	<0.05
MW-250S	04/16/14	112.1	0.0	16.6	1.1	0.020 J	0.1	0.060 J	<0.100 U	12.53	43	5.11	32.17	<0.100 U	<10.000 U	<0.100 U
MW-250S	09/09/14	93.3	0.0	9.9	0.340 J	0.030 J	0.1	0.1	<0.100 U	70.17	54	3.22	36.59	<0.100 U	<10.000 U	<0.100 U
NGP-1	05/10/09	272.7	0.0	117.2	6.9	<0.5	<0.5	<0.5	<0.04	<7.68	185	15.00	63.10	<0.20	<500	0.12
NGP-1	09/08/09	282.1	0.0	95.1	8.4	<0.5	<0.5	<0.5	<0.04	<7.60	185	17.30	63.40	<0.20	<500	0.12
NGP-1	06/20/12	271.7	0.0	118.6	6.4	0.2	0.2	0.2	<0.100 U	18.86	166	17.93	63.26	<0.100 U	88.00	<0.100 U
NGP-1	04/21/14	314.1	0.0	110.4	6.7	0.2	0.3	0.1	<0.100 U	6.830 J	126	14.24	60.99	<0.100 U	92.00	<0.100 U
NGP-1	07/15/14	305.0	0.0	121.8	7.0	0.2	0.3	0.1	<0.100 U	396.48	148	14.64	75.72	<0.100 U	78.00	<0.100 U
WGP-1	05/27/09	262.1	0.0	509.5	6.3	<0.5	2.2	<0.5	<0.20	<7.68	6.06	45.60	18.20	<1.01	<500	<0.25
WGP-1	08/11/09	292.4	0.0	527.2	8.0	<0.5	2.4	<0.5	<0.20	<38.00	5.76	52.30	15.90	<1.00	<500	<0.25
WGP-1	05/22/14	254.9	0.0	530.6	5.3	0.040 J	1.6	<0.020 U	<0.250 U	38.24	510	84.24	152.06	<0.250 U	<10.000 U	7.73
WGP-1	07/17/14	261.0	0.0	570.6	5.4	0.050 J	1.8	<0.020 U	<0.250 U	782.97	627	40.54	130.10	<0.250 U	<10.000 U	8.43
SH-3	08/11/09	334.3	0.0	879.4	8.6	<0.5	2.1	<0.5	<0.20	<38.00	283	90.70	103.00	<1.00	<500	8.25
SH-3	07/16/14	351.8	0.0	1024.0	8.2	0.1	2.5	<0.020 U	<0.250 U	173.94	70	78.05	34.64	<0.250 U	<10.000 U	0.800 J
SP97-12	08/20/09	341.9	0.0	52.6	<5.0	<0.5	<0.5	<0.5	<0.13	<15.10	455	11.20	41.70	<0.14	<500	<0.16
SP97-12	07/17/14	482.5	0.0	47.3	2.3	<0.010 U	0.5	0.080 J	<0.100 U	2.240 J	1546	14.91	50.19	<0.100 U	<10.000 U	0.230 J
SP97-19	08/13/09	273.6	0.0	158.3	11.9	2.2	1.3	<0.5	<0.04	<7.60	2.30	20.20	21.20	<0.20	<500	0.11
SP97-19	07/09/14	260.2	4.9	173.5	9.4	1.8	1.4	<0.020 U	<0.100 U	<2.000 U	2.27	19.90	18.96	<0.100 U	84.00	<0.100 U
SP98-16	08/26/09	113.2	0.0	5.9	<0.5	<0.05	0.1	<0.05	<0.04	<7.60	6.01	1.96	19.20	<0.20	<50	<0.05
SP98-16	07/24/14	116.3	0.0	1.930 J	0.230 J	<0.010 U	0.1	<0.020 U	<0.100 U	87.09	7.55	1.850 J	24.79	<0.100 U	<10.000 U	<0.100 U
SP98-20	09/04/09	90.2	0.0	22.8	1.3	<0.05	0.2	<0.05	0.05	<7.60	3.89	3.90	32.80	<0.20	<50	<0.05
SP98-20	07/18/14	95.3	0.0	20.7	0.8	0.1	0.1	<0.020 U	<0.100 U	5.910 J	7.30	2.68	37.58	<0.100 U	<10.000 U	<0.100 U
SP98-23	08/28/09	16.7	0.0	5.7	<0.5	<0.05	0.3	<0.05	<0.04	<7.60	0.46	0.73	1.52	<0.20	<50	<0.05
SP98-23	07/10/14	19.8	0.0	4.6	0.410 J	<0.010 U	0.3	<0.020 U	<0.100 U	6.270 J	<0.100 U	0.780 J	0.66	<0.100 U	<10.000 U	<0.100 U

Explanation of Qualifiers: E = Estimated due to interference; J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits; U = Analyzed for but not detected above MDL.

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Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-249S	05/02/09	0.36	<0.09	0.87	17.30	0.38	0.20	<0.20	0.65	0.89	<0.05	104.00	0.67	<0.03	9.14	3.31	<1.29
MW-249S	09/16/09	1.95	0.74	57.80	14.80	1.21	5.93	8.90	0.91	0.47	0.57	168.00	13.20	<0.03	4.40	2.18	626.00
MW-249S	04/18/14	<0.100 U	<0.100 U	1.150 J	16.26	0.300 J	0.74	<0.060 U	0.73	0.86	<0.100 U	101.79	1.19	<0.100 U	8.84	2.14	<0.500 U
MW-249S	09/08/14	<0.100 U	<0.100 U	0.670 J	20.93	0.430 J	0.53	<0.060 U	0.80	0.440 J	<0.100 U	99.32	34.72	<0.100 U	8.86	3.69	<0.500 U
MW-250D	04/25/09	0.21	0.82	0.71	7.23	0.40	0.26	<0.15 U	0.14	0.26	<0.04	1156.00	0.56	<0.03	3.07	2.62	<0.94 U
MW-250D	08/09/09	0.23	2.17	11.60	5.11	0.23	0.87	0.69	0.12	0.26	0.12	1016.00	6.68	<0.03	2.96	3.80	4.91
MW-250D	04/29/14	<0.100 U	0.61	<0.500 U	5.990 J	0.360 J	0.330 J	<0.060 U	<0.100 U	0.350 J	<0.100 U	902.14	0.490 J	<0.100 U	2.79	3.33	2.68
MW-250D	09/09/14	<0.100 U	0.52	1.240 J	4.220 J	0.370 J	0.330 J	<0.060 U	0.220 J	<0.100 U	<0.100 U	862.48	18.09	<0.100 U	2.80	3.83	18.56
MW-250S	04/25/09	<0.06	0.11	1.16	2.10	0.15	0.17	0.75	0.86	0.11	<0.04	251.00	<0.19	<0.03	0.11	3.44	<0.94 U
MW-250S	08/09/09	<0.10	0.15	1.01	1.48	0.14	0.15	<0.15	0.87	0.14	0.87	337.00	0.25	<0.03	0.26	3.93	<0.90
MW-250S	04/16/14	<0.100 U	<0.100 U	0.850 J	<2.000 U	<0.100 U	0.260 J	<0.060 U	0.300 J	<0.100 U	<0.100 U	204.36	0.400 J	<0.100 U	<0.100 U	2.77	<0.500 U
MW-250S	09/09/14	<0.100 U	<0.100 U	1.010 J	<2.000 U	<0.100 U	0.200 J	<0.060 U	0.91	<0.100 U	<0.100 U	187.45	7.32	<0.100 U	<0.100 U	5.32	1.120 J
NGP-1	05/10/09	0.24	0.12	9.12	12.50	0.83	0.81	0.37	1.35	1.09	<0.04	399.00	1.75	<0.03	18.70	5.35	7.41
NGP-1	09/08/09	0.79	0.20	8.19	11.60	0.86	0.54	<0.16	1.38	0.78	<0.04	364.00	1.17	<0.03	18.70	5.92	6.19
NGP-1	06/20/12	<0.100 U	<0.100 U	8.17	12.23	0.50	1.88	0.26	0.87	0.64	<0.100 U	389.71	1.21	<0.100 U	17.93	4.58	8.42
NGP-1	04/21/14	<0.100 U	<0.100 U	5.50	11.12	0.450 J	0.85	0.290 J	0.73	0.67	<0.100 U	378.07	1.29	<0.100 U	20.15	5.04	4.10
NGP-1	07/15/14	0.200 J	0.53	10.01	9.870 J	1.27	1.07	2.30	0.96	0.75		381.31	15.91	<0.100 U		8.56	7.70
WGP-1	05/27/09	0.89	<0.20	<2.02	102.00	5.13	0.77	<0.77	<0.24	<0.51	<0.21	2937.00	9.33	<0.17	1.00	<0.51	<4.55
WGP-1	08/11/09	0.77	<0.20	<2.00	110.00	4.18	<0.50	<0.76	<0.24	<0.50	<0.24	<0.50	7.01	<0.17	1.09	<0.50	<4.50
WGP-1	05/22/14	2.66	<0.250 U	25.92	87.15	10.12	5.24	1.21	4.39	0.610 J	<0.250 U	2141.12	5.22	<0.250 U	2.68	1.250 J	179.95
WGP-1	07/17/14	3.01	0.810 J	47.87	80.94	6.89	3.99	8.38	4.12	<0.250 U		2553.60	29.04	<0.250 U		1.180 J	174.35
SH-3	08/11/09	0.74	<0.20	47.50	146.00	9.98	0.91	<0.76	9.55	1.93	<0.21	3478.00	10.70	<0.25	3.04	1.22	746.00
SH-3	07/16/14	0.780 J	<0.250 U	15.81	188.89	10.65	1.130 J	1.94	2.72	<0.250 U		5503.24	15.60	<0.250 U		<0.250 U	42.89
SP97-12	08/20/09	0.39	<0.10	2.64	9.52	<0.16	<0.24	<0.14	0.71	<0.26	<0.16	184.00	0.59	<0.14	0.67	0.94	11.30
SP97-12	07/17/14	<0.100 U	<0.100 U	5.99	<2.000 U	2.17	0.66	<0.060 U	1.43	0.320 J		226.61	0.85	<0.100 U		2.03	24.80
SP97-19	08/13/09	0.15	0.42	1.06	25.90	4.78	0.54	<0.15	0.21	2.36	0.06	690.00	1.88	0.41	2.11	<0.10	29.30
SP97-19	07/09/14	<0.100 U	0.250 J	0.510 J	24.27	6.51	0.62	2.28	0.210 J	2.22		649.25	2.71	0.380 J		<0.100 U	0.640 J
SP98-16	08/26/09	<0.10	0.08	0.62	0.81	0.09	<0.10	<0.15	0.31	<0.10	<0.04	31.10	<0.20	<0.03	0.39	0.25	2.39
SP98-16	07/24/14	<0.100 U	<0.100 U	1.050 J	<2.000 U	<0.100 U	3.73	<0.060 U	0.55	<0.100 U	0.76	31.60	18.62	<0.100 U	0.53	0.350 J	3.18
SP98-20	09/04/09	<0.10	0.07	1.34	6.88	0.71	<0.10	<0.15	0.44	0.16	0.15	193.00	0.27	<0.03	1.96	1.84	3.26
SP98-20	07/18/14	<0.100 U	<0.100 U	1.960 J	<2.000 U	0.90	<0.100 U	<0.060 U	0.56	<0.100 U		213.69	0.52	<0.100 U		2.58	2.96
SP98-23	08/28/09	0.13	<0.04	0.73	0.37	0.75	<0.10	<0.15	<0.05	<0.10	<0.04	23.40	<0.20	<0.03	0.12	<0.10	2.69
SP98-23	07/10/14	0.270 J	<0.100 U	<0.500 U	<2.000 U	1.47	<0.100 U	<0.060 U	<0.100 U	<0.100 U		26.67	<0.100 U	<0.100 U		<0.100 U	7.38

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Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-249S	05/02/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	0.66	<0.02	<0.03	<0.05
MW-249S	09/16/09	0.33	0.78	0.06	0.11	0.44	<0.04	0.38	<0.10	0.09	3.24	0.03	0.09	<0.05
MW-249S	04/18/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.480 J	<0.100 U	<0.100 U	<0.010 U
MW-249S	09/08/14	<0.100 U	<0.100 U	<0.100 U	0.62	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.95	<0.100 U	<0.100 U	<0.010 U
MW-250D	04/25/09	0.07	0.18	<0.04	<0.05	0.10	<0.04	0.10	0.23	0.02	1.32	<0.02	0.79	<0.05
MW-250D	08/09/09	0.12	2.43	0.08	0.16	1.15	0.06	1.09	0.31	0.29	2.28	<0.02	1.68	<0.05
MW-250D	04/29/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.340 J	<0.100 U	1.33	<0.100 U	<0.100 U	<0.010 U
MW-250D	09/09/14	<0.100 U	<0.100 U	<0.100 U	2.88	<0.100 U	<0.100 U	<0.100 U	0.92	<0.100 U	1.31	<0.100 U	<0.100 U	<0.010 U
MW-250S	04/25/09	0.08	<0.02	<0.04	<0.05	0.02	<0.04	<0.05	<0.06	<0.02	0.42	<0.02	<0.05	<0.05
MW-250S	08/09/09	0.10	<0.02	<0.04	<0.05	0.03	<0.04	<0.05	0.10	<0.02	0.65	<0.02	<0.05	<0.05
MW-250S	04/16/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.300 J	<0.100 U	<0.100 U	<0.010 U
MW-250S	09/09/14	<0.100 U	<0.100 U	<0.100 U	1.35	<0.100 U	<0.100 U	<0.100 U	0.200 J	<0.100 U	0.51	<0.100 U	<0.100 U	<0.010 U
NGP-1	05/10/09	<0.05	0.04	<0.04	<0.05	0.03	<0.04	<0.05	0.15	<0.02	0.67	<0.02	3.50	<0.5
NGP-1	09/08/09	<0.15	0.04	<0.04	<0.05	0.03	<0.04	<0.05	0.13	<0.02	0.69	<0.02	5.55	<0.5
NGP-1	06/20/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.110 J	<0.100 U	0.54	<0.100 U	1.76	<0.010 U
NGP-1	04/21/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.63	<0.100 U	1.40	<0.010 U
NGP-1	07/15/14													<0.010 U
WGP-1	05/27/09	<0.25	0.74	13.70	<0.25	0.13	<0.20	<0.26	1.13	<0.11	52.70	<0.12	<0.25	<0.5
WGP-1	08/11/09	<0.25	0.83	14.40	<0.25	0.15	<0.20	<0.26	0.84	<0.11	51.90	<0.12	<0.20	<0.5
WGP-1	05/22/14	<0.250 U	<0.250 U	0.790 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.540 J	<0.250 U	12.80	<0.250 U	2.06	<0.010 U
WGP-1	07/17/14													<0.010 U
SH-3	08/11/09	<0.25	<0.10	7.63	<0.25	<0.11	<0.20	<0.26	0.99	<0.11	49.40	<0.12	0.31	<0.5
SH-3	07/16/14													0.050 J
SP97-12	08/20/09	<0.18	<0.12	<0.12	<0.10	<0.10	<0.34	<0.13	<0.12	<0.10	2.43	<0.18	<0.13	<0.5
SP97-12	07/17/14													<0.010 U
SP97-19	08/13/09	<0.05	<0.02	3.57	<0.05	<0.02	<0.04	<0.05	0.16	<0.02	11.70	<0.02	<0.05	<0.5
SP97-19	07/09/14													<0.010 U
SP98-16	08/26/09	<0.05	0.03	<0.04	<0.05	0.02	<0.04	<0.05	<0.10	<0.02	2.43	<0.02	<0.05	<0.05
SP98-16	07/24/14	<0.100 U	0.220 J	<0.100 U	1.14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.29	<0.100 U	<0.100 U	<0.010 U
SP98-20	09/04/09	0.14	0.05	<0.04	<0.05	0.12	0.04	0.09	<0.10	0.04	0.38	0.04	<0.05	<0.05
SP98-20	07/18/14													<0.010 U
SP98-23	08/28/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.20	<0.02	<0.05	<0.05
SP98-23	07/10/14													<0.010 U

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Sample Type	Gwic Id	Site Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249927	SP98-36	08/19/09	15:06	15.54	8.03	451	7.89	472	46.3	2.6	61.1	1.2	0.012	0.012	15.1
DISSOLVED	249927	SP98-36	10/02/14	14:50	9.70	6.43	500	7.68	475	46.1	5.5	61.9	1.4	0.026 J	0.005 J	13.8
DISSOLVED	249928	SP98-37	08/24/09	11:17	9.11	10.64	190	7.46	205	15.5	7.9	16.1	1.3	0.019	0.001	29.5
DISSOLVED	249928	SP98-37	10/19/11	14:02	8.11	7.87	233	7.78								
DISSOLVED	249928	SP98-37	06/18/12	16:25	6.48	6.37	27	7.46	191	11.8	7.2	13.5	1.1	0.030 J	<0.002 U	23.5
DISSOLVED	249928	SP98-37	07/16/14	11:40	15.40	6.32	82	7.52	82	5.6	1.0	11.4	1.6	0.679	0.013 J	28.7
DISSOLVED	249929	SP98-8	09/02/09	14:20	10.77	7.26	96	7.48	154	11.9	0.9	5.4	0.4	0.003	0.003	22.4
DISSOLVED	249929	SP98-8	07/25/14	12:35	9.69	6.15	84	7.49	86	11.4	0.9	5.4	0.4	0.118	0.002 J	23.6
DISSOLVED	249931	SST-1	08/18/09	13:55	16.12	6.68	298	7.16	301	39.9	8.6	11.7	2.6	0.023	0.013	34.3
DISSOLVED	249931	SST-1	07/07/14	15:00	16.10	6.53	340	7.38	322	41.7	9.3	11.9	3.5	1.114	0.031 J	34.7
DISSOLVED	249932	SST-26	08/24/09	14:05	11.38	9.98	385	7.28	388	55.5	9.5	12.9	2.1	0.042	0.024	24.3
DISSOLVED	249932	SST-26	10/19/11	14:24	8.19	7.38	366	7.83								
DISSOLVED	249932	SST-26	07/09/14	11:12	12.40	6.78	340	7.51	338	46.9	8.7	11.6	1.8	<0.015 U	<0.002 U	20.3
DISSOLVED	249933	SST-29	08/26/09	11:50	9.49	7.59	320	7.98	312	34.8	18.9	4.9	1.8	0.003	0.001	20.0
DISSOLVED	249933	SST-29	07/15/14	14:10	10.50	7.04	200	8.04	198	21.0	11.0	4.5	1.6	0.095	0.003 J	23.4
DISSOLVED	249934	SST-30	08/11/09	15:48	15.61	7.86	591	8.19	601	62.7	10.2	65.0	1.9	0.003	0.042	25.6
DISSOLVED	249934	SST-30	07/15/14	11:47	13.90	7.30	585	8.13	573	55.6	10.1	62.1	1.6	0.115	0.086	25.8

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
SP98-36	08/19/09	217.4	0.0	59.3	2.3	<0.05	0.3	<0.05	<0.13	<15.10	50	12.80	12.60	<0.14	<50	<0.16
SP98-36	10/02/14	250.7	0.0	73.2	2.8	0.1	0.1	0.020 J	<0.100 U	<2.000 U	64	9.52	18.59	<0.100 U	<10.000 U	<0.100 U
SP98-37	08/24/09	117.6	0.0	10.7	0.7	<0.05	0.2	0.2	<0.13	20.90	89	4.84	67.50	<0.14	<50	<0.16
SP98-37	10/19/11															
SP98-37	06/18/12	90.5	0.0	13.7	0.6	0.1	0.1	0.1	<0.100 U	78.63	58	5.10	48.01	<0.100 U	<10.000 U	<0.100 U
SP98-37	07/16/14	48.7	0.0	7.3	0.460 J	0.040 J	0.1	0.080 J	<0.100 U	1035.90	97	2.35	21.10	<0.100 U	<10.000 U	0.330 J
SP98-8	09/02/09	62.1	0.0	10.3	0.6	<0.05	0.2	<0.05	<0.04	<7.60	3.21	1.96	3.25	<0.20	<50	<0.05
SP98-8	07/25/14	50.7	0.0	8.8	0.290 J	<0.010 U	0.1	<0.020 U	<0.100 U	333.77	4.54	2.18	6.07	<0.100 U	<10.000 U	<0.100 U
SST-1	08/18/09	121.0	0.0	55.1	3.0	<0.05	0.3	<0.05	<0.13	<15.10	28	10.60	30.90	<0.14	<50	0.20
SST-1	07/07/14	140.8	0.0	56.6	5.4	0.040 J	0.2	<0.020 U	<0.100 U	<2.000 U	44	9.12	29.63	<0.100 U	<10.000 U	<0.100 U
SST-26	08/24/09	95.2	0.0	112.0	3.0	0.3	0.2	<0.05	<0.13	<15.10	13	8.07	32.80	<0.14	<50	<0.16
SST-26	10/19/11															
SST-26	07/09/14	105.6	0.0	95.3	3.3	0.2	0.1	<0.020 U	<0.100 U	<2.000 U	2.34	3.59	28.34	<0.100 U	<10.000 U	<0.100 U
SST-29	08/26/09	189.1	0.0	30.4	1.1	<0.05	0.3	<0.05	<0.04	<7.60	6.37	4.53	89.00	<0.20	<50	0.12
SST-29	07/15/14	114.8	0.0	19.4	0.7	0.040 J	0.2	<0.020 U	<0.100 U	124.97	8.87	2.69	84.07	<0.100 U	<10.000 U	<0.100 U
SST-30	08/11/09	250.7	0.0	99.5	6.5	0.8	<0.5	<0.5	<0.04	<7.60	250	16.10	57.70	<0.20	<500	0.05
SST-30	07/15/14	269.5	0.5	99.2	4.9	0.3	0.3	0.100 J	<0.100 U	124.32	225	15.40	55.11	<0.100 U	<10.000 U	<0.100 U

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Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
SP98-36	08/19/09	1.13	<0.10	4.33	15.70	0.21	0.83	<0.14	0.90	0.34	<0.16	55.90	0.64	<0.14	5.23	4.58	15.80
SP98-36	10/02/14	<0.100 U	<0.100 U	<0.500 U	20.99	0.380 J	0.300 J	<0.060 U	0.61	0.59	<0.100 U	86.60	35.96	<0.100 U	10.89	5.42	1.360 J
SP98-37	08/24/09	0.40	0.21	2.35	1.47	0.17	0.53	<0.14	1.00	<0.26	<0.16	173.00	0.70	<0.14	0.23	3.64	1.21
SP98-37	10/19/11																
SP98-37	06/18/12	<0.100 U	0.220 J	1.46	<0.400 U	<0.100 U	0.490 J	<0.040 U	0.68	<0.100 U	<0.100 U	138.43	1.59	<0.100 U	<0.100 U	3.00	<0.200 U
SP98-37	07/16/14	<0.100 U	0.480 J	13.84	<2.000 U	0.400 J	0.56	3.11	0.93	<0.100 U		43.59	23.10	<0.100 U		1.66	7.05
SP98-8	09/02/09	<0.10	0.06	1.00	2.29	0.05	<0.10	<0.15	0.15	<0.10	0.53	41.00	0.33	<0.03	0.10	0.34	6.89
SP98-8	07/25/14	0.71	<0.100 U	1.660 J	2.730 J	<0.100 U	0.95	0.260 J	0.340 J	<0.100 U	<0.100 U	44.96	11.69	<0.100 U	0.230 J	0.68	3.17
SST-1	08/18/09	0.42	<0.10	11.30	5.72	0.32	0.37	<0.14	0.50	<0.26	<0.16	319.00	0.48	<0.14	0.13	1.74	44.90
SST-1	07/07/14	0.270 J	<0.100 U	3.46	<2.000 U	0.330 J	<0.100 U	0.220 J	0.420 J	<0.100 U		442.98	0.76	<0.100 U		1.50	5.44
SST-26	08/24/09	0.37	<0.10	1.78	15.00	4.04	<0.24	<0.14	0.61	0.39	<0.16	223.00	1.55	<0.14	2.30	5.88	11.90
SST-26	10/19/11																
SST-26	07/09/14	<0.100 U	<0.100 U	4.51	11.24	1.94	<0.100 U	<0.060 U	3.11	0.330 J		196.67	1.42	<0.100 U		8.48	0.850 J
SST-29	08/26/09	0.20	0.16	2.10	2.95	0.29	<0.10	<0.15	0.25	0.13	<0.04	132.00	0.38	<0.03	0.63	0.31	1.55
SST-29	07/15/14	<0.100 U	<0.100 U	5.28	<2.000 U	0.300 J	0.490 J	0.280 J	0.490 J	<0.100 U		125.52	3.24	<0.100 U		0.490 J	3.20
SST-30	08/11/09	<0.10	0.27	5.02	12.30	0.59	0.16	<0.15	1.27	0.73	<0.04	333.00	0.95	<0.03	13.10	5.55	<0.90
SST-30	07/15/14	<0.100 U	0.210 J	4.71	11.11	0.59	0.78	0.36	0.95	0.62		269.71	6.35	<0.100 U		5.82	4.63

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Mount Haggin/Smelter Hill HAA TI Zone

Site Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
SP98-36	08/19/09	<0.18	<0.10	0.14	<0.10	<0.10	<0.34	<0.13	<0.12	<0.10	3.22	<0.18	<0.13	<0.05
SP98-36	10/02/14	<0.100 U	<0.100 U	<0.100 U	0.82	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.77	<0.100 U	<0.100 U	<0.010 U
SP98-37	08/24/09	0.21	<0.10	<0.12	<0.10	<0.10	<0.34	<0.13	<0.12	<0.10	0.67	<0.18	<0.13	<0.05
SP98-37	10/19/11													
SP98-37	06/18/12	0.180 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.450 J	<0.100 U	<0.100 U	<0.010 U
SP98-37	07/16/14					<0.100 U								<0.010 U
SP98-8	09/02/09	0.07	0.03	0.27	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.60	<0.02	<0.05	<0.05
SP98-8	07/25/14	<0.100 U	0.330 J	0.400 J	0.340 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.04	<0.100 U	<0.100 U	<0.010 U
SST-1	08/18/09	<0.18	<0.10	<0.12	<0.10	<0.10	<0.34	<0.13	<0.12	<0.10	0.70	<0.18	0.35	<0.05
SST-1	07/07/14													<0.010 U
SST-26	08/24/09	<0.18	<0.10	1.78	<0.10	<0.10	<0.34	<0.13	<0.12	<0.10	0.37	<0.18	<0.13	<0.05
SST-26	10/19/11													
SST-26	07/09/14													<0.010 U
SST-29	08/26/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	2.20	<0.02	<0.05	<0.05
SST-29	07/15/14													<0.010 U
SST-30	08/11/09	<0.05	<0.02	0.09	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.75	<0.02	0.06	<0.5
SST-30	07/15/14													<0.010 U

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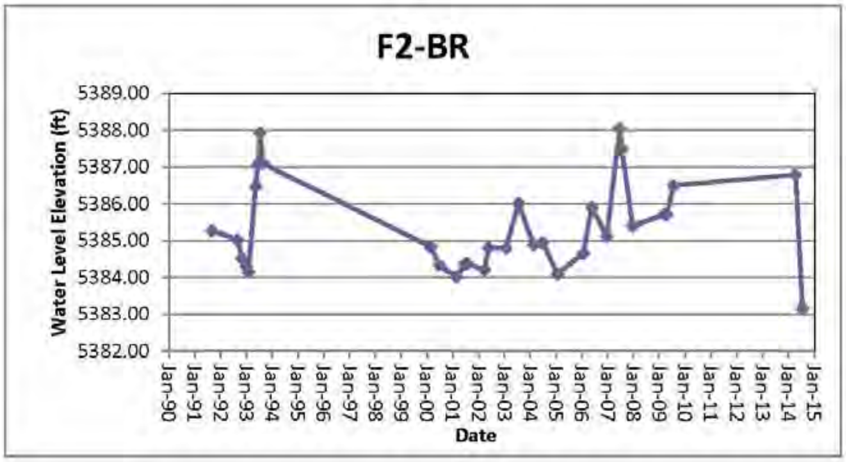
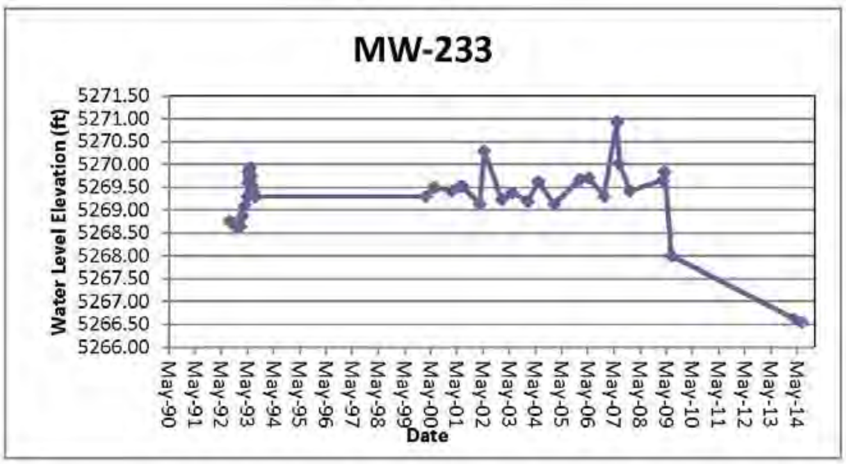
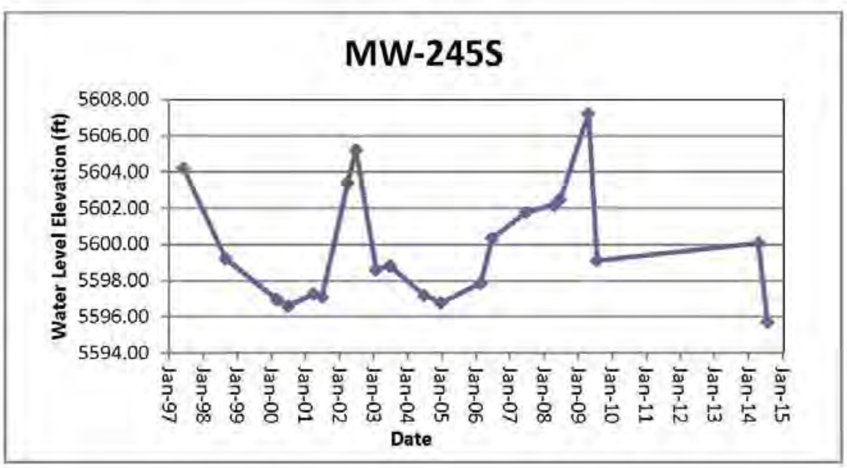
Appendix C

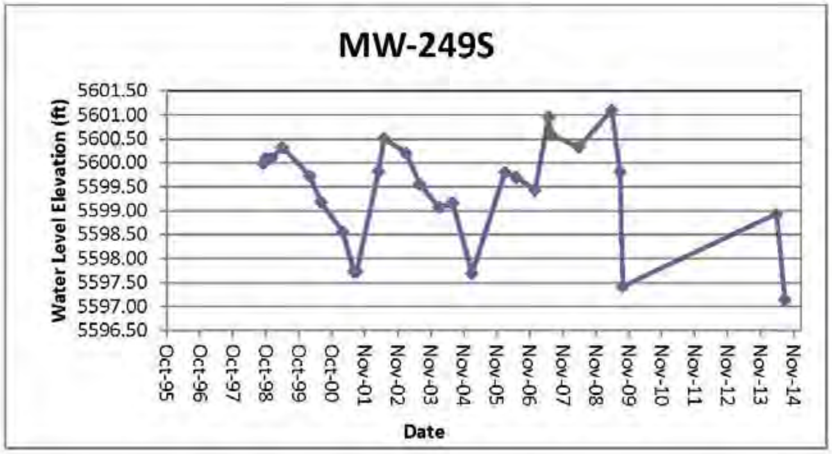
Hydrographs for Mount Haggin/Smelter Hill HAA/TI Zone Monitoring Wells

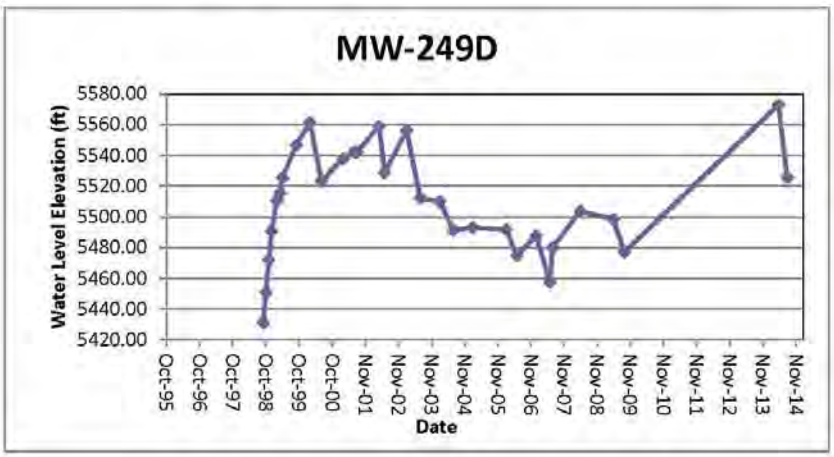


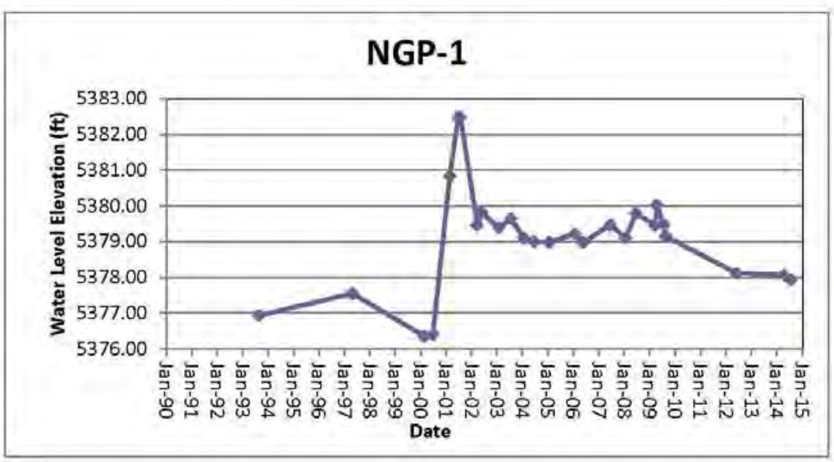




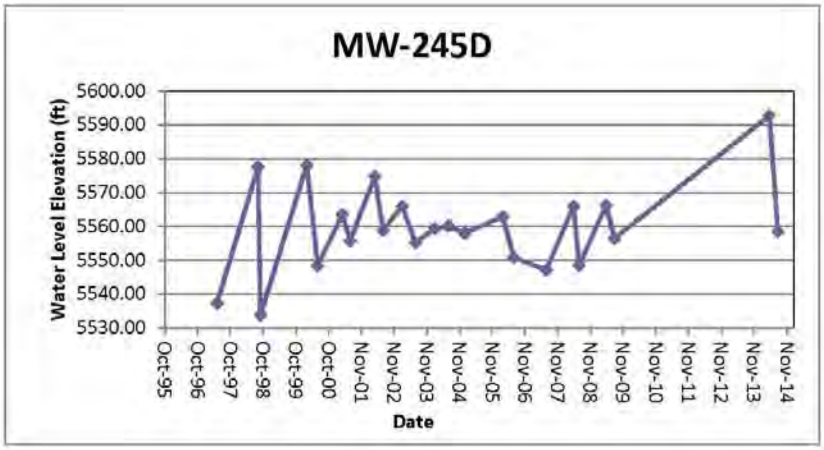
Appendix C. Water-level hydrographs Mount Haggin/Smelter HAA TI Zone.

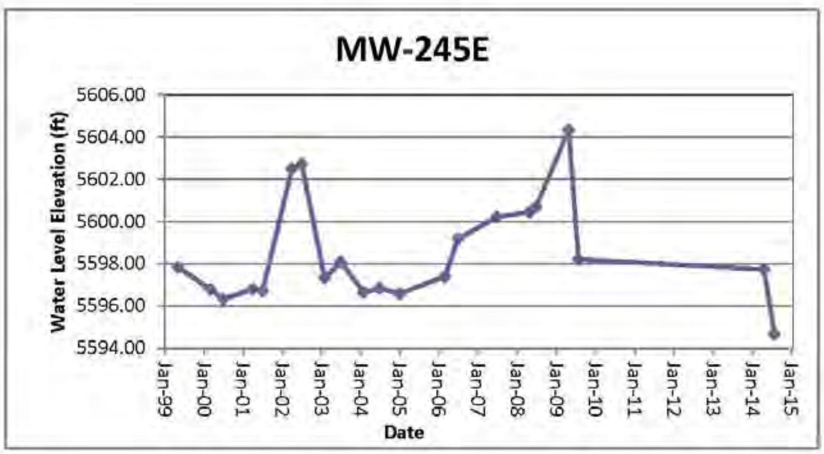




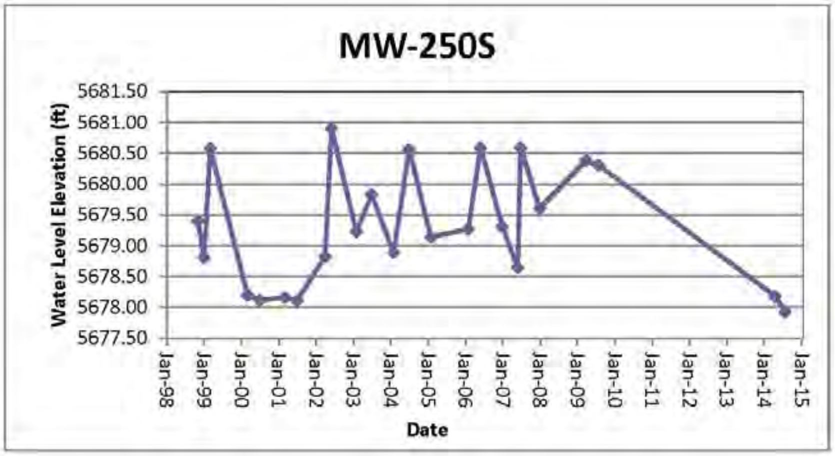


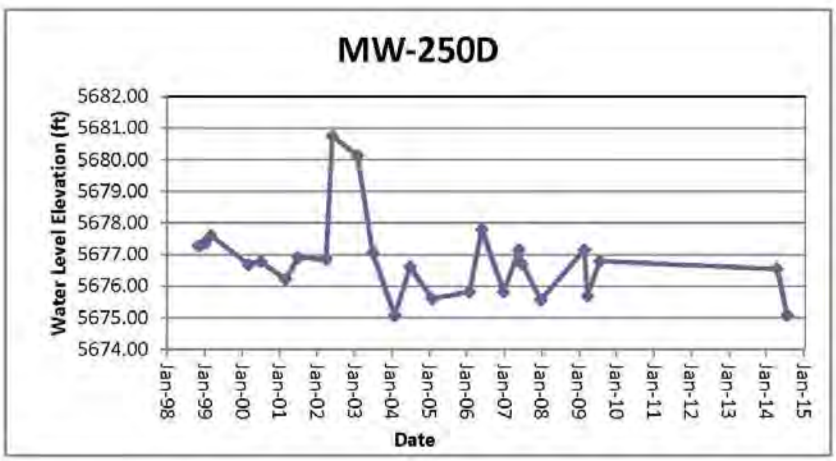
Appendix C. Water-level hydrographs Mount Haggin/Smelter HAA TI Zone.





Appendix C. Water-level hydrographs Mount Haggin/Smelter HAA TI Zone.





Appendix C. Water-level hydrographs Mount Haggin/Smelter HAA TI Zone.

Appendix D

Water-Quality Data for Smelter Hill/Opportunity Ponds Waste Management Area

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	51384	A1-BR-2	05/16/09	11:30	12.38	7.21	1,247	7.71	1,254	134.0	90.4	45.8	3.4	0.011	0.020	19.5
DISSOLVED	51384	A1-BR-2	09/10/09	15:30	13.64	7.47	1,376	7.78	1,389	146.0	92.2	50.6	3.3	<0.010	0.001	19.0
DISSOLVED	51384	A1-BR-2	04/11/14	15:36	15.57	7.48	1,515	7.49	1,629	142.4	95.5	50.7	3.3	<0.038 U	<0.005 U	18.0
DISSOLVED	51384	A1-BR-2	09/16/14	17:35	14.80	7.04	1,565	7.65	1,514	145.1	104.1	56.6	2.9	<0.038 U	<0.005 U	18.3
DISSOLVED	51383	A2-BR	04/25/09	15:25	10.26	7.28	900	7.56	927	109.0	21.3	62.8	3.1	<0.043 U	<0.031 U	19.8
DISSOLVED	51383	A2-BR	08/07/09	16:35	10.23	6.83	914	7.60	984	129.0	24.2	68.3	3.1	<0.002	<0.001	19.5
DISSOLVED	51383	A2-BR	03/20/14	13:05	9.50	7.14	1,100	7.56	1,340	135.9	26.5	66.4	3.0	<0.038 U	<0.005 U	17.9
DISSOLVED	51383	A2-BR	08/20/14	14:10	10.40	7.09	1,060	7.58	1,045	131.9	25.6	68.0	2.6	<0.038 U	<0.005 U	19.1
DISSOLVED	51382	B4-BR	04/24/09	20:30				7.33	1,824	168.0	8.2	296.0	1.8	<0.043 U	<0.031 U	14.8
DISSOLVED	51382	B4-BR	08/10/09	17:40	12.08	6.73	1,900	7.91	1,925	105.0	6.7	349.0	1.8	<0.010	0.012	13.6
DISSOLVED	51382	B4-BR	03/28/14	14:05	10.70	7.05	2,010	7.31	2,381	111.6	7.9	333.6	2.0	<0.038 U	0.007 J	13.6
DISSOLVED	51382	B4-BR	08/26/14	14:10	11.70	6.88	1,980	7.40	1,972	106.3	7.4	344.6	1.7	<0.038 U	0.017 J	13.7
DISSOLVED	249864	C2-AL	04/24/09	18:15	12.23	6.01	1,589	6.02	1,631	268.0	49.4	61.8	5.3	10.600	8.430	35.1
DISSOLVED	249864	C2-AL	08/07/09	15:28	13.56	5.51	1,678	6.18	1,671	283.0	50.3	70.8	5.4	10.600	8.670	36.4
DISSOLVED	249864	C2-AL	03/28/14	15:20	13.00	5.89	1,880	6.21	2,050	287.8	54.5	73.6	5.3	8.485	7.195	33.2
DISSOLVED	249864	C2-AL	08/26/14	12:50	13.70	5.79	1,895	6.32	1,851	292.8	55.6	73.9	5.6	9.540	9.072	33.6
DISSOLVED	249866	D3-AL-1	04/24/09	16:10	7.37	7.30	1,938	7.37	1,930	319.0	54.9	102.0	16.8	<0.043 U	<0.031 U	22.8
DISSOLVED	249866	D3-AL-1	08/07/09	14:12	9.47	7.02	1,958	7.56	1,986	344.0	53.8	109.0	15.6	<0.010	<0.001	21.4
DISSOLVED	249866	D3-AL-1	06/19/12	15:40	9.73	6.83	2,129	7.33	2,281	327.2	52.2	105.4	15.5	0.060 J	<0.005 U	21.2
DISSOLVED	249866	D3-AL-1	04/10/14	15:07	10.33	7.13	2,155	7.21	2,320	326.9	51.4	111.3	14.8	<0.038 U	<0.005 U	22.2
DISSOLVED	249866	D3-AL-1	08/26/14	11:40	9.00	7.05	2,310	7.62	2,270	388.8	65.2	101.9	16.2	<0.038 U	<0.005 U	22.3
DISSOLVED	249961	E2-AL1	05/16/09	10:00	9.93	7.05	695	7.67	690	104.0	16.3	36.1	4.9	0.006	0.002	23.2
DISSOLVED	249961	E2-AL1	09/08/09	13:20	13.63	7.64	759	7.75	752	109.0	16.8	39.3	4.8	0.008	0.003	22.4
DISSOLVED	249961	E2-AL1	04/10/14	16:33	10.40	7.56	855	7.51	970	123.2	18.1	41.0	4.6	<0.015 U	<0.002 U	21.7
DISSOLVED	249961	E2-AL1	09/11/14	16:20	11.00	7.19	850	7.78	808	117.2	18.5	41.5	4.5	0.030 J	0.003 J	21.9
DISSOLVED	249791	MW-24	04/13/09	12:45	8.11	7.21	759	7.25	799	120.0	21.1	7.9	2.7	1.280	0.079	11.7
DISSOLVED	249791	MW-24	08/25/09	16:40	13.55	6.70	1,027	8.14	1,111	203.0	28.9	10.4	3.0	<0.010	0.002	22.6
DISSOLVED	249791	MW-24	03/27/14	15:35	6.70	7.63	400	7.68	430	63.8	12.2	6.6	1.8	4.058	0.012 J	10.1
DISSOLVED	249791	MW-24	08/25/14	13:25	9.30	7.13	435	7.66	417	69.3	12.8	6.4	2.1	0.360	0.008 J	10.1
DISSOLVED	249792	MW-25	04/13/09	16:15	7.38	6.96	901	7.06	904	192.0	25.0	8.5	3.0	1.350	6.160	21.3
DISSOLVED	249792	MW-25	08/25/09	15:41	9.27	6.61	1,034	7.35	1,029	187.0	24.4	8.7	2.9	1.050	5.790	20.1
DISSOLVED	249792	MW-25	03/27/14	13:00	7.50	6.90	860	7.20	982	150.3	22.8	8.0	2.6	0.606	1.892	17.5
DISSOLVED	249792	MW-25	09/04/14	15:30	8.20	7.05	1,030	7.14	1,038	194.4	26.9	10.2	2.9	0.666	3.421	19.6

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Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
A1-BR-2	05/16/09	181.5	0.0	530.7	46.6	7.9	1.9	<0.5	<0.20	57.60	4959	80.70	30.70	<1.01	<500	0.32
A1-BR-2	09/10/09	178.1	0.0	596.4	63.7	10.1	1.8	<0.5	0.33	<38.00	4901	116.00	29.20	<1.00	<500	0.40
A1-BR-2	04/11/14	181.5	0.0	585.5	49.0	7.4	2.3	0.030 J	<0.250 U	<5.000 U	4605	76.30	27.70	<0.250 U	202.00	<0.250 U
A1-BR-2	09/16/14	183.5	0.0	702.1	49.7	7.6	2.0	0.030 J	<0.250 U	<5.000 U	4867	80.87	29.47	<0.250 U	212.00	<0.250 U
A2-BR	04/25/09	231.0	0.0	324.0	8.5	2.0	0.8	<0.5	<0.21	<38.20	1456	34.40	32.10	<0.91	<500	<0.24 U
A2-BR	08/07/09	257.2	0.0	292.3	15.9	3.2	0.7	<0.5	<0.04	<7.60	1052	33.40	32.60	<0.20	<500	0.05
A2-BR	03/20/14	278.9	0.0	350.4	12.7	2.5	0.6	0.040 J	<0.250 U	<5.000 U	1031	34.51	34.60	<0.250 U	110.00	<0.250 U
A2-BR	08/20/14	270.8	0.0	352.8	13.9	4.0	0.8	0.020 J	<0.250 U	<5.000 U	1014	39.90	36.49	<0.250 U	111.00	<0.250 U
B4-BR	04/24/09	162.9	0.0	878.9	22.7	5.5	<0.5	<0.5	<0.42	<76.41	1161	82.30	29.80	<1.82	<500	62
B4-BR	08/10/09	196.8	0.0	750.1	30.9	6.2	<0.5	<0.5	<0.20	<38.00	1125	69.80	25.40	<1.00	<500	66
B4-BR	03/28/14	185.6	0.0	807.4	30.3	6.3	0.4	0.030 J	<0.250 U	<5.000 U	1173	59.87	25.55	<0.250 U	132.00	55
B4-BR	08/26/14	174.0	0.0	826.7	26.4	7.0	0.4	0.030 J	<0.250 U	<5.000 U	1217	83.31	26.98	<0.250 U	139.00	64
C2-AL	04/24/09	85.9	0.0	969.2	12.5	<0.5	1.2	<0.5	<0.42	81.27	1476	42.10	17.70	<1.82	<500	0.95
C2-AL	08/07/09	99.6	0.0	957.9	14.3	<0.5	1.3	<0.5	<0.04	71.30	1447	25.80	17.50	0.99	<500	0.91
C2-AL	03/28/14	121.4	0.0	977.8	15.7	<0.010 U	1.5	<0.020 U	<0.250 U	51.25	1312	32.47	17.17	0.718 J	81.00	1.07
C2-AL	08/26/14	129.1	0.0	1020.0	15.6	0.050 J	1.4	<0.020 U	<0.250 U	88.75	1355	47.13	20.27	0.800 J	<10.000 U	1.41
D3-AL-1	04/24/09	233.3	0.0	1046.0	22.5	2.5	2.3	<0.5	<0.42	<76.41	90	92.80	12.10	<1.82	<500	<0.49 U
D3-AL-1	08/07/09	208.6	0.0	1009.0	23.7	2.5	2.3	<0.5	<0.04	<38.00	69	85.00	12.20	<1.00	<500	<0.25
D3-AL-1	06/19/12	216.2	0.0	1074.0	24.2	2.7	2.4	<0.020 U	<0.250 U	69.72	68	86.70	11.19	<0.250 U	106.00	<0.250 U
D3-AL-1	04/10/14	291.7	0.0	1018.0	17.5	4.7	2.9	<0.020 U	<0.250 U	<5.000 U	78	98.55	10.85	<0.250 U	107.00	<0.250 U
D3-AL-1	08/26/14	237.1	0.0	1179.0	30.9	2.4	2.5	<0.020 U	<0.250 U	<5.000 U	64	99.14	13.86	<0.250 U	152.00	<0.250 U
E2-AL1	05/16/09	165.0	0.0	252.7	15.5	3.3	1.1	<0.5	<0.04	12.00	1.13	22.40	21.10	<0.20	<500	0.08
E2-AL1	09/08/09	179.6	0.0	231.2	15.1	3.3	1.0	<0.5	<0.04	14.10	0.96	20.40	21.10	<0.20	<500	0.11
E2-AL1	04/10/14	184.5	0.0	305.0	15.3	5.0	1.2	<0.020 U	<0.100 U	21.74	1.27	25.15	21.23	<0.100 U	132.00	<0.100 U
E2-AL1	09/11/14	178.1	0.0	293.3	15.9	5.3	1.0	0.020 J	<0.100 U	60.09	1.13	23.56	21.49	<0.100 U	76.00	<0.100 U
MW-24	04/13/09	188.5	0.0	240.7	<5.0	<0.5	0.6	<0.5	<0.35	<30.41	<0.37 U	8.63	46.70	<0.96	<500	<0.24 U
MW-24	08/25/09	314.8	0.0	391.8	6.8	<0.5	<0.5	<0.5	<0.20	<38.00	0.84	14.80	22.10	<1.00	<500	<0.25
MW-24	03/27/14	214.9	0.0	48.7	3.2	0.1	0.7	<0.020 U	<0.100 U	3.260 J	0.250 J	8.01	41.77	<0.100 U	<10.000 U	<0.100 U
MW-24	08/25/14	220.4	0.0	61.9	3.7	0.1	0.7	<0.020 U	<0.100 U	<2.000 U	0.62	10.86	45.17	<0.100 U	<10.000 U	<0.100 U
MW-25	04/13/09	266.4	0.0	380.6	<5.0	<0.5	0.6	<0.5	<0.35	<30.41	0.53	13.60	12.90	<0.96	<500	<0.24 U
MW-25	08/25/09	284.3	0.0	393.7	5.5	<0.5	0.6	<0.5	<0.20	<38.00	0.52	12.30	12.50	<1.00	<500	<0.25
MW-25	03/27/14	283.6	0.0	270.8	4.6	0.1	0.6	0.020 J	<0.100 U	<2.000 U	0.59	7.45	17.85	<0.100 U	<10.000 U	<0.100 U
MW-25	09/04/14	297.5	0.0	391.8	4.5	0.7	0.5	<0.020 U	<0.250 U	<5.000 U	0.510 J	16.85	23.66	<0.250 U	<10.000 U	<0.250 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
A1-BR-2	05/16/09	<0.51	0.88	3.28	16.80	1.15	1.33	<0.77	<0.24	20.40	<0.21	4680.00	10.20	<0.17	2.11	13.30	9.00
A1-BR-2	09/10/09	0.58	0.52	<2.00	16.40	1.14	<0.50	<0.78	<0.24	19.40	<0.21	4691.00	6.28	<0.17	2.13	13.10	10.90
A1-BR-2	04/11/14	<0.250 U	<0.250 U	<1.250 U	13.630 J	0.600 J	2.45	<0.150 U	<0.250 U	19.18	<0.250 U	4620.51	6.16	<0.250 U	1.93	9.44	2.310 J
A1-BR-2	09/16/14	<0.250 U	<0.250 U	<1.250 U	15.600 J	0.820 J	1.68	<0.150 U	<0.250 U	17.77	<0.250 U	4648.23	126.88	<0.250 U	2.12	11.93	9.60
A2-BR	04/25/09	<0.29	<0.20	<1.99 U	24.40	5.59	<0.57	<0.77 U	<2.81	5.15	<0.21	412.00	1.85	<0.17	8.89	8.55	<4.71 U
A2-BR	08/07/09	0.15	0.34	0.83	16.40	4.76	<0.10	<0.15	1.59	4.02	1.59	446.00	2.64	<0.03	10.90	6.65	<0.90
A2-BR	03/20/14	<0.250 U	<0.250 U	<1.250 U	18.520 J	4.20	1.020 J	<0.150 U	1.45	5.44	<0.250 U	459.46	2.40	<0.250 U	10.24	5.23	<1.250 U
A2-BR	08/20/14	<0.250 U	0.540 J	<1.250 U	24.380 J	3.18	<0.250 U	<0.150 U	2.05	5.39	<0.250 U	436.58	84.42	<0.250 U	11.95	7.26	<1.250 U
B4-BR	04/24/09	<0.58	<0.40	418.00	35.20	1.69	6.77	<1.54 U	1.38	43.50	<0.42	123.00	5.16	<0.33	31.30	12.50	763.00
B4-BR	08/10/09	0.79	<0.20	495.00	27.20	1.68	7.48	<0.76	1.28	47.00	<0.21	107.00	9.41	<0.17	42.20	11.90	8.26
B4-BR	03/28/14	<0.250 U	<0.250 U	402.58	29.03	1.48	6.76	<0.150 U	1.060 J	46.50	<0.250 U	115.27	5.23	<0.250 U	33.86	7.57	663.21
B4-BR	08/26/14	0.730 J	<0.250 U	519.76	39.42	2.86	6.53	<0.150 U	1.62	45.45	<0.250 U	112.13	104.99	<0.250 U	49.60	12.49	726.49
C2-AL	04/24/09	34.40	<0.40	<3.98 U	76.30	1.58	34.10	<1.54 U	<0.49	<1.05	<0.42	2155.00	5.73	<0.33	0.50	<0.78	8312
C2-AL	08/07/09	28.00	<0.04	0.81	48.60	1.63	26.60	<0.15	0.05	0.40	0.05	2035.00	7.52	0.05	0.54	0.15	3605
C2-AL	03/28/14	27.85	<0.250 U	6.45	52.76	1.39	30.22	<0.150 U	<0.250 U	<0.250 U	<0.250 U	2321.75	5.49	<0.250 U	<0.250 U	<0.250 U	8578
C2-AL	08/26/14	37.20	<0.250 U	<1.250 U	83.92	2.43	36.88	<0.150 U	<0.250 U	<0.250 U	<0.250 U	2403.33	252.76	<0.250 U	0.770 J	<0.250 U	9119
D3-AL-1	04/24/09	<0.58	<0.40	<3.98 U	161.00	29.10	<1.14	<1.54 U	2.94	5.77	<0.42	4490.00	7.16	<0.33	5.55	2.02	<9.42 U
D3-AL-1	08/07/09	<0.50	<0.20	<2.00	143.00	31.40	<0.50	<0.76	2.70	0.30	2.70	41.85	12.40	<0.17	5.91	1.87	<4.50
D3-AL-1	06/19/12	<0.250 U	<0.250 U	4.04	140.12	27.74	4.79	<0.100 U	2.17	5.00	<0.250 U	4194.03	9.97	<0.250 U	7.19	1.45	1.680 J
D3-AL-1	04/10/14	<0.250 U	<0.250 U	<1.250 U	146.04	21.76	2.48	<0.150 U	2.26	5.88	<0.250 U	4184.38	9.03	<0.250 U	6.09	1.61	<1.250 U
D3-AL-1	08/26/14	0.990 J	<0.250 U	6.15	175.10	28.02	<0.250 U	<0.150 U	3.12	6.36	<0.250 U	5134.46	327.81	<0.250 U	8.04	1.80	<1.250 U
E2-AL1	05/16/09	0.83	0.38	1.51	51.50	8.37	0.12	<0.15	0.23	1.19	<0.04	1327.00	3.93	<0.03	1.03	0.68	6.89
E2-AL1	09/08/09	0.20	0.38	0.87	48.80	7.69	<0.10	<0.16	0.48	1.29	0.05	1290.00	2.67	<0.03	1.24	0.63	<0.90
E2-AL1	04/10/14	<0.100 U	0.320 J	<0.500 U	55.42	6.18	1.02	<0.060 U	0.300 J	1.62	<0.100 U	1435.97	2.81	<0.100 U	1.41	0.59	<0.500 U
E2-AL1	09/11/14	0.310 J	0.270 J	1.330 J	59.41	6.71	0.69	<0.060 U	0.300 J	1.21	<0.100 U	1351.89	85.25	<0.100 U	1.28	0.63	4.33
MW-24	04/13/09	<0.21	<0.43	<2.05 U	4.34	4.31	0.72	<0.99 U	<0.25	<1.02	<0.24	197.00	2.45	<0.16	11.30	<0.25	<6.52 U
MW-24	08/25/09	<0.50	<0.20	<2.00	6.60	0.53	<0.50	<0.76	<0.24	<0.50	<0.21	148.00	3.30	<0.17	2.69	0.85	<4.50
MW-24	03/27/14	<0.100 U	<0.100 U	4.12	3.700 J	1.79	0.380 J	<0.060 U	<0.100 U	0.55	<0.100 U	111.24	0.67	<0.100 U	6.16	0.290 J	<0.500 U
MW-24	08/25/14	0.300 J	<0.100 U	<0.500 U	5.000 J	8.45	<0.100 U	<0.060 U	0.260 J	0.380 J	<0.100 U	125.58	48.27	<0.100 U	10.06	0.390 J	<0.500 U
MW-25	04/13/09	0.38	<0.43	<2.05 U	6.79	1.96	<0.41	<0.99 U	<0.25	<1.02	<0.24	191.00	3.82	<0.16	2.71	0.32	<6.52 U
MW-25	08/25/09	0.58	<0.20	<2.00	6.16	1.81	<0.50	<0.76	<0.24	<0.50	<0.21	159.00	3.30	<0.17	2.84	<0.50	<4.50
MW-25	03/27/14	<0.100 U	<0.100 U	<0.500 U	5.300 J	1.97	1.31	<0.060 U	<0.100 U	<0.100 U	<0.100 U	155.11	1.59	<0.100 U	3.83	0.330 J	<0.500 U
MW-25	09/04/14	0.860 J	<0.250 U	5.40	5.400 J	1.73	2.02	<0.150 U	<0.250 U	<0.250 U	<0.250 U	185.45	143.43	<0.250 U	4.93	<0.250 U	<1.250 U

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
A1-BR-2	05/16/09	<0.25	<0.10	18.50	<0.25	<0.11	<0.20	<0.26	2.01	<0.11	12.20	<0.12	0.28	<0.5
A1-BR-2	09/10/09	<0.25	0.15	18.20	<0.25	0.13	<0.20	<0.26	1.58	0.17	11.20	<0.12	<0.25	<0.5
A1-BR-2	04/11/14	<0.250 U	<0.250 U	15.50	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.46	<0.250 U	9.59	<0.250 U	<0.250 U	<0.010 U
A1-BR-2	09/16/14	<0.250 U	<0.250 U	17.26	0.960 J	<0.250 U	<0.250 U	<0.250 U	4.70	<0.250 U	9.77	<0.250 U	<0.250 U	<0.010 U
A2-BR	04/25/09	<0.24	<0.10	0.27	<0.25	<0.11	<0.22	<0.26	<0.32	<0.11	6.18	<0.12	0.43	<0.5
A2-BR	08/07/09	<0.05	<0.02	0.25	<0.05	<0.02	<0.04	<0.05	0.13	<0.02	5.90	<0.02	0.49	<0.5
A2-BR	03/20/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.06	<0.250 U	<0.250 U	<0.010 U
A2-BR	08/20/14	<0.250 U	<0.250 U	<0.250 U	1.52	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.24	<0.250 U	<0.250 U	<0.010 U
B4-BR	04/24/09	<0.47	<0.20	<0.42	<0.47	<0.22	<0.44	<0.51	<0.64	<0.21	5.19	<0.24	<0.51	<0.5
B4-BR	08/10/09	<0.25	<0.10	<0.21	<0.25	<0.11	<0.20	<0.26	<0.50	<0.11	5.37	<0.12	<0.25	<0.5
B4-BR	03/28/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	4.77	<0.250 U	<0.250 U	<0.010 U
B4-BR	08/26/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.730 J	<0.250 U	<0.250 U	<0.250 U	5.70	<0.250 U	0.690 J	<0.010 U
C2-AL	04/24/09	<0.47	0.61	4.58	<0.47	0.36	<0.44	<0.51	<0.64	<0.21	22.90	<0.24	<0.51	<0.5
C2-AL	08/07/09	<0.05	0.69	4.65	<0.05	0.42	<0.04	0.33	0.65	0.08	23.70	<0.02	<0.05	<0.5
C2-AL	03/28/14	<0.250 U	<0.250 U	3.92	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.900 J	<0.250 U	21.93	<0.250 U	<0.250 U	<0.010 U
C2-AL	08/26/14	<0.250 U	0.680 J	5.58	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.36	<0.250 U	26.10	<0.250 U	<0.250 U	<0.010 U
D3-AL-1	04/24/09	<0.47	<0.20	10.40	<0.47	<0.22	<0.44	<0.51	0.94	<0.21	55.90	<0.24	<0.51	<0.5
D3-AL-1	08/07/09	<0.25	<0.10	10.00	<0.25	<0.11	<0.20	<0.26	1.27	<0.11	52.60	<0.12	<0.25	<0.5
D3-AL-1	06/19/12	<0.250 U	<0.250 U	8.25	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.16	<0.250 U	44.41	<0.250 U	<0.250 U	<0.010 U
D3-AL-1	04/10/14	<0.250 U	<0.250 U	9.25	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.190 J	<0.250 U	49.81	<0.250 U	<0.250 U	<0.010 U
D3-AL-1	08/26/14	<0.250 U	<0.250 U	11.51	<0.250 U	<0.250 U	<0.250 U	<0.250 U	4.89	<0.250 U	59.60	<0.250 U	<0.250 U	<0.010 U
E2-AL1	05/16/09	<0.05	0.06	2.62	<0.05	0.03	<0.04	<0.05	0.56	<0.02	20.50	<0.02	0.10	<0.5
E2-AL1	09/08/09	<0.05	0.04	2.54	<0.05	0.03	<0.04	<0.05	0.44	<0.02	20.20	<0.02	0.09	<0.5
E2-AL1	04/10/14	<0.100 U	<0.100 U	2.44	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.400 J	<0.100 U	18.21	<0.100 U	<0.100 U	<0.010 U
E2-AL1	09/11/14	<0.100 U	<0.100 U	2.44	0.71	<0.100 U	<0.100 U	<0.100 U	1.41	<0.100 U	16.83	<0.100 U	<0.100 U	<0.010 U
MW-24	04/13/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	0.57	<0.09	<0.15	<0.5
MW-24	08/25/09	<0.25	<0.10	<0.21	<0.25	<0.11	<0.20	<0.26	<0.50	<0.11	0.91	<0.12	<0.25	<0.5
MW-24	03/27/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.450 J	<0.100 U	<0.100 U	<0.010 U
MW-24	08/25/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.63	<0.100 U	<0.100 U	<0.010 U
MW-25	04/13/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	0.67	<0.09	<0.15	<0.5
MW-25	08/25/09	<0.25	<0.10	<0.21	<0.25	<0.11	<0.20	<0.26	<0.50	<0.11	0.64	<0.12	<0.25	<0.5
MW-25	03/27/14	<0.100 U	<0.100 U	<0.100 U	0.260 J	<0.100 U	<0.100 U	0.220 J	<0.100 U	<0.100 U	0.67	<0.100 U	0.210 J	<0.010 U
MW-25	09/04/14	<0.250 U	<0.250 U	<0.250 U	0.820 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249793	MW-26	04/13/09	17:20	5.46	6.64	1,736	6.80	1,841	449.0	43.6	9.6	6.4	4.080	15.500	22.0
DISSOLVED	249793	MW-26	08/25/09	13:44	9.89	6.31	1,953	7.34	1,883	429.0	43.4	10.1	7.0	2.720	15.300	21.5
DISSOLVED	249793	MW-26	08/25/09	13:49	9.89	6.31	1,953	7.44	1,944	474.0	44.1	9.8	6.9	2.650	14.000	22.9
DISSOLVED	249793	MW-26	04/01/10	14:22	6.10	6.57	199	7.12	1,834	396.0	44.2	9.3	5.9	1.930	13.600	19.4
DISSOLVED	249793	MW-26	07/16/10	13:02	9.96	6.47	196	7.22	2,070	407.0	46.3	9.2	6.5	1.970	14.100	19.8
TOTAL RECOVERABLE	249793	MW-26	07/16/10	13:02	9.96	6.47	196			465.0	48.5	10.3	6.9	2.040	15.300	
DISSOLVED	249793	MW-26	04/06/11	14:51	5.95	6.74	186	6.73	1,668	436.0	48.1	10.5	6.2	3.510	13.900	19.6
TOTAL RECOVERABLE	249793	MW-26	04/06/11	14:51	5.95	6.74	186			430.0	44.8	9.6	5.8	5.000	13.000	
DISSOLVED	249793	MW-26	07/26/11	13:50	9.12	5.85	2,074	6.61	1,667	431.4	47.3	9.7	6.6	1.505	14.328	20.1
TOTAL RECOVERABLE	249793	MW-26	07/26/11	13:50	9.12	5.85	2,074			389.9	46.4	9.7	6.4	1.904	13.892	
DISSOLVED	249793	MW-26	03/07/12	14:17	5.86	6.00	1,879	6.55	1,946	349.9	40.4	9.6	5.5	5.244	13.021	20.6
TOTAL RECOVERABLE	249793	MW-26	03/07/12	14:17	5.86	6.00	1,879			405.8	46.8	11.3	6.5	7.532	13.751	
DISSOLVED	249793	MW-26	08/27/12	13:17	10.64	6.29	1,957	6.59	1,698	369.4	45.9	10.3	6.9	3.078	12.434	20.6
DISSOLVED	249793	MW-26	02/28/13	15:07	6.26	6.92	1,824	6.60	1,861	357.6	37.9	9.1	5.3	2.459	12.180	20.1
DISSOLVED	249793	MW-26	08/14/13	12:40	10.12	6.26	1,825	6.72	1,858	392.6	40.5	9.8	6.3	2.060	12.977	21.4
TOTAL RECOVERABLE	249793	MW-26	08/14/13	12:40	10.12	6.26	1,825			361.0	37.2	9.0	6.1	2.304	12.525	
DISSOLVED	249793	MW-26	03/27/14	11:05	5.60	6.48	1,755	6.82	1,927	358.9	38.2	9.4	5.6	1.437	10.707	19.9
DISSOLVED	249793	MW-26	08/22/14	12:30	9.90	6.52	1,750	6.84	1,673	361.4	38.8	10.0	6.2	1.835	12.469	21.2
DISSOLVED	249790	MW-26M	04/14/09	10:15	6.98	6.51	1,543	6.86	1,571	377.0	38.4	9.3	5.9	0.025	11.700	21.2
DISSOLVED	249790	MW-26M	08/25/09	13:50	8.06	6.64	1,680	7.14	1,685	351.0	37.6	9.7	6.0	<0.012	10.000	20.4
DISSOLVED	249790	MW-26M	04/01/10	13:41	7.95	6.60	2	7.90	1,817	347.0	39.9	8.9	5.4	<0.001	11.300	19.0
DISSOLVED	249790	MW-26M	07/16/10	13:47	9.34	6.65	179	7.07	1,818	340.0	40.0	9.0	6.0	0.012	11.200	19.4
TOTAL RECOVERABLE	249790	MW-26M	07/16/10	13:47	9.34	6.65	179			452.0	46.0	11.1	7.0	0.060	14.100	
DISSOLVED	249790	MW-26M	04/06/11	15:47	7.62	6.74	176	6.80	1,626	364.0	41.5	9.5	5.1	<0.010	10.500	18.3
TOTAL RECOVERABLE	249790	MW-26M	04/06/11	15:47	7.62	6.74	176			431.0	47.4	10.4	6.1	0.049	12.600	
TOTAL RECOVERABLE	249790	MW-26M	07/26/11	15:21	8.60	6.37	1,966			393.0	49.1	10.7	6.8	0.146	12.153	
DISSOLVED	249790	MW-26M	07/26/11	15:21	8.60	6.37	1,966	6.64	1,590	398.7	46.2	10.1	6.1	<0.002 U	11.034	20.2
DISSOLVED	249790	MW-26M	03/07/12	15:55	7.07	6.32	1,817	6.67	1,888	325.6	39.5	8.8	5.2	0.027 J	10.666	19.8
TOTAL RECOVERABLE	249790	MW-26M	03/07/12	15:55	7.07	6.32	1,817			368.1	48.2	11.3	6.5	0.064 J	12.681	
DISSOLVED	249790	MW-26M	08/27/12	14:20	8.72	6.41	1,792	6.65	1,578	333.7	43.7	10.4	6.8	<0.038 U	9.757	20.1
DISSOLVED	249790	MW-26M	02/28/13	16:13	7.74	6.86	1,761	6.65	1,816	339.8	38.6	8.9	5.1	<0.038 U	9.787	19.5
DISSOLVED	249790	MW-26M	02/28/13	16:13	7.74	6.86	1,761									
DISSOLVED	249790	MW-26M	08/14/13	14:36	8.88	6.27	1,720	6.75	1,736	351.3	38.9	9.9	6.0	<0.038 U	9.567	21.0
TOTAL RECOVERABLE	249790	MW-26M	08/14/13	14:36	8.88	6.27	1,720			321.1	40.0	10.5	6.3	<0.075 U	9.487	
DISSOLVED	249790	MW-26M	08/14/13	14:39	8.88	6.27	1,720	6.77	1,729	321.5	39.7	10.5	6.0	<0.038 U	9.221	20.9
TOTAL RECOVERABLE	249790	MW-26M	08/14/13	14:39	8.88	6.27	1,720			301.3	37.4	9.7	6.0	<0.075 U	9.491	
DISSOLVED	249790	MW-26M	03/27/14	12:00	7.40	6.51	1,805	6.86	1,943	367.0	41.4	9.6	5.2	<0.038 U	9.465	19.2
DISSOLVED	249790	MW-26M	08/22/14	13:40	8.70	6.65	1,720	6.85	1,651	348.9	40.0	10.1	6.0	<0.038 U	10.058	21.1

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Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-26	04/13/09	388.4	0.0	963.8	<5.0	<0.5	1.3	<0.5	<0.70	<60.82	<0.74 U	15.00	11.90	<1.93	<500	<0.48 U
MW-26	08/25/09	453.8	0.0	1011.0	6.5	<0.5	1.4	<0.5	<0.20	<38.00	<0.50	16.10	13.10	<1.00	<500	<0.25
MW-26	08/25/09	453.8	0.0	986.2	6.5	<0.5	1.4	<0.5	<0.20	<38.00	<0.50	13.70	13.10	<1.00	<500	<0.25
MW-26	04/01/10	323.7	0.0	986.6	5.4	<0.05	1.6	<0.05	<0.10	2.84	0.59	9.23	13.60	<0.10	56.00	<0.10
MW-26	07/16/10	404.0	0.0	933.7	4.9	<0.05	1.7	<0.05	<0.2	3.05	0.40	10.80	15.10	<0.2	<50	<0.2
MW-26	07/16/10								<0.5	13.20	0.91		15.20	<0.5		1.25
MW-26	04/06/11	376.8	0.0	945.6	4.4	<0.05	1.4	<0.1	<1.0	<10.0	<0.9	12.80	12.90	<1.0	<50	<1.0
MW-26	04/06/11								<0.5	9.48	0.50	12.20	14.00	<0.5		<0.5
MW-26	07/26/11	394.0	0.0	984.3	4.6	0.1	1.6	<0.020 U	<0.500 U	182.72	1.300 J	15.12	15.43	1.930 J	<10.000 U	1.020 J
MW-26	07/26/11								<0.500 U	88.35	0.570 J		15.38	<0.500 U		0.860 J
MW-26	03/07/12	366.6	0.0	808.1	4.2	<0.010 U	1.5	<0.020 U	<0.250 U	103.57	0.590 J	15.02	11.35	<0.250 U	<10.000 U	<0.250 U
MW-26	03/07/12								<0.500 U	111.08	8.90	14.85	12.63	<0.500 U		1.750 J
MW-26	08/27/12	361.3	0.0	864.7	4.2	<0.010 U	1.6	<0.020 U	<0.250 U	<1.000 U	0.390 J	17.05	14.28	<0.250 U	<10.000 U	<0.250 U
MW-26	02/28/13	355.7	0.0	924.3	4.4	<0.010 U	1.6	<0.020 U	<0.250 U	3.000 J	<0.250 U	9.73	12.06	<0.250 U	<10.000 U	<0.250 U
MW-26	08/14/13	397.4	0.0	884.3	4.2	0.1	1.8	<0.020 U	<0.250 U	3.420 J	0.730 J	15.14	14.34	<0.250 U	<10.000 U	<0.250 U
MW-26	08/14/13									18.77	<0.500 U	16.18	13.83	<0.500 U		<0.500 U
MW-26	03/27/14	407.7	0.0	731.3	4.3	0.010 J	1.8	0.020 J	<0.250 U	<5.000 U	<0.250 U	10.43	12.36	<0.250 U	<10.000 U	<0.250 U
MW-26	08/22/14	406.7	0.0	789.9	4.6	0.2	1.9	<0.020 U	<0.250 U	<5.000 U	1.24	20.03	15.06	<0.250 U	<10.000 U	0.540 J
MW-26M	04/14/09	353.3	0.0	840.7	<5.0	<0.5	1.1	<0.5	<0.70	<60.82	<0.74 U	12.50	6.22	<1.93	<500	<0.48 U
MW-26M	08/25/09	313.9	0.0	745.3	6.0	<0.5	1.2	<0.5	<0.50	<89.00	<1.00	15.60	8.56	<0.50	<500	<1.00
MW-26M	04/01/10	339.2	0.0	894.7	4.9	0.1	1.4	0.4	<0.10	1.82	0.70	8.23	8.51	<0.10	50.00	0.14
MW-26M	07/16/10	344.0	0.0	834.9	4.8	0.2	1.5	0.4	<0.2	2.22	0.60	10.20	9.92	<0.2	<50	<0.2
MW-26M	07/16/10								<0.5	8.45	0.56	16.80	16.00	<0.5		<0.5
MW-26M	04/06/11	366.2	0.0	858.6	4.4	0.1	1.2	0.3	<1.0	<10.0	<0.9	11.70	9.04	<1.0	<50	<1.0
MW-26M	04/06/11								<0.5	7.74	0.56	11.40	16.30	<0.5		<0.5
MW-26M	07/26/11								<0.500 U	55.40	0.710 J		15.71	<0.500 U		<0.500 U
MW-26M	07/26/11	374.2	0.0	913.1	4.7	0.2	1.3	0.5	<0.500 U	90.52	0.640 J	14.20	11.17	<0.500 U	<10.000 U	<0.500 U
MW-26M	03/07/12	351.6	0.0	773.9	4.2	<0.010 U	1.3	0.4	<0.250 U	83.05	1.010 J	12.55	9.04	<0.250 U	<10.000 U	0.270 J
MW-26M	03/07/12								<0.500 U	178.62	14.51	13.09	12.59	<0.500 U		<0.500 U
MW-26M	08/27/12	334.4	0.0	768.0	4.1	0.2	1.4	<0.020 U	<0.250 U	<1.000 U	0.520 J	15.22	10.51	<0.250 U	<10.000 U	<0.250 U
MW-26M	02/28/13	343.8	0.0	797.7	4.4	0.2	1.4	0.2	<0.250 U	3.950 J	0.530 J	7.84	9.61	<0.250 U	<10.000 U	<0.250 U
MW-26M	02/28/13															
MW-26M	08/14/13	375.6	0.0	770.6	4.0	0.2	1.5	0.2	<0.250 U	2.220 J	0.510 J	13.37	10.34	<0.250 U	<10.000 U	<0.250 U
MW-26M	08/14/13									9.820 J	<0.500 U	14.13	10.19	<0.500 U		<0.500 U
MW-26M	08/14/13	375.7	0.0	785.4	4.1	0.2	1.5	0.2	<0.250 U	2.130 J	0.540 J	13.41	10.21	<0.250 U	<10.000 U	<0.250 U
MW-26M	08/14/13									4.390 J	<0.500 U	15.17	10.50	<0.500 U		<0.500 U
MW-26M	03/27/14	407.2	0.0	757.0	4.4	0.1	1.5	0.1	<0.250 U	<5.000 U	0.510 J	9.19	10.35	<0.250 U	<10.000 U	<0.250 U
MW-26M	08/22/14	398.9	0.0	773.3	4.7	0.2	1.6	0.1	<0.250 U	<5.000 U	0.630 J	17.10	11.69	<0.250 U	<10.000 U	<0.250 U

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Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-26	04/13/09	3.29	<0.86 U	<4.11	11.70	2.33	6.24	<1.97 U	<0.50	<2.03	<0.47	451.00	9.94	<0.33	24.00	<0.51	<13.04 U
MW-26	08/25/09	1.46	<0.20	<2.00	11.50	2.44	<0.50	<0.76	<0.24	<0.50	<0.21	444.00	8.23	<0.17	33.00	<0.50	<4.50
MW-26	08/25/09	1.50	<0.20	<2.00	11.30	2.46	<0.50	<0.76	<0.24	<0.50	<0.21	449.00	8.52	<0.17	33.10	<0.50	<4.50
MW-26	04/01/10	1.79	<0.10	0.65	7.07	2.96	0.31	<0.10	<0.20	0.26	<0.10	474.00	7.78	<0.10	48.70	0.28	<0.51
MW-26	07/16/10	1.80	<0.2	0.60	9.04	3.01	0.43	<0.2	<0.2	<0.2	<0.2	574.00	7.45	<0.2	59.00	0.33	<1.0
MW-26	07/16/10	8.31	0.71	3.45	10.90	4.30	14.70	<0.5	<0.5	<0.5		555.00	7.79	<0.5	52.80	1.12	4.79
MW-26	04/06/11	1.62	<1.0	<2.5	<10.0	2.41	2.33	<1.0	<1.0	<0.9	<2.5	488.00	14.90	<1.0	43.50	<1.0	<2.5
MW-26	04/06/11	3.67	<0.5	1.43	5.61	3.05	7.95	<0.5	<0.5	<0.5		550.00	11.80	<0.5	59.00	0.70	<1.3
MW-26	07/26/11	2.450 J	0.560 J	3.07	12.01	3.40	2.77	1.08	<0.500 U	<0.500 U	<0.500 U	525.54	12.70	0.800 J	52.09	0.840 J	8.53
MW-26	07/26/11	2.300 J	<0.500 U	1.700 J	13.03	2.84	9.11	<0.200 U	<0.500 U	<0.500 U	<0.500 U	531.83	28.22	<0.500 U	53.69	<0.500 U	<1.000 U
MW-26	03/07/12	1.68	<0.250 U	3.96	9.25	2.23	3.31	<0.100 U	<0.250 U	<0.250 U	<0.250 U	454.58	10.17	<0.250 U	39.61	<0.250 U	<0.500 U
MW-26	03/07/12	2.95	1.230 J	9.47	13.86	2.72	6.40	<0.200 U	<0.500 U	<0.500 U	<0.500 U	492.48	15.10	<0.500 U	40.73	5.03	4.100 J
MW-26	08/27/12	1.160 J	<0.250 U	7.90	20.58	2.73	5.77	<0.100 U	<0.250 U	<0.250 U	<0.250 U	478.02	8.79	<0.250 U	45.27	<0.250 U	<0.500 U
MW-26	02/28/13	1.140 J	<0.250 U	<0.100 U	<3.750 U	2.38	6.64	<0.150 U	<0.250 U	<0.250 U	<0.250 U	431.24	10.71	<0.250 U	26.71	<0.250 U	<0.130 U
MW-26	08/14/13	0.680 J	<0.250 U	<0.100 U	10.950 J	3.00	5.65	<0.150 U	<0.250 U	<0.250 U	<0.250 U	464.40	6.54	<0.250 U	35.51	<0.250 U	<0.130 U
MW-26	08/14/13	0.750 J	<0.500 U	<0.200 U	13.580 J	2.96	5.12	<0.300 U	<0.500 U	<0.500 U	<0.500 U	435.24	8.53	<0.500 U	34.05	1.030 J	2.500 J
MW-26	03/27/14	1.090 J	<0.250 U	5.35	7.800 J	2.22	4.32	<0.150 U	<0.250 U	<0.250 U	<0.250 U	436.76	4.54	<0.250 U	23.65	<0.250 U	<1.250 U
MW-26	08/22/14	3.14	<0.250 U	7.10	15.510 J	4.63	3.65	<0.150 U	0.920 J	<0.250 U	<0.250 U	443.29	297.66	<0.250 U	38.00	<0.250 U	<1.250 U
MW-26M	04/14/09	0.51	<0.86	<4.11 U	10.80	2.30	3.49	<1.97 U	<50.0	<2.03	<0.47	429.00	8.51	<0.33	17.20	<0.51	13.04
MW-26M	08/25/09	0.56	0.55	<4.00	11.80	3.12	2.17	<0.50	<0.50	<1.50	<0.50	496.00	9.41	<0.50	24.50	0.69	<9.50
MW-26M	04/01/10	0.69	<0.10	0.91	6.40	2.35	1.57	<0.10	<0.20	0.23	<0.10	447.00	7.17	<0.10	30.00	0.39	<0.81
MW-26M	07/16/10	0.81	<0.2	0.82	8.22	3.04	2.01	<0.2	<0.2	<0.2	<0.2	478.00	6.75	<0.2	35.60	0.48	<1.0
MW-26M	07/16/10	2.06	<0.5	1.48	12.30	1.41	1.70	<0.5	<0.5	<0.5		529.00	6.85	<0.5	29.60	0.67	<2.5
MW-26M	04/06/11	<0.9	<1.0	<2.5	<10.0	2.63	3.80	<1.0	<1.0	<0.9	<2.5	472.00	15.50	<1.0	29.70	<1.0	<2.5
MW-26M	04/06/11	2.33	<0.5	1.40	6.01	2.62	5.08	<0.5	<0.5	<0.5		541.00	11.20	<0.5	40.80	0.77	<1.3
MW-26M	07/26/11	1.710 J	<0.500 U	2.210 J	12.63	1.470 J	10.20	0.230 J	<0.500 U	<0.500 U	<0.500 U	571.49	25.58	<0.500 U	40.13	0.540 J	<1.000 U
MW-26M	07/26/11	1.000 J	<0.500 U	5.56	9.750 J	2.75	3.42	<0.200 U	<0.500 U	<0.500 U	<0.500 U	523.23	11.42	<0.500 U	35.99	<0.500 U	2.560 J
MW-26M	03/07/12	0.980 J	<0.250 U	6.03	9.61	2.32	4.30	<0.100 U	<0.250 U	0.770 J	<0.250 U	442.24	10.18	<0.250 U	31.11	<0.250 U	0.770 J
MW-26M	03/07/12	1.800 J	1.180 J	9.09	13.05	2.82	4.49	<0.200 U	8.11	<0.500 U	<0.500 U	505.17	14.84	<0.500 U	33.03	5.36	<1.000 U
MW-26M	08/27/12	0.870 J	<0.250 U	7.55	19.44	2.78	7.55	<0.100 U	<0.250 U	<0.250 U	<0.250 U	459.97	7.81	<0.250 U	31.85	<0.250 U	<0.500 U
MW-26M	02/28/13	0.750 J	<0.250 U	<0.100 U	<3.750 U	2.52	8.22	<0.150 U	<0.250 U	<0.250 U	<0.250 U	431.31	10.98	<0.250 U	21.49	<0.250 U	1.230 J
MW-26M	02/28/13																
MW-26M	08/14/13	0.400 J	<0.250 U	<0.100 U	6.730 J	2.71	7.14	<0.150 U	<0.250 U	<0.250 U	<0.250 U	455.27	6.08	<0.250 U	25.98	<0.250 U	<0.130 U
MW-26M	08/14/13	<0.500 U	<0.500 U	<0.200 U	12.460 J	2.56	6.03	5.58	<0.500 U	<0.500 U	<0.500 U	448.12	7.68	<0.500 U	23.12	<0.500 U	2.910 J
MW-26M	08/14/13	0.400 J	<0.250 U	<0.100 U	6.650 J	2.69	7.18	<0.150 U	<0.250 U	<0.250 U	<0.250 U	457.09	6.42	<0.250 U	25.94	<0.250 U	<0.130 U
MW-26M	08/14/13	<0.500 U	<0.500 U	<0.200 U	12.710 J	2.91	6.19	<0.300 U	<0.500 U	<0.500 U	<0.500 U	436.70	7.39	<0.500 U	23.89	1.250 J	<0.250 U
MW-26M	03/27/14	0.750 J	<0.250 U	5.00	8.100 J	2.25	5.72	<0.150 U	<0.250 U	<0.250 U	<0.250 U	461.50	4.80	<0.250 U	18.87	<0.250 U	<1.250 U
MW-26M	08/22/14	1.48	<0.250 U	<1.250 U	14.500 J	3.67	2.76	<0.150 U	<0.250 U	<0.250 U	<0.250 U	447.63	272.99	<0.250 U	27.15	0.500 J	<1.250 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-26	04/13/09	<0.61	<0.42	<0.36	<0.38	<0.49	<0.31	<0.39	<0.72	<0.32	1.12	<0.18	<0.29	<0.5
MW-26	08/25/09	<0.25	0.27	<0.21	<0.25	0.16	<0.20	<0.26	<0.50	<0.11	1.26	<0.12	<0.25	<0.5
MW-26	08/25/09	<0.25	0.27	<0.21	<0.25	0.17	<0.20	<0.26	<0.50	<0.11	1.30	<0.12	<0.25	<0.5
MW-26	04/01/10	<0.10	0.29	<0.10	<0.10	0.18	<0.20	<0.10	0.17	<0.10	1.31	<0.10	0.11	0.063
MW-26	07/16/10	<0.2	0.54	<0.5	<0.2	0.32	<0.2	<0.2	<0.5	<0.2	1.50	<0.2	<0.2	<0.05
MW-26	07/16/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	1.43	<0.5	<0.5	
MW-26	04/06/11	<0.9	<1.0	<2.5	<0.9	<1.0	<2.5	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	<0.05
MW-26	04/06/11	<0.5	<0.5	<1.3	393.00	<0.5	<1.3	<0.5	<1.3	<0.5	1.38	<0.5	<0.5	
MW-26	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.000 J	<0.500 U	1.240 J	<0.500 U	<0.500 U	<0.010 U
MW-26	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.210 J	<0.500 U	<0.500 U	
MW-26	03/07/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.980 J	<0.250 U	<0.250 U	<0.010 U
MW-26	03/07/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.080 J	<0.500 U	<0.500 U	
MW-26	08/27/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.210 J	<0.250 U	<0.250 U	<0.010 U
MW-26	02/28/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.920 J	<0.250 U	<0.250 U	<0.010 U
MW-26	08/14/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.35	<0.250 U	<0.250 U	<0.010 U
MW-26	08/14/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.440 J	<0.500 U	<0.500 U	
MW-26	03/27/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.180 J	<0.250 U	<0.250 U	<0.010 U
MW-26	08/22/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.48	<0.250 U	<0.250 U	<0.010 U
MW-26M	04/14/09	<0.61	<0.42	<0.36	<0.38	<0.49	<0.31	<0.39	<0.72	<0.32	1.03	<0.18	<0.29	<0.5
MW-26M	08/25/09	1.29	<0.50	<0.50	<0.50	<0.50	<1.00	<0.50	<0.50	<0.50	1.37	<0.50	<0.50	<0.5
MW-26M	04/01/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	0.12	<0.10	1.19	<0.10	<0.10	<0.05
MW-26M	07/16/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	1.38	<0.2	<0.2	<0.05
MW-26M	07/16/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	1.44	<0.5	<0.5	
MW-26M	04/06/11	<0.9	<1.0	<2.5	<0.9	<1.0	<2.5	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	<0.05
MW-26M	04/06/11	<0.5	0.52	<1.3	318.00	<0.5	<1.3	<0.5	<1.3	<0.5	1.30	<0.5	<0.5	
MW-26M	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.210 J	<0.500 U	<0.500 U	
MW-26M	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.120 J	<0.500 U	<0.500 U	0.08
MW-26M	03/07/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.920 J	<0.250 U	<0.250 U	<0.010 U
MW-26M	03/07/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.070 J	<0.500 U	<0.500 U	
MW-26M	08/27/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.160 J	<0.250 U	<0.250 U	<0.010 U
MW-26M	02/28/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.890 J	<0.250 U	<0.250 U	<0.010 U
MW-26M	02/28/13													
MW-26M	08/14/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.26	<0.250 U	<0.250 U	0.09
MW-26M	08/14/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.280 J	<0.500 U	<0.500 U	
MW-26M	08/14/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.240 J	<0.250 U	<0.250 U	0.08
MW-26M	08/14/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.240 J	<0.500 U	1.330 J	<0.500 U	<0.500 U	
MW-26M	03/27/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.030 J	<0.250 U	<0.250 U	<0.010 U
MW-26M	08/22/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.40	<0.250 U	<0.250 U	0.18

Explanation of Qualifiers: E = Estimated due to interference;
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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249794	MW-31	04/20/09	15:30	9.86	7.21	1,305	7.73	1,419	291.0	52.8	12.8	7.2	0.222	0.005	15.6
DISSOLVED	249794	MW-31	08/24/09	14:25	16.17	6.79	1,710	7.39	1,724	333.0	61.3	18.0	11.0	0.385	0.010	18.4
DISSOLVED	249794	MW-31	04/20/10	11:56	5.15	6.71	1,138	7.79	1,112	186.0	39.9	11.4	5.5	0.090	0.005	11.4
DISSOLVED	249794	MW-31	07/19/10	10:55	12.13	6.54	934	7.84	980	152.0	31.0	10.2	6.1	0.067	0.003	15.2
TOTAL RECOVERABLE	249794	MW-31	07/19/10	10:55	12.13	6.54	934			179.0	34.2	11.6	6.7	5.850	0.008	
DISSOLVED	249794	MW-31	04/07/11	14:21	2.97	7.77	769	7.65	754	136.0	26.7	8.9	4.2	0.026	0.002	10.5
TOTAL RECOVERABLE	249794	MW-31	04/07/11	14:21	2.97	7.77	769			132.0	28.0	9.2	4.4	3.480	0.015	
DISSOLVED	249794	MW-31	07/29/11	14:57	12.76	5.73	804	7.45	691	124.8	24.0	9.7	5.5	0.049	0.003	16.0
TOTAL RECOVERABLE	249794	MW-31	07/29/11	14:57	12.76	5.73	804			116.9	24.4	10.0	5.6	2.226	0.005 J	
DISSOLVED	249794	MW-31	03/27/12	13:20	3.34	7.06	753	7.51	699	112.8	23.3	8.4	3.8	0.050	<0.002 U	11.2
TOTAL RECOVERABLE	249794	MW-31	03/27/12	13:20	3.34	7.06	753			123.5	25.0	9.0	4.0	1.462	0.005 J	
DISSOLVED	249794	MW-31	08/21/12	12:34	16.19	2.07	1,030	7.35	977	154.0	33.7	13.0	6.5	0.153 J	0.005 J	17.9
DISSOLVED	249794	MW-31	03/12/13	16:20	4.06	7.89	841	7.45	933	119.2	26.2	9.4	3.5	0.038 J	<0.002 U	11.9
TOTAL RECOVERABLE	249794	MW-31	08/09/13	15:31	15.60	7.24	1,020			160.2	31.4	12.5	5.6	1.162	<0.010 U	
DISSOLVED	249794	MW-31	08/09/13	15:31	15.60	7.24	1,020	7.31	999	157.4	31.3	12.3	5.6	0.142 J	<0.005 U	18.3
DISSOLVED	249794	MW-31	04/03/14	15:22	4.64	7.24	780	7.60	885	118.0	24.9	9.2	3.3	0.035 J	0.002 J	11.4
DISSOLVED	249794	MW-31	08/14/14	15:10	16.30	7.20	950	7.58	921	149.1	30.5	11.7	4.7	2.888	0.010 J	18.8
DISSOLVED	249785	MW-31M	04/20/09	15:40	7.48	7.48	129	7.55	692	110.0	24.8	18.1	3.4	0.030	0.002	31.5
DISSOLVED	249785	MW-31M	08/24/09	13:45	11.51	7.07	803	7.51	806	123.0	26.4	18.5	3.2	0.071	0.027	30.5
DISSOLVED	249785	MW-31M	04/15/10	13:54	11.11	7.17	790	7.86	759	116.0	26.4	17.6	3.4	<0.002	<0.001	28.2
DISSOLVED	249785	MW-31M	07/19/10	12:04	10.63	7.13	688	8.07	654	97.8	21.9	16.4	2.8	<0.002	<0.001	27.3
TOTAL RECOVERABLE	249785	MW-31M	07/19/10	12:04	10.63	7.13	688			116.0	24.7	18.9	3.2	0.691	0.531	
DISSOLVED	249785	MW-31M	04/07/11	13:38	9.22	7.53	681	7.41	744	110.0	24.1	18.5	2.9	<0.002	<0.001	29.5
TOTAL RECOVERABLE	249785	MW-31M	04/07/11	13:38	9.22	7.53	681			116.0	24.5	18.8	3.0	0.198	0.370	
DISSOLVED	249785	MW-31M	07/29/11	13:49	10.58	7.09	728	7.37	641	105.0	23.6	17.7	2.9	0.005	0.001 J	29.1
TOTAL RECOVERABLE	249785	MW-31M	07/29/11	13:49	10.58	7.09	728			95.3	23.3	17.4	3.0	0.110	0.027	
DISSOLVED	249785	MW-31M	03/15/12	16:47	9.48	7.13	697	7.37	730	100.9	22.6	18.2	2.7	0.010 J	<0.002 U	30.2
TOTAL RECOVERABLE	249785	MW-31M	03/15/12	16:47	9.48	7.13	697			103.4	23.6	18.6	2.9	0.709	0.469	
DISSOLVED	249785	MW-31M	08/21/12	13:25	11.17	7.06	709	7.38	702	91.9	24.5	18.4	2.8	<0.015 U	<0.002 U	29.7
DISSOLVED	249785	MW-31M	03/12/13	15:25	9.58	7.80	701	7.28	770	95.0	23.4	18.6	2.8	<0.015 U	<0.002 U	30.2
DISSOLVED	249785	MW-31M	08/09/13	14:30	10.30	7.00	720	7.24	704	99.0	23.3	18.6	2.7	<0.015 U	0.026 J	31.4
TOTAL RECOVERABLE	249785	MW-31M	08/09/13	14:30	10.30	7.00	720			100.4	22.8	18.4	2.8	0.039 J	0.122 J	
DISSOLVED	249785	MW-31M	04/03/14	16:54	9.80	7.18	735	7.42	841	103.3	23.8	19.3	2.7	<0.015 U	<0.002 U	29.8
DISSOLVED	249785	MW-31M	08/14/14	14:20	10.40	6.88	735	7.50	718	108.1	24.6	18.2	2.7	<0.015 U	<0.002 U	32.1

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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-31	04/20/09	185.0	0.0	840.4	5.1	<0.5	2.3	<0.5	<0.72	<62.62	1.80	17.60	8.06	<1.99	<500	<0.50 U
MW-31	08/24/09	136.6	0.0	967.2	10.2	<0.5	2.6	<0.5	<0.50	<89.00	3.60	39.30	17.00	<0.50	<500	<1.00
MW-31	04/20/10	145.2	0.0	520.3	5.0	0.2	2.1	<0.05	<0.1	<1.0	3.50	12.00	9.06	<0.2	59.00	<0.1
MW-31	07/19/10	141.3	0.0	409.0	5.3	0.1	2.6	<0.05	<0.2	<2.0	4.13	18.60	13.20	<0.2	<50	<0.2
MW-31	07/19/10								<0.5	8.74	7.58		14.80	<0.5		<0.5
MW-31	04/07/11	143.5	0.0	315.8	4.1	0.3	1.7	<0.1	<0.2	<2.0	4.16	6.74	11.40	<0.2	<50	<0.2
MW-31	04/07/11								<0.5	7.53	8.07	7.98	14.60	<0.5		<0.5
MW-31	07/29/11	139.2	0.0	301.2	6.0	0.1	2.0	<0.020 U	<0.100 U	32.31	4.95	23.07	14.95	<0.100 U	<10.000 U	<0.100 U
MW-31	07/29/11								<0.250 U	28.00	6.91		16.23	<0.250 U		<0.250 U
MW-31	03/27/12	138.1	0.0	275.4	4.8	0.3	1.5	<0.020 U	<0.100 U	40.55	5.20	5.41	14.79	<0.100 U	<10.000 U	<0.100 U
MW-31	03/27/12									65.88	11	8.46	16.60	<0.250 U		<0.250 U
MW-31	08/21/12	119.1	0.0	440.0	8.1	0.1	1.6	<0.020 U	<0.250 U	<1.000 U	3.74	25.37	27.39	<0.250 U	125.00	<0.250 U
MW-31	03/12/13	176.0	0.0	326.0	5.6	0.3	1.5	<0.020 U	<0.100 U	<0.400 U	4.65	8.79	13.81	<0.100 U	<10.000 U	<0.100 U
MW-31	08/09/13									3,980 J	8.95	26.30	24.40	<0.500 U		<0.500 U
MW-31	08/09/13	137.2	0.0	439.4	6.7	0.1	1.7	<0.020 U	<0.250 U	<1.000 U	6.15	28.13	25.38	<0.250 U	99.00	<0.250 U
MW-31	04/03/14	164.2	0.0	282.3	4.8	0.2	1.5	<0.020 U	<0.100 U	<2.000 U	4.82	8.41	12.71	<0.100 U	<10.000 U	<0.100 U
MW-31	08/14/14	146.1	0.0	397.8	7.5	0.1	1.6	<0.020 U	<0.100 U	<2.000 U	12	17.47	25.75	<0.100 U	83.00	<0.100 U
MW-31M	04/20/09	259.6	0.0	185.5	3.1	0.1	0.7	<0.05	<0.07	17.60	1.25	7.06	15.60	<0.20	<50	<0.05 U
MW-31M	08/24/09	257.1	0.0	221.3	5.1	<0.5	0.5	<0.5	<0.10	68.30	1.18	7.35	21.30	<0.10	<500	<0.20
MW-31M	04/15/10	236.1	0.0	232.4	3.9	0.1	0.7	<0.05	<0.1	<1.0	1.57	6.09	21.50	<0.2	52.00	<0.1
MW-31M	07/19/10	255.7	0.0	167.6	3.4	0.1	0.6	<0.05	<0.2	<2.0	1.59	6.85	19.20	<0.2	<50	<0.2
MW-31M	07/19/10								<0.5	46.70	1.50		28.30	<0.5		<0.5
MW-31M	04/07/11	245.7	0.0	189.8	3.5	0.1	0.5	<0.1	<0.2	<2.0	1.73	5.60	21.70	<0.2	<50	<0.2
MW-31M	04/07/11								<0.5	10.30	1.48	7.29	24.20	<0.5		<0.5
MW-31M	07/29/11	256.8	0.0	175.7	3.3	0.1	0.5	<0.020 U	<0.100 U	36.35	1.65	9.72	20.88	<0.100 U	<10.000 U	<0.100 U
MW-31M	07/29/11								<0.250 U	33.76	1.61		23.07	<0.250 U		<0.250 U
MW-31M	03/15/12	245.9	0.0	163.8	3.3	0.1	0.4	<0.020 U	<0.100 U	32.55	1.87	7.00	21.43	<0.100 U	<10.000 U	<0.100 U
MW-31M	03/15/12								<0.250 U	60.61	3.34	9.18	26.17	<0.250 U		<0.250 U
MW-31M	08/21/12	244.0	0.0	151.6	3.1	0.1	0.4	<0.020 U	<0.100 U	<0.400 U	1.65	8.23	21.34	<0.100 U	<10.000 U	<0.100 U
MW-31M	03/12/13	271.4	0.0	173.6	3.4	0.1	0.5	<0.020 U	<0.100 U	2.15	1.71	7.12	20.84	<0.100 U	<10.000 U	<0.100 U
MW-31M	08/09/13	271.5	0.0	173.1	3.3	0.1	0.4	<0.020 U	<0.100 U	3.30	1.82	7.61	23.35	<0.100 U	<10.000 U	<0.100 U
MW-31M	08/09/13									11.46	1.95	7.01	22.46	<0.250 U		<0.250 U
MW-31M	04/03/14	281.0	0.0	183.8	3.7	0.1	0.5	<0.020 U	<0.100 U	<2.000 U	1.75	6.89	23.65	<0.100 U	<10.000 U	<0.100 U
MW-31M	08/14/14	279.3	0.0	197.0	3.5	0.1	0.4	<0.020 U	<0.100 U	<2.000 U	1.77	5.03	26.10	<0.100 U	<10.000 U	<0.100 U

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-31	04/20/09	<0.43	<0.89	<4.23 U	20.80	1.68	<0.85	<2.03 U	1.05	<2.09	<0.49	714.00	8.05	<0.34	6.78	<0.52	<13.43 U
MW-31	08/24/09	<0.50	0.56	<4.00	31.70	2.59	<0.50	<0.50	2.31	<1.50	<0.50	974.00	12.60	<0.50	4.49	1.11	14.50
MW-31	04/20/10	0.23	0.21	0.72	22.90	2.43	<0.1	<0.2	1.46	0.97	<0.1	564.00	5.25	<0.1	6.65	0.59	7.93
MW-31	07/19/10	<0.2	<0.2	0.54	15.50	3.19	<0.2	<0.2	2.07	1.21	<0.2	515.00	3.48	<0.2	4.40	0.91	4.35
MW-31	07/19/10	<0.5	<0.5	1.30	20.80	3.18	<0.5	<0.5	2.55	0.90		517.00	3.42	<0.5	3.88	1.75	15.30
MW-31	04/07/11	<0.2	<0.2	<0.5	8.85	2.60	<0.2	<0.2	1.20	1.01	<0.5	429.00	6.14	<0.2	4.14	0.53	4.15
MW-31	04/07/11	<0.5	<0.5	<1.3	11.00	2.79	<0.5	<0.5	1.44	0.78		488.00	4.39	<0.5	4.77	1.43	7.46
MW-31	07/29/11	0.130 J	0.160 J	0.65	17.38	3.63	<0.100 U	<0.040 U	2.27	1.03	0.100 J	434.07	3.16	<0.100 U	3.23	0.98	3.83
MW-31	07/29/11	<0.250 U	<0.250 U	1.180 J	17.65	3.14	2.00	<0.100 U	1.89	0.710 J	<0.250 U	457.32	8.26	<0.250 U	2.93	1.000 J	8.81
MW-31	03/27/12	<0.100 U	<0.100 U	0.380 J	9.64	2.12	<0.100 U	<0.040 U	1.17	<0.100 U	<0.100 U	397.69	3.45	<0.100 U	3.36	0.500 J	4.08
MW-31	03/27/12	<0.250 U	1.37	5.13	15.06	2.35	<0.250 U	<0.100 U	1.44	1.85	<0.250 U	425.73	10.02	<0.250 U	4.59	6.64	6.22
MW-31	08/21/12	<0.250 U	<0.250 U	0.420 J	26.52	3.39	1.84	<0.100 U	2.49	0.800 J	<0.250 U	588.81	4.76	<0.250 U	3.45	0.720 J	4.43
MW-31	03/12/13	<0.100 U	<0.100 U	<0.040 U	9.01	1.95	2.17	<0.060 U	1.13	1.02	<0.100 U	450.89	5.52	<0.100 U	6.29	0.390 J	3.86
MW-31	08/09/13	<0.500 U	<0.500 U	<0.200 U	23.160 J	3.55	0.680 J	<0.300 U	2.390 J	<0.500 U	<0.500 U	609.84	4.95	<0.500 U	4.60	2.350 J	9.470 J
MW-31	08/09/13	<0.250 U	<0.250 U	<0.100 U	19.00	3.48	1.51	<0.150 U	2.45	0.730 J	<0.250 U	624.76	3.73	<0.250 U	4.83	1.080 J	7.35
MW-31	04/03/14	<0.100 U	<0.100 U	<0.500 U	9.870 J	2.48	0.98	<0.060 U	1.38	0.76	<0.100 U	429.00	2.53	<0.100 U	6.70	0.55	3.08
MW-31	08/14/14	0.330 J	<0.100 U	<0.500 U	20.86	2.89	<0.100 U	<0.060 U	2.85	0.77	<0.100 U	548.46	102.89	<0.100 U	5.87	1.79	9.35
MW-31M	04/20/09	0.28	0.26	<0.42 U	12.40	3.11	0.41	<0.20 U	<0.05	<0.21	<0.05	459.00	2.55	<0.03	19.90	1.36	2.54
MW-31M	08/24/09	0.53	0.44	5.32	12.80	4.54	6.21	<0.10	<0.10	0.34	<0.10	467.00	2.50	<0.10	3.61	6.30	<1.90
MW-31M	04/15/10	0.11	0.32	<0.4	20.00	3.23	<0.1	<0.2	0.08	0.26	<0.1	504.00	2.01	<0.1	24.40	1.98	1.76
MW-31M	07/19/10	<0.2	<0.2	<0.5	9.48	3.35	<0.2	<0.2	<0.2	0.21	<0.2	442.00	1.25	<0.2	23.50	2.12	<1.0
MW-31M	07/19/10	4.69	<0.5	<1.3	17.00	<0.5	3.38	<0.5	<0.5	<0.5		481.00	2.97	<0.5	20.50	4.11	7.82
MW-31M	04/07/11	<0.2	<0.2	<0.5	6.22	3.15	<0.2	<0.2	<0.2	0.22	<0.5	503.00	2.35	<0.2	21.80	1.77	<0.5
MW-31M	04/07/11	3.09	<0.5	<1.3	10.60	3.73	1.10	<0.5	<0.5	<0.5		522.00	2.52	<0.5	22.30	3.12	<1.3
MW-31M	07/29/11	0.130 J	0.210 J	0.220 J	14.89	3.27	<0.100 U	<0.040 U	<0.100 U	0.320 J	<0.100 U	482.93	2.04	<0.100 U	21.49	2.31	<0.200 U
MW-31M	07/29/11	0.300 J	<0.250 U	0.510 J	14.86	2.50	1.76	<0.100 U	<0.250 U	<0.250 U	<0.250 U	491.24	4.54	<0.250 U	17.79	2.19	0.590 J
MW-31M	03/15/12	<0.100 U	<0.100 U	<0.100 U	12.21	2.87	<0.100 U	<0.040 U	<0.100 U	<0.100 U	<0.100 U	480.07	2.42	<0.100 U	4.37	2.06	<0.200 U
MW-31M	03/15/12	3.76	1.42	0.480 J	17.72	3.52	1.030 J	<0.100 U	36.13	1.230 J	0.370 J	502.45	11.31	<0.250 U	5.64	7.16	3.09
MW-31M	08/21/12	<0.100 U	0.260 J	1.61	18.19	3.15	1.05	<0.040 U	<0.100 U	0.200 J	<0.100 U	457.01	1.75	<0.100 U	19.78	2.29	1.79
MW-31M	03/12/13	<0.100 U	<0.100 U	<0.040 U	12.16	2.36	1.59	<0.060 U	<0.100 U	0.150 J	<0.100 U	474.26	2.93	<0.100 U	32.32	1.65	<0.050 U
MW-31M	08/09/13	0.120 J	<0.100 U	<0.040 U	13.52	3.57	1.00	<0.060 U	<0.100 U	<0.100 U	<0.100 U	499.24	1.56	<0.100 U	22.15	2.51	<0.050 U
MW-31M	08/09/13	0.380 J	0.630 J	15.73	19.05	3.54	1.40	<0.150 U	<0.250 U	<0.250 U	0.350 J	491.83	3.24	<0.250 U	20.64	3.60	10.45
MW-31M	04/03/14	<0.100 U	0.210 J	<0.500 U	14.82	3.04	0.70	<0.060 U	<0.100 U	<0.100 U	<0.100 U	491.71	1.53	<0.100 U	21.20	2.40	<0.500 U
MW-31M	08/14/14	0.240 J	<0.100 U	<0.500 U	16.27	2.52	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	487.01	70.43	<0.100 U	22.21	2.66	<0.500 U

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-31	04/20/09	<0.62	<0.43	<0.37	<0.39	<0.50	<0.32	<0.40	<0.74	<0.32	2.26	<0.18	<0.30	<0.5
MW-31	08/24/09	<0.50	<0.50	<0.50	<0.50	<0.50	<1.00	<0.50	<0.50	<0.50	4.62	<0.50	<0.50	<0.5
MW-31	04/20/10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.45	<0.1	2.00	<0.1	0.13	<0.05
MW-31	07/19/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	2.50	<0.2	<0.2	<0.05
MW-31	07/19/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.44	<0.5	<0.5	
MW-31	04/07/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	1.32	<0.2	<0.2	<0.05
MW-31	04/07/11	<0.5	<0.5	<1.3	128.00	<0.5	<1.3	<0.5	<1.3	<0.5	1.51	<0.5	<0.5	
MW-31	07/29/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.110 J	<0.100 U	2.05	<0.100 U	0.180 J	<0.010 U
MW-31	07/29/11	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.81	<0.250 U	<0.250 U	
MW-31	03/27/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.92	<0.100 U	<0.100 U	<0.010 U
MW-31	03/27/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.070 J	<0.250 U	<0.250 U	
MW-31	08/21/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.43	<0.250 U	<0.250 U	<0.010 U
MW-31	03/12/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.240 J	<0.100 U	0.86	<0.100 U	<0.100 U	<0.010 U
MW-31	08/09/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.82	<0.500 U	2.54	<0.500 U	<0.500 U	
MW-31	08/09/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.41	<0.250 U	<0.250 U	<0.010 U
MW-31	04/03/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.04	<0.100 U	<0.100 U	<0.010 U
MW-31	08/14/14	<0.100 U	<0.100 U	<0.100 U	1.05	<0.100 U	<0.100 U	<0.100 U	0.410 J	<0.100 U	2.23	<0.100 U	<0.100 U	<0.010 U
MW-31M	04/20/09	0.11	0.07	<0.04	<0.04	<0.05	<0.03	<0.04	0.12	<0.03	1.13	0.02	1.06	<0.05
MW-31M	08/24/09	<0.10	0.28	<0.10	<0.10	0.14	<0.10	<0.10	0.14	<0.10	0.82	<0.10	1.35	<0.5
MW-31M	04/15/10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.41	<0.1	1.24	<0.1	1.20	<0.05
MW-31M	07/19/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	1.16	<0.2	1.16	<0.05
MW-31M	07/19/10	<0.5	1.23	<1.3	<0.5	0.57	<0.4	<0.5	<1.3	<0.5	1.28	<0.5	<0.5	
MW-31M	04/07/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	1.14	<0.2	1.09	<0.05
MW-31M	04/07/11	<0.5	<0.5	<1.3	94.60	<0.5	<1.3	<0.5	<1.3	<0.5	1.31	<0.5	1.41	
MW-31M	07/29/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.110 J	<0.100 U	1.16	<0.100 U	1.21	<0.010 U
MW-31M	07/29/11	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.030 J	<0.250 U	0.830 J	
MW-31M	03/15/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.99	<0.100 U	0.86	<0.010 U
MW-31M	03/15/12	<0.250 U	0.270 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.220 J	<0.250 U	1.32	
MW-31M	08/21/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.220 J	<0.100 U	1.11	<0.100 U	1.47	<0.010 U
MW-31M	03/12/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.260 J	<0.100 U	0.440 J	<0.100 U	1.06	<0.010 U
MW-31M	08/09/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.28	<0.100 U	1.48	<0.010 U
MW-31M	08/09/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.33	<0.250 U	1.45	
MW-31M	04/03/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.16	<0.100 U	1.10	<0.010 U
MW-31M	08/14/14	<0.100 U	<0.100 U	<0.100 U	1.12	<0.100 U	<0.100 U	<0.100 U	0.370 J	<0.100 U	1.32	<0.100 U	0.88	<0.010 U

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249840	MW-82	04/20/09	13:00	12.41	6.33	1,610	6.68	1,670	404.0	34.5	16.6	10.6	1.150	11.700	21.9
DISSOLVED	249840	MW-82	08/24/09	17:00	12.95	6.64	1,770	7.04	1,751	351.0	34.7	18.6	7.9	15.700	10.200	20.7
DISSOLVED	249840	MW-82	04/15/10	12:23	10.30	6.42	1,780	6.56	1,796	379.0	33.9	16.6	10.3	1.610	11.300	20.2
DISSOLVED	249840	MW-82	07/21/10	9:46	9.59	6.31	175	7.65	1,819	408.0	34.2	16.8	9.9	1.690	11.500	20.3
TOTAL RECOVERABLE	249840	MW-82	07/21/10	9:46	9.59	6.31	175			426.0	36.3	18.0	10.6	1.820	12.200	
DISSOLVED	249840	MW-82	04/07/11	14:56	8.96	6.87	166	6.77	1,544	380.0	34.0	17.0	9.6	1.860	10.300	20.1
TOTAL RECOVERABLE	249840	MW-82	04/07/11	14:56	8.96	6.87	166			370.0	32.4	16.0	9.2	1.760	9.590	
TOTAL RECOVERABLE	249840	MW-82	07/28/11	15:03	10.32	5.04	1,778			331.4	34.3	16.6	9.8	1.954	10.406	
DISSOLVED	249840	MW-82	07/28/11	15:03	10.32	5.04	1,778	6.69	1,428	357.0	33.6	16.4	9.5	1.722	10.280	19.8
DISSOLVED	249840	MW-82	03/22/12	14:11	10.14	6.38	1,755	6.70	1,866	331.4	31.4	15.9	8.5	1.751	9.510	21.3
TOTAL RECOVERABLE	249840	MW-82	03/22/12	14:11	10.14	6.38	1,755			355.6	35.1	16.8	9.6	1.808	10.128	
DISSOLVED	249840	MW-82	08/23/12	15:20	10.25	6.49	1,808	6.87	1,638	346.3	35.9	17.6	9.9	2.276	9.721	20.0
DISSOLVED	249840	MW-82	03/13/13	15:20	9.23	7.00	1,717	6.78	1,764	334.0	32.2	15.5	8.7	1.875	9.150	20.7
DISSOLVED	249840	MW-82	08/12/13	15:02	9.92	6.27	1,715	6.59	1,724	326.5	33.5	16.8	9.2	2.105	9.669	21.2
TOTAL RECOVERABLE	249840	MW-82	08/12/13	15:02	9.92	6.27	1,715			343.9	33.0	16.2	9.2	2.098	9.531	
DISSOLVED	249840	MW-82	03/26/14	12:32	9.30	6.34	1,670	6.99	1,796	335.5	33.8	16.3	9.2	1.896	8.028	20.2
DISSOLVED	249840	MW-82	08/15/14	14:00	9.80	6.21	1,710	6.88	1,671	340.2	34.5	16.2	8.8	2.207	9.543	22.2
DISSOLVED	249896	MW-82M	09/27/11	15:43	10.69	5.98	2,461	7.12	2,500	417.6	103.9	18.0	4.9	0.066	0.119	21.4
TOTAL RECOVERABLE	249896	MW-82M	09/27/11	15:43	10.69	5.98	2,461			421.4	104.7	19.8	4.9	0.772	0.242	
DISSOLVED	249896	MW-82M	03/22/12	13:09	9.73	6.76	2,450	7.16	2,547	445.4	101.2	19.5	4.5	0.228	0.074 J	22.6
TOTAL RECOVERABLE	249896	MW-82M	03/22/12	13:09	9.73	6.76	2,450			483.0	112.7	20.4	5.2	0.205	0.099 J	
DISSOLVED	249896	MW-82M	08/23/12	14:24	9.20	6.75	2,539	7.27	2,219	472.7	112.8	22.1	5.0	0.099 J	0.051 J	21.3
DISSOLVED	249896	MW-82M	03/13/13	14:38	8.89	7.53	2,466	7.22	2,512	422.3	102.5	18.1	4.4	0.125 J	0.046 J	22.6
DISSOLVED	249896	MW-82M	08/12/13	16:05	9.92	6.82	2,460	7.19	2,488	456.9	108.5	20.7	5.0	0.140 J	0.040 J	22.8
TOTAL RECOVERABLE	249896	MW-82M	08/12/13	16:05	9.92	6.82	2,460			482.5	106.9	20.1	5.1	0.319 J	0.056 J	
DISSOLVED	249896	MW-82M	03/26/14	13:52	9.16	7.00	2,490	7.41	2,740	475.8	110.6	19.7	4.7	0.145 J	0.030 J	22.1
DISSOLVED	249896	MW-82M	08/15/14	14:50	9.20	6.79	2,140	7.32	2,227	472.6	111.0	19.7	4.4	0.196	0.042 J	23.8
DISSOLVED	249843	MW-85	04/20/09	12:10	9.37	6.69	1,626	6.58	1,632	366.0	37.1	18.2	8.6	16.200	10.400	22.7
DISSOLVED	249843	MW-85	08/24/09	18:00	8.92	6.72	1,750	7.28	2,331	323.0	33.9	17.3	10.2	<0.010	0.519	20.9
DISSOLVED	249843	MW-85	04/06/10	15:20	8.38	6.57	1,730	6.65	1,696	350.0	35.6	17.9	8.2	15.100	9.330	20.3
DISSOLVED	249843	MW-85	07/21/10	10:22	9.62	6.40	169	7.94	1,625	351.0	34.9	18.0	7.7	14.200	9.250	19.7
TOTAL RECOVERABLE	249843	MW-85	07/21/10	10:22	9.62	6.40	169			392.0	37.5	19.5	8.5	15.400	10.600	
DISSOLVED	249843	MW-85	04/13/11	12:49	8.97	7.00	162	6.78	1,524	340.0	31.7	17.0	7.0	12.600	8.110	19.1
TOTAL RECOVERABLE	249843	MW-85	04/13/11	12:49	8.97	7.00	162			380.0	36.2	19.1	8.2	14.400	9.330	
DISSOLVED	249843	MW-85	07/28/11	13:40	10.22	5.76	1,731	6.69	1,398	336.8	33.9	17.6	7.8	14.987	8.790	19.6
TOTAL RECOVERABLE	249843	MW-85	07/28/11	13:40	10.22	5.76	1,731			311.0	34.4	18.3	7.8	15.347	8.828	
DISSOLVED	249843	MW-85	03/27/12	14:50	9.03	6.16	1,706	6.69	1,650	304.1	33.6	20.5	7.5	12.708	8.271	21.1
TOTAL RECOVERABLE	249843	MW-85	03/27/12	14:50	9.03	6.16	1,706			344.0	36.3	19.3	8.3	14.339	9.086	
DISSOLVED	249843	MW-85	08/16/12	16:16	10.99	6.57	1,722	6.71	1,569	313.4	36.5	17.6	7.8	12.590	8.356	19.7
DISSOLVED	249843	MW-85	03/13/13	12:58	9.18	7.20	1,679	6.68	1,727	279.8	31.5	16.7	7.0	14.765	8.104	20.7
DISSOLVED	249843	MW-85	08/12/13	11:42	9.49	6.29	1,655	6.65	1,655	306.4	32.9	18.1	7.6	12.598	8.405	20.4
TOTAL RECOVERABLE	249843	MW-85	08/12/13	11:42	9.49	6.29	1,655			306.1	32.4	17.4	7.5	13.018	8.437	
DISSOLVED	249843	MW-85	03/25/14	15:20	9.00	6.55	1,675	6.78	1,817	312.4	34.5	16.9	7.3	11.753	7.287	19.8
DISSOLVED	249843	MW-85	08/22/14	11:30	9.00	6.68	1,700	6.85	1,576	327.8	35.2	17.4	7.2	13.229	8.906	20.9

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-82	04/20/09	320.6	0.0	916.0	5.8	<0.5	3.4	<0.5	<0.72	<62.62	2.70	22.50	17.50	<1.99	<500	0.66
MW-82	08/24/09	239.9	0.0	923.7	6.1	<0.5	3.3	<0.5	<0.20	<38.00	51	18.40	15.30	<1.00	<500	<0.25
MW-82	04/15/10	326.9	0.0	883.0	6.3	<0.05	3.2	<0.05	0.25	<36.0	0.88	20.10	19.00	<1.01	75.00	0.56
MW-82	07/21/10	309.6	0.0	871.7	6.2	0.1	3.8	<0.05	<0.2	4.73	0.73	16.40	19.70	<0.2	81.00	<0.2
MW-82	07/21/10								<0.5	136.00	0.48		63.40	<0.5		<0.5
MW-82	04/07/11	286.5	0.0	858.9	6.0	0.1	3.1	<0.1	<1.0	<10.0	<0.9	18.80	18.60	<1.0	65.00	<1.0
MW-82	04/07/11								<0.5	22.90	0.86	17.80	19.30	<0.5		<0.5
MW-82	07/28/11								<0.500 U	161.39	0.850 J		20.36	<0.500 U		<0.500 U
MW-82	07/28/11	301.1	0.0	828.0	5.9	<0.010 U	3.6	<0.020 U	<0.500 U	93.26	0.830 J	22.31	18.40	<0.500 U	82.00	<0.500 U
MW-82	03/22/12	286.1	0.0	794.5	6.0	<0.010 U	3.5	<0.020 U	<0.500 U	83.45	1.290 J	22.47	16.65	<0.500 U	89.00	<0.500 U
MW-82	03/22/12									97.70	3.24	22.36	19.46	<0.500 U		<0.500 U
MW-82	08/23/12	279.9	0.0	792.4	6.2	<0.010 U	3.5	<0.020 U	<0.250 U	21.12	0.730 J	22.42	19.43	<0.250 U	<10.000 U	<0.250 U
MW-82	03/13/13	320.9	0.0	784.9	7.2	0.1	4.0	<0.020 U	<0.250 U	3.860 J	0.410 J	25.43	17.52	<0.250 U	<10.000 U	<0.250 U
MW-82	08/12/13	299.0	0.0	739.2	7.1	5.5	4.0	<0.020 U	<0.250 U	10.14	0.890 J	22.35	18.70	<0.250 U	<10.000 U	<0.250 U
MW-82	08/12/13									16.51	1.010 J	24.88	17.71	<0.500 U		<0.500 U
MW-82	03/26/14	337.6	0.0	739.5	8.0	0.2	4.4	<0.020 U	<0.250 U	<5.000 U	0.880 J	16.27	18.62	<0.250 U	86.00	<0.250 U
MW-82	08/15/14	333.6	0.0	764.4	8.3	0.040 J	4.0	<0.020 U	<0.250 U	6.620 J	0.840 J	17.66	21.19	<0.250 U	78.00	<0.250 U
MW-82M	09/27/11	335.7	0.0	1333.0	6.5	<0.010 U	0.5	<0.020 U	<0.250 U	103.20	1.000 J	6.86	29.82	<0.250 U	93.00	<0.250 U
MW-82M	09/27/11								<0.500 U	856.50	6.34		64.11	1.020 J		0.740 J
MW-82M	03/22/12	310.3	0.0	1318.0	6.4	<0.010 U	0.5	<0.020 U	<0.500 U	122.40	1.830 J	4.260 J	22.19	<0.500 U	105.00	<0.500 U
MW-82M	03/22/12									201.44	4.36	6.260 J	30.78	<0.500 U		<0.500 U
MW-82M	08/23/12	308.6	0.0	1354.0	6.3	<0.010 U	0.5	<0.020 U	<0.500 U	<2.000 U	<0.500 U	6.000 J	22.86	<0.500 U	<10.000 U	<0.500 U
MW-82M	03/13/13	349.5	0.0	1354.0	7.0	<0.010 U	0.5	<0.020 U	<0.250 U	1.660 J	1.050 J	6.13	19.90	<0.250 U	89.00	<0.250 U
MW-82M	08/12/13	354.8	0.0	1304.0	6.7	0.1	0.5	<0.020 U	<0.250 U	4.180 J	1.080 J	6.40	21.97	<0.250 U	110.00	<0.250 U
MW-82M	08/12/13									149.72	1.310 J	7.520 J	24.50	<0.500 U		<0.500 U
MW-82M	03/26/14	375.7	0.0	1354.0	7.2	<0.010 U	0.5	<0.020 U	<0.250 U	<5.000 U	1.04	5.29	22.72	<0.250 U	110.00	<0.250 U
MW-82M	08/15/14	370.2	0.0	1328.0	6.7	1.1	0.5	<0.020 U	<0.250 U	<5.000 U	1.17	1.670 J	24.03	<0.250 U	108.00	<0.250 U
MW-85	04/20/09	250.8	0.0	939.3	5.3	<0.5	3.1	<0.5	<0.70	<60.82	72	19.90	16.70	<1.93	<500	<0.48 U
MW-85	08/24/09	72.0	0.0	910.8	6.7	<0.5	3.7	<0.5	<0.20	<38.00	<0.50	18.40	11.20	<1.00	<500	<0.25
MW-85	04/06/10	259.6	0.0	863.0	5.6	<0.05	3.4	<0.05	<0.04	<7.68	62	12.10	17.90	<0.20	67.00	0.12
MW-85	07/21/10	242.5	0.0	859.0	5.7	0.1	3.5	<0.05	<0.2	3.45	62	13.70	19.60	<0.2	67.00	<0.2
MW-85	07/21/10								<0.5	15.20	56		17.60	<0.5		<0.5
MW-85	04/13/11	254.5	0.0	834.9	5.6	<0.05	2.7	<0.1	<1.0	<10.0	59	17.10	15.10	<1.0	<50	<1.0
MW-85	04/13/11								<0.5	10.50	53	16.80	18.40	<0.5		<0.5
MW-85	07/28/11	276.6	0.0	814.4	5.5	<0.010 U	3.1	<0.020 U	<0.500 U	111.97	66	21.30	17.16	<0.500 U	<10.000 U	<0.500 U
MW-85	07/28/11								<0.500 U	93.01	64		18.48	<0.500 U		<0.500 U
MW-85	03/27/12	257.0	0.0	786.1	5.7	0.1	3.1	<0.020 U	<0.500 U	84.83	64	20.19	15.21	<0.500 U	<10.000 U	<0.500 U
MW-85	03/27/12									149.85	70	24.20	18.84	<0.500 U		<0.500 U
MW-85	08/16/12	256.8	0.0	766.1	5.5	<0.010 U	3.1	<0.020 U	<0.250 U	<1.000 U	61	27.38	17.78	<0.250 U	<10.000 U	<0.250 U
MW-85	03/13/13	278.3	0.0	728.7	6.2	<0.010 U	3.5	<0.020 U	<0.250 U	1.740 J	63	27.02	16.16	<0.250 U	<10.000 U	<0.250 U
MW-85	08/12/13	282.4	0.0	737.4	6.2	<0.010 U	3.5	<0.020 U	<0.250 U	4.710 J	71	21.73	17.60	<0.250 U	<10.000 U	<0.250 U
MW-85	08/12/13									11.38	69	21.33	16.40	<0.500 U		<0.500 U
MW-85	03/25/14	287.4	0.0	735.0	6.8	<0.010 U	3.8	<0.020 U	<0.250 U	<5.000 U	69	13.62	18.35	<0.250 U	71.00	<0.250 U
MW-85	08/22/14	293.8	0.0	813.7	7.6	<0.010 U	3.5	<0.020 U	<0.250 U	<5.000 U	74	22.94	19.68	<0.250 U	<10.000 U	<0.250 U

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Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-82	04/20/09	6.00	<0.89	11.80	16.50	2.19	1.95	<2.03 U	<0.52	<2.09	<0.49	623.00	9.13	<0.34	8.10	<0.52	34.70
MW-82	08/24/09	5.05	<0.20	<2.00	13.50	3.42	<0.50	<0.76	<0.24	<0.50	<0.21	534.00	7.20	<0.17	11.70	<0.50	38.40
MW-82	04/15/10	6.06	0.27	<2.02	56.60	2.74	0.61	<0.77	0.33	0.57	<0.21	612.00	8.67	0.25	9.72	<0.51	10.80
MW-82	07/21/10	5.43	<0.2	<0.2	8.75	2.76	<0.2	<0.2	<0.2	0.23	<0.2	598.00	6.22	<0.2	12.20	<0.2	3.37
MW-82	07/21/10	<0.5	<0.5	<1.3	5.31	2.15	<0.5	<0.5	0.85	0.87		632.00	6.94	<0.5	1.64	0.71	<2.5
MW-82	04/07/11	4.29	<1.0	<2.5	<10.0	2.48	<0.9	<1.0	<1.0	<0.9	<2.5	557.00	12.90	<1.0	8.74	<1.0	4.34
MW-82	04/07/11	4.65	<0.5	1.83	9.34	2.74	1.53	<0.5	<0.5	<0.5		634.00	10.60	<0.5	10.70	<0.5	3.67
MW-82	07/28/11	4.25	<0.500 U	2.100 J	16.82	2.500 J	5.35	<0.200 U	<0.500 U	<0.500 U	<0.500 U	602.21	24.50	<0.500 U	8.38	<0.500 U	5.24
MW-82	07/28/11	4.19	<0.500 U	0.970 J	15.65	2.77	<0.500 U	<0.200 U	<0.500 U	<0.500 U	<0.500 U	581.76	10.29	<0.500 U	9.62	<0.500 U	4.210 J
MW-82	03/22/12	3.25	<0.500 U	6.13	10.89	2.230 J	1.450 J	<0.200 U	<0.500 U	<0.500 U	<0.500 U	532.45	7.77	<0.500 U	7.04	<0.500 U	6.49
MW-82	03/22/12	3.97	1.210 J	4.46	15.22	2.58	0.620 J	<0.200 U	<0.500 U	<0.500 U	<0.500 U	590.69	12.63	<0.500 U	7.98	4.79	7.37
MW-82	08/23/12	4.83	<0.250 U	<0.250 U	15.97	2.84	4.75	<0.100 U	<0.250 U	<0.250 U	<0.250 U	576.32	4.22	<0.250 U	9.24	<0.250 U	<0.500 U
MW-82	03/13/13	2.82	<0.250 U	<0.100 U	12.820 J	1.66	3.72	<0.150 U	<0.250 U	<0.250 U	<0.250 U	529.94	6.04	<0.250 U	6.71	<0.250 U	3.470 J
MW-82	08/12/13	4.87	<0.250 U	<0.100 U	14.160 J	3.03	3.98	<0.150 U	<0.250 U	<0.250 U	<0.250 U	555.92	5.75	<0.250 U	9.65	<0.250 U	6.95
MW-82	08/12/13	4.14	<0.500 U	<0.200 U	19.430 J	3.27	3.01	<0.300 U	<0.500 U	<0.500 U	<0.500 U	541.08	7.11	<0.500 U	9.30	<0.500 U	10.38
MW-82	03/26/14	3.15	<0.250 U	7.20	13.440 J	2.77	5.12	<0.150 U	<0.250 U	<0.250 U	<0.250 U	558.86	4.44	<0.250 U	6.97	<0.250 U	3.130 J
MW-82	08/15/14	4.88	<0.250 U	<1.250 U	18.100 J	2.39	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	535.54	245.46	<0.250 U	9.92	<0.250 U	1.550 J
MW-82M	09/27/11	0.980 J	0.360 J	1.180 J	7.79	3.71	2.00	<0.100 U	<0.250 U	0.590 J	<0.250 U	1269.27	14.64	<0.250 U	74.15	1.050 J	4.04
MW-82M	09/27/11	2.52	1.500 J	5.61	12.65	4.74	3.66	1.98	0.740 J	1.330 J	<0.500 U	1331.92	47.51	0.780 J	70.35	3.49	5.27
MW-82M	03/22/12	<0.500 U	<0.500 U	7.53	7.490 J	3.31	<0.500 U	<0.200 U	<0.500 U	<0.500 U	<0.500 U	1226.96	11.49	<0.500 U	56.93	1.140 J	2.790 J
MW-82M	03/22/12	0.530 J	1.500 J	8.57	11.71	3.98	<0.500 U	<0.200 U	34.63	<0.500 U	<0.500 U	1391.86	26.61	<0.500 U	66.09	4.66	4.280 J
MW-82M	08/23/12	0.520 J	<0.500 U	<0.500 U	<2.000 U	3.84	5.37	<0.200 U	<0.500 U	<0.500 U	<0.500 U	1316.93	<0.500 U	<0.500 U	62.05	<0.500 U	<1.000 U
MW-82M	03/13/13	<0.250 U	<0.250 U	<0.100 U	7.850 J	3.00	7.91	<0.150 U	<0.250 U	0.570 J	<0.250 U	1271.88	21.35	<0.250 U	109.41	1.070 J	<0.130 U
MW-82M	08/12/13	<0.250 U	<0.250 U	9.55	6.860 J	4.20	4.92	<0.150 U	<0.250 U	0.520 J	<0.250 U	1353.87	11.56	<0.250 U	74.52	1.58	<0.130 U
MW-82M	08/12/13	<0.500 U	<0.500 U	<0.200 U	<7.500 U	4.08	3.82	<0.300 U	<0.500 U	<0.500 U	<0.500 U	1323.65	17.49	<0.500 U	66.02	2.92	2.220 J
MW-82M	03/26/14	<0.250 U	<0.250 U	9.10	8.100 J	3.85	4.15	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1416.25	10.05	<0.250 U	62.99	1.060 J	<1.250 U
MW-82M	08/15/14	1.090 J	<0.250 U	7.40	13.540 J	2.67	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1272.82	358.19	<0.250 U	73.06	1.88	<1.250 U
MW-85	04/20/09	5.95	<0.86	<4.11 U	15.10	3.54	1.06	<1.97 U	<50.0	<2.03	<0.47	636.00	9.23	<0.33	11.70	<0.51	53.50
MW-85	08/24/09	5.05	<0.20	<2.00	14.40	2.18	<0.50	<0.76	<0.24	<0.50	<0.21	500.00	7.34	<0.17	7.43	<0.50	<4.50
MW-85	04/06/10	5.32	0.05	0.52	18.80	3.97	0.50	0.15	0.08	0.26	<0.04	604.00	6.99	0.07	15.00	<0.10	32.90
MW-85	07/21/10	5.47	<0.2	<0.5	9.72	4.10	<0.2	<0.2	<0.2	0.20	<0.2	579.00	6.70	<0.2	16.40	<0.2	32.60
MW-85	07/21/10	5.07	<0.5	<1.3	14.10	3.92	<0.5	<0.5	<0.5	<0.5		624.00	5.79	<0.5	13.80	<0.5	41.60
MW-85	04/13/11	4.40	<1.0	<2.5	<10.0	3.80	1.68	<1.0	<1.0	<0.9	<2.5	543.00	12.20	<1.0	10.80	<1.0	38.00
MW-85	04/13/11	5.10	<0.5	<1.3	9.46	4.28	2.27	<0.5	<0.5	<0.5		636.00	10.40	<0.5	14.60	<0.5	34.40
MW-85	07/28/11	4.72	<0.500 U	1.050 J	16.85	4.17	1.130 J	0.410 J	<0.500 U	<0.500 U	<0.500 U	580.95	9.88	<0.500 U	12.78	<0.500 U	41.78
MW-85	07/28/11	4.55	<0.500 U	1.590 J	16.55	3.59	5.77	<0.200 U	<0.500 U	<0.500 U	<0.500 U	587.05	22.66	<0.500 U	12.27	<0.500 U	45.72
MW-85	03/27/12	3.87	<0.500 U	<0.500 U	9.350 J	3.01	2.55	<0.200 U	<0.500 U	<0.500 U	<0.500 U	533.76	7.27	<0.500 U	8.46	<0.500 U	42.87
MW-85	03/27/12	4.75	1.050 J	9.51	18.76	3.41	1.250 J	<0.200 U	<0.500 U	2.340 J	<0.500 U	580.32	13.78	<0.500 U	11.51	5.73	42.73
MW-85	08/16/12	4.83	<0.250 U	0.350 J	19.56	3.92	5.23	<0.100 U	<0.250 U	<0.250 U	<0.250 U	543.67	7.81	<0.250 U	11.46	<0.250 U	44.08
MW-85	03/13/13	3.76	<0.250 U	<0.100 U	13.440 J	2.89	6.91	<0.150 U	<0.250 U	<0.250 U	<0.250 U	529.59	12.25	<0.250 U	8.76	<0.250 U	40.84
MW-85	08/12/13	5.48	<0.250 U	<0.100 U	13.720 J	4.20	4.39	<0.150 U	<0.250 U	<0.250 U	<0.250 U	544.48	5.53	<0.250 U	11.65	<0.250 U	42.08
MW-85	08/12/13	4.70	<0.500 U	<0.200 U	18.760 J	4.21	3.71	<0.300 U	<0.500 U	<0.500 U	<0.500 U	533.66	6.90	<0.500 U	11.96	<0.500 U	42.45
MW-85	03/25/14	3.69	<0.250 U	<1.250 U	14.590 J	3.59	3.11	<0.150 U	<0.250 U	<0.250 U	<0.250 U	555.48	4.19	<0.250 U	9.73	<0.250 U	37.47
MW-85	08/22/14	6.20	<0.250 U	<1.250 U	19.840 J	5.92	0.790 J	<0.150 U	<0.250 U	<0.250 U	<0.250 U	577.22	269.43	<0.250 U	14.32	<0.250 U	43.39

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-82	04/20/09	<0.82	<0.43	<0.37	<0.39	<0.50	<0.32	<0.40	<0.74	<0.32	0.73	<0.18	<0.30	<0.5
MW-82	08/24/09	<0.25	0.64	<0.21	<0.25	0.29	<0.20	<0.26	<0.50	<0.11	0.74	<0.12	<0.25	<0.5
MW-82	04/15/10	0.52	0.89	<0.26	<0.25	0.30	0.37	<0.26	1.34	<0.11	0.84	<0.12	<0.25	<0.05
MW-82	07/21/10	<0.2	0.96	<0.5	<0.2	0.40	<0.2	<0.2	<0.5	<0.2	0.76	<0.2	<0.2	<0.05
MW-82	07/21/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	3.30	<0.5	<0.5	
MW-82	04/07/11	<0.9	<1.0	<2.5	<0.9	<1.0	<2.5	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	<0.05
MW-82	04/07/11	<0.5	0.68	<1.3	345.00	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-82	07/28/11	0.540 J	0.600 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.760 J	<0.500 U	<0.500 U	
MW-82	07/28/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.620 J	<0.500 U	<0.500 U	<0.010 U
MW-82	03/22/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.500 J	<0.500 U	<0.500 U	<0.010 U
MW-82	03/22/12	<0.500 U	0.520 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.620 J	<0.500 U	<0.500 U	
MW-82	08/23/12	<0.250 U	0.570 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.660 J	<0.250 U	<0.250 U	<0.010 U
MW-82	03/13/13	<0.250 U	0.270 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.320 J	<0.250 U	<0.250 U	<0.010 U
MW-82	08/12/13	<0.250 U	1.080 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.650 J	<0.250 U	<0.250 U	<0.010 U
MW-82	08/12/13	<0.500 U	1.060 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	
MW-82	03/26/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.540 J	<0.250 U	0.640 J	<0.250 U	<0.250 U	<0.010 U
MW-82	08/15/14	<0.250 U	0.720 J	<0.250 U	0.890 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-82M	09/27/11	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.800 J	<0.250 U	2.21	<0.010 U
MW-82M	09/27/11	1.780 J	3.35	<0.500 U	<0.500 U	1.740 J	<0.500 U	1.210 J	0.650 J	<0.500 U	2.63	<0.500 U	5.36	
MW-82M	03/22/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.680 J	<0.500 U	1.440 J	<0.010 U
MW-82M	03/22/12	<0.500 U	0.660 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.060 J	<0.500 U	1.990 J	
MW-82M	08/23/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.890 J	<0.500 U	1.800 J	<0.010 U
MW-82M	03/13/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.770 J	<0.250 U	0.680 J	<0.250 U	1.63	<0.010 U
MW-82M	08/12/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.950 J	<0.250 U	1.91	<0.010 U
MW-82M	08/12/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.290 J	<0.500 U	2.080 J	
MW-82M	03/26/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.860 J	<0.250 U	1.71	<0.010 U
MW-82M	08/15/14	<0.250 U	<0.250 U	<0.250 U	0.930 J	<0.250 U	<0.250 U	<0.250 U	0.870 J	<0.250 U	<0.250 U	<0.250 U	0.960 J	<0.010 U
MW-85	04/20/09	<0.61	<0.42	<0.36	<0.38	<0.49	<0.31	<0.39	<0.72	<0.32	0.78	<0.18	<0.29	<0.5
MW-85	08/24/09	<0.25	0.64	<0.21	<0.75	<0.11	<0.20	<0.26	<0.50	<0.11	0.70	<0.12	<0.25	<0.5
MW-85	04/06/10	<0.05	1.00	<0.04	<0.05	0.40	0.06	0.20	0.46	0.08	0.93	0.06	0.20	<0.05
MW-85	07/21/10	<0.2	1.09	<0.5	<0.2	0.45	<0.2	0.22	<0.5	<0.2	0.93	<0.2	<0.2	<0.05
MW-85	07/21/10	<0.5	0.67	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-85	04/13/11	<0.9	<1.0	<2.5	<0.9	<1.0	<2.5	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	<0.05
MW-85	04/13/11	<0.5	0.66	<1.3	320.00	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-85	07/28/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.770 J	<0.500 U	<0.500 U	<0.010 U
MW-85	07/28/11	<0.500 U	0.530 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.770 J	<0.500 U	<0.500 U	
MW-85	05/27/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.620 J	<0.500 U	<0.500 U	0.08
MW-85	03/27/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.740 J	<0.500 U	<0.500 U	
MW-85	08/16/12	<0.250 U	0.500 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.780 J	<0.250 U	<0.250 U	<0.010 U
MW-85	03/13/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.650 J	<0.250 U	<0.250 U	<0.010 U
MW-85	08/12/13	<0.250 U	0.280 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.880 J	<0.250 U	<0.250 U	<0.010 U
MW-85	08/12/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	
MW-85	03/25/14	<0.250 U	0.520 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.840 J	<0.250 U	<0.250 U	<0.010 U
MW-85	08/22/14	<0.250 U	0.690 J	<0.250 U	<0.250 U	<0.250 U	0.760 J	<0.250 U	0.630 J	<0.250 U	1.080 J	<0.250 U	<0.250 U	<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249897	MW-85M	09/27/11	14:23	10.96	6.17	778	7.42	803	104.4	25.0	14.2	2.2	0.005 J	0.780	22.6
TOTAL RECOVERABLE	249897	MW-85M	09/27/11	14:23	10.96	6.17	778			112.0	28.2	16.3	4.1	6.521	1.145	
DISSOLVED	249897	MW-85M	03/22/12	15:51	9.28	7.27	754	7.40	884	107.8	23.6	15.3	2.0	<0.005 U	0.122	24.6
TOTAL RECOVERABLE	249897	MW-85M	03/22/12	15:51	9.28	7.27	754			117.9	27.6	15.8	4.3	8.676	0.627	
DISSOLVED	249897	MW-85M	08/16/12	15:27	10.58	7.09	784	7.40	761	115.1	28.4	14.9	2.3	<0.015 U	0.042 J	24.1
DISSOLVED	249897	MW-85M	03/13/13	13:35	9.16	7.69	788	7.39	878	110.7	26.2	16.4	2.1	<0.015 U	0.009 J	24.8
DISSOLVED	249897	MW-85M	08/12/13	13:39	9.30	7.03	800	7.35	794	117.2	26.2	16.8	2.2	<0.015 U	0.010 J	25.4
TOTAL RECOVERABLE	249897	MW-85M	08/12/13	13:39	9.30	7.03	800			119.6	26.8	16.5	2.8	2.790	0.168	
DISSOLVED	249897	MW-85M	03/25/14	15:44	9.20	7.24	815	7.68	992	117.3	26.0	16.7	1.9	<0.015 U	<0.002 U	24.7
DISSOLVED	249897	MW-85M	08/22/14	10:40	8.60	7.46	780	7.57	757	121.9	27.0	18.2	2.0	<0.015 U	0.003 J	25.0
DISSOLVED	249844	MW-90	04/23/09	11:05	9.05	6.86	1,046	6.95	1,058	212.0	21.4	16.0	8.3	10.400	3.640	23.8
DISSOLVED	249844	MW-90	08/24/09	16:10	9.90	6.84	1,148	7.71	1,148	214.0	20.8	15.3	7.7	9.860	3.470	21.7
DISSOLVED	249844	MW-90	04/06/10	14:09	9.13	6.56	1,160	7.22	1,065	204.0	20.9	14.6	7.5	9.490	3.380	21.3
DISSOLVED	249844	MW-90	07/21/10	11:11	11.37	6.60	1,134	7.32	1,132	206.0	20.9	14.3	7.3	9.080	3.220	20.8
TOTAL RECOVERABLE	249844	MW-90	07/21/10	11:11	11.37	6.60	1,134			241.0	23.0	16.2	8.0	10.100	3.700	
DISSOLVED	249844	MW-90	04/13/11	13:30	9.71	7.11	1,086	6.90	947	187.0	18.8	13.4	6.4	8.010	2.770	17.5
TOTAL RECOVERABLE	249844	MW-90	04/13/11	13:30	9.71	7.11	1,086			235.0	22.3	15.7	7.7	9.720	3.440	
TOTAL RECOVERABLE	249844	MW-90	07/27/11	15:50	11.33	5.47	1,137			186.7	21.0	14.4	7.4	9.973	3.053	
DISSOLVED	249844	MW-90	07/27/11	15:50	11.33	5.47	1,137	6.83	946	191.7	20.7	14.4	7.2	9.729	3.073	20.3
TOTAL RECOVERABLE	249844	MW-90	03/28/12	14:30	9.78	6.45	1,129			209.3	22.5	16.6	7.7	9.420	3.283	
DISSOLVED	249844	MW-90	03/28/12	14:30	9.78	6.45	1,129	6.75	1,120	188.1	21.5	17.0	7.4	8.709	3.065	21.9
DISSOLVED	249844	MW-90	08/15/12	14:57	11.31	6.72	1,262	6.80	1,173	214.5	25.6	15.5	7.4	9.648	3.472	21.3
DISSOLVED	249844	MW-90	02/27/13	15:30	9.17	6.72	1,317	6.65	1,390	230.8	24.6	15.2	6.9	10.793	3.479	20.9
TOTAL RECOVERABLE	249844	MW-90	02/27/13	15:30	9.17	6.72	1,317			228.5	27.1	16.3	8.0	11.099	3.631	
DISSOLVED	249844	MW-90	08/05/13	15:14	10.83	6.50	1,225	6.24	1,178	185.9	20.2	13.9	6.2	4.794	2.739	19.7
TOTAL RECOVERABLE	249844	MW-90	08/05/13	15:14	10.83	6.50	1,225			191.5	21.1	13.5	6.6	6.660	2.050	
DISSOLVED	249844	MW-90	03/25/14	13:55	10.10	7.00	1,100	6.94	1,318	176.3	20.8	13.2	5.8	7.036	2.332	19.9
DISSOLVED	249844	MW-90	08/13/14	14:15	10.70	6.32	1,010	7.16	1,028	183.0	20.7	15.0	6.8	6.578	2.473	21.4
DISSOLVED	249899	MW-90M	09/27/11	12:52	11.70	5.46	1,229	6.43	1,262	203.0	15.5	17.5	6.2	0.076	12.268	17.8
TOTAL RECOVERABLE	249899	MW-90M	09/27/11	12:52	11.70	5.46	1,229			207.8	16.1	17.8	6.1	1.099	12.910	
DISSOLVED	249899	MW-90M	03/22/12	17:01	10.19	6.39	1,198	6.53	1,325	225.1	16.0	18.2	6.2	0.081 J	12.468	18.3
TOTAL RECOVERABLE	249899	MW-90M	03/22/12	17:01	10.19	6.39	1,198			235.0	17.3	18.8	6.8	1.293	12.636	
DISSOLVED	249899	MW-90M	08/15/12	16:08	11.27	6.44	1,218	6.54	1,150	216.9	17.1	17.4	6.3	0.059 J	12.032	17.9
TOTAL RECOVERABLE	249899	MW-90M	02/27/13	16:19	8.96	6.57	1,162			205.3	15.8	17.7	6.6	0.450	11.262	
DISSOLVED	249899	MW-90M	02/27/13	16:19	8.96	6.57	1,162	6.41	1,219	215.4	15.1	17.0	6.1	<0.038 U	11.102	17.7
DISSOLVED	249899	MW-90M	08/06/13	13:40	10.47	6.10	1,160	6.61	1,174	211.1	15.3	16.1	6.0	<0.038 U	11.412	19.0
TOTAL RECOVERABLE	249899	MW-90M	08/06/13	13:40	10.47	6.10	1,160			210.3	15.3	16.9	6.2	0.110 J	11.339	
DISSOLVED	249899	MW-90M	03/25/14	14:06	10.30	6.19	1,200	6.85	1,336	220.6	16.1	17.2	6.1	<0.038 U	9.645	18.2
DISSOLVED	249899	MW-90M	08/13/14	15:10	10.60	5.94	1,200	6.83	1,252	242.7	17.6	18.7	6.7	<0.038 U	10.743	18.5

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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-85M	09/27/11	247.0	0.0	222.9	2.6	0.1	0.4	<0.020 U	<0.100 U	38.44	0.58	6.03	87.51	<0.100 U	<10.000 U	<0.100 U
MW-85M	09/27/11								<0.250 U	6270.70	1.43		223.24	0.400 J		<0.250 U
MW-85M	03/22/12	220.5	0.0	220.4	2.7	0.1	0.4	<0.020 U	<0.100 U	37.77	0.68	5.03	62.34	<0.100 U	<10.000 U	<0.100 U
MW-85M	03/22/12									10967.69	3.37	5.93	228.34	0.440 J		<0.250 U
MW-85M	08/16/12	239.0	0.0	221.6	2.5	0.1	0.4	<0.020 U	<0.100 U	<0.400 U	0.68	5.85	65.20	<0.100 U	<10.000 U	<0.100 U
MW-85M	03/13/13	246.4	0.0	245.0	2.8	0.1	0.4	<0.020 U	<0.100 U	0.700 J	0.71	5.30	51.20	<0.100 U	<10.000 U	<0.100 U
MW-85M	08/12/13	248.8	0.0	242.7	2.8	0.1	0.4	<0.020 U	<0.100 U	3.31	0.84	5.20	53.19	<0.100 U	<10.000 U	<0.100 U
MW-85M	08/12/13									3182.90	1.44	6.67	96.20	<0.250 U		<0.250 U
MW-85M	03/25/14	262.5	0.0	264.5	3.3	0.1	0.5	<0.020 U	<0.100 U	<2.000 U	0.92	3.32	46.31	<0.100 U	<10.000 U	<0.100 U
MW-85M	08/22/14	257.8	0.0	262.4	3.0	0.1	0.5	<0.020 U	<0.100 U	4.450 J	1.04	6.81	50.75	<0.100 U	<10.000 U	<0.100 U
MW-90	04/23/09	269.6	0.0	442.9	6.3	<0.5	5.2	<0.5	<0.35	<30.41	196	21.10	17.00	<0.98	<500	<0.24 U
MW-90	08/24/09	263.9	0.0	426.1	6.9	<0.5	4.9	<0.5	<0.50	<89.00	188	23.30	19.80	<0.50	<500	<1.00
MW-90	04/06/10	266.0	0.0	392.8	6.7	<0.05	4.6	<0.05	<0.5	<5.0	183	15.40	18.80	<1.0	57.00	<0.5
MW-90	07/21/10	275.7	0.0	409.9	6.8	<0.05	4.9	<0.05	<1.0	10.90	183	20.30	18.00	<1.0	<50	<1.0
MW-90	07/21/10								<1.0	57.80	339		39.80	<1.0		<1.0
MW-90	04/13/11	266.0	0.0	409.4	7.4	<0.05	4.5	<0.1	<1.0	<10.0	174	18.00	16.40	<1.0	<50	<1.0
MW-90	04/13/11								<1.0	26.70	170	20.20	74.20	<1.0		<1.0
MW-90	07/27/11								<0.250 U	195.03	185		22.40	<0.250 U		<0.250 U
MW-90	07/27/11	283.5	0.0	342.5	7.1	<0.010 U	4.8	<0.020 U	<0.500 U	76.90	180	23.03	18.58	<0.500 U	<10.000 U	<0.500 U
MW-90	03/28/12									103.52	194	23.97	20.68	<0.500 U		<0.500 U
MW-90	03/28/12	264.2	0.0	374.6	8.6	0.1	4.9	<0.020 U	<0.500 U	12.80	170	21.01	17.17	<0.500 U	<10.000 U	<0.500 U
MW-90	08/15/12	261.1	0.0	442.7	9.3	<0.010 U	4.7	<0.020 U	<0.250 U	<1.000 U	182	22.15	21.33	0.310 J	<10.000 U	<0.250 U
MW-90	02/27/13	262.2	0.0	509.5	13.0	0.1	5.0	<0.020 U	<0.250 U	5.73	181	19.02	21.47	<0.250 U	84.00	<0.250 U
MW-90	02/27/13									14.21	179	28.49	22.77	<0.500 U		<0.500 U
MW-90	08/05/13	126.2	0.0	366.3	10.5	53.8	5.1	0.030 J	<0.250 U	93.62	93	19.37	27.55	<0.250 U	<10.000 U	3.02
MW-90	08/05/13									191.81	125	18.03	28.39	<0.250 U		2.83
MW-90	03/25/14	302.0	0.0	337.3	13.5	0.1	5.8	<0.020 U	<0.250 U	<5.000 U	171	14.49	17.61	<0.250 U	78.00	<0.250 U
MW-90	08/13/14	308.8	0.0	330.3	13.3	<0.010 U	5.4	<0.020 U	<0.250 U	<5.000 U	154	18.52	18.91	<0.250 U	<10.000 U	<0.250 U
MW-90M	09/27/11	222.6	0.0	507.8	6.4	<0.010 U	1.0	<0.020 U	<0.250 U	46.52	0.340 J	22.12	14.31	<0.250 U	<10.000 U	0.970 J
MW-90M	09/27/11								<0.500 U	1439.84	0.930 J		25.36	<0.500 U		1.000 J
MW-90M	03/22/12	208.2	0.0	489.1	6.4	<0.010 U	0.9	<0.020 U	<0.500 U	74.65	0.560 J	19.69	12.70	<0.500 U	<10.000 U	0.840 J
MW-90M	03/22/12									2222.52	2.53	20.52	27.01	<0.500 U		1.170 J
MW-90M	08/15/12	211.3	0.0	480.0	6.3	<0.010 U	0.9	<0.020 U	<0.250 U	<1.000 U	0.390 J	21.86	13.24	0.350 J	<10.000 U	0.980 J
MW-90M	02/27/13									645.15	<0.500 U	22.45	16.35	<0.500 U		1.210 J
MW-90M	02/27/13	210.9	0.0	524.0	7.8	<0.010 U	1.3	<0.020 U	<0.250 U	18.04	<0.250 U	17.46	12.80	<0.250 U	<10.000 U	0.880 J
MW-90M	08/06/13	236.1	0.0	458.0	8.0	0.1	1.3	<0.020 U	<0.250 U	5.64	<0.250 U	20.42	13.13	<0.250 U	<10.000 U	0.830 J
MW-90M	08/06/13									68.62	<0.250 U	18.56	13.50	<0.250 U		<0.250 U
MW-90M	03/25/14	252.8	0.0	480.7	9.8	<0.010 U	1.4	<0.020 U	<0.250 U	<5.000 U	<0.250 U	12.80	12.87	<0.250 U	78.00	0.910 J
MW-90M	08/13/14	252.8	0.0	523.2	11.2	0.1	1.4	<0.020 U	<0.250 U	<5.000 U	<0.250 U	19.30	13.97	<0.250 U	<10.000 U	0.760 J

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-85M	09/27/11	0.480 J	0.180 J	0.52	0.840 J	5.27	3.85	<0.040 U	<0.100 U	0.240 J	<0.100 U	549.19	2.42	<0.100 U	26.65	0.81	1.69
MW-85M	09/27/11	3.79	6.38	13.17	8.14	6.66	11.82	10.15	<0.250 U	0.410 J	<0.250 U	607.39	471.61	<0.250 U	26.54	9.68	27.01
MW-85M	03/22/12	<0.100 U	0.170 J	0.230 J	0.850 J	3.66	1.72	<0.040 U	<0.100 U	<0.100 U	<0.100 U	501.86	3.20	<0.100 U	21.72	0.68	1.19
MW-85M	03/22/12	3.38	7.99	18.28	8.87	4.43	8.34	11.64	0.440 J	<0.250 U	1.030 J	575.31	504.47	<0.250 U	23.90	14.59	34.84
MW-85M	08/16/12	0.150 J	0.300 J	0.370 J	4.96	4.20	1.83	<0.040 U	<0.100 U	0.210 J	<0.100 U	534.89	2.38	<0.100 U	25.54	1.11	1.27
MW-85M	03/13/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	3.34	1.97	<0.060 U	<0.100 U	0.120 J	<0.100 U	529.33	6.03	<0.100 U	41.47	0.410 J	<0.050 U
MW-85M	08/12/13	<0.100 U	<0.100 U	<0.040 U	1.680 J	4.84	1.06	<0.060 U	<0.100 U	<0.100 U	<0.100 U	556.12	1.85	<0.100 U	28.39	1.40	<0.050 U
MW-85M	08/12/13	1.020 J	2.34	11.03	<3.750 U	4.77	3.02	4.46	<0.250 U	<0.250 U	<0.250 U	567.37	156.95	<0.250 U	27.70	5.83	13.73
MW-85M	03/25/14	<0.100 U	<0.100 U	<0.500 U	4.100 J	3.98	1.03	<0.060 U	<0.100 U	<0.100 U	<0.100 U	525.86	1.65	<0.100 U	21.15	0.98	<0.500 U
MW-85M	08/22/14	0.52	<0.100 U	<0.500 U	7.200 J	6.03	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	567.67	93.23	<0.100 U	32.23	2.05	<0.500 U
MW-90	04/23/09	3.01	<0.43	<2.05 U	12.80	10.70	0.83	<0.99 U	<0.25	<1.02	<0.24	311.00	5.17	<0.16	6.47	<0.25	11.90
MW-90	08/24/09	3.30	<0.50	<4.00	13.70	12.20	<0.50	<0.50	<0.50	<1.50	<0.50	323.00	4.71	<0.50	8.19	<0.50	10.60
MW-90	04/06/10	3.42	<0.5	<2.0	54.50	11.70	0.70	<1.0	0.47	<0.5	<0.5	304.00	4.42	<0.5	8.48	<0.5	11.60
MW-90	07/21/10	3.24	<1.0	<2.5	<10.0	11.70	<1.0	<1.0	<1.0	<1.0	<1.0	317.00	3.74	<1.0	9.00	<1.0	8.22
MW-90	07/21/10	5.87	<1.0	<2.5	31.60	24.80	3.89	<1.0	<1.0	<0.9		648.00	7.92	<1.0	17.60	<1.0	17.30
MW-90	04/13/11	2.45	<1.0	<2.5	<10.0	11.40	<0.9	<1.0	<1.0	<0.9	<2.5	293.00	5.62	<1.0	7.63	<1.0	8.58
MW-90	04/13/11	2.99	<1.0	<2.5	<10.0	12.80	1.52	<1.0	<1.0	<0.9		334.00	5.95	<1.0	9.46	<1.0	9.92
MW-90	07/27/11	2.62	0.330 J	3.63	12.80	10.59	3.65	1.84	<0.250 U	<0.250 U	<0.250 U	303.65	18.37	<0.250 U	9.98	<0.250 U	15.37
MW-90	07/27/11	2.70	<0.500 U	1.070 J	13.44	12.53	1.150 J	0.590 J	<0.500 U	<0.500 U	<0.500 U	282.55	4.67	<0.500 U	8.87	0.590 J	11.20
MW-90	03/28/12	2.70	1.190 J	7.75	16.71	10.61	<0.500 U	<0.200 U	<0.500 U	1.850 J	<0.500 U	292.60	11.85	<0.500 U	9.08	6.53	9.71
MW-90	03/28/12	2.210 J	<0.500 U	<0.500 U	7.600 J	9.54	<0.500 U	<0.200 U	<0.500 U	<0.500 U	<0.500 U	285.05	4.74	<0.500 U	6.39	<0.500 U	10.06
MW-90	08/15/12	3.03	<0.250 U	<0.250 U	16.71	11.94	3.46	<0.100 U	<0.250 U	<0.250 U	<0.250 U	323.27	4.68	<0.250 U	10.22	<0.250 U	13.18
MW-90	02/27/13	2.65	<0.250 U	<0.100 U	8.790 J	11.77	3.71	<0.150 U	<0.250 U	<0.250 U	<0.250 U	322.38	6.21	<0.250 U	9.42	<0.250 U	11.62
MW-90	02/27/13	3.01	<0.500 U	<0.200 U	15.080 J	10.48	4.41	<0.300 U	<0.500 U	<0.500 U	<0.500 U	349.72	11.17	<0.500 U	10.75	1.840 J	
MW-90	08/05/13	2.18	<0.250 U	61.27	5.810 J	7.28	3.04	1.38	<0.250 U	<0.250 U	<0.250 U	284.41	2.82	<0.250 U	8.95	<0.250 U	151.96
MW-90	08/05/13	2.55	1.78	61.05	13.010 J	10.09	3.63	8.06	<0.250 U	<0.250 U	1.140 J	283.06	9.74	<0.250 U	9.57	1.82	149.78
MW-90	03/25/14	1.75	<0.250 U	<1.250 U	10.700 J	11.89	1.66	<0.150 U	<0.250 U	<0.250 U	<0.250 U	266.46	2.22	<0.250 U	7.99	<0.250 U	10.87
MW-90	08/13/14	2.28	<0.250 U	5.45	13.240 J	11.39	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	236.08	115.32	<0.250 U	8.33	<0.250 U	6.94
MW-90M	09/27/11	2.11	0.330 J	1.93	10.27	0.270 J	4.09	0.190 J	<0.250 U	<0.250 U	<0.250 U	446.75	5.47	<0.250 U	4.24	<0.250 U	7.33
MW-90M	09/27/11	3.47	1.730 J	5.38	15.10	1.190 J	3.99	0.910 J	<0.500 U	<0.500 U	<0.500 U	474.68	35.49	<0.500 U	4.55	1.910 J	5.56
MW-90M	03/22/12	1.450 J	<0.500 U	5.89	8.900 J	<0.500 U	1.820 J	<0.200 U	<0.500 U	<0.500 U	<0.500 U	447.75	5.93	<0.500 U	3.18	<0.500 U	3.320 J
MW-90M	03/22/12	2.360 J	2.75	6.78	13.78	<0.500 U	3.50	1.07	<0.500 U	<0.500 U	<0.500 U	473.01	64.58	<0.500 U	3.64	8.01	6.56
MW-90M	08/15/12	1.71	<0.250 U	1.43	18.23	0.350 J	3.63	<0.100 U	<0.250 U	<0.250 U	<0.250 U	448.92	5.00	<0.250 U	4.22	<0.250 U	3.73
MW-90M	02/27/13	1.530 J	<0.500 U	2.530 J	16.550 J	<0.500 U	4.38	<0.300 U	<0.500 U	<0.500 U	<0.500 U	436.30	19.33	<0.500 U	4.25	2.62	
MW-90M	02/27/13	1.30	<0.250 U	<0.100 U	9.780 J	<0.250 U	3.67	<0.150 U	<0.250 U	<0.250 U	<0.250 U	424.63	5.62	<0.250 U	3.77	<0.250 U	<0.130 U
MW-90M	08/06/13	1.50	<0.250 U	<0.100 U	8.330 J	<0.250 U	3.00	<0.150 U	<0.250 U	<0.250 U	<0.250 U	448.04	3.57	<0.250 U	5.02	<0.250 U	<0.130 U
MW-90M	08/06/13	1.50	1.25	<0.100 U	13.990 J	<0.250 U	3.01	<0.150 U	<0.250 U	<0.250 U	<0.250 U	430.14	9.11	<0.250 U	4.85	1.32	<0.130 U
MW-90M	03/25/14	1.040 J	<0.250 U	6.10	11.370 J	<0.250 U	2.56	<0.150 U	<0.250 U	<0.250 U	<0.250 U	434.37	2.96	<0.250 U	3.52	<0.250 U	<1.250 U
MW-90M	08/13/14	1.61	<0.250 U	8.11	15.880 J	0.610 J	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	414.03	152.76	<0.250 U	5.29	<0.250 U	<1.250 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-85M	09/27/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.160 J	<0.100 U	0.71	<0.100 U	3.94	<0.010 U
MW-85M	09/27/11	9.00	20.13	4.27	2.47	11.83	1.58	9.06	0.420 J	2.21	24.31	7.92	8.39	
MW-85M	03/22/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.58	<0.100 U	1.41	<0.010 U
MW-85M	03/22/12	17.15	21.80	3.94	3.26	11.83	0.890 J	9.87	<0.250 U	2.21	20.91	4.91	4.08	
MW-85M	08/16/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.240 J	<0.100 U	0.70	<0.100 U	1.52	<0.010 U
MW-85M	03/13/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.290 J	<0.100 U	0.53	<0.100 U	1.26	<0.010 U
MW-85M	08/12/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.75	<0.100 U	1.68	<0.010 U
MW-85M	08/12/13	<0.250 U	7.77	1.44	1.080 J	3.67	<0.250 U	3.05	<0.250 U	0.390 J	8.86	<0.250 U	2.84	
MW-85M	03/25/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.61	<0.100 U	1.14	<0.010 U
MW-85M	08/22/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.320 J	<0.100 U	0.62	<0.100 U	0.85	<0.100 U	2.29	<0.010 U
MW-90	04/23/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	1.13	<0.09	<0.15	<0.5
MW-90	08/24/09	<0.50	<0.50	<0.50	<0.50	<0.50	<1.00	<0.50	<0.50	<0.50	1.23	<0.50	<0.50	<0.5
MW-90	04/06/10	0.46	0.19	<0.5	<0.5	<0.1	0.26	<0.25	1.25	<0.1	1.24	0.15	<0.5	<0.05
MW-90	07/21/10	<1.0	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	<0.05
MW-90	07/21/10	<0.9	<1.0	<2.5	<0.9	<1.0	<0.9	<1.0	<2.5	<1.0	2.55	<1.0	<1.0	
MW-90	04/13/11	<0.9	<1.0	<2.5	<0.9	<1.0	<2.5	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	<0.05
MW-90	04/13/11	<0.9	<1.0	<2.5	217.00	<1.0	<2.5	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	
MW-90	07/27/11	<0.250 U	0.550 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.380 J	<0.250 U	<0.250 U	1.84	<0.250 U	0.300 J	
MW-90	07/27/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.990 J	<0.500 U	<0.500 U	<0.010 U
MW-90	03/28/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.950 J	<0.500 U	<0.500 U	
MW-90	03/28/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.840 J	<0.500 U	<0.500 U	0.08
MW-90	08/15/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.080 J	<0.250 U	<0.250 U	<0.010 U
MW-90	02/27/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.010 J	<0.250 U	<0.250 U	0.06
MW-90	02/27/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.060 J	<0.500 U	<0.500 U	
MW-90	08/05/13	<0.250 U	0.540 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.230 J	<0.250 U	<0.250 U	<0.010 U
MW-90	08/05/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.45	<0.250 U	<0.250 U	
MW-90	03/25/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.970 J	<0.250 U	<0.250 U	<0.010 U
MW-90	08/13/14	<0.250 U	<0.250 U	<0.250 U	0.770 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-90M	09/27/11	<0.250 U	0.350 J	<0.250 U	<0.250 U	0.270 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.11	<0.250 U	<0.250 U	<0.010 U
MW-90M	09/27/11	0.710 J	1.840 J	<0.500 U	<0.500 U	1.110 J	<0.500 U	0.840 J	<0.500 U	<0.500 U	3.91	<0.500 U	3.36	
MW-90M	03/22/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.850 J	<0.500 U	<0.500 U	<0.010 U
MW-90M	03/22/12	0.860 J	2.250 J	<0.500 U	0.630 J	1.300 J	<0.500 U	1.100 J	<0.500 U	<0.500 U	4.10	0.520 J	<0.500 U	
MW-90M	08/15/12	<0.250 U	0.330 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.26	<0.250 U	<0.250 U	<0.010 U
MW-90M	02/27/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.64	<0.500 U	<0.500 U	
MW-90M	02/27/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.09	<0.250 U	<0.250 U	<0.010 U
MW-90M	08/06/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.46	<0.250 U	<0.250 U	<0.010 U
MW-90M	08/06/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.52	<0.250 U	<0.250 U	
MW-90M	03/25/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.04	<0.250 U	<0.250 U	<0.010 U
MW-90M	08/13/14	<0.250 U	<0.250 U	<0.250 U	0.550 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.05	<0.250 U	<0.250 U	<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	138024	MW-210	04/22/09	18:00	9.60	7.30	390	7.55	398	50.3	10.9	6.8	1.6	<0.043 U	<0.031 U	13.7
DISSOLVED	138024	MW-210	09/08/09	14:50	9.26	7.46	438	7.66	455	60.4	12.3	7.0	1.8	<0.002	<0.001	12.5
DISSOLVED	138024	MW-210	06/20/12	11:25	8.74	6.70	412	7.43	468	58.6	12.0	7.0	1.9	<0.015 U	<0.002 U	13.0
DISSOLVED	138024	MW-210	06/20/12	11:30	8.74	6.70	412	7.43	481	58.5	12.0	7.1	1.9	<0.015 U	<0.002 U	13.0
DISSOLVED	138024	MW-210	06/20/12	11:35	8.74	6.70	412	7.45	450	58.7	12.0	7.5	1.9	<0.015 U	<0.002 U	12.7
DISSOLVED	138024	MW-210	03/20/14	10:55	6.00	7.27	460	7.64	495	63.6	13.4	7.5	1.6	<0.015 U	<0.002 U	13.6
DISSOLVED	138024	MW-210	08/20/14	15:10	9.20	7.34	445	7.74	434	65.0	13.5	8.1	1.8	<0.015 U	<0.002 U	13.1
DISSOLVED	138028	MW-211	04/23/09	14:15	8.98	7.47	443	7.43	523	75.3	13.7	10.4	3.1	0.006	0.004	16.7
DISSOLVED	138028	MW-211	04/23/09	14:19				7.49	516	75.7	13.7	10.3	3.1	0.006	0.005	16.7
DISSOLVED	138028	MW-211	08/12/09	17:30	10.52	7.26	628	7.95	611	93.0	16.0	13.0	4.0	<0.002	<0.001	17.1
DISSOLVED	138028	MW-211	04/11/14	12:00	10.56	7.19	540	7.51	592	83.5	14.3	10.4	2.7	<0.015 U	<0.002 U	15.2
DISSOLVED	138028	MW-211	09/09/14	14:11	18.90	7.42	740	7.67	663	106.9	18.8	15.4	4.0	<0.015 U	<0.002 U	16.5
DISSOLVED	138007	MW-212	04/14/09	11:18	7.35	7.47	214	7.35	289	38.8	7.5	2.6	1.2	<0.004 U	0.001	11.7
DISSOLVED	138007	MW-212	09/08/09	15:30	7.46	7.61	212	7.70	219	35.0	6.4	2.1	1.1	0.004	0.001	11.2
DISSOLVED	138007	MW-212	04/20/10	10:31	9.13	6.34	248	8.03	320	35.5	7.0	2.4	1.1	0.002	<0.001	10.7
DISSOLVED	138007	MW-212	07/15/10	11:51	8.36	6.51	260	7.97	278	41.1	8.0	2.7	1.2	<0.002	<0.001	10.8
TOTAL RECOVERABLE	138007	MW-212	07/15/10	11:51	8.36	6.51	260			45.2	8.5	2.6	1.4	0.067	<0.003	
DISSOLVED	138007	MW-212	04/06/11	13:12	7.10	7.71	220	7.66	261	33.1	6.4	2.3	1.0	<0.002	<0.001	10.2
TOTAL RECOVERABLE	138007	MW-212	04/06/11	13:12	7.10	7.71	220			37.5	7.1	2.6	1.1	0.066	<0.003	
TOTAL RECOVERABLE	138007	MW-212	07/27/11	12:10	8.47	6.36	349			48.4	10.1	2.7	1.4	0.071	0.002 J	
DISSOLVED	138007	MW-212	07/27/11	12:10	8.47	6.36	349	7.59	336	52.0	9.9	2.7	1.2	<0.000 U	<0.001 U	10.4
DISSOLVED	138007	MW-212	03/26/12	15:57	8.90	7.33	292	7.52	337	41.6	8.8	2.8	1.2	0.006 J	<0.002 U	11.7
TOTAL RECOVERABLE	138007	MW-212	03/26/12	15:57	8.90	7.33	292			42.7	9.4	3.1	1.4	0.166	<0.005 U	
DISSOLVED	138007	MW-212	08/27/12	16:08	10.52	7.63	281	7.36	255	40.3	9.0	2.9	1.5	<0.015 U	<0.002 U	10.7
DISSOLVED	138007	MW-212	08/27/12	16:12	10.52	7.63	281	7.40	253	42.1	8.4	2.7	1.4	<0.015 U	<0.002 U	11.6
DISSOLVED	138007	MW-212	02/28/13	12:10	7.27	7.48	294									
DISSOLVED	138007	MW-212	02/28/13	12:10	7.27	7.48	294	7.24	323	44.5	8.5	2.5	1.2	<0.015 U	0.018 J	10.6
TOTAL RECOVERABLE	138007	MW-212	08/06/13	16:06	8.77	7.09	305			46.1	9.2	2.6	1.4	<0.038 U	<0.005 U	
DISSOLVED	138007	MW-212	08/06/13	16:06	8.77	7.09	305	7.16	310	46.0	9.2	2.6	1.2	<0.015 U	<0.002 U	11.2
DISSOLVED	138007	MW-212	08/06/13	16:10	8.77	7.09	305	6.91	295	44.1	9.3	2.4	1.2	<0.015 U	<0.002 U	10.9
TOTAL RECOVERABLE	138007	MW-212	08/06/13	16:10	8.77	7.09	305			46.9	9.3	2.3	1.3	<0.038 U	<0.005 U	
DISSOLVED	138007	MW-212	03/28/14	11:40	7.50	7.41	295	7.63	316	47.9	9.5	2.6	1.5	<0.015 U	<0.002 U	10.7
DISSOLVED	138007	MW-212	08/25/14	15:00	7.90	7.19	205	7.83	234	39.6	7.9	2.6	1.2	<0.015 U	<0.002 U	10.2

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-210	04/22/09	189.4	0.0	34.5	5.8	1.3	0.5	0.2	<0.04	<7.64	71	18.70	35.10	<0.18	<50	<0.05 U
MW-210	09/08/09	198.9	0.0	53.8	7.8	2.0	0.5	<0.05	<0.04	<7.60	44	15.20	34.80	<0.20	<50	<0.05
MW-210	06/20/12	194.0	0.0	31.0	5.4	1.1	0.4	0.080 J	<0.100 U	14.73	41	19.51	30.96	<0.100 U	<10.000 U	<0.100 U
MW-210	06/20/12	194.0	0.0	30.9	5.4	1.1	0.4	0.080 J	<0.100 U	11.87	43	18.51	31.53	<0.100 U	<10.000 U	<0.100 U
MW-210	06/20/12	194.1	0.0	30.9	5.4	1.1	0.4	0.080 J	<0.100 U	0.680 J	42	21.14	31.45	<0.100 U	<10.000 U	<0.100 U
MW-210	03/20/14	232.9	0.0	53.7	5.4	1.4	0.4	0.080 J	<0.100 U	<2.000 U	44	12.95	38.40	<0.100 U	<10.000 U	<0.100 U
MW-210	08/20/14	232.4	0.0	45.4	6.3	1.7	0.5	0.080 J	<0.100 U	<2.000 U	56	11.74	40.14	<0.100 U	<10.000 U	<0.100 U
MW-211	04/23/09	215.0	0.0	71.5	5.9	1.6	0.6	0.1	<0.07	<6.08	47	20.80	52.80	<0.19	<50	<0.05 U
MW-211	04/23/09	216.9	0.0	71.5	6.0	1.6	0.6	0.1	<0.07	<6.08	48	21.00	53.10	<0.19	<50	<0.05 U
MW-211	08/12/09	230.3	0.0	131.4	7.2	2.2	0.6	<0.5	<0.04	<7.60	56	23.80	80.90	<0.20	<500	<0.05
MW-211	04/11/14	236.9	0.0	96.2	8.2	1.7	0.6	0.040 J	<0.100 U	<2.000 U	40	26.95	60.72	<0.100 U	153.00	<0.100 U
MW-211	09/09/14	252.4	0.0	174.6	6.3	2.0	0.6	0.040 J	<0.100 U	<2.000 U	45	28.38	82.70	<0.100 U	<10.000 U	<0.100 U
MW-212	04/14/09	138.6	0.0	12.8	1.1	0.1	0.6	<0.05	<0.07	<6.26	0.64	4.15	19.50	<0.20	<50	<0.05 U
MW-212	09/08/09	130.8	0.0	13.4	0.8	0.1	0.6	<0.05	<0.04	<7.60	0.67	4.14	19.70	<0.20	<50	<0.05
MW-212	04/20/10	135.4	0.0	11.4	1.5	0.2	0.5	<0.5	<0.1	<1.0	0.69	2.94	22.30	<0.2	<50	<0.1
MW-212	07/15/10	134.9	0.0	18.7	1.1	0.2	0.5	<0.05	<0.2	<2.0	0.65	5.98	23.30	<0.2	<50	<0.2
MW-212	07/15/10								<0.5	7.46	0.48		22.90	<0.5		<0.5
MW-212	04/06/11	125.8	0.0	13.8	1.1	0.1	0.4	<0.1	<0.2	2.10	0.65	3.43	15.50	<0.2	<50	<0.2
MW-212	04/06/11								<0.5	45.60	0.56	<5.0	20.60	<0.5		<0.5
MW-212	07/27/11								<0.250 U	21.60	0.580 J		30.27	<0.250 U		<0.250 U
MW-212	07/27/11	132.6	0.0	54.3	6.5	0.9	0.4	<0.020 U	<0.100 U	15.32	0.64	3.75	29.44	<0.100 U	<10.000 U	<0.100 U
MW-212	03/26/12	160.2	0.0	13.7	1.4	0.2	0.4	<0.020 U	<0.100 U	<0.400 U	0.60	3.13	22.91	<0.100 U	<10.000 U	<0.100 U
MW-212	03/26/12									2.310 J	1.55	3.750 J	27.65	<0.250 U		<0.250 U
MW-212	08/27/12	154.8	0.0	13.7	1.0	0.1	0.4	<0.020 U	<0.100 U	<0.400 U	0.56	4.43	25.22	<0.100 U	<10.000 U	<0.100 U
MW-212	08/27/12	154.8	0.0	13.7	1.0	0.1	0.4	<0.020 U	<0.100 U	<0.400 U	0.53	4.33	25.44	<0.100 U	<10.000 U	<0.100 U
MW-212	02/28/13															
MW-212	02/28/13	159.7	0.0	12.7	1.4	0.7	0.5	<0.020 U	<0.100 U	1.370 J	0.61	1.460 J	25.14	<0.100 U	<10.000 U	<0.100 U
MW-212	08/06/13									4.070 J	0.850 J	2.660 J	26.51	<0.250 U		<0.250 U
MW-212	08/06/13	165.6	0.0	16.1	1.3	1.5	0.4	<0.020 U	<0.100 U	0.800 J	0.59	3.46	26.42	<0.100 U	<10.000 U	<0.100 U
MW-212	08/06/13	166.6	0.0	16.0	1.3	1.2	0.4	0.040 J	<0.100 U	<0.400 U	0.57	3.34	26.63	<0.100 U	<10.000 U	<0.100 U
MW-212	08/06/13									6.53	0.360 J	2.750 J	25.05	<0.250 U		<0.250 U
MW-212	03/28/14	188.3	0.0	18.9	1.9	0.2	0.5	<0.020 U	<0.100 U	<2.000 U	0.58	2.23	25.90	<0.100 U	<10.000 U	<0.100 U
MW-212	08/25/14	150.8	0.0	16.3	1.2	0.1	0.5	<0.020 U	<0.100 U	<2.000 U	0.62	5.03	23.29	<0.100 U	<10.000 U	<0.100 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-210	04/22/09	<0.06	0.16	1.54	5.37	2.55	<0.11	<0.15 U	1.06	0.92	<0.04	131.00	0.26	<0.03	1.73	2.75	2.60
MW-210	09/08/09	<0.10	0.19	0.43	4.11	1.91	<0.10	<0.15	0.68	1.27	<0.04	131.00	0.40	<0.03	1.77	1.54	1.84
MW-210	06/20/12	<0.100 U	<0.100 U	0.330 J	4.14	1.79	0.91	<0.040 U	0.63	0.200 J	<0.100 U	133.06	0.140 J	<0.100 U	1.69	1.51	3.18
MW-210	06/20/12	<0.100 U	0.190 J	0.58	2.93	1.81	0.88	<0.040 U	0.82	0.57	<0.100 U	133.78	0.150 J	<0.100 U	1.59	1.51	3.71
MW-210	06/20/12	<0.100 U	<0.100 U	0.370 J	3.64	1.83	0.91	<0.040 U	0.63	0.90	<0.100 U	133.32	0.140 J	<0.100 U	1.65	1.52	2.97
MW-210	03/20/14	<0.100 U	0.220 J	<0.500 U	3.250 J	2.54	0.470 J	<0.060 U	0.66	1.01	<0.100 U	151.87	0.330 J	<0.100 U	2.06	1.35	2.85
MW-210	08/20/14	0.330 J	0.250 J	<0.500 U	5.190 J	1.66	<0.100 U	<0.060 U	1.10	0.97	<0.100 U	145.58	37.11	<0.100 U	2.29	2.52	2.41
MW-211	04/23/09	0.12	0.17	<0.41 U	5.37	4.22	0.11	<0.20 U	3.56	0.94	<0.05	215.00	0.80	<0.03	2.22	2.15	<1.30 U
MW-211	04/23/09	0.28	0.17	0.42	5.45	4.31	0.14	<0.20 U	3.55	0.93	<0.05	216.00	0.78	<0.03	2.23	2.17	<1.30 U
MW-211	08/12/09	<0.10	0.48	2.54	4.97	6.01	<0.10	<0.15	6.12	1.42	<0.04	292.00	1.52	<0.03	4.09	2.38	<0.90
MW-211	04/11/14	<0.100 U	<0.100 U	<0.500 U	4.490 J	3.49	0.89	<0.060 U	2.97	0.98	<0.100 U	225.24	0.81	<0.100 U	2.68	1.92	<0.500 U
MW-211	09/09/14	0.250 J	0.200 J	1.450 J	7.240 J	3.63	1.62	<0.060 U	5.30	1.16	<0.100 U	313.99	72.93	<0.100 U	4.54	2.15	9.70
MW-212	04/14/09	0.05	<0.09	<0.42 U	2.39	3.61	<0.09	<0.20 U	0.45	<0.21	<0.05	79.60	0.15	<0.03	0.52	0.38	1.84
MW-212	09/08/09	<0.10	0.12	<0.40	2.43	4.33	<0.10	<0.16	0.48	0.12	<0.04	70.80	0.23	<0.03	0.52	0.47	<0.90
MW-212	04/20/10	<0.1	0.17	<0.4	10.20	3.89	0.16	<0.2	<0.5	0.12	<0.1	84.60	<0.2	<0.1	0.55	0.49	<1.0
MW-212	07/15/10	<0.2	<0.2	<0.5	<2.0	3.98	<0.2	<0.2	0.42	<0.2	<0.2	81.30	<0.2	<0.2	0.78	0.46	<1.0
MW-212	07/15/10	<0.5	<0.5	<1.3	<5.0	3.77	<0.5	<0.5	<0.5	<0.5		82.20	<0.5	<0.5	0.73	0.62	<2.5
MW-212	04/06/11	<0.2	<0.2	<0.5	<2.0	3.37	<0.2	<0.2	0.41	<0.2	<0.5	62.10	0.26	<0.2	0.39	0.32	<0.5
MW-212	04/06/11	<0.5	<0.5	<1.3	<5.0	3.81	<0.5	<0.5	<0.5	<0.5		79.60	0.86	<0.5	0.53	0.76	<1.3
MW-212	07/27/11	<0.250 U	0.300 J	0.560 J	2.310 J	3.26	0.880 J	<0.100 U	0.380 J	<0.250 U	<0.250 U	105.07	1.51	<0.250 U	1.210 J	0.440 J	<0.500 U
MW-212	07/27/11	<0.100 U	0.210 J	0.360 J	0.510 J	3.64	0.120 J	<0.040 U	0.410 J	0.430 J	<0.100 U	102.62	0.62	<0.100 U	1.18	0.450 J	0.500 J
MW-212	03/26/12	<0.100 U	<0.100 U	0.120 J	<0.400 U	2.79	<0.100 U	<0.040 U	0.400 J	<0.100 U	<0.100 U	91.59	<0.100 U	<0.100 U	0.490 J	0.380 J	<0.200 U
MW-212	03/26/12	<0.250 U	1.39	<0.250 U	<1.000 U	3.11	<0.250 U	<0.100 U	0.540 J	<0.250 U	<0.250 U	91.60	6.79	<0.250 U	0.580 J	5.09	<0.500 U
MW-212	08/27/12	<0.100 U	<0.100 U	<0.100 U	5.19	3.94	0.51	<0.040 U	0.52	<0.100 U	<0.100 U	86.37	<0.100 U	<0.100 U	0.68	<0.100 U	<0.200 U
MW-212	08/27/12	<0.100 U	<0.100 U	<0.100 U	5.14	3.86	0.51	<0.040 U	0.490 J	<0.100 U	<0.100 U	84.95	<0.100 U	<0.100 U	0.66	<0.100 U	<0.200 U
MW-212	02/28/13																
MW-212	02/28/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	3.55	0.51	<0.060 U	0.430 J	<0.100 U	<0.100 U	86.06	<0.100 U	<0.100 U	0.51	0.340 J	<0.050 U
MW-212	08/06/13	<0.250 U	0.940 J	<0.100 U	<3.750 U	3.66	<0.250 U	<0.150 U	0.650 J	<0.250 U	<0.250 U	92.09	3.01	<0.250 U	0.770 J	2.38	1.140 J
MW-212	08/06/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	3.69	0.420 J	<0.060 U	0.54	<0.100 U	<0.100 U	95.61	<0.100 U	<0.100 U	0.78	0.380 J	<0.050 U
MW-212	08/06/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	3.77	0.220 J	<0.060 U	0.54	<0.100 U	<0.100 U	95.57	<0.100 U	<0.100 U	0.77	0.410 J	<0.050 U
MW-212	08/06/13	<0.250 U	1.68	18.48	5.770 J	3.64	0.600 J	<0.150 U	0.390 J	<0.250 U	<0.250 U	93.82	2.97	<0.250 U	0.720 J	1.78	8.71
MW-212	03/28/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	3.38	0.340 J	<0.060 U	0.460 J	<0.100 U	<0.100 U	95.28	<0.100 U	<0.100 U	0.56	0.280 J	<0.500 U
MW-212	08/25/14	0.260 J	<0.100 U	<0.500 U	3.370 J	5.06	<0.100 U	<0.060 U	0.67	<0.100 U	<0.100 U	83.52	25.02	<0.100 U	0.81	0.440 J	<0.500 U

Explanation of Qualifiers: E = Estimated due to interference;
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U = Analyzed for but not detected above MDL.

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-210	04/22/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.06	<0.02	1.21	<0.02	0.24	<0.05
MW-210	09/08/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	1.24	<0.02	0.15	<0.05
MW-210	06/20/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.12	<0.100 U	0.210 J	<0.010 U
MW-210	06/20/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.10	<0.100 U	0.180 J	<0.010 U
MW-210	06/20/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.12	<0.100 U	0.200 J	<0.010 U
MW-210	03/20/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.42	<0.100 U	0.220 J	<0.010 U
MW-210	08/20/14	<0.100 U	<0.100 U	<0.100 U	1.81	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.52	<0.100 U	<0.100 U	<0.010 U
MW-211	04/23/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.20	<0.03	1.97	<0.02	10.50	<0.05
MW-211	04/23/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	1.98	<0.02	10.70	<0.05
MW-211	08/12/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	2.27	<0.02	10.20	<0.5
MW-211	04/11/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.83	<0.100 U	11.22	<0.010 U
MW-211	09/09/14	<0.100 U	<0.100 U	<0.100 U	2.87	<0.100 U	<0.100 U	<0.100 U	0.360 J	<0.100 U	2.02	<0.100 U	7.86	<0.010 U
MW-212	04/14/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	1.19	<0.02	0.12	<0.05
MW-212	09/08/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	1.04	<0.02	<0.04	<0.05
MW-212	04/20/10	<0.1	<0.1	<0.1	<0.1	<0.1	0.07	<0.1	0.25	<0.1	1.37	<0.1	0.22	<0.05
MW-212	07/15/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	1.19	<0.2	<0.2	<0.05
MW-212	07/15/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	1.27	<0.5	<0.5	
MW-212	04/06/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	0.96	<0.2	<0.2	<0.05
MW-212	04/06/11	<0.5	<0.5	<1.3	27.70	<0.5	<1.3	<0.5	<1.3	<0.5	1.29	<0.5	<0.5	
MW-212	07/27/11	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.180 J	<0.250 U	0.380 J	
MW-212	07/27/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.21	<0.100 U	0.120 J	<0.010 U
MW-212	03/26/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.08	<0.100 U	0.100 J	<0.010 U
MW-212	03/26/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.200 J	<0.250 U	<0.250 U	
MW-212	08/27/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.35	<0.100 U	0.150 J	<0.010 U
MW-212	08/27/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.32	<0.100 U	0.140 J	<0.010 U
MW-212	02/28/13													
MW-212	02/28/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.16	<0.100 U	<0.100 U	<0.010 U
MW-212	08/06/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.39	<0.250 U	<0.250 U	
MW-212	08/06/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.35	<0.100 U	<0.100 U	<0.010 U
MW-212	08/06/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.39	<0.100 U	<0.100 U	<0.010 U
MW-212	08/06/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.42	<0.250 U	<0.250 U	
MW-212	03/28/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.31	<0.100 U	<0.100 U	<0.010 U
MW-212	08/25/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.39	<0.100 U	0.240 J	<0.010 U

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U = Analyzed for but not detected above MDL.

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	138065	MW-214	04/13/09	14:50	6.13	6.94	772	7.28	850	159.0	24.5	9.2	2.6	0.004	<0.001 U	22.8
DISSOLVED	138065	MW-214	04/13/09	14:55	6.13	6.95	772	6.99	774	161.0	24.5	9.1	2.5	0.004	<0.003 U	22.5
DISSOLVED	138065	MW-214	08/24/09	15:20	11.56	6.93	1,082	7.23	1,048	205.0	29.7	10.8	3.1	<0.010	0.001	23.1
DISSOLVED	138065	MW-214	03/30/10	12:59	6.35	6.73	1,161	7.82	1,195	217.0	32.7	10.4	2.7	<0.001	<0.001	20.1
DISSOLVED	138065	MW-214	07/16/10	12:28	10.91	6.68	703	7.77	720	107.0	15.8	7.0	2.1	<0.002	<0.001	19.2
TOTAL RECOVERABLE	138065	MW-214	07/16/10	12:28	10.91	6.68	703			130.0	18.1	8.2	2.4	0.030	<0.003	
DISSOLVED	138065	MW-214	04/06/11	14:00	5.87	7.31	647	7.34	715	111.0	15.7	7.4	1.9	<0.002	<0.001	18.4
TOTAL RECOVERABLE	138065	MW-214	04/06/11	14:00	5.87	7.31	647			130.0	17.5	8.0	2.1	0.065	<0.003	
DISSOLVED	138065	MW-214	07/26/11	11:20	11.01	3.89	943	7.05	868	165.5	23.1	8.8	2.6	<0.000 U	<0.001 U	20.9
TOTAL RECOVERABLE	138065	MW-214	07/26/11	11:20	11.01	3.89	943			154.3	23.2	8.8	2.8	0.054	<0.001 U	
DISSOLVED	138065	MW-214	03/26/12	14:46	7.09	6.81	825	7.11	945	133.1	20.8	8.8	2.1	0.007 J	<0.002 U	20.4
TOTAL RECOVERABLE	138065	MW-214	03/26/12	14:46	7.09	6.81	825			151.7	22.5	8.9	2.4	0.041 J	<0.005 U	
DISSOLVED	138065	MW-214	03/26/12	14:50	7.09	6.81	825	7.09	911	133.2	20.9	8.9	2.2	0.052	<0.002 U	20.6
TOTAL RECOVERABLE	138065	MW-214	03/26/12	14:50	7.09	6.81	825			154.0	22.5	8.9	2.4	0.112	<0.005 U	
DISSOLVED	138065	MW-214	08/27/12	15:12	13.12	6.91	1,002	6.97	917	159.0	26.1	10.3	3.2	<0.038 U	<0.005 U	21.2
DISSOLVED	138065	MW-214	02/28/13	14:10	6.55	7.56	659	7.08	711	108.2	15.4	6.6	1.8	<0.015 U	<0.002 U	16.9
DISSOLVED	138065	MW-214	02/28/13	14:10	6.55	7.56	659									
DISSOLVED	138065	MW-214	08/06/13	14:57	12.52	6.75	880	7.13	882	148.2	23.1	9.0	2.5	<0.015 U	<0.002 U	22.0
TOTAL RECOVERABLE	138065	MW-214	08/06/13	14:57	12.52	6.75	880			148.2	23.1	9.2	2.7	<0.038 U	<0.005 U	
DISSOLVED	138065	MW-214	03/27/14	14:20	6.00	7.00	790	7.30	893	137.0	21.8	8.4	2.2	<0.015 U	<0.002 U	18.1
DISSOLVED	138065	MW-214	08/25/14	12:00	12.00	6.79	1,070	7.31	1,049	196.3	29.2	10.4	2.9	<0.038 U	<0.005 U	20.1
DISSOLVED	137957	MW-216	04/14/09	14:59	3.53	7.21	629	7.52	671	116.0	20.9	8.9	3.1	0.032	0.010	15.3
DISSOLVED	137957	MW-216	08/24/09	15:45	14.60	6.85	697	7.22	685	113.0	19.1	10.3	4.1	0.048	0.008	19.8
DISSOLVED	137957	MW-216	04/20/10	12:24	5.46	6.57	674	7.86	654	109.0	17.8	7.7	2.8	0.035	0.009	13.2
DISSOLVED	137957	MW-216	07/19/10	10:27	8.38	6.40	804	8.20	802	134.0	22.0	9.2	3.5	0.111	0.046	16.3
TOTAL RECOVERABLE	137957	MW-216	07/19/10	10:27	8.38	6.40	804			161.0	23.6	9.9	3.7	0.172	0.079	
DISSOLVED	137957	MW-216	04/07/11	12:16	4.69	7.38	910	7.35	883	174.0	26.3	10.3	3.4	0.147	0.096	16.9
TOTAL RECOVERABLE	137957	MW-216	04/07/11	12:16	4.69	7.38	910			161.0	26.7	10.4	3.5	0.300	0.112	
DISSOLVED	137957	MW-216	07/29/11	15:50	8.67	5.79	920	7.28	795	155.8	24.6	9.8	3.7	0.178	0.059	18.3
TOTAL RECOVERABLE	137957	MW-216	07/29/11	15:50	8.67	5.79	920			145.5	24.9	10.2	3.9	0.276	0.054	
DISSOLVED	137957	MW-216	03/15/12	14:55	6.13	6.79	885	7.17	927	142.9	22.2	9.5	3.0	0.647	0.073	18.8
TOTAL RECOVERABLE	137957	MW-216	03/15/12	14:55	6.13	6.79	885			151.6	24.1	10.0	3.5	0.987	0.065 J	
DISSOLVED	137957	MW-216	08/21/12	11:24	9.34	7.11	928	7.36	886	143.1	26.6	10.4	3.7	0.090	0.025 J	17.3
DISSOLVED	137957	MW-216	03/12/13	13:26	5.39	7.28	919	7.13	1,005	141.5	23.6	10.7	3.4	0.265	0.118	19.9
DISSOLVED	137957	MW-216	08/08/13	12:59	9.47	6.86	880	7.15	869	138.4	23.1	10.6	3.6	0.160	0.062	19.3
TOTAL RECOVERABLE	137957	MW-216	08/08/13	12:59	9.47	6.86	880			146.0	23.2	10.4	3.7	0.188	0.065 J	
DISSOLVED	137957	MW-216	04/09/14	12:03	5.77	7.13	995	7.22	1,113	163.6	25.2	11.2	3.3	0.387	0.178	19.8
DISSOLVED	137957	MW-216	08/14/14	12:35	9.90	7.00	925	6.81	899	157.6	24.8	10.9	3.7	0.241	0.097	20.0
DISSOLVED	137957	MW-216	08/14/14	12:40	9.90	7.00	925	7.32	900	157.6	24.8	11.3	3.5	0.246	0.095	20.2
DISSOLVED	138013	MW-218D	04/23/09	15:45	11.53	6.85	943	6.94	959	148.0	11.4	60.3	4.0	<0.043 U	6.950	24.8
DISSOLVED	138013	MW-218D	08/12/09	20:10	12.25	6.86	962	7.63	953	142.0	9.9	63.6	3.7	<0.002	5.310	23.4
DISSOLVED	138013	MW-218D	05/06/14	15:15	11.40	6.99	1,015	6.92	1,227	128.6	10.2	65.7	3.5	<0.038 U	5.526	22.1
DISSOLVED	138013	MW-218D	05/06/14	15:20	11.40	6.99	1,015	7.04	1,221	131.2	10.4	66.7	3.4	<0.038 U	5.544	22.4
DISSOLVED	138013	MW-218D	09/16/14	16:10	13.00	6.87	975	7.26	942	136.7	10.6	65.4	3.2	<0.015 U	6.455	22.3

Explanation of Qualifiers: E = Estimated due to interference;
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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-214	04/13/09	288.2	0.0	267.2	<5.0	0.7	<0.5	<0.5	<0.35	<30.41	0.89	14.70	15.90	<0.96	<500	<0.24 U
MW-214	04/13/09	272.1	0.0	262.0	<5.0	0.8	<0.5	<0.5	<0.70	<60.82	1.88	30.50	32.10	<1.93	<500	<0.48 U
MW-214	08/24/09	268.4	0.0	371.8	6.3	<0.5	<0.5	<0.5	<0.20	<38.00	0.85	25.70	23.00	<1.00	<500	<0.25
MW-214	03/30/10	342.0	0.0	424.4	5.0	0.2	0.2	<0.05	<0.51	<4.04	0.98	15.50	24.70	<0.51	<50	<0.51
MW-214	07/16/10	252.5	0.0	185.2	3.3	0.7	0.2	<0.05	<0.2	<2.0	1.05	12.00	19.60	<0.2	<50	<0.2
MW-214	07/16/10								<0.5	5.39	0.95		21.50	<0.5		<0.5
MW-214	04/06/11	244.5	0.0	164.8	3.2	0.2	0.1	<0.1	<0.2	<2.0	1.05	9.72	16.20	<0.2	<50	<0.2
MW-214	04/06/11								<0.5	10.60	0.85	11.70	18.60	<0.5		<0.5
MW-214	07/26/11	302.7	0.0	281.3	3.8	0.4	0.2	<0.020 U	<0.100 U	43.51	1.15	14.44	34.98	<0.100 U	<10.000 U	<0.100 U
MW-214	07/26/11								<0.250 U	46.53	1.180 J		35.30	<0.250 U		<0.250 U
MW-214	03/26/12	259.7	0.0	229.5	4.3	0.2	0.2	<0.020 U	<0.100 U	48.65	1.08	10.93	23.67	<0.100 U	<10.000 U	<0.100 U
MW-214	03/26/12									54.65	2.87	12.91	28.69	<0.250 U		<0.250 U
MW-214	03/26/12	260.6	0.0	229.2	4.3	0.2	0.2	<0.020 U	<0.100 U	50.00	1.07	11.01	23.60	<0.100 U	<10.000 U	<0.100 U
MW-214	03/26/12									57.59	2.85	12.62	28.71	<0.250 U		<0.250 U
MW-214	08/27/12	275.3	0.0	296.6	4.1	0.2	0.2	<0.020 U	<0.250 U	<1.000 U	1.020 J	16.39	35.06	<0.250 U	<10.000 U	<0.250 U
MW-214	02/28/13	223.1	0.0	166.6	3.6	0.3	0.2	0.020 J	<0.100 U	<0.400 U	0.95	8.73	20.15	<0.100 U	<10.000 U	<0.100 U
MW-214	02/28/13															
MW-214	08/06/13	293.5	0.0	250.6	4.2	0.5	0.2	<0.020 U	<0.100 U	0.460 J	1.06	13.51	33.49	<0.100 U	<10.000 U	<0.100 U
MW-214	08/06/13									4.240 J	1.27	14.66	32.58	<0.250 U		<0.250 U
MW-214	03/27/14	287.5	0.0	216.2	4.4	0.3	0.2	<0.020 U	<0.100 U	<2.000 U	0.92	8.95	25.76	<0.100 U	<10.000 U	<0.100 U
MW-214	08/25/14	286.7	0.0	368.5	5.4	8.0	0.2	<0.020 U	<0.250 U	<5.000 U	1.39	18.11	45.61	<0.250 U	<10.000 U	<0.250 U
MW-216	04/14/09	164.7	0.0	261.4	5.0	<0.5	1.9	<0.5	<0.35	<30.41	2.29	12.40	23.60	<0.96	<500	<0.24 U
MW-216	08/24/09	144.3	0.0	253.3	9.6	<0.5	1.9	<0.5	<0.10	<17.80	3.66	18.20	32.20	<0.10	<500	<0.20
MW-216	04/20/10	157.1	0.0	227.3	4.1	0.1	1.1	<0.05	<0.1	<1.0	1.99	7.19	26.70	<0.2	<50	<0.1
MW-216	07/19/10	242.5	0.0	302.0	4.9	<0.05	1.3	<0.05	<0.2	<2.0	2.20	9.60	33.60	<0.2	<50	<0.2
MW-216	07/19/10								<0.5	9.20	2.11		34.30	<0.5		<0.5
MW-216	04/07/11	203.5	0.0	360.0	5.6	0.1	1.2	<0.1	<0.2	12.90	1.76	8.41	35.50	<0.2	<50	<0.2
MW-216	04/07/11								<0.5	5.11	2.37	10.50	35.10	<0.5		<0.5
MW-216	07/29/11	188.0	0.0	344.4	5.2	<0.010 U	1.3	<0.020 U	<0.100 U	42.20	2.46	11.52	36.23	<0.100 U	<10.000 U	<0.100 U
MW-216	07/29/11								<0.250 U	38.46	2.77		38.47	<0.250 U		<0.250 U
MW-216	03/15/12	184.5	0.0	314.2	5.5	0.1	1.2	<0.020 U	<0.100 U	44.55	2.27	9.68	31.24	<0.100 U	<10.000 U	<0.100 U
MW-216	03/15/12								<0.250 U	47.40	4.38	13.05	33.94	<0.250 U		<0.250 U
MW-216	08/21/12	154.1	0.0	353.8	6.8	<0.010 U	1.1	<0.020 U	<0.100 U	<0.400 U	1.85	11.69	36.56	<0.100 U	105.00	<0.100 U
MW-216	03/12/13	203.1	0.0	344.2	6.8	0.1	1.4	<0.020 U	<0.100 U	<0.400 U	1.98	10.43	28.88	<0.100 U	76.00	<0.100 U
MW-216	08/08/13	179.1	0.0	330.6	5.6	0.1	1.5	0.020 J	<0.100 U	<0.400 U	2.63	10.70	35.02	<0.100 U	<10.000 U	<0.100 U
MW-216	08/08/13									4.510 J	2.80	10.59	32.46	<0.250 U		<0.250 U
MW-216	04/09/14	257.6	0.0	359.0	6.4	0.030 J	1.5	<0.020 U	<0.100 U	<2.000 U	1.89	9.34	34.56	<0.100 U	81.00	<0.100 U
MW-216	08/14/14	190.6	0.0	375.0	7.1	<0.010 U	1.5	<0.020 U	<0.100 U	<2.000 U	2.22	8.72	38.09	<0.100 U	<10.000 U	<0.100 U
MW-216	08/14/14	193.6	0.0	372.0	7.0	<0.010 U	1.4	<0.020 U	<0.100 U	<2.000 U	2.23	8.42	38.25	<0.100 U	<10.000 U	<0.100 U
MW-218D	04/23/09	249.8	0.0	390.7	8.1	0.7	<0.5	<0.5	<0.42	<76.4	0.81	56.00	18.90	<1.82	<500	<0.49 U
MW-218D	08/12/09	232.7	0.0	320.7	10.2	1.4	<0.5	<0.5	<0.04	<7.60	0.71	27.30	17.80	<0.20	<500	0.33
MW-218D	05/06/14	269.4	0.0	323.6	9.0	1.6	0.2	<0.020 U	<0.250 U	<5.000 U	0.560 J	38.66	16.00	<0.250 U	86.00	<0.250 U
MW-218D	05/06/14	270.3	0.0	325.6	9.1	1.6	0.2	<0.020 U	<0.250 U	<5.000 U	0.550 J	35.19	15.96	<0.250 U	86.00	<0.250 U
MW-218D	09/16/14	259.1	0.0	317.7	8.8	1.8	0.2	<0.020 U	<0.100 U	<2.000 U	2.07	33.35	14.18	<0.100 U	<10.000 U	0.290 J

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U = Analyzed for but not detected above MDL.

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-214	04/13/09	<0.21	<0.43	<2.05 U	5.35	0.55	<0.41	<0.99 U	<0.25	<1.02	<0.24	134.00	2.77	<0.16	1.56	0.60	<6.52 U
MW-214	04/13/09	<0.42	<0.86	<4.11 U	12.10	1.09	<0.83	<1.97 U	<0.50	<2.05	<0.47	269.00	5.75	<0.33	3.11	1.26	<13.04 U
MW-214	08/24/09	<0.50	<0.20	<2.00	7.50	0.64	<0.50	<0.76	<0.24	<0.50	<0.21	159.00	3.16	<0.17	2.68	1.11	<4.50
MW-214	03/30/10	<0.51	<0.51	<0.51	5.28	0.52	<0.51	<0.51	<1.01	<1.01	<0.51	187.00	3.99	<0.51	3.43	0.68	<4.04
MW-214	07/16/10	<0.2	<0.2	<0.5	3.80	1.02	<0.2	<0.2	<0.2	0.56	<0.2	119.00	1.46	<0.2	1.15	0.72	<1.0
MW-214	07/16/10	<0.5	<0.5	<1.3	<5.0	1.05	<0.5	<0.5	<0.5	<0.5		119.00	1.41	<0.5	1.28	0.89	<2.5
MW-214	04/06/11	<0.2	<0.2	<0.5	2.02	0.60	<0.2	<0.2	<0.2	0.25	<0.5	109.00	2.24	<0.2	0.89	0.52	<0.5
MW-214	04/06/11	<0.5	<0.5	<1.3	<5.0	0.72	<0.5	<0.5	<0.5	<0.5		127.00	2.36	<0.5	1.06	0.96	<1.3
MW-214	07/26/11	0.180 J	0.170 J	0.450 J	4.84	0.360 J	<0.100 U	<0.040 U	<0.100 U	0.490 J	<0.100 U	174.38	3.09	<0.100 U	1.81	0.75	<0.200 U
MW-214	07/26/11	0.260 J	<0.250 U	0.940 J	10.19	0.660 J	2.30	<0.100 U	<0.250 U	0.350 J	1.66	182.62	7.77	<0.250 U	1.86	0.720 J	<0.500 U
MW-214	03/26/12	<0.100 U	<0.100 U	0.400 J	<0.400 U	0.410 J	<0.100 U	<0.040 U	<0.100 U	<0.100 U	<0.100 U	140.57	3.25	<0.100 U	1.39	0.480 J	1.33
MW-214	03/26/12	<0.250 U	1.100 J	5.17	1.420 J	0.490 J	<0.250 U	<0.100 U	22.24	<0.250 U	0.270 J	155.15	9.70	<0.250 U	1.69	4.21	0.520 J
MW-214	03/26/12	<0.100 U	<0.100 U	3.90	<0.400 U	0.420 J	<0.100 U	<0.040 U	<0.100 U	<0.100 U	<0.100 U	141.35	3.24	<0.100 U	1.39	0.490 J	1.34
MW-214	03/26/12	<0.250 U	1.130 J	4.37	1.360 J	0.470 J	<0.250 U	<0.100 U	<0.250 U	<0.250 U	1.28	153.42	9.97	<0.250 U	1.73	4.18	<0.500 U
MW-214	08/27/12	<0.250 U	<0.250 U	<0.250 U	10.49	0.550 J	2.13	<0.100 U	<0.250 U	<0.250 U	<0.250 U	170.59	2.83	<0.250 U	2.87	<0.250 U	<0.500 U
MW-214	02/28/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.390 J	1.35	<0.060 U	<0.100 U	0.270 J	<0.100 U	102.50	1.96	<0.100 U	1.55	0.470 J	<0.050 U
MW-214	02/28/13																
MW-214	08/06/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.78	1.43	<0.060 U	<0.100 U	0.220 J	<0.100 U	148.89	1.89	<0.100 U	3.87	0.68	<0.050 U
MW-214	08/06/13	<0.250 U	0.600 J	<0.100 U	5.510 J	0.720 J	1.35	<0.150 U	<0.250 U	<0.250 U	<0.250 U	145.35	4.37	<0.250 U	3.85	2.27	<0.130 U
MW-214	03/27/14	<0.100 U	<0.100 U	<0.500 U	4.300 J	0.65	0.90	<0.060 U	<0.100 U	0.230 J	<0.100 U	128.17	1.38	<0.100 U	1.96	0.420 J	<0.500 U
MW-214	08/25/14	0.730 J	<0.250 U	<1.250 U	8.600 J	1.64	<0.250 U	<0.150 U	<0.250 U	2.22	<0.250 U	208.16	154.22	<0.250 U	7.31	0.940 J	<1.250 U
MW-216	04/14/09	<0.21	<0.43	<2.05 U	15.00	4.29	<0.41	<0.99 U	0.63	1.81	<0.24	439.00	2.63	<0.16	5.39	3.12	<6.52
MW-216	08/24/09	0.35	0.13	1.18	16.40	6.55	<1.90	<0.10	0.55	0.34	<0.10	467.00	2.50	<0.10	3.61	6.30	<1.90
MW-216	04/20/10	0.18	0.10	0.70	20.10	3.78	<0.1	<0.2	0.47	1.36	<0.1	429.00	2.29	<0.1	6.44	2.87	<1.0
MW-216	07/19/10	<0.2	<0.2	<0.5	11.50	3.45	<0.2	<0.2	0.36	<0.2	<0.2	589.00	2.58	<0.2	6.52	1.74	<1.0
MW-216	07/19/10	<0.5	<0.5	<1.3	16.60	3.50	<0.5	<0.5	<0.5	<0.5		570.00	2.37	<0.5	6.05	2.07	<2.5
MW-216	04/07/11	0.21	<0.2	1.20	10.30	3.15	<0.2	<0.2	0.32	0.67	<0.5	659.00	4.64	<0.2	5.42	2.02	<0.5
MW-216	04/07/11	<0.5	<0.5	<1.3	13.60	3.59	0.71	<0.5	<0.5	0.50		700.00	4.53	<0.5	6.14	3.30	<1.3
MW-216	07/29/11	0.260 J	0.150 J	0.60	18.12	3.27	0.230 J	<0.040 U	0.340 J	0.130 J	<0.100 U	624.05	3.69	<0.100 U	6.17	2.83	<0.200 U
MW-216	07/29/11	0.310 J	0.260 J	1.82	19.80	2.94	2.63	<0.100 U	0.300 J	<0.250 U	<0.250 U	651.19	9.04	<0.250 U	5.59	2.80	<0.500 U
MW-216	03/15/12	<0.100 U	<0.100 U	0.52	13.07	2.67	<0.100 U	<0.040 U	6.43	<0.100 U	<0.100 U	574.98	3.77	<0.100 U	54.12	2.49	<0.200 U
MW-216	03/15/12	<0.250 U	1.37	1.38	21.06	3.10	<0.250 U	<0.100 U	0.710 J	<0.250 U	0.350 J	622.48	9.30	<0.250 U	2.54	6.96	1.270 J
MW-216	08/21/12	0.200 J	<0.100 U	0.320 J	21.31	3.27	1.80	<0.040 U	0.380 J	0.380 J	<0.100 U	598.34	3.61	<0.100 U	6.27	3.30	0.520 J
MW-216	03/12/13	0.100 J	<0.100 U	<0.040 U	14.72	2.29	2.49	<0.060 U	0.170 J	0.62	<0.100 U	600.86	5.50	<0.100 U	4.32	1.65	<0.050 U
MW-216	08/08/13	<0.100 U	<0.100 U	<0.040 U	17.81	3.70	1.49	<0.060 U	0.310 J	<0.100 U	<0.100 U	603.26	2.54	<0.100 U	6.86	2.59	<0.050 U
MW-216	08/08/13	<0.250 U	<0.250 U	4.610 J	22.21	3.66	1.40	<0.150 U	0.290 J	<0.250 U	<0.250 U	599.02	4.04	<0.250 U	6.31	3.88	3.970 J
MW-216	04/09/14	<0.100 U	<0.100 U	<0.500 U	18.10	2.85	1.71	<0.060 U	0.260 J	0.490 J	<0.100 U	671.99	3.10	<0.100 U	6.02	1.93	<0.500 U
MW-216	08/14/14	0.370 J	<0.100 U	<0.500 U	20.50	2.85	<0.100 U	<0.060 U	0.290 J	<0.100 U	<0.100 U	600.99	111.20	<0.100 U	7.61	2.24	<0.500 U
MW-216	08/14/14	0.380 J	<0.100 U	<0.500 U	20.49	2.90	<0.100 U	<0.060 U	0.310 J	<0.100 U	<0.100 U	604.00	108.04	<0.100 U	7.65	2.27	<0.500 U
MW-218D	04/23/09	<0.58	<0.48	<3.98 U	14.80	2.16	<1.14	<1.54 U	<0.49	<1.05	<0.42	749.00	1.93	<0.33	1.57	<0.78	<9.42 U
MW-218D	08/12/09	0.53	0.84	2.01	8.90	1.69	<0.10	<0.15	0.08	0.57	<0.04	181.00	1.68	<0.03	1.57	0.62	<0.90
MW-218D	05/06/14	<0.250 U	<0.250 U	<1.250 U	12.470 J	1.73	1.39	<0.150 U	<0.250 U	0.950 J	<0.250 U	706.10	2.67	<0.250 U	1.56	<0.250 U	<1.250 U
MW-218D	05/06/14	<0.250 U	<0.250 U	<1.250 U	11.400 J	1.61	1.39	<0.150 U	<0.250 U	0.840 J	<0.250 U	716.85	2.51	<0.250 U	1.57	<0.250 U	<1.250 U
MW-218D	09/16/14	0.410 J	<0.100 U	<0.500 U	11.96	1.50	1.67	<0.060 U	<0.100 U	0.83	<0.100 U	652.95	102.61	<0.100 U	1.83	0.420 J	5.32

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-214	04/13/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	0.65	<0.09	<0.15	<0.5
MW-214	04/13/09	<0.61	<0.42	<0.36	<0.38	<0.49	<0.31	<0.39	<0.72	<0.32	1.33	<0.18	<0.29	<0.5
MW-214	08/24/09	<0.25	0.21	<0.21	<0.25	0.21	<0.20	<0.26	<0.50	0.23	0.91	<0.12	<0.25	<0.5
MW-214	03/30/10	<0.51	<0.51	<0.51	<0.51	<0.51	<1.01	<0.51	<0.51	<0.51	0.85	<0.51	<0.51	0.076
MW-214	07/16/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	0.77	<0.2	<0.2	<0.05
MW-214	07/16/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-214	04/06/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	0.56	<0.2	<0.2	<0.05
MW-214	04/06/11	<0.5	<0.5	<1.3	110.00	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-214	07/26/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.83	<0.100 U	<0.100 U	<0.010 U
MW-214	07/26/11	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.850 J	<0.250 U	<0.250 U	
MW-214	03/26/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.54	<0.100 U	<0.100 U	<0.010 U
MW-214	03/26/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.650 J	<0.250 U	<0.250 U	
MW-214	03/26/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.55	<0.100 U	<0.100 U	<0.010 U
MW-214	03/26/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.640 J	<0.250 U	<0.250 U	
MW-214	08/27/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.990 J	<0.250 U	<0.250 U	<0.010 U
MW-214	02/28/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.54	<0.100 U	<0.100 U	<0.010 U
MW-214	02/28/13													
MW-214	08/06/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.97	<0.100 U	<0.100 U	<0.010 U
MW-214	08/06/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.980 J	<0.250 U	<0.250 U	
MW-214	03/27/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.69	<0.100 U	<0.100 U	<0.010 U
MW-214	08/25/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.670 J	<0.250 U	<0.250 U	<0.250 U	1.27	<0.250 U	<0.250 U	<0.010 U
MW-216	04/14/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	0.49	<0.09	0.74	<0.5
MW-216	08/24/09	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.14	<0.10	0.82	<0.10	<0.10	<0.5
MW-216	04/20/10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.38	<0.1	0.58	<0.1	0.93	<0.05
MW-216	07/19/10	<0.2	0.21	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	0.66	<0.2	0.80	<0.05
MW-216	07/19/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	1.02	
MW-216	04/07/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	0.62	<0.2	0.61	<0.05
MW-216	04/07/11	<0.5	<0.5	<1.3	153.00	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	0.70	
MW-216	07/29/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.300 J	<0.100 U	0.67	<0.100 U	0.70	<0.010 U
MW-216	07/29/11	<0.250 U	0.260 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.480 J	<0.250 U	0.730 J	<0.250 U	0.610 J	
MW-216	03/15/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.470 J	<0.100 U	0.52	<0.010 U
MW-216	03/15/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.530 J	<0.250 U	0.680 J	
MW-216	08/21/12	<0.100 U	0.100 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.310 J	<0.100 U	0.60	<0.100 U	0.82	<0.010 U
MW-216	03/12/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.330 J	<0.100 U	0.240 J	<0.100 U	0.57	<0.010 U
MW-216	08/08/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.75	<0.100 U	0.96	<0.010 U
MW-216	08/08/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.790 J	<0.250 U	0.930 J	
MW-216	04/09/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.280 J	<0.100 U	0.66	<0.100 U	0.72	<0.010 U
MW-216	08/14/14	<0.100 U	<0.100 U	<0.100 U	1.57	<0.100 U	<0.100 U	<0.100 U	0.440 J	<0.100 U	0.79	<0.100 U	0.58	<0.010 U
MW-216	08/14/14	<0.100 U	<0.100 U	<0.100 U	1.56	<0.100 U	<0.100 U	<0.100 U	0.430 J	<0.100 U	0.81	<0.100 U	0.56	<0.010 U
MW-218D	04/23/09	<0.47	0.41	1.99	<0.47	0.39	<0.44	<0.51	<0.64	0.35	3.50	<0.24	<0.51	<0.5
MW-218D	08/12/09	0.10	0.05	1.89	<0.05	0.04	<0.04	<0.05	0.17	<0.02	2.18	<0.02	1.23	<0.5
MW-218D	05/06/14	<0.250 U	<0.250 U	1.51	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.66	<0.250 U	<0.250 U	<0.010 U
MW-218D	05/06/14	<0.250 U	<0.250 U	1.53	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.76	<0.250 U	<0.250 U	<0.010 U
MW-218D	09/16/14	<0.100 U	<0.100 U	1.68	0.450 J	<0.100 U	<0.100 U	<0.100 U	0.70	<0.100 U	2.69	<0.100 U	<0.100 U	<0.010 U

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Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	138011	MW-218S	04/23/09	16:25	9.38	6.71		6.83	1,145	256.0	26.1	27.7	8.3	0.007	0.001	31.1
DISSOLVED	138011	MW-218S	08/12/09	18:45	12.00	6.66	1,307	7.01	1,306	262.0	23.9	28.5	7.7	<0.002	<0.001	28.6
DISSOLVED	138011	MW-218S	03/26/14	10:40	10.50	6.58	1,410	6.91	1,556	248.9	26.3	24.8	7.0	<0.038 U	<0.005 U	25.9
DISSOLVED	138011	MW-218S	09/02/14	14:05	11.70	6.74	1,490	6.87	1,524	294.6	32.4	24.8	8.3	<0.038 U	<0.005 U	26.9
DISSOLVED	138015	MW-219	04/23/09	17:30	8.64	6.59	908	6.54	989	163.0	30.4	13.6	2.9	0.015	0.001	28.1
DISSOLVED	138015	MW-219	08/10/09	17:10		6.07	722	6.85	728	117.0	22.7	12.1	2.4	<0.002	<0.001	24.4
DISSOLVED	138015	MW-219	03/25/14	12:10	8.70	6.39	780	6.74	819	110.8	22.4	11.0	2.2	<0.015 U	<0.002 U	23.6
DISSOLVED	138015	MW-219	09/02/14	12:55	9.70	6.67	750	6.52	753	117.6	24.7	13.5	2.4	<0.015 U	<0.002 U	22.4
DISSOLVED	249963	MW-220	04/24/09	14:15	9.72	7.31	179	7.90	242	22.7	7.1	6.9	1.2	<0.043 U	<0.031 U	17.4
DISSOLVED	249963	MW-220	08/07/09	11:40	10.26	6.69	190	7.67	346	25.0	7.2	7.6	1.2	0.003	<0.001	18.1
DISSOLVED	249963	MW-220	08/07/09	11:45	10.26	6.69		7.54	199	24.0	7.1	7.5	1.2	<0.002	<0.001	18.1
DISSOLVED	249963	MW-220	09/02/14	11:30	9.80	7.24	475	6.80	465	62.2	18.7	11.0	1.8	<0.015 U	<0.002 U	17.4
DISSOLVED	249963	MW-220	09/02/14	11:40	9.80	7.24	475	7.36	464	62.3	18.7	11.3	1.8	<0.015 U	<0.002 U	17.5
DISSOLVED	138026	MW-227	04/22/09	15:00	9.50	7.25	355	7.36	358	52.0	11.6	6.7	1.9	<0.043 U	<0.031 U	14.0
DISSOLVED	138026	MW-227	09/08/09	16:05	8.89	7.39	392	7.51	405	55.6	11.1	6.7	1.7	<0.002	0.001	12.5
DISSOLVED	138026	MW-227	06/20/12	12:45	8.19	6.67	402	7.44	472	57.0	12.0	6.7	1.9	<0.015 U	<0.002 U	12.7
DISSOLVED	138026	MW-227	03/20/14	14:40	8.90	7.26	440	7.61	472	60.3	12.7	7.8	1.8	<0.015 U	<0.002 U	13.4
DISSOLVED	138026	MW-227	09/03/14	14:10	9.50	7.42	440	7.44	431	65.7	14.5	8.1	2.0	<0.015 U	<0.002 U	12.9
DISSOLVED	249795	MW-243	04/23/09	12:15	9.55	7.09	1,159	7.57	1,195	269.0	21.3	18.1	3.8	0.006	<0.001 U	27.6
DISSOLVED	249795	MW-243	09/08/09	14:25	10.15	6.91	1,189	7.41	1,205	249.0	19.3	16.1	3.5	<0.010	<0.001	25.6
DISSOLVED	249795	MW-243	04/03/14	14:11	11.50	6.89	1,235	7.20	1,340	227.5	19.9	11.2	3.6	<0.038 U	<0.005 U	24.1
DISSOLVED	249795	MW-243	08/12/14	15:10	10.70	6.89	1,055	7.53	1,058	203.6	18.0	9.8	3.3	<0.038 U	<0.005 U	24.3
DISSOLVED	249806	MW-244	04/20/09	16:55	8.40	7.54	315	7.47	335	52.3	11.3	6.3	1.7	<0.004 U	<0.001 U	14.4
DISSOLVED	249806	MW-244	09/08/09	16:57	10.96	7.53	343	7.66	350	48.9	10.2	6.3	1.7	<0.002	0.001	12.4
DISSOLVED	249806	MW-244	03/18/14	15:40	9.00	6.78	430	7.26	442	56.0	12.1	7.6	1.6	<0.015 U	<0.002 U	13.9
DISSOLVED	249806	MW-244	09/03/14	15:15	10.20	7.44	395	7.63	392	59.1	13.3	8.2	1.8	<0.015 U	<0.002 U	13.5
DISSOLVED	249965	MW-247	04/25/09	13:40	9.81	8.42		8.23	1,630	8.0	0.4	352.0	0.8	<0.043 U	<0.031 U	8.9
DISSOLVED	249965	MW-247	08/09/09	15:45	9.98	8.21	1,557	8.58	1,620	5.1	0.4	418.0	0.9	0.062	0.001	9.9
DISSOLVED	249965	MW-247	04/09/14	14:49	9.48	8.45	1,680	8.46	1,766	4.7	0.3	376.1	0.9	0.044 J	<0.005 U	7.4
DISSOLVED	249965	MW-247	09/03/14	12:40	10.00	8.54	1,675	8.52	1,673	5.1	0.4	401.7	0.9	<0.038 U	<0.005 U	8.2
DISSOLVED	249847	MW-253	04/17/09	18:30	9.58	6.89	1,595	6.98	1,645	381.0	36.5	14.3	8.1	<0.018 U	<0.003 U	34.2
DISSOLVED	249847	MW-253	08/20/09	16:45	10.29	6.90	1,390	7.13	1,305	267.0	26.4	13.9	6.3	<0.019	<0.001	26.9
DISSOLVED	249847	MW-253	03/26/14	11:50	10.00	6.63	1,470	6.98	1,601	282.5	27.7	18.9	7.4	<0.038 U	<0.005 U	26.7
DISSOLVED	249847	MW-253	08/12/14	12:15	12.10	6.57	1,395	7.14	1,397	275.7	29.5	14.1	6.5	<0.038 U	<0.005 U	28.0
DISSOLVED	249798	MW-254	04/17/09	19:35	9.93	6.56	1,384	6.50	1,391	269.0	58.0	14.7	7.9	0.004	<0.001 U	40.5
DISSOLVED	249798	MW-254	08/20/09	15:30	12.80	6.67	1,248	7.73	1,255	211.0	27.6	28.9	6.9	<0.019	0.709	27.9
DISSOLVED	249798	MW-254	05/22/14	14:14	12.89	6.58	1,475	6.80	1,753	254.0	31.5	26.4	6.7	<0.038 U	0.887	28.7
DISSOLVED	249798	MW-254	09/17/14	12:15	12.20	6.22	1,670	6.88	1,635	301.5	49.7	19.0	6.9	<0.038 U	0.019 J	30.0

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-218S	04/23/09	244.0	0.0	529.8	<5.0	2.1	9.2	0.5	<0.35	52.30	42	29.20	20.40	<0.96	<500	0.62
MW-218S	08/12/09	264.7	0.0	507.4	5.3	2.7	9.5	<0.5	<0.04	10.70	7.99	6.02	5.21	<0.20	<500	0.15
MW-218S	03/26/14	290.8	0.0	533.1	6.2	2.8	9.1	0.2	<0.250 U	20.580 J	39	24.92	23.53	<0.250 U	77.00	0.730 J
MW-218S	09/02/14	297.5	0.0	728.4	6.5	3.2	9.3	0.4	<0.250 U	36.60	38	25.69	27.38	<0.250 U	<10.000 U	0.840 J
MW-219	04/23/09	167.4	0.0	438.2	<5.0	4.3	<0.5	<0.5	<0.35	<30.41	0.80	25.20	17.90	<0.90	<500	<0.24 U
MW-219	08/10/09	125.7	0.0	273.8	<5.0	4.8	<0.5	<0.5	<0.04	<7.60	0.53	21.10	18.40	<0.20	<500	<0.05
MW-219	03/25/14	142.8	0.0	285.7	2.8	3.1	0.2	0.030 J	<0.100 U	<2.000 U	0.44	15.77	19.31	<0.100 U	<10.000 U	<0.100 U
MW-219	09/02/14	133.7	0.0	317.0	3.0	3.5	0.3	<0.020 U	<0.100 U	<2.000 U	0.44	22.06	20.51	<0.100 U	<10.000 U	<0.100 U
MW-220	04/24/09	109.1	0.0	15.4	0.5	0.4	0.5	<0.05	<0.04	10.65	0.96	10.10	42.70	<0.18	<50	<0.05 U
MW-220	08/07/09	113.5	0.0	15.2	0.8	0.2	0.5	<0.05	<0.04	<7.60	0.81	10.10	43.90	<0.20	<50	<0.05
MW-220	08/07/09	112.9	0.0	15.4	0.8	0.2	0.6	<0.05	<0.04	<7.60	0.81	10.00	44.10	<0.20	<50	<0.05
MW-220	09/02/14	160.8	0.0	119.9	8.5	1.7	0.4	<0.020 U	<0.100 U	<2.000 U	0.87	7.40	104.44	<0.100 U	<10.000 U	0.98
MW-220	09/02/14	165.4	0.0	120.1	8.4	1.7	0.4	<0.020 U	<0.100 U	<2.000 U	0.92	7.70	105.41	<0.100 U	<10.000 U	<0.100 U
MW-227	04/22/09	204.0	0.0	21.8	5.4	1.1	0.4	<0.05	<0.04	<7.64	39	15.80	34.70	<0.18	<50	<0.05 U
MW-227	09/08/09	213.7	0.0	29.2	7.0	1.7	0.5	<0.05	<0.04	<7.60	35	17.10	28.90	<0.20	<50	<0.05
MW-227	06/20/12	193.5	0.0	26.3	5.4	1.2	0.4	<0.020 U	<0.100 U	<0.400 U	44	18.12	31.17	<0.100 U	<10.000 U	<0.100 U
MW-227	03/20/14	238.0	0.0	36.8	6.3	1.4	0.4	<0.020 U	<0.100 U	<2.000 U	38	12.62	35.03	<0.100 U	<10.000 U	<0.100 U
MW-227	09/03/14	231.3	0.0	45.7	7.1	2.1	0.4	<0.020 U	<0.100 U	<2.000 U	29	14.66	38.31	<0.100 U	<10.000 U	<0.100 U
MW-243	04/23/09	201.9	0.0	543.3	5.6	4.4	<0.5	<0.5	<0.35	<30.41	0.82	15.40	15.70	<0.96	<500	<0.24 U
MW-243	09/08/09	212.7	0.0	516.4	11.6	7.1	<0.5	<0.5	<0.20	<38.00	0.90	16.30	16.80	<1.00	<500	<0.25
MW-243	04/03/14	273.3	0.0	410.6	24.8	8.1	0.5	0.020 J	<0.250 U	<5.000 U	0.850 J	18.40	19.41	<0.250 U	85.00	<0.250 U
MW-243	08/12/14	255.4	0.0	396.4	19.6	5.7	0.5	<0.020 U	<0.250 U	<5.000 U	0.710 J	16.69	16.70	<0.250 U	<10.000 U	<0.250 U
MW-244	04/20/09	196.9	0.0	19.8	4.1	1.0	0.4	<0.05	<0.07	<6.08	6.19	12.30	39.10	<0.19	<50	<0.05 U
MW-244	09/08/09	198.2	0.0	23.0	5.7	1.4	0.5	<0.05	<0.04	<7.60	5.00	13.80	33.40	<0.20	<50	<0.05
MW-244	03/18/14	209.1	0.0	30.2	5.8	5.7	0.4	0.030 J	<0.100 U	<2.000 U	6.39	12.19	45.46	<0.100 U	<10.000 U	<0.100 U
MW-244	09/03/14	224.5	0.0	31.5	7.3	2.2	0.4	<0.020 U	<0.100 U	<2.000 U	5.40	15.28	46.89	<0.100 U	<10.000 U	<0.100 U
MW-247	04/25/09	511.9	0.0	416.2	17.9	<0.5	1.0	<0.5	<0.42	<76.41	<0.59	204.00	11.20	<1.82	<500	<0.49 U
MW-247	08/09/09	508.9	12.0	411.8	17.4	<0.5	1.0	<0.5	<0.20	76.60	<0.50	195.00	12.30	<1.00	<500	<0.25
MW-247	04/09/14	538.9	10.8	389.9	17.1	0.4	1.3	<0.020 U	<0.250 U	53.77	<0.250 U	187.67	11.21	<0.250 U	109.00	<0.250 U
MW-247	09/03/14	552.0	10.6	414.7	22.1	0.1	1.1	<0.020 U	<0.250 U	15.480 J	<0.250 U	174.62	13.53	<0.250 U	107.00	<0.250 U
MW-253	04/17/09	330.4	0.0	776.3	19.3	4.5	8.4	<0.5	<0.70	<60.82	21	19.60	22.10	<1.93	<500	<0.48 U
MW-253	08/20/09	303.4	0.0	540.2	7.8	4.4	7.2	<0.5	<0.65	<75.50	15	23.30	21.30	<0.70	<500	<0.80
MW-253	03/26/14	323.7	0.0	551.5	7.4	3.4	9.5	0.2	<0.250 U	15.720 J	78	23.47	27.56	<0.250 U	74.00	1.14
MW-253	08/12/14	340.4	0.0	536.0	10.0	3.4	6.5	0.080 J	<0.250 U	5.910 J	8.19	19.27	19.09	<0.250 U	<10.000 U	<0.250 U
MW-254	04/17/09	134.2	0.0	804.8	35.3	5.6	5.9	<0.5	<0.70	88.70	0.78	22.30	12.70	<1.93	<500	<0.48 U
MW-254	08/20/09	258.6	0.0	501.5	6.2	3.0	8.1	<0.5	<0.65	<75.50	2.22	31.30	14.70	<0.70	<500	1.10
MW-254	05/22/14	272.9	0.0	627.8	7.3	3.1	7.4	<0.020 U	<0.250 U	40.23	1.17	33.48	13.41	<0.250 U	72.00	2.80
MW-254	09/17/14	248.3	0.0	756.7	25.6	4.0	8.0	<0.020 U	<0.250 U	27.13	0.870 J	21.08	13.12	<0.250 U	<10.000 U	<0.250 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-218S	04/23/09	<0.21	<0.43	<2.05 U	13.70	0.33	<0.41	<0.99 U	0.56	3.13	<0.24	591.00	6.11	<0.16	0.64	2.52	337.00
MW-218S	08/12/09	<0.10	0.08	1.25	1.98	0.09	<0.10	<0.15	0.15	0.63	<0.04	594.00	1.29	<0.03	0.18	0.52	52.60
MW-218S	03/26/14	<0.250 U	<0.250 U	<1.250 U	11.680 J	<0.250 U	1.83	<0.150 U	0.730 J	3.21	<0.250 U	600.39	3.42	<0.250 U	1.040 J	1.68	235.75
MW-218S	09/02/14	0.740 J	<0.250 U	6.15	14.970 J	<0.250 U	2.08	<0.150 U	1.040 J	3.17	<0.250 U	663.12	222.05	<0.250 U	1.44	2.69	294.73
MW-219	04/23/09	<0.21	<0.43	<2.05 U	3.84	0.37	<0.41	<0.99 U	<0.25	1.65	<0.24	1288.00	<0.16	<0.16	3.53	0.52	<6.52 U
MW-219	08/10/09	<0.10	0.15	0.59	1.77	0.60	<0.10	<0.15	<0.05	0.61	<0.04	846.00	2.72	<0.03	2.25	0.51	<0.90
MW-219	03/25/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	0.440 J	0.66	<0.060 U	<0.100 U	0.74	<0.100 U	925.72	1.78	<0.100 U	1.41	0.320 J	<0.500 U
MW-219	09/02/14	0.350 J	<0.100 U	<0.500 U	<2.000 U	0.60	0.54	<0.060 U	<0.100 U	0.55	<0.100 U	974.85	86.46	<0.100 U	2.12	0.470 J	<0.500 U
MW-220	04/24/09	<0.06	0.09	<0.40 U	18.90	2.55	<0.11	<0.15 U	0.09	0.31	<0.04	364.00	0.25	<0.03	0.38	0.93	<0.94 U
MW-220	08/07/09	<0.10	0.10	3.69	16.10	2.21	<0.10	<0.15	0.10	0.30	0.10	354.00	0.22	<0.03	0.33	0.89	<0.90
MW-220	08/07/09	<0.10	0.11	3.85	16.80	2.19	<0.10	<0.15	0.09	0.29	0.09	343.00	<0.20	<0.03	0.35	0.90	<0.90
MW-220	09/02/14	<0.100 U	<0.100 U	<0.500 U	27.82	1.95	0.280 J	0.36	<0.100 U	1.31	<0.100 U	878.87	43.31	<0.100 U	5.34	0.80	<0.500 U
MW-220	09/02/14	0.310 J	<0.100 U	<0.500 U	27.87	1.92	0.400 J	<0.060 U	<0.100 U	1.29	<0.100 U	878.94	43.57	<0.100 U	5.20	0.82	<0.500 U
MW-227	04/22/09	<0.06	0.16	1.47	4.81	2.57	<0.11	<0.15 U	0.62	0.54	<0.04	150.00	<0.19	<0.03	1.85	0.97	8.34
MW-227	09/08/09	0.16	0.16	0.63	3.65	1.96	<0.10	<0.15	0.56	0.56	<0.04	124.00	0.24	<0.03	1.42	0.76	5.91
MW-227	06/20/12	<0.100 U	<0.100 U	0.430 J	5.32	1.77	0.91	<0.040 U	0.450 J	0.490 J	<0.100 U	135.57	0.120 J	<0.100 U	1.70	0.77	7.18
MW-227	03/20/14	<0.100 U	<0.100 U	<0.500 U	3.650 J	2.15	0.470 J	<0.060 U	0.440 J	0.81	<0.100 U	149.60	0.230 J	<0.100 U	1.98	0.61	7.55
MW-227	09/03/14	0.210 J	<0.100 U	0.540 J	5.570 J	1.98	0.52	<0.060 U	0.490 J	1.15	<0.100 U	162.32	42.05	<0.100 U	2.39	0.82	8.77
MW-243	04/23/09	0.24	0.49	<2.05 U	8.13	0.62	<0.41	<0.99 U	<0.25	2.55	<0/24	440.00	6.35	<0.16	2.48	0.64	<6.52 U
MW-243	09/08/09	<0.50	0.70	<2.00	8.81	0.73	<0.50	0.78	<0.24	2.35	<0.21	416.00	5.85	<017	3.29	0.76	<4.50
MW-243	04/03/14	<0.250 U	0.670 J	<1.250 U	<5.000 U	0.950 J	1.66	<0.150 U	<0.250 U	2.98	<0.250 U	410.33	3.71	<0.250 U	5.19	0.780 J	<1.250 U
MW-243	08/12/14	<0.250 U	<0.250 U	<1.250 U	7.180 J	1.040 J	<0.250 U	<0.150 U	<0.250 U	1.83	<0.250 U	328.94	129.11	<0.250 U	4.15	0.540 J	<1.250 U
MW-244	04/20/09	<0.04	<0.09	0.69	4.09	2.28	<0.08	<0.20 U	0.28	0.35	<0.05	138.00	0.17	<0.03	1.70	0.82	<1.30 U
MW-244	09/08/09	0.12	0.17	0.61	3.59	1.99	<0.10	<0.15	0.38	0.36	<0.04	118.00	0.21	0.04	1.50	0.80	<0.90
MW-244	03/18/14	<0.100 U	0.250 J	<0.500 U	<2.000 U	2.01	0.450 J	<0.060 U	0.400 J	0.53	<0.100 U	149.59	<0.100 U	<0.100 U	2.05	0.68	<0.500 U
MW-244	09/03/14	<0.100 U	<0.100 U	0.570 J	3.630 J	2.00	0.52	<0.060 U	0.340 J	0.62	<0.100 U	154.48	38.05	<0.100 U	2.21	0.91	<0.500 U
MW-247	04/25/09	<0.58	<0.40	<3.98 U	58.30	7.12	<1.14	<1.54	<0.49	<1.05	<0.42	123.00	2.80	<0.33	2.00	<0.78	<9.42 U
MW-247	08/09/09	<0.50	<0.20	<2.00	53.80	7.20	<0.50	<0.76	<0.24	<0.50	<0.24	125.00	4.78	<0.17	2.07	<0.50	<4.50
MW-247	04/09/14	<0.250 U	<0.250 U	<1.250 U	47.49	7.29	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	115.97	4.23	<0.250 U	1.83	<0.250 U	<1.250 U
MW-247	09/03/14	<0.250 U	<0.250 U	<1.250 U	51.50	5.84	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	125.59	23.78	<0.250 U	2.25	<0.250 U	<1.250 U
MW-253	04/17/09	<0.42	<0.86	<4.11 U	20.00	<0.43	<0.83	<1.97 U	<0.50	3.73	<0.47	765.00	8.47	<0.33	2.89	2.00	243.00
MW-253	08/20/09	<0.50	0.76	<1.30	19.60	<0.80	<1.20	<0.70	0.62	2.07	<0.80	656.00	6.23	<0.70	3.27	1.95	150.00
MW-253	03/26/14	<0.250 U	<0.250 U	<1.250 U	15.300 J	0.640 J	2.33	<0.150 U	0.540 J	2.79	<0.250 U	705.97	3.58	<0.250 U	1.89	1.74	273.07
MW-253	08/12/14	<0.250 U	0.520 J	4.900 J	20.390 J	0.510 J	<0.250 U	<0.150 U	0.560 J	2.17	<0.250 U	555.00	175.70	<0.250 U	2.78	1.210 J	113.09
MW-254	04/17/09	<0.42	<0.86	<4.11 U	28.50	<0.43	<0.83	<1.97 U	<0.50	<2.03	<0.47	680.00	8.14	<0.33	<0.20	<0.51	70.70
MW-254	08/20/09	<0.50	<0.50	4.57	28.00	2.86	<1.20	<0.70	<0.55	2.26	<0.80	578.00	5.68	<0.70	2.24	0.63	36.10
MW-254	05/22/14	<0.250 U	<0.250 U	<1.250 U	30.08	2.92	5.72	<0.150 U	<0.250 U	3.28	<0.250 U	667.61	4.70	<0.250 U	1.93	0.690 J	147.20
MW-254	09/17/14	0.700 J	<0.250 U	<1.250 U	23.560 J	<0.250 U	4.23	<0.150 U	<0.250 U	2.13	<0.250 U	677.30	242.71	<0.250 U	1.87	<0.250 U	83.33

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-218S	04/23/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	1.84	<0.09	<0.15	<0.5
MW-218S	08/12/09	<0.05	<0.02	<0.04	<0.05	<0.02	0.05	<0.05	<0.10	<0.02	0.51	<0.02	<0.05	<0.5
MW-218S	03/26/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.90	<0.250 U	<0.250 U	<0.010 U
MW-218S	09/02/14	<0.250 U	<0.250 U	<0.250 U	0.940 J	<0.250 U	<0.250 U	<0.250 U	0.680 J	<0.250 U	2.07	<0.250 U	<0.250 U	<0.010 U
MW-219	04/23/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	<0.21	<0.09	<0.15	<0.5
MW-219	08/10/09	<0.05	<0.02	<0.04	<0.05	0.03	<0.04	<0.05	0.23	<0.02	0.03	<0.02	<0.05	<0.5
MW-219	03/25/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.310 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-219	09/02/14	<0.100 U	<0.100 U	<0.100 U	0.66	<0.100 U	<0.100 U	<0.100 U	1.05	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-220	04/24/09	<0.05	0.02	<0.04	<0.05	<0.02	<0.04	<0.05	0.07	<0.02	0.27	<0.02	0.21	<0.05
MW-220	08/07/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	0.11	<0.02	0.25	<0.02	0.28	<0.05
MW-220	08/07/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	0.11	<0.02	0.26	<0.02	0.28	<0.05
MW-220	09/02/14	<0.100 U	<0.100 U	<0.100 U	3.67	<0.100 U	<0.100 U	<0.100 U	0.88	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-220	09/02/14	<0.100 U	<0.100 U	<0.100 U	3.79	<0.100 U	<0.100 U	<0.100 U	0.93	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-227	04/22/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.06	<0.02	2.01	<0.02	0.16	<0.05
MW-227	09/08/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	1.71	<0.02	0.11	<0.05
MW-227	06/20/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.54	<0.100 U	0.150 J	<0.010 U
MW-227	03/20/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.89	<0.100 U	<0.100 U	<0.010 U
MW-227	09/03/14	<0.100 U	<0.100 U	<0.100 U	1.44	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.82	<0.100 U	<0.100 U	<0.010 U
MW-243	04/23/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	2.04	<0.09	<0.15	<0.5
MW-243	09/08/09	<0.25	<0.10	<0.21	<0.25	<0.11	<0.20	<0.26	<0.50	<0.11	2.15	<0.12	<0.25	<0.5
MW-243	04/03/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.88	<0.250 U	<0.250 U	<0.010 U
MW-243	08/12/14	<0.250 U	<0.250 U	<0.250 U	0.600 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.55	<0.250 U	<0.250 U	<0.010 U
MW-244	04/20/09	<0.06	<0.04	0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	1.38	<0.02	0.14	<0.05
MW-244	09/08/09	<0.05	0.03	0.09	<0.05	0.04	0.08	<0.05	<0.10	0.03	1.30	0.03	0.21	<0.05
MW-244	03/18/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.57	<0.100 U	<0.100 U	<0.010 U
MW-244	09/03/14	<0.100 U	<0.100 U	<0.100 U	1.73	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.46	<0.100 U	<0.100 U	<0.010 U
MW-247	04/25/09	<0.47	<0.20	<0.42	<0.47	<0.22	<0.44	<0.51	<0.64 U	<0.21	4.01	<0.24	<0.51	<0.5
MW-247	08/09/09	<0.25	0.36	0.34	<0.25	0.21	<0.20	<0.26	<0.50	<0.11	4.08	<0.12	<0.25	<0.5
MW-247	04/09/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.56	<0.250 U	<0.250 U	<0.010 U
MW-247	09/03/14	<0.250 U	<0.250 U	<0.250 U	0.560 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.42	<0.250 U	<0.250 U	<0.010 U
MW-253	04/17/09	<0.61	<0.42	<0.36	<0.38	<0.49	<0.31	<0.39	<0.72	<0.32	4.06	<0.18	<0.29	<0.5
MW-253	08/20/09	<0.90	<0.50	<0.60	<0.50	<0.50	<1.70	<0.65	<0.60	<0.50	3.82	<0.90	<0.65	<0.5
MW-253	03/26/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.59	<0.250 U	<0.250 U	<0.010 U
MW-253	08/12/14	<0.250 U	<0.250 U	<0.250 U	0.670 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.13	<0.250 U	<0.250 U	<0.010 U
MW-254	04/17/09	<0.61	<0.42	<0.36	<0.38	<0.49	<0.31	<0.39	<0.72	<0.32	3.25	<0.18	<0.29	<0.5
MW-254	08/20/09	<0.90	<0.50	<0.60	<0.50	<0.50	<1.70	<0.65	<0.60	<0.50	3.54	<0.90	<0.80	<0.5
MW-254	05/22/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.78	<0.250 U	<0.250 U	<0.010 U
MW-254	09/17/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.620 J	<0.250 U	0.710 J	<0.250 U	2.98	<0.250 U	<0.250 U	<0.010 U

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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249851	MW-256	04/17/09	17:10	9.75	7.13	552	7.20	845	102.0	18.1	7.5	2.5	0.005	<0.001 U	18.0
DISSOLVED	249851	MW-256	08/20/09	14:00	9.85	6.86	590	7.34	597	90.3	15.7	6.9	2.2	<0.004	<0.001	16.4
DISSOLVED	249851	MW-256	03/25/10	14:17	9.74	6.67	654	7.42	678	100.0	18.1	7.1	2.2	0.005	<0.001	15.7
DISSOLVED	249851	MW-256	07/16/10	10:56	10.77	6.46	625	8.09	626	93.5	16.6	6.6	2.2	0.003	<0.001	15.9
TOTAL RECOVERABLE	249851	MW-256	07/16/10	10:56	10.77	6.46	625			102.0	18.7	7.8	2.5	0.200	0.003	
DISSOLVED	249851	MW-256	04/13/11	14:22	9.28	7.34	575	7.24	637	97.5	17.2	7.6	2.3	<0.002	<0.001	15.5
TOTAL RECOVERABLE	249851	MW-256	04/13/11	14:22	9.28	7.34	575			93.0	17.6	7.6	2.3	0.088	0.005	
DISSOLVED	249851	MW-256	07/27/11	14:17	10.16	4.93	461	7.13	426	69.0	12.4	6.0	1.9	<0.000 U	<0.001 U	15.2
TOTAL RECOVERABLE	249851	MW-256	07/27/11	14:17	10.16	4.93	461			63.2	12.3	6.1	2.0	0.081	0.011	
TOTAL RECOVERABLE	249851	MW-256	03/26/12	16:53	9.48	6.89	917			157.9	28.6	9.9	3.2	0.334	0.006 J	
DISSOLVED	249851	MW-256	03/26/12	16:53	9.48	6.89	917	7.07	958	132.1	25.4	9.0	2.6	0.055	<0.002 U	17.2
DISSOLVED	249851	MW-256	08/15/12	12:27	10.30	6.74	821	7.01	771	124.7	25.2	8.7	2.7	<0.015 U	<0.002 U	16.5
DISSOLVED	249851	MW-256	02/27/13	12:21	9.09	6.80	684	6.84	711	105.9	19.1	7.4	2.4	<0.015 U	<0.002 U	15.8
DISSOLVED	249851	MW-256	08/05/13	12:38	10.16	6.98	605	7.16	603	93.0	16.9	7.0	2.2	<0.015 U	<0.002 U	16.9
TOTAL RECOVERABLE	249851	MW-256	08/05/13	12:38	10.16	6.98	605			95.7	17.8	2.5	2.5	<0.038 U	<0.005 U	
DISSOLVED	249851	MW-256	03/26/14	15:32	9.50	7.02	550	7.39	605	85.7	15.5	6.7	2.4	<0.015 U	<0.002 U	16.0
DISSOLVED	249851	MW-256	08/12/14	13:50	10.20	6.71	465	7.43	457	72.6	13.2	6.3	2.0	<0.015 U	<0.002 U	16.0
DISSOLVED	249909	MW-258(NW-6S)	09/11/09	14:45	9.68	7.43	276	7.60	288	40.4	8.0	5.4	0.9	0.004	0.001	14.9
DISSOLVED	249909	MW-258(NW-6S)	04/15/10	15:45	10.24	6.56	244	7.56	332	32.6	7.0	5.0	0.8	0.006	0.001	14.1
DISSOLVED	249909	MW-258(NW-6S)	07/14/10	12:40	9.63	6.59	356	7.91	349	51.7	9.9	5.7	0.9	0.002	<0.001	14.5
TOTAL RECOVERABLE	249909	MW-258(NW-6S)	07/14/10	12:40	9.63	6.59	356			63.2	11.5	7.0	1.1	0.146	<0.003	
DISSOLVED	249909	MW-258(NW-6S)	04/13/11	15:18	8.68	7.85	230	7.54	256	33.6	7.1	5.6	0.8	<0.002	<0.001	14.4
TOTAL RECOVERABLE	249909	MW-258(NW-6S)	04/13/11	15:18	8.68	7.85	230			31.1	6.6	4.9	0.8	0.191	<0.003	
TOTAL RECOVERABLE	249909	MW-258(NW-6S)	07/27/11	11:57	9.09	6.78	207			25.9	6.3	4.9	0.9	0.074	<0.006 U	
DISSOLVED	249909	MW-258(NW-6S)	07/27/11	11:57	9.09	6.78	207	7.55	199	27.3	6.1	4.9	0.8	<0.002 U	<0.003 U	13.9
TOTAL RECOVERABLE	249909	MW-258(NW-6S)	03/12/12	12:49	8.69	8.01	241			32.5	6.7	5.0	0.9	0.072	<0.005 U	
DISSOLVED	249909	MW-258(NW-6S)	03/12/12	12:49	8.69	8.01	241	7.36	270	30.8	6.6	5.1	0.8	<0.005 U	<0.002 U	14.9
DISSOLVED	249909	MW-258(NW-6S)	08/28/12	16:23	9.40	7.76	223	7.38	197	28.6	6.1	5.1	0.8	<0.015 U	<0.002 U	15.2
DISSOLVED	249909	MW-258(NW-6S)	08/28/12	16:26	9.40	7.76	223	7.38	193	27.8	5.9	4.7	0.8	<0.015 U	<0.002 U	15.3
DISSOLVED	249909	MW-258(NW-6S)	03/20/13	12:11	8.50	7.51	195	7.19	176	24.8	5.2	4.4	0.7	<0.015 U	<0.002 U	13.9
DISSOLVED	249909	MW-258(NW-6S)	07/31/13	14:03	9.68	6.34	200	6.61	198	24.7	5.1	4.5	0.7	<0.015 U	<0.002 U	15.1
TOTAL RECOVERABLE	249909	MW-258(NW-6S)	07/31/13	14:03	9.68	6.34	200			26.2	5.7	4.7	0.9	<0.038 U	<0.005 U	
DISSOLVED	249909	MW-258(NW-6S)	03/25/14	11:05	8.40	7.32	180	7.53	179	25.0	5.4	4.3	0.8	<0.015 U	<0.002 U	14.0
DISSOLVED	249909	MW-258(NW-6S)	09/11/14	15:45	9.10	7.45	200	7.42	186	26.6	6.0	5.0	0.8	<0.015 U	<0.002 U	14.3

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-256	04/17/09	215.0	0.0	115.8	11.5	5.1	<0.5	<0.5	<0.07	<6.08	0.56	17.30	51.30	<0.19	<500	<0.05 U
MW-256	08/20/09	218.4	0.0	94.3	21.1	8.7	<0.5	<0.5	<0.13	<15.10	0.52	17.00	55.80	<0.14	<500	<0.16
MW-256	03/23/10	210.1	0.0	142.0	13.9	6.0	0.3	<0.05	<0.10	1.67	0.67	15.50	61.20	<0.10	<50	<0.10
MW-256	07/16/10	210.8	0.0	121.4	17.6	6.0	0.3	<0.05	<0.2	<2.0	0.54	17.00	59.30	<0.2	<50	<0.2
MW-256	07/16/10								<0.5	175.00	<0.5		63.60	<1.0		<0.5
MW-256	04/13/11	208.5	0.0	108.1	12.9	5.2	0.3	<0.1	<0.2	<2.0	0.57	16.60	52.00	<0.2	<50	<0.2
MW-256	04/13/11								<0.5	87.60	0.52	17.10	57.60	<0.5		<0.5
MW-256	07/27/11	178.7	0.0	65.5	7.2	3.7	0.3	<0.020 U	<0.100 U	23.76	0.51	17.57	41.92	<0.100 U	<10.000 U	<0.100 U
MW-256	07/27/11								<0.250 U	70.93	0.560 J		37.09	<0.250 U		<0.250 U
MW-256	03/26/12									417.12	4.82	23.63	98.37	<0.250 U		<0.250 U
MW-256	03/26/12	185.6	0.0	255.2	24.7	9.5	0.3	<0.020 U	<0.100 U	34.35	0.63	19.64	78.18	<0.100 U	95.00	<0.100 U
MW-256	08/15/12	182.0	0.0	208.7	23.4	5.9	0.3	<0.020 U	<0.100 U	<0.400 U	0.250 J	18.83	78.05	<0.100 U	<10.000 U	<0.100 U
MW-256	02/27/13	204.2	0.0	161.8	14.3	9.8	0.3	<0.020 U	<0.100 U	0.450 J	0.450 J	17.02	63.91	<0.100 U	<10.000 U	<0.100 U
MW-256	08/05/13	233.3	0.0	120.2	9.9	4.1	0.3	<0.020 U	<0.100 U	<0.400 U	0.52	14.64	56.05	<0.100 U	<10.000 U	<0.100 U
MW-256	08/05/13									15.32	0.410 J	19.02	58.52	<0.250 U		<0.250 U
MW-256	03/26/14	244.2	0.0	80.7	7.8	5.0	0.4	<0.020 U	<0.100 U	<2.000 U	0.47	12.49	49.03	<0.100 U	<10.000 U	<0.100 U
MW-256	08/12/14	215.6	0.0	63.9	5.3	3.8	0.4	<0.020 U	<0.100 U	6.290 J	0.43	16.04	42.21	<0.100 U	<10.000 U	<0.100 U
MW-258(NW-6S)	09/11/09	93.0	0.0	64.5	0.8	0.5	0.5	<0.05	<0.10	<17.80	0.64	7.11	44.10	<0.10	<50	<0.20
MW-258(NW-6S)	04/15/10	89.5	0.0	49.9	0.6	0.2	0.4	<0.05	<0.1	<1.0	0.69	6.59	35.90	<0.2	<50	<0.1
MW-258(NW-6S)	07/14/10	76.1	0.0	114.6	0.8	0.6	0.4	<0.05	<0.2	<2.0	0.69	7.83	58.40	<0.2	<50	<0.2
MW-258(NW-6S)	07/14/10								<0.5	27.40	0.60	9.95	60.80	<0.5		<0.5
MW-258(NW-6S)	04/13/11	83.6	0.0	43.4	1.5	0.3	0.3	<0.1	<0.2	5.25	0.69	6.13	35.60	<0.2	<50	<0.2
MW-258(NW-6S)	04/13/11								<0.5	227.00	0.70	7.72	36.70	<0.5		<0.5
MW-258(NW-6S)	07/27/11								<1.250 U	100.54	0.730 J		31.80	<1.250 U		<1.250 U
MW-258(NW-6S)	07/27/11	86.8	0.0	28.7	1.3	0.2	0.3	<0.100 U	<0.500 U	9.94	0.63	6.35	31.04	<0.500 U	<50.000 U	<0.500 U
MW-258(NW-6S)	03/12/12								<0.250 U	117.06	1.70	10.52	35.45	<0.250 U		<0.250 U
MW-258(NW-6S)	03/12/12	81.9	0.0	38.1	1.0	0.2	0.4	<0.020 U	<0.100 U	3.02	0.74	7.14	34.06	<0.100 U	<10.000 U	<0.100 U
MW-258(NW-6S)	08/28/12	86.3	0.0	32.8	0.9	0.2	0.4	0.040 J	<0.100 U	<0.400 U	0.73	7.94	31.31	<0.100 U	<10.000 U	<0.100 U
MW-258(NW-6S)	08/28/12	80.0	0.0	35.8	1.0	0.2	0.4	0.040 J	<0.100 U	1.210 J	0.73	7.75	30.51	<0.100 U	<10.000 U	<0.100 U
MW-258(NW-6S)	03/20/13	79.8	0.0	27.2	0.9	0.2	0.5	<0.020 U	<0.100 U	1.190 J	0.67	6.81	26.30	<0.100 U	<10.000 U	<0.100 U
MW-258(NW-6S)	07/31/13	70.7	0.0	25.7	1.1	6.7	0.5	0.020 J	<0.100 U	3.54	0.73	7.69	27.19	<0.100 U	<10.000 U	<0.100 U
MW-258(NW-6S)	07/31/13									25.11	1.030 J	7.49	27.16	<0.250 U		<0.250 U
MW-258(NW-6S)	03/25/14	89.1	0.0	19.6	2.7	0.3	0.5	0.020 J	<0.100 U	<2.000 U	0.67	5.88	26.73	<0.100 U	<10.000 U	<0.100 U
MW-258(NW-6S)	09/11/14	91.4	0.0	25.4	1.5	0.8	0.4	<0.020 U	<0.100 U	<2.000 U	0.61	6.63	29.19	<0.100 U	<10.000 U	<0.100 U

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Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-256	04/17/09	0.23	<0.09	0.98	4.25	2.36	<0.08	<0.20 U	0.78	1.01	<0.05	229.00	1.22	<0.03	1.50	0.37	<1.30 U
MW-256	08/20/09	0.12	<0.10	7.82	4.31	2.44	<0.24	<0.14	1.02	0.74	<0.16	220.00	0.99	<0.14	1.54	0.41	<0.89
MW-256	03/23/10	<0.10	0.51	0.46	3.15	2.40	<0.10	0.16	0.82	1.42	<0.10	232.00	1.34	<0.10	1.90	0.39	1.61
MW-256	07/16/10	<0.2	<0.2	0.53	3.78	2.10	<0.2	<0.2	0.90	1.06	<0.2	223.00	1.01	<0.2	1.43	0.40	<1.0
MW-256	07/16/10	2.73	<0.5	<1.3	7.22	1.35	<0.5	<0.5	<0.5	<0.5		312.00	3.70	<0.5	5.09	<0.5	<2.5
MW-256	04/13/11	<0.2	<0.2	<0.5	<2.0	2.37	<0.2	<0.2	0.78	1.13	<0.5	224.00	1.45	<0.2	1.45	0.34	<0.5
MW-256	04/13/11	<0.5	<0.5	<1.3	<5.0	2.44	<0.5	<0.5	0.83	0.83		246.00	5.57	<0.5	1.67	0.75	<1.3
MW-256	07/27/11	0.110 J	0.160 J	0.240 J	4.29	2.24	<0.100 U	<0.040 U	0.82	0.57	<0.100 U	164.74	0.390 J	<0.100 U	0.84	0.330 J	<0.200 U
MW-256	07/27/11	<0.250 U	0.300 J	0.570 J	2.420 J	3.30	0.940 J	<0.100 U	0.400 J	<0.250 U	<0.250 U	139.70	1.53	<0.250 U	1.240 J	0.440 J	<0.500 U
MW-256	03/26/12	<0.250 U	1.99	1.36	9.16	1.76	<0.250 U	<0.100 U	0.910 J	4.03	<0.250 U	368.14	27.68	<0.250 U	2.42	6.01	2.430 J
MW-256	03/26/12	<0.100 U	<0.100 U	0.54	0.490 J	1.58	<0.100 U	<0.040 U	0.74	1.44	<0.100 U	336.10	3.96	<0.100 U	1.71	0.280 J	1.72
MW-256	08/15/12	0.140 J	0.160 J	0.82	8.27	1.99	1.73	<0.040 U	0.91	1.70	<0.100 U	302.09	2.15	<0.100 U	1.82	0.400 J	2.22
MW-256	02/27/13	<0.100 U	<0.100 U	<0.040 U	3.530 J	2.11	1.37	<0.060 U	0.410 J	1.15	<0.100 U	258.58	1.74	<0.100 U	1.38	0.340 J	<0.050 U
MW-256	08/05/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	2.32	0.86	<0.060 U	1.00	1.17	<0.100 U	232.58	0.82	<0.100 U	1.62	0.380 J	<0.050 U
MW-256	08/05/13	<0.250 U	0.920 J	<0.100 U	<3.750 U	2.39	0.920 J	<0.150 U	1.150 J	1.50	<0.250 U	229.62	3.99	<0.250 U	1.65	2.02	<0.130 U
MW-256	03/26/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	2.01	0.63	<0.060 U	0.400 J	1.07	<0.100 U	207.11	0.54	<0.100 U	0.99	0.260 J	<0.500 U
MW-256	08/12/14	<0.100 U	<0.100 U	<0.500 U	3.540 J	2.23	<0.100 U	<0.060 U	0.97	0.58	<0.100 U	152.71	41.35	<0.100 U	0.91	0.310 J	<0.500 U
MW-258(NW-6S)	09/11/09	<0.10	0.19	<0.80	1.16	3.32	<0.10	<0.10	<0.10	<0.30	<0.10	278.00	0.77	<0.10	3.18	0.78	<1.90
MW-258(NW-6S)	04/15/10	0.10	0.18	<0.4	8.77	3.52	0.26	<0.2	0.07	0.14	<0.1	254.00	0.51	<0.1	2.26	0.79	<1.0
MW-258(NW-6S)	07/14/10	<0.2	<0.2	<0.5	<2.0	3.48	<0.2	<0.2	<0.2	0.26	<0.2	388.00	0.97	<0.2	7.15	0.81	<1.0
MW-258(NW-6S)	07/14/10	<0.5	<0.5	<1.3	<5.0	3.59	<0.5	<0.5	<0.5	<0.5		447.00	1.47	<0.5	6.65	1.00	<2.5
MW-258(NW-6S)	04/13/11	<0.2	<0.2	<0.5	<2.0	3.16	<0.2	<0.2	<0.2	<0.2	<0.5	240.00	0.74	<0.2	1.81	0.69	<0.5
MW-258(NW-6S)	04/13/11	<0.5	<0.5	<1.3	<5.0	3.57	<0.5	<0.5	<0.5	<0.5		240.00	5.27	<0.5	2.07	1.33	<1.3
MW-258(NW-6S)	07/27/11	<1.250 U	<1.250 U	0.460 J	4.920 J	2.87	0.590 J	<0.500 U	<1.250 U	<1.250 U		185.32	2.48	<1.250 U	1.41	0.740 J	<2.500 U
MW-258(NW-6S)	07/27/11	<0.500 U	<0.500 U	<0.500 U	<2.000 U	3.22	<0.500 U	<0.200 U	<0.500 U	<0.500 U	<0.500 U	178.91	0.160 J	<0.500 U	1.26	0.69	0.430 J
MW-258(NW-6S)	03/12/12	<0.250 U	1.58	1.150 J	6.22	3.45	<0.250 U	<0.100 U	0.410 J	<0.250 U	0.530 J	241.34	7.43	<0.250 U	0.830 J	7.20	0.930 J
MW-258(NW-6S)	03/12/12	<0.100 U	<0.100 U	0.110 J	<0.400 U	3.01	<0.100 U	<0.040 U	<0.100 U	<0.100 U	<0.100 U	225.01	0.220 J	<0.100 U	0.69	0.73	0.690 J
MW-258(NW-6S)	08/28/12	<0.100 U	<0.100 U	<0.100 U	0.610 J	3.72	0.340 J	<0.040 U	<0.100 U	<0.100 U	<0.100 U	207.43	<0.100 U	<0.100 U	2.20	<0.100 U	<0.200 U
MW-258(NW-6S)	08/28/12	<0.100 U	<0.100 U	<0.100 U	0.860 J	3.72	0.310 J	<0.040 U	<0.100 U	<0.100 U	<0.100 U	201.39	<0.100 U	<0.100 U	2.03	<0.100 U	<0.200 U
MW-258(NW-6S)	03/20/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	3.37	0.290 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	175.32	0.230 J	<0.100 U	0.96	0.72	<0.050 U
MW-258(NW-6S)	07/31/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	4.00	0.230 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	175.90	<0.100 U	<0.100 U	1.01	0.84	0.560 J
MW-258(NW-6S)	07/31/13	<0.250 U	0.910 J	<0.100 U	<3.750 U	3.80	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	174.22	3.85	<0.250 U	1.010 J	2.68	1.310 J
MW-258(NW-6S)	03/25/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	3.53	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	161.55	<0.100 U	<0.100 U	0.64	0.53	<0.500 U
MW-258(NW-6S)	09/11/14	<0.100 U	<0.100 U	0.950 J	<2.000 U	3.28	1.41	<0.060 U	<0.100 U	<0.100 U	<0.100 U	170.90	18.34	<0.100 U	1.01	0.80	3.40

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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-256	04/17/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	2.63	<0.02	0.12	<0.5
MW-256	08/20/09	<0.18	<0.10	<0.12	<0.10	<0.10	<0.34	<0.13	<0.12	<0.10	2.74	<0.18	<0.13	<0.5
MW-256	03/23/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	2.90	0.16	<0.10	<0.05
MW-256	07/16/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	2.86	<0.2	<0.2	<0.05
MW-256	07/16/10	0.70	<0.5	<1.3	<0.5	<0.5	0.47	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-256	04/13/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	2.64	<0.2	<0.2	<0.05
MW-256	04/13/11	<0.5	<0.5	<1.3	89.10	<0.5	<1.3	<0.5	<1.3	<0.5	3.24	<0.5	<0.5	
MW-256	07/27/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.10	<0.100 U	<0.100 U	<0.010 U
MW-256	07/27/11	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.750 U	<0.250 U	1.200 J	<0.250 U	0.390 J	
MW-256	03/26/12	<0.250 U	0.310 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.86	<0.250 U	<0.250 U	
MW-256	03/26/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.52	<0.100 U	<0.100 U	<0.010 U
MW-256	08/15/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.170 J	<0.100 U	3.01	<0.100 U	<0.100 U	<0.010 U
MW-256	02/27/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.85	<0.100 U	<0.100 U	<0.010 U
MW-256	08/05/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.88	<0.100 U	<0.100 U	<0.010 U
MW-256	08/05/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.06	<0.250 U	<0.250 U	
MW-256	03/26/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.54	<0.100 U	<0.100 U	<0.010 U
MW-256	08/12/14	<0.100 U	<0.100 U	<0.100 U	1.61	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.18	<0.100 U	<0.100 U	<0.010 U
MW-258(NW-6S)	09/11/09	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	<0.10	<0.10	0.27	<0.05
MW-258(NW-6S)	04/15/10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.30	<0.1	0.04	<0.1	0.29	<0.05
MW-258(NW-6S)	07/14/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	0.24	<0.05
MW-258(NW-6S)	07/14/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-258(NW-6S)	04/13/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.5	<0.2	0.21	<0.05
MW-258(NW-6S)	04/13/11	<0.5	<0.5	<1.3	28.30	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-258(NW-6S)	07/27/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	
MW-258(NW-6S)	07/27/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.210 J	<0.050 U
MW-258(NW-6S)	03/12/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.290 J	
MW-258(NW-6S)	03/12/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.230 J	<0.010 U
MW-258(NW-6S)	08/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.300 J	<0.010 U
MW-258(NW-6S)	08/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.290 J	<0.010 U
MW-258(NW-6S)	03/20/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.260 J	<0.010 U
MW-258(NW-6S)	07/31/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.300 J	<0.010 U
MW-258(NW-6S)	07/31/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-258(NW-6S)	03/25/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.230 J	<0.010 U
MW-258(NW-6S)	09/11/14	<0.100 U	<0.100 U	<0.100 U	1.08	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.260 J	<0.010 U

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249900	MW-265(NW-01D)	03/05/12	14:24	7.96	7.01	1,276	7.26	1,280	213.3	41.5	8.8	2.9	0.028 J	<0.005 U	22.9
TOTAL RECOVERABLE	249900	MW-265(NW-01D)	03/05/12	14:24	7.96	7.01	1,276			216.0	50.7	10.8	3.5	0.080 J	<0.010 U	
DISSOLVED	249900	MW-265(NW-01D)	08/23/12	12:30	9.79	7.45	1,325	7.48	1,244	221.8	48.2	9.3	3.4	0.196	0.022 J	21.5
DISSOLVED	249900	MW-265(NW-01D)	01/18/13	14:40	7.92	7.05	1,279	7.28	1,275	224.4	46.2	8.9	3.0	<0.038 U	<0.005 U	22.0
TOTAL RECOVERABLE	249900	MW-265(NW-01D)	01/18/13	14:40	7.92	7.05	1,279			226.7	46.7	9.2	3.3	<0.075 U	<0.010 U	
DISSOLVED	249900	MW-265(NW-01D)	03/06/13	14:28	7.85	7.53	1,282	7.35	1,369	221.5	45.3	9.1	3.0	<0.038 U	<0.005 U	22.7
TOTAL RECOVERABLE	249900	MW-265(NW-01D)	10/07/13	12:37	8.66	7.09	1,295							<0.038 U	<0.005 U	
TOTAL RECOVERABLE	249900	MW-265(NW-01D)	10/07/13	12:37	8.66	7.09	1,295							<0.038 U	<0.005 U	
DISSOLVED	249900	MW-265(NW-01D)	10/07/13	12:37	8.66	7.09	1,295	7.55	1,314	213.0	47.1	9.1	3.1	<0.038 U	<0.005 U	23.1
DISSOLVED	249900	MW-265(NW-01D)	10/07/13	12:37	8.66	7.09	1,295	7.56	1,308	211.8	46.8	9.1	3.0	<0.038 U	<0.005 U	22.3
DISSOLVED	249900	MW-265(NW-01D)	04/08/14	16:00	8.13	7.30	1,285	7.54	1,449	221.9	47.2	9.3	3.0	<0.038 U	<0.005 U	22.8
DISSOLVED	249900	MW-265(NW-01D)	08/21/14	14:30	9.10	7.32	1,330	7.49	1,257	234.3	49.8	10.6	3.2	<0.038 U	<0.005 U	22.7
DISSOLVED	249901	MW-266(NW-01S)	09/28/11	13:26	14.47	6.33	2,058	6.62	2,130	384.5	43.9	12.3	9.7	0.343	14.139	25.5
TOTAL RECOVERABLE	249901	MW-266(NW-01S)	09/28/11	13:26	14.47	6.33	2,058			404.9	46.4	13.9	10.1	0.812	15.324	
DISSOLVED	249901	MW-266(NW-01S)	03/09/12	12:45	6.18	6.42	1,787	6.55	1,732	335.0	37.5	11.8	7.0	0.874	12.955	22.4
TOTAL RECOVERABLE	249901	MW-266(NW-01S)	03/09/12	12:45	6.18	6.42	1,787			378.2	41.4	13.0	7.7	1.566	13.863	
DISSOLVED	249901	MW-266(NW-01S)	08/23/12	11:45	14.12	6.50	1,858	6.80	1,689	357.9	39.9	13.4	9.2	0.359	12.130	25.1
DISSOLVED	249901	MW-266(NW-01S)	03/06/13	15:46	5.12	6.78	1,798	6.60	2,008	380.3	41.3	12.5	7.4	0.363	12.962	22.2
DISSOLVED	249901	MW-266(NW-01S)	07/02/13	11:00	10.55	6.20	1,783	6.55	1,744	346.4	36.6	11.6	8.1	0.329	12.320	24.3
TOTAL RECOVERABLE	249901	MW-266(NW-01S)	07/02/13	11:00	10.55	6.20	1,783			366.0	40.8	13.5	8.5	0.521	15.353	
DISSOLVED	249901	MW-266(NW-01S)	07/16/13	14:05				6.72	1,726	361.7	39.4	12.7	7.9	<0.038 U	13.002	23.8
TOTAL RECOVERABLE	249901	MW-266(NW-01S)	07/16/13	14:05										0.260	12.530	
TOTAL RECOVERABLE	249901	MW-266(NW-01S)	07/16/13	14:15										47.983	9.260	
DISSOLVED	249901	MW-266(NW-01S)	07/16/13	14:15				6.87	1,655	342.5	38.5	19.0	14.9	39.244	10.828	19.2
DISSOLVED	249901	MW-266(NW-01S)	08/15/13	13:58	14.33	6.57	1,785	6.82	1,800	328.3	39.5	13.1	9.0	0.326	11.840	25.9
TOTAL RECOVERABLE	249901	MW-266(NW-01S)	08/15/13	13:58	14.33	6.57	1,785			349.2	38.7	13.2	8.7	0.387	12.334	
DISSOLVED	249901	MW-266(NW-01S)	04/08/14	14:57	6.97	6.88	1,765	6.90	1,946	344.8	39.5	12.1	6.7	0.325	12.558	21.9
DISSOLVED	249901	MW-266(NW-01S)	08/21/14	14:02	12.00	6.62	1,795	6.80	1,664	362.0	41.0	14.1	8.7	0.249	12.651	25.3
DISSOLVED	249903	MW-267(NW-02D)	09/28/11	15:05	10.04	4.99	944	7.32	976	132.8	31.3	12.4	2.4	0.070	0.044	22.9
TOTAL RECOVERABLE	249903	MW-267(NW-02D)	09/28/11	15:05	10.04	4.99	944			141.1	33.1	13.2	2.4	0.520	0.046	
DISSOLVED	249903	MW-267(NW-02D)	03/09/12	15:02	8.45	7.13	975	7.34	996	140.7	31.9	13.2	2.3	0.023 J	0.017 J	24.3
TOTAL RECOVERABLE	249903	MW-267(NW-02D)	03/09/12	15:02	8.45	7.13	975			159.0	34.1	14.0	2.5	0.106	0.020 J	
DISSOLVED	249903	MW-267(NW-02D)	08/22/12	17:11	9.23	7.25	1,000	7.43	945	145.5	37.9	14.3	2.4	<0.038 U	0.012 J	23.4
DISSOLVED	249903	MW-267(NW-02D)	03/07/13	15:12	8.35	7.57	1,013	7.19	1,182	167.3	36.1	14.5	2.3	<0.038 U	0.017 J	23.5
DISSOLVED	249903	MW-267(NW-02D)	08/15/13	12:46	9.95	7.03	1,005	7.41	1,003	148.2	35.6	14.2	2.5	<0.038 U	0.011 J	24.1
TOTAL RECOVERABLE	249903	MW-267(NW-02D)	08/15/13	12:46	9.95	7.03	1,005			158.3	35.4	14.2	2.6	<0.075 U	0.010 J	
DISSOLVED	249903	MW-267(NW-02D)	04/07/14	15:10	9.03	7.19	1,050	7.46	1,258	165.9	36.1	13.7	2.8	<0.038 U	0.020 J	23.3
DISSOLVED	249903	MW-267(NW-02D)	08/21/14	11:55	9.30	7.24	1,035	6.89	981	168.4	37.6	13.6	2.5	<0.038 U	0.017 J	23.9

Explanation of Qualifiers: E = Estimated due to interference;
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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-265(NW-01D)	03/05/12	266.4	0.0	512.5	3.2	<0.010 U	0.3	<0.020 U	<0.250 U	61.66	1.61	1.550 J	27.88	<0.250 U	<10.000 U	<0.250 U
MW-265(NW-01D)	03/05/12								<0.500 U	73.90	12	3.620 J	33.17	<0.500 U		<0.500 U
MW-265(NW-01D)	08/23/12	265.3	0.0	517.4	3.2	<0.010 U	0.3	<0.020 U	<0.250 U	<1.000 U	0.550 J	6.83	31.72	<0.250 U	<10.000 U	<0.250 U
MW-265(NW-01D)	01/18/13	288.3	0.0	521.3	3.4	0.1	0.4	<0.020 U	<0.250 U	<1.000 U	1.41	3.960 J	30.65	<0.250 U	<10.000 U	<0.250 U
MW-265(NW-01D)	01/18/13									<2.000 U	1.450 J	5.050 J	32.64	<0.500 U		<0.500 U
MW-265(NW-01D)	03/06/13	296.6	0.0	524.6	3.4	0.1	0.4	0.030 J	<0.250 U	<1.000 U	1.43	4.190 J	28.88	<0.250 U	<10.000 U	<0.250 U
MW-265(NW-01D)	10/07/13									5.490 J	1.34	3.690 J	31.21	<0.250 U		<0.250 U
MW-265(NW-01D)	10/07/13									<5.000 U	1.44	3.900 J	32.13	<0.250 U		<0.250 U
MW-265(NW-01D)	10/07/13	293.5	0.0	541.9	3.5	0.1	0.4	<0.020 U	<0.250 U	<5.000 U	1.39	4.100 J	30.65	<0.250 U	<10.000 U	<0.250 U
MW-265(NW-01D)	10/07/13	294.2	0.0	539.9	3.5	0.1	0.4	<0.020 U	<0.250 U	<5.000 U	1.39	3.830 J	30.40	<0.250 U	<10.000 U	<0.250 U
MW-265(NW-01D)	04/08/14	307.4	0.0	551.5	3.9	0.030 J	0.4	<0.020 U	<0.250 U	<5.000 U	1.38	3.230 J	33.87	<0.250 U	<10.000 U	<0.250 U
MW-265(NW-01D)	08/21/14	307.0	0.0	586.4	3.8	0.1	0.4	<0.020 U	<0.250 U	<5.000 U	1.48	7.39	34.12	<0.250 U	<10.000 U	<0.250 U
MW-266(NW-01S)	09/28/11	370.6	0.0	991.9	6.0	<0.010 U	1.4	<0.020 U	<0.250 U	124.88	2.24	21.78	26.21	<0.250 U	<10.000 U	0.260 J
MW-266(NW-01S)	09/28/11								<0.500 U	470.94	7.28		34.38	<0.500 U		<0.500 U
MW-266(NW-01S)	03/09/12	344.7	0.0	764.5	6.0	<0.010 U	1.2	<0.020 U	<0.250 U	84.27	2.22	17.60	16.77	<0.250 U	<10.000 U	<0.250 U
MW-266(NW-01S)	03/09/12								<0.500 U	415.40	7.06	20.43	22.60	<0.500 U		<0.500 U
MW-266(NW-01S)	08/23/12	339.9	0.0	788.3	5.8	<0.010 U	1.5	<0.020 U	<0.250 U	14.95	2.31	20.78	22.62	<0.250 U	<10.000 U	<0.250 U
MW-266(NW-01S)	03/06/13	381.1	0.0	799.2	6.3	<0.010 U	1.4	<0.020 U	<0.250 U	<1.000 U	1.71	17.77	17.29	<0.250 U	<10.000 U	<0.250 U
MW-266(NW-01S)	07/02/13	380.4	0.0	756.9	6.2	<0.010 U	1.6	<0.020 U	<0.250 U	<1.000 U	2.37	18.05	20.25	<0.250 U	<10.000 U	<0.250 U
MW-266(NW-01S)	07/02/13									91.42	2.54	31.84	22.04	<0.500 U		<0.500 U
MW-266(NW-01S)	07/16/13	383.4	0.0	775.0	6.5	0.1	1.6	0.020 J	1.140 J	3.960 J	0.710 J	22.16	20.65	<0.250 U	106.00	<0.250 U
MW-266(NW-01S)	07/16/13									6.21	1.150 J	20.34	21.05	<0.250 U		<0.250 U
MW-266(NW-01S)	07/16/13									13.22	1.010 J	751.94	34.29	<0.250 U		<0.250 U
MW-266(NW-01S)	07/16/13	360.7	0.0	800.5	8.1	0.1	1.6	<0.020 U	<0.250 U	1.750 J	<0.250 U	835.01	34.50	<0.250 U	109.00	<0.250 U
MW-266(NW-01S)	08/15/13	381.0	0.0	757.3	6.1	<0.010 U	1.8	<0.020 U	<0.250 U	2.650 J	2.32	20.02	21.24	<0.250 U	<10.000 U	<0.250 U
MW-266(NW-01S)	08/15/13									34.72	2.480 J	20.56	21.99	<0.500 U		<0.500 U
MW-266(NW-01S)	04/08/14	403.9	0.0	759.0	6.6	0.1	1.7	<0.020 U	<0.250 U	<5.000 U	1.82	14.83	19.03	<0.250 U	79.00	<0.250 U
MW-266(NW-01S)	08/21/14	396.6	0.0	815.2	6.8	<0.010 U	1.9	<0.020 U	<0.250 U	<5.000 U	2.63	24.35	24.05	<0.250 U	<10.000 U	<0.250 U
MW-267(NW-02D)	09/28/11	281.8	0.0	309.4	3.6	0.1	0.4	<0.020 U	<0.100 U	36.94	0.87	5.77	44.10	<0.100 U	<10.000 U	<0.100 U
MW-267(NW-02D)	09/28/11								<0.250 U	568.34	0.860 J		53.28	<0.250 U		<0.250 U
MW-267(NW-02D)	03/09/12	260.2	0.0	309.9	3.6	<0.010 U	0.4	<0.020 U	<0.100 U	44.02	1.51	4.60	40.95	<0.100 U	<10.000 U	<0.100 U
MW-267(NW-02D)	03/09/12								<0.250 U	59.30	5.90	6.10	44.98	<0.250 U		<0.250 U
MW-267(NW-02D)	08/22/12	257.0	0.0	315.8	3.5	0.1	0.4	<0.020 U	<0.250 U	<1.000 U	1.39	6.58	42.96	<0.250 U	<10.000 U	<0.250 U
MW-267(NW-02D)	03/07/13	286.5	0.0	374.2	3.9	0.1	0.4	<0.020 U	<0.250 U	<1.000 U	1.29	5.81	41.48	<0.250 U	<10.000 U	<0.250 U
MW-267(NW-02D)	08/15/13	289.6	0.0	338.0	3.8	0.1	0.4	<0.020 U	<0.250 U	5.09	1.41	5.65	43.85	<0.250 U	<10.000 U	<0.250 U
MW-267(NW-02D)	08/15/13									2.780 J	1.410 J	6.020 J	44.09	<0.500 U		<0.500 U
MW-267(NW-02D)	04/07/14	301.9	0.0	372.6	4.3	0.020 J	0.5	<0.020 U	<0.250 U	<5.000 U	1.27	5.89	44.26	<0.250 U	80.00	<0.250 U
MW-267(NW-02D)	08/21/14	294.6	0.0	379.0	4.1	0.1	0.4	<0.020 U	<0.250 U	<5.000 U	1.42	10.20	48.01	<0.250 U	<10.000 U	<0.250 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-265(NW-01D)	03/05/12	<0.250 U	<0.250 U	0.410 J	5.15	3.07	<0.250 U	<0.100 U	<0.250 U	<0.250 U	<0.250 U	598.06	6.24	<0.250 U	45.33	1.91	52.34
MW-265(NW-01D)	03/05/12	<0.500 U	1.480 J	<0.500 U	9.280 J	3.39	<0.500 U	<0.200 U	<0.500 U	<0.500 U	<0.500 U	692.49	19.52	<0.500 U	50.24	7.04	50.36
MW-265(NW-01D)	08/23/12	<0.250 U	<0.250 U	<0.250 U	8.35	3.62	2.79	0.75	<0.250 U	<0.250 U	<0.250 U	648.78	<0.250 U	<0.250 U	39.85	<0.250 U	2297
MW-265(NW-01D)	01/18/13	<0.250 U	<0.250 U	<0.250 U	<2.500 U	3.19	2.48	<0.150 U	<0.250 U	<0.250 U	<0.250 U	621.65	5.01	<0.250 U	47.12	2.21	111.46
MW-265(NW-01D)	01/18/13	<0.500 U	<0.500 U	<0.500 U	<5.000 U	3.65	3.38	<0.300 U	<0.500 U	<0.500 U	<0.500 U	657.50	10.27	<0.500 U	52.83	5.70	133.81
MW-265(NW-01D)	03/06/13	<0.250 U	<0.250 U	<0.100 U	6.000 J	2.55	3.26	<0.150 U	<0.250 U	<0.250 U	<0.250 U	630.90	7.44	<0.250 U	44.89	1.59	110.10
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.100 U	<5.000 U	3.69	2.38	<0.150 U	<0.250 U	<0.250 U	<0.250 U	693.62	7.68	<0.250 U	49.00	4.38	2.050 J
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.100 U	<5.000 U	3.78	2.05	<0.150 U	<0.250 U	<0.250 U	<0.250 U	709.42	7.72	<0.250 U	51.52	4.37	<0.130 U
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.100 U	<5.000 U	3.49	1.97	<0.150 U	<0.250 U	<0.250 U	<0.250 U	665.11	5.02	<0.250 U	50.15	2.36	<0.130 U
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.100 U	<5.000 U	3.61	2.05	<0.150 U	<0.250 U	<0.250 U	<0.250 U	665.02	4.79	<0.250 U	49.21	2.28	<0.130 U
MW-265(NW-01D)	04/08/14	<0.250 U	<0.250 U	<1.250 U	<5.000 U	3.25	2.15	<0.150 U	<0.250 U	<0.250 U	<0.250 U	677.75	5.38	<0.250 U	52.90	2.33	1.380 J
MW-265(NW-01D)	08/21/14	0.730 J	<0.250 U	3.650 J	9.470 J	4.69	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	708.74	198.69	<0.250 U	63.21	2.81	1.630 J
MW-266(NW-01S)	09/28/11	3.69	0.300 J	2.23	8.47	3.52	4.29	<0.100 U	<0.250 U	0.520 J	<0.250 U	661.23	10.70	<0.250 U	11.90	<0.250 U	9.55
MW-266(NW-01S)	09/28/11	4.56	0.820 J	5.89	13.78	4.05	4.47	0.370 J	<0.500 U	<0.500 U	<0.500 U	714.39	16.29	<0.500 U	12.80	0.970 J	7.94
MW-266(NW-01S)	03/09/12	3.08	<0.250 U	6.76	9.90	2.80	3.66	<0.100 U	<0.250 U	<0.250 U	<0.250 U	552.71	9.92	<0.250 U	8.76	<0.250 U	1.720 J
MW-266(NW-01S)	03/09/12	3.51	1.400 J	4.71	12.29	3.13	3.65	<0.200 U	<0.500 U	<0.500 U	<0.500 U	587.73	26.37	<0.500 U	9.67	5.40	2.080 J
MW-266(NW-01S)	08/23/12	3.15	<0.250 U	<0.250 U	13.92	4.30	6.58	<0.100 U	<0.250 U	<0.250 U	<0.250 U	569.98	3.95	<0.250 U	9.83	<0.250 U	<0.500 U
MW-266(NW-01S)	05/06/13	2.63	<0.250 U	<0.100 U	8.350 J	2.39	8.25	<0.150 U	<0.250 U	<0.250 U	<0.250 U	555.54	12.00	<0.250 U	8.04	<0.250 U	1.070 J
MW-266(NW-01S)	07/02/13	3.27	<0.250 U	2.680 J	11.000 J	4.00	6.88	<0.150 U	<0.250 U	<0.250 U	<0.250 U	580.27	7.59	<0.250 U	13.22	<0.250 U	1.560 J
MW-266(NW-01S)	07/02/13	4.36	1.060 J	9.060 J	53.90	4.41	6.49	<0.300 U	<0.500 U	<0.500 U	<0.500 U	574.22	23.89	<0.500 U	11.83	1.030 J	3.380 J
MW-266(NW-01S)	07/16/13	3.73	<0.250 U	12.14	17.59	4.41	6.52	<0.150 U	0.630 J	<0.250 U	<0.250 U	578.67	9.09	<0.250 U	12.51	<0.250 U	103.90
MW-266(NW-01S)	07/16/13	3.76	0.770 J	1.280 J	13.540 J	4.20	6.67	<0.150 U	<0.250 U	<0.250 U	5.66	630.20	14.90	<0.250 U	13.23	1.91	4.850 J
MW-266(NW-01S)	07/16/13	3.39	3.02	72.18	12.910 J	6.32	30.79	161	1.30	<0.250 U	1.46	548.95	18.25	<0.250 U	3.31	1.33	972.92
MW-266(NW-01S)	07/16/13	4.49	<0.250 U	10.45	15.07	6.87	44.17	2.16	1.200 J	<0.250 U	<0.250 U	553.15	8.15	<0.250 U	5.51	<0.250 U	1426.19
MW-266(NW-01S)	08/15/13	3.42	<0.250 U	<0.100 U	6.940 J	4.33	5.89	<0.150 U	<0.250 U	<0.250 U	<0.250 U	573.20	6.04	<0.250 U	11.14	<0.250 U	1.030 J
MW-266(NW-01S)	08/15/13	3.02	<0.500 U	<0.200 U	12.710 J	4.24	5.21	<0.300 U	<0.500 U	<0.500 U	<0.500 U	559.63	9.50	<0.500 U	10.46	<0.500 U	3.600 J
MW-266(NW-01S)	04/08/14	3.16	<0.250 U	<1.250 U	6.170 J	3.04	5.98	<0.150 U	<0.250 U	<0.250 U	<0.250 U	540.74	6.81	<0.250 U	11.11	<0.250 U	<1.250 U
MW-266(NW-01S)	08/21/14	4.40	<0.250 U	<1.250 U	15.500 J	6.09	1.54	<0.150 U	<0.250 U	<0.250 U	<0.250 U	583.57	296.61	<0.250 U	14.81	<0.250 U	<1.250 U
MW-267(NW-02D)	09/28/11	0.480 J	0.180 J	0.440 J	5.25	2.96	1.15	0.050 J	<0.100 U	0.410 J	<0.100 U	552.80	3.20	<0.100 U	35.12	1.00	2.17
MW-267(NW-02D)	09/28/11	0.720 J	0.630 J	1.170 J	8.51	3.40	0.860 J	0.390 J	<0.250 U	<0.250 U	<0.250 U	596.74	29.40	<0.250 U	34.04	1.83	3.03
MW-267(NW-02D)	03/09/12	<0.100 U	<0.100 U	0.250 J	6.96	2.75	0.150 J	<0.040 U	<0.100 U	0.180 J	<0.100 U	581.00	3.89	<0.100 U	29.27	1.73	<0.200 U
MW-267(NW-02D)	03/09/12	<0.250 U	1.39	<0.250 U	9.89	2.94	<0.250 U	<0.100 U	<0.250 U	<0.250 U	<0.250 U	605.32	18.93	<0.250 U	31.48	6.46	0.790 J
MW-267(NW-02D)	08/22/12	<0.250 U	<0.250 U	<0.250 U	18.04	3.02	1.84	<0.100 U	<0.250 U	<0.250 U	<0.250 U	591.04	4.11	<0.250 U	30.05	2.38	<0.500 U
MW-267(NW-02D)	05/07/13	<0.250 U	<0.250 U	<0.100 U	6.150 J	2.25	2.45	<0.150 U	<0.250 U	<0.250 U	<0.250 U	590.97	5.11	<0.250 U	27.93	1.70	<0.130 U
MW-267(NW-02D)	08/15/13	<0.250 U	<0.250 U	<0.100 U	<3.750 U	3.23	2.02	<0.150 U	<0.250 U	<0.250 U	<0.250 U	610.87	3.11	<0.250 U	31.46	2.72	<0.130 U
MW-267(NW-02D)	08/15/13	<0.500 U	<0.500 U	<0.200 U	11.020 J	3.14	1.340 J	<0.300 U	<0.500 U	<0.500 U	<0.500 U	612.10	4.29	<0.500 U	28.75	3.88	<0.250 U
MW-267(NW-02D)	04/07/14	<0.250 U	<0.250 U	<1.250 U	5.820 J	2.76	1.63	<0.150 U	<0.250 U	<0.250 U	<0.250 U	600.40	3.66	<0.250 U	30.44	2.24	<1.250 U
MW-267(NW-02D)	08/21/14	0.520 J	<0.250 U	<1.250 U	11.570 J	5.31	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	619.19	136.70	<0.250 U	37.56	2.85	<1.250 U

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-265(NW-01D)	03/05/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.03	<0.010 U
MW-265(NW-01D)	03/05/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.260 J	
MW-265(NW-01D)	08/23/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.580 J	<0.250 U	2.43	<0.010 U
MW-265(NW-01D)	01/18/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.500 J	<0.250 U	2.39	<0.010 U
MW-265(NW-01D)	01/18/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.86	
MW-265(NW-01D)	03/06/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.93	<0.010 U
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.74	
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.81	
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.550 J	<0.250 U	2.61	<0.010 U
MW-265(NW-01D)	10/07/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.550 J	<0.250 U	2.74	<0.010 U
MW-265(NW-01D)	04/08/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.570 J	<0.250 U	2.47	<0.010 U
MW-265(NW-01D)	08/21/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.670 J	<0.250 U	<0.250 U	<0.250 U	3.25	<0.010 U
MW-266(NW-01S)	09/28/11	<0.250 U	0.620 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.480 J	<0.250 U	0.330 J	<0.010 U
MW-266(NW-01S)	09/28/11	<0.500 U	1.540 J	<0.500 U	<0.500 U	0.660 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.300 J	<0.500 U	2.56	
MW-266(NW-01S)	03/09/12	<0.250 U	0.510 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.260 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	03/09/12	<0.500 U	1.340 J	<0.500 U	<0.500 U	0.560 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.970 J	<0.500 U	<0.500 U	
MW-266(NW-01S)	08/23/12	<0.250 U	0.690 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.470 J	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	05/06/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	07/02/13	<0.250 U	0.700 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	07/02/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.690 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	
MW-266(NW-01S)	07/16/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	07/16/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.500 J	<0.250 U	<0.250 U	
MW-266(NW-01S)	07/16/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.36	<0.250 U	0.800 J	<0.250 U	0.630 J	
MW-266(NW-01S)	07/16/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.900 J	<0.250 U	0.760 J	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	08/15/13	<0.250 U	0.740 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	08/15/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	
MW-266(NW-01S)	04/08/14	<0.250 U	0.630 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-266(NW-01S)	08/21/14	<0.250 U	0.870 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.620 J	<0.250 U	<0.250 U	<0.250 U	0.520 J	<0.010 U
MW-267(NW-02D)	09/28/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.160 J	<0.100 U	0.78	<0.100 U	2.25	<0.010 U
MW-267(NW-02D)	09/28/11	1.56	1.200 J	<0.250 U	<0.250 U	0.700 J	<0.250 U	0.590 J	0.300 J	<0.250 U	2.08	0.300 J	3.00	
MW-267(NW-02D)	03/09/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.290 J	<0.100 U	0.61	<0.100 U	2.05	<0.010 U
MW-267(NW-02D)	03/09/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.670 J	<0.250 U	2.20	
MW-267(NW-02D)	08/22/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.670 J	<0.250 U	2.43	<0.010 U
MW-267(NW-02D)	05/07/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.260 J	<0.250 U	1.90	<0.010 U
MW-267(NW-02D)	08/15/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.740 J	<0.250 U	2.70	<0.010 U
MW-267(NW-02D)	08/15/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.65	
MW-267(NW-02D)	04/07/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.700 J	<0.250 U	2.40	<0.010 U
MW-267(NW-02D)	08/21/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.720 J	<0.250 U	0.840 J	<0.250 U	<0.250 U	<0.250 U	3.74	<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249904	MW-268(NW-02S)	09/28/11	16:11	16.75	5.31	2,182	7.12	2,250	376.8	68.1	17.0	12.8	0.011 J	0.004 J	15.8
TOTAL RECOVERABLE	249904	MW-268(NW-02S)	09/28/11	16:11	16.75	5.31	2,182			390.4	71.1	18.8	13.3	1.767	0.039	
DISSOLVED	249904	MW-268(NW-02S)	03/09/12	13:59	3.70	7.09	1,999	7.14	1,946	353.7	61.2	16.6	7.2	<0.013 U	0.007 J	14.3
TOTAL RECOVERABLE	249904	MW-268(NW-02S)	03/09/12	13:59	3.70	7.09	1,999			415.5	69.1	18.7	8.5	2.936	0.037 J	
DISSOLVED	249904	MW-268(NW-02S)	08/22/12	16:28	19.55	7.18	2,412	7.22	2,079	434.0	83.0	21.4	14.5	<0.038 U	<0.005 U	18.1
DISSOLVED	249904	MW-268(NW-02S)	03/07/13	16:07	2.95	7.21	2,010	7.09	2,208	354.3	66.3	17.8	7.7	<0.038 U	<0.005 U	14.1
DISSOLVED	249904	MW-268(NW-02S)	08/15/13	11:49	21.04	7.21	2,320	7.27	2,335	415.2	76.8	21.1	14.7	<0.038 U	<0.005 U	18.3
TOTAL RECOVERABLE	249904	MW-268(NW-02S)	08/15/13	11:49	21.04	7.21	2,320			421.2	76.7	21.4	14.8	0.178 J	0.011 J	
DISSOLVED	249904	MW-268(NW-02S)	04/07/14	14:06	4.70	7.01	1,945	7.27	2,170	363.7	62.0	16.3	8.0	<0.038 U	<0.005 U	12.8
DISSOLVED	249904	MW-268(NW-02S)	08/21/14	12:35	18.70	7.19	2,385	7.17	2,191	460.8	78.4	20.0	14.6	<0.038 U	<0.005 U	16.7
DISSOLVED	249905	MW-269(NW-03D)	09/29/11	13:31	10.10	6.92	950	7.38	936	139.9	31.1	21.0	2.6	0.045	0.013	21.5
TOTAL RECOVERABLE	249905	MW-269(NW-03D)	09/29/11	13:31	10.10	6.92	950			132.3	32.6	22.1	2.7	1.364	0.050	
DISSOLVED	249905	MW-269(NW-03D)	03/12/12	14:46	8.36	6.87	989	7.21	1,059	133.0	31.9	19.9	2.4	<0.013 U	<0.002 U	21.7
TOTAL RECOVERABLE	249905	MW-269(NW-03D)	03/12/12	14:46	8.36	6.87	989			155.6	34.8	20.9	2.7	0.066	<0.005 U	
DISSOLVED	249905	MW-269(NW-03D)	08/22/12	15:31	9.92	7.21	1,054	7.40	1,008	142.4	38.7	18.2	2.6	<0.038 U	<0.005 U	21.5
DISSOLVED	249905	MW-269(NW-03D)	03/08/13	13:03	8.39	7.43	1,052	7.27	1,186	153.6	38.6	18.7	2.7	<0.038 U	<0.005 U	21.1
DISSOLVED	249905	MW-269(NW-03D)	08/13/13	16:13	9.88	7.02	1,075	7.37	1,056	170.8	37.7	17.7	2.5	<0.038 U	<0.005 U	21.7
TOTAL RECOVERABLE	249905	MW-269(NW-03D)	08/13/13	16:13	9.88	7.02	1,075			170.4	37.7	17.8	2.8	0.133 J	<0.010 U	
DISSOLVED	249905	MW-269(NW-03D)	04/07/14	12:25	8.91	7.11	1,110	7.47	1,517	161.7	37.5	16.9	2.7	<0.038 U	<0.005 U	21.2
DISSOLVED	249905	MW-269(NW-03D)	04/07/14	12:29	8.91	7.11	1,110	7.46	1,335	162.5	37.7	17.1	2.6	<0.038 U	<0.005 U	21.0
DISSOLVED	249905	MW-269(NW-03D)	08/20/14	11:35	9.40	7.20	1,035	7.69	1,002	157.1	36.8	16.5	2.5	<0.038 U	<0.005 U	22.4
DISSOLVED	249906	MW-270(NW-03S)	09/29/11	14:24	10.52	5.52	2,334	6.92	2,430	432.1	102.0	18.5	9.5	3.932	0.373	46.0
TOTAL RECOVERABLE	249906	MW-270(NW-03S)	09/29/11	14:24	10.52	5.52	2,334			409.1	106.8	19.9	10.2	9.312	0.566	
DISSOLVED	249906	MW-270(NW-03S)	03/09/12	16:02	8.67	6.73	2,104	6.89	2,177	372.9	91.9	18.5	8.0	0.017 J	0.010 J	25.1
TOTAL RECOVERABLE	249906	MW-270(NW-03S)	03/09/12	16:02	8.67	6.73	2,104			425.5	100.1	20.4	9.2	2.600	0.098 J	
DISSOLVED	249906	MW-270(NW-03S)	08/22/12	14:42	12.69	6.83	2,336	7.04	2,048	377.6	107.3	19.7	8.5	<0.038 U	0.007 J	23.9
DISSOLVED	249906	MW-270(NW-03S)	03/08/13	14:35	7.96	7.05	2,214	6.87	2,325	374.9	97.7	19.8	9.1	<0.038 U	0.006 J	25.7
DISSOLVED	249906	MW-270(NW-03S)	08/13/13	15:20	11.20	6.62	2,245	6.96	2,259	401.4	93.5	18.6	8.5	<0.038 U	0.008 J	25.6
TOTAL RECOVERABLE	249906	MW-270(NW-03S)	08/13/13	15:20	11.20	6.62	2,245			409.3	94.9	18.8	8.7	0.499	0.067 J	
DISSOLVED	249906	MW-270(NW-03S)	04/04/14	15:58	8.35	6.67	2,240	6.95	2,668	388.3	94.3	18.3	8.6	<0.038 U	0.011 J	24.8
DISSOLVED	249906	MW-270(NW-03S)	08/20/14	12:15	9.30	6.68	2,250	7.18	2,227	407.6	99.2	18.8	8.6	0.494	0.025 J	29.1

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-268(NW-02S)	09/28/11	141.2	0.0	1239.0	7.7	0.1	3.5	<0.020 U	<0.250 U	85.90	0.530 J	23.98	22.95	<0.250 U	96.00	<0.250 U
MW-268(NW-02S)	09/28/11								<0.500 U	1516.73	1.630 J		40.89	<0.500 U		<0.500 U
MW-268(NW-02S)	03/09/12	252.2	0.0	1008.0	6.2	<0.010 U	2.4	<0.020 U	<0.250 U	96.84	0.810 J	22.71	12.94	<0.250 U	<10.000 U	<0.250 U
MW-268(NW-02S)	03/09/12								<0.500 U	1367.73	7.03	24.67	27.18	<0.500 U		<0.500 U
MW-268(NW-02S)	08/22/12	127.2	0.0	1366.0	7.5	<0.010 U	3.5	<0.020 U	<0.250 U	<1.000 U	0.390 J	29.05	26.35	<0.250 U	<10.000 U	<0.250 U
MW-268(NW-02S)	03/07/13	286.8	0.0	1144.0	6.5	0.3	2.8	<0.020 U	<0.250 U	<1.000 U	<0.250 U	24.17	12.20	<0.250 U	80.00	<0.250 U
MW-268(NW-02S)	08/15/13	142.6	0.0	1298.0	8.1	0.2	3.8	0.030 J	<0.250 U	4.600 J	0.540 J	30.25	26.55	<0.250 U	111.00	<0.250 U
MW-268(NW-02S)	08/15/13									142.64	<0.500 U	30.57	27.97	<0.500 U		<0.500 U
MW-268(NW-02S)	04/07/14	246.9	0.0	975.3	7.1	0.5	2.8	<0.020 U	<0.250 U	<5.000 U	<0.250 U	18.95	13.87	<0.250 U	86.00	<0.250 U
MW-268(NW-02S)	08/21/14	135.7	0.0	1418.0	9.1	0.1	3.9	<0.020 U	<0.250 U	<5.000 U	0.660 J	32.12	29.44	<0.250 U	131.00	<0.250 U
MW-269(NW-03D)	09/29/11	233.0	0.0	329.4	4.6	0.1	0.4	<0.020 U	<0.100 U	49.27	1.16	10.25	40.31	<0.100 U	97.00	<0.100 U
MW-269(NW-03D)	09/29/11								<0.250 U	1822.87	1.46		57.21	<0.250 U		<0.250 U
MW-269(NW-03D)	03/12/12	212.7	0.0	345.5	4.6	<0.010 U	0.3	<0.020 U	<0.100 U	47.20	1.48	3.70	27.76	<0.100 U	105.00	<0.100 U
MW-269(NW-03D)	03/12/12								<0.250 U	121.42	7.70	4.390 J	32.31	<0.250 U		<0.250 U
MW-269(NW-03D)	08/22/12	210.9	0.0	373.1	4.4	0.1	0.3	<0.020 U	<0.250 U	<1.000 U	1.26	5.21	26.55	<0.250 U	104.00	<0.250 U
MW-269(NW-03D)	03/08/13	234.9	0.0	407.9	4.9	0.1	0.4	<0.020 U	<0.250 U	<1.000 U	1.28	4.920 J	23.00	<0.250 U	96.00	<0.250 U
MW-269(NW-03D)	08/13/13	237.9	0.0	410.6	4.9	0.3	0.4	<0.020 U	<0.250 U	7.22	1.38	4.500 J	23.72	<0.250 U	114.00	<0.250 U
MW-269(NW-03D)	08/13/13									191.99	1.400 J	4.940 J	23.64	<0.500 U		<0.500 U
MW-269(NW-03D)	04/07/14	247.9	0.0	418.5	5.1	0.030 J	0.4	<0.020 U	<0.250 U	<5.000 U	1.25	4.240 J	21.61	<0.250 U	111.00	<0.250 U
MW-269(NW-03D)	04/07/14	247.7	0.0	419.6	5.1	0.030 J	0.4	<0.020 U	<0.250 U	<5.000 U	1.24	4.040 J	21.90	<0.250 U	111.00	<0.250 U
MW-269(NW-03D)	08/20/14	249.9	0.0	384.7	4.9	0.1	0.4	<0.020 U	<0.250 U	<5.000 U	1.46	<1.250 U	25.17	<0.250 U	103.00	<0.250 U
MW-270(NW-03S)	09/29/11	268.9	0.0	1316.0	7.3	0.2	0.3	<0.020 U	<0.250 U	5048.16	2.22	17.64	81.14	0.420 J	100.00	<0.250 U
MW-270(NW-03S)	09/29/11								<0.500 U	11205.04	3.05		160.77	0.710 J		<0.500 U
MW-270(NW-03S)	03/09/12	236.2	0.0	1157.0	6.8	<0.010 U	0.3	<0.020 U	<0.250 U	105.48	1.090 J	15.90	16.10	<0.250 U	<10.000 U	<0.250 U
MW-270(NW-03S)	03/09/12								<0.500 U	1916.95	7.51	17.43	33.50	<0.500 U		<0.500 U
MW-270(NW-03S)	08/22/12	223.8	0.0	1243.0	6.8	<0.010 U	0.3	<0.020 U	<0.250 U	<1.000 U	0.650 J	16.18	17.10	<0.250 U	<10.000 U	<0.250 U
MW-270(NW-03S)	03/08/13	237.2	0.0	1209.0	7.5	0.3	0.3	<0.020 U	<0.250 U	4.640 J	0.620 J	18.63	16.69	<0.250 U	92.00	<0.250 U
MW-270(NW-03S)	08/13/13	230.7	0.0	1228.0	7.7	0.2	0.3	<0.020 U	<0.250 U	1.020 J	0.600 J	17.92	17.46	<0.250 U	119.00	<0.250 U
MW-270(NW-03S)	08/13/13									669.04	<0.500 U	18.78	24.13	<0.500 U		<0.500 U
MW-270(NW-03S)	04/04/14	234.5	0.0	1181.0	7.8	0.2	0.3	<0.020 U	<0.250 U	<5.000 U	0.610 J	16.40	19.11	<0.250 U	105.00	<0.250 U
MW-270(NW-03S)	08/20/14	231.1	0.0	1256.0	8.0	0.2	0.4	<0.020 U	<0.250 U	618.76	0.920 J	12.22	25.43	<0.250 U	122.00	<0.250 U

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-268(NW-02S)	09/28/11	0.690 J	0.280 J	1.69	18.50	2.20	1.57	<0.100 U	<0.250 U	0.840 J	<0.250 U	848.19	13.96	<0.250 U	5.86	0.310 J	4.23
MW-268(NW-02S)	09/28/11	1.300 J	1.330 J	7.03	25.27	2.54	2.020 J	1.03	<0.500 U	<0.500 U	<0.500 U	908.59	60.99	<0.500 U	6.27	3.46	8.05
MW-268(NW-02S)	03/09/12	<0.250 U	<0.250 U	4.39	13.59	1.060 J	0.950 J	<0.100 U	<0.250 U	<0.250 U	<0.250 U	790.77	13.93	<0.250 U	8.86	<0.250 U	<0.500 U
MW-268(NW-02S)	03/09/12	0.810 J	2.310 J	7.65	19.31	1.200 J	1.410 J	<0.200 U	<0.500 U	<0.500 U	<0.500 U	858.57	63.21	<0.500 U	9.91	6.53	4.840 J
MW-268(NW-02S)	08/22/12	0.500 J	<0.250 U	9.79	38.84	2.21	5.50	<0.100 U	0.440 J	0.820 J	<0.250 U	972.60	16.58	<0.250 U	4.94	0.350 J	1.360 J
MW-268(NW-02S)	03/07/13	<0.250 U	<0.250 U	<0.100 U	12.400 J	0.450 J	6.06	<0.150 U	7.55	0.640 J	<0.250 U	768.21	17.08	<0.250 U	8.64	<0.250 U	<0.130 U
MW-268(NW-02S)	08/15/13	<0.250 U	<0.250 U	9.75	26.95	2.36	4.95	<0.150 U	0.600 J	0.540 J	<0.250 U	1013.78	11.90	<0.250 U	5.37	<0.250 U	<0.130 U
MW-268(NW-02S)	08/15/13	<0.500 U	<0.500 U	<0.200 U	31.82	2.180 J	3.80	<0.300 U	<0.500 U	<0.500 U	<0.500 U	1008.42	17.60	<0.500 U	5.02	1.680 J	2.050 J
MW-268(NW-02S)	04/07/14	<0.250 U	<0.250 U	<1.250 U	16.400 J	0.750 J	3.48	<0.150 U	<0.250 U	0.920 J	<0.250 U	769.32	9.64	<0.250 U	7.66	<0.250 U	<1.250 U
MW-268(NW-02S)	08/21/14	1.170 J	<0.250 U	7.00	33.30	2.51	<0.250 U	<0.150 U	0.560 J	<0.250 U	<0.250 U	1012.19	411.94	<0.250 U	5.43	<0.250 U	<1.250 U
MW-269(NW-03D)	09/29/11	0.330 J	0.180 J	0.390 J	10.83	5.22	0.220 J	<0.040 U	<0.100 U	0.66	<0.100 U	594.02	3.73	<0.100 U	23.64	1.47	2.77
MW-269(NW-03D)	09/29/11	0.870 J	1.020 J	2.55	8.39	5.34	1.49	1.01	<0.250 U	0.520 J	<0.250 U	624.93	74.75	<0.250 U	25.39	3.15	5.58
MW-269(NW-03D)	03/12/12	<0.100 U	<0.100 U	0.250 J	7.04	4.33	0.190 J	<0.040 U	<0.100 U	0.97	<0.100 U	619.47	4.80	<0.100 U	22.68	1.59	<0.200 U
MW-269(NW-03D)	03/12/12	<0.250 U	1.58	<0.250 U	9.10	4.77	<0.250 U	<0.100 U	<0.250 U	0.690 J	<0.250 U	680.25	15.11	<0.250 U	23.54	6.63	<0.500 U
MW-269(NW-03D)	08/22/12	<0.250 U	<0.250 U	<0.250 U	16.82	4.67	1.82	<0.100 U	<0.250 U	0.500 J	<0.250 U	649.25	4.73	<0.250 U	23.81	1.95	<0.500 U
MW-269(NW-03D)	03/08/13	<0.250 U	<0.250 U	<0.100 U	6.100 J	3.63	2.48	<0.150 U	<0.250 U	<0.250 U	<0.250 U	682.80	6.39	<0.250 U	18.91	1.38	<0.130 U
MW-269(NW-03D)	08/13/13	<0.250 U	<0.250 U	<0.100 U	<3.750 U	5.28	1.50	<0.150 U	<0.250 U	<0.250 U	<0.250 U	703.60	3.74	<0.250 U	26.52	2.18	<0.130 U
MW-269(NW-03D)	08/13/13	<0.500 U	<0.500 U	<0.200 U	11.310 J	5.05	1.310 J	<0.300 U	<0.500 U	<0.500 U	<0.500 U	698.66	11.61	<0.500 U	24.44	3.84	<0.250 U
MW-269(NW-03D)	04/07/14	<0.250 U	<0.250 U	<1.250 U	5.200 J	4.42	1.45	<0.150 U	<0.250 U	<0.250 U	<0.250 U	676.71	4.80	<0.250 U	25.37	1.84	<1.250 U
MW-269(NW-03D)	04/07/14	<0.250 U	<0.250 U	<1.250 U	5.300 J	4.43	1.46	<0.150 U	<0.250 U	<0.250 U	<0.250 U	677.89	4.56	<0.250 U	25.37	1.82	<1.250 U
MW-269(NW-03D)	08/20/14	0.730 J	<0.250 U	<1.250 U	10.190 J	3.42	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	631.44	108.91	<0.250 U	27.56	2.40	<1.250 U
MW-270(NW-03S)	09/29/11	2.99	2.95	35.97	19.44	1.89	3.80	6.51	<0.250 U	0.600 J	<0.250 U	1237.83	83.26	<0.250 U	26.26	7.35	21.58
MW-270(NW-03S)	09/29/11	4.89	6.11	28.99	13.68	3.15	7.17	11.37	<0.500 U	<0.500 U	<0.500 U	1315.21	414.35	<0.500 U	28.78	12.18	37.95
MW-270(NW-03S)	03/09/12	<0.250 U	<0.250 U	4.17	10.79	1.64	1.73	<0.100 U	<0.250 U	0.440 J	<0.250 U	1161.52	17.20	<0.250 U	16.35	0.990 J	<0.500 U
MW-270(NW-03S)	03/09/12	0.940 J	2.310 J	6.93	15.01	1.810 J	1.680 J	<0.200 U	<0.500 U	<0.500 U	<0.500 U	1247.52	72.38	<0.500 U	17.89	7.20	4.740 J
MW-270(NW-03S)	08/22/12	0.450 J	<0.250 U	7.45	24.08	1.55	4.83	<0.100 U	<0.250 U	0.610 J	<0.250 U	1136.25	14.71	<0.250 U	13.34	1.040 J	0.520 J
MW-270(NW-03S)	03/08/13	<0.250 U	<0.250 U	<0.100 U	12.710 J	1.060 J	6.48	<0.150 U	<0.250 U	0.280 J	<0.250 U	1124.68	20.52	<0.250 U	8.81	0.780 J	<0.130 U
MW-270(NW-03S)	08/13/13	<0.250 U	<0.250 U	10.15	13.430 J	0.740 J	4.28	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1149.33	10.96	<0.250 U	9.72	0.520 J	<0.130 U
MW-270(NW-03S)	08/13/13	<0.500 U	<0.500 U	<0.200 U	18.790 J	0.740 J	3.81	<0.300 U	<0.500 U	<0.500 U	<0.500 U	1147.97	25.87	<0.500 U	8.93	2.85	3.910 J
MW-270(NW-03S)	04/04/14	<0.250 U	<0.250 U	1.330 J	14.450 J	1.38	4.59	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1152.70	12.53	<0.250 U	9.10	1.040 J	1.710 J
MW-270(NW-03S)	08/20/14	1.130 J	<0.250 U	8.10	18.280 J	0.620 J	<0.250 U	0.630 J	<0.250 U	<0.250 U	<0.250 U	1113.42	176.66	<0.250 U	10.57	1.99	<1.250 U

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Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-268(NW-02S)	09/28/11	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.470 J	<0.250 U	<0.250 U	<0.010 U
MW-268(NW-02S)	09/28/11	0.760 J	2.050 J	<0.500 U	<0.500 U	1.320 J	<0.500 U	0.970 J	<0.500 U	<0.500 U	3.37	0.600 J	0.810 J	
MW-268(NW-02S)	03/09/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.350 J	<0.250 U	0.330 J	<0.250 U	<0.250 U	<0.010 U
MW-268(NW-02S)	03/09/12	0.690 J	1.890 J	<0.500 U	<0.500 U	1.310 J	<0.500 U	0.900 J	<0.500 U	<0.500 U	2.60	<0.500 U	<0.500 U	
MW-268(NW-02S)	08/22/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.490 J	<0.250 U	0.520 J	<0.250 U	<0.250 U	<0.010 U
MW-268(NW-02S)	03/07/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-268(NW-02S)	08/15/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.890 J	<0.250 U	<0.250 U	<0.010 U
MW-268(NW-02S)	08/15/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.250 J	<0.500 U	<0.500 U	
MW-268(NW-02S)	04/07/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-268(NW-02S)	08/21/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.750 J	<0.250 U	0.980 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-269(NW-03D)	09/29/11	<0.100 U	0.110 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.98	<0.100 U	0.88	<0.010 U
MW-269(NW-03D)	09/29/11	4.44	3.46	0.380 J	0.540 J	2.04	0.280 J	1.76	0.350 J	0.410 J	4.41	1.110 J	1.56	
MW-269(NW-03D)	03/12/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.290 J	<0.100 U	0.69	<0.100 U	0.72	<0.010 U
MW-269(NW-03D)	03/12/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.310 J	<0.250 U	0.940 J	<0.250 U	0.800 J	
MW-269(NW-03D)	08/22/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.800 J	<0.250 U	0.860 J	<0.010 U
MW-269(NW-03D)	03/08/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.640 J	<0.250 U	0.670 J	<0.010 U
MW-269(NW-03D)	08/13/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.910 J	<0.250 U	1.040 J	<0.010 U
MW-269(NW-03D)	08/13/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.330 J	<0.500 U	<0.500 U	
MW-269(NW-03D)	04/07/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.760 J	<0.250 U	0.860 J	<0.010 U
MW-269(NW-03D)	04/07/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.770 J	<0.250 U	0.860 J	<0.010 U
MW-269(NW-03D)	08/20/14	<0.250 U	<0.250 U	<0.250 U	1.040 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-270(NW-03S)	09/29/11	3.02	22.15	1.250 J	1.66	14.12	<0.250 U	9.34	<0.250 U	2.39	11.15	6.29	2.08	<0.010 U
MW-270(NW-03S)	09/29/11	17.52	32.48	2.460 J	3.50	20.34	1.230 J	13.41	0.780 J	3.38	18.42	9.38	14.53	
MW-270(NW-03S)	03/09/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.600 J	<0.250 U	0.330 J	<0.250 U	0.480 J	<0.010 U
MW-270(NW-03S)	03/09/12	2.81	3.89	<0.500 U	0.520 J	2.300 J	<0.500 U	1.440 J	0.550 J	<0.500 U	2.86	<0.500 U	2.140 J	
MW-270(NW-03S)	08/22/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.560 J	<0.250 U	0.690 J	<0.250 U	0.440 J	<0.010 U
MW-270(NW-03S)	03/08/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.590 J	<0.250 U	0.580 J	<0.250 U	<0.250 U	<0.010 U
MW-270(NW-03S)	08/13/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.800 J	<0.250 U	<0.250 U	<0.010 U
MW-270(NW-03S)	08/13/13	<0.500 U	1.890 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.770 J	<0.500 U	1.660 J	
MW-270(NW-03S)	04/04/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.810 J	<0.250 U	<0.250 U	<0.010 U
MW-270(NW-03S)	08/20/14	1.130 J	1.65	<0.250 U	1.130 J	1.010 J	<0.250 U	0.650 J	0.860 J	<0.250 U	1.62	<0.250 U	<0.250 U	<0.010 U

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Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249907	MW-271(NW-04D)	04/04/10	14:39	9.26	7.11	1,460	7.41	1,564	227.7	52.7	22.5	3.9	0.097 J	0.019 J	21.2
DISSOLVED	249907	MW-271(NW-04D)	09/29/11	15:45	11.34	4.29	728	7.46	751	101.7	22.9	19.6	2.8	0.049	0.049	21.8
TOTAL RECOVERABLE	249907	MW-271(NW-04D)	09/29/11	15:45	11.34	4.29	728			96.0	23.7	22.3	2.7	0.307	0.038	
DISSOLVED	249907	MW-271(NW-04D)	03/12/12	16:31	9.02	7.06	1,300	7.31	1,300	186.1	43.8	24.3	3.5	0.035 J	0.026 J	22.3
TOTAL RECOVERABLE	249907	MW-271(NW-04D)	03/12/12	16:31	9.02	7.06	1,300			214.5	48.5	23.9	3.5	0.038 J	0.030 J	
DISSOLVED	249907	MW-271(NW-04D)	08/22/12	12:10	10.14	6.99	1,334	7.33	1,259	189.7	50.7	25.7	3.5	0.087 J	0.030 J	21.8
DISSOLVED	249907	MW-271(NW-04D)	03/08/13	15:34	8.86	7.59	1,396	7.27	1,514	201.5	50.3	22.3	3.6	0.070 J	0.019 J	22.0
DISSOLVED	249907	MW-271(NW-04D)	08/13/13	14:22	10.23	6.95	1,420	7.32	1,421	240.6	53.0	23.0	3.7	0.108 J	0.021 J	22.1
TOTAL RECOVERABLE	249907	MW-271(NW-04D)	08/13/13	14:22	10.23	6.95	1,420			238.2	51.5	22.7	3.8	0.113 J	0.019 J	
DISSOLVED	249907	MW-271(NW-04D)	08/15/14	11:55	9.80	7.03	1,455	7.49	1,435	242.4	56.1	22.1	3.6	0.154 J	0.019 J	22.8
DISSOLVED	249908	MW-272(NW-04S)	09/29/11	16:36	14.12	4.38	2,252	6.98	2,110	392.9	86.4	19.6	8.5	0.114	0.012 J	28.2
TOTAL RECOVERABLE	249908	MW-272(NW-04S)	09/29/11	16:36	14.12	4.38	2,252			370.7	91.0	21.0	9.9	7.289	0.329	
DISSOLVED	249908	MW-272(NW-04S)	03/12/12	15:32	5.59	6.82	1,758	7.12	1,706	283.7	63.3	16.3	6.7	<0.013 U	<0.005 U	19.3
TOTAL RECOVERABLE	249908	MW-272(NW-04S)	03/12/12	15:32	5.59	6.82	1,758			318.5	69.2	15.8	7.4	1.356	0.040 J	
DISSOLVED	249908	MW-272(NW-04S)	08/22/12	13:06	14.43	6.82	1,888	7.12	1,696	296.2	76.7	18.7	8.1	0.043 J	0.007 J	24.8
DISSOLVED	249908	MW-272(NW-04S)	03/08/13	16:13	4.83	7.44	1,842	7.14	1,937	282.3	68.3	16.4	6.6	<0.038 U	<0.005 U	20.3
DISSOLVED	249908	MW-272(NW-04S)	08/13/13	13:26	14.10	6.83	1,815	7.13	1,799	322.5	69.8	18.0	7.7	<0.038 U	<0.005 U	24.5
TOTAL RECOVERABLE	249908	MW-272(NW-04S)	08/13/13	13:26	14.10	6.83	1,815			318.3	68.6	17.9	7.7	0.286 J	<0.010 U	
DISSOLVED	249908	MW-272(NW-04S)	04/04/14	13:36	5.35	6.96	1,620	7.21	1,839	269.0	58.4	15.3	7.0	<0.038 U	<0.005 U	18.2
DISSOLVED	249908	MW-272(NW-04S)	08/15/14	11:10	12.60	6.69	1,580	7.27	1,570	273.6	61.2	16.1	7.2	<0.038 U	<0.005 U	25.2
DISSOLVED	249942	MW-273(NW-05S)	10/25/11	15:28	15.14	7.62	311	6.68	363	37.5	9.4	7.9	1.6	0.025	0.012	19.4
TOTAL RECOVERABLE	249942	MW-273(NW-05S)	10/25/11	15:28	15.14	7.62	311			40.0	11.4	8.2	3.9	5.765	0.063	
DISSOLVED	249942	MW-273(NW-05S)	03/26/12	12:59	7.22	6.62	352	6.87	434	43.7	11.7	8.1	1.2	0.040	0.003 J	15.5
TOTAL RECOVERABLE	249942	MW-273(NW-05S)	03/26/12	12:59	7.22	6.62	352			48.8	12.8	7.7	1.9	1.438	0.017 J	
DISSOLVED	249942	MW-273(NW-05S)	08/15/12	13:49	13.93	6.73	379	6.82	348	46.5	12.6	8.0	1.5	0.017 J	0.002 J	16.9
DISSOLVED	249942	MW-273(NW-05S)	02/27/13	14:32	6.91	6.58	252	6.65	261	31.2	7.7	5.9	1.0	<0.015 U	<0.002 U	13.8
DISSOLVED	249942	MW-273(NW-05S)	02/27/13	14:32	6.91	6.58	252									
DISSOLVED	249942	MW-273(NW-05S)	08/05/13	14:20	13.33	6.75	250	6.91	247	29.9	7.4	6.1	1.0	<0.015 U	<0.002 U	15.5
TOTAL RECOVERABLE	249942	MW-273(NW-05S)	08/05/13	14:20	13.33	6.75	250			31.2	7.9	6.0	1.4	0.114 J	<0.005 U	
DISSOLVED	249942	MW-273(NW-05S)	04/02/14	15:40	6.77	6.78	240	6.91	246	30.6	7.6	5.6	1.2	<0.015 U	0.005 J	12.1
DISSOLVED	249942	MW-273(NW-05S)	08/13/14	12:40	15.50	6.15	340	7.13	341	46.7	11.2	8.2	1.8	<0.015 U	<0.002 U	20.3

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U = Analyzed for but not detected above MDL.

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Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-271(NW-04D)	04/04/10	226.6	0.0	676.1	5.9	0.030 J	0.5	<0.020 U	<0.250 U	<5.000 U	1.39	6.70	25.17	<0.250 U	85.00	<0.250 U
MW-271(NW-04D)	09/29/11	265.1	0.0	171.4	3.5	0.1	0.5	<0.020 U	<0.100 U	39.36	1.52	8.34	32.79	<0.100 U	<10.000 U	<0.100 U
MW-271(NW-04D)	09/29/11								<0.250 U	323.73	1.48		37.25	<0.250 U		<0.250 U
MW-271(NW-04D)	03/12/12	203.0	0.0	533.7	4.8	<0.010 U	0.4	<0.020 U	<0.250 U	63.34	1.59	6.59	34.20	<0.250 U	<10.000 U	<0.250 U
MW-271(NW-04D)	03/12/12								<0.500 U	62.62	3.21	10.07	39.51	<0.500 U		<0.500 U
MW-271(NW-04D)	08/22/12	203.1	0.0	557.6	4.8	0.1	0.4	<0.020 U	<0.250 U	69.35	1.39	8.00	31.02	<0.250 U	<10.000 U	<0.250 U
MW-271(NW-04D)	03/08/13	218.8	0.0	646.3	5.4	0.1	0.4	<0.020 U	<0.250 U	<1.000 U	1.31	7.25	25.10	<0.250 U	81.00	<0.250 U
MW-271(NW-04D)	08/13/13	220.7	0.0	654.5	5.3	0.1	0.4	<0.020 U	<0.250 U	<1.000 U	1.29	6.69	26.85	<0.250 U	<10.000 U	<0.250 U
MW-271(NW-04D)	08/13/13									5.070 J	1.420 J	8.200 J	24.56	<0.500 U		<0.500 U
MW-271(NW-04D)	08/15/14	226.0	0.0	679.1	5.4	0.1	0.4	<0.020 U	<0.250 U	<5.000 U	1.49	3.020 J	27.52	<0.250 U	79.00	<0.250 U
MW-272(NW-04S)	09/29/11	209.6	0.0	1210.0	9.3	0.1	0.6	<0.020 U	<0.250 U	153.30	0.740 J	26.96	18.58	<0.250 U	104.00	<0.250 U
MW-272(NW-04S)	09/29/11								<0.500 U	8709.28	2.390 J		133.27	0.570 J		<0.500 U
MW-272(NW-04S)	03/12/12	175.5	0.0	840.6	7.6	<0.010 U	1.2	<0.020 U	<0.250 U	81.64	0.820 J	16.91	11.08	<0.250 U	<10.000 U	<0.250 U
MW-272(NW-04S)	03/12/12								<0.500 U	2207.24	3.03	21.86	33.23	<0.500 U		<0.500 U
MW-272(NW-04S)	08/22/12	165.3	0.0	897.8	8.1	<0.010 U	1.0	<0.020 U	<0.250 U	<1.000 U	0.650 J	27.18	14.17	<0.250 U	89.00	<0.250 U
MW-272(NW-04S)	03/08/13	196.6	0.0	952.8	7.9	0.2	1.1	<0.020 U	<0.250 U	<1.000 U	<0.250 U	18.24	10.66	<0.250 U	87.00	<0.250 U
MW-272(NW-04S)	08/13/13	189.7	0.0	954.8	7.2	0.1	1.1	<0.020 U	<0.250 U	4.620 J	0.630 J	27.76	13.36	<0.250 U	<10.000 U	<0.250 U
MW-272(NW-04S)	08/13/13									422.98	<0.500 U	26.92	15.45	<0.500 U		<0.500 U
MW-272(NW-04S)	04/04/14	192.0	0.0	792.4	7.1	0.1	1.4	<0.020 U	<0.250 U	<5.000 U	<0.250 U	12.78	11.28	<0.250 U	82.00	<0.250 U
MW-272(NW-04S)	08/15/14	181.0	0.0	795.4	7.3	0.1	1.1	<0.020 U	<0.250 U	<5.000 U	0.750 J	18.40	14.95	<0.250 U	78.00	<0.250 U
MW-273(NW-05S)	10/25/11	96.7	0.0	71.8	3.0	0.2	0.3	<0.020 U	<0.100 U	14.00	0.57	8.62	50.85	<0.100 U	<10.000 U	<0.100 U
MW-273(NW-05S)	10/25/11								<0.250 U	7062.48	2.23		142.62	0.350 J		<0.250 U
MW-273(NW-05S)	03/26/12	90.9	0.0	93.3	2.9	0.9	0.3	<0.020 U	<0.100 U	2.96	0.360 J	4.08	49.13	<0.100 U	<10.000 U	<0.100 U
MW-273(NW-05S)	03/26/12									2032.42	1.71	4.990 J	77.66	<0.250 U		<0.250 U
MW-273(NW-05S)	08/15/12	96.8	0.0	89.1	3.3	1.8	0.3	<0.020 U	<0.100 U	<0.400 U	0.420 J	8.63	57.82	<0.100 U	<10.000 U	<0.100 U
MW-273(NW-05S)	02/27/13	77.8	0.0	53.8	2.3	1.4	0.4	<0.020 U	<0.100 U	6.34	0.320 J	4.02	34.51	<0.100 U	<10.000 U	<0.100 U
MW-273(NW-05S)	02/27/13															
MW-273(NW-05S)	08/05/13	92.2	0.0	45.1	2.3	1.7	0.4	<0.020 U	<0.100 U	5.16	0.390 J	4.91	35.96	<0.100 U	<10.000 U	<0.100 U
MW-273(NW-05S)	08/05/13									123.44	<0.250 U	2.220 J	28.14	<0.250 U		<0.250 U
MW-273(NW-05S)	04/02/14	77.2	0.0	51.0	3.5	2.7	0.5	0.030 J	<0.100 U	5.120 J	0.310 J	4.45	33.13	<0.100 U	<10.000 U	<0.100 U
MW-273(NW-05S)	08/13/14	156.0	0.0	58.2	3.8	0.1	0.4	<0.020 U	<0.100 U	6.690 J	0.46	14.56	56.61	<0.100 U	<10.000 U	<0.100 U

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Anaconda Regional Water, Waste, and Soils
Opportunity Ponds/Smelter Hill WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-271(NW-04D)	04/04/10	<0.250 U	<0.250 U	<1.250 U	18.490 J	2.92	2.05	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1131.31	5.90	<0.250 U	24.44	2.17	<1.250 U
MW-271(NW-04D)	09/29/11	0.360 J	0.200 J	0.280 J	16.62	5.01	0.440 J	<0.040 U	<0.100 U	0.360 J	<0.100 U	499.83	1.95	<0.100 U	18.01	2.19	1.54
MW-271(NW-04D)	09/29/11	0.470 J	0.550 J	0.890 J	14.10	4.80	0.870 J	0.160 J	<0.250 U	<0.250 U	<0.250 U	532.78	12.70	<0.250 U	19.39	2.71	2.560 J
MW-271(NW-04D)	03/12/12	<0.250 U	<0.250 U	0.350 J	17.12	2.81	0.430 J	<0.100 U	<0.250 U	0.450 J	<0.250 U	1018.94	7.64	<0.250 U	23.07	1.83	<0.500 U
MW-271(NW-04D)	03/12/12	<0.500 U	1.400 J	4.57	26.02	3.26	<0.500 U	<0.200 U	7.99	<0.500 U	<0.500 U	1113.67	10.60	<0.500 U	10.48	6.37	2.440 J
MW-271(NW-04D)	08/22/12	0.290 J	<0.250 U	<0.250 U	28.02	3.15	2.52	<0.100 U	<0.250 U	<0.250 U	<0.250 U	1019.72	6.59	<0.250 U	24.07	2.06	<0.500 U
MW-271(NW-04D)	03/08/13	<0.250 U	<0.250 U	<0.100 U	16.94	2.27	3.61	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1072.78	10.57	<0.250 U	20.69	0.710 J	<0.130 U
MW-271(NW-04D)	08/13/13	<0.250 U	<0.250 U	<0.100 U	15.93	3.23	2.26	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1172.93	5.85	<0.250 U	25.84	2.08	<0.130 U
MW-271(NW-04D)	08/13/13	<0.500 U	<0.500 U	<0.200 U	24.120 J	3.26	1.870 J	<0.300 U	<0.500 U	<0.500 U	<0.500 U	1148.53	6.19	<0.500 U	23.70	3.29	<0.250 U
MW-271(NW-04D)	08/15/14	0.610 J	<0.250 U	<1.250 U	22.830 J	1.72	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1133.42	179.04	<0.250 U	27.30	2.57	<1.250 U
MW-272(NW-04S)	09/29/11	0.430 J	0.340 J	4.34	25.65	2.55	0.720 J	<0.100 U	<0.250 U	0.810 J	<0.250 U	1447.12	13.87	<0.250 U	11.46	1.120 J	2.84
MW-272(NW-04S)	09/29/11	3.99	6.18	15.75	24.33	2.88	6.84	10.58	<0.500 U	<0.500 U	<0.500 U	1540.19	333.58	<0.500 U	13.07	11.09	26.11
MW-272(NW-04S)	03/12/12	<0.250 U	<0.250 U	1.65	16.66	2.05	0.530 J	<0.100 U	<0.250 U	0.460 J	<0.250 U	1048.16	12.46	<0.250 U	9.18	0.350 J	<0.500 U
MW-272(NW-04S)	03/12/12	0.710 J	2.58	7.79	25.25	2.360 J	0.680 J	1.73	<0.500 U	<0.500 U	0.500 J	1125.25	75.22	<0.500 U	4.92	7.89	5.33
MW-272(NW-04S)	08/22/12	0.360 J	0.310 J	8.17	29.68	2.70	3.82	<0.100 U	0.500 J	0.790 J	<0.250 U	1147.52	14.01	<0.250 U	7.61	1.150 J	0.590 J
MW-272(NW-04S)	03/08/13	<0.250 U	<0.250 U	<0.100 U	13.740 J	0.850 J	4.97	<0.150 U	<0.250 U	0.710 J	<0.250 U	1064.48	15.94	<0.250 U	7.65	0.600 J	<0.130 U
MW-272(NW-04S)	08/13/13	<0.250 U	<0.250 U	<0.100 U	19.88	2.81	3.18	<0.150 U	0.550 J	0.650 J	<0.250 U	1176.83	7.85	<0.250 U	7.54	1.120 J	<0.130 U
MW-272(NW-04S)	08/13/13	<0.500 U	<0.500 U	<0.200 U	25.400 J	2.60	2.64	<0.300 U	<0.500 U	<0.500 U	<0.500 U	1148.68	19.18	<0.500 U	6.93	2.76	3.970 J
MW-272(NW-04S)	04/04/14	<0.250 U	<0.250 U	<1.250 U	17.060 J	1.84	2.13	<0.150 U	<0.250 U	<0.250 U	<0.250 U	857.42	6.37	<0.250 U	6.47	0.630 J	<1.250 U
MW-272(NW-04S)	08/15/14	0.940 J	<0.250 U	<1.250 U	21.390 J	1.150 J	<0.250 U	<0.150 U	0.610 J	<0.250 U	<0.250 U	932.84	195.61	<0.250 U	5.95	1.220 J	<1.250 U
MW-273(NW-05S)	10/25/11	<0.100 U	0.160 J	1.42	3.07	2.04	0.480 J	<0.040 U	0.150 J	<0.100 U	<0.100 U	174.00	0.87	<0.100 U	2.01	0.91	2.15
MW-273(NW-05S)	10/25/11	1.62	3.49	10.71	9.32	2.30	4.91	4.88	<0.250 U	<0.250 U	<0.250 U	189.81	251.74	<0.250 U	3.32	9.01	21.54
MW-273(NW-05S)	03/26/12	<0.100 U	<0.100 U	0.73	<0.400 U	1.07	0.52	<0.040 U	7.17	<0.100 U	<0.100 U	201.61	1.08	<0.100 U	2.30	0.400 J	1.55
MW-273(NW-05S)	03/26/12	0.460 J	3.31	4.63	1.230 J	1.30	2.13	1.19	0.300 J	<0.250 U	0.310 J	217.02	70.79	<0.250 U	2.82	7.93	6.68
MW-273(NW-05S)	08/15/12	<0.100 U	0.170 J	1.41	3.11	1.62	1.42	<0.040 U	<0.100 U	<0.100 U	<0.100 U	206.86	1.11	<0.100 U	2.34	0.74	3.34
MW-273(NW-05S)	02/27/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	1.82	0.440 J	<0.060 U	<0.100 U	0.250 J	<0.100 U	131.19	0.71	<0.100 U	1.54	0.460 J	2.36
MW-273(NW-05S)	02/27/13																
MW-273(NW-05S)	08/05/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	2.49	0.330 J	<0.060 U	<0.100 U	0.350 J	<0.100 U	133.68	0.430 J	<0.100 U	2.13	0.67	<0.050 U
MW-273(NW-05S)	08/05/13	<0.250 U	0.700 J	<0.100 U	<3.750 U	1.28	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	98.89	5.64	<0.250 U	1.050 J	1.83	<0.130 U
MW-273(NW-05S)	04/02/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	2.35	0.280 J	<0.060 U	0.280 J	0.380 J	<0.100 U	128.30	0.53	<0.100 U	1.62	0.50	0.530 J
MW-273(NW-05S)	08/13/14	<0.100 U	<0.100 U	0.940 J	2.920 J	3.03	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	178.46	23.63	<0.100 U	4.58	0.77	<0.500 U

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-271(NW-04D)	04/04/10	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.050 J	<0.250 U	2.12	<0.010 U
MW-271(NW-04D)	09/29/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.95	<0.100 U	3.11	<0.010 U
MW-271(NW-04D)	09/29/11	0.830 J	0.660 J	<0.250 U	<0.250 U	0.450 J	<0.250 U	0.340 J	0.270 J	<0.250 U	1.57	<0.250 U	3.60	
MW-271(NW-04D)	03/12/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.590 J	<0.250 U	0.910 J	<0.250 U	1.81	<0.010 U
MW-271(NW-04D)	03/12/12	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.090 J	<0.500 U	1.930 J	
MW-271(NW-04D)	08/22/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.490 J	<0.250 U	1.070 J	<0.250 U	2.11	<0.010 U
MW-271(NW-04D)	03/08/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.580 J	<0.250 U	0.820 J	<0.250 U	0.930 J	<0.010 U
MW-271(NW-04D)	08/13/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.190 J	<0.250 U	2.29	<0.010 U
MW-271(NW-04D)	08/13/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.090 J	<0.500 U	0.620 J	<0.500 U	2.210 J	
MW-271(NW-04D)	08/15/14	<0.250 U	<0.250 U	<0.250 U	1.120 J	<0.250 U	<0.250 U	<0.250 U	0.810 J	<0.250 U	1.210 J	<0.250 U	1.49	<0.010 U
MW-272(NW-04S)	09/29/11	<0.250 U	0.320 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.920 J	<0.250 U	1.100 J	<0.010 U
MW-272(NW-04S)	09/29/11	9.90	19.47	2.110 J	2.60	10.70	0.960 J	7.61	0.800 J	1.880 J	15.84	5.95	14.60	
MW-272(NW-04S)	03/12/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.530 J	<0.250 U	<0.250 U	<0.250 U	0.360 J	<0.010 U
MW-272(NW-04S)	03/12/12	2.190 J	2.77	<0.500 U	0.610 J	1.660 J	<0.500 U	1.170 J	<0.500 U	<0.500 U	3.33	<0.500 U	1.170 J	
MW-272(NW-04S)	08/22/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.590 J	<0.250 U	0.790 J	<0.250 U	0.550 J	<0.010 U
MW-272(NW-04S)	03/08/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.580 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-272(NW-04S)	08/13/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.710 J	<0.250 U	0.610 J	<0.010 U
MW-272(NW-04S)	08/13/13	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.320 J	<0.500 U	<0.500 U	
MW-272(NW-04S)	04/04/14	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-272(NW-04S)	08/15/14	<0.250 U	<0.250 U	<0.250 U	0.570 J	<0.250 U	<0.250 U	<0.250 U	0.600 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.010 U
MW-273(NW-05S)	10/25/11	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.240 J	<0.100 U	0.130 J	<0.010 U
MW-273(NW-05S)	10/25/11	3.00	14.57	1.81	2.37	7.19	0.760 J	6.15	<0.250 U	1.37	20.98	3.41	1.78	
MW-273(NW-05S)	03/26/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.110 J	<0.100 U	<0.100 U	<0.010 U
MW-273(NW-05S)	03/26/12	0.540 J	4.28	0.530 J	0.700 J	1.96	<0.250 U	1.67	<0.250 U	0.370 J	5.28	0.700 J	0.380 J	
MW-273(NW-05S)	08/15/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.200 J	<0.100 U	<0.100 U	<0.010 U
MW-273(NW-05S)	02/27/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-273(NW-05S)	02/27/13													
MW-273(NW-05S)	08/05/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-273(NW-05S)	08/05/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-273(NW-05S)	04/02/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-273(NW-05S)	08/13/14	<0.100 U	<0.100 U	<0.100 U	2.20	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.280 J	<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Appendix E

Water-Quality Data for Old Works Waste Management Area

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	250038	IW-01	06/10/09	10:05	7.40	6.91	475.0	7.02	452.0	74.8	14.0	6.1	1.8	<0.008	0.002	13.8
DISSOLVED	250038	IW-01	10/13/10	14:03	8.92	5.87	320.4	7.74	318.0	45.7	8.6	4.6	1.5	0.013	0.010	12.3
DISSOLVED	250038	IW-01	06/23/11	11:30	9.02	3.52	508.0	6.71	531.7	77.7	13.9	5.7	1.7	0.029	0.099	13.2
TOTAL RECOVERABLE	250038	IW-01	06/23/11	11:30	9.02	3.52	508.0			73.9	14.0	5.5	1.9	0.137	0.106	
DISSOLVED	250039	IW-05	06/10/09	10:20	4.60	6.89	480.0	6.95	468.0	63.1	13.2	5.8	1.6	<0.008	0.001	13.8
DISSOLVED	250039	IW-05	10/13/10	13:58	9.03	5.81	337.1	7.69	326.0	48.5	8.9	4.7	1.6	0.007	0.004	13.1
DISSOLVED	250039	IW-05	06/23/11	12:00	14.04	4.15	545.2	6.94	549.2	88.6	16.3	6.4	1.8	0.023	0.003	12.3
TOTAL RECOVERABLE	250039	IW-05	06/23/11	12:00	14.04	4.15	545.2			84.9	16.5	6.3	2.0	0.073	0.004	
DISSOLVED	250039	IW-05	05/22/14	15:26	5.22	7.28	365.0	7.24	370.4	56.0	8.9	4.7	1.5	<0.015 U	0.010 J	12.4
DISSOLVED	250039	IW-05	07/11/14	12:10	8.10	6.52	350.0	6.33	355.8	56.0	10.3	4.9	1.7	0.035 J	0.061	11.1
DISSOLVED	249800	LF-04	04/17/09	17:35	6.30	7.50	375.0	7.38	395.0	52.3	12.7	7.8	1.7	<0.004 U	<0.001 U	14.5
DISSOLVED	249800	LF-04	09/18/09	11:55	8.46	7.05	490.6	7.71	489.0	73.1	14.1	8.4	1.7	<0.002	<0.001	11.7
DISSOLVED	249800	LF-04	04/22/14	13:42	6.67	7.23	610.0	7.48	694.3	87.9	17.7	13.1	2.1	<0.015 U	<0.002 U	11.9
DISSOLVED	249800	LF-04	04/22/14	13:45	6.67	7.23	610.0	7.49	711.5	86.5	17.5	13.1	2.1	<0.015 U	<0.002 U	12.0
DISSOLVED	249800	LF-04	07/14/14	14:45	7.90	7.13	395.0	7.64	392.2	60.1	11.9	7.7	1.8	<0.015 U	<0.002 U	11.8
DISSOLVED	249801	TI-A	04/20/09	12:40	7.10	7.01	240.0	6.84	293.0	42.8	8.7	4.3	1.4	<0.004 U	<0.001 U	24.1
DISSOLVED	249801	TI-A	09/17/09	12:31	9.91	6.45	232.7	6.92	315.0	31.7	6.4	4.1	1.3	<0.002	0.005	11.6
DISSOLVED	249801	TI-A	03/18/14	13:25	6.00	6.68	395.0	6.90	406.8	53.7	10.4	5.7	1.5	<0.015 U	0.012 J	11.9
DISSOLVED	249801	TI-A	07/11/14	14:10	7.40	6.43	220.0	7.04	225.6	33.7	6.7	3.6	1.4	<0.015 U	0.003 J	10.3
DISSOLVED	250051	MW-72	05/05/09	16:20	2.25	7.29	504.6	8.02	509.0	76.4	15.9	15.4	2.0	0.007	<0.001 U	12.8
DISSOLVED	250051	MW-72	09/18/09	15:27	9.41	6.80	666.4	7.33	640.0	100.0	18.9	15.6	2.0	<0.002	0.001	12.9
DISSOLVED	250051	MW-72	03/19/14	15:20	8.20	7.06	660.0	7.44	724.8	91.7	17.9	15.4	1.9	<0.015 U	<0.002 U	12.7
DISSOLVED	250051	MW-72	07/14/14	11:50	8.20	7.02	595.0	7.47	592.7	91.3	18.1	14.6	2.1	<0.015 U	<0.002 U	12.6
DISSOLVED	249804	MW-201	04/17/09	15:45	7.90	7.16	265.0	7.03	289.0	42.8	9.5	5.1	1.5	<0.004 U	<0.001 U	12.6
DISSOLVED	249804	MW-201	09/21/09	14:13	8.64	6.70	247.4	7.50	274.0	35.9	7.6	3.9	1.3	<0.003	0.001	11.8
DISSOLVED	249804	MW-201	03/18/14	14:45	7.10	6.90	310.0	7.19	311.9	41.0	8.9	5.0	1.2	<0.015 U	<0.002 U	11.0
DISSOLVED	249804	MW-201	07/11/14	15:30	7.40	6.58	240.0	6.82	244.5	36.5	7.8	4.1	1.4	<0.015 U	<0.002 U	10.9
DISSOLVED	250041	MW-204	06/08/09	14:45	8.30	7.39	415.0	7.36	425.0	55.2	12.8	6.8	1.7	<0.002	0.004	12.3
DISSOLVED	250041	MW-204	07/01/10	10:30	9.01	6.54	439.0	7.72	449.0	62.1	14.3	7.0	1.7	<0.002	<0.001	11.5
TOTAL RECOVERABLE	250041	MW-204	07/01/10	11:30						75.1	14.7	7.8	1.9	0.025	<0.003	
TOTAL RECOVERABLE	250041	MW-204	06/17/11	10:47	8.33	6.81	477.4			64.9	14.3	7.4	1.8	0.051	<0.004 U	
DISSOLVED	250041	MW-204	06/17/11	10:47	8.33	6.81	477.4	7.32	457.1	69.7	14.6	7.4	1.7	<0.004 U	<0.002 U	11.2
TOTAL RECOVERABLE	250041	MW-204	03/28/12	10:38	8.25	7.07	386.0			55.8	13.3	7.4	1.8	<0.013 U	<0.005 U	
DISSOLVED	250041	MW-204	03/28/12	10:38	8.25	7.07	386.0	7.28	424.8	55.7	11.4	6.5	1.5	0.009 J	<0.002 U	11.5
DISSOLVED	250041	MW-204	06/26/14	14:25	7.70	6.92	315.0	7.54	303.3	45.8	9.6	5.2	1.4	<0.015 U	<0.002 U	10.5

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
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Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
IW-01	06/10/09	143.7	0.0	126.0	2.0	1.3	0.6	<0.05	<0.06	<0.35	0.68	12.30	63.80	<0.15	<50	3.44
IW-01	10/13/10	127.6	0.0	54.3	1.8	0.3	0.6	<0.1	<0.2	3.33	0.83	9.02	34.60	<0.2	<50	3.29
IW-01	06/23/11	88.6	0.0	186.6	1.6	1.0	0.7	<0.100 U	<0.500 U	193.10	1.05	8.50	39.07	<0.500 U	<50.000 U	6.91
IW-01	06/23/11								<1.250 U	207.85	1.28		41.60	<1.250 U		7.23
IW-05	06/10/09	129.9	0.0	129.3	2.0	1.3	0.5	<0.05	<0.06	0.81	0.72	13.00	57.50	<0.15	<50	3.18
IW-05	10/13/10	145.2	0.0	53.9	1.7	0.4	0.6	<0.1	<0.2	<2.0	0.57	10.50	34.00	<0.2	<50	3.17
IW-05	06/23/11	126.7	0.0	185.6	2.3	1.9	0.4	<0.100 U	<0.500 U	29.80	0.68	12.52	59.91	<0.500 U	<50.000 U	3.93
IW-05	06/23/11								<1.250 U	28.69	0.820 J		63.98	<1.250 U		4.05
IW-05	05/22/14	179.3	0.0	54.5	2.2	0.5	0.7	<0.020 U	0.87	<2.000 U	1.81	12.85	38.20	0.99	<10.000 U	3.03
IW-05	07/11/14	165.4	0.0	57.1	2.2	0.2	0.7	<0.020 U	<0.100 U	21.50	<0.100 U	22.19	38.06	<0.100 U	<10.000 U	1.92
LF-04	04/17/09	186.7	0.0	55.1	3.1	0.5	0.4	<0.05	<0.07	<6.08	4.03	15.00	42.50	<0.19	<50	2.19
LF-04	09/18/09	211.1	0.0	104.8	3.6	1.4	0.5	<0.05	<0.04	<7.60	3.88	18.10	55.60	<0.20	<50	2.76
LF-04	04/22/14	252.4	0.0	127.9	6.1	1.2	0.5	<0.020 U	<0.100 U	<2.000 U	4.70	22.97	58.96	<0.100 U	<10.000 U	2.62
LF-04	04/22/14	252.3	0.0	124.6	5.9	1.2	0.5	<0.020 U	<0.100 U	<2.000 U	4.67	23.54	58.57	<0.100 U	<10.000 U	2.56
LF-04	07/14/14	186.6	0.0	68.0	2.8	0.6	0.5	<0.020 U	<0.100 U	<2.000 U	4.36	13.19	39.69	<0.100 U	<10.000 U	1.88
TI-A	04/20/09	149.6	0.0	20.3	1.9	0.2	0.5	<0.05	<0.07	<6.08	0.80	6.21	52.80	<0.19	<50	1.73
TI-A	09/17/09	129.3	0.0	22.3	1.5	<0.05	0.5	<0.05	<0.04	<7.60	0.72	9.84	48.60	<0.20	<50	2.42
TI-A	03/18/14	139.8	0.0	91.5	2.3	0.5	0.4	<0.020 U	<0.100 U	<2.000 U	1.07	9.43	62.12	<0.100 U	<10.000 U	2.60
TI-A	07/11/14	121.9	0.0	24.7	1.2	0.2	0.6	<0.020 U	<0.100 U	<2.000 U	0.71	4.23	38.51	<0.100 U	<10.000 U	1.60
MW-72	05/05/09	249.9	0.0	93.8	6.2	1.2	<0.5	<0.5	<0.07	15.20	1.44	23.80	50.90	<0.19	<500	2.98
MW-72	09/18/09	244.9	0.0	145.5	<5.0	1.9	<0.5	<0.5	<0.04	<7.60	1.39	27.10	62.80	<0.20	<500	3.69
MW-72	03/19/14	253.1	0.0	150.2	7.9	1.6	0.4	<0.020 U	<0.100 U	<2.000 U	1.55	16.22	51.26	<0.100 U	78.00	2.57
MW-72	07/14/14	243.7	0.0	140.0	6.7	1.4	0.4	<0.020 U	<0.100 U	<2.000 U	1.64	21.96	48.57	<0.100 U	<10.000 U	2.30
MW-201	04/17/09	146.2	0.0	20.3	4.1	0.4	0.5	<0.05	<0.07	<6.08	0.97	8.54	36.00	<0.19	<50	0.74
MW-201	09/21/09	140.3	0.0	20.8	2.1	0.3	0.5	<0.05	<0.13	<15.83	0.78	8.72	35.50	<0.14	<50	0.94
MW-201	03/18/14	150.7	0.0	37.1	4.1	0.4	0.4	<0.020 U	<0.100 U	<2.000 U	0.93	6.57	37.23	<0.100 U	<10.000 U	0.97
MW-201	07/11/14	130.1	0.0	26.5	1.4	0.2	0.5	<0.020 U	<0.100 U	<2.000 U	0.77	4.93	34.23	<0.100 U	<10.000 U	1.01
MW-204	06/08/09	190.6	0.0	50.1	6.1	0.6	0.5	<0.05	<0.04	<7.68	0.67	11.80	35.70	<0.20	<50	1.13
MW-204	07/01/10	235.2	0.0	72.8	6.7	0.6	0.5	<0.05	<0.2	<2.0	0.62	10.60	34.60	<0.2	<50	1.26
MW-204	07/01/10								<0.5	<5.0	0.51		36.10	<0.5		1.33
MW-204	06/17/11								<1.250 U	29.08	0.620 J		40.43	0.040 J		1.39
MW-204	06/17/11	188.4	0.0	78.7	7.4	0.7	0.4	<0.100 U	<0.500 U	28.48	0.66	11.38	38.40	<0.500 U	<50.000 U	1.36
MW-204	03/28/12									35.09	0.810 J	16.41	25.71	<0.250 U		1.36
MW-204	03/28/12	178.6	0.0	35.5	3.4	0.4	0.5	<0.020 U	<0.100 U	27.80	0.55	13.56	24.41	<0.100 U	<10.000 U	1.33
MW-204	06/26/14	163.1	0.0	36.6	2.9	0.3	0.6	<0.020 U	<0.100 U	<2.000 U	0.51	5.22	26.60	<0.100 U	<10.000 U	0.84

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
IW-01	06/10/09	<0.13	<0.12	608	8.00	3.53	2.22	2.44	0.40	0.74	0.11	191.00	1.14	0.05	0.26	0.16	602
IW-01	10/13/10	0.21	<0.2	1,120	7.28	1.39	2.56	0.47	0.24	0.30	<0.5	119.00	0.48	<0.2	<0.2	<0.2	590
IW-01	06/23/11	2.26	<0.500 U	2,333	9.81	2.48	7.03	0.24	0.350 J	0.74	<0.500 U	161.72	2.87	0.110 J	0.65	<0.500 U	1,411
IW-01	06/23/11	1.87	0.300 J	2,473	5.27	2.81	6.90	0.370 J	0.420 J	0.670 J	<1.250 U	176.09	3.80	<1.250 U	0.670 J	0.320 J	1,430
IW-05	06/10/09	0.13	<0.12	571	7.43	3.41	2.16	3.77	0.39	0.96	0.34	195.00	1.45	0.05	0.24	0.16	533
IW-05	10/13/10	<0.2	<0.2	688	7.64	1.47	2.43	0.71	0.25	0.31	<0.5	129.00	0.48	<0.2	<0.2	<0.2	593
IW-05	06/23/11	0.270 J	<0.500 U	542	8.91	3.21	3.24	1.02	0.350 J	1.09	<0.500 U	203.75	2.90	0.110 J	0.500 J	<0.500 U	619
IW-05	06/23/11	<1.250 U	0.300 J	558	4.320 J	3.57	4.34	7.07	34.68	1.150 J	0.280 J	221.24	3.92	<1.250 U	0.490 J	0.340 J	638
IW-05	05/22/14	1.15	1.15	374	12.19	3.15	3.53	3.12	1.29	1.59	0.480 J	128.58	1.52	1.23	0.70	1.18	328
IW-05	07/11/14	0.360 J	<0.100 U	212	4.940 J	1.37	6.35	0.45	0.270 J	0.230 J		130.88	0.92	<0.100 U		<0.100 U	340
LF-04	04/17/09	<0.04	<0.09	65	7.97	2.30	0.22	<0.20 U	0.65	0.52	<0.05	161.00	0.49	<0.03	2.03	0.17	588
LF-04	09/18/09	<0.10	0.21	62	8.70	2.63	0.16	<0.16	0.70	0.92	<0.04	191.00	1.08	0.04	3.86	0.23	6
LF-04	04/22/14	<0.100 U	<0.100 U	120	10.62	2.45	1.25	<0.060 U	0.350 J	1.50	<0.100 U	222.18	1.11	<0.100 U	4.96	0.240 J	597
LF-04	04/22/14	<0.100 U	<0.100 U	122	10.49	2.36	1.27	<0.060 U	0.71	1.55	<0.100 U	220.74	1.26	<0.100 U	4.91	0.210 J	596
LF-04	07/14/14	<0.100 U	<0.100 U	55	3.990 J	2.87	0.68	<0.060 U	0.76	0.59		140.26	1.06	<0.100 U		0.270 J	377
TI-A	04/20/09	<0.04	<0.09	502	4.82	2.36	1.01	<0.20 U	0.37	<0.20	<0.05	113.00	<0.03	<0.03	<0.02	0.14	313
TI-A	09/17/09	0.17	<0.04	655	6.39	1.72	1.54	<0.16	0.38	0.19	<0.04	97.10	0.28	0.05	<0.02	0.17	442
TI-A	03/18/14	0.300 J	<0.100 U	662	4.200 J	3.90	1.94	<0.060 U	0.56	0.490 J	<0.100 U	136.38	0.54	<0.100 U	0.220 J	<0.100 U	438
TI-A	07/11/14	<0.100 U	<0.100 U	496	<2.000 U	2.41	1.15	<0.060 U	0.410 J	<0.100 U		84.73	0.360 J	<0.100 U		<0.100 U	255
MW-72	05/05/09	0.13	0.09	171	11.50	2.60	0.24	<0.20 U	0.82	1.27	<0.05	203.00	0.77	0.03	2.43	0.43	617
MW-72	09/18/09	0.17	0.16	181	11.50	2.33	0.33	<0.16	0.79	1.93	<0.04	248.00	1.67	0.04	4.86	0.44	743
MW-72	03/19/14	<0.100 U	<0.100 U	138	10.92	2.45	1.03	<0.060 U	0.78	1.21	<0.100 U	237.50	0.94	<0.100 U	3.85	0.340 J	484
MW-72	07/14/14	<0.100 U	<0.100 U	144	10.47	2.86	1.01	<0.060 U	0.83	1.48		226.30	1.95	<0.100 U		0.53	410
MW-201	04/17/09	<0.04	<0.09	143	5.02	2.67	0.33	<0.20 U	0.44	0.24	<0.05	120.00	0.22	<0.03	0.95	0.35	113
MW-201	09/21/09	<0.07	<0.06	150	6.48	2.25	0.44	<0.11	0.40	<0.30	<0.10	107.00	<0.43	<0.07	0.67	0.35	143
MW-201	03/18/14	<0.100 U	<0.100 U	131	4.430 J	2.91	0.64	<0.060 U	0.460 J	0.380 J	<0.100 U	111.94	0.220 J	<0.100 U	1.09	0.250 J	129
MW-201	07/11/14	<0.100 U	<0.100 U	144	2.450 J	3.37	0.73	<0.060 U	0.430 J	0.220 J		96.98	0.400 J	<0.100 U		0.370 J	144
MW-204	06/08/09	<0.10	0.09	258	5.84	3.62	0.38	<0.15	0.35	0.48	<0.04	173.00	0.29	<0.03	1.62	0.29	338
MW-204	07/01/10	<0.2	<0.2	249	4.76	3.63	<0.2	<0.2	0.35	0.49	<0.2	168.00	0.65	<0.2	2.53	0.27	406
MW-204	07/01/10	<0.5	<0.5	257	8.87	3.71	<0.5	<0.5	<0.5	<0.5		174.00	0.58	<0.5	2.45	<0.5	433
MW-204	06/17/11	<1.250 U	0.400 J	265	5.75	3.97	1.38	<0.500 U	0.370 J	0.380 J	<1.250 U	187.79	1.94	<1.250 U	2.79	0.450 J	369
MW-204	06/17/11	<0.500 U	<0.500 U	262	7.21	3.65	0.77	<0.200 U	0.330 J	0.50	<0.500 U	180.89	1.15	0.170 J	2.67	0.140 J	369
MW-204	03/28/12	<0.250 U	1.39	416	7.60	2.63	0.520 J	<0.100 U	0.460 J	<0.250 U	0.360 J	150.78	14.01	<0.250 U	0.710 J	5.93	312
MW-204	03/28/12	<0.100 U	<0.100 U	405	10.47	2.32	0.100 J	<0.040 U	0.260 J	0.59	<0.100 U	140.60	0.160 J	<0.100 U	0.300 J	<0.100 U	319
MW-204	06/26/14	<0.100 U	<0.100 U	219	<2.000 U	2.95	0.58	<0.060 U	0.310 J	0.200 J		113.35	0.56			0.250 J	198

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
IW-01	06/10/09	<0.05	<0.05	0.14	<0.07	0.22	<0.03	0.13	<0.10	0.03	3.02	<0.02	0.08	<0.05
IW-01	10/13/10	<0.2	<0.2	<0.5	<0.2	0.27	<0.5	<0.2	<0.5	<0.2	2.51	<0.2	<0.2	<0.05
IW-01	06/23/11	<0.500 U	0.420 J	<0.500 U	<0.500 U	0.74	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.78	<0.500 U	<0.500 U	<0.050 U
IW-01	06/23/11	<1.250 U	0.480 J	<1.250 U	<1.250 U	0.820 J	<1.250 U	<1.250 U	<1.250 U	<1.250 U	3.04	<1.250 U	<1.250 U	
IW-05	06/10/09	<0.05	<0.05	0.12	<0.07	0.21	<0.03	0.12	<0.10	0.03	2.52	<0.02	<0.07	<0.05
IW-05	10/13/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	2.63	<0.2	<0.2	<0.05
IW-05	06/23/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.290 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.90	<0.500 U	<0.500 U	<0.050 U
IW-05	06/23/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.310 J	<1.250 U	<1.250 U	<1.250 U	<1.250 U	3.18	<1.250 U	<1.250 U	
IW-05	05/22/14	0.51	0.52	0.65	0.58	0.62	0.450 J	0.61	0.440 J	0.54	3.44	0.490 J	0.58	<0.010 U
IW-05	07/11/14													<0.010 U
LF-04	04/17/09	<0.06	<0.04	0.08	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	2.10	<0.02	0.08	<0.05
LF-04	09/18/09	<0.05	<0.02	0.12	<0.05	0.05	<0.04	<0.05	<0.10	<0.02	2.45	<0.02	0.11	<0.05
LF-04	04/22/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.67	<0.100 U	<0.100 U	<0.010 U
LF-04	04/22/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.65	<0.100 U	<0.100 U	<0.010 U
LF-04	07/14/14													<0.010 U
TI-A	04/20/09	<0.06	<0.04	0.08	<0.04	0.09	<0.03	0.06	<0.07	<0.03	1.99	<0.02	0.07	<0.05
TI-A	09/17/09	<0.05	0.04	0.13	<0.05	0.14	<0.04	0.09	<0.10	<0.02	2.21	<0.02	0.06	<0.05
TI-A	03/18/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.260 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.28	<0.100 U	<0.100 U	<0.010 U
TI-A	07/11/14													<0.010 U
MW-72	05/05/09	<0.06	<0.04	0.13	<0.04	0.06	<0.03	0.05	<0.07	<0.03	2.82	<0.02	0.07	<0.5
MW-72	09/18/09	<0.05	<0.02	0.14	<0.05	0.09	<0.04	0.06	0.10	<0.02	2.97	<0.02	0.06	<0.5
MW-72	03/19/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.78	<0.100 U	<0.100 U	<0.010 U
MW-72	07/14/14													<0.010 U
MW-201	04/17/09	<0.06	<0.04	0.08	<0.04	0.05	<0.03	<0.04	<0.07	<0.03	2.17	<0.02	0.10	<0.05
MW-201	09/21/09	<0.11	<0.05	0.12	<0.11	0.08	<0.24	<0.09	<0.13	<0.10	2.14	<0.06	<0.14	<0.05
MW-201	03/18/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.07	<0.100 U	<0.100 U	<0.010 U
MW-201	07/11/14													<0.010 U
MW-204	06/08/09	<0.05	<0.02	0.13	<0.050	0.27	<0.04	0.16	<0.10	0.04	2.66	<0.02	0.06	<0.05
MW-204	07/01/10	<0.2	<0.2	<0.5	<0.2	0.41	<0.2	0.25	<0.5	<0.2	2.59	<0.2	<0.2	<0.05
MW-204	07/01/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.70	<0.5	<0.5	
MW-204	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.290 J	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.88	<1.250 U	<1.250 U	
MW-204	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.280 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.69	<0.500 U	<0.500 U	<0.050 U
MW-204	03/28/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.310 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.37	<0.250 U	<0.250 U	
MW-204	03/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.270 J	<0.100 U	0.140 J	<0.100 U	<0.100 U	2.10	<0.100 U	<0.100 U	<0.010 U
MW-204	06/26/14					<0.100 U								<0.010 U

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249803	MW-205	04/17/09	18:30	7.40	7.37	470.0	7.25	491.0	81.2	15.3	13.0	1.9	<0.004 U	<0.001 U	13.7
DISSOLVED	249803	MW-205	09/18/09	14:22	10.24	6.92	593.5	7.28	657.0	87.0	17.5	14.7	2.0	<0.002	0.001	12.5
DISSOLVED	249803	MW-205	09/18/09	14:26	10.24	6.92	593.5	7.40	604.0	86.8	17.1	14.7	2.0	0.005	0.001	12.3
DISSOLVED	249803	MW-205	04/29/14	15:05	7.10	7.30	590.0	7.34	627.6	80.7	16.0	13.2	1.7	<0.015 U	<0.002 U	11.4
DISSOLVED	249803	MW-205	07/14/14	13:05	8.00	6.97	560.0	7.48	561.4	85.8	17.4	12.9	2.1	<0.015 U	<0.002 U	12.8
DISSOLVED	250042	MW-206	06/08/09	17:15	8.50		535.0	7.39	531.0	72.9	14.5	8.1	2.1	0.004	0.019	13.4
DISSOLVED	250042	MW-206	07/01/10	12:26	9.99	6.81	516.0	7.81	526.0	75.3	13.4	8.2	2.0	<0.002	<0.001	12.5
TOTAL RECOVERABLE	250042	MW-206	07/01/10	12:26	9.99	6.81	516.0			91.0	15.4	9.7	2.2	0.029	<0.003	
DISSOLVED	250042	MW-206	06/17/11	15:12	8.58	6.81	633.9	7.31	654.5	97.6	17.6	9.9	2.2	<0.004 U	<0.002 U	12.0
TOTAL RECOVERABLE	250042	MW-206	06/17/11	15:12	8.58	6.81	633.9			86.5	16.3	9.6	2.2	0.040	0.007	
DISSOLVED	250042	MW-206	03/27/12	11:40	8.64	7.18	465.0	7.27	495.6	66.7	12.0	10.3	2.0	0.008 J	<0.002 U	12.9
TOTAL RECOVERABLE	250042	MW-206	03/27/12	11:40	8.64	7.18	465.0			69.6	12.5	10.6	2.1	<0.013 U	<0.005 U	
DISSOLVED	250042	MW-206	06/27/14	12:30	9.50	6.90	470.0	7.53	454.2	72.1	12.5	10.2	2.1	<0.015 U	<0.002 U	12.0
DISSOLVED	250054	MW-206D	06/08/09	17:50	8.60	7.29	495.0	7.58	501.0	66.1	13.5	8.2	1.9	0.006	0.035	13.5
DISSOLVED	250054	MW-206D	07/01/10	12:02	9.62	6.58	476.0	7.64	460.0	62.8	12.3	8.4	1.7	0.008	0.013	12.8
TOTAL RECOVERABLE	250054	MW-206D	07/01/10	12:02	9.62	6.58	476.0			87.4	14.8	10.4	2.1	0.026	0.016	
DISSOLVED	250054	MW-206D	06/17/11	15:42	9.18	6.90	559.3	7.30	586.0	80.8	14.6	9.5	1.8	0.026	0.011	12.2
TOTAL RECOVERABLE	250054	MW-206D	06/17/11	15:42	9.18	6.90	559.3			79.1	15.0	9.8	2.0	0.047	0.011	
TOTAL RECOVERABLE	250054	MW-206D	03/27/12	11:05	8.73	8.51	474.0			73.6	13.1	11.7	2.0	0.017 J	0.012 J	
DISSOLVED	250054	MW-206D	03/27/12	11:05	8.73	8.51	474.0	7.27	509.1	69.7	12.5	10.4	1.8	0.008 J	0.011 J	12.7
DISSOLVED	250054	MW-206D	06/27/14	13:15	9.40	6.95	440.0	7.49	460.6	72.5	12.7	9.5	1.9	<0.015 U	0.003 J	12.4
DISSOLVED	250043	MW-207	05/05/09	12:00	12.42	7.11	526.1	8.07	537.0	86.3	16.5	6.3	2.8	0.808	<0.001	14.7
DISSOLVED	250043	MW-207	06/11/09	0:00	9.51	7.41	620.0	7.39	581.0	91.8	17.0	7.0	3.0	<0.002	<0.001	15.9
DISSOLVED	250043	MW-207	09/21/09	10:55				7.63	707.0	105.0	19.1	7.0	2.8	0.003	0.001	14.0
DISSOLVED	250043	MW-207	03/23/10	13:12	9.81	6.70	566.0	7.57	512.0	85.3	16.1	6.6	2.5	0.003	<0.001	13.4
DISSOLVED	250043	MW-207	07/01/10	13:45	10.78	6.63	600.0	7.75	544.0	81.4	15.2	6.5	2.7	<0.002	<0.001	15.3
TOTAL RECOVERABLE	250043	MW-207	07/01/10	13:45	10.78	6.63	600.0			107.0	18.5	7.8	3.1	0.033	<0.003	
DISSOLVED	250043	MW-207	04/04/11	13:14	9.54	6.75	571.0	7.20	586.0	88.6	16.3	7.3	2.4	0.015	<0.001	14.3
TOTAL RECOVERABLE	250043	MW-207	04/04/11	13:14	9.54	6.75	571.0			93.8	16.5	7.3	2.7	0.109	<0.003	
DISSOLVED	250043	MW-207	06/17/11	9:20	9.38	6.62	563.3	7.06	614.7	86.5	15.9	7.2	2.7	0.001 J	<0.100 U	14.1
TOTAL RECOVERABLE	250043	MW-207	06/17/11	9:20	9.38	6.62	563.3			91.5	16.4	7.9	3.1	<0.025 U	<0.013 U	
DISSOLVED	250043	MW-207	03/29/12	10:14	8.98	6.99	888.0	7.13	908.1	134.7	24.3	8.9	3.1	0.023 J	<0.002 U	14.5
TOTAL RECOVERABLE	250043	MW-207	03/29/12	10:14	8.98	6.99	888.0			135.2	28.8	10.7	3.7	<0.013 U	<0.005 U	
DISSOLVED	250043	MW-207	08/28/12	15:14	10.41	7.00	662.4	7.05	618.1	96.9	18.1	8.4	2.9	<0.015 U	<0.002 U	15.2
DISSOLVED	250043	MW-207	03/19/13	16:10	9.15	7.32	533.7	6.92	546.9	77.0	14.0	8.2	2.3	<0.015 U	<0.002 U	13.8
DISSOLVED	250043	MW-207	07/30/13	15:35	9.87	6.64	505.0	6.85	523.9	70.5	13.2	8.5	2.4	<0.015 U	<0.002 U	14.3
TOTAL RECOVERABLE	250043	MW-207	07/30/13	15:35	9.87	6.64	505.0			75.7	14.1	9.2	2.9	<0.038 U	<0.005 U	
DISSOLVED	250043	MW-207	03/24/14	13:50	9.10	6.88	500.0	7.09	528.4	74.0	13.3	8.2	2.5	<0.015 U	<0.002 U	14.3
DISSOLVED	250043	MW-207	06/30/14	13:55	10.00	6.50	530.0	7.26	566.1	89.0	15.9	9.4	2.9	<0.015 U	<0.002 U	15.0

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Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-205	04/17/09	237.7	0.0	80.1	5.4	0.9	0.4	<0.05	<0.07	<6.08	5.61	20.30	40.20	40.20	<50	<0.19
MW-205	09/18/09	247.4	0.0	113.5	<5.0	1.5	<0.5	<0.5	<0.04	<7.60	5.14	30.20	53.10	<0.20	<500	1.68
MW-205	09/18/09	255.9	0.0	117.3	<5.0	1.5	<0.5	<0.5	<0.04	<7.60	5.21	29.90	54.50	<0.20	<500	1.65
MW-205	04/29/14	248.1	0.0	116.0	6.1	1.1	0.5	0.030 J	<0.100 U	<2.000 U	5.54	23.68	42.51	<0.100 U	<10.000 U	1.18
MW-205	07/14/14	242.3	0.0	123.9	6.0	1.1	0.4	<0.020 U	<0.100 U	7.720 J	5.41	22.62	44.03	<0.100 U	<10.000 U	1.31
MW-206	06/08/09	242.0	0.0	60.8	8.8	3.0	0.5	<0.5	<0.04	<7.68	0.58	15.10	39.80	<0.20	<500	9.93
MW-206	07/01/10	289.1	0.0	60.2	8.6	2.6	0.6	<0.05	<0.2	<2.0	0.56	14.10	43.90	<0.2	<50	9.01
MW-206	07/01/10								<0.5	<5.0	<0.5		47.90	<0.5		9.91
MW-206	06/17/11	237.6	0.0	95.6	13.0	4.7	0.4	<0.100 U	<0.500 U	36.19	0.68	14.64	48.20	<0.500 U	<50.000 U	10.8
MW-206	06/17/11								<1.250 U	49.10	1.55		48.07	<1.250 U		10.6
MW-206	03/27/12	214.2	0.0	40.2	4.5	1.0	0.7	<0.020 U	<0.100 U	24.95	0.53	16.56	30.96	<0.100 U	<10.000 U	6.75
MW-206	03/27/12									20.46	3.13	20.84	32.89	<0.250 U		6.76
MW-206	06/27/14	220.5	0.0	57.1	14.9	1.1	0.7	<0.020 U	<0.100 U	<2.000 U	0.56	9.51	41.63	<0.100 U	<10.000 U	7.63
MW-206D	06/08/09	212.5	0.0	55.7	7.2	2.8	0.5	<0.05	<0.04	<7.68	0.55	15.10	48.30	<0.20	<50	7.57
MW-206D	07/01/10	299.1	0.0	45.7	6.7	2.4	0.6	<0.05	<0.2	<2.0	0.54	13.30	46.00	<0.2	<50	6.09
MW-206D	07/01/10								<0.5	<5.0	<0.5		52.70	<0.5		7.20
MW-206D	06/17/11	225.2	0.0	73.3	11.0	3.4	0.4	<0.100 U	<0.500 U	31.64	0.59	13.79	52.62	<0.500 U	<50.000 U	7.96
MW-206D	06/17/11								<1.250 U	30.29	0.640 J		57.32	<1.250 U		8.18
MW-206D	03/27/12									27.75	3.31	17.83	48.05	<0.250 U		5.93
MW-206D	03/27/12	210.4	0.0	46.5	4.6	1.7	0.6	<0.020 U	<0.100 U	18.80	0.51	15.91	46.75	<0.100 U	<10.000 U	5.81
MW-206D	06/27/14	225.8	0.0	54.0	13.2	1.7	0.6	<0.020 U	<0.100 U	<2.000 U	0.52	9.86	43.60	<0.100 U	<10.000 U	6.76
MW-207	05/05/09	209.8	0.0	97.6	12.1	6.7	<0.5	<0.5	<0.07	12.00	0.69	15.30	57.10	<0.19	<500	<0.05 U
MW-207	06/11/09	211.3	0.0	89.7	15.5	7.3	<0.5	<0.5	<0.04	<7.68	0.75	18.60	61.90	<0.20	<500	<0.05
MW-207	09/21/09	217.2	0.0	155.0	10.2	4.2	0.7	<0.5	<0.04	<7.60	0.75	15.80	64.70	<0.20	<500	<0.05
MW-207	03/23/10	198.9	0.0	101.4	14.5	2.8	0.7	<0.05	<0.10	2.62	0.81	15.10	52.10	<0.10	<50	<0.10
MW-207	07/01/10	214.2	0.0	102.0	15.5	6.3	0.6	<0.05	<0.2	<2.0	0.73	16.80	55.90	<0.2	<50	<0.2
MW-207	07/01/10								<0.5	9.18	0.56		61.40	<0.5		<0.5
MW-207	04/04/11	210.4	0.0	71.8	15.4	3.3	0.5	<0.1	<0.2	26.50	0.81	14.00	51.30	<0.2	<50	<0.2
MW-207	04/04/11								<0.5	76.20	0.80	16.80	51.60	<0.5		<0.5
MW-207	06/17/11	217.2	0.0	74.7	13.0	5.5	0.5	<0.100 U	<0.500 U	23.87	0.67	18.11	57.35	<0.500 U	<50.000 U	<0.500 U
MW-207	06/17/11								<1.250 U	11.29	0.683 J		60.26	<1.250 U		<1.250 U
MW-207	03/29/12	206.1	0.0	242.7	22.9	3.6	0.6	<0.020 U	<0.100 U	39.20	0.89	20.55	84.22	<0.100 U	<10.000 U	<0.100 U
MW-207	03/29/12									57.91	1.080 J	22.99	87.58	<0.250 U		<0.250 U
MW-207	08/28/12	225.7	0.0	125.8	11.8	2.8	0.6	<0.020 U	<0.100 U	<0.400 U	0.70	21.33	61.00	<0.100 U	<10.000 U	<0.100 U
MW-207	03/19/13	212.7	0.0	74.9	8.8	2.9	0.7	<0.020 U	<0.100 U	1.420 J	0.74	18.31	47.42	<0.100 U	<10.000 U	<0.100 U
MW-207	07/30/13	218.7	0.0	59.5	7.7	6.5	0.7	<0.020 U	<0.100 U	7.28	0.75	15.97	49.52	<0.100 U	<10.000 U	<0.100 U
MW-207	07/30/13									22.11	0.820 J	29.21	50.26	<0.250 U		<0.250 U
MW-207	03/24/14	235.9	0.0	68.2	9.7	2.8	0.7	<0.020 U	<0.100 U	<2.000 U	0.69	14.21	48.52	<0.100 U	<10.000 U	<0.100 U
MW-207	06/30/14	238.7	0.0	83.5	12.9	7.4	0.7	<0.020 U	<0.100 U	<2.000 U	0.67	15.46	56.32	<0.100 U	<10.000 U	<0.100 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-205	04/17/09	<0.04	<0.09	39	9.95	2.24	<0.08	<0.20 U	0.72	1.16	<0.05	193.00	0.77	<0.03	1.99	0.45	188
MW-205	09/18/09	0.18	0.14	42	11.40	2.16	<0.10	<0.16	0.78	1.41	<0.04	232.00	1.31	<0.03	3.33	0.55	196
MW-205	09/18/09	0.11	0.13	42	11.30	2.11	<0.10	<0.16	0.77	1.46	<0.04	230.00	1.37	<0.03	3.32	0.56	200
MW-205	04/29/14	<0.100 U	<0.100 U	40	12.09	2.38	0.82	<0.060 U	0.72	1.36	<0.100 U	201.51	1.18	<0.100 U	3.25	0.470 J	150
MW-205	07/14/14	<0.100 U	<0.100 U	42	10.000 J	2.46	0.82	<0.060 U	1.15	1.34		211.43	2.32	<0.100 U		0.65	146
MW-206	06/08/09	<0.10	0.09	115	7.88	3.02	1.03	<0.15	0.51	1.94	<0.04	208.00	1.08	0.06	<0.02	0.21	1,606
MW-206	07/01/10	<0.2	<0.2	101	5.72	3.00	0.71	<0.2	0.46	2.54	<0.2	195.00	0.54	<0.2	<0.2	<0.2	1,532
MW-206	07/01/10	<0.5	<0.5	120	9.45	3.29	0.86	<0.5	0.64	2.12		200.00	0.60	<0.5	<0.5	<0.5	1,692
MW-206	06/17/11	0.110 J	<0.500 U	121	7.86	3.22	1.67	<0.200 U	0.420 J	3.26	<0.500 U	228.01	1.57	0.240 J	<0.500 U	0.100 J	1,782
MW-206	06/17/11	<1.250 U	0.430 J	123	9.01	3.47	2.32	2.22	0.520 J	2.91	<1.250 U	229.73	3.42	<1.250 U	<1.250 U	0.350 J	1,685
MW-206	03/27/12	<0.100 U	<0.100 U	113	10.47	1.73	0.75	<0.040 U	0.420 J	1.48	<0.100 U	154.87	1.09	<0.100 U	<0.100 U	<0.100 U	1,142
MW-206	03/27/12	<0.250 U	1.180 J	118	12.05	1.96	0.900 J	<0.100 U	0.490 J	1.79	<0.250 U	163.94	10.15	<0.250 U	<0.250 U	5.53	1,113
MW-206	06/27/14	<0.100 U	<0.100 U	104	2.630 J	3.62	1.37	<0.060 U	0.74	1.09		157.60	0.97			0.220 J	1,190
MW-206D	06/08/09	0.23	0.04	76	7.78	2.45	0.85	<0.15	0.49	1.93	<0.04	185.00	1.00	0.06	0.04	0.26	983
MW-206D	07/01/10	<0.2	<0.2	66	5.90	2.32	0.31	<0.2	0.45	1.92	<0.2	167.00	0.43	<0.2	<0.2	0.25	725
MW-206D	07/01/10	<0.5	<0.5	82	9.59	2.50	0.48	<0.5	0.55	1.70		186.00	<0.5	<0.5	<0.5	<0.5	953
MW-206D	06/17/11	0.120 J	<0.500 U	80	7.62	2.53	1.26	<0.200 U	0.410 J	2.52	<0.500 U	188.44	1.17	0.230 J	<0.500 U	0.110 J	983
MW-206D	06/17/11	<1.250 U	0.400 J	80	5.65	2.82	1.95	<0.500 U	0.440 J	2.44	<1.250 U	208.15	1.63	<1.250 U	<1.250 U	0.350 J	996
MW-206D	03/27/12	<0.250 U	1.27	68	14.66	1.77	0.630 J	<0.100 U	0.470 J	2.13	<0.250 U	172.15	9.71	<0.250 U	<0.250 U	6.45	624
MW-206D	03/27/12	<0.100 U	<0.100 U	60	9.56	1.65	0.460 J	<0.040 U	0.400 J	1.50	<0.100 U	161.36	1.55	<0.100 U	<0.100 U	0.210 J	631
MW-206D	06/27/14	<0.100 U	<0.100 U	83	2.870 J	2.89	1.17	<0.060 U	1.26	1.39		155.97	0.78			0.270 J	841
MW-207	05/05/09	0.09	0.09	0.58	5.44	2.09	<0.08	<0.20 U	0.98	1.32	<0.05	217.00	0.86	<0.03	1.28	0.35	<1.29 U
MW-207	06/11/09	<0.10	<0.04	0.46	6.03	2.11	<0.10	<0.15	1.09	1.10	<0.04	260.00	1.02	<0.03	1.22	0.49	<0.91
MW-207	09/21/09	<0.10	0.32	1.06	5.76	2.34	<0.10	<0.16	1.05	1.14	<0.04	259.00	1.81	<0.03	1.75	0.56	<0.90
MW-207	03/23/10	0.12	0.17	0.74	3.96	2.36	<0.10	0.15	0.97	1.25	<0.10	213.00	0.93	<0.10	1.32	0.47	1.4
MW-207	07/01/10	<0.2	<0.2	1.93	3.21	2.04	<0.2	<0.2	0.92	1.26	<0.2	229.00	0.97	<0.2	1.23	0.40	<1.0
MW-207	07/01/10	<0.5	<0.5	2.74	8.12	2.07	<0.5	<0.5	1.01	0.96		248.00	1.06	<0.5	1.27	0.62	<2.5
MW-207	04/04/11	<0.2	<0.2	0.58	3.09	1.94	<0.2	<0.2	0.92	1.23	<0.5	232.00	2.03	<0.2	1.11	0.41	<0.5
MW-207	04/04/11	<0.5	<0.5	<1.3	<5.0	2.12	<0.5	<0.5	0.97	0.99		234.00	4.45	<0.5	1.30	0.84	<1.3
MW-207	06/17/11	<0.500 U	<0.500 U	0.330 J	7.76	2.01	0.480 J	<0.200 U	0.87	1.14	<0.500 U	225.20	1.20	0.210 J	1.08	0.430 J	<1.000 U
MW-207	06/17/11	<1.250 U	<1.250 U	<1.250 U	<5.000 U	2.28	0.954 J	0.470 J	1.020 J	0.907 J	<1.250 U	258.52	2.06	<1.250 U	1.217 J	0.631 J	<2.500 U
MW-207	03/29/12	<0.100 U	0.250 J	0.56	12.79	2.23	<0.100 U	<0.040 U	0.93	3.51	<0.100 U	333.46	2.52	<0.100 U	2.06	0.370 J	<0.200 U
MW-207	03/29/12	<0.250 U	1.35	15.82	7.69	2.49	<0.250 U	<0.100 U	1.120 J	1.42	0.340 J	354.19	16.30	<0.250 U	2.47	4.85	<0.500 U
MW-207	08/28/12	0.120 J	<0.100 U	<0.100 U	8.32	2.58	1.30	<0.040 U	1.05	1.12	<0.100 U	242.25	<0.100 U	<0.100 U	1.65	<0.100 U	<0.200 U
MW-207	03/19/13	<0.100 U	0.200 J	0.440 J	2.720 J	2.47	1.05	<0.060 U	1.09	1.51	<0.100 U	191.01	0.82	<0.100 U	1.05	0.460 J	<0.050 U
MW-207	07/30/13	<0.100 U	<0.100 U	0.700 J	4.050 J	2.24	0.84	0.230 J	1.14	1.31	<0.100 U	183.13	0.65	<0.100 U	0.98	0.500 J	0.520 J
MW-207	07/30/13	<0.250 U	1.68	1.090 J	23.16	2.29	1.40	<0.150 U	1.220 J	1.140 J	<0.250 U	187.37	8.61	<0.250 U	0.920 J	3.63	1.220 J
MW-207	03/24/14	<0.100 U	<0.100 U	<0.500 U	3.900 J	1.98	0.500 J	<0.060 U	0.84	1.47	<0.100 U	186.12	0.360 J	<0.100 U	0.85	0.290 J	<0.500 U
MW-207	06/30/14	0.220 J	<0.100 U	<0.500 U	<2.000 U	2.56	0.67	<0.060 U	0.98	2.73		206.57	1.28			0.54	0.790 J

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Old Works WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-205	04/17/09	<0.06	<0.04	0.10	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	2.21	<0.02	0.06	<0.05
MW-205	09/18/09	<0.05	<0.02	0.17	<0.05	0.03	<0.04	<0.05	<0.10	<0.02	2.77	<0.02	<0.05	<0.5
MW-205	09/18/09	<0.05	<0.02	0.17	<0.05	0.03	<0.04	<0.05	<0.10	<0.02	2.74	<0.02	0.08	<0.5
MW-205	04/29/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.26	<0.100 U	<0.100 U	<0.010 U
MW-205	07/14/14													<0.010 U
MW-206	06/08/09	<0.05	<0.02	0.06	<0.05	0.08	<0.04	0.66	<0.10	<0.02	1.81	<0.02	0.36	<0.5
MW-206	07/01/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	1.73	<0.2	0.30	<0.05
MW-206	07/01/10	0.69	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	1.90	<0.5	0.75	
MW-206	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.89	<0.500 U	0.280 J	<0.050 U
MW-206	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.03	<1.250 U	0.310 J	
MW-206	03/27/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.55	<0.100 U	0.120 J	<0.010 U
MW-206	03/27/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.59	<0.250 U	<0.250 U	
MW-206	06/27/14					<0.100 U								<0.010 U
MW-206D	06/08/09	<0.05	<0.02	0.07	<0.05	0.04	<0.04	<0.05	<0.10	<0.02	1.90	<0.02	0.22	<0.05
MW-206D	07/01/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	1.89	<0.2	0.26	<0.05
MW-206D	07/01/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.17	<0.5	<0.5	
MW-206D	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.94	<0.500 U	0.200 J	<0.050 U
MW-206D	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.11	<1.250 U	<1.250 U	
MW-206D	03/27/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.85	<0.250 U	<0.250 U	
MW-206D	03/27/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.76	<0.100 U	0.180 J	0.07
MW-206D	06/27/14					<0.100 U								<0.010 U
MW-207	05/05/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	3.89	<0.02	1.51	<0.5
MW-207	06/11/09	<0.05	<0.02	<0.04	<0.05	0.03	<0.04	<0.05	<0.10	<0.02	4.33	<0.02	1.41	<0.5
MW-207	09/21/09	<0.05	<0.02	<0.04	<0.05	0.02	<0.10	<0.04	<0.10	<0.02	3.85	<0.02	1.74	<0.5
MW-207	03/23/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	3.71	<0.10	1.77	<0.05
MW-207	07/01/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	3.94	<0.2	1.27	<0.05
MW-207	07/01/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	4.32	<0.5	1.42	
MW-207	04/04/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	3.73	<0.2	1.50	<0.05
MW-207	04/04/11	<0.5	<0.5	<1.3	69.80	<0.5	<1.3	<0.5	<1.3	<0.5	4.11	<0.5	1.73	
MW-207	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	4.31	<0.500 U	1.12	<0.050 U
MW-207	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	4.71	<1.250 U	1.211 J	
MW-207	03/29/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.85	<0.100 U	1.45	<0.010 U
MW-207	03/29/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	4.27	<0.250 U	1.64	
MW-207	08/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.73	<0.100 U	1.74	<0.010 U
MW-207	03/19/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.44	<0.100 U	1.84	<0.010 U
MW-207	07/30/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.67	<0.100 U	1.75	<0.010 U
MW-207	07/30/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.97	<0.250 U	1.77	
MW-207	03/24/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.58	<0.100 U	1.34	<0.010 U
MW-207	06/30/14					<0.100 U								<0.010 U

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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	250044	MW-208	06/10/09	13:45	7.60	7.60	270.0	7.64	292.0	41.0	8.1	3.2	1.3	<0.008	<0.001	12.6
DISSOLVED	250044	MW-208	06/30/10	14:34	8.99	6.62	244.0	8.11	239.0	35.6	7.3	2.8	1.2	0.003	<0.001	10.3
TOTAL RECOVERABLE	250044	MW-208	06/30/10	14:34	8.99	6.62	244.0			39.9	7.5	3.0	1.3	0.031	<0.003	
TOTAL RECOVERABLE	250044	MW-208	06/21/11	10:50	7.91	7.81	244.8			34.8	6.9	2.6	1.2	<0.025 U	<0.013 U	
DISSOLVED	250044	MW-208	06/21/11	10:50	7.91	7.81	244.8	7.63	263.8	38.1	7.2	2.9	1.2	0.006	<0.100 U	10.1
TOTAL RECOVERABLE	250044	MW-208	03/27/12	12:21	6.45	7.22	283.0			43.3	8.3	2.9	1.2	0.013 J	<0.005 U	
DISSOLVED	250044	MW-208	03/27/12	12:21	6.45	7.22	283.0	7.62	315.7	42.9	8.2	3.3	1.2	0.007 J	<0.002 U	9.6
DISSOLVED	250044	MW-208	06/23/14	15:49	6.72	6.72	235.0	7.62	230.6	37.7	6.9	2.6	1.3	<0.015 U	<0.002 U	10.1
DISSOLVED	250045	MW-209	06/12/09	11:00	8.16	7.57	573.0	7.67	561.0	87.5	14.8	6.7	2.0	0.010	<0.001	14.6
DISSOLVED	250045	MW-209	06/29/10	15:18	10.00	6.94	470.0	8.15	463.0	72.9	12.9	5.9	1.8	<0.002	<0.001	13.4
TOTAL RECOVERABLE	250045	MW-209	06/29/10	15:18	10.00	6.94	470.0			78.6	12.5	5.5	1.8	0.036	<0.005	
TOTAL RECOVERABLE	250045	MW-209	06/20/11	15:15	8.65	6.80	450.0			72.7	11.5	5.1	1.8	<0.025 U	<0.013 U	
DISSOLVED	250045	MW-209	06/20/11	15:15	8.65	6.80	450.0	7.43	487.3	73.3	12.0	5.7	1.6	0.002	<0.100 U	12.7
TOTAL RECOVERABLE	250045	MW-209	03/13/12	12:02	7.78	8.50	532.0			85.9	14.3	6.2	1.8	0.019 J	<0.005 U	
DISSOLVED	250045	MW-209	03/13/12	12:02	7.78	8.50	532.0	7.31	551.0	83.2	13.7	6.3	1.6	<0.005 U	<0.002 U	13.7
DISSOLVED	250045	MW-209	06/23/14	14:40	8.95	7.46	485.0	7.20	474.4	79.2	14.7	6.7	2.3	<0.015 U	<0.002 U	13.2
DISSOLVED	138022	MW-213	06/08/09	13:30	7.70	6.61	615.0	6.73	614.0	77.4	16.6	6.8	1.9	<0.002	0.447	13.5
DISSOLVED	138022	MW-213	08/28/09	14:50	7.48	6.64	552.0	7.11	570.0	88.6	15.6	7.7	1.8	<0.002	0.058	12.0
DISSOLVED	138022	MW-213	07/01/10	9:47	8.23	6.16	441.0	7.40	455.0	64.4	13.0	6.2	1.6	<0.002	0.103	11.2
TOTAL RECOVERABLE	138022	MW-213	07/01/10	9:47	8.23	6.16	441.0			74.1	13.4	6.8	1.8	0.030	0.105	
DISSOLVED	138022	MW-213	07/26/10	11:10	8.27	6.24	447.0	7.20	372.0	82.0	12.3	5.9	1.6	0.002	0.084	10.9
TOTAL RECOVERABLE	138022	MW-213	07/26/10	11:10	8.27	6.24	447.0			75.6	13.7	6.8	1.9	0.062	0.088	
DISSOLVED	138022	MW-213	06/17/11	13:24	8.24	6.55	473.2	6.96	499.3	67.7	12.6	6.3	1.6	<0.004 U	0.061	10.6
TOTAL RECOVERABLE	138022	MW-213	06/17/11	13:24	8.24	6.55	473.2			65.1	12.8	6.6	1.8	0.047	0.059	
TOTAL RECOVERABLE	138022	MW-213	03/28/12	10:03	7.62	7.05	407.0			62.3	11.4	6.5	1.5	<0.013 U	0.006 J	
DISSOLVED	138022	MW-213	03/28/12	10:03	7.62	7.05	407.0	6.86	447.9	59.1	10.9	6.3	1.5	0.010 J	0.006 J	12.4
DISSOLVED	138022	MW-213	06/26/14	13:05	8.20	6.50	450.0	7.18	444.8	68.6	13.0	6.2	1.7	<0.015 U	0.011 J	10.5
DISSOLVED	250047	MW-240	06/10/09	16:45				7.48	596.0	89.7	16.2	8.7	1.8	<0.002	0.192	15.9
DISSOLVED	250047	MW-240	07/01/10	13:05	11.46	6.62	481.0	7.52	485.0	67.9	11.9	7.4	1.7	<0.002	0.144	14.9
TOTAL RECOVERABLE	250047	MW-240	07/01/10	13:05	11.46	6.62	481.0			85.2	14.0	8.8	1.8	0.032	0.164	
TOTAL RECOVERABLE	250047	MW-240	06/21/11	11:50	10.00	7.35	485.0			71.5	13.3	9.3	1.7	<0.001 U	<0.001 U	
DISSOLVED	250047	MW-240	06/21/11	11:50	10.00	7.35	485.0	7.16	544.3	73.2	13.0	8.8	1.4	0.003	0.149	14.0
TOTAL RECOVERABLE	250047	MW-240	03/29/12	10:46	8.64	8.42	695.0			102.7	21.6	11.7	2.4	<0.013 U	0.195	
DISSOLVED	250047	MW-240	03/29/12	10:46	8.64	8.42	695.0	7.05	745.0	100.2	17.8	9.6	1.9	0.020 J	0.182	15.7
DISSOLVED	250047	MW-240	06/25/14	14:35	9.40	6.65	450.0	7.26	511.2	76.9	13.1	8.3	1.7	<0.015 U	0.146	14.9

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-208	06/10/09	142.5	0.0	22.5	1.9	0.2	0.4	<0.05	<0.06	<0.35	0.72	5.98	25.10	<0.15	<50	<0.11
MW-208	06/30/10	195.2	0.0	14.6	0.9	0.1	0.4	<0.05	<0.2	<2.0	0.70	4.61	22.10	<0.2	<50	<0.2
MW-208	06/30/10								<0.5	8.91	0.58		21.80	<0.5		<0.5
MW-208	06/21/11								<1.250 U	6.90	0.696 J		22.44	<1.250 U		<1.250 U
MW-208	06/21/11	140.0	0.0	10.5	1.1	0.1	0.3	<0.100 U	<0.500 U	18.23	0.71	4.17	22.49	<0.500 U	<50.000 U	<0.500 U
MW-208	03/27/12									8.47	3.14	3.830 J	24.35	<0.250 U		<0.250 U
MW-208	03/27/12	145.3	0.0	15.6	1.9	0.1	0.4	<0.020 U	<0.100 U	13.17	0.70	3.60	24.01	<0.100 U	<10.000 U	<0.100 U
MW-208	06/23/14	142.2	0.0	16.0	0.9	0.1	0.5	<0.020 U	<0.100 U	<2.000 U	0.65	3.73	21.87	<0.100 U	<10.000 U	<0.100 U
MW-209	06/12/09	191.5	0.0	118.9	<5.0	1.8	0.8	<0.5	<0.04	11.90	0.47	11.10	51.90	<0.20	<500	7.99
MW-209	06/29/10	246.2	0.0	80.7	2.5	0.7	0.8	<0.05	<0.2	<2.0	0.37	10.30	41.80	<0.2	<50	6.22
MW-209	06/29/10								<1.0	<10.0	<0.9	12.60	42.70	<1.0		6.40
MW-209	06/20/11								<1.250 U	6.75	<1.250 U		46.79	<1.250 U		5.61
MW-209	06/20/11	199.4	0.0	64.9	3.1	0.7	0.7	<0.100 U	<0.500 U	26.55	0.350 J	10.27	45.05	<0.500 U	<50.000 U	5.71
MW-209	03/13/12								<0.250 U	58.48	1.75	16.48	38.20	<0.250 U		5.70
MW-209	03/13/12	186.9	0.0	105.4	2.5	0.5	0.7	<0.020 U	<0.100 U	<0.400 U	0.440 J	14.51	36.51	<0.100 U	<10.000 U	5.69
MW-209	06/23/14	202.7	0.0	98.8	3.0	0.7	0.8	<0.020 U	<0.100 U	6.240 J	0.280 J	11.57	45.46	<0.100 U	<10.000 U	7.15
MW-213	06/08/09	119.5	0.0	229.8	<5.0	0.9	0.5	<0.5	<0.04	33.40	0.22	18.30	30.60	0.25	<500	21.1
MW-213	08/28/09	160.6	0.0	151.2	<5.0	2.1	0.7	<0.5	<0.04	<7.60	0.21	20.60	20.50	<0.20	<500	8.59
MW-213	07/01/10	206.2	0.0	102.7	1.9	0.6	0.7	<0.05	<0.2	6.92	<0.2	15.20	32.70	<0.2	<50	6.87
MW-213	07/01/10								<0.5	11.50	<0.5		31.90	<0.5		6.87
MW-213	07/26/10	142.5	0.0	133.8	2.0	1.1	0.7	<0.05	<0.2	6.55	<0.2	14.90	28.10	<0.2	<50	7.36
MW-213	07/26/10								<0.5	11.30	<0.5	15.50	28.10	<0.5		6.77
MW-213	06/17/11	176.9	0.0	92.3	2.3	0.8	0.6	<0.100 U	<0.500 U	31.20	0.230 J	14.44	34.53	<0.500 U	<50.000 U	5.04
MW-213	06/17/11								<1.250 U	33.20	<1.250 U		37.89	<1.250 U		4.99
MW-213	03/28/12									23.73	<0.250 U	16.02	36.46	<0.250 U		3.54
MW-213	03/28/12	163.6	0.0	59.3	2.6	0.4	0.7	<0.020 U	<0.100 U	23.97	<0.100 U	18.83	34.64	<0.100 U	<10.000 U	3.72
MW-213	06/26/14	176.2	0.0	108.1	2.5	0.8	0.8	<0.020 U	<0.100 U	<2.000 U	<0.100 U	9.59	24.46	<0.100 U	<10.000 U	3.30
MW-240	06/10/09	214.4	0.0	96.1	7.2	6.4	<0.5	<0.5	<0.04	<7.68	0.72	20.40	71.60	<0.20	<500	0.12
MW-240	07/01/10	258.9	0.0	52.1	7.6	4.2	0.6	<0.05	<0.2	<2.0	0.59	16.70	53.60	<0.2	<50	<0.2
MW-240	07/01/10								<0.5	14.00	0.49		56.20	<0.5		<0.5
MW-240	06/21/11								<1.250 U	5.00	0.554 J		55.41	0.040 J		<1.250 U
MW-240	06/21/11	212.8	0.0	45.5	10.4	4.3	0.5	<0.100 U	<0.500 U	25.35	0.64	17.07	52.12	<0.500 U	<50.000 U	<0.500 U
MW-240	03/29/12									50.82	0.940 J	22.50	75.65	<0.250 U		<0.250 U
MW-240	03/29/12	198.6	0.0	162.8	15.4	3.6	0.5	<0.020 U	<0.100 U	39.01	0.63	20.54	71.92	<0.100 U	<10.000 U	<0.100 U
MW-240	06/25/14	227.5	0.0	60.9	11.8	7.7	0.5	<0.020 U	<0.100 U	<2.000 U	0.61	12.59	54.62	<0.100 U	<10.000 U	<0.100 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-208	06/10/09	<0.13	<0.12	0.42	5.86	3.07	<0.08	<0.05	1.04	0.29	<0.05	97.60	<0.32	<0.03	0.64	0.40	<0.48
MW-208	06/30/10	<0.2	<0.2	<0.5	4.14	3.42	<0.2	<0.2	0.89	<0.2	<0.2	86.70	<0.2	<0.2	0.66	0.40	<1.0
MW-208	06/30/10	<0.5	<0.5	<1.3	7.06	3.35	<0.5	<0.5	0.88	<0.5		81.00	<0.5	<0.5	0.60	0.52	<2.5
MW-208	06/21/11	<1.250 U	<1.250 U	<1.250 U	<5.000 U	3.65	0.501 J	0.240 J	0.934 J	<1.250 U	<1.250 U	80.69	0.580 J	<1.250 U	0.529 J	0.549 J	<2.500 U
MW-208	06/21/11	<0.500 U	<0.500 U	<0.500 U	8.45	3.39	<0.500 U	<0.200 U	0.86	0.110 J	<0.500 U	79.60	0.100 J	<0.500 U	0.490 J	0.400 J	<1.000 U
MW-208	03/27/12	<0.250 U	1.38	0.730 J	7.25	3.16	<0.250 U	<0.100 U	0.570 J	0.930 J	<0.250 U	100.20	14.27	<0.250 U	0.940 J	6.68	<0.500 U
MW-208	03/27/12	<0.100 U	0.120 J	0.51	7.78	2.67	<0.100 U	<0.040 U	0.53	0.54	<0.100 U	95.44	<0.100 U	<0.100 U	0.85	0.320 J	0.680 J
MW-208	06/23/14	<0.100 U	<0.100 U	<0.500 U	3.220 J	4.02	<0.100 U	<0.060 U	0.91	<0.100 U		81.95	<0.100 U			0.320 J	<0.500 U
MW-209	06/12/09	0.12	0.13	0.56	10.40	1.65	0.49	<0.15	0.35	0.87	<0.04	195.00	1.78	<0.03	0.22	0.39	1,168
MW-209	06/29/10	<0.2	<0.2	<0.5	7.27	1.70	<0.2	<0.2	0.31	0.40	<0.2	163.00	0.72	<0.2	<0.2	0.35	951
MW-209	06/29/10	<0.9	<1.0	<2.5	<10.0	1.92	<0.9	<1.0	<1.0	<0.9		165.00	<1.0	<1.0	<1.0	<1.0	936
MW-209	06/20/11	<1.250 U	0.516 J	<1.250 U	8.83	1.98	1.38	<0.500 U	<1.250 U	<1.250 U	<1.250 U	164.14	1.62	<1.250 U	<1.250 U	<1.250 U	763
MW-209	06/20/11	<0.500 U	<0.500 U	<0.500 U	12.42	1.68	0.80	<0.200 U	0.280 J	0.410 J	<0.500 U	142.83	1.01	<0.500 U	0.130 J	0.340 J	805
MW-209	03/13/12	<0.250 U	1.36	0.560 J	14.05	1.43	0.630 J	<0.100 U	0.520 J	<0.250 U	0.340 J	166.55	9.11	<0.250 U	1.130 J	4.98	601
MW-209	03/13/12	<0.100 U	<0.100 U	0.350 J	9.17	1.26	0.440 J	<0.040 U	0.250 J	<0.100 U	<0.100 U	158.75	1.96	<0.100 U	2.19	0.260 J	648
MW-209	06/23/14	<0.100 U	<0.100 U	<0.500 U	9.890 J	2.52	0.460 J	<0.060 U	0.340 J	0.440 J		187.57	1.13			0.240 J	896
MW-213	06/08/09	7.51	0.07	4,574	15.50	1.84	6.90	<0.15	0.35	0.96	<0.04	218.00	3.63	0.09	3.63	<0.10	12,780
MW-213	08/28/09	0.97	0.11	1,295	9.45	1.77	2.07	<0.16	0.35	0.92	<0.04	189.00	1.60	0.07	0.72	<0.10	3,873
MW-213	07/01/10	1.60	<0.2	1,306	8.23	1.83	1.67	<0.2	0.30	0.62	<0.2	164.00	0.92	<0.2	0.26	<0.2	3,212
MW-213	07/01/10	1.55	<0.5	1,422	12.20	1.81	1.87	<0.5	<0.5	0.51		156.00	0.87	<0.5	<0.5	<0.5	3,391
MW-213	07/26/10	1.30	<0.2	1,229	8.98	1.64	1.76	<0.2	0.29	0.53	<0.2	156.00	0.77	<0.2	0.34	<0.2	3,260
MW-213	07/26/10	1.33	0.87	1,373	12.80	1.76	2.39	<0.5	<0.5	0.51		163.00	1.03	<0.5	<0.5	<0.5	2,821
MW-213	06/17/11	0.83	<0.500 U	1,013	9.25	1.97	2.59	<0.200 U	0.320 J	0.64	<0.500 U	150.63	1.45	0.140 J	0.230 J	<0.500 U	2,029
MW-213	06/17/11	0.910 J	0.300 J	1,006	9.46	2.27	2.61	<0.500 U	29.60	0.620 J	<1.250 U	166.24	1.98	<1.250 U	0.260 J	<1.250 U	1,948
MW-213	03/28/12	<0.250 U	1.090 J	867	11.54	1.34	1.43	<0.100 U	0.310 J	0.890 J	<0.250 U	145.57	10.04	<0.250 U	<0.250 U	5.27	1,288
MW-213	03/28/12	<0.100 U	<0.100 U	836	13.44	1.13	2.14	<0.040 U	0.120 J	0.64	<0.100 U	145.14	2.04	<0.100 U	<0.100 U	<0.100 U	1,351
MW-213	06/26/14	0.290 J	<0.100 U	576	3.460 J	2.79	1.36	<0.060 U	0.67	0.56		147.17	1.66			<0.100 U	942
MW-240	06/10/09	0.14	<0.04	0.83	8.59	2.41	<0.10	<0.15	0.78	2.96	<0.04	254.00	1.06	0.08	0.83	0.46	<0.91
MW-240	07/01/10	<0.2	<0.2	2.90	5.40	2.06	<0.2	<0.2	0.71	1.55	<0.2	187.00	0.49	<0.2	0.54	0.40	<1.0
MW-240	07/01/10	<0.5	<0.5	3.57	10.10	2.08	<0.5	<0.5	0.76	1.22		196.00	0.89	<0.5	0.52	0.56	<2.5
MW-240	06/21/11	<1.250 U	<1.250 U	<5.000 U	6.98	2.19	1.02	<1.250 U	0.712 J	1.49	<1.250 U	208.75	1.240 J	<1.250 U	<1.250 U	0.525 J	<2.500 U
MW-240	06/21/11	0.120 J	<0.500 U	<0.500 U	9.71	1.88	0.200 J	<0.200 U	0.63	1.76	<0.500 U	180.23	0.75	0.220 J	0.420 J	0.390 J	<1.000 U
MW-240	03/29/12	<0.250 U	1.36	4.42	10.26	1.73	0.350 J	<0.100 U	0.800 J	1.37	0.280 J	271.95	14.70	<0.250 U	0.840 J	4.36	<0.500 U
MW-240	03/29/12	<0.100 U	<0.100 U	0.59	14.06	1.49	<0.100 U	<0.040 U	0.63	2.98	<0.100 U	252.82	1.81	<0.100 U	0.68	0.310 J	<0.200 U
MW-240	06/25/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	2.20	0.71	<0.060 U	0.78	2.67		187.68	1.02			0.52	0.710 J

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-208	06/10/09	<0.05	<0.05	0.07	<0.07	<0.03	<0.03	<0.07	<0.10	<0.02	1.84	<0.02	0.17	<0.05
MW-208	06/30/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	1.75	<0.2	0.26	<0.05
MW-208	06/30/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	1.74	<0.5	<0.5	
MW-208	06/21/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	1.83	<1.250 U	<1.250 U	
MW-208	06/21/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.77	<0.500 U	0.160 J	<0.050 U
MW-208	03/27/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.49	<0.250 U	<0.250 U	
MW-208	03/27/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.46	<0.100 U	0.160 J	<0.010 U
MW-208	06/23/14					<0.100 U								<0.010 U
MW-209	06/12/09	<0.05	<0.02	<0.04	<0.05	0.05	<0.04	<0.05	<0.10	<0.02	2.97	<0.02	0.07	<0.5
MW-209	06/29/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	2.71	<0.2	<0.2	<0.05
MW-209	06/29/10	<0.9	<1.0	<2.5	<0.9	<1.0	<0.9	<1.0	<2.5	<1.0	2.78	<1.0	<1.0	
MW-209	06/20/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.76	<1.250 U	<1.250 U	
MW-209	06/20/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.51	<0.500 U	<0.500 U	<0.050 U
MW-209	03/13/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.42	<0.250 U	<0.250 U	
MW-209	03/13/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.09	<0.100 U	<0.100 U	<0.010 U
MW-209	06/23/14					<0.100 U								<0.010 U
MW-213	06/08/09	<0.05	1.57	0.17	<0.05	2.11	<0.04	1.35	0.18	0.35	3.51	<0.02	<0.05	<0.5
MW-213	08/28/09	<0.05	0.18	0.13	<0.05	0.67	0.04	0.48	0.11	0.13	2.94	<0.02	<0.05	<0.5
MW-213	07/01/10	<0.2	<0.2	<0.5	<0.2	0.67	<0.2	0.56	<0.5	<0.2	2.82	<0.2	<0.2	<0.05
MW-213	07/01/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.81	<0.5	<0.5	
MW-213	07/26/10	<0.2	<0.2	<0.5	<0.2	0.44	<0.2	0.33	<0.5	<0.2	2.74	<0.2	<0.2	<0.05
MW-213	07/26/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.72	<0.5	<0.5	
MW-213	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.390 J	<0.500 U	<0.500 U	0.140 J	<0.500 U	2.62	<0.500 U	<0.500 U	<0.050 U
MW-213	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.370 J	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.85	<1.250 U	<1.250 U	
MW-213	03/28/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.13	<0.250 U	<0.250 U	
MW-213	03/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.240 J	<0.100 U	0.190 J	<0.100 U	<0.100 U	2.19	<0.100 U	<0.100 U	<0.010 U
MW-213	06/26/14					<0.100 U								<0.010 U
MW-240	06/10/09	<0.05	<0.02	<0.04	<0.05	0.04	<0.04	<0.05	<0.10	<0.02	3.34	<0.02	1.04	1.49
MW-240	07/01/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	2.81	<0.2	0.97	<0.05
MW-240	07/01/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	3.03	<0.5	0.99	
MW-240	06/21/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<5.000 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.90	<1.250 U	<5.000 U	
MW-240	06/21/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.64	<0.500 U	0.78	<0.050 U
MW-240	03/29/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.22	<0.250 U	0.680 J	
MW-240	03/29/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.86	<0.100 U	0.57	0.76
MW-240	06/25/14					<0.100 U								0.06

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	250048	MW-241	06/10/09	15:40	8.00	7.01	355.0	7.09	336.0	46.9	10.4	5.9	1.5	<0.008	<0.001	13.8
DISSOLVED	250048	MW-241	06/30/10	13:38	9.25	6.33	333.0	8.15	338.0	48.5	10.4	5.9	1.6	<0.002	<0.001	11.2
TOTAL RECOVERABLE	250048	MW-241	06/30/10	13:38	9.25	6.33	333.0			55.9	11.1	6.5	1.7	0.032	<0.003	
TOTAL RECOVERABLE	250048	MW-241	06/20/11	16:05	9.10	6.74	365.6			48.8	10.8	5.7	1.7	<0.025 U	<0.013 U	
DISSOLVED	250048	MW-241	06/20/11	16:05	9.10	6.74	365.6	7.18	397.5	53.4	11.1	6.2	1.6	0.001 J	<0.100 U	10.5
DISSOLVED	250048	MW-241	03/29/12	12:03	8.40	6.70	361.0	6.87	397.3	45.5	9.1	5.2	1.4	0.013 J	<0.002 U	13.2
DISSOLVED	250048	MW-241	03/29/12	12:03	8.40	6.70	361.0	6.86	413.3	48.0	9.6	5.2	1.5	0.014 J	<0.002 U	13.2
TOTAL RECOVERABLE	250048	MW-241	03/29/12	12:03	8.40	6.70	361.0			50.5	12.0	6.8	1.9	0.028 J	<0.005 U	
TOTAL RECOVERABLE	250048	MW-241	03/29/12	12:03	8.40	6.70	361.0			50.7	12.0	7.2	1.9	0.026 J	<0.005 U	
DISSOLVED	250048	MW-241	03/19/14	14:25	8.30	6.89	340.0	7.17	353.5	44.2	9.1	4.9	1.3	<0.015 U	<0.002 U	11.3
DISSOLVED	250048	MW-241	06/26/14	11:45	8.40	6.55	310.0	7.28	302.5	44.3	8.6	4.9	1.4	<0.015 U	<0.002 U	11.2
DISSOLVED	250048	MW-241	06/26/14	11:50	8.40	6.55	310.0	7.31	298.1	44.2	9.6	5.2	1.7	<0.015 U	<0.002 U	11.2
DISSOLVED	250049	MW-242	06/09/09	16:35	8.80	7.43	435.0	7.55	417.0	61.8	11.7	6.4	1.6	<0.008	0.001	14.1
DISSOLVED	250049	MW-242	06/29/10	13:29	9.51	6.53	378.0	8.33	371.0	55.9	11.3	6.4	1.7	<0.002	<0.001	11.6
TOTAL RECOVERABLE	250049	MW-242	06/29/10	13:29	9.51	6.53	378.0			67.9	11.9	7.0	1.8	0.048	<0.003	
TOTAL RECOVERABLE	250049	MW-242	06/17/11	11:15	8.37	6.90	396.4			62.6	11.5	6.5	1.7	<0.025 U	<0.013 U	
DISSOLVED	250049	MW-242	06/17/11	11:15	8.37	6.90	396.4	7.42	397.9	62.7	11.6	6.2	1.6	0.001 J	<0.100 U	11.6
TOTAL RECOVERABLE	250049	MW-242	06/17/11	11:16	8.37	6.90	396.4			62.2	11.3	6.4	1.7	<0.025 U	<0.013 U	
DISSOLVED	250049	MW-242	06/17/11	11:16	8.37	6.90	396.4	7.43	405.0	61.2	11.4	6.5	1.6	<0.002 U	<0.100 U	11.4
DISSOLVED	250049	MW-242	03/30/12	0:00	8.35	7.26	429.0	7.47	468.5	63.5	11.5	6.1	1.6	0.014 J	<0.002 U	13.0
TOTAL RECOVERABLE	250049	MW-242	03/30/12	0:00	8.35	7.26	429.0			63.4	13.7	7.5	2.0	<0.013 U	<0.005 U	
DISSOLVED	250049	MW-242	06/24/14	14:55	9.50	6.99	315.0	7.58	348.2	57.4	10.2	5.1	1.7	<0.015 U	<0.002 U	12.3
DISSOLVED	250014	MW-251	06/12/09	0:00		7.68	593.0	7.62	577.0	92.1	15.1	6.7	2.0	0.105	0.002	15.5
DISSOLVED	250014	MW-251	09/23/09	11:36	9.39	7.16	488.6	7.42	500.0	74.5	11.8	5.7	1.7	0.007	0.001	12.7
DISSOLVED	250014	MW-251	03/19/10	12:33	7.87	6.86	479.0	7.80	474.0	73.0	11.9	5.5	1.6	0.002	0.001	11.5
DISSOLVED	250014	MW-251	06/30/10	12:59	9.19	6.43	456.0	8.01	411.0	71.3	12.1	5.7	1.7	<0.002	<0.001	12.9
TOTAL RECOVERABLE	250014	MW-251	06/30/10	12:59	9.19	6.43	456.0			90.8	13.4	6.3	2.0	0.131	<0.003	
DISSOLVED	250014	MW-251	03/31/11	14:41	8.59	7.18	469.0	7.40	480.0	76.5	12.0	6.2	1.6	0.003	<0.001	12.6
TOTAL RECOVERABLE	250014	MW-251	03/31/11	14:41	8.59	7.18	469.0			74.3	11.8	5.9	1.6	0.101	<0.003	
DISSOLVED	250014	MW-251	06/20/11	14:15	9.23	6.61	443.7	7.42	477.9	69.6	11.2	5.7	1.5	0.001 J	<0.100 U	12.5
TOTAL RECOVERABLE	250014	MW-251	06/20/11	14:15	9.23	6.61	443.7			67.9	11.3	5.4	1.8	<0.025 U	<0.013 U	
TOTAL RECOVERABLE	250014	MW-251	03/13/12	11:03	7.93	8.31	549.0			88.0	14.4	5.5	1.8	0.030 J	<0.005 U	
DISSOLVED	250014	MW-251	03/13/12	11:03	7.93	8.31	549.0	7.28	598.0	86.0	13.9	6.2	1.6	<0.005 U	<0.002 U	13.2
DISSOLVED	250014	MW-251	09/13/12	15:37	9.67	7.23	466.3	7.26	432.8	72.8	12.3	5.7	1.7	<0.015 U	<0.002 U	14.0
DISSOLVED	250014	MW-251	03/19/13	15:18	8.23	7.73	432.8	7.14	441.4	67.0	10.9	5.2	1.5	<0.015 U	<0.002 U	12.7
DISSOLVED	250014	MW-251	07/30/13	13:04	11.43	6.58	455.0	7.03	466.4	65.1	10.9	5.7	1.6	<0.015 U	<0.002 U	13.7
TOTAL RECOVERABLE	250014	MW-251	07/30/13	13:04	11.43	6.58	455.0			69.6	11.5	5.7	1.9	0.050 J	<0.005 U	
DISSOLVED	250014	MW-251	03/24/14	15:10	8.30	7.18	420.0	7.42	438.7	70.1	11.2	5.2	1.5	0.029 J	<0.002 U	12.9
DISSOLVED	250014	MW-251	06/23/14	13:42	9.37	7.38	445.0	6.69	461.0	77.9	14.1	6.6	2.0	<0.015 U	<0.002 U	12.9

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Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-241	06/10/09	152.3	0.0	51.4	3.5	0.4	0.5	<0.05	<0.06	5.03	0.39	11.60	31.40	<0.15	<50	3.20
MW-241	06/30/10	220.6	0.0	36.3	4.0	0.4	0.7	<0.05	<0.2	<2.0	0.35	10.70	42.60	<0.2	<50	3.24
MW-241	06/30/10								<0.5	7.44	<0.5		42.40	<0.5		3.23
MW-241	06/20/11								<1.250 U	8.81	<1.250 U		41.17	<1.250 U		3.07
MW-241	06/20/11	161.2	0.0	43.9	6.3	0.5	0.5	<0.100 U	<0.500 U	0.431 J	0.450 J	12.08	41.02	<0.500 U	<50.000 U	3.18
MW-241	03/29/12	141.1	0.0	52.4	3.0	0.4	0.6	<0.020 U	<0.100 U	<0.400 U	0.370 J	12.83	32.56	<0.100 U	<10.000 U	5.22
MW-241	03/29/12	140.5	0.0	50.6	2.9	0.4	0.6	<0.020 U	<0.100 U	12.25	0.350 J	12.50	33.86	<0.100 U	<10.000 U	5.06
MW-241	03/29/12									37.21	0.680 J	13.79	37.08	<0.250 U		5.44
MW-241	03/29/12									46.63	0.620 J	13.81	37.45	<0.250 U		5.37
MW-241	03/19/14	172.5	0.0	40.0	2.9	0.8	0.6	<0.020 U	<0.100 U	<2.000 U	0.360 J	6.01	38.60	<0.100 U	<10.000 U	3.32
MW-241	06/26/14	150.9	0.0	42.1	2.8	0.4	0.7	<0.020 U	<0.100 U	<2.000 U	0.360 J	5.81	36.54	<0.100 U	<10.000 U	3.27
MW-241	06/26/14	150.9	0.0	42.3	2.8	0.4	0.7	<0.020 U	<0.100 U	<2.000 U	0.360 J	5.45	36.64	<0.100 U	<10.000 U	3.23
MW-242	06/09/09	195.2	0.0	67.6	4.2	0.5	0.5	<0.05	<0.06	<0.35	0.47	11.80	49.80	<0.15	<50	0.30
MW-242	06/29/10	239.4	0.0	33.3	2.7	0.3	0.6	<0.05	<0.2	<2.0	0.46	11.80	49.00	<0.2	<50	0.24
MW-242	06/29/10								<0.5	30.70	<0.5		49.60	<0.5		<0.5
MW-242	06/17/11								<1.250 U	77.02	0.833 J		52.20	<1.250 U		0.582 J
MW-242	06/17/11	199.2	0.0	36.6	4.7	0.4	0.5	<0.100 U	<0.500 U	19.76	0.470 J	12.57	51.52	<0.500 U	<50.000 U	0.250 J
MW-242	06/17/11								<1.250 U	10.11	0.833 J		52.20	<1.250 U		<1.250 U
MW-242	06/17/11	200.0	0.0	37.8	4.9	0.4	0.5	<0.100 U	<0.500 U	20.00	0.410 J	11.02	49.33	<0.500 U	<50.000 U	0.230 J
MW-242	03/30/12	187.1	0.0	49.2	2.9	0.4	0.5	<0.020 U	<0.100 U	24.88	0.500 J	14.33	52.89	<0.100 U	<10.000 U	0.450 J
MW-242	03/30/12									39.02	0.860 J	14.97	54.65	<0.250 U		0.430 J
MW-242	06/24/14	195.3	0.0	35.8	3.1	0.3	0.6	<0.020 U	<0.100 U	<2.000 U	0.380 J	7.61	45.64	<0.100 U	<10.000 U	0.390 J
MW-251	06/12/09	195.5	0.0	133.1	<5.0	1.6	0.9	<0.5	<0.04	111.00	0.56	11.00	58.10	<0.20	<500	0.67
MW-251	09/23/09	178.1	0.0	110.5	3.1	1.2	0.8	<0.05	<0.13	45.83	0.46	9.82	51.10	<0.14	<50	<0.09
MW-251	03/19/10	198.4	0.0	94.4	2.2	0.7	0.9	<0.05	<0.10	3.55	0.48	7.80	49.10	<0.10	<50	<0.10
MW-251	06/30/10	217.2	0.0	74.2	2.3	0.5	0.9	<0.05	<0.2	<2.0	0.42	10.40	46.30	<0.2	<50	<0.2
MW-251	06/30/10								<0.5	103.00	<0.5		48.00	<0.5		<0.5
MW-251	03/31/11	191.6	0.0	80.0	2.3	0.6	0.8	<0.1	<0.2	<2.0	0.48	9.70	45.70	<0.2	<50	<0.2
MW-251	03/31/11								<0.5	67.60	<0.5	10.40	46.00	<0.5		<0.5
MW-251	06/20/11	202.7	0.0	60.9	2.9	0.6	0.8	<0.100 U	<0.500 U	35.95	0.450 J	10.32	42.62	<0.500 U	<50.000 U	0.220 J
MW-251	06/20/11								<1.250 U	24.06	0.495 J		46.07	<1.250 U		<1.250 U
MW-251	03/13/12								<0.250 U	58.42	1.86	13.60	52.21	<0.250 U		0.320 J
MW-251	03/13/12	178.1	0.0	121.1	2.4	0.6	0.8	<0.020 U	<0.100 U	26.70	0.54	10.88	50.25	<0.100 U	<10.000 U	0.330 J
MW-251	09/13/12	197.7	0.0	66.1	2.5	0.4	0.8	<0.020 U	<0.100 U	1.640 J	0.450 J	13.38	39.77	<0.100 U	<10.000 U	1.07
MW-251	03/19/13	193.2	0.0	55.6	2.4	0.4	0.9	<0.020 U	<0.100 U	1.730 J	0.450 J	12.17	40.50	<0.100 U	<10.000 U	<0.100 U
MW-251	07/30/13	203.1	0.0	56.5	2.6	3.5	0.9	0.030 J	<0.100 U	2.97	0.490 J	10.35	38.58	<0.100 U	<10.000 U	1.06
MW-251	07/30/13									60.29	0.630 J	19.72	38.88	<0.250 U		0.980 J
MW-251	03/24/14	213.8	0.0	52.8	2.4	0.7	0.9	<0.020 U	<0.100 U	2.200 J	0.44	7.89	42.34	<0.100 U	<10.000 U	<0.100 U
MW-251	06/23/14	203.7	0.0	88.7	2.9	0.8	0.9	<0.020 U	<0.100 U	8.350 J	0.42	14.56	42.00	<0.100 U	<10.000 U	0.92

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-241	06/10/09	<0.13	<0.12	169	6.37	2.26	0.82	<0.05	0.35	0.39	<0.05	119.00	0.58	0.04	<0.01	0.20	957
MW-241	06/30/10	<0.2	<0.2	183	5.11	2.44	0.72	<0.2	0.32	0.30	<0.2	129.00	0.34	<0.2	<0.2	0.22	952
MW-241	06/30/10	<0.5	<0.5	182	8.54	2.39	0.95	<0.5	<0.5	<0.5		124.00	<0.5	<0.5	<0.5	<0.5	1,004
MW-241	06/20/11	<1.250 U	<1.250 U	184	5.00	2.95	1.63	<0.500 U	<1.250 U	<1.250 U	<1.250 U	137.46	1.172 J	<1.250 U	<1.250 U	<1.250 U	763
MW-241	06/20/11	<0.500 U	<0.500 U	185	7.28	2.79	1.14	<0.200 U	0.300 J	0.480 J	<0.500 U	126.25	0.63	0.110 J	<0.500 U	0.100 J	850
MW-241	03/29/12	<0.100 U	0.110 J	245	16.20	1.13	2.09	<0.040 U	0.120 J	0.76	<0.100 U	117.04	0.52	<0.100 U	<0.100 U	<0.100 U	1,949
MW-241	03/29/12	<0.100 U	0.150 J	250	16.49	1.10	2.06	<0.040 U	0.120 J	0.71	<0.100 U	118.68	0.54	<0.100 U	<0.100 U	<0.100 U	1,974
MW-241	03/29/12	<0.250 U	1.27	263	10.92	1.31	2.45	<0.100 U	0.380 J	<0.250 U	0.290 J	132.78	13.99	<0.250 U	<0.250 U	5.69	1,969
MW-241	03/29/12	<0.250 U	1.32	266	10.31	1.29	2.38	<0.100 U	0.360 J	<0.250 U	0.300 J	133.04	14.51	<0.250 U	<0.250 U	5.78	1,971
MW-241	03/19/14	<0.100 U	<0.100 U	179	4.640 J	2.17	1.25	<0.060 U	0.280 J	0.350 J	<0.100 U	107.57	0.250 J	<0.100 U	<0.100 U	<0.100 U	973
MW-241	06/26/14	<0.100 U	<0.100 U	179	2.030 J	2.43	1.40	<0.060 U	0.320 J	0.260 J		105.97	0.65			0.240 J	933
MW-241	06/26/14	<0.100 U	<0.100 U	178	<2.000 U	2.77	1.27	<0.060 U	0.330 J	0.270 J		105.07	0.62			0.250 J	932
MW-242	06/09/09	<0.13	<0.12	<0.33	7.88	2.72	<0.08	<0.05	0.53	0.40	<0.05	139.00	0.63	<0.03	0.25	0.33	47
MW-242	06/29/10	<0.2	<0.2	<0.5	6.61	2.98	<0.2	<0.2	0.51	0.25	<0.2	135.00	0.34	<0.2	0.21	0.38	36
MW-242	06/29/10	<0.5	<0.5	<1.3	7.87	3.03	<0.5	<0.5	0.55	<0.5		131.00	1.48	<0.5	<0.5	0.56	36
MW-242	06/17/11	<1.250 U	0.780 J	1.70	7.69	3.22	1.30	<0.500 U	0.748 J	0.486 J	<1.250 U	144.53	3.66	<1.250 U	<1.250 U	0.810 J	36
MW-242	06/17/11	<0.500 U	<0.500 U	<0.500 U	10.79	2.80	0.130 J	<0.200 U	0.51	0.370 J	<0.500 U	132.59	0.63	0.160 J	0.200 J	0.400 J	41
MW-242	06/17/11	<1.250 U	0.527 J	<1.250 U	8.54	3.00	0.820 J	<0.500 U	0.571 J	<1.250 U	<1.250 U	144.38	1.201 J	<1.250 U	<1.250 U	0.559 J	35
MW-242	06/17/11	0.120 J	<0.500 U	<0.500 U	10.50	2.69	0.120 J	<0.200 U	0.430 J	0.310 J	<0.500 U	128.51	0.58	0.140 J	0.190 J	0.370 J	38
MW-242	03/30/12	<0.100 U	0.150 J	0.98	15.88	2.12	<0.100 U	<0.040 U	0.460 J	0.92	<0.100 U	141.07	1.10	<0.100 U	0.120 J	0.300 J	68
MW-242	03/30/12	<0.250 U	1.33	13.18	8.99	2.38	0.260 J	<0.100 U	0.610 J	0.280 J	0.310 J	149.62	13.98	<0.250 U	0.280 J	5.08	65
MW-242	06/24/14	<0.100 U	<0.100 U	<0.500 U	7.180 J	2.93	<0.100 U	<0.060 U	0.59	0.230 J		121.43	0.270 J			0.290 J	51
MW-251	06/12/09	<0.10	0.22	0.52	12.70	1.49	<0.10	<0.15	0.62	0.72	<0.04	198.00	7.28	<0.03	0.31	0.56	82
MW-251	09/23/09	0.34	0.15	0.53	11.80	1.38	<0.23	<0.11	0.33	0.47	<0.10	168.00	1.13	<0.07	0.23	0.34	4.1
MW-251	03/19/10	<0.10	11.00	0.33	10.50	1.42	<0.10	<0.10	0.30	0.47	<0.10	171.00	0.94	<0.10	0.21	0.37	2.9
MW-251	06/30/10	<0.2	<0.2	<0.5	9.55	1.41	<0.2	<0.2	0.34	0.37	<0.2	153.00	0.70	<0.2	0.21	0.35	11
MW-251	06/30/10	<0.5	<0.5	<1.3	14.30	1.48	<0.5	<0.5	<0.5	<0.5		153.00	5.17	<0.5	<0.5	0.65	11
MW-251	03/31/11	<0.2	<0.2	<0.5	7.71	1.32	<0.2	<0.2	0.30	0.44	<0.5	158.00	1.05	<0.2	<0.2	0.30	3.9
MW-251	03/31/11	<0.5	<0.5	<1.3	10.10	1.41	<0.5	<0.5	<0.5	<0.5		156.00	4.34	<0.5	<0.5	0.73	2.0
MW-251	06/20/11	<0.500 U	<0.500 U	<0.500 U	15.21	1.46	0.120 J	<0.200 U	0.310 J	0.380 J	<0.500 U	133.08	1.01	0.110 J	0.170 J	0.350 J	23
MW-251	06/20/11	<1.250 U	0.607 J	<1.250 U	11.45	1.72	0.810 J	<0.500 U	<1.250 U	<1.250 U	<1.250 U	157.31	2.17	<1.250 U	<1.250 U	0.527 J	20
MW-251	03/13/12	<0.250 U	1.29	0.590 J	15.74	1.32	<0.250 U	<0.100 U	0.570 J	<0.250 U	0.330 J	178.79	9.99	<0.250 U	0.260 J	4.56	38
MW-251	03/13/12	<0.100 U	<0.100 U	3.78	10.24	1.17	<0.100 U	<0.040 U	0.280 J	<0.100 U	<0.100 U	171.76	2.08	<0.100 U	0.430 J	0.290 J	40
MW-251	09/13/12	<0.100 U	<0.100 U	0.300 J	8.43	1.44	1.07	<0.040 U	0.480 J	0.340 J	<0.100 U	141.58	0.77	<0.100 U	0.190 J	0.370 J	143
MW-251	03/19/13	<0.100 U	<0.100 U	2.39	9.33	1.60	1.08	<0.060 U	0.340 J	0.330 J	<0.100 U	138.07	0.63	<0.100 U	<0.100 U	0.380 J	6.0
MW-251	07/30/13	<0.100 U	<0.100 U	<0.040 U	8.71	1.55	0.91	<0.060 U	0.54	0.230 J	<0.100 U	135.99	0.68	<0.100 U	0.200 J	0.420 J	119
MW-251	07/30/13	<0.250 U	1.41	<0.100 U	24.61	1.56	1.25	<0.150 U	0.750 J	<0.250 U	<0.250 U	134.82	11.00	<0.250 U	<0.250 U	3.46	125
MW-251	03/24/14	<0.100 U	<0.100 U	<0.500 U	9.690 J	1.54	0.450 J	<0.060 U	0.310 J	0.340 J	<0.100 U	137.20	0.390 J	<0.100 U	<0.100 U	0.260 J	4.1
MW-251	06/23/14	<0.100 U	<0.100 U	<0.500 U	10.92	2.62	<0.100 U	<0.060 U	0.440 J	0.480 J		183.92	1.17			0.330 J	109

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-241	06/10/09	<0.05	<0.05	0.08	<0.07	0.06	<0.03	<0.07	<0.10	<0.02	2.19	<0.02	<0.07	<0.05
MW-241	06/30/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	2.50	<0.2	<0.2	<0.05
MW-241	06/30/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.52	<0.5	<0.5	
MW-241	06/20/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.52	<1.250 U	<1.250 U	
MW-241	06/20/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.44	<0.500 U	<0.500 U	<0.050 U
MW-241	03/29/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.22	<0.100 U	<0.100 U	<0.010 U
MW-241	03/29/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.12	<0.100 U	<0.100 U	<0.010 U
MW-241	03/29/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.58	<0.250 U	<0.250 U	
MW-241	03/29/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.59	<0.250 U	<0.250 U	
MW-241	03/19/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.09	<0.100 U	<0.100 U	<0.010 U
MW-241	06/26/14					<0.100 U								<0.010 U
MW-241	06/26/14					<0.100 U								<0.010 U
MW-242	06/09/09	<0.05	<0.05	<0.04	<0.07	<0.03	<0.03	<0.07	<0.10	<0.02	2.35	<0.02	0.10	<0.05
MW-242	06/29/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	2.52	<0.2	<0.2	<0.05
MW-242	06/29/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.63	<0.5	<0.5	
MW-242	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.69	<1.250 U	<1.250 U	
MW-242	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.44	<0.500 U	<0.500 U	<0.050 U
MW-242	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.58	<1.250 U	<1.250 U	
MW-242	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.43	<0.500 U	<0.500 U	<0.050 U
MW-242	03/30/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.11	<0.100 U	<0.100 U	<0.010 U
MW-242	03/30/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.41	<0.250 U	<0.250 U	
MW-242	06/24/14					<0.100 U								<0.010 U
MW-251	06/12/09	<0.05	0.15	0.05	<0.05	0.09	<0.04	0.09	<0.10	0.02	3.34	0.03	0.09	<0.5
MW-251	09/23/09	<0.11	<0.05	<0.06	<0.11	<0.05	<0.24	<0.09	<0.13	<0.10	2.60	<0.06	<0.14	<0.05
MW-251	03/19/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	2.57	<0.10	<0.10	<0.05
MW-251	06/30/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	2.50	<0.2	<0.2	<0.05
MW-251	06/30/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	2.85	<0.5	<0.5	
MW-251	03/31/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	2.38	<0.2	<0.2	<0.05
MW-251	03/31/11	<0.5	<0.5	<1.3	65.60	<0.5	<1.3	<0.5	<1.3	<0.5	2.75	<0.5	<0.5	
MW-251	06/20/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.42	<0.500 U	<0.500 U	<0.050 U
MW-251	06/20/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.65	<1.250 U	<1.250 U	
MW-251	03/13/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.45	<0.250 U	<0.250 U	
MW-251	03/13/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.07	<0.100 U	<0.100 U	<0.010 U
MW-251	09/13/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.38	<0.100 U	<0.100 U	<0.010 U
MW-251	03/19/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.39	<0.100 U	<0.100 U	<0.010 U
MW-251	07/30/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.49	<0.100 U	<0.100 U	<0.010 U
MW-251	07/30/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.71	<0.250 U	<0.250 U	
MW-251	03/24/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.27	<0.100 U	<0.100 U	<0.010 U
MW-251	06/23/14					<0.100 U								<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
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U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249797	MW-252	05/06/09	13:55	8.66	7.48	411.3	8.22	457.0	67.3	13.3	6.7	1.8	0.005	<0.001 U	12.3
DISSOLVED	249797	MW-252	06/09/09	17:50	8.70	7.49	445.0	7.50	422.0	67.9	12.7	6.9	1.7	<0.008	<0.001	13.6
DISSOLVED	249797	MW-252	06/09/09	17:52	8.70	7.49	445.0	7.45	430.0	66.7	13.0	7.1	1.8	<0.008	<0.001	14.1
DISSOLVED	249797	MW-252	09/22/09	14:35	8.92	7.32	413.2	7.74	490.0	63.4	11.4	5.7	1.5	<0.003	0.001	11.4
DISSOLVED	249797	MW-252	03/18/10	13:34	8.74	6.51	398.0	7.67	429.0	55.6	10.7	6.1	1.5	0.002	0.001	11.5
DISSOLVED	249797	MW-252	03/18/10	13:34	8.74	6.51	398.0	7.74	426.0	56.1	10.9	6.1	1.5	0.002	0.001	11.5
DISSOLVED	249797	MW-252	06/29/10	14:08	9.60	6.54	381.0	7.96	378.0	52.4	10.7	6.2	1.6	0.004	<0.001	12.2
TOTAL RECOVERABLE	249797	MW-252	06/29/10	14:08	9.60	6.54	381.0			54.2	10.4	5.8	1.7	0.110	<0.005	
DISSOLVED	249797	MW-252	03/31/11	14:03	8.83	6.81	407.0	7.54	405.0	64.0	12.0	6.9	1.4	<0.002	<0.001	11.9
TOTAL RECOVERABLE	249797	MW-252	03/31/11	14:03	8.83	6.81	407.0			65.4	11.7	7.0	1.6	0.072	<0.003	
TOTAL RECOVERABLE	249797	MW-252	06/17/11	10:25	8.37	6.81	389.8			61.9	11.4	6.2	1.8	<0.025 U	<0.013 U	
DISSOLVED	249797	MW-252	06/17/11	10:25	8.37	6.81	389.8	7.47	429.9	60.8	11.5	6.6	1.6	0.002 J	<0.100 U	11.5
DISSOLVED	249797	MW-252	03/30/12	10:58	8.12	7.25	419.0	7.48	445.6	62.0	11.6	6.2	1.6	0.016 J	<0.002 U	12.7
TOTAL RECOVERABLE	249797	MW-252	03/30/12	10:58	8.12	7.25	419.0			63.1	14.1	7.2	2.0	0.041 J	<0.005 U	
DISSOLVED	249797	MW-252	08/28/12	13:47	10.11	7.49	374.8	7.40	335.4	53.7	10.3	5.5	1.5	<0.015 U	<0.002 U	12.6
DISSOLVED	249797	MW-252	03/19/13	14:20	8.59	7.76	379.8	7.19	382.0	53.6	10.1	5.5	1.4	<0.015 U	<0.002 U	12.3
TOTAL RECOVERABLE	249797	MW-252	07/29/13	16:18	9.80	7.10	370.0			56.5	10.6	5.5	1.7	<0.038 U	<0.005 U	
DISSOLVED	249797	MW-252	07/29/13	16:18	9.80	7.10	370.0	7.32	381.1	57.4	10.9	5.6	1.7	<0.015 U	<0.002 U	12.2
DISSOLVED	249797	MW-252	03/24/14	12:25	8.70	7.23	385.0	7.31	403.9	59.6	10.6	5.2	1.3	<0.015 U	<0.002 U	12.2
DISSOLVED	249797	MW-252	06/24/14	13:45	9.40	6.98	295.0	7.56	331.9	54.2	9.5	4.9	1.4	<0.015 U	<0.002 U	11.6
DISSOLVED	250055	MW-255	05/05/09	17:05	7.76	7.48	330.4	7.64	394.0	51.9	11.5	4.3	1.6	0.004	<0.001 U	11.5
DISSOLVED	250055	MW-255	06/09/09	15:30	8.20	7.44	345.0	7.51	426.0	52.9	11.3	4.2	1.6	<0.008	0.001	12.3
DISSOLVED	250055	MW-255	09/22/09	0:00				7.64	357.0	51.6	10.7	4.0	1.6	0.013	0.001	10.8
DISSOLVED	250055	MW-255	03/19/10	14:52	8.09	6.72	329.0	7.66	351.0	45.8	9.9	4.0	1.4	0.004	0.001	10.1
DISSOLVED	250055	MW-255	06/29/10	12:49	8.74	6.51	317.0	8.12	301.0	42.4	9.5	3.8	1.5	<0.002	<0.001	11.2
TOTAL RECOVERABLE	250055	MW-255	06/29/10	12:49	8.74	6.51	317.0			45.5	10.0	3.8	1.6	0.081	<0.005	
DISSOLVED	250055	MW-255	04/04/11	12:31	7.40	6.72	338.0	7.52	380.0	51.2	10.5	4.8	1.5	<0.002	<0.001	10.8
TOTAL RECOVERABLE	250055	MW-255	04/04/11	12:31	7.40	6.72	338.0			48.3	9.7	4.2	1.5	0.260	0.004	
TOTAL RECOVERABLE	250055	MW-255	06/17/11	9:50	7.47	6.78	309.8			46.0	9.7	4.0	1.4	0.039	<0.013 U	
DISSOLVED	250055	MW-255	06/17/11	9:50	7.47	6.78	309.8	7.44	346.9	46.7	9.8	3.8	1.4	<0.002 U	<0.100 U	10.6
TOTAL RECOVERABLE	250055	MW-255	03/28/12	11:26	7.43	7.04	368.0			52.9	12.9	4.9	1.8	0.030 J	<0.005 U	
DISSOLVED	250055	MW-255	03/28/12	11:26	7.43	7.04	368.0	7.47	407.0	53.8	11.2	4.6	1.5	0.011 J	<0.002 U	11.1
DISSOLVED	250055	MW-255	08/28/12	11:35	10.25	7.47	277.3	7.33	255.9	39.3	8.4	3.6	1.4	<0.015 U	<0.002 U	11.3
DISSOLVED	250055	MW-255	03/19/13	13:12	7.69	7.55	274.1	7.16	267.4	39.2	8.1	3.3	1.3	<0.015 U	<0.002 U	10.7
DISSOLVED	250055	MW-255	03/19/13	13:15	7.69	7.55	274.1	7.13	266.5	39.5	8.2	3.2	1.3	<0.015 U	<0.002 U	10.7
DISSOLVED	250055	MW-255	06/25/13	13:10	8.90	6.86	290.0	7.61	293.6	47.2	9.3	3.0	1.6	<0.015 U	<0.002 U	11.1
DISSOLVED	250055	MW-255	07/29/13	15:26	9.01	6.79	290.0	7.33	312.6	42.9	9.2	3.5	1.4	<0.015 U	0.003 J	11.1
TOTAL RECOVERABLE	250055	MW-255	07/29/13	15:26	9.01	6.79	290.0			44.2	9.4	3.4	1.8	0.043 J	<0.005 U	
DISSOLVED	250055	MW-255	03/20/14	15:30	7.60	7.30	295.0	7.62	311.5	44.4	9.5	3.8	1.3	<0.015 U	<0.002 U	10.7

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-252	05/06/09	198.4	0.0	86.0	3.6	0.5	0.6	<0.05	<0.07	7.01	0.43	10.10	59.70	<0.19	<50	0.94
MW-252	06/09/09	199.6	0.0	73.9	4.4	0.5	0.5	<0.05	<0.06	0.89	0.43	12.00	56.70	<0.15	<50	2.21
MW-252	06/09/09	195.4	0.0	68.6	4.2	0.4	0.5	<0.05	<0.06	<0.35	0.43	11.70	58.10	<0.15	<50	2.25
MW-252	09/22/09	176.7	0.0	73.8	6.0	1.0	0.6	0.1	<0.13	<15.83	0.46	9.43	51.90	<0.14	<50	1.54
MW-252	03/18/10	187.6	0.0	46.5	3.3	0.5	0.6	<0.05	<0.10	2.18	0.49	9.11	49.80	<0.10	<50	1.23
MW-252	03/18/10	202.3	0.0	46.4	3.3	0.5	0.6	<0.05	<0.10	2.67	0.49	10.00	50.00	<0.10	<50	1.20
MW-252	06/29/10	239.6	0.0	36.4	3.2	0.4	0.6	<0.05	<0.2	<2.0	0.44	11.40	49.90	<0.2	<50	1.24
MW-252	06/29/10								<1.0	109.00	<0.9	12.30	51.40	<1.0		1.21
MW-252	03/31/11	187.3	0.0	41.2	3.5	0.5	0.5	<0.1	<0.2	<2.0	0.49	9.72	48.30	<0.2	<50	0.43
MW-252	03/31/11								<0.5	35.50	<0.5	10.10	48.90	<0.5		<0.5
MW-252	06/17/11								<1.250 U	23.36	<1.250 U		<1.250 U	<1.250 U		2.08
MW-252	06/17/11	196.9	0.0	36.8	4.0	0.4	0.4	<0.100 U	<0.500 U	19.22	0.400 J	9.85	51.59	<0.500 U	<50.000 U	2.00
MW-252	03/30/12	182.0	0.0	48.4	2.9	0.4	0.5	<0.020 U	<0.100 U	18.18	0.470 J	14.56	52.64	<0.100 U	<10.000 U	1.65
MW-252	03/30/12									100.88	0.780 J	15.55	57.07	<0.250 U		1.79
MW-252	08/28/12	179.4	0.0	34.8	2.7	0.3	0.5	<0.020 U	<0.100 U	<0.400 U	0.380 J	9.88	44.26	<0.100 U	<10.000 U	1.50
MW-252	03/19/13	183.3	0.0	34.0	2.8	0.3	0.6	<0.020 U	<0.100 U	<0.400 U	0.430 J	10.09	44.00	<0.100 U	<10.000 U	1.23
MW-252	07/29/13									33.75	0.260 J	17.11	46.93	<0.250 U		1.35
MW-252	07/29/13	195.4	0.0	32.9	3.7	0.3	0.6	0.050 J	<0.100 U	0.810 J	0.420 J	7.63	48.37	<0.100 U	<10.000 U	1.48
MW-252	03/24/14	215.9	0.0	33.4	3.2	0.3	0.6	<0.020 U	<0.100 U	2.320 J	0.42	6.16	48.37	<0.100 U	<10.000 U	1.94
MW-252	06/24/14	187.7	0.0	33.4	2.8	0.3	0.6	<0.020 U	<0.100 U	5.970 J	0.330 J	7.64	45.89	<0.100 U	<10.000 U	1.86
MW-255	05/05/09	161.8	0.0	49.9	4.9	0.6	0.4	<0.05	<0.07	24.90	0.75	6.00	35.50	<0.19	<50	<0.05 U
MW-255	06/09/09	166.7	0.0	41.7	3.8	0.5	0.4	<0.05	<0.06	0.77	0.78	7.00	33.60	<0.15	<50	<0.11
MW-255	09/22/09	148.4	0.0	45.8	18.2	0.8	0.5	<0.05	<0.13	<15.83	0.76	6.00	33.10	<0.14	<50	<0.09
MW-255	03/19/10	165.9	0.0	34.3	3.3	0.3	0.4	<0.05	<0.10	5.79	0.77	4.23	30.80	<0.10	<50	<0.10
MW-255	06/29/10	202.8	0.0	25.9	2.2	0.3	0.4	<0.05	<0.2	<2.0	0.71	6.26	27.40	<0.2	<50	<0.2
MW-255	06/29/10								<1.0	70.40	<0.9	<10.0	31.50	<1.0		<1.0
MW-255	04/04/11	164.6	0.0	27.1	3.2	0.3	0.4	<0.1	<0.2	4.81	0.72	5.47	29.10	<0.2	<50	<0.2
MW-255	04/04/11								<0.5	410.00	0.82	5.83	36.40	<0.5		<0.5
MW-255	06/17/11								<0.250 U	41.25	0.820 J		28.32	<1.250 U		<1.250 U
MW-255	06/17/11	166.4	0.0	22.0	2.7	0.2	0.3	<0.100 U	<0.500 U	1.560 J	0.73	5.17	27.88	<0.500 U	<50.000 U	<0.500 U
MW-255	03/28/12									79.93	1.050 J	7.28	35.13	<0.250 U		<0.250 U
MW-255	03/28/12	144.9	0.0	54.8	2.0	0.3	0.4	<0.020 U	<0.100 U	33.02	0.75	6.93	33.30	<0.100 U	<10.000 U	<0.100 U
MW-255	08/28/12	141.4	0.0	21.4	1.4	0.1	0.4	<0.020 U	<0.100 U	1.630 J	0.74	5.85	24.78	<0.100 U	<10.000 U	<0.100 U
MW-255	03/19/13	145.3	0.0	16.5	1.6	0.2	0.4	<0.020 U	<0.100 U	1.130 J	0.83	5.25	23.26	<0.100 U	<10.000 U	<0.100 U
MW-255	03/19/13	138.8	0.0	16.3	1.5	0.2	0.4	<0.020 U	<0.100 U	1.440 J	0.85	4.96	23.12	<0.100 U	<10.000 U	<0.100 U
MW-255	06/25/13	175.8	0.0	20.3	2.6	0.3	0.4	<0.020 U	<0.100 U	<2.000 U	0.86	2.98	27.42	<0.100 U	<10.000 U	<0.100 U
MW-255	07/29/13	166.5	0.0	19.1	1.6	0.2	0.4	<0.020 U	<0.100 U	1.910 J	0.79	3.72	26.89	<0.100 U	<10.000 U	<0.100 U
MW-255	07/29/13									64.53	0.940 J	10.45	27.72	<0.250 U		<0.250 U
MW-255	03/20/14	175.9	0.0	20.2	2.3	0.3	0.4	<0.020 U	<0.100 U	<2.000 U	0.82	3.55	27.34	<0.100 U	<10.000 U	<0.100 U

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Old Works WMA

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-252	05/06/09	0.18	<0.09	<0.41 U	8.37	2.81	<0.08	<0.20 U	0.52	0.43	<0.05	169.00	0.66	<0.03	0.37	0.30	98
MW-252	06/09/09	<0.13	<0.12	0.35	7.29	2.90	<0.08	<0.05	0.61	0.43	<0.05	153.00	0.70	<0.03	0.32	0.30	248
MW-252	06/09/09	0.22	<0.12	0.37	7.37	2.94	<0.08	<0.05	0.56	0.42	<0.05	156.00	0.71	0.03	0.33	0.31	249
MW-252	09/22/09	0.11	0.12	0.71	6.85	3.05	<0.23	<0.11	0.51	0.32	<0.10	144.00	0.67	<0.07	0.33	0.30	152
MW-252	03/18/10	<0.10	0.13	0.66	6.17	2.90	<0.10	<0.10	0.52	0.33	<0.10	142.00	0.47	<0.10	0.26	0.36	130
MW-252	03/18/10	<0.10	<0.10	0.73	6.20	2.90	<0.10	<0.10	0.53	0.36	<0.10	142.00	0.47	<0.10	0.26	0.35	129
MW-252	06/29/10	<0.2	<0.2	<0.5	6.23	3.01	<0.2	<0.2	0.56	0.32	<0.2	135.00	0.35	<0.2	0.26	0.36	128
MW-252	06/29/10	<0.9	<1.0	<2.5	<10.0	2.97	<0.9	<1.0	<1.0	<0.9		132.00	5.27	<1.0	<1.0	<1.0	129
MW-252	03/31/11	<0.2	<0.2	<0.5	5.73	2.81	<0.2	<0.2	0.50	0.30	<0.5	150.00	0.57	<0.2	0.28	0.31	45
MW-252	03/31/11	<0.5	<0.5	<1.3	6.46	3.03	<0.5	<0.5	0.50	<0.5		145.00	2.18	<0.5	<0.5	0.68	41
MW-252	06/17/11	0.490 J	0.535 J	1.71	6.13	3.18	0.877 J	<0.500 U	0.569 J	<1.250 U	<1.250 U	149.57	1.99	<1.250 U	<1.250 U	0.530 J	197
MW-252	06/17/11	<0.500 U	<0.500 U	<0.500 U	9.85	2.88	0.180 J	<0.200 U	0.470 J	0.310 J	<0.500 U	130.05	0.67	0.140 J	0.220 J	0.340 J	211
MW-252	03/30/12	<0.100 U	0.190 J	0.68	15.68	2.12	<0.100 U	<0.040 U	0.460 J	0.88	<0.100 U	140.85	0.450 J	<0.100 U	0.240 J	0.280 J	188
MW-252	03/30/12	<0.250 U	1.28	4.17	10.09	2.44	0.260 J	<0.100 U	0.720 J	0.330 J	0.310 J	154.73	12.36	<0.250 U	0.290 J	4.34	191
MW-252	08/28/12	<0.100 U	<0.100 U	<0.100 U	9.16	2.73	0.82	<0.040 U	0.51	<0.100 U	<0.100 U	120.53	<0.100 U	<0.100 U	0.230 J	<0.100 U	151
MW-252	03/19/13	<0.100 U	<0.100 U	<0.040 U	4.500 J	2.37	0.80	<0.060 U	0.52	0.250 J	<0.100 U	122.99	0.370 J	<0.100 U	0.210 J	0.330 J	131
MW-252	07/29/13	<0.250 U	1.77	<0.100 U	25.90	2.66	1.090 J	0.720 J	0.670 J	<0.250 U	<0.250 U	125.24	10.87	<0.250 U	<0.250 U	3.07	151
MW-252	07/29/13	<0.100 U	<0.100 U	<0.040 U	5.760 J	2.66	0.76	<0.060 U	0.280 J	0.260 J	<0.100 U	130.25	0.430 J	<0.100 U	0.220 J	0.350 J	155
MW-252	03/24/14	<0.100 U	<0.100 U	<0.500 U	5.350 J	2.20	0.56	<0.060 U	0.470 J	0.310 J	<0.100 U	130.42	0.320 J	<0.100 U	<0.100 U	0.240 J	210
MW-252	06/24/14	<0.100 U	<0.100 U	<0.500 U	4.060 J	3.33	<0.100 U	<0.060 U	0.55	0.220 J		120.38	0.420 J			0.250 J	187
MW-255	05/05/09	<0.04	<0.09	<0.41 U	3.98	2.82	<0.08	<0.20 U	0.98	0.41	<0.05	140.00	0.41	<0.03	1.41	0.42	1.6
MW-255	06/09/09	0.21	<0.12	0.36	3.85	2.79	<0.08	<0.05	1.15	0.36	<0.05	129.00	0.36	<0.03	1.26	0.44	<0.48
MW-255	09/22/09	0.46	0.12	0.54	3.79	2.69	<0.23	<0.11	1.01	0.36	<0.10	127.00	0.64	<0.07	1.21	0.43	3.4
MW-255	03/19/10	0.13	0.11	0.32	2.84	2.91	<0.10	<0.10	0.98	0.26	<0.10	124.00	0.42	<0.10	1.21	0.45	<0.81
MW-255	06/29/10	<0.2	<0.2	<0.5	2.57	2.79	<0.2	<0.2	1.01	0.19	<0.2	109.00	0.27	<0.2	0.97	0.40	<1.0
MW-255	06/29/10	<0.9	<1.0	<2.5	<10.0	2.83	<0.9	<1.0	<1.0	<0.9		119.00	2.33	<1.0	1.06	<1.0	<5.0
MW-255	04/04/11	<0.2	<0.2	<0.5	2.08	2.73	<0.2	<0.2	0.84	0.19	<0.5	123.00	0.53	<0.2	0.95	0.37	<0.5
MW-255	04/04/11	<0.5	<0.5	1.98	<5.0	2.92	0.48	<0.5	0.85	<0.5		125.00	13.00	<0.5	1.07	1.08	<1.3
MW-255	06/17/11	<1.250 U	<1.250 U	<1.250 U	6.03	2.80	<1.250 U	<0.500 U	0.960 J	0.330 J	<1.250 U	112.08	1.180 J	<1.250 U	0.860 J	0.750 J	<0.500 U
MW-255	06/17/11	<0.500 U	<0.500 U	<0.500 U	5.69	2.76	<0.500 U	<0.200 U	0.96	0.100 J	<0.500 U	102.84	0.200 J	<0.500 U	0.84	0.190 J	0.470 J
MW-255	03/28/12	<0.250 U	1.42	23.91	5.13	2.73	<0.250 U	<0.100 U	1.080 J	<0.250 U	0.320 J	135.45	17.14	<0.250 U	1.37	6.24	<0.500 U
MW-255	03/28/12	<0.100 U	0.130 J	0.450 J	9.94	2.37	<0.100 U	<0.040 U	0.85	0.62	<0.100 U	126.16	0.53	<0.100 U	1.13	0.330 J	0.240 J
MW-255	08/28/12	<0.100 U	<0.100 U	<0.100 U	6.19	3.04	0.500 J	<0.040 U	1.03	<0.100 U	<0.100 U	92.77	<0.100 U	<0.100 U	0.77	<0.100 U	<0.200 U
MW-255	03/19/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	2.68	0.460 J	<0.060 U	1.17	<0.100 U	<0.100 U	89.71	0.210 J	<0.100 U	0.67	0.430 J	<0.050 U
MW-255	03/19/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	2.62	0.480 J	<0.060 U	1.19	<0.100 U	<0.100 U	91.01	<0.100 U	<0.100 U	0.66	0.440 J	<0.050 U
MW-255	06/25/13	<0.100 U	<0.100 U	<0.500 U	<2.000 U	3.99	<0.100 U	<0.060 U	1.22	<0.100 U		102.55	0.340 J			0.58	<0.500 U
MW-255	07/29/13	<0.100 U	<0.100 U	<0.040 U	2.550 J	2.84	0.450 J	<0.060 U	1.25	<0.100 U	<0.100 U	100.56	0.280 J	<0.100 U	0.90	0.470 J	<0.050 U
MW-255	07/29/13	<0.250 U	1.91	<0.100 U	19.76	2.91	0.720 J	<0.150 U	1.25	<0.250 U	<0.250 U	98.73	13.05	<0.250 U	0.820 J	2.74	1.600 J
MW-255	03/20/14	<0.100 U	<0.100 U	<0.500 U	2.750 J	2.71	0.280 J	<0.060 U	0.98	0.200 J	<0.100 U	101.63	<0.100 U	<0.100 U	0.78	0.330 J	<0.500 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-252	05/06/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	2.63	<0.02	0.08	<0.05
MW-252	06/09/09	<0.05	<0.05	0.06	<0.07	<0.03	<0.03	<0.07	<0.10	<0.02	2.58	<0.02	0.09	<0.05
MW-252	06/09/09	<0.05	<0.05	0.07	<0.07	0.04	<0.03	<0.07	<0.10	<0.02	2.67	<0.02	0.09	<0.05
MW-252	09/22/09	<0.11	<0.05	<0.06	<0.11	<0.05	<0.24	<0.09	<0.13	<0.10	2.46	<0.06	<0.14	<0.05
MW-252	03/18/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	2.51	<0.10	<0.10	<0.05
MW-252	03/18/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	2.51	<0.10	<0.10	<0.05
MW-252	06/29/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	2.54	<0.2	<0.2	<0.05
MW-252	06/29/10	<0.9	<1.0	<2.5	<0.9	<1.0	<0.9	<1.0	<2.5	<1.0	3.14	<1.0	<1.0	
MW-252	03/31/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	2.48	<0.2	<0.2	<0.05
MW-252	03/31/11	<0.5	<0.5	<1.3	54.70	<0.5	<1.3	<0.5	<1.3	<0.5	2.70	<0.5	<0.5	
MW-252	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	2.79	<1.250 U	<1.250 U	
MW-252	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	2.52	<0.500 U	<0.500 U	<0.050 U
MW-252	03/30/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.12	<0.100 U	<0.100 U	<0.010 U
MW-252	03/30/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.68	<0.250 U	<0.250 U	
MW-252	08/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.17	<0.100 U	<0.100 U	<0.010 U
MW-252	03/19/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.21	<0.100 U	<0.100 U	<0.010 U
MW-252	07/29/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.600 J	<0.250 U	2.66	<0.250 U	<0.250 U	
MW-252	07/29/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.45	<0.100 U	<0.100 U	<0.010 U
MW-252	03/24/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.24	<0.100 U	<0.100 U	<0.010 U
MW-252	06/24/14					<0.100 U								<0.010 U
MW-255	05/05/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	2.28	<0.02	0.15	<0.05
MW-255	06/09/09	<0.05	<0.05	<0.04	<0.07	<0.03	<0.03	<0.07	<0.10	<0.02	2.30	<0.02	0.18	<0.05
MW-255	09/22/09	<0.11	<0.05	<0.06	<0.11	<0.05	<0.24	<0.09	<0.13	<0.10	2.28	<0.06	0.15	<0.05
MW-255	03/19/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	2.19	<0.10	0.15	<0.05
MW-255	06/29/10	<0.2	<0.2	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5	<0.2	2.04	<0.2	<0.2	<0.05
MW-255	06/29/10	<0.9	<1.0	<2.5	<0.9	<1.0	<0.9	<1.0	<2.5	<1.0	<2.5	<1.0	<1.0	
MW-255	04/04/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	2.07	<0.2	<0.2	<0.05
MW-255	04/04/11	<0.5	<0.5	<1.3	42.90	<0.5	<1.3	<0.5	<1.3	<0.5	3.28	<0.5	<0.5	
MW-255	06/17/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	1.96	<1.250 U	<1.250 U	
MW-255	06/17/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.84	<0.500 U	<0.500 U	<0.050 U
MW-255	03/28/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.28	<0.250 U	<0.250 U	
MW-255	03/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.85	<0.100 U	0.140 J	<0.010 U
MW-255	08/28/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.83	<0.100 U	0.180 J	<0.010 U
MW-255	03/19/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.77	<0.100 U	0.210 J	<0.010 U
MW-255	03/19/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.75	<0.100 U	0.210 J	<0.010 U
MW-255	06/25/13					<0.100 U								<0.010 U
MW-255	07/29/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.01	<0.100 U	0.230 J	<0.010 U
MW-255	07/29/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.07	<0.250 U	2.33	<0.250 U	<0.250 U	
MW-255	03/20/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.93	<0.100 U	0.210 J	<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
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Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
			maximum											0.808	0.447	

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

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Anaconda Regional Water, Waste, and Soils
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Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
	maximum										5,610					21,100

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
	maximum			4574.000				7.070									########

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U = Analyzed for but not detected above MDL.

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
	maximum													

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Appendix F

Water-Quality Data for South Opportunity/ Yellow Ditch Area of Concern

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
South Opportunity/Yellow Ditch AOC

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SIO2 (mg/l)
DISSOLVED	249898	MW-9 (LAB)	05/06/09	15:10	8.30	6.24	160	6.79	230	21.3	5.9	6.0	0.9	0.007	<0.001	13.4
DISSOLVED	249898	MW-9 (LAB)	09/17/09	12:45	8.48	6.57	178	7.05	209	20.1	5.5	5.7	0.8	0.128	0.006	12.2
DISSOLVED	249898	MW-9 (LAB)	03/18/10	15:38	7.98	6.43	187	7.12	212	21.2	5.9	5.8	0.8	0.060	0.005	11.6
DISSOLVED	249898	MW-9 (LAB)	07/14/10	11:14	8.20	6.31	187	8.05	199	20.7	6.0	5.8	0.8	0.051	0.006	11.0
TOTAL RECOVERABLE	249898	MW-9 (LAB)	07/14/10	11:14	8.20	6.31	187			23.7	6.4	6.5	1.0	0.910	0.011	
DISSOLVED	249898	MW-9 (LAB)	03/30/11	13:56	8.99	6.67	181	6.93	206	20.7	5.5	6.7	0.6	0.041	0.006	12.0
TOTAL RECOVERABLE	249898	MW-9 (LAB)	03/30/11	13:56	8.99	6.67	181			21.1	5.7	6.0	0.8	0.936	0.011	
TOTAL RECOVERABLE	249898	MW-9 (LAB)	07/26/11	15:40	9.41	6.86	168			18.8	5.6	5.9	0.8	0.446	0.005 J	
DISSOLVED	249898	MW-9 (LAB)	07/26/11	15:40	9.41	6.86	168	6.86	158	19.0	5.5	5.2	0.8	0.011	0.002 J	11.9
TOTAL RECOVERABLE	249898	MW-9 (LAB)	03/15/12	10:47	8.76	6.55	168			19.9	5.5	5.9	0.9	0.511	<0.005 U	
DISSOLVED	249898	MW-9 (LAB)	03/15/12	10:47	8.76	6.55	168	6.75	187	17.8	4.8	5.6	0.7	0.020 J	<0.002 U	12.9
DISSOLVED	249898	MW-9 (LAB)	08/23/12	12:41	8.58	5.97	167	6.59	141	18.6	5.9	5.7	0.9	0.021 J	0.007 J	12.5
DISSOLVED	249898	MW-9 (LAB)	03/20/13	14:27	9.13	6.99	166	6.52	150	19.4	5.3	5.7	0.8	0.017 J	0.003 J	12.3
DISSOLVED	249898	MW-9 (LAB)	03/20/13	14:31	9.13	6.99	166	6.50	144	18.6	5.1	5.6	0.7	0.018 J	0.003 J	12.1
DISSOLVED	249898	MW-9 (LAB)	08/01/13	12:00	9.51	6.43	170	6.57	170	20.2	5.7	6.7	0.8	0.033 J	0.006 J	13.2
TOTAL RECOVERABLE	249898	MW-9 (LAB)	08/01/13	12:00	9.51	6.43	170			21.5	5.9	6.4	1.0	0.355	0.008 J	
DISSOLVED	249898	MW-9 (LAB)	03/18/14	11:05	8.80	6.62	170	6.99	164	19.2	5.4	5.5	0.8	0.026 J	0.005 J	12.8
DISSOLVED	249898	MW-9 (LAB)	07/30/14	15:15	10.10	6.08	175	7.15	173	22.2	6.3	6.0	0.9	0.039 J	0.006 J	13.7
DISSOLVED	138061	MW-225	04/22/09	19:15	6.10	6.95	415	7.24	414	50.4	12.3	13.7	1.3	<0.043 U	<0.031 U	25.2
DISSOLVED	138061	MW-225	09/22/09	15:46	10.10	7.00	505	7.60	525	68.0	14.8	16.7	1.7	<0.003	0.001	27.0
DISSOLVED	138061	MW-225	06/14/12	14:35	6.41	6.37	514	7.23	527	68.3	15.6	16.6	1.7	<0.015 U	<0.002 U	24.6
DISSOLVED	138061	MW-225	04/09/14	16:08	5.61	7.25	434	7.30	487	57.5	12.7	14.5	1.4	<0.015 U	<0.002 U	23.1
DISSOLVED	138061	MW-225	09/15/14	11:20	11.40	6.60	505	7.26	482	67.7	15.6	16.9	1.8	<0.015 U	<0.002 U	26.8
DISSOLVED	138020	MW-231	05/05/09	18:45	3.06	6.76	109	7.11	134	14.5	2.5	5.4	0.5	0.004	<0.001	24.8
DISSOLVED	138020	MW-231	09/17/09	14:42	9.70	6.39	189	6.78	231	25.0	4.1	7.9	0.7	0.007	0.001	27.3
DISSOLVED	138020	MW-231	04/29/14	11:50	3.90	6.28	105	5.96	111	12.1	2.0	4.7	0.4	<0.015 U	<0.002 U	20.7
DISSOLVED	138020	MW-231	09/15/14	15:35	10.80	5.70	195	6.64	187	26.0	4.2	8.0	0.6	<0.015 U	<0.002 U	27.8
DISSOLVED	138017	MW-232	05/16/09	9:00	6.20	6.67	287	7.68	327	50.1	9.2	9.0	2.0	0.004	0.018	20.7
DISSOLVED	138017	MW-232	09/17/09	13:52	9.89	6.95	435	7.67	438	66.4	11.9	10.8	2.4	<0.002	0.001	21.3
DISSOLVED	138017	MW-232	05/30/12	15:00	6.61	6.65	403	7.29	454	58.6	10.1	9.7	2.1	0.007 J	<0.002 U	18.8
DISSOLVED	138017	MW-232	09/17/14	14:00	12.50	6.80	665	7.47	638	99.7	17.7	14.0	2.9	<0.015 U	<0.002 U	24.2

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U = Analyzed for but not detected above MDL.

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South Opportunity/Yellow Ditch AOC

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-9 (LAB)	05/06/09	77.8	0.0	21.2	0.9	1.2	0.4	<0.05	<0.07	<6.02	0.25	2.93	46.80	<0.19	<50	<0.01
MW-9 (LAB)	09/17/09	81.3	0.0	23.8	0.9	0.8	0.4	<0.05	<0.04	<7.60	0.27	3.44	46.40	<0.20	<50	<0.05
MW-9 (LAB)	03/18/10	76.4	0.0	29.1	0.6	0.8	0.4	<0.05	<0.10	<0.81	0.31	<2.0	46.70	<0.10	<50	<0.10
MW-9 (LAB)	07/14/10	74.9	0.0	29.8	0.7	0.9	0.5	<0.05	<0.2	<2.0	0.22	2.95	42.30	<0.2	<50	<0.2
MW-9 (LAB)	07/14/10								<0.5	6.37	<0.5	<5.0	48.50	<0.5		<0.5
MW-9 (LAB)	03/30/11	69.6	0.0	23.6	0.6	0.6	0.4	<0.1	<0.2	<2.0	0.25	3.16	39.50	<0.2	<50	<0.2
MW-9 (LAB)	03/30/11								<0.5	6.89	<0.5	<5.0	43.90	<0.5		<0.5
MW-9 (LAB)	07/26/11								<1.250 U	18.73	0.320 J		43.16	<1.250 U		<1.250 U
MW-9 (LAB)	07/26/11	66.3	0.0	26.1	0.5	0.4	0.4	<0.100 U	<0.500 U	0.763 J	0.250 J	1.080 J	42.95	<0.500 U	<50.000 U	<0.500 U
MW-9 (LAB)	03/15/12								<0.250 U	1.130 J	1.020 J	4.860 J	43.14	<0.250 U		<0.250 U
MW-9 (LAB)	03/15/12	67.6	0.0	21.4	0.6	0.2	0.4	<0.020 U	<0.100 U	<0.400 U	0.260 J	2.61	38.20	<0.100 U	<10.000 U	<0.100 U
MW-9 (LAB)	08/23/12	68.6	0.0	22.1	0.7	0.3	0.4	<0.020 U	<0.100 U	<0.400 U	0.210 J	3.77	40.35	<0.100 U	<10.000 U	<0.100 U
MW-9 (LAB)	03/20/13	77.6	0.0	15.5	0.7	0.5	0.5	<0.020 U	<0.100 U	<0.400 U	0.250 J	3.79	41.67	<0.100 U	<10.000 U	<0.100 U
MW-9 (LAB)	03/20/13	75.8	0.0	15.5	0.7	0.5	0.5	<0.020 U	<0.100 U	<0.400 U	0.250 J	3.78	39.78	<0.100 U	<10.000 U	<0.100 U
MW-9 (LAB)	08/01/13	79.1	0.0	22.8	0.6	0.2	0.5	<0.020 U	<0.100 U	<0.400 U	0.270 J	3.43	44.32	<0.100 U	<10.000 U	<0.100 U
MW-9 (LAB)	08/01/13									10.35	0.510 J	3.070 J	42.91	<0.250 U		<0.250 U
MW-9 (LAB)	03/18/14	87.5	0.0	16.8	0.8	0.6	0.5	<0.020 U	<0.100 U	<2.000 U	<0.100 U	2.78	41.16	<0.100 U	<10.000 U	<0.100 U
MW-9 (LAB)	07/30/14	94.9	0.0	21.0	0.9	0.4	0.5	<0.020 U	<0.100 U	<2.000 U	0.240 J	3.21	46.98	<0.100 U	<10.000 U	<0.100 U
MW-225	04/22/09	161.7	0.0	80.4	4.2	0.2	0.4	<0.05	<0.04	<7.64	7.79	12.90	33.80	<0.18	<50	<0.05 U
MW-225	09/22/09	234.0	0.0	74.4	5.0	<0.5	<0.5	<0.5	<0.13	<15.83	7.82	9.87	46.00	<0.14	<500	<0.09
MW-225	06/14/12	218.8	0.0	82.0	5.2	0.2	0.3	0.050 J	<0.100 U	0.408 J	6.56	11.18	42.60	<0.100 U	<10.000 U	<0.100 U
MW-225	04/09/14	194.9	0.0	77.0	4.3	0.3	0.4	0.040 J	0.52	<2.000 U	7.26	11.78	33.63	<0.100 U	<10.000 U	<0.100 U
MW-225	09/15/14	235.8	0.0	46.9	3.6	0.1	0.3	0.030 J	<0.100 U	<2.000 U	7.64	9.95	43.18	<0.100 U	<10.000 U	<0.100 U
MW-231	05/05/09	56.0	0.0	15.8	1.0	<0.05	0.1	<0.05	<0.07	<6.02	0.67	2.05	12.10	<0.19	<50	<0.05
MW-231	09/17/09	109.1	0.0	18.6	0.9	0.1	0.2	0.1	<0.04	<7.60	0.91	4.43	23.20	<0.20	<50	<0.05
MW-231	04/29/14	45.0	0.0	18.7	1.3	0.050 J	0.2	0.030 J	<0.100 U	12.64	0.75	4.37	9.64	<0.100 U	<10.000 U	<0.100 U
MW-231	09/15/14	120.2	0.0	10.4	0.6	<0.010 U	0.1	0.060 J	<0.100 U	<2.000 U	0.82	3.52	21.29	<0.100 U	<10.000 U	<0.100 U
MW-232	05/16/09	195.4	0.0	15.5	0.7	<0.05	0.7	0.1	<0.06	<0.35	117	9.80	29.90	<0.15	<50	<0.11
MW-232	09/17/09	277.9	0.0	20.0	3.7	0.8	0.5	0.1	<0.04	<7.60	88	13.40	47.30	<0.20	<50	<0.05
MW-232	05/30/12	218.7	0.0	17.7	8.5	0.4	0.5	0.070 J	<0.100 U	29.42	105	17.81	36.77	<0.100 U	181.00	<0.100 U
MW-232	09/17/14	338.1	0.0	50.9	31.2	0.8	0.5	0.060 J	<0.100 U	2.550 J	98	14.05	63.26	<0.100 U	345.00	<0.100 U

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U = Analyzed for but not detected above MDL.

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South Opportunity/Yellow Ditch AOC

Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-9 (LAB)	05/06/09	<0.04	<0.09	<0.41	2.59	0.83	<0.08	<0.20	0.07	0.41	<0.05	110.00	0.14	<0.03	1.42	0.36	<1.29
MW-9 (LAB)	09/17/09	0.29	0.85	<0.40	2.29	0.81	0.15	<0.16	0.07	0.42	<0.04	106.00	0.25	<0.03	1.33	0.31	<0.90
MW-9 (LAB)	03/18/10	<0.10	<0.10	0.27	1.71	0.78	<0.10	<0.10	<0.20	0.51	<0.10	113.00	0.26	<0.10	1.44	0.39	<0.81
MW-9 (LAB)	07/14/10	<0.2	<0.2	<0.5	2.09	0.70	<0.2	<0.2	<0.2	0.43	<0.2	98.50	0.22	<0.2	1.09	0.32	<1.0
MW-9 (LAB)	07/14/10	<0.5	<0.5	<1.3	<5.0	0.74	<0.5	<0.5	<0.5	<0.5		106.00	<0.5	<0.5	1.18	0.51	<2.5
MW-9 (LAB)	03/30/11	<0.2	<0.2	<0.5	<2.0	0.77	<0.2	<0.2	<0.2	0.42	<0.5	98.30	0.29	<0.2	1.05	0.28	<0.5
MW-9 (LAB)	03/30/11	<0.5	<0.5	<1.3	<5.0	0.80	<0.5	<0.5	<0.5	<0.5		104.00	0.53	<0.5	1.22	0.67	<1.3
MW-9 (LAB)	07/26/11	<1.250 U	<1.250 U	0.500 J	10.38	0.750 J	0.500 J	<0.500 U	<1.250 U	0.380 J		94.30	0.340 J	<1.250 U	1.130 J	0.310 J	<2.500 U
MW-9 (LAB)	07/26/11	<0.500 U	<0.500 U	0.250 J	2.39	0.440 J	<0.500 U	<0.200 U	<0.500 U	0.51	<0.500 U	89.86	0.170 J	<0.500 U	1.05	0.320 J	<1.000 U
MW-9 (LAB)	03/15/12	<0.250 U	1.37	0.390 J	7.66	0.850 J	<0.250 U	<0.100 U	0.290 J	<0.250 U	0.350 J	91.64	9.44	<0.250 U	2.34	7.46	1.630 J
MW-9 (LAB)	03/15/12	<0.100 U	<0.100 U	<0.100 U	<0.400 U	0.76	<0.100 U	<0.040 U	<0.100 U	<0.100 U	<0.100 U	81.28	0.120 J	<0.100 U	0.170 J	0.320 J	<0.200 U
MW-9 (LAB)	08/23/12	<0.100 U	<0.100 U	<0.100 U	1.040 J	0.88	0.120 J	<0.040 U	<0.100 U	0.360 J	<0.100 U	88.63	<0.100 U	<0.100 U	0.99	0.370 J	0.380 J
MW-9 (LAB)	03/20/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.91	0.270 J	<0.060 U	<0.100 U	0.330 J	<0.100 U	94.09	<0.100 U	<0.100 U	1.26	0.390 J	<0.050 U
MW-9 (LAB)	03/20/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.90	0.260 J	<0.060 U	<0.100 U	0.310 J	<0.100 U	90.08	<0.100 U	<0.100 U	1.22	0.370 J	<0.050 U
MW-9 (LAB)	08/01/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.95	0.210 J	<0.060 U	<0.100 U	0.340 J	<0.100 U	97.06	<0.100 U	<0.100 U	1.35	0.390 J	<0.050 U
MW-9 (LAB)	08/01/13	<0.250 U	0.800 J	<0.100 U	<3.750 U	0.960 J	<0.250 U	<0.150 U	<0.250 U	0.570 J	<0.250 U	96.38	3.91	<0.250 U	1.41	2.36	1.050 J
MW-9 (LAB)	03/18/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	0.90	<0.100 U	<0.060 U	<0.100 U	0.240 J	<0.100 U	92.52	<0.100 U	<0.100 U	1.20	0.210 J	<0.500 U
MW-9 (LAB)	07/30/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	1.06	<0.100 U	<0.060 U	<0.100 U	0.270 J		104.65	0.310 J	<0.100 U		0.500 J	1.390 J
MW-225	04/22/09	<0.06	0.25	<0.40 U	12.40	1.48	<0.11	<0.15 U	0.10	0.16	<0.04	258.00	0.55	<0.03	21.70	3.79	<0.94 U
MW-225	09/22/09	0.20	0.23	0.32	13.00	1.31	<0.23	<0.11	0.11	<0.30	<0.10	350.00	0.77	<0.07	33.10	4.32	0.73
MW-225	06/14/12	<0.100 U	0.120 J	0.370 J	7.84	1.04	0.60	<0.040 U	<0.100 U	0.255 J	<0.100 U	352.00	0.400 J	<0.100 U	33.10	3.51	0.600 J
MW-225	04/09/14	<0.100 U	0.260 J	<0.500 U	12.52	1.36	0.440 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	284.22	0.66	<0.100 U	21.41	3.33	<0.500 U
MW-225	09/15/14	<0.100 U	<0.100 U	<0.500 U	16.37	1.34	0.300 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	326.92	44.66	<0.100 U	27.26	4.92	<0.500 U
MW-231	05/05/09	0.05	<0.09	1.22	2.50	0.21	0.51	<0.20	0.20	<0.20	<0.05	62.00	0.19	<0.03	0.47	2.98	<1.29
MW-231	09/17/09	<0.10	0.06	1.20	3.41	0.22	0.74	<0.16	0.22	<0.10	<0.04	107.00	0.22	<0.03	1.35	3.67	<0.90
MW-231	04/29/14	<0.100 U	<0.100 U	0.840 J	<2.000 U	0.260 J	0.60	<0.060 U	<0.100 U	<0.100 U	<0.100 U	46.05	0.70	<0.100 U	0.320 J	2.92	<0.500 U
MW-231	09/15/14	<0.100 U	<0.100 U	1.170 J	2.820 J	0.220 J	0.90	<0.060 U	0.220 J	<0.100 U	<0.100 U	97.26	15.85	<0.100 U	1.49	3.73	<0.500 U
MW-232	05/16/09	<0.13	<0.12	4.63	5.53	1.92	<0.08	<0.05	1.61	0.38	<0.05	181.00	<0.32	<0.03	2.12	4.03	<0.48
MW-232	09/17/09	<0.10	0.06	3.48	6.86	1.09	<0.10	<0.16	1.42	0.27	<0.04	253.00	0.22	<0.03	3.89	1.40	<0.90
MW-232	05/30/12	<0.100 U	<0.100 U	3.46	8.32	1.58	0.87	<0.040 U	1.29	0.160 J	<0.100 U	200.28	0.260 J	<0.100 U	3.21	4.16	1.12
MW-232	09/17/14	0.330 J	<0.100 U	4.56	9.180 J	0.95	0.74	<0.060 U	1.58	0.380 J	<0.100 U	340.34	59.98	<0.100 U	6.09	4.96	8.11

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-9 (LAB)	05/06/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	0.37	<0.02	<0.03	<0.05
MW-9 (LAB)	09/17/09	<0.05	<0.04	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.36	<0.02	0.10	<0.05
MW-9 (LAB)	03/18/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.37	<0.10	<0.10	<0.05
MW-9 (LAB)	07/14/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-9 (LAB)	07/14/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-9 (LAB)	03/30/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-9 (LAB)	03/30/11	<0.5	<0.5	<1.3	17.50	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-9 (LAB)	07/26/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.330 J	<1.250 U	<1.250 U	
MW-9 (LAB)	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.320 J	<0.500 U	<0.500 U	<0.050 U
MW-9 (LAB)	03/15/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.340 J	<0.250 U	<0.250 U	
MW-9 (LAB)	03/15/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.270 J	<0.100 U	<0.100 U	<0.010 U
MW-9 (LAB)	08/23/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.320 J	<0.100 U	<0.100 U	<0.010 U
MW-9 (LAB)	03/20/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.360 J	<0.100 U	<0.100 U	<0.010 U
MW-9 (LAB)	03/20/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.340 J	<0.100 U	<0.100 U	<0.010 U
MW-9 (LAB)	08/01/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.390 J	<0.100 U	<0.100 U	<0.010 U
MW-9 (LAB)	08/01/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-9 (LAB)	03/18/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.380 J	<0.100 U	<0.100 U	<0.010 U
MW-9 (LAB)	07/30/14													<0.010 U
MW-225	04/22/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.06	<0.02	0.10	<0.02	10.10	<0.05
MW-225	09/22/09	<0.11	<0.05	<0.06	<0.11	<0.05	<0.24	<0.09	<0.13	<0.10	0.14	<0.06	10.10	<0.5
MW-225	06/14/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	10.60	<0.010 U
MW-225	04/09/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	10.13	<0.010 U
MW-225	09/15/14	<0.100 U	<0.100 U	<0.100 U	1.53	<0.100 U	<0.100 U	<0.100 U	0.350 J	<0.100 U	<0.100 U	<0.100 U	9.85	<0.010 U
MW-231	05/05/09	0.03	<0.04	<0.04	<0.04	<0.05	<0.03	0.04	<0.07	<0.03	0.04	<0.02	0.18	<0.05
MW-231	09/17/09	<0.05	0.04	<0.04	<0.05	0.03	<0.04	<0.05	<0.10	<0.02	0.09	<0.02	0.25	<0.05
MW-231	04/29/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.400 J	<0.010 U
MW-231	09/15/14	<0.100 U	<0.100 U	<0.100 U	0.76	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.290 J	<0.010 U
MW-232	05/16/09	<0.05	<0.05	<0.04	<0.07	<0.03	<0.03	<0.07	<0.10	<0.02	0.18	<0.02	0.31	<0.05
MW-232	09/17/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.25	<0.02	0.22	<0.05
MW-232	05/30/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.210 J	<0.100 U	0.360 J	<0.010 U
MW-232	09/17/14	<0.100 U	<0.100 U	<0.100 U	2.22	<0.100 U	<0.100 U	<0.100 U	0.390 J	<0.100 U	<0.100 U	<0.100 U	0.500 J	<0.010 U

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
South Opportunity/Yellow Ditch AOC

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249940	MW-259(LTW-4-SOD)	09/11/09	16:20	9.45	7.25	119	6.95	135	13.7	4.0	4.9	0.9	0.009	0.001	13.3
DISSOLVED	249940	MW-259(LTW-4-SOD)	04/13/10	12:55	7.72	6.41	145	8.11	182	16.4	4.9	5.2	0.9	<0.002	<0.001	12.3
DISSOLVED	249940	MW-259(LTW-4-SOD)	07/15/10	10:25	7.68	6.38	155	7.86	157	17.4	5.2	4.8	0.9	0.005	<0.001	11.5
TOTAL RECOVERABLE	249940	MW-259(LTW-4-SOD)	07/15/10	10:25	7.68	6.38	155			20.0	5.7	5.7	1.1	0.177	<0.003	
TOTAL RECOVERABLE	249940	MW-259(LTW-4-SOD)	03/30/11	12:42	7.93	6.46	153			18.2	5.3	5.5	1.0	0.191	<0.003	
DISSOLVED	249940	MW-259(LTW-4-SOD)	03/30/11	12:42	7.93	6.46	153	7.07	153	18.6	5.3	5.8	0.9	<0.002	<0.001	13.4
TOTAL RECOVERABLE	249940	MW-259(LTW-4-SOD)	07/26/11	13:45	9.15	6.87	136			15.8	4.8	5.2	0.9	0.060	<0.006 U	
DISSOLVED	249940	MW-259(LTW-4-SOD)	07/26/11	13:45	9.15	6.87	136	7.11	133	15.8	4.6	4.6	0.9	<0.002 U	<0.003 U	12.7
DISSOLVED	249940	MW-259(LTW-4-SOD)	03/15/12	11:51	8.61	8.24	191	6.88	221	22.0	6.3	6.3	1.0	<0.005 U	<0.002 U	14.0
TOTAL RECOVERABLE	249940	MW-259(LTW-4-SOD)	03/15/12	11:51	8.61	8.24	191			22.9	6.6	5.5	1.2	0.094	<0.005 U	
DISSOLVED	249940	MW-259(LTW-4-SOD)	08/23/12	13:40	8.27	6.19	140	6.80	113	15.5	5.1	5.0	1.0	<0.015 U	<0.002 U	13.4
DISSOLVED	249940	MW-259(LTW-4-SOD)	03/20/13	15:37	9.07	7.60	222	6.68	201	24.6	6.9	5.7	1.0	<0.015 U	<0.002 U	13.1
DISSOLVED	249940	MW-259(LTW-4-SOD)	07/31/13	16:12	9.98	6.64	190	6.74	185	21.6	6.2	5.9	1.0	<0.015 U	<0.002 U	14.8
TOTAL RECOVERABLE	249940	MW-259(LTW-4-SOD)	07/31/13	16:12	9.98	6.64	190			22.9	6.6	6.0	1.2	0.054 J	<0.005 U	
DISSOLVED	249940	MW-259(LTW-4-SOD)	03/19/14	12:50	8.70	6.82	155	7.11	153	17.2	5.0	4.9	0.9	<0.015 U	<0.002 U	13.7
DISSOLVED	249940	MW-259(LTW-4-SOD)	09/15/14	13:10	10.80	6.28	145	7.20	136	16.7	4.8	5.7	0.9	<0.015 U	<0.002 U	14.0
DISSOLVED	249941	MW-260(LTW-4-SOS)	09/11/09	15:40	11.74	7.29	126	6.88	148	15.5	4.2	4.7	1.2	0.008	<0.001	14.5
DISSOLVED	249941	MW-260(LTW-4-SOS)	07/15/10	10:07	9.76	6.07	117	6.91	122	12.7	3.8	3.9	1.0	<0.002	<0.001	12.4
TOTAL RECOVERABLE	249941	MW-260(LTW-4-SOS)	07/15/10	10:07	9.76	6.07	117			14.2	4.1	4.6	1.1	0.071	<0.003	
TOTAL RECOVERABLE	249941	MW-260(LTW-4-SOS)	07/26/11	14:15	11.17	6.63	106			11.8	3.7	4.1	1.0	0.047	<0.006 U	
DISSOLVED	249941	MW-260(LTW-4-SOS)	07/26/11	14:15	11.17	6.63	106	7.07	107	12.5	3.6	4.0	0.9	0.002 J	<0.003 U	13.6
DISSOLVED	249938	MW-261(LTW-3-SOD)	09/15/09	14:38	8.86	6.80	244	6.89	274	34.3	9.3	6.5	1.0	0.004	0.001	14.1
DISSOLVED	249938	MW-261(LTW-3-SOD)	03/17/10	13:27			253	6.96	232	23.4	6.3	5.2	0.8	<0.001	0.001	9.6
TOTAL RECOVERABLE	249938	MW-261(LTW-3-SOD)	07/14/10	10:09	8.81	6.46	245			33.6	9.1	6.8	1.1	0.043	<0.003	
DISSOLVED	249938	MW-261(LTW-3-SOD)	07/14/10	10:09	8.81	6.46	245	7.89	268	25.7	7.8	5.6	0.9	<0.002	0.001	13.0
TOTAL RECOVERABLE	249938	MW-261(LTW-3-SOD)	04/04/11	14:11	8.25	6.77	244			32.2	8.7	6.5	1.0	0.058	<0.003	
DISSOLVED	249938	MW-261(LTW-3-SOD)	04/04/11	14:11	8.25	6.77	244	7.22	293	32.3	8.6	6.7	1.0	<0.002	<0.001	13.6
TOTAL RECOVERABLE	249938	MW-261(LTW-3-SOD)	07/26/11	11:15	9.04	7.00	225			27.7	8.2	6.0	1.0	0.052	<0.006 U	
DISSOLVED	249938	MW-261(LTW-3-SOD)	07/26/11	11:15	9.04	7.00	225	7.16	217	29.0	7.9	5.9	1.0	<0.002 U	<0.003 U	12.9
TOTAL RECOVERABLE	249938	MW-261(LTW-3-SOD)	03/26/12	12:42	8.13	7.52	239			31.5	8.5	6.7	1.0	0.131	<0.005 U	
DISSOLVED	249938	MW-261(LTW-3-SOD)	03/26/12	12:42	8.13	7.52	239	7.03	249	30.4	8.2	5.9	0.9	<0.005 U	<0.002 U	13.3
DISSOLVED	249938	MW-261(LTW-3-SOD)	08/22/12	11:57	7.95	6.23	231	6.77	195	27.8	8.6	5.8	1.0	<0.015 U	<0.002 U	13.2
DISSOLVED	249938	MW-261(LTW-3-SOD)	03/25/13	14:30	8.28	7.19	225	6.63	187	27.1	7.4	5.7	0.8	<0.015 U	<0.002 U	13.0
DISSOLVED	249938	MW-261(LTW-3-SOD)	08/02/13	13:51	9.14	6.59	215	6.85	211	26.5	7.4	5.8	0.8	<0.015 U	<0.002 U	14.0
TOTAL RECOVERABLE	249938	MW-261(LTW-3-SOD)	08/02/13	13:51	9.14	6.59	215			27.0	7.6	6.1	1.1	<0.038 U	<0.005 U	
DISSOLVED	249938	MW-261(LTW-3-SOD)	03/19/14	11:35	8.00	6.88	215	7.19	217	27.3	7.6	5.7	0.9	<0.015 U	<0.002 U	13.4
DISSOLVED	249938	MW-261(LTW-3-SOD)	07/30/14	11:45	9.20	6.34	210	7.40	212	28.5	7.9	5.7	0.9	<0.015 U	<0.002 U	14.2

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Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-259(LTW-4-SOD)	09/11/09	68.3	0.0	7.0	<0.5	<0.05	0.5	<0.05	<0.10	<17.80	0.55	4.19	39.10	<0.10	<50	<0.20
MW-259(LTW-4-SOD)	04/13/10	74.4	0.0	10.6	<0.5	0.1	0.5	<0.05	<0.1	<1.0	0.48	3.14	45.00	<0.2	<50	<0.1
MW-259(LTW-4-SOD)	07/15/10	84.4	0.0	13.4	<0.5	0.2	0.5	<0.05	<0.2	9.95	0.47	3.62	49.30	<0.2	<50	<0.2
MW-259(LTW-4-SOD)	07/15/10								<0.5	284.00	0.47	<5.0	55.80	<0.5		<0.5
MW-259(LTW-4-SOD)	03/30/11								<0.5	246.00	0.52	<5.0	47.70	<0.5		<0.5
MW-259(LTW-4-SOD)	03/30/11	74.4	0.0	10.2	0.9	0.2	0.4	<0.1	<0.2	25.50	0.52	3.21	44.70	<0.2	<50	<0.2
MW-259(LTW-4-SOD)	07/26/11								<1.250 U	21.98	0.590 J		42.17	<1.250 U		<1.250 U
MW-259(LTW-4-SOD)	07/26/11	66.3	0.0	13.9	<0.500 U	0.1	0.3	<0.100 U	<0.500 U	0.858 J	0.52	2.31	40.43	<0.500 U	<50.000 U	<0.500 U
MW-259(LTW-4-SOD)	03/15/12	82.4	0.0	20.7	0.9	0.1	0.4	<0.020 U	<0.100 U	3.26	0.470 J	2.41	57.78	<0.100 U	<10.000 U	<0.100 U
MW-259(LTW-4-SOD)	03/15/12								<0.250 U	187.79	1.29	5.22	63.04	<0.250 U		<0.250 U
MW-259(LTW-4-SOD)	08/23/12	68.0	0.0	12.0	0.6	0.2	0.4	0.040 J	<0.100 U	<0.400 U	0.250 J	3.42	41.31	<0.100 U	<10.000 U	<0.100 U
MW-259(LTW-4-SOD)	03/20/13	92.4	0.0	30.0	1.2	0.2	0.4	<0.020 U	<0.100 U	2.30	0.450 J	3.66	61.29	<0.100 U	<10.000 U	<0.100 U
MW-259(LTW-4-SOD)	07/31/13	91.0	0.0	21.8	0.7	0.2	0.4	<0.020 U	<0.100 U	1.880 J	0.460 J	4.01	54.34	<0.100 U	<10.000 U	<0.100 U
MW-259(LTW-4-SOD)	07/31/13									39.31	0.670 J	3.700 J	53.24	<0.250 U		<0.250 U
MW-259(LTW-4-SOD)	03/19/14	82.2	0.0	15.4	0.8	0.2	0.4	0.030 J	<0.100 U	<2.000 U	0.47	2.32	42.15	<0.100 U	<10.000 U	<0.100 U
MW-259(LTW-4-SOD)	09/15/14	79.9	0.0	10.8	0.6	0.8	0.4	0.020 J	<0.100 U	4.620 J	0.50	3.40	40.76	<0.100 U	<10.000 U	<0.100 U
MW-260(LTW-4-SOS)	09/11/09	75.2	0.0	7.1	<0.5	<0.05	0.4	<0.05	<0.10	<17.80	0.56	4.68	37.30	<0.10	<50	<0.20
MW-260(LTW-4-SOS)	07/15/10	55.1	0.0	7.8	<0.5	0.1	0.5	<0.05	<0.2	4.87	0.51	3.47	29.20	<0.2	<50	<0.2
MW-260(LTW-4-SOS)	07/15/10								<0.5	57.30	<0.5	<5.0	30.80	<0.5		<0.5
MW-260(LTW-4-SOS)	07/26/11								<1.250 U	35.20	0.590 J		27.53	<1.250 U		<1.250 U
MW-260(LTW-4-SOS)	07/26/11	60.3	0.0	5.7	0.390 J	0.1	0.4	<0.100 U	<0.500 U	15.22	0.55	2.73	26.89	<0.500 U	<50.000 U	<0.500 U
MW-261(LTW-3-SOD)	09/15/09	137.4	0.0	22.0	2.6	<0.05	0.5	<0.05	<0.10	<17.80	0.42	4.05	73.10	<0.10	<50	<0.20
MW-261(LTW-3-SOD)	03/17/10	68.8	0.0	21.9	2.1	0.7	0.4	<0.05	<0.10	1.08	0.35	2.66	50.50	<0.10	<50	<0.10
MW-261(LTW-3-SOD)	07/14/10								<0.5	8.07	<0.5	<5.0	66.10	<0.5		<0.5
MW-261(LTW-3-SOD)	07/14/10	126.6	0.0	20.9	1.2	0.4	0.5	<0.05	<0.2	<2.0	0.36	4.59	63.80	<0.2	<50	<0.2
MW-261(LTW-3-SOD)	04/04/11								<0.5	11.90	<0.5	<5.0	60.40	<0.5		<0.5
MW-261(LTW-3-SOD)	04/04/11	126.0	0.0	17.4	1.0	0.2	0.4	<0.1	<0.2	<2.0	0.39	3.78	58.50	<0.2	<50	<0.2
MW-261(LTW-3-SOD)	07/26/11								<1.250 U	24.45	0.440 J		60.75	<1.250 U		<1.250 U
MW-261(LTW-3-SOD)	07/26/11	120.9	0.0	16.0	0.8	0.2	0.4	<0.100 U	<0.500 U	16.48	0.380 J	5.05	57.85	<0.500 U	<50.000 U	<0.500 U
MW-261(LTW-3-SOD)	03/26/12									41.10	1.74	5.75	62.39	<0.250 U		<0.250 U
MW-261(LTW-3-SOD)	03/26/12	114.5	0.0	17.2	1.4	0.3	0.5	<0.020 U	0.100 J	1.600 J	0.390 J	3.89	60.76	<0.100 U	<10.000 U	<0.100 U
MW-261(LTW-3-SOD)	08/22/12	116.2	0.0	17.6	0.9	0.3	0.4	<0.020 U	<0.100 U	<0.400 U	0.360 J	4.61	56.05	<0.100 U	<10.000 U	<0.100 U
MW-261(LTW-3-SOD)	03/25/13	121.2	0.0	17.3	0.9	0.4	0.5	0.040 J	<0.100 U	<0.400 U	0.400 J	4.57	51.93	<0.100 U	<10.000 U	<0.100 U
MW-261(LTW-3-SOD)	08/02/13	115.2	0.0	17.5	0.8	0.4	0.6	<0.020 U	<0.100 U	0.430 J	0.420 J	4.83	54.24	<0.100 U	<10.000 U	<0.100 U
MW-261(LTW-3-SOD)	08/02/13									12.19	0.600 J	4.160 J	51.68	<0.250 U		<0.250 U
MW-261(LTW-3-SOD)	03/19/14	125.3	0.0	15.0	0.9	0.3	0.5	0.020 J	<0.100 U	<2.000 U	0.400 J	3.18	53.58	<0.100 U	<10.000 U	<0.100 U
MW-261(LTW-3-SOD)	07/30/14	130.4	0.0	15.0	1.0	0.3	0.6	<0.020 U	<0.100 U	<2.000 U	0.390 J	4.09	54.90	<0.100 U	<10.000 U	<0.100 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-259(LTW-4-SOD)	09/11/09	0.12	0.17	1.01	1.69	2.60	0.26	<0.10	0.39	<0.30	<0.10	87.50	0.82	<0.10	0.97	0.77	53.50
MW-259(LTW-4-SOD)	04/13/10	0.34	0.09	0.55	9.80	2.49	0.44	<0.2	0.30	<0.1	<0.1	107.00	<0.2	<0.1	1.59	0.70	70.50
MW-259(LTW-4-SOD)	07/15/10	<0.2	<0.2	0.75	<2.0	2.11	0.27	<0.2	0.28	<0.2	<0.2	114.00	0.24	<0.2	1.73	0.66	78.00
MW-259(LTW-4-SOD)	07/15/10	<0.5	<0.5	4.14	<5.0	2.33	0.47	<0.5	<0.5	<0.5		120.00	5.43	<0.5	1.83	0.99	72.00
MW-259(LTW-4-SOD)	03/30/11	<0.5	<0.5	<1.3	<5.0	2.39	0.53	<0.5	<0.5	<0.5		107.00	6.49	<0.5	1.65	1.19	65.50
MW-259(LTW-4-SOD)	03/30/11	<0.2	<0.2	0.66	<2.0	2.15	0.30	<0.2	0.27	<0.2	<0.5	108.00	1.06	<0.2	1.49	0.60	80.80
MW-259(LTW-4-SOD)	07/26/11	<1.250 U	<1.250 U	0.910 J	6.97	2.08	0.660 J	<0.500 U	0.300 J	<1.250 U		93.16	0.260 J	<1.250 U	1.33	0.650 J	47.90
MW-259(LTW-4-SOD)	07/26/11	<0.500 U	<0.500 U	0.73	<2.000 U	2.27	0.280 J	<0.200 U	0.320 J	<0.500 U	<0.500 U	88.14	<0.500 U	<0.500 U	1.19	0.65	48.03
MW-259(LTW-4-SOD)	03/15/12	<0.100 U	<0.100 U	0.53	<0.400 U	1.70	0.370 J	<0.040 U	0.240 J	<0.100 U	<0.100 U	123.51	0.180 J	<0.100 U	11.43	0.64	80.88
MW-259(LTW-4-SOD)	03/15/12	<0.250 U	1.50	1.090 J	7.46	1.88	0.590 J	0.290 J	0.480 J	<0.250 U	0.610 J	133.51	10.57	<0.250 U	0.940 J	7.20	84.50
MW-259(LTW-4-SOD)	08/23/12	<0.100 U	<0.100 U	0.220 J	0.420 J	2.10	0.400 J	<0.040 U	0.160 J	<0.100 U	<0.100 U	89.01	<0.100 U	<0.100 U	1.03	0.73	58.88
MW-259(LTW-4-SOD)	03/20/13	<0.100 U	<0.100 U	0.470 J	<1.500 U	1.71	0.72	<0.060 U	0.260 J	<0.100 U	<0.100 U	139.50	0.360 J	<0.100 U	2.98	0.59	69.50
MW-259(LTW-4-SOD)	07/31/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	2.01	0.490 J	<0.060 U	0.300 J	<0.100 U	<0.100 U	124.25	<0.100 U	<0.100 U	2.26	0.68	61.58
MW-259(LTW-4-SOD)	07/31/13	<0.250 U	0.930 J	<0.100 U	<3.750 U	2.07	0.560 J	<0.150 U	<0.250 U	<0.250 U	<0.250 U	121.81	4.69	<0.250 U	2.29	2.57	64.67
MW-259(LTW-4-SOD)	03/19/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	2.10	0.310 J	<0.060 U	0.240 J	<0.100 U	<0.100 U	92.34	<0.100 U	<0.100 U	1.33	0.51	35.21
MW-259(LTW-4-SOD)	09/15/14	<0.100 U	<0.100 U	0.550 J	<2.000 U	2.16	0.280 J	<0.060 U	0.330 J	<0.100 U	<0.100 U	87.87	10.69	<0.100 U	1.16	0.78	41.51
MW-260(LTW-4-SOS)	09/11/09	<0.10	0.10	1.09	1.23	1.99	0.27	<0.10	0.60	<0.30	<0.10	88.70	<0.30	<0.10	0.75	0.87	68.90
MW-260(LTW-4-SOS)	07/15/10	<0.2	<0.2	1.39	<2.0	1.66	0.28	<0.2	0.41	<0.2	<0.2	75.50	<0.2	<0.2	0.48	0.66	64.00
MW-260(LTW-4-SOS)	07/15/10	<0.5	<0.5	1.75	<5.0	1.70	<0.5	<0.5	<0.5	<0.5		74.40	1.77	<0.5	<0.5	0.87	52.80
MW-260(LTW-4-SOS)	07/26/11	<1.250 U	<1.250 U	1.76	9.84	1.36	0.780 J	0.170 J	0.430 J	<1.250 U		66.95	1.060 J	<1.250 U	0.480 J	0.670 J	52.77
MW-260(LTW-4-SOS)	07/26/11	<0.500 U	<0.500 U	1.34	<2.000 U	1.52	0.310 J	<0.200 U	0.460 J	<0.500 U	<0.500 U	66.37	<0.500 U	<0.500 U	0.450 J	0.64	58.25
MW-261(LTW-3-SOD)	09/15/09	0.47	0.18	<0.80	2.36	3.19	<0.10	<0.10	0.11	<0.30	<0.10	169.00	0.34	<0.10	10.50	0.65	<1.90
MW-261(LTW-3-SOD)	03/17/10	<0.10	0.11	0.91	1.28	2.46	<0.10	<0.10	<0.20	<0.20	<0.10	121.00	<0.20	<0.10	6.28	0.52	<0.81
MW-261(LTW-3-SOD)	07/14/10	<0.5	<0.5	<1.3	<5.0	3.38	<0.5	<0.5	<0.5	<0.5		160.00	<0.5	<0.5	7.99	0.84	<2.5
MW-261(LTW-3-SOD)	07/14/10	<0.2	<0.2	0.67	<2.0	3.18	<0.2	<0.2	<0.2	<0.2	<0.2	153.00	<0.2	<0.2	8.40	0.68	<1.0
MW-261(LTW-3-SOD)	04/04/11	<0.5	<0.5	<1.3	<5.0	3.52	<0.5	<0.5	<0.5	<0.5		153.00	0.52	<0.5	8.86	0.99	<1.3
MW-261(LTW-3-SOD)	04/04/11	<0.2	<0.2	<0.5	<2.0	3.07	<0.2	<0.2	<0.2	<0.2	<0.5	150.00	0.26	<0.2	7.75	0.57	<0.5
MW-261(LTW-3-SOD)	07/26/11	<1.250 U	<1.250 U	0.510 J	9.74	2.96	0.590 J	0.140 J	<1.250 U	<1.250 U		144.03	<1.250 U	<1.250 U	8.28	0.590 J	0.920 J
MW-261(LTW-3-SOD)	07/26/11	<0.500 U	<0.500 U	0.350 J	2.38	3.24	<0.500 U	<0.200 U	<0.500 U	<0.500 U	<0.500 U	132.11	<0.500 U	<0.500 U	7.65	0.57	<1.000 U
MW-261(LTW-3-SOD)	03/26/12	<0.250 U	1.30	5.71	8.83	3.05	<0.250 U	<0.100 U	0.280 J	1.75	<0.250 U	135.12	13.58	<0.250 U	8.07	8.40	1.320 J
MW-261(LTW-3-SOD)	03/26/12	<0.100 U	<0.100 U	<0.100 U	2.62	2.79	<0.100 U	<0.040 U	<0.100 U	0.230 J	<0.100 U	133.79	0.100 J	<0.100 U	6.85	0.54	<0.200 U
MW-261(LTW-3-SOD)	08/22/12	<0.100 U	<0.100 U	0.140 J	2.49	3.26	0.160 J	<0.040 U	<0.100 U	<0.100 U	<0.100 U	131.88	<0.100 U	<0.100 U	7.25	0.71	<0.200 U
MW-261(LTW-3-SOD)	03/25/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	3.41	0.340 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	124.34	0.230 J	<0.100 U	7.43	0.59	<0.050 U
MW-261(LTW-3-SOD)	08/02/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	3.59	0.230 J	<0.060 U	<0.100 U	<0.100 U	<0.100 U	124.75	<0.100 U	<0.100 U	6.47	0.63	<0.050 U
MW-261(LTW-3-SOD)	08/02/13	<0.250 U	0.960 J	<0.100 U	<3.750 U	3.60	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	122.51	3.63	<0.250 U	6.57	2.71	<0.130 U
MW-261(LTW-3-SOD)	03/19/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	3.81	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	125.22	<0.100 U	<0.100 U	6.84	0.500 J	<0.500 U
MW-261(LTW-3-SOD)	07/30/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	3.58	<0.100 U	<0.060 U	<0.100 U	<0.100 U		129.64	0.230 J	<0.100 U		0.94	0.850 J

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
South Opportunity/Yellow Ditch AOC

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-259(LTW-4-SOD)	09/11/09	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.32	<0.10	0.11	<0.05
MW-259(LTW-4-SOD)	04/13/10	<0.1	<0.1	<0.1	<0.1	<0.1	0.07	<0.1	0.26	<0.1	0.33	<0.1	0.12	<0.05
MW-259(LTW-4-SOD)	07/15/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-259(LTW-4-SOD)	07/15/10	0.48	0.74	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-259(LTW-4-SOD)	03/30/11	<0.5	0.90	<1.3	15.10	0.51	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-259(LTW-4-SOD)	03/30/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-259(LTW-4-SOD)	07/26/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.320 J	<1.250 U	<1.250 U	
MW-259(LTW-4-SOD)	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.270 J	<0.500 U	<0.500 U	<0.050 U
MW-259(LTW-4-SOD)	03/15/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.300 J	<0.100 U	<0.100 U	<0.010 U
MW-259(LTW-4-SOD)	03/15/12	<0.250 U	0.320 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.840 J	<0.250 U	<0.250 U	
MW-259(LTW-4-SOD)	08/23/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.280 J	<0.100 U	<0.100 U	<0.010 U
MW-259(LTW-4-SOD)	03/20/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.350 J	<0.100 U	<0.100 U	<0.010 U
MW-259(LTW-4-SOD)	07/31/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.390 J	<0.100 U	<0.100 U	<0.010 U
MW-259(LTW-4-SOD)	07/31/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-259(LTW-4-SOD)	03/19/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.330 J	<0.100 U	<0.100 U	<0.010 U
MW-259(LTW-4-SOD)	09/15/14	<0.100 U	<0.100 U	<0.100 U	1.49	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-260(LTW-4-SOS)	09/11/09	<0.10	<0.10	<0.10	<0.10	0.11	<0.20	<0.10	<0.10	<0.10	0.20	<0.10	0.12	<0.05
MW-260(LTW-4-SOS)	07/15/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-260(LTW-4-SOS)	07/15/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-260(LTW-4-SOS)	07/26/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	
MW-260(LTW-4-SOS)	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.100 J	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.140 J	<0.500 U	<0.500 U	<0.050 U
MW-261(LTW-3-SOD)	09/15/09	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.37	<0.10	0.12	<0.05
MW-261(LTW-3-SOD)	03/17/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.33	<0.10	<0.10	<0.05
MW-261(LTW-3-SOD)	07/14/10	0.60	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.2	
MW-261(LTW-3-SOD)	07/14/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-261(LTW-3-SOD)	04/04/11	<0.5	<0.5	<1.3	23.30	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-261(LTW-3-SOD)	04/04/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-261(LTW-3-SOD)	07/26/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.310 J	<1.250 U	<1.250 U	
MW-261(LTW-3-SOD)	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.290 J	<0.500 U	<0.500 U	<0.050 U
MW-261(LTW-3-SOD)	03/26/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.400 J	<0.250 U	<0.250 U	
MW-261(LTW-3-SOD)	03/26/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.270 J	<0.100 U	<0.100 U	<0.010 U
MW-261(LTW-3-SOD)	08/22/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.310 J	<0.100 U	0.120 J	<0.010 U
MW-261(LTW-3-SOD)	03/25/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.290 J	<0.100 U	<0.100 U	<0.010 U
MW-261(LTW-3-SOD)	08/02/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.310 J	<0.100 U	<0.100 U	<0.010 U
MW-261(LTW-3-SOD)	08/02/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-261(LTW-3-SOD)	03/19/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.320 J	<0.100 U	<0.100 U	<0.010 U
MW-261(LTW-3-SOD)	07/30/14													<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
South Opportunity/Yellow Ditch AOC

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SIO2 (mg/l)
DISSOLVED	249939	MW-262(LTW-3-SOS)	09/15/09	14:40	9.37	6.54	267	6.76	269	34.9	9.3	7.5	1.0	<0.002	<0.001	14.3
DISSOLVED	249939	MW-262(LTW-3-SOS)	03/17/10	13:45	7.16	6.60	235	7.31	248	27.9	7.5	6.5	0.8	<0.001	0.001	12.9
DISSOLVED	249939	MW-262(LTW-3-SOS)	07/14/10	10:28	8.24	6.48	228	8.25	239	26.9	7.1	6.0	0.8	<0.002	<0.001	13.1
TOTAL RECOVERABLE	249939	MW-262(LTW-3-SOS)	07/14/10	10:28	8.24	6.48	228			30.6	8.0	7.1	1.0	0.056	<0.003	
DISSOLVED	249939	MW-262(LTW-3-SOS)	04/04/11	14:39	6.38	6.77	246	6.90	262	31.0	8.2	7.2	0.8	<0.002	<0.001	13.1
TOTAL RECOVERABLE	249939	MW-262(LTW-3-SOS)	04/04/11	14:39	6.38	6.77	246			29.8	8.6	7.4	0.9	0.064	<0.003	
TOTAL RECOVERABLE	249939	MW-262(LTW-3-SOS)	07/26/11	11:50	9.27	7.06	249			30.5	8.8	7.3	1.0	0.099	<0.006 U	
DISSOLVED	249939	MW-262(LTW-3-SOS)	07/26/11	11:50	9.27	7.06	249	6.91	256	31.2	8.8	6.7	0.9	<0.002 U	<0.003 U	13.1
DISSOLVED	249939	MW-262(LTW-3-SOS)	03/26/12	13:07	5.94	7.96	255	6.74	275	32.6	8.6	7.1	0.8	0.006 J	<0.002 U	13.4
TOTAL RECOVERABLE	249939	MW-262(LTW-3-SOS)	03/26/12	13:07	5.94	7.96	255			34.3	9.0	7.5	0.9	0.059 J	<0.005 U	
DISSOLVED	249939	MW-262(LTW-3-SOS)	08/22/12	12:45	9.50	5.93	215	6.65	189	25.4	7.7	6.6	0.9	<0.015 U	<0.002 U	14.3
DISSOLVED	249939	MW-262(LTW-3-SOS)	03/25/13	15:08	6.90	7.01	221	6.39	180	24.0	6.4	5.5	0.7	<0.015 U	<0.002 U	13.6
DISSOLVED	249939	MW-262(LTW-3-SOS)	08/02/13	14:40	11.09	6.30	210	6.41	212	26.0	7.0	7.0	0.9	<0.015 U	<0.002 U	20.1
TOTAL RECOVERABLE	249939	MW-262(LTW-3-SOS)	08/02/13	14:40	11.09	6.30	210			26.5	7.3	7.3	1.0	<0.038 U	<0.005 U	
DISSOLVED	249939	MW-262(LTW-3-SOS)	03/19/14	12:00	6.30	6.59	230	6.95	235	29.4	7.9	6.0	0.8	<0.015 U	<0.002 U	13.9
DISSOLVED	249939	MW-262(LTW-3-SOS)	07/29/14	12:20	10.10	6.01	205	7.06	198	26.7	7.3	6.4	0.8	<0.015 U	<0.002 U	15.4
DISSOLVED	249936	MW-263(LTW-1-SOD)	09/11/09	18:05	8.80	6.96	182	6.91	189	21.6	6.0	6.6	0.9	0.012	0.001	14.1
DISSOLVED	249936	MW-263(LTW-1-SOD)	03/17/10	12:22	8.73	6.05	187	6.91	195	20.6	5.9	6.3	0.8	0.007	0.001	12.5
TOTAL RECOVERABLE	249936	MW-263(LTW-1-SOD)	07/15/10	9:40	8.94	6.25	188			24.2	6.7	7.3	1.0	0.090	<0.003	
DISSOLVED	249936	MW-263(LTW-1-SOD)	07/15/10	9:40	8.94	6.25	188	7.34	188	21.8	6.1	6.3	0.8	0.004	<0.001	13.1
DISSOLVED	249936	MW-263(LTW-1-SOD)	03/30/11	15:00	8.64	6.74	202	6.85	214	23.3	6.5	7.0	0.8	<0.002	<0.001	12.9
TOTAL RECOVERABLE	249936	MW-263(LTW-1-SOD)	03/30/11	15:00	8.64	6.74	202			23.6	6.6	6.9	0.8	0.059	<0.003	
TOTAL RECOVERABLE	249936	MW-263(LTW-1-SOD)	07/25/11	16:50	8.51	6.12	190			20.5	6.3	6.2	0.9	0.051	<0.006 U	
DISSOLVED	249936	MW-263(LTW-1-SOD)	07/25/11	16:50	8.51	6.12	190	6.88	179	21.9	6.4	6.2	0.9	0.019	<0.003 U	12.8
DISSOLVED	249936	MW-263(LTW-1-SOD)	03/16/12	10:38	8.00	7.97	191	6.60	216	20.5	5.8	6.2	0.7	0.013 J	<0.002 U	13.4
TOTAL RECOVERABLE	249936	MW-263(LTW-1-SOD)	03/16/12	10:38	8.00	7.97	191			22.4	6.4	6.4	0.9	0.148	<0.005 U	
DISSOLVED	249936	MW-263(LTW-1-SOD)	08/22/12	14:38	7.66	5.79	195	6.61	165	21.5	7.0	6.6	0.9	<0.015 U	<0.002 U	13.0
DISSOLVED	249936	MW-263(LTW-1-SOD)	03/25/13	12:10	8.09	6.53	191	6.20	169	21.1	5.9	6.8	0.8	<0.015 U	<0.002 U	13.7
DISSOLVED	249936	MW-263(LTW-1-SOD)	08/02/13	11:07	9.01	6.28	195	6.54	191	22.5	6.5	6.5	0.8	<0.015 U	<0.002 U	13.9
TOTAL RECOVERABLE	249936	MW-263(LTW-1-SOD)	08/02/13	11:07	9.01	6.28	195			23.9	6.8	6.8	1.1	<0.038 U	<0.005 U	
DISSOLVED	249936	MW-263(LTW-1-SOD)	03/17/14	15:10	8.60	6.59	175	6.86	171	20.1	5.8	6.0	0.8	<0.015 U	<0.002 U	13.7
DISSOLVED	249936	MW-263(LTW-1-SOD)	07/30/14	13:35	9.20	6.06	180	7.14	180	22.8	6.6	6.7	0.8	<0.015 U	<0.002 U	13.7

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Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-262(LTW-3-SOS)	09/15/09	135.4	0.0	27.2	4.4	0.3	0.6	<0.05	<0.10	<17.80	2.32	5.55	92.40	<0.10	<50	<0.20
MW-262(LTW-3-SOS)	03/17/10	121.3	0.0	19.5	1.1	0.1	0.6	<0.05	<0.10	1.43	2.36	2.51	74.60	<0.10	<50	<0.10
MW-262(LTW-3-SOS)	07/14/10	123.4	0.0	18.3	1.0	0.2	0.6	<0.05	<0.2	<2.0	2.37	4.47	71.70	<0.2	<50	<0.2
MW-262(LTW-3-SOS)	07/14/10								<0.5	19.90	2.10	<5.0	74.40	<0.5		<0.5
MW-262(LTW-3-SOS)	04/04/11	123.0	0.0	17.2	1.1	0.1	0.5	<0.1	<0.2	<2.0	2.23	4.04	67.70	<0.2	<50	<0.2
MW-262(LTW-3-SOS)	04/04/11								<0.5	60.40	1.98	<5.0	73.30	<0.5		<0.5
MW-262(LTW-3-SOS)	07/26/11								<1.250 U	33.72	2.52		80.02	<1.250 U		<1.250 U
MW-262(LTW-3-SOS)	07/26/11	136.6	0.0	17.8	1.7	0.1	0.5	<0.100 U	<0.500 U	19.11	2.77	3.15	79.06	<0.500 U	<50.000 U	<0.500 U
MW-262(LTW-3-SOS)	03/26/12	121.5	0.0	20.8	1.6	0.1	0.5	<0.020 U	<0.100 U	14.99	1.99	4.40	78.21	<0.100 U	<10.000 U	<0.100 U
MW-262(LTW-3-SOS)	03/26/12									67.39	2.84	5.87	81.29	<0.250 U		<0.250 U
MW-262(LTW-3-SOS)	08/22/12	105.2	0.0	16.8	1.8	0.2	0.6	<0.020 U	<0.100 U	<0.400 U	3.20	5.32	65.61	<0.100 U	<10.000 U	<0.100 U
MW-262(LTW-3-SOS)	03/25/13	107.6	0.0	16.4	0.9	0.2	0.6	0.030 J	<0.100 U	1.030 J	1.85	4.96	56.90	<0.100 U	<10.000 U	<0.100 U
MW-262(LTW-3-SOS)	08/02/13	124.2	0.0	10.9	0.9	0.1	0.7	<0.020 U	<0.100 U	7.91	7.30	5.31	68.91	<0.100 U	<10.000 U	<0.100 U
MW-262(LTW-3-SOS)	08/02/13									30.58	7.89	4.910 J	69.06	<0.250 U		<0.250 U
MW-262(LTW-3-SOS)	03/19/14	121.0	0.0	22.6	3.3	0.2	0.6	<0.020 U	<0.100 U	<2.000 U	2.92	2.53	70.22	<0.100 U	<10.000 U	<0.100 U
MW-262(LTW-3-SOS)	07/29/14	110.9	0.0	18.3	4.4	0.1	0.7	<0.020 U	<0.100 U	2.390 J	4.44	3.33	63.46	<0.100 U	<10.000 U	<0.100 U
MW-263(LTW-1-SOD)	09/11/09	96.9	0.0	21.0	1.2	1.3	0.3	<0.05	<0.10	<17.80	0.44	4.64	51.60	<0.10	<50	<0.20
MW-263(LTW-1-SOD)	03/17/10	82.2	0.0	23.1	1.0	1.3	0.3	<0.05	<0.10	3.17	0.49	<2.0	49.90	<0.10	<50	<0.10
MW-263(LTW-1-SOD)	07/15/10								<0.5	71.10	<0.5	<5.0	54.30	<0.5		<0.5
MW-263(LTW-1-SOD)	07/15/10	83.5	0.0	22.4	1.1	1.4	0.3	<0.05	<0.2	6.78	0.45	51.80	4.14	<0.2	<50	<0.2
MW-263(LTW-1-SOD)	03/30/11	78.8	0.0	24.9	0.8	1.1	0.2	<0.1	<0.2	<2.0	0.44	3.22	51.00	<0.2	<50	<0.2
MW-263(LTW-1-SOD)	03/30/11								<0.5	11.60	<0.5	<5.0	51.30	<0.5		<0.5
MW-263(LTW-1-SOD)	07/25/11								<1.250 U	10.29	0.450 J		50.75	<1.250 U		<1.250 U
MW-263(LTW-1-SOD)	07/25/11	79.2	0.0	24.9	0.9	0.9	0.2	<0.100 U	<0.500 U	84.46	0.420 J	1.960 J	53.45	<0.500 U	<50.000 U	<0.500 U
MW-263(LTW-1-SOD)	03/16/12	74.5	0.0	24.7	0.8	0.8	0.3	<0.020 U	<0.100 U	1.120 J	0.440 J	3.20	45.99	<0.100 U	<10.000 U	<0.100 U
MW-263(LTW-1-SOD)	03/16/12								<0.250 U	1.470 J	1.210 J	4.940 J	52.38	<0.250 U		<0.250 U
MW-263(LTW-1-SOD)	08/22/12	79.9	0.0	24.0	0.8	1.0	0.3	<0.020 U	<0.100 U	<0.400 U	0.390 J	3.91	50.46	<0.100 U	<10.000 U	<0.100 U
MW-263(LTW-1-SOD)	03/25/13	77.8	0.0	25.1	0.7	0.9	0.3	0.040 J	<0.100 U	1.260 J	0.420 J	4.01	47.30	<0.100 U	<10.000 U	<0.100 U
MW-263(LTW-1-SOD)	08/02/13	92.5	0.0	22.4	1.2	0.6	0.3	<0.020 U	<0.100 U	<0.400 U	0.380 J	3.80	51.29	<0.100 U	<10.000 U	<0.100 U
MW-263(LTW-1-SOD)	08/02/13									4.280 J	0.630 J	2.980 J	49.97	<0.250 U		<0.250 U
MW-263(LTW-1-SOD)	03/17/14	96.1	0.0	17.0	0.7	0.3	0.3	<0.020 U	<0.100 U	<2.000 U	0.43	2.95	47.01	<0.100 U	<10.000 U	<0.100 U
MW-263(LTW-1-SOD)	07/30/14	110.5	0.0	13.5	1.0	0.4	0.4	<0.020 U	<0.100 U	<2.000 U	0.380 J	2.77	50.97	<0.100 U	<10.000 U	<0.100 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-262(LTW-3-SOS)	09/15/09	<0.10	0.14	1.08	2.77	3.22	0.16	<0.10	0.35	<0.30	<0.10	170.00	<0.30	<0.10	20.90	1.63	<1.90
MW-262(LTW-3-SOS)	03/17/10	<0.10	<0.10	1.15	1.64	2.78	0.14	<0.10	0.28	0.23	<0.10	147.00	<0.20	<0.10	17.30	1.50	<0.81
MW-262(LTW-3-SOS)	07/14/10	<0.2	<0.2	1.16	2.10	2.95	<0.2	<0.2	0.30	0.32	<0.2	140.00	<0.2	<0.2	15.10	1.57	<1.0
MW-262(LTW-3-SOS)	07/14/10	<0.5	<0.5	11.50	5.15	3.08	<0.5	<0.5	<0.5	<0.5		138.00	0.79	<0.5	14.00	1.89	<2.5
MW-262(LTW-3-SOS)	04/04/11	<0.2	<0.2	0.66	<2.0	2.70	<0.2	<0.2	0.25	0.28	<0.5	142.00	0.28	<0.2	19.50	1.24	<0.5
MW-262(LTW-3-SOS)	04/04/11	<0.5	<0.5	2.38	<5.0	3.08	<0.5	<0.5	<0.5	<0.5		156.00	0.91	<0.5	20.70	1.84	4.16
MW-262(LTW-3-SOS)	07/26/11	<1.250 U	<1.250 U	1.190 J	10.48	2.87	0.830 J	<0.500 U	0.260 J	0.320 J		154.60	0.300 J	<1.250 U	22.51	1.51	<2.500 U
MW-262(LTW-3-SOS)	07/26/11	<0.500 U	<0.500 U	0.99	<2.000 U	3.23	0.230 J	<0.200 U	0.300 J	0.470 J	<0.500 U	143.87	<0.500 U	<0.500 U	23.24	1.56	0.490 J
MW-262(LTW-3-SOS)	03/26/12	<0.100 U	<0.100 U	0.420 J	4.05	2.45	<0.100 U	<0.040 U	0.260 J	0.54	<0.100 U	142.12	0.110 J	<0.100 U	18.30	1.16	<0.200 U
MW-262(LTW-3-SOS)	03/26/12	<0.250 U	1.39	0.940 J	9.18	2.66	<0.250 U	<0.100 U	0.330 J	1.70	<0.250 U	146.38	8.63	<0.250 U	20.59	9.31	1.560 J
MW-262(LTW-3-SOS)	08/22/12	<0.100 U	<0.100 U	0.87	2.98	3.53	0.490 J	<0.040 U	0.360 J	0.300 J	<0.100 U	121.01	<0.100 U	<0.100 U	10.88	1.90	<0.200 U
MW-262(LTW-3-SOS)	03/25/13	<0.100 U	<0.100 U	0.490 J	<1.500 U	2.93	0.450 J	<0.060 U	0.310 J	0.380 J	<0.100 U	111.88	0.230 J	<0.100 U	13.88	1.17	<0.050 U
MW-262(LTW-3-SOS)	08/02/13	<0.100 U	<0.100 U	3.30	<1.500 U	3.37	0.56	<0.060 U	0.53	<0.100 U	<0.100 U	121.58	<0.100 U	<0.100 U	10.35	2.61	<0.050 U
MW-262(LTW-3-SOS)	08/02/13	<0.250 U	1.000 J	3.940 J	<3.750 U	3.42	0.730 J	<0.150 U	0.730 J	<0.250 U	<0.250 U	121.00	4.45	<0.250 U	10.70	5.15	<0.130 U
MW-262(LTW-3-SOS)	03/19/14	<0.100 U	<0.100 U	0.510 J	<2.000 U	2.87	0.320 J	<0.060 U	0.300 J	0.61	<0.100 U	134.46	<0.100 U	<0.100 U	12.37	1.07	<0.500 U
MW-262(LTW-3-SOS)	07/29/14	<0.100 U	<0.100 U	0.930 J	<2.000 U	3.56	<0.100 U	<0.060 U	0.390 J	0.410 J		120.34	0.310 J	<0.100 U		2.55	1.260 J
MW-263(LTW-1-SOD)	09/11/09	<0.10	0.18	<0.80	2.54	0.89	<1.90	<0.10	0.15	<0.30	<0.10	108.00	<0.30	<0.10	1.47	0.51	<1.90
MW-263(LTW-1-SOD)	03/17/10	0.11	0.12	3.59	1.62	0.80	<0.10	<0.10	<0.20	0.30	<0.10	110.00	0.25	<0.10	1.49	0.50	6.06
MW-263(LTW-1-SOD)	07/15/10	<0.5	<0.5	1.65	<5.0	0.93	<0.5	<0.5	<0.5	<0.5		109.00	2.61	<0.5	1.35	0.68	<2.5
MW-263(LTW-1-SOD)	07/15/10	<0.2	<0.2	<0.5	2.58	0.80	<0.2	<0.2	<0.2	0.28	<0.2	111.00	0.39	<0.2	1.40	0.49	<1.0
MW-263(LTW-1-SOD)	03/30/11	<0.2	<0.2	<0.5	<2.0	0.71	<0.2	<0.2	<0.2	0.39	<0.5	113.00	0.37	<0.2	1.40	0.40	0.59
MW-263(LTW-1-SOD)	03/30/11	<0.5	<0.5	<1.3	<5.0	0.80	<0.5	<0.5	<0.5	<0.5		116.00	0.74	<0.5	1.61	0.79	<1.3
MW-263(LTW-1-SOD)	07/25/11	<1.250 U	<1.250 U	0.370 J	10.51	0.670 J	0.450 J	6.80	<1.250 U	<1.250 U		105.47	0.390 J	<1.250 U	1.61	0.360 J	<2.500 U
MW-263(LTW-1-SOD)	07/25/11	<0.500 U	<0.500 U	0.270 J	<2.000 U	0.76	<0.500 U	<0.200 U	<0.500 U	0.450 J	<0.500 U	104.31	0.120 J	<0.500 U	1.52	0.390 J	0.330 J
MW-263(LTW-1-SOD)	03/16/12	<0.100 U	<0.100 U	<0.100 U	<0.400 U	0.66	<0.100 U	<0.040 U	<0.100 U	<0.100 U	<0.100 U	99.30	0.110 J	<0.100 U	0.210 J	0.390 J	<0.200 U
MW-263(LTW-1-SOD)	03/16/12	<0.250 U	1.47	0.370 J	8.20	0.750 J	<0.250 U	<0.100 U	0.250 J	0.950 J	0.450 J	106.20	8.34	<0.250 U	1.47	6.11	0.640 J
MW-263(LTW-1-SOD)	08/22/12	<0.100 U	<0.100 U	<0.100 U	3.24	0.75	0.290 J	<0.040 U	<0.100 U	0.350 J	<0.100 U	107.22	0.250 J	<0.100 U	1.50	0.480 J	<0.200 U
MW-263(LTW-1-SOD)	03/25/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.76	0.330 J	<0.060 U	<0.100 U	0.51	<0.100 U	100.94	0.370 J	<0.100 U	1.41	0.420 J	<0.050 U
MW-263(LTW-1-SOD)	08/02/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.87	0.220 J	<0.060 U	<0.100 U	0.290 J	<0.100 U	110.39	<0.100 U	<0.100 U	1.95	0.430 J	<0.050 U
MW-263(LTW-1-SOD)	08/02/13	<0.250 U	0.880 J	<0.100 U	<3.750 U	0.870 J	<0.250 U	<0.150 U	<0.250 U	<0.250 U	<0.250 U	109.88	3.62	<0.250 U	2.03	2.36	1.080 J
MW-263(LTW-1-SOD)	03/17/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	0.86	<0.100 U	<0.060 U	<0.100 U	0.280 J	<0.100 U	96.85	<0.100 U	<0.100 U	1.55	0.350 J	<0.500 U
MW-263(LTW-1-SOD)	07/30/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	0.96	<0.100 U	<0.060 U	<0.100 U	<0.100 U		107.82	0.210 J	<0.100 U		0.58	0.820 J

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Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-262(LTW-3-SOS)	09/15/09	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.17	<0.10	<0.10	<0.05
MW-262(LTW-3-SOS)	03/17/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.14	<0.10	<0.10	<0.05
MW-262(LTW-3-SOS)	07/14/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-262(LTW-3-SOS)	07/14/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-262(LTW-3-SOS)	04/04/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-262(LTW-3-SOS)	04/04/11	<0.5	<0.5	<1.3	27.70	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-262(LTW-3-SOS)	07/26/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	
MW-262(LTW-3-SOS)	07/26/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.160 J	<0.500 U	<0.500 U	<0.050 U
MW-262(LTW-3-SOS)	03/26/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.110 J	<0.100 U	<0.100 U	<0.010 U
MW-262(LTW-3-SOS)	03/26/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.280 J	<0.250 U	<0.250 U	
MW-262(LTW-3-SOS)	08/22/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-262(LTW-3-SOS)	03/25/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-262(LTW-3-SOS)	08/02/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.210 J	<0.100 U	<0.100 U	<0.010 U
MW-262(LTW-3-SOS)	08/02/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.780 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-262(LTW-3-SOS)	03/19/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-262(LTW-3-SOS)	07/29/14													<0.010 U
MW-263(LTW-1-SOD)	09/11/09	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.43	<0.10	<0.10	<0.05
MW-263(LTW-1-SOD)	03/17/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.42	<0.10	<0.10	<0.05
MW-263(LTW-1-SOD)	07/15/10	<0.5	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-263(LTW-1-SOD)	07/15/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-263(LTW-1-SOD)	03/30/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-263(LTW-1-SOD)	03/30/11	<0.5	<0.5	<1.3	17.20	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-263(LTW-1-SOD)	07/25/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.360 J	<1.250 U	<1.250 U	
MW-263(LTW-1-SOD)	07/25/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.350 J	<0.500 U	<0.500 U	<0.050 U
MW-263(LTW-1-SOD)	03/16/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.310 J	<0.100 U	<0.100 U	<0.010 U
MW-263(LTW-1-SOD)	03/16/12	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.380 J	<0.250 U	<0.250 U	
MW-263(LTW-1-SOD)	08/22/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.370 J	<0.100 U	<0.100 U	<0.010 U
MW-263(LTW-1-SOD)	03/25/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.370 J	<0.100 U	<0.100 U	<0.010 U
MW-263(LTW-1-SOD)	08/02/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.430 J	<0.100 U	<0.100 U	<0.010 U
MW-263(LTW-1-SOD)	08/02/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-263(LTW-1-SOD)	03/17/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.400 J	<0.100 U	<0.100 U	<0.010 U
MW-263(LTW-1-SOD)	07/30/14													<0.010 U

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South Opportunity/Yellow Ditch AOC

Sample Type	Gwic Id	Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	249937	MW-264(LTW-1-SOS)	09/11/09	17:25	10.19	7.23	170	6.73	196	20.2	5.4	6.3	0.9	0.004	<0.001	14.6
DISSOLVED	249937	MW-264(LTW-1-SOS)	03/17/10	12:45	8.37	6.30	189	6.88	210	20.6	5.7	5.7	0.8	0.005	0.001	12.8
TOTAL RECOVERABLE	249937	MW-264(LTW-1-SOS)	07/15/10	9:21	8.75	5.99	200			24.6	6.5	6.7	1.0	0.140	0.002	
DISSOLVED	249937	MW-264(LTW-1-SOS)	07/15/10	9:21	8.75	5.99	200	7.84	205	23.1	6.2	6.0	0.8	<0.002	<0.001	12.9
TOTAL RECOVERABLE	249937	MW-264(LTW-1-SOS)	03/30/11	14:34	8.33	6.71	201			24.3	6.5	6.3	0.9	0.099	<0.003	
DISSOLVED	249937	MW-264(LTW-1-SOS)	03/30/11	14:34	8.33	6.71	201	6.86	203	24.0	6.4	6.3	0.8	<0.002	<0.001	12.7
TOTAL RECOVERABLE	249937	MW-264(LTW-1-SOS)	07/25/11	16:05	8.90	6.53	219			24.6	7.2	6.9	1.0	0.054	<0.006 U	
DISSOLVED	249937	MW-264(LTW-1-SOS)	07/25/11	16:05	8.90	6.53	219	6.94	218	25.4	6.9	6.6	0.9	<0.002 U	<0.003 U	13.0
TOTAL RECOVERABLE	249937	MW-264(LTW-1-SOS)	03/16/12	11:03	7.23	7.23	198			23.7	6.6	6.4	1.0	0.832	<0.005 U	
DISSOLVED	249937	MW-264(LTW-1-SOS)	03/16/12	11:03	7.23	7.23	198	6.62	232	19.7	5.4	5.9	0.7	0.006 J	<0.002 U	14.0
DISSOLVED	249937	MW-264(LTW-1-SOS)	08/22/12	13:51	8.59	5.82	173	6.35	148	19.1	6.0	5.9	0.9	<0.015 U	<0.002 U	13.6
DISSOLVED	249937	MW-264(LTW-1-SOS)	08/02/13	11:54	9.71	6.37	175	6.48	172	20.0	5.5	5.8	0.8	<0.015 U	<0.002 U	14.5
TOTAL RECOVERABLE	249937	MW-264(LTW-1-SOS)	08/02/13	11:54	9.71	6.37	175			20.6	5.8	6.1	1.0	<0.038 U	<0.005 U	
DISSOLVED	249937	MW-264(LTW-1-SOS)	07/30/14	14:05	9.60	5.99	190	7.11	192	23.5	6.6	6.6	0.9	<0.015 U	<0.002 U	13.5
DISSOLVED	264393	MW-274	08/23/12	14:10	9.33	6.18	160	6.77	133	18.5	5.8	5.2	1.2	<0.015 U	<0.002 U	13.8
DISSOLVED	264393	MW-274	07/31/13	15:23	12.45	6.46	200	6.50	190	22.0	6.1	5.6	1.2	<0.015 U	0.003 J	14.6
TOTAL RECOVERABLE	264393	MW-274	07/31/13	15:23	12.45	6.46	200			23.6	6.4	5.4	1.4	0.038 J	0.005 J	
DISSOLVED	264393	MW-274	09/15/14	12:30	12.00	6.21	150	7.06	143	17.7	4.9	5.0	1.1	<0.015 U	<0.002 U	14.3
DISSOLVED	249799	OD-2S	04/13/09	19:20	5.35	6.32	215	6.48	247	32.2	8.8	6.8	0.7	2.180	0.138	30.7
DISSOLVED	249799	OD-2S	09/16/09	15:38	13.43	6.20	373	6.85	394	47.5	12.7	11.1	0.8	0.702	0.064	27.2
DISSOLVED	249799	OD-2S	06/14/12	13:20	8.70	5.54	330	6.37	346	41.8	11.6	8.2	0.9	2.821	0.120	27.0
DISSOLVED	249799	OD-2S	03/17/14	12:56	5.20	6.16	295	6.30	292	35.5	10.2	6.6	0.7	1.951	0.110	26.3
DISSOLVED	249799	OD-2S	07/29/14	13:45	12.10	5.67	370	6.63	353	47.4	13.2	8.5	0.9	3.136	0.161	28.8
DISSOLVED	249781	OD-3D	04/13/09	12:35	7.80	7.17	190	7.08	207	27.2	6.8	6.6	1.1	0.004	<0.001 U	26.4
DISSOLVED	249781	OD-3D	09/11/09	12:30	8.11	7.03	210	7.53	243	30.0	6.9	7.0	1.2	0.005	0.001	25.4
DISSOLVED	249781	OD-3D	03/20/14	9:45	7.80	7.04	220	7.50	225	27.4	7.0	6.6	1.1	<0.015 U	<0.002 U	24.0
DISSOLVED	249781	OD-3D	07/29/14	14:40	9.10	6.65	220	7.59	213	28.7	7.4	6.8	1.1	0.023 J	<0.002 U	25.2
DISSOLVED	249782	OD-3S	04/13/09	13:00	4.30	6.89	620	6.90	636	87.4	27.2	34.1	2.4	0.009	<0.001 U	19.6
DISSOLVED	249782	OD-3S	09/11/09	13:00	11.80	6.78	660	7.55	656	80.8	23.9	39.1	2.8	0.005	0.001	21.4
DISSOLVED	249782	OD-3S	03/20/14	10:08	4.50	6.87	550	7.32	595	60.5	20.0	26.6	1.9	<0.015 U	<0.002 U	17.9
DISSOLVED	249782	OD-3S	07/29/14	15:10	11.30	6.39	715	7.27	693	83.2	26.9	31.4	2.6	<0.015 U	<0.002 U	20.9
DISSOLVED	249935	WCT-27	06/12/09	12:25	14.80	7.25	355	7.48	344	47.7	13.6	8.4	1.4	0.022	0.015	19.3
DISSOLVED	249935	WCT-27	06/12/09	12:50	12.50	7.06	345	7.13	332	48.1	13.5	8.1	1.3	0.020	0.009	18.3
DISSOLVED	249935	WCT-27	09/04/09	15:15	11.05	6.80	324	7.24	307	39.3	10.6	6.9	1.1	0.010	0.008	16.1
DISSOLVED	249935	WCT-27	05/08/14	14:45	12.60	6.81	310	7.20	310	36.2	10.3	6.9	1.3	<0.015 U	0.004 J	16.1
DISSOLVED	249935	WCT-27	07/28/14	14:50	9.30	6.22	245	7.23	243	32.5	9.0	5.7	0.9	<0.015 U	<0.002 U	17.1
DISSOLVED	249935	WCT-27	07/28/14	15:00	9.30	6.22	245	7.24	232	32.4	9.0	5.7	0.9	<0.015 U	<0.002 U	17.0

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South Opportunity/Yellow Ditch AOC

Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-264(LTW-1-SOS)	09/11/09	74.9	0.0	21.0	1.3	1.1	0.5	<0.05	<0.10	<17.80	6.24	5.48	55.70	<0.10	<50	<0.20
MW-264(LTW-1-SOS)	03/17/10	79.5	0.0	25.9	1.0	1.9	0.4	<0.05	<0.10	5.88	1.78	2.25	57.60	<0.10	<50	<0.10
MW-264(LTW-1-SOS)	07/15/10								<0.5	18.40	4.22	<5.0	65.30	<0.5		<0.5
MW-264(LTW-1-SOS)	07/15/10	73.2	0.0	24.1	7.8	1.6	0.4	<0.05	<0.2	<2.0	4.72	4.48	63.40	<0.2	<50	<0.2
MW-264(LTW-1-SOS)	03/30/11								<0.5	52.00	1.27	<5.0	61.90	<0.5		<0.5
MW-264(LTW-1-SOS)	03/30/11	74.9	0.0	25.7	1.3	1.2	0.3	<0.1	<0.2	3.13	1.46	3.09	58.10	<0.2	<50	<0.2
MW-264(LTW-1-SOS)	07/25/11								<1.250 U	11.02	4.56		70.40	<1.250 U		<1.250 U
MW-264(LTW-1-SOS)	07/25/11	79.5	0.0	30.3	7.3	1.3	0.3	<0.100 U	<0.500 U	1.400 J	4.57	6.09	67.85	<0.500 U	<50.000 U	<0.500 U
MW-264(LTW-1-SOS)	03/16/12								<0.250 U	300.14	2.37	4.960 J	67.56	<0.250 U		<0.250 U
MW-264(LTW-1-SOS)	03/16/12	72.9	0.0	26.8	1.0	1.0	0.4	<0.020 U	<0.100 U	0.590 J	1.50	3.21	52.20	<0.100 U	<10.000 U	<0.100 U
MW-264(LTW-1-SOS)	08/22/12	72.1	0.0	20.1	1.2	0.8	0.4	<0.020 U	<0.100 U	<0.400 U	4.63	4.12	53.09	<0.100 U	<10.000 U	<0.100 U
MW-264(LTW-1-SOS)	08/02/13	77.7	0.0	18.6	4.1	0.6	0.4	<0.020 U	<0.100 U	1.080 J	4.41	3.88	54.14	<0.100 U	<10.000 U	<0.100 U
MW-264(LTW-1-SOS)	08/02/13									10.42	4.46	3.030 J	52.96	<0.250 U		<0.250 U
MW-264(LTW-1-SOS)	07/30/14	90.5	0.0	16.8	11.0	0.9	0.5	<0.020 U	<0.100 U	<2.000 U	5.54	5.13	60.90	<0.100 U	<10.000 U	<0.100 U
MW-274	08/23/12	79.8	0.0	12.4	0.7	0.2	0.3	0.070 J	<0.100 U	<0.400 U	0.55	3.53	46.75	<0.100 U	<10.000 U	0.150 J
MW-274	07/31/13	83.0	0.0	19.0	0.7	3.0	0.4	0.020 J	<0.100 U	21.39	0.59	3.45	62.11	<0.100 U	<10.000 U	0.220 J
MW-274	07/31/13									77.33	0.800 J	3.530 J	62.88	<0.250 U		<0.250 U
MW-274	09/15/14	82.1	0.0	11.3	0.420 J	0.4	0.4	0.040 J	<0.100 U	2.350 J	0.58	3.30	43.26	<0.100 U	<10.000 U	<0.100 U
OD-2S	04/13/09	101.7	0.0	39.3	0.7	<0.05	0.5	<0.05	<0.07	7.24	5.80	5.12	33.50	<0.19	<50	<0.05 U
OD-2S	09/16/09	209.6	0.0	41.0	1.0	<0.05	0.9	<0.05	<0.04	9.66	5.59	4.15	60.80	<0.20	<50	<0.05
OD-2S	06/14/12	140.4	0.0	48.5	0.7	<0.010 U	0.5	<0.020 U	<0.100 U	8.14	4.49	5.04	51.00	<0.100 U	<10.000 U	<0.100 U
OD-2S	03/17/14	99.2	0.0	67.4	1.9	<0.010 U	0.4	<0.020 U	<0.100 U	5.110 J	3.97	3.49	42.94	<0.100 U	<10.000 U	<0.100 U
OD-2S	07/29/14	126.8	0.0	95.5	2.7	<0.010 U	0.5	<0.020 U	<0.100 U	4.660 J	5.74	3.87	59.86	<0.100 U	<10.000 U	<0.100 U
OD-3D	04/13/09	102.2	0.0	23.9	1.0	0.5	0.3	<0.05	<0.07	<6.08	0.90	4.29	16.10	<0.19	<50	<0.05 U
OD-3D	09/11/09	102.5	0.0	25.4	1.2	0.5	0.4	<0.05	<0.04	<7.60	0.93	5.44	17.60	<0.20	<50	<0.05
OD-3D	03/20/14	109.5	0.0	27.6	1.3	0.5	0.3	0.030 J	<0.100 U	10.02	0.84	2.38	16.48	<0.100 U	<10.000 U	<0.100 U
OD-3D	07/29/14	112.4	0.0	28.7	1.2	0.5	0.3	<0.020 U	<0.100 U	16.32	0.88	3.16	17.75	<0.100 U	<10.000 U	<0.100 U
OD-3S	04/13/09	276.3	0.0	122.6	17.9	1.0	0.7	<0.5	<0.35	<30.4	0.47	23.40	94.80	<0.96	<500	<0.24 U
OD-3S	09/11/09	285.2	0.0	111.6	14.2	0.7	0.9	<0.5	<0.04	<7.60	0.55	26.40	99.80	<0.20	<500	<0.05
OD-3S	03/20/14	254.4	0.0	67.0	16.4	1.7	0.8	<0.020 U	<0.100 U	14.15	0.54	42.15	177.60	<0.100 U	<10.000 U	<0.100 U
OD-3S	07/29/14	255.3	0.0	163.2	21.4	1.4	0.9	<0.020 U	<0.100 U	<2.000 U	0.53	36.99	101.82	<0.100 U	<10.000 U	<0.100 U
WCT-27	06/12/09	210.6	0.0	19.0	1.5	0.2	0.6	<0.05	<0.04	<7.68	44	10.10	41.90	<0.20	<50	0.08
WCT-27	06/12/09	196.4	0.0	17.3	1.5	0.3	0.6	<0.05	<0.04	<7.68	26	9.88	42.60	<0.20	<50	0.07
WCT-27	09/04/09	197.9	0.0	16.0	1.6	0.3	0.7	<0.05	<0.04	<7.60	9.08	5.37	32.90	<0.20	<50	<0.05
WCT-27	05/08/14	167.7	0.0	23.5	2.8	0.2	0.6	<0.020 U	<0.100 U	<2.000 U	3.36	6.83	28.67	<0.100 U	<10.000 U	<0.100 U
WCT-27	07/28/14	143.9	0.0	17.9	1.1	0.1	0.6	<0.020 U	<0.100 U	<2.000 U	4.32	5.95	27.51	<0.100 U	<10.000 U	<0.100 U
WCT-27	07/28/14	143.4	0.0	18.0	1.1	0.1	0.6	<0.020 U	<0.100 U	<2.000 U	4.22	6.01	27.44	<0.100 U	<10.000 U	<0.100 U

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Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-264(LTW-1-SOS)	09/11/09	0.15	0.16	<0.80	2.74	1.12	<0.10	<0.10	0.62	0.44	<0.10	102.00	<0.30	<0.10	1.20	0.79	<1.90
MW-264(LTW-1-SOS)	03/17/10	0.32	0.17	1.28	1.70	0.77	<0.10	<0.10	0.46	0.49	<0.10	110.00	0.36	<0.10	1.01	0.58	1.69
MW-264(LTW-1-SOS)	07/15/10	<0.5	<0.5	<1.3	<5.0	0.79	<0.5	<0.5	0.61	0.52		115.00	0.81	<0.5	1.01	0.79	<2.5
MW-264(LTW-1-SOS)	07/15/10	<0.2	<0.2	0.64	2.82	0.71	<0.2	<0.2	0.44	0.55	<0.2	117.00	0.22	<0.2	1.04	0.59	<1.0
MW-264(LTW-1-SOS)	03/30/11	<0.5	<0.5	<1.3	<5.0	0.77	<0.5	<0.5	<0.5	<0.5		120.00	3.36	<0.5	1.26	0.89	<1.3
MW-264(LTW-1-SOS)	03/30/11	<0.2	<0.2	<0.5	2.03	0.66	<0.2	<0.2	0.34	0.46	<0.5	114.00	0.45	<0.2	1.07	0.47	<0.5
MW-264(LTW-1-SOS)	07/25/11	<1.250 U	<1.250 U	0.780 J	7.47	0.740 J	0.580 J	0.320 J	0.410 J	0.520 J		133.59	0.870 J	<1.250 U	1.65	0.490 J	<2.500 U
MW-264(LTW-1-SOS)	07/25/11	<0.500 U	<0.500 U	0.67	<2.000 U	0.79	<0.500 U	<0.200 U	0.430 J	0.66	<0.500 U	118.38	0.180 J	<0.500 U	1.51	0.51	0.730 J
MW-264(LTW-1-SOS)	03/16/12	<0.250 U	1.68	1.000 J	8.97	0.710 J	0.380 J	<0.100 U	0.560 J	1.79	0.320 J	110.62	18.13	<0.250 U	1.65	7.89	2.410 J
MW-264(LTW-1-SOS)	03/16/12	<0.100 U	<0.100 U	0.370 J	<0.400 U	0.61	<0.100 U	<0.040 U	7.37	<0.100 U	<0.100 U	94.23	0.380 J	<0.100 U	0.200 J	0.450 J	<0.200 U
MW-264(LTW-1-SOS)	08/22/12	<0.100 U	<0.100 U	0.280 J	8.05	0.77	0.280 J	<0.040 U	0.490 J	0.450 J	<0.100 U	93.84	0.140 J	<0.100 U	0.96	0.65	<0.200 U
MW-264(LTW-1-SOS)	08/02/13	<0.100 U	<0.100 U	<0.040 U	<1.500 U	0.71	0.220 J	<0.060 U	0.500 J	0.430 J	<0.100 U	97.78	<0.100 U	<0.100 U	1.03	0.55	<0.050 U
MW-264(LTW-1-SOS)	08/02/13	<0.250 U	1.040 J	<0.100 U	<3.750 U	0.750 J	<0.250 U	<0.150 U	0.630 J	0.590 J	<0.250 U	96.75	3.36	<0.250 U	1.060 J	2.66	<0.130 U
MW-264(LTW-1-SOS)	07/30/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	1.40	<0.100 U	<0.060 U	0.54	0.61		109.89	0.260 J	<0.100 U		0.74	1.100 J
MW-274	08/23/12	<0.100 U	<0.100 U	0.78	<0.400 U	1.47	0.420 J	<0.040 U	0.450 J	<0.100 U	<0.100 U	102.20	<0.100 U	<0.100 U	1.16	0.79	77.96
MW-274	07/31/13	<0.100 U	<0.100 U	0.860 J	<1.500 U	1.59	0.450 J	<0.060 U	0.53	<0.100 U	<0.100 U	123.70	<0.100 U	<0.100 U	1.98	0.80	101.21
MW-274	07/31/13	<0.250 U	1.040 J	1.390 J	<3.750 U	1.61	0.560 J	<0.150 U	0.690 J	<0.250 U	<0.250 U	123.33	5.31	<0.250 U	2.06	2.81	111.95
MW-274	09/15/14	<0.100 U	<0.100 U	0.960 J	<2.000 U	1.33	0.250 J	<0.060 U	0.51	<0.100 U	<0.100 U	90.97	11.84	<0.100 U	0.87	0.86	74.47
OD-2S	04/13/09	0.19	0.12	<0.41 U	2.96	2.40	0.42	<0.20 U	0.11	<0.20	<0.05	120.00	0.53	<0.03	1.82	2.20	2.02
OD-2S	09/16/09	1.07	0.27	1.29	3.20	14.60	3.42	<0.16	0.73	0.48	<0.04	180.00	0.70	<0.03	44.10	4.36	0.90
OD-2S	06/14/12	0.215 J	0.110 J	0.185 J	<0.400 U	2.71	1.47	<0.040 U	0.132 J	1.56	<0.100 U	133.60	0.65	<0.100 U	4.61	2.22	2.47
OD-2S	03/17/14	<0.100 U	0.200 J	<0.500 U	<2.000 U	2.12	0.64	<0.060 U	<0.100 U	<0.100 U	<0.100 U	139.74	0.210 J	<0.100 U	1.71	1.39	0.830 J
OD-2S	07/29/14	0.260 J	<0.100 U	<0.500 U	<2.000 U	2.78	0.73	<0.060 U	<0.100 U	<0.100 U		187.31	1.62	<0.100 U		2.62	2.62
OD-3D	04/13/09	<0.04	0.46	<0.41 U	4.56	1.39	<0.08	0.20	<0.05	<0.20	<0.05	137.00	0.28	<0.03	3.26	2.40	<1.30 U
OD-3D	09/11/09	<0.10	0.56	<0.40	4.62	1.42	<0.10	<0.16	<0.05	0.13	<0.04	140.00	0.34	<0.03	3.71	2.47	<0.90
OD-3D	03/20/14	<0.100 U	0.350 J	<0.500 U	2.850 J	1.22	<0.100 U	<0.060 U	<0.100 U	<0.100 U	<0.100 U	137.59	0.320 J	<0.100 U	3.24	1.79	<0.500 U
OD-3D	07/29/14	<0.100 U	0.290 J	<0.500 U	<2.000 U	1.35	<0.100 U	<0.060 U	<0.100 U	<0.100 U		143.57	0.73	<0.100 U		2.97	<0.500 U
OD-3S	04/13/09	0.27	<0.43	3.91	6.80	5.45	1.00	<0.99 U	<0.25	<1.02	<0.24	539.00	1.45	<0.16	28.00	1.16	<6.52 U
OD-3S	09/11/09	0.31	<0.04	2.29	6.61	7.10	0.41	<0.16	0.22	0.32	<0.04	491.00	1.32	<0.03	28.10	1.58	<0.90
OD-3S	03/20/14	0.51	0.81	<0.500 U	14.93	13.68	2.20	<0.060 U	1.12	0.430 J	<0.100 U	582.63	1.50	<0.100 U	168.97	2.34	<0.500 U
OD-3S	07/29/14	0.300 J	<0.100 U	2.40	2.150 J	6.15	1.16	<0.060 U	0.210 J	0.470 J		517.61	2.51	<0.100 U		1.91	1.710 J
WCT-27	06/12/09	0.17	<0.04	5.74	5.12	4.12	0.11	<0.15	0.76	0.15	<0.04	237.00	0.40	<0.03	18.90	1.71	5.48
WCT-27	06/12/09	0.29	0.09	3.42	4.75	3.48	0.14	<0.15	0.58	0.20	<0.04	247.00	0.37	<0.03	21.90	1.61	3.45
WCT-27	09/04/09	0.38	<0.04	0.96	2.83	1.95	<0.10	<0.15	0.32	<0.10	<0.04	167.00	<0.20	<0.03	13.30	0.97	<0.90
WCT-27	05/08/14	<0.100 U	<0.100 U	0.960 J	2.170 J	1.65	0.66	<0.060 U	0.240 J	0.320 J	<0.100 U	189.58	0.220 J	<0.100 U	7.45	0.74	3.16
WCT-27	07/28/14	<0.100 U	<0.100 U	0.640 J	<2.000 U	2.27	<0.100 U	<0.060 U	0.320 J	<0.100 U		150.26	0.310 J	<0.100 U		1.53	0.670 J
WCT-27	07/28/14	<0.100 U	<0.100 U	0.670 J	<2.000 U	2.67	<0.100 U	<0.060 U	0.320 J	<0.100 U		149.27	0.290 J	<0.100 U		1.52	0.710 J

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
South Opportunity/Yellow Ditch AOC

Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-264(LTW-1-SOS)	09/11/09	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.35	<0.10	<0.10	<0.05
MW-264(LTW-1-SOS)	03/17/10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.20	<0.10	<0.10	<0.10	0.34	<0.10	<0.10	<0.05
MW-264(LTW-1-SOS)	07/15/10	0.81	<0.5	<1.3	<0.5	<0.5	<0.4	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-264(LTW-1-SOS)	07/15/10	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-264(LTW-1-SOS)	03/30/11	<0.5	<0.5	<1.3	20.10	<0.5	<1.3	<0.5	<1.3	<0.5	<1.3	<0.5	<0.5	
MW-264(LTW-1-SOS)	03/30/11	<0.2	<0.2	<0.5	<0.2	<0.2	<0.5	<0.2	<0.5	<0.2	<0.5	<0.2	<0.2	<0.05
MW-264(LTW-1-SOS)	07/25/11	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	<1.250 U	0.300 J	<1.250 U	<1.250 U	
MW-264(LTW-1-SOS)	07/25/11	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.280 J	<0.500 U	<0.500 U	<0.050 U
MW-264(LTW-1-SOS)	03/16/12	<0.250 U	0.620 J	<0.250 U	<0.250 U	0.270 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.34	<0.250 U	<0.250 U	
MW-264(LTW-1-SOS)	03/16/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.240 J	<0.100 U	<0.100 U	<0.010 U
MW-264(LTW-1-SOS)	08/22/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.280 J	<0.100 U	<0.100 U	<0.010 U
MW-264(LTW-1-SOS)	08/02/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.310 J	<0.100 U	<0.100 U	<0.010 U
MW-264(LTW-1-SOS)	08/02/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MW-264(LTW-1-SOS)	07/30/14													<0.010 U
MW-274	08/23/12	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.330 J	<0.100 U	0.130 J	<0.010 U
MW-274	07/31/13	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.360 J	<0.100 U	0.210 J	<0.010 U
MW-274	07/31/13	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.540 J	<0.250 U	<0.250 U	
MW-274	09/15/14	<0.100 U	<0.100 U	<0.100 U	1.62	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
OD-2S	04/13/09	0.14	0.85	<0.04	<0.04	0.40	<0.03	0.39	<0.07	0.07	0.83	<0.05	0.10	<0.05
OD-2S	09/16/09	0.39	3.51	<0.04	<0.05	2.16	<0.04	1.54	0.13	0.38	2.18	0.08	0.18	<0.05
OD-2S	06/14/12	0.400 J	1.09	<0.100 U	<0.100 U	0.63	<0.100 U	0.57	<0.100 U	0.110 J	1.06	<0.100 U	0.250 J	<0.010 U
OD-2S	03/17/14	0.100 J	0.93	<0.100 U	<0.100 U	0.230 J	<0.100 U	0.430 J	<0.100 U	<0.100 U	0.94	<0.100 U	<0.100 U	<0.010 U
OD-2S	07/29/14													<0.010 U
OD-3D	04/13/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	<0.04	<0.02	1.96	<0.05
OD-3D	09/11/09	0.06	0.02	<0.04	<0.05	0.03	<0.04	<0.05	<0.10	<0.02	<0.02	<0.02	2.12	<0.05
OD-3D	03/20/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.00	<0.010 U
OD-3D	07/29/14													<0.010 U
OD-3S	04/13/09	<0.30	<0.21	<0.18	<0.19	<0.25	<0.16	<0.20	<0.36	<0.16	<0.21	<0.09	<0.15	<0.5
OD-3S	09/11/09	<0.05	<0.02	<0.04	<0.05	0.08	0.05	0.07	0.19	<0.02	0.16	<0.02	0.27	<0.5
OD-3S	03/20/14	0.310 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.96	<0.100 U	3.43	<0.100 U	<0.100 U	<0.100 U	4.09	<0.010 U
OD-3S	07/29/14													<0.010 U
WCT-27	06/12/09	0.06	0.07	<0.04	<0.05	0.08	<0.04	0.07	<0.10	<0.02	0.69	<0.02	0.24	<0.05
WCT-27	06/12/09	<0.05	0.06	<0.04	<0.05	0.09	<0.04	0.08	<0.10	0.03	0.49	<0.02	0.21	<0.05
WCT-27	09/04/09	<0.05	0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	0.29	<0.02	0.12	<0.05
WCT-27	05/08/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
WCT-27	07/28/14													<0.010 U
WCT-27	07/28/14													<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL.

Appendix G

Water-Quality Data for Blue Lagoon Area of Concern

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste and Soils
Blue Lagoon AOC

Sample Type	Gwic Id	Site Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)
DISSOLVED	250046	MW-235	05/09/09	12:30	4.27	6.57	205	7.10	197	22.2	7.1	7.4	3.4	<0.043	<0.031	19.1
DISSOLVED		MW-235	09/17/09	16:25	9.28	6.65	305	6.94	294	33.9	9.8	8.8	4.2	0.021	0.001	20.1
DISSOLVED		MW-235	04/18/14	13:48	6.06	6.12	610	6.53	766	70.3	21.6	16.8	5.5	<0.015 U	<0.002 U	24.0
DISSOLVED		MW-235	09/12/14	13:55	14.50	6.09	590	5.77	577	69.6	19.9	16.3	6.0	<0.015 U	<0.002 U	28.6
DISSOLVED	250015	MW-257	05/02/09	15:10				6.83	229	24.2	7.0	11.1	2.3	<0.043	<0.031	33.9
DISSOLVED		MW-257	05/09/09	15:00	4.99	6.57	237	6.87	236	24.9	7.0	10.8	2.3	<0.002	<0.031	34.7
DISSOLVED		MW-257	09/17/09	15:35	10.38	6.17	258	6.62	301	26.6	7.1	12.0	2.4	0.006	0.001	30.1
DISSOLVED		MW-257	04/17/14	16:00	7.11	6.39	145	6.76	236	22.5	6.3	10.1	1.9	<0.015 U	<0.002 U	27.1
DISSOLVED		MW-257	09/12/14	14:55	11.20	6.27	195	6.45	191	21.1	5.5	9.2	1.9	<0.015 U	<0.002 U	28.5

Explanation of Qualifiers: E = Estimated due to interference; J = Detected above MDL but less than MRL; Spiked sample recovery not within control limits; U = Analyzed for but not detected above MDL; * = Duplicate analysis not within control limits.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste and Soils
Blue Lagoon AOC

Site Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)	Co (µg/L)	Cr (µg/L)
MW-235	05/09/09	88.8	0.0	28.8	1.8	<0.05	0.9	<0.05	<0.04	<7.60	0.65	4.89	39.30	<0.20	<50	3.20	<0.10	<0.04
MW-235	09/17/09	110.3	0.0	68.6	2.9	0.3	0.8	<0.05	<0.04	21.50	1.08	9.03	87.50	<0.20	<50	5.13	0.16	0.97
MW-235	04/18/14	102.3	0.0	253.2	4.1	0.7	0.6	0.020 J	<0.100 U	2.720 J	0.390 J	12.44	46.25	<0.100 U	<10.000 U	13.31	<0.100 U	<0.100 U
MW-235	09/12/14	87.8	0.0	248.8	3.6	0.3	0.5	<0.020 U	<0.100 U	<2.000 U	0.62	16.64	58.82	<0.100 U	<10.000 U	12.22	<0.100 U	<0.100 U
MW-257	05/02/09	68.3	0.0	56.6	2.4	1.1	0.7	<0.05	<0.04	<7.60	1.14	10.10	10.60	<0.20	<50	0.07	<0.10	<0.04
MW-257	05/09/09	69.5	0.0	56.5	2.4	1.1	0.6	<0.05	<0.04	<7.60	1.11	9.87	10.30	<0.20	<50	0.07	<0.10	<0.04
MW-257	09/17/09	67.3	0.0	65.9	2.5	3.3	0.7	<0.05	<0.04	12.80	1.29	10.00	12.50	<0.20	<50	0.10	<0.10	<0.04
MW-257	04/17/14	57.1	0.0	58.7	2.3	1.7	0.5	0.050 J	<0.100 U	2.270 J	1.53	5.44	8.91	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U
MW-257	09/12/14	71.3	0.0	30.4	1.2	0.3	0.4	0.030 J	<0.100 U	<2.000 U	2.52	5.57	8.28	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U

Explanation of Qualifiers: E = Estimated due to interference; J = Detected above MDL but less than MRL; Spiked sample recovery not within control limits; U = Analyzed for but not detected above MDL; * = Duplicate analysis not within control limits.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste and Soils
Blue Lagoon AOC

Site Name	Sample Date	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)	Zr (µg/L)	Ce (µg/L)
MW-235	05/09/09	179.00	9.81	4.69	1.96	<0.15	0.24	0.13	<0.04	209.00	0.38	<0.03	0.96	0.91	3,453	<0.05	0.15
MW-235	09/17/09	198.00	13.60	3.06	2.31	<0.16	0.22	0.20	0.14	327.00	2.72	<0.03	1.69	4.99	4,327	<0.05	<0.04
MW-235	04/18/14	508.20	27.60	0.67	7.36	<0.060 U	<0.100 U	0.300 J	<0.100 U	648.49	2.67	<0.100 U	0.98	0.59	13,216	<0.100 U	<0.100 U
MW-235	09/12/14	374.88	30.08	0.96	5.00	<0.060 U	0.210 J	0.63	<0.100 U	573.37	51.17	<0.100 U	0.66	0.89	10,131	<0.100 U	<0.100 U
MW-257	05/02/09	2.08	19.00	0.59	8.52	<0.15	0.18	0.22	<0.04	247.00	0.49	<0.03	0.23	2.32	1,486	<0.05	0.02
MW-257	05/09/09	2.74	18.30	0.56	8.36	<0.15	0.25	0.21	<0.04	238.00	0.49	<0.03	0.21	2.23	1,472	<0.05	0.03
MW-257	09/17/09	2.22	17.80	0.58	8.72	<0.16	0.19	0.29	<0.04	251.00	0.79	<0.03	0.21	2.39	1,374	<0.05	0.07
MW-257	04/17/14	1.860 J	15.29	0.65	7.99	<0.060 U	0.200 J	<0.100 U	<0.100 U	219.29	0.55	<0.100 U	<0.100 U	1.83	1,010	<0.100 U	<0.100 U
MW-257	09/12/14	2.92	16.01	0.97	6.29	<0.060 U	0.290 J	<0.100 U	<0.100 U	181.52	12.95	<0.100 U	0.260 J	2.86	647	<0.100 U	<0.100 U

Explanation of Qualifiers: E = Estimated due to interference; J = Detected above MDL but less than MRL; Spiked sample recovery not within control limits;
U = Analyzed for but not detected above MDL; * = Duplicate analysis not within control limits.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste and Soils
Blue Lagoon AOC

Site Name	Sample Date	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-235	05/09/09	<0.04	<0.05	0.20	<0.04	0.20	<0.10	0.04	1.03	<0.02	<0.05	<0.05
MW-235	09/17/09	<0.04	<0.05	0.26	<0.04	0.24	0.38	0.05	1.60	<0.02	<0.05	<0.05
MW-235	04/18/14	<0.100 U	<0.100 U	0.450 J	<0.100 U	0.290 J	0.230 J	<0.100 U	1.63	<0.100 U	<0.100 U	<0.010 U
MW-235	09/12/14	<0.100 U	2.09	0.370 J	<0.100 U	0.230 J	0.65	<0.100 U	2.20	<0.100 U	<0.100 U	<0.010 U
MW-257	05/02/09	<0.04	<0.05	0.04	<0.04	<0.05	<0.10	<0.02	0.20	<0.02	<0.05	<0.05
MW-257	05/09/09	<0.04	<0.05	0.04	<0.04	<0.05	<0.10	<0.02	0.20	<0.02	<0.05	<0.05
MW-257	09/17/09	<0.04	<0.05	0.07	<0.04	0.07	<0.10	<0.02	0.24	<0.02	<0.05	<0.05
MW-257	04/17/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MW-257	09/12/14	<0.100 U	0.300 J	<0.100 U	<0.100 U	<0.100 U	0.200 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U

Explanation of Qualifiers: E = Estimated due to interference; J = Detected above MDL but less than MRL; Spiked sample recovery not within control limits; U = Analyzed for but not detected above MDL; * = Duplicate analysis not within control limits.

Appendix H
Water-Quality Data for Dutchman Creek High Arsenic Area

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Dutchman Creek High Arsenic Area

Sample Type	Gwic Id	Site Name	Sample Date	Sample Time	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SIO2 (mg/l)
DISSOLVED	138068	MW-224	05/05/09	9:50	8.15	7.41	247	7.89	357	40.8	8.6	3.0	1.4	0.007	<0.001	11.3
DISSOLVED	138068	MW-224	09/08/09	16:30	7.20	7.58	227	7.65	312	35.6	7.4	2.5	1.3	0.003	0.001	11.3
DISSOLVED	138068	MW-224	03/24/14	10:35	6.30	7.19	300	6.61	312	47.4	9.6	2.7	1.2	<0.015 U	<0.002 U	10.2
DISSOLVED	138068	MW-224	03/24/14	10:40	6.30	7.19	300	7.16	312	47.8	9.5	2.6	1.2	<0.015 U	<0.002 U	10.3
DISSOLVED	138068	MW-224	08/19/14	11:50	7.70	7.15	255	7.67	258	38.5	8.0	2.6	1.1	<0.015 U	<0.002 U	10.7
DISSOLVED	128740	MW-230	05/05/09	14:30	5.62	6.93	600	7.10	618	97.0	18.5	4.3	1.7	0.007	<0.001	12.7
DISSOLVED	128740	MW-230	09/21/09	15:16	6.79	7.14	684	7.97	680	113.0	20.6	4.8	1.9	<0.003	0.001	12.1
DISSOLVED	128740	MW-230	05/09/14	11:29	5.75	7.42	535	7.68	816	112.7	21.1	5.2	1.9	<0.015 U	<0.002 U	12.3
DISSOLVED	128740	MW-230	09/04/14	14:10	6.90	7.50	635	7.65	625	106.2	20.7	5.9	2.0	<0.015 U	<0.002 U	12.5
DISSOLVED	249910	NORTH OPPORTUNITY * SP-07-01	10/02/14	12:20	6.20	7.75	155	8.11	1,125	173.2	53.5	17.6	9.0	<0.038 U	<0.005 U	29.4
DISSOLVED	249911	NORTH OPPORTUNITY * SP-07-02	07/28/14	12:50	16.50	7.13	1,560	7.63	1,439	218.8	77.6	27.6	8.6	0.081 J	0.033 J	46.3
DISSOLVED	249912	NORTH OPPORTUNITY * SP-07-03	09/11/09	13:35	15.77	9.47	182	8.07	295	28.0	12.4	9.6	3.2	0.008	0.010	22.1
DISSOLVED	249912	NORTH OPPORTUNITY * SP-07-03	06/15/12	0:00	18.24	7.52	736	7.88	724	92.4	29.9	9.9	7.1	0.026 J	0.003 J	18.9
DISSOLVED	249912	NORTH OPPORTUNITY * SP-07-03	10/02/14	13:15	10.50	7.64	1,050	8.35	998	139.9	50.9	18.9	8.1	<0.038 U	<0.005 U	22.0

Explanation of Qualifiers: E = Estimated due to interference;
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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Dutchman Creek High Arsenic Area

Site Name	Sample Date	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (µg/L)	Al (µg/L)	As (µg/L)	B (µg/L)	Ba (µg/L)	Be (µg/L)	Br (µg/L)	Cd (µg/L)
MW-224	05/05/09	164.9	0.0	14.0	1.0	0.1	0.3	<0.05	<0.07	<6.02	0.59	3.15	25.60	<0.19	<50	<0.05
MW-224	09/08/09	136.2	0.0	12.8	0.9	0.1	0.4	<0.05	<0.04	<7.60	0.74	3.93	21.40	<0.20	<50	<0.05
MW-224	03/24/14	169.8	0.0	23.8	1.9	0.1	0.5	<0.020 U	<0.100 U	<2.000 U	0.67	2.43	26.83	<0.100 U	<10.000 U	<0.100 U
MW-224	03/24/14	171.8	0.0	23.3	1.9	0.1	0.4	<0.020 U	<0.100 U	<2.000 U	0.63	2.34	26.60	<0.100 U	<10.000 U	<0.100 U
MW-224	08/19/14	154.0	0.0	15.0	1.1	0.1	0.4	<0.020 U	<0.100 U	<2.000 U	0.66	1.860 J	24.52	<0.100 U	<10.000 U	<0.100 U
MW-230	05/05/09	216.4	0.0	179.0	<5.0	<0.5	0.7	<0.5	<0.07	23.20	1.04	3.49	21.50	<0.19	<500	<0.05
MW-230	09/21/09	233.3	0.0	187.1	<5.0	<0.5	<0.5	<0.5	<0.13	<15.83	1.00	3.82	25.50	<0.14	<500	<0.09
MW-230	05/09/14	263.1	0.0	191.2	2.8	0.2	0.4	<0.020 U	<0.100 U	<2.000 U	1.04	3.33	24.63	<0.100 U	<10.000 U	<0.100 U
MW-230	09/04/14	258.3	0.0	165.0	2.4	0.2	0.4	<0.020 U	<0.100 U	12.63	1.01	3.07	25.38	<0.100 U	<10.000 U	<0.100 U
NORTH OPPORTUNITY * SP-07-01	10/02/14	407.0	2.6	369.4	13.3	<0.010 U	1.3	<0.020 U	<0.250 U	<5.000 U	92	12.45	33.48	<0.250 U	<10.000 U	<0.250 U
NORTH OPPORTUNITY * SP-07-02	07/28/14	542.1	0.0	483.1	12.4	0.050 J	1.5	<0.020 U	<0.250 U	<5.000 U	102	20.60	43.86	<0.250 U	114.00	<0.250 U
NORTH OPPORTUNITY * SP-07-03	09/11/09	107.1	0.0	61.1	3.1	<0.05	1.1	<0.05	<0.04	<7.60	47	11.00	18.80	<0.20	<50	<0.05
NORTH OPPORTUNITY * SP-07-03	06/15/12	220.4	0.0	183.2	3.9	<0.010 U	0.8	<0.020 U	<0.100 U	1.970 J	68	20.02	32.20	<0.100 U	<10.000 U	<0.100 U
NORTH OPPORTUNITY * SP-07-03	10/02/14	377.7	8.9	305.1	10.0	<0.010 U	1.2	<0.020 U	<0.250 U	<5.000 U	81	8.15	44.50	<0.250 U	<10.000 U	<0.250 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL;
U = Analyzed for but not detected above MDL; * = Duplicate analysis not within control limits.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Dutchman Creek High Arsenic Area

Site Name	Sample Date	Co (µg/L)	Cr (µg/L)	Cu (µg/L)	Li (µg/L)	Mo (µg/L)	Ni (µg/L)	Pb (µg/L)	Sb (µg/L)	Se (µg/L)	Sn (µg/L)	Sr (µg/L)	Ti (µg/L)	Tl (µg/L)	U (µg/L)	V (µg/L)	Zn (µg/L)
MW-224	05/05/09	<0.04	0.18	<0.41	3.26	2.69	0.13	<0.20	0.93	<0.20	<0.05	98.80	0.12	<0.03	1.40	0.37	<1.29
MW-224	09/08/09	<0.10	0.14	0.49	3.01	3.08	<0.10	<0.16	0.99	0.22	<0.04	80.00	<0.20	<0.03	1.19	0.51	<0.90
MW-224	03/24/14	<0.100 U	<0.100 U	<0.500 U	<2.000 U	3.02	0.320 J	<0.060 U	0.90	0.310 J	<0.100 U	97.87	<0.100 U	<0.100 U	1.39	0.320 J	<0.500 U
MW-224	03/24/14	<0.100 U	<0.100 U	<0.500 U	3.350 J	3.00	0.320 J	<0.060 U	0.89	0.280 J	<0.100 U	97.78	<0.100 U	<0.100 U	1.40	0.320 J	<0.500 U
MW-224	08/19/14	<0.100 U	<0.100 U	<0.500 U	3.050 J	3.17	<0.100 U	<0.060 U	1.16	<0.100 U	<0.100 U	81.53	22.06	<0.100 U	1.44	0.53	<0.500 U
MW-230	05/05/09	0.11	<0.09	<0.41	3.60	3.21	<0.08	<0.20	0.08	<0.20	<0.05	157.00	1.45	<0.03	11.30	0.23	<1.29
MW-230	09/21/09	0.32	0.10	0.32	3.71	3.56	<0.23	<0.11	0.04	<0.30	<0.10	204.00	1.92	<0.07	15.10	0.30	<0.55
MW-230	05/09/14	<0.100 U	<0.100 U	<0.500 U	2.710 J	2.76	0.91	<0.060 U	<0.100 U	<0.100 U	<0.100 U	192.47	1.64	<0.100 U	12.98	0.280 J	<0.500 U
MW-230	09/04/14	0.360 J	<0.100 U	<0.500 U	2.460 J	3.23	0.85	<0.060 U	<0.100 U	<0.100 U	<0.100 U	171.07	78.60	<0.100 U	11.99	0.300 J	<0.500 U
NORTH OPPORTUNITY * SP-07-01	10/02/14	0.550 J	<0.250 U	8.33	9.940 J	7.58	<0.250 U	<0.150 U	2.13	<0.250 U	<0.250 U	446.88	140.57	<0.250 U	12.67	1.38	<1.250 U
NORTH OPPORTUNITY * SP-07-02	07/28/14	0.530 J	<0.250 U	4.430 J	8.750 J	2.47	1.38	<0.150 U	2.27	0.850 J		688.68	9.46	<0.250 U		<0.250 U	3.660 J
NORTH OPPORTUNITY * SP-07-03	09/11/09	1.12	0.07	2.04	11.70	5.03	0.37	<0.16	0.51	0.15	<0.04	198.00	0.69	<0.03	0.93	1.05	3.67
NORTH OPPORTUNITY * SP-07-03	06/15/12	0.120 J	<0.100 U	6.04	3.84	4.12	1.42	<0.040 U	0.74	0.230 J	<0.100 U	360.19	1.84	<0.100 U	5.22	0.71	1.47
NORTH OPPORTUNITY * SP-07-03	10/02/14	<0.250 U	<0.250 U	4.060 J	9.110 J	8.38	<0.250 U	<0.150 U	1.88	<0.250 U	<0.250 U	384.08	115.67	<0.250 U	10.16	1.040 J	<1.250 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL;
U = Analyzed for but not detected above MDL; * = Duplicate analysis not within control limits.

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Dutchman Creek High Arsenic Area

Site Name	Sample Date	Zr (µg/L)	Ce (µg/L)	Cs (µg/L)	Ga (µg/L)	La (µg/L)	Nb (µg/L)	Nd (µg/L)	Pd (µg/L)	Pr (µg/L)	Rb (µg/L)	Th (µg/L)	W (µg/L)	NO2-N (mg/l)
MW-224	05/05/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	1.00	<0.02	0.46	<0.05
MW-224	09/08/09	<0.05	<0.02	<0.04	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	1.04	<0.02	0.30	<0.05
MW-224	03/24/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.03	<0.100 U	0.210 J	<0.010 U
MW-224	03/24/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.04	<0.100 U	0.200 J	<0.010 U
MW-224	08/19/14	<0.100 U	<0.100 U	<0.100 U	1.04	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.06	<0.100 U	<0.100 U	<0.010 U
MW-230	05/05/09	<0.06	<0.04	<0.04	<0.04	<0.05	<0.03	<0.04	<0.07	<0.03	0.37	<0.02	0.21	<0.5
MW-230	09/21/09	<0.11	<0.05	<0.06	<0.11	<0.05	<0.24	<0.09	<0.13	<0.10	0.43	<0.06	0.31	<0.5
MW-230	05/09/14	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.370 J	<0.100 U	<0.100 U	<0.010 U
MW-230	09/04/14	<0.100 U	<0.100 U	<0.100 U	0.88	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.210 J	<0.010 U
NORTH OPPORTUNITY * SP-07-01	10/02/14	<0.250 U	<0.250 U	<0.250 U	1.46	<0.250 U	<0.250 U	<0.250 U	0.520 J	<0.250 U	3.33	<0.250 U	0.900 J	<0.010 U
NORTH OPPORTUNITY * SP-07-02	07/28/14													<0.010 U
NORTH OPPORTUNITY * SP-07-03	09/11/09	<0.05	<0.02	0.08	<0.05	<0.02	<0.04	<0.05	<0.10	<0.02	2.62	<0.02	2.39	<0.05
NORTH OPPORTUNITY * SP-07-03	06/15/12	0.130 J	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.360 J	<0.100 U	1.89	0.57	0.93	<0.010 U
NORTH OPPORTUNITY * SP-07-03	10/02/14	<0.250 U	<0.250 U	<0.250 U	2.15	<0.250 U	0.640 J	<0.250 U	0.520 J	<0.250 U	3.23	<0.250 U	0.870 J	<0.010 U

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL;
U = Analyzed for but not detected above MDL; * = Duplicate analysis not within control limits.

Appendix I

Water-Quality Data for Smelter Hill Repository

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Smelter Hill Repository Complex

Site ID	Sample Date (MM/DD/YY)	Time (HRS	SWL (FT)	Flow (GPM)	Fld pH	Fld SC (umhos/cm)	Temp (°C)	Redox (mv)	Lab pH	Lab SC (umhos/cm)	Hardness (mg/l)	Alkalinity (mg/l)
MW-1	08/16/99				7.50							
	08/10/00											
	08/06/01											
	07/12/02											
	08/06/03											
	08/10/04											
	07/28/05											
	08/04/06											
	07/31/07											
	08/20/08											
	07/31/09											
	07/21/10				6.97	1,124	14.27		7.55	1,210	545	137
	08/04/11				4.00	1,118	14.02		7.28	1,040	458	127
	08/09/12				7.16	1,164	15.20		7.27	1,072	454	124
	07/23/13	14:02	118.61	2.0	6.87	1,120	15.21	428	7.23	1,138	445	135
	08/08/14	14:25	117.68		6.85	1,105	15.10	345	7.46	1,013	465	130
MW-2	08/16/99											
	08/10/00											
	08/06/01											
	07/12/02											
	08/06/03											
	08/10/04											
	07/28/05											
	08/04/06											
	07/31/07											
	08/20/08											
	07/31/09											
	07/15/10				7.22	836	12.93		7.78	844	385	120
	08/03/11				4.52	891	12.74		7.46	854	382	114
	08/09/12				6.91	896	13.84		7.25	834	360	104
	07/23/13	12:09	119.43	1.0	7.01	900	13.66		7.31	908	385	117
	08/07/14	10:40	118.77		6.90	890	13.60	323	7.56	830	390	123
MW-3	08/16/99											
	08/10/00											
	08/06/01											
	07/12/02											
	08/06/03											
	08/10/04											
	07/28/05											
	09/29/05											
	08/04/06											
	07/31/07											
	08/20/08											
	07/31/09											
	07/16/10				7.32	860	14.83		7.75	923	400	146
	08/03/11				3.93	920	13.49		7.46	886	414	139
	08/08/12				7.01	905	12.68		7.45	852	387	133
	07/22/13	16:15	125.78	1.0	7.12	950	14.41	410	7.31	854	376	145
	08/11/14	15:40	125.56		6.79	965	15.10	375	7.48	923	423	145

Explanation of Qualifiers: E = Estimated due to interference;
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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Smelter Hill Repository Complex

Site ID	Sample Date (MM/DD/YY)	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	NO3-N (mg/l)	F (mg/l)
MW-1	08/16/99													
	08/10/00													
	08/06/01													
	07/12/02													
	08/06/03													
	08/10/04													
	07/28/05													
	08/04/06													
	07/31/07													
	08/20/08													
	07/31/09													
	07/21/10	181.9	22.2	44.1	8.49	0.015	<0.005	23.1	167	0.0	66.21	355	12.37	1.76
	08/04/11	147.1	22.0	50.6	8.69	<0.002 U	<0.003 U	22.5	155	0.0	65.73	307	11.86	1.65
	08/09/12	143.8	22.9	50.5	9.11	<0.038 U	<0.005 U	23.1	151	0.0	62.08	327	11.00	1.62
	07/23/13	142.1	21.8	50.4	8.65	<0.038	<0.005	24.1	165	0.0	65.43	332	12.36	1.77
	08/08/14	143.6	22.7	49.7	9.05	<0.038 U	<0.005 U	24.1	159	0.0	66.13	329	11.34	1.84
MW-2	08/16/99													
	08/10/00													
	08/06/01													
	07/12/02													
	08/06/03													
	08/10/04													
	07/28/05													
	08/04/06													
	07/31/07													
	08/20/08													
	07/31/09													
	07/15/10	128.0	16.0	30.7	4.80	0.044	0.001	19.9	148	0.0	55.63	239	5.59	0.81
	08/03/11	126.3	16.1	32.0	5.04	0.012	0.002 J	19.7	139	0.0	56.44	238	5.62	0.75
	08/09/12	118.1	15.9	32.2	4.81	0.041 J	0.003 J	19.4	127	0.0	57.38	234	6.39	0.67
	07/23/13	125.9	16.5	33.0	4.86	<0.015	<0.002	20.1	143	0.0	65.30	243	6.38	0.76
	08/07/14	120.0	16.6	33.6	4.88	<0.015 U	<0.002 U	20.6	143	0.0	66.35	250	6.11	0.75
MW-3	08/16/99													
	08/10/00													
	08/06/01													
	07/12/02													
	08/06/03													
	08/10/04													
	07/28/05													
	09/29/05													
	08/04/06													
	07/31/07													
	08/20/08													
	07/31/09													
	07/16/10	132.0	17.1	37.1	3.67	0.026	0.001	20.2	178	0.0	27.53	301	2.17	0.76
	08/03/11	135.4	18.5	43.5	4.30	0.005	0.001 J	20.5	170	0.0	31.57	316	2.75	0.75
	08/08/12	120.9	17.1	46.7	3.44	0.030 J	0.005 J	20.1	162	0.0	20.48	291	1.90	0.59
	07/22/13	122.7	16.8	39.5	3.50	<0.015	<0.002	21.4	177	0.0	31.63	309	2.59	0.70
	08/11/14	139.3	18.2	38.1	3.58	0.019 J	0.012 J	20.7	177	0.0	31.86	308	7.54	0.69

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Anaconda Regional Water, Waste, and Soils
Smelter Hill Repository Complex

Site ID	Sample Date (MM/DD/YY)	Ag (ug/l)	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Hg (ug/l)	Li (ug/l)	Mn (ug/l)	Ni (ug/l)	Pb (ug/l)	Sn (ug/l)	Sr (ug/l)	U (ug/l)	Zn (ug/l)
MW-1	08/16/99			5.00			0.10	<0.1								<1.0				
	08/10/00			11.0			0.30	<0.1								2.40				
	08/06/01			8.00			0.50	<0.1												9.00
	07/12/02			4.60			<0.06	0.03												0.70
	08/06/03			4.80			<0.05	0.08								<0.66				
	08/10/04			7.50				<0.1			<1.6					<0.1				<9.6
	07/28/05			6.20				<0.1			<1.6					<0.1				<6.6
	08/04/06			6.70				<0.03			2.16					0.20				3.66
	07/31/07			7.19				0.10			1.21					<0.045				<15.4
	08/20/08			7.90				0.05			1.90									
	07/31/09			8.50				0.06			3.00									3.30
	07/21/10	<1.0	<10.0	7.50	48.9	11.2	<1.0	<1.0	<1.0	1.58	<2.5		73.90	10.00	<1.0	<1.0	6.56	1,914	1.26	<5.0
	08/04/11	<0.500 U	49.7	7.40	47.8	12.3	<0.300 U	<0.500 U	<0.500 U	0.920 J	<0.500 U		74.11	10.14	<0.500 U	<0.200 U	6.75	1,890	1.240 J	<1.000 U
	08/09/12	<0.250 U	<1.000 U	6.80	49.4	16.1	<0.250 U	<0.250 U	<0.250 U	0.970 J	0.890 J		75.95	9.56	2.60	<0.100 U	7.03	1,956	1.160 J	1.850 J
	07/23/13	<0.250	<1.00	7.50	45.4	12.1	<0.250	<0.250	<0.250	0.92	<0.100		74.47	11.11	2.09	<0.150	6.86	1,898	1.35	9.33
	08/08/14	<0.250 U	<5.000 U	5.60	41.3	12.6	<0.250 U	<0.250 U	<0.250 U	0.580 J	<1.250 U		74.31	9.23	<0.250 U	<0.150 U	4.78	1675.76	1.090 J	12.56
MW-2	08/16/99			3.00			0.10	<0.1								<1.0				
	08/10/00			7.00			0.20	<0.1								1.00				
	08/06/01			4.00			0.30	<0.1												7.00
	07/12/02			1.40			<0.06	<0.03												<0.59
	08/06/03			1.60			<0.05	<0.08								<0.66				
	08/10/04			3.50				<0.1			<1.6					<0.20				<9.6
	07/28/05			2.80				0.12			2.00					<0.10				<6.6
	08/04/06			2.92				<0.03			1.36					<0.123				0.33
	07/31/07			3.25				0.16			1.12					<0.045				<15.4
	08/20/08			3.30							1.40									
	07/31/09			15.0							2.30									2.70
	07/15/10	<0.2	<1.0	2.64	22.0	12.8	<0.2	<0.2	0.39	0.22	<0.5		33.00	4.31	<0.2	<0.2	6.74	1,373	1.72	2.75
	08/03/11	<0.100 U	52.0	3.03	22.1	13.6	<0.100 U	<0.100 U	0.310 J	0.260 J	0.340 J		36.85	4.36	0.180 J	<0.040 U	7.66	1,359	1.59	<0.200 U
	08/09/12	<0.100 U	3.9	2.15	23.0	18.2	<0.100 U	<0.100 U	0.290 J	0.160 J	9.71		36.19	4.10	2.73	0.40	6.95	1,333	1.38	11.16
	07/23/13	<0.100	<0.400	2.52	18.6	13.6	<0.100	<0.100	<0.100	0.25	0.51		38.12	4.34	1.60	<0.060	6.36	1,398	1.57	12.56
	08/07/14	<0.100 U	<2.000 U	2.15	21.6	13.1	<0.100 U	<0.100 U	0.300 J	<0.100 U	<0.500 U		38.44	3.58	<0.100 U	<0.060 U	5.46	1223.97	1.32	20.62
MW-3	08/16/99			15,300			<0.20	0.20								5.00				
	08/10/00			72.0			0.10	<0.10								0.19				
	08/06/01			40.0			0.40	<0.10												7.00
	07/12/02			310			<0.06	<0.03												<0.59
	08/06/03			65.3			<0.05	<0.08								<0.66				
	08/10/04			118				<0.10			<1.6					<0.10				<9.6
	07/28/05			1,260				<0.10			2.70					<0.10				<6.6
	09/29/05			137				<0.10			3.60					<0.10				<6.6
	08/04/06			57.2				<0.03			1.86					0.15				3.73
	07/31/07			730				0.12			1.26					<0.045				<15.4
	08/20/08			140							1.80									
	07/31/09			3.80							2.10									
	07/16/10	<0.2	8.0	11.3	20.1	12.1	<0.2	<0.2	0.34	0.25	<0.5		31.10	2.73	0.88	<0.2	1.54	1,355	1.40	3.38
	08/03/11	<0.100 U	53.1	73.9	25.5	11.8	<0.100 U	<0.100 U	0.180 J	0.240 J	0.400 J		40.14	2.60	0.220 J	<0.040 U	2.42	1,460	1.29	<0.200 U
	08/09/12	<0.100 U	19.6	20.6	20.0	17.1	<0.100 U	<0.100 U	0.240 J	0.230 J	4.97		31.78	2.08	4.39	<0.040 U	1.88	1,304	1.27	3.96
	07/22/13	<0.100	0.6	12.8	19.5	11.9	<0.100	<0.100	<0.100	0.30	0.42		36.38	2.61	2.13	<0.060	1.58	1,327	1.41	7.77
	08/11/14	<0.100 U	4.680 J	25.8	19.2	12.6	<0.100 U	<0.100 U	0.5	<0.100 U	0.650 J		33.32	2.37	1.01	<0.060 U	1.28	1175.57	1.25	22.81

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Smelter Hill Repository Complex

Site ID	Sample Date (MM/DD/YY)	Ce (ug/l)	Cs (ug/l)	Ga (ug/l)	La (ug/l)	Nb (ug/l)	Nd (ug/l)	Pd (ug/l)	Pr (ug/l)	Rb (ug/l)	Sn (ug/l)	Th (ug/l)	Ti (ug/l)	Tl (ug/l)	W (ug/l)
MW-1	08/16/99														
	08/10/00														
	08/06/01														
	07/12/02														
	08/06/03														
	08/10/04														
	07/28/05														
	08/04/06														
	07/31/07														
	08/20/08														
	07/31/09														
	07/21/10	<1.0	3.90	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	33.50	<1.0	<1.0	3.22	<1.0	<1.0
	08/04/11	<0.500 U	3.51	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.940 J	<0.500 U	31.23	<0.500 U	<0.500 U	3.67	<0.500 U	<0.500 U
	08/09/12	<0.250 U	3.47	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.030 J	<0.250 U	29.43	<0.250 U	<0.250 U	3.96	<0.250 U	<0.250 U
	07/23/13	<0.250	4.01	<0.250	<0.250	<0.250	<0.250	0.77	<0.250	33.55	<0.250	<0.250	3.80	<0.250	<0.250
	08/08/14	<0.250 U	3.66	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.20	<0.250 U	26.74	<0.250 U	<0.250 U	87.78	<0.250 U	<0.250 U
MW-2	08/16/99														
	08/10/00														
	08/06/01														
	07/12/02														
	08/06/03														
	08/10/04														
	07/28/05														
	08/04/06														
	07/31/07														
	08/20/08														
	07/31/09														
	07/15/10	<0.2	5.88	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	21.00	<0.2	<0.2	1.55	<0.2	0.44
	08/03/11	<0.200 U	5.26	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.68	<0.100 U	20.50	0.230 J	<0.100 U	3.79	<0.100 U	1.13
	08/09/12	<0.100 U	5.20	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.77	<0.100 U	18.47	<0.100 U	<0.100 U	2.68	<0.100 U	0.420 J
	07/23/13	<0.100	5.94	<0.100	<0.100	<0.100	<0.100	0.63	<0.100	20.95	<0.100	<0.100	2.48	<0.100	0.39
	08/07/14	<0.100 U	5.28	0.480 J	<0.100 U	<0.100 U	<0.100 U	0.96	<0.100 U	16.88	<0.100 U	<0.100 U	75.31	<0.100 U	0.340 J
MW-3	08/16/99														
	08/10/00														
	08/06/01														
	07/12/02														
	08/06/03														
	08/10/04														
	07/28/05														
	09/29/05														
	08/04/06														
	07/31/07														
	08/20/08														
	07/31/09														
	07/16/10	<0.2	5.24	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	19.40	<0.2	<0.2	3.95	<0.2	0.93
	08/03/11	<0.100 U	5.16	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.72	<0.100 U	21.03	0.190 J	<0.100 U	4.43	<0.100 U	0.84
	08/08/12	<0.100 U	4.19	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.67	<0.100 U	16.82	<0.100 U	<0.100 U	4.11	<0.100 U	0.300 J
	07/22/13	<0.100	5.36	<0.100	<0.100	<0.100	<0.100	0.58	<0.100	19.54	<0.100	<0.100	3.35	<0.100	0.17
	08/11/14	<0.100 U	4.44	0.470 J	<0.100 U	<0.100 U	<0.100 U	0.91	<0.100 U	14.94	<0.100 U	<0.100 U	84.79	<0.100 U	0.440 J

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Smelter Hill Repository Complex

Site ID	Sample Date (MM/DD/YY)	Time (HRS	SWL (FT)	Flow (GPM)	Fld pH	Fld SC (umhos/cm)	Temp (°C)	Redox (mv)	Lab pH	Lab SC (umhos/cm)	Hardness (mg/l)	Alkalinity (mg/l)
MW-4	08/16/99											
	08/10/00											
	08/06/01											
	07/12/02											
	08/06/03											
	08/10/04											
	07/28/05											
	08/04/06											
	07/31/07											
	08/20/08											
	07/31/09											
	07/16/10				7.12	1,245	13.05		7.68	1,330	596	127
	08/02/11				4.24	1,347	12.59		7.29	1,209	590	121
	08/10/12				7.48	1,379	12.47		7.34	1,258	602	116
	07/22/13	14:20	129.19	2.5	7.01	1,360	12.83	411	7.16	1,407	594	128
	08/11/14	13:50	129.32		6.80	1,360	13.40	384	7.53	1,308	611	135
MW-60	08/16/99											
	08/10/00											
	08/06/01											
	07/12/02											
	08/06/03											
	08/10/04											
	07/28/05											
	08/04/06											
	07/31/07											
	08/20/08											
	07/31/09											
	07/16/10											
	07/21/10				7.16	879	13.60		7.68	941	386	86
	08/02/11				3.69	925	15.90		6.56	814	380	62
	08/10/12				7.00	953	13.85		7.56	832	388	83
	07/23/13	16:50	103.93	0.8	7.29	787	16.10	477	7.43	886	385	87
	08/11/14	12:20	103.8		6.89	965	17.20	301	7.52	920	391	91

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Smelter Hill Repository Complex

Site ID	Sample Date (MM/DD/YY)	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	NO3-N (mg/l)	F (mg/l)
MW-4	08/16/99													
	08/10/00													
	08/06/01													
	07/12/02													
	08/06/03													
	08/10/04													
	07/28/05													
	08/04/06													
	07/31/07													
	08/20/08													
	07/31/09													
	07/16/10	195.0	28.4	56.9	2.86	0.019	<0.005	18.6	155	0.0	84.36	442	9.06	0.73
	08/02/11	193.6	26.0	59.1	2.97	0.030	<0.003 U	18.4	148	0.0	86.75	446	8.83	0.67
	08/10/12	191.6	30.0	63.1	3.07	<0.038 U	<0.005 U	19.5	142	0.0	88.67	452	8.83	0.62
	07/22/13	193.3	27.0	62.0	2.86	<0.038	<0.005	19.8	156	0.0	98.63	453	9.84	0.68
	08/11/14	190.0	27.8	59.7	2.87	<0.038 U	<0.005 U	19.2	164	0.0	95.06	454	9.48	0.69
MW-60	08/16/99													
	08/10/00													
	08/06/01													
	07/12/02													
	08/06/03													
	08/10/04													
	07/28/05													
	08/04/06													
	07/31/07													
	08/20/08													
	07/31/09													
	07/16/10													
	07/21/10	138.0	10.1	25.0	2.21	0.115	0.024	17.8	117	0.0	112.10	192	6.44	0.42
	08/02/11	136.3	9.7	26.2	2.06	0.153	0.022	17.8	76	0.0	106.20	174	14.90	0.35
	08/10/12	136.2	11.7	30.1	2.18	0.030 J	0.002 J	19.3	101	0.0	123.50	170	6.46	0.40
	07/23/13	136.2	10.9	32.7	2.26	<0.015	0.009	19.0	105	0.0	156.60	153	6.97	0.49
	08/11/14	137.8	11.2	30.9	2.37	0.785	0.014 J	18.9	111	0.0	156.50	151	6.86	0.55

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Site ID	Sample Date (MM/DD/YY)	Ag (ug/l)	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Hg (ug/l)	Li (ug/l)	Mn (ug/l)	Ni (ug/l)	Pb (ug/l)	Sn (ug/l)	Sr (ug/l)	U (ug/l)	Zn (ug/l)
MW-4	08/16/99			<1.0			<0.1	<0.40								<1.0				
	08/10/00			5.00			0.10	<0.10								3.00				
	08/06/01			<2.0			0.30	<0.10												6.00
	07/12/02			2.70			<0.06	<0.03												<0.59
	08/06/03			1.50			<0.05	<0.08								<0.66				
	08/10/04			3.10				<0.10			<1.6					<0.10				<9.6
	07/28/05			5.80				<0.10			<1.6					<0.10				<6.6
	08/04/06			3.59				<0.01			1.98					0.14				3.07
	07/31/07			4.85				0.09			1.55					<0.045				<15.4
	08/20/08			7.20							2.00									
	07/31/09			5.00							2.50									
	07/16/10	<1.0	<10.0	2.38	25.9	10.7	<1.0	<1.0	<0.9	<1.0	<2.5		50.70	1.78	<0.9	<1.0	3.89	1,378	1.15	<5.0
	08/02/11	<0.500 U	39.0	2.56	26.0	10.8	<0.500 U	<0.500 U	<0.500 U	<0.500 U	1.260 J		47.36	1.840 J	0.860 J	<0.200 U	4.57	1,382	1.180 J	<1.000 U
	08/10/12	<0.250 U	<1.000 U	2.02	31.7	11.1	<0.250 U	<0.250 U	0.300 J	<0.250 U	6.49		52.94	1.78	2.85	<0.100 U	4.91	1,439	1.140 J	<0.500 U
	07/22/13	<0.250	<1.00	1.74	23.7	11.1	<0.250	<0.250	<0.250	<0.250	<0.100		47.64	1.89	2.67	<0.150	3.07	1,406	1.34	5.04
	08/11/14	<0.250 U	<5.000 U	1.09	26.7	9.8	<0.250 U	<0.250 U	0.500 J	<0.250 U	5.05		48.43	2.32	<0.250 U	<0.150 U	3.80	1209.24	1.090 J	13.06
MW-60	08/16/99			4.00			<0.10	0.10								<1.0				
	08/10/00			7.00			0.10	0.10								0.10				
	08/06/01			4.00			0.10	<0.10												2.00
	07/12/02			5.60			<0.06	<0.03												<0.59
	08/06/03			1.60			<0.05	<0.08								<0.66				
	08/10/04			3.60				<0.10			<1.6					<0.10				<9.6
	07/28/05			16.6				<0.12			2.40					<0.10				9.80
	08/04/06			5.04				0.07			4.10					0.28				7.73
	07/31/07			22.0				0.33			2.94					<0.045				<15.4
	08/20/08			22.0				0.06			2.60									2.60
	07/31/09			6.80				0.11			4.40					0.12				6.80
	07/16/10			2.38			<1.0	<1.0			<2.5					<1.0				<5.0
	07/21/10	<0.2	29.4	3.28	12.9	33.1	<0.2	<0.2	2.71	0.29	1.26		9.99	2.10	6.85	<0.2	4.27	857	0.80	11.30
	08/02/11	0.131 J	98.5	3.51	9.5	35.3	<0.100 U	0.370 J	1.04	0.51	113.44		10.55	1.36	3.55	8.83	4.15	823	0.76	165.63
	08/10/12	<0.100 U	5.9	7.02	12.3	34.0	<0.100 U	<0.100 U	0.200 J	0.380 J	1.41		14.10	1.96	2.60	<0.040 U	4.01	907	0.90	7.46
	07/23/13	<0.100	1.2	2.76	10.6	40.3	<0.100	<0.100	<0.100	0.62	0.70		9.05	2.37	2.84	<0.060	2.53	920	1.05	188.08
	08/11/14	<0.100 U	<2.000 U	2.45	13.5	41.8	<0.100 U	<0.100 U	0.430 J	0.310 J	1.750 J		12.77	2.02	6.21	<0.060 U	4.35	801.27	0.84	20.49

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste, and Soils
Smelter Hill Repository Complex

Site ID	Sample Date (MM/DD/YY)	Co (ug/l)	Cs (ug/l)	Ga (ug/l)	La (ug/l)	Nb (ug/l)	Nd (ug/l)	Pd (ug/l)	Pr (ug/l)	Rb (ug/l)	Sn (ug/l)	Th (ug/l)	Ti (ug/l)	Tl (ug/l)	W (ug/l)
MW-4	08/16/99														
	08/10/00														
	08/06/01														
	07/12/02														
	08/06/03														
	08/10/04														
	07/28/05														
	08/04/06														
	07/31/07														
	08/20/08														
	07/31/09														
	07/16/10	<1.0	5.98	<0.9	<1.0	<0.9	<1.0	<2.5	<1.0	16.90	<1.0	<1.0	2.76	<1.0	<1.0
	08/02/11	<0.500 U	5.59	<0.500 U	<0.500 U	<0.500 U	<0.500 U	0.680 J	<0.500 U	16.24	<0.500 U	<0.500 U	5.07	<0.500 U	<0.500 U
	08/10/12	<0.250 U	6.05	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.620 J	<0.250 U	16.73	<0.250 U	<0.250 U	4.14	<0.250 U	<0.250 U
	07/22/13	<0.250	6.49	<0.250	<0.250	<0.250	<0.250	1.07	<0.250	17.34	<0.250	<0.250	4.44	<0.250	<0.250
	08/11/14	<0.250 U	5.61	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.080 J	<0.250 U	13.95	<0.250 U	<0.250 U	130.6	<0.250 U	<0.250 U
MW-60	08/16/99														
	08/10/00														
	08/06/01														
	07/12/02														
	08/06/03														
	08/10/04														
	07/28/05														
	08/04/06														
	07/31/07														
	08/20/08														
	07/31/09														
	07/16/10														
	07/21/10	<0.2	4.47	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	13.70	<0.2	<0.2	3.41	<0.2	1.90
	08/02/11	0.180 J	3.81	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.420 J	<0.100 U	11.78	0.58	<0.100 U	4.40	<0.100 U	0.58
	08/10/12	<0.100 U	4.28	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.390 J	<0.100 U	12.90	<0.100 U	<0.100 U	1.80	<0.100 U	0.180 J
	07/23/13	<0.100	4.37	<0.100	<0.100	<0.100	<0.100	0.43	<0.100	13.53	<0.100	<0.100	1.79	<0.100	0.25
	08/11/14	<0.100 U	4	1.57	<0.100 U	<0.100 U	<0.100 U	0.62	<0.100 U	10.84	<0.100 U	<0.100 U	82.22	<0.100 U	0.220 J

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Appendix J
Water-Quality Results for Domestic Wells Sampled during 2014

Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste and Soils
2014 Domestic Well Water Quality Results

Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
276409	ROUSE, JIM	01/02/14	8.6	6.22	164						
276416	CLARK, JIM / SPAUN, LORAINE	01/02/14	7.6	6.15	212						
51075	TUSS, ROXINE & JAMES	01/02/14	10.8	6.36	177						
131153	CRAIG, WARREN	01/06/14	8.5	6.38	170						
276456	STAVANJA, NANCY	01/07/14	8.8	6.39	175						
276458	SCHAFER, JENNA AND TRAVIS	01/07/14	8.8	6.76	252						
191558	SCHAFER, RODNEY	01/09/14	7.5	7.06	180						
158373	SCHAFER, RODNEY	01/09/14	8.3	7.23	164						
276730	SPINLER, ROSE AND TIM	02/03/14	5.6	7.05	569						
276847	HERTOGHE, CRAIG	02/11/14	6.37	5.8	49						
126985	NELSON, RAY & GLORIA	02/13/14	9.4	6.5	155						
276932	MAES, JIM	02/15/14	8.6	7.46	298						
276913	JOHNSON, WADE	02/25/14	7.3	6.78	197						
165756	REICH, RANDY	02/25/14	12.4	7.58	286						
276937	FISCHER, GILBERT	02/27/14	8.5	7.06	221						
276941	PRESKAR, CAROL	02/27/14	7.5	6.73	192						
245672	ANDERSON, CHRIS & JESSICA	03/03/14	7.5	6.7	366						
171617	ANDERSON, JIM	03/03/14	8.5	6.59	185						
276968	FISCHER, FRED	03/04/14	9.6	6.75	220						
51151	OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	03/04/14	8.9	6.55	187						
51151	OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	03/04/14	8.9	6.55	187						
174795	COLUCCI, JOYCE	03/04/14	9.2	6.53	160						
275246	MATOSICH, GREG	03/05/14	8.8	6.53	162						
51114	BRENNAN, DOROTHY	03/06/14	8.2	6.48	173						
51109	SCHAFER, WALT & TERRY	03/06/14	9.4	6.58	194						
276982	SMITH, CATHY AND MATT	03/06/14	8.1	6.61	195						
276997	MORLEY, LINDA	03/12/14	5.25	7.24	288						
51363	GARRELS, JOYCE AND LLOYD	03/31/14	9.23	6.78	179	5.87	178.7	15.91	6	8.43	2.6
51363	GARRELS, JOYCE AND LLOYD	03/31/14	9.23	6.78	179						
126979	MCKENNA , MARY	04/01/14	9.1	6.58	152						
277143	RICE, CORKY * 107 RICE DR.	04/01/14	9.2	6.77	176						
277147	COOK, KEN * 45 SMITHVILLE RD	04/02/14	5.9	7.35	306						
79764	JOVANICH, JULIENNE & STEVE	04/02/14	9.3	7.41	368						
254781	STERGAR, JOHN & JAN	04/02/14	8.7	7.32	401						
52051	SMITH, LEONARD AND DOROTHY	04/03/14	6.8	7.37	297						

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste and Soils
2014 Domestic Well Water Quality Results

Site Name	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (ug/l)
ROUSE, JIM	<0.038 U	<0.005 U									
CLARK, JIM / SPAUN, LORAINE	0.291	<0.005 U									
TUSS, ROXINE & JAMES	<0.038 U	<0.005 U									
CRAIG, WARREN	0.698	0.008 J									
STAVANJA, NANCY	0.108 J	<0.005 U									
SCHAFER, JENNA AND TRAVIS	<0.038 U	<0.005 U									
SCHAFER, RODNEY	1.303	0.017 J									
SCHAFER, RODNEY	0.957	0.021 J									
SPINLER, ROSE AND TIM	<0.038 U	<0.005 U									
HERTOGHE, CRAIG	0.077 J	<0.005 U									
NELSON, RAY & GLORIA	0.177 J	<0.005 U									
MAES, JIM	0.056 J	<0.005 U									
JOHNSON, WADE	0.058 J	<0.005 U									
REICH, RANDY	0.101 J	<0.005 U									
FISCHER, GILBERT	0.170 J	<0.005 U									
PRESKAR, CAROL	0.92	<0.005 U									
ANDERSON, CHRIS & JESSICA	9.544	0.087 J									
ANDERSON, JIM	0.085 J	<0.005 U									
FISCHER, FRED	<0.038 U	<0.005 U									
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	0.58	<0.005 U									
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	0.69	<0.005 U									
COLUCCI, JOYCE	0.061 J	<0.005 U									
MATOSICH, GREG	1.272	0.099 J									
BRENNAN, DOROTHY	0.234	<0.005 U									
SCHAFER, WALT & TERRY	0.077 J	<0.005 U									
SMITH, CATHY AND MATT	<0.038 U	<0.005 U									
MORLEY, LINDA	9.975	0.425									
GARRELS, JOYCE AND LLOYD	<0.015 U	<0.002 U	12.25	58.61	0	30.36	5.51	2.07	0.2	<0.020 U	<0.100 U
GARRELS, JOYCE AND LLOYD	0.044 J	<0.005 U									
MCKENNA , MARY	0.087 J	<0.005 U									
RICE, CORKY * 107 RICE DR.	<0.038 U	<0.005 U									
COOK, KEN * 45 SMITHVILLE RD	<0.038 U	<0.005 U									
JOVANICH, JULIENNE & STEVE	<0.038 U	<0.005 U									
STERGAR, JOHN & JAN	0.094 J	<0.005 U									
SMITH, LEONARD AND DOROTHY	<0.038 U	<0.005 U									

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Montana Bureau of Mines and Geology
Anaconda Regional Water, Waste and Soils
2014 Domestic Well Water Quality Results

Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
ROUSE, JIM	<5.000 U	<0.250 U	12.05	28.14	<0.250 U		<0.250 U	<0.250 U	0.820 J	3.510 J	<5.000 U	1.49	<0.250 U
CLARK, JIM / SPAUN, LORAINE	<5.000 U	2.74	9.26	45.21	<0.250 U		<0.250 U	<0.250 U	0.630 J	7.99	<5.000 U	4.02	1.020 J
TUSS, ROXINE & JAMES	<5.000 U	<0.250 U	5.6	23.09	<0.250 U		<0.250 U	<0.250 U	0.590 J	15.79	<5.000 U	0.980 J	<0.250 U
CRAIG, WARREN	<5.000 U	0.630 J	3.460 J	39.01	<0.250 U		<0.250 U	<0.250 U	0.680 J	14.06	<5.000 U	1.070 J	0.580 J
STAVANJA, NANCY	<5.000 U	<0.250 U	10.13	32.8	<0.250 U		<0.250 U	<0.250 U	1.110 J	12.95	<5.000 U	1.65	1.33
SCHAFER, JENNA AND TRAVIS	<5.000 U	<0.250 U	2.840 J	18.6	<0.250 U		<0.250 U	<0.250 U	0.730 J	3.220 J	<5.000 U	1.040 J	0.680 J
SCHAFER, RODNEY	1390.7	1.08	21.92	45.81	<0.250 U		<0.250 U	<0.250 U	2.77	1.500 J	<5.000 U	1.28	1.6
SCHAFER, RODNEY	122.21	2.07	6.2	27.72	<0.250 U		<0.250 U	<0.250 U	1.150 J	<1.250 U	<5.000 U	1.3	<0.250 U
SPINLER, ROSE AND TIM	<5.000 U	1.83	7.48	54.34	<0.250 U		<0.250 U	<0.250 U	0.590 J	<1.250 U	5.370 J	<0.250 U	1.160 J
HERTOGHE, CRAIG	43.84	<0.250 U	1.950 J	9.04	<0.250 U		<0.250 U	<0.250 U	0.770 J	10.86	<5.000 U	<0.250 U	<0.250 U
NELSON, RAY & GLORIA	<5.000 U	0.900 J	3.370 J	39.98	<0.250 U		<0.250 U	<0.250 U	0.650 J	2.530 J	5.520 J	1.020 J	0.560 J
MAES, JIM	<5.000 U	0.570 J	5.65	25.71	<0.250 U		<0.250 U	<0.250 U	1.050 J	<1.250 U	10.010 J	1.57	<0.250 U
JOHNSON, WADE	<5.000 U	<0.250 U	9.8	8.66	<0.250 U		0.450 J	<0.250 U	1.010 J	<1.250 U	<5.000 U	0.540 J	<0.250 U
REICH, RANDY	91.02	10.62	43.67	19.65	<0.250 U		<0.250 U	<0.250 U	1.040 J	<1.250 U	<5.000 U	0.620 J	<0.250 U
FISCHER, GILBERT	7.830 J	1.87	9.83	20.26	<0.250 U		<0.250 U	<0.250 U	1.35	<1.250 U	8.990 J	<0.250 U	<0.250 U
PRESKAR, CAROL	<5.000 U	<0.250 U	4.160 J	5.2	<0.250 U		<0.250 U	<0.250 U	1.34	<1.250 U	<5.000 U	0.540 J	<0.250 U
ANDERSON, CHRIS & JESSICA	5.710 J	1.07	6.01	12.71	<0.250 U		<0.250 U	<0.250 U	0.330 J	2.620 J	7.630 J	0.450 J	<0.250 U
ANDERSON, JIM	<5.000 U	<0.250 U	5.36	8.52	<0.250 U		<0.250 U	<0.250 U	0.460 J	<1.250 U	<5.000 U	0.420 J	<0.250 U
FISCHER, FRED	<5.000 U	<0.250 U	4.190 J	8.55	<0.250 U		<0.250 U	<0.250 U	0.960 J	1.300 J	<5.000 U	0.530 J	<0.250 U
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	<5.000 U	<0.250 U	7.62	8.1	<0.250 U		<0.250 U	<0.250 U	1.060 J	2.240 J	<5.000 U	0.300 J	<0.250 U
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	<5.000 U	<0.250 U	7.29	7.82	<0.250 U		<0.250 U	<0.250 U	1.040 J	2.710 J	<5.000 U	0.290 J	<0.250 U
COLUCCI, JOYCE	<5.000 U	<0.250 U	4.540 J	7.72	<0.250 U		<0.250 U	<0.250 U	1.070 J	<1.250 U	<5.000 U	0.340 J	<0.250 U
MATOSICH, GREG	<5.000 U	0.780 J	3.720 J	28.29	<0.250 U		<0.250 U	<0.250 U	<0.250 U	9.41	<5.000 U	1.010 J	<0.250 U
BRENNAN, DOROTHY	<5.000 U	<0.250 U	8.17	32.43	<0.250 U		<0.250 U	<0.250 U	<0.250 U	6.09	<5.000 U	0.860 J	<0.250 U
SCHAFER, WALT & TERRY	<5.000 U	<0.250 U	6.39	37.09	<0.250 U		<0.250 U	<0.250 U	<0.250 U	3.320 J	<5.000 U	1.44	<0.250 U
SMITH, CATHY AND MATT	<5.000 U	1	3.230 J	57.08	<0.250 U		<0.250 U	<0.250 U	<0.250 U	1.810 J	<5.000 U	2.33	<0.250 U
MORLEY, LINDA	5.410 J	2.78	30.49	26.94	<0.250 U		<0.250 U	<0.250 U	<0.250 U	2.430 J	<5.000 U	1.160 J	0.890 J
GARRELS, JOYCE AND LLOYD	<2.000 U	27.25	12.43	164.83	<0.100 U	92	<0.100 U	0.350 J	<0.100 U	25.44	<2.000 U	<0.100 U	4.27
GARRELS, JOYCE AND LLOYD	<5.000 U	26.47	11.89	167.2	<0.250 U		<0.250 U	<0.250 U	<0.250 U	24.29	<5.000 U	<0.250 U	4.45
MCKENNA , MARY	<5.000 U	<0.250 U	6.8	34.63	<0.250 U		<0.250 U	<0.250 U	<0.250 U	19.29	<5.000 U	0.880 J	<0.250 U
RICE, CORKY * 107 RICE DR.	<5.000 U	2.55	4.950 J	49.46	<0.250 U		<0.250 U	<0.250 U	<0.250 U	23.93	5.130 J	1.4	0.540 J
COOK, KEN * 45 SMITHVILLE RD	<5.000 U	1.97	7.84	25.42	<0.250 U		<0.250 U	<0.250 U	0.540 J	<1.250 U	6.570 J	2.95	<0.250 U
JOVANICH, JULIENNE & STEVE	<5.000 U	1.27	6.61	43.94	<0.250 U		<0.250 U	<0.250 U	0.520 J	15.54	<5.000 U	1.95	<0.250 U
STERGAR, JOHN & JAN	<5.000 U	2.33	8.05	46.51	<0.250 U		<0.250 U	<0.250 U	0.560 J	23.58	6.560 J	1.42	<0.250 U
SMITH, LEONARD AND DOROTHY	<5.000 U	2.29	5.65	25.38	<0.250 U		<0.250 U	<0.250 U	0.630 J	4.270 J	<5.000 U	2.5	<0.250 U

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Anaconda Regional Water, Waste and Soils
2014 Domestic Well Water Quality Results

Site Name	Pb (ug/l)	Sb (ug/l)	Se (ug/l)	Sn (ug/l)	Sr (ug/l)	Ti (ug/l)	Tl (ug/l)	U (ug/l)	V (ug/l)	Zn (ug/l)	Zr (ug/l)	Ce (ug/l)	Cs (ug/l)
ROUSE, JIM	<0.150 U	<0.250 U	<0.250 U	<0.250 U	106.39	3.03	<0.250 U	0.920 J	1.97	3.390 J	<0.250 U	<0.250 U	<0.250 U
CLARK, JIM / SPAUN, LORAINE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	139.02	3.64	<0.250 U	2.94	2.77	12.94	<0.250 U	<0.250 U	<0.250 U
TUSS, ROXINE & JAMES	<0.150 U	<0.250 U	<0.250 U	<0.250 U	107.65	3.48	<0.250 U	0.900 J	2.07	2.170 J	<0.250 U	<0.250 U	<0.250 U
CRAIG, WARREN	0.83	<0.250 U	<0.250 U	<0.250 U	110.11	3.99	<0.250 U	1.010 J	2.7	2.200 J	<0.250 U	<0.250 U	<0.250 U
STAVANJA, NANCY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	101.14	3.15	<0.250 U	1.250 J	1.99	4.790 J	<0.250 U	<0.250 U	<0.250 U
SCHAFER, JENNA AND TRAVIS	<0.150 U	<0.250 U	<0.250 U	<0.250 U	186	3.43	<0.250 U	2.68	2.44	2.350 J	<0.250 U	<0.250 U	<0.250 U
SCHAFER, RODNEY	0.700 J	<0.250 U	<0.250 U	<0.250 U	121.9	99.16	<0.250 U	2.06	5.68	5.84	1.84	2.32	<0.250 U
SCHAFER, RODNEY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	122.05	9.44	<0.250 U	1.38	7.32	2.900 J	<0.250 U	<0.250 U	<0.250 U
SPINLER, ROSE AND TIM	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1021.38	4.32	<0.250 U	4.52	5.01	3.520 J	<0.250 U	<0.250 U	<0.250 U
HERTOGHE, CRAIG	<0.150 U	<0.250 U	<0.250 U	<0.250 U	52.99	3.08	<0.250 U	<0.250 U	2.51	3.750 J	<0.250 U	<0.250 U	<0.250 U
NELSON, RAY & GLORIA	<0.150 U	0.510 J	<0.250 U	<0.250 U	89.93	3.15	<0.250 U	0.770 J	2.69	20.99	<0.250 U	<0.250 U	<0.250 U
MAES, JIM	<0.150 U	<0.250 U	<0.250 U	2.04	59.03	3.47	<0.250 U	1.33	1.63	15.69	113.77	<0.250 U	<0.250 U
JOHNSON, WADE	<0.150 U	<0.250 U	<0.250 U	2.02	44.6	3.42	<0.250 U	0.840 J	1.9	<1.250 U	90.33	<0.250 U	<0.250 U
REICH, RANDY	<0.150 U	<0.250 U	<0.250 U	2.09	49.49	8.64	<0.250 U	0.530 J	8.25	6.63	91.41	<0.250 U	<0.250 U
FISCHER, GILBERT	<0.150 U	<0.250 U	<0.250 U	2.12	66.68	3.26	1.210 J	0.400 J	9.28	<1.250 U	133.42	<0.250 U	<0.250 U
PRESKAR, CAROL	<0.150 U	<0.250 U	<0.250 U	1.9	43.31	3.47	<0.250 U	0.610 J	2.84	3.490 J	86.61	<0.250 U	<0.250 U
ANDERSON, CHRIS & JESSICA	<0.150 U	<0.250 U	<0.250 U	1.93	92.05	7.89	1.64	2.63	4.57	2.350 J	184.09	1.43	<0.250 U
ANDERSON, JIM	<0.150 U	<0.250 U	<0.250 U	2.36	39.12	3.91	<0.250 U	0.510 J	1.67	<1.250 U	78.54	<0.250 U	<0.250 U
FISCHER, FRED	<0.150 U	<0.250 U	<0.250 U	2.61	48.57	3.38	<0.250 U	1.240 J	2.19	<1.250 U	97.12	<0.250 U	<0.250 U
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	<0.150 U	<0.250 U	<0.250 U	2.46	40.8	3.8	<0.250 U	0.500 J	2.14	11	81.58	<0.250 U	<0.250 U
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	0.330 J	<0.250 U	<0.250 U	2.54	40.17	3.96	<0.250 U	0.470 J	2.2	10.96	80.31	<0.250 U	<0.250 U
COLUCCI, JOYCE	<0.150 U	<0.250 U	<0.250 U	2.63	32.12	3.64	<0.250 U	0.280 J	1.83	3.920 J	64.24	<0.250 U	<0.250 U
MATOSICH, GREG	1.79	<0.250 U	<0.250 U	<0.250 U	92.28	4.02	<0.250 U	0.880 J	1.83	3.290 J	<0.250 U	<0.250 U	<0.250 U
BRENNAN, DOROTHY	2.39	<0.250 U	<0.250 U	<0.250 U	101.35	3.17	<0.250 U	1.030 J	1.49	5.72	<0.250 U	<0.250 U	<0.250 U
SCHAFER, WALT & TERRY	0.620 J	<0.250 U	<0.250 U	<0.250 U	117.94	3.31	<0.250 U	1.61	1.43	11.41	<0.250 U	<0.250 U	<0.250 U
SMITH, CATHY AND MATT	<0.150 U	0.880 J	<0.250 U	<0.250 U	124.34	2.76	<0.250 U	2.84	1.57	8.64	<0.250 U	<0.250 U	<0.250 U
MORLEY, LINDA	0.170 J	<0.250 U	<0.250 U	<0.250 U	197.26	5.2	<0.250 U	0.520 J	0.840 J	26.24	<0.250 U	<0.250 U	<0.250 U
GARRELS, JOYCE AND LLOYD	0.65	0.320 J	0.240 J	<0.100 U	58.05	0.210 J	<0.100 U	<0.100 U	<0.100 U	2209.43	<0.100 U	<0.100 U	0.75
GARRELS, JOYCE AND LLOYD	1.11	<0.250 U	<0.250 U	<0.250 U	57.58	2.54	<0.250 U	<0.250 U	1.25	2069.61	<0.250 U	<0.250 U	0.750 J
MCKENNA , MARY	0.580 J	<0.250 U	<0.250 U	<0.250 U	90.8	2.67	<0.250 U	0.770 J	1.060 J	7.32	<0.250 U	<0.250 U	<0.250 U
RICE, CORKY * 107 RICE DR.	<0.150 U	0.640 J	<0.250 U	<0.250 U	112.84	2.39	<0.250 U	3.69	1.64	5.85	<0.250 U	<0.250 U	<0.250 U
COOK, KEN * 45 SMITHVILLE RD	<0.150 U	<0.250 U	<0.250 U	<0.250 U	88.92	2.46	<0.250 U	1.81	1.250 J	20.42	<0.250 U	<0.250 U	<0.250 U
JOVANICH, JULIENNE & STEVE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	132.82	2.57	<0.250 U	1.120 J	1.41	1.270 J	<0.250 U	<0.250 U	<0.250 U
STERGAR, JOHN & JAN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	316.48	2.29	<0.250 U	1.86	2.43	5.6	<0.250 U	<0.250 U	<0.250 U
SMITH, LEONARD AND DOROTHY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	87.31	2.57	<0.250 U	1.62	1.73	3.150 J	<0.250 U	<0.250 U	<0.250 U

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Site Name	Ga (ug/l)	La (ug/l)	Nb (ug/l)	Nd (ug/l)	Pd (ug/l)	Pr (ug/l)	Rb (ug/l)	Th (ug/l)	W (ug/l)	NO2-N (mg/l)
ROUSE, JIM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.600 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
CLARK, JIM / SPAUN, LORAINE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
TUSS, ROXINE & JAMES	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
CRAIG, WARREN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
STAVANJA, NANCY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.59	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
SCHAFER, JENNA AND TRAVIS	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
SCHAFER, RODNEY	0.600 J	1.44	<0.250 U	1.6	0.540 J	<0.250 U	4.87	<0.250 U	0.530 J	
SCHAFER, RODNEY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.500 J	<0.250 U	2.02	
SPINLER, ROSE AND TIM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.750 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
HERTOGHE, CRAIG	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
NELSON, RAY & GLORIA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MAES, JIM	<0.250 U	51.02	<0.250 U	<0.250 U	3.22	<0.250 U	1.61	1.45	2.4	
JOHNSON, WADE	<0.250 U	17.32	<0.250 U	<0.250 U	1.190 J	<0.250 U	<0.250 U	1.45	2.24	
REICH, RANDY	<0.250 U	39.33	0.310 J	<0.250 U	1.62	<0.250 U	1.93	1.53	2.38	
FISCHER, GILBERT	<0.250 U	40.52	<0.250 U	<0.250 U	0.280 J	<0.250 U	<0.250 U	2.38	2.96	
PRESKAR, CAROL	<0.250 U	10.41	<0.250 U	<0.250 U	1.130 J	<0.250 U	<0.250 U	2.06	2.17	
ANDERSON, CHRIS & JESSICA	<0.250 U	25.89	<0.250 U	<0.250 U	0.970 J	1.000 J	<0.250 U	1.39	2.98	
ANDERSON, JIM	<0.250 U	17.03	0.610 J	<0.250 U	0.830 J	<0.250 U	0.440 J	2.49	2.63	
FISCHER, FRED	<0.250 U	17.09	<0.250 U	<0.250 U	1.180 J	<0.250 U	<0.250 U	2.67	2.87	
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	<0.250 U	16.19	<0.250 U	<0.250 U	0.710 J	<0.250 U	<0.250 U	2.48	1.79	
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	<0.250 U	15.65	<0.250 U	<0.250 U	0.660 J	<0.250 U	<0.250 U	2.6	2.74	
COLUCCI, JOYCE	<0.250 U	15.44	<0.250 U	<0.250 U	0.650 J	<0.250 U	<0.250 U	2.66	2.83	
MATOSICH, GREG	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
BRENNAN, DOROTHY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.650 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
SCHAFER, WALT & TERRY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
SMITH, CATHY AND MATT	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MORLEY, LINDA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
GARRELS, JOYCE AND LLOYD	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.29	<0.100 U	<0.100 U	<0.010 U
GARRELS, JOYCE AND LLOYD	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.45	<0.250 U	<0.250 U	
MCKENNA , MARY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
RICE, CORKY * 107 RICE DR.	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
COOK, KEN * 45 SMITHVILLE RD	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.9	<0.250 U	<0.250 U	
JOVANICH, JULIENNE & STEVE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.600 J	<0.250 U	0.780 J	<0.250 U	<0.250 U	
STERGAR, JOHN & JAN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.570 J	<0.250 U	<0.250 U	
SMITH, LEONARD AND DOROTHY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.04	<0.250 U	<0.250 U	

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Anaconda Regional Water, Waste and Soils
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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
ROUSE, JIM	0	0	0.0001	0	TOTAL RECOVERABLE
CLARK, JIM / SPAUN, LORAINE	0.021	0.021	0.0001	0	TOTAL RECOVERABLE
TUSS, ROXINE & JAMES	0.016	0.016	0.0001	0	TOTAL RECOVERABLE
CRAIG, WARREN	1.014	1.014	0.0001	0	TOTAL RECOVERABLE
STAVANJA, NANCY	0.013	0.013	0.0001	0	TOTAL RECOVERABLE
SCHAFER, JENNA AND TRAVIS	0	0	0.0001	0	TOTAL RECOVERABLE
SCHAFER, RODNEY	2.397	2.397	0.0001	0	TOTAL RECOVERABLE
SCHAFER, RODNEY	1.122	1.122	0.0001	0	TOTAL RECOVERABLE
SPINLER, ROSE AND TIM	0	0	0.0001	0	TOTAL RECOVERABLE
HERTOGHE, CRAIG	0.055	0.055	0.0001	0	TOTAL RECOVERABLE
NELSON, RAY & GLORIA	0.021	0.021	0.0001	0	TOTAL RECOVERABLE
MAES, JIM	0.016	0.016	0.0001	0	TOTAL RECOVERABLE
JOHNSON, WADE	0	0	0.0001	0	TOTAL RECOVERABLE
REICH, RANDY	0.098	0.098	0.0001	0	TOTAL RECOVERABLE
FISCHER, GILBERT	0	0	0.0001	0	TOTAL RECOVERABLE
PRESKAR, CAROL	1	1	0.0001	0	TOTAL RECOVERABLE
ANDERSON, CHRIS & JESSICA	10	10	0.0001	0	TOTAL RECOVERABLE
ANDERSON, JIM	0	0	0.0001	0	TOTAL RECOVERABLE
FISCHER, FRED	0	0	0.0001	0	TOTAL RECOVERABLE
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	1.011	1.011	0.0001	0	TOTAL RECOVERABLE
OPPORTUNITY FIRE DISTRICT * COMMUNITY CENTER	1.011	1.011	0.0001	0	TOTAL RECOVERABLE
COLUCCI, JOYCE	0	0	0.0001	0	TOTAL RECOVERABLE
MATOSICH, GREG	1.009	1.009	0.0001	0	TOTAL RECOVERABLE
BRENNAN, DOROTHY	0.012	0.012	0.0001	0	TOTAL RECOVERABLE
SCHAFER, WALT & TERRY	0.011	0.011	0.0001	0	TOTAL RECOVERABLE
SMITH, CATHY AND MATT	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
MORLEY, LINDA	10.026	10.026	0.0001	0	TOTAL RECOVERABLE
GARRELS, JOYCE AND LLOYD	114.208	144.144	64.4233	48.3901	DISSOLVED
GARRELS, JOYCE AND LLOYD	2.094	2.094	0.0001	0	TOTAL RECOVERABLE
MCKENNA , MARY	0.026	0.026	0.0001	0	TOTAL RECOVERABLE
RICE, CORKY * 107 RICE DR.	0.03	0.03	0.0001	0	TOTAL RECOVERABLE
COOK, KEN * 45 SMITHVILLE RD	0.02	0.02	0.0001	0	TOTAL RECOVERABLE
JOVANICH, JULIENNE & STEVE	0.016	0.016	0.0001	0	TOTAL RECOVERABLE
STERGAR, JOHN & JAN	0.03	0.03	0.0001	0	TOTAL RECOVERABLE
SMITH, LEONARD AND DOROTHY	0	0	0.0001	0	TOTAL RECOVERABLE

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Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
52056	MCCULLOCH, ALICE AND STEPHEN * WELL 3	04/03/14	7	7.58	325						
51859	SCALISE, PAT AND LAUREL	04/04/14	9.3	7.24	447						
183517	JAMISON, SHERI	04/04/14	6.4	7.08	533						
186891	ILLSTON, KIETH	04/07/14	8.9	7.28	402						
125802	DUNN, MICHAEL D	04/07/14	9	7.41	369						
237566	MCCALLUM, DALE & MARY JEAN	04/07/14	8.3	7.46	324						
273688	NOVAK, JIM	04/08/14	10.4	7.39	1179						
258865	MILLER, ALICE	04/08/14	8.6	7.39	377						
153773	BUCHOLZ, BENNY F AND CONSTANCE M	04/08/14	8.8	7.33	432						
126999	HANNON, JOE & BABE	04/09/14	8.3	7.44	325						
159901	GRAHAM, DAVID	04/09/14	7.2	7.38	290						
166648	BLUME, KEN AND AMY	04/09/14	13.5	6.4	241.9	6.97	259.99	24.75	3.93	26.52	1.65
166648	BLUME, KEN AND AMY	04/09/14	13.5	6.4	241.9						
143520	MEYER, MILDRED	04/09/14	12.51	6.05	190.1						
51870	KOSTELECKY, CALVIN AND DONNA	04/11/14	11.1	7.14	634						
277218	RIDDLE, TIM AND KATHY * NEW MODULAR HOME, 2013	04/11/14	8.5	7.49	325						
51854	STURM, LARRY	04/11/14	9.3	7.15	370						
184528	MCGEE, MARY J	04/11/14	6.7	7.31	285						
133737	MURPHY, JAMES C & JEANNE M	04/14/14	7	7.48	303						
275489	NELSON, BOB AND PATTY	04/14/14	5.1	7.33	276						
260499	BAUTISTA, BECKY	04/14/14	6.4	7.43	329						
180515	DERZAY, JOHN	04/15/14	5.6	7.5	294						
180515	DERZAY, JOHN	04/15/14	5.6	7.5	294						
230527	QUICK STEVE	04/16/14	7.8	7.48	364						
277318	QUICK, STEVE * RENTAL	04/16/14	6.6	7.6	260						
209006	BOWEN, RICH	04/16/14	11.4	7.38	963						
153766	MACKEY, KAREN L	04/17/14	9.45	5.96	337.4						
189209	PESANTI, RYAN AND STACIE	04/17/14	10.1	7.58	512						
51843	ARRINGTON, OWEN AND YVONNE	04/17/14	6.5	7.97	300						
254420	DAVIS, RICK	04/18/14	7.5	7.48	273						
165756	REICH, RANDY	04/18/14	13.27	6.8	284.5	7.32	269.14	32.54	3.7	18.56	6.5
165756	REICH, RANDY	04/18/14	13.27	6.8	284.5						
51821	GALLE, TERRY V. & CHARLENE	04/18/14	8.6	7.54	302						
209005	GALLE, TERRY J. & STEPHANIE	04/18/14	8.1	7.64	318						
219571	GALLE, TERRY & CHARLENE * RENTAL	04/18/14	6.3	7.36	219						

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Site Name	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (ug/l)
MCCULLOCH, ALICE AND STEPHEN * WELL 3	0.051 J	0.062 J									
SCALISE, PAT AND LAUREL	<0.038 U	<0.005 U									
JAMISON, SHERI	<0.038 U	<0.005 U									
ILLSTON, KIETH	0.063 J	<0.005 U									
DUNN, MICHAEL D	0.112 J	<0.005 U									
MCCALLUM, DALE & MARY JEAN	<0.038 U	<0.005 U									
NOVAK, JIM	0.742	0.029 J									
MILLER, ALICE	0.418	<0.005 U									
BUCHOLZ, BENNY F AND CONSTANCE M	<0.038 U	<0.005 U									
HANNON, JOE & BABE	<0.038 U	<0.005 U									
GRAHAM, DAVID	0.224	0.006 J									
BLUME, KEN AND AMY	<0.015 U	<0.002 U	41.03	135.78	0	11.32	10.61	0.76	0.73	0.060 J	<0.100 U
BLUME, KEN AND AMY	1.351	0.007 J									
MEYER, MILDRED	0.549	0.012 J									
KOSTELECKY, CALVIN AND DONNA	<0.038 U	<0.005 U									
RIDDLE, TIM AND KATHY * NEW MODULAR HOME, 2013	0.043 J	<0.005 U									
STURM, LARRY	0.155 J	<0.005 U									
MCGEE, MARY J	0.169 J	<0.005 U									
MURPHY, JAMES C & JEANNE M	0.959	0.011 J									
NELSON, BOB AND PATTY	0.318	0.005 J									
BAUTISTA, BECKY	<0.038 U	<0.005 U									
DERZAY, JOHN	0.059 J	<0.005 U									
DERZAY, JOHN	0.104 J	<0.005 U									
QUICK STEVE	<0.038 U	<0.005 U									
QUICK, STEVE * RENTAL	0.094 J	<0.005 U									
BOWEN, RICH	0.469	0.019 J									
MACKEY, KAREN L	<0.038 U	<0.005 U									
PESANTI, RYAN AND STACIE	<0.038 U	<0.005 U									
ARRINGTON, OWEN AND YVONNE	0.51	<0.005 U									
DAVIS, RICK	<0.038 U	<0.005 U									
REICH, RANDY	<0.015 U	<0.002 U	54.77	148.86	0	19.05	5.44	1.16	0.41	<0.020 U	<0.100 U
REICH, RANDY	0.045 J	<0.005 U									
GALLE, TERRY V. & CHARLENE	0.133 J	<0.005 U									
GALLE, TERRY J. & STEPHANIE	0.042 J	<0.005 U									
GALLE, TERRY & CHARLENE * RENTAL	<0.038 U	<0.005 U									

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Montana Bureau of Mines and Geology
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Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
MCCULLOCH, ALICE AND STEPHEN * WELL 3	<5.000 U	<0.250 U	24.86	108.11	<0.250 U		<0.250 U	<0.250 U	0.520 J	3.200 J	8.860 J	<0.250 U	<0.250 U
SCALISE, PAT AND LAUREL	<5.000 U	1.03	9.44	57.1	<0.250 U		<0.250 U	<0.250 U	0.500 J	1.910 J	6.940 J	1.61	<0.250 U
JAMISON, SHERI	38.21	1.25	13.35	123.33	<0.250 U		<0.250 U	<0.250 U	0.610 J	115.22	8.140 J	1.010 J	0.820 J
ILLSTON, KIETH	<5.000 U	1.94	9.91	45.59	<0.250 U		<0.250 U	<0.250 U	0.530 J	<1.250 U	6.420 J	1.77	<0.250 U
DUNN, MICHAEL D	<5.000 U	1.76	7.31	43.08	<0.250 U		<0.250 U	<0.250 U	0.630 J	<1.250 U	5.180 J	1.83	<0.250 U
MCCALLUM, DALE & MARY JEAN	<5.000 U	1.81	5.07	35.15	<0.250 U		<0.250 U	<0.250 U	0.700 J	<1.250 U	<5.000 U	2.28	<0.250 U
NOVAK, JIM	<5.000 U	<0.250 U	25.59	9.35	<0.250 U		<0.250 U	<0.250 U	0.530 J	1.400 J	14.380 J	0.640 J	0.660 J
MILLER, ALICE	<5.000 U	2	7.21	45.07	<0.250 U		<0.250 U	<0.250 U	0.780 J	1.890 J	5.600 J	1.83	0.500 J
BUCHOLZ, BENNY F AND CONSTANCE M	<5.000 U	1.6	8.51	62.46	<0.250 U		<0.250 U	<0.250 U	0.730 J	1.300 J	8.870 J	1.76	0.600 J
HANNON, JOE & BABE	<5.000 U	1.98	5.08	35.19	<0.250 U		<0.250 U	<0.250 U	<0.250 U	10.48	<5.000 U	2.11	0.510 J
GRAHAM, DAVID	<5.000 U	0.830 J	3.990 J	29.02	<0.250 U		<0.250 U	<0.250 U	0.540 J	2.090 J	<5.000 U	2.21	<0.250 U
BLUME, KEN AND AMY	<2.000 U	2.81	32.27	35.99	<0.100 U	106	<0.100 U	<0.100 U	0.470 J	1.140 J	30.34	0.340 J	<0.100 U
BLUME, KEN AND AMY	72.18	3.55	35.42	40.17	<0.250 U		<0.250 U	<0.250 U	1.45	1.850 J	28.16	0.740 J	<0.250 U
MEYER, MILDRED	<5.000 U	<0.250 U	3.520 J	26.47	<0.250 U		<0.250 U	<0.250 U	0.700 J	132.47	<5.000 U	1.87	1.100 J
KOSTELECKY, CALVIN AND DONNA	19.960 J	2.36	14.75	30.48	<0.250 U		<0.250 U	<0.250 U	0.660 J	1.870 J	14.590 J	1.010 J	0.500 J
RIDDLE, TIM AND KATHY * NEW MODULAR HOME, 2013	7.210 J	1.44	3.700 J	38.37	<0.250 U		<0.250 U	<0.250 U	0.600 J	<1.250 U	<5.000 U	1.87	<0.250 U
STURM, LARRY	<5.000 U	3.02	23.51	65.7	<0.250 U		<0.250 U	<0.250 U	0.550 J	41.82	11.670 J	0.870 J	0.930 J
MCGEE, MARY J	<5.000 U	1.27	3.550 J	25	<0.250 U		<0.250 U	<0.250 U	0.510 J	21.24	<5.000 U	2.52	<0.250 U
MURPHY, JAMES C & JEANNE M	<5.000 U	1.37	3.230 J	27.68	<0.250 U		<0.250 U	<0.250 U	0.530 J	4.590 J	<5.000 U	2.23	<0.250 U
NELSON, BOB AND PATTY	9.780 J	0.960 J	1.750 J	28.3	<0.250 U		<0.250 U	<0.250 U	0.570 J	<1.250 U	<5.000 U	2.63	<0.250 U
BAUTISTA, BECKY	<5.000 U	1.16	2.810 J	28.52	<0.250 U		<0.250 U	<0.250 U	0.520 J	2.100 J	<5.000 U	2.29	<0.250 U
DERZAY, JOHN	5.030 J	2.02	5.92	19.46	<0.250 U		<0.250 U	<0.250 U	<0.250 U	2.180 J	<5.000 U	1.95	<0.250 U
DERZAY, JOHN	7.500 J	1.83	2.300 J	19.34	<0.250 U		<0.250 U	<0.250 U	<0.250 U	<1.250 U	<5.000 U	1.66	<0.250 U
QUICK STEVE	<5.000 U	2.79	5.63	13.37	<0.250 U		<0.250 U	<0.250 U	0.500 J	<1.250 U	8.240 J	2.59	<0.250 U
QUICK, STEVE * RENTAL	5.700 J	1.84	3.320 J	34.16	<0.250 U		<0.250 U	<0.250 U	0.520 J	<1.250 U	<5.000 U	2.3	<0.250 U
BOWEN, RICH	25.2	2.33	38.77	13.8	<0.250 U		<0.250 U	<0.250 U	0.530 J	<1.250 U	106.33	1.74	1.55
MACKEY, KAREN L	<5.000 U	0.82	8.26	95.02	<0.250 U		<0.250 U	<0.250 U	0.66	1.6	8.4	4.22	<0.250 U
PESANTI, RYAN AND STACIE	<5.000 U	11.13	13.04	74.73	<0.250 U		<0.250 U	<0.250 U	0.540 J	7.28	16.950 J	2.25	<0.250 U
ARRINGTON, OWEN AND YVONNE	8.450 J	1.25	5.45	36.29	<0.250 U		<0.250 U	<0.250 U	0.580 J	<1.250 U	5.200 J	2.38	<0.250 U
DAVIS, RICK	5.470 J	0.520 J	4.040 J	45.23	<0.250 U		<0.250 U	<0.250 U	2.16	<1.250 U	<5.000 U	2.8	1.060 J
REICH, RANDY	<2.000 U	11.68	46.61	54.84	<0.100 U	78	<0.100 U	<0.100 U	<0.100 U	0.850 J	<2.000 U	1.34	0.260 J
REICH, RANDY	37.71	10.74	49.93	35.64	<0.250 U		<0.250 U	<0.250 U	0.530 J	<1.250 U	6.830 J	1.86	<0.250 U
GALLE, TERRY V. & CHARLENE	<5.000 U	3.01	4.940 J	45.3	<0.250 U		<0.250 U	<0.250 U	0.580 J	<1.250 U	15.110 J	9.85	<0.250 U
GALLE, TERRY J. & STEPHANIE	8.000 J	1.2	3.100 J	106.19	<0.250 U		<0.250 U	<0.250 U	0.560 J	1.590 J	6.100 J	4.27	<0.250 U
GALLE, TERRY & CHARLENE * RENTAL	6.310 J	<0.250 U	1.790 J	35.72	<0.250 U		<0.250 U	<0.250 U	0.830 J	10.89	<5.000 U	2.28	<0.250 U

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Site Name	Pb (ug/l)	Sb (ug/l)	Se (ug/l)	Sn (ug/l)	Sr (ug/l)	Ti (ug/l)	Tl (ug/l)	U (ug/l)	V (ug/l)	Zn (ug/l)	Zr (ug/l)	Ce (ug/l)	Cs (ug/l)
MCCULLOCH, ALICE AND STEPHEN * WELL 3	<0.150 U	<0.250 U	<0.250 U	<0.250 U	342.4	2.59	<0.250 U	<0.250 U	0.770 J	12.8	<0.250 U	<0.250 U	<0.250 U
SCALISE, PAT AND LAUREL	<0.150 U	<0.250 U	<0.250 U	<0.250 U	264.2	2.54	<0.250 U	1.38	1.3	2.790 J	<0.250 U	<0.250 U	<0.250 U
JAMISON, SHERI	<0.150 U	<0.250 U	<0.250 U	<0.250 U	442.07	3.05	<0.250 U	3.81	1.66	4.680 J	<0.250 U	<0.250 U	<0.250 U
ILLSTON, KIETH	<0.150 U	<0.250 U	<0.250 U	<0.250 U	284.88	2.47	<0.250 U	1.44	1.75	3.360 J	<0.250 U	<0.250 U	<0.250 U
DUNN, MICHAEL D	<0.150 U	<0.250 U	<0.250 U	<0.250 U	212.07	2.06	<0.250 U	1.36	1.88	8.8	<0.250 U	<0.250 U	<0.250 U
MCCALLUM, DALE & MARY JEAN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	142.76	2.27	<0.250 U	1.38	1.84	2.190 J	<0.250 U	<0.250 U	<0.250 U
NOVAK, JIM	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1380.04	4.1	<0.250 U	<0.250 U	1.030 J	<1.250 U	<0.250 U	<0.250 U	<0.250 U
MILLER, ALICE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	231	2.09	<0.250 U	1.37	2.22	2.390 J	<0.250 U	<0.250 U	<0.250 U
BUCHOLZ, BENNY F AND CONSTANCE M	<0.150 U	<0.250 U	<0.250 U	<0.250 U	395.25	1.99	<0.250 U	1.250 J	1.77	8.18	<0.250 U	<0.250 U	<0.250 U
HANNON, JOE & BABE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	146.67	2.77	<0.250 U	1.200 J	1.4	3.360 J	<0.250 U	<0.250 U	<0.250 U
GRAHAM, DAVID	<0.150 U	<0.250 U	<0.250 U	<0.250 U	85.11	2.28	<0.250 U	1.36	1.090 J	<1.250 U	<0.250 U	<0.250 U	<0.250 U
BLUME, KEN AND AMY	<0.060 U	<0.100 U	0.320 J	<0.100 U	151.78	<0.100 U	<0.100 U	0.61	0.5	5.68	<0.100 U	<0.100 U	0.54
BLUME, KEN AND AMY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	151.9	5.11	<0.250 U	0.630 J	1.64	6.73	<0.250 U	<0.250 U	0.580 J
MEYER, MILDRED	2.31	<0.250 U	<0.250 U	<0.250 U	128.8	2.42	<0.250 U	3.77	1.97	19.71	<0.250 U	<0.250 U	<0.250 U
KOSTELECKY, CALVIN AND DONNA	<0.150 U	<0.250 U	<0.250 U	<0.250 U	556.35	3.08	<0.250 U	<0.250 U	1.44	19.61	<0.250 U	<0.250 U	<0.250 U
RIDDLE, TIM AND KATHY * NEW MODULAR HOME, 2013	<0.150 U	<0.250 U	<0.250 U	<0.250 U	115.36	2.47	<0.250 U	1.180 J	1.48	<1.250 U	<0.250 U	<0.250 U	<0.250 U
STURM, LARRY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	856.86	2.73	<0.250 U	1.84	1.9	8.76	<0.250 U	<0.250 U	<0.250 U
MCGEE, MARY J	<0.150 U	<0.250 U	<0.250 U	<0.250 U	77.04	2.38	<0.250 U	1.45	1.240 J	9.7	<0.250 U	<0.250 U	<0.250 U
MURPHY, JAMES C & JEANNE M	<0.150 U	<0.250 U	<0.250 U	<0.250 U	81.28	2.57	<0.250 U	1.4	1.28	1.350 J	<0.250 U	<0.250 U	<0.250 U
NELSON, BOB AND PATTY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	81.07	2.66	<0.250 U	1.38	1.150 J	5.37	<0.250 U	<0.250 U	<0.250 U
BAUTISTA, BECKY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	85.44	2.41	<0.250 U	1.33	1.100 J	9.68	<0.250 U	<0.250 U	<0.250 U
DERZAY, JOHN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	121.76	3.01	<0.250 U	1.85	1.28	6.25	<0.250 U	<0.250 U	<0.250 U
DERZAY, JOHN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	123.17	2.95	<0.250 U	1.81	1.160 J	5.85	<0.250 U	<0.250 U	<0.250 U
QUICK STEVE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	222.89	2.32	<0.250 U	2.71	1.53	8.5	<0.250 U	<0.250 U	<0.250 U
QUICK, STEVE * RENTAL	<0.150 U	<0.250 U	<0.250 U	<0.250 U	116.75	2.56	<0.250 U	1.89	1.34	3.170 J	<0.250 U	<0.250 U	<0.250 U
BOWEN, RICH	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1896.14	3.31	<0.250 U	1.27	0.710 J	17.41	<0.250 U	<0.250 U	3.73
MACKEY, KAREN L	0.61	<0.250 U	<0.250 U	<0.250 U	246.02	1.62	<0.250 U	6.14	1.3	29.38	0	<0.250 U	<0.250 U
PESANTI, RYAN AND STACIE	<0.150 U	<0.250 U	0.610 J	<0.250 U	866.88	2.22	<0.250 U	7.36	5.12	<1.250 U	288.96	<0.250 U	<0.250 U
ARRINGTON, OWEN AND YVONNE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	662.22	2.22	<0.250 U	2.84	4.02	6.82	<0.250 U	<0.250 U	<0.250 U
DAVIS, RICK	<0.150 U	<0.250 U	<0.250 U	<0.250 U	115.45	1.96	<0.250 U	3.36	1.230 J	4.340 J	<0.250 U	<0.250 U	<0.250 U
REICH, RANDY	<0.060 U	<0.100 U	<0.100 U	<0.100 U	124.63	<0.100 U	<0.100 U	1.51	4.78	12.08	<0.100 U	<0.100 U	<0.100 U
REICH, RANDY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	131.49	3.92	<0.250 U	1.41	7.88	9.3	<0.250 U	<0.250 U	<0.250 U
GALLE, TERRY V. & CHARLENE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	327.81	1.89	<0.250 U	2.65	1.100 J	17.12	<0.250 U	<0.250 U	1.030 J
GALLE, TERRY J. & STEPHANIE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	128.67	2.64	<0.250 U	2.93	1.110 J	1.620 J	<0.250 U	<0.250 U	0.560 J
GALLE, TERRY & CHARLENE * RENTAL	<0.150 U	<0.250 U	<0.250 U	<0.250 U	69.46	1.99	<0.250 U	2.42	1.080 J	2.540 J	<0.250 U	<0.250 U	<0.250 U

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Site Name	Ga (ug/l)	La (ug/l)	Nb (ug/l)	Nd (ug/l)	Pd (ug/l)	Pr (ug/l)	Rb (ug/l)	Th (ug/l)	W (ug/l)	NO2-N (mg/l)
MCCULLOCH, ALICE AND STEPHEN * WELL 3	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.55	<0.250 U	<0.250 U	
SCALISE, PAT AND LAUREL	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.170 J	<0.250 U	<0.250 U	
JAMISON, SHERI	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.87	<0.250 U	<0.250 U	
ILLSTON, KIETH	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.860 J	<0.250 U	0.880 J	<0.250 U	<0.250 U	
DUNN, MICHAEL D	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.880 J	<0.250 U	<0.250 U	
MCCALLUM, DALE & MARY JEAN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.6	<0.250 U	<0.250 U	
NOVAK, JIM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.530 J	<0.250 U	6.57	<0.250 U	<0.250 U	
MILLER, ALICE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.990 J	<0.250 U	<0.250 U	
BUCHOLZ, BENNY F AND CONSTANCE M	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.63	<0.250 U	<0.250 U	
HANNON, JOE & BABE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.38	<0.250 U	<0.250 U	
GRAHAM, DAVID	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.67	<0.250 U	<0.250 U	
BLUME, KEN AND AMY	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.3	<0.100 U	3.68	<0.010 U
BLUME, KEN AND AMY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.84	<0.250 U	3.82	
MEYER, MILDRED	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
KOSTELECKY, CALVIN AND DONNA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.920 J	<0.250 U	0.680 J	<0.250 U	<0.250 U	
RIDDLE, TIM AND KATHY * NEW MODULAR HOME, 2013	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.980 J	<0.250 U	<0.250 U	
STURM, LARRY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.810 J	<0.250 U	<0.250 U	
MCGEE, MARY J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.43	<0.250 U	<0.250 U	
MURPHY, JAMES C & JEANNE M	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.52	<0.250 U	<0.250 U	
NELSON, BOB AND PATTY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.870 J	<0.250 U	<0.250 U	
BAUTISTA, BECKY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.200 J	<0.250 U	<0.250 U	
DERZAY, JOHN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.960 J	<0.250 U	<0.250 U	
DERZAY, JOHN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.960 J	<0.250 U	<0.250 U	
QUICK STEVE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.79	<0.250 U	<0.250 U	
QUICK, STEVE * RENTAL	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.57	<0.250 U	1.71	<0.250 U	<0.250 U	
BOWEN, RICH	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.650 J	<0.250 U	24.55	<0.250 U	<0.250 U	
MACKEY, KAREN L	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.46	<0.250 U	<0.250 U	
PESANTI, RYAN AND STACIE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.510 J	<0.250 U	2.7	<0.250 U	<0.250 U	
ARRINGTON, OWEN AND YVONNE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.250 J	<0.250 U	<0.250 U	
DAVIS, RICK	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.86	<0.250 U	<0.250 U	
REICH, RANDY	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	4.21	<0.100 U	<0.100 U	<0.010 U
REICH, RANDY	<0.250 U	15.62	<0.250 U	<0.250 U	0.470 J	<0.250 U	5.41	<0.250 U	<0.250 U	
GALLE, TERRY V. & CHARLENE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.88	<0.250 U	<0.250 U	
GALLE, TERRY J. & STEPHANIE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.780 J	<0.250 U	2.9	<0.250 U	<0.250 U	
GALLE, TERRY & CHARLENE * RENTAL	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.92	<0.250 U	<0.250 U	

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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
MCCULLOCH, ALICE AND STEPHEN * WELL 3	0.013	0.013	0.0001	0	TOTAL RECOVERABLE
SCALISE, PAT AND LAUREL	0	0	0.0001	0	TOTAL RECOVERABLE
JAMISON, SHERI	0.153	0.153	0.0001	0	TOTAL RECOVERABLE
ILLSTON, KIETH	0	0	0.0001	0	TOTAL RECOVERABLE
DUNN, MICHAEL D	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
MCCALLUM, DALE & MARY JEAN	0	0	0.0001	0	TOTAL RECOVERABLE
NOVAK, JIM	1	1	0.0001	0	TOTAL RECOVERABLE
MILLER, ALICE	0	0	0.0001	0	TOTAL RECOVERABLE
BUCHOLZ, BENNY F AND CONSTANCE M	0.008	0.008	0.0001	0	TOTAL RECOVERABLE
HANNON, JOE & BABE	0.01	0.01	0.0001	0	TOTAL RECOVERABLE
GRAHAM, DAVID	0	0	0.0001	0	TOTAL RECOVERABLE
BLUME, KEN AND AMY	189.6811	258.686	77.9766	111.5433	DISSOLVED
BLUME, KEN AND AMY	1.079	1.079	0.0001	0	TOTAL RECOVERABLE
MEYER, MILDRED	1.152	1.152	0.0001	0	TOTAL RECOVERABLE
KOSTELECKY, CALVIN AND DONNA	0.02	0.02	0.0001	0	TOTAL RECOVERABLE
RIDDLE, TIM AND KATHY * NEW MODULAR HOME, 2013	0	0	0.0001	0	TOTAL RECOVERABLE
STURM, LARRY	0.051	0.051	0.0001	0	TOTAL RECOVERABLE
MCGEE, MARY J	0.031	0.031	0.0001	0	TOTAL RECOVERABLE
MURPHY, JAMES C & JEANNE M	1	1	0.0001	0	TOTAL RECOVERABLE
NELSON, BOB AND PATTY	0.005	0.005	0.0001	0	TOTAL RECOVERABLE
BAUTISTA, BECKY	0.01	0.01	0.0001	0	TOTAL RECOVERABLE
DERZAY, JOHN	0.006	0.006	0.0001	0	TOTAL RECOVERABLE
DERZAY, JOHN	0.006	0.006	0.0001	0	TOTAL RECOVERABLE
QUICK STEVE	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
QUICK, STEVE * RENTAL	0	0	0.0001	0	TOTAL RECOVERABLE
BOWEN, RICH	0.042	0.042	0.0001	0	TOTAL RECOVERABLE
MACKEY, KAREN L	0.031	0.031	0.0001	0	TOTAL RECOVERABLE
PESANTI, RYAN AND STACIE	0.007	0.007	0.0001	0	TOTAL RECOVERABLE
ARRINGTON, OWEN AND YVONNE	1.007	1.007	0.0001	0	TOTAL RECOVERABLE
DAVIS, RICK	0	0	0.0001	0	TOTAL RECOVERABLE
REICH, RANDY	215.651	291.252	96.4816	122.2055	DISSOLVED
REICH, RANDY	0.047	0.047	0.0001	0	TOTAL RECOVERABLE
GALLE, TERRY V. & CHARLENE	0.017	0.017	0.0001	0	TOTAL RECOVERABLE
GALLE, TERRY J. & STEPHANIE	0	0	0.0001	0	TOTAL RECOVERABLE
GALLE, TERRY & CHARLENE * RENTAL	0.011	0.011	0.0001	0	TOTAL RECOVERABLE

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Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
254105	HEIKKINEN, LEONARD	04/18/14	10.6	6.78	284						
51807	KILLOY, JAMES	04/21/14	9.1	7.8	265						
51808	VANDEKOP, DUANE & FRANCIE	04/21/14	10.9	7.95	237						
51820	JOHNSON, RICK & MARIE	04/21/14	7.8	7.64	314						
185920	ZACHOW, SONIA	04/22/14	8.7	7.29	467						
51865	GREEN, MERLE	04/22/14	7.6	7.19	630						
277330	OTTO, CHARLES	04/23/14	7.5	6.91	245						
252948	JANY, JOSEPH	04/23/14	7.9	6.66	182						
52024	JANY, JOE	04/24/14	6.5	7.44	298						
257692	MCKENNEY, DUSTIN AND TINA	04/24/14	9.4	7.49	271						
251786	REED, BOB	04/24/14	9.1	7.1	630						
163598	FORSMAN, JAMES E	04/25/14	9.7	7.14	686						
255400	JAN, DENG KUI	04/25/14	8.9	6.99	855						
51236	RANGITSCH, JAMES	05/06/14	8.4	7.26	279						
192402	HOCKADAY, TONY AND BECKY JO	05/07/14	8.5	6.96	189						
252950	PERIMAN, JUANITA	05/07/14	8.2	6.63	162						
137936	UELAND RANCHES INC.	05/07/14	9.2	7.3	242						
227300	UELAND RANCHES INC	05/08/14	9.8	7.22	290						
227300	UELAND RANCHES INC	05/08/14	9.8	7.22	290						
163548	HOWSER, JACK	05/13/14	8.5	7.52	466						
182138	GLUECKERT, ALAN & SUSAN	05/13/14	8.1	7.15	1088						
276484	SWANSON, MARK	05/14/14	10.4	6.57	528	7.29	621.01	26.12	7.59	64.73	5.23
276484	SWANSON, MARK	05/14/14	10.4	6.57	528						
181457	WHITAKER, RAY	05/14/14	10.4	7.32	530	7.84	577.8	36.45	9.91	44.14	5.3
181457	WHITAKER, RAY	05/14/14	10.4	7.32	530						
51327	FAUGHT, STANLEY	05/15/14	9.8	7.16	593	7.82	645.2	47.92	13.85	46.57	5.92
51327	FAUGHT, STANLEY	05/15/14	9.8	7.16	593						
51328	SCHERMAN, RUSS- RENTAL	05/15/14	11.7	7.2	507	7.73	515	15.33	3.62	78.55	5.81
51328	SCHERMAN, RUSS- RENTAL	05/15/14	11.7	7.2	507						
221430	KEELE, DON - SHOP	05/15/14	10.3	7.04	708	7.73	783.25	41.59	14.07	75.12	6.27
221430	KEELE, DON - SHOP	05/15/14	10.3	7.04	708						
153592	STOCK-JONES, CHARLENE	05/16/14	13.4	7.41	288	7.84	293.25	28.62	3	18.31	9.17
153592	STOCK-JONES, CHARLENE	05/16/14	13.4	7.41	288						
252623	MACCIOLI JOE & PATTI	05/19/14	19.8	7.44	1006	7.36	1171.5	41.46	13.5	134.7	6.03
252623	MACCIOLI JOE & PATTI	05/19/14	19.8	7.44	1006						

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HEIKKINEN, LEONARD	<0.038 U	<0.005 U									
KILLOY, JAMES	0.069 J	<0.005 U									
VANDEKOP, DUANE & FRANCIE	0.527	<0.005 U									
JOHNSON, RICK & MARIE	<0.038 U	<0.005 U									
ZACHOW, SONIA	0.499	0.006 J									
GREEN, MERLE	0.130 J	<0.005 U									
OTTO, CHARLES	0.354	0.006 J									
JANY, JOSEPH	1.103	0.013 J									
JANY, JOE	<0.038 U	<0.005 U									
MCKENNEY, DUSTIN AND TINA	<0.038 U	<0.005 U									
REED, BOB	0.287	<0.005 U									
FORSMAN, JAMES E	1.107	0.011 J									
JAN, DENG KUI	0.245	<0.005 U									
RANGITSCH, JAMES	0.594	<0.005 U									
HOCKADAY, TONY AND BECKY JO	0.253	<0.005 U									
PERIMAN, JUANITA	6.578	0.192									
UELAND RANCHES INC.	1.449	0.025 J									
UELAND RANCHES INC	0.197	<0.005 U									
UELAND RANCHES INC	0.095 J	<0.005 U									
HOWSER, JACK	0.197	<0.005 U									
GLUECKERT, ALAN & SUSAN	<0.038 U	0.012 J									
SWANSON, MARK	<0.015 U	<0.002 U	46.89	250.87	0	61.3	21.41	2.08	4.33	<0.020 U	<0.100 U
SWANSON, MARK	0.087 J	<0.005 U									
WHITAKER, RAY	<0.015 U	<0.002 U	45.26	253.78	0	61.11	11.99	3.23	1.5	0.020 J	<0.100 U
WHITAKER, RAY	0.044 J	<0.005 U									
FAUGHT, STANLEY	<0.015 U	<0.002 U	47.83	324.99	0	48.92	7.43	5	0.9	<0.020 U	<0.100 U
FAUGHT, STANLEY	<0.038 U	<0.005 U									
SCHERMAN, RUSS- RENTAL	0.088	0.004 J	37.47	240.21	0	49.08	16.31	0.66	2.95	<0.020 U	<0.100 U
SCHERMAN, RUSS- RENTAL	1.22	0.012 J									
KEELE, DON - SHOP	0.049 J	0.002 J	44.39	327.32	0	75.17	25.86	4	2.39	<0.020 U	<0.100 U
KEELE, DON - SHOP	7.3	0.053 J									
STOCK-JONES, CHARLENE	<0.015 U	<0.002 U	58.93	150.95	0	19.87	6.88	0.99	0.35	<0.020 U	<0.100 U
STOCK-JONES, CHARLENE	0.078 J	<0.005 U									
MACCIOLI JOE & PATTI	<0.038 U	<0.005 U	30.15	451.47	0	128.9	36.52	3.1	5.22	<0.020 U	<0.250 U
MACCIOLI JOE & PATTI	0.075 J	<0.005 U									

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Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
HEIKKINEN, LEONARD	<5.000 U	0.890 J	5.43	30.4	<0.250 U		<0.250 U	<0.250 U	0.710 J	8.01	7.790 J	5.18	<0.250 U
KILLOY, JAMES	<5.000 U	0.720 J	3.180 J	47.71	<0.250 U		<0.250 U	<0.250 U	0.620 J	13.88	5.950 J	4.64	<0.250 U
VANDEKOP, DUANE & FRANCIE	<5.000 U	0.720 J	2.860 J	98.58	<0.250 U		<0.250 U	<0.250 U	0.780 J	3.830 J	7.600 J	7.37	<0.250 U
JOHNSON, RICK & MARIE	7.080 J	0.830 J	3.130 J	80.74	<0.250 U		<0.250 U	<0.250 U	0.570 J	<1.250 U	6.550 J	4.36	<0.250 U
ZACHOW, SONIA	<5.000 U	2.45	13.53	54.29	<0.250 U		<0.250 U	<0.250 U	0.560 J	32.98	9.980 J	1.59	0.520 J
GREEN, MERLE	<5.000 U	3.81	37.89	62.92	<0.250 U		<0.250 U	<0.250 U	<0.250 U	2.600 J	55.88	2.4	0.650 J
OTTO, CHARLES	<5.000 U	<0.250 U	12.83	49.62	<0.250 U		<0.250 U	<0.250 U	<0.250 U	7.2	<5.000 U	<0.250 U	0.650 J
JANY, JOSEPH	5.630 J	<0.250 U	4.000 J	35.56	<0.250 U		<0.250 U	<0.250 U	<0.250 U	<1.250 U	<5.000 U	<0.250 U	<0.250 U
JANY, JOE	<5.000 U	1.35	4.170 J	26.77	<0.250 U		<0.250 U	<0.250 U	0.670 J	6.24	<5.000 U	2.68	<0.250 U
MCKENNEY, DUSTIN AND TINA	5.540 J	3.26	12.86	37.78	<0.250 U		<0.250 U	<0.250 U	0.740 J	2.270 J	8.820 J	0.950 J	0.540 J
REED, BOB	<5.000 U	0.750 J	17.24	50.11	<0.250 U		<0.250 U	<0.250 U	<0.250 U	9.98	6.050 J	2.2	0.520 J
FORSMAN, JAMES E	107.92	0.870 J	10.44	53.71	<0.250 U		<0.250 U	<0.250 U	0.530 J	1.790 J	9.400 J	1.74	0.720 J
JAN, DENG KUI	43.74	3.3	76.18	35.85	<0.250 U		<0.250 U	<0.250 U	0.600 J	1.930 J	175.06	5.39	0.650 J
RANGITSCH, JAMES	6.260 J	1.47	4.540 J	18.34	<0.250 U		<0.250 U	<0.250 U	0.930 J	4.100 J	6.740 J	1.050 J	<0.250 U
HOCKADAY, TONY AND BECKY JO	<5.000 U	0.830 J	23.52	19.99	<0.250 U		<0.250 U	<0.250 U	2.76	1.300 J	<5.000 U	0.530 J	1.51
PERIMAN, JUANITA	18.750 J	2.45	7.9	13.63	<0.250 U		<0.250 U	0.580 J	0.980 J	2.670 J	<5.000 U	<0.250 U	1.81
UELAND RANCHES INC.	6.880 J	1.76	14.3	31.33	<0.250 U		<0.250 U	<0.250 U	0.950 J	22.48	6.100 J	1.57	0.560 J
UELAND RANCHES INC	5.260 J	1.89	14.01	39.19	<0.250 U		<0.250 U	<0.250 U	0.600 J	1.530 J	7.510 J	1.37	<0.250 U
UELAND RANCHES INC	<5.000 U	1.77	13.44	39.45	<0.250 U		<0.250 U	<0.250 U	0.710 J	<1.250 U	7.250 J	1.47	<0.250 U
HOWSER, JACK	<5.000 U	1.97	9.66	17.93	<0.250 U		<0.250 U	<0.250 U	0.620 J	<1.250 U	9.910 J	2.38	<0.250 U
GLUECKERT, ALAN & SUSAN	6.480 J	2.52	30.85	47.26	<0.250 U		<0.250 U	<0.250 U	<0.250 U	3.340 J	35.39	2.13	2.62
SWANSON, MARK	<2.000 U	7.82	104.18	29.69	<0.100 U	142	<0.100 U	<0.100 U	<0.100 U	1.350 J	178.48	10.55	<0.100 U
SWANSON, MARK	41.86	8.15	147.85	33.25	<0.250 U		<0.250 U	<0.250 U	1.090 J	3.130 J	241.94	11.56	<0.250 U
WHITAKER, RAY	7.710 J	11.66	71.73	36.2	<0.100 U	98	<0.100 U	1.15	0.290 J	0.560 J	48.88	5.78	<0.100 U
WHITAKER, RAY	13.850 J	11.31	101.87	41.72	<0.250 U		<0.250 U	1.35	1.4	1.870 J	65.03	6.34	<0.250 U
FAUGHT, STANLEY	<2.000 U	8.21	77.95	62.74	<0.100 U	67	<0.100 U	2.54	<0.100 U	<0.500 U	37.34	3.56	<0.100 U
FAUGHT, STANLEY	<5.000 U	7.89	88.63	63.25	<0.250 U		<0.250 U	3.21	1.28	<1.250 U	47.37	4.1	<0.250 U
SCHERMAN, RUSS- RENTAL	<2.000 U	15.65	122.51	4.39	<0.100 U	120	<0.100 U	<0.100 U	<0.100 U	<0.500 U	93.4	8.97	<0.100 U
SCHERMAN, RUSS- RENTAL	15.000 J	16.08	142.98	4.81	<0.250 U		<0.250 U	<0.250 U	1.250 J	7.7	105.55	9.39	<0.250 U
KEELE, DON - SHOP	2.910 J	6.52	104.99	54.64	<0.100 U	158	<0.100 U	0.78	<0.100 U	2.72	165.76	4.95	0.270 J
KEELE, DON - SHOP	2306.35	20.55	126.76	74.44	<0.250 U		<0.250 U	1.5	2.37	10.71	165.39	5.07	1.6
STOCK-JONES, CHARLENE	<2.000 U	9.39	42.5	69.93	<0.100 U	88	<0.100 U	<0.100 U	<0.100 U	0.740 J	10.19	2.42	<0.100 U
STOCK-JONES, CHARLENE	7.640 J	8.62	49.67	69.74	<0.250 U		<0.250 U	<0.250 U	1.080 J	1.710 J	16.300 J	2.19	<0.250 U
MACCIOLI JOE & PATTI	<5.000 U	16.18	237.26	44.3	<0.250 U	236	<0.250 U	<0.250 U	<0.250 U	<1.250 U	486.43	11.34	<0.250 U
MACCIOLI JOE & PATTI	62.42	15.69	269.12	50.5	<0.250 U		<0.250 U	<0.250 U	0.750 J	1.720 J	546.38	12.76	0.560 J

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HEIKKINEN, LEONARD	<0.150 U	<0.250 U	<0.250 U	<0.250 U	101.76	1.95	<0.250 U	5.49	1.190 J	7.85	<0.250 U	<0.250 U	<0.250 U
KILLOY, JAMES	1.170 J	<0.250 U	<0.250 U	<0.250 U	103.8	1.64	<0.250 U	4.78	1.43	10.22	<0.250 U	<0.250 U	<0.250 U
VANDEKOP, DUANE & FRANCIE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	121.39	1.84	<0.250 U	9.52	1.160 J	4.940 J	<0.250 U	<0.250 U	1.37
JOHNSON, RICK & MARIE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	129.33	2.22	<0.250 U	3.17	1.140 J	7.65	<0.250 U	<0.250 U	<0.250 U
ZACHOW, SONIA	<0.150 U	<0.250 U	<0.250 U	<0.250 U	196.56	2.28	<0.250 U	1.47	1.73	2.380 J	<0.250 U	<0.250 U	<0.250 U
GREEN, MERLE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	982.81	2.28	<0.250 U	1.36	0.950 J	29.01	<0.250 U	<0.250 U	<0.250 U
OTTO, CHARLES	<0.150 U	<0.250 U	<0.250 U	<0.250 U	159.06	1.84	<0.250 U	<0.250 U	0.580 J	2.830 J	<0.250 U	<0.250 U	<0.250 U
JANY, JOSEPH	<0.150 U	<0.250 U	<0.250 U	<0.250 U	119.89	2.12	<0.250 U	<0.250 U	2.17	2.360 J	<0.250 U	<0.250 U	<0.250 U
JANY, JOE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	86.29	2.15	<0.250 U	1.51	0.810 J	3.800 J	<0.250 U	<0.250 U	<0.250 U
MCKENNEY, DUSTIN AND TINA	0.570 J	<0.250 U	<0.250 U	<0.250 U	472.03	2.06	<0.250 U	2.43	3.19	30.2	1.070 J	<0.250 U	<0.250 U
REED, BOB	<0.150 U	<0.250 U	<0.250 U	<0.250 U	572.37	2.35	<0.250 U	24.12	4.17	3.130 J	<0.250 U	<0.250 U	<0.250 U
FORSMAN, JAMES E	<0.150 U	<0.250 U	<0.250 U	<0.250 U	658.81	15.95	<0.250 U	29.17	4.54	29.91	<0.250 U	<0.250 U	<0.250 U
JAN, DENG KUI	<0.150 U	<0.250 U	<0.250 U	<0.250 U	596.53	5.82	<0.250 U	24.13	5.79	13.77	<0.250 U	<0.250 U	1.170 J
RANGITSCH, JAMES	<0.150 U	<0.250 U	<0.250 U	<0.250 U	196.79	3.15	<0.250 U	6.58	3.41	6.43	<0.250 U	<0.250 U	<0.250 U
HOCKADAY, TONY AND BECKY JO	<0.150 U	<0.250 U	<0.250 U	<0.250 U	123.76	2.18	<0.250 U	0.920 J	3.12	14.48	<0.250 U	<0.250 U	<0.250 U
PERIMAN, JUANITA	0.620 J	<0.250 U	<0.250 U	<0.250 U	66.01	6.1	<0.250 U	<0.250 U	2.16	124.22	<0.250 U	0.600 J	<0.250 U
UELAND RANCHES INC.	1.63	<0.250 U	<0.250 U	<0.250 U	167.58	3.07	<0.250 U	3.48	3.69	17.22	<0.250 U	<0.250 U	<0.250 U
UELAND RANCHES INC	<0.150 U	0.600 J	<0.250 U	<0.250 U	199.68	2.59	<0.250 U	3.59	3.01	12.92	<0.250 U	<0.250 U	<0.250 U
UELAND RANCHES INC	<0.150 U	0.630 J	<0.250 U	<0.250 U	200.88	2.79	<0.250 U	3.55	2.96	12.25	<0.250 U	<0.250 U	<0.250 U
HOWSER, JACK	<0.150 U	<0.250 U	<0.250 U	<0.250 U	604.16	2.38	<0.250 U	5.83	1.83	7.04	<0.250 U	<0.250 U	<0.250 U
GLUECKERT, ALAN & SUSAN	0.520 J	0.980 J	0.520 J	<0.250 U	2009.82	3.33	<0.250 U	5.38	0.930 J	2807.33	<0.250 U	<0.250 U	0.510 J
SWANSON, MARK	<0.060 U	0.460 J	0.290 J	<0.100 U	275.22	0.210 J	<0.100 U	2.63	7.12	1.200 J	<0.100 U	<0.100 U	7
SWANSON, MARK	<0.150 U	0.630 J	<0.250 U	<0.250 U	298.52	3.35	<0.250 U	2.91	10.94	3.030 J	<0.250 U	<0.250 U	7.97
WHITAKER, RAY	<0.060 U	<0.100 U	0.74	<0.100 U	324.65	0.220 J	<0.100 U	12.5	10.71	<0.500 U	<0.100 U	<0.100 U	5.8
WHITAKER, RAY	<0.150 U	<0.250 U	0.730 J	<0.250 U	368.21	2.91	<0.250 U	13.24	15.38	3.850 J	<0.250 U	<0.250 U	6.75
FAUGHT, STANLEY	<0.060 U	<0.100 U	0.52	<0.100 U	474.68	<0.100 U	<0.100 U	16.8	11.72	<0.500 U	<0.100 U	<0.100 U	4.56
FAUGHT, STANLEY	<0.150 U	<0.250 U	0.530 J	<0.250 U	474.25	2.42	<0.250 U	15.73	14.54	2.550 J	<0.250 U	<0.250 U	4.54
SCHERMAN, RUSS- RENTAL	<0.060 U	<0.100 U	0.480 J	<0.100 U	88.6	0.210 J	<0.100 U	3.48	9.68	1.060 J	<0.100 U	<0.100 U	<0.100 U
SCHERMAN, RUSS- RENTAL	0.720 J	<0.250 U	<0.250 U	0.580 J	83.03	2.89	<0.250 U	3.26	12.28	3.930 J	<0.250 U	<0.250 U	<0.250 U
KEELE, DON - SHOP	<0.060 U	0.320 J	1.08	<0.100 U	601.08	0.340 J	<0.100 U	11.6	11.85	2.75	<0.100 U	<0.100 U	2.61
KEELE, DON - SHOP	1.33	0.530 J	1.010 J	<0.250 U	577.79	50.54	<0.250 U	12.27	27.64	12.87	1.56	4.01	3.68
STOCK-JONES, CHARLENE	<0.060 U	<0.100 U	0.310 J	<0.100 U	131.07	<0.100 U	<0.100 U	1.14	9.45	6.98	<0.100 U	<0.100 U	<0.100 U
STOCK-JONES, CHARLENE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	126.99	2.54	<0.250 U	1.040 J	12.11	13.64	<0.250 U	<0.250 U	<0.250 U
MACCIOLI JOE & PATTI	<0.150 U	<0.250 U	0.960 J	<0.250 U	552.11	0.600 J	<0.250 U	20.44	12.59	5.3	<0.250 U	<0.250 U	<0.250 U
MACCIOLI JOE & PATTI	0.560 J	<0.250 U	0.920 J	<0.250 U	616.24	4.28	<0.250 U	22.8	14.93	8.17	<0.250 U	<0.250 U	<0.250 U

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Site Name	Ga (ug/l)	La (ug/l)	Nb (ug/l)	Nd (ug/l)	Pd (ug/l)	Pr (ug/l)	Rb (ug/l)	Th (ug/l)	W (ug/l)	NO2-N (mg/l)
HEIKKINEN, LEONARD	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.14	<0.250 U	1.060 J	
KILLOY, JAMES	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.23	<0.250 U	0.790 J	
VANDEKOP, DUANE & FRANCIE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.96	<0.250 U	1.76	
JOHNSON, RICK & MARIE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.05	<0.250 U	<0.250 U	
ZACHOW, SONIA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.890 J	<0.250 U	<0.250 U	
GREEN, MERLE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.47	<0.250 U	<0.250 U	
OTTO, CHARLES	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.010 J	<0.250 U	<0.250 U	
JANY, JOSEPH	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
JANY, JOE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.67	<0.250 U	<0.250 U	
MCKENNEY, DUSTIN AND TINA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.730 J	<0.250 U	0.760 J	<0.250 U	<0.250 U	
REED, BOB	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
FORSMAN, JAMES E	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.610 J	<0.250 U	1.61	
JAN, DENG KUI	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	7.52	<0.250 U	17.7	
RANGITSCH, JAMES	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	4.84	
HOCKADAY, TONY AND BECKY JO	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
PERIMAN, JUANITA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
UELAND RANCHES INC.	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
UELAND RANCHES INC	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
UELAND RANCHES INC	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
HOWSER, JACK	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.020 J	<0.250 U	<0.250 U	
GLUECKERT, ALAN & SUSAN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.780 J	<0.250 U	1.57	<0.250 U	<0.250 U	
SWANSON, MARK	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	7.22	<0.100 U	67.37	<0.010 U
SWANSON, MARK	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	8.85	<0.250 U	65.42	
WHITAKER, RAY	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.68	<0.100 U	26.72	<0.010 U
WHITAKER, RAY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.8	<0.250 U	26.19	
FAUGHT, STANLEY	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	10.65	<0.100 U	15.57	<0.010 U
FAUGHT, STANLEY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	11.42	<0.250 U	14.85	
SCHERMAN, RUSS- RENTAL	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.96	<0.100 U	28.29	<0.010 U
SCHERMAN, RUSS- RENTAL	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.34	<0.250 U	28.41	
KEELE, DON - SHOP	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	7.12	<0.100 U	44.68	<0.010 U
KEELE, DON - SHOP	0.570 J	2.43	<0.250 U	2.13	<0.250 U	0.540 J	10.68	<0.250 U	44.46	
STOCK-JONES, CHARLENE	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.77	<0.100 U	0.250 J	<0.010 U
STOCK-JONES, CHARLENE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.07	<0.250 U	<0.250 U	
MACCIOLI JOE & PATTI	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.07	<0.250 U	103.83	<0.010 U
MACCIOLI JOE & PATTI	<0.250 U	<0.250 U	0.660 J	<0.250 U	0.950 J	<0.250 U	2.64	<0.250 U	106.22	

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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
HEIKKINEN, LEONARD	0.016	0.016	0.0001	0	TOTAL RECOVERABLE
KILLOY, JAMES	0.024	0.024	0.0001	0	TOTAL RECOVERABLE
VANDEKOP, DUANE & FRANCIE	1	1	0.0001	0	TOTAL RECOVERABLE
JOHNSON, RICK & MARIE	0.008	0.008	0.0001	0	TOTAL RECOVERABLE
ZACHOW, SONIA	0.033	0.033	0.0001	0	TOTAL RECOVERABLE
GREEN, MERLE	0.029	0.029	0.0001	0	TOTAL RECOVERABLE
OTTO, CHARLES	0.007	0.007	0.0001	0	TOTAL RECOVERABLE
JANY, JOSEPH	1	1	0.0001	0	TOTAL RECOVERABLE
JANY, JOE	0.006	0.006	0.0001	0	TOTAL RECOVERABLE
MCKENNEY, DUSTIN AND TINA	0.03	0.03	0.0001	0	TOTAL RECOVERABLE
REED, BOB	0.01	0.01	0.0001	0	TOTAL RECOVERABLE
FORSMAN, JAMES E	1.138	1.138	0.0001	0	TOTAL RECOVERABLE
JAN, DENG KUI	0.058	0.058	0.0001	0	TOTAL RECOVERABLE
RANGITSCH, JAMES	1.006	1.006	0.0001	0	TOTAL RECOVERABLE
HOCKADAY, TONY AND BECKY JO	0.014	0.014	0.0001	0	TOTAL RECOVERABLE
PERIMAN, JUANITA	7.124	7.124	0.0001	0	TOTAL RECOVERABLE
UELAND RANCHES INC.	1.039	1.039	0.0001	0	TOTAL RECOVERABLE
UELAND RANCHES INC	0.013	0.013	0.0001	0	TOTAL RECOVERABLE
UELAND RANCHES INC	0.012	0.012	0.0001	0	TOTAL RECOVERABLE
HOWSER, JACK	0.007	0.007	0.0001	0	TOTAL RECOVERABLE
GLUECKERT, ALAN & SUSAN	2.807	2.807	0.0001	0	TOTAL RECOVERABLE
SWANSON, MARK	362.3553	489.71	96.4621	205.8629	DISSOLVED
SWANSON, MARK	0.042	0.042	0.0001	0	TOTAL RECOVERABLE
WHITAKER, RAY	343.4832	472.36	131.8052	208.3234	DISSOLVED
WHITAKER, RAY	0	0	0.0001	0	TOTAL RECOVERABLE
FAUGHT, STANLEY	384.8685	549.77	176.6628	266.5556	DISSOLVED
FAUGHT, STANLEY	0	0	0.0001	0	TOTAL RECOVERABLE
SCHERMAN, RUSS- RENTAL	328.1766	449.95	53.1789	196.841	DISSOLVED
SCHERMAN, RUSS- RENTAL	1.008	1.008	0.0001	0	TOTAL RECOVERABLE
KEELE, DON - SHOP	448.7497	614.666	161.7623	268.1959	DISSOLVED
KEELE, DON - SHOP	9.33	9.33	0.0001	0	TOTAL RECOVERABLE
STOCK-JONES, CHARLENE	220.0112	296.627	83.8121	123.8458	DISSOLVED
STOCK-JONES, CHARLENE	0.014	0.014	0.0001	0	TOTAL RECOVERABLE
MACCIOLI JOE & PATTI	622.1325	850.965	159.0916	369.8971	DISSOLVED
MACCIOLI JOE & PATTI	0.07	0.07	0.0001	0	TOTAL RECOVERABLE

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Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
252926	JENRICH, TROY AND TRACY	05/19/14	9.7	6.49	567	7.15	612.8	36.79	10.31	65.1	7.08
252926	JENRICH, TROY AND TRACY	05/19/14	9.7	6.49	567						
226130	SCHERMAN, RUSSEL AND LISA	05/19/14	11.7	7.53	577	6.35	587	12.66	2.77	90.12	5.01
226130	SCHERMAN, RUSSEL AND LISA	05/19/14	11.7	7.53	577						
254433	BAILEY, DON & DEBRAH	05/21/14	11.1	6.63	420	7.39	429.7	24.83	7.17	47.42	5.12
254433	BAILEY, DON & DEBRAH	05/21/14	11.1	6.63	420						
51333	FRESH, JEAN AND ELDEN	05/21/14									
51333	FRESH, JEAN AND ELDEN	05/21/14	11.9	7.26	850	7.93	972.2	29.74	7.64	135.88	3.93
51333	FRESH, JEAN AND ELDEN	05/21/14	11.9	7.26	850						
252623	MACCIOLI JOE & PATTI	05/21/14									
278056	JENRICH, TROY	05/21/14	10.8	6.7	660						
51142	POFFENBERGER, JIM	05/22/14	8.7	6.26	255						
275482	CLARK, HERB	05/22/14	11	6.98	225	7.46	222.17	22.43	4.98	14.02	2.51
275482	CLARK, HERB	05/22/14	11	6.98	225						
250294	MCQUEARY CAM	05/27/14	12.4	7.57	590	7.96	619.8	37.41	5.97	62.46	9.73
250294	MCQUEARY CAM	05/27/14	12.4	7.57	590						
259949	GESSELE, EDWIN C JR	05/27/14	12.1	7.71	275	8.09	274.14	26.87	2.88	22.56	8.32
259949	GESSELE, EDWIN C JR	05/27/14	12.1	7.71	275						
153591	LOEHR, JOANN AND JAMIE	05/27/14	14.2	7.64	295	8.07	292.93	32.64	3.95	21.79	8.29
153591	LOEHR, JOANN AND JAMIE	05/27/14	14.2	7.64	295						
266861	PIERCE, COLT	05/28/14	11.8	7.46	407	7.11	398.57	31.45	6.71	39.16	7.11
266861	PIERCE, COLT	05/28/14	11.8	7.46	407						
266861	PIERCE, COLT	05/28/14	11.8	7.46	407	7.76	390.73	31.34	6.62	38.69	7.23
266861	PIERCE, COLT	05/28/14	11.8	7.46	407						
53591	RUEGAMER, ANTHONY	05/28/14	12.4	7.61	495	7.7	489.27	31.75	4.4	59.09	8.47
53591	RUEGAMER, ANTHONY	05/28/14	12.4	7.61	495						
156248	HANSEN, DEBORAH	05/28/14	11.8	7.46	334	7.94	316.88	41.92	4.9	13.26	7.23
156248	HANSEN, DEBORAH	05/28/14	11.8	7.46	334						
158808	DINSDALE JEFFERY E AND JULIE M	05/29/14	14.8	7.52	311	7.97	295.73	33.11	3.9	20.74	7.52
158808	DINSDALE JEFFERY E AND JULIE M	05/29/14	14.8	7.52	311						
158808	DINSDALE JEFFERY E AND JULIE M	05/29/14									
153593	ARENTZ, IVAN AND LINDA	05/29/14	12.1	7.42	385	8	366.58	33.41	3.54	37.87	9.74
153593	ARENTZ, IVAN AND LINDA	05/29/14	12.1	7.42	385						
153593	ARENTZ, IVAN AND LINDA	05/29/14	12.1	7.42	385	8.02	364.97	33.79	3.6	36.35	9.84
153593	ARENTZ, IVAN AND LINDA	05/29/14	12.1	7.42	385						

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Site Name	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (ug/l)
JENRICH, TROY AND TRACY	0.198	<0.002 U	48.3	275.99	0	58.16	14.55	2.32	2.32	0.020 J	<0.100 U
JENRICH, TROY AND TRACY	0.192	<0.005 U									
SCHERMAN, RUSSEL AND LISA	0.097	0.003 J	33.57	94.24	0	99.56	16.94	0.31	9.49	<0.020 U	<0.100 U
SCHERMAN, RUSSEL AND LISA	0.764	<0.005 U									
BAILEY, DON & DEBRAH	<0.015 U	<0.002 U	40.66	214.28	0	37.06	10.44	0.94	2.73	0.050 J	<0.100 U
BAILEY, DON & DEBRAH	0.105 J	<0.005 U									
FRESH, JEAN AND ELDEN	<0.038 U	<0.005 U									
FRESH, JEAN AND ELDEN	0.022 J	<0.002 U	31.09	244.46	0	160.8	60.87	2.84	7.77	<0.020 U	<0.100 U
FRESH, JEAN AND ELDEN	0.193	<0.005 U									
MACCIOLI JOE & PATTI	<0.038 U	<0.005 U									
JENRICH, TROY	2.836	0.021 J									
POFFENBERGER, JIM	0.099 J	<0.005 U									
CLARK, HERB	<0.015 U	<0.002 U	38.82	134.7	0	8.71	4.52	0.29	0.47	<0.020 U	<0.100 U
CLARK, HERB	0.356	<0.005 U									
MCQUEARY CAM	<0.015 U	<0.002 U	59.02	158.73	0	79.17	69.96	1.9	0.52	<0.020 U	<0.100 U
MCQUEARY CAM	0.044 J	<0.005 U									
GESSELE, EDWIN C JR	0.018 J	<0.002 U	56.03	150.03	0	15.65	7.08	0.88	0.55	<0.020 U	<0.100 U
GESSELE, EDWIN C JR	1.518	0.028 J									
LOEHR, JOANN AND JAMIE	0.048 J	<0.002 U	55.94	158.6	0	22.29	7.05	1.63	0.37	<0.020 U	<0.100 U
LOEHR, JOANN AND JAMIE	0.087 J	<0.005 U									
PIERCE, COLT	0.035 J	<0.002 U	50.95	166.17	0	34.41	25.71	1.79	0.51	<0.020 U	0.260 J
PIERCE, COLT	4.497	0.052 J									
PIERCE, COLT	<0.015 U	<0.002 U	50.85	168.76	0	34.72	25.88	1.8	0.52	<0.020 U	<0.100 U
PIERCE, COLT	3.998	0.051 J									
RUEGAMER, ANTHONY	0.017 J	<0.002 U	53.42	153.24	0	47.06	56.01	2.35	0.62	<0.020 U	<0.100 U
RUEGAMER, ANTHONY	0.039 J	<0.005 U									
HANSEN, DEBORAH	<0.015 U	<0.002 U	51.75	135.86	0	25.4	24.47	1.4	0.47	<0.020 U	<0.100 U
HANSEN, DEBORAH	0.082 J	<0.005 U									
DINSDALE JEFFERY E AND JULIE M	0.067 J	<0.002 U	53.18	150.84	0	23	9.8	1.17	0.4	<0.020 U	<0.100 U
DINSDALE JEFFERY E AND JULIE M	0.160 J	<0.005 U									
DINSDALE JEFFERY E AND JULIE M	<0.038 U	<0.005 U									
ARENTZ, IVAN AND LINDA	0.017 J	<0.002 U	52.76	165.76	0	23.64	26.49	1.6	0.53	<0.020 U	<0.100 U
ARENTZ, IVAN AND LINDA	0.056 J	<0.005 U									
ARENTZ, IVAN AND LINDA	<0.015 U	<0.002 U	53.4	165.62	0	24.05	26.75	1.64	0.55	<0.020 U	<0.100 U
ARENTZ, IVAN AND LINDA	0.049 J	<0.005 U									

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Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
JENRICH, TROY AND TRACY	7.990 J	9.85	80.83	51.77	<0.100 U	115	<0.100 U	<0.100 U	<0.100 U	0.600 J	100.59	5.91	<0.100 U
JENRICH, TROY AND TRACY	14.390 J	9.56	85.36	48.82	<0.250 U		<0.250 U	<0.250 U	0.820 J	<1.250 U	95.52	6.2	<0.250 U
SCHERMAN, RUSSEL AND LISA	<2.000 U	30.9	237.86	2.51	<0.100 U	103	<0.100 U	<0.100 U	<0.100 U	<0.500 U	296.55	21.76	<0.100 U
SCHERMAN, RUSSEL AND LISA	11.390 J	33.66	282.5	3.83	<0.250 U		<0.250 U	<0.250 U	1.200 J	2.420 J	345.72	22.73	<0.250 U
BAILEY, DON & DEBRAH	<2.000 U	11.63	51.06	39.77	<0.100 U	88	<0.100 U	0.74	<0.100 U	6.29	33.45	19.02	0.300 J
BAILEY, DON & DEBRAH	71.72	11.27	69.69	40.62	<0.250 U		<0.250 U	1.010 J	0.700 J	8.49	49.45	17.07	0.500 J
FRESH, JEAN AND ELDEN	16.980 J	<0.250 U	338.76	1.45	<0.250 U		<0.250 U	<0.250 U	1.120 J	<1.250 U	143.28	1.080 J	<0.250 U
FRESH, JEAN AND ELDEN	<2.000 U	13.27	190.29	30.98	<0.100 U	449	<0.100 U	<0.100 U	0.320 J	<0.500 U	475.57	16.46	<0.100 U
FRESH, JEAN AND ELDEN	12.390 J	13.93	268.55	31.13	<0.250 U		<0.250 U	<0.250 U	1.220 J	2.380 J	704.16	15.21	<0.250 U
MACCIOLI JOE & PATTI	9.680 J	<0.250 U	253.49	1.73	<0.250 U		<0.250 U	<0.250 U	0.850 J	1.430 J	45.88	<0.250 U	<0.250 U
JENRICH, TROY	320.81	2.65	23.35	41.64	<0.250 U		<0.250 U	<0.250 U	1.190 J	5.3	36.58	1.65	0.880 J
POFFENBERGER, JIM	31.01	20.69	8.12	28.24	<0.250 U		<0.250 U	<0.250 U	0.870 J	7.71	8.820 J	4.76	1.220 J
CLARK, HERB	<2.000 U	2.58	14.82	50.4	<0.100 U	<10.000 U	<0.100 U	<0.100 U	0.480 J	<0.500 U	20.78	1.79	<0.100 U
CLARK, HERB	<5.000 U	2.5	21.09	49.83	<0.250 U		<0.250 U	<0.250 U	1.37	2.500 J	32.21	1.4	<0.250 U
MCQUEARY CAM	<2.000 U	12.51	60.53	27.49	<0.100 U	636	<0.100 U	<0.100 U	0.310 J	<0.500 U	13.69	6.58	<0.100 U
MCQUEARY CAM	16.060 J	11.4	87.35	28.59	<0.250 U		<0.250 U	<0.250 U	1.120 J	<1.250 U	18.830 J	5.7	<0.250 U
GESSELE, EDWIN C JR	7.720 J	15.01	37.42	36.66	<0.100 U	94	<0.100 U	<0.100 U	<0.100 U	<0.500 U	5.900 J	3.56	<0.100 U
GESSELE, EDWIN C JR	1908.8	13.68	54.2	49	<0.250 U		<0.250 U	<0.250 U	3.6	46.58	13.640 J	3.18	2.01
LOEHR, JOANN AND JAMIE	<2.000 U	14.64	21.84	51.76	<0.100 U	92	<0.100 U	<0.100 U	<0.100 U	<0.500 U	12.76	3.75	<0.100 U
LOEHR, JOANN AND JAMIE	7.760 J	12.5	33.28	48.69	<0.250 U		<0.250 U	<0.250 U	0.800 J	<1.250 U	20.650 J	3.51	<0.250 U
PIERCE, COLT	3.430 J	11.29	70.63	54.59	<0.100 U	214	<0.100 U	<0.100 U	<0.100 U	<0.500 U	14.85	6.75	<0.100 U
PIERCE, COLT	1587.37	12.91	92.31	85.92	<0.250 U		<0.250 U	<0.250 U	1.78	1.570 J	26.54	5.96	1.020 J
PIERCE, COLT	2.910 J	10.92	59.29	54	<0.100 U	219	<0.100 U	<0.100 U	<0.100 U	<0.500 U	14.11	6.4	<0.100 U
PIERCE, COLT	1458.12	12.53	91.84	81.72	<0.250 U		<0.250 U	<0.250 U	1.94	<1.250 U	35.07	6.12	1.120 J
RUEGAMER, ANTHONY	<2.000 U	13.97	63.55	20.75	<0.100 U	532	<0.100 U	<0.100 U	0.230 J	<0.500 U	14.37	7.62	<0.100 U
RUEGAMER, ANTHONY	10.240 J	13.65	100.17	21.2	<0.250 U		<0.250 U	<0.250 U	1.230 J	<1.250 U	26.3	7.7	<0.250 U
HANSEN, DEBORAH	<2.000 U	8.51	29.67	107.49	<0.100 U	252	<0.100 U	<0.100 U	<0.100 U	2.02	7.920 J	1.02	0.240 J
HANSEN, DEBORAH	67.34	8.19	41.02	103.04	<0.250 U		<0.250 U	<0.250 U	1.34	3.430 J	24.660 J	0.450 J	<0.250 U
DINSDALE JEFFERY E AND JULIE M	<2.000 U	8.76	43.32	51.84	<0.100 U	117	<0.100 U	<0.100 U	<0.100 U	<0.500 U	9.920 J	2.66	<0.100 U
DINSDALE JEFFERY E AND JULIE M	7.580 J	8.67	65.83	52.83	<0.250 U		<0.250 U	<0.250 U	1.180 J	<1.250 U	19.560 J	2.63	<0.250 U
DINSDALE JEFFERY E AND JULIE M	<5.000 U	<0.250 U	66.4	1.35	<0.250 U		<0.250 U	<0.250 U	1.25	<1.250 U	14.360 J	<0.250 U	<0.250 U
ARENTZ, IVAN AND LINDA	<2.000 U	16.27	45.66	70.82	<0.100 U	257	<0.100 U	<0.100 U	0.310 J	<0.500 U	19.88	3.51	0.55
ARENTZ, IVAN AND LINDA	10.180 J	15.83	70.73	72.01	<0.250 U		<0.250 U	<0.250 U	1.69	<1.250 U	43.17	3.35	<0.250 U
ARENTZ, IVAN AND LINDA	<2.000 U	16.2	45.95	71.61	<0.100 U	261	<0.100 U	<0.100 U	0.310 J	<0.500 U	19.62	3.42	<0.100 U
ARENTZ, IVAN AND LINDA	8.810 J	16.19	69.39	71.74	<0.250 U		<0.250 U	<0.250 U	1.5	<1.250 U	43.68	3.29	<0.250 U

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Site Name	Pb (ug/l)	Sb (ug/l)	Se (ug/l)	Sn (ug/l)	Sr (ug/l)	Ti (ug/l)	Tl (ug/l)	U (ug/l)	V (ug/l)	Zn (ug/l)	Zr (ug/l)	Ce (ug/l)	Cs (ug/l)
JENRICH, TROY AND TRACY	0.260 J	0.300 J	0.290 J	<0.100 U	362.85	0.430 J	<0.100 U	3.81	10.96	10.56	<0.100 U	<0.100 U	1.91
JENRICH, TROY AND TRACY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	341.77	2.55	<0.250 U	3.57	12.48	7.81	<0.250 U	<0.250 U	1.86
SCHERMAN, RUSSEL AND LISA	<0.060 U	<0.100 U	0.300 J	<0.100 U	77.55	0.460 J	<0.100 U	2.55	11.19	3.45	<0.100 U	<0.100 U	<0.100 U
SCHERMAN, RUSSEL AND LISA	<0.150 U	<0.250 U	<0.250 U	<0.250 U	81.6	2.88	<0.250 U	2.74	15.98	7.39	<0.250 U	<0.250 U	<0.250 U
BAILEY, DON & DEBRAH	<0.060 U	0.460 J	0.54	<0.100 U	223.73	0.220 J	<0.100 U	3.16	7.73	6.63	<0.100 U	<0.100 U	3.87
BAILEY, DON & DEBRAH	<0.150 U	<0.250 U	<0.250 U	<0.250 U	240.46	3.27	<0.250 U	2.72	10.8	9.65	<0.250 U	<0.250 U	3.45
FRESH, JEAN AND ELDEN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	14.02	1.38	<0.250 U	<0.250 U	1.41	13.52	<0.250 U	<0.250 U	<0.250 U
FRESH, JEAN AND ELDEN	<0.060 U	0.300 J	1.36	<0.100 U	316.05	0.78	<0.100 U	4.06	6.77	12.29	<0.100 U	<0.100 U	<0.100 U
FRESH, JEAN AND ELDEN	<0.150 U	<0.250 U	1.020 J	<0.250 U	329.75	2.5	<0.250 U	3.4	10.97	19.35	<0.250 U	<0.250 U	<0.250 U
MACCIOLI JOE & PATTI	<0.150 U	<0.250 U	<0.250 U	<0.250 U	15.51	1.120 J	<0.250 U	<0.250 U	1.090 J	5.5	<0.250 U	<0.250 U	<0.250 U
JENRICH, TROY	1.63	<0.250 U	<0.250 U	<0.250 U	604.31	11.62	<0.250 U	22.18	7.06	7.29	<0.250 U	5.38	<0.250 U
POFFENBERGER, JIM	<0.150 U	0.530 J	<0.250 U	<0.250 U	153.81	3.2	<0.250 U	6.55	2.29	11.49	<0.250 U	<0.250 U	<0.250 U
CLARK, HERB	<0.060 U	<0.100 U	0.220 J	<0.100 U	184.21	<0.100 U	<0.100 U	1.75	5.24	2.14	<0.100 U	<0.100 U	<0.100 U
CLARK, HERB	<0.150 U	<0.250 U	<0.250 U	<0.250 U	189.32	1.75	<0.250 U	1.53	7.75	9.56	<0.250 U	<0.250 U	<0.250 U
MCQUEARY CAM	<0.060 U	<0.100 U	2.59	<0.100 U	176.94	0.350 J	<0.100 U	1.24	7.64	0.650 J	<0.100 U	<0.100 U	<0.100 U
MCQUEARY CAM	<0.150 U	<0.250 U	1.95	<0.250 U	191.11	2.26	<0.250 U	1.090 J	11.54	8.73	<0.250 U	<0.250 U	<0.250 U
GESSELE, EDWIN C JR	<0.060 U	<0.100 U	0.390 J	<0.100 U	110.24	0.51	<0.100 U	1.36	7.6	3.88	<0.100 U	<0.100 U	<0.100 U
GESSELE, EDWIN C JR	1.04	<0.250 U	<0.250 U	2.18	110.72	79.31	<0.250 U	1.26	14.68	25.04	<0.250 U	2.98	<0.250 U
LOEHR, JOANN AND JAMIE	<0.060 U	<0.100 U	0.64	<0.100 U	144.35	<0.100 U	<0.100 U	1.04	10.02	4.56	<0.100 U	<0.100 U	<0.100 U
LOEHR, JOANN AND JAMIE	<0.150 U	<0.250 U	0.550 J	<0.250 U	134.51	1.78	<0.250 U	0.880 J	14.13	12.23	<0.250 U	<0.250 U	<0.250 U
PIERCE, COLT	<0.060 U	<0.100 U	1.5	<0.100 U	202.1	0.300 J	<0.100 U	2.15	11.42	5.18	<0.100 U	<0.100 U	<0.100 U
PIERCE, COLT	1.1	<0.250 U	1.59	<0.250 U	224.86	53.79	<0.250 U	2.23	19.54	13.87	<0.250 U	4.53	<0.250 U
PIERCE, COLT	<0.060 U	<0.100 U	1.46	<0.100 U	200.93	0.330 J	<0.100 U	2.11	11.18	4.59	<0.100 U	<0.100 U	<0.100 U
PIERCE, COLT	1.03	<0.250 U	1.51	<0.250 U	227.29	47.58	<0.250 U	2.2	20.22	15.55	<0.250 U	4.17	<0.250 U
RUEGAMER, ANTHONY	<0.060 U	<0.100 U	2.86	<0.100 U	133.33	0.290 J	<0.100 U	1.43	12.05	2.01	<0.100 U	<0.100 U	<0.100 U
RUEGAMER, ANTHONY	<0.150 U	<0.250 U	2.89	<0.250 U	147.65	2.64	<0.250 U	1.34	17.42	9.48	<0.250 U	<0.250 U	<0.250 U
HANSEN, DEBORAH	<0.060 U	<0.100 U	0.99	<0.100 U	186.68	<0.100 U	<0.100 U	3.03	9.53	1.660 J	<0.100 U	<0.100 U	<0.100 U
HANSEN, DEBORAH	<0.150 U	<0.250 U	0.740 J	<0.250 U	193.94	5.54	<0.250 U	2.74	13.74	6.49	<0.250 U	<0.250 U	<0.250 U
DINSDALE JEFFERY E AND JULIE M	0.32	<0.100 U	0.440 J	<0.100 U	136.14	<0.100 U	<0.100 U	1.47	5.73	14.22	<0.100 U	<0.100 U	<0.100 U
DINSDALE JEFFERY E AND JULIE M	<0.150 U	<0.250 U	<0.250 U	<0.250 U	147.36	2.15	<0.250 U	1.42	9.04	20.37	<0.250 U	<0.250 U	<0.250 U
DINSDALE JEFFERY E AND JULIE M	<0.150 U	<0.250 U	<0.250 U	<0.250 U	4.01	2.41	<0.250 U	<0.250 U	1.72	8.57	<0.250 U	<0.250 U	<0.250 U
ARENTZ, IVAN AND LINDA	<0.060 U	<0.100 U	<0.100 U	<0.100 U	126.83	<0.100 U	<0.100 U	0.99	16.5	3.11	<0.100 U	<0.100 U	<0.100 U
ARENTZ, IVAN AND LINDA	<0.150 U	<0.250 U	0.810 J	<0.250 U	137.64	2.07	<0.250 U	0.950 J	24.4	8.28	<0.250 U	<0.250 U	<0.250 U
ARENTZ, IVAN AND LINDA	<0.060 U	<0.100 U	<0.100 U	<0.100 U	128.3	<0.100 U	<0.100 U	0.99	16.22	3.07	<0.100 U	<0.100 U	<0.100 U
ARENTZ, IVAN AND LINDA	<0.150 U	<0.250 U	0.940 J	<0.250 U	137.93	1.73	<0.250 U	0.930 J	24.54	12.27	<0.250 U	<0.250 U	<0.250 U

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JENRICH, TROY AND TRACY	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.63	<0.100 U	18.35	<0.010 U
JENRICH, TROY AND TRACY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	5.75	<0.250 U	17.7	
SCHERMAN, RUSSEL AND LISA	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.1	<0.100 U	196.08	<0.010 U
SCHERMAN, RUSSEL AND LISA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	5.84	<0.250 U	200.47	
BAILEY, DON & DEBRAH	<0.100 U	<0.100 U	0.250 J	<0.100 U	<0.100 U	<0.100 U	2.96	<0.100 U	6.84	<0.010 U
BAILEY, DON & DEBRAH	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.02	<0.250 U	6.15	
FRESH, JEAN AND ELDEN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.24	
FRESH, JEAN AND ELDEN	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	1.48	<0.100 U	216.57	<0.010 U
FRESH, JEAN AND ELDEN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.51	<0.250 U	205.52	
MACCIOLI JOE & PATTI	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.200 J	
JENRICH, TROY	<0.250 U	3.09	<0.250 U	2.92	<0.250 U	0.740 J	8.72	<0.250 U	1.240 J	
POFFENBERGER, JIM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.800 J	<0.250 U	<0.250 U	
CLARK, HERB	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.76	<0.100 U	5.22	<0.010 U
CLARK, HERB	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.720 J	<0.250 U	4.59	
MCQUEARY CAM	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	6.85	<0.100 U	1.64	<0.010 U
MCQUEARY CAM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.86	<0.250 U	1.45	
GESSELE, EDWIN C JR	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	6.19	<0.100 U	<0.100 U	<0.010 U
GESSELE, EDWIN C JR	0.540 J	1.84	<0.250 U	2.07	0.660 J	0.510 J	9.34	<0.250 U	<0.250 U	
LOEHR, JOANN AND JAMIE	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.07	<0.100 U	0.350 J	<0.010 U
LOEHR, JOANN AND JAMIE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	4.94	<0.250 U	<0.250 U	
PIERCE, COLT	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	4.44	<0.100 U	1.32	<0.010 U
PIERCE, COLT	<0.250 U	2.26	<0.250 U	2.21	<0.250 U	0.630 J	7.91	<0.250 U	0.880 J	
PIERCE, COLT	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	4.35	<0.100 U	1.07	<0.010 U
PIERCE, COLT	<0.250 U	2.01	<0.250 U	1.98	<0.250 U	0.550 J	7.46	<0.250 U	0.940 J	
RUEGAMER, ANTHONY	<0.100 U	<0.100 U	0.250 J	<0.100 U	0.430 J	<0.100 U	6.37	<0.100 U	1.26	<0.010 U
RUEGAMER, ANTHONY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.150 J	<0.250 U	6.69	<0.250 U	1.26	
HANSEN, DEBORAH	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.91	<0.100 U	<0.100 U	<0.010 U
HANSEN, DEBORAH	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	5.95	<0.250 U	<0.250 U	
DINSDALE JEFFERY E AND JULIE M	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.33	<0.100 U	<0.100 U	<0.010 U
DINSDALE JEFFERY E AND JULIE M	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	5.6	<0.250 U	<0.250 U	
DINSDALE JEFFERY E AND JULIE M	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.540 J	<0.250 U	<0.250 U	
ARENTZ, IVAN AND LINDA	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.240 J	<0.100 U	5.74	<0.100 U	0.240 J	<0.010 U
ARENTZ, IVAN AND LINDA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.690 J	<0.250 U	6.1	<0.250 U	<0.250 U	
ARENTZ, IVAN AND LINDA	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	5.71	<0.100 U	0.220 J	<0.010 U
ARENTZ, IVAN AND LINDA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.11	<0.250 U	<0.250 U	

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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
JENRICH, TROY AND TRACY	380.0716	520.111	134.3006	226.3672	DISSOLVED
JENRICH, TROY AND TRACY	0.008	0.008	0.0001	0	TOTAL RECOVERABLE
SCHERMAN, RUSSEL AND LISA	316.7384	364.433	43.0133	77.0961	DISSOLVED
SCHERMAN, RUSSEL AND LISA	1.007	1.007	0.0001	0	TOTAL RECOVERABLE
BAILEY, DON & DEBRAH	281.4317	390.013	91.5122	175.5166	DISSOLVED
BAILEY, DON & DEBRAH	0.09	0.09	0.0001	0	TOTAL RECOVERABLE
FRESH, JEAN AND ELDEN	0.014	0.014	0.0001	0	TOTAL RECOVERABLE
FRESH, JEAN AND ELDEN	561.589	685.392	105.707	200.1217	DISSOLVED
FRESH, JEAN AND ELDEN	0.019	0.019	0.0001	0	TOTAL RECOVERABLE
MACCIOLI JOE & PATTI	0.006	0.006	0.0001	0	TOTAL RECOVERABLE
JENRICH, TROY	3.333	3.333	0.0001	0	TOTAL RECOVERABLE
POFFENBERGER, JIM	0.05	0.05	0.0001	0	TOTAL RECOVERABLE
CLARK, HERB	163.9145	232.412	76.5054	110.7231	DISSOLVED
CLARK, HERB	0.01	0.01	0.0001	0	TOTAL RECOVERABLE
MCQUEARY CAM	404.7051	485.38	117.9853	130.4072	DISSOLVED
MCQUEARY CAM	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
GESSELE, EDWIN C JR	215.6456	291.754	78.9485	123.0257	DISSOLVED
GESSELE, EDWIN C JR	3.981	3.981	0.0001	0	TOTAL RECOVERABLE
LOEHR, JOANN AND JAMIE	231.9201	312.595	97.7603	130.4072	DISSOLVED
LOEHR, JOANN AND JAMIE	0.012	0.012	0.0001	0	TOTAL RECOVERABLE
PIERCE, COLT	279.9384	364.165	106.149	136.1484	DISSOLVED
PIERCE, COLT	5.601	5.601	0.0001	0	TOTAL RECOVERABLE
PIERCE, COLT	282.2162	367.965	105.5039	138.6089	DISSOLVED
PIERCE, COLT	5.474	5.474	0.0001	0	TOTAL RECOVERABLE
RUEGAMER, ANTHONY	337.5215	415.152	97.3901	125.4862	DISSOLVED
RUEGAMER, ANTHONY	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
HANSEN, DEBORAH	235.8171	304.822	124.8426	111.5433	DISSOLVED
HANSEN, DEBORAH	0.073	0.073	0.0001	0	TOTAL RECOVERABLE
DINSDALE JEFFERY E AND JULIE M	227.4082	304.024	98.7281	123.8458	DISSOLVED
DINSDALE JEFFERY E AND JULIE M	0.02	0.02	0.0001	0	TOTAL RECOVERABLE
DINSDALE JEFFERY E AND JULIE M	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
ARENTZ, IVAN AND LINDA	272.7264	356.953	97.9954	136.1484	DISSOLVED
ARENTZ, IVAN AND LINDA	0.008	0.008	0.0001	0	TOTAL RECOVERABLE
ARENTZ, IVAN AND LINDA	272.1664	356.393	99.1912	136.1484	DISSOLVED
ARENTZ, IVAN AND LINDA	0.012	0.012	0.0001	0	TOTAL RECOVERABLE

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Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
156249	WAYMIRE, EDWARD	05/30/14	14.7	7.67	316	8	305.18	32.61	3.55	23.68	9.83
156249	WAYMIRE, EDWARD	05/30/14	14.7	7.67	316						
260549	MITCHELL, HAROLD AND HOLLY	05/30/14	11.9	7.42	343	7.86	308.08	45.63	6.37	11.25	7.48
260549	MITCHELL, HAROLD AND HOLLY	05/30/14	11.9	7.42	343						
238047	BLOM, LORIN	05/30/14	13	7.37	340	7.94	322.35	34.25	4.76	10.85	7.15
238047	BLOM, LORIN	05/30/14	13	7.37	340						
256874	SHYBA, LORI	06/02/14	16.8	6.98	818	7.42	730.91	97.08	18.19	42.9	2.77
256874	SHYBA, LORI	06/02/14	16.8	6.98	818						
174778	CATALENELLO, MARK	06/02/14	8.3	6.67	264	7.33	259.24	31.32	8.77	8.68	1.11
174778	CATALENELLO, MARK	06/02/14	8.3	6.67	264						
246960	CONNORS, KEN	06/03/14	13.3	7.05	668	7.66	638.48	66.88	16.92	52.25	2.73
246960	CONNORS, KEN	06/03/14	13.3	7.05	668						
51874	WALTER, RICHARD	06/03/14	13.9	6.73	835	7.26	814.53	81.41	21.87	75.01	4.03
51874	WALTER, RICHARD	06/03/14	13.9	6.73	835						
244470	LUSSY, JERRY	06/03/14	13.7	6.77	820	7.3	792.31	81.84	21.95	71.67	3.72
244470	LUSSY, JERRY	06/03/14	13.7	6.77	820						
258964	SALLE, RON	06/04/14	14.8	6.63	1095	6.54	1113.3	103.05	29.52	113.79	6.37
258964	SALLE, RON	06/04/14	14.8	6.63	1095						
122659	NORTON, LOU AND GAIL	06/04/14	12.5	7.29	675	7.53	681.22	80.83	17.22	44.18	0.54
122659	NORTON, LOU AND GAIL	06/04/14	12.5	7.29	675						
241972	FLACHMEYER DAN	06/05/14	12.4	7.35	385	7.79	377.61	45.89	7.04	16.35	8.8
241972	FLACHMEYER DAN	06/05/14	12.4	7.35	385						
256622	STEWART JOHN & PHYLLIS	06/05/14	13.8	7.36	405	7.83	402.21	45.53	6.35	21.44	9.96
256622	STEWART JOHN & PHYLLIS	06/05/14	13.8	7.36	405						
256447	SMITH MONTY & JULIE	06/05/14	14.4	7.46	690	7.83	685.5	46.3	3.48	80.82	16.41
256447	SMITH MONTY & JULIE	06/05/14	14.4	7.46	690						
198928	RANKIN, KEITH AND JEAN	06/06/14	5.4	5.65	52	6.52	54.02	5.06	0.94	2.85	1.39
198928	RANKIN, KEITH AND JEAN	06/06/14	5.4	5.65	52						
264544	SWANSON, RON	06/06/14	9.1	6.87	280	7.43	274.29	36.58	9	7.36	1.17
264544	SWANSON, RON	06/06/14	9.1	6.87	280						
5377	GALLE CLIFF JR	06/09/14	9.7	7.21	285	7.43	284.94	46.52	7.39	2.73	1.59
5377	GALLE CLIFF JR	06/09/14	9.7	7.21	285						
51790	GALLE, TYKE	06/09/14	6.6	7.17	220	7.7	216.31	31.55	7.16	2.97	1.41
51790	GALLE, TYKE	06/09/14	6.6	7.17	220						
51805	RASOR, ANASTEASIA	06/09/14	7	7.59	290						

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Site Name	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (ug/l)
WAYMIRE, EDWARD	<0.015 U	<0.002 U	55.13	168.35	0	18.98	7.42	1.14	0.35	<0.020 U	<0.100 U
WAYMIRE, EDWARD	0.058 J	<0.005 U									
MITCHELL, HAROLD AND HOLLY	<0.015 U	<0.002 U	52.29	163.72	0	18.92	13.31	2.1	0.23	<0.020 U	<0.100 U
MITCHELL, HAROLD AND HOLLY	1.901	0.030 J									
BLOM, LORIN	<0.015 U	<0.002 U	45.38	180.4	0	18.3	9.34	1.3	0.26	<0.020 U	<0.100 U
BLOM, LORIN	0.676	0.012 J									
SHYBA, LORI	<0.015 U	<0.002 U	37.25	130.67	0	273.4	34.82	1.22	0.56	0.090 J	<0.100 U
SHYBA, LORI	0.118 J	<0.005 U									
CATALENELLO, MARK	<0.015 U	<0.002 U	11.84	125.07	0	40.87	1.84	0.22	0.3	<0.020 U	<0.100 U
CATALENELLO, MARK	<0.038 U	<0.005 U									
CONNORS, KEN	0.337	0.015 J	7.86	328.02	0	103.9	5.12	<0.010 U	2.68	<0.020 U	<0.100 U
CONNORS, KEN	0.46	0.021 J									
WALTER, RICHARD	0.507	0.018 J	19.19	493.57	0	73.83	5.64	<0.010 U	2.8	<0.020 U	<0.100 U
WALTER, RICHARD	0.644	0.025 J									
LUSSY, JERRY	0.798	0.017 J	17.01	475.42	0	81.82	5.53	<0.010 U	2.65	<0.020 U	<0.100 U
LUSSY, JERRY	2.252	0.026 J									
SALLE, RON	0.53	0.017 J	42.56	706.35	0	62.32	5.05	<0.010 U	3.01	<0.020 U	0.540 J
SALLE, RON	0.754	0.023 J									
NORTON, LOU AND GAIL	0.021 J	0.052	11.74	245.23	0	141.9	26.72	0.11	0.21	<0.020 U	<0.100 U
NORTON, LOU AND GAIL	0.337	0.112 J									
FLACHMEYER DAN	<0.015 U	<0.002 U	51.28	173.19	0	23	19.35	2.63	0.29	<0.020 U	<0.100 U
FLACHMEYER DAN	1.301	0.016 J									
STEWART JOHN & PHYLLIS	<0.015 U	<0.002 U	52.53	175.04	0	25.4	25.01	2.6	0.3	<0.020 U	<0.100 U
STEWART JOHN & PHYLLIS	0.054 J	<0.005 U									
SMITH MONTY & JULIE	<0.015 U	<0.002 U	57.33	168.22	0	90.3	75.11	2.4	0.54	<0.020 U	<0.100 U
SMITH MONTY & JULIE	0.385	0.007 J									
RANKIN, KEITH AND JEAN	0.034 J	<0.002 U	32.04	27.4	0	4.8	0.83	0.43	0.08	0.040 J	<0.100 U
RANKIN, KEITH AND JEAN	0.125 J	<0.005 U									
SWANSON, RON	<0.015 U	<0.002 U	23.62	149.43	0	29.9	1.93	0.41	0.31	<0.020 U	<0.100 U
SWANSON, RON	0.226	<0.005 U									
GALLE CLIFF JR	<0.015 U	<0.002 U	11.12	185.5	0	11.25	0.78	0.1	0.39	<0.020 U	<0.100 U
GALLE CLIFF JR	0.061 J	<0.005 U									
GALLE, TYKE	<0.015 U	<0.002 U	10.54	137.48	0	8.71	0.97	0.23	0.42	<0.020 U	<0.100 U
GALLE, TYKE	<0.038 U	<0.005 U									
RASOR, ANASTEASIA	0.189	<0.005 U									

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Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
WAYMIRE, EDWARD	<2.000 U	14.86	35.62	85.23	<0.100 U	97	<0.100 U	<0.100 U	0.260 J	<0.500 U	17.14	2.11	0.320 J
WAYMIRE, EDWARD	40.29	13.93	53.85	83.86	<0.250 U		<0.250 U	<0.250 U	1.55	<1.250 U	37.35	1.98	<0.250 U
MITCHELL, HAROLD AND HOLLY	<2.000 U	6.16	20.27	118.13	<0.100 U	143	<0.100 U	<0.100 U	0.230 J	<0.500 U	14.71	1	0.230 J
MITCHELL, HAROLD AND HOLLY	948.8	6.4	36.48	135.02	<0.250 U		<0.250 U	<0.250 U	2.16	<1.250 U	32.49	0.970 J	0.610 J
BLOM, LORIN	<2.000 U	6.51	21.28	88.18	<0.100 U	106	<0.100 U	<0.100 U	<0.100 U	0.600 J	13.61	1.15	<0.100 U
BLOM, LORIN	65.86	7.77	38.69	109.61	<0.250 U		<0.250 U	<0.250 U	1.98	1.360 J	26.59	1.130 J	0.510 J
SHYBA, LORI	<2.000 U	32.98	39.31	32.48	<0.100 U	185	<0.100 U	<0.100 U	<0.100 U	4.55	55.28	1.04	5.69
SHYBA, LORI	6.220 J	32.03	56.47	32.37	<0.250 U		<0.250 U	<0.250 U	1.020 J	6.52	86.61	0.940 J	6.56
CATALENELLO, MARK	<2.000 U	0.260 J	2.27	53.46	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	14.84	2.800 J	1.79	<0.100 U
CATALENELLO, MARK	<5.000 U	<0.250 U	4.400 J	53.7	<0.250 U		<0.250 U	<0.250 U	1.010 J	19.15	17.630 J	1.36	<0.250 U
CONNORS, KEN	<2.000 U	9.15	52.4	27.72	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	<0.500 U	118.8	4.12	0.59
CONNORS, KEN	6.250 J	9.61	76.57	27.63	<0.250 U		<0.250 U	<0.250 U	0.720 J	<1.250 U	191.96	4.05	<0.250 U
WALTER, RICHARD	<2.000 U	14.11	64.44	37.21	0.380 J	<10.000 U	<0.100 U	<0.100 U	<0.100 U	<0.500 U	140.75	4.17	0.480 J
WALTER, RICHARD	16.380 J	14.58	97.87	36.97	0.620 J		<0.250 U	<0.250 U	0.760 J	<1.250 U	229.33	4.2	0.520 J
LUSSY, JERRY	<2.000 U	13.3	64.81	35.76	0.320 J	<10.000 U	<0.100 U	<0.100 U	<0.100 U	0.530 J	145.53	4.39	0.480 J
LUSSY, JERRY	<5.000 U	14.7	93.35	34.79	0.270 J		<0.250 U	<0.250 U	1.030 J	14.37	225.9	4.59	0.590 J
SALLE, RON	<5.000 U	9.13	152.92	51.72	1.020 J	<10.000 U	<0.250 U	<0.250 U	0.590 J	<1.250 U	205.06	8.18	0.520 J
SALLE, RON	<5.000 U	9.7	164.44	53.2	1.4		<0.250 U	<0.250 U	0.600 J	<1.250 U	307.74	7.78	0.560 J
NORTON, LOU AND GAIL	<2.000 U	1.81	28.07	44.14	<0.100 U	237	<0.100 U	<0.100 U	0.220 J	<0.500 U	30.88	2.58	0.91
NORTON, LOU AND GAIL	110.82	2.69	38.71	48.33	<0.250 U		<0.250 U	<0.250 U	0.950 J	6.31	57.38	2.42	1.29
FLACHMEYER DAN	<2.000 U	6.12	23.87	96.87	<0.100 U	166	<0.100 U	<0.100 U	0.200 J	<0.500 U	15.58	1.86	<0.100 U
FLACHMEYER DAN	1657.79	6.7	40.3	120.05	<0.250 U		<0.250 U	<0.250 U	2.94	<1.250 U	32.13	1.28	1.41
STEWART JOHN & PHYLLIS	<2.000 U	6.32	29.5	73.66	<0.100 U	230	<0.100 U	<0.100 U	0.250 J	0.910 J	17.94	1.63	<0.100 U
STEWART JOHN & PHYLLIS	80.27	6.61	48.77	77.83	<0.250 U		<0.250 U	<0.250 U	1.160 J	1.620 J	28.67	1.38	<0.250 U
SMITH MONTY & JULIE	<2.000 U	21.33	38.05	28.17	<0.100 U	734	<0.100 U	<0.100 U	0.490 J	<0.500 U	62.03	6.52	<0.100 U
SMITH MONTY & JULIE	470.37	21.53	57.44	32.04	<0.250 U		<0.250 U	<0.250 U	1.69	13.89	92.34	6.41	0.500 J
RANKIN, KEITH AND JEAN	125.01	5.51	3.31	1.64	<0.100 U	<10.000 U	<0.100 U	<0.100 U	0.57	1.230 J	<2.000 U	<0.100 U	0.270 J
RANKIN, KEITH AND JEAN	329.49	5.71	3.980 J	2.64	<0.250 U		<0.250 U	<0.250 U	2.04	2.390 J	15.080 J	<0.250 U	<0.250 U
SWANSON, RON	<2.000 U	0.95	3	25.14	<0.100 U	<10.000 U	<0.100 U	<0.100 U	0.420 J	2.05	6.960 J	1.19	0.240 J
SWANSON, RON	34.18	1.1	6	27.18	<0.250 U		<0.250 U	<0.250 U	1.8	3.130 J	25.4	1.41	<0.250 U
GALLE CLIFF JR	<2.000 U	7.36	1.310 J	15.71	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	1.160 J	2.440 J	1.49	0.270 J
GALLE CLIFF JR	12.480 J	7.77	6.4	16.87	<0.250 U		<0.250 U	<0.250 U	1.170 J	33.02	16.530 J	1.64	<0.250 U
GALLE, TYKE	4.820 J	7.54	1.500 J	6.18	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	2.05	2.180 J	1.48	<0.100 U
GALLE, TYKE	25.51	8.17	5.63	6.65	<0.250 U		<0.250 U	<0.250 U	1.230 J	2.290 J	16.130 J	1.6	<0.250 U
RASOR, ANASTEASIA	5.320 J	0.760 J	5.55	14.48	<0.250 U		<0.250 U	<0.250 U	1.39	2.370 J	16.300 J	2.01	<0.250 U

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Site Name	Pb (ug/l)	Sb (ug/l)	Se (ug/l)	Sn (ug/l)	Sr (ug/l)	Ti (ug/l)	Tl (ug/l)	U (ug/l)	V (ug/l)	Zn (ug/l)	Zr (ug/l)	Ce (ug/l)	Cs (ug/l)
WAYMIRE, EDWARD	<0.060 U	<0.100 U	0.480 J	<0.100 U	126.5	<0.100 U	<0.100 U	1	11.89	1.990 J	<0.100 U	<0.100 U	<0.100 U
WAYMIRE, EDWARD	<0.150 U	<0.250 U	0.640 J	<0.250 U	131.99	2.72	<0.250 U	0.950 J	18.67	7.24	<0.250 U	<0.250 U	<0.250 U
MITCHELL, HAROLD AND HOLLY	<0.060 U	<0.100 U	0.86	<0.100 U	213.81	<0.100 U	<0.100 U	1.97	2.83	4.91	<0.100 U	<0.100 U	<0.100 U
MITCHELL, HAROLD AND HOLLY	0.550 J	<0.250 U	0.730 J	<0.250 U	228.32	53.56	<0.250 U	2.02	6.59	11.01	<0.250 U	1.66	<0.250 U
BLOM, LORIN	<0.060 U	<0.100 U	0.73	<0.100 U	159.85	<0.100 U	<0.100 U	1.66	3.58	6.62	<0.100 U	<0.100 U	<0.100 U
BLOM, LORIN	<0.150 U	<0.250 U	0.740 J	<0.250 U	202.67	4.67	<0.250 U	1.91	7.69	14.72	<0.250 U	<0.250 U	<0.250 U
SHYBA, LORI	<0.060 U	1.02	1.65	<0.100 U	1281.46	1.91	1.02	7.27	5.29	14.48	<0.100 U	<0.100 U	48.91
SHYBA, LORI	<0.150 U	1.100 J	2.79	<0.250 U	1349.29	3.76	0.520 J	6.87	8.63	20.92	<0.250 U	<0.250 U	49.25
CATALENELLO, MARK	<0.060 U	0.340 J	<0.100 U	<0.100 U	171.89	0.310 J	<0.100 U	3.54	0.85	<0.500 U	<0.100 U	<0.100 U	<0.100 U
CATALENELLO, MARK	<0.150 U	<0.250 U	<0.250 U	<0.250 U	177.69	2.1	<0.250 U	3.29	2.7	7.64	<0.250 U	<0.250 U	<0.250 U
CONNORS, KEN	<0.060 U	<0.100 U	<0.100 U	<0.100 U	2672.51	0.89	<0.100 U	0.64	<0.100 U	0.560 J	<0.100 U	<0.100 U	3.35
CONNORS, KEN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	2901.57	2.91	<0.250 U	0.600 J	1.250 J	7.38	<0.250 U	<0.250 U	3.49
WALTER, RICHARD	<0.060 U	0.370 J	<0.100 U	<0.100 U	2289.59	0.500 J	<0.100 U	0.54	<0.100 U	13.3	0.210 J	<0.100 U	6.1
WALTER, RICHARD	<0.150 U	<0.250 U	<0.250 U	<0.250 U	2433.22	3.37	<0.250 U	0.540 J	1.070 J	21.47	<0.250 U	<0.250 U	6.46
LUSSY, JERRY	<0.060 U	0.360 J	<0.100 U	<0.100 U	2491.62	0.53	<0.100 U	0.95	<0.100 U	<0.500 U	<0.100 U	<0.100 U	7.01
LUSSY, JERRY	<0.150 U	0.540 J	<0.250 U	<0.250 U	2568.24	2.96	<0.250 U	1.010 J	1.000 J	6.14	<0.250 U	<0.250 U	8.72
SALLE, RON	<0.150 U	0.570 J	<0.250 U	<0.250 U	1326.55	<0.250 U	<0.250 U	1.160 J	<0.250 U	<1.250 U	<0.250 U	<0.250 U	14.68
SALLE, RON	<0.150 U	0.650 J	<0.250 U	<0.250 U	1380.59	2.55	<0.250 U	1.29	0.570 J	7.91	<0.250 U	<0.250 U	17.31
NORTON, LOU AND GAIL	<0.060 U	1	0.390 J	<0.100 U	1339.25	0.97	<0.100 U	0.71	<0.100 U	15.94	<0.100 U	<0.100 U	0.380 J
NORTON, LOU AND GAIL	0.91	1.250 J	<0.250 U	<0.250 U	1421.81	6.51	<0.250 U	0.770 J	1.210 J	26.62	<0.250 U	<0.250 U	0.530 J
FLACHMEYER DAN	<0.060 U	<0.100 U	1.16	<0.100 U	166.5	0.370 J	<0.100 U	1.43	4.52	<0.500 U	<0.100 U	<0.100 U	<0.100 U
FLACHMEYER DAN	0.640 J	<0.250 U	1.38	<0.250 U	179.21	94.95	<0.250 U	1.64	8.75	7.37	<0.250 U	2.43	<0.250 U
STEWART JOHN & PHYLLIS	<0.060 U	<0.100 U	1.41	<0.100 U	191.9	<0.100 U	<0.100 U	1.66	5	1.750 J	<0.100 U	<0.100 U	<0.100 U
STEWART JOHN & PHYLLIS	<0.150 U	<0.250 U	1.49	<0.250 U	203.42	6.23	<0.250 U	1.84	8.13	8.16	<0.250 U	<0.250 U	<0.250 U
SMITH MONTY & JULIE	<0.060 U	<0.100 U	5.67	<0.100 U	162.56	0.58	<0.100 U	1.17	7.67	8.25	<0.100 U	<0.100 U	<0.100 U
SMITH MONTY & JULIE	0.650 J	<0.250 U	5.24	<0.250 U	170.06	27.62	<0.250 U	1.240 J	11.91	18.4	<0.250 U	0.990 J	<0.250 U
RANKIN, KEITH AND JEAN	<0.060 U	<0.100 U	<0.100 U	<0.100 U	13.19	3.24	<0.100 U	<0.100 U	0.99	14.25	<0.100 U	0.280 J	<0.100 U
RANKIN, KEITH AND JEAN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	14.29	10.39	<0.250 U	<0.250 U	3.16	24.51	<0.250 U	<0.250 U	<0.250 U
SWANSON, RON	<0.060 U	<0.100 U	<0.100 U	<0.100 U	186.17	<0.100 U	<0.100 U	5.39	2.47	0.640 J	<0.100 U	<0.100 U	<0.100 U
SWANSON, RON	<0.150 U	<0.250 U	<0.250 U	<0.250 U	200.27	4.22	<0.250 U	6.28	4.96	8.92	<0.250 U	<0.250 U	<0.250 U
GALLE CLIFF JR	<0.060 U	0.63	<0.100 U	<0.100 U	83.12	<0.100 U	<0.100 U	1.37	0.98	0.730 J	<0.100 U	<0.100 U	<0.100 U
GALLE CLIFF JR	0.540 J	0.810 J	<0.250 U	<0.250 U	88.33	3.36	<0.250 U	1.58	2.61	12.12	<0.250 U	<0.250 U	<0.250 U
GALLE, TYKE	<0.060 U	0.450 J	<0.100 U	<0.100 U	63.83	0.210 J	<0.100 U	1.23	0.81	22.62	<0.100 U	<0.100 U	<0.100 U
GALLE, TYKE	<0.150 U	0.580 J	<0.250 U	<0.250 U	67.14	3.64	<0.250 U	1.4	2.66	27.62	<0.250 U	<0.250 U	<0.250 U
RASOR, ANASTEASIA	<0.150 U	<0.250 U	<0.250 U	<0.250 U	65.87	2.97	<0.250 U	4.29	2.77	29.77	<0.250 U	<0.250 U	<0.250 U

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Site Name	Ga (ug/l)	La (ug/l)	Nb (ug/l)	Nd (ug/l)	Pd (ug/l)	Pr (ug/l)	Rb (ug/l)	Th (ug/l)	W (ug/l)	NO2-N (mg/l)
WAYMIRE, EDWARD	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	6.29	<0.100 U	<0.100 U	<0.010 U
WAYMIRE, EDWARD	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	6.46	<0.250 U	<0.250 U	
MITCHELL, HAROLD AND HOLLY	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	4.2	<0.100 U	<0.100 U	<0.010 U
MITCHELL, HAROLD AND HOLLY	<0.250 U	0.760 J	<0.250 U	0.780 J	<0.250 U	<0.250 U	5.8	<0.250 U	<0.250 U	
BLOM, LORIN	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	4.16	<0.100 U	<0.100 U	<0.010 U
BLOM, LORIN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	4.65	<0.250 U	<0.250 U	
SHYBA, LORI	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.440 J	<0.100 U	15.14	<0.100 U	2.5	<0.010 U
SHYBA, LORI	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	15.94	<0.250 U	2.34	
CATALENELLO, MARK	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.380 J	<0.100 U	<0.100 U	<0.010 U
CATALENELLO, MARK	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
CONNORS, KEN	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.82	<0.100 U	9.4	<0.100 U	4.66	<0.010 U
CONNORS, KEN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.670 J	<0.250 U	10.28	<0.250 U	4.52	
WALTER, RICHARD	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.83	<0.100 U	15.09	<0.100 U	4.18	<0.010 U
WALTER, RICHARD	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.5	<0.250 U	16.54	<0.250 U	4.18	
LUSSY, JERRY	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.77	<0.100 U	15.64	<0.100 U	4.27	<0.010 U
LUSSY, JERRY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.770 J	<0.250 U	16.76	<0.250 U	4.08	
SALLE, RON	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	29.12	<0.250 U	6.06	<0.010 U
SALLE, RON	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	32.35	<0.250 U	5.96	
NORTON, LOU AND GAIL	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.360 J	<0.100 U	0.91	<0.100 U	<0.100 U	<0.010 U
NORTON, LOU AND GAIL	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.090 J	<0.250 U	<0.250 U	
FLACHMEYER DAN	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.230 J	<0.100 U	5.48	<0.100 U	<0.100 U	<0.010 U
FLACHMEYER DAN	<0.250 U	1.31	<0.250 U	1.33	<0.250 U	<0.250 U	8.51	<0.250 U	<0.250 U	
STEWART JOHN & PHYLLIS	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	4.55	<0.100 U	<0.100 U	<0.010 U
STEWART JOHN & PHYLLIS	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	5.21	<0.250 U	<0.250 U	
SMITH MONTY & JULIE	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	9.55	<0.100 U	<0.100 U	<0.010 U
SMITH MONTY & JULIE	<0.250 U	0.570 J	<0.250 U	0.600 J	0.860 J	<0.250 U	10.85	<0.250 U	<0.250 U	
RANKIN, KEITH AND JEAN	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.7	<0.100 U	<0.100 U	<0.010 U
RANKIN, KEITH AND JEAN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.980 J	<0.250 U	<0.250 U	
SWANSON, RON	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3	<0.010 U
SWANSON, RON	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.3	
GALLE CLIFF JR	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.67	<0.100 U	<0.100 U	<0.010 U
GALLE CLIFF JR	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.600 J	<0.250 U	0.760 J	<0.250 U	<0.250 U	
GALLE, TYKE	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.95	<0.100 U	<0.100 U	<0.010 U
GALLE, TYKE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.120 J	<0.250 U	<0.250 U	
RASOR, ANASTEASIA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.03	<0.250 U	0.740 J	

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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
WAYMIRE, EDWARD	234.9186	320.16	96.039	137.7887	DISSOLVED
WAYMIRE, EDWARD	0.047	0.047	0.0001	0	TOTAL RECOVERABLE
MITCHELL, HAROLD AND HOLLY	236.7932	320.005	140.157	134.508	DISSOLVED
MITCHELL, HAROLD AND HOLLY	2.96	2.96	0.0001	0	TOTAL RECOVERABLE
BLOM, LORIN	218.6869	310.017	105.1144	147.6308	DISSOLVED
BLOM, LORIN	1.081	1.081	0.0001	0	TOTAL RECOVERABLE
SHYBA, LORI	572.821	639.289	317.2788	107.4424	DISSOLVED
SHYBA, LORI	0.028	0.028	0.0001	0	TOTAL RECOVERABLE
CATALENELLO, MARK	166.6814	230.105	114.3034	102.5214	DISSOLVED
CATALENELLO, MARK	0.027	0.027	0.0001	0	TOTAL RECOVERABLE
CONNORS, KEN	420.3764	586.8	236.6421	269.0161	DISSOLVED
CONNORS, KEN	0.007	0.007	0.0001	0	TOTAL RECOVERABLE
WALTER, RICHARD	528.6428	779.293	293.2877	405.1645	DISSOLVED
WALTER, RICHARD	1.021	1.021	0.0001	0	TOTAL RECOVERABLE
LUSSY, JERRY	522.7801	763.79	294.7007	389.5812	DISSOLVED
LUSSY, JERRY	2.02	2.02	0.0001	0	TOTAL RECOVERABLE
SALLE, RON	714.3533	1072.57	378.8202	579.0407	DISSOLVED
SALLE, RON	1.008	1.008	0.0001	0	TOTAL RECOVERABLE
NORTON, LOU AND GAIL	444.7557	569.066	272.71	200.9419	DISSOLVED
NORTON, LOU AND GAIL	0.144	0.144	0.0001	0	TOTAL RECOVERABLE
FLACHMEYER DAN	259.1517	346.93	143.564	141.8896	DISSOLVED
FLACHMEYER DAN	2.665	2.665	0.0001	0	TOTAL RECOVERABLE
STEWART JOHN & PHYLLIS	275.0869	363.88	139.825	143.5299	DISSOLVED
STEWART JOHN & PHYLLIS	0.088	0.088	0.0001	0	TOTAL RECOVERABLE
SMITH MONTY & JULIE	454.5466	539.788	129.9348	137.7887	DISSOLVED
SMITH MONTY & JULIE	0.502	0.502	0.0001	0	TOTAL RECOVERABLE
RANKIN, KEITH AND JEAN	61.4395	75.139	16.5039	22.1446	DISSOLVED
RANKIN, KEITH AND JEAN	0.354	0.354	0.0001	0	TOTAL RECOVERABLE
SWANSON, RON	182.981	258.582	128.3843	122.2055	DISSOLVED
SWANSON, RON	0.043	0.043	0.0001	0	TOTAL RECOVERABLE
GALLE CLIFF JR	173.5356	267.91	146.5777	152.5518	DISSOLVED
GALLE CLIFF JR	0.045	0.045	0.0001	0	TOTAL RECOVERABLE
GALLE, TYKE	131.2227	200.735	108.2509	112.3634	DISSOLVED
GALLE, TYKE	0.054	0.054	0.0001	0	TOTAL RECOVERABLE
RASOR, ANASTEASIA	0.03	0.03	0.0001	0	TOTAL RECOVERABLE

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Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
166679	JOHNSON, WADE	06/10/14	12.1	8.39	340	8.44	331.28	15.25	0.76	60.07	0.55
166679	JOHNSON, WADE	06/10/14	12.1	8.39	340						
256874	SHYBA, LORI	06/10/14									
256874	SHYBA, LORI	06/10/14									
174771	MCKAY, RUSSELL AND KRISTY	06/11/14	8.9	7.42	249						
264545	VAUTHIER, RHONDA & TOM	06/11/14	8.2	6.59	295	6.91	316.47	37.69	10.91	7.93	1.17
264545	VAUTHIER, RHONDA & TOM	06/11/14	8.2	6.59	295						
197463	MCKAY, ROBERT AND LORRAINE	06/11/14	8.8	7.08	301	7.37	315.14	37.93	8.28	10.5	1.95
197463	MCKAY, ROBERT AND LORRAINE	06/11/14	8.8	7.08	301						
267423	PENTILLA, MIKE AND APRIL	06/12/14	8.7	7.47	325	7.71	339.2	43.88	11.04	8.55	1.55
267423	PENTILLA, MIKE AND APRIL	06/12/14	8.7	7.47	325						
266770	BLOTKAMP, MARY AND BOB	06/12/14	8.6	7.38	497	7.65	511.35	65.01	15.94	15.48	2.27
266770	BLOTKAMP, MARY AND BOB	06/12/14	8.6	7.38	497						
51376	CHARNITSKI, JOHN	06/16/14	5.1	5.83	84						
163966	HILMO, TIM	06/17/14	8.3	7.18	235						
163965	MESHNIK, JOLEEN	06/17/14	9.1	7	247						
271485	MORGAN, PAUL AND TANJA	06/18/14	8.7	7.77	267						
271485	MORGAN, PAUL AND TANJA	06/18/14	8.7	7.77	267						
207693	SOUSHEK, GARY	06/18/14	10.6	7.86	342						
255461	REID, ALEX & SHEILA	06/19/14	9.5	7.49	720						
255402	RUSS, EMILY	06/19/14	10.2	7.13	1042						
153531	SALLE, RICH	06/20/14	9.9	7.18	678						
255425	SPEAR, TERRY & SALLY	06/20/14	8.3	6.76	235						
235888	RODRIGUEZ, ALEX	06/20/14	8.2	7.12	200						
51181	MESHNIK, JOLEEN	06/23/14	9.2	7.11	237						
251147	HILMO, TIM	06/23/14	8.9	7.17	165						
250642	NELSON, JASON AND NICOLE	06/27/14	12.1	7.45	331						
251739	TOWN PUMP ANACONDA	06/30/14	13.3	8.86	380	9.43	371.07	3.51	0.34	98.87	0.140 J
254941	MIKES SALES AND PAWN	07/01/14	9.7	6.98	405	7.49	401.01	63.47	13.35	6.73	2.02
278812	SLOTHOWER, GERALD AND JOYCE	07/09/14	8.13	6.48	187.1						
271485	MORGAN, PAUL AND TANJA	07/14/14	9.34	7.21	283.9	8.04	279.59	19.16	6.32	38.82	0.210 J
271485	MORGAN, PAUL AND TANJA	07/14/14	9.34	7.21	283.9						
215604	ROLLINS, JOHANNA	07/22/14	10.9	7.91	400						
170889	NICHOLS MARTIN	07/23/14	7.95	7.36	345						
279059	TUCKER, MARGARET	07/24/14	10.6	8.11	445						

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Site Name	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (ug/l)
JOHNSON, WADE	<0.015 U	<0.002 U	15.1	141.53	2.37	42.54	9.47	0.77	0.21	<0.020 U	<0.100 U
JOHNSON, WADE	<0.038 U	<0.005 U									
SHYBA, LORI	<0.038 U	<0.005 U									
SHYBA, LORI	<0.038 U	<0.005 U									
MCKAY, RUSSELL AND KRISTY	<0.038 U	<0.005 U									
VAUTHIER, RHONDA & TOM	<0.015 U	<0.002 U	20.43	162.01	0	26.79	2.89	0.36	0.28	<0.020 U	<0.100 U
VAUTHIER, RHONDA & TOM	0.699	<0.005 U									
MCKAY, ROBERT AND LORRAINE	0.164	0.132	22.4	113.13	0	62.8	2.53	0.28	0.24	0.030 J	<0.100 U
MCKAY, ROBERT AND LORRAINE	0.304	0.144									
PENTILLA, MIKE AND APRIL	<0.015 U	<0.002 U	11.79	166.48	0	37.74	2.46	0.32	0.66	<0.020 U	<0.100 U
PENTILLA, MIKE AND APRIL	0.111 J	<0.005 U									
BLOTKAMP, MARY AND BOB	<0.015 U	<0.002 U	13.53	193.38	0	111.1	7.8	0.59	1.09	<0.020 U	<0.100 U
BLOTKAMP, MARY AND BOB	<0.038 U	<0.005 U									
CHARNITSKI, JOHN	0.138 J	<0.005 U									
HILMO, TIM	0.552	<0.005 U									
MESHNIK, JOLEEN	0.093 J	<0.005 U									
MORGAN, PAUL AND TANJA	0.184 J	0.015 J									
MORGAN, PAUL AND TANJA	0.189	0.014 J									
SOUSHEK, GARY	<0.038 U	<0.005 U									
REID, ALEX & SHEILA	0.187 J	0.007 J									
RUSS, EMILY	0.246	0.008 J									
SALLE, RICH	<0.038 U	<0.005 U									
SPEAR, TERRY & SALLY	0.298	<0.005 U									
RODRIGUEZ, ALEX	0.096 J	<0.005 U									
MESHNIK, JOLEEN	<0.038 U	<0.005 U									
HILMO, TIM	<0.038 U	<0.005 U									
NELSON, JASON AND NICOLE	0.136 J	<0.005 U									
TOWN PUMP ANACONDA	<0.015 U	<0.002 U	11.61	152.83	21.74	35.1	5.16	0.030 J	0.83	<0.020 U	<0.100 U
MIKES SALES AND PAWN	<0.015 U	<0.002 U	12.36	219.42	0	38.77	7.42	1.03	0.46	<0.020 U	<0.100 U
SLOTHOWER, GERALD AND JOYCE	0.286	0.010 J									
MORGAN, PAUL AND TANJA	<0.015 U	0.009 J	15.84	181.05	0	13.45	1.92	<0.010 U	0.1	<0.020 U	<0.100 U
MORGAN, PAUL AND TANJA	<0.038 U	0.008 J									
ROLLINS, JOHANNA	0.039 J	0.012 J									
NICHOLS MARTIN	0.21	<0.005 U									
TUCKER, MARGARET	<0.038 U	<0.005 U									

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Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
JOHNSON, WADE	<2.000 U	2.7	6.67	109.91	<0.100 U	101	<0.100 U	<0.100 U	<0.100 U	<0.500 U	7.250 J	0.400 J	<0.100 U
JOHNSON, WADE	13.600 J	2.83	17.36	117.1	<0.250 U		<0.250 U	<0.250 U	1.25	<1.250 U	23.200 J	1.060 J	<0.250 U
SHYBA, LORI	<5.000 U	<0.250 U	25.89	1.140 J	<0.250 U		<0.250 U	<0.250 U	1.38	<1.250 U	20.760 J	<0.250 U	<0.250 U
SHYBA, LORI	<5.000 U	<0.250 U	29.03	1.180 J	<0.250 U		<0.250 U	<0.250 U	1.140 J	<1.250 U	29.84	<0.250 U	<0.250 U
MCKAY, RUSSELL AND KRISTY	<5.000 U	2.39	54.54	22.93	<0.250 U		<0.250 U	<0.250 U	0.590 J	<1.250 U	<5.000 U	3.08	<0.250 U
VAUTHIER, RHONDA & TOM	<2.000 U	0.44	5.15	26.85	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	7.92	5.000 J	0.72	0.270 J
VAUTHIER, RHONDA & TOM	<5.000 U	1.15	17	25.52	<0.250 U		<0.250 U	<0.250 U	<0.250 U	11.43	7.230 J	0.870 J	<0.250 U
MCKAY, ROBERT AND LORRAINE	<2.000 U	8.79	4.16	83.62	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	<0.500 U	3.420 J	6.07	1.15
MCKAY, ROBERT AND LORRAINE	12.130 J	9.91	13.44	83.62	<0.250 U		<0.250 U	<0.250 U	0.570 J	<1.250 U	6.570 J	6.81	1.3
PENTILLA, MIKE AND APRIL	<2.000 U	6.22	8.48	31.08	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	16.39	12.32	3.94	0.320 J
PENTILLA, MIKE AND APRIL	<5.000 U	6.32	13.58	29.51	<0.250 U		<0.250 U	<0.250 U	<0.250 U	18.86	15.260 J	4.1	<0.250 U
BLOTKAMP, MARY AND BOB	<2.000 U	6.66	14.54	51.41	<0.100 U	<10.000 U	<0.100 U	0.240 J	0.220 J	71.05	17.83	4.89	0.55
BLOTKAMP, MARY AND BOB	<5.000 U	6.33	20.2	47.77	<0.250 U		<0.250 U	<0.250 U	<0.250 U	73.52	19.150 J	5.04	0.530 J
CHARNITSKI, JOHN	35.16	0.660 J	3.770 J	15.04	<0.250 U		<0.250 U	<0.250 U	0.540 J	2.930 J	<5.000 U	<0.250 U	<0.250 U
HILMO, TIM	5.480 J	0.560 J	<1.250 U	33.23	<0.250 U		<0.250 U	<0.250 U	0.590 J	<1.250 U	<5.000 U	2.57	<0.250 U
MESHNIK, JOLEEN	<5.000 U	<0.250 U	<1.250 U	23.92	<0.250 U		<0.250 U	<0.250 U	<0.250 U	3.310 J	5.410 J	1.3	<0.250 U
MORGAN, PAUL AND TANJA	224.17	29.38	5.14	8.93	<0.250 U		<0.250 U	<0.250 U	1.34	10.85	32.54	1.72	1.060 J
MORGAN, PAUL AND TANJA	218.28	28.86	5.41	9.03	<0.250 U		<0.250 U	<0.250 U	1.35	10.64	28.95	1.75	0.540 J
SOUSHEK, GARY	<5.000 U	1.02	4.710 J	20.05	<0.250 U		<0.250 U	<0.250 U	0.600 J	2.710 J	20.900 J	359.13	<0.250 U
REID, ALEX & SHEILA	23.580 J	1.87	19.49	82.89	<0.250 U		<0.250 U	<0.250 U	0.630 J	1.300 J	42.98	2.01	0.700 J
RUSS, EMILY	<5.000 U	1.24	8.06	41.23	<0.250 U		<0.250 U	<0.250 U	0.640 J	<1.250 U	36.3	2.36	1.050 J
SALLE, RICH	<5.000 U	0.820 J	12.08	41.6	<0.250 U		<0.250 U	<0.250 U	0.620 J	2.150 J	8.570 J	1.66	0.680 J
SPEAR, TERRY & SALLY	<5.000 U	<0.250 U	4.570 J	24.98	<0.250 U		<0.250 U	<0.250 U	0.690 J	1.370 J	<5.000 U	1.34	<0.250 U
RODRIGUEZ, ALEX	10.640 J	<0.250 U	1.320 J	26.03	<0.250 U		<0.250 U	<0.250 U	0.760 J	2.320 J	<5.000 U	1.100 J	<0.250 U
MESHNIK, JOLEEN	<5.000 U	<0.250 U	4.570 J	24.23	<0.250 U		<0.250 U	<0.250 U	0.510 J	4.330 J	<5.000 U	1.63	<0.250 U
HILMO, TIM	<5.000 U	<0.250 U	1.750 J	29.03	<0.250 U		<0.250 U	<0.250 U	0.540 J	2.240 J	<5.000 U	2.38	<0.250 U
NELSON, JASON AND NICOLE	6.380 J	4.65	20.28	107.72	<0.250 U		<0.250 U	<0.250 U	1.3	1.570 J	14.620 J	0.820 J	0.810 J
TOWN PUMP ANACONDA	20.89	1.03	85.57	1.12	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	3.5	46.26	3.82	<0.100 U
MIKES SALES AND PAWN	<2.000 U	2.24	13.79	38.78	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	2.53	<2.000 U	3.1	0.450 J
SLOTHOWER, GERALD AND JOYCE	257.26	<0.250 U	<1.250 U	77.54	<0.250 U		<0.250 U	<0.250 U	1.82	1.410 J	5.030 J	3.05	0.760 J
MORGAN, PAUL AND TANJA	3.940 J	5.79	3.58	7.2	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	1.410 J	28.08	2.15	<0.100 U
MORGAN, PAUL AND TANJA	18.050 J	5.84	5.79	6.69	<0.250 U		<0.250 U	<0.250 U	0.700 J	2.650 J	25.13	1.85	<0.250 U
ROLLINS, JOHANNA	8.460 J	0.750 J	38.46	229.32	<0.250 U		<0.250 U	<0.250 U	0.550 J	<1.250 U	62.43	4.79	<0.250 U
NICHOLS MARTIN	<5.000 U	<0.250 U	5.95	43.72	<0.250 U		<0.250 U	<0.250 U	0.600 J	1.570 J	7.190 J	2.31	<0.250 U
TUCKER, MARGARET	<5.000 U	0.670 J	9.6	22.3	<0.250 U		<0.250 U	<0.250 U	0.720 J	2.360 J	13.070 J	7.11	<0.250 U

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Site Name	Pb (ug/l)	Sb (ug/l)	Se (ug/l)	Sn (ug/l)	Sr (ug/l)	Ti (ug/l)	Tl (ug/l)	U (ug/l)	V (ug/l)	Zn (ug/l)	Zr (ug/l)	Ce (ug/l)	Cs (ug/l)
JOHNSON, WADE	<0.060 U	<0.100 U	2.47	<0.100 U	608.78	0.250 J	<0.100 U	5.05	6.05	3.19	<0.100 U	<0.100 U	<0.100 U
JOHNSON, WADE	<0.150 U	<0.250 U	2.65	<0.250 U	668.42	2.72	<0.250 U	5.9	10.17	10.73	<0.250 U	<0.250 U	<0.250 U
SHYBA, LORI	<0.150 U	<0.250 U	<0.250 U	<0.250 U	38.95	2.39	<0.250 U	<0.250 U	1.46	8.78	<0.250 U	<0.250 U	6.87
SHYBA, LORI	<0.150 U	<0.250 U	<0.250 U	<0.250 U	46.75	2.31	<0.250 U	<0.250 U	1.43	10.05	<0.250 U	<0.250 U	8.31
MCKAY, RUSSELL AND KRISTY	0.530 J	0.670 J	<0.250 U	1.020 J	180.24	1.92	<0.250 U	3.54	5.61	8.76	<0.250 U	<0.250 U	<0.250 U
VAUTHIER, RHONDA & TOM	<0.060 U	<0.100 U	<0.100 U	<0.100 U	203.15	0.230 J	<0.100 U	4.45	0.84	<0.500 U	<0.100 U	<0.100 U	<0.100 U
VAUTHIER, RHONDA & TOM	<0.150 U	<0.250 U	<0.250 U	0.660 J	202.1	1.39	<0.250 U	4.08	1.45	7.68	<0.250 U	<0.250 U	<0.250 U
MCKAY, ROBERT AND LORRAINE	<0.060 U	<0.100 U	0.280 J	<0.100 U	345.25	0.450 J	<0.100 U	9.82	2.43	6.96	<0.100 U	<0.100 U	<0.100 U
MCKAY, ROBERT AND LORRAINE	<0.150 U	<0.250 U	<0.250 U	0.840 J	368.71	2.35	<0.250 U	10.39	3.22	14.22	<0.250 U	<0.250 U	<0.250 U
PENTILLA, MIKE AND APRIL	<0.060 U	0.390 J	<0.100 U	<0.100 U	191.4	0.320 J	<0.100 U	1.47	0.66	3.9	<0.100 U	<0.100 U	0.470 J
PENTILLA, MIKE AND APRIL	<0.150 U	0.750 J	<0.250 U	0.950 J	195.55	1.63	<0.250 U	1.35	1.030 J	11.89	<0.250 U	<0.250 U	<0.250 U
BLOTKAMP, MARY AND BOB	<0.060 U	0.95	2.12	<0.100 U	307.31	0.84	<0.100 U	2.54	0.84	23.52	<0.100 U	<0.100 U	0.65
BLOTKAMP, MARY AND BOB	<0.150 U	1.150 J	2.27	0.670 J	311.63	1.55	<0.250 U	2.33	1.080 J	28.15	<0.250 U	<0.250 U	0.660 J
CHARNITSKI, JOHN	<0.150 U	<0.250 U	<0.250 U	0.660 J	85.49	2.84	<0.250 U	<0.250 U	0.550 J	10.76	<0.250 U	<0.250 U	<0.250 U
HILMO, TIM	<0.150 U	<0.250 U	<0.250 U	0.700 J	142.94	1.75	<0.250 U	8.75	1.200 J	11.19	<0.250 U	<0.250 U	<0.250 U
MESHNIK, JOLEEN	<0.150 U	<0.250 U	<0.250 U	0.630 J	154.1	1.71	<0.250 U	4.54	0.950 J	11.89	<0.250 U	<0.250 U	<0.250 U
MORGAN, PAUL AND TANJA	0.650 J	2.96	<0.250 U	<0.250 U	957.37	8.7	<0.250 U	1.78	3.16	20.91	<0.250 U	<0.250 U	<0.250 U
MORGAN, PAUL AND TANJA	0.610 J	3.02	<0.250 U	<0.250 U	941.6	8.71	<0.250 U	1.84	2.93	18.01	<0.250 U	<0.250 U	<0.250 U
SOUSHEK, GARY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	449.01	2.82	<0.250 U	17.28	1.25	11.26	<0.250 U	<0.250 U	2.39
REID, ALEX & SHEILA	<0.150 U	<0.250 U	<0.250 U	<0.250 U	610.34	3.68	<0.250 U	19.27	5.45	13.91	<0.250 U	<0.250 U	<0.250 U
RUSS, EMILY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1101.17	3.88	<0.250 U	62.99	4.86	15.25	<0.250 U	<0.250 U	<0.250 U
SALLE, RICH	<0.150 U	<0.250 U	0.570 J	<0.250 U	582.41	2.95	<0.250 U	24.31	4.63	8.09	<0.250 U	<0.250 U	<0.250 U
SPEAR, TERRY & SALLY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	144.08	3.49	<0.250 U	2.34	2.11	24.05	<0.250 U	<0.250 U	<0.250 U
RODRIGUEZ, ALEX	<0.150 U	<0.250 U	<0.250 U	<0.250 U	123.75	3.47	<0.250 U	1.89	2.18	8.17	<0.250 U	<0.250 U	<0.250 U
MESHNIK, JOLEEN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	155.62	2.99	<0.250 U	4.5	1.97	6.52	<0.250 U	<0.250 U	<0.250 U
HILMO, TIM	<0.150 U	<0.250 U	<0.250 U	<0.250 U	139.42	2.98	<0.250 U	4.81	2.21	19.7	<0.250 U	<0.250 U	<0.250 U
NELSON, JASON AND NICOLE	0.99	<0.250 U	<0.250 U	<0.250 U	218.72	1.88	<0.250 U	2.18	3.79	9.36	<0.250 U	<0.250 U	<0.250 U
TOWN PUMP ANACONDA	<0.060 U	<0.100 U	<0.100 U		10.53	1.37			<0.100 U	17.76			
MIKES SALES AND PAWN	<0.060 U	0.360 J	0.450 J		155.07	0.57			0.75	3.88			
SLOTHOWER, GERALD AND JOYCE	<0.150 U	<0.250 U	<0.250 U	<0.250 U	109.01	22.54	<0.250 U	5.67	3.57	6.49	<0.250 U	<0.250 U	<0.250 U
MORGAN, PAUL AND TANJA	0.210 J	0.65	<0.100 U		1030.17	0.240 J	<0.100 U		0.210 J	2.21			
MORGAN, PAUL AND TANJA	0.340 J	0.610 J	<0.250 U	<0.250 U	993.07	1.51	<0.250 U	1.72	0.970 J	5.51	<0.250 U	<0.250 U	<0.250 U
ROLLINS, JOHANNA	<0.150 U	<0.250 U	<0.250 U	<0.250 U	1203.98	1.82	<0.250 U	<0.250 U	0.810 J	8.86	<0.250 U	<0.250 U	0.810 J
NICHOLS MARTIN	<0.150 U	<0.250 U	<0.250 U	<0.250 U	266.96	1.73	<0.250 U	6.5	2.55	17.91	<0.250 U	<0.250 U	<0.250 U
TUCKER, MARGARET	<0.150 U	<0.250 U	<0.250 U	<0.250 U	693.88	1.88	<0.250 U	14.39	4.01	69.84	<0.250 U	<0.250 U	<0.250 U

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JOHNSON, WADE	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	0.470 J	<0.100 U	<0.100 U	<0.010 U
JOHNSON, WADE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.960 J	<0.250 U	0.300 J	<0.250 U	<0.250 U	
SHYBA, LORI	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.62	<0.250 U	<0.250 U	
SHYBA, LORI	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	7.41	<0.250 U	<0.250 U	
MCKAY, RUSSELL AND KRISTY	<0.250 U	<0.250 U	0.520 J	<0.250 U	1.54	<0.250 U	<0.250 U	<0.250 U	1.88	
VAUTHIER, RHONDA & TOM	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
VAUTHIER, RHONDA & TOM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.670 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MCKAY, ROBERT AND LORRAINE	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.010 U
MCKAY, ROBERT AND LORRAINE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.590 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
PENTILLA, MIKE AND APRIL	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	2.4	<0.100 U	0.250 J	<0.010 U
PENTILLA, MIKE AND APRIL	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.520 J	<0.250 U	2.61	<0.250 U	<0.250 U	
BLOTKAMP, MARY AND BOB	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U	3.63	<0.100 U	0.260 J	<0.010 U
BLOTKAMP, MARY AND BOB	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.9	<0.250 U	<0.250 U	
CHARNITSKI, JOHN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.930 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
HILMO, TIM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MESHNIK, JOLEEN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MORGAN, PAUL AND TANJA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.59	<0.250 U	1.080 J	<0.250 U	<0.250 U	
MORGAN, PAUL AND TANJA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.740 J	<0.250 U	1.050 J	<0.250 U	<0.250 U	
SOUSHEK, GARY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.54	<0.250 U	17.52	
REID, ALEX & SHEILA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.810 J	<0.250 U	<0.250 U	<0.250 U	8.25	
RUSS, EMILY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.750 J	<0.250 U	<0.250 U	<0.250 U	2.34	
SALLE, RICH	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
SPEAR, TERRY & SALLY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.240 J	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
RODRIGUEZ, ALEX	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
MESHNIK, JOLEEN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
HILMO, TIM	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
NELSON, JASON AND NICOLE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.35	<0.250 U	5.46	<0.250 U	<0.250 U	
TOWN PUMP ANACONDA		<0.100 U								<0.010 U
MIKES SALES AND PAWN		<0.100 U								<0.010 U
SLOTHOWER, GERALD AND JOYCE	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	1.78	<0.250 U	<0.250 U	
MORGAN, PAUL AND TANJA										<0.010 U
MORGAN, PAUL AND TANJA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	2.86	<0.250 U	0.900 J	<0.250 U	<0.250 U	
ROLLINS, JOHANNA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.500 J	<0.250 U	7.97	<0.250 U	<0.250 U	
NICHOLS MARTIN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
TUCKER, MARGARET	<0.250 U	0.530 J	<0.250 U	<0.250 U	3.83	<0.250 U	1.81	<0.250 U	<0.250 U	

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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
JOHNSON, WADE	216.9637	289.013	41.2074	119.6001	DISSOLVED
JOHNSON, WADE	0.011	0.011	0.0001	0	TOTAL RECOVERABLE
SHYBA, LORI	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
SHYBA, LORI	0.01	0.01	0.0001	0	TOTAL RECOVERABLE
MCKAY, RUSSELL AND KRISTY	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
VAUTHIER, RHONDA & TOM	187.411	269.608	139.0175	132.8677	DISSOLVED
VAUTHIER, RHONDA & TOM	1.019	1.019	0.0001	0	TOTAL RECOVERABLE
MCKAY, ROBERT AND LORRAINE	202.882	260.217	128.7917	92.6793	DISSOLVED
MCKAY, ROBERT AND LORRAINE	0.014	0.014	0.0001	0	TOTAL RECOVERABLE
PENTILLA, MIKE AND APRIL	200.7134	284.94	155.009	136.1484	DISSOLVED
PENTILLA, MIKE AND APRIL	0.031	0.031	0.0001	0	TOTAL RECOVERABLE
BLOTKAMP, MARY AND BOB	328.1189	426.045	227.939	158.293	DISSOLVED
BLOTKAMP, MARY AND BOB	0.102	0.102	0.0001	0	TOTAL RECOVERABLE
CHARNITSKI, JOHN	0.046	0.046	0.0001	0	TOTAL RECOVERABLE
HILMO, TIM	1.011	1.011	0.0001	0	TOTAL RECOVERABLE
MESHNIK, JOLEEN	0.012	0.012	0.0001	0	TOTAL RECOVERABLE
MORGAN, PAUL AND TANJA	0.256	0.256	0.0001	0	TOTAL RECOVERABLE
MORGAN, PAUL AND TANJA	0.247	0.247	0.0001	0	TOTAL RECOVERABLE
SOUSHEK, GARY	0.011	0.011	0.0001	0	TOTAL RECOVERABLE
REID, ALEX & SHEILA	0.014	0.014	0.0001	0	TOTAL RECOVERABLE
RUSS, EMILY	0.015	0.015	0.0001	0	TOTAL RECOVERABLE
SALLE, RICH	0.008	0.008	0.0001	0	TOTAL RECOVERABLE
SPEAR, TERRY & SALLY	0.024	0.024	0.0001	0	TOTAL RECOVERABLE
RODRIGUEZ, ALEX	0.008	0.008	0.0001	0	TOTAL RECOVERABLE
MESHNIK, JOLEEN	0.007	0.007	0.0001	0	TOTAL RECOVERABLE
HILMO, TIM	0.02	0.02	0.0001	0	TOTAL RECOVERABLE
NELSON, JASON AND NICOLE	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
TOWN PUMP ANACONDA	253.2625	330.893	10.1639	162.1799	DISSOLVED
MIKES SALES AND PAWN	252.7088	363.827	213.4332	179.6174	DISSOLVED
SLOTHOWER, GERALD AND JOYCE	0.263	0.263	0.0001	0	TOTAL RECOVERABLE
MORGAN, PAUL AND TANJA	184.6446	276.482	73.8556	148.451	DISSOLVED
MORGAN, PAUL AND TANJA	0.006	0.006	0.0001	0	TOTAL RECOVERABLE
ROLLINS, JOHANNA	0.009	0.009	0.0001	0	TOTAL RECOVERABLE
NICHOLS MARTIN	0.018	0.018	0.0001	0	TOTAL RECOVERABLE
TUCKER, MARGARET	0.07	0.07	0.0001	0	TOTAL RECOVERABLE

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Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
126156	KRISKOVICH, KEVIN & SHELLY	07/28/14	8.43	7.51	150						
279064	GLOVAN, KIMBERLY A.	07/28/14	9.44	7.27	185						
51067	SIDERS, CLINTON	07/30/14	8.05	5.81	157.3						
279186	JORGENSEN, JAMES	07/31/14	9.37	6.73	509.5						
152565	POPE, MILDRED	07/31/14	6.66	6.16	184.5						
178945	LETICA, ILIGA	08/01/14	9.49	7.46	192.9						
194337	STANLEY, CALVIN	08/04/14									
255428	JOHNSON, ROSEMARY	08/07/14	9.11	5.42	100.9						
255457	POWERS, BILL	08/07/14	9.22	5.87	202.1						
279269	LAURANDEAU, JOSH AND KEVIN	08/07/14	7.34	7.34	187.9						
279270	RICE, CLARK	08/08/14	8.89	6.05	147.8						
214161	TUSS, VERN AND BETTY	08/08/14	9.43	6.14	162.4						
275245	FISCHER, FRED AND RUBY	08/12/14	9.95	6.32	177.6						
51142	POFFENBERGER, JIM	08/13/14	9.95	6.32	177.6	6.66	205.93	26.59	7.33	7.68	0.8
51142	POFFENBERGER, JIM	08/13/14	9.95	6.32	177.6						
189209	PESANTI, RYAN AND STACIE	08/13/14	10.36	6.85	527	7.85	503.95	51.35	19.5	33.38	2.28
189209	PESANTI, RYAN AND STACIE	08/13/14	10.36	6.85	527						
279323	HUOT, DAN AND MELINDA	08/13/14	13.75	6.16	215.6						
51234	WYANT, CORA	08/14/14	9.9	6.28	219.6						
279487	SWENOR, GLENN	08/14/14	8.21	6.76	217.9						
255423	LEVASSEUR, PAUL AND TAMLYN	08/14/14	9.07	6.13	196.1						
168861	SILVA, STANLEY AND KATHY	08/15/14	9.26	9.64	507.1						
255399	JAN, DENG KUI	08/15/14	9.45	6.57	929.1						
279411	SCHAFER, BRANNON	08/15/14	8.6	5.98	170.5						
183656	COSTLE, DAN	08/18/14	9.91	6.74	227.5						
271506	ZWYGART, DANIEL	08/18/14	14.81	8.01	548.6						
255427	NELSON, RON & LESLIE	08/18/14	9.05	6	162.1						
255429	PECKENPAUGH, TONI BARKER	08/20/14	8.74	6.25	171.9						
126790	AYERS, JEFF AND LAURIE	08/28/14	8.54	5.9	319.3						
255426	GANNON, CURTIS AND JENNIFER	09/05/14	9.49	6.78	1210						
51177	ADAMS, MARYLIN	09/05/14	9.69	6.7	177.1						
127875	KENNEY, RODGER	09/05/14	9.25	6.79	297.4						
178948	JOHNSON, STEVE AND JEAN	09/05/14	8.16	6.53	247.2						
121001	MUNRO, BOB & CHRIS	09/05/14	9.64	6.6	878.4						
154673	BRABY, DANIEL	09/07/14	11.63	7.6	546.9						

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Site Name	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (ug/l)
KRISKOVICH, KEVIN & SHELLY	0.120 J	<0.005 U									
GLOVAN, KIMBERLY A.	<0.038 U	<0.005 U									
SIDERS, CLINTON	0.335	0.022 J									
JORGENSEN, JAMES	0.120 J	<0.005 U									
POPE, MILDRED	<0.038 U	<0.005 U									
LETICA, ILIGA	0.454	0.006 J									
STANLEY, CALVIN	0.143 J	<0.005 U									
JOHNSON, ROSEMARY											
POWERS, BILL											
LAURANDEAU, JOSH AND KEVIN											
RICE, CLARK											
TUSS, VERN AND BETTY											
FISCHER, FRED AND RUBY											
POFFENBERGER, JIM	0.029 J	0.002 J	19.64	105.97	0	25.78	2.09	0.13	0.72	<0.020 U	<0.100 U
POFFENBERGER, JIM											
PESANTI, RYAN AND STACIE	<0.015 U	<0.002 U	16.1	243.09	0	76.99	10.44	0.46	0.88	0.020 J	<0.100 U
PESANTI, RYAN AND STACIE											
HUOT, DAN AND MELINDA											
WYANT, CORA											
SWENOR, GLENN											
LEVASSEUR, PAUL AND TAMLYN											
SILVA, STANLEY AND KATHY											
JAN, DENG KUI											
SCHAFER, BRANNON											
COSTLE, DAN											
ZWYGART, DANIEL											
NELSON, RON & LESLIE											
PECKENPAUGH, TONI BARKER											
AYERS, JEFF AND LAURIE											
GANNON, CURTIS AND JENNIFER											
ADAMS, MARYLIN											
KENNEY, RODGER											
JOHNSON, STEVE AND JEAN											
MUNRO, BOB & CHRIS											
BRABY, DANIEL											

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Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
KRISKOVICH, KEVIN & SHELLY	<5.000 U	<0.250 U	4.640 J	25.5	<0.250 U		<0.250 U	<0.250 U	0.610 J	<1.250 U	5.020 J	0.860 J	<0.250 U
GLOVAN, KIMBERLY A.	<5.000 U	<0.250 U	5.25	28.95	<0.250 U		<0.250 U	<0.250 U	<0.250 U	1.390 J	5.270 J	0.850 J	<0.250 U
SIDERS, CLINTON	<5.000 U	<0.250 U	5.29	33.03	<0.250 U		<0.250 U	<0.250 U	<0.250 U	1.760 J	<5.000 U	0.740 J	<0.250 U
JORGENSEN, JAMES	<5.000 U	2.41	15.66	58.38	<0.250 U		<0.250 U	<0.250 U	0.530 J	1.890 J	9.120 J	1.6	0.590 J
POPE, MILDRED	<5.000 U	2.23	2.750 J	32.25	<0.250 U		<0.250 U	<0.250 U	0.590 J	5.18	<5.000 U	2.15	<0.250 U
LETICA, ILIGA	<5.000 U	<0.250 U	3.360 J	17.2	<0.250 U		<0.250 U	<0.250 U	0.840 J	50.56	<5.000 U	5.22	<0.250 U
STANLEY, CALVIN	<5.000 U	<0.250 U	2.950 J	31.48	<0.250 U		<0.250 U	<0.250 U	<0.250 U	5.4	<5.000 U	1.37	<0.250 U
JOHNSON, ROSEMARY		<0.250 U					<0.250 U			3.270 J			
POWERS, BILL		2.15					<0.250 U			6.13			
LAURANDEAU, JOSH AND KEVIN		0.510 J					<0.250 U			1.480 J			
RICE, CLARK		<0.250 U					<0.250 U			<1.250 U			
TUSS, VERN AND BETTY		<0.250 U					<0.250 U			2.120 J			
FISCHER, FRED AND RUBY		<0.250 U					<0.250 U			2.970 J			
POFFENBERGER, JIM	8.160 J	7.5	4.39	25.96	<0.100 U	<10.000 U	<0.100 U	<0.100 U	<0.100 U	15.56	2.750 J	6.44	1.36
POFFENBERGER, JIM		9.97					<0.250 U			18.11			
PESANTI, RYAN AND STACIE	<2.000 U	4.85	11.91	69.9	<0.100 U	40.000 J	<0.100 U	<0.100 U	<0.100 U	7.52	15.84	2.1	<0.100 U
PESANTI, RYAN AND STACIE		6.8					<0.250 U			6.59			
HUOT, DAN AND MELINDA		<0.250 U					<0.250 U			2.510 J			
WYANT, CORA		<0.250 U					<0.250 U			1.270 J			
SWENOR, GLENN		0.670 J					<0.250 U			16.37			
LEVASSEUR, PAUL AND TAMLYN		<0.250 U					<0.250 U			3.460 J			
SILVA, STANLEY AND KATHY		1.23					<0.250 U			8.79			
JAN, DENG KUI		4.11					<0.250 U			5.66			
SCHAFER, BRANNON		<0.250 U					<0.250 U			2.610 J			
COSTLE, DAN		1.91					<0.250 U			1.790 J			
ZWYGART, DANIEL		7.59					<0.250 U			30.93			
NELSON, RON & LESLIE		<0.250 U					<0.250 U			2.480 J			
PECKENPAUGH, TONI BARKER		<0.250 U					<0.250 U			4.510 J			
AYERS, JEFF AND LAURIE		0.680 J					<0.250 U			11.04			
GANNON, CURTIS AND JENNIFER		<0.250 U					<0.250 U			7.78			
ADAMS, MARYLIN		<0.250 U					<0.250 U			4.130 J			
KENNEY, RODGER		0.680 J					<0.250 U			3.900 J			
JOHNSON, STEVE AND JEAN		<0.250 U					<0.250 U			<1.250 U			
MUNRO, BOB & CHRIS		1.11					<0.250 U			20.72			
BRABY, DANIEL		<0.250 U					<0.250 U			2.620 J			

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Site Name	Pb (ug/l)	Sb (ug/l)	Se (ug/l)	Sn (ug/l)	Sr (ug/l)	Ti (ug/l)	Tl (ug/l)	U (ug/l)	V (ug/l)	Zn (ug/l)	Zr (ug/l)	Ce (ug/l)	Cs (ug/l)
KRISKOVICH, KEVIN & SHELLY	<0.150 U	<0.250 U	<0.250 U	<0.250 U	76.23	1.66	<0.250 U	0.770 J	1.52	7.11	<0.250 U	<0.250 U	<0.250 U
GLOVAN, KIMBERLY A.	<0.150 U	<0.250 U	<0.250 U	<0.250 U	101.07	1.41	<0.250 U	0.960 J	1.34	40.24	<0.250 U	<0.250 U	<0.250 U
SIDERS, CLINTON	<0.150 U	<0.250 U	<0.250 U	<0.250 U	92.74	1.52	<0.250 U	0.810 J	0.990 J	10.64	<0.250 U	<0.250 U	<0.250 U
JORGENSEN, JAMES	<0.150 U	<0.250 U	<0.250 U	<0.250 U	438.32	1.65	<0.250 U	1.72	1.43	6.35	<0.250 U	<0.250 U	<0.250 U
POPE, MILDRED	<0.150 U	<0.250 U	<0.250 U	<0.250 U	158.56	1.77	<0.250 U	2.16	1.76	9.46	<0.250 U	<0.250 U	<0.250 U
LETICA, ILIGA	3.88	<0.250 U	<0.250 U	<0.250 U	63.82	1.8	<0.250 U	8.69	1.040 J	518.47	<0.250 U	<0.250 U	<0.250 U
STANLEY, CALVIN	0.86	<0.250 U	<0.250 U	<0.250 U	123.17	1.58	<0.250 U	2.69	1.27	6.47	<0.250 U	<0.250 U	<0.250 U
JOHNSON, ROSEMARY	<0.150 U									21.59			
POWERS, BILL	0.530 J									28.54			
LAURANDEAU, JOSH AND KEVIN	0.84									27.25			
RICE, CLARK	<0.150 U									25.67			
TUSS, VERN AND BETTY	<0.150 U									56.76			
FISCHER, FRED AND RUBY	<0.150 U									25.34			
POFFENBERGER, JIM	0.87	0.82	<0.100 U	<0.100 U	121.63	13.19	<0.100 U	6.82	0.94	3.68	<0.100 U	0.410 J	<0.100 U
POFFENBERGER, JIM	1.17									31.05			
PESANTI, RYAN AND STACIE	0.140 J	<0.100 U	0.500 J	<0.100 U	709.31	26.72	<0.100 U	7.4	3.2	<0.500 U	<0.100 U	<0.100 U	<0.100 U
PESANTI, RYAN AND STACIE	<0.150 U									26			
HUOT, DAN AND MELINDA	<0.150 U									26.38			
WYANT, CORA	<0.150 U									32.91			
SWENOR, GLENN	0.510 J									57.02			
LEVASSEUR, PAUL AND TAMLYN	<0.150 U									25.25			
SILVA, STANLEY AND KATHY	<0.150 U									31.79			
JAN, DENG KUI	<0.150 U									28.38			
SCHAFER, BRANNON	0.650 J									29.15			
COSTLE, DAN	<0.150 U									29.07			
ZWYGART, DANIEL	2.63									32.62			
NELSON, RON & LESLIE	<0.150 U									27.4			
PECKENPAUGH, TONI BARKER	0.650 J									37.88			
AYERS, JEFF AND LAURIE	0.650 J									39.34			
GANNON, CURTIS AND JENNIFER	<0.150 U									41.03			
ADAMS, MARYLIN	<0.150 U									36.85			
KENNEY, RODGER	<0.150 U									43.2			
JOHNSON, STEVE AND JEAN	<0.150 U									22.79			
MUNRO, BOB & CHRIS	<0.150 U									25.61			
BRABY, DANIEL	0.83									25.22			

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KRISKOVICH, KEVIN & SHELLY	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
GLOVAN, KIMBERLY A.	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
SIDERS, CLINTON	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
JORGENSEN, JAMES	<0.250 U	<0.250 U	<0.250 U	<0.250 U	0.640 J	<0.250 U	1.020 J	<0.250 U	<0.250 U	
POPE, MILDRED	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
LETICA, ILIGA	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	3.02	<0.250 U	<0.250 U	
STANLEY, CALVIN	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	<0.250 U	
JOHNSON, ROSEMARY										
POWERS, BILL										
LAURANDEAU, JOSH AND KEVIN										
RICE, CLARK										
TUSS, VERN AND BETTY										
FISCHER, FRED AND RUBY										
POFFENBERGER, JIM	1.01	1.02	<0.100 U	0.77	<0.100 U	<0.100 U	0.73	<0.100 U	<0.100 U	<0.010 U
POFFENBERGER, JIM										
PESANTI, RYAN AND STACIE	2.72	<0.100 U	<0.100 U	<0.100 U	0.6	<0.100 U	2.11	<0.100 U	<0.100 U	<0.010 U
PESANTI, RYAN AND STACIE										
HUOT, DAN AND MELINDA										
WYANT, CORA										
SWENOR, GLENN										
LEVASSEUR, PAUL AND TAMLYN										
SILVA, STANLEY AND KATHY										
JAN, DENG KUI										
SCHAFER, BRANNON										
COSTLE, DAN										
ZWYGART, DANIEL										
NELSON, RON & LESLIE										
PECKENPAUGH, TONI BARKER										
AYERS, JEFF AND LAURIE										
GANNON, CURTIS AND JENNIFER										
ADAMS, MARYLIN										
KENNEY, RODGER										
JOHNSON, STEVE AND JEAN										
MUNRO, BOB & CHRIS										
BRABY, DANIEL										

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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
KRISKOVICH, KEVIN & SHELLY	0.007	0.007	0.0001	0	TOTAL RECOVERABLE
GLOVAN, KIMBERLY A.	0.04	0.04	0.0001	0	TOTAL RECOVERABLE
SIDERS, CLINTON	0.011	0.011	0.0001	0	TOTAL RECOVERABLE
JORGENSEN, JAMES	0.006	0.006	0.0001	0	TOTAL RECOVERABLE
POPE, MILDRED	0.014	0.014	0.0001	0	TOTAL RECOVERABLE
LETICA, ILIGA	0.569	0.569	0.0001	0	TOTAL RECOVERABLE
STANLEY, CALVIN	0.011	0.011	0.0001	0	TOTAL RECOVERABLE
JOHNSON, ROSEMARY	0.022	0.022	0.0001	0	TOTAL RECOVERABLE
POWERS, BILL	0.035	0.035	0.0001	0	TOTAL RECOVERABLE
LAURANDEAU, JOSH AND KEVIN	0.027	0.027	0.0001	0	TOTAL RECOVERABLE
RICE, CLARK	0.026	0.026	0.0001	0	TOTAL RECOVERABLE
TUSS, VERN AND BETTY	0.057	0.057	0.0001	0	TOTAL RECOVERABLE
FISCHER, FRED AND RUBY	0.025	0.025	0.0001	0	TOTAL RECOVERABLE
POFFENBERGER, JIM	144.1567	197.94	96.5655	86.9381	DISSOLVED
POFFENBERGER, JIM	0.049	0.049	0.0001	0	TOTAL RECOVERABLE
PESANTI, RYAN AND STACIE	329.5624	452.858	208.4829	199.3016	DISSOLVED
PESANTI, RYAN AND STACIE	0.033	0.033	0.0001	0	TOTAL RECOVERABLE
HUOT, DAN AND MELINDA	0.026	0.026	0.0001	0	TOTAL RECOVERABLE
WYANT, CORA	0.033	0.033	0.0001	0	TOTAL RECOVERABLE
SWENOR, GLENN	0.073	0.073	0.0001	0	TOTAL RECOVERABLE
LEVASSEUR, PAUL AND TAMLYN	0.025	0.025	0.0001	0	TOTAL RECOVERABLE
SILVA, STANLEY AND KATHY	0.041	0.041	0.0001	0	TOTAL RECOVERABLE
JAN, DENG KUI	0.034	0.034	0.0001	0	TOTAL RECOVERABLE
SCHAFER, BRANNON	0.029	0.029	0.0001	0	TOTAL RECOVERABLE
COSTLE, DAN	0.029	0.029	0.0001	0	TOTAL RECOVERABLE
ZWYGART, DANIEL	0.064	0.064	0.0001	0	TOTAL RECOVERABLE
NELSON, RON & LESLIE	0.027	0.027	0.0001	0	TOTAL RECOVERABLE
PECKENPAUGH, TONI BARKER	0.038	0.038	0.0001	0	TOTAL RECOVERABLE
AYERS, JEFF AND LAURIE	0.05	0.05	0.0001	0	TOTAL RECOVERABLE
GANNON, CURTIS AND JENNIFER	0.049	0.049	0.0001	0	TOTAL RECOVERABLE
ADAMS, MARYLIN	0.037	0.037	0.0001	0	TOTAL RECOVERABLE
KENNEY, RODGER	0.043	0.043	0.0001	0	TOTAL RECOVERABLE
JOHNSON, STEVE AND JEAN	0.023	0.023	0.0001	0	TOTAL RECOVERABLE
MUNRO, BOB & CHRIS	0.047	0.047	0.0001	0	TOTAL RECOVERABLE
BRABY, DANIEL	0.025	0.025	0.0001	0	TOTAL RECOVERABLE

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Gwic Id	Site Name	Sample Date	Water Temp	Fld pH	Fld SC	Lab pH	Lab SC	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)
125258	VETTER, TERRY	09/12/14	16.42	7.08	266.3						
215517	HAFFEY, DAN	09/15/14	9.62	7.29	743.2						
158374	DUXBURY, BRUCE	09/16/14	11.02	7.65	698.7						
280067	NYMAN, CARL	10/02/14	8.74	7.25	281.6						
183656	COSTLE, DAN	10/07/14	9.85	7.14	225						
280209	BROWN, SCOTT AND CHRISTINE	10/14/14	9.8	7.16	535						
230299	GALLE JEFF AND ANGELLA	10/14/14	10.9	7.51	370						
215345	OTTO, JUDY AND JERRY	10/16/14	8.22	7.26	162.1						
174779	STEVENS, BRAD AND BARBARA	10/16/14	8.78	7.71	307.7						
256394	COSTLE, DANIEL	10/24/14	9.92	7.32	179.3						
258260	KOEPPLIN, CARL	10/24/14	10.8	6.63	165						
184524	REITER FOUNDATION	10/30/14	10.39	7.45	780.3						

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Site Name	Fe (mg/l)	Mn (mg/l)	SiO2 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3-N (mg/l)	F (mg/l)	OPO4-P (mg/l)	Ag (ug/l)
VETTER, TERRY											
HAFFEY, DAN											
DUXBURY, BRUCE											
NYMAN, CARL	0.177 J	<0.005 U									
COSTLE, DAN											
BROWN, SCOTT AND CHRISTINE											
GALLE JEFF AND ANGELLA											
OTTO, JUDY AND JERRY	0.411	0.011 J									
STEVENS, BRAD AND BARBARA	0.069 J	<0.002 U									
COSTLE, DANIEL	0.016 J	<0.002 U									
KOEPPLIN, CARL	0.077	<0.002 U									
REITER FOUNDATION	0.148	0.017 J									

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Site Name	Al (ug/l)	As (ug/l)	B (ug/l)	Ba (ug/l)	Be (ug/l)	Br (ug/l)	Cd (ug/l)	Co (ug/l)	Cr (ug/l)	Cu (ug/l)	Li (ug/l)	Mo (ug/l)	Ni (ug/l)
VETTER, TERRY		1.32					<0.250 U			72.13			
HAFFEY, DAN		<0.250 U					<0.250 U			1.400 J			
DUXBURY, BRUCE		3.17					<0.250 U			4.430 J			
NYMAN, CARL	<5.000 U	7.77	10.66	27.96	<0.250 U		<0.250 U	<0.250 U	0.720 J	1.890 J	<5.000 U	2.84	<0.250 U
COSTLE, DAN		1.894					<0.100 U			0.510 J			
BROWN, SCOTT AND CHRISTINE		<0.100 U					<0.100 U			1.720 J			
GALLE JEFF AND ANGELLA		6.901					<0.100 U			<0.500 U			
OTTO, JUDY AND JERRY	171.49	1.52	6.09	24.68	<0.100 U		<0.100 U	<0.100 U	1.47	1.340 J	<2.000 U	1.9	0.51
STEVENS, BRAD AND BARBARA	5.090 J	<0.100 U	6.35	38.7	<0.100 U		<0.100 U	<0.100 U	1.97	2.02	6.300 J	11.2	<0.100 U
COSTLE, DANIEL	6.570 J	1.47	10.85	46.81	<0.100 U		<0.100 U	<0.100 U	1.48	3.22	5.090 J	1.25	<0.100 U
KOEPPLIN, CARL	29.28	<0.100 U	7.85	44.66	<0.100 U		<0.100 U	<0.100 U	1.4	6.76	<2.000 U	1.1	0.98
REITER FOUNDATION	9.210 J	5.13	47.82	14.72	<0.100 U		<0.100 U	<0.100 U	1.34	2.88	56.55	4.3	<0.100 U

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Site Name	Pb (ug/l)	Sb (ug/l)	Se (ug/l)	Sn (ug/l)	Sr (ug/l)	Ti (ug/l)	Tl (ug/l)	U (ug/l)	V (ug/l)	Zn (ug/l)	Zr (ug/l)	Ce (ug/l)	Cs (ug/l)
VETTER, TERRY	<0.150 U									37.36			
HAFFEY, DAN	<0.150 U									34.79			
DUXBURY, BRUCE	<0.150 U									35.82			
NYMAN, CARL	<0.150 U	<0.250 U	<0.250 U		88.26	3.05	<0.250 U		4.35	6.85			
COSTLE, DAN	<0.060 U									5.16			
BROWN, SCOTT AND CHRISTINE	0.120 J									20.36			
GALLE JEFF AND ANGELLA	<0.060 U									16.99			
OTTO, JUDY AND JERRY	<0.060 U	<0.100 U	<0.100 U	<0.100 U	115.67	17.99	<0.100 U	2.01	3.21	1.850 J	0.300 J	0.53	<0.100 U
STEVENS, BRAD AND BARBARA	<0.060 U	<0.100 U	<0.100 U	<0.100 U	509.65	12.64	<0.100 U	3.53	<0.100 U	1.840 J	<0.100 U	<0.100 U	<0.100 U
COSTLE, DANIEL	<0.060 U	<0.100 U	<0.100 U	<0.100 U	159.84	7.89	<0.100 U	0.94	4.37	10.29	<0.100 U	<0.100 U	<0.100 U
KOEPPLIN, CARL	0.87	<0.100 U	<0.100 U	<0.100 U	86.9	10.23	<0.100 U	0.84	<0.100 U	10.45	<0.100 U	<0.100 U	<0.100 U
REITER FOUNDATION	<0.060 U	<0.100 U	<0.100 U	<0.100 U	2609.83	29.68	<0.100 U	1.02	<0.100 U	1.330 J	<0.100 U	<0.100 U	1.09

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Site Name	Ga (ug/l)	La (ug/l)	Nb (ug/l)	Nd (ug/l)	Pd (ug/l)	Pr (ug/l)	Rb (ug/l)	Th (ug/l)	W (ug/l)	NO2-N (mg/l)
VETTER, TERRY										
HAFFEY, DAN										
DUXBURY, BRUCE										
NYMAN, CARL										
COSTLE, DAN										
BROWN, SCOTT AND CHRISTINE										
GALLE JEFF AND ANGELLA										
OTTO, JUDY AND JERRY	1.28	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U		<0.100 U	1.22	
STEVENS, BRAD AND BARBARA	1.77	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U		<0.100 U	<0.100 U	
COSTLE, DANIEL	2.08	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U		<0.100 U	2.64	
KOEPPLIN, CARL	2.05	<0.100 U	<0.100 U	<0.100 U	<0.100 U	<0.100 U		<0.100 U	<0.100 U	
REITER FOUNDATION	0.84	<0.100 U	<0.100 U	<0.100 U	2.44	<0.100 U		<0.100 U	<0.100 U	

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Site Name	Total Dissolved Solids (mg/l)	Sum Dissolved Constituents (mg/l)	Hardness (mg/l)	Alkalinity	Procedure
VETTER, TERRY	0.109	0.109	0.0001	0	TOTAL RECOVERABLE
HAFFEY, DAN	0.035	0.035	0.0001	0	TOTAL RECOVERABLE
DUXBURY, BRUCE	0.036	0.036	0.0001	0	TOTAL RECOVERABLE
NYMAN, CARL	0.007	0.007	0.0001	0	TOTAL RECOVERABLE
COSTLE, DAN	0.005	0.005	0.0001	0	TOTAL RECOVERABLE
BROWN, SCOTT AND CHRISTINE	0.02	0.02	0.0001	0	TOTAL RECOVERABLE
GALLE JEFF AND ANGELLA	0.017	0.017	0.0001	0	TOTAL RECOVERABLE
OTTO, JUDY AND JERRY	0.171	0.171	0.0001	0	TOTAL RECOVERABLE
STEVENS, BRAD AND BARBARA	0.002	0.002	0.0001	0	TOTAL RECOVERABLE
COSTLE, DANIEL	0.013	0.013	0.0001	0	TOTAL RECOVERABLE
KOEPPLIN, CARL	0.046	0.046	0.0001	0	TOTAL RECOVERABLE
REITER FOUNDATION	0.003	0.003	0.0001	0	TOTAL RECOVERABLE

Explanation of Qualifiers: E = Estimated due to interference;
J = Detected above MDL but less than MRL; N = Spiked sample recovery not within control limits;
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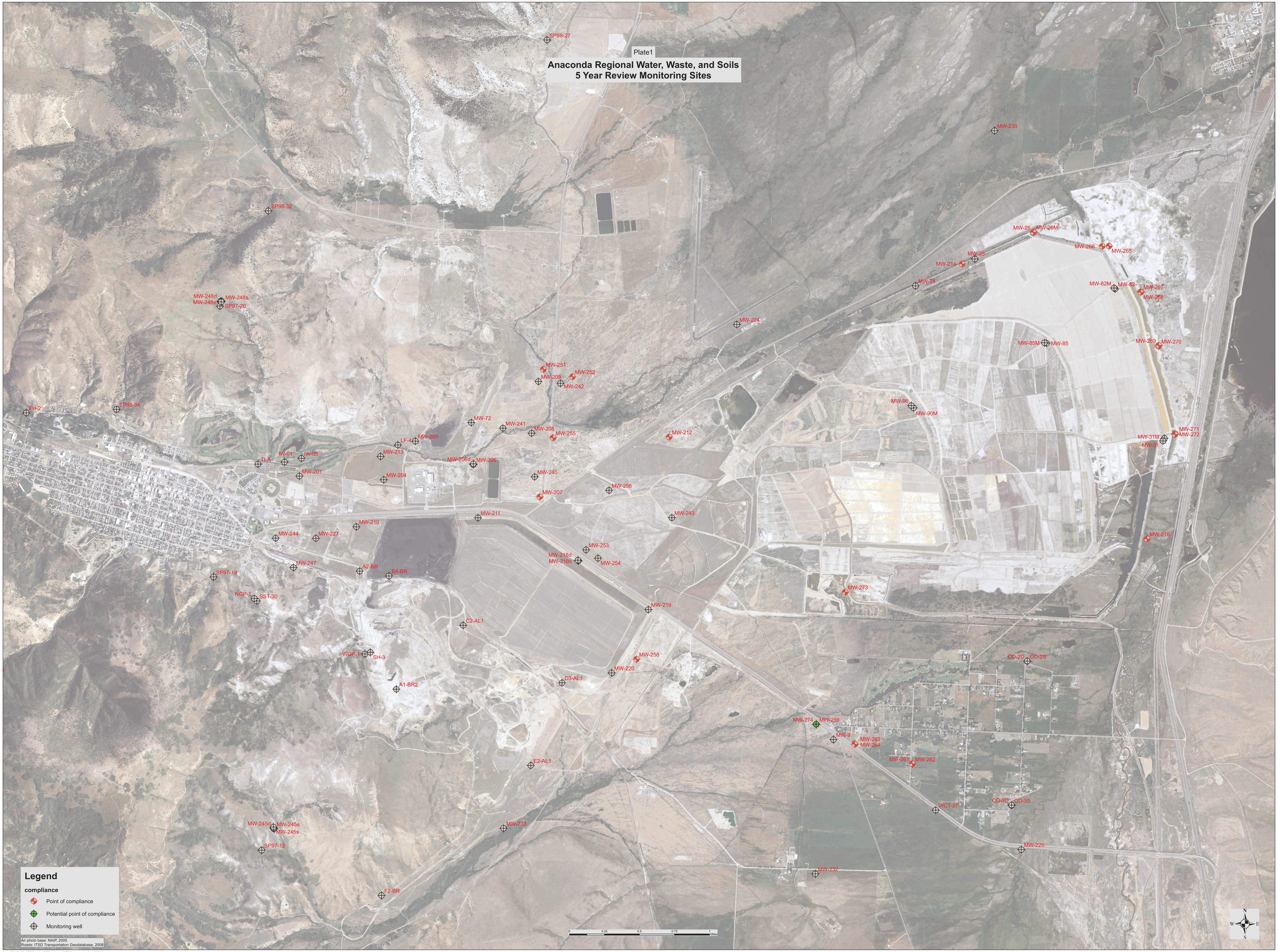

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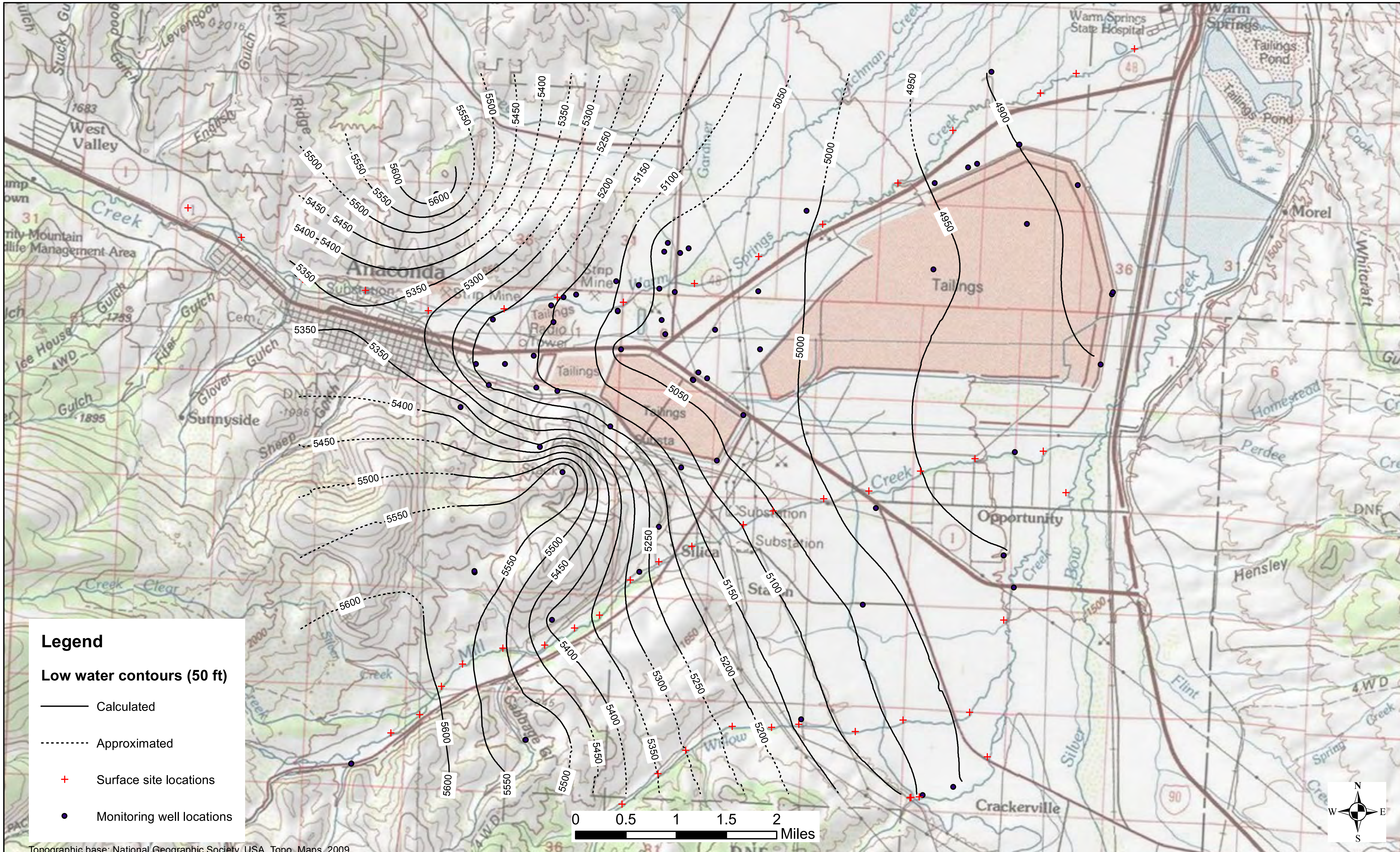

Plate 2. ARWWS low-water potentiometric map, 2014.

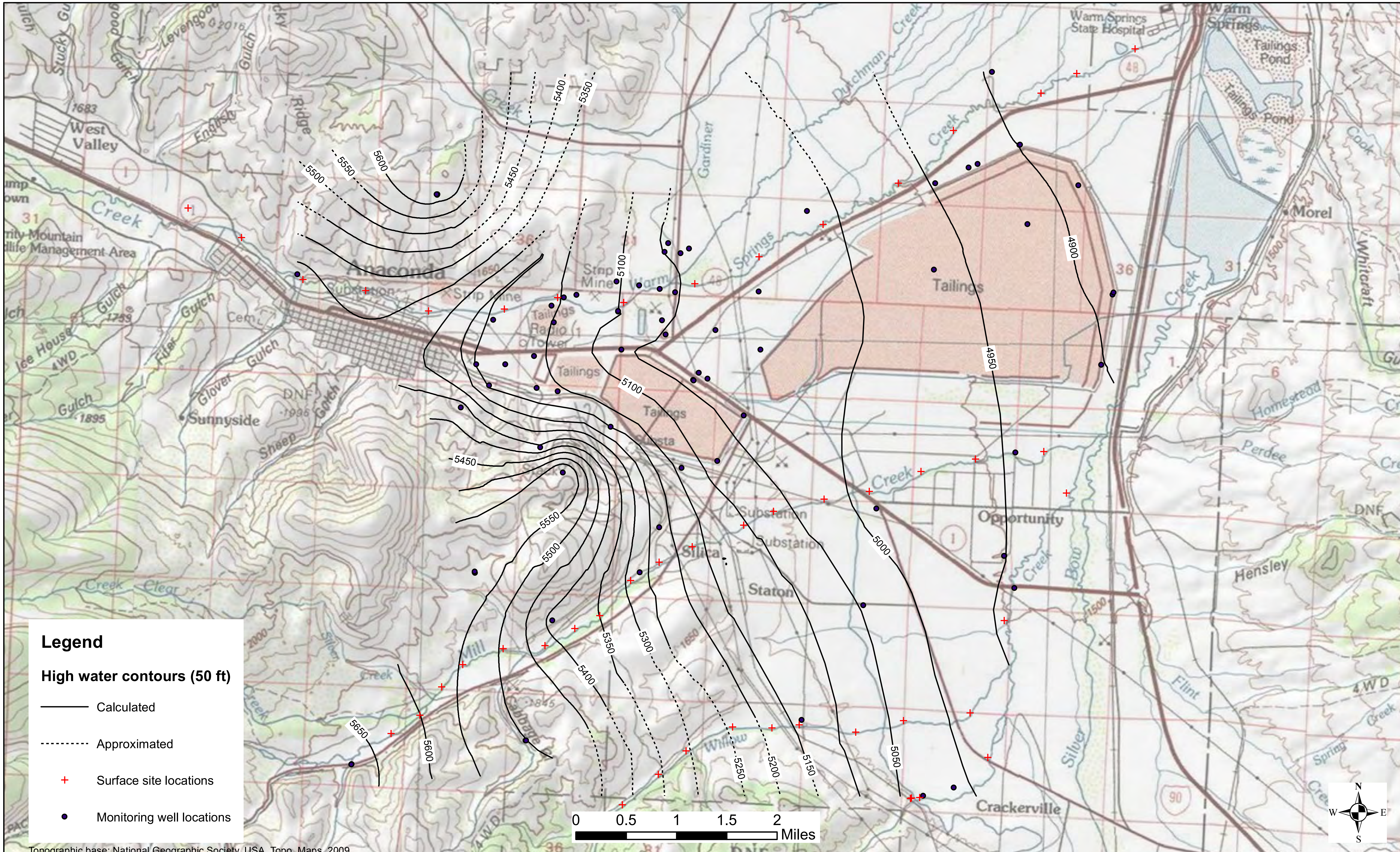

Plate 3. ARWWS high-water potentiometric map, 2014.