MINTO CREEK WATER QUALITY CHARACTERIZATION

JANUARY 2005 – DECEMBER 2015

FINAL

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Prepared for:

MINTO EXPLORATIONS LTD.

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LIST OF ABBREVIATIONS

ACG	Access Consulting Group
AEG	Alexco Environmental Group
BCP	Background Concentrations Procedure
CCME	Canadian Council of Ministers of the Environment
CWQG	Canadian Water Quality Guideline
DSTSF	Dry Stack Tailings Storage Facility
Minnow	Minnow Environmental Inc.
MMER	Metal Mining Effluent Regulations
RDL	Reportable Detection Limit
SSWQO	Site Specific Water Quality Objective
SWD	Southwest Waste Dump
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
WQO	Water Quality Objective
WSP	Water Storage Pond

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APPENDIX A: MINTO CREEK AND MINTO MINE WATER QUALITY DATA (JANUARY 2005–DECEMBER 2015)

APPENDIX B: OUTLIER IDENTIFICATION – MINTO CREEK SURFACE WATER QUALITY

1 INTRODUCTION

Minto Explorations Ltd. (a wholly owned subsidiary of Capstone Mining Corp.) owns and operates Minto Mine, a high-grade copper mine located approximately 240 km northwest of Whitehorse, Yukon (Figure 1-1).

Water quality in Minto Creek, which forms part of the receiving environment for Minto Mine, has been comprehensively characterized in numerous reports. Minnow Environmental Inc. (Minnow) first characterized background water quality of Minto Creek to the end of 2008 within the report entitled *Evaluation of the Background Water Quality of Minto Creek and Options for the Derivation of Site Specific Water Quality Objectives* (Minnow 2009). In 2010, Minnow prepared the *Characterization of Baseline and Operational Water Quality of Minto Creek* including water quality results to the end of 2009 (Minnow 2010b). The Minnow 2009 evaluation report focused on defining background concentrations of key metals to represent Minto Creek as a whole and for potential application as site-specific water quality objectives in lower Minto Creek (Minnow 2009). The Minnow 2010 report characterizes water quality for discrete time intervals of relevance to the mine (Minnow 2010a). In 2014, Access Consulting Group (ACG) and Minnow worked in conjunction to update the water quality characterization for Minto Creek (including data collected between 2005 and 2012),

The present report constitutes an update to the 2014 characterization report of Minto Creek water quality and includes January 2005 to December 2015 monitoring data. Minto Creek water quality data have been reviewed for the pre-mine operation phase and for operations during periods of mine effluent discharge to Minto Creek and periods without mine effluent discharge. Water quality at key mine site monitoring locations/collection points that have the potential to discharge to Minto Creek have also been reviewed. Methods used in the evaluation of water quality data are summarized in Section 2 and results which form the basis of the characterization of water quality for Minto Creek are provided in Section 3.

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MINTO CREEK WATER QUALITY CHARACTERIZATION

FIGURE 1-1

PROJECT LOCATION

2 METHODS

2.1 WATER QUALITY DATA HANDLING AND SUMMARIZATION

2.1.1 Minto Creek

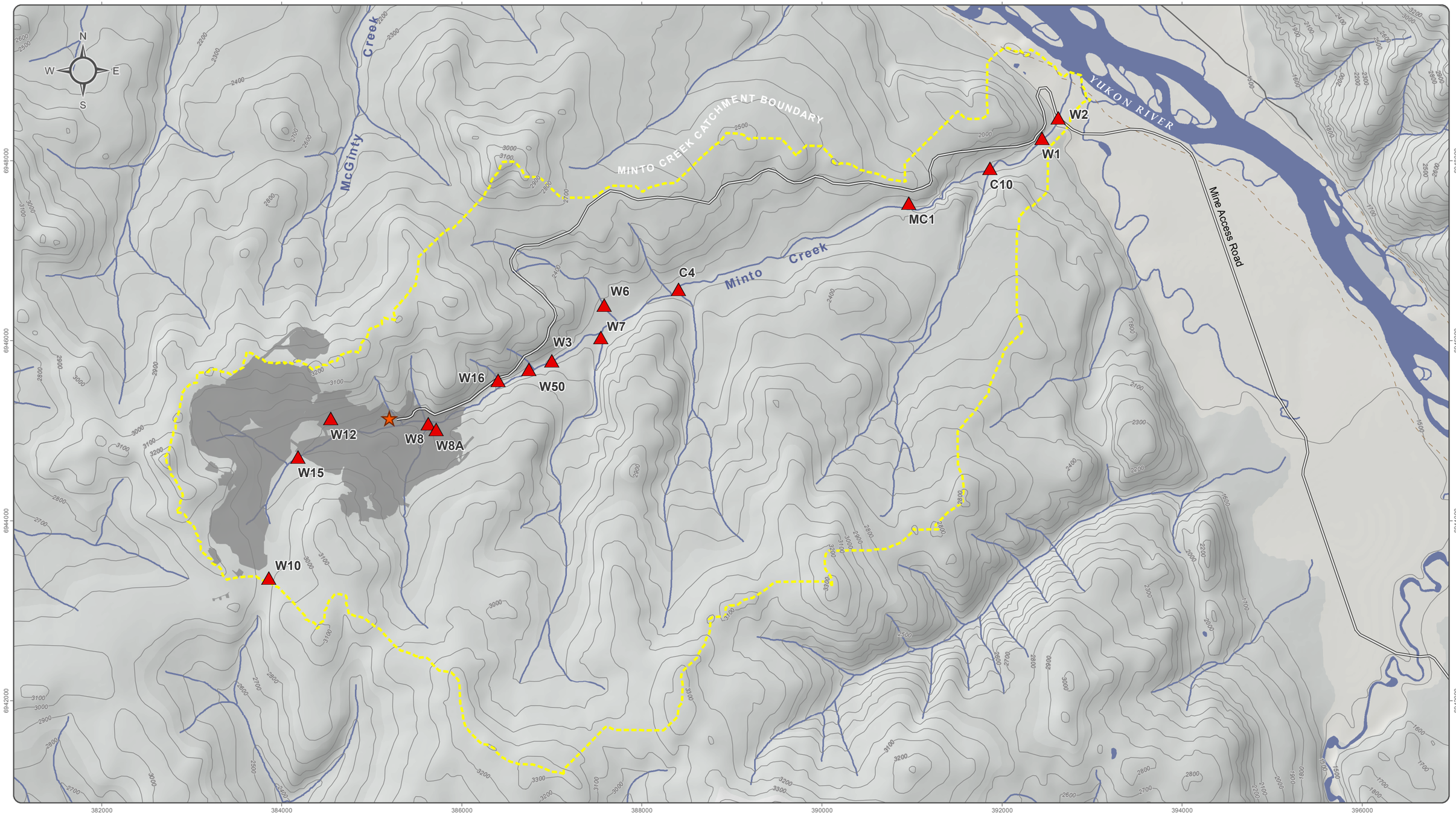
Water quality data were obtained from Minto Mine with the understanding that results have been subject to appropriate quality assurance and quality control procedures so that they may be used in the characterization of Minto Creek. An assessment of outliers has been carried out. Outliers are considered to be results >3 or <3 times the standard deviation of the entire set of results for each station. Outliers that were less than the reportable detection limit (RDL) values were removed from the dataset (not used in statistical analysis or graphs) and are shown in the summary tables provided in Appendix B and shaded for ease of reference.

Minto Creek has a number of water quality stations that have been monitored over the years. Seven Minto Creek monitoring stations are the focus of this report: W3, W7, W6, C4, MC1, C10, and W2, and are described in Table 2-1 and shown in Figure 2-1.

Table 2-1: Minto Creek Monitoring Station Locations.

Station	Description / Location
W3	Downstream of Water Storage Pond dam, MMER Final Discharge Point (Flume) – Effluent
W7	North-flowing Tributary to Minto Creek – Reference
W6	South-flowing Tributary to Minto Creek - Reference
C4	North-flowing Tributary to Minto Creek – Reference
MC1	Minto Canyon – Receiving Environment
C10	Northeast-flowing Tributary to Minto Creek – Reference
W2	Lower Minto-Creek at Road Crossing – Receiving Environment

As noted in Table 2-1, station W3—located downstream of the Water Storage Pond dam—is the mine effluent monitoring and compliance point per the Metal Mining Effluent Regulations (MMER). Station W2 is the lowermost Minto Creek receiving environment monitoring location before the confluence with the Yukon River, and is the "WQO Station" designated in the Water Use Licence (QZ94-031, August 5th 2015) during the period when flow is encountered at stations W15 and W35. Both W2 and W3 have been monitored regularly since 2005. Station MC1 in Minto Canyon serves as a comparison monitoring point between W3 and W2 and began regular monitoring in 2010. The remaining four stations are situated on tributaries to Minto Creek, serving as reference stations.



National Topographic Data Base (NTDB) compiled by Natural Resources Canada at a scale of 1:50,000. Cadastral data compiled by Natural Resources Canada. Reproduced underlicense from Her Majesty the Queen in Right of Canada, Department of Natural Resources Canada. All rights reserved.

Datum: NAD 83; Map Projection: UTM Zone 8N

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- Surface Water Quality Station
- Mine Footprint
- Minto Access Road
- Limited-use road
- Trail
- Contours (100ft)

1:40,000 (when printed on 11 x17 inch paper)

0 0.5 1 2 Kilometres

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MINTO CREEK WATER QUALITY CHARACTERIZATION

FIGURE 2-1
MINTO CREEK MONITORING STATION LOCATIONS

JULY 2016

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Station W7 is located on the most upstream and north-flowing tributary and has been monitored most consistently out of the tributary stations since 2005. Station W6 is located on a south-flowing Minto Creek tributary and has also been monitored 2005; however, monitoring results from W6 in 2009 to 2011 are not included in this report. The W6 station location was not consistent with field staff during the 2009 to 2011 period and an undetermined number of mainstem Minto Creek monitoring results were included with the W6 dataset, rendering results for those years unusable for characterizing water quality. Stations C4 and C10 have been monitored since 2012, when sediment-laden water was observed to be entering Minto Creek via these north- and northeast-flowing tributaries respectively. Sediment levels have since been observed to have subsided (see section 3.2).

For the most part, sampling occurs during the open water season between April and October. Table 2-2 outlines general sample frequency of Minto Creek stations by quarter for 2005 to 2015, although it does not necessarily reflect the number of times a site was visited if conditions were not conducive to sample collection. Table 2-2 provides general sample frequency only since a sample may include several parameters, only one or a few parameters, or results may be split into two samples on the same date.

Table 2-2: Minto Creek Sample Frequency by Quarter, 2005–2015.

	W2	W3	MC1	W7	W6	C4	C10	Samples per Quarter	% of Total Samples
Quarter 1	2	203	0	3	0	0	0	208	8.89%
Quarter 2	252	468	68	53	5	5	7	858	36.65%
Quarter 3	308	420	35	41	12	9	12	837	35.75%
Quarter 4	137	270	7	13	3	3	5	438	18.71%
Total Samples	699	1361	110	110	20	17	24	2341	100%

Minto Creek catchment water quality is divided into three phases:

- Pre-mine operation:
    - January 2005 to March 31, 2006;
- Operational phase with no mine discharge to Minto Creek:
    - April 1, 2006 to August 25, 2008;
    - October 1, 2008 to June 25, 2009;
    - August 7 to August 12, 2009;
    - October 31, 2009 to July 13, 2010;
    - October 28, 2010 to April 15, 2012;
    - May 12 2012 to April 19 2013
    - May 23 2013 to April 2 2014
    - May 27 2014 to December 17 2014
    - December 17 2014 to April 2 2015

    - June 2 2015 to December 31 2015

- Operational phase with mine discharge to Minto Creek:
    - August 26 to September 30, 2008;
    - June 26 to August 6, 2009;
    - August 13 to October 30, 2009;
    - July 14 to October 27, 2010;
    - April 16 to May 11, 2012;
    - April 20 to May 22 2013
    - April 3 to May 26 2014
    - December 8 to December 16 2014
    - April 3 to June 1 2015

This report focuses mainly on parameters within the Canadian Water Quality Guidelines (CWQG) for the protection of freshwater aquatic life (CCME 1999), as well as the water quality objectives defined in the QZ14-031 water license. Parameters examined include total and dissolved aluminum, arsenic, cadmium, chromium, copper, iron, lead, mercury, molybdenum, nickel, selenium, silver, thallium, zinc, as well as pH, nitrate, nitrite, ammonia, fluoride, and phosphorus (phosphorus analysis as part of metals analysis). Total suspended solids (TSS) and total dissolved solids (TDS) concentrations have also been considered.

The following calculations were conducted for the parameters of interest for the three discrete time intervals (undetected concentrations in water samples were replaced with ½ the RDL (reportable detection limit)):

- Average,
- Minimum,
- Maximum,
- standard deviation,
- Count (number of results for a particular parameter),
- Number of results below detection limit,
- Number of results and % above CWQG (for W-2 only), and
- Number of results and % above the Water Use Licence's Water Quality Objectives (for W-2 only)

2.1.2 Minto Mine Facilities

Water quality for seven monitoring stations around the Minto Mine facilities are also summarized in this report including W8, W8A, W12, W15, W16, and W35A. These stations are described in Table 2-3 and shown in Figure 2-1. Water quality is monitored at many more locations on the Minto site, but these seven stations are the most critical with respect to decisions regarding the conveyance, storage and treatment of site water.

Table 2-3: Minto Mine Monitoring Station Locations.

Station	Description / Location
W8	Drystack Tailings Facility drainage, west
W8A	Drystack Tailings Facility drainage, east
W12	Main Pit
W15	Minto Creek, d/s of Southwest Waste Rock Dump
W16	Water Storage Pond
W35A	Top of South Diversion Ditch
W50	Minto Creek, approx..50m d/s of toe of WSP dam

Stations W8 and W8A are the monitoring locations for the seepage from the Drystack Tailings Storage Facility (DSTSF). These DSTSF seepages have consistently returned the poorest drainage water quality on the Minto Site, and their location on the site downgradient of the storage location of the Main Pit makes them of critical concern to site water management.

Station W12 is the monitoring station in the Main Pit. The Main Pit has been used as the reservoir for any site water that could not be directly discharged. Given the water management constraints at the site (effluent and water quality standards) the Main Pit has received a significant influx of site water each year and has carried an inventory of runoff and impacted water each year since 2007. The W12 monitoring results determined ongoing site water treatment requirements and are of constant importance to water managers at the site.

Station W15 is a key water collection point downstream of the Southwest Waste Dump (SWD). Runoff and seepage water currently collects at W15 in a sump and then is conveyed to the Main Pit for treatment (if required) or off site for discharge if appropriate. Monitoring of the water quality at this location determines the fate of this runoff, and also provides an indication of altered seepage quality from the SWD.

Station W16 is the Water Storage Pond (WSP). This important site water management feature accepts water from all site diversions and drainage, with the exception of Water Treatment Plant effluent or other directly discharged runoff (although each of these is often combined with WSP water prior to discharge.) Results from monitoring at Station W16 determine the WSP's fitness for discharge, or alternatively any requirements to withhold or further treat the WSP water.

W35A is a monitoring station at the inlet to the South Diversion Ditch. It receives runoff from the Ridgetop exploration areas, the exploration camp and the airstrip, but the majority of the W35A catchment is undisturbed. The quality of this water determines its potential for direct site discharge, and as such monitoring at this location is of importance to site water managers.

W50 is located downstream of the inflow of the treated water and is a point of compliance for effluent standards outlined in WUL QZ14-031.

The following calculations were conducted for parameters of interest (undetected concentrations in water samples were substituted with ½ the RDL):

- Average concentration,
- Count (number of results for a particular parameter),
- Minimum concentration,
- Maximum concentration,
- Geometric mean,
- Number of results below detection limit,
- Standard deviation,
- 1st quartile,
- Median, and
- 3rd quartile

2.2 INTERPRETATION OF WATER QUALITY DATA

Minto Creek

The approach to interpreting Minto Creek water quality data involves the following steps to summarize and review monitoring results.

1. Average water quality at W2 was compared to the respective CWQG for freshwater aquatic life and to the water quality objectives (WQOs) specified in WUL QZ14-031 to help identify parameters with naturally high concentrations during three discrete time intervals.

2. The number and percentage of individual samples with parameter concentrations exceeding the CWQG and WQOs at W2 were also determined for the three discrete time intervals.

3. Concentrations during mine discharge periods and non-discharge periods were plotted separately over time and examined for trends.

Minto Mine Facilities

Water quality results from monitoring at key site water management locations at the Minto Mine facilities are also summarized in the following ways:

1. Summary statistics provided for parameters of interest.

2. Parameter concentrations plotted over time.

3 CHARACTERIZATION OF WATER QUALITY

3.1 MINTO CREEK WATER QUALITY BY PERIOD

Parameters with CWQGs as well as those which have associated WQOs within Water License QZ14-031 were examined for sample stations W3, W7, W6, C4, MC1, C10, and W2. The guidelines and objectives were developed for the protection of freshwater aquatic life and, as noted in the *Aquatic Resources Baseline Report* (ACG & Minnow 2012), fisheries resources have only been observed in lower Minto Creek. Guidelines and objectives apply to the receiving environment, which is defined as station W2 for Minto Creek, and associated water quality results are therefore compared to their respective CWQG or WQO.

Certain CWQGs are dependent on hardness at the time of sampling including total cadmium, copper, lead, and nickel. The CWQG is determined for these parameters on a sample-by-sample basis and the number and percent exceedances listed in Table 3-7 reflect these fluctuating CWQGs. Average CWQGs for these parameters have also been calculated for each of the time intervals based on an average hardness, allowing a comparison to be made with the average parameter concentration. The average CWQGs for each time interval are presented in Table 3-7.

Results below RDLs that are higher than the guideline or limit being compared against are also included as an exceedance. This type of exceedance mainly pertains to historic results prior to 2011 when poor (high) RDLs were in effect, mainly for mercury, cadmium, and phosphorus. Outliers that are <RDL have been removed from the results summaries. Results <RDL that have been removed from the station datasets summaries and that are not necessarily considered outliers include poor RDLs used for phosphorus and cadmium analysis. Phosphorus measurements in 2005 to mid-2006 have been removed due to a poor RDL which, even at half the RDL, is misleading to include with the dataset. Similarly, cadmium was measured in 2010 between May 21 and September 23 using a poor (high) RDL (<0.0001 mg/L), such that values are less than this elevated detection limit, and half the RDL is still in exceedance of the CWQG or WQO. This portion of misleading cadmium results has therefore been removed before calculating averages. Mercury results have been left as is, since most results are below detection and once the RDL improved and results were still below detection it is clear that mercury is not a parameter of concern.

Historically, a hardness result was not always provided, which has an impact on the CWQGs that are calculated based upon sample hardness including copper, lead, nickel, and cadmium. For copper, lead, and nickel in the absence of a hardness value, a lower limit to the guideline is applied by default; however, with no hardness available for the calculation of the cadmium guideline, an overall average hardness value is used to calculate the CWQG.

Please refer to Appendix B for the 2005–2015 water quality data, with data omitted from calculation of summary statistics shaded for easy reference.

Table 3-1: Minto Creek Monitoring Station W3: Summary of Water Quality Data.

Parameter	Units	Averages			Minimum			Maximum			Standard Deviation			Count			Count<DL		
		pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge
Metals																			
Aluminum (total)	mg/L	0.216	0.142	0.4295	0.006	0.0025	0.017	0.732	10.8	16.60	0.248	0.526	1.373	7	606	167	0	4	0
Aluminum (dissolved)	mg/L	0.017	0.0122	0.056	0.003	0.0015	0.002	0.027	0.297	0.121	0.009	0.022	0.032	7	548	145	0	159	4
Arsenic (total)	mg/L	0.0005	0.0004	0.00051	0.0002	0.00005	0.0001	0.0008	0.009	0.0062	0.0002	0.0005	0.0005	7	606	167	1	74	28
Arsenic (dissolved)	mg/L	0.0003	0.0003	0.0004	0.0002	0.0001	0.0002	0.0004	0.0022	0.0011	0.0001	0.0002	0.0002	7	548	145	3	62	18
Cadmium (total)	mg/L	0.00002	0.000809	0.000045	0.000008	0.000003	0.000005	0.000025	0.372000	0.00083	0.000008	0.015850	0.000093	7	554	103	7	316	14
Cadmium (dissolved)	mg/L	0.00002	0.001302	0.000020	0.000008	0.000005	0.000005	0.000025	0.565	0.00021	0.000008	0.02542	0.000028	7	496	82	7	304	30
Chromium (total)	mg/L	0.0006	0.0007	0.0011593	0.00025	0.0001	0.0005	0.0020	0.0170	0.0247	0.0006	0.0009	0.0023	7	606	167	5	464	141
Chromium (dissolved)	mg/L	0.0004	0.0006	0.0076	0.00025	0.00005	0.0002	0.0005	0.0098	0.0024	0.0001	0.0006	0.0003	7	569	146	7	452	139
Copper (total)	mg/L	0.0079	0.0082	0.02705	0.0017	0.001	0.0020	0.0149	0.211	0.2590	0.0043	0.0146	0.0407	7	606	167	0	57	10
Copper (dissolved)	mg/L	0.0047	0.0043	0.0009	0.0016	0.0005	0.0012	0.0066	0.067	0.0622	0.0017	0.0051	0.0116	7	548	145	0	4	0
Iron (total)	mg/L	0.532	0.229	0.58309	0.015	0.009	0.01	1.32	13.500	26.8	0.454	0.694	2.2	7	602	167	1	46	77
Iron (dissolved)	mg/L	0.203	0.045	0.057	0.015	0.0025	0.0025	0.421	0.750	0.64	0.167	0.058	0.107	7	548	145	1	35	67
Lead (total)	mg/L	0.00021	0.00022	0.00084	0.000025	0.0000030	0.00010	0.00036	0.0316	0.0935	0.00013	0.00131	0.0072	7	606	167	5	444	116
Lead (dissolved)	mg/L	0.00015	0.00022	0.0001	0.000025	0.00001	0.00005	0.00025	0.0603	0.00050	0.00012	0.00257	0.00005	7	548	145	6	479	138
Mercury (total)	mg/L	0.000010	0.000022	0.000046	0.000010	0.000005	0.000005	0.000010	0.00021	0.0004	0	0.00003	0.000052	3	535	167	3	511	142
Molybdenum (total)	mg/L	0.0014	0.0040	0.0123	0.0011	0.0004	0.0015	0.0019	0.06	0.1020	0.0003	0.0033	0.0086	7	606	167	0	4	0
Molybdenum (dissolved)	mg/L	0.0012	0.0040	0.0129	0.0005	0.0003	0.0015	0.0016	0.024	0.103	0.0004	0.0018	0.0089	7	548	145	1	1	1
Nickel (total)	mg/L	0.0015	0.00137	0.0028	0.00025	0.00025	0.0005	0.0026	0.03	0.1390	0.0007	0.0021	0.0110	7	606	167	1	191	45
Nickel (dissolved)	mg/L	0.0011	0.0009	0.0008	0.00025	0.00025	0.0005	0.0014	0.009	0.0060	0.0004	0.0008	0.0007	7	548	145	1	294	93
Selenium (total)	mg/L	0.0005	0.0006	0.0026	0.0005	0.0001	0.0002	0.0005	0.008	0.0324	0	0.0006	0.0028	7	606	167	7	183	12
Selenium (dissolved)	mg/L	0.0005	0.0005	0.0030	0.0005	0.0001	0.0002	0.0005	0.0069	0.0348	0	0.0006	0.0031	7	548	145	7	166	2
Silver (total)	mg/L	0.000014	0.000025	0.000030	0.000005	0.0000025	0.000005	0.000029	0.00038	0.00019	0.000010	0.000034	0.000029	7	603	167	5	537	154
Silver (dissolved)	mg/L	0.000007	0.000029	0.000027	0.000005	0.000003	0.000005	0.000010	0.0005	0.000050	0.000003	0.000073	0.000020	7	548	145	7	539	145
Thallium (total)	mg/L	0.000050	0.000025	0.000025	0.000050	0.000001	0.000005	0.000050	0.00009	0.000137	0	0.000011	0.000012	4	603	167	4	596	157
Zinc (total)	mg/L	0.0021	0.0059	0.0094	0.0005	0.0004	0.0025	0.0035	0.1570	0.1680	0.0010	0.0106	0.0177	7	606	167	6	402	104
Zinc (dissolved)	mg/L	0.0045	0.0039	0.00627931	0.0015	0.0005	0.0005	0.0116	0.091	0.1430	0.0040	0.0059	0.0144	7	548	145	3	364	127
Non-Metallic Parameters																			
Ammonia - N (total)	mg/L	0.025	0.0340	0.014	0.010	0.001	0.0025	0.070	0.62	0.620	0.023	0.053	0.101	7	513	153	4	137	13
Fluoride	mg/L	-	0.47	0.038	-	0.06	0.12	-	4.71	0.61	-	0.26	0.08	-	389	133	-	0	0
Nitrite (as N)	mg/L	0.0005	0.0161	0.089	0.0005	0.0005	0.0025	0.0005	4.04	0.347	0	0.179	0.06193279	7	513	160	7	412	7
Nitrate (as N)	mg/L	0.257	2.146	7.432	0.0025	0.0025	0.040	1.650	289	18.700	0.615	12.40	5.083	7	557	161	1	41	0
pH (field)	pH units	-	7.7	7.93	-	6.02	5.03	-	10.12	9.06	-	0.42	0.291096	-	471	363	-	0	0
pH (lab)	pH units	7.98	8.1	8.05	7.31	7.09	7.6	8.24	8.6	8.3	0.31	0.23	0.118906	7	590	239	-	0	0
Phosphorus (total)	mg/L	-	0.023	0.055	-	0.005	0.016	-	0.25	0.71	-	0.029	0.09057	-	390	59	-	255	2
Phosphorus (dissolved)	mg/L	-	0.009	0.013	-	0.005	0.005	-	0.16	0.025	-	0.012	0.00582	-	327	38	-	243	10
Hardness (from total)	mg/L	149.0	264.1	209.0	93.9	60	62	236	3040	389	48.4	179	43	6	424	150	0	0	0
Total Suspended Solids	mg/L	7.7	5.9	10.0		0.5	0.05		460	985		25	63.5		588	244	3	336	124
Total Dissolved Solids	mg/L	196	322.296	308.603	1.5	100	124	25.7	2900	510	8.6	149	65.6243	7	581	239	0	0	0

Table 3-2: Minto Creek Monitoring Station W7: Summary of Water Quality Data.

Parameter	Units	Averages			Minimum			Maximum			Standard Deviation			Count			Count<DL		
		pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge
Metals																			
Aluminum (total)	mg/L	0.486	0.942	0.2692	0.044	0.0087	0.0079	1.650	11.4000	1.3400	0.605	1.9820	0.3371	6	108	16	0	1	0
Aluminum (dissolved)	mg/L	0.015	0.0219	0.026	0.009	0.002	0.003	0.024	0.407	0.07	0.006	0.042	0.224	6	105	15	0	8	0
Arsenic (total)	mg/L	0.0007	0.0008	0.0004694	0.0005	0.0001	0.00019	0.0015	0.006	0.00074	0.0004	0.0008815	0.000157	6	108	16	0	4	0
Arsenic (dissolved)	mg/L	0.0004	0.0004	0.0004	0.00025	0.0001	0.0003	0.0005	0.0010	0.0005	0.0001	0.0002	0.0001	6	105	15	1	17	0
Cadmium (total)	mg/L	0.00003	0.000036	0.000077	0.000008	0.000005	0.000005	0.000061	0.00025	0.00091	0.000017	0.000048	0.002155	6	108	16	5	58	6
Cadmium (dissolved)	mg/L	0.00002	0.000020	0.000017	0.000008	0.000005	0.000005	0.000025	0.00028	0.0001	0.000009	0.000032	0.000016	6	105	15	6	85	9
Chromium (total)	mg/L	0.0014	0.0023	0.00095	0.0005	0.00025	0.0005	0.0037	0.025	0.0027	0.0012	0.00437	0.00066	6	108	16	1	57	11
Chromium (dissolved)	mg/L	0.0004	0.0007	0.0007	0.00025	0.0002	0.0005	0.0005	0.0020	0.0016	0.0001	0.0003	0.0003	6	105	15	6	82	13
Copper (total)	mg/L	0.0040	0.0052	0.00042613	0.0015	0.0005	0.001	0.0101	0.0285	0.0116	0.0035	0.00547	0.0027823	6	108	16	0	7	0
Copper (dissolved)	mg/L	0.0019	0.0018	0.0030	0.0012	0.0005	0.0010	0.0040	0.0154	0.0089	0.0011	0.0018	0.0021	6	105	15	0	7	0
Iron (total)	mg/L	1.03	1.580	0.53286	0.358	0.043	0.288	3.42	17.200	2.2	1.194	2.945	0.054385	6	108	16	0	4	0
Iron (dissolved)	mg/L	0.196	0.198	0.017	0.07	0.010	0.014	0.32	1.060	0.475	0.105	0.235	0.143	6	105	15	0	1	0
Lead (total)	mg/L	0.00035	0.00055	0.00025		0.00005	0.00010		0.00547	0.00150		0.00096	0.00034		108	16	2	50	11
Lead (dissolved)	mg/L	0.00014	0.00010	0.0002	0.00003	0.00005	0.00010	0.00025	0.0005	0.00170	0.00012	0.00005	0.00040	6	105	15	6	97	13
Mercury (total)	mg/L	0.000010	0.000083	0.000018	0.000010	0.000005	0.000005	0.000010	0.005	0.0001	0	0.000528	0.000032	3	88	15	3	86	15
Molybdenum (total)	mg/L	0.0010	0.0012	0.0011	0.0005	0.0002	0.0005	0.0012	0.0730	0.0021	0.0003	0.0005	0.0005	6	108	16	1	21	6
Molybdenum (dissolved)	mg/L	0.0009	0.0012	0.0009	0.0005	0.0001	0.0005	0.0013	0.0020	0.0018	0.0003	0.0005	0.0004	6	104	15	2	22	5
Nickel (total)	mg/L	0.0027	0.00332	0.0016	0.0014	0.00025	0.0005	0.0068	0.1100	0.0030	0.0021	0.0049	0.0008	6	108	16	0	16	3
Nickel (dissolved)	mg/L	0.0014	0.0011	0.0009	0.0009	0.00025	0.0005	0.0018	0.0040	0.0020	0.0004	0.0007	0.0004	6	105	15	0	36	6
Selenium (total)	mg/L	0.0005	0.0003	0.0003	0.0005	0.0001	0.0001	0.0005	0.0010	0.0008	0	0.0002	0.0002	6	108	16	6	43	6
Selenium (dissolved)	mg/L	0.0005	0.0002	0.0002	0.0005	0.00005	0.0001	0.0005	0.0022	0.0004	0	0.00024	0.0001	6	105	15	6	48	8
Silver (total)	mg/L	0.000008	0.000034	0.000019	0.000005	0.000005	0.000005	0.00001	0.0003	0.00006	0.000003	0.000038	0.000017	6	108	16	6	97	13
Silver (dissolved)	mg/L	0.000008	0.000029	0.000015	0.000005	0.000005	0.000005	0.00001	0.00050	0.000050	0.000003	0.000050	0.000014	6	105	15	6	104	15
Thallium (total)	mg/L	0.000080	0.000029	0.000021	0.000050	0.000005	0.000005	0.000100	0.00017	0.000025	0.000030	0.000018	0.000008	6	108	16	6	101	16
Zinc (total)	mg/L	0.0034	0.0067	0.00441	0.0010	0.0005	0.0025	0.0101	0.049	0.0090	0.0033	0.008	0.0024	6	108	16	4	56	10
Zinc (dissolved)	mg/L	0.0027	0.0031	0.00277	0.0005	0.0005	0.0010	0.0064	0.0100	0.0050	0.0020	0.0018	0.0010	6	105	15	4	80	13
Non-Metallic Parameters																			
Ammonia - N (total)	mg/L	0.013	0.0357	0.024	0.010	0.003	0.003	0.021	0.35	0.069	0.005	0.05	0.021	6	102	13	4	15	2
Fluoride	mg/L	-	0.27	0.245	-	0.08	0.06	-	0.66	0.53	-	0.11	0.16	-	71	12	-	0	0
Nitrite (as N)	mg/L	0.0009	0.0089	0.003	0.0005	0.0015	0.0025	0.0018	0.14	0.0101	0.0006	0.01809	0.00208	6	86	13	4	67	12
Nitrate (as N)	mg/L	0.101	0.120	0.064	0.023	0.0100	0.010	0.172	2.900	0.180	0.060	0.1	0.058	6	103	15	0	12	5
pH (field)	pH units	-	7.7	7.88	-	6.3	7.1	-	8.6	8.24	-	0.40	0.329156	-	64	16	-	0	0
pH (lab)	pH units	7.66	8.0	7.86	6.75	6.84	5.74	8.19	8.4	8.35	0.57	0.25	0.58177	6	107	17	-	0	0
Phosphorus (total)	mg/L	-	0.065	0.041	-	0.012	0.005	-	0.77	0.116	-	0.11	0.02929	-	65	12	-	4	2
Phosphorus (dissolved)	mg/L	-	0.019	0.020	-	0.005	0.005	-	0.15	0.035	-	0.02	0.00967	-	61	11	-	16	2
Hardness (from total)	mg/L	113.1	126.7	107.3	76.6	33.1	36.4	109.6	676	205	32.9	73.3	61	5	83	13	0	0	0
Total Suspended Solids	mg/L	72.6	44.741	11.8	3	0.5	0.5	361	705	55.3	141.6	100	14	6	105	17	0	19	3
Total Dissolved Solids	mg/L	150	154.74	160.1176	116	40	70	197	308	322	26	47.0	63	6	98	17	0	0	0

Table 3-3: Minto Creek Monitoring Station W6: Summary of Water Quality Data.

Parameter	Units	Averages			Minimum			Maximum			Standard Deviation			Count			Count<DL		
		pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge
Metals																			
Aluminum (total)	mg/L	0.179	2.157	0.6348	0.018	0.0175	0.022	0.598	20.8	1.76	0.223	4.5144	0.59683	6	32	5	0	0	0
Aluminum (dissolved)	mg/L	0.020	0.0107	0.022	0.006	0.0015	0.0072	0.077	0.0252	0.0591	0.028	0.0055	0.01884	6	27	5	0	17	0
Arsenic (total)	mg/L	0.0004	0.0014	0.000688	0.00025	0.0004	0.0001	0.0006	0.00898	0.0014	0.00015	0.0018817	0.0004146	6	32	5	2	7	1
Arsenic (dissolved)	mg/L	0.0003	0.0005	0.0004	0.00025	0.0004	0.0004	0.00042	0.0008	0.0004	0.00008	0.0001	0.0000	6	27	5	3	13	0
Cadmium (total)	mg/L	0.00002	0.000043	0.000018	0.000008	0.000005	0.000005	0.000025	0.00047	0.00003	0.000009	0.00009	0.000009	6	32	5	6	35	4
Cadmium (dissolved)	mg/L	0.00002	0.000006	0.000006	0.000008	0.000005	0.000050	0.000025	0.00003	0.0000	0.000009	0.00000	0.000003	6	27	5	6	46	8
Chromium (total)	mg/L	0.0006	0.0042	0.00126	0.00025	0.00025	0.0005	0.0015	0.0388	0.0029	0.0004	0.00823	0.00089	6	32	5	4	34	5
Chromium (dissolved)	mg/L	0.0004	0.0005	0.0007	0.00025	0.0003	0.0005	0.0005	0.0006	0.0013	0.0001	0.0001	0.0003	6	27	5	6	47	8
Copper (total)	mg/L	0.0031	0.0063	0.0040302	0.0011	0.00093	0.001	0.0118	0.0402	0.00697	0.0043	0.008999	0.00192	6	32	5	0	1	0
Copper (dissolved)	mg/L	0.0014	0.0013	0.0021	0.0010	0.0008	0.0011	0.0025	0.0030	0.0035	0.0006	0.0005	0.0008	6	27	5	0	6	1
Iron (total)	mg/L	0.343	3.209	1.044	0.088	0.050	0.09	1.08	29.800	2.57	0.375	6.484	0.83	6	32	5	0	2	0
Iron (dissolved)	mg/L	0.067	0.090	0.109	0.015	0.014	0.056	0.1	0.200	0.183	0.029	0.042	0.042	6	27	5	1	2	0
Lead (total)	mg/L	0.00021	0.00106	0.00009	0.000025	0.00005	0.00005	0.00035	0.00971	0.00010	0.00011	0.00212	0.00002	6	32	5	4	29	5
Lead (dissolved)	mg/L	0.00015	0.00010	0.0003	0.000025	0.00003	0.00005	0.00025	0.00010	0.00094	0.00012	0.00002	0.00033	6	27	5	5	47	9
Mercury (total)	mg/L	0.000010	0.000181	0.000005	0.000010	0.000005	0.000005	0.000010	0.005	0.000005	0	0.000911	0	3	29	5	3	47	10
Molybdenum (total)	mg/L	0.0006	0.0006	0.0005	0.0004	0.0004	0.0003	0.0013	0.0018	0.0005	0.00036	0.0003	0.0001	6	32	5	3	46	7
Molybdenum (dissolved)	mg/L	0.0005	0.0005	0.0005	0.0004	0.0003	0.0003	0.0008	0.0019	0.0005	0.00015	0.0003	0.0001	6	27	5	3	43	7
Nickel (total)	mg/L	0.0015	0.00505	0.0023	0.0011	0.00050	0.0010	0.0021	0.0348	0.0042	0.0004	0.0075	0.0011	6	32	5	0	10	0
Nickel (dissolved)	mg/L	0.0011	0.0012	0.0013	0.0006	0.00050	0.0010	0.0015	0.0018	0.0020	0.0003	0.0003	0.0003	6	27	5	0	17	1
Selenium (total)	mg/L	0.0005	0.0002	0.0001	0.0005	0.0001	0.0001	0.0005	0.0007	0.0003	0	0.0002	0.0001	6	32	5	6	33	8
Selenium (dissolved)	mg/L	0.0005	0.0001	0.0003	0.0005	0.00005	0.00005	0.0005	0.0005	0.0012	0	0.00009	0.00046	6	27	5	6	40	6
Silver (total)	mg/L	0.000008	0.000032	0.000024	0.01810	0.00001	0.00001	0.59800	0.00017	0.00008	0.22330	0.00004	0.00003	6	32	5	6	42	10
Silver (dissolved)	mg/L	0.000008	0.000011	0.000009	0.000005	0.000005	0.000005	0.000010	0.00005	0.000010	0.000003	0.000008	0.000002	6	27	5	6	51	10
Thallium (total)	mg/L	0.000080	0.000035	0.000021	0.00005	0.000005	0.000005	0.000100	0.00001	0.000025	0.000030	0.000027	0.000008	6	32	5	6	50	11
Zinc (total)	mg/L	0.0021	0.0106	0.0043		0.0005	0.0025		0.073	0.0068		0.016	0.0017		32	5	6	36	5
Zinc (dissolved)	mg/L	0.0054	0.0025	0.0026	0.0005	0.0020	0.0025	0.0030	0.003	0.0030	0.0009	0.000	0.0002	6	27	5	3	45	8
Non-Metallic Parameters																			
Ammonia - N (total)	mg/L	0.010	0.0262	0.048	0.010	0.005	0.019	0.010	0.140	0.130	0	0.025	0.041	6	30	5	6	6	2
Fluoride	mg/L	-	0.25	0.136	-	0.18	0.08	-	0.36	0.22	-	0.03	0.05	-	27	4	-	0	0
Nitrite (as N)	mg/L	0.0007	0.0066	0.003	0.0005	0.0005	0.0025	0.0016	0.07	0.005	0.0004	0.0127	0.001	6	30	5	5	44	8
Nitrate (as N)	mg/L	0.012	0.026	0.014	0.0025	0.01	0.005	0.032	0.10	0.037	0.012	0.023	0.011	6	32	5	2	31	7
pH (field)	pH units	-	7.8	7.69	-	6.69	7.55	-	8.30	7.92	-	0.34	0.16	-	26	3	-	0	0
pH (lab)	pH units	7.9	8.0	7.77	7.41	7.64	7.48	8.17	8.29	7.88	0.26	0.13	0.15	6	32	5	-	0	0
Phosphorus (total)	mg/L	-	0.139	0.076	-	0.011	0.02	-	0.99	0.175	-	0.23	0.05	-	29	5	-	2	1
Phosphorus (dissolved)	mg/L	-	0.010	0.024	-	0.005	0.011	-	0.015	0.044	-	0.004	0.011	-	25	5	-	14	0
Hardness (from total)	mg/L	109.3	120.9	62.0	65.4	81	33.8	171	182	109	38.3	28.2	28.21	5	29	4	0	0	0
Total Suspended Solids	mg/L	9	151.371	67.0	1.5	0.5	4	22.2	1160	301	8.3	297.0	117.025	6	31	5	2	3	3
Total Dissolved Solids	mg/L	139	141.903	103.6	103	90	84	198	230	150	32	29.7	23.6102	6	31	5	0	0	0

Table 3-4: Minto Creek Monitoring Station C4: Summary of Water Quality Data.

Parameter	Units	Averages		Minimum		Maximum		Standard Deviation		Count		Count<DL	
		operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge
Metals													
Aluminum (total)	mg/L	4.562	11.253	0.025	0.189	20.40	29.700	5.817	14.713	19	5	0	0
Aluminum (dissolved)	mg/L	0.028	0.0345	0.012	0.009	0.059	0.062	0.013	0.024	19	5	0	0
Arsenic (total)	mg/L	0.0043	0.0056	0.0010	0.0005	0.0123	0.0127	0.0033	0.0064	19	5	0	0
Arsenic (dissolved)	mg/L	0.0017	0.0008	0.0007	0.0003	0.0056	0.0012	0.0011	0.00039	19	5	0	0
Cadmium (total)	mg/L	0.00009	0.000190	0.000005	0.000015	0.0	0.000470	0.000102	0.000232	19	5	3	0
Cadmium (dissolved)	mg/L	0.00001	0.000016	0.000005	0.000005	0.000022	0.000029	0.000004	0.000009	19	5	16	1
Chromium (total)	mg/L	0.0094	0.0226	0.0005	0.0005	0.0426	0.0600	0.0118	0.0295	19	5	5	2
Chromium (dissolved)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0013	0.0005	0.0002	0.0000	19	5	18	5
Copper (total)	mg/L	0.0122	0.0309	0.0012	0.0038	0.0479	0.0660	0.0134	0.0290	19	5	0	0
Copper (dissolved)	mg/L	0.0013	0.0045	0.0010	0.0011	0.0018	0.0095	0.0003	0.0034	19	5	0	0
Iron (total)	mg/L	10.493	19.629	0.821	0.3	36.20	49.1	10.262	25.438	19	5	0	0
Iron (dissolved)	mg/L	1.801	0.649	0.322	0.056	14.200	1.580	3.032	0.669	19	5	0	0
Lead (total)	mg/L	0.00238	0.00575	0.00010	0.00010	0.00977	0.01520	0.00293	0.00750	19	5	8	2
Lead (dissolved)	mg/L	0.00010	0.00012	0.00010	0.00010	0.00010	0.00022	0.00000	0	19	5	19	4
Mercury (total)	mg/L	0.000008	0.000005	0.000005	0.000005	0.000033	0.000005	0.000007	0.000000	19	5	16	5
Molybdenum (total)	mg/L	0.0011	0.0021	0.0005	0.0005	0.0023	0.0074	0.0005	0.0030	19	5	7	3
Molybdenum (dissolved)	mg/L	0.0010	0.0018	0.0005	0.0005	0.0018	0.0068	0.0004	0.0028	19	5	5	4
Nickel (total)	mg/L	0.0123	0.02150	0.0019	0.0016	0.0483	0.0499	0.0130	0.0259	19	5	0	0
Nickel (dissolved)	mg/L	0.0026	0.0015	0.0017	0.0005	0.0061	0.0023	0.0009	0.0007	19	5	0	1
Selenium (total)	mg/L	0.0002	0.0005	0.0001	0.0001	0.0007	0.0008	0.0002	0.0003	19	5	3	1
Selenium (dissolved)	mg/L	0.0001	0.0002	0.00005	0.0001	0.0002	0.0007	0.0001	0.0003	19	5	10	4
Silver (total)	mg/L	0.000037	0.000084	0.000010	0.000010	0.000124	0.000210	0.000034	0.000102	19	5	9	3
Silver (dissolved)	mg/L	0.000010	0.000010	0.000010	0.000010	0.000010	0.000010	0.000000	0.000000	19	5	19	5
Thallium (total)	mg/L	0.000043	0.000101	0.000025	0.000025	0.000122	0.000244	0.000029	0	19	5	12	3
Zinc (total)	mg/L	0.0205	0.0472	0.0025	0.0025	0.0872	0.1290	0.0236	0.0608	19	5	8	2
Zinc (dissolved)	mg/L	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0000	0.0000	19	5	19	5
Non-Metallic Parameters													
Ammonia - N (total)	mg/L	0.119	0.0960	0.0050	0.0240	0.360	0.260	0.094	0.095	19	5	0	0
Fluoride	mg/L	0.24	0.24	0.19	0.13	0.43	0.44	0.05	0.14	19	5	0	0
Nitrite (as N)	mg/L	0.0067	0.0073	0.0025	0.0025	0.025	0.0229	0.0062	0.0089	19	5	11	3
Nitrate (as N)	mg/L	0.078	0.476	0.010	0.010	0.371	2.310	0.074	1.025	19	5	2	2
pH (field)	pH units	7.73	7.8	7.16	7.51	8.2	7.95	0.29	0.17	19	5	0	0
pH (lab)	pH units	8.1	7.9	7.9	7.59	8.29	8.14	0.12	0.23	19	5	0	0
Phosphorus (total)	mg/L	0.326	0.544	0.036	0.044	1.28	1.41	0.355	0.662	19	5	0	0
Phosphorus (dissolved)	mg/L	0.039	0.031	0.019	0.016	0.117	0.04	0.022	0.01	19	5	0	0
Hardness (from total)	mg/L	165.0	138.2	133	53.8	264	252	34	71.7	19	5	0	0
Total Suspended Solids	mg/L	243.8	449.2	2.3	3.3	886	1260	305.6	591.8	19	5	0	0
Total Dissolved Solids	mg/L	188	146	144	84	272	318	29	97	19	5	0	0

Table 3-5: Minto Creek Monitoring Station MC-1: Summary of Water Quality Data.

Parameter	Units	Averages		Minimum		Maximum		Standard Deviation		Count		Count<DL	
		operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge
Metals													
Aluminum (total)	mg/L	1.215	1.331	0.008	0.010	14.90	9.380	2.674	2.397	173	35	0	0
Aluminum (dissolved)	mg/L	0.016	0.021	0.004	0.003	0.070	0.045	0.012	0.011	171	35	14	0
Arsenic (total)	mg/L	0.0012	0.0012	0.0002	0.0002	0.0079	0.0056	0.0013	0.0014	173	35	4	0
Arsenic (dissolved)	mg/L	0.0006	0.0005	0.0002	0.0003	0.0013	0.0008	0.0002	0.00010	171	35	4	0
Cadmium (total)	mg/L	0.000036	0.000045	0.000005	0.000005	0.0005	0.000187	0.000062	0.000050	173	25	86	3
Cadmium (dissolved)	mg/L	0.000014	0.000012	0.000005	0.000005	0.000060	0.000200	0.000016	0.000008	171	26	107	12
Chromium (total)	mg/L	0.0027	0.0029	0.0005	0.0005	0.0330	0.0176	0.0052	0.0045	173	35	107	23
Chromium (dissolved)	mg/L	0.0006	0.0006	0.0002	0.0005	0.0021	0.0010	0.0002	0.0002	171	35	170	35
Copper (total)	mg/L	0.0062	0.0119	0.0013	0.0030	0.0488	0.0426	0.0075	0.0106	173	35	3	0
Copper (dissolved)	mg/L	0.0023	0.0047	0.0010	0.0019	0.0099	0.0812	0.0013	0.0022	171	35	0	0
Iron (total)	mg/L	2.213	2.391	0.047	0.051	23.90	16.7	4.296	4.2358	173	35	0	0
Iron (dissolved)	mg/L	0.273	0.155	0.024	0.028	1.110	0.403	0.228	0.111	171	35	0	0
Lead (total)	mg/L	0.00059	0.00072	0.00010	0.00010	0.00652	0.00479	0.00113	0.00128	173	35	97	20
Lead (dissolved)	mg/L	0.00010	0.00010	0.00010	0.00010	0.00048	0.00010	0.00003	0	171	35	168	35
Mercury (total)	mg/L	0.000017	0.000031	0.000005	0.000005	0.000100	0.000100	0.000030	0.000041	172	35	164	34
Molybdenum (total)	mg/L	0.0014	0.0036	0.0004	0.0005	0.0035	0.0090	0.0005	0.0026	173	35	19	2
Molybdenum (dissolved)	mg/L	0.0014	0.0035	0.0003	0.0005	0.0040	0.0080	0.0005	0.0027	171	35	19	4
Nickel (total)	mg/L	0.0035983	0.00408	0.0005	0.0005	0.0330	0.0223	0.0052	0.0056	173	35	19	8
Nickel (dissolved)	mg/L	0.0012398	0.0009	0.0005	0.0005	0.0040	0.0016	0.0006	0.0004	171	35	38	15
Selenium (total)	mg/L	0.0002	0.0008	0.0001	0.0001	0.0009	0.0022	0.0001	0.0006	173	35	39	1
Selenium (dissolved)	mg/L	0.0002	0.0007	0.00005	0.0001	0.0008	0.0022	0.0001	0.0007	171	35	46	0
Silver (total)	mg/L	0.00002	0.0000244	0.000005	0.000010	0.002620	0.000063	0.000265	0.000019	173	35	143	30
Silver (dissolved)	mg/L	0.000015	0.00002	0.000005	0.000010	0.000050	0.000050	0.000013	0.000017	171	35	170	35
Thallium (total)	mg/L	0.000029	0.000029	0.000005	0.000025	0.000130	0.000075	0.000018	0.000013	173	35	161	32
Zinc (total)	mg/L	0.0069	0.0081	0.0020	0.0025	0.0560	0.0407	0.0010	0.0101	173	35	119	23
Zinc (dissolved)	mg/L	0.0032	0.0031	0.0005	0.0025	0.0334	0.0050	0.0027	0.0011	171	35	164	35
Non-Metallic Parameters													
Ammonia - N (total)	mg/L	0.039	0.040	0.0025	0.0025	0.360	0.200	0.045	0.039	171	34	10	2
Fluoride	mg/L	0.35594	0.29	0.11	0.13	1.10	0.51	0.12	0.10	158	33	0	0
Nitrite (as N)	mg/L	0.004789	0.01085	0.0025	0.0025	0.0342	0.032	0.0058292	0.00765	172	35	142	12
Nitrate (as N)	mg/L	0.166	2.027	0.010	0.010	2.250	7.300	0.214	2.201	172	35	20	1
pH (field)	pH units	7.98	7.87	7.28	7.31	12.41	8.6	0.48	0.3	151	49	0	0
pH (lab)	pH units	8.16	8.07	7.5	7.65	8.54	8.36	0.15	0.2	173	35	0	0
Phosphorus (total)	mg/L	0.0894306	0.15971	0.01	0.019	0.788	0.672	0.1403484	0.21071	144	24	0	0
Phosphorus (dissolved)	mg/L	0.0194085	0.026	0.005	0.011	0.069	0.065	0.0088119	0.013	142	24	8	0
Hardness (from total)	mg/L	166.2	145	43.5	61	771	233	73.6	46	173	35	0	0
Total Suspended Solids	mg/L	54.6	79.0	0.5	0.5	660	727	118.6	164.6	173	35	22	4
Total Dissolved Solids	mg/L	204.2	207.8	56	106	746	320	74.8	62.8	173	35	0	0

Table 3-6: Minto Creek Monitoring Station C10: Summary of Water Quality Data.

Parameter	Units	Averages		Minimum		Maximum		Standard Deviation		Count		Count<DL	
		operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge	operation no discharge	operation with discharge
Metals													
Aluminum (total)	mg/L	7.821	7.139	0.023	0.377	39.60	13.900	12.517	9.562	15	2	0	0
Aluminum (dissolved)	mg/L	0.029	2.9274	0.009	0.015	0.079	5.840	0.021	4.119	15	2	0	0
Arsenic (total)	mg/L	0.0053	0.0054	0.0007	0.0006	0.0208	0.0102	0.0065	0.0068	15	2	0	0
Arsenic (dissolved)	mg/L	0.0012	0.0030	0.0005	0.0004	0.0016	0.0055	0.0003	0.00361	15	2	0	0
Cadmium (total)	mg/L	0.00018	0.000185	0.000005	0.000038	0.0	0.000331	0.000287	0.000207	15	2	2	0
Cadmium (dissolved)	mg/L	0.00001	0.000182	0.000005	0.000019	0.000019	0.000344	0.000005	0.000230	15	2	12	0
Chromium (total)	mg/L	0.0148	0.0130	0.0005	0.0005	0.0779	0.0255	0.0237	0.0177	15	2	4	1
Chromium (dissolved)	mg/L	0.0006	0.0049	0.0005	0.0005	0.0017	0.0093	0.0003	0.0062	15	2	14	1
Copper (total)	mg/L	0.0209	0.0235	0.0012	0.0066	0.1000	0.0405	0.0315	0.0240	15	2	0	0
Copper (dissolved)	mg/L	0.0015	0.0181	0.0009	0.0023	0.0031	0.0339	0.0006	0.0223	15	2	0	0
Iron (total)	mg/L	15.005	16.334	0.459	0.868	73.20	31.8	22.553	21.872	15	2	0	0
Iron (dissolved)	mg/L	0.883	10.020	0.358	0.141	1.550	19.900	0.331	13.972	15	2	0	0
Lead (total)	mg/L	0.00413	0.00380	0.00010	0.00026	0.02140	0.00734	0.00672	0.00501	15	2	4	0
Lead (dissolved)	mg/L	0.00015	0.00391	0.00010	0.00010	0.00067	0.00772	0.00015	0	15	2	13	1
Mercury (total)	mg/L	0.000009	0.000005	0.000005	0.000005	0.000062	0.000005	0.000015	0.000000	15	2	14	2
Molybdenum (total)	mg/L	0.0010	0.0008	0.0005	0.0005	0.0023	0.0010	0.0007	0.0004	15	2	8	2
Molybdenum (dissolved)	mg/L	0.0008	0.0008	0.0005	0.0005	0.0019	0.0012	0.0005	0.0005	15	2	9	1
Nickel (total)	mg/L	0.0169	0.01890	0.0016	0.0018	0.0740	0.0359	0.0239	0.0241	15	2	0	0
Nickel (dissolved)	mg/L	0.0021	0.0110	0.0015	0.0005	0.0025	0.0215	0.0003	0.0148	15	2	0	1
Selenium (total)	mg/L	0.0003	0.0002	0.0001	0.0001	0.0012	0.0004	0.0004	0.0002	15	2	4	0
Selenium (dissolved)	mg/L	0.0001	0.0001	0.00005	0.0001	0.0001	0.0001	0.0000	0.0001	15	2	9	1
Silver (total)	mg/L	0.000075	0.000031	0.000010	0.000010	0.000337	0.000053	0.000106	0.000030	15	2	9	1
Silver (dissolved)	mg/L	0.000010	0.000038	0.000010	0.000010	0.000010	0.000066	0.000000	0.000040	15	2	15	1
Thallium (total)	mg/L	0.000089	0.000077	0.000025	0.000025	0.000369	0.000130	0.000110	0	15	2	10	1
Zinc (total)	mg/L	0.0375	0.0503	0.0025	0.0086	0.1860	0.0920	0.0588	0.0590	15	2	6	0
Zinc (dissolved)	mg/L	0.003	0.0314	0.0025	0.0025	0.0104	0.0603	0.0020	0.0409	15	2	14	1
Non-Metallic Parameters													
Ammonia - N (total)	mg/L	0.085	0.0760	0.0025	0.0230	0.200	0.130	0.066	0.076	15	2	1	0
Fluoride	mg/L	0.46	0.14	0.16	0.11	4.00	0.18	0.98	0.05	15	2	0	0
Nitrite (as N)	mg/L	0.0094	0.0185	0.0025	0.0025	0.025	0.0344	0.0078	0.0226	15	2	7	1
Nitrate (as N)	mg/L	0.151	0.010	0.022	0.010	0.417	0.010	0.091	0.000	15	2	1	2
pH (field)	pH units	8.24	7.7	7.78	7.52	8.71	7.79	0.23	0.19	15	2	0	0
pH (lab)	pH units	8.17	7.9	7.73	7.83	8.37	7.99	0.15	0.11	15	2	0	0
Phosphorus (total)	mg/L	0.43	0.544	0.025	0.176	2.08	0.913	0.646	0.521	15	2	0	0
Phosphorus (dissolved)	mg/L	0.033	0.398	0.021	0.067	0.053	0.73	0.008	0.469	15	2	0	0
Hardness (from total)	mg/L	173.0	92.8	133	59.5	264	126	40	47	15	2	0	0
Total Suspended Solids	mg/L	442.8	326.4	0.5	38.9	2210	614	729.5	406.7	15	2	1	0
Total Dissolved Solids	mg/L	185	130	132	124	218	136	24	8	15	2	0	0

Table 3-7: Minto Creek Monitoring Station W2: Summary of Water Quality Data.

Parameter	Units	CWQG Pre-op / Op. no disch/ Op. wt Disch	W2 Water License Water Quality Objectives August 5th 2015	Averages[d]			Miniumum			Maximum			Standard Deviation			Count			Count<DL			Count & %>CWQG[g]			Count & %>WL[g]		
				pre-operation[a]	operation no discharge[b]	operation with discharge[c]	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge	pre-operation	operation no discharge	operation with discharge
Metals																											
Aluminum (total)	mg/L	**0.1**	-	0.258	1.380	0.7855	0.0021	0.0050	0.0070	0.0049	**30.7000**	11.3000	0.0010	3.6160	1.8488	7	338	168	0	3	0	n = 3; 43%	n=189; 54.9%	n=106; 63.5%	0	-	-
Aluminum (dissolved)	mg/L	-	**0.1**	0.012	0.0187	0.022	0.011	0.003	0.002	1.140	0.103	0.20	0.407	0.018	0.018	7	301	164	0	53	3	0	0	-	-	n=2; 0.7%	n=1; 0.6%
Arsenic (total)	mg/L	**0.005**	-	0.0007	0.0012	0.00083		0.0001	0.0002		0.0151	0.00637		0.00176	0.00096		338	168	0	39	15	0	n=15; 4.4%	n=4; 2.4%	0	-	-
Arsenic (dissolved)	mg/L	-	**0.005**	0.0005	0.0005	0.0005	0.0005	0.0001	0.0002	0.0010	0.0018	0.0012	0.0002	0.0002	0.0001	7	301	164	1	42	5	-	-	-	-	-	-
Cadmium (total)	mg/L	**0.0002 / 0.0002 / 0.0002**[d]	-	0.00002	0.000055	0.000042	0.000250	0.000005	0.000005	0.002700	0.001	0.00026	0.000870	0.000113	0.000055	7	287	97	7	187	94	0	n=18; 5.2%	n=4; 2.4%	0	-	-
Cadmium (dissolved)	mg/L	-	**0.0003**[d]	0.00002	0.000020	0.000012	0.000008	0.000005	0.000005	0.000025	0.001	0.0002	0.000009	0.000080	0.000023	6	250	198	6	224	103	-	-	-	-	n=1; 0.3%	-
Chromium (total)	mg/L	**0.001**	-	0.0009	0.0030	0.00185		0.0002	0.0005		0.0582	0.0211		0.00674	0.00326		338	168	4	195	127	n = 2; 29%	n=165; 48%	n=104; 62.3%	0	-	-
Chromium (dissolved)	mg/L	-	**0.001**	0.0004	0.0006	0.0007	0.0003	0.0002	0.0005	0.0005	0.0069	0.0021	0.0001	0.0004	0.0003	6	311	166	6	284	163	-	-	-	-	n=61; 19.4%	n=2; 1.2%
Copper (total)	mg/L	**0.0003 / 0.004 / 0.003**[d]	-	0.0034	0.0078	0.01006		0.0012	0.0001		0.125	0.0656		0.01186	0.01201		338	168	0	1	1	n = 4; 57%	n=187; 54.4%	n=121; 46.4%	0	-	-
Copper (dissolved)	mg/L	-	**0.013**	0.0025	0.0028	0.0038	0.0021	0.0005	0.0010	0.0033	0.0161	0.0227	0.0005	0.0020	0.0039	6	301	164	0	2	0	-	-	-	-	n=2; 0.7%	n=7; 4.3%
Iron (total)	mg/L	**0.3**	-	0.555	2.404	1.39144	0.052	0.025	0.021	1.49	51.500	18.5	0.494	5.915	3.02852	7	338	168	0	17	0	n = 5; 71%	n=183; 53.2%	n=88; 33.7%	0	-	-
Iron (dissolved)	mg/L	-	**1.1**	0.178	0.202	0.108	0.039	0.010	0.221	0.338	0.905	0.761	0.118	0.208	0.118	6	301	164	0	16	0	-	-	-	-	-	-
Lead (total)	mg/L	**0.004 / 0.006 / 0.005**[d]	-	0.00022	0.00074	0.00064	0.00003	0.00003	0.0001	0.00066	0.01550	0.029	0.00022	0.00173	0.00238	7	338	168	5	180	102	0	n=19; 5.5%	n=5; 3%	0	-	-
Lead (dissolved)	mg/L	-	**0.004**	0.00014	0.00010	0.0001	0.0000	0.0000	0.0001	0.00025	0.00090	0.0003	0.00012	0.00006	0.00017	6	301	164	6	284	160	-	-	-	-	-	-
Mercury (total)	mg/L	**0.000026**	-	0.000010	0.000026	0.000049	0.000010	0.000005	0.0005	0.000010	0.000100	0.016	0	0.000346	0.0031	3	280	168	3	256	148	0	n=72; 25.4%	n=80; 47.9%	-	-	-
Molybdenum (total)	mg/L	**0.073**	-	0.0009	0.0014	0.0058	0.0005	0.0002	0.0005	0.0013	0.0100	0.0170	0.0003	0.0010	0.0031	6	338	168	2	39	9	0	-	0	0	-	-
Molybdenum (dissolved)	mg/L	-	**0.073**	0.0009	0.0014	0.0057	0.0005	0.0002	0.0005	0.0013	0.0090	0.0150	0.0003	0.0010	0.0029	6	301	164	2	41	12	-	-	-	-	-	-
Nickel (total)	mg/L	**0.11 / 0.15 / 0.13**[d]	-	0.0019	0.00376	0.0028	0.0011	0.00025	0.0005	0.0033	0.0629	0.0235	0.0008	0.0069	0.0034	7	338	168	0	45	12	0	-	0	0	-	-
Nickel (dissolved)	mg/L	-	**0.11**	0.0014	0.0012	0.0009	0.0010	0.00025	0.0005	0.0017	0.0040	0.0020	0.0003	0.0006	0.0004	6	301	164	0	82	55	-	-	-	-	-	-
Selenium (total)	mg/L	**0.001**	-	0.0005	0.0003	0.0013	0.0005	0.0001	0.0001	0.0005	0.0025	0.0044	0	0.0003	0.0008	6	338	168	6	163	17	0	n=8; 2.3%	n=100; 59.9%	0	-	-
Selenium (dissolved)	mg/L	-	**0.002**	0.0005	0.0002	0.0013	0.0005	0.00005	0.0001	0.0005	0.0024	0.0026	0	0.00030	0.0008	6	301	164	6	142	14	-	-	-	-	n=4; 1.3%	n=46; 28.2%
Silver (total)	mg/L	**0.00025**	-	0.000008	0.000033	0.000031	0.000005	0.000005	0.000005	0.000010	0.000680	0.000160	0.000003	0.000050	0.000023	6	337	168	6	263	149	0	n=3; 0.9%	0	-	-	-
Silver (dissolved)	mg/L		**0.0001**	0.000008	0.000026	0.000027	0.000005	0.000005	0.000005	0.000010	0.000500	0.000050	0.000003	0.000054	0.00002	6	301	164	6	303	163	-	0	-	0	n=4; 1.3%	-
Thallium (total)	mg/L	**0.0008**	-	0.000080	0.000034	0.000027	0.000050	0.000005	0.000005	0.000030	0.00025	0.000129	0.000030	0.000030	0.000015	6	338	168	6	312	160	0	-	0	-	-	-
Zinc (total)	mg/L	**0.03**	-	0.0022	0.0091	0.00702	0.0005	0.0005	0.0025	0.0019	0.136	0.0484	0.0019	0.015	0.0075	7	338	168	5	167	120	0	n=19; 5.5%	n=6; 3.6%	0	-	-
Zinc (dissolved)	mg/L	-	**0.03**	0.0018	0.0032	0.00362	0.0005	0.0005	0.0025	0.0025	0.0200	0.0100	0.0009	0.0022	0.0013	6	301	164	4	252	160	-	-	-	-	-	-
Non-Metallic Parameters																											
Ammonia - N (total)	mg/L	**0.197**[e]	**0.25**	0.015	0.041	0.038	0.010	0.001	0.003	0.029	0.550	0.830	0.009	0.060	0.074	7	297	168	5	54	32	0	n=4; 1.3%	n=2; 1.1%	0	-	n=2; 1.2%
Fluoride	mg/L	**0.12**	-	-	0.31	0.322	-	0.03	0.04	-	0.80	0.75	-	0.11	0.09	-	263	157	-	0	0	-	n=262; 96%	n=152; 97.4%	-	-	-
Nitrite (as N)	mg/L	**0.06**	**0.06**	0.0007	0.0060	0.013	0.0005	0.0005	0.0025	0.0015	0.0439	0.125	0.0004	0.008	0.01312	7	304	172	5	224	45	0	0	n=1; 0.6%	0	-	n=1; 0.6%
Nitrate (as N)	mg/L	**3**	**9.1**	0.051	0.343	3.949	0.012	0.0025	0.010	0.133	8.900	8.8	0.041	1.1	2.615	7	324	172	0	55	3	0	n=14; 4.2%	n=105; 61.4%	0	n=1; 0.3%	-
pH (field)	pH units	**6.5 - 9.0**	**6.0-9.0**	-	7.9	8.08	-	6.3	7.11	-	9.4	8.94	-	0.35	0.26429	-	279	271	-	0	0	0	n=2; 0.7%	0	-	-	-
pH (lab)	pH units	**6.5 - 9.0**	**6.0-9.0**	8.08	8.1	8.11	7.9	7	7.17	8.26	8.5	8.43	0.12	0.23	0.13304	7	336	250	-	0	0	0	0	0	0	-	-
Phosphorus (total)	mg/L	-	-	-	0.121	0.153	-	0.005	0.024	-	1.65	0.679	-	0.22	0.143236	-	203	42	-	57	0	-	-	-	-	-	-
Phosphorus (dissolved)	mg/L	-	-	-	0.020	0.030	-	0.005	0.01	-	0.11	0.125	-	0.016	0.019476	-	193	39	-	44	1	-	-	-	-	-	-
Hardness (from total)	mg/L	-	-	122.3	153.4	173.4	72.2	43.5	41.1	153	746	412	30.2	67.196	48.24022	6	260	162	-	0	0	-	-	-	2; 28.6%	n=143; 38%	n= 66, 24%
Total Suspended Solids	mg/L	-	**15**[f]	*17.2*	*75.4*	*29.1*	72.2	43.5	1.0	153	746	597	30.2	67.2	81.7554	6	260	254	2	99	29	-	-	-	-	-	-
Total Dissolved Solids	mg/L	-	-	163	189.8	245.482	80	52	78	194	464	544	42	59.7	54.342	7	328	251	0	0	0	-	-	-	-	-	-

a) Pre-operation data from between January 1, 2005 and March 31, 2006.

b) Operation no discharge data from April 8, 2006 to August 25, 2008; October 1, 2008 to June 25, 2009; August 7, 2009 to August 12, 2009; October 31, 2009 to July 13, 2010; October 28, 2010 to April 15, 2012; May 12 2012 to April 19 2013; May 23 2013 to April 2 2014; May 27 2014 to December 17 2014; December 17 2014 to April 2 2015.

c) Operation discharge data from August 26, 2008 to September 30, 2008; June 26, 2009 to August 6, 2009; August 13, 2009 to October 30, 2009; July 14, 2010 to October 27, 2010; April 16 to May 11, 2012; April 20 to May 22 2013; April 3 to May 26 2014; December 8 to December 16 2014; April 3 to June 1 2015.

d) Guideline are calculated and based on hardness. Guideline values shown based on station W2's average hardness.

e) Conservative ammonia guideline based on pH and temperature not exceeding 8.5 and 15 degrees Celcius respectively.

f) Conservative TSS guideline based of 15mg/L

g) Counts of results over the guideline: for hardness dependant (calculated guideline), exceedances were assesed based on the sample's hardness (not the station's average hardness)

number Averages higher than the CQWG are highlighted in violet; averages higher than the W2 WQO WUL14-031 limits highlighted in italics and underlined

Between 5 and 25% of individual samples (and / or detection limits) are > applicable guideline / limit.

Between 25 and 50% of individual samples (and / or detection limits) are > applicable guideline / limit.

>50% of individual samples (and / or detection limits) are > applicable guideline / limit.

Although differences in average parameter concentrations between phases were not tested for statistical significance, general observations are outlined below.

Table 3-1 shows results for station W3, the MMER compliance point downstream of the water storage pond dam. TSS results considered to be outliers (>mean + 3 standard deviations) were 985 mg/L on April 16, 2012 and 283 mg/L on September 4th, 2014. In addition, there are several other occurrences of outliers for this large dataset of upwards of seven hundred samples. Some parameters appear elevated during spring freshet, winter sampling events and others during mine discharge (see Appendix B). Average concentrations during the operations phase with mine water discharge were found to be higher than during pre-operations and non-discharge periods for total and dissolved aluminum, chromium, molybdenum, selenium and zinc, while only the total fraction was found to be higher for copper, iron, lead, mercury and nickel, Nitrite, nitrate, phosphorous and TSS are also on average higher during discharge periods. Total and dissolved cadmium, ammonia, fluoride, hardness and total dissolved solids (TDS) are on average higher during non-discharge.

Water quality results for station W7, located on the north-flowing tributary to Minto Creek, are summarized in Table 3-2. TSS results considered to be outliers (>mean + 3 standard deviations) were 705 mg/L on June 2, 2006 and 400 mg/L on August 2, 2011. While not quite considered an outlier, TSS on May 27, 2010 was elevated at 350 mg/L. Other parameters also appear elevated as outliers on these dates. Differences in parameter average concentrations between phases are generally not as substantial as for station W3, and in fact most metals have a higher average value during non-discharge or pre-operation periods (total aluminum, arsenic, chromium, copper, iron, lead, mercury, nickel, selenium, silver, thallium and zinc as well as dissolved iron, nickel, selenium, silver and zinc). Non-metallic parameters are also generally higher during non-discharge. These findings are consistent with the station location (reference) where it is not expected to detect the influence from the mine activities; differences observed may therefore reflect natural variations.

Water quality results for station W6, located on a south-flowing tributary to Minto Creek about 200 m downstream of the W7 tributary, are summarized in Table 3-3. TSS results considered to be outliers were July 17 and August 25th 2012 with TSS recorded at 1130 mg/L and 1160 mg/L, respectively, both of which occurred during non-discharge periods. Other outliers at W6 mainly correspond with the July 2012 sample event. As was the case for W7, average total metals and non-metallic parameters concentrations are frequently higher during non-discharge periods (aluminum, arsenic, cadmium, chromium, copper, iron, lead, nickel, silver, thallium and zinc) than during discharge or pre-operations. Most of the differences in dissolved metals concentrations are minor. Again, these findings are consistent with the station location (reference) where it is not expected to detect the influence from the mine activities; differences observed may therefore reflect natural variations.

Station C4, located on a north-flowing tributary to Minto Creek approximately 1 km downstream of the W6 tributary, has been monitored since 2012 after visual observation showed turbid waters entering Minto Creek from this tributary. Due to a small sample size for C4, no TSS results are considered outliers; However, high TSS were observed in summer months: in May and August 2012 (1260 mg/L and 855 mg/L), in August 2013 (784 mg/L) and in May 2014 (904 mg/L). Parameters with high results were not associated with these sampling events, but rather with samples taken in the winter months (November 20013 and December 2014). Water quality results for station C4 are summarized in Table 3-4. Except for dissolved arsenic, iron and nickel, average concentrations of most total and dissolved metallic parameters are higher during period of mine discharge. For non-metallic parameters, nitrite, nitrate, total phosphorus and TSS are also higher during discharge. The average concentrations are however calculated from a much smaller sample size for this station (n=19 for non-discharge

and n=5 for discharge) compared to most other stations. C4 is also a reference station differences observed should be a reflection of natural variations rather than of mine influence.

Station MC1, located on mainstem Minto Creek in the Minto Canyon, began being monitored regularly in 2010 serving as a comparison monitoring point between stations W3 and W2. Results for MC1 from the mine operations phase with and without discharge are summarized in Table 3-5. TSS results considered to be outliers (>mean + 3 standard deviations) ranged between 465 mg/L and 727 mg/L during nine sample events in summer months. Some parameters, particularly certain total metals, appear to correspond with elevated TSS, mainly in 2011 and 2012. Except dissolved cadmium, iron and nickel, average concentrations of most total and dissolved metallic parameters are higher during period of mine discharge. For non-metallic parameters, nitrite, nitrate, phosphorus and TSS are also higher during discharge. This station is part of the receiving environment, therefore differences between phases could be associated with the mine`s activities, however the reference stations also showed similar differences, indicating a possible natural contribution.

Station C10 is located on a northeast-flowing tributary to Minto Creek approximately halfway between stations MC1 and W2. Water quality monitoring began in 2012, after visual observation showed turbid waters entering Minto Creek from this tributary, and results are summarized in Table 3-6. Due to a small sample size for C10, no TSS results are considered outliers; however, in May and August 2012 two sample events had TSS results of 2210 mg/L and 1650 mg/L, respectively. A high TSS was also recorded for the sample taken May 20th 2015 (614 mg/L). Elevated parameters at C10 mainly correspond with the July 2012 and the May 2015 samples. Total copper, iron, nickel and zinc as well as dissolved aluminum, arsenic, cadmium, chromium copper, iron, lead, nickel and silver were on average higher during discharge periods. Other metals were on average more elevated during non-discharge periods (total aluminum, chromium, lead, mercury. molybdenum, selenium, silver and thallium), but the differences is generally small. For non-metallic parameters, nitrite and phosphorus are higher and pH lower during discharge. Note that the average concentrations are calculated from a much smaller sample size for this station (n=15 for non-discharge and n=2 for discharge) compared to most other stations. C10 is also a reference station differences observed should be a reflection of natural variations rather than of mine influence.

Table 3-7 shows results for W2, the lowermost Minto Creek receiving environment monitoring location before the confluence with the Yukon River. This station is where both the CWQGs and WQOs apply. TSS results considered to be outliers (>mean + 3 standard deviations) ranged between 707 mg/L and 2600 mg/L during nine sample events occurring in summer months between 2011 and 2013, with most (7 events) in 2011. A number of total metals follow this trend with outlier values mainly in 2012. Parameters which were found to be more elevated during periods of mine discharge compared to pre-operations or operation with no discharge include dissolved aluminum, total and dissolved copper, total mercury, total and dissolved molybdenum, total and dissolved selenium, dissolved zinc, nitrite, nitrate, total and dissolved phosphorus and TDS. When looking at guideline or objective exceedences, the following parameters were found to be in exceedence of their respective CWQG during the pre-operation phase: aluminum (43% of samples), chromium (29%), copper (57%) and iron (71%). Average values exceed the CWQG for aluminum, copper and iron. No exceedences of the WQOs were observed during that phase. During the operation phase with no discharge, CWQG were exceeded for aluminum (55% of samples), arsenic (4%), cadmium (5%), chromium (48%), copper (54%), iron (53%), lead (6%), mercury (25%), selenium (2%), silver (1%), zinc (6%), ammonia (1%), fluoride (96%), nitrate (4%) and field pH (1%). Average values exceed their respective guidelines for aluminum, chromium, copper, and fluoride. Exceedences of the WUL WQOs, which are site-specific, are much less common and of smaller magnitude and include: aluminum (0.7%%), cadmium (0.3%), chromium (19.4%), copper (0.7%), selenium (1.3%), silver (1.3%) and nitrate

(0.3%). During periods of operations with discharge, aluminum (64%), arsenic (2%), cadmium (2%), chromium (62%), iron (34%) lead (3%), mercury (48%), selenium (60%), zinc (4%), ammonia (1%), fluoride (97%), nitrite (0.6%) and nitrate (61%) were found to be in exceedance of their respective CWQG. When comparing to the WUL WQO, only aluminum (0.6%), chromium (1.2%), copper (4.3%), selenium (28%), ammonia (1.2%) and nitrite (0.6%) show exceedences. Average values exceed their respective CWQG during discharge period for aluminum, chromium, copper, iron, mercury, selenium, fluoride and nitrate. Average TSS values exceed the WQO during all phases and individual values exceed in 6%, 38% and 24% of the samples during pre-operations, operation with no discharge and operation with discharge phases respectively.

Generally speaking, during the pre-mine operation phase, aluminum, chromium, copper and iron experienced exceedances of the CWQGs, while no exeedences of the current operational WQOs were observed. Chromium has separate CWQGs for the two main valence states, however laboratory speciation is not readily available so the lower value of 0.001 mg/L (for hexavalent chromium) is used. This is a conservative approach since reported water quality data correspond to total chromium, and the hexavalent form would comprise only a fraction of the total.

A much more robust dataset exists for the operations with no discharge phase which also showed exceedances of the CWQGs for the same parameters as during pre-operations, and additional parameters for which exceeedences were observed include: arsenic, cadmium, lead, mercury, selenium, silver, zinc, ammonia, fluoride, nitrate and pH. The list of parameters exceeding the WQOs, which are site specific, is shorter (aluminum, cadmium, chromium, copper, selenium, silver and nitrate) and the frequency and magnitude of exceedences is also reduced.

The following is also noted:

- The CCME issued revised guidelines for cadmium (for short and long term exposure) in 2014, resulting in a significant reduction in the number and magnitude of guideline exceedences in Minto Creek, when compared to results presented in the initial baseline water quality characterization report prepared in 2014, where comparisons were made with the more stringent CCME interim guideline.

- Mercury appears to exceed the CWQG although values are typically close to or below the lab RDL, including low level RDLs. Mercury is therefore not a parameter of concern and is not considered further.

- The CWQGs for arsenic, cadmium, lead, selenium, silver, zinc, ammonia, nitrate and pH are exceeded very infrequently at W2 (<10% of samples) while no molybdenum, nickel or thallium exceedances have occurred.

During the operation phase with discharge, the same parameters as during non-discharge are found to be in exceedance of their respective CWQG at W2, with the exception of silver and pH and the addition of nitrite. When comparing to the site specific WQOs, only aluminum, chromium, copper, selenium, ammonia and nitrate show occasional exceedences.

3.2 MINTO CREEK WATER QUALITY OVER TIME

For parameters that have shown exceedences of their respective water quality objective or frequent exceedences of their CWQG at W2, data were plotted versus time. Although the CWQG and WQOs are only applicable at station W2, data from all seven Minto Creek stations are shown on the graphs for comparison. Parameters examined include aluminum, cadmium, chromium, copper, selenium, silver, nitrate, nitrite and ammonia; total suspended solids is also graphed. For metals, both total and dissolved fractions are presented since the CWQGs applies to total metals while the WUL WQOs apply to the dissolved fraction. Two graphs are provided for each parameter, dividing the data into periods of time with no mine discharge and periods of time with mine discharge; pre-mine operation data is provided on both graphs (Figures 3-1 to 3-32). For results below laboratory detection levels, ½ the RDL has been plotted. The CWQGs and WQOs are depicted on the graphs. The guidelines or objectives for hardness-dependent parameters (cadmium and copper) shown on the figures are calculated from the average hardness of all Minto Creek stations for each period. For ammonia, a conservative CWQG of 0.239 mg/L NH_3 (equivalent to 0.197 mg/L NH_3-N) was used. Because the CWQG is for unionized ammonia (0.019 mg/L) and the fraction of total ammonia that is unionized is temperature and pH dependant, using a guideline value of 0.293 mg/L ensures that the guideline is protective at pH values less than or equal to 8.5 and water temperatures less than or equal to 15°C. A review of all data collected at W2 since 2005 shows that water temperature never exceeded 15°C during sampling events and that pH exceeded a value of 8.5 only 2.3% of the time.

Figures 3-1 and 3-2 show that total aluminum is frequently above the CWQG at W2, both during periods of mine water discharge and periods of non discharge. Total aluminum values during non-discharge periods peaked in 2012 and declined since, in correlation with TSS values. Dissolved aluminum at W2 rarely exceeds the WQO (Figures 3-3 and 3-4).

Total cadmium at W2 (Figures 3-5 and 3-6) occasionally exceeds the average CWQG at W2 during both periods, however when looking at individual results, the exceedance rate is higher during periods of mine water discharge (refer to Table 3-7). Most exceedences observed during non-discharge periods occurred in 2012 and, similar to total aluminum results, are correlated with a peak in TSS. Dissolved cadmium very rarely exceeded the WQO during non-discharge periods and never exceeded the WQO during discharge periods (Figures 3-7 and 3-8).

Figures 3-9 and 3-10 show that total chromium frequently exceeds the CWQG at W2, both during periods of mine water discharge and periods of non discharge. Total chromium values during non-discharge periods peaked in 2012 and declined since, in correlation with TSS values. Dissolved chromium at W2 occasionally exceeds the WQO (Figures 3-11 and 3-12).

Total copper at W2 (Figures 3-13 and 3-14) displays a similar pattern as the other parameters with a peak in 2012 during non-discharge periods associated with a peak in TSS, and frequent exceedences of the CWQG during both periods. Dissolved copper however is generally below the WQO during both periods (Figures 3-15 and 3-16).

Total selenium rarely exceeded the CWQG at W2 during non-discharge periods (Figure 3-17), but frequently surpassed it during discharge periods, with all exceedences occurring in 2009 and 2010 (Figure 3-18). A similar pattern can be observed for dissolved selenium with rare WQO exceedences during non-discharge (Figure 3-19) and more frequent exceedences during discharge (Figure 3-20), again all occurring in 2009 and 2010.

Total silver shows occasional exceedences of the CWQG at W2 during non-discharge periods and none during discharge (Figures 3-21 and 3-22), similar to dissolved silver which rarely exceeded the WQO during non-discharge periods (Figure 3-23) and never exceeded the objective during discharge periods (Figure 3-24).

Nitrate rarely exceeded the CWQG or the WQO at W2 during non-discharge periods (Figures 3-25) but frequently exceeded the CWQG during discharge periods (Figure 3-26). Because the WQO is site specific and higher than the CWQG, only one exceedance of the WQO occurred during discharge periods. Also of note is the fact that the majority of exceedences happened in 2009 and 2010.

Nitrite had no exceedences of the CWQG and WQO at W2 during non-discharge periods and only one during discharge, in 2009 (Figures 3-27 and 3-28). Ammonia had very few exceedences during both periods, all between 2008 and 2011 (Figures 3-29 and 3-30).

Total suspended solids are on average lower during non-discharge periods than during discharge periods (see Table 3-7). TSS started increasing in 2011, peaked in 2012 during non-discharge and has displayed a decreasing trend since (Figure 3-31). In 2011, TSS levels in Minto Creek were observed to increase though the mine did not discharge effluent that year. The source of the increased TSS has since been attributed at least in part to slope failure in the Minto Creek watershed, up gradient of the C4 and C10 tributaries. TSS remained relatively constant during discharge periods since 2012 (Figure 3-32).

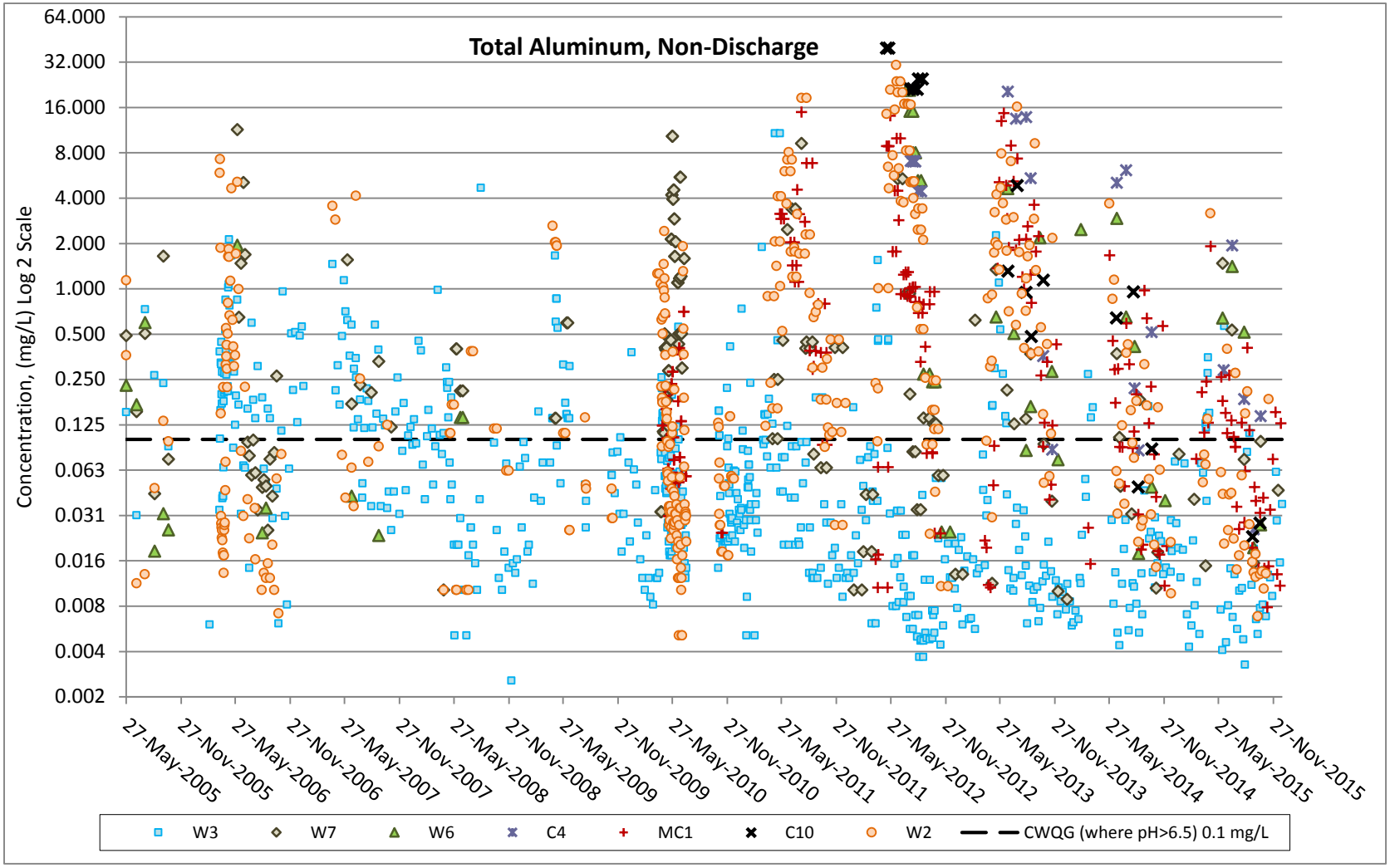

Figure 3-1: Concentrations of Total Aluminum in Minto Creek Catchment during Non-Discharge Periods.

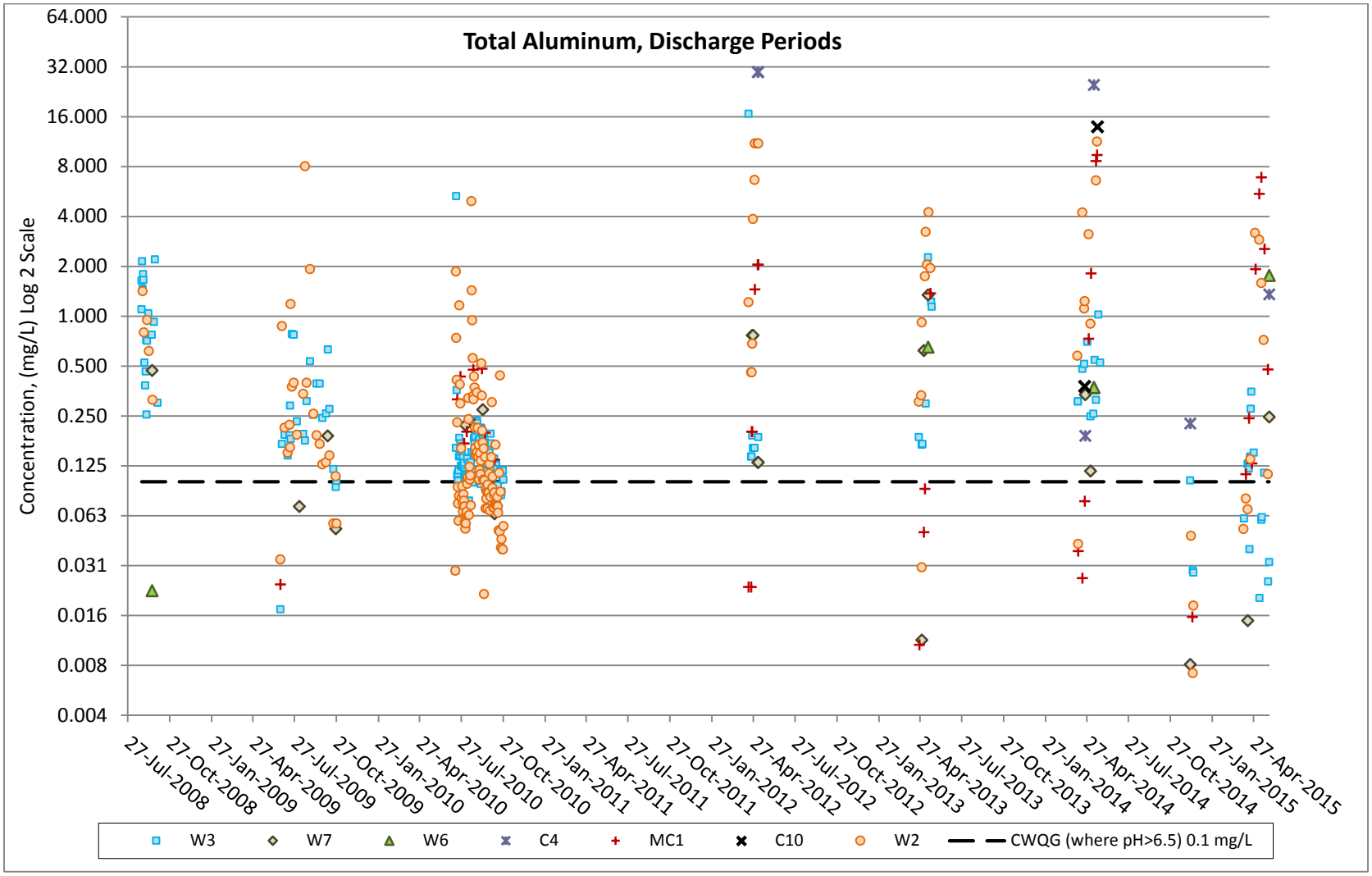

Figure 3-2: Concentrations of Total Aluminum in Minto Creek Catchment during Mine Discharge Periods.

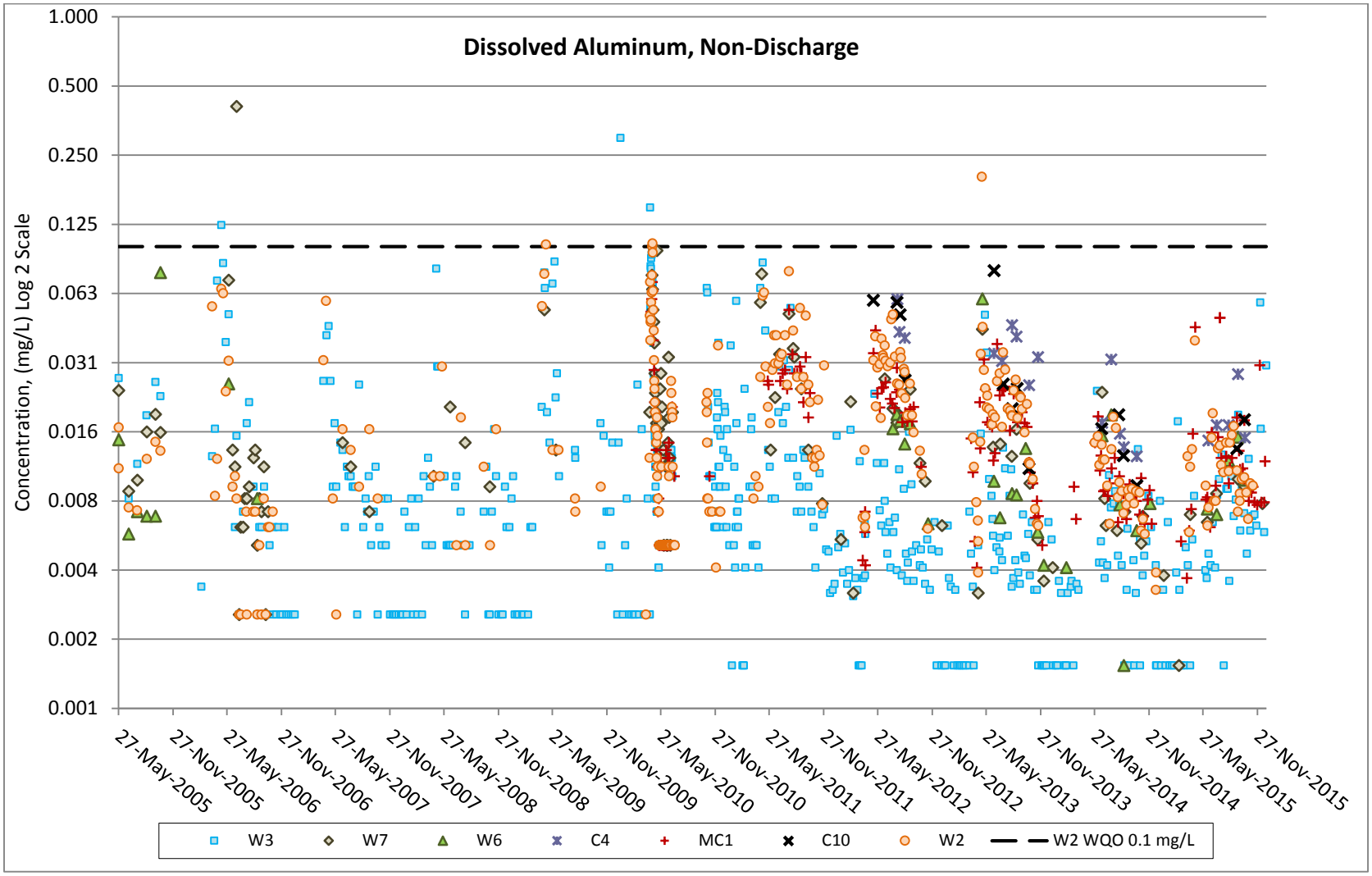

Figure 3-3: Concentrations of Dissolved Aluminum in Minto Creek Catchment during Non-Discharge Periods.

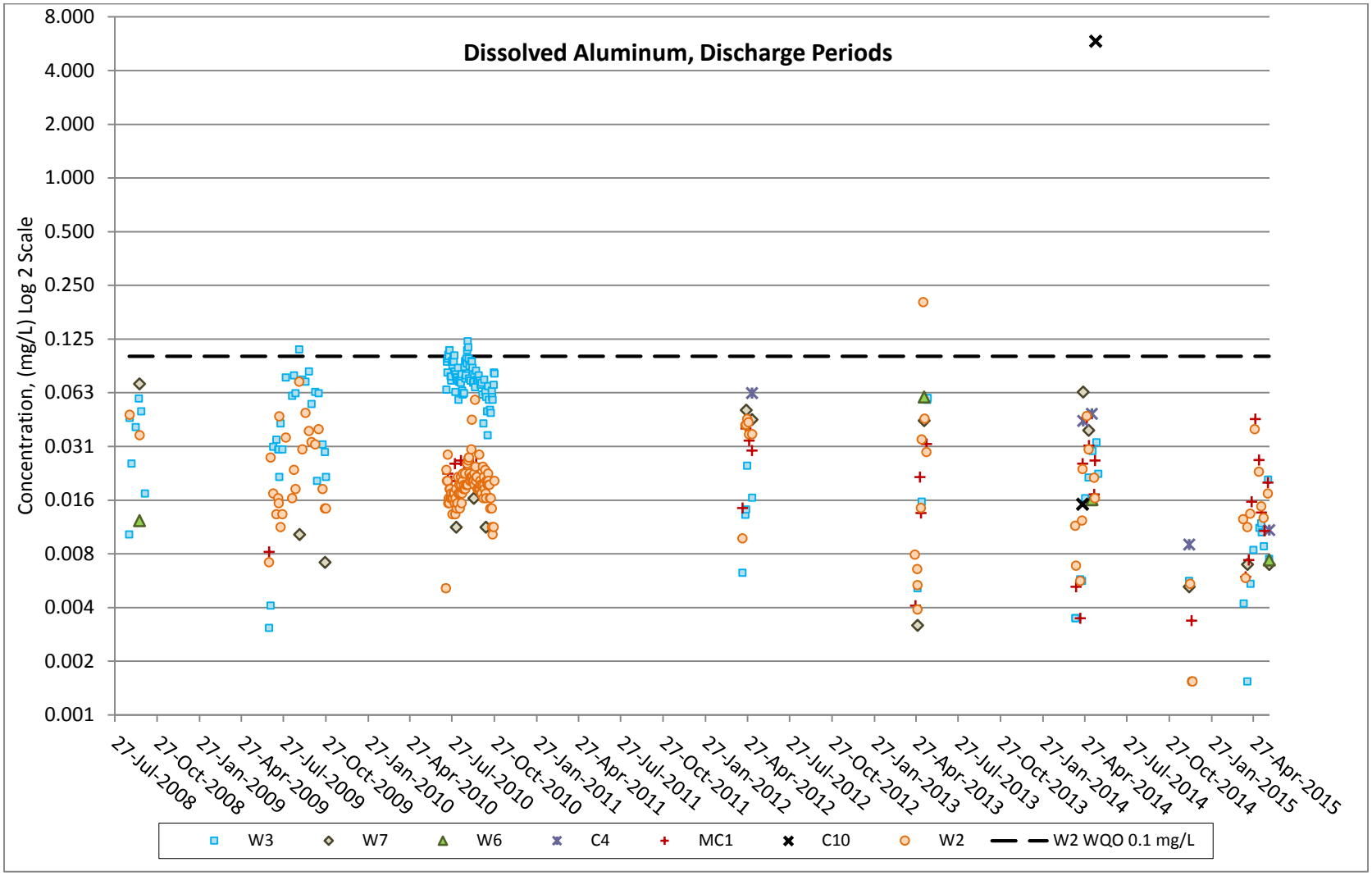

Figure 3-4: Concentrations of Dissolved Aluminum in Minto Creek Catchment during Mine Discharge Periods.

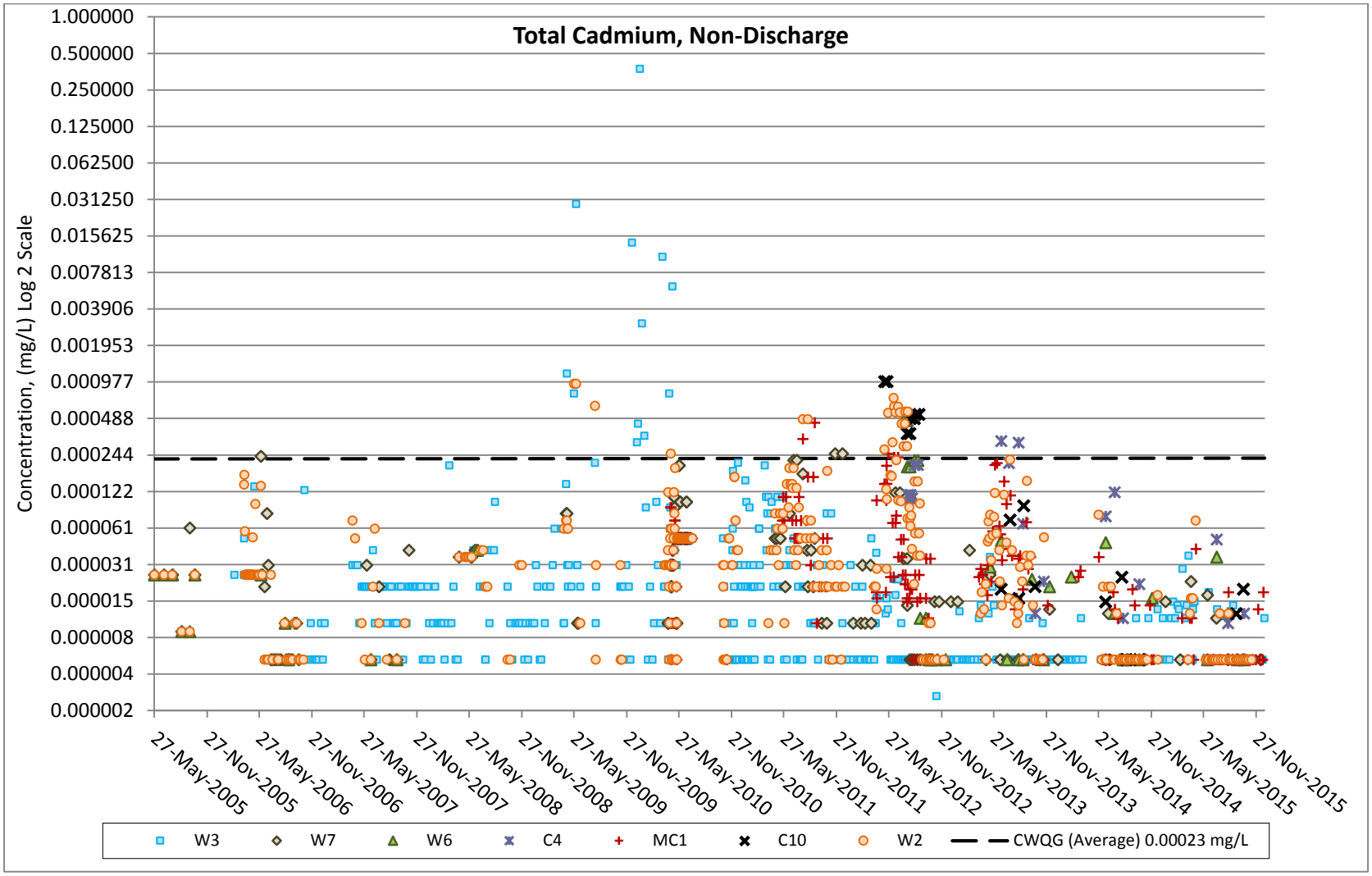

Figure 3-5: Concentrations of Total Cadmium in Minto Creek Catchment during Non-Discharge Periods.

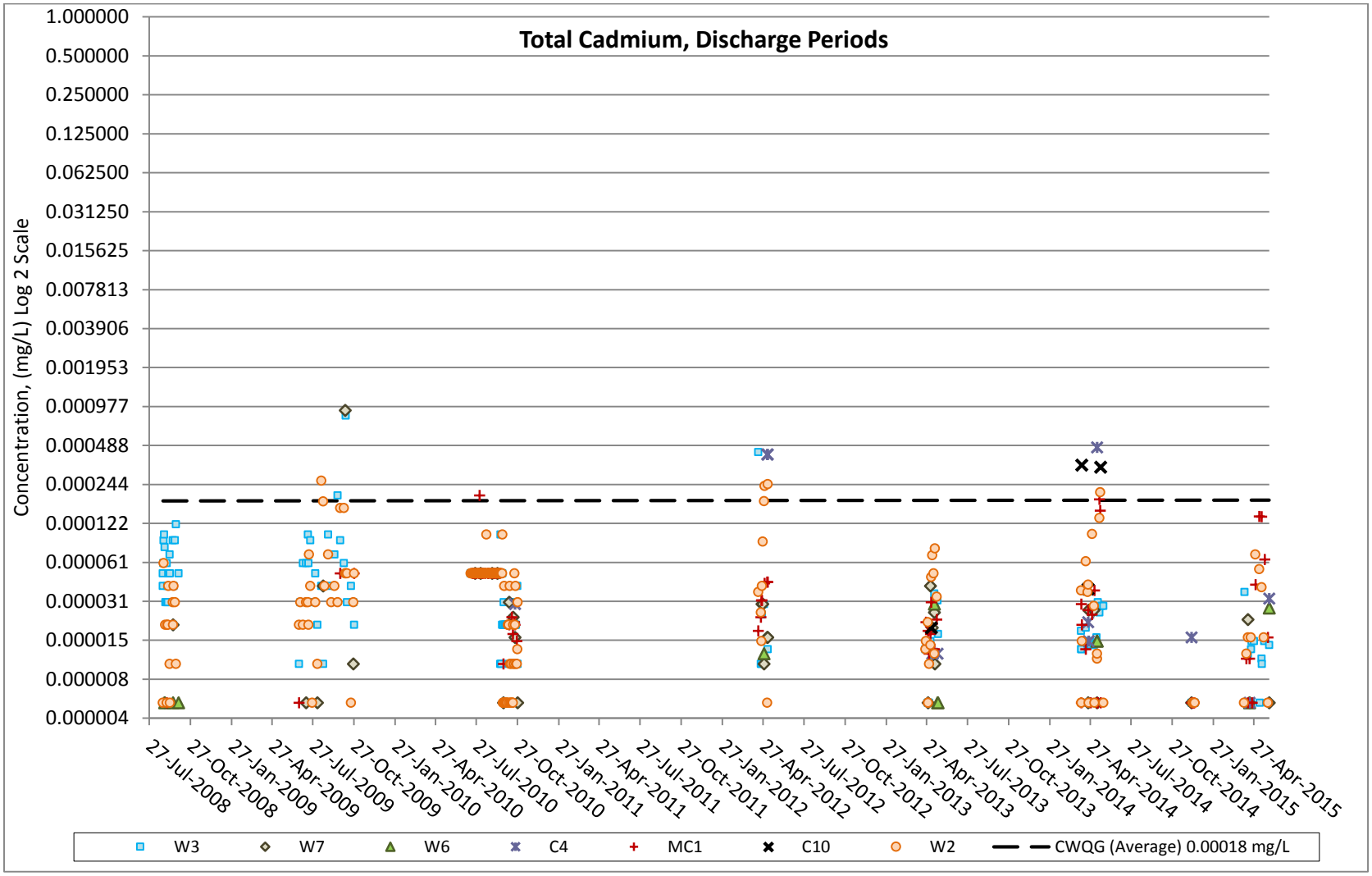

Figure 3-6: Concentrations of Total Cadmium in Minto Creek Catchment during Mine Discharge Periods.

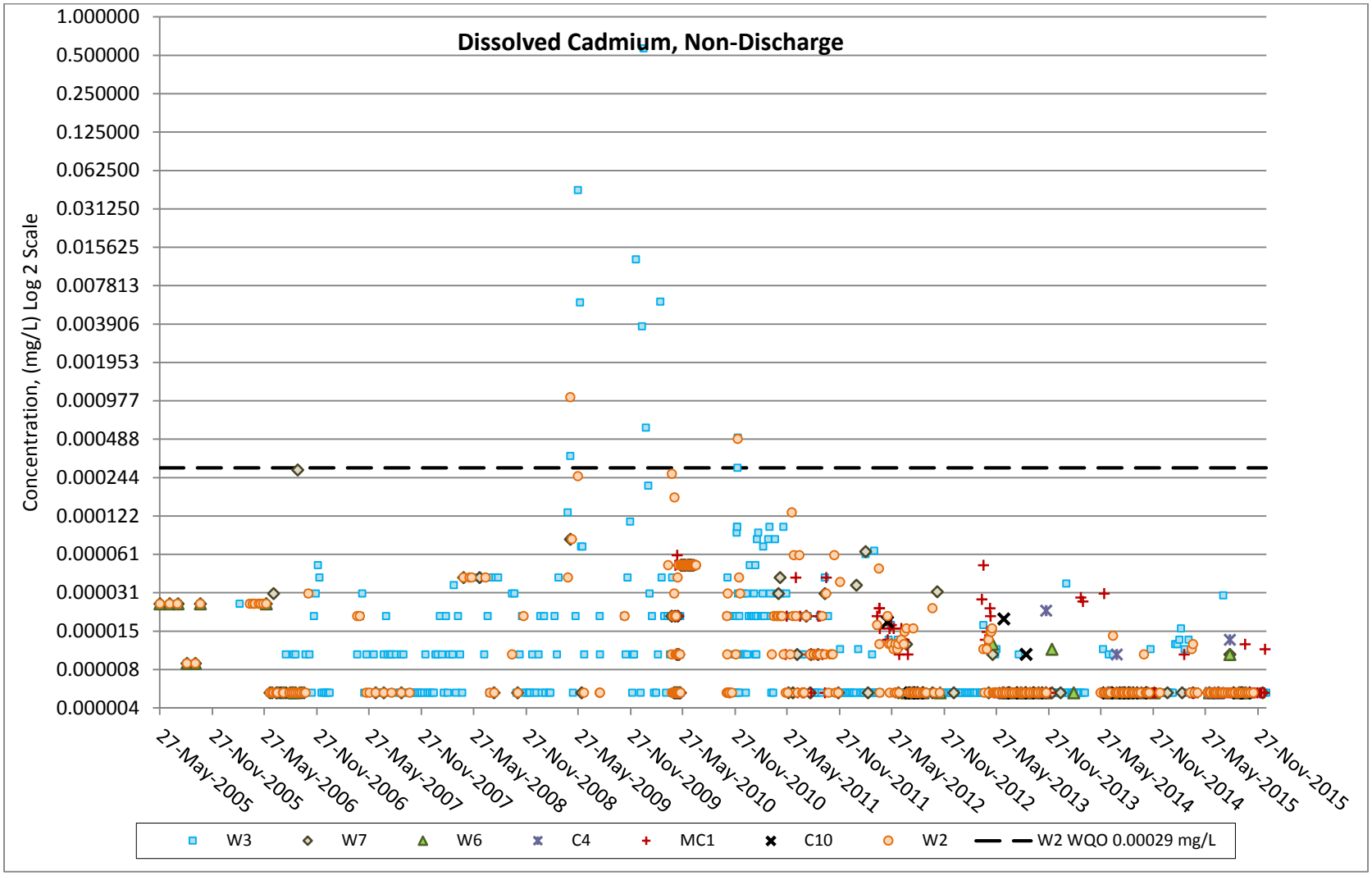

Figure 3-7: Concentrations of Dissolved Cadmium in Minto Creek Catchment during Non-Discharge Periods.

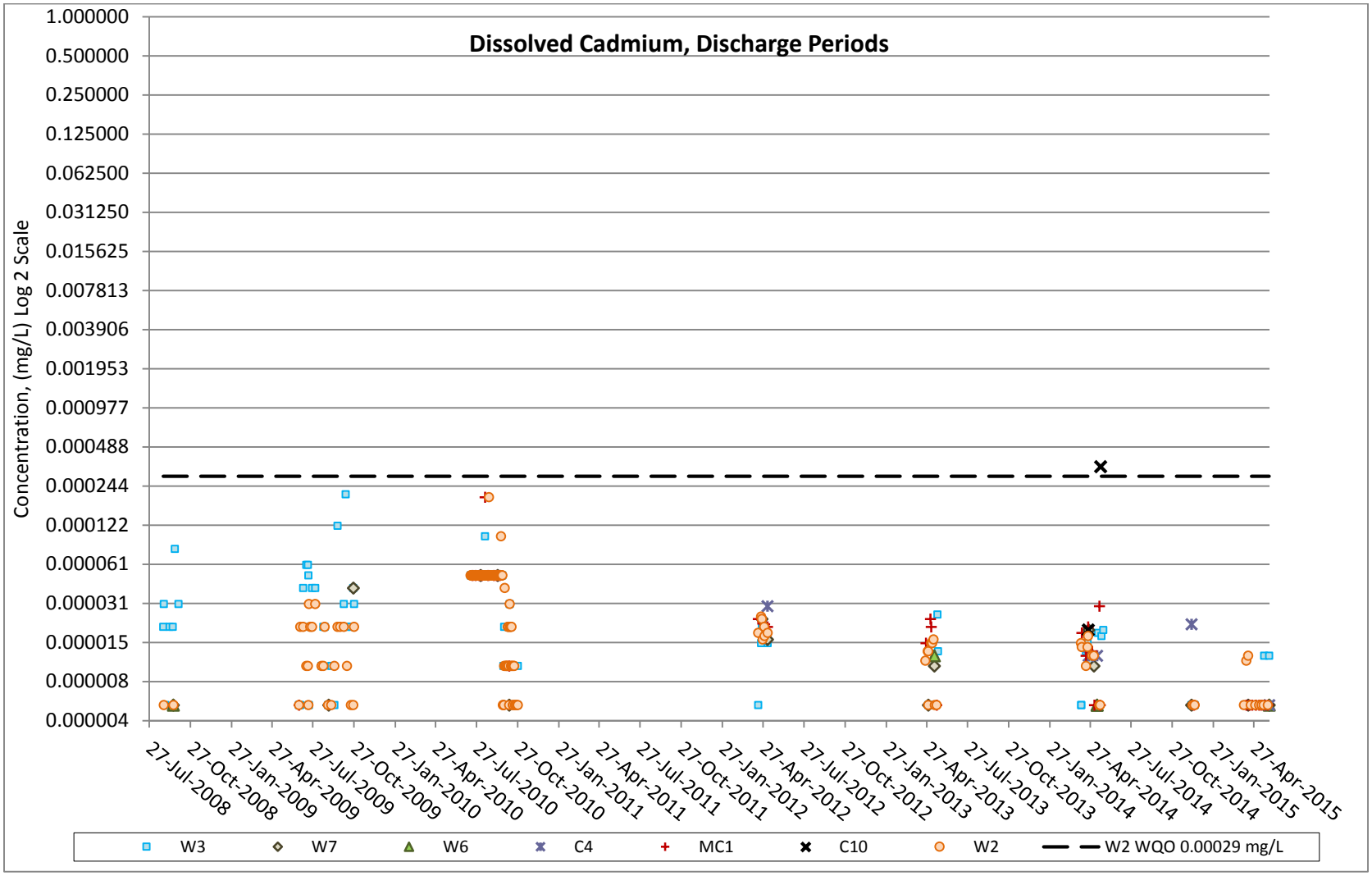

Figure 3-8: Concentrations of Dissolved Cadmium in Minto Creek Catchment during Mine Discharge Periods.

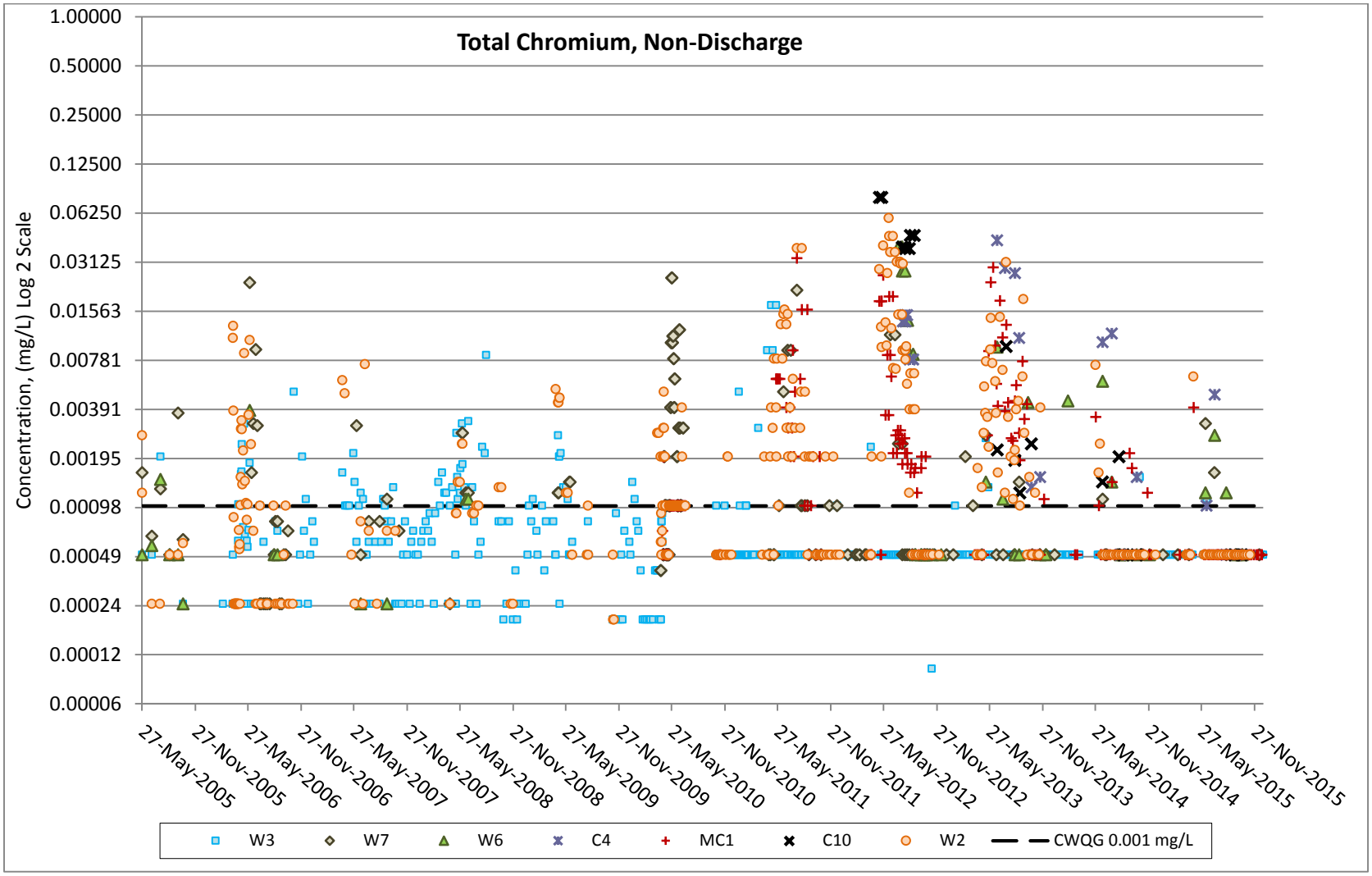

Figure 3-9: Concentrations of Total Chromium in Minto Creek Catchment during Non-Discharge Periods.

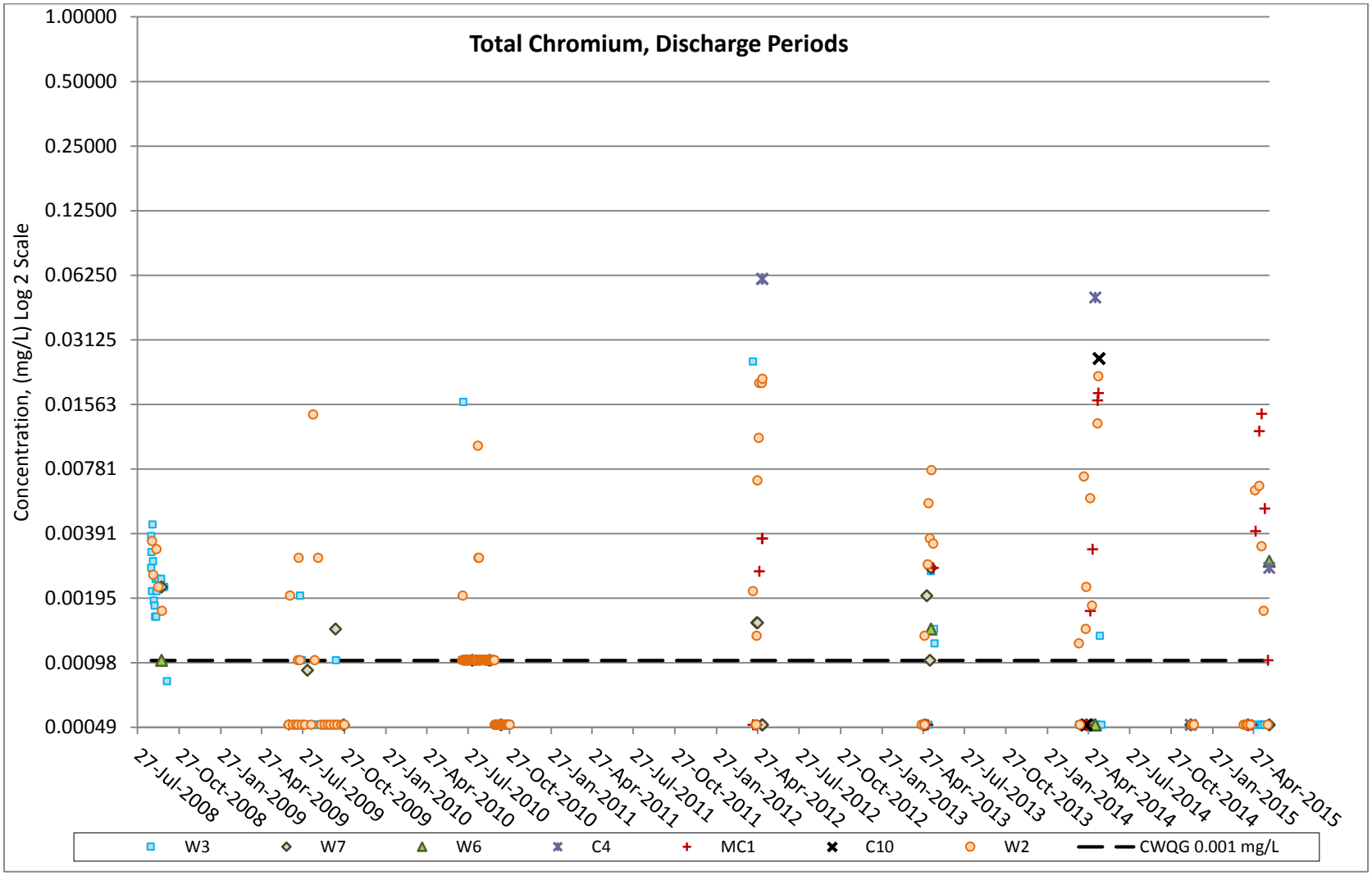

Figure 3-10: Concentrations of Total Chromium in Minto Creek Catchment during Mine Discharge Periods.

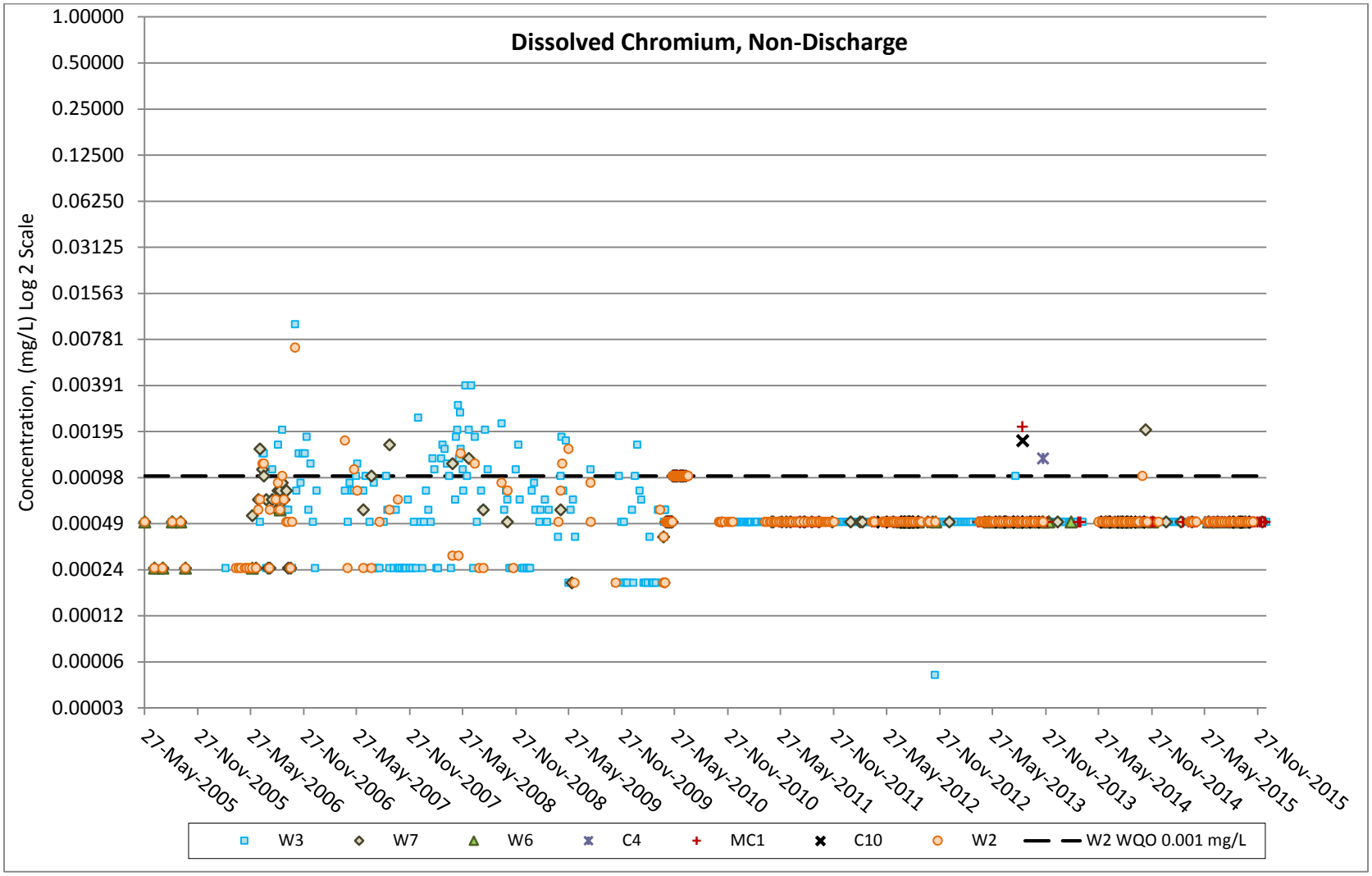

Figure 3-11: Concentrations of Dissolved Chromium in Minto Creek Catchment during Non-Discharge Periods.

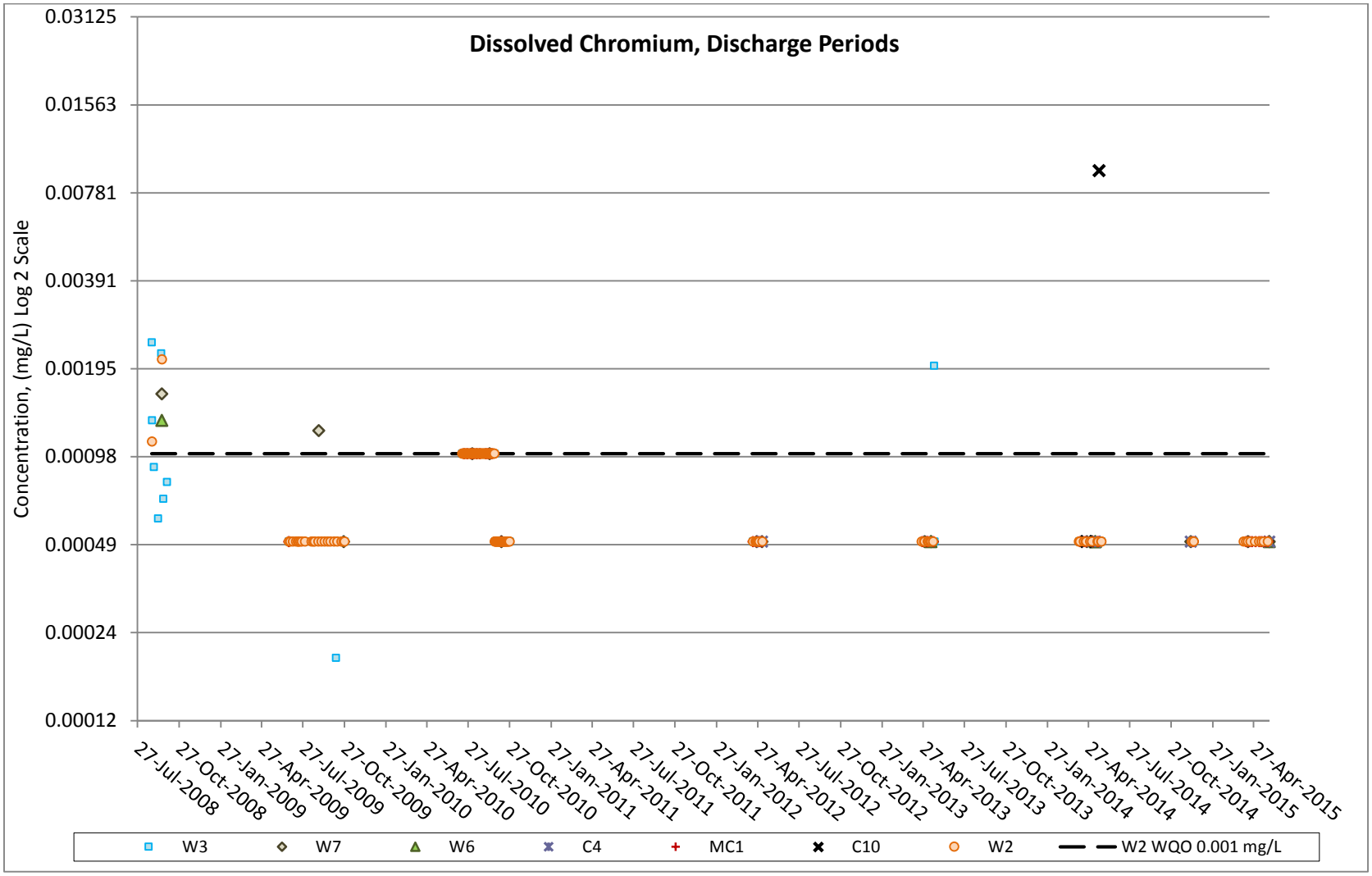

Figure 3-12: Concentrations of Dissolved Chromium in Minto Creek Catchment during Mine Discharge Periods.

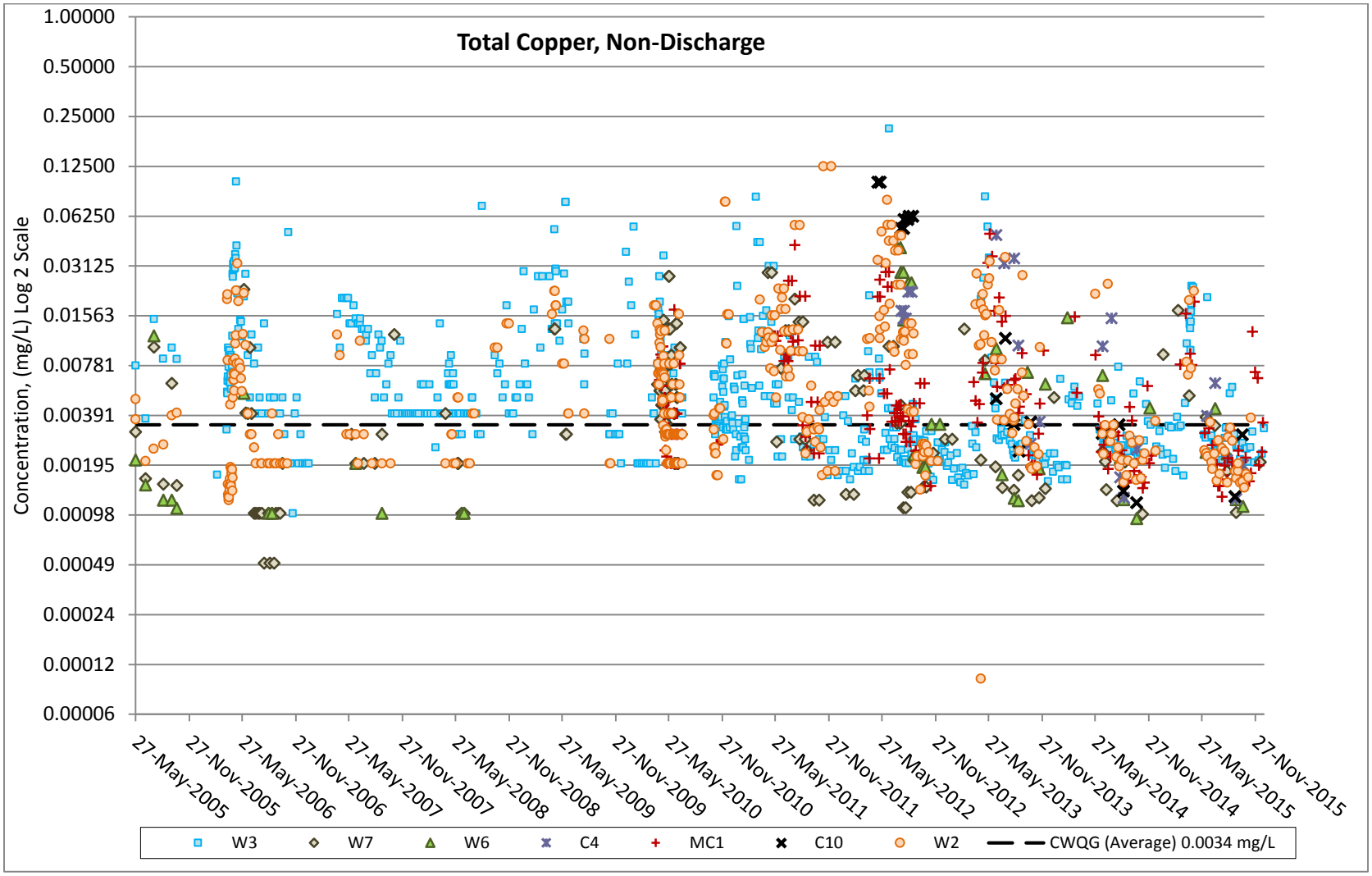

Figure 3-13: Concentrations of Total Copper in Minto Creek Catchment during Non-Discharge Periods.

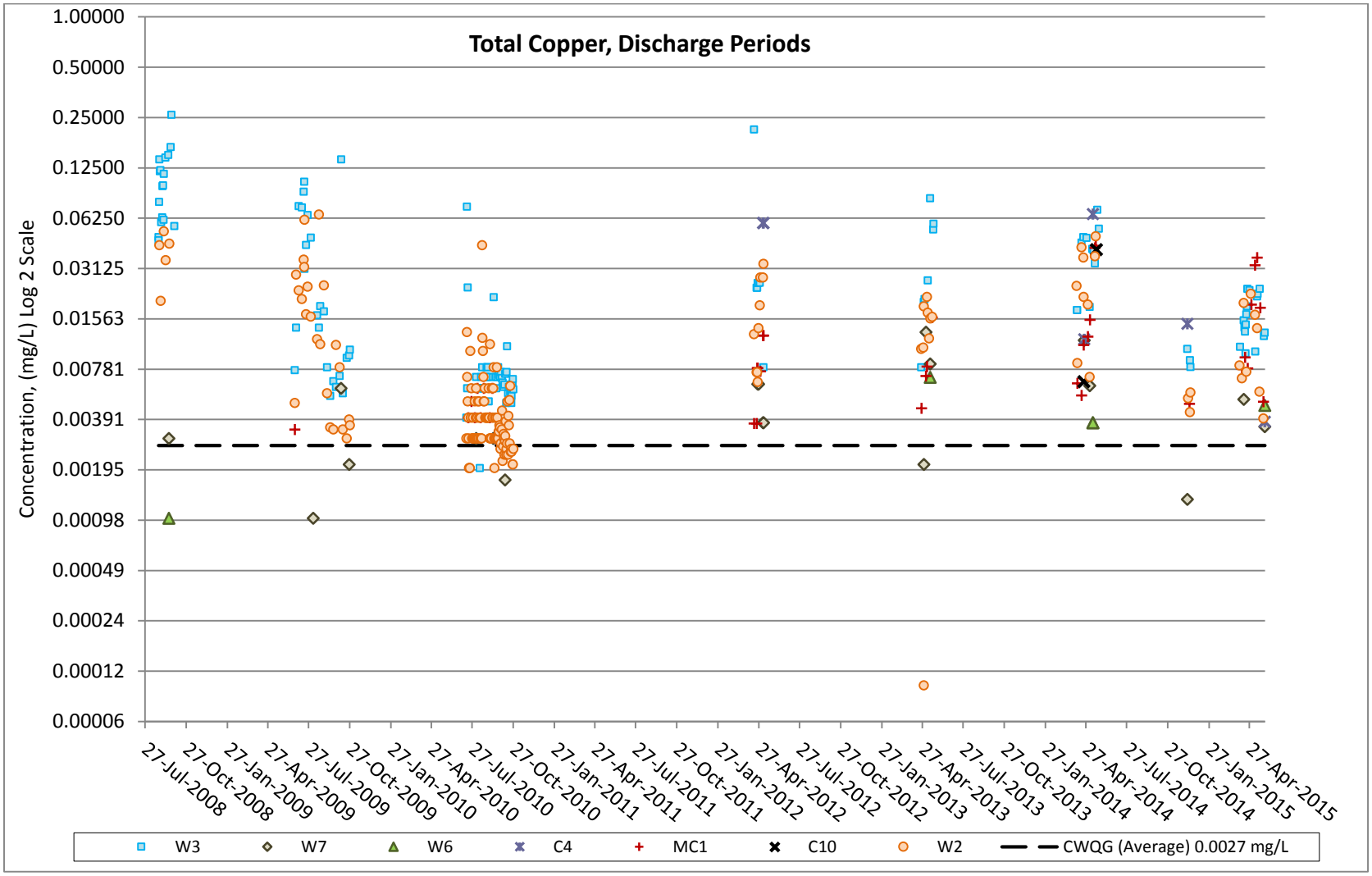

Figure 3-14: Concentrations of Total Copper in Minto Creek Catchment during Mine Discharge Periods.

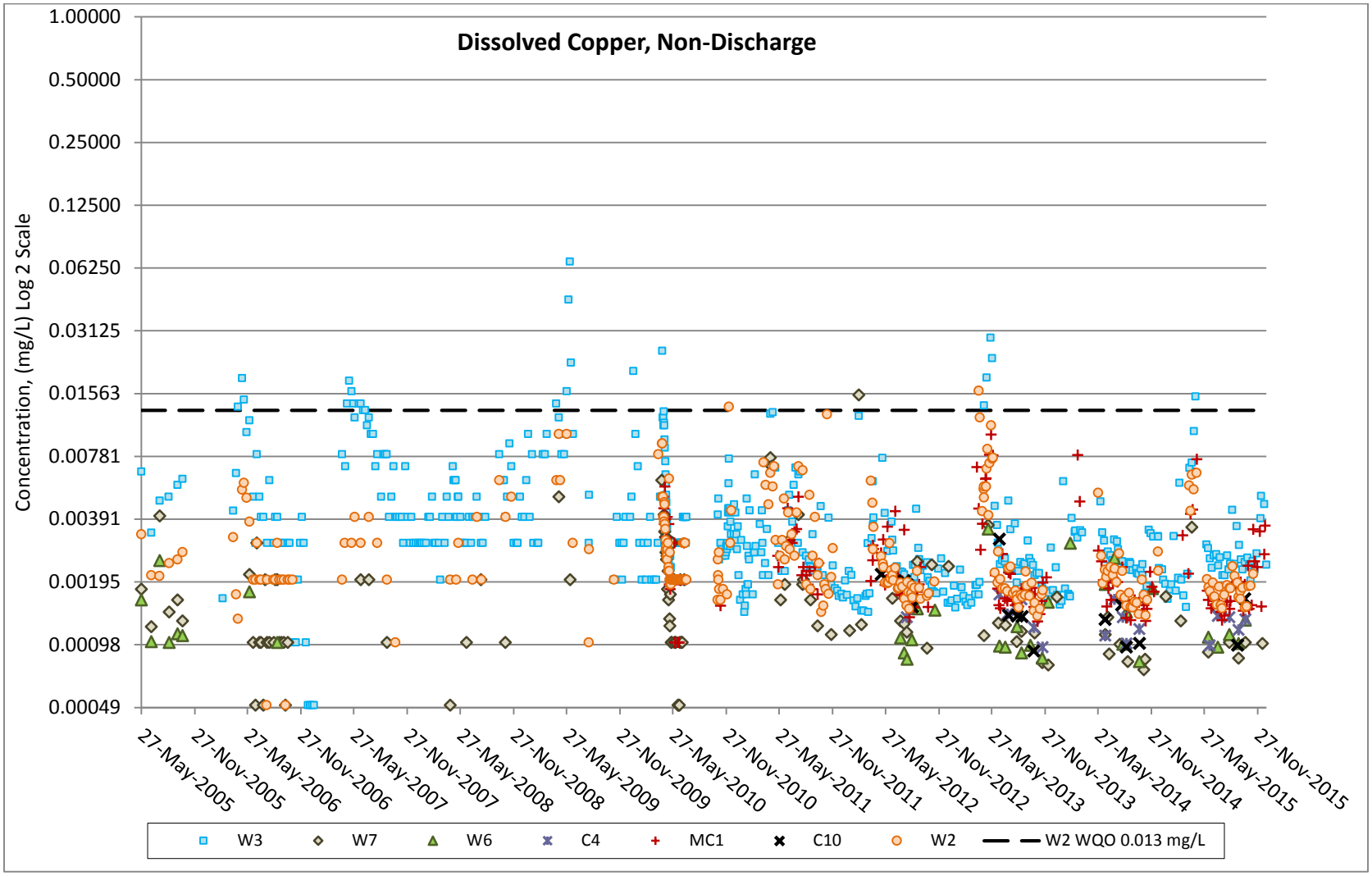

Figure 3-15: Concentrations of Dissolved Copper in Minto Creek Catchment during Non-Discharge Periods.

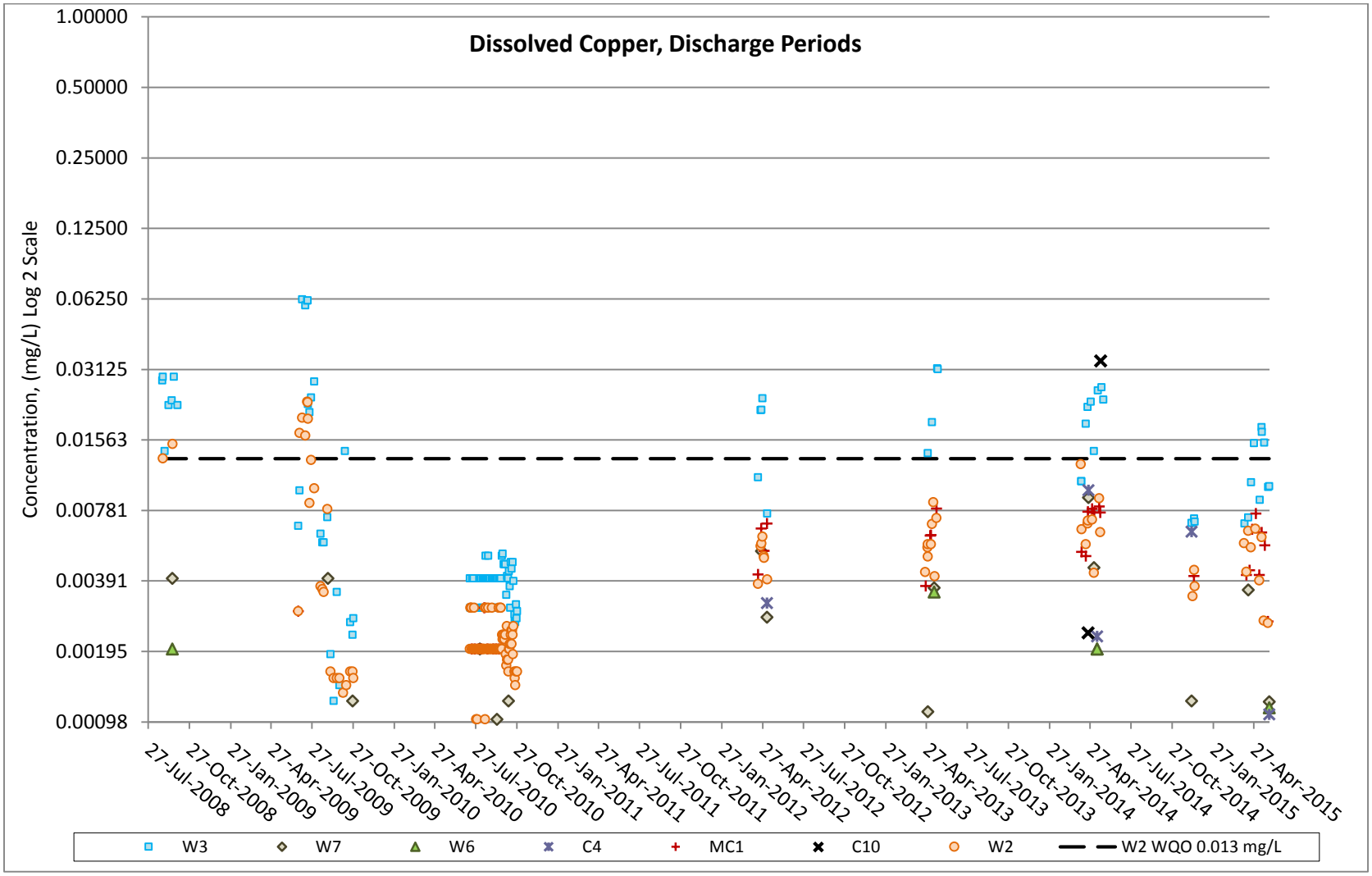

Figure 3-16: Concentrations of Dissolved Copper in Minto Creek Catchment during Mine Discharge Periods.

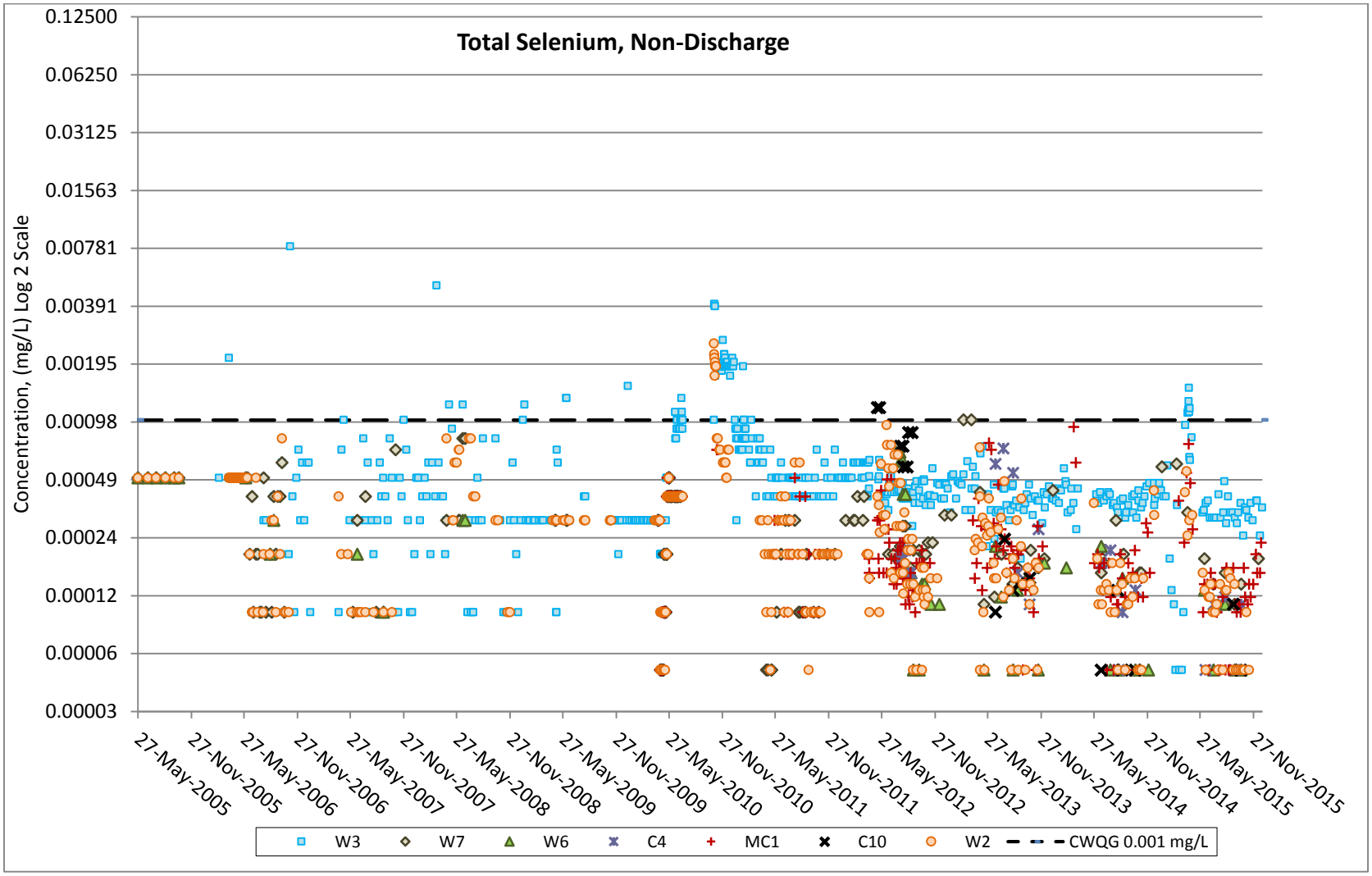

Figure 3-17: Concentrations of Total Selenium in Minto Creek Catchment during Non-Discharge Periods.

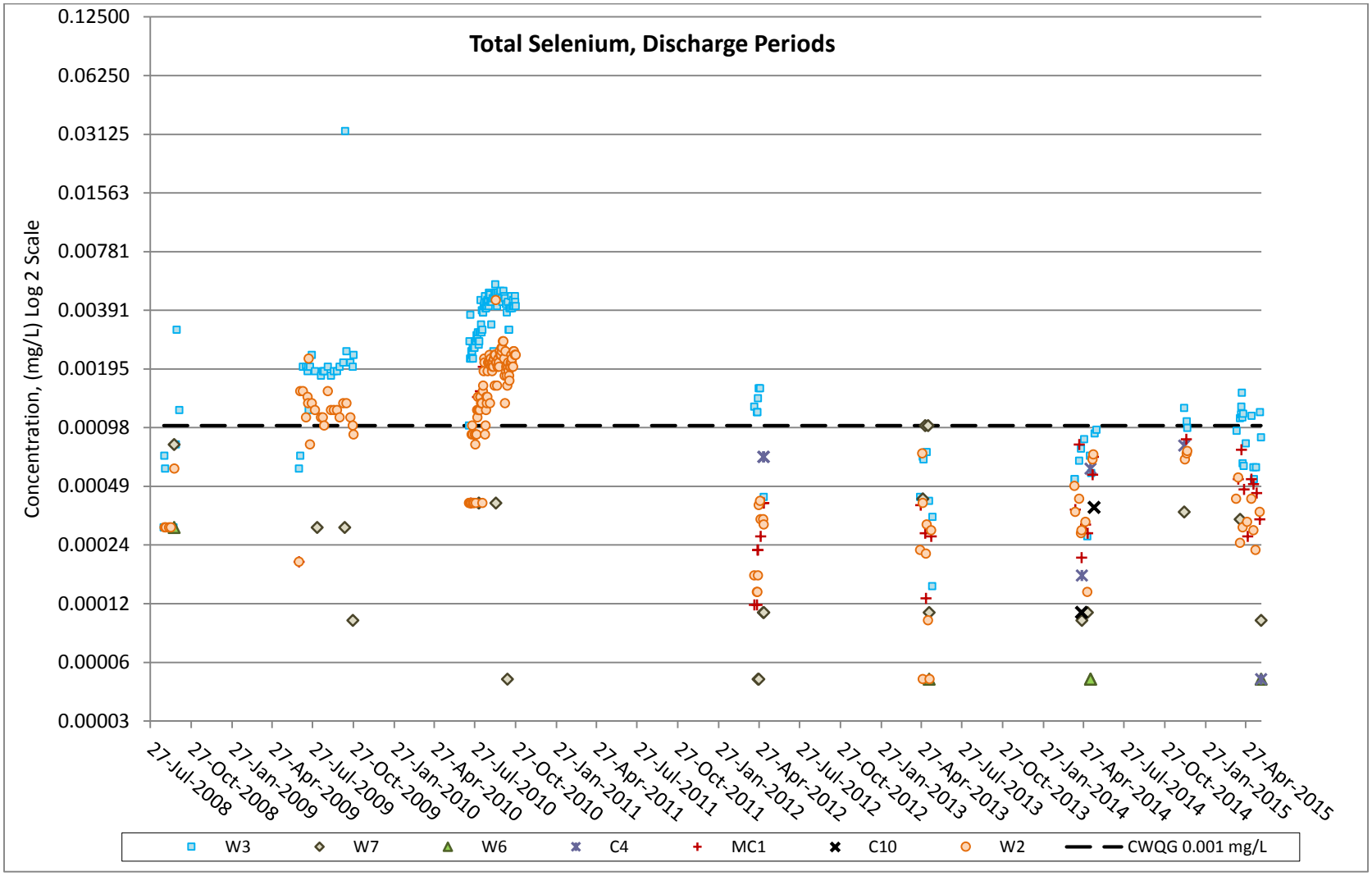

Figure 3-18: Concentrations of Total Selenium in Minto Creek Catchment during Mine Discharge Periods.

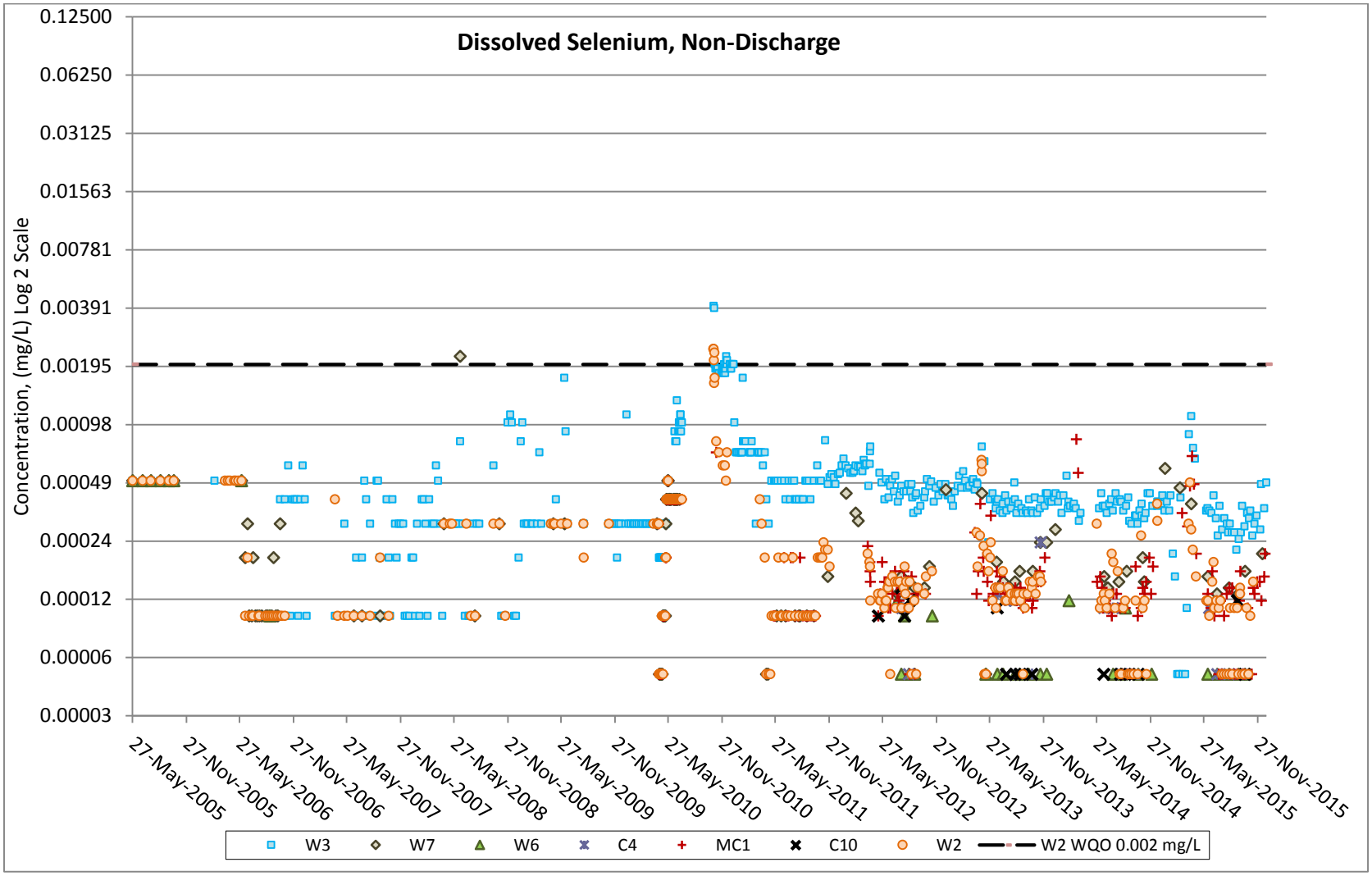

Figure 3-19: Concentrations of Dissolved Selenium in Minto Creek Catchment during Non-Discharge Periods.

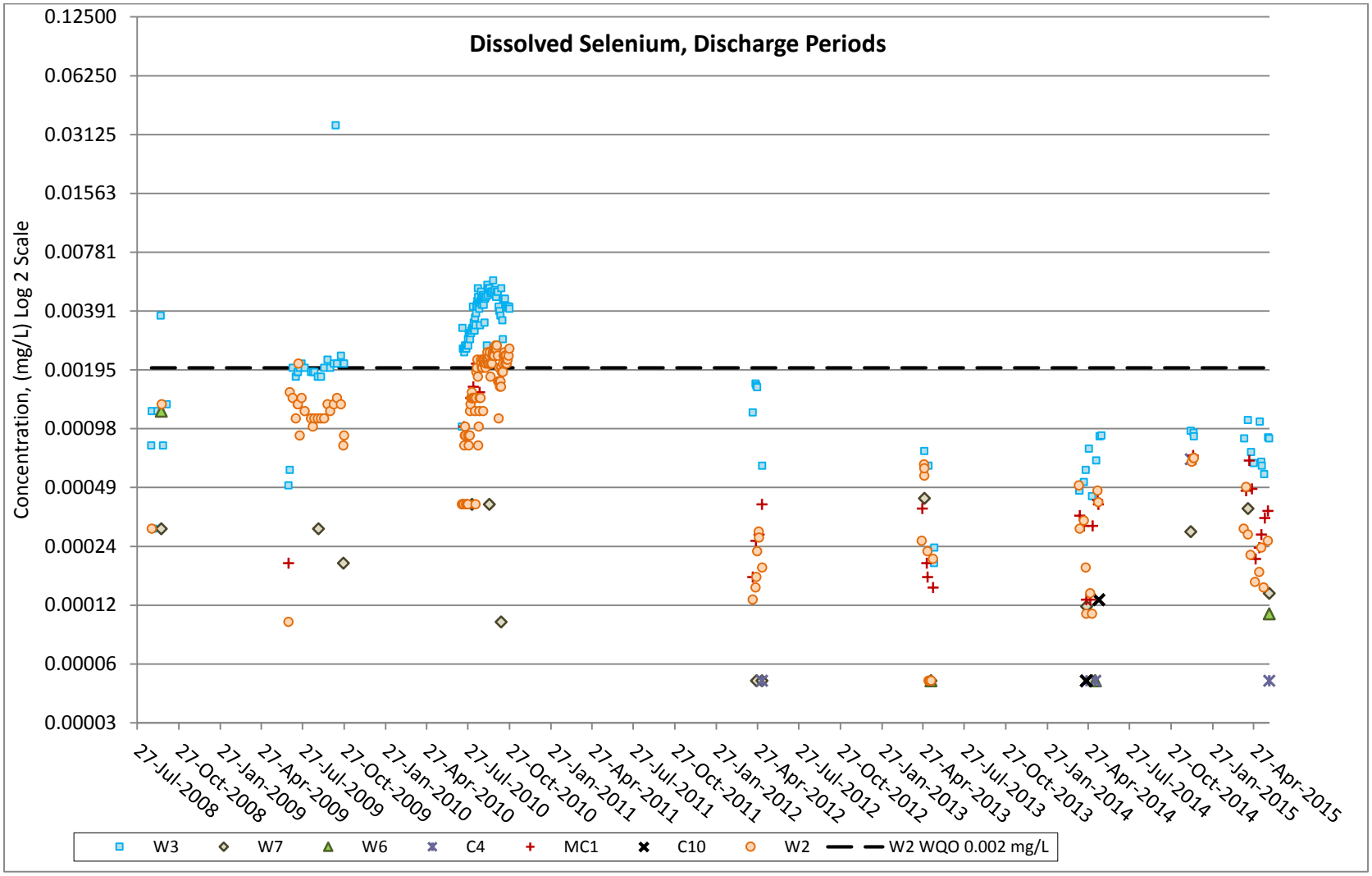

Figure 3-20: Concentrations of Dissolved Selenium in Minto Creek Catchment during Mine Discharge Periods.

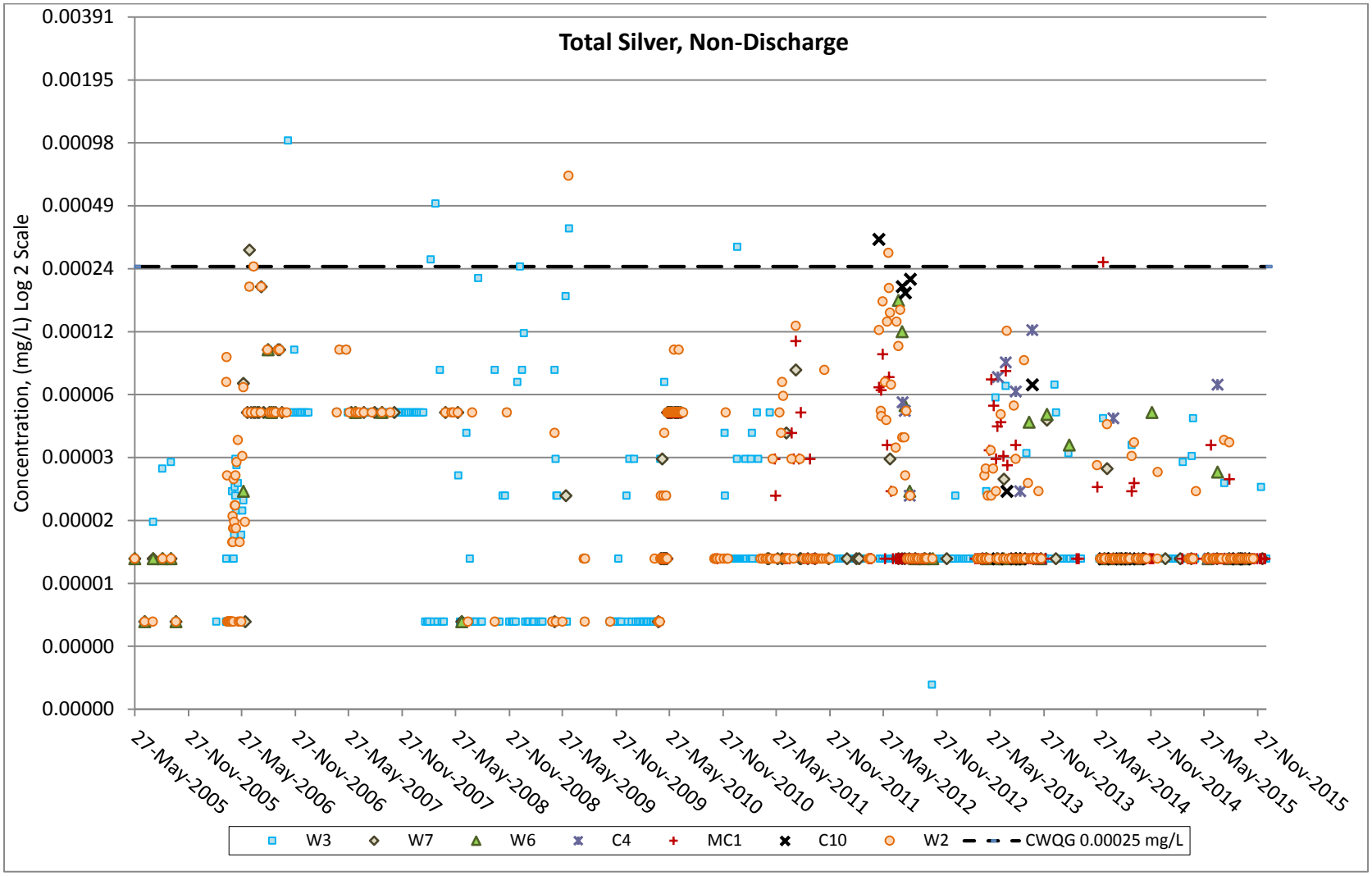

Figure 3-21: Concentrations of Total Silver in Minto Creek Catchment during Non-Discharge Periods.

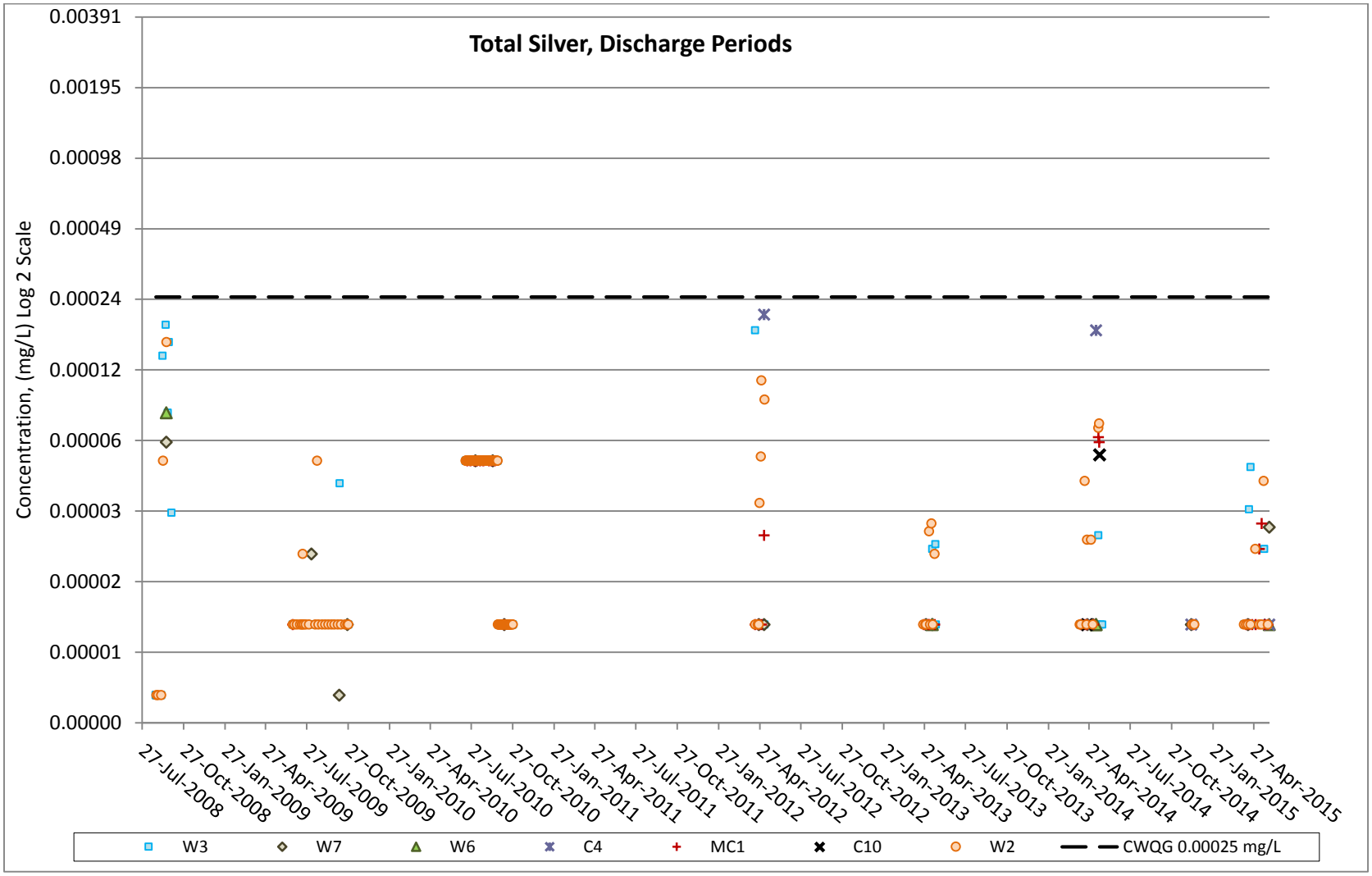

Figure 3-22: Concentrations of Total Silver in Minto Creek Catchment during Mine Discharge Periods.

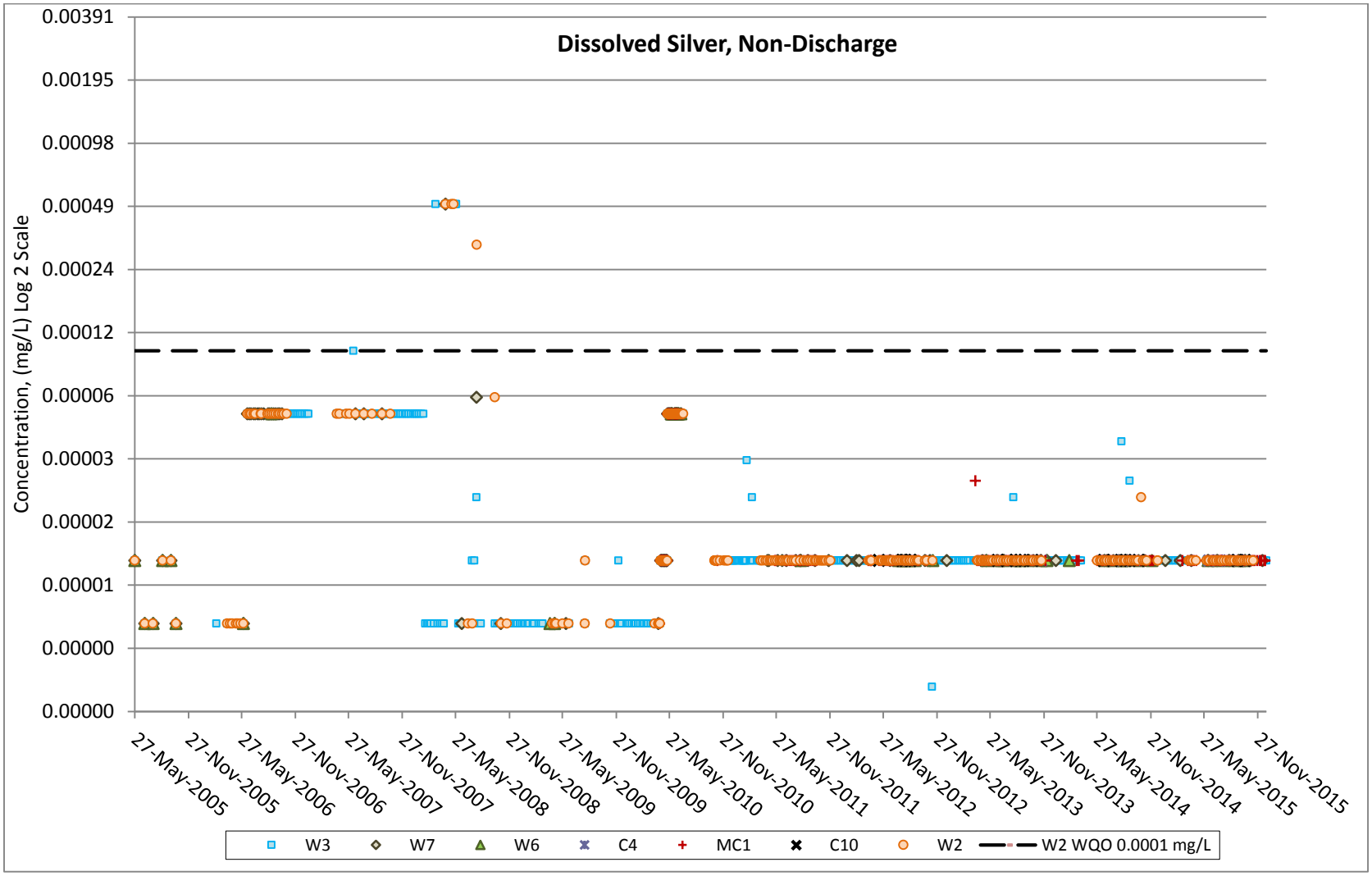

Figure 3-23: Concentrations of Dissolved Silver in Minto Creek Catchment during Non-Discharge Periods.

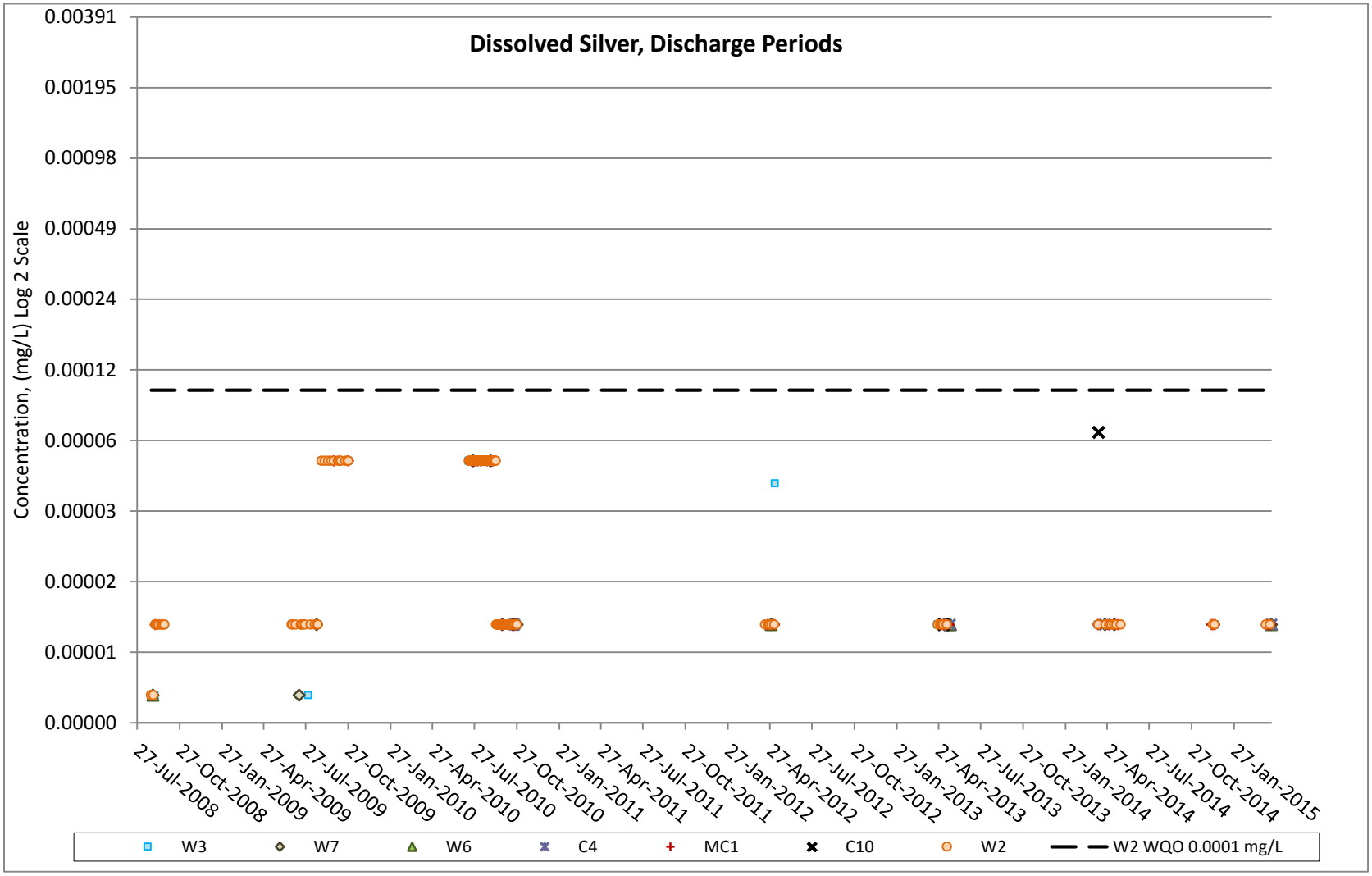

Figure 3-24: Concentrations of Dissolved Silver in Minto Creek Catchment during Mine Discharge Periods.

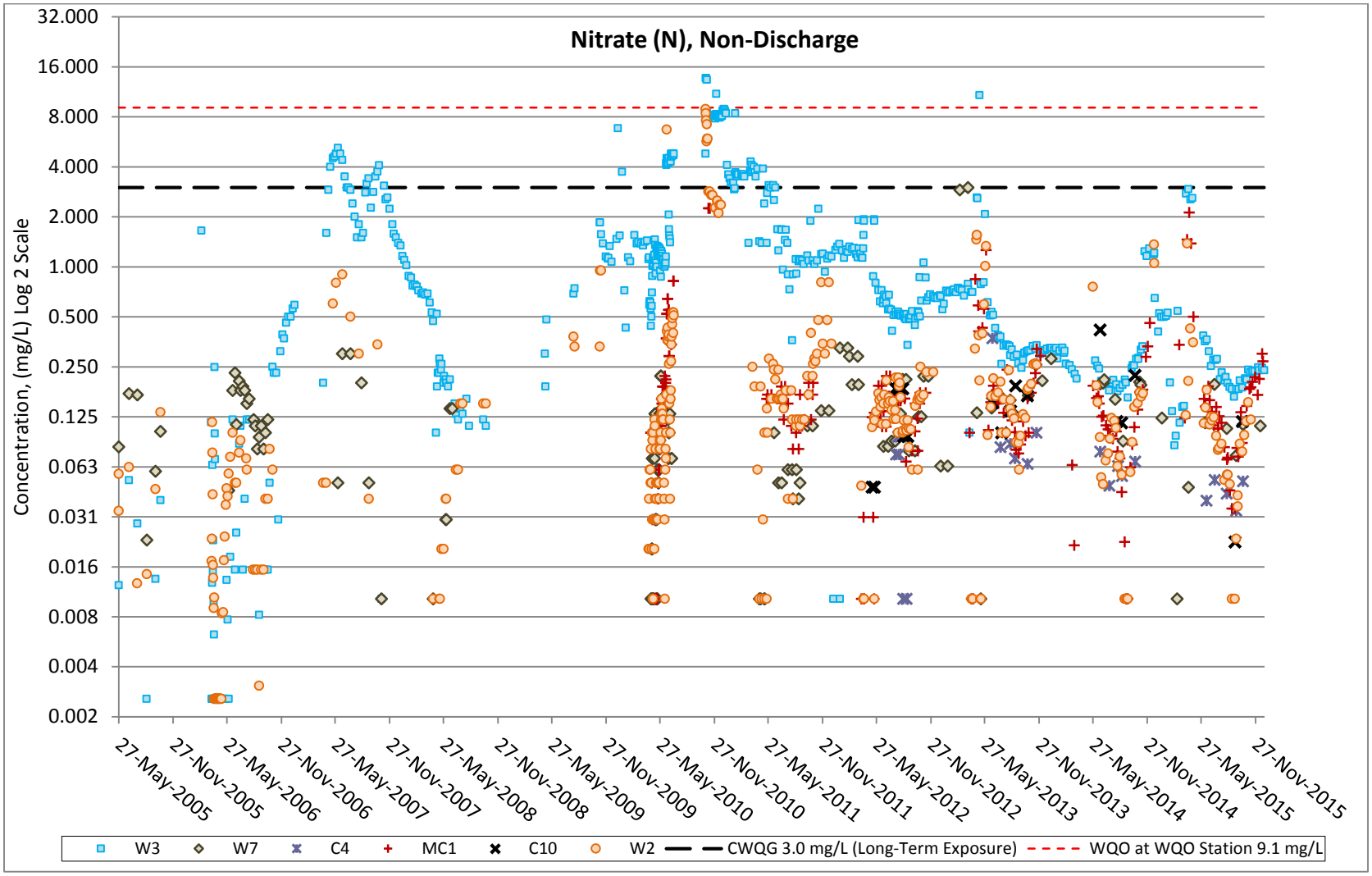

Figure 3-25: Concentrations of Nitrate (N) in Minto Creek Catchment during Non-Discharge Periods.

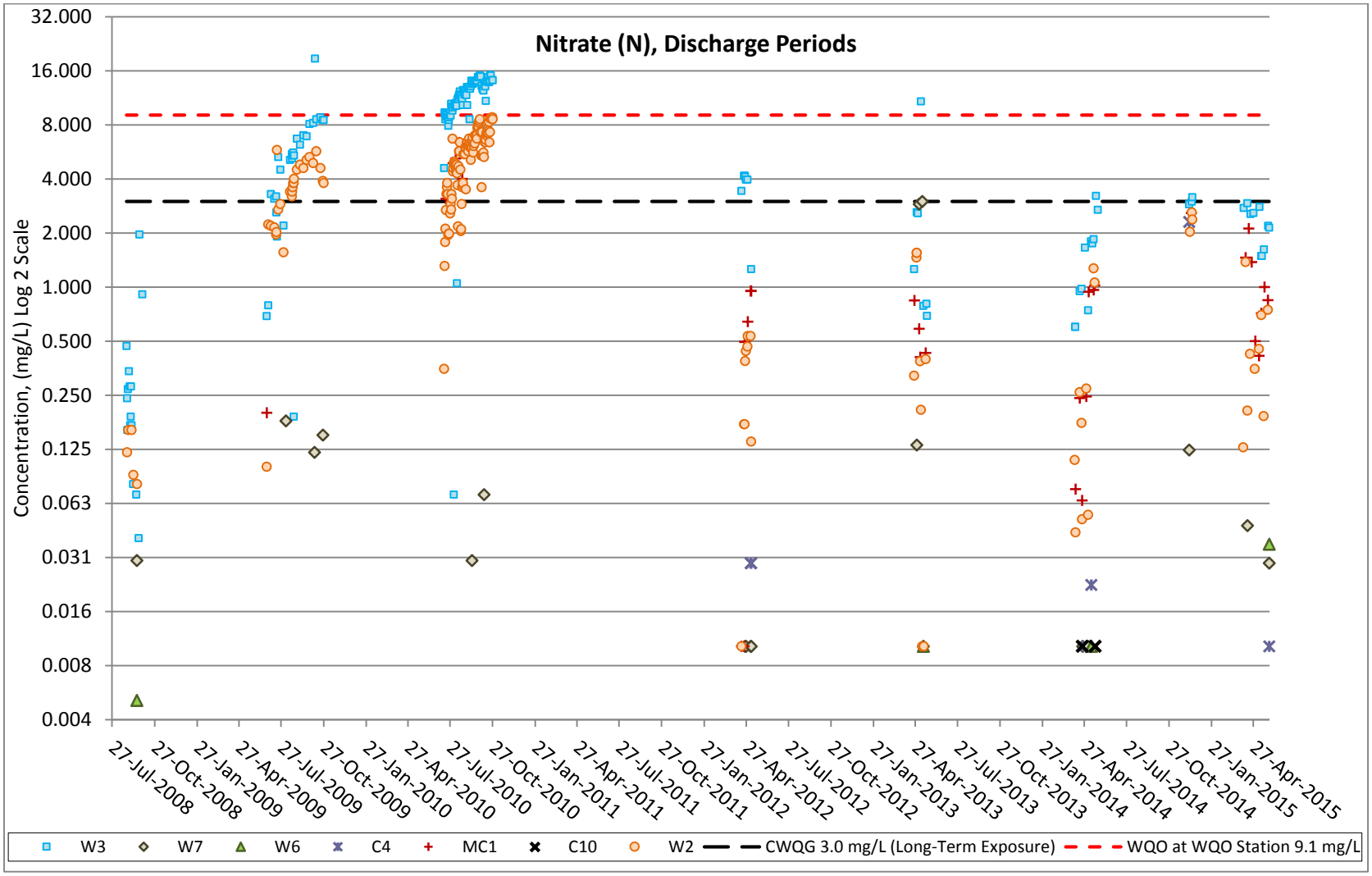

Figure 3-26: Concentrations of Nitrate (N) in Minto Creek Catchment during Mine Discharge Periods.

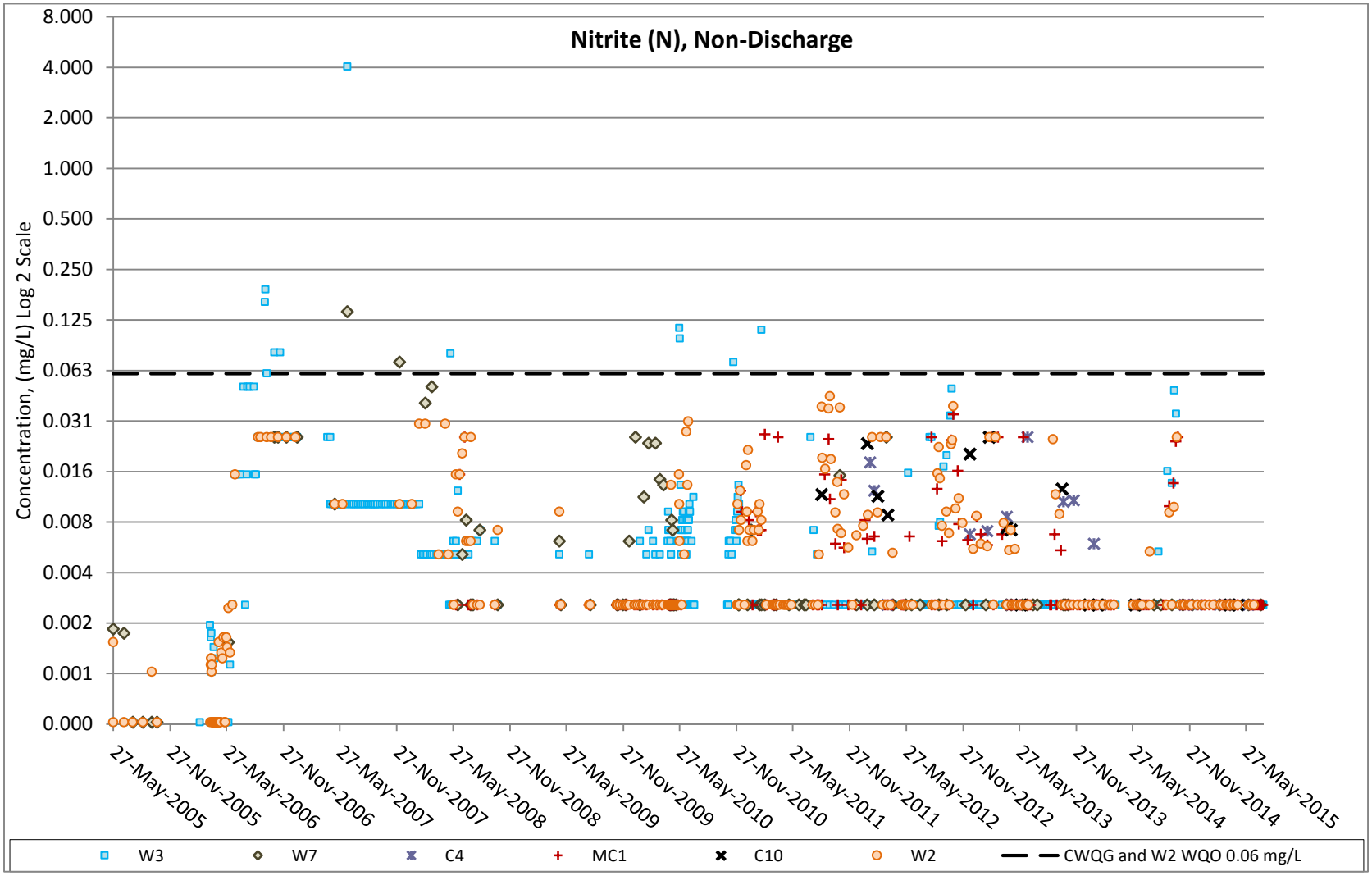

Figure 3-27: Concentrations of Nitrite (N) in Minto Creek Catchment during Non-Discharge Periods.

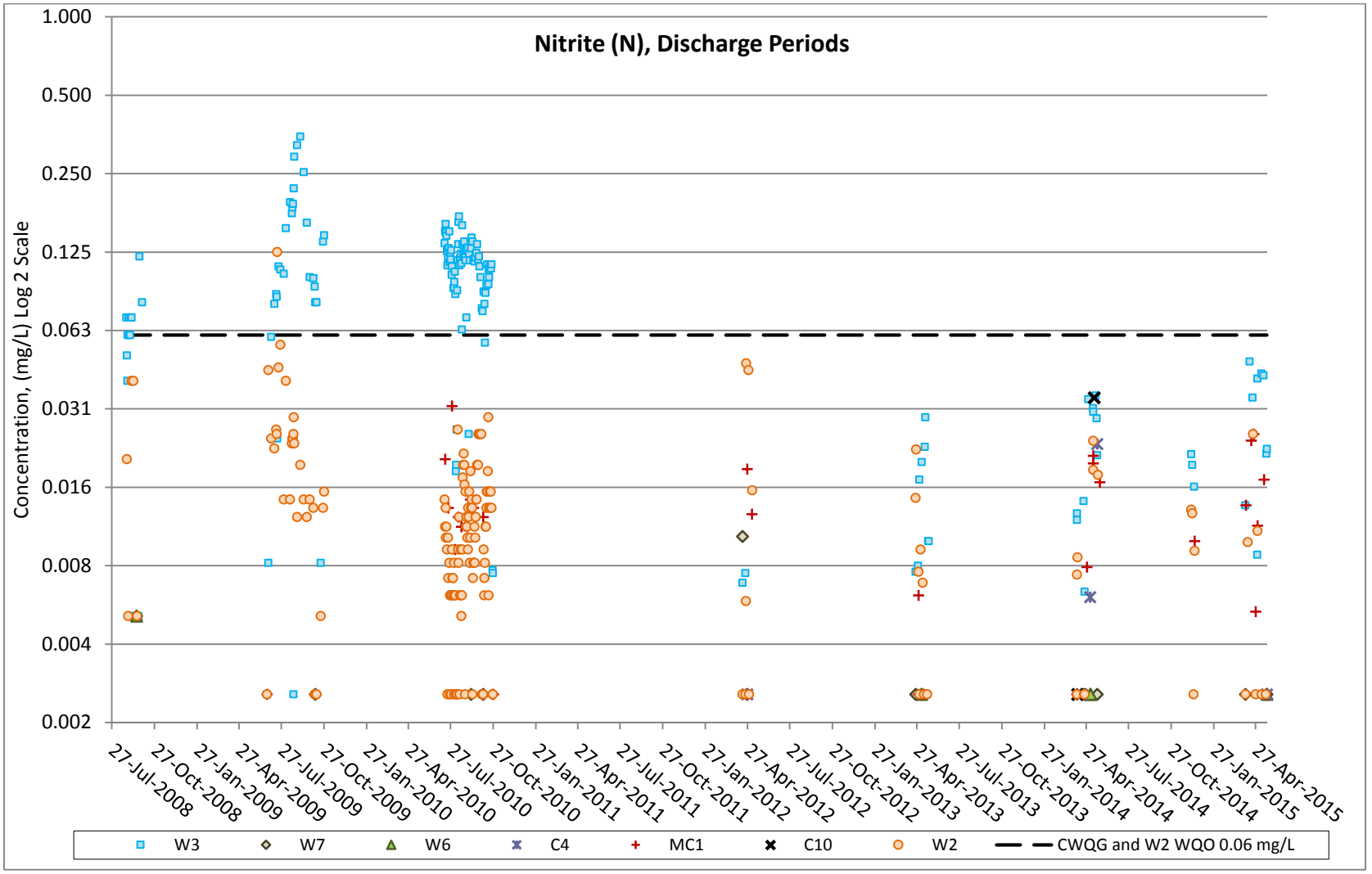

Figure 3-28: Concentrations of Nitrite (N) in Minto Creek Catchment during Mine Discharge Periods.

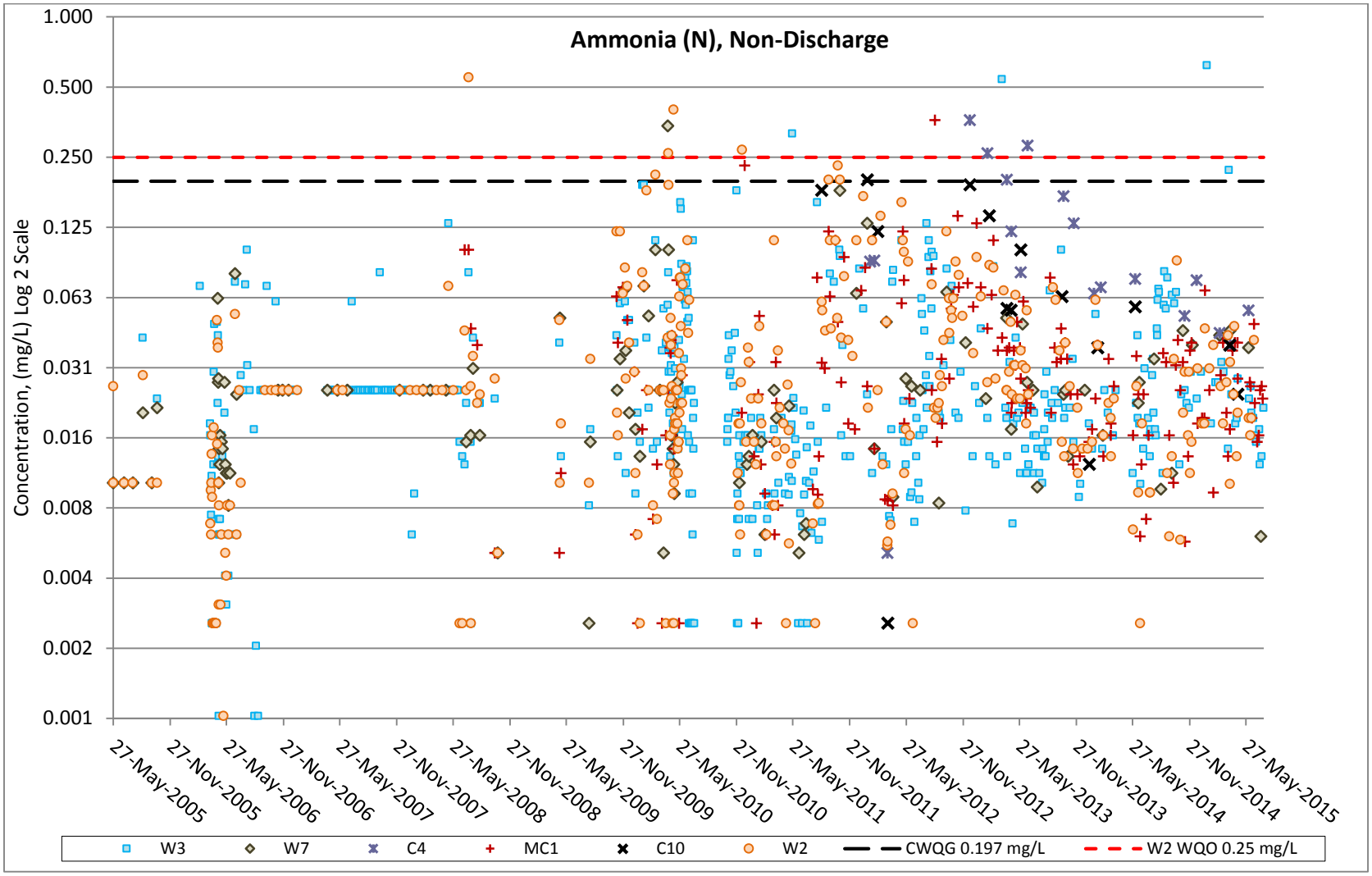

Figure 3-29: Concentrations of Ammonia (N) in Minto Creek Catchment during Non-Discharge Periods.

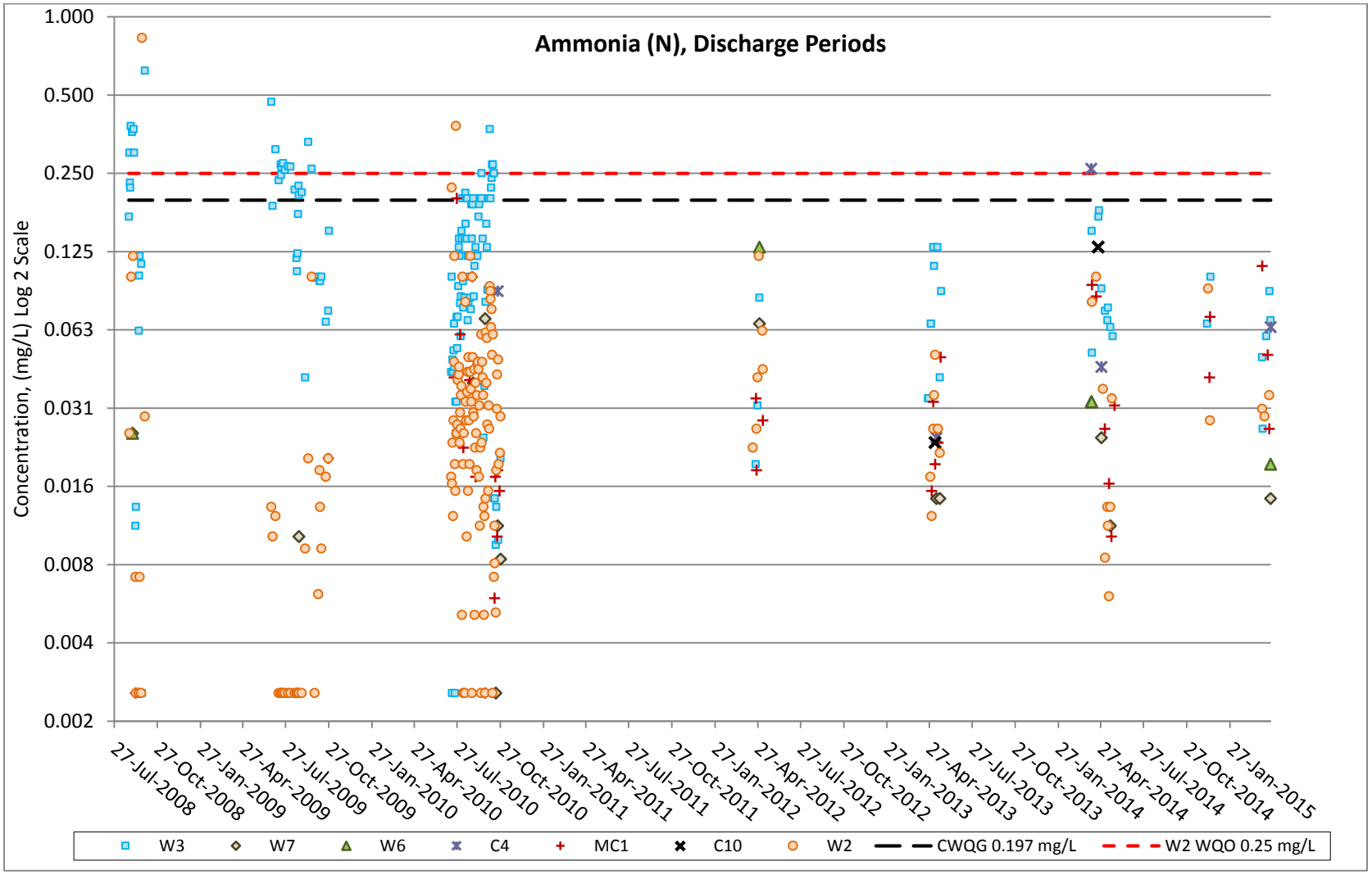

Figure 3-30: Concentrations of Ammonia (N) in Minto Creek Catchment during Mine Discharge Periods.

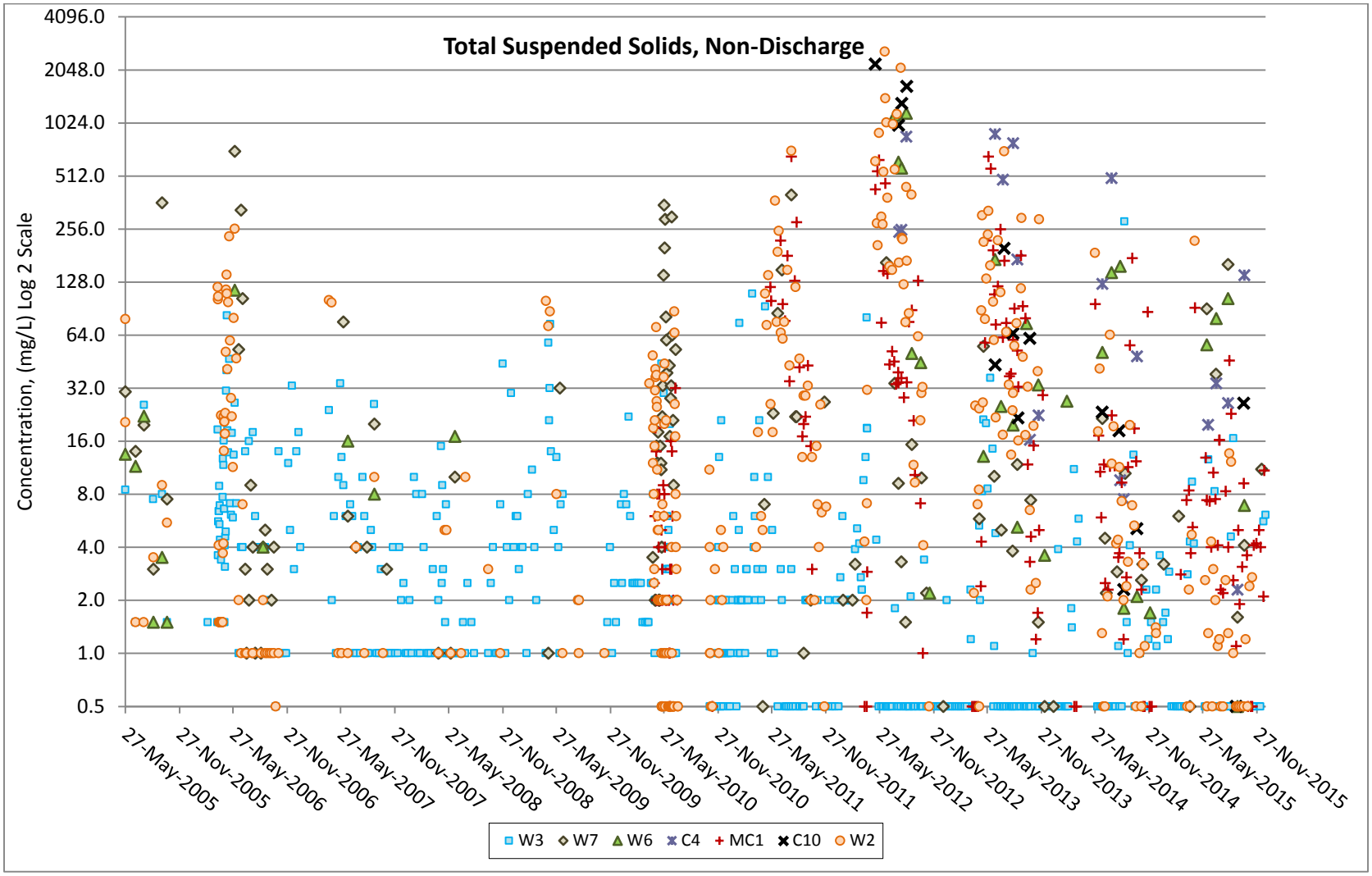

Figure 3-31: Concentrations of Total Suspended Solids in Minto Creek Catchment during Non-Discharge Periods.

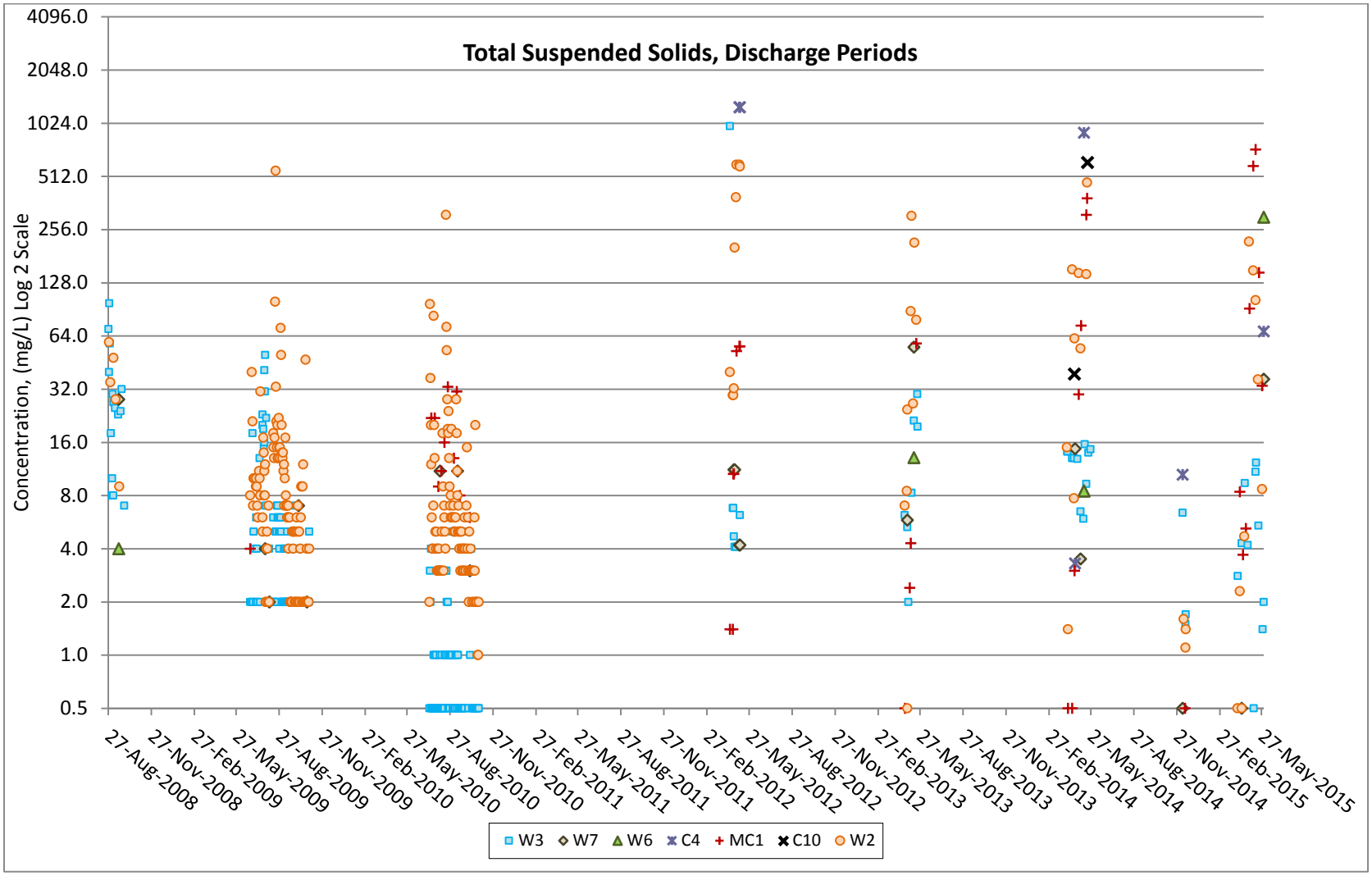

Figure 3-32: Concentrations of Total Suspended Solids in Minto Creek Catchment during Mine Discharge Periods.

3.3 MINTO MINE FACILITIES WATER QUALITY

Water quality results for seven monitoring locations on the Minto Mine property are summarized in Tables 3-15 to 3-21. Statistics were compiled for the 2005-2015 period, and ½ of the detection limit was used to calculate summary statistics where results were below the RDL. No outliers were removed. Please refer to Appendix B for complete 2005–2015 water quality data.

Table 3-8: Minto Mine Facility Monitoring Station W8: Summary of Water Quality Data.

	pH (field)	pH (lab)	Total Suspended Solids	Fluoride	Ammonia (N)	Nitrite (N)	Nitrate (N)	Total Phosphorous (colorimetric)	Aluminum (Al), total	Aluminum (Al), dissolved	Arsenic (As), total	Arsenic (As), dissolved	Cadmium (Cd), total	Cadmium (Cd), dissolved	Chromium (Cr), total	Chromium (Cr), dissolved	Copper (Cu), total	Copper (Cu), dissolved
	pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	7.61	7.92	37.8	0.49	0.43	0.7134	34.3334	0.049	4.3419	0.024	0.00455	0.00058	0.001675	0.000122	0.00558	0.00069	1.53184	0.10211
Count	58	128	128	62	94	92	115	24	132	127	132	127	132	127	132	127	132	127
Minimum	6.62	7.06	1	0.049	0.003	0.0005	0.001	0.012	0.008	0.0015	0.0001	0.0002	0.000005	0.000005	0.0002	0.0002	0.006	0.0005
Maximum	8.2	8.4	660	1.85	4.2	4.5	116	0.09	413	0.99	0.5	0.0085	0.2	0.00211	0.5	0.0053	170	0.352
Geometric Mean	7.6	7.92	12.4	0.353	0.143	0.1162	4.2235	0.045	0.2849	0.0102	0.0006	0.00048	0.000091	0.000068	0.0008	0.00059	0.11712	0.05912
Count <DL	0	0	23	0	4	14	22	0	0	27	7	10	28	23	74	97	0	1
Standard Deviation	0.34	0.22	87	0.45	0.666	1.0756	31.733	0.019	36.3085	0.0895	0.04349	0.00076	0.017397	0.000196	0.0444	0.00053	14.7857	0.09127
1st Quartile	7.41	7.8	5	0.273	0.043	0.068	5.165	0.037	0.085	0.005	0.0004	0.0004	0.00005	0.00003	0.0005	0.0005	0.0376	0.0217
Median	7.62	7.96	12.9	0.32	0.138	0.165	22.1	0.05	0.257	0.009	0.0005	0.0005	0.000125	0.0001	0.0006	0.0005	0.1595	0.094
3rd Quartile	7.89	8.1	36.8	0.395	0.528	0.7075	63.5	0.06	0.6388	0.0175	0.0007	0.0006	0.0002	0.00017	0.001	0.001	0.2895	0.1335

	Iron (Fe), total	Iron (Fe), dissolved	Lead (Pb), total	Lead (Pb), dissolved	Mercury (Hg), total	Molybdenum (Mo), total	Molybdenum (Mo), dissolved	Nickel (Ni), total	Nickel (Ni), dissolved	Phosphorus (P), total	Phosphorus (P), dissolved	Selenium (Se), total	Selenium (Se), dissolved	Silver (Ag), total	Silver (Ag), dissolved	Zinc (Zn), total	Zinc (Zn), dissolved
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	10.82	0.142	0.002871	0.000133	0.000031	0.056766	0.01154	0.01894	0.00207	0.03	0.646	0.09924	0.00572	0.000041	0.000503	0.4294	0.2518
Count	132	127	132	127	107	132	127	132	127	79	86	132	127	127	132	132	127
Minimum	0.054	0.005	0.000025	0.000025	0.000005	0.000212	0.00018	0.0005	0.00025	0.005	0.017	0.00005	0.00005	0.000005	0.000005	0.0005	0.0005
Maximum	1010	0.826	0.3	0.0023	0.0003	6	0.064	2	0.009	0.15	47	12.4	0.0193	0.00076	0.05	12.5	9.49
Geometric Mean	0.939	0.084	0.000223	0.000096	0.000017	0.006428	0.0064	0.00225	0.00161	0.02	0.075	0.00273	0.00264	0.000018	0.000039	0.0085	0.0038
Count <DL	0	7	51	110	88	11	11	4	16	17	17	31	29	106	61	38	78
Standard Deviation	89.11	0.153	0.026182	0.000221	0.000043	0.521384	0.01262	0.1741	0.00166	0.036	5.059	1.07883	0.00518	0.000096	0.004358	2.1029	1.3921
1st Quartile	0.4	0.04	0.0001	0.0001	0.00001	0.005877	0.005	0.00158	0.001	0.014	0.034	0.0005	0.00145	0.00001	0.00001	0.0025	0.0025
Median	0.716	0.089	0.0002	0.0001	0.00001	0.008	0.00799	0.002	0.0018	0.02	0.058	0.0038	0.0039	0.00001	0.00005	0.007	0.0025
3rd Quartile	1.495	0.189	0.0005	0.0001	0.00003	0.013	0.013	0.003	0.00202	0.03	0.147	0.01073	0.01165	0.00005	0.00007	0.0152	0.005

Table 3-9: Minto Mine Facility Monitoring Station W8A: Summary of Water Quality Data.

	pH (field)	pH (lab)	Total Suspended Solids	Fluoride	Ammonia (N)	Nitrite (N)	Nitrate (N)	Total Phosphorous (colorimetric)	Aluminum (Al), total	Aluminum (Al), dissolved	Arsenic (As), total	Arsenic (As), dissolved	Cadmium (Cd), total	Cadmium (Cd), dissolved	Chromium (Cr), total	Chromium (Cr), dissolved	Copper (Cu), total	Copper (Cu), dissolved
	pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	7.58	8.07	46.9	0.48	0.1017	0.0636	10.62	0.0649	1.741	0.01255	0.002217	0.000544	0.000765	0.00017	0.00335	0.0006	0.7752	0.114
Count	215	272	271	212	238	243	258	32	274	272	274	272	274	272	274	272	274	272
Minimum	6.2	7.45	1	0.24	0.007	0.0025	0.534	0.003	0.015	0.0015	0.0001	0.0001	0.00003	0.00002	0.0002	0.0001	0.0208	0.0125
Maximum	21.6	8.6	6540	1.6	1.6	0.61	72	0.46	151	0.157	0.4	0.0066	0.14	0.0013	0.5	0.002	124	0.272
Geometric Mean	7.54	8.06	11.6	0.46	0.0612	0.0253	8.356	0.0488	0.2138	0.00844	0.000659	0.000501	0.000167	0.000133	0.00085	0.0005	0.1739	0.1062
Count <DL	0	0	5	0	0	33	0	0	0	29	3	4	9	10	173	250	0	0
Standard Deviation	1.03	0.2	398.5	0.15	0.1472	0.1041	7.59	0.0754	12.1798	0.01672	0.024138	0.000405	0.008475	0.000139	0.03061	0.0003	7.6945	0.0387
1st Quartile	7.23	7.94	5.7	0.39	0.031	0.0113	5.678	0.04	0.0767	0.005	0.0005	0.0004	0.00010	0.00009	0.0005	0.0005	0.126	0.0909
Median	7.48	8.09	10	0.44	0.0515	0.022	10.1	0.05	0.1625	0.008	0.00061	0.00051	0.00015	0.000133	0.0005	0.0005	0.166	0.114
3rd Quartile	7.75	8.2	19.9	0.56	0.1	0.0721	13.9	0.07	0.5348	0.01285	0.0008	0.0006	0.00025	0.000212	0.00117	0.0005	0.212	0.133

	Iron (Fe), total	Iron (Fe), dissolved	Lead (Pb), total	Lead (Pb), dissolved	Mercury (Hg), total	Molybdenum (Mo), total	Molybdenum (Mo), dissolved	Nickel (Ni), total	Nickel (Ni), dissolved	Phosphorus (P), total	Phosphorus (P), dissolved	Selenium (Se), total	Selenium (Se), dissolved	Silver (Ag), total	Silver (Ag), dissolved	Zinc (Zn), total	Zinc (Zn), dissolved
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	3.938	0.132	0.00203	0.000113	0.000016	0.02872	0.01034	0.01066	0.0013	0.028	0.21	0.01768	0.00603	0.000018	0.0002	0.908	0.695
Count	274	272	274	272	269	274	272	274	272	238	241	274	272	272	274	274	272
Minimum	0.073	0.017	0.00005	0.000013	0.000005	0.000340	0.00033	0.0005	0.0005	0.005	0.005	0.0003	0.0003	0.000005	0.000005	0.003	0.0005
Maximum	365	0.648	0.4	0.0005	0.00021	5.0000	0.049	2	0.006	0.13	28	3.2	0.018	0.0005	0.0164	9	5.17
Geometric Mean	0.864	0.0978	0.00024	0.000102	0.000008	0.009310	0.00904	0.00163	0.00106	0.025	0.063	0.00456	0.00455	0.000012	0.000027	0.151	0.0854
Count <DL	0	0	128	252	247	0	0	44	89	8	5	9	3	239	123	43	79
Standard Deviation	27.4	0.1155	0.02428	0.000073	0.000028	0.30148	0.00568	0.12219	0.00094	0.014	1.814	0.193	0.00419	0.000036	0.001393	1.171	0.9331
1st Quartile	0.385	0.0579	0.0001	0.0001	0.000005	0.006130	0.006	0.00103	0.0005	0.02	0.042	0.00244	0.00258	0.00001	0.00001	0.008	0.0029
Median	0.839	0.09	0.0002	0.0001	0.000005	0.009000	0.009	0.0015	0.001	0.026	0.054	0.00479	0.00468	0.00001	0.000026	0.58	0.3685
3rd Quartile	1.637	0.1583	0.00048	0.0001	0.00001	0.01385	0.0139	0.002	0.0015	0.034	0.086	0.00856	0.00867	0.00001	0.00005	1.468	1.1125

Table 3-10: Minto Mine Facility Monitoring Station W12: Summary of Water Quality Data.

	pH (field)	pH (lab)	Total Suspended Solids	Fluoride	Ammonia (N)	Nitrite (N)	Nitrate (N)	Total Phosphorous (colorimetric)	Aluminum (Al), total	Aluminum (Al), dissolved	Arsenic (As), total	Arsenic (As), dissolved	Cadmium (Cd), total	Cadmium (Cd), dissolved	Chromium (Cr), total	Chromium (Cr), dissolved	Copper (Cu), total	Copper (Cu), dissolved
	pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	7.89	8.08	19.6	1.06	2.2444	0.6406	20.42	0.0605	0.9071	0.0251	0.00112	0.00072	0.000146	0.000052	0.0011	0.0005	0.35864	0.06246
Count	88	100	97	63	86	89	95	34	108	85	108	85	108	85	108	96	108	85
Minimum	6.01	7.27	0.5	0.14	0.0025	0.007	0.01	0.01	0.016	0.0016	0.0001	0.00027	0.000005	0.000005	0.0002	0.0002	0.00156	0.00046
Maximum	8.66	10.6	251	3.2	24	8.78	141	0.44	13.8	0.124	0.0196	0.003	0.00135	0.00049	0.0076	0.0025	6.21	0.476
Geometric Mean	7.87	8.07	9.3	0.9	0.8207	0.2351	14.05	0.0442	0.3391	0.0175	0.00079	0.00063	0.000069	0.000032	0.0007	0.0005	0.09509	0.02463
Count <DL	0	0	11	0	3	0	1	7	0	4	2	1	3	8	75	89	0	0
Standard Deviation	0.47	0.34	32.2	0.53	3.526	1.2908	22.53	0.0729	1.6948	0.0227	0.00194	0.00046	0.000231	0.000069	0.0014	0.0003	0.90078	0.08691
1st Quartile	7.85	7.93	4.6	0.56	0.4575	0.108	10.5	0.025	0.1247	0.012	0.0005	0.00044	0.000028	0.000019	0.0005	0.0005	0.03757	0.00699
Median	8	8.11	10.4	1.3	1.35	0.213	14.1	0.04	0.2955	0.019	0.0007	0.00054	0.000053	0.00003	0.0005	0.0005	0.08005	0.029
3rd Quartile	8.16	8.2	20.8	1.4	2.2	0.48	19.15	0.0675	0.8945	0.0288	0.001	0.00086	0.00016	0.00005	0.0009	0.0005	0.20675	0.077

	Iron (Fe), total	Iron (Fe), dissolved	Lead (Pb), total	Lead (Pb), dissolved	Mercury (Hg), total	Molybdenum (Mo), total	Molybdenum (Mo), dissolved	Nickel (Ni), total	Nickel (Ni), dissolved	Phosphorus (P), total	Phosphorus (P), dissolved	Selenium (Se), total	Selenium (Se), dissolved	Silver (Ag), total	Silver (Ag), dissolved	Zinc (Zn), total	Zinc (Zn), dissolved
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	1.581	0.0466	0.00072	0.00013	0.000035	0.03915	0.03955	0.003	0.0014	0.011	0.066	0.0064	0.00618	0.000032	0.000128	0.0133	0.004
Count	107	85	108	85	108	108	85	108	85	76	93	108	85	85	108	108	85
Minimum	0.005	0.0025	0.00005	0.00005	0.000005	0.003000	0.003	0.0003	0.0003	0.005	0.005	0.00064	0.0003	0.000005	0.000005	0.0025	0.001
Maximum	23.3	0.386	0.0056	0.0005	0.0005	0.1010	0.0972	0.051	0.0038	0.082	0.44	0.0185	0.0207	0.0005	0.00251	0.17	0.031
Geometric Mean	0.5	0.02	0.00029	0.00011	0.000012	0.031600	0.03071	0.0016	0.0011	0.008	0.037	0.00516	0.00495	0.000012	0.000031	0.0072	0.0032
Count <DL	3	14	48	72	91	0	0	26	32	50	13	0	1	82	63	42	63
Standard Deviation	3.108	0.0652	0.00116	0.00008	0.000085	0.02389	0.02614	0.007	0.0009	0.015	0.087	0.00417	0.00384	0.000093	0.00036	0.0213	0.0043
1st Quartile	0.177	0.0069	0.0001	0.0001	0.000005	0.020000	0.018	0.001	0.0005	0.005	0.017	0.004	0.00437	0.00001	0.00001	0.0025	0.0025
Median	0.437	0.016	0.0002	0.0001	0.000005	0.035750	0.0286	0.0017	0.001	0.005	0.031	0.00534	0.0058	0.00001	0.00002	0.0067	0.0025
3rd Quartile	1.395	0.069	0.0008	0.0001	0.000021	0.05170	0.0561	0.0028	0.002	0.011	0.076	0.00715	0.00704	0.00001	0.00006	0.014	0.003

Table 3-11: Minto Mine Facility Monitoring Station W15: Summary of Water Quality Data.

	pH (field)	pH (lab)	Total Suspended Solids	Fluoride	Ammonia (N)	Nitrite (N)	Nitrate (N)	Total Phosphorous (colorimetric)	Aluminum (Al), total	Aluminum (Al), dissolved	Arsenic (As), total	Arsenic (As), dissolved	Cadmium (Cd), total	Cadmium (Cd), dissolved	Chromium (Cr), total	Chromium (Cr), dissolved	Copper (Cu), total	Copper (Cu), dissolved
	pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	7.74	7.93	17.7	0.183	0.1233	0.1034	11.97	0.0497	0.5673	0.0571	0.000729	0.000552	0.00004	0.000041	0.00092	0.00059	0.05534	0.02413
Count	283	238	238	186	217	219	227	58	240	216	240	216	240	216	240	216	240	216
Minimum	6.16	6.39	0.5	0.07	0.0025	0.0025	0.01	0.02	0.006	0.0032	0.0002	0.0001	0.000005	0.000005	0.00025	0.0002	0.002	0.0038
Maximum	9.95	8.48	370	1.6	5.3	3.78	265	0.27	14.7	2.65	0.00614	0.0022	0.00038	0.00234	0.0226	0.0053	1.18	0.415
Geometric Mean	7.73	7.92	7.4	0.157	0.0677	0.0467	5.61	0.0422	0.2166	0.0278	0.000633	0.000506	0.000023	0.000017	0.00068	0.00055	0.03307	0.01886
Count <DL	0	0	17	0	21	16	2	4	0	0	2	3	71	80	181	200	0	0
Standard Deviation	0.46	0.33	35.7	0.175	0.3716	0.2685	22.12	0.0383	1.3293	0.1845	0.000544	0.000281	0.00005	0.000166	0.00173	0.00041	0.09866	0.0303
1st Quartile	7.45	7.77	3	0.122	0.038	0.02	3.1	0.03	0.0903	0.0146	0.00047	0.0004	0.00001	0.000005	0.0005	0.0005	0.01847	0.01205
Median	7.74	8	7	0.16	0.072	0.0409	5.76	0.0401	0.223	0.0243	0.00058	0.0005	0.000027	0.000017	0.0005	0.0005	0.03015	0.0185
3rd Quartile	8.05	8.15	16	0.18	0.12	0.1185	13.2	0.05	0.5365	0.0546	0.0008	0.0006	0.00005	0.00004	0.001	0.0005	0.05475	0.0289

	Iron (Fe), total	Iron (Fe), dissolved	Lead (Pb), total	Lead (Pb), dissolved	Mercury (Hg), total	Molybdenum (Mo), total	Molybdenum (Mo), dissolved	Nickel (Ni), total	Nickel (Ni), dissolved	Phosphorus (P), total	Phosphorus (P), dissolved	Selenium (Se), total	Selenium (Se), dissolved	Silver (Ag), total	Silver (Ag), dissolved	Zinc (Zn), total	Zinc (Zn), dissolved
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	1.412	0.4356	0.00038	0.000125	0.000017	0.00401	0.00416	0.00181	0.0012	0.019	0.064	0.00251	0.00258	0.0000146	0.0000278	0.00721	0.00378
Count	240	216	240	216	237	240	216	240	216	183	203	240	216	216	240	240	216
Minimum	0.039	0.0025	0.00005	0.000031	0.000005	0.000160	0.0001	0.00025	0.0005	0.005	0.005	0.0001	0.0001	0.0000025	0.0000025	0.002	0.0005
Maximum	24.5	6.48	0.0122	0.0027	0.0001	0.1270	0.113	0.0187	0.008	0.121	2.5	0.0681	0.0504	0.00018	0.00051	0.063	0.041
Geometric Mean	0.864	0.2449	0.000186	0.000105	0.000009	0.002340	0.00253	0.00143	0.00101	0.016	0.041	0.00125	0.00134	0.0000115	0.0000172	0.00503	0.00321
Count <DL	0	2	138	201	215	12	7	39	64	29	12	28	20	212	179	125	173
Standard Deviation	2.117	0.5914	0.00098	0.000194	0.000027	0.01072	0.01007	0.00168	0.00087	0.014	0.178	0.00529	0.00453	0.0000166	0.0000446	0.00835	0.00343
1st Quartile	0.484	0.128	0.0001	0.0001	0.000005	0.002000	0.002	0.001	0.0005	0.011	0.024	0.00056	0.00063	0.00001	0.00001	0.0025	0.0025
Median	0.842	0.316	0.0001	0.0001	0.000005	0.002400	0.00264	0.0014	0.001	0.017	0.04	0.00124	0.00128	0.00001	0.00001	0.005	0.0025
3rd Quartile	1.45	0.549	0.00035	0.0001	0.00001	0.00330	0.0032	0.002	0.00123	0.026	0.067	0.00237	0.00259	0.00001	0.00004	0.0083	0.004

Table 3-12: Minto Mine Facility Monitoring Station W16: Summary of Water Quality Data.

	pH (field)	pH (lab)	Total Suspended Solids	Fluoride	Ammonia (N)	Nitrite (N)	Nitrate (N)	Total Phosphorous (colorimetric)	Aluminum (Al), total	Aluminum (Al), dissolved	Arsenic (As), total	Arsenic (As), dissolved	Cadmium (Cd), total	Cadmium (Cd), dissolved	Chromium (Cr), total	Chromium (Cr), dissolved	Copper (Cu), total	Copper (Cu), dissolved
	pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	7.95	7.97	7.4	0.294	0.1603	0.1196	3.709	0.0382	0.2601	0.01876	0.000526	0.000403	0.000041	0.000041	0.00068	0.00066	0.04404	0.02513
Count	291	357	356	255	341	347	353	132	368	310	368	310	368	310	368	310	368	310
Minimum	6.64	6.74	0.5	0.005	0.0025	0.0025	0.01	0.0025	0.005	0.0015	0.00005	0.00005	0.000005	0.000005	0.00013	0.00013	0.003	0.00158
Maximum	10.05	8.76	181	0.81	2	8.62	35	0.211	6.06	0.234	0.005	0.0015	0.0026	0.00557	0.0066	0.0172	0.468	0.123
Geometric Mean	7.93	7.97	4.1	0.26	0.0718	0.0323	2.064	0.0317	0.1179	0.01093	0.000456	0.000342	0.000021	0.000015	0.00058	0.00056	0.03437	0.02027
Count <DL	0	0	53	1	10	47	5	17	2	29	13	28	112	152	293	279	0	0
Standard Deviation	0.52	0.29	13.5	0.144	0.2306	0.5134	3.838	0.0256	0.5367	0.02506	0.000361	0.000199	0.000142	0.000316	0.0006	0.001	0.04058	0.01819
1st Quartile	7.62	7.8	2	0.2	0.03	0.0103	0.946	0.0214	0.0496	0.0055	0.00037	0.00032	0.000012	0.000005	0.0005	0.0005	0.02265	0.0145
Median	7.88	8.03	4	0.26	0.063	0.0281	3.08	0.03	0.101	0.01	0.0005	0.0004	0.00002	0.000014	0.0005	0.0005	0.03155	0.019
3rd Quartile	8.22	8.17	8	0.345	0.17	0.105	4.52	0.05	0.2575	0.02155	0.0006	0.0005	0.00004	0.000032	0.0006	0.0005	0.05155	0.02997

	Iron (Fe), total	Iron (Fe), dissolved	Lead (Pb), total	Lead (Pb), dissolved	Mercury (Hg), total	Molybdenum (Mo), total	Molybdenum (Mo), dissolved	Nickel (Ni), total	Nickel (Ni), dissolved	Phosphorus (P), total	Phosphorus (P), dissolved	Selenium (Se), total	Selenium (Se), dissolved	Silver (Ag), total	Silver (Ag), dissolved	Zinc (Zn), total	Zinc (Zn), dissolved
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	0.526	0.1357	0.000208	0.00011	0.000047	0.00726	0.00639	0.0018	0.00109	0.015	0.038	0.001245	0.001209	0.0000322	0.000032	0.0084	0.00497
Count	367	310	368	310	364	368	310	368	310	264	315	368	310	310	368	368	310
Minimum	0.021	0.0066	0.000046	0.00002	0.000005	0.000500	0.0005	0.00025	0.00025	0.005	0.005	0.00005	0.00005	0.0000025	0.0000025	0.0025	0.001
Maximum	8.2	1.36	0.0025	0.0008	0.005	0.0330	0.0271	0.025	0.009	0.08	0.28	0.0067	0.0064	0.0005	0.001	0.104	0.0828
Geometric Mean	0.292	0.0615	0.000147	0.0001	0.00001	0.005350	0.00479	0.0012	0.00082	0.011	0.031	0.000841	0.000824	0.0000133	0.0000185	0.0055	0.00353
Count <DL	6	1	235	280	345	20	18	111	162	112	41	26	20	301	301	190	247
Standard Deviation	0.807	0.2551	0.000271	0.00006	0.00037	0.00559	0.00474	0.00272	0.00131	0.013	0.029	0.001236	0.001196	0.0000921	0.0000664	0.0097	0.00724
1st Quartile	0.139	0.0289	0.0001	0.0001	0.000005	0.003980	0.00373	0.0005	0.0005	0.005	0.021	0.00048	0.000492	0.00001	0.00001	0.0025	0.0025
Median	0.242	0.0575	0.0001	0.0001	0.000005	0.005000	0.0046	0.0011	0.0005	0.012	0.029	0.0009	0.000885	0.00001	0.00001	0.005	0.0025
3rd Quartile	0.566	0.1087	0.0002	0.0001	0.00001	0.00950	0.0085	0.002	0.0011	0.02	0.047	0.0014	0.001377	0.00001	0.00005	0.011	0.005

Table 3-13: Minto Mine Facility Monitoring Station W35A: Summary of Water Quality Data.

	pH (field)	pH (lab)	Total Suspended Solids	Fluoride	Ammonia (N)	Nitrite (N)	Nitrate (N)	Total Phosphorous (colorimetric)	Aluminum (Al), total	Aluminum (Al), dissolved	Arsenic (As), total	Arsenic (As), dissolved	Cadmium (Cd), total	Cadmium (Cd), dissolved	Chromium (Cr), total	Chromium (Cr), dissolved	Copper (Cu), total	Copper (Cu), dissolved
	pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	7.48	7.64	24.6	0.112	0.0906	0.0636	0.795	0.0871	1.2246	0.0548	0.00062	0.00035	0.000124	0.00004	0.0012	0.0006	0.13443	0.02698
Count	66	71	73	56	60	60	63	26	74	73	74	73	74	73	74	73	74	73
Minimum	6.21	5.72	0.5	0.07	0.0025	0.0025	0.005	0.0097	0.022	0.005	0.0002	0.0002	0.000005	0.000005	0.0004	0.0002	0.005	0.00309
Maximum	8.72	8.28	1460	0.66	1.3	3.09	16.9	1.38	70.6	0.271	0.0157	0.0024	0.0028	0.00061	0.03	0.0014	6.69	0.11
Geometric Mean	7.46	7.63	2.1	0.102	0.0297	0.0046	0.026	0.0364	0.1252	0.0421	0.00038	0.00032	0.000034	0.000023	0.0007	0.0006	0.02646	0.01809
Count <DL	0	0	41	0	6	50	48	0	0	1	14	15	28	29	53	64	0	0
Standard Deviation	0.52	0.38	170.6	0.081	0.206	0.3988	3.116	0.2643	8.2046	0.049	0.00181	0.00026	0.000376	0.000072	0.0034	0.0003	0.77498	0.02537
1st Quartile	7.14	7.48	0.5	0.08	0.01	0.0025	0.01	0.0254	0.0504	0.0264	0.0002	0.00026	0.000014	0.00001	0.0005	0.0005	0.00925	0.0086
Median	7.53	7.7	2	0.1	0.03	0.0025	0.01	0.031	0.0881	0.0421	0.0004	0.0003	0.000041	0.000022	0.0005	0.0005	0.0204	0.0153
3rd Quartile	7.86	7.9	3.7	0.11	0.061	0.0025	0.055	0.05	0.2132	0.061	0.0005	0.0004	0.000054	0.00005	0.001	0.001	0.05428	0.037

	Iron (Fe), total	Iron (Fe), dissolved	Lead (Pb), total	Lead (Pb), dissolved	Mercury (Hg), total	Molybdenum (Mo), total	Molybdenum (Mo), dissolved	Nickel (Ni), total	Nickel (Ni), dissolved	Phosphorus (P), total	Phosphorus (P), dissolved	Selenium (Se), total	Selenium (Se), dissolved	Silver (Ag), total	Silver (Ag), dissolved	Zinc (Zn), total	Zinc (Zn), dissolved
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	2.252	0.1754	0.00059	0.00013	0.00003	0.00107	0.00096	0.0019	0.0014	0.022	0.075	0.00051	0.00047	0.000018	0.000085	0.0133	0.0036
Count	74	73	74	73	73	74	73	74	73	46	48	74	73	73	74	74	73
Minimum	0.08	0.022	0.00005	0.00005	0.000005	0.000400	0.0003	0.0005	0.0005	0.005	0.005	0.00005	0.00005	0.000005	0.000005	0.0025	0.0005
Maximum	130	1.38	0.0276	0.0009	0.0001	0.0120	0.012	0.021	0.005	0.12	1.36	0.0106	0.0111	0.00005	0.0027	0.512	0.019
Geometric Mean	0.34	0.1469	0.00017	0.00011	0.000016	0.000680	0.00064	0.0016	0.0013	0.016	0.034	0.0002	0.00019	0.000013	0.000017	0.0051	0.0031
Count <DL	0	0	48	65	59	52	54	3	8	12	4	43	42	72	63	45	59
Standard Deviation	15.08	0.1637	0.00319	0.00012	0.000037	0.00200	0.00185	0.0024	0.0006	0.02	0.196	0.00141	0.00145	0.000017	0.000393	0.0592	0.0026
1st Quartile	0.185	0.11	0.0001	0.0001	0.000005	0.000500	0.0005	0.001	0.001	0.006	0.016	0.0001	0.0001	0.00001	0.00001	0.0025	0.0025
Median	0.255	0.132	0.0001	0.0001	0.00001	0.000500	0.0005	0.0015	0.0013	0.019	0.031	0.0002	0.0002	0.00001	0.00001	0.005	0.0025
3rd Quartile	0.45	0.188	0.0003	0.0001	0.00002	0.00078	0.0005	0.002	0.002	0.027	0.059	0.0004	0.0004	0.00001	0.000038	0.0072	0.005

Table 3-14: Minto Mine Facility Monitoring Station W50: Summary of Water Quality Data.

	pH (field)	pH (lab)	Total Suspended Solids	Fluoride	Ammonia (N)	Nitrite (N)	Nitrate (N)	Total Phosphorous (colorimetric)	Aluminum (Al), total	Aluminum (Al), dissolved	Arsenic (As), total	Arsenic (As), dissolved	Cadmium (Cd), total	Cadmium (Cd), dissolved	Chromium (Cr), total	Chromium (Cr), dissolved	Copper (Cu), total	Copper (Cu), dissolved
	pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	7.81	8.03	5.9	0.34	0.0856	0.0237	4.303	0.0254	0.2338	0.0201	0.00049	0.00042	0.000183	0.000019	0.0007	0.0006	0.02482	0.0148
Count	107	114	114	87	89	92	102	49	116	112	116	112	116	112	116	112	116	112
Minimum	6.99	6.82	0.5	0.06	0.0025	0.0025	0.01	0.0101	0.0051	0.0015	0.0002	0.0002	0.000005	0.000005	0.0002	0.0002	0.004	0.0005
Maximum	9.5	8.4	42	0.53	1	0.158	16.2	0.0585	1.17	0.12	0.0022	0.0031	0.0185	0.00028	0.0059	0.0017	0.105	0.075
Geometric Mean	7.8	8.03	3.2	0.32	0.0409	0.0126	2.452	0.0237	0.1239	0.0116	0.00045	0.00039	0.000017	0.000012	0.0006	0.0005	0.01798	0.01074
Count <DL	0	0	30	0	3	17	2	0	0	10	5	4	34	48	82	94	0	1
Standard Deviation	0.35	0.26	7.5	0.1	0.1456	0.0291	3.964	0.0098	0.2646	0.0236	0.00024	0.0003	0.001716	0.00003	0.0006	0.0003	0.02093	0.01194
1st Quartile	7.6	7.96	1.4	0.28	0.017	0.0075	1.785	0.0181	0.063	0.0055	0.00039	0.00034	0.00001	0.000005	0.0005	0.0005	0.00896	0.00569
Median	7.82	8.09	3.7	0.36	0.034	0.0098	2.935	0.0234	0.147	0.009	0.00044	0.00039	0.000019	0.000012	0.0005	0.0005	0.017	0.01155
3rd Quartile	7.99	8.18	6.7	0.39	0.083	0.0297	5.085	0.03	0.2885	0.0263	0.0005	0.0004	0.00003	0.000022	0.0008	0.0005	0.03112	0.02432

	Iron (Fe), total	Iron (Fe), dissolved	Lead (Pb), total	Lead (Pb), dissolved	Mercury (Hg), total	Molybdenum (Mo), total	Molybdenum (Mo), dissolved	Nickel (Ni), total	Nickel (Ni), dissolved	Phosphorus (P), total	Phosphorus (P), dissolved	Selenium (Se), total	Selenium (Se), dissolved	Silver (Ag), total	Silver (Ag), dissolved	Zinc (Zn), total	Zinc (Zn), dissolved
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Average	0.3535	0.0548	0.00025	0.00013	0.000011	0.00743	0.00728	0.0016	0.001	0.011	0.027	0.00117	0.00127	0.000011	0.000023	0.0064	0.0034
Count	116	112	116	112	114	116	112	116	112	95	100	116	112	112	116	116	112
Minimum	0.0025	0.0025	0.00005	0.00005	0.000005	0.000500	0.0005	0.0005	0.0005	0.005	0.005	0.00005	0.00005	0.000005	0.000005	0.0025	0.0005
Maximum	2.2	0.3	0.0021	0.0008	0.0001	0.0200	0.019	0.018	0.003	0.07	0.156	0.0054	0.0049	0.00005	0.000471	0.038	0.018
Geometric Mean	0.1499	0.0267	0.00017	0.00011	0.000007	0.006400	0.00629	0.0012	0.0008	0.009	0.021	0.00087	0.00094	0.000009	0.000012	0.0048	0.003
Count <DL	5	21	69	95	108	1	1	32	55	50	26	8	4	110	102	59	87
Standard Deviation	0.4407	0.067	0.00031	0.00012	0.00002	0.00433	0.00419	0.0019	0.0007	0.009	0.022	0.00104	0.00106	0.000009	0.000059	0.0061	0.0023
1st Quartile	0.0533	0.01	0.0001	0.0001	0.000005	0.005080	0.00508	0.0005	0.0005	0.005	0.016	0.00054	0.00061	0.00001	0.00001	0.0025	0.0025
Median	0.223	0.03	0.0001	0.0001	0.000005	0.005700	0.0057	0.0012	0.001	0.005	0.025	0.0009	0.00094	0.00001	0.00001	0.0045	0.0025
3rd Quartile	0.4313	0.0774	0.0003	0.0001	0.000005	0.00800	0.0077	0.002	0.0011	0.014	0.031	0.0014	0.00168	0.00001	0.00001	0.008	0.0025

3.4 MINTO MINE FACILITIES WATER QUALITY OVER TIME

The same parameters of interest as for Minto Creek stations were plotted versus time. The parameters graphed in Figures 3-33 through 3-48 include total and dissolved aluminum, cadmium, chromium, copper, selenium and silver, as well as nitrate, nitrite, ammonia and total suspended solids. For results below laboratory detection levels, ½ the RDL has been plotted.

Most parameters exhibit a seasonal pattern, with the highest values occurring during the summer months. Except for total and dissolved cadmium at station W8A and ammonia at station W12 that display a slight increasing trend since 2012, no clear trend emerges for other stations and parameters. Totals and dissolved copper and cadmium values are higher at station W8A than at the other stations since 2010 and 2012 respectively. Some elevated total metals values appear to coincide with high TSS events.

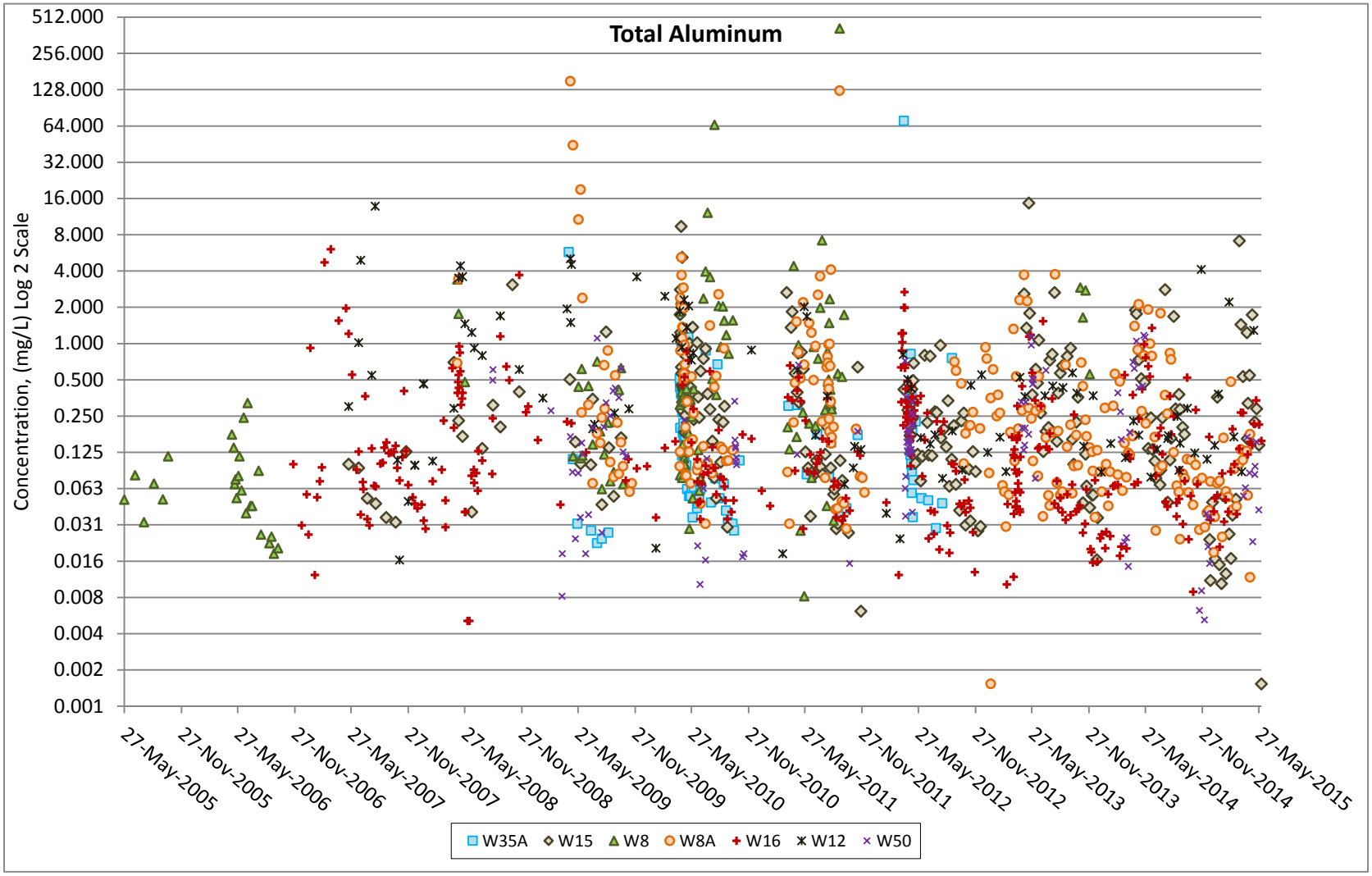

Figure 3-33: Concentrations of Total Aluminum at Minto Mine Facility Monitoring Locations.

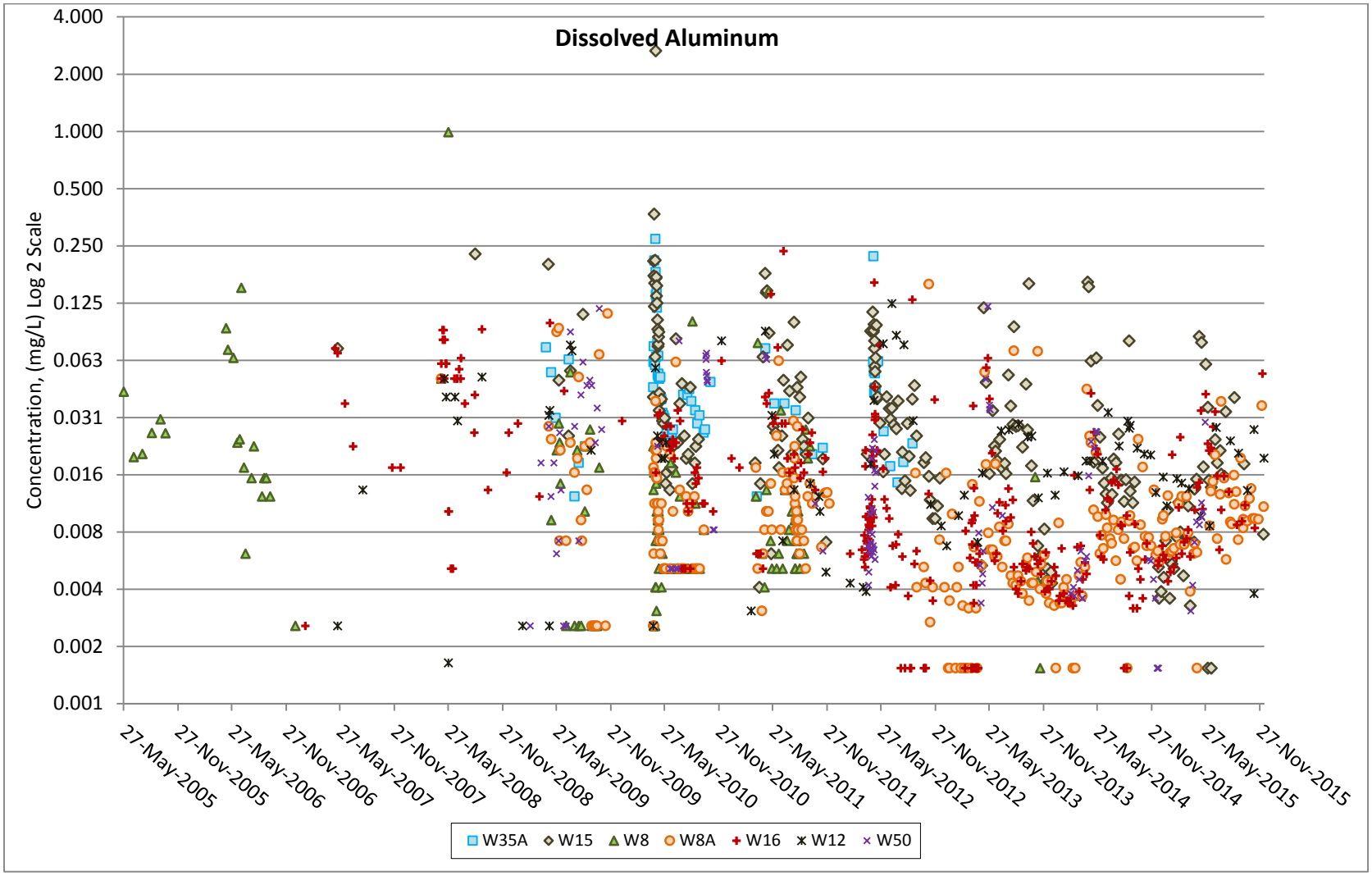

Figure 3-34: Concentrations of Dissolved Aluminum at Minto Mine Facility Monitoring Locations.

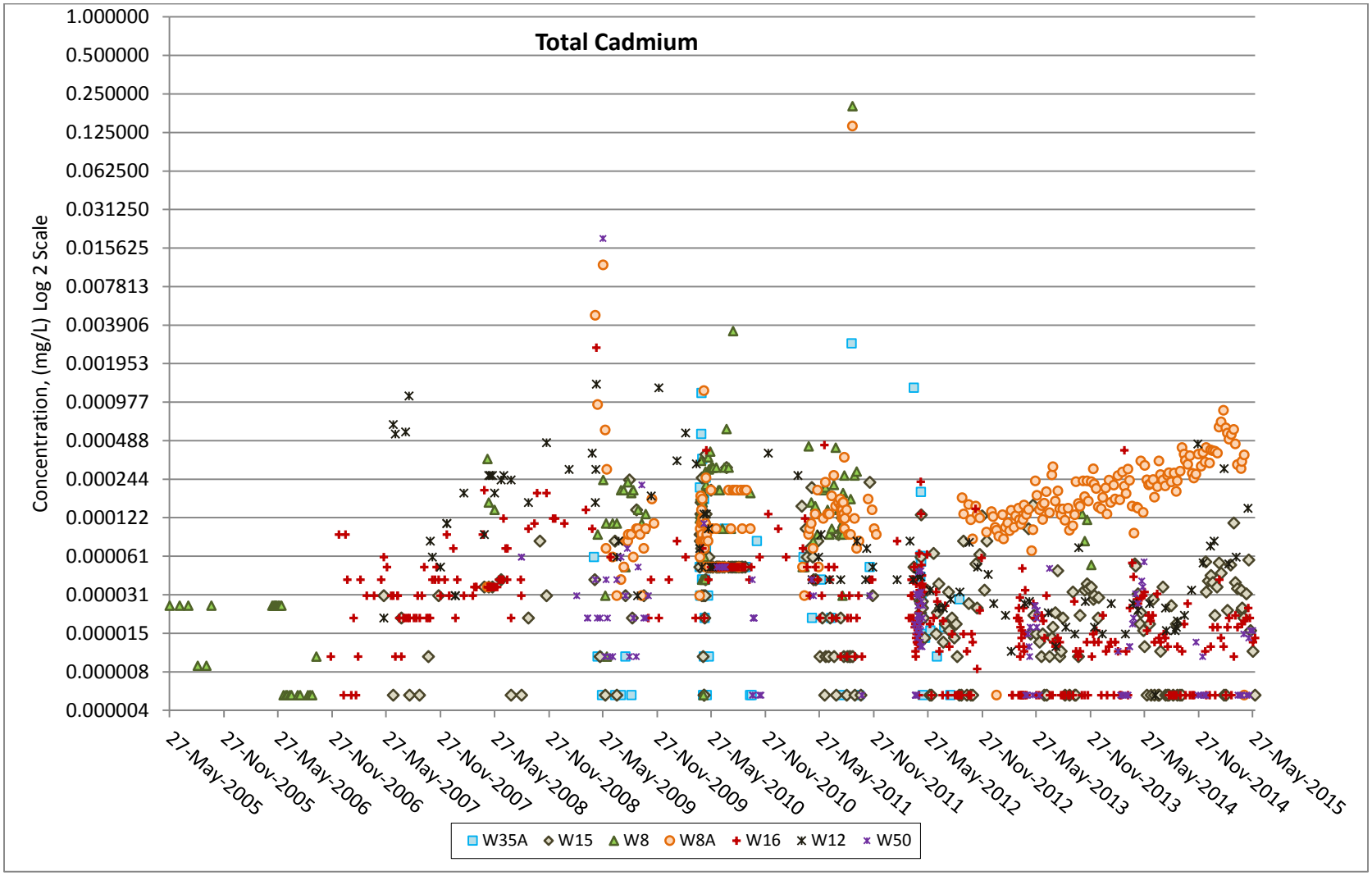

Figure 3-35: Concentrations of Total Cadmium at Minto Mine Facility Monitoring Locations.

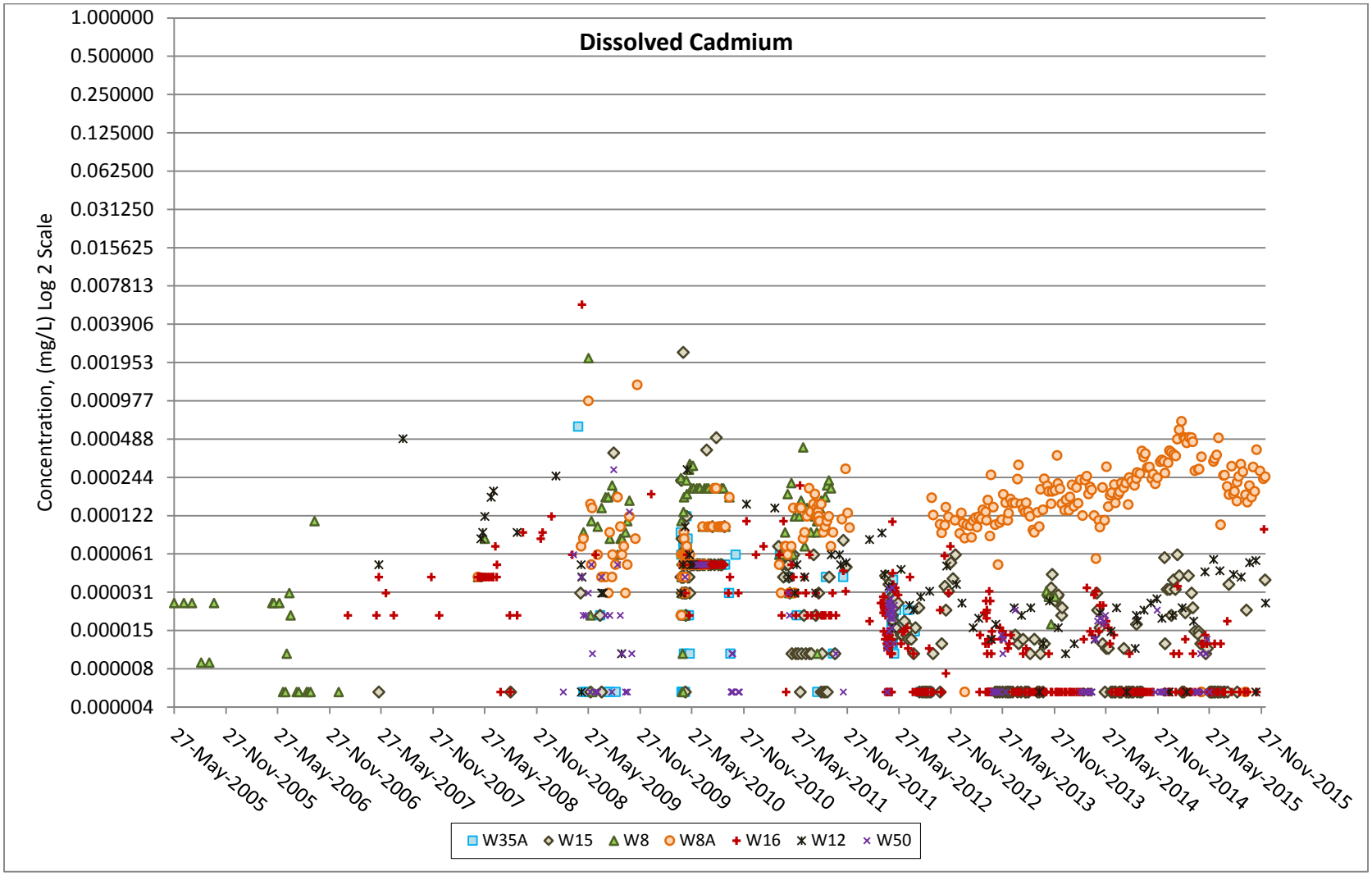

Figure 3-36: Concentrations of Dissolved Cadmium at Minto Mine Facility Monitoring Locations.

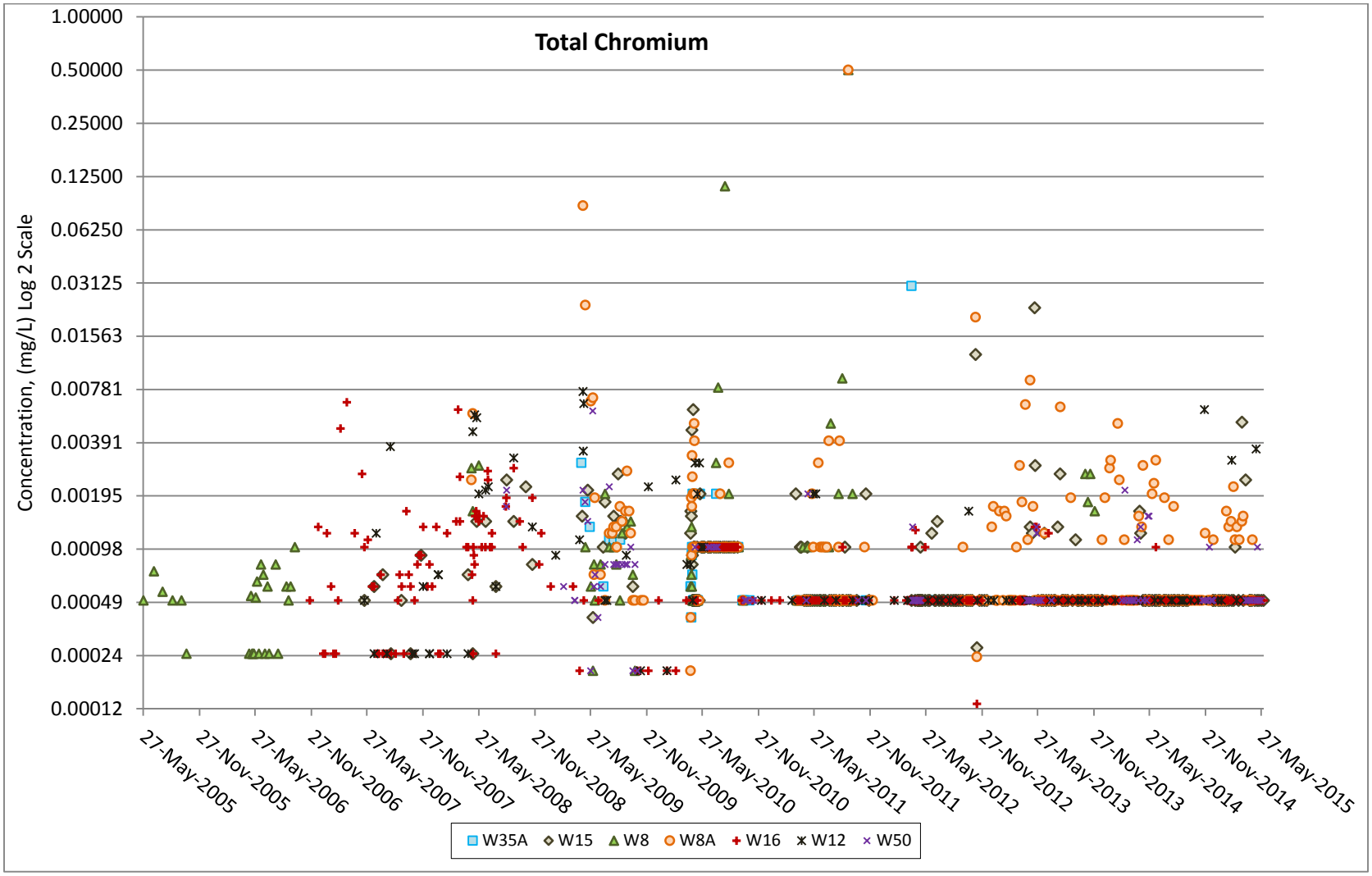

Figure 3-37: Concentrations of Total Chromium at Minto Mine Facility Monitoring Locations.

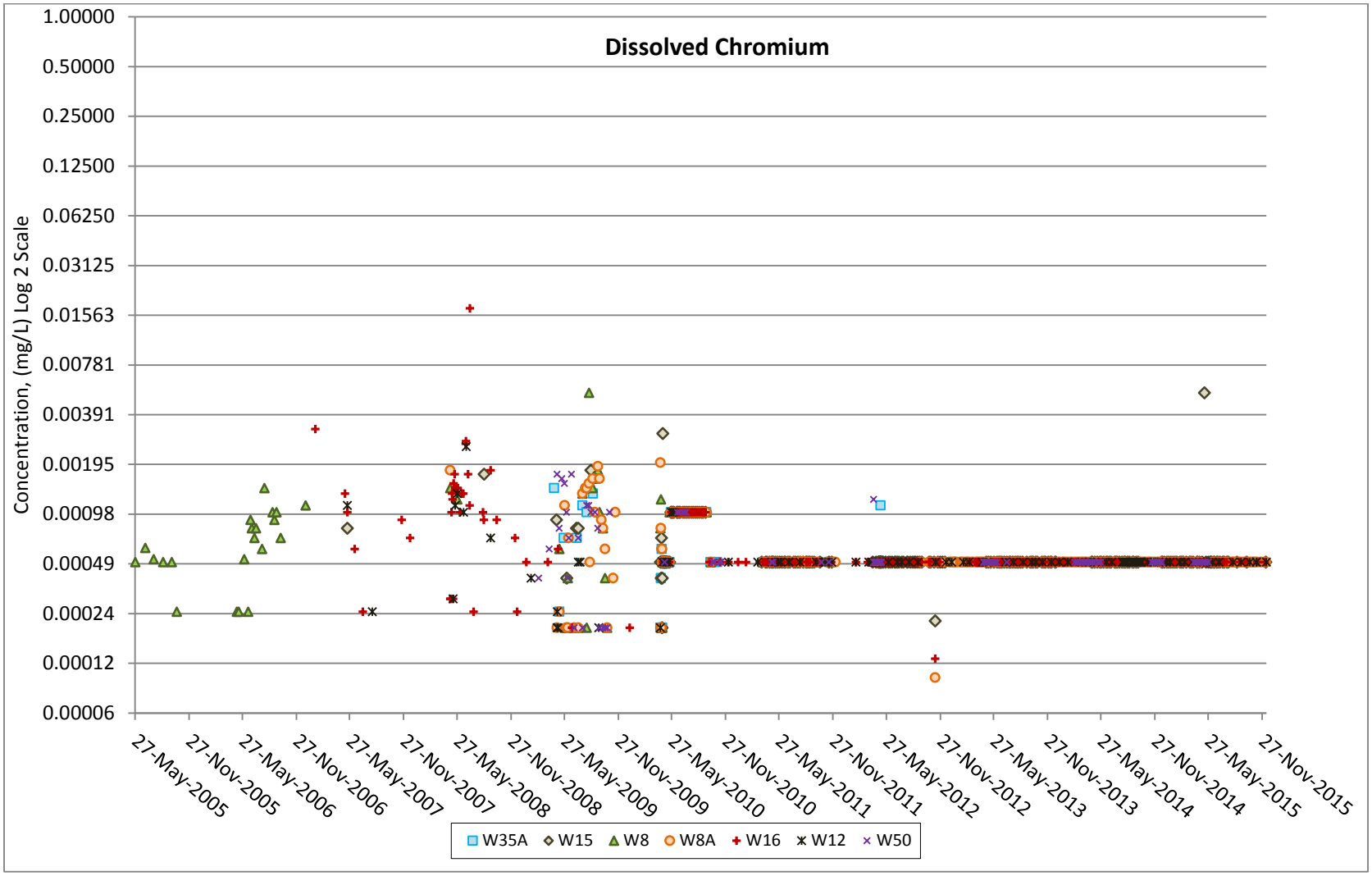

Figure 3-38: Concentrations of Dissolved Chromium at Minto Mine Facility Monitoring Locations.

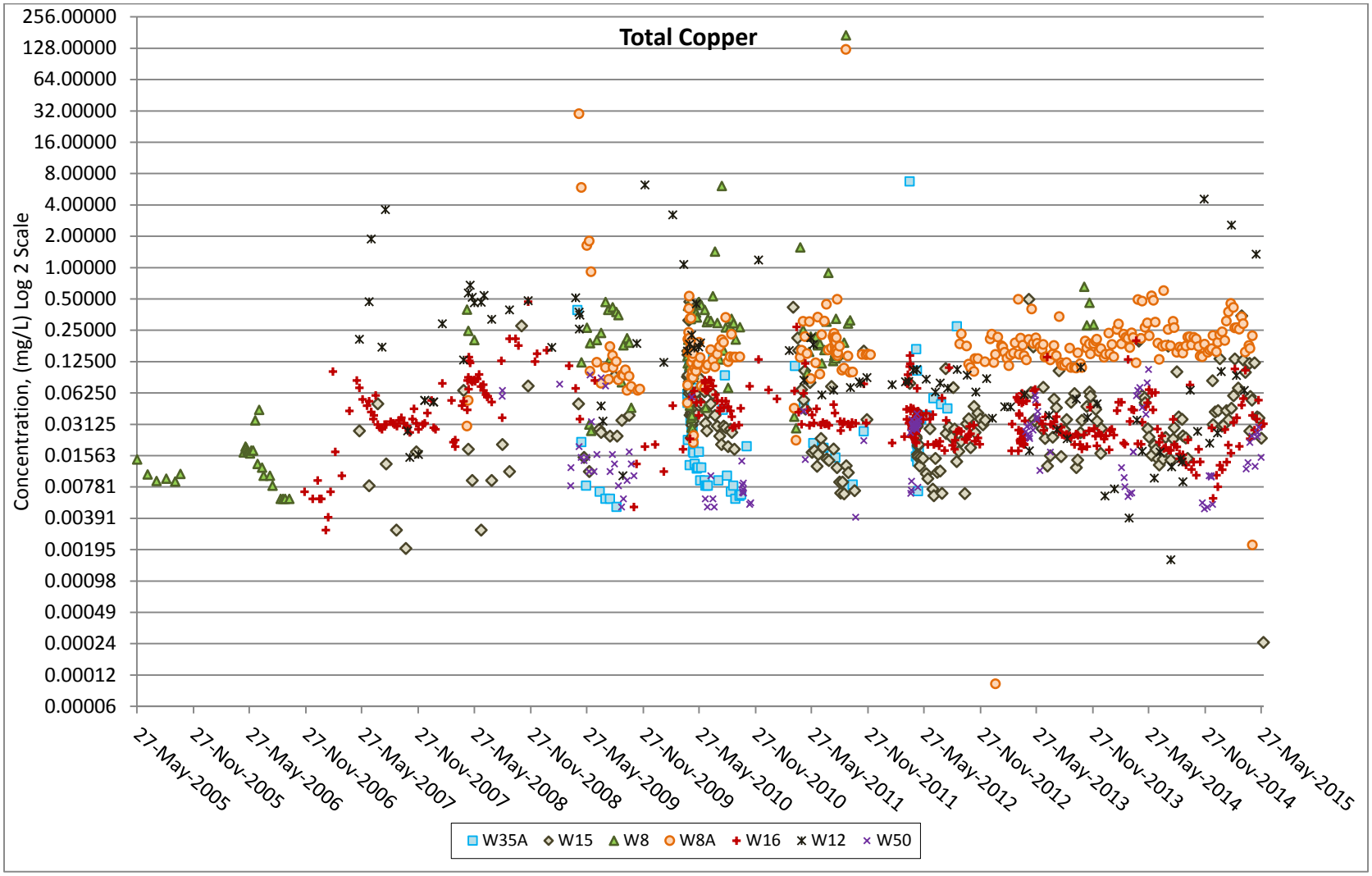

Figure 3-39: Concentrations of Total Copper at Minto Mine Facility Monitoring Locations.

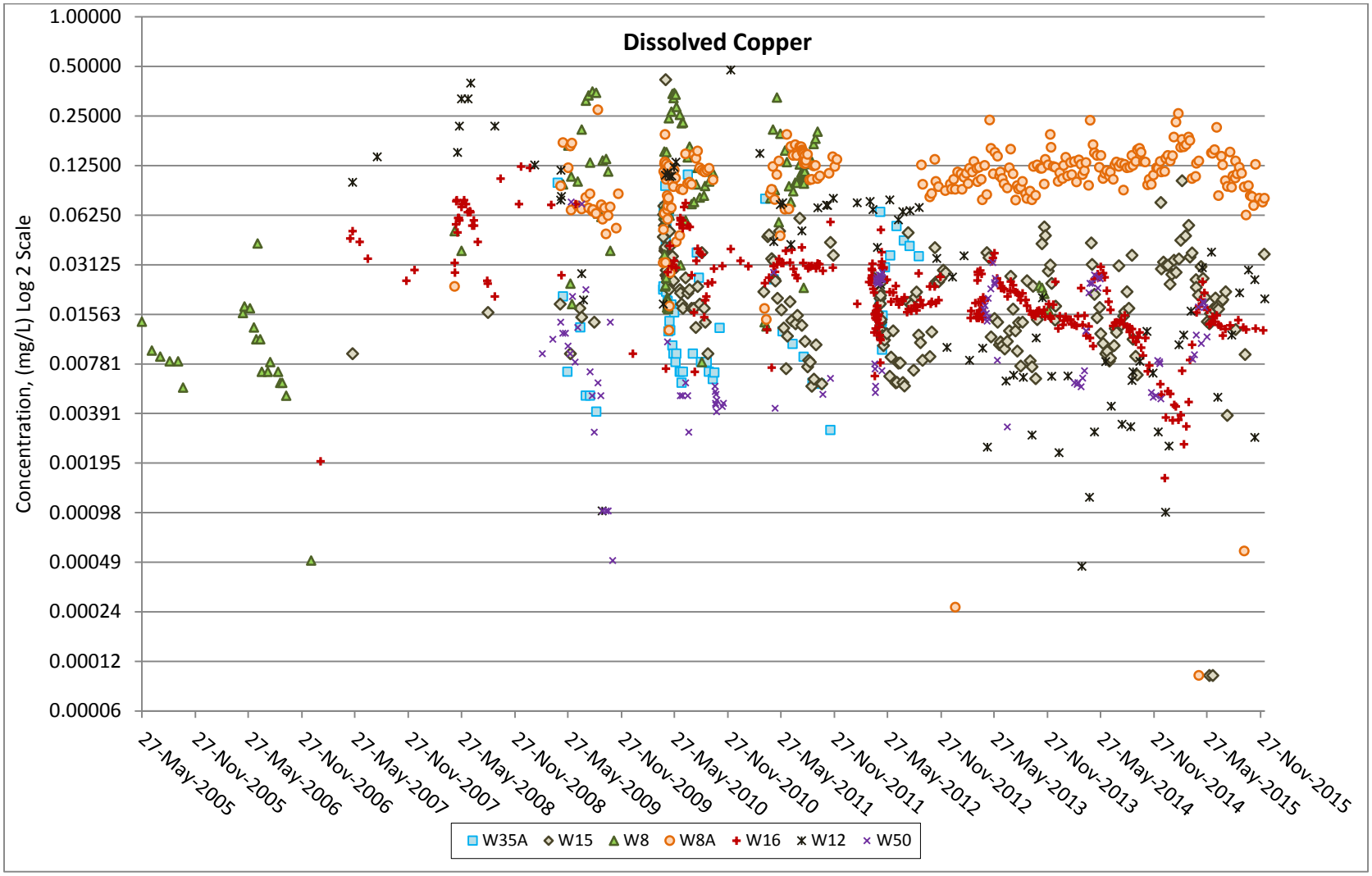

Figure 3-40: Concentrations of Dissolved Copper at Minto Mine Facility Monitoring Locations.

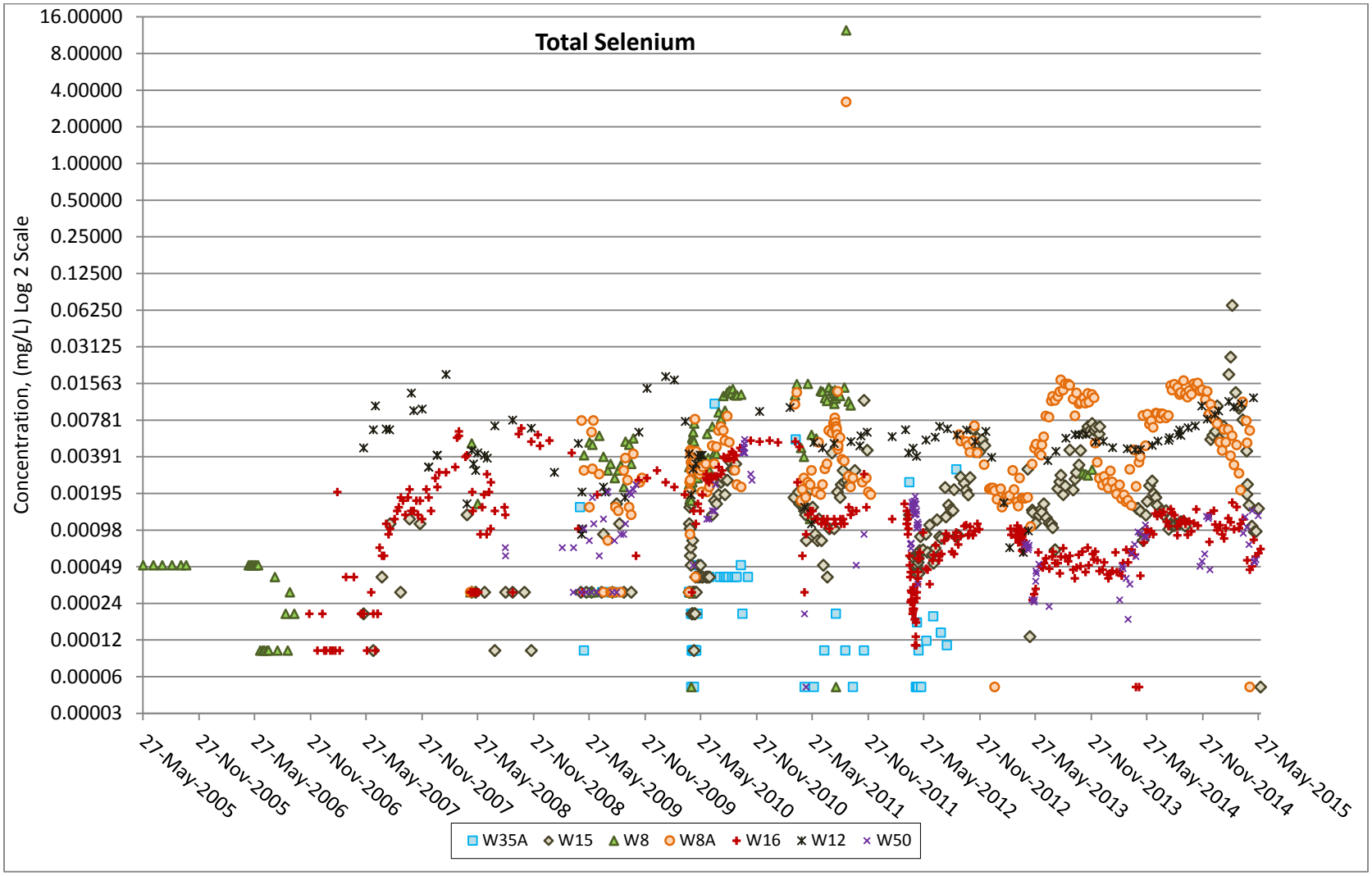

Figure 3-41: Concentrations of Total Selenium at Minto Mine Facility Monitoring Locations.

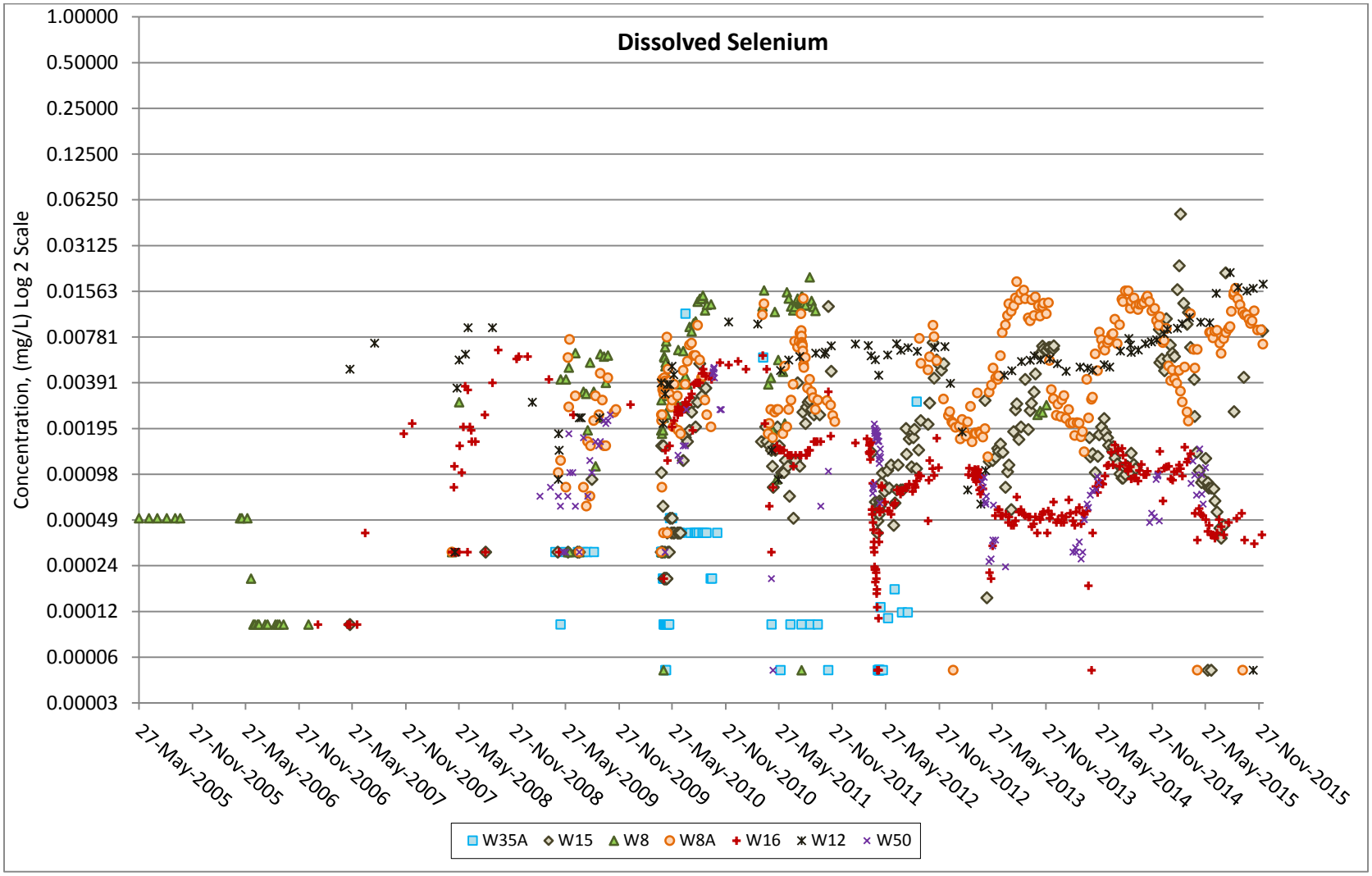

Figure 3-42: Concentrations of Dissolved Selenium at Minto Mine Facility Monitoring Locations.

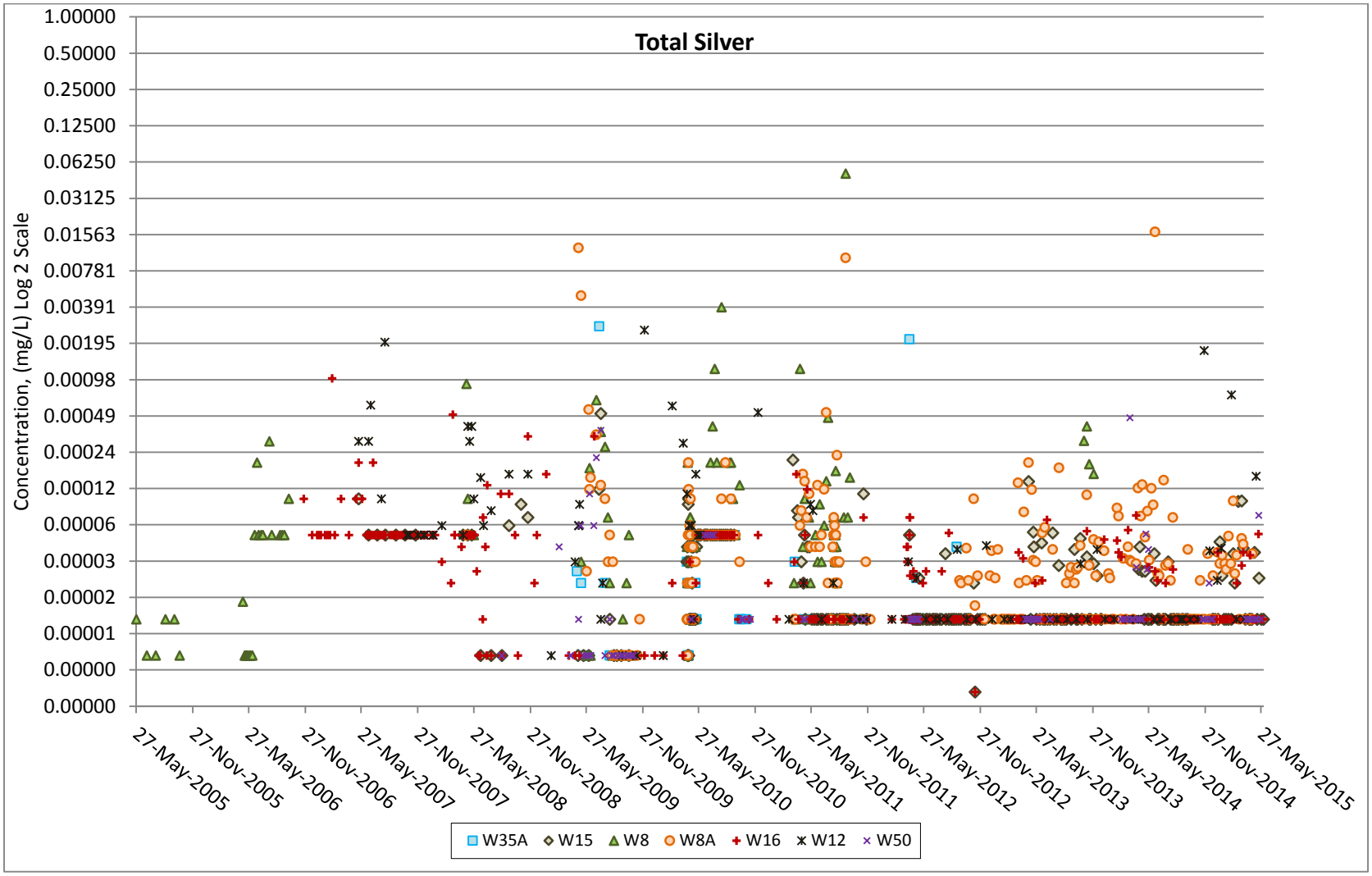

Figure 3-43: Concentrations of Total Silver at Minto Mine Facility Monitoring Locations.

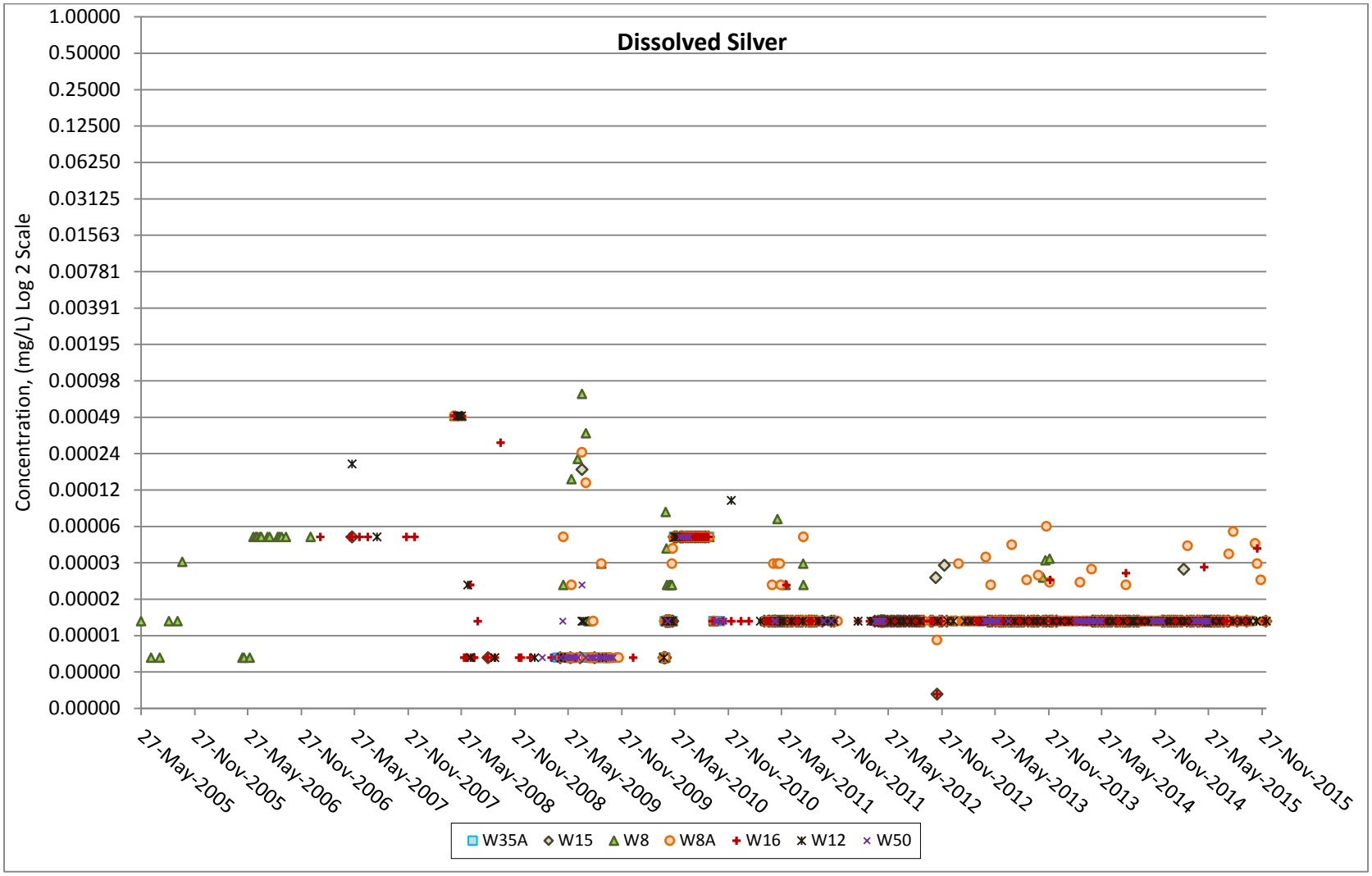

Figure 3-44: Concentrations of Dissolved Silver at Minto Mine Facility Monitoring Locations.

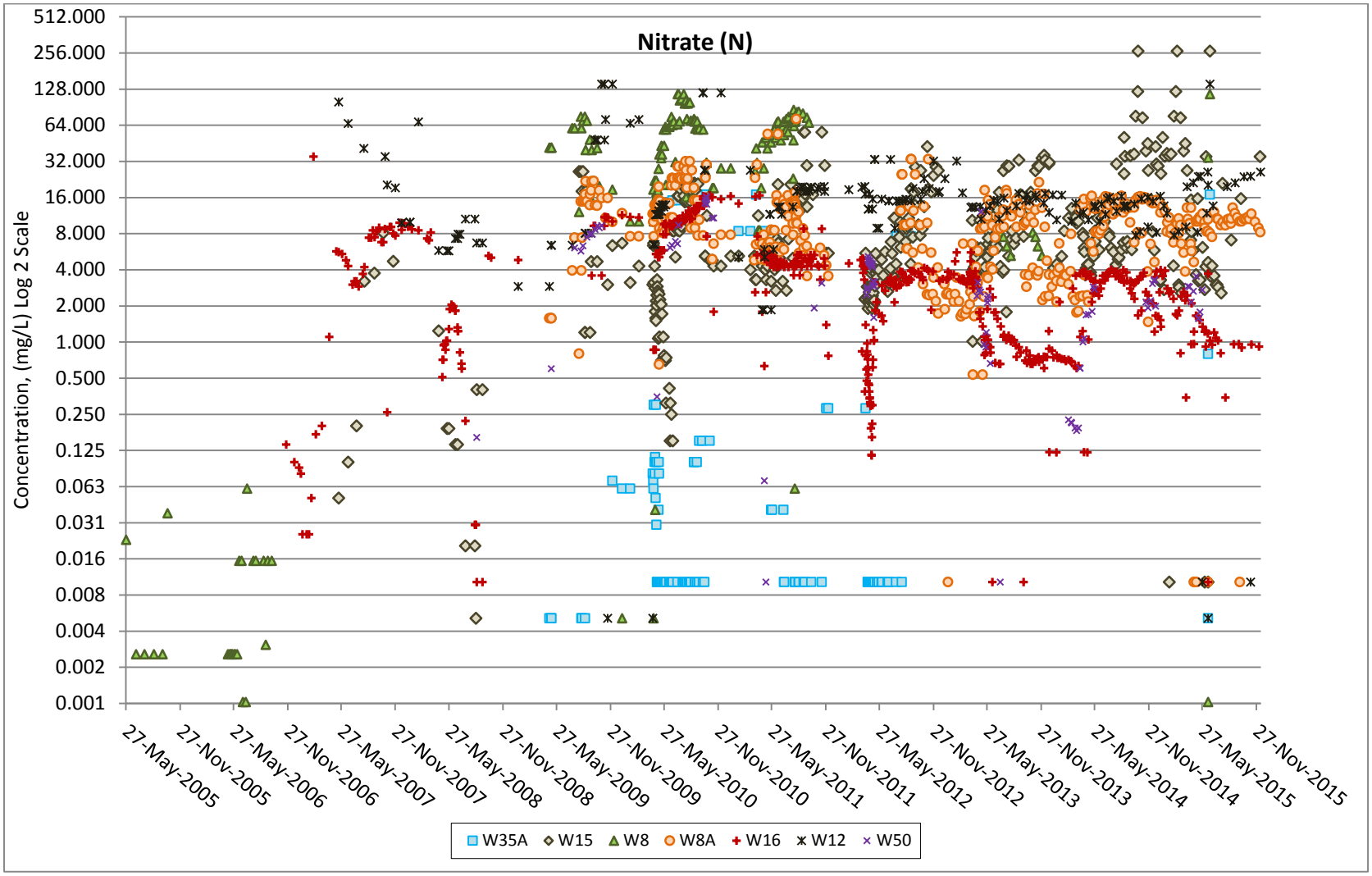

Figure 3-45: Concentrations of Nitrate (N) at Minto Mine Facility Monitoring Locations.

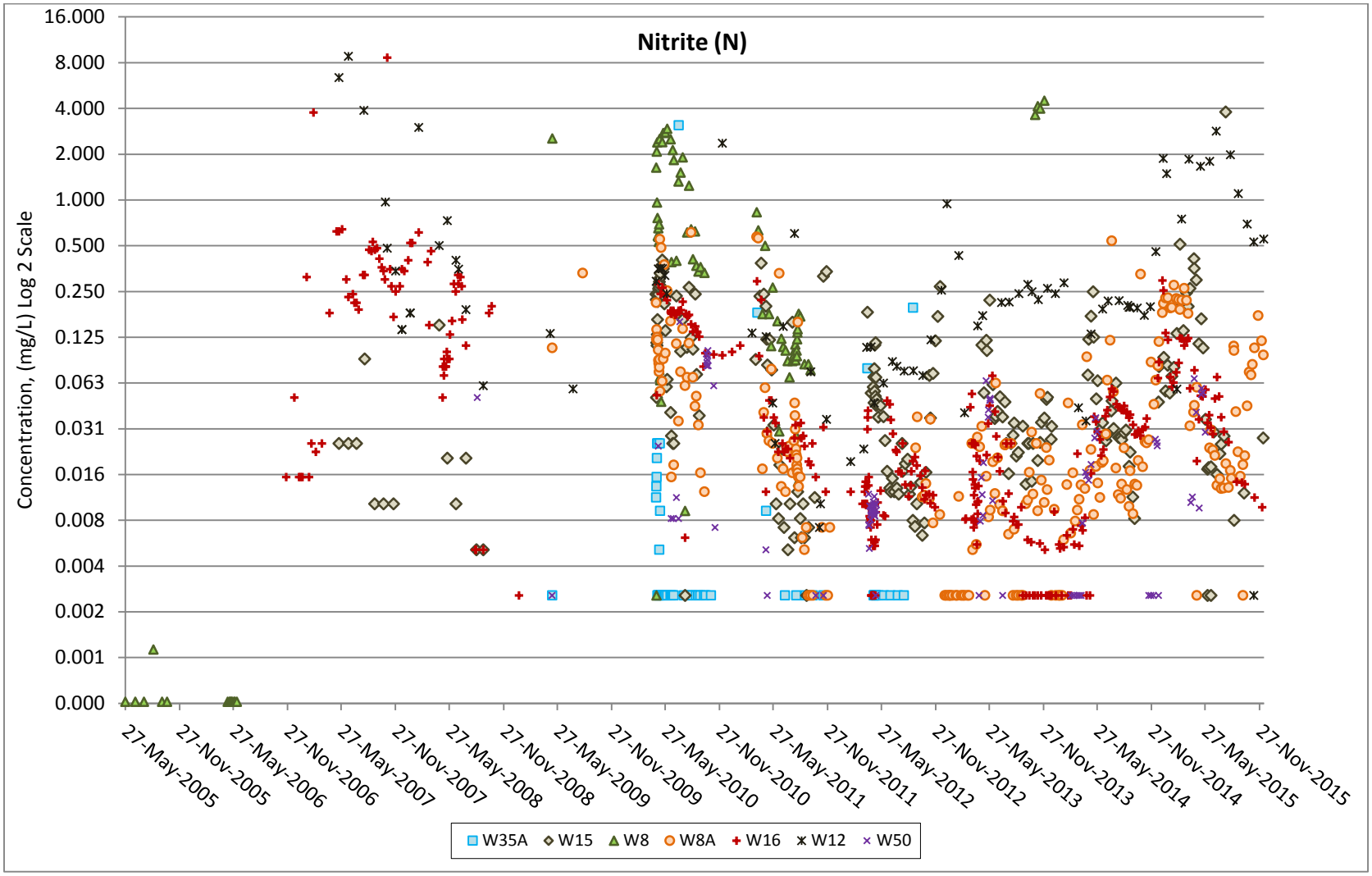

Figure 3-46: Concentrations of Nitrite (N) at Minto Mine Facility Monitoring Locations.

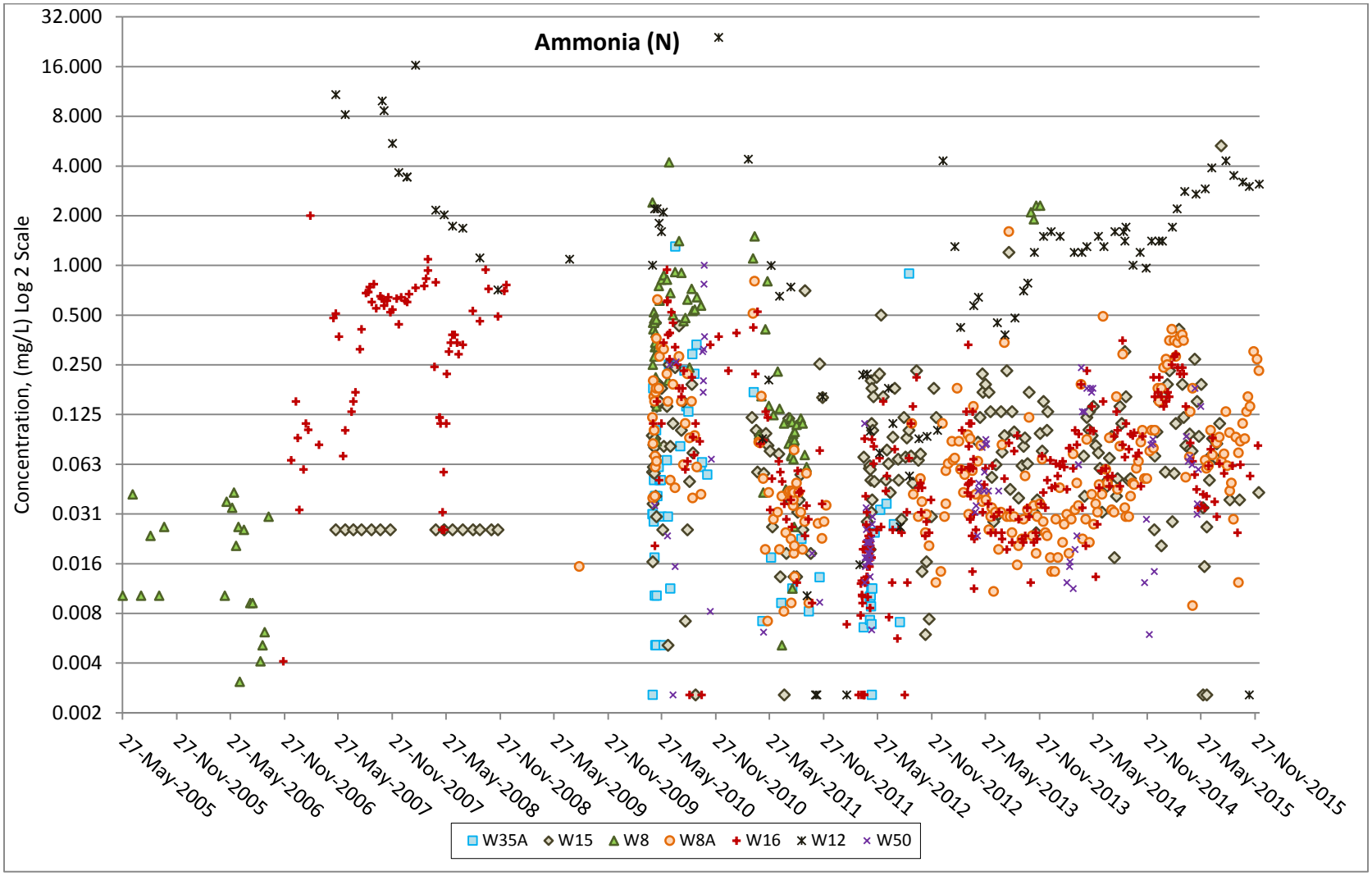

Figure 3-47: Concentrations of Ammonia (N) at Minto Mine Facility Monitoring Locations.

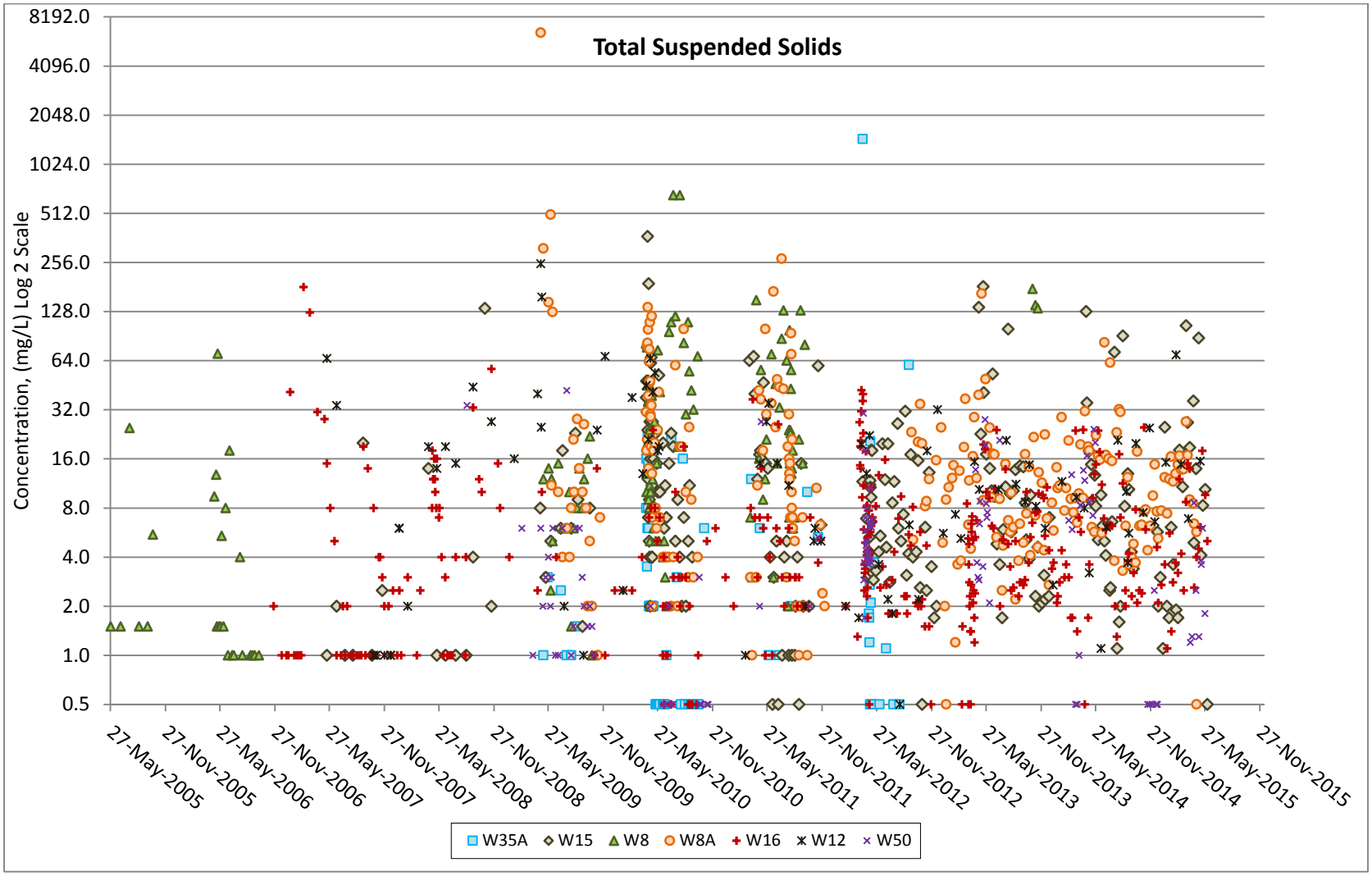

Figure 3-48: Concentrations of Total Suspended Solids at Minto Mine Facility Monitoring Locations.

4 LIMITATIONS OF REPORT

Alexco Environmental Group (AEG) of Whitehorse, Yukon has prepared this Water Quality Characterization for Minto Creek for the Minto Project for the exclusive use of Minto Explorations Ltd., and is based on data and information managed by Minto Mine. AEG has followed standard professional procedures in conducting the investigations and in preparing the contents of this report. The material in this report reflects AEG's best judgment in light of the information available at the time of the preparation of this report. Any use that a third party makes of this report, or any reliance on decisions to be made based on it, is the responsibility of the third parties. AEG accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. AEG believes that the contents of this report are substantively correct.

The information and data contained in this report, including without limitation, the results of any sampling and analyses conducted by AEG, are based solely on the conditions observed at the time of the field assessment and have been developed or obtained through the exercise of AEG's professional judgment and are set to the best of AEG's knowledge, information, and belief. Although every effort has been made to confirm that all such information and data is factual, complete and accurate, AEG offers no guarantees or warranties, either expressed or implied, with respect to such information or data.

AEG shall not by the act of issuing this report be deemed to have represented that any sampling and analyses conducted by it have been exhaustive or will identify all pertinent conditions at the site, and persons relying on the results thereof do so at their own risk.

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APPENDIX A

MINTO CREEK AND MINTO MINE WATER QUALITY DATA (JANUARY 2005–DECEMBER 2015)

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/05/2005**	**30/06/2005**	**29/07/2005**	**29/08/2005**	**28/09/2005**	**15/10/2005**	**02/03/2006**	**04/04/2006**	**05/04/2006**	**06/04/2006**	**07/04/2006**	**08/04/2006**	**09/04/2006**	**10/04/2006**	**11/04/2006**	**12/04/2006**	**13/04/2006**	**14/04/2006**	**15/04/2006**	**16/04/2006**	**17/04/2006**	**18/04/2006**	**19/04/2006**	**20/04/2006**	**21/04/2006**	**22/04/2006**	**23/04/2006**	**24/04/2006**	**25/04/2006**	**26/04/2006**	**27/04/2006**	**28/04/2006**	**29/04/2006**
Total Suspended Solids	mg/L	8.5	<3.0	25.7	7.5	8	<3.0	<3.0	<3.0	18.6	3.6	5.6	6.4	6.4	8.9	5.4	6.9	4.4	<3.0	<3.0	3.4	<3.0	3.7	4.2	4.2	<3.0	7.7	12.7	11.7	16.1	6.6	6.6	<3.0	4.1
Total Dissolved Solids	mg/L	141	224	198	182	174	176	279	487	940	442	354	288	252	256	276	305	361	316	363	554	585	504	294	285	266	266	210	182	165	174	168	174	177
pH (field)	pH units									8.50	8.40		7.70	8.50	8.45	8.5	8.5	8.5	8.6	8.6	8.55	8.6	8.6	8.6	8.5	8.45	8.5	8.55	8.45	8.6	8.4	8	7.9	8.5
pH (lab)	pH units	7.99	8.22	8.06	8.24	7.99	8.08	7.31	8.04	8.45	8.43	8.36	8.28	8.28	8.30	8.31	8.29	8.32	8.33	8.38	8.39	8.41	8.18	8.32	8.33	8.31	8.31	8.25	8.16	7.63	7.81	7.90	7.85	7.94
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	188	341	322	267	238	245	463	731	1270	661	539	434	391	400	424	479	551	533	575	822	872	756	473	462	426	427	341	271	212	211	215	186	220
Temperature (field)	C																																	
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%																																	
ORP (field)	mV																																	
Hardness (from total)	mg/L	93.9		166	135	129	134	236																										
Hardness (from dissolved)	mg/L																																	
Alkalinity, total	mg/L	61.2	153		122	101		193					190	164	165	177	197	224	220	239	364	368	337	208	201	178	182	152	103	84.4	75.4	84.2	73.1	87.4
Chloride	mg/L	<0.50	0.86	<0.50	<0.50	<0.50	<0.50	6.20	2.82	2.38	2.09	2.08	1.58	1.46	1.1	0.95	1.18	1.47	1.41	1.33	2.27	2.24	2.03	1.00	0.95	0.80	0.84	0.64	0.88	1.15	0.88	0.83	0.73	0.72
Fluoride	mg/L								0.513	0.87	0.519	0.42	0.336	0.34	0.314	0.32	0.360	0.387	0.402	0.405	0.532	0.570	0.574	0.369	0.356	0.315	0.292	0.233	0.238	0.203	0.167	0.17	0.14	0.15
Sulphate, dissolved	mg/L	2.4	45.5		25.5	23.9		50.4					58.1	53.1	56.2	63.1	74.9	84.2	78.9	81.5	124	136	120	65.6	60.3	55	58.6	42.7	35.3	26.4	29.9	28.5	23.9	29.3
Ammonia	mg/L	<0.020	<0.020	<0.020	0.042	<0.020	0.023	0.07	0.018	0.016	0.0093	0.0073	0.01	0.0107	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0120	0.0300	0.0480	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020					
Nitrite (N)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0019	<0.0010	0.0016	0.0017	0.0017	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nitrate (N)	mg/L	0.0121	0.0519	0.0284	<0.0050	0.0132	0.0393	1.6500	0.1160	<0.0050	<0.0050	0.0125	0.0640	<0.0050	0.0146	0.0225	0.0094	0.0061	<0.0050	0.249	0.0992	0.0694	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Organic Carbon	mg/L											9.9100										14.0000							13.9000					
Aluminum, total	mg/L	0.152	0.0313	0.732	0.267	0.236	0.09	0.0059	0.034	0.3840	0.101	0.1560	0.323	0.3160	0.444	0.1990	0.173	0.280	0.0407	0.0423	0.0419	0.0653	0.1790	0.2040	0.2750	0.2170	0.2120	0.5360	0.8480	0.3940	0.3300	0.2690	0.2100	0.2130
Antimony, total	mg/L	<0.00050	<0.00010	0.0001	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	mg/L	<0.00050	0.00037	0.00081	0.00054	0.00055	0.00045	0.00019	0.00061	0.00103	0.00055	0.00048	0.0005	0.00047	0.00049	0.00039	0.00038	0.00043	0.00033	0.00031	0.00046	0.00055	0.00064	0.00039	0.00041	0.00037	0.00035	0.00040	0.00057	0.00048	0.00045	0.00042	0.00039	0.00040
Barium, total	mg/L	0.042	0.0518	0.0667	0.06	0.055	0.0489	0.0798	0.123	0.1550	0.084	0.0683	0.058	0.0551	0.055	0.0551	0.0579	0.0705	0.0639	0.0659	0.0954	0.1020	0.0936	0.0564	0.0563	0.0533	0.0531	0.0483	0.0491	0.0522	0.0393	0.0373	0.0368	0.0443
Beryllium, total	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth, total	mg/L		<0.00050	<0.00050			<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total	mg/L	<0.10	<0.010	<0.010	<0.10	<0.10	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.000050	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium, total	mg/L	20.9	39.1	37.3	30.8	28.7	29.4	63.2	75.6	102.0	60.3	51.8	41.9	40.3	38.8	39.9	41.9	47.8	47.6	49.1	70.5	80.0	66.8	43.3	41.2	38.9	37.7	29.2	24.0	20.1	20.0	21.0	19.4	24.0
Chromium, total	mg/L	<0.0010	0.0005	0.002	<0.0010	<0.0010	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00061	0.00102	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	mg/L	<0.00030	<0.00010	0.00062	<0.00030	0.0003	0.00023	<0.00010	0.0002	0.00023	0.0001	0.00011	0.00023	0.0002	0.00023	0.00016	0.00015	0.00021	<0.00010	<0.00010	0.00015	0.00015	0.00027	0.00019	0.00016	0.00016	0.00015	0.00029	0.00035	0.00012	0.00022	0.00021	0.00019	0.00018
Copper, total	mg/L	0.0078	0.00374	0.0149	0.0086	0.01	0.00855	0.00171	0.0032	0.00542	0.0053	0.00629	0.0067	0.01000	0.0084	0.00768	0.00919	0.00966	0.00626	0.00613	0.00670	0.00687	0.00904	0.00565	0.00878	0.00818	0.00780	0.01180	0.02790	0.02680	0.03210	0.02970	0.03150	0.03320
Iron, total	mg/L	0.32	0.081	1.32	0.698	0.794	0.497	<0.030	0.279	0.357	0.133	0.129	0.354	0.325	0.430	0.271	0.178	0.291	<0.030	0.030	0.034	0.071	0.185	0.247	0.279	0.201	0.220	0.590	0.913	0.370	0.366	0.285	0.261	0.256
Lead, total	mg/L	<0.00050	0.000292	0.000359	<0.00050	<0.00050	<0.000050	<0.000050	<0.000050	0.000120	<0.000050	0.000057	0.000212	0.000142	0.000168	0.000096	0.000103	0.000113	<0.000050	<0.000050	0.000059	0.000074	0.000051	0.000153	0.000142	0.000198	0.000074	0.000195	0.000289	0.000078	0.000086	0.000068	0.000091	0.000060
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	0.02	0.008	0.006	<0.0050	<0.0050	<0.0050	<0.0050	0.0051	0.0056	0.0058	0.0061	0.0088	0.0095	0.0076	0.0054	0.0055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	9.03	17.6	17.2	13.2	12	12.5	18.7	45.80	104.0	44.80	36.2	28.80	24.5	25.60	28.3	26.4	31.3	30.7	33.5	51.2	62.4	51.4	31.5	31.9	28.6	28.4	22.8	17.4	10.5	11.2	11.8	10.6	13.1
Manganese, total	mg/L	0.023	0.0084	0.0641	0.0806	0.12	0.124	0.00158	0.3090	0.03450	0.0216	0.02160	0.0286	0.02770	0.0298	0.02890	0.0347	0.0475	0.0237	0.0261	0.0362	0.0371	0.0509	0.0342	0.0296	0.0325	0.0342	0.0451	0.0465	0.0112	0.0506	0.04950	0.03960	0.03600
Mercury, total	mg/L	<0.000020			<0.000020	<0.000020																												
Molybdenum, total	mg/L	0.0011	0.00163	0.0019	0.0014	0.0012	0.00126	0.00128	0.0033	0.00574	0.0045	0.00345	0.0027	0.00278	0.0026	0.00273	0.00365	0.00384	0.00400	0.00355	0.00481	0.00525	0.00470	0.00278	0.00268	0.00235	0.00239	0.00177	0.00187	0.00139	0.00109	0.00116	0.00089	0.00118
Nickel, total	mg/L	0.0017	0.00087	0.00257	0.0017	0.0018	0.00136	<0.00050	0.0009	<0.0010	<0.00050	<0.00050	0.0005	<0.00050	0.0005	<0.00050	<0.00050	0.00075	<0.00050	<0.00050	0.00084	0.00070	0.00080	<0.00050	<0.00050	<0.00050	0.00050	0.00067	0.00110	0.00087	0.00099	0.00096	0.00110	0.00117
Phosphorus, total	mg/L		<0.30	<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium, total	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5.3	11.1	6.4	4.8	3.6	3.7	3.4	3.5	4.0	4.0	4.5	4.3	6.2	6.4	8.7	4.3	4.1	3.8	3.4	2.8	3.4	6.6	3.4	3.1	3.1	3.2
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0021	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon, total	mg/L			7.03			5.86	6.15	11.4	20.00	12.1	10.10	7.78	7.39	7.1	7.11	7.28	7.95	8.16	8.73	12.2	13.3	12.4	8.0	8.0	7.1	6.7	5.8	6.1	4.2	4.5	4.49	4.30	4.89
Silver, total	mg/L	<0.000020	<0.000010	<0.000030	0.000027	0.000029	<0.000010	<0.000010	<0.000010	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000021	<0.000010	0.00001	0.000016	0.00001	0.000012
Sodium, total	mg/L	4.9	12.1	9.4	7.8	7.1	7	10.5	28.7	67.2	28.3	22.7	16.1	13.9	14.8	16.5	16.8	20.7	19.7	21.1	32.4	35.9	29.6	18.5	18.1	16.1	16.4	12.6	10.6	8.5	9.9	9.9	7.5	7.7
Strontium, total	mg/L		0.299	0.295			0.233	0.355	0.676	1.120	0.575	0.455	0.36	0.317	0.305	0.326	0.365	0.430	0.437	0.473	0.699	0.734	0.615	0.382	0.393	0.358	0.358	0.287	0.215	0.137	0.139	0.146	0.137	0.174
Sulpher, total	mg/L																																	
Thallium, total	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010	<0.00010	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	mg/L	<0.00050	<0.00010	0.00011	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00023	<0.00010	0.00019	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	mg/L	<0.010	<0.010	0.045	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	<0.010	<0.010	0.014	0.018	0.01	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.015	<0.010	0.012	0.022	0.046	0.015	0.016	<0.010	0.011	0.011
Uranium, total	mg/L	0.00035	0.0009	0.000778	0.00051	0.00039	0.00044	0.002770	0.00232	0.003930	0.00153	0.001130	0.00096	0.000809	0.00091	0.000979	0.00102	0.00129	0.00121	0.00135	0.00223	0.00245	0.00189	0.00108	0.00106	0.00095	0.00097	0.00082	0.00056	0.00023	0.00026	0.000273	0.000220	0.000321
Vanadium, total	mg/L	<0.030	<0.0010	0.0032	<0.030	<0.030	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	0.0015	0.0015	0.0018	0.0011	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0011	0.0011	<0.0010	<0.0010	0.0018	0.0024	0.0013	0.0011	<0.0010	<0.0010	<0.0010
Zinc, total	mg/L	<0.0050	<0.0020	<0.0070	<0.0050	<0.0050	<0.0010	0.0021	<0.0030	<0.0040	<0.0030	0.0016	0.0031	0.0025	0.0028	0.002	0.0027	0.0036	0.0016	0.0031	0.0029	<0.0030	0.0025	0.0031	0.0035	0.0031	0.0094	0.0031	0.0047	0.0023	0.0027	0.0028	0.0236	0.0035
Zirconium, total	mg/L																																	
Aluminum, dissolved	mg/L	0.0267	0.008	0.0113	0.0184	0.0257	0.0223	0.0033				0.0122										0.0161							0.0710					
Antimony, dissolved	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	<0.00010				<0.00010										<0.00010							<0.00010					
Arsenic, dissolved	mg/L	<0.00050	0.00034	0.00041	<0.00050	<0.00050	0.00043	0.00020				0.00042										0.00051							0.00033					
Barium, dissolved	mg/L	0.041	0.0507	0.0553	0.057	0.055	0.0475	0.0794				0.0653										0.1000							0.0369					
Beryllium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.00050				<0.00050										<0.00050							<0.00050					
Bismuth, dissolved	mg/L		<0.00050	<0.00050			<0.00050	<0.00050				<0.00050										<0.00050							<0.00050					
Boron, dissolved	mg/L	<0.10	<0.010	<0.010	<0.10	<0.10	<0.010	<0.010				<0.010										<0.010							<0.010					
Cadmium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.000050				<0.000050										<0.000050							<0.000050					
Calcium, dissolved	mg/L	22	38.5	38	31.8	30.4	31.6	63.6				51.3										82.5							24.3					
Chromium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.00050				<0.00050										<0.00050							<0.00050					
Cobalt, dissolved	mg/L	<0.00030	<0.00010	0.0001	<0.00030	<0.00030	0.00016	<0.00010				<0.00010										0.00015							<0.00010					
Copper, dissolved	mg/L	0.0066	0.00336	0.00478	0.005	0.0057	0.00608	0.00163				0.00428										0.00648							0.01350					
Iron, dissolved	mg/L	0.116	0.042	0.134	0.306	0.421	0.39	<0.030				<0.030										<0.030							0.134					
Lead, dissolved	mg/L	<0.00050	0.000241	<0.000050	<0.00050	<0.00050	<0.000050	<0.000050				<0.000050										<0.000050							<0.000050					
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				0.0056										0.0096							<0.0050					
Magnesium, dissolved	mg/L	9.48	17.4	17.3	13.6	12.8	13.4	18.6				35.7										64.3							17.7					
Manganese, dissolved	mg/L	0.0094	0.0052	0.0311	0.0657	0.102	0.112	0.00139				0.01780										0.03540							0.03240					
Mercury, dissolved	mg/L	<0.000020			<0.000020	<0.000020																												
Molydenum, dissolved	mg/L	<0.0010	0.00163	0.00158	0.0013	0.0011	0.00122	0.00127				0.00353										0.00504							0.00204					
Nickel, dissolved	mg/L	0.0014	0.00078	0.00115	0.0014	0.0014	0.00121	<0.00050				<0.00050										0.00065							0.00056					
Phosphorus, dissolved	mg/L		<0.30	<0.30			<0.30	<0.30				<0.30										<0.30							<0.30					
Potassium, dissolved	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				4.8										6.6							3.3					
Selenium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010										<0.0010							<0.0010					
Silicon, dissolved	mg/L		5.89	5.56			6.16	6.08				9.83										13.50							4.58					
Silver, dissolved	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	<0.000010				<0.000010										<0.000010							<0.000010					
Sodium, dissolved	mg/L	5.2	11.7	9.7	8	7.7	7.5	10.4				22.4										36.7							10.9					
Strontium, dissolved	mg/L		0.297	0.279			0.225	0.355				0.449										0.737							0.212					
Sulpher, dissolved	mg/L																																	
Thallium, dissolved	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010				<0.00010										<0.00010							<0.00010					
Tin, dissolved	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	<0.00010				<0.00010										0.00017							<0.00010					
Titanium, dissolved	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010				<0.010										<0.010							<0.010					
Uranium, dissolved	mg/L	0.00031	0.000903	0.000717	0.00045	0.00034	0.00042	0.002790				0.001130										0.002440							0.000548					
Vanadium, dissolved	mg/L	<0.030	<0.0010	<0.0010	<0.030	<0.030	<0.0010	<0.0010				<0.0010										<0.0010							<0.0010					
Zinc, dissolved	mg/L	<0.0050	0.0116	0.0015	<0.0050	<0.0050	0.0018	0.0088				0.0017										0.0017							0.0017					
Zirconium, dissolved	mg/L																																	

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**30/04/2006**	**01/05/2006**	**02/05/2006**	**03/05/2006**	**04/05/2006**	**05/05/2006**	**06/05/2006**	**08/05/2006**	**10/05/2006**	**14/05/2006**	**17/05/2006**	**20/05/2006**	**23/05/2006**	**26/05/2006**	**29/05/2006**	**02/06/2006**	**07/06/2006**	**15/06/2006**	**15/06/2006**	**23/06/2006**	**28/06/2006**	**07/07/2006**	**12/07/2006**	**20/07/2006**	**26/07/2006**	**26/07/2006**	**02/08/2006**	**10/08/2006**	**25/08/2006**	**25/08/2006**	**30/08/2006**	**06/09/2006**	**13/09/2006**
Total Suspended Solids	mg/L	3.1	4.6	4.9	30.9		40.4	82.9	18.4	13.8	46.8	7.1	6.1	17.8	5.9	13.4	26.4	7.1		<2	4	4	14	<2	16		<2	18	6		4	<2	<2	4
Total Dissolved Solids	mg/L	159	170	137	126		100	102	122	118	116	131	126	133	139	120	129	134		196	266	212	249							282	294		
pH (field)	pH units	8.4	8.3	8.2	8.2	8.2																												
pH (lab)	pH units	7.93	7.94	7.87	7.80		7.53	7.52	7.43	7.51	7.6	7.59	7.75	7.89	7.71	7.64	7.42	7.59		7.95	7.83	7.88	7.93	7.7	7.92		7.93	8	7.82		7.94	7.86	7.92	7.96
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	199	199	155	143		77	76	69	82.2	93	105	125	161	166	120	136	143		323	382	334	319	372	378		405	422	430		413	406	416	407
Temperature (field)	C																																	
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%																																	
ORP (field)	mV																																	
Hardness (from total)	mg/L																																	
Hardness (from dissolved)	mg/L																			169	190	163	179	183	208		209	163	202		204	192	210	215
Alkalinity, total	mg/L	77.9	81.6							29.9	35.5	43.2	55.4	68.4	74	55.2	68.7	69.7		134	164	138	158	164	174		171	182	183		175	178	186	183
Chloride	mg/L	0.63	0.64	0.60	0.55		<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5															
Fluoride	mg/L	0.15	0.16	0.122	0.126		0.064	0.069	0.063	0.078	0.158	0.105	0.136	0.149	0.143	0.122	0.127	0.126															
Sulphate, dissolved	mg/L	25.4	24.7							5.48	6.85	7.66	10.3	15.4	19	11.9	12.2	14.3		34	47		38	39	42		45	40	45		43	39	38	42.9
Ammonia	mg/L								<0.020		0.049			0.012			0.022	0.043	0.013		0.007	<0.002		0.006	0.006	0.007		0.016	0.013	0.02		0.004	0.003	0.006
Nitrite (N)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	0.0015	<0.001	<0.001	0.0011															
Nitrate (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	0.0075	<0.005	0.0179		0.12	<0.03	0.025	0.086	0.11	<0.03		0.04	0.12	0.12		<0.03	<0.03	<0.03	0.008
Dissolved Organic Carbon	mg/L								37.7000		29.7			21.5			27.8	28.4		13.3	5.9	11.3	9.8	7.9	8.7		8.7	9.2	8.7		9	8.2	8	8.4
Aluminum, total	mg/L	0.2090	0.2250	0.2090	1.0200		1.0700	2.1300	0.7740	0.316	1.66	0.357	0.0881	0.281	0.125	0.195	0.847	0.17		0.032	0.067	0.065	0.16	0.014	0.594		0.183	0.138	0.306		0.19	0.064	0.05	0.16
Antimony, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		0.00016	0.00011	<0.00010	<0.0001	0.00016	<0.0001	<0.0001	<0.0001	0.00012	0.00039	0.00014	<0.0001		<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0004	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.00037	0.00037	0.00036	0.00076		0.00065	0.00101	0.00057	0.00045	0.00118	0.00056	0.00045	0.00056	0.00051	0.00055	0.00079	0.00054		0.0004	0.0004	0.0004	<0.001	0.0003	0.0006		0.0004	0.0006	0.0005		0.0004	0.0003	0.0004	0.0004
Barium, total	mg/L	0.0412	0.0417	0.0368	0.0495		0.0397	0.0605	0.0400	0.034	0.065	0.0393	0.034	0.0431	0.0415	0.036	0.0503	0.0404		0.058	0.068	0.059	0.074	0.067	0.08		0.082	0.086	0.087		0.086	0.075	0.076	0.079
Beryllium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0001	<0.0001	<0.0001	<0.0005	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0002	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.002	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.001	<0.0005	<0.0005	<0.0005
Boron, total	mg/L	<0.010	<0.010	<0.010	<0.010		<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		0.007	0.006	0.007	0.01	0.007	0.077		0.005	0.007	0.007		0.006	0.006	0.007	0.007
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	0.000134	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001		<0.00002	<0.00001	<0.00001	<0.00001
Calcium, total	mg/L	22.4	23.0	17.5	16.4		10.5	11.4	11.1	12.2	14	14.9	17.1	19.5	21.7	16.7	18.8	19.6		36.5	45.2	38.1	45.2	46.7	47.3		50.4	48.4	54.7		48.3	47.1	49.2	49.8
Chromium, total	mg/L	<0.00050	<0.00050	<0.00050	0.00156		0.00162	0.00238	0.001	0.00074	0.00318	0.00067	<0.0005	0.00061	0.00056	0.00071	0.00183	<0.0005		<0.0005	<0.0005	<0.0005	<0.002	<0.0005	0.0006		<0.0005	<0.0005	<0.0005		<0.001	0.0008	0.0007	0.0005
Cobalt, total	mg/L	0.00017	0.00018	0.00019	0.00064		0.00071	0.00136	0.00057	0.00041	0.0013	0.00043	<0.0001	0.00035	0.00019	0.00018	0.00068	0.00017		<0.0001	<0.0001	<0.0001	<0.0005	<0.0001	0.0003		0.0002	0.0001	0.0006		<0.0002	0.0001	0.0001	0.0001
Copper, total	mg/L	0.03010	0.03040	0.03040	0.03670		0.03480	0.10100	0.04150	0.0213	0.013	0.0224	0.0147	0.0144	0.0117	0.022	0.0204	0.0279		0.009	0.005	0.012	0.008	0.004	0.01		0.005	0.004	0.014		0.004	0.005	0.004	0.005
Iron, total	mg/L	0.251	0.259	0.327	1.460		1.530	3.200	1.200	0.504	2.44	0.82	0.261	0.629	0.299	0.385	1.38	0.342		0.1	<0.1	0.2	0.1	<0.1	0.7		0.3	0.3	0.4		0.3	0.1	0.1	0.3
Lead, total	mg/L	0.000078	0.000062	0.000117	0.000461		0.000461	0.000760	0.000285	0.000183	0.00116	0.000183	<0.00005	0.000193	0.000084	0.000131	0.000386	0.000087		<0.0001	<0.0001	<0.0001	<0.0005	<0.0001	0.0002		0.0001	<0.0001	0.0002		<0.0002	<0.0001	0.0001	0.0001
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		0.002	0.002	0.002	<0.005	0.002	0.002		0.002	0.002	0.002		0.002	0.002	0.002	0.002
Magnesium, total	mg/L	11.7	11.7	8.1	7.8		4.3	4.8	4.0	4.32	4.26	5.82	6.8	8.8	9.4	6.42	7.65	7.53		14.8	17.3	15.1	17.1	16.8	20.7		20.1	18.8	20.4		19	17.8	18.5	18.8
Manganese, total	mg/L	0.03570	0.03110	0.0302	0.0711		0.0925	0.1380	0.0599	0.0708	0.135	0.0965	0.0107	0.0543	0.0187	0.0172	0.0641	0.0201		0.011	0.008	0.01	0.012	0.008	0.043		0.021	0.057	0.104		0.046	0.032	0.036	0.038
Mercury, total	mg/L																																	
Molybdenum, total	mg/L	0.00113	0.00100	0.00080	0.00085		0.00047	0.00056	0.00041	0.000454	0.000581	0.000681	0.000956	0.000992	0.000868	0.000815	0.000915	0.000802		0.002	0.002	0.002	<0.005	0.001	0.002		0.002	0.002	0.002		<0.002	0.002	0.002	0.002
Nickel, total	mg/L	0.00110	0.00106	0.00119	0.00212		0.00223	0.00304	0.00212	0.00183	0.0046	0.00221	0.00187	0.00211	0.00209	0.00238	0.00354	0.00212		0.0014	0.0011	0.0009	0.003	0.001	0.0019		0.0009	0.0011	0.0014		0.002	0.0014	0.0015	0.0014
Phosphorus, total	mg/L	<0.30	<0.30	<0.30	<0.30		<0.30	<0.30	<0.30	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3															
Potassium, total	mg/L	3	2.9	2.6	2.8		2.1	2.4	2.1	2	<2	<2	<2	<2	<2	<2	<2	<2		1.3	1.4	1.3	1.3	1.4	1.6		1.7	1.6	1.8		1.7	1.4	1.5	1.5
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002		<0.0002	0.0003	0.0003		<0.0004	0.0002	0.0004	<0.0002
Silicon, total	mg/L	4.73	4.82	4.0	5.2		4.2	6.2	3.7	3.18	6.01	3.56	3.33	4.08	4.07	3.96	5.05	4.46		5	5.61	5.47	5.6	5.87	6.22		7.04	6.38	6.65		6.38	6.58	6.3	7.18
Silver, total	mg/L	0.00001	<0.000010	0.000013	0.000022		0.00002	0.00003	0.000017	0.000028	0.000023	0.000012	<0.00001	<0.00001	0.000013	0.000017	0.000019	<0.00001		<0.0001	0.0002	<0.0001	<0.0005	<0.0001	<0.0001		<0.0001	0.0002	<0.0001		<0.0002	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	5.4	5.3	3.4	3.3		<2.0	<2.0	<2.0	<2	2.1	3.4	3.5	5.4	5.7	4.3	4.7	4.6		9.6	11	10.2	11.6	11.1	12.6		11.6	13.5	13.2		13	11.4	11.9	12.2
Strontium, total	mg/L	0.165	0.162	0.124	0.119		0.068	0.074	0.064	0.0751	0.1	0.0919	0.115	0.136	0.148	0.109	0.13	0.124		0.339	0.408	0.294	0.42	0.382	0.393		0.405	0.391	0.442		0.314	0.369	0.378	0.409
Sulpher, total	mg/L																			10.5	13.2	11.7	13.8	13.6	16.2		16.4	15.1	16.4		15	13.5	16.1	14.2
Thallium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.00005	<0.00005	<0.00005	<0.0002	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.0001	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00011	<0.0001	<0.0001		<0.001	<0.001	<0.001	<0.005	<0.001	<0.001		<0.001	<0.001	<0.001		<0.002	<0.001	<0.001	<0.001
Titanium, total	mg/L	0.012	<0.010	<0.010	0.046		0.047	0.122	0.04	0.01	0.067	0.016	<0.01	0.01	<0.01	<0.01	0.036	<0.01		0.0019	0.0036	0.0034	0.0078	0.0012	0.0244		0.0076	0.0062	0.0183		<0.0010	0.0031	0.0027	0.0094
Uranium, total	mg/L	0.000270	0.000266	0.00020	0.00024		0.00013	0.00019	0.00011	0.000112	0.000297	0.000177	0.0002	0.00032	0.000282	0.000149	0.000248	0.000221		0.001	0.0013	0.0011	<0.002	0.0013	0.0012		0.0013	0.0016	0.0016		<0.001	0.0011	0.0012	0.0013
Vanadium, total	mg/L	<0.0010	<0.0010	<0.0010	0.0035		0.0036	0.0075	0.003	0.0011	0.0056	0.0017	<0.001	0.0016	<0.001	0.0013	0.0033	0.0013		0.0009	0.0008	0.0007	0.0006	0.0005	0.0022		0.0012	0.0013	0.0021		0.001	0.0008	0.0007	0.001
Zinc, total	mg/L	0.0138	0.0037	0.0050	0.0053		0.0192	0.0137	0.0079	0.0051	0.0085	0.0029	<0.001	0.0023	0.0018	<0.005	0.0052	0.0016		<0.001	0.001	0.002	<0.005	0.002	0.003		0.003	0.002	0.004		0.005	0.002	0.002	0.003
Zirconium, total	mg/L																			<0.001	<0.001	<0.001	<0.005	<0.001	<0.001		<0.001	<0.001	<0.001		<0.002	<0.001	<0.001	<0.001
Aluminum, dissolved	mg/L								0.1240		0.0846			0.0383			0.0507			0.009	0.006	0.015	<0.005	0.005	0.007		<0.005	0.017	0.021		0.009	0.007	<0.005	0.006
Antimony, dissolved	mg/L								<0.00010		<0.0001			<0.0001			<0.0001			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, dissolved	mg/L								0.00031		0.0004			0.00043			0.00049			0.0004	0.0004	0.0004	0.0004	0.0004	0.0003		0.0002	0.0005	0.0006		0.0004	0.0004	0.0004	0.0003
Barium, dissolved	mg/L								0.0270		0.0323			0.0367			0.0351			0.061	0.065	0.056	0.067	0.07	0.084		0.082	0.086	0.078		0.082	0.07	0.074	0.071
Beryllium, dissolved	mg/L								<0.00050		<0.0005			<0.0005			<0.0005			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L								<0.00050		<0.0005			<0.0005			<0.0005			<0.0005	<0.0005	<0.0005	0.0007	0.0007	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L								<0.010		<0.01			<0.01			<0.01			0.004	0.004	0.004	0.007	0.007	0.004		<0.002	0.006	0.008		0.004	0.005	0.005	0.007
Cadmium, dissolved	mg/L								<0.000050		<0.00005			<0.00005			<0.00005			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	0.00001		<0.00001	<0.00001	0.00001	0.00001
Calcium, dissolved	mg/L								11.1		13.8			19			19.1			40.7	46.6	39	40.9	42.6	48.6		51.5	45.7	50.1		48.1	46.9	51.7	50.6
Chromium, dissolved	mg/L								<0.00050		<0.0005			<0.0005			<0.0005			<0.0005	0.0006	0.0005	0.0014	0.0014	<0.0005		<0.0005	0.0007	0.0011		0.0007	0.0016	0.0008	0.002
Cobalt, dissolved	mg/L								0.0002		0.00026			0.00011			<0.0001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	0.0002	0.0001		0.0002	0.0002	<0.0001	<0.0001
Copper, dissolved	mg/L								0.01850		0.0146			0.0102			0.0116			0.005	0.003	0.008	0.005	0.004	0.004		0.002	0.003	0.006		0.003	0.004	0.004	0.003
Iron, dissolved	mg/L								0.220		0.285			0.167			0.198			0.04	0.03	0.03	0.03	0.02	0.04		0.03	0.08	0.04		0.04	0.05	0.05	0.05
Lead, dissolved	mg/L								0.000052		0.00007			<0.00005			<0.00005			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Lithium, dissolved	mg/L								<0.0050		<0.005			<0.005			<0.005			0.001	0.001	0.001	0.002	0.002	0.001		<0.001	0.001	0.002		0.002	0.002	0.002	0.002
Magnesium, dissolved	mg/L								3.8		4.32			8.52			7.63			16.3	18	16.9	18.8	18.6	21.2		19.6	11.9	18.8		20.4	18.1	19.7	20.3
Manganese, dissolved	mg/L								0.02550		0.0901			0.0292			0.00826			<0.005	0.006	<0.005	<0.005	0.005	0.01		0.012	0.135	0.085		0.041	0.027	0.03	0.018
Mercury, dissolved	mg/L																																	
Molydenum, dissolved	mg/L								0.00032		0.000572			0.00101			0.000854			0.001	0.002	0.002	0.002	0.002	0.001		<0.001	0.001	0.002		0.001	0.002	0.002	0.002
Nickel, dissolved	mg/L								0.00136		0.00159			0.00152			0.00204			0.0009	0.001	0.0012	0.0014	<0.0005	<0.0005		<0.0005	0.0008	0.0007		0.0009	0.0007	0.001	0.0008
Phosphorus, dissolved	mg/L								<0.30		<0.3			<0.3			<0.3																	
Potassium, dissolved	mg/L								<2.0		<2			<2			<2			0.6	1.4	1.4	1.2	1.5	1.6		1.7	2.1	1.7		1.5	1.4	1.6	1.6
Selenium, dissolved	mg/L								<0.0010		<0.001			<0.001			<0.001			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Silicon, dissolved	mg/L								2.51		2.95			3.58			3.94			5.73	5.77	6.49	7	5.86	6.88		6.02	4.57	6.02		6.7	6.15	6.44	6.02
Silver, dissolved	mg/L								<0.000010		<0.00001			<0.00001			<0.00001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L								<2.0		2.3			5.3			4.9			10.8	11	10.2	11.3	11	13.1		13	13.6	13.3		12.2	11.4	12.7	13.4
Strontium, dissolved	mg/L								0.057		0.0843			0.134			0.124			0.323	0.405	0.304	0.387	0.408	0.294		0.301	0.284	0.389		0.31	0.322	0.4	0.372
Sulpher, dissolved	mg/L																			11.7	13.8	12.9	14.6	14.4	16.8		16.7	50.1	15.8		15.7	13.5	14.6	14.3
Thallium, dissolved	mg/L								<0.00010		<0.0001			<0.0001			<0.0001			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L								<0.00010		0.00027			<0.0001			<0.0001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001
Titanium, dissolved	mg/L								<0.010		<0.01			<0.01			<0.01			0.0008	0.0007	0.0009	0.0013	0.001	0.001		0.0007	0.0018	0.0016		<0.0005	<0.0005	0.001	0.0012
Uranium, dissolved	mg/L								0.000067		0.000123			0.000286			0.00019			0.0009	0.0014	0.0008	0.001	0.0008	0.0011		0.001	0.0021	0.0018		0.0009	0.0011	0.0011	0.0012
Vanadium, dissolved	mg/L								<0.0010		<0.001			<0.001			<0.001			0.0012	0.0009	0.0009	0.0012	0.002	0.0013		0.0007	0.0022	0.0021		0.002	0.0018	0.0018	0.0016
Zinc, dissolved	mg/L								0.0057		0.0024			<0.001			0.0013			<0.001	0.003	0.002	0.001	<0.001	<0.001		0.001	0.002	0.003		0.003	0.002	0.002	0.002
Zirconium, dissolved	mg/L																																	

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**20/09/2006**	**29/09/2006**	**04/10/2006**	**12/10/2006**	**18/10/2006**	**28/10/2006**	**01/11/2006**	**09/11/2006**	**16/11/2006**
Total Suspended Solids	mg/L	2	<2	<2	<2	<1	14	<2	<2	<2
Total Dissolved Solids	mg/L		160		280	247	130	290	304	324
pH (field)	pH units									
pH (lab)	pH units	8.02	7.74	7.93	7.61	8.19	7.44	7.1	7.49	7.22
Specific Conductance, field	µS/cm									
Specific Conductance (lab)	µS/cm	423	434	413	430	335	456	445	469	518
Temperature (field)	C									
Dissolved Oxygen (field)	mg/L									
Dissolved Oxygen (field)	%									
ORP (field)	mV									
Hardness (from total)	mg/L									
Hardness (from dissolved)	mg/L	216	210	203	210	216	224	226	234	267
Alkalinity, total	mg/L	190	191	180	184	152	205	210	214	248
Chloride	mg/L					0.9	1.12	1.06	1.21	1.46
Fluoride	mg/L									
Sulphate, dissolved	mg/L	42	43	43	42		42	42	42	40
Ammonia	mg/L	0.004	0.006	0.073	0.006	<0.05	0.029	<0.05	0.071	0.1
Nitrite (N)	mg/L					<0.005	<0.03	<0.03	<0.03	<0.03
Nitrate (N)	mg/L	<0.03	<0.03	<0.03	<0.03	0.05	0.25	0.23	0.23	0.03
Dissolved Organic Carbon	mg/L	7.5	7.4	8	7.7	7.8	4.1	5.2	8	12.6
Aluminum, total	mg/L	0.138	0.03	0.081	0.047	0.006	0.114	0.96	0.031	0.008
Antimony, total	mg/L	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	0.005	0.0002	<0.0002
Arsenic, total	mg/L	0.0005	0.0004	<0.0004	0.0002	0.0003	0.0004	0.009	0.0003	0.0002
Barium, total	mg/L	0.078	0.079	0.075	0.078	0.084	0.082	1.9	0.075	0.052
Beryllium, total	mg/L	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.002	<0.0001	<0.0001
Bismuth, total	mg/L	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005
Boron, total	mg/L	0.007	0.008	0.007	0.007	0.006	0.018	0.48	0.018	0.007
Cadmium, total	mg/L	<0.00001	<0.00002	<0.00002	<0.00001	<0.00001	<0.00001	<0.00025	<0.00001	<0.00001
Calcium, total	mg/L	51.2	51.1	46.2	52	54.3	50.4	49.8	53	64.4
Chromium, total	mg/L	0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005
Cobalt, total	mg/L	0.0001	<0.0002	<0.0002	<0.0001	<0.0001	0.0002	0.004	0.0002	0.0005
Copper, total	mg/L	0.004	0.004	0.004	0.005	0.003	0.002	0.05	0.002	0.001
Iron, total	mg/L	0.2	<0.2	<0.2	<0.1	<0.1	0.2	0.1	0.1	0.3
Lead, total	mg/L	0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	0.003	0.0001	<0.0001
Lithium, total	mg/L	0.002	0.002	<0.002	0.002	0.002	0.004	0.09	0.004	0.002
Magnesium, total	mg/L	21.3	20.4	18	20.8	20.8	24.8	24	26.9	29.2
Manganese, total	mg/L	0.029	0.03	0.047	0.047	0.073	0.297	0.308	0.399	2.26
Mercury, total	mg/L						<0.00005	<0.00005	<0.00005	<0.00005
Molybdenum, total	mg/L	0.002	<0.002	<0.002	0.002	0.002	0.002	0.06	0.002	0.002
Nickel, total	mg/L	0.0015	0.002	0.0025	0.0012	0.0013	<0.0005	0.03	0.0011	0.0014
Phosphorus, total	mg/L					0.06		<0.05		0.06
Potassium, total	mg/L	1.7	1.6	1.4	1.4	1.4	1.9	1.8	1.9	2
Selenium, total	mg/L	0.0004	<0.0004	0.0006	<0.0002	<0.0002	0.0002	0.008	0.0004	<0.0002
Silicon, total	mg/L	6.78	5.96	5.76	6.36	6.56	6.34	6.23	6.72	7.4
Silver, total	mg/L	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.002	<0.0001	<0.0001
Sodium, total	mg/L	12.1	13	12	11.6	11.1	15.8	14.9	14.2	14
Strontium, total	mg/L	0.416	0.381	0.382	0.415	0.435	0.607	15.9	0.693	0.345
Sulpher, total	mg/L	14.7	15	14	15.2	15.2	14.1	14.7	16	15
Thallium, total	mg/L	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.001	<0.00005	<0.00005
Tin, total	mg/L	<0.001	<0.002	<0.002	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001
Titanium, total	mg/L	0.0078	0.002	0.0049	0.0023	0.0008	0.006	0.052	0.0021	0.0007
Uranium, total	mg/L	0.0013	0.001	0.001	0.0012	0.0013	0.0022	0.058	0.0024	0.0013
Vanadium, total	mg/L	0.001	0.0006	0.0009	0.0006	0.0005	0.0009	0.02	0.0007	0.0004
Zinc, total	mg/L	0.003	0.003	0.002	0.001	0.002	0.003	0.05	0.004	0.002
Zirconium, total	mg/L	<0.001	<0.002	<0.002	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001
Aluminum, dissolved	mg/L	0.006	0.009	<0.005	0.007	0.005	<0.005	0.006	<0.005	0.006
Antimony, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, dissolved	mg/L	0.0003	0.0004	0.0005	0.0004	0.0004	0.0004	0.0003	0.0002	0.0006
Barium, dissolved	mg/L	0.074	0.077	0.071	0.072	0.083	0.078	0.078	0.069	0.095
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L	0.006	0.004	0.004	0.006	0.007	0.017	0.016	0.02	0.011
Cadmium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00003	0.00001	<0.00001	0.00002
Calcium, dissolved	mg/L	52.2	51.3	49.4	51.7	54.8	48.4	48.5	51.6	63.1
Chromium, dissolved	mg/L	0.0007	0.0006	0.0006	<0.0005	<0.0005	0.0098	0.0008	0.0014	0.0009
Cobalt, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0002	0.0002	0.0008
Copper, dissolved	mg/L	0.003	0.003	0.002	0.003	0.003	0.001	0.002	0.001	0.002
Iron, dissolved	mg/L	0.06	0.03	0.06	0.05	0.03	0.06	0.05	<0.01	0.29
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Lithium, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.004	0.004	0.003	0.003
Magnesium, dissolved	mg/L	20.9	20	19.3	19.6	19.2	25	25.6	25.6	26.5
Manganese, dissolved	mg/L	0.021	0.032	0.038	0.046	0.069	0.27	0.307	0.334	2.16
Mercury, dissolved	mg/L						<0.0001	<0.0001	<0.0001	<0.0001
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.003
Nickel, dissolved	mg/L	<0.0005	<0.0005	0.0006	0.0006	0.001	<0.0005	0.0025	0.0009	0.0008
Phosphorus, dissolved	mg/L									
Potassium, dissolved	mg/L	1.6	1.6	1.6	1.4	1.4	1.7	1.8	1.9	1.7
Selenium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	0.0004	<0.0002	0.0006	<0.0002
Silicon, dissolved	mg/L	6.4	6.49	6.2	6.37	6.33	6.48	6.31	6.36	6.98
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	12.1	13.2	12.7	12.6	11.9	14	13.9	15.4	15.3
Strontium, dissolved	mg/L	0.379	0.401	0.384	0.392	0.424	0.574	0.654	0.634	0.566
Sulpher, dissolved	mg/L	15.5	15	14.8	14.8	15	15.5	14.6	15.2	14.9
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, dissolved	mg/L	<0.0005	0.0011	0.0012	0.0018	0.0009	0.0012	0.0013	0.0013	0.0012
Uranium, dissolved	mg/L	0.0013	0.0011	0.0011	0.0011	0.0012	0.0019	0.0022	0.0016	0.0024
Vanadium, dissolved	mg/L	0.0019	0.0006	0.0012	0.001	0.0011	0.0031	0.0007	0.0029	0.0034
Zinc, dissolved	mg/L	0.002	0.002	0.001	0.002	0.002	<0.001	0.005	0.002	0.002
Zirconium, dissolved	mg/L									

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**23/11/2006**	**30/11/2006**	**06/12/2006**	**13/12/2006**	**20/12/2006**	**28/12/2006**	**04/01/2007**	**10/01/2007**	**17/04/2007**	**27/04/2007**	**04/05/2007**	**11/05/2007**	**19/05/2007**
Total Suspended Solids	mg/L	<2	12	5	33	3	14	18	4	24	2	6	<2	10
Total Dissolved Solids	mg/L	320	296	240	320	308	308	298	288	332	274	252	280	250
pH (field)	pH units													
pH (lab)	pH units	8.29	7.45	8.15	8.28	7.46	7.5	7.63	8.36	7.91	7.92	7.97	7.91	7.8
Specific Conductance, field	µS/cm													
Specific Conductance (lab)	µS/cm	480	480	478	469	485	460	463	482	461	313	264	317	352
Temperature (field)	C													
Dissolved Oxygen (field)	mg/L													
Dissolved Oxygen (field)	%													
ORP (field)	mV													
Hardness (from total)	mg/L			238					239					
Hardness (from dissolved)	mg/L	244	230		229	223	236	233		246	167	142	167	173
Alkalinity, total	mg/L	202	215	204	208	210	206	193	204	203	130	106	118	128
Chloride	mg/L			1.13	1.28	1.5	1.9	2.18	2.39	4	2.5	1.7	1.9	2
Fluoride	mg/L													
Sulphate, dissolved	mg/L	46	44	41	42	42	43	43	42	48	31	22.1	25.9	27.4
Ammonia	mg/L	0.032	<0.05	0.017	<0.002	0.002	<0.002	<0.05	<0.05		<0.05	0.07	<0.05	<0.05
Nitrite (N)	mg/L	<0.1	<0.005	<0.03	<0.1	<0.1	<0.1	<0.03	<0.03	<0.05	<0.05	0.16	0.19	0.06
Nitrate (N)	mg/L	0.31	0.39	0.37	0.46	0.5	0.5	0.56	0.59	0.2	1.6	2.9	4	4.5
Dissolved Organic Carbon	mg/L	3.2	2.4	2.9	1.9	2.4	2.2	2.8	2.4	14.1	25.6			18.3
Aluminum, total	mg/L	0.064	0.505	0.213	0.516	0.13	0.49	0.562	0.226	1.46	0.212	0.31	0.17	0.485
Antimony, total	mg/L	<0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0004	<0.0004
Arsenic, total	mg/L	<0.0004	0.0006	0.0004	0.0003	0.0006	0.0004	0.0004	<0.0002	0.0012	0.0005	0.0008	0.0009	0.0007
Barium, total	mg/L	0.074	0.069	0.061	0.064	0.062	0.071	0.08	0.067	0.104	0.071	0.064	0.064	0.079
Beryllium, total	mg/L	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	0.02	0.022	0.017	0.02	0.017	0.019	0.017	0.015	0.016	0.009	0.058	0.075	0.01
Cadmium, total	mg/L	<0.00002	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	0.00001	0.00003	0.00003	0.00003	<0.00002	0.00002
Calcium, total	mg/L	52.1	51.5	50.9	50.2	47.9	51.6	52.9	50.5	60.6	45.1	38.9	43.9	48.4
Chromium, total	mg/L	<0.001	0.002	0.0007	0.0011	<0.0005	0.0005	0.0008	0.0006	0.0016	0.001	0.001	0.001	<0.001
Cobalt, total	mg/L	<0.0002	0.0012	0.0002	0.0002	<0.0001	0.0002	0.0003	<0.0001	0.0009	0.0003	0.0004	0.0004	0.0006
Copper, total	mg/L	0.004	0.005	0.002	0.003	0.002	0.002	0.002	0.002	0.016	0.01	0.02	0.02	0.02
Iron, total	mg/L	<0.2	0.7	0.3	0.6	0.2	0.6	0.6	0.3	1.8	0.2	0.4	0.2	0.7
Lead, total	mg/L	0.0007	0.0031	0.0003	0.0003	<0.0001	0.0002	0.0002	0.0003	0.0004	<0.0002	<0.0002	<0.0002	0.0003
Lithium, total	mg/L	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.002	<0.002	<0.002	<0.002	<0.002
Magnesium, total	mg/L	26.7	27.7	26.8	27.4	25.3	27.4	28	27.4	23.6	12	11	13	15
Manganese, total	mg/L	0.14	0.021	0.018	0.023	0.012	0.027	0.024	0.013	0.692	0.054	0.057	0.062	0.11
Mercury, total	mg/L	<0.00005	<0.00005	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002
Nickel, total	mg/L	0.0023	0.0016	0.0015	0.0014	0.0007	<0.0005	0.0012	0.0007	0.0023	0.002	0.0022	<0.001	0.0023
Phosphorus, total	mg/L		<0.05	<0.02	0.03	<0.02	0.02	0.02	<0.05	0.09	0.14	0.09	0.06	0.07
Potassium, total	mg/L	2	2.1	2.2	2	2	2.4	2.2	2	3	2.4	2.4	2.1	2
Selenium, total	mg/L	0.0005	0.0007	0.0003	0.0006	0.0003	0.0006	0.0006	<0.0002	<0.0002	0.0007	0.001	<0.0004	<0.0004
Silicon, total	mg/L	6.45	7.58	7.12	6.2	5.92	7.82	8.18	6.75	10.1	5.46	5.74	5.17	6.4
Silver, total	mg/L	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002
Sodium, total	mg/L	15	14.8	15.5	15.1	14.1	15.2	15.5	14.6	14.1	8.9	7.7	7.8	8.3
Strontium, total	mg/L	0.689	0.728	0.654	0.711	0.663	0.753	0.768	0.673	0.459	0.308	0.236	0.301	0.323
Sulpher, total	mg/L	15	15.6	15.8	16.4	15	16.1	16.7	16	17.4	10	7.7	8.9	10
Thallium, total	mg/L	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001
Tin, total	mg/L	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002
Titanium, total	mg/L	0.0031	0.0377	0.0124	0.0268	0.0071	0.0258	0.0295	0.013	0.0264	<0.001	0.002	0.0071	0.019
Uranium, total	mg/L	0.0025	0.0027	0.0025	0.0027	0.0024	0.0026	0.0027	0.0024	0.0014	0.0024	0.002	0.0023	0.002
Vanadium, total	mg/L	0.0008	0.0021	0.0013	0.0022	0.001	0.0022	0.0025	0.0012	0.0045	0.001	0.002	0.001	0.0024
Zinc, total	mg/L	0.01	0.044	0.008	0.01	0.005	0.005	0.007	0.002	0.007	0.01	0.01	0.007	0.02
Zirconium, total	mg/L	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	0.026	0.041	0.045	0.026	0.009
Antimony, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, dissolved	mg/L	0.0003	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003	<0.0002	0.0011	0.0005	0.0007	0.0005	0.0007
Barium, dissolved	mg/L	0.075	0.056	0.056	0.058	0.056	0.058	0.06	0.062	0.092	0.066	0.058	0.061	0.069
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L	0.018	0.019	0.022	0.018	0.017	0.021	0.016	0.017	0.014	0.007	0.009	0.013	0.012
Cadmium, dissolved	mg/L	0.00003	0.00005	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00002	0.00003	<0.00001	0.00001
Calcium, dissolved	mg/L	53.3	49.3	50.9	47.6	47	50.2	48.8	51	59.3	46.1	38.6	45.7	45.8
Chromium, dissolved	mg/L	0.0014	0.0014	0.0018	0.0006	0.0012	0.0005	<0.0005	0.0008	0.0008	0.0005	0.0009	0.0008	0.0008
Cobalt, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0006	0.0002	0.0002	0.0003	0.0004
Copper, dissolved	mg/L	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	0.008	0.007	0.014	0.018	0.016
Iron, dissolved	mg/L	0.06	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.27	0.09	0.08	0.07	0.11
Lead, dissolved	mg/L	0.0002	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Lithium, dissolved	mg/L	0.003	0.004	0.004	0.003	0.003	0.004	0.004	0.004	0.002	0.002	0.001	0.002	0.002
Magnesium, dissolved	mg/L	27	26	26.2	26.8	25.6	26.9	27	26.9	23.8	12.6	11.1	12.9	14.2
Manganese, dissolved	mg/L	0.136	0.006	0.006	0.008	0.007	0.016	0.007	0.008	0.785	0.05	0.048	0.057	0.094
Mercury, dissolved	mg/L	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Molydenum, dissolved	mg/L	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.003	0.002
Nickel, dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	0.0014	0.0015	0.0011	0.0006	<0.0005
Phosphorus, dissolved	mg/L										0.1			
Potassium, dissolved	mg/L	2	2	2	1.9	1.9	1.5	2	2	2.8	2.6	2.2	2.2	2
Selenium, dissolved	mg/L	0.0004	0.0004	0.0004	<0.0002	0.0004	0.0006	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003
Silicon, dissolved	mg/L	6.44	6.34	6.49	6.53	6.3	6.36	6.58	6.7	6.55	5.24	5.2	5.57	5.69
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	16.3	15.9	15.8	15.2	14.2	16.6	14.7	15.1	14.1	9.6	7.2	8.3	8.6
Strontium, dissolved	mg/L	0.584	0.652	0.638	0.661	0.656	0.659	0.661	0.646	0.432	0.287	0.238	0.299	0.315
Sulpher, dissolved	mg/L	15.2	15.4	17.4	15.2	15	15.4	15.7	16.2	17	10.8	7.6	9.6	9.7
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, dissolved	mg/L	0.0012	0.0012	0.0021	0.0019	0.0012	0.0018	0.0014	0.0014	0.0034	<0.0005	0.002	0.0017	0.0015
Uranium, dissolved	mg/L	0.0026	0.0022	0.0016	0.0023	0.0023	0.0022	0.0024	0.0023	0.0013	0.0024	0.0021	0.0022	0.0018
Vanadium, dissolved	mg/L	0.0031	0.0026	0.0053	0.0015	0.0022	0.0012	0.0007	0.0019	0.0025	0.001	0.001	0.0014	0.0017
Zinc, dissolved	mg/L	0.002	0.005	0.004	0.012	0.003	0.001	0.006	0.001	0.003	0.004	0.003	0.005	0.003
Zirconium, dissolved	mg/L													

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**25/05/2007**	**30/05/2007**	**05/06/2007**	**13/06/2007**	**20/06/2007**	**27/06/2007**	**28/06/2007**	**04/07/2007**	**05/07/2007**	**11/07/2007**	**18/07/2007**
Total Suspended Solids	mg/L	34	13	9	6	6		7		6	<2	<2
Total Dissolved Solids	mg/L	236	260	238	232	244		256		258	248	284
pH (field)	pH units											
pH (lab)	pH units	7.91	7.89	7.88	7.91	7.75		7.86		7.86	7.9	7.8
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	314	341	330	316	346		328		339	369	383
Temperature (field)	C											
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%											
ORP (field)	mV											
Hardness (from total)	mg/L		168	168					172			
Hardness (from dissolved)	mg/L	167			174	178		184		175	180	193
Alkalinity, total	mg/L	127	126	128	144	147		153		159	162	169
Chloride	mg/L	1.8	1.7	1.9	1.9	1.7		1.9		1.8	1.8	0.4
Fluoride	mg/L											
Sulphate, dissolved	mg/L	25	25	26	26	26		27		27	28	29
Ammonia	mg/L	<0.05	0.06	<0.05	<0.05	<0.05		<0.05			<0.05	<0.05
Nitrite (N)	mg/L	<0.05	<0.05	0.08	<0.05	<0.05		0.08		<0.05	<0.05	<0.05
Nitrate (N)	mg/L	4.6	4.8	5.2	4.8	4.4		3.5		3	3	2.9
Dissolved Organic Carbon	mg/L				17.2							
Aluminum, total	mg/L	1.14	0.708	0.62	0.36	0.579	0.12	0.295	0.346	0.258	0.136	0.184
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.0005	0.0006	0.0007	0.0004	0.0006	0.0005	0.0007	0.0005	0.0005	0.0006	0.0005
Barium, total	mg/L	0.084	0.085	0.08	0.075	0.076	0.071	0.078	0.082	0.076	0.082	0.08
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, total	mg/L	0.017	0.013	0.014	0.016	0.016	0.015	0.015	0.016	0.016	0.014	0.016
Cadmium, total	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00004	<0.00001	0.00001	0.00001	<0.00001	0.00002
Calcium, total	mg/L	44.8	45.7	46	45.6	49.1	47.5	47.8	46.4	47.4	49.4	51.5
Chromium, total	mg/L	0.0021	0.0014	0.0006	0.001	0.0012	<0.0005	0.0011	0.0005	<0.0005	0.0005	0.0006
Cobalt, total	mg/L	0.0009	0.0007	0.0006	0.0004	0.0006	0.0004	0.0005	0.0005	0.0004	0.0004	0.0003
Copper, total	mg/L	0.02	0.014	0.014	0.018	0.015	0.014	0.014	0.014	0.015	0.013	0.013
Iron, total	mg/L	1.4	0.8	0.7	0.4	0.6	0.2	0.4	0.4	0.3	0.2	0.3
Lead, total	mg/L	0.0004	0.0002	0.0003	0.0002	0.0002	<0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001
Lithium, total	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Magnesium, total	mg/L	13	13.2	12.8	13.4	13.3	13.6	13.5	13.7	13.9	14.3	15.4
Manganese, total	mg/L	0.088	0.06	0.062	0.038	0.048	0.03	0.045	0.042	0.04	0.036	0.037
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.002	0.002	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Nickel, total	mg/L	0.001	0.0016	0.0016	0.0008	0.0022	0.0014	0.0017	0.0018	0.0015	0.0011	0.0009
Phosphorus, total	mg/L	0.06	<0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05	
Potassium, total	mg/L	2.1	1.9	2	2	1.9	2	2.1	2	2	2	2.3
Selenium, total	mg/L	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	<0.0002	<0.0002	<0.0002	0.0008	0.0003
Silicon, total	mg/L	7.16	6.76	6.26	6.08	6.64	5.52	5.95	6.03	5.83	5.47	5.32
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	8.9	9.4	9.1	9.4	9	9.4	9.4	9.6	9.5	9.9	10.7
Strontium, total	mg/L	0.344	0.324	0.348	0.355	0.355	0.357	0.345	0.364	0.341	0.372	0.436
Sulpher, total	mg/L	9.5	9.4	9.3	9.7	9.6	9.4	9.4	9.3	9.4	9.9	10.4
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, total	mg/L	0.0568	0.0365	0.0305	0.0155	0.0307	0.007	0.0181	0.0145	0.0106	0.0031	0.0085
Uranium, total	mg/L	0.0016	0.0015	0.0017	0.0018	0.002	0.0019	0.0019	0.0019	0.0019	0.0022	0.0021
Vanadium, total	mg/L	0.004	0.0026	0.0028	0.0018	0.0028	0.0013	0.0016	0.002	0.0017	0.0014	0.0014
Zinc, total	mg/L	0.009	0.008	0.006	0.007	0.005	0.004	0.004	0.003	0.004	0.003	0.006
Zirconium, total	mg/L	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Aluminum, dissolved	mg/L	0.017	0.009		0.014	0.013		0.006		0.011	0.01	0.01
Antimony, dissolved	mg/L	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002
Arsenic, dissolved	mg/L	0.0004	0.0004		0.0004	0.0006		0.0008		0.0005	0.0006	0.0004
Barium, dissolved	mg/L	0.064	0.071		0.066	0.069		0.073		0.075	0.075	0.075
Beryllium, dissolved	mg/L	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005		<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L	0.011	0.01		0.012	0.017		0.02		0.015	0.014	0.016
Cadmium, dissolved	mg/L	<0.00001	<0.00001		0.00001	<0.00001		<0.00001		<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L	45.1	43.9		47	49.2		49.8		47.7	48.8	51.7
Chromium, dissolved	mg/L	0.001	0.0012		0.0008	0.0008		0.001		<0.0005	0.0005	<0.0005
Cobalt, dissolved	mg/L	0.0003	0.0003		0.0003	0.0003		0.0002		0.0002	0.0002	0.0002
Copper, dissolved	mg/L	0.014	0.012		0.014	0.014		0.013		0.013	0.011	0.012
Iron, dissolved	mg/L	0.05	0.06		0.04	0.04		0.03		0.03	0.03	0.03
Lead, dissolved	mg/L	0.0002	<0.0001		<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001
Lithium, dissolved	mg/L	0.001	0.001		0.002	0.002		0.002		0.002	0.002	0.002
Magnesium, dissolved	mg/L	13.1	12.7		13.8	13.5		14.4		13.5	14	15.6
Manganese, dissolved	mg/L	0.058	0.05		0.031	0.038		<0.005		0.033	0.031	0.032
Mercury, dissolved	mg/L	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001
Molydenum, dissolved	mg/L	0.002	0.002		0.002	0.003		0.003		0.003	0.003	0.004
Nickel, dissolved	mg/L	<0.0005	<0.0005		<0.0005	0.0009		<0.0005		0.0014	<0.0005	<0.0005
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	1.9	1.9		1.9	2		2		2	1.8	2
Selenium, dissolved	mg/L	<0.0002	<0.0002		<0.0002	<0.0002		0.0002		<0.0002	<0.0002	0.0002
Silicon, dissolved	mg/L	5.22	5.11		5.38	5.27		5.37		5.34	5.47	5.6
Silver, dissolved	mg/L	<0.0001	<0.0001		0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	8.9	9.6		9.7	9.6		10		9.6	9.8	10.2
Strontium, dissolved	mg/L	0.324	0.314		0.333	0.368		0.367		0.361	0.37	0.391
Sulpher, dissolved	mg/L	9.3	9.1		9.5	9.7		9.6		9.3	9.7	10.2
Thallium, dissolved	mg/L	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005		<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.001	<0.001		<0.001	<0.001		<0.001		<0.001	<0.001	<0.001
Titanium, dissolved	mg/L	0.0015	0.0018		0.0018	0.0014		0.0011		0.0014	0.0012	0.0011
Uranium, dissolved	mg/L	0.0014	0.0014		0.0016	0.0018		0.0017		0.002	0.002	0.0021
Vanadium, dissolved	mg/L	0.0021	0.0018		0.0018	0.0024		0.003		0.0015	0.0014	0.001
Zinc, dissolved	mg/L	0.002	0.003		0.002	0.004		0.002		0.003	0.002	0.002
Zirconium, dissolved	mg/L											

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**25/07/2007**	**26/07/2007**	**01/08/2007**	**09/08/2007**	**15/08/2007**	**24/08/2007**	**29/08/2007**	**06/09/2007**	**11/09/2007**	**17/09/2007**	**25/09/2007**
Total Suspended Solids	mg/L	4		<2	10	6	<2	<2	5	4	26	<2
Total Dissolved Solids	mg/L	270		304	262	318	288	304	300	310	318	302
pH (field)	pH units											
pH (lab)	pH units	7.78		8.08	7.85	8.03	8.03	8.08	8.08	8.05	8.07	8.05
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	387		366	395	385	406	394	398	395	447	443
Temperature (field)	C											
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%											
ORP (field)	mV											
Hardness (from total)	mg/L						198		218			
Hardness (from dissolved)	mg/L	199		188	199	202		206		217	208	211
Alkalinity, total	mg/L	175		175	183	191	198	202	209	208	204	202
Chloride	mg/L	5		2	2	2.4	2.1	2.4	2.8	2.98	3.17	2.89
Fluoride	mg/L											
Sulphate, dissolved	mg/L	30		31	32	32	34	34	36	35.2	36.5	37.5
Ammonia	mg/L	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrite (N)	mg/L	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02
Nitrate (N)	mg/L	2.4		2	1.5	1.8	1.5	1.6	2.8	3.17	3.41	2.27
Dissolved Organic Carbon	mg/L											
Aluminum, total	mg/L	0.041	0.051	0.119	0.218	0.18	0.036	0.12	0.578	0.148	0.395	0.036
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.0005	0.0004	0.0006	0.0005	0.0004	0.0005	0.0006	0.0006	0.0006	0.0006	0.0003
Barium, total	mg/L	0.078	0.079	0.081	0.082	0.088	0.076	0.084	0.102	0.091	0.092	0.082
Beryllium, total	mg/L	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, total	mg/L	0.017	0.016	0.016	0.014	0.016	0.016	0.013	0.024	0.026	0.021	0.015
Cadmium, total	mg/L	0.00002	0.00002	0.00002	0.00002	0.00001	0.00002	0.00002	0.00001	0.00001	0.00001	0.00002
Calcium, total	mg/L	49.7	50.5	51.3	50.6	54.2	53.1	51.1	59.3	58.7	55.1	52.2
Chromium, total	mg/L	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	0.0006	0.0011	0.001	0.0008	0.0006
Cobalt, total	mg/L	0.0002	0.0003	0.0004	0.0009	0.0003	0.0002	0.0002	0.0007	0.0003	0.0005	0.0002
Copper, total	mg/L	0.011	0.012	0.013	0.007	0.009	0.005	0.007	0.012	0.01	0.011	0.005
Iron, total	mg/L	<0.1	0.1	0.2	0.3	0.2	<0.1	0.2	0.7	0.2	0.5	<0.1
Lead, total	mg/L	<0.0001	<0.0001	0.0007	0.0001	0.0001	0.0003	<0.0001	0.0002	<0.0001	0.0002	<0.0001
Lithium, total	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002
Magnesium, total	mg/L	14.8	14.8	16.1	15.5	15.9	16	16.2	17	16.7	16.8	16.6
Manganese, total	mg/L	0.047	0.047	0.067	0.05	0.053	0.066	0.071	0.143	0.097	0.108	0.073
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.004	0.003	0.004	0.002
Nickel, total	mg/L	<0.0005	0.0009	0.0018	0.0013	0.0012	0.0006	0.0011	0.0021	0.0021	0.0015	0.0011
Phosphorus, total	mg/L	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Potassium, total	mg/L	2.2	2.2	1.9	1.9	2.1	1.8	2	2.4	2.4	2.5	1.9
Selenium, total	mg/L	<0.0002	0.0006	<0.0002	0.0003	0.0002	<0.0002	0.0003	0.0006	0.0004	0.0005	0.0004
Silicon, total	mg/L	5.28	5.6	5.84	6.65	6.24	5.77	5.63	6.94	6.25	6.53	5.48
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	10.6	10.5	10.4	11	11.2	10.6	11.4	12.1	12.5	13	11.8
Strontium, total	mg/L	0.387	0.412	0.404	0.413	0.419	0.46	0.418	0.444	0.445	0.459	0.464
Sulpher, total	mg/L	10.1	10.1	10.3	10.6	11	10.7	10.9	12	12.6	12.4	12
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, total	mg/L	0.002	0.0024	0.0067	0.0094	0.0027	0.0018	0.0067	0.0285	0.0081	0.0196	0.0018
Uranium, total	mg/L	0.002	0.0021	0.002	0.0021	0.0021	0.0022	0.002	0.0023	0.0023	0.0023	0.0022
Vanadium, total	mg/L	0.001	0.0011	0.0014	0.0014	0.0015	0.0008	0.0011	0.0026	0.0013	0.0023	0.0007
Zinc, total	mg/L	0.006	0.006	0.008	0.008	0.012	0.009	0.008	0.01	0.003	0.009	0.006
Zirconium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Aluminum, dissolved	mg/L	0.009	0.009	0.009	<0.005	0.025		0.006	0.008	0.007	0.01	0.005
Antimony, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		0.0011	<0.0002	0.001	<0.0002	<0.0002
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0002	0.0004	0.0003		0.0005	0.0006	0.0004	0.0004	0.0003
Barium, dissolved	mg/L	0.074	0.08	0.077	0.079	0.081		0.082	0.09	0.082	0.091	0.088
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L	0.014	0.012	0.014	0.014	0.017		0.014	0.018	0.02	0.02	0.013
Cadmium, dissolved	mg/L	<0.00001	0.00002	0.00001	0.00001	0.00001		0.00001	<0.00001	<0.00001	0.00001	0.00001
Calcium, dissolved	mg/L	54.3	53.6	50.6	53.9	54		54.9	57.4	58.2	55.5	55.1
Chromium, dissolved	mg/L	<0.0005	0.0009	<0.0005	<0.0005	<0.0005		0.0005	0.001	0.0006	<0.0005	0.0006
Cobalt, dissolved	mg/L	0.0003	0.0002	0.0003	0.0001	0.0002		0.0002	0.0002	0.0003	0.0001	0.0001
Copper, dissolved	mg/L	0.01	0.01	0.01	0.007	0.008		0.005	0.008	0.008	0.008	0.004
Iron, dissolved	mg/L	0.04	0.04	0.04	0.03	0.04		0.03	0.06	0.03	0.04	0.03
Lead, dissolved	mg/L	<0.0001	0.0001	<0.0001	<0.0001	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Lithium, dissolved	mg/L	0.002	0.001	0.002	0.002	0.002		0.002	0.002	0.002	0.002	0.002
Magnesium, dissolved	mg/L	15.4	15.1	14.8	15.7	16.3		16.8	17.4	17.4	16.9	17.8
Manganese, dissolved	mg/L	0.044	0.043	0.058	0.044	0.047		0.07	0.113	0.08	0.071	0.076
Mercury, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molydenum, dissolved	mg/L	0.003	0.003	0.003	0.002	0.003		0.002	0.003	0.003	0.003	0.002
Nickel, dissolved	mg/L	<0.0005	<0.0005	0.0034	<0.0005	<0.0005		<0.0005	0.0008	0.0015	0.0009	<0.0005
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	2.2	2.2	2	1.8	2		1.8	2.3	2.2	2.4	2
Selenium, dissolved	mg/L	<0.0002	0.0005	0.0004	<0.0002	0.0003		<0.0002	0.0005	0.0005	0.0002	<0.0002
Silicon, dissolved	mg/L	5.78	5.88	6.2	6.04	5.98		5.95	6.02	5.86	5.76	6.02
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	11.4	10.8	10.8	11.1	11.6		11.3	12.4	12.3	12.6	12.2
Strontium, dissolved	mg/L	0.408	0.411	0.391	0.408	0.383		0.416	0.44	0.426	0.464	0.458
Sulpher, dissolved	mg/L	10.3	10.6	10.3	11	11.1		11.8	12.2	12.2	12.2	12.7
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, dissolved	mg/L	0.0015	0.0012	0.0012	0.001	0.0011		0.0011	0.0014	0.001	0.0012	0.0009
Uranium, dissolved	mg/L	0.002	0.002	0.002	0.0019	0.002		0.0022	0.0022	0.0024	0.0023	0.0021
Vanadium, dissolved	mg/L	0.0014	0.0022	0.0016	0.0014	0.0018		0.0011	0.0018	0.0009	0.001	0.0012
Zinc, dissolved	mg/L	0.002	0.003	0.007	0.008	0.008		0.002	0.006	0.003	0.008	0.007
Zirconium, dissolved	mg/L											

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**03/10/2007**	**10/10/2007**	**17/10/2007**	**22/10/2007**	**30/10/2007**	**08/11/2007**	**13/11/2007**	**20/11/2007**	**27/11/2007**	**06/12/2007**	**11/12/2007**
Total Suspended Solids	mg/L	<2	3	<2	<2	<2	<2	<2	4	<2	<2	4
Total Dissolved Solids	mg/L	276	290	300	290	288	304	320	328	316	316	322
pH (field)	pH units											
pH (lab)	pH units	8.13	8.06	8.06	8.09	7.93	7.76	8.19	7.94	8.02	7.91	7.86
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	410	453	442	465	464	469	472	490	455	495	498
Temperature (field)	C											
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%											
ORP (field)	mV											
Hardness (from total)	mg/L											232
Hardness (from dissolved)	mg/L	218	228	224	233	221	221	232	239	235	251	
Alkalinity, total	mg/L	184	183	184	182	186	194	203	208	215	216	211
Chloride	mg/L	3.06	2.7	2.7	2.7	3.44	3.37	3.45	4.13	3.62	3.92	3.74
Fluoride	mg/L											
Sulphate, dissolved	mg/L	36	38		39.7	39.1	40.6	41.2		40.9	41.1	39.9
Ammonia	mg/L	<0.05		<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05
Nitrite (N)	mg/L	<0.02	<0.02	<0.02	<0.02	4.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nitrate (N)	mg/L	2.82	3.5	3.75	4.08	<0.02	3.08	2.55	2.61	2.23	1.8	1.58
Dissolved Organic Carbon	mg/L											
Aluminum, total	mg/L	0.137	0.124	0.035	0.045	0.025	0.045	0.153	0.257	0.032	0.084	0.174
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.0004	0.0004	0.0003	0.0002	<0.0002	<0.0002	0.0004	0.0005	0.0006	<0.0002	<0.0002
Barium, total	mg/L	0.091	0.095	0.091	0.092	0.091	0.085	0.085	0.097	0.088	0.093	0.094
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, total	mg/L	0.015	0.022	0.017	0.017	0.016	0.018	0.016	0.024	0.017	0.016	0.019
Cadmium, total	mg/L	0.00002	<0.00001	0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
Calcium, total	mg/L	51.4	57.8	57.7	56.5	55.8	55.8	57.6	61.4	57.4	61.1	58
Chromium, total	mg/L	0.0008	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0008	0.0005	<0.0005	0.0006
Cobalt, total	mg/L	0.0002	0.0003	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002
Copper, total	mg/L	0.006	0.008	0.009	0.004	0.004	0.004	0.005	0.011	0.004	0.004	0.004
Iron, total	mg/L	0.2	0.2	<0.1	<0.1	<0.1	<0.1	0.2	0.3	0.2	0.1	0.2
Lead, total	mg/L	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0003	0.0001	<0.0001	0.0006
Lithium, total	mg/L	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.003
Magnesium, total	mg/L	16.7	17.6	18.2	17.8	17.7	19.3	19.8	19.6	19.9	21.9	21.1
Manganese, total	mg/L	0.125	0.057	0.064	0.064	0.062	0.074	0.088	0.079	0.079	0.079	0.079
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001
Molybdenum, total	mg/L	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.005	0.002	0.002	0.002
Nickel, total	mg/L	0.0011	0.0008	0.0011	<0.0005	0.0007	0.0013	0.0015	<0.0005	0.001	0.0008	0.0009
Phosphorus, total	mg/L	0.06	<0.05		0.12		<0.02	<0.05		<0.05	<0.05	0.07
Potassium, total	mg/L	1.9	2.3	2	1.9	1.8	2	2	2.6	1.9	2	2.2
Selenium, total	mg/L	0.0003	0.0008	0.0005	<0.0002	<0.0002	<0.0002	0.0005	0.0004	0.001	0.0007	0.0003
Silicon, total	mg/L	5.73	5.86	5.65	5.65	5.65	5.34	6.05	6.06	5.62	6.12	5.95
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	11.6	13.6	12.4	12.6	12.7	13.7	13.5	14.8	13.6	14.6	14.9
Strontium, total	mg/L	0.42	0.517	0.492	0.515	0.545	0.575	0.547	0.533	0.531	0.565	0.545
Sulpher, total	mg/L	11.6	13	13.1	13.2	13	14.2	13.9	14.4	14.1	15	14.5
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, total	mg/L	0.0078	0.0068	0.0017	0.0025	0.0019	0.0033	0.0076	0.0114	0.002	0.0049	0.0086
Uranium, total	mg/L	0.002	0.0024	0.0023	0.0023	0.0023	0.0024	0.0025	0.0033	0.0029	0.0031	0.0032
Vanadium, total	mg/L	0.001	0.001	0.0008	0.0008	0.0007	0.0007	0.0009	0.0013	0.0008	0.0008	0.001
Zinc, total	mg/L	0.008	0.011	0.007	0.006	0.007	0.005	0.012	0.01	0.006	0.005	0.007
Zirconium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Aluminum, dissolved	mg/L	0.007	0.011	<0.005	0.006	0.005	0.008	0.005	0.008	<0.005	<0.005	<0.005
Antimony, dissolved	mg/L	<0.0002	<0.0002	0.001	0.0011	0.0015	0.001	0.0008	0.0011	0.0009	<0.0002	0.0008
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0005	0.0003	0.0003	0.0005
Barium, dissolved	mg/L	0.087	0.09	0.086	0.083	0.084	0.083	0.085	0.095	0.083	0.091	0.089
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L	0.015	0.016	0.018	0.015	0.015	0.015	0.014	0.02	0.016	0.017	0.017
Cadmium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L	56.5	60.5	58.8	60.8	58.7	55.8	59.6	62.6	60.2	63.1	63
Chromium, dissolved	mg/L	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	0.0005
Cobalt, dissolved	mg/L	0.0002	0.0002	0.0001	<0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002
Copper, dissolved	mg/L	0.005	0.007	0.004	0.004	0.004	0.004	0.003	0.007	0.004	0.003	0.004
Iron, dissolved	mg/L	0.08	0.03	0.05	0.02	0.02	0.03	0.03	0.02	0.03	0.01	0.02
Lead, dissolved	mg/L	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Lithium, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Magnesium, dissolved	mg/L	18.8	18.7	18.8	19.7	18.2	19.9	20.3	20	20.6	22.8	22
Manganese, dissolved	mg/L	0.127	0.054	0.063	0.061	0.065	0.073	0.078	0.067	0.079	0.067	0.067
Mercury, dissolved	mg/L	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molydenum, dissolved	mg/L	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.004	0.002	0.002	0.002
Nickel, dissolved	mg/L	0.0011	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	0.001	<0.0005	<0.0005
Phosphorus, dissolved	mg/L	<0.05										
Potassium, dissolved	mg/L	2	2.2	2	1.8	1.9	2	1.8	2.5	1.8	2	2
Selenium, dissolved	mg/L	<0.0002	0.0004	0.0002	<0.0002	0.0004	0.0003	0.0002	0.0003	0.0003	0.0003	<0.0002
Silicon, dissolved	mg/L	5.96	6.01	5.98	6.06	5.86	5.81	6.06	5.65	5.87	6.17	6.04
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	12	12.9	12.7	12.5	12.8	14.4	13.8	14.5	13.8	14.9	14.7
Strontium, dissolved	mg/L	0.423	0.452	0.485	0.484	0.481	0.545	0.505	0.505	0.497	0.564	0.531
Sulpher, dissolved	mg/L	12.3	13.3	13.6	13.9	13.5	13.8	14.4	14.4	14.5	15.4	15.5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, dissolved	mg/L	<0.0005	0.0017	0.0007	0.001	0.0011	0.0022	<0.0005	0.0012	<0.0005	0.0008	0.0013
Uranium, dissolved	mg/L	0.002	0.0022	0.0022	0.0022	0.0024	0.0024	0.0026	0.0033	0.003	0.0032	0.0031
Vanadium, dissolved	mg/L	0.0007	0.001	0.0008	0.0017	0.0006	0.0007	0.001	0.002	0.0008	0.0005	0.0013
Zinc, dissolved	mg/L	0.007	0.009	0.002	0.003	0.002	0.002	0.002	0.004	0.002	0.004	0.002
Zirconium, dissolved	mg/L											

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**18/12/2007**	**18/12/2007**	**26/12/2007**	**03/01/2008**	**09/01/2008**	**15/01/2008**	**22/01/2008**	**30/01/2008**	**07/02/2008**	**13/02/2008**	**20/02/2008**
Total Suspended Solids	mg/L		2	<5	<2	<2	2	<2	10	8	<2	<2
Total Dissolved Solids	mg/L		352	330	322	338	336	348	346	364	360	350
pH (field)	pH units											
pH (lab)	pH units		8.06	7.82	7.97	7.87	7.78	7.83	7.89	7.84	7.96	7.85
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm		419	462	472	485	509	515	538	519	571	557
Temperature (field)	C											
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%											
ORP (field)	mV											
Hardness (from total)	mg/L			230								256
Hardness (from dissolved)	mg/L		241		255	257	258	266	266		288	
Alkalinity, total	mg/L		214	233	228	228	243	232	238	250	259	252
Chloride	mg/L		3.77	3.77	3.93	6.97	4.25	4.22	0.14	4.41	4.66	4.59
Fluoride	mg/L											
Sulphate, dissolved	mg/L		39.3	38.4	40.2	40.2	40.1	39.8	39.8	42.6	42.3	42.4
Ammonia	mg/L	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08
Nitrite (N)	mg/L		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nitrate (N)	mg/L		1.5	1.39	1.34	1.16	1.1	1.02	0.88	0.86	0.77	0.78
Dissolved Organic Carbon	mg/L											
Aluminum, total	mg/L		0.046	0.106	0.121	0.092	0.136	0.094	0.451	0.389	0.068	0.04
Antimony, total	mg/L		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L		0.0005	0.0002	0.0006	0.0002	0.0002	0.0005	0.0005	0.0007	0.0003	0.0005
Barium, total	mg/L		0.091	0.09	0.097	0.099	0.095	0.096	0.103	0.11	0.099	0.096
Beryllium, total	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, total	mg/L		0.018	0.017	0.018	0.017	0.029	0.016	0.018	0.019	0.018	0.02
Cadmium, total	mg/L		<0.00001	<0.00001	0.00002	0.00001	<0.00001	0.00001	0.00002	0.00001	0.00001	0.00001
Calcium, total	mg/L		57.7	58.3	62.1	64.7	62.5	66	65	63.3	70.2	64.2
Chromium, total	mg/L		0.0007	0.0005	0.0005	<0.0005	0.0006	0.0007	0.0008	0.0007	0.0009	0.0006
Cobalt, total	mg/L		0.0005	0.0002	0.0002	0.0002	0.0003	0.0002	0.0005	0.0004	0.0003	0.0002
Copper, total	mg/L		0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.006	0.004	0.004
Iron, total	mg/L		<0.1	0.1	0.2	0.2	0.2	0.2	0.6	0.5	0.2	0.1
Lead, total	mg/L		<0.0001	0.0002	0.0003	<0.0001	0.0002	<0.0001	0.0002	0.0001	<0.0001	<0.0001
Lithium, total	mg/L		0.002	0.003	0.003	0.002	0.002	0.002	0.003	0.003	0.003	0.002
Magnesium, total	mg/L		21.4	20.5	21.9	22.9	22.5	23	22.5	24.8	24.9	23.3
Manganese, total	mg/L		0.055	0.07	0.11	0.123	0.136	0.151	0.213	0.185	0.117	0.104
Mercury, total	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L		0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.003	0.002	0.002
Nickel, total	mg/L		<0.0005	0.0011	0.0009	0.0013	0.0012	0.0012	0.0017	0.0016	0.0014	0.0012
Phosphorus, total	mg/L		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Potassium, total	mg/L		2	1.9	2	2	2.1	2	2.1	2.4	2.3	2.1
Selenium, total	mg/L		<0.0002	<0.0002	0.0002	0.0005	0.0005	0.0003	0.0004	0.0005	0.0004	0.0006
Silicon, total	mg/L		5.69	5.65	5.83	5.94	5.94	5.93	5.19	6.41	6.11	6.08
Silver, total	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001
Sodium, total	mg/L		14.5	14.2	14.7	15.3	15.6	15.5	15.2	16.7	16.3	16
Strontium, total	mg/L		0.582	0.606	0.57	0.586	0.589	0.613	0.611	0.678	0.688	0.628
Sulpher, total	mg/L		14.5	14.2	14.5	15.1	14.9	14.9	14.9	15.6	16.3	15
Thallium, total	mg/L		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, total	mg/L		0.0033	0.0051	0.0069	0.0018	0.0068	0.005	0.016	0.0016	0.0039	0.0026
Uranium, total	mg/L		0.0034	0.0035	0.0039	0.0042	0.0043	0.0042	0.0046	0.0048	0.0047	0.0049
Vanadium, total	mg/L		0.0007	0.0009	0.0009	0.001	0.0011	0.001	0.002	0.0019	0.0009	0.0007
Zinc, total	mg/L		0.005	0.006	0.005	0.005	0.006	0.007	0.007	0.007	0.007	0.006
Zirconium, total	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Aluminum, dissolved	mg/L		<0.005	<0.005	<0.005	<0.005	0.007	<0.005	0.006	0.008	<0.005	0.006
Antimony, dissolved	mg/L		0.0009	<0.0002	0.0012	0.0008	0.0009	0.0007	0.0005	0.0009	0.0006	0.0006
Arsenic, dissolved	mg/L		0.0005	0.0005	0.0004	0.0003	0.0004	0.0005	<0.0002	0.0006	0.0003	0.0005
Barium, dissolved	mg/L		0.089	0.086	0.087	0.098	0.091	0.091	0.097	0.1	0.101	0.097
Beryllium, dissolved	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L		0.017	0.015	0.014	0.018	0.018	0.018	0.02	0.022	0.016	0.018
Cadmium, dissolved	mg/L		<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00002	0.00001	<0.00001	0.00002
Calcium, dissolved	mg/L		60.9	64.4	64.4	64.9	65.3	67.3	67.6	69.3	72.1	69.6
Chromium, dissolved	mg/L		<0.0005	0.0024	0.0005	<0.0005	0.0005	0.0008	0.0006	0.0005	0.0013	0.0011
Cobalt, dissolved	mg/L		<0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	<0.0001	<0.0001
Copper, dissolved	mg/L		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.005
Iron, dissolved	mg/L		0.01	<0.01	0.05	0.05	0.06	0.07	0.1	0.1	0.06	0.06
Lead, dissolved	mg/L		0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001
Lithium, dissolved	mg/L		0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.004
Magnesium, dissolved	mg/L		21.7	23.2	23	23.1	22.9	23.7	23.7	26.2	26.2	25.6
Manganese, dissolved	mg/L		0.054	<0.005	0.105	0.117	0.131	0.145	0.164	0.179	0.117	0.113
Mercury, dissolved	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molydenum, dissolved	mg/L		0.002	0.007	0.002	0.002	0.003	0.002	0.002	0.003	0.002	0.002
Nickel, dissolved	mg/L		<0.0005	0.0009	<0.0005	0.0008	0.001	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L		2	2.1	2	2	2	2	2	2.4	2.4	5.4
Selenium, dissolved	mg/L		<0.0002	<0.0002	0.0002	0.0002	<0.0002	0.0003	<0.0002	0.0004	0.0004	0.0003
Silicon, dissolved	mg/L		5.92	6.04	5.87	5.9	5.83	5.87	5.95	6.24	6.23	6.03
Silver, dissolved	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001
Sodium, dissolved	mg/L		14.8	15.2	15	15	14.8	15.8	15.7	17.2	17.4	16.9
Strontium, dissolved	mg/L		0.531	0.585	0.532	0.591	0.583	0.616	0.646	0.713	0.651	0.653
Sulpher, dissolved	mg/L		14.6	15.7	15	15	14.8	15.4	15.3	16.9	16.9	16.3
Thallium, dissolved	mg/L		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Titanium, dissolved	mg/L		0.0013	0.0007	0.0007	0.0011	0.0011	0.0014	0.0022	0.0013	0.0009	0.001
Uranium, dissolved	mg/L		0.0032	0.0028	0.0035	0.0038	0.0041	0.004	0.0042	0.0046	0.0048	0.0048
Vanadium, dissolved	mg/L		0.001	0.0072	0.0008	0.0015	0.0009	0.0023	0.0015	0.0016	0.0019	0.0032
Zinc, dissolved	mg/L		0.003	0.002	0.002	0.003	0.003	0.002	0.002	0.005	0.004	0.006
Zirconium, dissolved	mg/L											

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		27/02/2008	03/03/2008	14/03/2008	19/03/2008	26/03/2008	03/04/2008	10/04/2008	10/04/2008	17/04/2008	22/04/2008	01/05/2008
Total Suspended Solids	mg/L	8	4	<2	<2	<2	3		<2	6	2	15
Total Dissolved Solids	mg/L	358	360	356	352	350	362		370	372	378	264
pH (field)	pH units											
pH (lab)	pH units	7.87	7.84	8.03	8.1	8.02	8.08		8.07	8.02	8.05	7.67
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	506	507	508	564	514	554			575	523	173
Temperature (field)	C											
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%											
ORP (field)	mV											
Hardness (from total)	mg/L				272	276						
Hardness (from dissolved)	mg/L						271		270	280	261	
Alkalinity, total	mg/L	248	254	253	254	254	253		254	258	252	83
Chloride	mg/L	4.6	4.85	4.56	4.65	4.61	3.38		3.45	4.73	4.74	1.43
Fluoride	mg/L											
Sulphate, dissolved	mg/L	43.4	42	42.6	44.2	44.8	49.3		50.6	50.7	49.8	11.7
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05
Nitrite (N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
Nitrate (N)	mg/L	0.76	0.72	0.69	0.7	0.68	0.69		0.61	0.53	0.47	0.1
Dissolved Organic Carbon	mg/L											
Aluminum, total	mg/L	0.105	0.157	0.118	<0.1	0.09	0.985		0.107	0.08	0.11	0.3
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.0003	0.0005	0.0002	0.001	0.0004	0.0003		0.0004	0.0004	0.0004	0.0024
Barium, total	mg/L	0.101	0.099	0.095	0.096	0.099	0.112		0.107	0.096	0.102	0.053
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.00020	<0.0001	<0.0001		<0.0001	<0.0001	<0.00004	<0.00004
Bismuth, total	mg/L	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		
Boron, total	mg/L	0.023	0.018	0.021	<0.02	0.02	0.018		0.02	0.017	0.015	0.016
Cadmium, total	mg/L	0.00001	<0.00001	0.00001	<0.0004	0.00001	0.00002		<0.00001	<0.00001	<0.00007	<0.00007
Calcium, total	mg/L	66.6	67.8	66.4	69	70.6	68.3		66.9	70.9	63.4	17.9
Chromium, total	mg/L	<0.0005	0.0009	0.0014	<0.002	0.0016	0.0012		0.0012	<0.0005	0.001	0.0013
Cobalt, total	mg/L	0.0004	0.0003	0.0002	<0.0001	0.0002	0.0006		0.0002	0.0001	0.00023	0.00026
Copper, total	mg/L	0.006	0.004	0.004	<0.005	0.005	0.014		0.004	0.004	0.004	0.007
Iron, total	mg/L	0.2	0.2	0.2	0.2	0.2	1.2		0.2	0.2	0.2	0.42
Lead, total	mg/L	<0.0001	0.0001	<0.0001	<0.0005	<0.0001	0.0002		<0.0001	<0.0001	<0.0001	0.0001
Lithium, total	mg/L	0.002	0.002	0.003	<0.005	0.002	0.003		0.003	0.002	0.002	<0.001
Magnesium, total	mg/L	23.8	24	23.2	24.1	24.2	24.4		23.9	25	22.1	6.41
Manganese, total	mg/L	0.122	0.123	0.108	0.111	0.108	0.157		0.122	0.12	0.11	0.0308
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.01	<0.0001	<0.0001		<0.0001	<0.0001	<0.00001	0.00002
Molybdenum, total	mg/L	0.003	0.002	0.002	0.0017	0.003	0.002		0.003	0.002	0.00216	0.00057
Nickel, total	mg/L	0.0014	0.0026	0.0023	<0.005	0.0012	0.0018		0.0006	<0.0005	0.003	0.005
Phosphorus, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05					0.02	0.07
Potassium, total	mg/L	2.2	2.1	2.2	2.2	1.9	2.3		2.1	2.1	1.98	1.42
Selenium, total	mg/L	0.0002	0.0006	0.0004	0.005	0.0006	0.0004		0.0004	0.0002	<0.0006	0.0012
Silicon, total	mg/L	5.94	5.87	5.68	3	5.66	7.72		5.2	5.66	3.06	2.07
Silver, total	mg/L	<0.00001	0.00027	<0.00001	<0.001	<0.00001	0.00008		<0.00001	<0.00001	<0.0001	<0.0001
Sodium, total	mg/L	17.2	16.3	16.1	16.6	16.4	15.8		16.4	16.6	14.7	4.2
Strontium, total	mg/L	0.616	0.649	0.656	0.641	0.696	0.656		0.674	0.617	0.599	0.15
Sulpher, total	mg/L	15.4	15.6	15.6		16.2	16.3		16.9	16.5		
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	0.00006	<0.00001
Tin, total	mg/L	<0.001	<0.001	<0.001	<0.004	<0.001	<0.001		<0.001	<0.001	<0.0001	<0.0001
Titanium, total	mg/L	0.0054	0.0078	0.0059	0.005	0.0017	0.0316		0.0054	0.0037	0.0004	0.0105
Uranium, total	mg/L	0.0055	0.0056	0.0047	0.005	0.0052	0.0049		0.0056	0.0051	0.0055	0.0012
Vanadium, total	mg/L	0.001	0.0012	0.001	0.0008	0.001	0.0032		0.001	0.0008	0.00077	0.00182
Zinc, total	mg/L	0.008	0.007	0.007	0.01	0.007	0.005		0.004	0.009	0.005	0.005
Zirconium, total	mg/L	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001		<0.001	<0.001	0.0001	0.0005
Aluminum, dissolved	mg/L	<0.005	0.008	<0.005	<0.02	0.005	0.012		0.009	0.005	<0.02	0.08
Antimony, dissolved	mg/L	0.0006	0.0006	0.0014	0.0007	0.0007	0.0008		0.0008	0.001	0.0006	0.0011
Arsenic, dissolved	mg/L	0.0003	0.0004	0.0004	0.0002	0.0004	0.0003		0.0003	0.0003	0.0004	0.0005
Barium, dissolved	mg/L	0.095	0.097	0.095	0.092	0.096	0.096		0.095	0.096	0.097	0.046
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0	<0.0001	<0.0001		<0.0001	<0.0001	<0.00004	<0.00004
Bismuth, dissolved	mg/L	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		
Boron, dissolved	mg/L	0.023	0.018	0.019	0.015	0.019	0.018		0.014	0.019	0.015	0.006
Cadmium, dissolved	mg/L	<0.00001	0.00001	0.00001	<0.00007	<0.00001	0.00002		0.00001	<0.00001	<0.00008	<0.00008
Calcium, dissolved	mg/L	70.9	70.5	71.2		74.3	65.9		66.5	70.7	65.9	21.7
Chromium, dissolved	mg/L	<0.0005	<0.0005	0.0013	0.0016	0.0015	0.0012		0.001	<0.0005	<0.0006	0.0007
Cobalt, dissolved	mg/L	0.0002	0.0002	0.0003	0.00014	0.0002	0.0002		<0.0001	0.0002	0.00018	0.00022
Copper, dissolved	mg/L	0.003	0.003	0.003	0.002	0.004	0.003		0.005	0.004	0.002	0.007
Iron, dissolved	mg/L	0.06	0.06	0.06	0.06	0.07	0.05		0.04	0.05	0.04	0.12
Lead, dissolved	mg/L	<0.0001	0.0001	<0.0001	0.0002	<0.0001	<0.0001		0.0004	<0.0001	<0.0001	<0.0001
Lithium, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.003		0.004	0.002	0.002	<0.001
Magnesium, dissolved	mg/L	25	25	25.2		25.9	24.9		25.2	25.2	23.5	7.07
Manganese, dissolved	mg/L	0.123	0.12	0.104	0.103	0.112	0.124		0.117	0.113	0.11	0.0248
Mercury, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.01	<0.0001	<0.0001		<0.0001	<0.0001	<0.00001	0.00002
Molydenum, dissolved	mg/L	0.003	0.003	0.002	0.00221	0.002	0.002		0.002	0.002	0.00218	0.00066
Nickel, dissolved	mg/L	0.001	0.0018	0.001	0.001	0.0011	0.0012		<0.0005	<0.0005	0.001	0.003
Phosphorus, dissolved	mg/L						<0.03			<0.05	0.01	0.04
Potassium, dissolved	mg/L	2.1	2.1	2		2.2	2.1		5.6	2.1	2.12	1.52
Selenium, dissolved	mg/L	<0.0002	0.0004	0.0003	<0.0006	0.0006	0.0005		0.0003	<0.0002	<0.0006	<0.0006
Silicon, dissolved	mg/L	5.93	5.88	5.99		6.06	5.76		5.74	5.84	3.18	1.74
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.001	<0.00001	<0.00001		<0.00001	<0.00001	<0.0010	<0.001
Sodium, dissolved	mg/L	16.6	16.5	17.2		16.7	16.6		16.8	16.6	16	4.61
Strontium, dissolved	mg/L	0.639	0.689	0.66	0.65	0.674	0.671		0.644	0.665	0.625	0.171
Sulpher, dissolved	mg/L	15.8	16	17.1		17.3	16.4		16.3	16.8		
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00001	<0.00005	<0.00005		<0.00005	<0.00005	<0.00001	<0.00001
Tin, dissolved	mg/L	<0.001	<0.001	<0.001	<0.004	<0.001	<0.001		<0.001	<0.001	<0.004	<0.004
Titanium, dissolved	mg/L	0.0008	0.0012	0.0012	0.0005	0.0013	0.0017		0.0011	0.0007	0.0051	0.0021
Uranium, dissolved	mg/L	0.005	0.0054	0.0052	0.0047	0.0052	0.0051		0.0052	0.0053	0.0052	0.0011
Vanadium, dissolved	mg/L	0.001	0.0007	0.0008	0.0008	0.0026	0.0011		0.0006	0.0007	0.00063	0.0005
Zinc, dissolved	mg/L	0.002	0.003	0.003	0.003	0.006	0.003		0.006	0.005	<0.001	0.006
Zirconium, dissolved	mg/L				0.0001						0.0001	0.0005

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		04/05/2008	05/05/2008	08/05/2008	11/05/2008	13/05/2008	15/05/2008	18/05/2008	20/05/2008	27/05/2008	29/05/2008	03/06/2008
Total Suspended Solids	mg/L	<5	9	3	<2	<2	<3	7	<2	<2	<2	<2
Total Dissolved Solids	mg/L	304	302	304	338	338	340	324	364	336	352	328
pH (field)	pH units											
pH (lab)	pH units	7.75	7.86	7.86	7.92	8.07	8.02	8.04	7.84	8.01	8.22	8
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	394	364	422	466	499	544	504	523	474	528	552
Temperature (field)	C											
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%											
ORP (field)	mV											
Hardness (from total)	mg/L			184								272
Hardness (from dissolved)	mg/L			191	236	232	257	238	246	247	260	
Alkalinity, total	mg/L	178	170	190	210	241	247	233	246	244	257	261
Chloride	mg/L	2.12	2.81	3.18	3.53	4.42	0.19	0.13	4.39	4.37	4.72	4.29
Fluoride	mg/L											
Sulphate, dissolved	mg/L	34.5	27.9	31.7	35	40.3	41	37.8	41.3	36.3	39.2	40.8
Ammonia	mg/L	<0.05	<0.05	<0.05		<0.05	0.006	0.009	<0.05	<0.05	<0.05	<0.05
Nitrite (N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01
Nitrate (N)	mg/L	0.52	0.19	0.23	0.23	0.28	0.26	0.24	0.26	0.2	0.22	0.21
Dissolved Organic Carbon	mg/L											
Aluminum, total	mg/L	0.24	0.22	0.14	0.24	0.07	0.04	0.19	0.05	0.02	<0.01	0.01
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.0003	0.0004	<0.0002	0.0009	0.0007	<0.0002	0.0008	<0.0002	<0.0002	<0.0002	0.0006
Barium, total	mg/L	0.082	0.074	0.084	0.083	0.094	0.086	0.087	0.089	0.076	0.083	0.089
Beryllium, total	mg/L	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	0.00005	<0.00004	<0.00004	<0.00004	<0.00004
Bismuth, total	mg/L											
Boron, total	mg/L	0.008	<0.005	0.011	0.015	0.019	0.013	0.014	0.013	0.016	0.015	0.017
Cadmium, total	mg/L	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007
Calcium, total	mg/L	40.8	41.4	47.3	59.6	64.7	62.5	58.5	66.8	55.6	61.2	68.8
Chromium, total	mg/L	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0028	0.0015	0.0011	0.0012	0.0017	0.0032
Cobalt, total	mg/L	0.00025	0.00023	0.00023	0.00031	0.00021	0.0002	0.00029	0.00022	0.00019	0.00016	0.00016
Copper, total	mg/L	0.006	0.008	0.006	0.009	0.006	0.004	0.007	0.006	0.004	0.003	0.003
Iron, total	mg/L	0.38	0.35	0.25	0.43	0.23	0.13	0.36	0.16	0.09	0.07	0.11
Lead, total	mg/L	0.0002	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Lithium, total	mg/L	0.002	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Magnesium, total	mg/L	18.1	14.2	16	20.8	23.2	20.9	19.9	23.1	19.9	21.4	24.5
Manganese, total	mg/L	0.0569	0.0818	0.0897	0.132	0.131	0.106	0.0977	0.0982	0.0845	0.0882	0.112
Mercury, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum, total	mg/L	0.00165	0.00132	0.00157	0.00198	0.00202	0.00209	0.00209	0.00223	0.00202	0.0022	0.00225
Nickel, total	mg/L	0.004	0.004	0.004	0.005	0.003	0.002	0.004	0.002	<0.001	<0.001	<0.001
Phosphorus, total	mg/L	0.04	0.04	0.03	0.04	0.03	0.01	0.03	0.03	0.01	0.01	0.02
Potassium, total	mg/L	1.69	1.63	1.64	1.98	2.06	1.92	1.82	2.15	1.72	1.85	2.1
Selenium, total	mg/L	<0.0006	<0.0006	<0.0006	0.0009	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silicon, total	mg/L	3.01	2.66	2.75	3.37	3.41	2.99	3.02	2.78	2.56	2.55	2.93
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	11.5	9.7	11.1	14.7	16.1	15	15	16.1	14.2	15.2	17.3
Strontium, total	mg/L	0.452	0.353	0.411	0.516	0.581	0.576	0.519	0.58	0.523	0.566	0.6
Sulpher, total	mg/L											
Thallium, total	mg/L	<0.00001	<0.00001	0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Tin, total	mg/L	<0.0001	<0.0001	0.0002	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium, total	mg/L	0.0092	0.0096	0.0049	0.0102	0.0029	0.002	0.0085	0.0019	0.0023	0.0012	0.0014
Uranium, total	mg/L	0.0027	0.0033	0.0037	0.0043	0.0051	0.0051	0.0048	0.0049	0.0046	0.005	0.005
Vanadium, total	mg/L	0.0011	0.00103	0.00078	0.00114	0.00074	0.0011	0.00115	0.00068	0.00059	0.00071	0.0011
Zinc, total	mg/L	0.007	0.005	0.008	0.009	0.004	0.006	0.005	0.004	0.003	0.003	0.002
Zirconium, total	mg/L	0.0003	0.0004	0.0005	0.0004	0.0003	0.0003	0.0002	0.0002	0.0003	0.0003	0.0002
Aluminum, dissolved	mg/L	0.03		0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
Antimony, dissolved	mg/L	0.0013		0.0013	0.0008	0.0007	0.0013	0.0006	0.0012	0.0013	0.0012	
Arsenic, dissolved	mg/L	<0.0002		0.0003	0.001	0.0012	<0.0002	0.0003	0.0008	0.0007	0.0005	
Barium, dissolved	mg/L	0.074		0.079	0.079	0.089	0.091	0.082	0.084	0.084	0.087	
Beryllium, dissolved	mg/L	<0.00004		0.00006	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	
Bismuth, dissolved	mg/L											
Boron, dissolved	mg/L	0.012		0.012	0.014	0.013	0.013	0.014	0.013	0.023	0.024	
Cadmium, dissolved	mg/L	<0.00008		<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	
Calcium, dissolved	mg/L	43.9		49.9	59.8	58.8	66.7	61.4	63.8	63.1	66.4	
Chromium, dissolved	mg/L	0.0018		0.002	0.0029	<0.0006	0.0013	0.0026	0.0015	0.0011	0.0008	
Cobalt, dissolved	mg/L	0.0002		0.00017	0.00026	0.00019	0.00028	0.00018	0.00024	0.00015	0.00022	
Copper, dissolved	mg/L	0.006		0.006	0.006	0.004	0.004	0.005	0.005	0.004	0.003	
Iron, dissolved	mg/L	0.1		0.1	0.11	0.07	0.09	0.06	0.07	0.04	0.04	
Lead, dissolved	mg/L	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002	<0.0001	<0.0001	
Lithium, dissolved	mg/L	0.002		0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
Magnesium, dissolved	mg/L	18.8		16.2	21	20.8	21.9	20.6	21	21.8	22.8	
Manganese, dissolved	mg/L	0.0508		0.0892	0.123	0.0979	0.106	0.0926	0.0998	0.0885	0.0886	
Mercury, dissolved	mg/L	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
Molydenum, dissolved	mg/L	0.00154		0.0015	0.00183	0.00205	0.00223	0.00217	0.00241	0.00208	0.00207	
Nickel, dissolved	mg/L	0.002		0.003	0.002	0.002	0.002	0.002	0.002	0.001	0.001	
Phosphorus, dissolved	mg/L	0.02		0.02	0.02	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	
Potassium, dissolved	mg/L	1.86		1.68	1.98	1.28	1.98	1.9	2.19	2.02	2.03	
Selenium, dissolved	mg/L	<0.0006		<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	
Silicon, dissolved	mg/L	2.83		2.73	3.29	2.89	3.06	2.92	2.46	2.6	2.68	
Silver, dissolved	mg/L	<0.0010		<0.0010	<0.0010	<0.0010	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	
Sodium, dissolved	mg/L	12.5		11.1	13.5	14.5	15.4	14.7	15.1	15.4	16.2	
Strontium, dissolved	mg/L	0.473		0.429	0.522	0.557	0.61	0.548	0.585	0.564	0.592	
Sulpher, dissolved	mg/L											
Thallium, dissolved	mg/L	<0.00001		<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
Tin, dissolved	mg/L	<0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	
Titanium, dissolved	mg/L	0.0013		0.001	0.0009	0.0008	0.0006	0.0008	0.0003	0.0016	0.0005	
Uranium, dissolved	mg/L	0.0025		0.0037	0.0043	0.005	0.0053	0.0047	0.005	0.0051	0.0054	
Vanadium, dissolved	mg/L	0.00098		0.00106	0.0014	0.0005	0.00059	0.001	0.00063	0.00053	0.00049	
Zinc, dissolved	mg/L	0.004		0.005	0.003	0.002	0.002	0.002	0.004	0.002	0.003	
Zirconium, dissolved	mg/L	0.0003		0.0004	0.0003	0.0003	0.0002	0.0002	0.0002	0.0003	0.0003	

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		05/06/2008	11/06/2008	17/06/2008	25/06/2008	03/07/2008	08/07/2008	15/07/2008	22/07/2008	30/07/2008	06/08/2008	12/08/2008
Total Suspended Solids	mg/L	<2	<2	<2	<2	<2	<2	<3	<2	<5		<3
Total Dissolved Solids	mg/L	368	338	332	422	282	368	340	310	330		330
pH (field)	pH units											
pH (lab)	pH units	8.2	8.03	7.98	8.14	8.08	8.15	8.01	7.96	7.89		8.09
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	516	504	533	522	530	528	536	496	532		527
Temperature (field)	C											
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%											
ORP (field)	mV											
Hardness (from total)	mg/L	288										
Hardness (from dissolved)	mg/L					273			259		269	
Alkalinity, total	mg/L	261	261	258	258	264	266	233	250	273		249
Chloride	mg/L	4.23	4.35	4.04	3.86	3.86	3.93	3.77	3.79	3.66		4.17
Fluoride	mg/L											
Sulphate, dissolved	mg/L	40.4	41.2	37.9	38.2	37.7	36.9	35.9	32.8	3.29		30.5
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrite (N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
Nitrate (N)	mg/L	0.2	0.19	0.21	0.14	0.15	0.13	0.12	0.14	0.13		0.16
Dissolved Organic Carbon	mg/L										7.3	
Aluminum, total	mg/L	0.02	0.02	0.03	0.01	0.01	<0.01	0.017	0.026	0.02	0.015	0.01
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	<0.0002	<0.0002	0.0009	<0.0002	0.0011	0.0009	0.0003	0.0004	0.0004	0.0004	0.0005
Barium, total	mg/L	0.09	0.091	0.084	0.086	0.094	0.09	0.089	0.094	0.093	0.1	0.084
Beryllium, total	mg/L	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001	<0.00004	<0.0001	<0.0001	<0.00004	<0.0001	<0.00004
Bismuth, total	mg/L					<0.0005		<0.0005	<0.0005		<0.0005	
Boron, total	mg/L	0.016	0.016	0.017	0.018	0.021	0.014	0.019	0.019	0.014	0.019	0.018
Cadmium, total	mg/L	<0.00007	<0.00008	<0.00008	<0.00008	0.00002	<0.00008	0.00002	<0.00001	<0.00008	0.00001	<0.00008
Calcium, total	mg/L	73.1	79.8	67.1	70	68.1	73.2	64.5	63.8	70.5	67.4	72.2
Chromium, total	mg/L	0.0018	0.0013	0.001	0.0033	<0.0005	0.0013	0.0008	<0.0005	0.0005	0.0006	0.0023
Cobalt, total	mg/L	0.00023	0.00019	0.00018	0.00019	0.0001	0.0002	0.0002	0.0002	0.00019	0.0001	0.00017
Copper, total	mg/L	0.004	0.004	0.003	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.003
Iron, total	mg/L	0.12	0.11	0.11	0.09	0.06	0.11	0.08	0.09	0.16	0.12	0.11
Lead, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Lithium, total	mg/L	0.002	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.002	0.003	0.002
Magnesium, total	mg/L	25.8	27.8	23.7	24.8	24.7	26	23.4	22.8	24.9	24.5	26
Manganese, total	mg/L	0.11	0.117	0.0911	0.0883	0.078	0.0932	0.082	0.09	0.115	0.11	0.102
Mercury, total	mg/L	<0.01	<0.01		<0.00001	<0.0001	<0.00001	0.0001	<0.0001	<0.00001	<0.0001	<0.00001
Molybdenum, total	mg/L	0.00243	0.00248	0.0023	0.00235	0.003	0.00239	0.003	0.002	0.0026	0.002	0.00252
Nickel, total	mg/L	0.001	<0.001	<0.001	0.001	<0.0005	0.001	0.0028	0.0008	0.002	0.0014	0.001
Phosphorus, total	mg/L	<0.05	<0.05	<0.05	0.03		0.01			0.01		0.04
Potassium, total	mg/L	2.2	2.4	2.08	2.08	2	2.13	1.9	1.8	2.1	1.9	2.13
Selenium, total	mg/L	<0.0006	<0.0006	0.0012	<0.0006	<0.0002	<0.0006	<0.0002	<0.0002	<0.0006	0.0005	<0.0006
Silicon, total	mg/L	3.04	5.67	4.81	5.08	5.61	5.16	5.39	5.43	5.73	5.61	6.63
Silver, total	mg/L	<0.00005	<0.00001	<0.00001	<0.00001	0.00004	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00022
Sodium, total	mg/L	18.6	19.2	16.9	17.6	16.6	16.5	16.5	16.3	17.9	16.6	18.1
Strontium, total	mg/L	0.638	0.686	0.613	0.626	0.668	0.642	0.62	0.591	0.664	0.68	0.617
Sulpher, total	mg/L					12.8		11.9	11.3		11	
Thallium, total	mg/L	<0.00001	0.00002	<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00001	<0.00005	<0.00001
Tin, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.001	<0.001	<0.0001	<0.001	0.0001
Titanium, total	mg/L	0.0017	0.0016	0.0013	0.0009	0.0009	0.0009	0.002	0.0013	0.0018	0.0015	0.0015
Uranium, total	mg/L	0.0051	0.0055	0.0046	0.0047	0.0053	0.0044	0.0047	0.0046	0.0045	0.0046	0.0044
Vanadium, total	mg/L	0.00076	0.00062	0.00069	0.00105	0.0007	0.00077	0.0006	0.0007	0.0006	0.0007	0.00097
Zinc, total	mg/L	0.002	0.005	0.006	0.004	0.006	0.005	0.006	0.003	0.006	0.005	0.004
Zirconium, total	mg/L	0.0003	0.0003	0.0002	0.0003	<0.001	0.0003	<0.001	<0.001	0.0002	<0.001	0.0002
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	0.009	0.01	0.005	0.007	<0.01	<0.005	<0.01
Antimony, dissolved	mg/L	0.0008	0.0008	0.001	0.0006	0.001	0.0011	0.001	0.0014	0.0007	0.0008	0.0009
Arsenic, dissolved	mg/L	<0.0002	0.0003	0.0005	<0.0002	0.0004	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004
Barium, dissolved	mg/L	0.087	0.085	0.081	0.082	0.091	0.09	0.089	0.09	0.09	0.094	0.087
Beryllium, dissolved	mg/L	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001	<0.00004	<0.0001	<0.0001	<0.00004	<0.0001	<0.00004
Bismuth, dissolved	mg/L					<0.0005		<0.0005	<0.0005		<0.0005	
Boron, dissolved	mg/L	0.016	0.016	0.018	0.016	0.019	0.014	0.019	0.016	0.016	0.015	0.017
Cadmium, dissolved	mg/L	<0.00008	<0.00008	<0.00008	<0.00008	0.00001	<0.00008	0.00002	<0.00001	<0.00008	<0.00001	<0.00008
Calcium, dissolved	mg/L				68	68.9	72	67.1	65.7	67.8	67.6	69.8
Chromium, dissolved	mg/L	0.0039	0.001	0.002	0.0039	<0.0005	0.0018	0.0005	<0.0005	0.0008	0.0006	0.002
Cobalt, dissolved	mg/L	0.00018	0.00018	0.00017	0.00015	0.0001	0.00025	0.0003	0.0002	0.00031	0.0002	0.00031
Copper, dissolved	mg/L	0.003	0.003	0.003	0.004	0.003	0.004	0.004	0.005	0.004	0.003	0.003
Iron, dissolved	mg/L	0.05	0.05	0.04	0.04	0.05	0.07	0.08	0.05	0.09	0.1	0.08
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	0.0002	<0.0001	0.0001	<0.0001	0.0001
Lithium, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Magnesium, dissolved	mg/L				23.7	24.6	25	24.2	23.1	23.9	24.2	25
Manganese, dissolved	mg/L	0.103	0.104	0.0844	0.083	0.084	0.0893	0.082	0.067	0.111	0.106	0.103
Mercury, dissolved	mg/L	<0.01	<0.01		<0.00001	<0.0001	<0.00001	<0.0001	<0.0001	<0.00001	<0.0001	<0.00001
Molydenum, dissolved	mg/L	0.00227	0.00238	0.00237	0.00233	0.003	0.00229	0.002	0.002	0.00245	0.002	0.00258
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	<0.0005	0.001	<0.0005	0.0007	0.001	<0.0005	0.001
Phosphorus, dissolved	mg/L				0.01		<0.01			<0.01	<0.05	0.01
Potassium, dissolved	mg/L				1.94	2	2.09	2	1.8	2.04	1.9	2.06
Selenium, dissolved	mg/L	<0.0006	<0.0006	0.0008	<0.0006	<0.0002	<0.0006	<0.0002	<0.0002	<0.0006	<0.0002	<0.0006
Silicon, dissolved	mg/L				4.85	5.71	5.02	5.76	5.73	5.7	5.87	6.43
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00002	<0.00001
Sodium, dissolved	mg/L				16.7	17.4	16.2	17.7	16.4	16.8	16.9	17.3
Strontium, dissolved	mg/L	0.621	0.628	0.596	0.6	0.654	0.631	0.596	0.598	0.639	0.597	0.621
Sulpher, dissolved	mg/L					13		12.1	11.2		11.1	
Thallium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00001	<0.00005	0.00001
Tin, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0001	<0.001	<0.001	<0.0001	<0.001	<0.0001
Titanium, dissolved	mg/L	0.0003	0.0005	0.0003	0.0007	0.0007	0.0007	0.0018	0.0006	0.0007	0.0005	0.0008
Uranium, dissolved	mg/L	0.0051	0.0049	0.0047	0.0045	0.0048	0.0045	0.0048	0.0043	0.0041	0.0045	0.0044
Vanadium, dissolved	mg/L	0.00117	0.00046	0.00091	0.0013	0.0006	0.00088	0.0006	0.0006	0.00066	0.0007	0.00094
Zinc, dissolved	mg/L	0.002	0.002	0.002	0.003	0.006	0.003	0.004	0.003	0.006	0.004	0.003
Zirconium, dissolved	mg/L	0.0002	0.0003	0.0002	0.0003		0.0003			0.0002		0.0002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**21/08/2008**	**25/08/2008**	**26/08/2008**	**26/08/2008**	**27/08/2008**	**28/08/2008**	**29/08/2008**	**30/08/2008**	**01/09/2008**	**03/09/2008**	**04/09/2008**	**05/09/2008**	**06/09/2008**	**07/09/2008**	**10/09/2008**	**17/09/2008**	**22/09/2008**	**24/09/2008**	**30/09/2008**	**08/10/2008**	**17/10/2008**	**24/10/2008**	**28/10/2008**	**04/11/2008**	**12/11/2008**	**18/11/2008**	**24/11/2008**	**26/11/2008**	**05/12/2008**	**10/12/2008**	**18/12/2008**	**24/12/2008**	**02/01/2009**
Total Suspended Solids	mg/L	<2				70	40	98	58	18	8	10	30	8	27	25	23	24	32	7	<2	<5	4		<2	<2	7		44	<2	4	2	30	4
Total Dissolved Solids	mg/L	384				292	290	288	284	270	300	128	306	304	300	330	376	338	376	362	296	334	356		384	388	414		238	392	386	362	422	390
pH (field)	pH units																								8.5	8.2	7.96	8.32	8.32	8.15	7.24		7.17	6.98
pH (lab)	pH units	8.15				8.09	7.99	8.03	7.95	8.04	8.07	7.97	8	8.02	7.95	7.89	7.94	7.99	7.96	7.78	7.98	7.86	7.94		7.7	8.01	7.82		8.12	7.71	7.66	7.7	7.88	7.71
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	517				403	393	376	380	383	374	397	391	400	386	388	424	416	445	467	445	494	514		522	542	556		303	565	547	562	570	560
Temperature (field)	C																									2.2	0.3			1.6	2.1			0.1
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%																																	
ORP (field)	mV																																	
Hardness (from total)	mg/L																		194															
Hardness (from dissolved)	mg/L																			219			276	304	255	260					288	162	277
Alkalinity, total	mg/L	270				154	161	131	156	156	171	170	164	170	162	177	189	191	174	203	222	232	246		239	255	261		129	254	243	261	256	254
Chloride	mg/L	3.86				3.42	3.51	3.47	3.26	3.14	3.18	3.24	3.14	3.15	3.23	3.27	3.75	3.82	3.33	3.26	3.01	3.22	0.54		0.82	1.6	3.3		1.97	4.14	3.27	3.25	5.9	4.6
Fluoride	mg/L																																	
Sulphate, dissolved	mg/L	29.3				36.6	34.8	33.8	33.1	34.7	34.6	34.4	35	34.2	35.9	32	31.8	29.7	49.6	42.3	35.8	36.5	39		40	43.1	46.2		27.5	51.8	49.7	59.2	61.3	57.6
Ammonia	mg/L	<0.05				0.17	0.3			0.23	0.22					0.38	0.36	0.37		0.3	0.13	<0.05	<0.05		<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05		
Nitrite (N)	mg/L	<0.01				0.07	0.05	0.04	0.06	0.07	0.06	0.06	0.07	0.07	0.07	<0.01	<0.01	<0.01	0.12	0.08	<0.01	<0.01												
Nitrate (N)	mg/L	0.11				0.47	0.24	0.16	0.27	0.34	0.28	0.17	0.19	0.28	0.17	0.08	0.07	0.04	1.96	0.91	0.12	0.11												
Dissolved Organic Carbon	mg/L					21.8	25.8										25.4			14.5	13		11.7	10.4	9.5	9.4								
Aluminum, total	mg/L	0.04	4.69	1.1	1.64	2.14	1.46	1.79	1.65	0.523	0.382	0.462	0.717	0.254	0.709	1.04	0.771	0.921	2.2	0.3	0.095	0.025	0.012		0.01	0.018	0.069		0.014	<0.005	0.015	0.013	0.016	0.066
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.0004	0.0026	0.0013	0.0016	0.0014	0.001	0.0012	0.001	0.0006	0.0006	0.0009	0.0006	0.0008	0.0009	0.0012	0.0007	0.001	0.0013	0.0006	0.0005	0.0004	0.0004		0.0005	0.0004	0.0005		0.0003	0.0004	0.0004	0.0003	0.0004	0.0003
Barium, total	mg/L	0.092	0.168	0.101	0.113	0.121	0.098	0.109	0.104	0.084	0.082	0.081	0.083	0.074	0.09	0.099	0.088	0.105	0.117	0.104	0.082	0.08	0.088		0.084	0.085	0.093		0.032	0.089	0.09	0.098	0.095	0.087
Beryllium, total	mg/L	<0.00004	0.00017	0.00007	0.00006	0.00009	0.00005	0.0001	0.00006	<0.00004	<0.00004	<0.00004	0.00006	0.00006	0.00008	<0.00004	<0.00004	0.00004	0.0001	<0.0001	<0.00004	<0.00004	<0.00004		<0.0001	<0.0001	<0.0001		<0.00004	<0.00004	<0.00004	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L															<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001		<0.0005	<0.0005	<0.0005		<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005
Boron, total	mg/L	0.016	0.026	0.022	0.022	0.024	0.021	0.024	0.02	0.019	0.02	0.02	0.02	0.018	0.021	0.022	0.019	0.026	0.032	0.022	0.016	0.018	0.015		0.024	0.019	0.02		<0.005	0.011	0.012	0.02	0.016	0.017
Cadmium, total	mg/L	<0.00008	0.0001	0.00004	0.00005	0.00006	0.00009	0.0001	0.00008	0.00003	0.00003	0.00006	0.00004	0.00003	0.00005	0.00007	0.00009	0.00009	0.00012	0.00005	0.00002	0.00001	<0.00001		0.00001	0.00001	0.00001		0.00001	<0.00001	0.00001	<0.00001	0.00001	0.00001
Calcium, total	mg/L	71.2	53.5	49.8	48.8	60.8	53.3	50.9	50.7	51.2	53.2	47	45.7	45.6	45.1	48.9	48.9	50.3	53	57.8	61.9	59.1	75.5		64	67.4	69		24.7	69.7	69.7	69.6	66.4	63.8
Chromium, total	mg/L	0.0021	0.0084	0.0027	0.0038	0.0032	0.0021	0.0043	0.0029	0.0019	0.0018	0.0016	0.0024	0.0016	0.0021	0.0024	0.0024	0.0022	0.0022	0.0008	0.0008	0.0008	<0.0004		<0.0005	0.0008	<0.0005		<0.0004	0.0004	<0.0004	<0.0005	<0.0005	<0.0005
Cobalt, total	mg/L	0.00018	0.00339	0.00112	0.00145	0.0015	0.00132	0.00179	0.00146	0.00074	0.00062	0.00083	0.00089	0.00059	0.00112	0.0011	0.00107	0.00136	0.0017	0.0006	0.00036	0.00025	0.00023		0.0002	0.0002	0.0002		0.00008	0.0002	0.00021	0.0001	0.0003	0.0002
Copper, total	mg/L	0.003	0.072	0.046	0.048	0.078	0.14	0.119	0.121	0.059	0.063	0.097	0.098	0.061	0.115	0.144	0.149	0.166	0.259	0.056	0.009	0.007	0.008		0.005	0.006	0.018		0.004	0.004	0.004	0.005	0.005	0.006
Iron, total	mg/L	0.12	6.61	1.89	2.54	4.53	3.35	4.67	3.84	1.56	0.94	0.99	1.43	0.69	1.78	1.92	1.89	1.84	3.49	0.69	0.23	0.18	0.2		0.15	0.14	0.29		0.11	0.18	0.23	0.14	0.17	0.18
Lead, total	mg/L	<0.0001	0.0022	0.0006	0.001	0.0008	0.0006	0.0009	0.0008	0.0003	0.0003	0.0003	0.0008	0.0003	0.0006	0.0006	0.0006	0.0005	0.0009	0.0002	0.0004	0.001	<0.0001		<0.0001	<0.0001	<0.0001		0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Lithium, total	mg/L	0.002	0.006	0.003	0.003	0.004	0.003	0.004	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.002	0.003	0.004	0.003	0.002	0.002	0.002		0.003	0.003	0.003		<0.001	0.002	0.002	0.003	0.003	0.003
Magnesium, total	mg/L	25.8	15.2	13.8	13.4	16.5	13.4	13.7	14	13.9	14.4	13.2	12.7	12.8	13.1	13.3	14	15.1	15.1	18.7	22.9	21.7	27.1		23.1	24.3	25.6		9.68	27.5	26.6	27.5	25.3	27.9
Manganese, total	mg/L	0.0966	0.618	0.42	0.391	0.525	0.461	0.518	0.541	0.528	0.442	0.454	0.406	0.374	0.553	0.616	0.629	0.844	0.79	0.503	0.306	0.237	0.21		0.19	0.185	0.234		0.0745	0.227	0.24	0.165	0.221	0.132
Mercury, total	mg/L	<0.00001	0.00002	<0.00001	0.00001	0.00001	0.00001	<0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.00001	<0.00001	0.00001		<0.0001	<0.0001	<0.0001		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.00262	0.00585	0.00658	0.00645	0.00682	0.00667	0.00595	0.00618	0.00694	0.00699	0.00621	0.00578	0.00588	0.00555	0.00591	0.00536	0.00627	0.013	0.006	0.00289	0.00259	0.00292		0.003	0.003	0.003		0.00092	0.00232	0.00242	0.003	0.002	0.002
Nickel, total	mg/L	0.002	0.024	0.008	0.011	0.012	0.008	0.012	0.01	0.005	<0.001	<0.001	0.001	<0.001	0.001	0.004	0.004	0.003	0.0056	0.0027	0.002	0.002	0.002		0.0015	0.0014	0.0017		<0.001	0.001	0.002	0.0008	0.0011	0.0011
Phosphorus, total	mg/L	0.04	0.25	0.08	0.15	0.12	0.09	0.12	0.11	0.06	0.05	0.04	0.05	0.02	0.06	0.07	0.07	0.05	0.07	<0.05	<0.01	0.015	<0.01						0.01	0.019	<0.01		<0.05	<0.05
Potassium, total	mg/L	2.14	5.26	6.58	6.28	7.01	8.04	9.61	8.57	7.18	6.9	7	7.07	6.19	7.82	8.4	8.34	7.47	7.9	4.1	2.4	2	2.7		2.1	2.1	2.2		0.7	2.2	2.1	2.2	2.1	2.3
Selenium, total	mg/L	<0.0006	0.0008	<0.0006	<0.0006	0.0007	<0.0006	0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0008	0.0031	0.0012	0.0008	<0.0006	<0.0006		<0.0002	<0.0002	<0.0002		<0.0006	0.0006	<0.0006	0.0002	<0.0002	0.0003
Silicon, total	mg/L	6.55	14.7	6.9	7.76	9.5	7.93	8.01	8.14	6.13	6.01	5.66	6.13	5.09	6.08	6.85	6.61	9	11.3	6.82	6.14	5.58	6.99		5.94	6.22	7.25		1.94	6.06	5.96	6.32	5.57	5.58
Silver, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00014	0.00019	0.00008	0.00016	0.00003	0.00008	<0.00001	<0.00001		0.00002	0.00002	0.00005		<0.00001	<0.00001	<0.00001	<0.00001	0.00007	0.00025
Sodium, total	mg/L	18.1	15.8	16.2	16.2	18.1	17.9	17.4	17.6	16.5	15.8	16.1	15.2	14.6	16.6	17.5	17.3	16	18.3	16.8		15	20		16.9	16.4	17.4		6.04	16.6	16.8	18.4	16.7	18.2
Strontium, total	mg/L	0.669	0.365	0.367	0.353	0.421	0.435	0.435	0.45	0.437	0.472	0.44	0.438	0.423	0.423	0.472	0.462	0.488	0.658	0.618	0.574	0.598	0.597		0.644	0.606	0.658		0.209	0.647	0.627	0.696	0.722	0.714
Sulpher, total	mg/L																			13.5					14	16	16.7					19.4	17.9	19.9
Thallium, total	mg/L	<0.00001	0.00006	0.00002	0.00002	0.00002	0.00004	0.00003	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	0.00002	<0.00005	<0.00005	0.00003	<0.00001	<0.00001		<0.00005	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.0001	0.002	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	0.0003	<0.001	<0.001	0.0028	0.001	<0.0001		<0.001	<0.001	<0.001		<0.0001	0.0001	0.0003	<0.001	<0.001	<0.001
Titanium, total	mg/L	0.0028	0.112	0.05	0.058	0.0712	0.0578	0.059	0.0586	0.0273	0.0192	0.0174	0.0383	0.0122	0.0277	0.0459	0.0305	0.0348	0.0569	0.0136	0.0038	0.0017	0.0015		0.0014	0.002	0.004		0.0014	0.0007	0.0014	0.0021	0.0014	0.0037
Uranium, total	mg/L	0.0043	0.0017	0.0013	0.0014	0.0016	0.0013	0.0012	0.0012	0.0013	0.0015	0.0013	0.0012	0.0012	0.0011	0.0011	0.0012	0.0013	0.0017	0.0027	0.0029	0.0031	0.0032		0.0036	0.0035	0.0035		0.0011	0.003	0.003	0.0034	0.0035	0.0033
Vanadium, total	mg/L	0.00107	0.0162	0.00551	0.00693	0.00745	0.00575	0.00772	0.00662	0.00335	0.00269	0.00336	0.00431	0.00255	0.00434	0.00524	0.00475	0.00562	0.0089	0.0022	0.00082	0.00065	0.00065		0.0006	0.0006	0.0008		0.00025	0.00047	0.0005	0.0008	0.0006	0.0008
Zinc, total	mg/L	0.003	0.025	0.009	0.013	0.016	0.014	0.022	0.016	0.012	0.008	0.012	0.012	0.011	0.01	0.011	0.012	0.014	0.031	0.014	0.016	0.007	0.007		0.008	0.006	0.006		0.002	0.003	<0.001	0.008	0.006	0.007
Zirconium, total	mg/L	0.0002	0.001	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0005	0.0003	0.0004	0.0005	0.0005	0.0005	0.001	<0.001	0.0005	0.0002	0.0002		<0.001	<0.001	<0.001		<0.0001	0.0002	0.0002	<0.001	<0.001	<0.001
Aluminum, dissolved	mg/L	<0.01				0.01	0.045			0.025						0.04	0.058	0.049		0.017	0.007	0.011	<0.005	<0.005	0.007	0.016	0.01		<0.005	<0.005	<0.005	0.009	0.006	0.006
Antimony, dissolved	mg/L	0.0009				<0.0002	0.0034			0.0014						0.0008	0.0008	0.0004		0.001	0.0003	0.0011	0.0008	0.0008	0.001	0.0011	0.0008		0.0008	0.0006	0.0011	0.001	0.0016	0.0011
Arsenic, dissolved	mg/L	0.0003				0.0006	0.0007			0.0009						0.0009	0.0008	0.0008		0.0006	0.0005	0.0006	0.0004	0.0003	0.0004	0.0014	0.0004		0.0004	0.0003	0.0003	0.0002	<0.0002	0.0003
Barium, dissolved	mg/L	0.084				0.082	0.078			0.076						0.083	0.074	0.089		0.087	0.083	0.075	0.086	0.079	0.088	0.088	0.094		0.09	0.099	0.091	0.092	0.051	0.091
Beryllium, dissolved	mg/L	<0.00004				<0.00004	<0.00004			<0.00004						<0.00004	<0.00004	<0.00004		<0.0001	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001	<0.0001	<0.0001		<0.00004	<0.00004	<0.00004	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L																			<0.0005					<0.0001	<0.0005	<0.0005		<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005
Boron, dissolved	mg/L	0.013				0.024	0.023			0.021						0.021	0.025	0.023		0.02	0.018	0.013	0.018	0.016	0.022	0.023	0.018		0.017	0.016	0.017	0.021	0.011	0.018
Cadmium, dissolved	mg/L	<0.00008				0.00002	0.00003			<0.00001						0.00002	0.00002	0.00008		0.00003	0.00003	0.00003	<0.00001	<0.00001	0.00001	0.00002	<0.00001		<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001
Calcium, dissolved	mg/L	65.6				56.1	53.1			46.9						46.5	47.6	49.8		57	53.9	61.9	69.5	74	64	63.4	65.4		64.7	69.7	69.1	67.9	36.2	63.8
Chromium, dissolved	mg/L	0.0011				0.0024	0.0013			0.0009						0.0006	0.0022	0.0007		0.0008	0.0022	0.0006	0.0008	0.0007	<0.0005	<0.0005	<0.0005		0.0011	0.0016	0.0007	<0.0005	<0.0005	<0.0005
Cobalt, dissolved	mg/L	0.00028				0.00028	0.00128			0.00073						0.00068	0.00089	0.00069		0.0004	0.00025	0.00044	0.00022	0.00019	0.0002	0.0002	0.0002		0.00018	0.00026	0.00017	0.0002	0.0002	0.0003
Copper, dissolved	mg/L	0.004				0.028	0.029			0.014						0.022	0.023	0.029		0.022	0.008	0.006	0.006	0.004	0.005	0.009	0.007		0.003	0.003	0.003	0.005	0.004	0.004
Iron, dissolved	mg/L	0.08				0.19	0.44			0.62						0.58	0.44	0.64		0.17	0.142	0.171	0.085	0.167	0.13	0.13	0.15		0.146	0.175	0.192	0.12	0.02	0.11
Lead, dissolved	mg/L	<0.0001				<0.0001	0.0002			0.0001						0.0002	0.0001	0.0004		<0.0001	0.0002	0.001	<0.0001	<0.0001	0.0001	0.0004	<0.0001		<0.0001	<0.0001	<0.0001	0.0014	<0.0001	<0.0001
Lithium, dissolved	mg/L	0.002				0.003	0.003			0.002						0.002	0.002	0.002		0.002	0.002	0.002	0.002	0.002	0.003	0.004	0.003		0.002	0.002	0.002	0.003	0.002	0.003
Magnesium, dissolved	mg/L	22.9				15.1	13.4			13						13	13.4	14.7		18.7	20.3	22.6	24.8	28.9	23.2	24.7	26.1		24.3	27.1	26.2	28.8	17.4	28.6
Manganese, dissolved	mg/L	0.0899				0.21	0.406			0.538						0.63	0.668	0.77		0.489	0.24	0.243	0.209	0.201	0.188	0.18	0.226		0.213	0.229	0.245	0.165	0.114	0.134
Mercury, dissolved	mg/L	<0.00001				0.00001	<0.00001			<0.00001						<0.00001	<0.00001	<0.00001		<0.0001	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001
Molydenum, dissolved	mg/L	0.00231				0.00727	0.00625			0.00647						0.00477	0.00422	0.00531		0.006	0.00268	0.00236	0.00302	0.00232	0.003	0.003	0.002		0.00234	0.00244	0.00236	0.003	0.001	0.002
Nickel, dissolved	mg/L	0.001				0.003	0.003			<0.001						0.003	0.002	0.006		0.0018	0.004	0.002	0.002	0.002	0.0015	0.0009	0.0006		0.001	0.001	0.001	<0.0005	0.0007	0.0011
Phosphorus, dissolved	mg/L	<0.01				0.02	0.01			0.01						<0.01	<0.01	<0.01			<0.01	<0.01	0.02	<0.01					0.02	0.01	<0.01			
Potassium, dissolved	mg/L	1.96				6.28	7.65			7.07						8.04	8.06	7.14		4.3	2.1	2.3	2.4	2.6	3.2	3	2.2		1.9	2	1.9	2.3	1.5	2.2
Selenium, dissolved	mg/L	<0.0006				0.0008	0.0012			<0.0006						0.0012	0.0037	0.0008		0.0013	0.0006	<0.0006	<0.0006	<0.0006	<0.0002	<0.0002	<0.0002		0.001	0.0011	0.001	<0.0002	<0.0002	0.0002
Silicon, dissolved	mg/L	5.95				5.5	5.01			4.93						4.75	5.14	5.1		5.66	5.43	5.76	6.29	6.74	6.02	6.02	6.27		5.13	5.98	5.8	6.64	3.09	6.75
Silver, dissolved	mg/L	<0.00001				<0.00001	<0.00001			<0.00001						<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L	15.8				17	18.3			16.6						16.9	16.2	15.5		17.8	13.9	15.1	17.5	19.1	16.8	18	18.7		15.9	16.3	17	19.7	12	18.3
Strontium, dissolved	mg/L	0.597				0.41	0.452			0.448						0.439	0.43	0.481		0.591	0.55	0.543	0.585	0.592	0.611	0.611	0.644		0.623	0.657	0.628	0.725	0.421	0.76
Sulpher, dissolved	mg/L																		16.1	13.2					14.3	15.5	16.5		15.5	17.5	17.4	19.5	11.9	19.8
Thallium, dissolved	mg/L	<0.00001				0.00001	<0.00001			<0.00001						<0.00001	<0.00001	0.00001		<0.00005	0.00005	0.00021	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.0001				<0.0001	<0.0001			<0.0001						0.0001	<0.0001	<0.0001		<0.001	0.0018	0.0014	<0.0001	0.0002	<0.001	<0.001	<0.001		<0.0001	<0.0001	<0.0001	<0.001	<0.001	<0.001
Titanium, dissolved	mg/L	0.0007				0.0012	0.004			0.0021						0.0037	0.0036	0.0037		0.0018	0.001	0.0012	0.001	0.0007	0.0007	0.0018	0.0013		0.0005	0.0006	0.0008	0.0011	0.0008	0.0013
Uranium, dissolved	mg/L	0.0038				0.0016	0.0014			0.0012						0.0011	0.0012	0.0013		0.0027	0.0027	0.0028	0.003	0.003	0.0036	0.0037	0.0037		0.003	0.0032	0.0029	0.0038	0.0022	0.0036
Vanadium, dissolved	mg/L	0.00068				0.00202	0.00228			0.00206						0.0026	0.00301	0.00328		0.0016	0.00115	0.00048	0.00071	0.00067	0.0006	0.0008	0.0008		0.00077	0.00081	0.00064	0.0007	0.0006	0.0007
Zinc, dissolved	mg/L	0.002				0.002	0.004			0.003						0.004	0.006	0.024		0.005	0.004	0.012	0.012	0.002	0.005	0.007	0.003		0.002	0.002	0.004	0.003	0.004	0.004
Zirconium, dissolved	mg/L	0.0002				0.0004	0.0004			0.0004						0.0004	0.0005	0.0005			0.0002	0.0002	0.0002	0.0001					0.0001	0.0001	0.0001			

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**09/01/2009**	**15/01/2009**	**20/01/2009**	**28/01/2009**	**02/02/2009**	**12/02/2009**	**15/02/2009**	**18/02/2009**	**19/02/2009**	**06/03/2009**	**14/03/2009**	**20/03/2009**	**06/04/2009**	**21/04/2009**	**30/04/2009**	**02/05/2009**	**04/05/2009**	**06/05/2009**	**09/05/2009**	**18/05/2009**	**27/05/2009**	**03/06/2009**	**07/06/2009**	**11/06/2009**	**18/06/2009**	**26/06/2009**	**28/06/2009**	**29/06/2009**	**30/06/2009**	**01/07/2009**	**02/07/2009**	**03/07/2009**	**04/07/2009**
Total Suspended Solids	mg/L	6	6	3	4	4		<2		8	11	4	2		<2	58	21	32	74	14	5	13	4	<2	7	8	<4		<4		18	<4	5	
Total Dissolved Solids	mg/L	448	420	398	392	330		396		414	380	398	388		314	170	200	180	310	298	308	308	302	302	310	286	270		290		270	260	290	
pH (field)	pH units	7.17	7.6	7.3	7.12	6.95	6.9		6.59		7.63	7.13		7.8	8.2	7.63				7.41	7.25	7.75	7.97		7.88	8		7.87	7.84	8.17	8.17	8.14	8.11	8.13
pH (lab)	pH units	7.81	7.85	7.99	7.9	7.96		7.64		7.8	7.88	7.75	7.77		7.81	7.44	7.62	7.8	8.17	7.83	7.86	7.99	8.05	8.05	8.04	7.97	8.2		8.2		8.2	8.1	8.2	
Specific Conductance, field	µS/cm																																
Specific Conductance (lab)	µS/cm	577	565	596	593	546		576		633	561	572	591		483	188	271	242	448	442	438	463	466	434	454	440	475		478		423	426	427	
Temperature (field)	C	0.4	0.2	0.1	0.2	0.8	1.3		1.4		1.2	1.2	0.1		4	0.1				1.3	8.6		4.9		6	3.2		4.41	9.46	13.29	12.35	14.5	13.53	12.87
Dissolved Oxygen (field)	mg/L																																
Dissolved Oxygen (field)	%												113			301												97.7	100	105	103.1	103.7	103.3	103.5
ORP (field)	mV																																
Hardness (from total)	mg/L									299	252															227		238					
Hardness (from dissolved)	mg/L	278	264	330	330	307		261				252	276		246	95	147			198	224	221	213	203	206	198	225		227					
Alkalinity, total	mg/L	251	226	253	258	229		251		275	212	220	224		192	63	98	94	163	192	171	180	182	152	171	176			180					
Chloride	mg/L	3.1	3.5	3.68	3.64	3.28		3.2		2.7	3.9	3.9	4.89		2.8	1.5	2.13	2.3	3.5	2.2	3.63	2.93	3.4	3.1	3.5	2.84			3					
Fluoride	mg/L																												0.44					
Sulphate, dissolved	mg/L	71.8	77.5	75.8	74.8	67.8		68.5		76.8	84.2	82.9	83.6		58.9	24	34.4				53.3	54.4	53.2	58.7	55.5	42.2			50					
Ammonia	mg/L																										0.011		0.013					
Nitrite (N)	mg/L																	<0.005	0.079	<0.005							<0.005		0.008					
Nitrate (N)	mg/L																	0.3	0.19	0.48							0.69		0.79					
Dissolved Organic Carbon	mg/L															27.8										12.7	9.8		9.9					
Aluminum, total	mg/L	0.026	0.096	0.075	0.018	0.02		0.011		0.041	0.153	0.039	0.07		0.138	1.66	0.605	0.862	0.091	0.551	0.051	0.314	0.175	0.147	0.138	0.306	0.017		0.169					
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005		<0.0005					
Arsenic, total	mg/L	0.0004	0.0005	0.0003	0.0002	<0.0002		<0.0002		0.0003	0.0004	0.0003	0.0007		0.0004	0.0007	0.0006	0.0004	<0.0002	0.0004	0.0004	0.0005	0.0006	0.0006	0.0004	0.0004	0.0004		0.0004					
Barium, total	mg/L	0.092	0.098	0.099	0.093	0.087		0.081		0.091	0.087	0.096	0.097		0.08	0.076	0.066	0.062	0.053	0.07	0.082	0.088	0.087	0.078	0.07	0.074	0.079		0.093					
Beryllium, total	mg/L	<0.0001	<0.0001	<0.00004	<0.00004	<0.00004		<0.00004		<0.00004	<0.00004	<0.00004	<0.00004		<0.00004	0.00012	<0.00004	<0.0001	<0.0001	<0.0001	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001		<0.0001					
Bismuth, total	mg/L	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001		<0.001					
Boron, total	mg/L	0.02	0.022	0.02	0.017	0.015		0.016		0.017	0.018	0.016	0.021		0.01	0.01	0.01	0.013	0.016	0.019	0.015	0.015	0.021	0.027	0.027	0.019	<0.05		<0.05					
Cadmium, total	mg/L	0.00001	0.00003	0.00002	<0.00001	<0.00001		0.00001		0.00002	0.00002	0.00003	0.00006		0.00001	0.00014	0.00114	0.00003	0.00002	0.00003	0.00002	0.00078	0.0285	0.00003	0.00001	0.00002	0.00001		0.00003					
Calcium, total	mg/L	68.3	71.1					69.3		73.2	65.5		80.4		62.8	26	37.9	30.9	39.8	50.3	64	58.3	62.7	53.4	56.1	53.9	60.4		63.3					
Chromium, total	mg/L	<0.0005	0.0005	0.001	0.0008	0.0011		0.0007		0.0005	0.001	0.0004	0.0008		0.0005	0.0027	0.0012	0.002	<0.0005	0.0021	0.0013	0.0013	0.0011	0.0005	0.0005	0.0006	<0.001		<0.001					
Cobalt, total	mg/L	0.0003	0.0003	0.00022	0.00012	0.00011		0.0001		0.00016	0.00023	0.00013	0.00017		0.00012	0.00109	0.0005	0.0006	<0.0001	0.0003	0.00034	0.00042	0.00029	0.00023	0.00021	0.00029	<0.0005		<0.0005					
Copper, total	mg/L	0.013	0.029	0.008	0.006	0.005		0.003		0.017	0.027	0.01	0.027		0.013	0.052	0.014	0.03	0.029	0.014	0.011	0.017	0.028	0.076	0.019	0.014	0.0077		0.0138					
Iron, total	mg/L	0.1	0.18					0.09		0.18	0.26		0.19		0.17	3.22	0.96	0.98	0.14	0.7	0.09	0.45	0.27	0.35	0.63	0.39	0.062		0.219					
Lead, total	mg/L	0.0004	0.0001	0.0002	<0.0001	<0.0001		<0.0001		0.0002	0.0003	0.0002	0.0004		0.0002	0.0008	0.0004	0.0003	<0.0001	0.0002	0.0002	0.0003	0.0016	0.0004	<0.0001	0.0002	<0.0002		<0.0002					
Lithium, total	mg/L	0.003	0.002	0.004	0.003	0.003		0.003		0.003	0.002	0.002	0.002		0.002	0.002	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.002	<0.005		<0.005					
Magnesium, total	mg/L	27.8	23.8					28.6		31.7	23.7		27.8		22.7	8.97	12	9.4	13.9	21.5	19.7	18.8	19.3	16	17.4	16.9	18.6		19.5					
Manganese, total	mg/L	0.114	0.154	0.129	0.112	0.102		0.0965		0.128	0.0601	0.0354	0.0498		0.0158	0.348	0.155	0.15	0.037	0.082	0.0532	0.18	0.126	0.201	0.243	0.0864	0.056		0.07					
Mercury, total	mg/L	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	0.00002	0.00002	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	0.00001		<0.00001	0.00002		0.00002					
Molybdenum, total	mg/L	0.003	0.005	0.00241	0.00232	0.002		0.00195		0.00218	0.00412	0.00465	0.00488		0.00222	0.00163	0.00238	0.002	0.002	0.003	0.00524	0.00583	0.00541	0.00982	0.0056	0.00496	0.006		0.006					
Nickel, total	mg/L	0.0019	0.0026	0.001	0.001	0.001		<0.001		0.001	0.002	0.002	0.002		0.001	0.004	0.002	0.002	<0.0005	0.0018	0.002	0.002	0.002	0.002	0.002	0.002	0.001		0.002					
Phosphorus, total	mg/L	<0.05	<0.05	0.07	0.08	0.06		<0.05		<0.05	<0.05	<0.05	0.05		<0.05	0.12	0.08		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	0.026								
Potassium, total	mg/L	3.1	3.8					2.5		2.5	3.4		3.9		2.5	3.2	3	2.3	1.6	2.6	3.2	3.3	3.5	5.8	4	2.9	3.17		3.63					
Selenium, total	mg/L	0.001	0.0012	<0.0006	<0.0006	<0.0006		<0.0006		<0.0006	<0.0006	<0.0006	<0.0006		<0.0006	<0.0006	<0.0006	<0.0002	0.0007	0.0006	<0.0006	<0.0006	<0.0006	0.0013	<0.0006	<0.0006	0.0006		0.0007					
Silicon, total	mg/L	5.8	5.53					5.93		6.79	6.18		6.63		5.32	5.62	4.65	4	3.21	5.6	5.02	5.29	5.15	4.76	4.87	5.2	6.45		7.24					
Silver, total	mg/L	0.00008	0.00012	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	0.00008	<0.00001	0.00003	0.00002	0.00002	<0.00001	<0.00001	<0.00001	0.00018	<0.00001	0.00038	<0.00002		<0.00002					
Sodium, total	mg/L	19.9	19.3					18.6		20.9	20.4		22		14.8	8.27	10.9	8.2	11.1	15.1	17.2	16.6	21	17.4	16.6	15.1	16.4		17					
Strontium, total	mg/L	0.718	0.625	0.849	0.804	0.764		0.687		0.761	0.617	0.594	0.689		0.544	0.202	0.263	0.273	0.413	0.647	0.51	0.528	0.54	0.593	0.549	0.492	0.497		0.585					
Sulpher, total	mg/L	24.2	26.2					21		23.7	25		29.3		19.8	8.9	12	9.6	14.5	17.2	18.3	17.8	18.6	19.3	17.9	15.1	17		18					
Thallium, total	mg/L	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005		<0.00005					
Tin, total	mg/L	<0.001	<0.001	<0.0001	<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	0.0002		<0.0001	<0.0001	<0.0001	<0.001	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.005		<0.005					
Titanium, total	mg/L	0.0026	0.0061	0.0044	0.0017	0.002		0.0012		0.0031	0.0092	0.0027	0.0043		0.0066	0.0691	0.025	0.0349	0.0048	0.03	0.0028	0.0165	0.0072	0.007	0.0072	0.0132	<0.005		<0.005					
Uranium, total	mg/L	0.0036	0.0039	0.0034	0.0031	0.0029		0.0028		0.0031	0.0029	0.0033	0.004		0.0027	0.0008	0.0015	0.0014	0.0022	0.0028	0.0029	0.0028	0.0026	0.0012	0.0022	0.002	0.0024		0.0027					
Vanadium, total	mg/L	0.0007	0.0009	0.00078	0.00049	0.00052		0.00047		0.00062	0.00083	0.00043	0.00058		0.0007	0.00525	0.00203	0.003	0.0005	0.0024	0.0006	0.00164	0.0011	0.00111	0.00147	0.00115	<0.005		<0.005					
Zinc, total	mg/L	0.005	0.01	0.055	0.011	0.007		0.006		0.024	0.022	0.016	0.031		0.011	0.019	0.012	0.014	0.003	0.006	0.006	0.007	0.032	0.008	0.004	0.004	<0.005		<0.005					
Zirconium, total	mg/L	<0.001	<0.001	0.0002	0.0001	0.0001		<0.0001		0.0001	0.0002	0.0002	0.0002		0.0003	0.0008	0.0005	<0.001	<0.001	<0.001	0.0005	0.0003	0.0004	0.0002	0.0003	0.0003	<0.0005		<0.0005					
Aluminum, dissolved	mg/L	0.008	0.01	<0.005	<0.005	<0.005		<0.005		<0.005	<0.005	0.006	0.006		0.02	0.077	0.066				0.019	0.014	0.069	0.086	0.022	0.028	0.01	0.003	0.004					
Antimony, dissolved	mg/L	0.0019	0.0014	0.0014	0.0015	0.0009		0.0012		0.0007	0.0007	0.001	0.003		0.0008	0.001	0.0009			0.0007	0.0007	0.0008	0.0008	0.001	0.0011	<0.0002	<0.0005		<0.0005					
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0002	0.0002	0.0002		0.0003		0.0004	0.0004	0.0003	0.0004		0.0003	0.0004	0.0004			0.0003	0.0004	0.0003	0.0003	0.0006	0.0003	0.0004	0.0003		0.0003					
Barium, dissolved	mg/L	0.093	0.097	0.094	0.094	0.089		0.092		0.093	0.088	0.096	0.091		0.071	0.038	0.047			0.062	0.07	0.113	0.073	0.078	0.064	0.072	0.072		0.075					
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.00004	<0.00004	<0.00004		<0.00004		<0.00004	<0.00004	<0.00004	<0.00004		0.00005	<0.00004	<0.00004			<0.0001	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001		<0.0001					
Bismuth, dissolved	mg/L	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001		<0.001					
Boron, dissolved	mg/L	0.019	0.02	0.017	0.017	0.015		0.014		0.017	0.017	0.019	0.023		0.009	0.012	0.013			0.019	0.018	0.01	0.02	0.026	0.025	0.018	<0.05		<0.05					
Cadmium, dissolved	mg/L	0.00001	0.00002	<0.00001	0.00002	<0.00001		<0.00001		<0.00001	0.00002	0.00001	0.00004		0.00013	0.00036	0.00008			<0.00001	0.00002	0.0437	0.00574	0.00007	0.00007	0.00001	<0.00001		<0.00001					
Calcium, dissolved	mg/L	66.2	67.1	77.6	77.7	72.3		70.7		69.2	62.9	63.5	69		61.6	24.6	38.2			47	59.7	59	56.4	54.3	54.8	52.5	59.3		59.5					
Chromium, dissolved	mg/L	<0.0005	<0.0005	0.0008	0.0009	0.0006		0.0005		0.0006	0.0007	0.0005	0.0006		0.0004	0.001	0.0018			0.0008	0.0017	<0.0004	0.0006	<0.0004	0.0007	0.0004	<0.001		<0.001					
Cobalt, dissolved	mg/L	0.0003	0.0004	0.00011	0.00022	0.0002		0.00013		0.00019	0.00015	0.00018	0.00023		0.00016	0.00018	0.00035			0.0002	0.00017	0.00022	0.00023	0.00022	0.0002	0.00017	<0.0005		<0.0005					
Copper, dissolved	mg/L	0.006	0.01	0.004	0.008	0.003		0.003		0.003	0.008	0.008	0.01		0.014	0.012	0.01			0.008	0.008	0.016	0.044	0.067	0.022	0.01	0.0067		0.0095					
Iron, dissolved	mg/L	0.08	0.05	0.08	0.09	0.1		0.08		0.08	0.04	0.04	0.03		0.02	0.3	0.1			0.09	0.04	0.07	0.22	0.16	0.08	0.06	0.025		0.024					
Lead, dissolved	mg/L	0.0001	<0.0001	<0.0001	0.0002	0.0002		<0.0001		0.0002	0.0002	0.0002	0.0003		0.0002	0.0001	0.0002			<0.0001	0.0001	0.0004	0.0005	0.0003	0.0002	0.0001	<0.0002		<0.0002					
Lithium, dissolved	mg/L	0.003	0.002	0.003	0.027	0.003		0.002		0.003	0.002	0.002	0.002		0.004	<0.001	0.001			0.003	0.002	0.002	0.002	0.003	0.002	0.002	<0.005		<0.005					
Magnesium, dissolved	mg/L	27.3	23.5	33.2	33.2	30.7		20.5		30.7	22.9	22.8	25.1		22.3	8.1	12.6			19.7	18.3	18	17.6	16.3	16.8	16.4	18.7		18.9					
Manganese, dissolved	mg/L	0.11	0.139	0.114	0.109	0.0997		0.1		0.127	0.0537	0.036	0.0482		0.0257	0.145	0.0998			0.079	0.049	0.128	0.0953	0.193	0.12	0.0575	0.047		0.037					
Mercury, dissolved	mg/L	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	0.00001	0.00001			<0.0001	<0.00001	<0.00001	<0.00001	<0.00001		0.00001	<0.00002		<0.00002					
Molydenum, dissolved	mg/L	0.003	0.005	0.00233	0.00229	0.00199		0.00198		0.0023	0.00402	0.00459	0.00489		0.00204	0.00156	0.00217			0.004	0.00455	0.00491	0.00502	0.00958	0.00562	0.00477	0.006		0.006					
Nickel, dissolved	mg/L	0.0014	0.0019	0.001	0.001	<0.001		<0.001		0.001	0.002	0.002	0.002		<0.001	0.002	0.002			0.0012	0.002	0.002	0.002	0.002	0.002	0.002	0.001		0.001					
Phosphorus, dissolved	mg/L			0.02	<0.01	0.02		<0.01		0.01	0.01	0.02	0.02		0.02	0.03	0.04				<0.01	0.03	<0.01	<0.01	<0.01	<0.01								
Potassium, dissolved	mg/L	3	3.6	2.9	4.5	2.6		3.8		2.4	3.4	3.1	3.6		2.9	2.7	3			2.6	3	3.2	2.9	5.9	4.4	2.8	3.03		3.32					
Selenium, dissolved	mg/L	0.0008	0.001	<0.0006	<0.0006	<0.0006		<0.0006		<0.0006	<0.0006	0.0007	<0.0006		<0.0006	<0.0006	<0.0006			0.0004	<0.0006	<0.0006	<0.0006	0.0017	0.0009	<0.0006	0.0005		0.0006					
Silicon, dissolved	mg/L	6.91	6.56	6.91	6.84	6.35		5.54		6.49	5.68	5.55	5.84		5.16	2.71	3.71			4.93	4.97	4.65	4.6	4.57	4.5	4.58	6.18		6.13					
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002		<0.00002					
Sodium, dissolved	mg/L	19.6	19.3	20.2	20.9	19.1		19.7		20.3	19.6	19	20.8		14.4	7	10.4			14.6	15.9	17.1	15.6	17.7	16.7	14.8	16.6		16.6					
Strontium, dissolved	mg/L	0.733	0.641	0.834	0.815	0.762		0.741		0.785	0.61	0.642	0.668		0.482	0.179	0.274			0.53	0.484	0.451	0.503	0.602	0.559	0.474	0.489		0.52					
Sulpher, dissolved	mg/L	23.7	25.5	22.5	23	20.1		25.1		22.3	23.6	24.1	27.3		19.9	8.5	12.3			16.3	16.8	17.2	16.4	19.6	17.2	14.1	19		19					
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		0.00001		<0.00001	<0.00001	<0.00001	<0.00001		0.00004	<0.00001	<0.00001			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005		<0.00005					
Tin, dissolved	mg/L	<0.001	<0.001	<0.0001	<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001			<0.001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.005		<0.005					
Titanium, dissolved	mg/L	0.0014	0.002	0.0011	0.001	0.0008		0.0006		0.0009	0.0008	0.0009	0.0007		0.0025	0.0034	0.0032			0.0014	0.0014	0.0017	0.0039	0.0028	0.0023	0.001	<0.005		<0.005					
Uranium, dissolved	mg/L	0.0036	0.0039	0.0032	0.0033	0.0029		0.0031		0.0031	0.0029	0.0035	0.0038		0.0023	0.0007	0.0015			0.0026	0.0025	0.0024	0.0025	0.0013	0.0021	0.0018	0.0025		0.0024					
Vanadium, dissolved	mg/L	0.0005	0.0005	0.00051	0.00051	0.00034		0.00038		0.0005	0.00041	0.00038	0.00046		0.00046	0.00067	0.00054			0.0008	0.00054	0.00069	0.00084	0.00066	0.00054	0.00052	<0.005		<0.005					
Zinc, dissolved	mg/L	0.005	0.006	0.006	0.022	0.005		0.005		0.008	0.013	0.007	0.014		0.005	0.005	0.008			0.004	0.004	0.016	0.009	0.005	0.012	0.002	<0.005		<0.005					
Zirconium, dissolved	mg/L			0.0002	0.0001	<0.0001		0.0001		0.0001	0.0002	0.0004	0.0002		0.0002	0.0005	0.0003				0.0002	<0.0001	0.0003	0.0002	0.0003	0.0002	<0.0005		<0.0005					

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**05/07/2009**	**06/07/2009**	**07/07/2009**	**08/07/2009**	**08/07/2009**	**09/07/2009**	**09/07/2009**	**10/07/2009**	**10/07/2009**	**11/07/2009**	**11/07/2009**	**12/07/2009**	**12/07/2009**	**13/07/2009**	**14/07/2009**	**15/07/2009**	**16/07/2009**	**17/07/2009**	**18/07/2009**	**19/07/2009**	**20/07/2009**	**21/07/2009**	**22/07/2009**	**22/07/2009**	**23/07/2009**	**24/07/2009**	**24/07/2009**	**25/07/2009**	**25/07/2009**	**26/07/2009**	**26/07/2009**	**27/07/2009**	**28/07/2009**
Total Suspended Solids	mg/L	4				<4		6		4		7		<4			6	13	<4	8				20	23			19		15	41	16	31	50
Total Dissolved Solids	mg/L	270												330			270	260	260	250				200	200			240		250	220	240	190	222
pH (field)	pH units	8.22	7.98	8.24	8.13		8.48		8.22		8.17		8.39		8.03	8.26	8.26	8.49	8.26	8.29	8.38	8.29	8.5	8.96		8.58	8.4		8.47			8.28	8.21	7.83
pH (lab)	pH units	8.2												8.3			8.2	8.2	8.2	8.2				8	8			8.1		8	8	8.1	7.8	7.85
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	430												444			426	428	426	403				336	335			381		387	331	388	331	330
Temperature (field)	C	12.95	14.3	12.8	13.96		8.95		14.13		14.56		11.07		12.97	12.05	9.95	9.22	10.88	12.58	6.25	6.8	12.85	12.33		12.69	12.93		12.22			12.97	12.79	11.4
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%	107.7	103.9	105.6	106.4		129.8		111.8		108.7		110.5		111.8	115.7	117	112.8	118.4	108	114	121.5	116	114.3		116.7	123.6		120.5			120.5	150.3	141.5
ORP (field)	mV																																	
Hardness (from total)	mg/L	191												192				195	205	185			146							187				
Hardness (from dissolved)	mg/L	193												193				182	183	177			137							155				140
Alkalinity, total	mg/L	150												160				150	160	160										120				86
Chloride	mg/L	3.6												3.4				3.6	3.6	3.1										8.1				5.78
Fluoride	mg/L	0.44												0.47				0.49	0.5	0.46										0.39				
Sulphate, dissolved	mg/L	55												52				53	53	47										50				45
Ammonia	mg/L	0.062												0.101				0.12	0.112	<0.005			0.62							0.471				
Nitrite (N)	mg/L	0.059												0.079				0.086	0.084	0.024			0.11							0.107				
Nitrate (N)	mg/L	3.3												3.1				3.2	2.6	1.91			5.3							4.5				
Dissolved Organic Carbon	mg/L													15.9																				
Aluminum, total	mg/L	0.192												0.144				0.191	0.288	0.181			0.78							0.771				
Antimony, total	mg/L	<0.0005												<0.0005				<0.0005	<0.0005	<0.0005			0.0009							0.0005				
Arsenic, total	mg/L	0.0005												0.0005				0.0004	0.0005	0.0005			0.001							0.0009				
Barium, total	mg/L	0.087												0.088				0.093	0.095	0.088			0.136							0.129				
Beryllium, total	mg/L	<0.0001												<0.0001				<0.0001	<0.0001	<0.0001			<0.0001							<0.0001				
Bismuth, total	mg/L	<0.001												<0.001				<0.001	<0.001	<0.001			<0.001							<0.001				
Boron, total	mg/L	<0.05												<0.05				<0.05	<0.05	<0.05			<0.05							<0.05				
Cadmium, total	mg/L	0.00006												0.00006				0.0001	0.00006	0.00003			0.00009							0.00003				
Calcium, total	mg/L	52.1												51.8				53.1	55.6	49.4			41.6							52.2				
Chromium, total	mg/L	<0.001												<0.001				<0.001	<0.001	<0.001			0.002							0.001				
Cobalt, total	mg/L	<0.0005												<0.0005				<0.0005	<0.0005	<0.0005			<0.0005							0.0006				
Copper, total	mg/L	0.0737												0.0723				0.0899	0.103	0.031			0.0431							0.0652				
Iron, total	mg/L	0.373												0.392				0.397	0.573	0.354			0.965							1.03				
Lead, total	mg/L	0.0005												0.0005				0.0004	0.0007	<0.0002			0.0017							0.0011				
Lithium, total	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			<0.005							<0.005				
Magnesium, total	mg/L	14.7												15.2				15.2	16.2	15			10.3							13.7				
Manganese, total	mg/L	0.171												0.285				0.362	0.42	0.028			0.12							0.311				
Mercury, total	mg/L	<0.00002												<0.00002				<0.00002	0.00007	0.00007			<0.00002							<0.00002				
Molybdenum, total	mg/L	0.011												0.011				0.012	0.012	0.008			0.015							0.015				
Nickel, total	mg/L	0.001												0.002				0.002	0.002	0.002			0.002							0.002				
Phosphorus, total	mg/L																																	
Potassium, total	mg/L	5.75												5.42				6.09	6.38	4.23			3.37							5.15				
Selenium, total	mg/L	0.002												0.002				0.0019	0.002	0.0012			0.002							0.0023				
Silicon, total	mg/L	4.78												5.76				5.38	6.1	5.82			5.77							6.96				
Silver, total	mg/L	<0.00002												<0.00002				<0.00002	<0.00002	<0.00002			<0.00002							<0.00002				
Sodium, total	mg/L	15.5												15.7				16.3	17.2	14.2			10.5							15.1				
Strontium, total	mg/L	0.605												0.575				0.604	0.616	0.51			0.637							0.62				
Sulpher, total	mg/L	24												20				22	22	21			20							14				
Thallium, total	mg/L	<0.00005												<0.00005				<0.00005	<0.00005	<0.00005			<0.00005							<0.00005				
Tin, total	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			<0.005							<0.005				
Titanium, total	mg/L	0.013												0.005				0.009	0.011	0.011			0.058							0.044				
Uranium, total	mg/L	0.0013												0.0013				0.0014	0.0015	0.0015			0.0014							0.0015				
Vanadium, total	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			<0.005							<0.005				
Zinc, total	mg/L	0.006												0.006				0.006	0.007	<0.005			0.009							0.009				
Zirconium, total	mg/L	<0.0005												<0.0005				<0.0005	<0.0005	<0.0005			0.002							0.001				
Aluminum, dissolved	mg/L	0.031												0.034				0.03	0.03	0.021			0.042							0.03				
Antimony, dissolved	mg/L	<0.0005												<0.0005				<0.0005	<0.0005	<0.0005			0.0007							0.0006				
Arsenic, dissolved	mg/L	0.0004												0.0005				0.0004	0.0005	0.0005			0.0008							0.0007				
Barium, dissolved	mg/L	0.077												0.081				0.077	0.08	0.079			0.108							0.108				
Beryllium, dissolved	mg/L	<0.0001												<0.0001				<0.0001	<0.0001	<0.0001			<0.0001							<0.0001				
Bismuth, dissolved	mg/L	<0.001												<0.001				<0.001	<0.001	<0.001			<0.001							<0.001				
Boron, dissolved	mg/L	<0.05												<0.05				<0.05	<0.05	<0.05			<0.05							<0.05				
Cadmium, dissolved	mg/L	0.00004												0.00006				0.00006	0.00005	<0.00001			0.00002							0.00004				
Calcium, dissolved	mg/L	54												52.6				50	49.9	47.9			38.7							43.2				
Chromium, dissolved	mg/L	<0.001												<0.001				<0.001	<0.001	<0.001			<0.001							<0.001				
Cobalt, dissolved	mg/L	<0.0005												<0.0005				<0.0005	<0.0005	<0.0005			<0.0005							<0.0005				
Copper, dissolved	mg/L	0.0622												0.0586				0.0613	0.0615	0.0222			0.0205							0.0237				
Iron, dissolved	mg/L	0.132												0.142				0.116	0.118	0.076			0.101							0.069				
Lead, dissolved	mg/L	<0.0002												<0.0002				<0.0002	<0.0002	<0.0002			0.0005							<0.0002				
Lithium, dissolved	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			<0.005							<0.005				
Magnesium, dissolved	mg/L	14.2												14.9				14	14.1	14.1			9.93							11.3				
Manganese, dissolved	mg/L	0.141												0.254				0.264	0.327	0.004			0.08							0.252				
Mercury, dissolved	mg/L	<0.00002												<0.00002				<0.00002	<0.00002	<0.00002			0.00006							0.00002				
Molybdenum, dissolved	mg/L	0.011												0.011				0.011	0.011	0.008			0.014							0.015				
Nickel, dissolved	mg/L	0.001												0.001				0.002	0.002	0.001			0.001							0.001				
Phosphorus, dissolved	mg/L																																	
Potassium, dissolved	mg/L	5.8												5.38				5.63	5.6	4.06			3.03							4.37				
Selenium, dissolved	mg/L	0.002												0.0018				0.0019	0.0019	0.0013			0.002							0.0021				
Silicon, dissolved	mg/L	4.48												5.04				4.96	4.95	5.35			3.34							4.03				
Silver, dissolved	mg/L	<0.00002												<0.00002				<0.00002	<0.00002	<0.00002			<0.00002							<0.00002				
Sodium, dissolved	mg/L	16.1												15.6				15.4	15.7	13.7			10.6							12.8				
Strontium, dissolved	mg/L	0.556												0.58				0.557	0.564	0.482			0.568							0.598				
Sulpher, dissolved	mg/L	16												20				19	18	17			15							17				
Thallium, dissolved	mg/L	<0.00005												<0.00005				<0.00005	<0.00005	<0.00005			<0.00005							<0.00005				
Tin, dissolved	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			<0.005							<0.005				
Titanium, dissolved	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			0.008							<0.005				
Uranium, dissolved	mg/L	0.0013												0.0013				0.0013	0.0014	0.0014			0.0013							0.0011				
Vanadium, dissolved	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			<0.005							<0.005				
Zinc, dissolved	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005			<0.005							<0.005				
Zirconium, dissolved	mg/L	<0.0005												<0.0005				<0.0005	<0.0005	<0.0005			0.0006							<0.0005				

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**29/07/2009**	**30/07/2009**	**31/07/2009**	**01/08/2009**	**01/08/2009**	**02/08/2009**	**02/08/2009**	**03/08/2009**	**03/08/2009**	**04/08/2009**	**05/08/2009**	**08/08/2009**	**09/08/2009**	**10/08/2009**	**11/08/2009**	**12/08/2009**	**14/08/2009**	**15/08/2009**	**16/08/2009**	**17/08/2009**	**18/08/2009**	**19/08/2009**	**20/08/2009**	**21/08/2009**	**22/08/2009**	**23/08/2009**	**24/08/2009**	**25/08/2009**	**26/08/2009**	**27/08/2009**	**28/08/2009**	**29/08/2009**	**30/08/2009**
Total Suspended Solids	mg/L	7	22	<4	<4		<4		<4		<4	4	<4			<2	<4	6	<4	<4	<4	<4	5	<4	5	7	7	6	6	5	4	6	5	6
Total Dissolved Solids	mg/L	290	230	260	270		240		240		260	240	290			326	300	270	230	250	250	260	260	260	260	250	250	240	280	270	270	280	290	280
pH (field)	pH units	7.93	7.8			7.98		8.1		7.98	8.06	8.16		7.88	7.96			8	7.87	7.83	7.93	7.85	7.96	8.09	8.03	7.98	7.98	7.96	7.88	7.96	7.92	7.86	7.86	7.89
pH (lab)	pH units	8.2	7.9	8.1	8.2		8.1		8		8.2	8.2	8.2			8.02	8.1	8.1	8	8.1	8.1	8.2	8	8.1	8.1	8	8.1	8.2	7.7	7.8	8	8	7.9	8
Specific Conductance, field	µS/cm																																		
Specific Conductance (lab)	µS/cm	460	364	454	434		426		435		426	432	473			475	472	407	408	408	408	422	406	409	407	411	414	417	416	417	420	427	429	431
Temperature (field)	C	8.49	8.83			15.02		12.72		12.06	12.35	11.59		5.65	4.6			12.55	12.61	12.51	12.3	10.66	12.34	11.69	11.79	11.9	11.74	11.68	11.35	11.8	11.4	11.45	11.31	11.4
Dissolved Oxygen (field)	mg/L																																		
Dissolved Oxygen (field)	%	78.1												89.3				115.8	99	100.5	107.3	89.1						90.4	76.7	110.9	101.1	99.3	98.5	98.7
ORP (field)	mV																																		
Hardness (from total)	mg/L				191								241				236		160				164			173								199
Hardness (from dissolved)	mg/L				208											208	222		169				170			169								177
Alkalinity, total	mg/L				150											197	190		100				100	100	100	100	100	100						88
Chloride	mg/L				7											5.48	6.5		17				17	17	17	17	19	20						30
Fluoride	mg/L				0.44												0.42		0.29				0.25	0.26	0.26	0.26	0.26	0.25						0.21
Sulphate, dissolved	mg/L				47											49.8	45		48				42	43	44	45	45	45						51
Ammonia	mg/L				0.187								0.015				0.013		0.309				0.235	0.27	0.246	0.264	0.273	0.257						0.266
Nitrite (N)	mg/L				0.103								0.006				0.005		0.154				0.194	0.176	0.185	0.191	<0.005	0.219						0.29
Nitrate (N)	mg/L				2.2								0.69				0.74		5.1				5.5	5.2	5.4	5.6	0.19	5.4						6.7
Dissolved Organic Carbon	mg/L																												7.9						
Aluminum, total	mg/L				0.231								0.05			0.026	0.039		0.194				0.177			0.306								0.534
Antimony, total	mg/L				<0.0005								<0.0005			<0.0002	<0.0005		0.0006				0.0007			0.0007								0.0008
Arsenic, total	mg/L				0.0004								0.0004			0.0006	0.0003		0.0005				0.0005			0.0005								0.0003
Barium, total	mg/L				0.103								0.092			0.076	0.088		0.12				0.123			0.127								0.147
Beryllium, total	mg/L				<0.0001								<0.0001			<0.00004	<0.0001		<0.0001				<0.0001			<0.0001								<0.0001
Bismuth, total	mg/L				<0.001								<0.001			<0.001	<0.001		<0.001				<0.001			<0.001								<0.001
Boron, total	mg/L				<0.05								<0.05			0.025	<0.05		<0.05				<0.05			<0.05								<0.05
Cadmium, total	mg/L				0.00005								0.00021			0.00001	0.00002		0.00004				0.00001			0.00004								0.0001
Calcium, total	mg/L				51.5								62.9			59.6	61.7		45.2				46			48.1								55.1
Chromium, total	mg/L				<0.001								<0.001			0.0008	<0.001		<0.001				<0.001			<0.001								<0.001
Cobalt, total	mg/L				<0.0005								<0.0005			0.00019	<0.0005		<0.0005				<0.0005			<0.0005								<0.0005
Copper, total	mg/L				0.0478								0.0113			0.006	0.0092		0.0164				0.0138			0.0186								0.0173
Iron, total	mg/L				0.347								0.121			0.067	0.098		0.178				0.16			0.364								0.15
Lead, total	mg/L				0.0016								0.0005			0.0003	0.0008		0.0005				<0.0002			0.0006								0.0007
Lithium, total	mg/L				<0.005								<0.005			0.002	<0.005		<0.005				<0.005			<0.005								<0.005
Magnesium, total	mg/L				15.1								20.5			19.8	19.9		11.5				12			12.9								14.9
Manganese, total	mg/L				0.434								0.192			0.16	0.153		0.226				0.217			0.239								0.293
Mercury, total	mg/L				<0.00002								<0.00002				<0.00002		<0.00002				<0.00002			0.00003								<0.00002
Molybdenum, total	mg/L				0.013								0.006			0.0048	0.005		0.014				0.015			0.015								0.015
Nickel, total	mg/L				0.002								0.002			0.002	0.002		0.001				0.001			0.002								0.002
Phosphorus, total	mg/L															0.016																			
Potassium, total	mg/L				5.42								3.11			2.8	2.91		3.78				3.6			3.71								3.87
Selenium, total	mg/L				0.0019								0.0004			<0.0006	0.0004		0.0018				0.0019			0.0019								0.002
Silicon, total	mg/L				4.91								6.75			5.98	6.3		3.7				3.84			4.25								4.15
Silver, total	mg/L				<0.00002								<0.00002			<0.00001	<0.00002		<0.00002				<0.00002			<0.00002								<0.00002
Sodium, total	mg/L				16.6								17.3			16.9	16.6		14.4				14.5			15.1								20.6
Strontium, total	mg/L				0.605								0.557			0.538	0.549		0.626				0.634			0.662								0.742
Sulpher, total	mg/L				25								20			16.4	19		22				22			20								23
Thallium, total	mg/L				<0.00005								<0.00005			<0.00001	<0.00005		<0.00005				<0.00005			<0.00005								<0.00005
Tin, total	mg/L				<0.005								<0.005			<0.0001	<0.005		<0.005				<0.005			<0.005								<0.005
Titanium, total	mg/L				0.009								<0.005			0.0013	<0.005		0.01				<0.005			0.005								<0.005
Uranium, total	mg/L				0.0012								0.0024			0.002	0.0025		0.0006				0.0007			0.0007								0.0005
Vanadium, total	mg/L				<0.005								<0.005			0.0006	<0.005		<0.005				<0.005			<0.005								<0.005
Zinc, total	mg/L				0.005								0.007			0.002	0.007		<0.005				0.007			<0.005								0.011
Zirconium, total	mg/L				<0.0005								<0.0005			0.0001	<0.0005		<0.0005				<0.0005			<0.0005								<0.0005
Aluminum, dissolved	mg/L				0.076											0.013	0.012		0.06				0.078			0.062								0.109
Antimony, dissolved	mg/L				<0.0005											<0.0002	<0.0005		0.0006				0.0007			0.0007								0.0007
Arsenic, dissolved	mg/L				0.0005											0.0004	0.0004		0.0005				0.0005			0.0005								0.0003
Barium, dissolved	mg/L				0.099											0.075	0.078		0.11				0.117			0.122								0.131
Beryllium, dissolved	mg/L				<0.0001											<0.00004	<0.0001		<0.0001				<0.0001			<0.0001								<0.0001
Bismuth, dissolved	mg/L				<0.001											<0.001	<0.001		<0.001				<0.001			<0.001								<0.001
Boron, dissolved	mg/L				<0.05											0.015	<0.05		<0.05				<0.05			<0.05								<0.05
Cadmium, dissolved	mg/L				0.00004											0.00002	0.00001		0.00001				0.00002			0.00002								<0.00001
Calcium, dissolved	mg/L				58.4											54	59		47				47.6			47.6								49.1
Chromium, dissolved	mg/L				<0.001											0.0011	<0.001		<0.001				<0.001			<0.001								<0.001
Cobalt, dissolved	mg/L				<0.0005											0.00014	<0.0005		<0.0005				<0.0005			<0.0005								<0.0005
Copper, dissolved	mg/L				0.0277											0.003	0.0051		0.0062				0.0057			0.0057								0.0073
Iron, dissolved	mg/L				0.086											0.05	0.037		0.014				0.017			0.021								0.007
Lead, dissolved	mg/L				<0.0002											0.0004	<0.0002		<0.0002				<0.0002			<0.0002								<0.0002
Lithium, dissolved	mg/L				<0.005											0.002	<0.005		<0.005				<0.005			<0.005								<0.005
Magnesium, dissolved	mg/L				15.2											17.8	18.3		12.6				12.4			12.1								13.2
Manganese, dissolved	mg/L				0.422											0.136	0.141		0.199				0.184			0.211								0.252
Mercury, dissolved	mg/L				0.00003												<0.00002		<0.00002				<0.00002			<0.00002								<0.00002
Molydenum, dissolved	mg/L				0.013											0.0044	0.005		0.015				0.015			0.015								0.013
Nickel, dissolved	mg/L				0.001											0.002	0.002		0.001				0.001			<0.001								<0.001
Phosphorus, dissolved	mg/L															<0.01																			
Potassium, dissolved	mg/L				5.69											2.5	2.83		3.92				3.78			3.66								3.46
Selenium, dissolved	mg/L				0.002											<0.0006	0.0003		0.0019				0.0019			0.0019								0.0018
Silicon, dissolved	mg/L				4.72											5.56	6.23		3.39				3.74			3.65								3.53
Silver, dissolved	mg/L				<0.00002											<0.00001	<0.00002		<0.00002				<0.00002			<0.00002								<0.00002
Sodium, dissolved	mg/L				17											15.4	15.8		15.5				15.3			14.6								18.8
Strontium, dissolved	mg/L				0.601											0.47	0.511		0.617				0.623			0.64								0.669
Sulpher, dissolved	mg/L				19											16.6	19		18				20			19								22
Thallium, dissolved	mg/L				<0.00005											<0.00001	<0.00005		<0.00005				<0.00005			<0.00005								<0.00005
Tin, dissolved	mg/L				<0.005											<0.0001	<0.005		<0.005				<0.005			<0.005								<0.005
Titanium, dissolved	mg/L				<0.005											0.0009	<0.005		<0.005				<0.005			<0.005								<0.005
Uranium, dissolved	mg/L				0.0012											0.0019	0.0023		0.0007				0.0006			0.0006								0.0004
Vanadium, dissolved	mg/L				<0.005											0.0005	<0.005		<0.005				<0.005			<0.005								<0.005
Zinc, dissolved	mg/L				<0.005											0.001	<0.005		<0.005				<0.005			<0.005								<0.005
Zirconium, dissolved	mg/L				<0.0005											0.0001	<0.0005		<0.0005				<0.0005			<0.0005								<0.0005

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**31/08/2009**	**01/09/2009**	**02/09/2009**	**03/09/2009**	**04/09/2009**	**05/09/2009**	**06/09/2009**	**07/09/2009**	**08/09/2009**	**09/09/2009**	**10/09/2009**	**11/09/2009**	**12/09/2009**	**13/09/2009**	**14/09/2009**	**15/09/2009**	**16/09/2009**	**17/09/2009**	**18/09/2009**	**19/09/2009**	**20/09/2009**	**21/09/2009**	**22/09/2009**	**23/09/2009**	**24/09/2009**	**25/09/2009**	**26/09/2009**	**27/09/2009**	**28/09/2009**	**29/09/2009**	**30/09/2009**	**01/10/2009**	**02/10/2009**
Total Suspended Solids	mg/L	5	<4	<4	<4	<4	<4	4	<4	4	<4	<4	4	<4	5	<4	<4	<4	<4	<4	<4	<4	<4	5	5	4	<4	<4	4	4	4	5	7	<4
Total Dissolved Solids	mg/L	280	280	280	280	270	280	290	280	290	270	280	270	280	300	290	250	290	270	300	260	260	280	270	250	270	270	290	320	270	280	300	330	320
pH (field)	pH units	7.86	7.85	7.89	7.88	8.06	7.96	7.97	7.99	8.09	8.15	8.1	8.14	8.33	8.16	8.2	8.03	8.24	8.05	8.27	8.16	8.28	8.25	8.46	8.18	8.07	8.09	8.17	8.02	8.06	8.18	8.04	7.96	7.88
pH (lab)	pH units	8	8	8	8	8	8	7.9	8	7.9	8	8	8	8	8	8	7.6	7.6	7.9	8	8	8	7.8	8	7.9	7.8	8	8	8	8.1	8.1	8.1	8.1	8
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	436	437	439	444	441	442	442	440	448	444	446	448	446	432	455	450	451	457	461	461	462	460	461	462	457	463	467	469	470	461	479	486	483
Temperature (field)	C	11.11	11.51	11.17	10.86	10.62	10.9	10.73	10.84	10.85	10.35	9.97	9.95	9.89	9.54	9.63	9.42	9.42	9.31	9.13	9.13	8.84	8.97	8.75	8.62	8.21	8.73	8.08	7.66	7.14	6.63	6.3	5.19	5.05
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%	99.7	100.7	100.6	100.9	101	102.4	102.1	101.4	102.4	104.4	103.4	102.9	106.3	103.7	106	105.9	102.3	103	102.6	103.7	105.4	103.9	105.8	108.8	106	105.5	108.8	109.6	108.5	84.3	42.5		102.8
ORP (field)	mV																																	
Hardness (from total)	mg/L							182							183							202						190						
Hardness (from dissolved)	mg/L							168							187							184						186						
Alkalinity, total	mg/L							86							87																			
Chloride	mg/L							31																										
Fluoride	mg/L							0.23																										
Sulphate, dissolved	mg/L							53																										
Ammonia	mg/L							0.265							0.216							0.118						0.105						
Nitrite (N)	mg/L							0.321							0.347							0.253						0.162						
Nitrate (N)	mg/L							6.2							7							6.9						8.1						
Dissolved Organic Carbon	mg/L																																	
Aluminum, total	mg/L							0.253							0.391							0.391						0.243						
Antimony, total	mg/L							0.0008							0.0009							0.0007						0.0007						
Arsenic, total	mg/L							0.0004							0.0004							0.0004						0.0004						
Barium, total	mg/L							0.142							0.146							0.15						0.131						
Beryllium, total	mg/L							<0.0001							<0.0001							<0.0001						<0.0001						
Bismuth, total	mg/L							<0.001							<0.001							<0.001						<0.001						
Boron, total	mg/L							<0.05							<0.05							<0.05						<0.05						
Cadmium, total	mg/L							0.00004							0.00007							0.0002						0.00009						
Calcium, total	mg/L							51.5							51.5							56.4						53.7						
Chromium, total	mg/L							<0.001							<0.001							<0.001						<0.001						
Cobalt, total	mg/L							<0.0005							<0.0005							<0.0005						<0.0005						
Copper, total	mg/L							0.008							0.0054							0.0066						0.0061						
Iron, total	mg/L							0.099							0.083							0.07						0.057						
Lead, total	mg/L							0.0005							0.0005							<0.0002						0.0005						
Lithium, total	mg/L							<0.005							<0.005							<0.005						<0.005						
Magnesium, total	mg/L							13							13.2							14.8						13.6						
Manganese, total	mg/L							0.284							0.298							0.303						0.283						
Mercury, total	mg/L							<0.00002							<0.00002							0.00003						0.00002						
Molybdenum, total	mg/L							0.014							0.016							0.016						0.016						
Nickel, total	mg/L							0.001							0.001							0.001						0.003						
Phosphorus, total	mg/L																																	
Potassium, total	mg/L							3.54							3.47							3.79						3.14						
Selenium, total	mg/L							0.0018							0.0019							0.0019						0.002						
Silicon, total	mg/L							3.52							3.59							3.97						3.64						
Silver, total	mg/L							<0.00002							<0.00002							<0.00002						<0.00002						
Sodium, total	mg/L							18.5							18.1							19.5						17.8						
Strontium, total	mg/L							0.708							0.75							0.714						0.702						
Sulpher, total	mg/L							24							20							29						25						
Thallium, total	mg/L							<0.00005							<0.00005							<0.00005						<0.00005						
Tin, total	mg/L							<0.005							<0.005							<0.005						<0.005						
Titanium, total	mg/L							<0.005							<0.005							<0.005						<0.005						
Uranium, total	mg/L							0.0003							0.0003							0.0004						0.0005						
Vanadium, total	mg/L							<0.005							<0.005							<0.005						<0.005						
Zinc, total	mg/L							<0.005							0.006							0.008						<0.005						
Zirconium, total	mg/L							<0.0005							<0.0005							<0.0005						<0.0005						
Aluminum, dissolved	mg/L							0.074							0.072							0.082						0.054						
Antimony, dissolved	mg/L							0.0008							0.0008							0.0008						0.0007						
Arsenic, dissolved	mg/L							0.0004							0.0003							0.0004						0.0003						
Barium, dissolved	mg/L							0.131							0.129							0.133						0.134						
Beryllium, dissolved	mg/L							<0.0001							<0.0001							<0.0001						<0.0001						
Bismuth, dissolved	mg/L							<0.001							<0.001							<0.001						<0.001						
Boron, dissolved	mg/L							<0.05							<0.05							<0.05						<0.05						
Cadmium, dissolved	mg/L							0.00001							<0.00001							0.00012						0.00002						
Calcium, dissolved	mg/L							47.3							53.3							52.3						52.3						
Chromium, dissolved	mg/L							<0.001							<0.001							<0.001						<0.001						
Cobalt, dissolved	mg/L							<0.0005							<0.0005							<0.0005						<0.0005						
Copper, dissolved	mg/L							0.0019							0.0012							0.0035						0.0014						
Iron, dissolved	mg/L							0.007							0.007							0.011						0.006						
Lead, dissolved	mg/L							<0.0002							<0.0002							<0.0002						<0.0002						
Lithium, dissolved	mg/L							<0.005							<0.005							<0.005						<0.005						
Magnesium, dissolved	mg/L							12.2							13							13						13.3						
Manganese, dissolved	mg/L							0.25							0.275							0.292						0.284						
Mercury, dissolved	mg/L							0.00002							0.00003							0.00004						0.00004						
Molybdenum, dissolved	mg/L							0.014							0.015							0.016						0.017						
Nickel, dissolved	mg/L							<0.001							<0.001							0.001						0.001						
Phosphorus, dissolved	mg/L																																	
Potassium, dissolved	mg/L							3.23							3.4							3.38						3.33						
Selenium, dissolved	mg/L							0.0018							0.002							0.0022						0.002						
Silicon, dissolved	mg/L							3.37							3.51							3.16						3.55						
Silver, dissolved	mg/L							<0.00002							<0.00002							<0.00002						<0.00002						
Sodium, dissolved	mg/L							17.4							18.3							18.4						17.3						
Strontium, dissolved	mg/L							0.669							0.686							0.747						0.757						
Sulpher, dissolved	mg/L							20							21							25						24						
Thallium, dissolved	mg/L							<0.00005							<0.00005							<0.00005						<0.00005						
Tin, dissolved	mg/L							<0.005							<0.005							<0.005						<0.005						
Titanium, dissolved	mg/L							<0.005							<0.005							<0.005						<0.005						
Uranium, dissolved	mg/L							0.0003							0.0003							0.0004						0.0004						
Vanadium, dissolved	mg/L							<0.005							<0.005							<0.005						<0.005						
Zinc, dissolved	mg/L							<0.005							<0.005							0.006						<0.005						
Zirconium, dissolved	mg/L							<0.0005							<0.0005							<0.0005						<0.0005						

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**03/10/2009**	**04/10/2009**	**05/10/2009**	**06/10/2009**	**07/10/2009**	**08/10/2009**	**09/10/2009**	**10/10/2009**	**11/10/2009**	**12/10/2009**	**13/10/2009**	**14/10/2009**	**15/10/2009**	**16/10/2009**	**17/10/2009**	**18/10/2009**	**19/10/2009**	**20/10/2009**	**21/10/2009**	**22/10/2009**	**23/10/2009**	**24/10/2009**	**25/10/2009**	**25/10/2009**	**26/10/2009**	**27/10/2009**	**28/10/2009**	**29/10/2009**	**30/10/2009**	**05/11/2009**	**09/11/2009**	**16/11/2009**	**25/11/2009**
Total Suspended Solids	mg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	5	<2	<2	<3	
Total Dissolved Solids	mg/L	270	300	300	320	310	310	310	330	310	300	280	270	270	250	270	260	270	270	280	280	290	270	260		290	310	300	310	290	340	132	358	
pH (field)	pH units	7.78	7.9	7.8	7.93	7.79	7.97	7.85	7.81	7.99	8.11	8.03	8.07	8.13	7.8	7.97	8.05	8.04	8.01	7.92	7.98	7.99	8.05	8.12	8.12	7.82	7.7	7.9	8.09	8.01	7.53	7.56	8.34	7.39
pH (lab)	pH units	8	8	8	8.1	8.1	8	8	8	7.7	8	8	8	8	8.1	8	8	8	8.1	8	8	8	8	8		8.1	8.1	8.1	8.1	8.1	7.67	7.79	7.68	
Specific Conductance, field	µS/cm																																			
Specific Conductance (lab)	µS/cm	480	480	484	482	471	491	493	495	489	495	496	499	503	504	507	509	509	512	500	502	505	481	508		509	512	503	507	507	463	512	512	
Temperature (field)	C	5.69	5.23	4.9	5.22	4.66	4.25	4.36	3.88	3.68	3.64	3.25	2.67	2.69	2.97	2.57	2.92	2.79	2.31	2.57	2.59	2.81	2.11	2.7	2.7	2.68	2.26	2.32	2	2.1	2.1	1.1	0.04	1.1
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%	114	110	111.5	117.6	116	105.2	110.1	92.6	96.3		116.5	128.9	131.9	139	143.6	148	138.1	141.1	131.9	109.1	96.7	97	105.7	105.7	91.9	89.2	90.2	93.8	91.5			67.5	
ORP (field)	mV																																	
Hardness (from total)	mg/L		197							206									223					234			231							
Hardness (from dissolved)	mg/L		187				228			201									216					218			212				224	243	230	
Alkalinity, total	mg/L						95												110					110			120				172	175	186	
Chloride	mg/L						6.1																								14.9	14.3	16.6	
Fluoride	mg/L																		0.33															
Sulphate, dissolved	mg/L						252																								55.7	59.6	50.7	
Ammonia	mg/L		0.123							0.174									0.224					0.206			0.211							
Nitrite (N)	mg/L		0.1							0.099									0.092					0.08			0.08							
Nitrate (N)	mg/L		8.2				18.7			8.6									8.8					8.5			8.5				1.85	1.57	1.38	1.15
Dissolved Organic Carbon	mg/L																							8.2										
Aluminum, total	mg/L		0.258				0.628			0.275									0.119					0.093			0.101				0.058	0.082	0.044	
Antimony, total	mg/L		0.0008				0.0004			0.0007									0.0007					0.0007			0.0006				<0.0002	<0.0002	<0.0002	
Arsenic, total	mg/L		0.0004				0.0012			0.0004									0.0003					0.0004			0.0003				0.0004	0.0005	0.0006	
Barium, total	mg/L		0.145				0.136			0.145									0.138					0.14			0.135				0.094	0.089	0.091	
Beryllium, total	mg/L		<0.0001				<0.00004			<0.0001									<0.0001					<0.0001			<0.0001				<0.00004	<0.00004	<0.00004	
Bismuth, total	mg/L		<0.001				<0.001			<0.001									<0.001					<0.001			<0.001				<0.001	<0.001	<0.001	
Boron, total	mg/L		<0.05				0.109			<0.05									<0.05					<0.05			<0.05				0.025	0.019	0.021	
Cadmium, total	mg/L		0.00006				0.00083			0.00003									0.00004					0.00003			0.00002				0.00002	0.00002	0.00002	
Calcium, total	mg/L		56.3				70.8			58.6									63.8					65.5			64.3				62.1	60.1	62.7	
Chromium, total	mg/L		<0.001				0.001			<0.001									<0.001					<0.001			<0.001				<0.0004	<0.0004	0.0009	
Cobalt, total	mg/L		<0.0005				0.00045			<0.0005									<0.0005					<0.0005			<0.0005				0.00026	0.00027	0.00025	
Copper, total	mg/L		0.0071				0.14			0.0056									0.0091					0.0094			0.0102				0.003	0.004	0.004	
Iron, total	mg/L		0.08				0.57			0.214									0.098					0.09			0.11				0.115	0.172	0.126	
Lead, total	mg/L		0.0005				0.0013			<0.0002									<0.0002					<0.0002			<0.0002				0.0001	0.0001	<0.0001	
Lithium, total	mg/L		<0.005				0.019			<0.005									<0.005					<0.005			<0.005				0.002	0.002	0.002	
Magnesium, total	mg/L		13.7				18.8			14.5									15.4					17.2			17.1				22.7	21.1	22.8	
Manganese, total	mg/L		0.295				0.146			0.325									0.314					0.336			0.317				0.342	0.333	0.34	
Mercury, total	mg/L		0.00003				<0.00001			0.00004									<0.00002					<0.00002			0.00002				<0.00001	<0.00001	<0.00001	
Molybdenum, total	mg/L		0.018				0.102			0.018									0.018					0.018			0.017				0.0038	0.0034	0.0033	
Nickel, total	mg/L		0.001				0.002			0.001									<0.001					0.001			0.001				0.003	0.003	0.002	
Phosphorus, total	mg/L						<0.05																								<0.05	<0.05	0.07	
Potassium, total	mg/L		3.42				58			3.58									3.71					3.85			3.76				2.4	2	2.2	
Selenium, total	mg/L		0.0021				0.0324			0.0024									0.0021					0.002			0.0023				<0.0006	<0.0006	<0.0006	
Silicon, total	mg/L		3.69				4.1			4.2									4.04					4.08			4.17				5.51	5.71	5.58	
Silver, total	mg/L		<0.00002				0.00004			<0.00002									<0.00002					<0.00002			<0.00002				<0.00001	<0.00001	<0.00001	
Sodium, total	mg/L		17.1				103			17.7									17.8					20.1			19.8				16.7	18.5	17.9	
Strontium, total	mg/L		0.799				2.04			0.863									0.903					0.903			0.862				0.644	0.591	0.61	
Sulpher, total	mg/L		29				81			24									28					24			26				19.2	20	19.3	
Thallium, total	mg/L		<0.00005				<0.00001			<0.00005									<0.00005					<0.00005			<0.00005				<0.00001	<0.00001	<0.00001	
Tin, total	mg/L		<0.005				<0.0001			<0.005									<0.005					<0.005			<0.005				<0.0001	<0.0001	<0.0001	
Titanium, total	mg/L		<0.005				0.0153			0.006									<0.005					<0.005			<0.005							
Uranium, total	mg/L		0.0005				<0.0004			0.0005									0.0007					0.0007			0.0008				0.0019	0.0016	0.0019	
Vanadium, total	mg/L		<0.005				0.0014			<0.005									<0.005					<0.005			<0.005				0.0006	0.0006	0.0005	
Zinc, total	mg/L		<0.005				0.008			<0.005									<0.005					<0.005			0.006				0.004	0.007	0.003	
Zirconium, total	mg/L		<0.0005				<0.0001			<0.0005									<0.0005					<0.0005			<0.0005				0.0003	0.0003	0.0001	
Aluminum, dissolved	mg/L		0.063				0.02			0.062									0.032					0.029			0.021				0.017	0.005	0.015	
Antimony, dissolved	mg/L		0.0008				0.0006			0.0007									0.0006					0.0007			0.0006				0.0008	0.0009	0.0016	
Arsenic, dissolved	mg/L		0.0004				0.0011			0.0003									0.0003					0.0003			0.0003				0.0003	0.0003	0.0004	
Barium, dissolved	mg/L		0.131				0.12			0.128									0.13					0.13			0.128				0.091	0.091	0.091	
Beryllium, dissolved	mg/L		<0.0001				<0.00004			<0.0001									<0.0001					<0.0001			<0.0001				<0.00004	<0.00004	<0.00004	
Bismuth, dissolved	mg/L		<0.001				<0.001			<0.001									<0.001					<0.001			<0.001				<0.001	<0.001	<0.001	
Boron, dissolved	mg/L		<0.05				0.091			<0.05									<0.05					<0.05			<0.05				0.022	0.018	0.014	
Cadmium, dissolved	mg/L		0.00003				0.00021			0.00002									0.00002					0.00004			0.00003				0.00002	0.00001	0.00004	
Calcium, dissolved	mg/L		52.8				63.5			57									61.4					62.6			60.9				56.3	61.6	57.4	
Chromium, dissolved	mg/L		<0.001				<0.0004			<0.001									<0.001					<0.001			<0.001				<0.0004	<0.0004	0.001	
Cobalt, dissolved	mg/L		<0.0005				0.00029			<0.0005									<0.0005					<0.0005			<0.0005				0.00026	0.00027	0.00034	
Copper, dissolved	mg/L		0.0013				0.014			0.0014									0.0026					0.0023			0.0027				0.002	0.002	0.004	
Iron, dissolved	mg/L		0.006				<0.01			0.01									0.008					0.018			0.02				0.07	0.09	0.09	
Lead, dissolved	mg/L		<0.0002				<0.0001			<0.0002									<0.0002					<0.0002			<0.0002				0.0001	0.0001	0.0001	
Lithium, dissolved	mg/L		<0.005				0.016			<0.005									<0.005					<0.005			<0.005				0.002	0.002	0.002	
Magnesium, dissolved	mg/L		13.5				17			14.4									15.2					14.9			14.5				20.2	21.7	21	
Manganese, dissolved	mg/L		0.276				0.13			0.301									0.296					0.309			0.298				0.328	0.323	0.33	
Mercury, dissolved	mg/L		0.0001				<0.00001			<0.0002									0.00008					<0.00002			0.00009				<0.00001	<0.00001	<0.00001	
Molydenum, dissolved	mg/L		0.018				0.103			0.018									0.017					0.017			0.016				0.0037	0.0034	0.0033	
Nickel, dissolved	mg/L		0.001				0.002			0.001									<0.001					<0.001			0.001				0.002	0.003	0.002	
Phosphorus, dissolved	mg/L						0.02																								<0.01	<0.01	<0.01	
Potassium, dissolved	mg/L		3.32				50			3.48									3.65					3.51			3.53				2.1	2	2	
Selenium, dissolved	mg/L		0.0021				0.0348			0.0021									0.0023					0.0021			0.0021				<0.0006	<0.0006	<0.0006	
Silicon, dissolved	mg/L		3.16				2.28			3.57									3.41					3.77			3.85				4.98	5.73	5.03	
Silver, dissolved	mg/L		<0.00002				<0.00001			<0.00002									<0.00002					<0.00002			<0.00002				<0.00001	<0.00001	<0.00001	
Sodium, dissolved	mg/L		17				94.4			18.3									18.6					18			17.6				15.5	19.6	16	
Strontium, dissolved	mg/L		0.797				2.08			0.804									0.893					0.839			0.824				0.607	0.599	0.598	
Sulpher, dissolved	mg/L		25				84			27									26					25			25				18.6	19.9	16.9	
Thallium, dissolved	mg/L		<0.00005				<0.00001			<0.00005									<0.00005					<0.00005			<0.00005				<0.00001	<0.00001	<0.00001	
Tin, dissolved	mg/L		<0.005				<0.0001			<0.005									<0.005					<0.005			<0.005				0.0001	<0.0001	<0.0001	
Titanium, dissolved	mg/L		<0.005				0.0004			<0.005									<0.005					<0.005			<0.005				<0.01	<0.01	<0.01	
Uranium, dissolved	mg/L		0.0005				<0.0004			0.0004									0.0007					0.0007			0.0007				0.0019	0.0017	0.0019	
Vanadium, dissolved	mg/L		<0.005				0.0004			<0.005									<0.005					<0.005			<0.005				0.0004	0.0004	0.0006	
Zinc, dissolved	mg/L		<0.005				<0.001			<0.005									<0.005					<0.005			<0.005				0.002	0.003	0.004	
Zirconium, dissolved	mg/L		<0.0005				<0.0001			<0.0005									<0.0005					<0.0005			<0.0005				0.0002	<0.0001	0.0001	

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**25/11/2009**	**02/12/2009**	**04/12/2009**	**09/12/2009**	**15/12/2009**	**01/01/2010**	**05/01/2010**	**11/01/2010**	**19/01/2010**
Total Suspended Solids	mg/L	4	<2		<5	<3	7	<5	8	7
Total Dissolved Solids	mg/L	340	336	291	356	298	346	404	396	1110
pH (field)	pH units		7.71		7.67	7.41	7.94	7.99	7.25	7.05
pH (lab)	pH units	7.79	7.83	7.9	8.27	7.7	7.69	7.96	7.89	7.7
Specific Conductance, field	µS/cm									
Specific Conductance (lab)	µS/cm	487	504	526	539	535	590	634	607	1480
Temperature (field)	C		1.1		1.1	1.1	0.47		1	1
Dissolved Oxygen (field)	mg/L									
Dissolved Oxygen (field)	%									
ORP (field)	mV									
Hardness (from total)	mg/L							272		795
Hardness (from dissolved)	mg/L	240	240	235	259	192	275	272	438	795
Alkalinity, total	mg/L	184	182	205	199	194	203	172	210	596
Chloride	mg/L	16.1	13	11	12.5	12.7	16.4	19.6	17.5	4.89
Fluoride	mg/L									
Sulphate, dissolved	mg/L	56	56.5	58.9	60.7	59	95.2	90.7	82.4	220
Ammonia	mg/L									
Nitrite (N)	mg/L			0.005						
Nitrate (N)	mg/L		1.12	1.13	1.33	1.07	1.47	6.83	1.54	3.73
Dissolved Organic Carbon	mg/L									
Aluminum, total	mg/L	0.083	0.032	0.103	0.018	0.032	0.07	0.021	0.379	0.063
Antimony, total	mg/L	<0.0002	<0.0002	0.0002	<0.0002	0.0002	0.001	0.0007	0.0015	0.0008
Arsenic, total	mg/L	0.0004	0.0004	0.0004	0.0003	<0.0002	0.0003	0.0004	0.0005	0.0018
Barium, total	mg/L	0.095	0.094	0.094	0.096	0.104	0.109	0.106	0.376	0.33
Beryllium, total	mg/L	<0.00004	<0.00004	0.0001	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Bismuth, total	mg/L	<0.001	<0.001	0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	0.018	0.015	0.018	0.03	0.019	0.018	0.031	0.012	0.045
Cadmium, total	mg/L	0.00003	<0.00001	0.00002	<0.00001	0.0137	0.00031	0.00044	0.372	0.00296
Calcium, total	mg/L	61.5	58.3	60.6	57.9	61.1	74.6	72.6	105	206
Chromium, total	mg/L	<0.0004	<0.0004	0.0005	<0.0004	0.0007	0.0006	0.0005	0.0014	0.0011
Cobalt, total	mg/L	0.00032	0.00029	0.0003	0.00029	0.00027	0.00019	0.00025	0.00032	0.00098
Copper, total	mg/L	0.003	0.003	0.008	0.003	0.002	0.038	0.008	0.025	0.018
Iron, total	mg/L	0.145	0.166	0.27	0.098	0.148	0.155	0.022	0.324	1.25
Lead, total	mg/L	0.0001	0.0001	0.0001	<0.0001	0.0007	0.0007	0.0006	0.0316	0.0004
Lithium, total	mg/L	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.006
Magnesium, total	mg/L	22.7	22.4	21.8	22.4	23.5	25.8	23.7	26.7	79.4
Manganese, total	mg/L	0.358	0.373	0.394	0.383	0.366	0.0322	0.462	0.0304	1.39
Mercury, total	mg/L	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum, total	mg/L	0.0032	0.0031	0.003	0.0032	0.0028	0.0029	0.0064	0.0024	0.0089
Nickel, total	mg/L	0.002	0.002	0.0013	0.002	0.002	0.002	0.003	0.004	0.006
Phosphorus, total	mg/L	0.08	0.05		<0.05	0.06	<0.05	<0.05	<0.05	0.15
Potassium, total	mg/L	2.1	2.1	2	2.2	2.3	3	4.2	2.8	7.3
Selenium, total	mg/L	<0.0006	<0.0006	0.0002	<0.0006	<0.0006	<0.0006	0.0015	<0.0006	<0.0006
Silicon, total	mg/L	5.5	5.41	4.29	5.22	5.15	5.6	5.12	5.79	16.5
Silver, total	mg/L	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00003	<0.00001
Sodium, total	mg/L	17.4	16.7	16.6	16.6	16	19.8	20.8	19.7	56
Strontium, total	mg/L	0.623	0.611	0.619	0.707	0.654	0.665	0.794	0.695	2.06
Sulpher, total	mg/L	19.4	23.5	19.6	20.5	19.9	28.4	29.3	28.2	69.3
Thallium, total	mg/L	<0.00001	<0.00001	0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Tin, total	mg/L	<0.0001	<0.0001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium, total	mg/L			0.0005						
Uranium, total	mg/L	0.002	0.0021	0.0019	0.0022	0.0022	0.0022	0.0026	0.0018	0.006
Vanadium, total	mg/L	0.0006	0.0006	0.0008	0.0005	0.0005	0.0007	0.0004	0.0012	0.0016
Zinc, total	mg/L	0.008	0.008	0.004	0.003	0.005	0.021	0.01	0.062	0.014
Zirconium, total	mg/L	0.0003	0.0004	0.001	0.0001	0.0009	0.0002	0.0001	0.0003	0.0006
Aluminum, dissolved	mg/L	0.007	0.007	0.004	0.007	0.014	<0.005	0.014	0.297	<0.005
Antimony, dissolved	mg/L	0.0011	0.002	0.0002	0.0011	0.0014	0.0007	0.0021	0.0026	0.0015
Arsenic, dissolved	mg/L	0.0004	0.0002	0.0005	0.0004	0.0003	0.0002	0.0004	0.0005	0.0012
Barium, dissolved	mg/L	0.091	0.089	0.094	0.091	0.097	0.101	0.104	0.536	0.307
Beryllium, dissolved	mg/L	<0.00004	<0.00004	0.0001	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Bismuth, dissolved	mg/L	<0.001	<0.001	0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	0.02	0.014	0.016	0.025	0.015	0.017	0.026	0.011	0.045
Cadmium, dissolved	mg/L	0.00011	<0.00001	0.00001	0.00001	0.0125	<0.00001	0.00373	0.565	0.0006
Calcium, dissolved	mg/L	59.7	59.6	61.6	63.4	47.4	72	70.9	130	197
Chromium, dissolved	mg/L	0.0005	<0.0004	0.0005	<0.0004	<0.0004	0.0006	<0.0004	0.001	0.0016
Cobalt, dissolved	mg/L	0.00032	0.00036	0.0003	0.00034	0.0003	0.00016	0.00023	0.00043	0.00094
Copper, dissolved	mg/L	0.003	0.003	0.002	0.003	0.004	0.004	0.005	0.02	0.01
Iron, dissolved	mg/L	0.09	0.13	0.14	0.12	0.13	0.03	0.02	0.16	0.13
Lead, dissolved	mg/L	0.0004	<0.0001	0.0001	0.0003	0.0005	0.0003	0.0002	0.0603	0.0007
Lithium, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.006
Magnesium, dissolved	mg/L	22	22.2	22.2	24.5	17.8	23.2	23.1	27.4	73.6
Manganese, dissolved	mg/L	0.33	0.363	0.391	0.355	0.386	0.0261	0.37	0.0294	1.29
Mercury, dissolved	mg/L	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molydenum, dissolved	mg/L	0.003	0.0029	0.003	0.003	0.0026	0.0026	0.0056	0.0024	0.0094
Nickel, dissolved	mg/L	0.002	0.001	0.0008	0.002	0.002	0.002	0.002	0.004	0.006
Phosphorus, dissolved	mg/L	<0.01	<0.01		<0.01	0.02	<0.01	<0.01	0.16	0.02
Potassium, dissolved	mg/L	2	2	2	2.2	2.2	4.3	4.2	2.8	7.6
Selenium, dissolved	mg/L	<0.0006	<0.0006	0.0002	<0.0006	<0.0006	<0.0006	0.0011	<0.0006	<0.0006
Silicon, dissolved	mg/L	5.22	5.18	5.55	5.64	4.92	5.25	4.95	5.63	15.7
Silver, dissolved	mg/L	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L	16.9	15.3	16.7	17.9	13	22.4	20.4	22.1	56.1
Strontium, dissolved	mg/L	0.594	0.598	0.598	0.631	0.592	0.62	0.728	0.711	1.99
Sulpher, dissolved	mg/L	18.6	18.8	19.9	20.2	19.6	31.7	30.2	27.4	73.2
Thallium, dissolved	mg/L	<0.00001	<0.00001	0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Tin, dissolved	mg/L	<0.0001	<0.0001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium, dissolved	mg/L	<0.01	<0.01	0.0009	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0019	0.002	0.0023	0.002	0.0018	0.0021	0.0025	0.0018	0.0056
Vanadium, dissolved	mg/L	0.0006	0.0005	0.0011	0.0004	0.0004	0.0005	0.0004	0.001	0.0012
Zinc, dissolved	mg/L	0.004	0.004	0.003	0.003	0.009	0.01	0.008	0.091	0.01
Zirconium, dissolved	mg/L	0.0002	0.0002		<0.0001	0.0002	0.0001	0.0001	0.0002	0.0004

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/01/2010**	**01/02/2010**	**09/02/2010**	**16/02/2010**	**24/02/2010**	**02/03/2010**	**10/03/2010**	**15/03/2010**	**24/03/2010**	**31/03/2010**	**05/04/2010**	**13/04/2010**
Total Suspended Solids	mg/L	22	6	<5	<5	<5	<5	<5	<3	<3	<3	<3	<5
Total Dissolved Solids	mg/L	456	468	328	366	350	376	354	390	368	368	360	360
pH (field)	pH units	7.05	6.82	7.35	6.98	6.9	6.94	7.08	7.02	7.3	6.62	7.02	6.72
pH (lab)	pH units	7.59	7.56	7.66	7.66	7.87	7.77	7.78	7.81	7.83	7.93	7.96	7.97
Specific Conductance, field	µS/cm												
Specific Conductance (lab)	µS/cm	695	705	547	564	564	566	551	574	566	531	573	543
Temperature (field)	C	1	1	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Dissolved Oxygen (field)	mg/L												
Dissolved Oxygen (field)	%												
ORP (field)	mV												
Hardness (from total)	mg/L	332	337	253	246	244	251	268	261	264	221	262	247
Hardness (from dissolved)	mg/L												
Alkalinity, total	mg/L	248	259	207	203	202	207	205	211	220	192	201	220
Chloride	mg/L	25.2	18.4	10.8	10	10.4	11.5	10.9	11.2	10.9	9.68	10.2	11
Fluoride	mg/L												
Sulphate, dissolved	mg/L	88.6	80.5	64.3	62	61.8	68	72.8	65	68.2	75.8	68.5	70.3
Ammonia	mg/L												
Nitrite (N)	mg/L												
Nitrate (N)	mg/L	0.72	0.43	1.14	1.08		1.55	1.38	1.41	1.38	1.34	1.41	1.44
Dissolved Organic Carbon	mg/L												
Aluminum, total	mg/L	0.05	0.028	0.016	0.012	0.01	0.023	0.012	0.009	0.008	0.046	0.012	0.013
Antimony, total	mg/L	0.0004	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.0021	0.0018	0.0003	<0.0002	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003
Barium, total	mg/L	0.135	0.145	0.094	0.09	0.09	0.095	0.094	0.091	0.092	0.089	0.09	0.093
Beryllium, total	mg/L	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	0.025	0.016	0.017	0.016	0.023	0.022	0.016	0.018	0.022	0.023	0.017	0.023
Cadmium, total	mg/L	0.00035	0.00009	<0.00001	0.00002	<0.00001	0.00001	0.0001	0.00003	0.00001	0.0105	0.00002	0.00001
Calcium, total	mg/L	81.3	86.2	74.8	60.3	63.7	64.5	72.8	66.1	65.3	60.9	65.2	65.9
Chromium, total	mg/L	0.0008	0.0007	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	<0.0004
Cobalt, total	mg/L	0.00086	0.001	0.00025	0.00022	0.00018	0.00021	0.0002	0.00018	0.00016	0.00018	0.00016	0.00015
Copper, total	mg/L	0.054	0.012	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.005	0.004	0.002
Iron, total	mg/L	1.77	1.6	0.155	0.143	0.126	0.135	0.194	0.102	0.093	0.115	0.087	0.146
Lead, total	mg/L	0.0002	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0022	<0.0001	0.0002
Lithium, total	mg/L	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.003	0.002
Magnesium, total	mg/L	32.6	32.3	28	26.2	26.9	26.4	29.7	26.9	27.6	24.7	26.2	26
Manganese, total	mg/L	1.86	2.37	0.233			0.217	0.203	0.164	0.165	0.171	0.132	0.13
Mercury, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum, total	mg/L	0.0032	0.0036	0.0022	0.0022	0.0023	0.0031	0.0024	0.0024	0.0024	0.0025	0.0026	0.0027
Nickel, total	mg/L	0.003	0.003	0.002	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, total	mg/L	0.12	0.12	0.05	<0.05	<0.05	<0.05	0.07	0.05	0.06	<0.05	0.06	<0.05
Potassium, total	mg/L	3	2.6	2.3	2	2.2	2.3	2.5	2.4	2.6	2.6	2.3	2.3
Selenium, total	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silicon, total	mg/L	6.73	7.08	5.6	5.26	5.47	5.31	6.37	5.36	5.39	5.14	5.25	5.27
Silver, total	mg/L	0.00003	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, total	mg/L	24.6	23.1	18.6	16.8	17.7	18.2	20.8	18.8	18.1	16.7	17.7	17.5
Strontium, total	mg/L	0.785	0.868	0.736	0.702	0.69	0.742	0.732	0.71	0.697	0.659	0.71	0.733
Sulpher, total	mg/L	30.7	25.3	24.1	22.1	25	23.6	27.3	23.6	23.4	22.2	23.6	24.8
Thallium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Tin, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Titanium, total	mg/L												
Uranium, total	mg/L	0.0021	0.002	0.0024	0.0019	0.0023	0.0028	0.0026	0.0026	0.0029	0.0023	0.0028	0.0027
Vanadium, total	mg/L	0.0013	0.0013	0.0005	0.0004	0.0004	0.0006	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004
Zinc, total	mg/L	0.008	0.004	0.003	0.002	0.004	0.015	0.003	0.007	0.002	0.005	0.008	0.005
Zirconium, total	mg/L	0.0004	0.0009	0.0002	0.0003	0.0001	0.0001	0.0002	0.0003	0.0002	0.0002	0.0001	0.0002
Aluminum, dissolved	mg/L	0.005	0.008	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	0.016	<0.005	<0.005	0.008
Antimony, dissolved	mg/L	0.0012	0.0011	0.0033	0.0012	0.0012	0.0009	0.001	0.0027	0.0035	<0.0002	0.0027	0.0018
Arsenic, dissolved	mg/L	0.0011	0.0011	<0.0002	0.0002	0.0003	<0.0002	0.0003	0.0002	0.0004	0.0003	<0.0002	0.0002
Barium, dissolved	mg/L	0.12	0.131	0.089	0.089	0.086	0.091	0.092	0.086	0.092	0.07	0.086	0.09
Beryllium, dissolved	mg/L	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	0.014	0.015	0.016	0.009	0.016	0.016	0.016	0.017	0.02	0.019	0.017	0.016
Cadmium, dissolved	mg/L	0.00021	0.00003	0.00002	<0.00001	<0.00001	0.00001	0.00582	0.00004	0.00002	<0.00001	0.00002	0.00001
Calcium, dissolved	mg/L	79.2	83.5	59.8	57.6	57.8	60.4	64.5	62.6	62.5	52.6	63.1	59.8
Chromium, dissolved	mg/L	0.0008	0.0007	<0.0004	<0.0004	<0.0004	0.0004	<0.0004	<0.0004	<0.0004	0.0006	0.0006	<0.0004
Cobalt, dissolved	mg/L	0.00072	0.00093	0.00047	0.00026	0.00023	0.00024	0.00024	0.00035	0.00071	0.00014	0.00047	0.00026
Copper, dissolved	mg/L	0.007	0.003	0.002	0.003	0.002	0.003	0.004	0.002	0.002	0.002	0.003	0.005
Iron, dissolved	mg/L	0.31	0.75	0.11	0.126	0.1	0.1	0.12	0.08	0.09	0.03	0.07	0.07
Lead, dissolved	mg/L	0.0003	0.0002	0.0002	0.0004	0.0002	0.0003	0.0018	<0.0001	<0.0001	<0.0001	<0.0001	0.0001
Lithium, dissolved	mg/L	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.003	0.002	0.003	0.002
Magnesium, dissolved	mg/L	32.7	31.3	25.2	24.9	24.3	24.4	26	25.5	26.1	21.7	25.3	23.8
Manganese, dissolved	mg/L	1.7	1.97	0.213	0.216	0.176	0.221	0.193	0.152	0.172	0.141	0.134	0.113
Mercury, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molydenum, dissolved	mg/L	0.0032	0.0034	0.0022	0.0021	0.0022	0.0026	0.0024	0.0022	0.0024	0.0022	0.0024	0.0025
Nickel, dissolved	mg/L	0.002	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001
Phosphorus, dissolved	mg/L	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	2.9	2.4	2.2	2	2.1	2.1	2.2	2.3	2.2	2.8	2.2	2
Selenium, dissolved	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silicon, dissolved	mg/L	6.36	6.61	5.1	4.99	4.91	4.98	5.45	5.04	5.09	4.8	5.07	4.68
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L	23	20.3	17	16.1	16	16.4	18.2	18	17.6	13.4	17.2	14.9
Strontium, dissolved	mg/L	0.772	0.828	0.688	0.696	0.666	0.693	0.674	0.672	0.713	0.562	0.704	0.668
Sulpher, dissolved	mg/L	29.5	26.8	21.4	20.6	20.6	22.6	24.3	21.7	22.7	25.3	22.8	23.4
Thallium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Tin, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0022	0.0019	0.0022	0.0023	0.0023	0.0026	0.0022	0.0026	0.003	0.0021	0.0026	0.0027
Vanadium, dissolved	mg/L	0.0007	0.0007	0.0004	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0004	0.0005	0.0003
Zinc, dissolved	mg/L	0.006	0.004	0.003	0.004	0.004	0.003	0.007	0.004	0.002	<0.001	0.002	0.004
Zirconium, dissolved	mg/L	0.0002	0.0004	0.0002	0.0002	0.0002	0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	<0.0001

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**19/04/2010**	**20/04/2010**	**21/04/2010**	**22/04/2010**	**23/04/2010**	**24/04/2010**	**25/04/2010**	**26/04/2010**	**27/04/2010**	**28/04/2010**	**29/04/2010**	**30/04/2010**
Total Suspended Solids	mg/L	<5	<5	8	<5	<5	<5	<2	<4	<4	<4	<4	<4
Total Dissolved Solids	mg/L	296	328	292	272	260	264	272	260	120	230	230	260
pH (field)	pH units	6.57	6.94	7	6.92	7.29	7.71	7.52	7.41	7.49	7.58	7.64	7.65
pH (lab)	pH units	7.86	7.97	7.4	7.58	7.59	7.69	7.68	7.9	7.8	7.9	7.8	8
Specific Conductance, field	µS/cm												
Specific Conductance (lab)	µS/cm	447	482	291	308	280	274	282	268	225	228	286	308
Temperature (field)	C	1.1	1.2	1	1.1	0	1.86	0	0	0		0.06	0
Dissolved Oxygen (field)	mg/L												
Dissolved Oxygen (field)	%					108.7	404.5	99.3	92.9	96.1	22.4	6.9	94.6
ORP (field)	mV												
Hardness (from total)	mg/L	214	228	151	156	148	144	142	134	118	116	142	167
Hardness (from dissolved)	mg/L								138	118	125	148	148
Alkalinity, total	mg/L	177	193	109	115	109	106	108	100	86	89	110	120
Chloride	mg/L	8.66	9.21	4.96	5.04	4.77	4.61	4.56	5.5	5	4.7	5.5	5.7
Fluoride	mg/L								0.22	0.2	0.19	0.23	0.23
Sulphate, dissolved	mg/L	56.6	60.8	33.1	31.4	30.6	29	28	27	2.9	5.9	38	39
Ammonia	mg/L								0.012	0.022	0.08	<0.03	<0.005
Nitrite (N)	mg/L								0.006	0.012	<0.03	<0.01	<0.05
Nitrate (N)	mg/L	1.11	1.14	0.59	0.62			0.61	0.56	0.44	0.5	0.58	0.7
Dissolved Organic Carbon	mg/L						46.7	48	38.7	39.2	37.3	31.8	33
Aluminum, total	mg/L	0.082	0.074	0.258	0.219	0.133	0.178	0.148	0.15	0.191	0.143	0.14	0.11
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0003	0.0003	0.0005	0.0004	0.0006	0.0006	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004
Barium, total	mg/L	0.076	0.078	0.064	0.066	0.063	0.066	0.06	0.06	0.056	0.053	0.061	0.069
Beryllium, total	mg/L	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	0.016	0.014	0.016	0.012	0.011	0.01	0.013	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00001	<0.00001	0.00003	0.00003	0.00003	0.00078	0.00002	0.00006	0.00009	0.00003	0.00003	<0.00001
Calcium, total	mg/L	55.4	57.6	38.6	41.3	39.7	40.6	38.5	34.3	30.1	30.5	35.8	42.9
Chromium, total	mg/L	<0.0004	<0.0004	0.0009	0.0008	0.0008	0.0009	0.0006	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L	0.00017	0.00017	0.00022	0.00019	0.0002	0.00019	0.00018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.008	0.006	0.017	0.015	0.014	0.016	0.027	0.0147	0.019	0.0133	0.0108	0.0121
Iron, total	mg/L	0.12	0.112	0.231	0.204	0.212	0.245	0.212	0.239	0.292	0.223	0.208	0.211
Lead, total	mg/L	0.0003	0.0001	0.0002	0.0002	0.0001	0.0004	0.0014	0.0003	0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	0.002	0.002	0.002	0.002	0.001	0.001	0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	20.5	22.3	14.1	15.3	14.7	14.8	14.1	11.8	10.3	9.6	12.7	14.5
Manganese, total	mg/L	0.146	0.149	0.0994	0.0944	0.0965	0.0942	0.0736	0.071	0.066	0.067	0.073	0.106
Mercury, total	mg/L	<0.00001	<0.00001	0.00002	0.00002	0.00002	0.00001	0.00003	0.00002	0.00002	<0.00002	<0.00002	0.00004
Molybdenum, total	mg/L	0.0023	0.0025	0.0018	0.0017	0.0016	0.0016	0.0014	0.001	0.001	0.001	0.002	0.002
Nickel, total	mg/L	0.001	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003
Phosphorus, total	mg/L	0.06	0.06	0.13	0.1	0.08	0.07	0.08					
Potassium, total	mg/L	2.2	2.4	2.4	2.2	2.1	2.2	1.9	1.63	1.63	1.48	1.52	1.68
Selenium, total	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002	0.0002	0.0001	0.0002	0.0002
Silicon, total	mg/L	4.58	4.92	4.25	4.51	4.56	4.76	4.52	4.63	4.58	4.13	4.52	5.16
Silver, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	14.1	15	8.64	9.24	9.36	9.41	8.86	7.36	6.39	5.99	8.02	9.58
Strontium, total	mg/L	0.55	0.584	0.36	0.364	0.338	0.35	0.322	0.278	0.236	0.234	0.299	0.363
Sulpher, total	mg/L	19.5	20.6	12.3	11.4	11.4	11.8	10.8	9	7	8	12	11
Thallium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0009	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L								<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.0023	0.0023	0.0011	0.0012	0.0012	0.0012	0.0011	0.0011	0.0009	0.0008	0.0012	0.0015
Vanadium, total	mg/L	0.0005	0.0004	0.0008	0.0007	0.0007	0.0008	0.0007	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	0.013	0.022	0.007	0.005	0.005	0.002	0.002	0.006	0.008	0.006	<0.005	<0.005
Zirconium, total	mg/L	<0.0001	<0.0001	0.0005	0.0007	0.0007	0.001	0.0008	0.0006	0.0006	0.0006	<0.0005	0.0005
Aluminum, dissolved	mg/L	<0.005	<0.005	0.148	0.054	0.082	0.08	0.089	0.092	0.097	0.098	0.071	0.068
Antimony, dissolved	mg/L	0.0011	0.0009	0.0015	<0.0002	0.0004	0.0004	0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	<0.0002	0.0002	0.0005	0.0006	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004
Barium, dissolved	mg/L	0.071	0.076	0.058	0.059	0.058	0.056	0.058	0.056	0.051	0.053	0.057	0.06
Beryllium, dissolved	mg/L	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	0.012	0.013	0.012	0.009	0.01	0.01	0.01	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.00001	0.00002	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00002	0.00002	0.00002
Calcium, dissolved	mg/L	53.5	56	38	38.6	36.8	35.8	35.6	35.8	31.1	33	38.6	38.1
Chromium, dissolved	mg/L	0.0004	0.0004	0.0005	0.0004	0.0006	0.0006	0.0006	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	0.00018	0.00018	0.00035	0.00006	0.00013	0.00012	0.00014	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.005	0.005	0.025	0.012	0.012	0.012	0.011	0.0128	0.0113	0.011	0.0094	0.0086
Iron, dissolved	mg/L	0.05	0.07	0.29	0.14	0.15	0.15	0.15	0.184	0.164	0.157	0.15	0.132
Lead, dissolved	mg/L	0.0002	0.0002	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	0.002	0.002	0.001	0.001	0.001	0.001	0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	19.6	21.5	13.7	14.4	13.5	13.1	13	11.7	9.87	10.4	12.4	12.7
Manganese, dissolved	mg/L	0.127	0.142	0.0978	0.0055	0.0289	0.0108	0.0412	0.009	0.029	0.022	0.051	0.039
Mercury, dissolved	mg/L	<0.00001	<0.00001	0.00002	0.00002	0.00001	<0.00001	0.00002	0.00002	0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.0022	0.0024	0.0014	0.0014	0.0014	0.0014	0.0014	0.001	0.001	0.001	0.002	0.002
Nickel, dissolved	mg/L	0.001	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
Phosphorus, dissolved	mg/L	<0.01	<0.01	0.08	0.04	0.04	0.03	0.03					
Potassium, dissolved	mg/L	2.2	2.2	2.5	2	1.9	1.8	1.8	1.74	1.59	1.64	1.62	1.53
Selenium, dissolved	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002	0.0002	0.0002	0.0002	0.0002
Silicon, dissolved	mg/L	4.27	4.59	4.09	4.11	4.11	4.06	4.02	5.12	4.28	4.44	4.43	4.22
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	13.3	14.2	8.4	8.6	8.6	8.3	8.3	7.56	6.2	6.58	8.19	8.6
Strontium, dissolved	mg/L	0.515	0.566	0.318	0.342	0.319	0.307	0.323	0.285	0.234	0.251	0.318	0.33
Sulpher, dissolved	mg/L	18.8	20.3	11	10.5	10.2	9.7	9.4	10	8	9	11	11
Thallium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0022	0.0024	0.0009	0.0011	0.0011	0.0011	0.0011	0.001	0.0008	0.0009	0.0012	0.0013
Vanadium, dissolved	mg/L	0.0004	0.0004	0.0008	0.0005	0.0006	0.0005	0.0006	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	0.003	0.004	0.009	0.002	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.0001	<0.0001	0.0005	0.0007	0.0007	0.001	0.0007	0.0007	0.0007	0.0006	0.0006	0.0006

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**01/05/2010**	**02/05/2010**	**03/05/2010**	**04/05/2010**	**05/05/2010**	**06/05/2010**	**07/05/2010**	**08/05/2010**	**09/05/2010**	**10/05/2010**	**11/05/2010**	**12/05/2010**	**13/05/2010**	**14/05/2010**	**15/05/2010**	**16/05/2010**	**17/05/2010**	**18/05/2010**	**19/05/2010**	**20/05/2010**	**21/05/2010**	**22/05/2010**	**23/05/2010**	**24/05/2010**	**25/05/2010**	**26/05/2010**	**27/05/2010**	**28/05/2010**	**29/05/2010**	**30/05/2010**	**31/05/2010**	**01/06/2010**	**02/06/2010**
Total Suspended Solids	mg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	44	<1	1	1	4	2	<1	<1	30	2	2	2	4	3	4	3
Total Dissolved Solids	mg/L	300	260	300	330	290	310	310	300	340	340	330	290	310	280	340	270	340	330	330	340	330	340	350	340	310	310	320	370	380	310	370	320	330
pH (field)	pH units	7.07	7.65	7.71	7.63	7.69	7.72	7.77	7.7	7.78	7.8				7.79	7.8	7.78	7.77	7.82	7.66	7.6	7.83	7.62	7.69	7.64	7.3	7.84	7.58	7.56	7.69	7.78	7.73	7.5	7.5
pH (lab)	pH units	8	8.3	8	8.1	8.1	8.1	8	8.1	8.1	8.1	8.2	8.3	8.2	8.3	8.2	8.3	8.1	8.4	8.4	8.4	8.2	8.2	8.1	8.4	8.2	8.4	8.2	8.5	8.5	8.4	8.2	8.5	8.5
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	360	412	419	445	456	470	475	498	524	520	522	461	526	453	531	436	519	493	520	526	484	505	526	534	532	509	544	507	534	436	530	540	540
Temperature (field)	C	0	0.02	0.03	0.02	0.04	0.04	0.04	0.04	0.12	0.11			1.5	1.9	1.5	1.8	1.5	1.7	1.4	1.4	2.6	2	1.4	1.4	1.9	1.8	1.4	2	1.3	3.3	2.2	1.4	1.7
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%	91.9	82.8	10.5	99.6	84.7	14.7	67	113.8	121.3	118.7			7.26																				
ORP (field)	mV																																	
Hardness (from total)	mg/L	190	200	198	211	229	226	243	264	240	268	258	237	252	212	239	211	251	263	276	287	241	235	236	262	282	249	279	261	274	215	254	308	286
Hardness (from dissolved)	mg/L	173	205	197	212	217	231	230	242	241	251	268	228	275	216	264	213	268	247	268	273	233	245	246	264	288	266	281	248	262	213	237	277	255
Alkalinity, total	mg/L	140	150	160	170	170	180	180	190	200	200	200	180	200	170	200	140	190	190	200	200	190	200	200	210	210	200	210	200	210	170	200	210	210
Chloride	mg/L	7.1	8.3	8.3	8.5	8.6	9	9.9	9.2	9.8	10	10	8.8	10	8.9	9.8	8	10	9.3	10	10	9.3	11	11	9.4	9.9	9.2	10	10	11	7.2	9.7	9.9	10
Fluoride	mg/L	0.26	0.29	0.31	0.33	0.32	0.3	0.33	0.35	0.37	0.37	0.24	0.22	0.34	0.33	0.35	0.3	0.35	0.35	0.37	0.39	0.39	0.41	0.41	0.42	0.39	0.39	0.4	0.44	0.4	0.37	0.39	0.37	0.4
Sulphate, dissolved	mg/L	53	63	61	65	66	70	73	69	72	70	74	62	78	62	73	57	84	67	74	87	63	68	67	69	69	65	67	68	77	55	69	68	68
Ammonia	mg/L	0.042	0.022	0.022	0.023	<0.01	0.04	0.01	0.013	0.008	0.017	0.043	<0.05	0.013	0.059	0.067	0.06	0.011	0.05	0.05	0.04	0.009	0.02	0.015	0.19	0.19	0.042	0.021	0.014	0.11	0.015	<0.05	0.037	0.056
Nitrite (N)	mg/L	0.006	0.005	<0.005	<0.005	0.006	0.006	0.007	0.006	<0.005	0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	0.005	0.007	0.006	0.005
Nitrate (N)	mg/L	0.88	1.01	1.03	1.14	1.05	1.1	1.11	1.18	1.45	1.46	1.35	1.09	0.91	1.06	1.29	1	1.28	1.21	1.33	1.31	1.18	1.24	1.31	1.3	1.23	1.19	1.28	0.95	1.25	0.87	1.14	1.24	1.2
Dissolved Organic Carbon	mg/L	23.8	35.1	20	14.7	13.9	13	18.7	11.2	9.4	9.4	8.3	6.8	7.9	7.2	7.3	6.5	7.6	6.7	6	6.2	4.9	6.3	6.1	5.5	6.3	5.9	5.9	5	4.7	4.5	5.5	5.2	4.9
Aluminum, total	mg/L	0.087	0.057	0.082	0.047	0.057	0.049	0.044	0.045	0.14	0.072	0.026	0.055	0.028	0.051	0.021	0.075	0.018	0.114	0.017	0.026	0.03	0.078	0.023	0.017	0.018	0.198	0.031	0.036	0.029	0.059	0.054	0.111	0.03
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0004	0.0004	0.0004	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.001	<0.001	<0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.001	0.0004	<0.001	0.0004	0.0004	<0.0004	0.0004	0.0005	<0.0004
Barium, total	mg/L	0.071	0.076	0.072	0.077	0.087	0.079	0.084	0.092	0.085	0.096	0.088	0.083	0.09	0.076	0.082	0.073	0.086	0.089	0.09	0.092	0.085	0.089	0.086	0.094	0.087	0.099	0.086	0.091	0.097	0.08	0.096	0.096	0.09
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	0.00001	<0.00001	0.00002	<0.00001	0.00597	0.00002	<0.00001	0.00004	0.00005	0.00001	0.00008	0.00004	0.00003	<0.00001	0.00002	<0.00001	0.00002	0.00003	0.00003	0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	48.4	50.8	50.3	53.3	59.1	57.1	61.5	67.1	61.5	68.7	67.2	61.3	65.8	54.3	61.9	55.3	65.5	64.8	67.8	70.8	62	60	61	67	68	64	67	66	70	55	65	80	75
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0095	0.0075	0.0078	0.0069	0.0087	0.0075	0.0064	0.0058	0.0361	0.0048	0.0046	0.0048	0.0039	0.0037	0.0049	0.0058	0.0034	0.0065	0.0033	0.0037	0.004	0.006	0.003	0.003	0.003	0.009	0.003	0.003	0.003	0.004	0.003	0.005	0.002
Iron, total	mg/L	0.171	0.15	0.165	0.134	0.154	0.136	0.121	0.123	0.232	0.155	0.106	0.124	0.092	0.114	0.084	0.146	0.084	0.207	0.08	0.092	0.086	0.197	0.098	0.071	0.086	0.365	0.148	0.15	0.178	0.211	0.168	0.26	0.14
Lead, total	mg/L	<0.0002	<0.0002	0.0002	0.0002	0.0008	<0.0002	0.0009	<0.0002	0.0008	0.0002	<0.0002	<0.0002	0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	16.8	17.7	17.5	18.8	19.8	20.2	21.7	23.5	20.9	23.4	22	20.3	21.4	18.5	20.4	17.6	21.3	24.6	25.8	26.9	21	20	21	23	27	22	27	23	24	19	22	26	24
Manganese, total	mg/L	0.095	0.094	0.098	0.087	0.126	0.11	0.128	0.121	0.095	0.099	0.092	0.117	0.095	0.119	0.102	0.138	0.12	0.162	0.123	0.13	0.133	0.143	0.121	0.132	0.153	0.358	0.271	0.301	0.282	0.344	0.316	0.316	0.253
Mercury, total	mg/L	<0.00002	0.00002	0.00005	0.00004	<0.00002	0.00004	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004
Nickel, total	mg/L	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.003	<0.003	<0.003	<0.001	<0.001	0.004	0.001	<0.003	0.001	<0.003	0.001	0.001	0.001	<0.001	0.001	0.001
Phosphorus, total	mg/L	0.025				0.032	0.02	0.018	0.017	0.035	0.013	<0.01	0.011	0.015		0.01	0.017	<0.01	0.024	0.016	0.015													
Potassium, total	mg/L	1.8	1.79	1.72	1.76	2.07	1.91	2.06	2.27	1.99	2.22	2.18	2.1	2.17	1.78	1.99	1.82	2.07	2.28	2.29	2.39	2	2	2	2	2	2	2	2	2	2	2	3	2
Selenium, total	mg/L	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0005	0.0002	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.001	<0.0008	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, total	mg/L	5.28	5.38	5.22	5.31	5.76	5.68	5.57	5.96	5.35	6	6.08	5.35	5.39	4.86	5.13	4.57	5.34	5.78	5.77	5.91	4.9	5.24	5.09	5.33	5.74	5.91	5.73	5.47	5.94	5	5.49	6.06	5.58
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00007	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	11.2	12.3	11.9	12.8	12.9	14.9	14.6	16	14.4	16.3	16.3	15	14.2	13.1	14	11.9	14.5	18.3	19.1	19.9	14	14	14	16	20	15	21	17	17	14	16	19	18
Strontium, total	mg/L	0.408	0.462	0.446	0.481	0.486	0.506	0.541	0.597	0.541	0.619	0.562	0.52	0.587	0.478	0.544	0.46	0.56	0.599	0.625	0.648	0.551	0.551	0.55	0.617	0.623	0.579	0.624	0.597	0.626	0.493	0.573	0.711	0.677
Sulpher, total	mg/L	16	14	14	17	21	21	21	21	20	22	21	18	25	16	22	18	21	23	24	25	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0017	0.002	0.002	0.0022	0.0022	0.0024	0.0026	0.003	0.0028	0.0032	0.0027	0.0025	0.003	0.0025	0.0028	0.0023	0.003	0.0024	0.0026	0.0027	0.0028	0.0028	0.0029	0.0031	0.0026	0.003	0.0026	0.003	0.0032	0.0024	0.003	0.0034	0.0032
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	0.028	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.053	0.038	0.028	0.026	0.019	0.016	0.015	0.014	0.011	0.009	0.008	0.008	0.007	0.007	0.013	0.007	0.01	0.007	0.004	0.004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0004	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0003	<0.0004	<0.0004	<0.0004	<0.0004	<0.001	<0.001	<0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium, dissolved	mg/L	0.065	0.07	0.071	0.073	0.071	0.072	0.074	0.08	0.08	0.082	0.084	0.076	0.086	0.072	0.085	0.07	0.085	0.078	0.082	0.086	0.081	0.082	0.085	0.082	0.093	0.089	0.09	0.086	0.09	0.075	0.086	0.085	0.087
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	0.00002	0.00001	0.00002	0.00002	<0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00002	0.00001	0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00001	0.00001	0.00002	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	44.4	52.8	50.3	53.9	55.3	59.2	58.4	61.4	61.4	63.1	69.5	59.7	71.5	56.6	68.8	55.8	69.7	62.6	68.4	67.7	61	64	64	69	71	65	68	64	69	56	59	71	66
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.0074	0.0064	0.0058	0.0051	0.0047	0.0042	0.0038	0.0035	0.0031	0.003	0.0027	0.003	0.0025	0.0031	0.0028	0.0026	0.0023	0.0026	0.0026	0.0023	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.12	0.108	0.101	0.091	0.08	0.076	0.068	0.067	0.06	0.059	0.056	0.045	0.048	0.047	0.069	0.034	0.037	0.032	0.033	0.036	0.027	0.022	0.025	0.025	0.025	0.038	0.042	0.026	0.044	0.035	0.031	0.021	0.025
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	15.1	17.7	17.3	18.9	19.1	20.2	20.4	21.6	21.2	22.7	23	19.3	23.5	18.3	22.3	17.8	22.8	22.1	23.5	25.2	20	21	21	22	27	25	27	21	22	18	22	24	22
Manganese, dissolved	mg/L	0.036	0.072	0.077	0.074	0.053	0.051	0.062	0.066	0.066	0.07	0.057	0.079	0.066	0.083	0.11	0.097	0.107	0.034	0.054	0.056	0.077	0.041	0.073	0.085	0.061	0.202	0.143	0.096	0.15	0.113	0.17	0.063	0.045
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00007	<0.00002	0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.003	0.004	0.004
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.003	<0.003	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L	0.016				0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01													
Potassium, dissolved	mg/L	1.66	1.83	1.78	1.83	1.86	1.98	1.95	2.08	1.99	2.05	2.2	1.98	2.27	1.92	2.23	1.9	2.3	2.05	2.17	2.17	2	2	2	2	2	2	2	2	2	2	2	2	2
Selenium, dissolved	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0003	0.0002	0.0003	<0.0008	<0.0008	<0.0008	<0.0008	<0.001	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, dissolved	mg/L	4.68	5.3	4.93	5.11	5.01	5.41	5.39	5.2	5.24	5.11	6.3	5.26	6.15	5.02	6.1	5.01	5.84	5.36	5.69	5.83	5.28	5.41	5.65	5.42	5.88	5.32	5.84	5.61	5.75	4.76		5.69	5.28
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	10.3	12	12	13.2	13	13.6	13.9	15.2	15.3	16.1	16.6	13.8	17	13.2	16.1	12.8	16.6	16.4	18.2	19	15	16	16	16	20	19	21	16	16	13	16	17	16
Strontium, dissolved	mg/L	0.397	0.454	0.454	0.489	0.499	0.523	0.528	0.545	0.558	0.567	0.607	0.511	0.616	0.496	0.587	0.474	0.581	0.495	0.509	0.508	0.508	0.53	0.558	0.588	0.661	0.609	0.606	0.592	0.634	0.506	0.561	0.605	0.599
Sulpher, dissolved	mg/L	15	19	17	19	20	22	22	24	22	25	24	21	26	21	25	20	26	23	26	27	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0016	0.002	0.0019	0.0022	0.0023	0.0025	0.0025	0.0027	0.0029	0.003	0.0031	0.0025	0.0031	0.0025	0.0028	0.0023	0.0029	0.0026	0.0027	0.0028	0.0025	0.0027	0.0028	0.003	0.0027	0.0024	0.0027	0.003	0.0031	0.0024	0.0027	0.003	0.003
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**03/06/2010**	**04/06/2010**	**05/06/2010**	**06/06/2010**	**07/06/2010**	**10/06/2010**	**11/06/2010**	**12/06/2010**	**13/06/2010**	**14/06/2010**	**15/06/2010**	**16/06/2010**	**17/06/2010**	**18/06/2010**	**19/06/2010**	**20/06/2010**	**21/06/2010**	**22/06/2010**	**23/06/2010**	**24/06/2010**	**25/06/2010**	**26/06/2010**	**26/06/2010**	**27/06/2010**	**28/06/2010**	**29/06/2010**	**30/06/2010**	**01/07/2010**	**02/07/2010**	**03/07/2010**	**04/07/2010**	**05/07/2010**	**06/07/2010**
Total Suspended Solids	mg/L	1	3	<4	<4	6	2	5	3	3	2	2	20	4	2	1	2	2	2	1	<1	<1		2	<1	<1	<1	<1	1	1	2	<1	<1	<1
Total Dissolved Solids	mg/L	380	290	350	320	330	310	320	340	350	330	340	310	310	340	330	350	330	330	340	320	290		300	340	320	350	340	340	330	340	340	340	360
pH (field)	pH units	7.73	7.5	7.19	7.76		7.72	7.56	7.54	7.55		7.03	7.32	6.92	7.1	7.21	6.91	6.55	7.81	7.81	7.81	7.88	7.72		7.69	7.7	7.72	7.7	7.86	7.85	7.87	7.91	7.93	7.91
pH (lab)	pH units	8.5	8.4	8.4	8.4	8.53	8.4	8.3	8.6	8.3	8.51	8.57	8.3	8.4	8.23	8.3	8.3	8.3	8.11	8.35	8.27	8.43		8.45	8	8.09	7.92	7.92	7.92	7.98	7.95	8.03	8.01	7.95
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	533	493	529	519	492	503	501	503	549	513	503	532	518	523	522	523	520	532	528	525	519		531	540	524	537	527	510	511	515	525	532	529
Temperature (field)	C	1.6	3.3	2.6	2.3		4.7	4.4	4.7	2.3	4.3	4.6	4.4	3.2	3.7	3.6	4.2	4.5	2.86	2.81	3.85	2.99	2.87		2.24	2.37	3.83	2.8	3.97	4.40	3.80	5.61	3.81	3.78
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%																		97.9	99.9	101.5	99	90.7		86.8	93.1	91.9	85.4	100.4	100.3	97.9	100.3	99.3	98.5
ORP (field)	mV																																	
Hardness (from total)	mg/L	265	247	264	258	236	242	235	249	263	234	258	260	230	229	235	213	254	235	287	256	245		242	259	241	243	236	232	226	228	216	244	232
Hardness (from dissolved)	mg/L	256	226	288	263	237	234	232	240	252	240	242	243	225	233	207	232	231	238	226	236	231		255	239	240	241	239	224	228	227	229	204	211
Alkalinity, total	mg/L	210	190	210	210	200	190	190	210	210	210	210	210	180	180	180	190	180	190	190	180	190		210	210	210	210	210	180	180	180	180	180	180
Chloride	mg/L	10	9	9.4	9	9	12	9.3	9.1	10	9.3	8.9	9.7	10	10	11	10	9.7	9.8	9.8	9.7	9.5		9.5	9	9.2	9	8.6	8.9	8.7	8.8	9	9.1	8.9
Fluoride	mg/L	0.37	0.35	0.38	0.38	0.39	0.38	0.36	0.37	0.38	0.39	0.38	0.38	0.43	0.41	0.42	0.42	0.41	0.41	0.42	0.44	0.45		0.41	0.38	0.37	0.38	0.38	0.4	0.4	0.4	0.41	0.41	0.41
Sulphate, dissolved	mg/L	70	60	71	64	64	65	63	69	69	64	65	69	67	69	71	64	67	67	67	70	68		65	65	71	68	66	64	63	64	70	69	64
Ammonia	mg/L	0.04	0.058	0.08	<0.05	0.03	0.02	0.038	0.013	0.043	0.032	0.03	0.043	0.036		<0.05			0.018		0.011	<0.005		0.016	0.038	0.031	0.031	0.015	<0.05	<0.05	<0.05	<0.05	<0.05	0.011
Nitrite (N)	mg/L	<0.005	0.005	<0.005	<0.005	<0.005	0.006	0.009	0.007	0.007	<0.005	<0.005	0.006	<0.005	0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	1.2	1.02	1.16	1.12	1.1	1.01	1.02	1	1.06	1.03	1.06	1.15	4.2	4.1	4.5	4.4	4.2	4.2	4.2	4.2	4.5		2.06	1.68	1.54	1.48	1.4	4.3	4.3	4.6	4.8	4.8	4.6
Dissolved Organic Carbon	mg/L	5.4	4.9			7	5.7	5.7	5.7	5.4	5.6	5.6	5.4	8.3	7.8	8.4	7.7	7.6	8.7	7.4	7.6	7.8		5.8	5.7	6.1	5.7	6.9	9.6	10.4	10.1	9.2	9.3	8.9
Aluminum, total	mg/L	0.033	0.047	0.021	0.019	0.087	0.055	0.122	0.054	0.052	0.057	0.032	0.56	0.1	0.039	0.035	0.029	0.061	0.029	0.03	0.029	0.02		0.041	0.027	0.019	0.014	0.014	0.045	0.028	0.065	0.02	0.019	0.013
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium, total	mg/L	0.095	0.09	0.096	0.094	0.093	0.096	0.101	0.1	0.105	0.096	0.1	0.106	0.093	0.091	0.091	0.086	0.095	0.093	0.095	0.093	0.085		0.087	0.093	0.089	0.09	0.085	0.089	0.084	0.085	0.078	0.089	0.088
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	68	64	67	65	58	60	59	62	66	58	64	65	59	60	60	55	64	63	76	66	62		62	64	62	61	60	61	59	59	57	64	62
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.003	0.003	0.002	0.002	0.005	0.004	0.005	0.007	0.003	0.004	0.003	0.01	0.004	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004		0.003	0.003	0.003	0.002	0.002	0.006	0.004	0.005	0.004	0.004	0.004
Iron, total	mg/L	0.12	0.17	0.103	0.101	0.209	0.161	0.206	0.17	0.155	0.157	0.127	0.799	0.168	0.079	0.065	0.059	0.103	0.068	0.07	0.059	0.049		0.123	0.118	0.109	0.094	0.092	0.091	0.069	0.112	0.06	0.058	0.044
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	23	21	24	23	22	22	21	23	24	22	24	24	20	19	21	19	23	19	24	22	22		21	24	21	22	21	19	19	19	18	20	19
Manganese, total	mg/L	0.21	0.297	0.239	0.237	0.334	0.338	0.509	0.514	0.349	0.325	0.277	0.284	0.166	0.106	0.086	0.066	0.07	0.064	0.061	0.059	0.059		0.138	0.155	0.168	0.159	0.145	0.055	0.053	0.064	0.05	0.054	0.054
Mercury, total	mg/L	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.004	0.003	0.004	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.005		0.004	0.004	0.004	0.004	0.003	0.005	0.005	0.005	0.004	0.005	0.005
Nickel, total	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	<0.001
Phosphorus, total	mg/L																																	
Potassium, total	mg/L	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3		2	2	2	2	2	3	3	3	3	3	3
Selenium, total	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0011	0.0008	<0.0008	0.0008	<0.0008	0.0009	0.001	0.0009	<0.0008		<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.0009	0.0009	0.0009	0.001	0.001
Silicon, total	mg/L	5.97	6.54	5.56	5.44	5.36	5.44	5.26	5.55	5.82	5.24	5.74	6.48	5.51	5.55	5.48	5.04	5.9	6.34	7	6.19	5.82		5.44	6.1	6.51	5.58	5.47	5.54	5.41	5.42	5.27	5.73	5.93
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	16	15	16	16	15	16	15	16	17	15	17	17	17	17	18	16	20	17	21	20	20		16	18	15	16	15	17	17	17	16	19	19
Strontium, total	mg/L	0.621	0.554	0.605	0.593	0.579	0.584	0.579	0.607	0.639	0.586	0.639	0.584	0.563	0.548	0.578	0.528	0.597	0.592	0.604	0.62	0.561		0.565	0.63	0.599	0.581	0.541	0.57	0.537	0.55	0.492	0.574	0.587
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60		<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0032	0.0027	0.003	0.0029	0.0029	0.0028	0.0029	0.003	0.0031	0.0029	0.0031	0.0031	0.003	0.0026	0.0027	0.0025	0.0028	0.0026	0.0029	0.0026	0.0026		0.0027	0.0029	0.0026	0.0027	0.0025	0.0024	0.0024	0.0024	0.0022	0.0026	0.0024
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.013	0.012	<0.01	0.01	<0.01
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	<0.0004
Barium, dissolved	mg/L	0.087	0.079	0.089	0.091	0.079	0.079	0.082	0.081	0.088	0.085	0.085	0.086	0.083	0.083	0.083	0.084	0.082	0.084	0.084	0.083	0.088		0.089	0.085	0.084	0.085	0.086	0.084	0.083	0.083	0.083	0.078	0.085
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	67	59	74	68	59	58	58	60	63	60	60	62	57	61	55	61	61	63	60	63	60		67	61	60	61	61	59	60	60	60	54	52
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.001	0.002	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003		0.002	0.002	0.002	0.002	0.002	0.004	0.004	0.004	0.004	0.004	0.004
Iron, dissolved	mg/L	<0.02	0.023	0.044	0.038	0.095	<0.02	<0.02	<0.02	<0.02	0.023	0.036	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	0.037	<0.02	0.021	<0.02	0.029	0.033	0.027	0.028	0.039	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	21	19	25	23	22	21	21	22	23	22	22	21	20	20	17	19	19	20	19	19	20		22	21	22	22	21	18	19	19	19	17	20
Manganese, dissolved	mg/L	0.039	0.1	0.203	0.195	0.009	0.012	<0.001	<0.001	0.069	0.153	0.158	0.054	0.001	<0.001	0.005	0.055	0.006	0.021	0.024	0.043	0.044		0.117	0.073	0.056	0.058	0.019	0.029	0.038	0.043	0.044	0.034	0.039
Mercury, dissolved	mg/L	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.004	0.003	0.004	0.004	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005		0.004	0.004	0.003	0.004	0.004	0.005	0.005	0.005	0.005	0.004	0.005
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001
Phosphorus, dissolved	mg/L																																	
Potassium, dissolved	mg/L	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3		3	2	2	2	2	3	3	3	3	3	3
Selenium, dissolved	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	<0.0008	0.0008	<0.0008	<0.0008	<0.0008	0.0008	<0.0008		0.0013	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.0009	0.001	0.001	<0.0008	0.0009
Silicon, dissolved	mg/L	5.32	4.66	5.84	5.94	5.64	5.43	5.37	5.57	5.88	5.63	5.58	5.21	5.11	5.67	4.89	5.49	5.52	5.49	5.28	5.5	5.69		5.98	6.34	6.35	6.36	6.44	5.62	5.74	5.66	5.7	5.97	4.85
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	15	14	18	16	17	17	17	18	18	18	18	17	18	17	16	17	17	18	17	18	18		17	16	16	16	16	17	18	18	18	15	18
Strontium, dissolved	mg/L	0.609	0.526	0.627	0.627	0.556	0.547	0.542	0.569	0.599	0.567	0.572	0.605	0.577	0.57	0.534	0.579	0.574	0.566	0.563	0.567	0.601		0.614	0.596	0.594	0.602	0.596	0.549	0.542	0.548	0.548	0.486	0.573
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60		<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0031	0.0026	0.0031	0.0031	0.0027	0.0026	0.0028	0.0029	0.0029	0.0028	0.0029	0.003	0.0027	0.0026	0.0026	0.0027	0.0026	0.0026	0.0026	0.0026	0.0026		0.0027	0.0025	0.0025	0.0025	0.0024	0.0024	0.0024	0.0023	0.0024	0.0019	0.0025
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		07/07/2010	08/07/2010	09/07/2010	10/07/2010	11/07/2010	12/07/2010	13/07/2010	14/07/2010	15/07/2010	16/07/2010	17/07/2010
Total Suspended Solids	mg/L	1	<1	<1	<1	2	<1	<1	<1	3	2	4
Total Dissolved Solids	mg/L	360	350	300	300	300	290	320	390	350	330	310
pH (field)	pH units	7.94	8.02	7.97	7.97	8.02	8.01	7.92	8.05	7.98	8.02	7.88
pH (lab)	pH units	8.04	7.92	8.17	8.27	8.23	8.09	8.03	7.94	8.1	8.11	8.14
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	532	523	533	530	530	535	534	521	547	518	535
Temperature (field)	C	5.90	5.99	4.33	4.96	4.33	5.94	4.09	4.25	13.49	13.67	12.5
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%	99.4	100.6	97.4	96.2	96.6	98.5	91.1	91.9	101.6	103.8	98
ORP (field)	mV											
Hardness (from total)	mg/L	237	236	229	228	232	229	246	236	220	212	389
Hardness (from dissolved)	mg/L	237	235	220	217	228	227	226	229	227	205	208
Alkalinity, total	mg/L	190	180	170	180	180	190	190	190	120	130	130
Chloride	mg/L	9	9.1	8.6	8.6	8.7	8.5	8.5	8.9	23	24	24
Fluoride	mg/L	0.42	0.42	0.42	0.43	0.42	0.46	0.41	0.44	0.37	0.36	0.36
Sulphate, dissolved	mg/L	63	66	67	66	65	64	64	63	75	71	68
Ammonia	mg/L	0.011	0.014	<0.03	<0.03	0.041	0.022	0.026	0.041	0.33	0.26	0.099
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	0.008	0.137	0.145	0.135
Nitrate (N)	mg/L	4.7	4.7	4.8	4.8	4.7	4.7	4.8	4.6	9.4	9.2	8.6
Dissolved Organic Carbon	mg/L	8.4	8.4	8.5	7.8	9.3	7.8	8.5	7.3	9.6	9.7	9.8
Aluminum, total	mg/L	0.015	0.015	0.013	0.012	0.023	0.021	0.014	0.029	0.16	5.28	0.357
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	0.0007
Barium, total	mg/L	0.089	0.09	0.088	0.087	0.084	0.088	0.087	0.086	0.092	0.086	0.151
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	62	62	61	60	61	59	65	61	60	57	105
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.016	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.073	0.006	0.024
Iron, total	mg/L	0.047	0.048	0.044	0.042	0.052	0.045	0.048	0.051	0.134	0.162	0.33
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	20	20	19	19	19	20	20	20	17	17	31
Manganese, total	mg/L	0.054	0.052	0.051	0.054	0.053	0.053	0.054	0.055	0.043	0.032	0.108
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.005	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.014	0.014	0.022
Nickel, total	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	<0.001	0.003	0.139	0.003
Phosphorus, total	mg/L											
Potassium, total	mg/L	3	3	3	3	3	3	3	3	5	5	8
Selenium, total	mg/L	0.001	0.0013	0.0011	0.0011	0.001	0.0009	0.001	0.001	0.0027	0.0022	0.0037
Silicon, total	mg/L	5.92	5.96	5.78	5.59	5.8	5.54	6.23	5.57	4.48	4.35	7.59
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	20	20	19	19	20	20	20	19	24	24	42
Strontium, total	mg/L	0.585	0.604	0.573	0.571	0.566	0.579	0.585	0.559	1.03	0.981	1.65
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0024	0.0025	0.0023	0.0023	0.0024	0.0026	0.0025	0.0024	0.001	0.001	0.0017
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.065	0.093	0.081
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0005	0.0005
Barium, dissolved	mg/L	0.087	0.087	0.086	0.087	0.079	0.081	0.081	0.081	0.089	0.085	0.086
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	61	62	58	58	60	60	61	60	65	56	56
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.003	0.003
Iron, dissolved	mg/L	0.022	0.021	<0.02	<0.02	0.028	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	20	19	18	18	19	19	18	19	16	16	16
Manganese, dissolved	mg/L	0.041	0.041	0.041	0.04	0.04	0.022	0.023	0.013	0.014	0.015	0.023
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.014	0.014	0.013
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	3	3	3	3	3	3	3	3	5	5	5
Selenium, dissolved	mg/L	0.0011	0.0011	0.001	0.0009	0.001	0.001	0.001	0.001	0.0032	0.0025	0.0025
Silicon, dissolved	mg/L	5.62	5.56	5.17	5.1	5.29	5.3	5.39	5.32	4.88	4.25	4.31
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	19	19	18	17	18	18	17	18	24	24	24
Strontium, dissolved	mg/L	0.574	0.572	0.604	0.605	0.543	0.564	0.559	0.553	1.03	0.997	0.994
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0025	0.0025	0.0027	0.0028	0.0024	0.0025	0.0024	0.0024	0.0011	0.001	0.0011
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		18/07/2010	19/07/2010	20/07/2010	21/07/2010	22/07/2010	23/07/2010	24/07/2010	25/07/2010	26/07/2010	27/07/2010	28/07/2010
Total Suspended Solids	mg/L	<1	<1	<1	<1	<1	1	<1	1	<1	<1	1
Total Dissolved Solids	mg/L	360	340	340	340	330	340	310	360	360	330	320
pH (field)	pH units	8.01	8.07	8.02	7.78	7.89	7.79	7.84	7.79	7.91	7.88	7.74
pH (lab)	pH units	8.07	8.08	8.15	8.13	8.1	8.01	8.01	8.04	8.12	7.98	8.15
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	540	541	542	545	534	499	527	527	533	538	546
Temperature (field)	C	13.39	13.81	14.19	13.82	13.45	12.09	11.94	11.97	12.22	14.12	12.11
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%	104.3	97.2	96.2	85	69.8	53.6	106.3	86.6	79.1	48.8	74.1
ORP (field)	mV											
Hardness (from total)	mg/L	191	198	182	179	189	193	197	209	190	203	203
Hardness (from dissolved)	mg/L	198	195	202	208	204		202	205	201	204	198
Alkalinity, total	mg/L	130	130	120	120	120	130	130	130	130	120	130
Chloride	mg/L	25	25	26	26	24	22	23	24	24	26	26
Fluoride	mg/L	0.36	0.35	0.37	0.4	0.38	0.39	0.39	0.48	0.39	0.35	0.37
Sulphate, dissolved	mg/L	70	71	71	72	69	66	70	72	72	70	69
Ammonia	mg/L			0.1	0.096	0.096	0.1	0.067	0.074	0.15	0.043	0.1
Nitrite (N)	mg/L	0.15	0.16	0.148	0.144	0.126	0.111	0.119	0.129	0.129	0.15	0.114
Nitrate (N)	mg/L	9.2	9.1	8.9	9.1	8.8	7.9	8.5	8.8	9.1	9.4	9
Dissolved Organic Carbon	mg/L	9.7	9.3	9.8	9.9	12	10.5	9.8	9.6	10.3	8.7	9.1
Aluminum, total	mg/L	0.109	0.112	0.101	0.117	0.142	0.184	0.145	0.17	0.125	0.16	0.151
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	<0.0004	0.0006	<0.0004	<0.0004	<0.0004	0.0012	0.0007	0.0006	<0.0004	0.0004	<0.0004
Barium, total	mg/L	0.084	0.087	0.078	0.082	0.097	0.095	0.096	0.097	0.084	0.101	0.092
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	52	54	51	50	52	52	53	55	51	54	54
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.005	0.005	0.004	0.004	0.005	0.005	0.004	0.006	0.006	0.005	0.005
Iron, total	mg/L	0.034	0.029	<0.02	0.021	0.025	0.063	0.033	0.066	0.037	0.028	0.034
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	15	15	14	13	14	16	16	17	15	16	16
Manganese, total	mg/L	0.021	0.019	0.02	0.022	0.027	0.029	0.021	0.03	0.017	0.022	0.036
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.012	0.013	0.012	0.012	0.014	0.011	0.011	0.012	0.011	0.013	0.013
Nickel, total	mg/L	<0.001	<0.001	0.001	<0.001	<0.001	0.005	0.004	0.005	0.003	0.004	0.003
Phosphorus, total	mg/L											
Potassium, total	mg/L	4	5	4	4	4	4	5	5	4	5	5
Selenium, total	mg/L	0.0022	0.0024	0.0023	0.0024	0.0025	0.0022	0.0025	0.0025	0.0025	0.0027	0.0027
Silicon, total	mg/L	4.21	4.34	4.05	4.05	4.31	4.39	4.32	4.67	3.95	4.53	4.25
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	25	26	23	22	24	22	23	24	22	24	23
Strontium, total	mg/L	0.939	0.968	0.831	0.858	0.958	0.818	0.81	0.838	0.801	0.868	0.872
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0009	0.0009	0.0008	0.0008	0.001	0.0009	0.0009	0.0009	0.0008	0.0007	0.0008
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	<0.01	0.054	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.097	0.102	0.1	0.108	0.108		0.077	0.073	0.077	0.094	0.089
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0004	<0.0004	0.0005	0.0005	0.0005		<0.0004	0.0004	<0.0004	<0.0004	<0.0004
Barium, dissolved	mg/L	0.086	0.085	0.092	0.094	0.093		0.092	0.094	0.093	0.097	0.091
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	54	53	56	58	57		55	55	54	55	54
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.003	0.004	0.003	0.003	0.004		0.002	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	16	15	15	15	15		16	16	16	16	16
Manganese, dissolved	mg/L	0.015	0.014	0.014	0.014	0.015		0.019	0.024	0.015	0.018	0.033
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.0003	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.013	0.013	0.014	0.014	0.014		0.013	0.013	0.013	0.014	0.013
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001		0.001	0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	5	5	5	5	5		5	5	5	5	5
Selenium, dissolved	mg/L	0.0025	0.0024	0.0025	0.0026	0.0025		0.0025	0.0026	0.0026	0.0028	0.0026
Silicon, dissolved	mg/L	4.45	4.36	4.19	4.36	4.33		4.66	4.33	4.47	4.63	4.46
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	26	25	24	24	23		26	24	27	28	26
Strontium, dissolved	mg/L	0.994	0.964	0.998	0.991	0.937		0.857	0.85	0.859	0.911	0.869
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60		<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0009	0.0009	0.0009	0.001	0.0009		0.0008	0.0009	0.0009	0.0007	0.0007
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		29/07/2010	30/07/2010	31/07/2010	01/08/2010	02/08/2010	03/08/2010	04/08/2010	05/08/2010	06/08/2010	07/08/2010	08/08/2010
Total Suspended Solids	mg/L	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1
Total Dissolved Solids	mg/L	330	330	340	330	340	330	350	360	340	360	370
pH (field)	pH units	7.82	7.8	7.81	7.84	7.83	7.84	7.85	7.87	7.85	7.96	7.89
pH (lab)	pH units	8.02	7.95	8.09	8.13	8.11	7.96	8.09	8.09	8.17	8.03	8.05
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	544	542	550	550	553		551	549	553	553	557
Temperature (field)	C	13.72	12.73	13.1	11.8	12.6	12.46	14.27	13.78	13.33	12.3	12.42
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%	77.4	74.4	74.9	75.8	76.7	77.1	77.6	77.5	76.7	76.9	76.8
ORP (field)	mV											
Hardness (from total)	mg/L	194	192	198	207	198	218	205	202	196	208	211
Hardness (from dissolved)	mg/L	211	209	210	214	213	208	217	215	205	245	206
Alkalinity, total	mg/L	130	130	130	130	130		130	130	130	130	130
Chloride	mg/L	27	26	27	25	25		0.6	25	25	24	26
Fluoride	mg/L	0.36	0.36	0.36	0.39	0.39		0.29	0.38	0.36	0.36	0.38
Sulphate, dissolved	mg/L	71	73	69	70	70		5.9	74	76	75	73
Ammonia	mg/L	<0.005	0.048	0.043	0.052	0.066	0.045	<0.005	0.033	<0.05	0.033	0.07
Nitrite (N)	mg/L	0.124	0.117	0.127	0.102	0.11		<0.005	0.091	0.091	0.096	0.105
Nitrate (N)	mg/L	10.4	10.5	10.1	9.6	10		0.07	10.4	10.2	10.4	10.6
Dissolved Organic Carbon	mg/L	7.5	8.5	9.1	8.9	7.9		10	10	9.2	8.9	9.5
Aluminum, total	mg/L	0.124	0.123	0.14	0.124	0.13	0.115	0.111	0.109	0.101	0.106	0.105
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium, total	mg/L	0.089	0.088	0.101	0.097	0.099	0.096	0.094	0.092	0.086	0.09	0.094
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	52	52	53	56	53	60	55	55	54	56	58
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.007	0.004	0.005	0.005
Iron, total	mg/L	0.021	<0.02	<0.02	0.026	0.023	<0.02	0.032	0.035	0.023	<0.02	0.02
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	15	15	16	16	16	17	16	16	15	16	16
Manganese, total	mg/L	0.02	0.021	0.023	0.023	0.023	0.021	0.023	0.021	0.02	0.023	0.023
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.013	0.013	0.015	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.014
Nickel, total	mg/L	0.004	0.003	0.003	0.003	0.003	0.004	0.002	0.003	0.001	0.001	0.001
Phosphorus, total	mg/L											
Potassium, total	mg/L	5	5	5	5	5	5	5	5	5	5	5
Selenium, total	mg/L	0.0027	0.0027	0.0029	0.0029	0.0028	0.003	0.0027	0.0026	0.0027	0.003	0.003
Silicon, total	mg/L	4	4.01	4.21	4.51	4.26	4.62	4.35	4.33	4.13	4.35	4.45
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	23	22	24	24	24	24	25	25	22	23	23
Strontium, total	mg/L	0.849	0.852	0.959	0.873	0.895	0.928	0.882	0.865	0.85	0.914	0.941
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0007	0.0007	0.0007	0.0008	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0009
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.093	0.099	0.093	0.101	0.082	0.063	0.079	0.076	0.073	0.076	0.073
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	<0.0004	<0.0004	0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	0.0004	0.0005	0.0004
Barium, dissolved	mg/L	0.099	0.099	0.098	0.098	0.098	0.091	0.095	0.094	0.096	0.097	0.093
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	58	57	57	58	58	57	59	59	55	71	55
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.002	0.002	0.002	0.003	0.002	0.002	0.004	0.004	0.004	0.004	0.004
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	16	16	17	17	17	16	17	17	16	17	17
Manganese, dissolved	mg/L	0.019	0.02	0.021	0.008	0.019	0.019	0.022	0.021	0.021	0.022	0.022
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	5	5	5	5	5	5	5	5	5	5	5
Selenium, dissolved	mg/L	0.003	0.003	0.003	0.0028	0.003	0.003	0.0031	0.0031	0.0032	0.0041	0.0032
Silicon, dissolved	mg/L	4.79	4.75	4.69	4.84	4.82	4.39	4.49	4.58	4.24	5.54	4.26
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	29	28	28	28	28	24	25	25	25	25	26
Strontium, dissolved	mg/L	0.938	0.942	0.947	0.907	0.919	0.897	0.934	0.936	0.96	0.965	0.944
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0007	0.0007	0.0007	0.0009	0.0008	0.0007	0.0008	0.0008	0.0008	0.0009	0.0008
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**09/08/2010**	**10/08/2010**	**11/08/2010**	**12/08/2010**	**13/08/2010**	**14/08/2010**	**15/08/2010**	**16/08/2010**	**17/08/2010**
Total Suspended Solids	mg/L	1	<1	<1	3	<1	<1	<1	1	1
Total Dissolved Solids	mg/L	320	370	320	360	330	340	360	330	340
pH (field)	pH units	7.87	7.9	7.94	7.97	7.84	7.86	7.84	7.93	7.87
pH (lab)	pH units	8.22	8.15	8.04	8.11	7.81	7.98	8.16	8.2	8.2
Specific Conductance, field	µS/cm									
Specific Conductance (lab)	µS/cm	566	585	570	577	570	580	581	590	584
Temperature (field)	C	13.3	12.35	13.39	12.23	13.07	13.32	13.97	13.99	14.73
Dissolved Oxygen (field)	mg/L									
Dissolved Oxygen (field)	%	83.1	41.4	76.8	78.3	84.1	82.9	87	84.4	82.6
ORP (field)	mV									
Hardness (from total)	mg/L	247	239	226	247	213	207	223	233	223
Hardness (from dissolved)	mg/L	219	221	219	220	221	224	223	219	218
Alkalinity, total	mg/L	130	130	130	130	130	130	130	130	130
Chloride	mg/L	27	29	30	26	24	26	26	26	24
Fluoride	mg/L	0.38	0.37	0.37	0.39	0.4	0.39	0.4	0.38	0.42
Sulphate, dissolved	mg/L	80	78	77	78	84	83	87	86	86
Ammonia	mg/L	0.053	0.07	0.092	0.13	0.14	0.12	0.079	0.059	0.084
Nitrite (N)	mg/L	0.086	0.018	0.019	0.026	0.089	0.116	0.134	0.163	0.171
Nitrate (N)	mg/L	10.5	10.2	1.05	11.1	11.1	11.4	11.7	11.8	12.3
Dissolved Organic Carbon	mg/L	9.2	9	9	9.6	9.9	8.7	9	9.5	10.2
Aluminum, total	mg/L	0.138	0.107	0.099	0.13	0.077	0.119	0.108	0.12	0.131
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	<0.0004	<0.0004	0.0005	<0.0004	0.0005	0.0005	0.0006	0.0006	0.0007
Barium, total	mg/L	0.107	0.106	0.108	0.105	0.097	0.112	0.108	0.114	0.112
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	68	64	62	67	57	57	61	63	61
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.005	0.005	0.004	0.006	0.002	0.005	0.005	0.007	0.006
Iron, total	mg/L	0.041	0.031	0.02	0.032	<0.02	0.032	0.023	0.033	0.023
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	19	19	17	20	17	16	17	18	17
Manganese, total	mg/L	0.03	0.036	0.038	0.05	0.026	0.04	0.045	0.047	0.043
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.015	0.015	0.014	0.015	0.014	0.016	0.016	0.017	0.017
Nickel, total	mg/L	0.003	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001
Phosphorus, total	mg/L									
Potassium, total	mg/L	6	6	6	6	5	5	5	5	5
Selenium, total	mg/L	0.0044	0.0033	0.003	0.0039	0.0031	0.0038	0.0038	0.0041	0.0042
Silicon, total	mg/L	6.33	4.91	4.84	4.92	4.41	4	4.34	4.67	4.49
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	29	30	29	30	26	24	29	30	29
Strontium, total	mg/L	1.07	0.987	0.984	1.09	0.931	1.16	1.15	1.21	1.23
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0011	0.0009	0.001	0.001	0.0011	0.001	0.001	0.001	0.0011
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	0.168	0.095	0.069	0.027	0.028	0.016	0.018	<0.01
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.086	0.057	0.072	0.072	0.074	0.072	0.071	0.077	0.079
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0004	<0.0004	<0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005
Barium, dissolved	mg/L	0.099	0.101	0.1	0.097	0.102	0.108	0.101	0.107	0.106
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	60	60	60	60	60	60	61	60	60
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.003	0.003	0.003	0.004	0.002	0.004	0.004	0.004	0.002
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	17	17	17	17	17	18	17	17	17
Manganese, dissolved	mg/L	0.023	0.029	0.035	0.039	0.011	0.039	0.041	0.039	0.037
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.014	0.014	0.014	0.015	0.015	0.016	0.016	0.016	0.017
Nickel, dissolved	mg/L	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L									
Potassium, dissolved	mg/L	5	6	6	5	5	5	5	5	5
Selenium, dissolved	mg/L	0.0034	0.0031	0.0031	0.0036	0.0033	0.0038	0.0041	0.0042	0.0044
Silicon, dissolved	mg/L	4.73	4.77	4.72	4.36	4.82	4.75	4.36	4.47	4.39
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	28	29	29	26	27	29	26	28	28
Strontium, dissolved	mg/L	1.01	0.956	0.976	1.02	0.972	1.1	1.14	1.21	1.23
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0009	0.0009	0.0009	0.001	0.0012	0.0009	0.0009	0.001	0.001
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	0.143	0.084	0.061	0.022	0.027	0.015	0.013	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**18/08/2010**	**19/08/2010**	**20/08/2010**	**21/08/2010**	**22/08/2010**	**23/08/2010**	**24/08/2010**	**25/08/2010**	**26/08/2010**	**27/08/2010**	**28/08/2010**	**29/08/2010**
Total Suspended Solids	mg/L	3	3	2	1	2	<1	<1	1	<1	1	1	1
Total Dissolved Solids	mg/L	360	380	350	350	380	370	360	370	350	360	350	390
pH (field)	pH units	7.95	7.87	7.59	7.88	8.04	7.99	7.95	7.9	8.05	8.09	8.09	8
pH (lab)	pH units	8.15	8.15	8.25	8.22	8.28	8.17	8.13	8.03	8.08	8.15	8.12	7.94
Specific Conductance, field	µS/cm												
Specific Conductance (lab)	µS/cm	579	574	575	573		565	578	587	583	586	589	591
Temperature (field)	C	12.69	11.68	11.17	11.23	11.34	12.2	11.21	11.2	10.83	11.47	10.75	11.15
Dissolved Oxygen (field)	mg/L												
Dissolved Oxygen (field)	%	82.8	83.3	89.5	85.3	85.6	86.6	85.4	84.1	84.6	81.4	79.9	76.4
ORP (field)	mV												
Hardness (from total)	mg/L	221	226	218	222	224	245	215	221	217	212	231	227
Hardness (from dissolved)	mg/L	226	206	205	218	223	204	218	207	215	222	221	218
Alkalinity, total	mg/L	120	120	120	120	120	130	120	120	110	120	120	120
Chloride	mg/L	24	24	25	27	28	30	26	27	29	29	29	29
Fluoride	mg/L	0.42	0.44	0.39	0.4	0.4	0.39	0.39	0.34	0.31	0.32	0.32	0.33
Sulphate, dissolved	mg/L	84	84	81	81	93	84	89	120	96	95	95	94
Ammonia	mg/L	0.15	0.14	0.2	0.096	0.076	0.035	0.083	0.14	0.21	0.16	0.2	0.14
Nitrite (N)	mg/L	0.111	0.118	0.118	0.123	0.113	0.063	0.158	0.133	0.122	0.12	0.137	0.129
Nitrate (N)	mg/L	11.8	11.7	11.6	11.1	11.2	10.3	12.5	12.5	12.1	11.8	12.4	12.4
Dissolved Organic Carbon	mg/L	9.8	3.5	3.4	5.6	3	9.4	9.4	8.7	8.5	9.4	8.9	9.6
Aluminum, total	mg/L	0.151	0.114	0.119	0.099	0.108	0.148	0.184	0.169	0.188	0.187	0.221	0.216
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0005	<0.0004	0.0004	<0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005	0.0006	0.0006
Barium, total	mg/L	0.102	0.105	0.101	0.102	0.105	0.096	0.105	0.101	0.107	0.096	0.104	0.108
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	60	61	59	60	62	72	59	59	58	57	64	62
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.008	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.008	0.007
Iron, total	mg/L	0.107	0.056	0.037	0.029	0.034	0.031	0.028	0.023	0.033	0.021	0.031	<0.02
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	17	17	17	17	17	16	16	18	17	17	18	18
Manganese, total	mg/L	0.05	0.052	0.043	0.042	0.041	0.03	0.046	0.049	0.055	0.049	0.054	0.047
Mercury, total	mg/L	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.017	0.017	0.016	0.016	0.016	0.014	0.017	0.016	0.017	0.016	0.017	0.017
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.001	<0.001	0.001
Phosphorus, total	mg/L												
Potassium, total	mg/L	5	5	5	5	5	5	5	5	5	5	5	5
Selenium, total	mg/L	0.0043	0.0046	0.004	0.004	0.0043	0.0041	0.0044	0.0043	0.0043	0.0041	0.0048	0.0047
Silicon, total	mg/L	4.47	4.86	4.52	4.79	4.35	5.27	4.12	4.2	4.22	4.14	4.71	4.47
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	26	28	26	27	26	25	26	31	26	26	27	28
Strontium, total	mg/L	1.18	1.29	1.17	1.16	1.18	0.914	1.23	1.21	1.26	1.12	1.22	1.25
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0009	0.001	0.0009	0.0009	0.0009	0.0009	0.0009	0.0008	0.0009	0.0008	0.0009	0.0009
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	0.013	<0.01	<0.01
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.064	0.061	0.062	0.062	0.062	0.087	0.094	0.075	0.078	0.097	0.091	0.108
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0005	0.0004	<0.0004	0.0005	0.0005	0.0005	0.0004	0.0005	0.0006
Barium, dissolved	mg/L	0.097	0.096	0.094	0.105	0.099	0.093	0.102	0.092	0.1	0.104	0.104	0.097
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	65	57	57	60	62	56	60	57	58	61	61	60
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.005	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.003
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	16	16	15	17	17	16	17	15	17	17	17	16
Manganese, dissolved	mg/L	0.045	0.048	0.041	0.041	0.039	0.026	0.041	0.046	0.05	0.041	0.043	0.04
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.016	0.017	0.015	0.016	0.016	0.014	0.017	0.015	0.017	0.017	0.017	0.016
Nickel, dissolved	mg/L	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L												
Potassium, dissolved	mg/L	5	5	4	5	5	5	5	5	5	5	5	5
Selenium, dissolved	mg/L	0.0051	0.0046	0.0043	0.004	0.0043	0.0033	0.0044	0.0049	0.0045	0.0042	0.0044	0.0047
Silicon, dissolved	mg/L	4.57	4.06	4.08	4.67	4.53	4.49	4.62	4.31	4.27	4.25	4.22	4.37
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	25	25	24	28	26	26	28	24	27	29	29	26
Strontium, dissolved	mg/L	1.22	1.24	1.2	1.16	1.17	0.925	1.25	1.18	1.27	1.26	1.3	1.18
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0009	0.0009	0.0009	0.0009	0.0009	0.0008	0.0009	0.0007	0.0008	0.0009	0.0009	0.0008
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**30/08/2010**	**31/08/2010**	**01/09/2010**	**02/09/2010**	**03/09/2010**	**05/09/2010**	**07/09/2010**	**08/09/2010**	**09/09/2010**	**11/09/2010**	**12/09/2010**	**13/09/2010**
Total Suspended Solids	mg/L	1	1	5	<1	<1	<1	<1	1	1	<1	1	1
Total Dissolved Solids	mg/L	370	370	380	360	370	370	440	510	500	510	440	390
pH (field)	pH units	8	8	7.98	7.77	7.91	7.91	7.83	8.14	7.98	7.89	7.94	7.93
pH (lab)	pH units	8.11	7.99	8.06	8.11	8.07	8.03	8.1		7.98	8.05	8	8.2
Specific Conductance, field	µS/cm												
Specific Conductance (lab)	µS/cm	579	594	600	579	599	585	564	598	609	616	605	609
Temperature (field)	C	10.92	11.36	11.69	10.04	11.13	10.33	8.88	11.07	10.75	9.93	10.6	11.02
Dissolved Oxygen (field)	mg/L												
Dissolved Oxygen (field)	%	71.5	66.1	62.4	68.6	77.8	76.8	76.8	79.9	81.3	84.2	82.5	82.8
ORP (field)	mV												
Hardness (from total)	mg/L	229	225	219	231	226	228	217	222	223	232	217	223
Hardness (from dissolved)	mg/L	225	225	222	226	223	218	232	218	230	229	236	227
Alkalinity, total	mg/L	120	120	120	140	120	120	150	120	120	110	120	120
Chloride	mg/L	29	29	29	23	28	26	16	26	25	26	27	27
Fluoride	mg/L	0.37	0.36	0.42	0.44	0.43	0.42	0.44	0.4	0.4	0.39	0.37	0.39
Sulphate, dissolved	mg/L	94	90	85	80	89	88	73	88	86	88	91	95
Ammonia	mg/L	0.2	0.068	0.12	0.08	0.1	0.083	0.075	0.19	0.14	0.19	0.2	0.084
Nitrite (N)	mg/L	0.119	0.116	0.129	0.07	0.128	0.13	0.025	0.123	0.116	0.136	0.129	0.142
Nitrate (N)	mg/L	11.8	11.7	13	10.3	12.9	13	8.6	12.7	13.1	14.1	13.5	14
Dissolved Organic Carbon	mg/L	8.5	9.3	8.8	8.9	8.7	8.9	8.9	11.8	9	7.7	8.7	8.5
Aluminum, total	mg/L	0.233	0.226	0.202	0.142	0.177	0.18	0.097	0.212	0.21	0.198	0.18	0.175
Antimony, total	mg/L	<0.0005	<0.0005	0.001	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005	<0.0004	0.0005	0.0004	<0.0004	0.0005	<0.0004
Barium, total	mg/L	0.113	0.113	0.106	0.106	0.109	0.106	0.093	0.112	0.111	0.118	0.105	0.111
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	63	61	59	62	61	62	58	60	61	63	60	61
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.008	0.008	0.007	0.005	0.006	0.006	0.003	0.006	0.006	0.006	0.007	0.021
Iron, total	mg/L	0.028	0.025	0.023	0.037	<0.02	<0.02	0.031	0.023	0.024	0.039	0.042	0.025
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0935
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	17	18	17	18	18	18	18	17	17	18	16	17
Manganese, total	mg/L	0.048	0.046	0.043	0.067	0.047	0.049	0.07	0.06	0.061	0.081	0.07	0.076
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004
Molybdenum, total	mg/L	0.018	0.017	0.017	0.012	0.017	0.016	0.01	0.018	0.018	0.02	0.019	0.018
Nickel, total	mg/L	<0.001	0.001	0.001	0.002	0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.01
Phosphorus, total	mg/L												
Potassium, total	mg/L	5	6	6	5	5	6	4	5	5	5	5	5
Selenium, total	mg/L	0.0047	0.0043	0.0043	0.0033	0.0043	0.0045	0.0024	0.0045	0.0048	0.0053	0.0048	0.0048
Silicon, total	mg/L	4.54	4.43	4.32	4.9	4.48	4.63	4.85	4.21	4.4	4.48	4.28	4.26
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	26	27	27	24	27	27	22	27	26	27	27	26
Strontium, total	mg/L	1.29	1.25	1.18	1.05	1.2	1.18	0.882	1.35	1.36	1.53	1.31	1.37
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00011
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.092
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.0009	0.0009	0.0008	0.0012	0.0008	0.0009	0.0016	0.001	0.0009	0.0009	0.0008	0.0008
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.049
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.121	0.112	0.097	0.075	0.088	0.073	0.094	0.093	0.086	0.071	0.072	0.079
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0009	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0004	0.0005	0.0006	<0.0004	0.0006	0.0006	0.0005	0.0005	0.0005
Barium, dissolved	mg/L	0.104	0.097	0.1	0.096	0.101	0.1	0.098	0.108	0.102	0.106	0.104	0.112
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	62	62	61	61	61	60	61	58	63	63	65	63
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.003	0.003	0.004	0.003	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.004
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.023	<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	17	17	17	18	17	16	19	18	18	18	18	17
Manganese, dissolved	mg/L	0.036	0.035	0.039	0.064	0.044	0.043	0.072	0.055	0.056	0.072	0.068	0.077
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.017	0.016	0.016	0.012	0.016	0.016	0.01	0.018	0.017	0.019	0.018	0.019
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L												
Potassium, dissolved	mg/L	5	5	5	5	5	5	4	5	5	5	5	5
Selenium, dissolved	mg/L	0.0045	0.0042	0.0046	0.0034	0.0045	0.0046	0.0026	0.0053	0.0047	0.0051	0.005	0.0051
Silicon, dissolved	mg/L	4.27	4.33	4.37	4.65	4.32	4.38	5.15	3.97	4.64	4.56	4.7	4.44
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	29	29	27	24	27	26	23	29	28	28	28	30
Strontium, dissolved	mg/L	1.27	1.15	1.23	1.07	1.24	1.23	0.912	1.34	1.34	1.48	1.42	1.46
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0009	0.0008	0.0008	0.0012	0.0008	0.0008	0.0016	0.0009	0.0009	0.0008	0.0008	0.0008
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**15/09/2010**	**17/09/2010**	**19/09/2010**	**21/09/2010**	**23/09/2010**	**25/09/2010**	**27/09/2010**	**29/09/2010**	**01/10/2010**	**03/10/2010**	**05/10/2010**
Total Suspended Solids	mg/L	<1	<1	<1	<1	<1	<1	<1	3	5	3	<1
Total Dissolved Solids	mg/L	380	410	390	400	400	390	400	400	400	390	380
pH (field)	pH units	7.82	7.91	7.99	7.98	7.97	7.94	7.91	7.96			7.95
pH (lab)	pH units	8.18	8.21	8.02	8.05	8.05	8.02	7.97	8.14	8.04	8.06	8.1
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	611	592	599	595	599	617	625	618	625	613	598
Temperature (field)	C	9.29	9.14	8.42	7.64	6.71	6.25	5.63	5.59			4.74
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%	86.8	93.1	107.1	49.3	91.3	93.5	95.1	98.6			98.6
ORP (field)	mV											
Hardness (from total)	mg/L	206	255	222	227	235	227	219	237	233	240	234
Hardness (from dissolved)	mg/L	231	240	238	258	230	237	233	227	233	234	231
Alkalinity, total	mg/L	120	130	130	130	130	130	130	130	130	140	140
Chloride	mg/L	27	18	19	19	20	21	23	20	22	22	22
Fluoride	mg/L	0.18	0.52	0.51	0.48	0.49	0.47	0.45	0.47	0.46	0.43	0.42
Sulphate, dissolved	mg/L	86	83	86	92	87	100	100	87	90	86	89
Ammonia	mg/L	0.11	0.13	0.12	0.12	0.17	0.19	0.2	0.2	0.25	0.14	0.024
Nitrite (N)	mg/L	0.137	0.117	0.115	0.119	0.124	0.134	0.117	0.12	0.11	0.1	0.076
Nitrate (N)	mg/L	13.6	13.8	14	13.9	14.1	14.8	14.7	15.1	14.9	13.2	12.7
Dissolved Organic Carbon	mg/L	8.4	10	9.7	10.7	10.4	9.8	8.7	9.7	9.4	9.9	10.4
Aluminum, total	mg/L	0.127	0.173	0.126	0.128	0.163	0.147	0.15	0.195	0.17	0.128	0.134
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	<0.0004	0.0005	<0.0004	0.0005	0.0005	0.0005	0.0002	0.0003	0.0002	0.0003	0.0004
Barium, total	mg/L	0.099	0.116	0.107	0.107	0.111	0.105	0.103	0.102	0.108	0.097	0.1
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.00002	<0.00001	0.00002	0.00002	0.00002	0.00002
Calcium, total	mg/L	56	69	61	61	64	62.2	58.7	65.2	63.8	65.2	63.7
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.004	0.007	0.006	0.007	0.008	0.0072	0.007	0.0075	0.0069	0.0065	0.0061
Iron, total	mg/L	<0.02	0.022	<0.02	<0.02	0.021	0.016	0.016	0.067	0.024	0.067	0.022
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	16	20	17	18	18	17.3	17.7	18	17.9	18.7	18.2
Manganese, total	mg/L	0.066	0.082	0.07	0.081	0.087	0.084	0.084	0.091	0.091	0.106	0.08
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.015	0.019	0.017	0.018	0.019	0.018	0.017	0.018	0.019	0.015	0.014
Nickel, total	mg/L	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001
Phosphorus, total	mg/L											
Potassium, total	mg/L	5	6	5	5	5	5.37	5.15	5.32	5.43	5.08	6.13
Selenium, total	mg/L	0.0041	0.0048	0.0045	0.0047	0.0049	0.0045	0.0043	0.0049	0.0046	0.0045	0.0042
Silicon, total	mg/L	3.97	5.02	4.11	4.23	4.37	4.34	4.01	4.41	4.28	4.74	4.93
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	24	29	24	26	26	24.4	25.1	30	29.4	28	23.7
Strontium, total	mg/L	1.14	1.37	1.35	1.39	1.47	1.44	1.41	1.54	1.61	1.26	1.08
Sulpher, total	mg/L	<60	<60	<60	<60	<60	34	33	36	35	36	27
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.0007	0.0019	0.0017	0.0017	0.0018	0.0017	0.0014	0.0015	0.0015	0.0013	0.0015
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.007
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.067	0.083	0.074	0.073	0.078	0.073	0.069	0.071	0.061	0.042	0.074
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	<0.0004	<0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004
Barium, dissolved	mg/L	0.112	0.106	0.106	0.105	0.106	0.106	0.105	0.103	0.092	0.099	0.099
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	0.055	<0.05	0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00001	0.00002	0.00001	0.00001	0.00001	0.00002
Calcium, dissolved	mg/L	63	66	65	74	62	63.9	62.3	62.6	64.2	63.7	63.4
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.003	0.004	0.004	0.004	0.005	0.0051	0.0046	0.0046	0.0046	0.0034	0.0041
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	0.006	0.005	0.007	0.005	0.016	0.008
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	18	18	18	18	18	18.9	18.8	17.2	17.6	18.1	17.7
Manganese, dissolved	mg/L	0.075	0.073	0.071	0.073	0.077	0.086	0.088	0.094	0.093	0.09	0.078
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00006	<0.00002	<0.00002	0.00004	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.018	0.018	0.018	0.018	0.018	0.019	0.019	0.018	0.016	0.015	0.014
Nickel, dissolved	mg/L	0.001	<0.001	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	6	5	5	5	6	5.79	5.58	5.36	5.6	5.15	6.19
Selenium, dissolved	mg/L	0.0048	0.0049	0.0049	0.0056	0.0048	0.005	0.0046	0.0049	0.0049	0.0041	0.0039
Silicon, dissolved	mg/L	4.45	4.56	4.46	5.27	4.43	4.44	4.14	4.39	4.37	4.6	4.7
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	31	26	27	28	29	31	28.5	28.4	29.2	27.3	24.3
Strontium, dissolved	mg/L	1.36	1.37	1.43	1.35	1.38	1.47	1.51	1.49	1.33	1.27	1.12
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	38	36	36	36	35	31
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0008	0.0018	0.0017	0.0016	0.0017	0.0016	0.0015	0.0014	0.0012	0.0013	0.0013
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**07/10/2010**	**09/10/2010**	**11/10/2010**	**12/10/2010**	**13/10/2010**	**15/10/2010**	**17/10/2010**	**19/10/2010**	**20/10/2010**	**21/10/2010**	**22/10/2010**
Total Suspended Solids	mg/L	2	1	4	2	<1	<1	<1	<1	<1	<1	<1
Total Dissolved Solids	mg/L	390	390	410	400	400	380	430	420	460	460	460
pH (field)	pH units	8.08	8.03	7.9	8.05	8.08	8.01				8.02	
pH (lab)	pH units	8.21	8.21	8.03	8.06	8.1	8.08	8.15	8.22	8.19	8.23	8.27
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	592	602	601	604	615	635	663	640	695	694	698
Temperature (field)	C	4.81	3.82	3.68	3.75	4.1	3.53				3.23	
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%	102.1	98.1	105.3	104.7	108	107.4				115.9	
ORP (field)	mV											
Hardness (from total)	mg/L	233	253	224	271	250	242	249	260	294	312	261
Hardness (from dissolved)	mg/L	232	275	239	238	267	269	257	248		270	268
Alkalinity, total	mg/L	150	140	140	160	150	140	140	140	150	150	150
Chloride	mg/L	22	22	21	20	21	24	26	25	24	24	24
Fluoride	mg/L	0.44	0.44	0.48	0.48	0.47	0.44	0.49	0.45	0.44	0.44	0.42
Sulphate, dissolved	mg/L	83	86	82	83	99	97	110	91	120	110	110
Ammonia	mg/L	0.038	0.08	0.16	0.13	0.089	0.2	0.37	0.2	0.22	0.24	0.27
Nitrite (N)	mg/L	0.074	0.088	0.079	0.056	0.087	0.093	0.112	0.094	0.107	0.1	0.109
Nitrate (N)	mg/L	12.4	13.4	13.1	10.9	13.9	14.1	14.8	13.8	14	14.1	15.2
Dissolved Organic Carbon	mg/L	9.3	8.1	8.4	9.3	9.6	9.3	8.1	8.6		8.5	8
Aluminum, total	mg/L	0.138	0.13	0.083	0.126	0.119	0.095	0.082	0.085	0.087	0.118	0.083
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0003	0.0001	0.0003	0.0003	0.0004	0.0003	0.0004	0.0003	0.0004	0.0004	0.0003
Barium, total	mg/L	0.1	0.11	0.098	0.107	0.103	0.1	0.095	0.097	0.108	0.113	0.103
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00001	0.00003	<0.00001	0.00003	<0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002
Calcium, total	mg/L	63.2	68.7	60.4	72.1	68.5	66	67.6	69.7	79.1	85.2	72.1
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0063	0.0073	0.0049	0.0075	0.0107	0.0056	0.0061	0.0061	0.0057	0.006	0.0049
Iron, total	mg/L	0.033	0.016	0.102	0.057	0.031	0.014	0.015	0.014	0.015	0.017	0.013
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	18.3	19.7	17.7	22	19.1	18.7	19.6	20.8	23.4	24.2	19.6
Manganese, total	mg/L	0.081	0.09	0.226	0.111	0.091	0.091	0.097	0.101	0.102	0.103	0.093
Mercury, total	mg/L	0.00004	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.013	0.016	0.012	0.011	0.016	0.016	0.016	0.015	0.016	0.017	0.017
Nickel, total	mg/L	0.001	0.001	<0.001	0.001	0.003	<0.001	<0.001	0.001	<0.001	0.001	<0.001
Phosphorus, total	mg/L											
Potassium, total	mg/L	6.02	6.13	4.77	5.53	5.9	5.73	5.46	6.08	5.83	6.37	5.12
Selenium, total	mg/L	0.0038	0.0043	0.0031	0.0031	0.004	0.004	0.0046	0.004	0.0041	0.0044	0.0041
Silicon, total	mg/L	4.91	4.78	4.44	5.59	4.64	4.46	4.74	5.19	5.2	5.5	4.71
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	23.5	28.4	24.6	25.7	29.1	29.5	31.3	32.4	33.7	32.2	30.3
Strontium, total	mg/L	1.05	1.28	1.06	1.06	1.34	1.35	1.54	1.36	1.76	1.67	1.66
Sulpher, total	mg/L	28	36	28	32	37	37	36	41	51	48	43
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.0015	0.0015	0.0015	0.0023	0.0016	0.0013	0.0015	0.0013	0.0016	0.0017	0.0016
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.046	0.006	0.005	0.005	<0.005
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.063	0.059	0.049	0.036	0.068	0.057	0.05	0.048		0.064	0.059
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003		0.0004	0.0004
Barium, dissolved	mg/L	0.097	0.098	0.101	0.096	0.105	0.097	0.102	0.098		0.104	0.103
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.054	<0.05		<0.05	<0.05
Cadmium, dissolved	mg/L	0.00002	0.00003	0.00002	0.00001	<0.00001	<0.00001	0.00001	<0.00001		<0.00001	<0.00001
Calcium, dissolved	mg/L	63.9	81.6	65.4	65.2	73.9	74.1	70.4	67.9		73.4	73.6
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
Copper, dissolved	mg/L	0.004	0.0043	0.0037	0.003	0.0047	0.0044	0.0047	0.0039		0.0028	0.0026
Iron, dissolved	mg/L	0.007	0.008	0.049	0.011	0.009	0.01	0.011	0.008		<0.005	<0.005
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005
Magnesium, dissolved	mg/L	17.5	17.4	18.4	18.2	20	20.4	19.7	19.1		21.1	20.6
Manganese, dissolved	mg/L	0.069	0.081	0.217	0.081	0.09	0.095	0.092	0.089		0.095	0.093
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00004	<0.00002	<0.00002		<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.013	0.015	0.013	0.01	0.017	0.017	0.016	0.015		0.016	0.016
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001		0.001	<0.001
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	5.94	5.74	5.04	5.04	5.84	5.92	5.69	5.7		5.53	5.31
Selenium, dissolved	mg/L	0.0037	0.0051	0.0035	0.0028	0.0045	0.0045	0.0045	0.0041		0.0041	0.0041
Silicon, dissolved	mg/L	4.74	5.88	4.67	5	5.02	5.18	4.4	4.57		4.43	4.46
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002
Sodium, dissolved	mg/L	23.6	24.1	22.9	21.2	27.8	29.6	29.1	27.4		28.1	27.9
Strontium, dissolved	mg/L	1.06	1.2	1.16	1.01	1.4	1.42	1.6	1.34		1.64	1.62
Sulpher, dissolved	mg/L	31	32	30	28	36	39	38	34		42	43
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005
Uranium, dissolved	mg/L	0.0014	0.0014	0.0018	0.0021	0.0019	0.0016	0.0015	0.0013		0.0016	0.0015
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005		<0.005	<0.005
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**23/10/2010**	**25/10/2010**	**26/10/2010**	**27/10/2010**	**29/10/2010**	**31/10/2010**	**02/11/2010**	**04/11/2010**	**07/11/2010**	**11/11/2010**	**16/11/2010**
Total Suspended Solids	mg/L	<1	<4	<1	<1	<1	<1	<1	<1	<1	<1	1
Total Dissolved Solids	mg/L	450	430	430	430	400	380	360	370	380	370	380
pH (field)	pH units				8.08	8.12	8.18	7.8		7.8	7.6	7.8
pH (lab)	pH units	8.11	8.1	8.08	8.14	8.24	8.22	8.28	8.14	8.08	8.18	8.19
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	690	669	670	652	642	636	592	583	590	585	589
Temperature (field)	C				3.31	2.94	2.17	2.2	3	3.94	0.96	0.19
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%				94.6	79.7	62.6	71.8				104.1
ORP (field)	mV											
Hardness (from total)	mg/L	284	273	286	280	260	260	218	289	285	262	273
Hardness (from dissolved)	mg/L	270	266	265	259	261	262	268	257	268	260	260
Alkalinity, total	mg/L	140	150	150	150	160	160	180	180	180	190	190
Chloride	mg/L	24	23	22	22	20	17	9.3	8	7.5	8.7	7.8
Fluoride	mg/L	0.43	0.38	0.46	0.45	0.38	0.42	0.42	0.41	0.45	0.38	0.42
Sulphate, dissolved	mg/L	110	110	110	110	94	90	81	80	80	77	86
Ammonia	mg/L	0.27	0.27	0.25	0.25	0.16	0.15	0.087	0.024	0.017	0.074	0.069
Nitrite (N)	mg/L	0.111		0.108	0.112	0.112	0.097	0.013	0.007	0.005	0.006	0.007
Nitrate (N)	mg/L	15.1		14.2	14.2	13.7	13.4	8.6	8.1	8	8.2	8.2
Dissolved Organic Carbon	mg/L	8		7.9	7.9	11.2	11.3	8.7		7.5	8.4	7.3
Aluminum, total	mg/L	0.087	0.108	0.117	0.103	0.155	0.106	0.022	0.042	0.023	0.02	0.021
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0004	0.0004	0.0005	0.0003	0.0003	0.0003	0.0002	0.0004	0.0004	0.0002	0.0002
Barium, total	mg/L	0.106	0.113	0.11	0.108	0.105	0.105	0.089	0.101	0.1	0.1	0.099
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00002	0.00001	0.00004	0.00001	0.00001	0.00002	<0.00001	<0.00001	0.00001	<0.00001	<0.00001
Calcium, total	mg/L	77.7	73500	77.2	76.4	69.9	71.4	54.3	73.3	72.7	68.6	70.3
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0054	0.0064	0.0068	0.0059	0.0069	0.0067	0.003	0.0035	0.0034	0.0036	0.0036
Iron, total	mg/L	0.011	0.012	0.021	0.018	0.024	0.02	0.036	0.051	0.031	0.035	0.034
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	21.8	21700	22.7	21.7	20.7	19.9	20	25.8	25.1	22	23.6
Manganese, total	mg/L	0.102	0.111	0.107	0.105	0.107	0.101	0.108	0.119	0.116	0.106	0.111
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00003
Molybdenum, total	mg/L	0.017	0.018	0.017	0.017	0.015	0.014	0.006	0.007	0.006	0.006	0.006
Nickel, total	mg/L	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, total	mg/L											
Potassium, total	mg/L	5.58	6.42	6.24	5.96	6.07	5.47	3.55	4.19	4.02	3.64	3.74
Selenium, total	mg/L	0.0041	0.0046	0.0043	0.0041	0.004	0.0039	0.0017	0.0019	0.0019	0.0018	0.0018
Silicon, total	mg/L	4.95	5.29	4.98	4.97	4.8	5.01	4.25	6.15	6.1	5.62	5.78
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	33	35.3	32.2	31.6	30.2	28.1	22	23.8	23.5	22.4	23.8
Strontium, total	mg/L	1.69	1.7	1.6	1.56	1.35	1.26	0.742	0.759	0.729	0.721	0.705
Sulpher, total	mg/L	47	47	41	43	34	35	27	30	33	29	28
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.0016	0.0018	0.0016	0.0016	0.0018	0.002	0.0022	0.0028	0.0028	0.0026	0.0027
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.057	0.069	0.081	0.08	0.066	0.063	0.02	0.014	0.01	0.01	0.01
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Barium, dissolved	mg/L	0.102	0.1	0.101	0.098	0.1	0.099	0.093	0.097	0.096	0.1	0.098
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001	0.00002	0.00004	0.00002	0.00002	<0.00001	<0.00001	<0.00001
Calcium, dissolved	mg/L	74.2	71900	71.9	70.1	69.6	70.6	70	66.9	68.3	67.6	67.8
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.0026	0.0031	0.0027	0.0029	0.0041	0.0049	0.0025	0.0027	0.003	0.0028	0.0026
Iron, dissolved	mg/L	<0.005	<0.005	0.007	0.005	0.011	0.014	0.027	0.023	0.022	0.017	0.012
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	20.5	21000	20.8	20.4	21.1	20.8	22.7	21.8	23.8	22.2	22.1
Manganese, dissolved	mg/L	0.094	0.091	0.088	0.093	0.101	0.099	0.116	0.107	0.114	0.106	0.101
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.016	0.016	0.015	0.015	0.015	0.014	0.007	0.007	0.006	0.006	0.006
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.001	<0.001
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	5.34	5.49	5.39	5.39	5.99	5.65	4.02	3.77	3.97	3.79	3.66
Selenium, dissolved	mg/L	0.0041	0.0041	0.0041	0.004	0.004	0.0039	0.002	0.0019	0.0019	0.0019	0.0018
Silicon, dissolved	mg/L	4.48	4.49	4.65	4.49	5.04	5.32	6.04	5.62	5.73	5.94	5.92
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	27.9	26.8	27.6	27.9	30.5	29.1	24.4	22.3	24.1	22.7	22.3
Strontium, dissolved	mg/L	1.61	1.48	1.54	1.47	1.31	1.23	0.807	0.779	0.749	0.723	0.694
Sulpher, dissolved	mg/L	42	39	40	39	37	36	31	29	31	31	31
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0016	0.0015	0.0016	0.0016	0.0017	0.0019	0.0024	0.0026	0.0027	0.0026	0.0026
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**19/11/2010**	**21/11/2010**	**24/11/2010**	**26/11/2010**	**27/11/2010**	**28/11/2010**	**29/11/2010**	**30/11/2010**	**01/12/2010**	**02/12/2010**	**03/12/2010**	**04/12/2010**	**05/12/2010**	**06/12/2010**	**07/12/2010**	**08/12/2010**	**10/12/2010**	**11/12/2010**	**13/12/2010**	**14/12/2010**	**19/12/2010**	**23/12/2010**	**24/12/2010**	**28/12/2010**	**30/12/2010**	**01/01/2011**	**03/01/2011**	**05/01/2011**	**08/01/2011**	**10/01/2011**	**12/01/2011**	**13/01/2011**	**14/01/2011**
Total Suspended Solids	mg/L		<1	<1	2	4	2	1	13	2	1	1	<1	<1	<1	21	1	1	1	1	<1	2	1	2	1	<1	1	1	<1	1			2	
Total Dissolved Solids	mg/L		340	330	370	380	370	350	310	370	370	360	360	360	390	370	400	400	390	400	380	370	400	400	410	400	400	390	390	350			360	
pH (field)	pH units				7.63	7.49	7.58	7.69	7.62	7.32	7.58	7.39	7.7	7.64	7.62	7.56	7.5	7.6						7.37	7.22	7.82	7.6	7.66	7.71	7.64	7.31			7.2
pH (lab)	pH units		8.19	8.13	8.08	8.15	8.14	8.13	8.09	8.27	8.27	8.22	8.23	8.19	8.21	8.2	8.19	8.18	8.17	8.2	8.18	8.03	8.15	8.11	8.08	8.1	8.11	7.99	8	7.99			8.07	
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm		582	585	590	593	623	592	594	591	591	610	605	604	602	599	605	608	602	609	608	615	618	621	623	623	626	631	630	588			585	
Temperature (field)	C				1.17	0.22	-0.17	0.32	0.33	-0.19	-0.21	-0.22	-0.12	0.56	1.01	0.39	0.9	0.12						0.16	0.4	0.17	0.55	0.7	0.83	-0.27	0.13			-0.27
Dissolved Oxygen (field)	mg/L																							13.24	13.15		11.72	12.01	12.43	13.15	12.89			9.7
Dissolved Oxygen (field)	%				98.5	101.8	102.3	102.5	102.2	112.5	111	111.6	113.4	105.5	120.6	81.1	82.1	91.1						93.7	91.3	192	81.6	83.9	87.2	89.6	88.7			66.5
ORP (field)	mV																																	
Hardness (from total)	mg/L	259	273	265	271	276	273	274	277	273	269	276	275	287	261	269	281	304	324	306	265	270	271	283	289	302	288	262	268	263	282	326	309	91.1
Hardness (from dissolved)	mg/L			247	259	266	275	270	274	269	285	280	291	288	288	283	269	269	318	268	307		302	271	269	274	273	272	274	261			252	
Alkalinity, total	mg/L		190	190	190	190	180	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	200	200	190	190	200	210			220	
Chloride	mg/L		8	7.3	7	7.2	5.9	7.2	7.1	8.2	8	8	7.3	7.3	7.4	7.2	7.7	9	7.2	7.2	7.7	7.6	7.3	7.2	7.1	6.9	7	7.6	7.2	6.1			3.8	
Fluoride	mg/L		0.44	0.45	0.44	0.46	0.5	0.46	0.47	0.43	0.46	0.47	0.45	0.46	0.45	0.47	0.42	0.45	0.43	0.45	0.43	0.43	0.45	0.46	0.48	0.48	0.49	0.44	0.47	0.4			0.46	
Sulphate, dissolved	mg/L		85	90	84	84	71	86	85	92	91	86	88	89	88	89	90	87	86	89	90	90	92	85	86	85	87	88	89	77			78	
Ammonia	mg/L		0.077	0.034	0.079	0.069	0.061	0.076	0.081	0.058	0.062	0.072	0.085	0.081	0.049	0.066	0.016	0.025	0.051	<0.005	0.015	0.009	<0.05	<0.05	<0.005	<0.005	<0.005	<0.05	<0.05	0.009			<0.005	
Nitrite (N)	mg/L		0.007	0.008	0.008	0.009	0.009	0.009	0.008	0.007	0.006	0.006	0.005	<0.005	0.005	0.008	0.006	0.007	0.006	0.007	0.008	0.009	0.008	0.009	0.01	0.009	0.009	<0.005	<0.005	<0.005			<0.005	
Nitrate (N)	mg/L		8.1	8.2	8.1	8	8	8.1	7.8	8.1	8.3	11	8.2	8.2	8.2	8.1	8	8	8	8.1	7.9	8	8.1	8.7	8.9	8.9	8.7	8.5	8.4	4.1			3.6	
Dissolved Organic Carbon	mg/L				7.5	9.7	9.9	9.9	9.3	6.7	8.2	8.6	7.8	8.5	7.4	7	7.4	7.9	7.6	8.1	6.4			7.5	7.3	7.1	6.9	6.8	7.1	4.8			3.8	
Aluminum, total	mg/L	0.022	0.021	0.022	0.22	0.09	0.021	0.021	0.101	0.065	0.051	0.044	0.05	0.032	0.022	0.414	0.03	0.028	0.029	0.03	0.023	0.062	0.021	0.061	0.044	0.028	0.04	0.026	0.034	0.032	0.025	0.035	0.034	0.739
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0002	0.0003	0.0004	0.0003	0.0003	0.0004	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	0.0002	0.0044
Barium, total	mg/L	0.096	0.101	0.096	0.106	0.103	0.11	0.1	0.106	0.104	0.104	0.106	0.105	0.109	0.097	0.106	0.106	0.112	0.116	0.111	0.094	0.094	0.097	0.099	0.101	0.105	0.103	0.104	0.106	0.098	0.107	0.107	0.104	0.02
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.088
Cadmium, total	mg/L	<0.00001	<0.00001	<0.00001	0.00003	0.00001	<0.00001	0.00003	0.00004	0.00006	0.00018	0.00003	0.00001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00021	<0.00001	0.00003	0.00003	0.00002	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00002	0.00015
Calcium, total	mg/L	66.1	69.5	68.4	70.4	72.1	72.5	71.3	71.8	72.1	71.3	73.4	72.9	76.7	67.8	69	72.7	78.2	83.4	78.9	68.1	68.6	68.3	70.7	72.9	77	72.5	67.9	69.8	65.3	69.8	79.6	75.2	23.7
Chromium, total	mg/L	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.005
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0014
Copper, total	mg/L	0.0047	0.0037	0.0038	0.0078	0.0058	0.0074	0.0033	0.0054	0.0065	0.0065	0.008	0.0044	0.0045	0.0038	0.0108	0.0032	0.0033	0.0035	0.0036	0.0032	0.0155	0.0033	0.0085	0.0038	0.0039	0.0035	0.0032	0.0058	0.0056	0.0022	0.003	0.0024	0.0543
Iron, total	mg/L	0.036	0.034	0.039	0.349	0.146	0.042	0.041	0.166	0.113	0.096	0.075	0.074	0.056	0.039	0.648	0.052	0.052	0.041	0.056	0.055	0.153	0.045	0.093	0.061	0.041	0.053	0.051	0.064	0.081	0.062	0.08	0.061	1.46
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0029
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	22.8	24.2	22.9	23.2	23.3	22.4	23.3	23.8	22.6	22	22.4	22.6	23.3	22.3	23.4	24.2	26.5	28.1	26.5	23	23.9	24.4	25.8	25.9	26.7	25.9	22.4	22.8	24.2	26.1	31	29.5	7.75
Manganese, total	mg/L	0.098	0.103	0.097	0.171	0.134	0.376	0.107	0.158	0.131	0.115	0.114	0.115	0.112	0.096	0.176	0.108	0.12	0.075	0.117	0.099	0.115	0.1	0.114	0.106	0.109	0.108	0.101	0.093	0.142	0.164	0.184	0.166	0.122
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002
Molybdenum, total	mg/L	0.006	0.006	0.006	0.006	0.006	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.007	0.006	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.004	0.005	0.005	0.004	0.002
Nickel, total	mg/L	<0.001	<0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	<0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.006
Phosphorus, total	mg/L																																	
Potassium, total	mg/L	3.49	3.66	3.48	3.76	3.75	4.52	3.69	3.78	3.62	3.53	3.51	3.61	3.71	3.35	3.5	3.6	3.85	4.09	3.81	3.31	3.42	3.44	3.73	3.64	3.76	3.76	3.41	3.48	2.62	2.69	2.86	2.71	10.6
Selenium, total	mg/L	0.0018	0.0019	0.0018	0.0019	0.0019	0.0026	0.002	0.0019	0.0019	0.0022	0.0022	0.0021	0.0021	0.0019	0.0019	0.0019	0.0019	0.002	0.002	0.0019	0.0019	0.0017	0.0019	0.0019	0.0021	0.0019	0.0019	0.002	0.001	0.0009	0.0009	0.0008	0.0003
Silicon, total	mg/L	5.51	5.87	5.83	5.93	5.88	5.54	5.68	5.89	5.61	5.48	5.58	5.56	5.8	5.38	6.13	5.75	6.19	6.6	6.3	5.55	5.64	5.67	5.73	5.85	6.07	5.78	5.26	5.39	5.58	5.9	6.92	6.52	5.89
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00031
Sodium, total	mg/L	22.2	23.2	21.9	20.5	20.5	20.9	20.3	21	20.1	19.7	20	20.1	20.3	19.7	20.2	21.9	23.5	25.1	23.8	19.6	20.5	20.9	23.2	23.1	23.7	23.1	19.8	20.2	19.6	20.6	24.2	22.8	54.6
Strontium, total	mg/L	0.7	0.721	0.688	0.721	0.719	0.717	0.701	0.715	0.718	0.712	0.705	0.71	0.735	0.663	0.681	0.716	0.764	0.803	0.758	0.677	0.676	0.693	0.682	0.697	0.716	0.707	0.71	0.721	0.681	0.726	0.72	0.678	0.097
Sulpher, total	mg/L	28	29	30	29	30	31	29	29	29	28	27	29	29	29	31	32	33	34	33	28	28	31	32	33	32	32	29	28	26	26	31	31	14
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024
Uranium, total	mg/L	0.0027	0.0028	0.0027	0.003	0.0031	0.0031	0.003	0.003	0.0031	0.0031	0.0031	0.0032	0.0033	0.0029	0.0029	0.0032	0.0035	0.0036	0.0034	0.0029	0.0029	0.003	0.003	0.0032	0.0033	0.0032	0.0031	0.0032	0.0031	0.0033	0.0033	0.0031	0.0001
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.064
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001
Aluminum, dissolved	mg/L			0.006	0.009	0.007	0.006	0.006	0.007	0.006	0.018	0.023	0.016	0.016	0.021	0.038	0.011	0.011	0.009	0.009	0.015		0.006	0.013	0.02	0.019	0.009	0.006	0.016	0.012			0.005	
Antimony, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	
Arsenic, dissolved	mg/L			0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0003		0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003			0.0002	
Barium, dissolved	mg/L			0.092	0.095	0.094	0.096	0.095	0.093	0.092	0.097	0.096	0.096	0.096	0.097	0.099	0.095	0.095	0.116	0.1	0.1		0.102	0.095	0.097	0.096	0.099	0.105	0.104	0.095			0.095	
Beryllium, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			<0.0001	
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			<0.001	
Boron, dissolved	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05	
Cadmium, dissolved	mg/L			0.00002	0.00001	0.00001	<0.00001	<0.00001	0.00001	0.00002	0.00009	0.0001	0.0001	0.00029	0.0005	0.00003	<0.00001	<0.00001	0.00002	0.00001	0.00001		0.00001	0.00003	0.00001	0.00001	0.00001	<0.00001	0.00003	0.00001			0.00002	
Calcium, dissolved	mg/L			64.4	67.6	68.8	71	70.1	69.2	68.6	74.2	72.1	75.5	74.8	76.1	73.7	68.9	68.6	80.8	68	79.6		76.3	68.1	67.9	69.4	69	71.1	70.7	65.1			60.8	
Chromium, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			<0.001	
Cobalt, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	
Copper, dissolved	mg/L			0.0026	0.0027	0.0029	0.0029	0.0028	0.003	0.0029	0.0036	0.0042	0.0044	0.0058	0.0076	0.0042	0.0044	0.0029	0.0038	0.0033	0.0042		0.0033	0.0046	0.0042	0.0031	0.0033	0.0028	0.0036	0.0021			0.0016	
Iron, dissolved	mg/L			0.008	0.009	0.012	0.01	0.011	0.011	0.012	0.041	0.046	0.037	0.042	0.036	0.077	0.015	0.021	0.02	0.021	0.032		0.01	0.03	0.034	0.019	0.016	0.017	0.038	0.044			0.016	
Lead, dissolved	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002	
Lithium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	
Magnesium, dissolved	mg/L			20.9	21.9	22.9	23.7	23.1	24.6	23.7	24.3	24.4	24.8	24.5	23.9	24	23.7	23.6	28.3	23.9	26.4		27.2	24.6	24.1	24.6	24.5	22.9	23.6	23.9			24.3	
Manganese, dissolved	mg/L			0.088	0.076	0.092	0.099	0.097	0.097	0.095	0.11	0.111	0.108	0.101	0.099	0.106	0.084	0.104	0.119	0.101	0.112		0.097	0.108	0.103	0.099	0.095	0.087	0.086	0.128			0.139	
Mercury, dissolved	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002			<0.00002	
Molydenum, dissolved	mg/L			0.005	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.007	0.005	0.006		0.006	0.005	0.005	0.005	0.005	0.006	0.006	0.004			0.004	
Nickel, dissolved	mg/L			0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001			<0.001	
Phosphorus, dissolved	mg/L																																	
Potassium, dissolved	mg/L			3.26	3.31	3.43	3.5	3.43	3.7	3.55	3.6	3.73	3.76	3.82	3.95	3.63	3.53	3.49	4.26	3.64	3.88		3.92	3.55	3.53	3.48	3.48	3.42	3.52	2.57			2.35	
Selenium, dissolved	mg/L			0.0018	0.0018	0.0019	0.0019	0.0019	0.0019	0.0018	0.0019	0.0019	0.002	0.0019	0.0019	0.0018	0.0019	0.002	0.0022	0.002	0.0021		0.002	0.0019	0.0019	0.002	0.002	0.002	0.002	0.001			0.0007	
Silicon, dissolved	mg/L			5.15	5.38	5.5	5.58	5.61	5.55	5.46	5.81	5.79	6.03	5.93	6.04	5.87	5.5	5.37	6.25	5.32	6.39		5.98	5.36	5.34	5.33	5.42	5.6	5.6	5.63			5.36	
Silver, dissolved	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002			<0.00002	
Sodium, dissolved	mg/L			18.5	19.8	20.5	21.2	20.9	22.4	21.2	21.7	21.8	22.4	22	21.3	21.1	21.7	20.9	25	21.2	24.2		24.3	22.2	21.8	22.4	22.1	20.5	21.1	19.4			21.1	
Strontium, dissolved	mg/L			0.68	0.701	0.69	0.695	0.694	0.687	0.687	0.723	0.715	0.714	0.707	0.722	0.72	0.686	0.688	0.799	0.675	0.754		0.737	0.692	0.707	0.723	0.706	0.745	0.738	0.683			0.664	
Sulpher, dissolved	mg/L			26	29	29	30	30	32	31	31	32	32	32	31	31	32	32	36	30	36		36	32	32	32	33	31	32	27			27	
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005			<0.00005	
Tin, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	
Titanium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	
Uranium, dissolved	mg/L			0.0026	0.0028	0.0029	0.0029	0.003	0.0029	0.0028	0.0031	0.003	0.0031	0.003	0.0031	0.0031	0.0029	0.003	0.0035	0.003	0.0032		0.0034	0.003	0.0031	0.0031	0.003	0.0031	0.0031	0.0028			0.0029	
Vanadium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	
Zinc, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	
Zirconium, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**17/01/2011**	**18/01/2011**	**22/01/2011**	**23/01/2011**	**28/01/2011**	**30/01/2011**	**01/02/2011**	**03/02/2011**	**04/02/2011**	**05/02/2011**	**06/02/2011**	**07/02/2011**	**08/02/2011**	**09/02/2011**	**10/02/2011**	**11/02/2011**	**12/02/2011**
Total Suspended Solids	mg/L	6		3		<1	1	2	2		5	75		1	1		2	
Total Dissolved Solids	mg/L	350		350		330	330	310	350		400	370		370	370		320	
pH (field)	pH units	7.38	7.21		6.67	7.47	7.42	7.44	7.48	7.52	7.63	7.31	7.16	6.6				
pH (lab)	pH units	7.83		7.78		8.38	8.35	8.1	8.12		8.13	8.06		7.84	7.84		8.05	
Specific Conductance, field	µS/cm																	
Specific Conductance (lab)	µS/cm	584		592		573	580	582	583		649	597		602	602		586	
Temperature (field)	C	-0.31	-0.28		-0.28	-0.3	-0.32	-0.3	-0.25	-0.26	-0.32	-0.3	-0.32	-0.32				
Dissolved Oxygen (field)	mg/L	8.42	9.35		12.72	11.8	11.85	11.52	11.93		11.99	12.77	12.05	10.63				
Dissolved Oxygen (field)	%	57.3	64.2		86.7	77	80.3	78.2	81.4		81.5	87.4	82.7	72.4				
ORP (field)	mV																	
Hardness (from total)	mg/L	330	263	280	260	256	256	303	255	306	322	303	291	291	303	307	295	322
Hardness (from dissolved)	mg/L	302		276		268	277	259	261		277	253		249	249		263	
Alkalinity, total	mg/L	210		210		220	220	220	220		210	220		220	220		210	
Chloride	mg/L	5.5		4.8		5.3	4.7	5.8	4.8		7.1	8.9		6.2	6.2		5.5	
Fluoride	mg/L	0.42		0.41		0.43	0.43	0.47	0.47		0.49	0.45		0.45	0.45		0.46	
Sulphate, dissolved	mg/L	76		78		72	72		79			85		82	82		74	
Ammonia	mg/L	0.006		0.11		0.019	0.014	0.022	<0.005		0.015	0.017		0.019	0.019		0.034	
Nitrite (N)	mg/L	0.006		<0.005		<0.005	<0.005	<0.005	<0.005		0.011	<0.005		<0.005	<0.005		<0.005	
Nitrate (N)	mg/L	3.4		3.2		3.2	3.2	2.92	2.97		8.4	3.7		3.6	3.6		3.5	
Dissolved Organic Carbon	mg/L	4.5		4.2		4	4.1	3.9	4.2		6.7	3.8		3.2	3.2		4	
Aluminum, total	mg/L	0.114	0.086	0.027	0.019	0.029	0.005	0.009	0.048	0.084	0.054	0.048	0.068	0.068	0.035	0.056	0.034	0.237
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0003	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0003	0.0001	0.0003	0.0003	0.0002	0.0001	0.0002	0.0001
Barium, total	mg/L	0.116	0.093	0.101	0.089	0.095	0.095	0.115	0.094	0.115	0.113	0.1	0.1	0.1	0.106	0.109	0.106	0.111
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.055
Cadmium, total	mg/L	0.0001	<0.00001	0.00002	<0.00001	0.00009	0.00003	0.00002	0.00002	<0.00001	<0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00003	0.00002
Calcium, total	mg/L	81.6	63.1	66.7	64.3	63.1	62.5	74.1	61	73.4	82.6	70.8	68.7	68.7	71.5	73.9	70.6	76.9
Chromium, total	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0236	0.0068	0.0035	0.0016	0.0029	0.0016	0.0025	0.0048	0.0069	0.0046	0.0025	0.0149	0.0149	0.0029	0.0033	0.0059	0.0036
Iron, total	mg/L	0.214	0.162	0.077	0.054	0.072	0.022	0.033	0.088	0.16	0.094	0.08	0.132	0.132	0.064	0.118	0.07	0.069
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	30.6	25.7	27.4	24.3	24	24.3	28.8	25	29.7	28.2	30.7	29	29	30.2	29.7	28.8	31.5
Manganese, total	mg/L	0.195	0.184	0.157	0.127	0.134	0.139	0.159	0.127	0.151	0.118	0.135	0.141	0.141	0.138	0.158	0.149	0.152
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002
Molybdenum, total	mg/L	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, total	mg/L	0.002	0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001
Phosphorus, total	mg/L																	
Potassium, total	mg/L	2.76	2.33	2.4	2.15	2.02	2.03	2.75	2.16	2.9	4.36	2.49	2.39	2.39	2.44	2.55	2.38	2.71
Selenium, total	mg/L	0.0009	0.0008	0.0007	0.0007	0.0007	0.0007	0.0008	0.0007	0.0008	0.0019	0.0008	0.001	0.001	0.0008	0.0008	0.0009	0.0009
Silicon, total	mg/L	7.26	5.87	6.05	5.86	5.6	5.51	6.93	5.26	6.9	6.73	6.53	6.37	6.37	6.6	6.54	6.29	6.94
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002
Sodium, total	mg/L	23.8	21.4	22.4	20.1	18.4	18.2	21.2	19.2	22.3	24.4	26.1	24.4	24.4	25.4	23.1	22.6	25.2
Strontium, total	mg/L	0.713	0.608	0.669	0.59	0.644	0.633	0.712	0.638	0.738	0.774	0.664	0.659	0.659	0.687	0.722	0.699	0.742
Sulpher, total	mg/L	30	25	27	26	24	25	30	24	30	39	33	31	31	30	33	28	28
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.0033	0.0026	0.0031	0.0027	0.0031	0.003	0.0033	0.003	0.0033	0.0034	0.0032	0.0031	0.0031	0.0033	0.0034	0.0033	0.0035
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.037		<0.003		0.005	0.011	0.004	0.006		0.058	0.017		0.007	0.007		0.006	
Antimony, dissolved	mg/L	<0.0005		<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	
Arsenic, dissolved	mg/L	0.0002		0.0002		0.0002	0.0002	0.0002	0.0002		0.0003	0.0002		0.0002	0.0002		0.0002	
Barium, dissolved	mg/L	0.099		0.098		0.094	0.1	0.095	0.093		0.097	0.096		0.094	0.094		0.09	
Beryllium, dissolved	mg/L	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	
Bismuth, dissolved	mg/L	<0.001		<0.001		<0.001	<0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	
Boron, dissolved	mg/L	<0.05		<0.05		<0.05	<0.05	<0.05	<0.05		<0.05	<0.05		<0.05	<0.05		<0.05	
Cadmium, dissolved	mg/L	0.00005		0.00002		0.00002	0.00002	0.00003	0.00001		0.00005	0.00002		0.00001	0.00001		0.00008	
Calcium, dissolved	mg/L	72.4		65.9		63.9	66.9	61.8	62.4		69.8	62.2		60.7	60.7		63.4	
Chromium, dissolved	mg/L	<0.001		<0.001		<0.001	<0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	
Cobalt, dissolved	mg/L	<0.0005		<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	
Copper, dissolved	mg/L	0.0031		0.0017		0.0014	0.0015	0.0018	0.0017		0.0049	0.0029		0.0019	0.0019		0.0026	
Iron, dissolved	mg/L	0.076		0.01		0.018	0.021	0.015	0.016		0.035	0.039		0.022	0.022		0.03	
Lead, dissolved	mg/L	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002	<0.0002		<0.0002	
Lithium, dissolved	mg/L	<0.005		<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	
Magnesium, dissolved	mg/L	29.4		27		26.4	26.7	25.5	25.5		25	23.8		23.7	23.7		25.5	
Manganese, dissolved	mg/L	0.171		0.141		0.125	0.139	0.138	0.113		0.093	0.108		0.109	0.109		0.138	
Mercury, dissolved	mg/L	<0.00002		<0.00002		<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002		<0.00002	<0.00002		<0.00002	
Molydenum, dissolved	mg/L	0.004		0.004		0.003	0.004	0.003	0.004		0.005	0.004		0.004	0.004		0.004	
Nickel, dissolved	mg/L	<0.001		<0.001		<0.001	<0.001	<0.001	<0.001		0.001	<0.001		<0.001	<0.001		<0.001	
Phosphorus, dissolved	mg/L																	
Potassium, dissolved	mg/L	2.61		2.46		2.26	2.27	2.18	2.23		3.45	2.27		2.17	2.17		2.25	
Selenium, dissolved	mg/L	0.0007		0.0007		0.0007	0.0007	0.0007	0.0007		0.0017	0.0008		0.0008	0.0008		0.0008	
Silicon, dissolved	mg/L	6.28		6.03		5.9	6.17	5.34	5.42		5.33	5.3		5.16	5.16		5.32	
Silver, dissolved	mg/L	<0.00002		<0.00002		<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002		<0.00002	<0.00002		<0.00002	
Sodium, dissolved	mg/L	22.8		22.2		20.5	20.3	19.3	19.7		22.2	20.5		20	20		19.4	
Strontium, dissolved	mg/L	0.647		0.668		0.612	0.653	0.635	0.615		0.724	0.708		0.68	0.68		0.645	
Sulpher, dissolved	mg/L	31		29		29	29	26	27		33	25		25	25		26	
Thallium, dissolved	mg/L	<0.00005		<0.00005		<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	
Tin, dissolved	mg/L	<0.005		<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	
Titanium, dissolved	mg/L	<0.005		<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	
Uranium, dissolved	mg/L	0.0029		0.0031		0.0027	0.003	0.0029	0.0029		0.0031	0.0032		0.003	0.003		0.0032	
Vanadium, dissolved	mg/L	<0.005		<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	
Zinc, dissolved	mg/L	<0.005		<0.005		<0.005	<0.005	<0.005	<0.005		0.013	<0.005		<0.005	<0.005		<0.005	
Zirconium, dissolved	mg/L	<0.0005		<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**13/02/2011**	**14/02/2011**	**15/02/2011**	**26/02/2011**	**02/03/2011**	**03/03/2011**	**05/03/2011**	**08/03/2011**	**22/03/2011**	**27/03/2011**	**29/03/2011**	**31/03/2011**	**02/04/2011**	**09/04/2011**	**15/04/2011**	**21/04/2011**
Total Suspended Solids	mg/L	2		2	1	3	3	2	2	110	4	10	6	2	3	21	2
Total Dissolved Solids	mg/L	330		350	370	370	370	390	380	350	370	330	350	350	360	350	310
pH (field)	pH units																
pH (lab)	pH units	7.99		7.85	7.92	7.93	7.89	7.89	7.88	8.32	8.28	8.13	8.06	8.13	7.85	8.1	8.22
Specific Conductance, field	µS/cm																
Specific Conductance (lab)	µS/cm	591		599	601	610	613	600	611	585	572	584	588	599	593	560	581
Temperature (field)	C																
Dissolved Oxygen (field)	mg/L																
Dissolved Oxygen (field)	%																
ORP (field)	mV																
Hardness (from total)	mg/L	310	313	295	273	278	281	318	331	320	309	272	267	274	280	268	285
Hardness (from dissolved)	mg/L	264		266	284	284	288	303	305	298	288	258	260	269	264	257	272
Alkalinity, total	mg/L	210		220	220	230	230	230	230	250	230	210	210	220	210	210	220
Chloride	mg/L	6.6		5.7	5.2	5	5.7	8.2	6.1	7.5	5.9	6.1	5.6	5.7	5.8	4.4	5.9
Fluoride	mg/L	0.46		0.47	0.46	0.47	0.48	0.5	0.49	0.49	0.48	0.49	0.51	0.48	0.47	0.49	0.51
Sulphate, dissolved	mg/L	75		77	85	82	79	83	81	81	83	75	79	78	79	77	84
Ammonia	mg/L	0.043		0.029	0.03	0.037	0.026	0.044	0.02	0.18	0.005	<0.005	0.007	0.009	<0.005	0.013	0.007
Nitrite (N)	mg/L	<0.005		<0.005	0.005	0.006	0.006	0.006	0.005	0.07	0.007	0.008	0.006	0.007	0.009	0.011	0.007
Nitrate (N)	mg/L	3.6		3.6	3.6	3.6	3.6	3.5	3.5	1.39	3.8	4.3	3.7	4.1	4	3.5	3.9
Dissolved Organic Carbon	mg/L			4.5	4.6	5.2	4.7	4.6	4.5	5.5	4.3	4.8	5.6	5.4	4.7	5.4	4.6
Aluminum, total	mg/L	0.029	0.037	0.018	0.005	0.037	0.029	0.044	0.024	1.89	0.099	0.093	0.147	0.145	0.077	0.186	0.065
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0001	0.0002	0.0003	0.0002	0.0002	0.0002	0.0004	0.0003	0.0012	0.0003	0.0003	0.0002	0.0002	0.0003	0.0004	0.0003
Barium, total	mg/L	0.11	0.113	0.103	0.099	0.105	0.104	0.119	0.12	0.166	0.104	0.101	0.101	0.1	0.1	0.096	0.099
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	0.055	0.054	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.00001	0.00002	<0.00001	0.00002	0.00006	0.00006	0.00003	0.00002	0.0002	0.00011	0.00004	0.00008	<0.00001	<0.00001	0.0001	0.00002
Calcium, total	mg/L	73.8	74.3	70.1	66	67.3	67.4	78.5	80.9	73	74.2	65.1	64.5	65.9	66	62.9	67.5
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.009
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0024	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0028	0.0037	0.0024	0.0021	0.0153	0.0105	0.0099	0.0057	0.0819	0.0434	0.0114	0.0127	0.0059	0.0098	0.0156	0.0051
Iron, total	mg/L	0.057	0.075	0.059	0.01	0.076	0.061	0.093	0.051	3.07	0.19	0.145	0.227	0.194	0.13	0.27	0.185
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	30.4	30.9	29	26.2	26.7	27.3	29.5	31.3	33.4	30	26.6	25.7	26.5	27.9	27	28.3
Manganese, total	mg/L	0.148	0.155	0.151	0.123	0.13	0.129	0.14	0.127	2.19	0.082	0.08	0.075	0.08	0.082	0.117	0.13
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005
Nickel, total	mg/L	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	0.001	<0.001	0.001	<0.001	<0.001	0.001	0.006
Phosphorus, total	mg/L									0.164	0.02	0.021	0.053	0.016	0.018	0.032	0.018
Potassium, total	mg/L	2.54	2.58	2.47	2.31	2.51	2.51	2.62	2.78	2.8	2.57	2.63	2.65	2.4	2.5	2.61	2.43
Selenium, total	mg/L	0.0008	0.0009	0.0008	0.0007	0.0006	0.0006	0.001	0.0008	0.0004	0.0008	0.0006	0.0006	0.0007	0.0007	0.0006	0.0007
Silicon, total	mg/L	6.65	6.79	6.01	5.78	6	5.99	6.38	6.53	9.52	6.34	5.79	6.09	5.93	5.66	5.7	5.85
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	0.00004	<0.00002	0.00005	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	24	24.2	21.5	21	21.5	21.9	21.9	22.8	22.7	22.5	20.3	19.8	21.2	20.4	19.7	20.3
Strontium, total	mg/L	0.721	0.734	0.689	0.692	0.703	0.703	0.8	0.809	0.777	0.735	0.679	0.659	0.688	0.703	0.67	0.695
Sulpher, total	mg/L	30	31	27	26	27	28	29	30	30	30	27	26	28	27	28	29
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.077	0.006	<0.005	0.008	0.006	<0.005	0.008	<0.005
Uranium, total	mg/L	0.0034	0.0034	0.0034	0.0033	0.0033	0.0033	0.0036	0.0036	0.0028	0.0035	0.0031	0.0031	0.0034	0.0035	0.0034	0.0036
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	0.006	0.008	0.009	<0.005	0.02	0.005	0.014	0.06	<0.005	<0.005	0.027	<0.005
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.008		0.008	<0.003	<0.003	<0.003	0.024	0.004	0.009	0.016	0.018	0.009	0.005	0.005	0.005	0.004
Antimony, dissolved	mg/L	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0002		0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Barium, dissolved	mg/L	0.09		0.095	0.1	0.102	0.1	0.102	0.085	0.112	0.099	0.096	0.099	0.092	0.094	0.091	0.099
Beryllium, dissolved	mg/L	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.00002		0.00009	0.00002	0.00002	0.00003	0.00007	0.00002	0.00008	0.0001	0.00003	0.00002	<0.00001	<0.00001	0.00008	0.00003
Calcium, dissolved	mg/L	61.9		62.4	68.6	67.6	69.2	70.5	71	69.7	69.1	60.8	63.1	65.3	64	60.2	65.1
Chromium, dissolved	mg/L	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.0025		0.0043	0.0017	0.0027	0.0027	0.0064	0.0029	0.0037	0.0027	0.0043	0.003	0.0021	0.0024	0.0035	0.0021
Iron, dissolved	mg/L	0.036		0.026	<0.005	<0.005	<0.005	0.045	0.011	0.045	0.03	0.033	0.013	0.011	0.011	0.013	0.012
Lead, dissolved	mg/L	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	26.5		26.8	27.3	27.9	27.9	30.9	31	30.2	28.1	25.7	24.8	25.7	25.2	25.8	26.6
Manganese, dissolved	mg/L	0.13		0.135	0.097	0.089	0.107	0.132	0.12	1.42	0.075	0.071	0.06	0.061	0.072	0.093	0.12
Mercury, dissolved	mg/L	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.004		0.004	0.003	0.004	0.003	0.004	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.003	0.004
Nickel, dissolved	mg/L	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Phosphorus, dissolved	mg/L									<0.01	<0.01	0.018	0.014	<0.01	0.01	0.012	0.012
Potassium, dissolved	mg/L	2.19		2.4	2.36	2.53	2.41	3.21	2.67	2.47	2.4	2.56	2.33	2.24	2.29	2.34	2.36
Selenium, dissolved	mg/L	0.0008		0.0008	0.0007	0.0007	0.0007	0.0007	0.0008	0.0003	0.0007	0.0007	0.0007	0.0007	0.0007	0.0006	0.0007
Silicon, dissolved	mg/L	5.32		5.31	5.99	5.87	6.09	6.03	6.51	6.22	5.92	5.47	5.53	6.1	5.93	5.3	5.74
Silver, dissolved	mg/L	<0.00002		0.00003	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	19.7		19.8	20.2	20.7	20.9	22.4	23.4	21.4	20.9	19.8	18.2	20.5	17.8	18.4	19.2
Strontium, dissolved	mg/L	0.65		0.664	0.694	0.693	0.7	0.731	0.661	0.715	0.691	0.645	0.681	0.633	0.658	0.656	0.713
Sulpher, dissolved	mg/L	25		27	29	29	29	34	33	30	30	27	26	29	29	27	28
Thallium, dissolved	mg/L	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0032		0.0033	0.0031	0.0033	0.0031	0.0035	0.0034	0.0024	0.0032	0.003	0.0032	0.0032	0.0031	0.0031	0.0034
Vanadium, dissolved	mg/L	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.005		<0.005	<0.005	<0.005	0.011	0.01	<0.005	<0.005	<0.005	0.034	0.008	<0.005	<0.005	0.023	<0.005
Zirconium, dissolved	mg/L	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/04/2011**	**05/05/2011**	**14/05/2011**	**24/05/2011**	**29/05/2011**	**04/06/2011**	**16/06/2011**	**27/06/2011**	**01/07/2011**
Total Suspended Solids	mg/L	3	93	10	<2	5	1	<1	3	2
Total Dissolved Solids	mg/L	240	270	290	320	340	330	360	320	170
pH (field)	pH units									
pH (lab)	pH units	7.85	7.61	8.13	8.25	8.12	8.04	8.21	8.2	8.05
Specific Conductance, field	µS/cm									
Specific Conductance (lab)	µS/cm	313	270		521	548	574	583	543	392
Temperature (field)	C									
Dissolved Oxygen (field)	mg/L									
Dissolved Oxygen (field)	%									
ORP (field)	mV									
Hardness (from total)	mg/L	156	142	186	236	232	239	271	244	162
Hardness (from dissolved)	mg/L	143	115	192	229	248	266	285	260	189
Alkalinity, total	mg/L	110	95	150	190	200	210	220	210	160
Chloride	mg/L	4.6	3.1	4.2	4.7	4.9				
Fluoride	mg/L	0.28	0.23	0.37	0.44	0.49	0.48			
Sulphate, dissolved	mg/L	39	38	62	77	73	74		70	53
Ammonia	mg/L	0.016	0.012	0.011	0.015	0.016	0.016	0.007	0.019	0.007
Nitrite (N)	mg/L	0.013	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	1.42	1.39	2.4	2.78	3.1	3	2.52	1.68	1.25
Dissolved Organic Carbon	mg/L	34		21.1	10.5	7	5.7	4.8	7	20.6
Aluminum, total	mg/L	0.127	10.8	0.454	0.045	0.076	0.02	0.123	0.041	0.09
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0004	0.004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004
Barium, total	mg/L	0.063	0.175	0.075	0.081	0.085	0.081	0.09	0.084	0.064
Beryllium, total	mg/L	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00006	0.00011	0.00003	0.00002	<0.00001	0.00003	0.00004	0.00003	0.00005
Calcium, total	mg/L	37	31.5	44.6	55.3	55.5	56.9	62.9	58.4	37.5
Chromium, total	mg/L	<0.001	0.017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0168	0.0312	0.0143	0.0046	0.006	0.0022	0.0028	0.0089	0.008
Iron, total	mg/L	0.168	13.5	0.611	0.098	0.235	0.044	0.154	0.099	0.142
Lead, total	mg/L	<0.0002	0.0028	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
Lithium, total	mg/L	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	15.6	15.4	18.2	23.7	22.6	23.6	27.6	23.8	16.7
Manganese, total	mg/L	0.081	0.204	0.147	0.077	0.097	0.07	0.078	0.09	0.064
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.002	0.002	0.003	0.004	0.004	0.004	0.005	0.004	0.003
Nickel, total	mg/L	0.002	0.016	0.002	0.002	0.002	<0.001	0.001	0.001	0.002
Phosphorus, total	mg/L	0.082	0.146	0.042	0.011	0.017	<0.01	0.017	0.016	0.022
Potassium, total	mg/L	3.47	3	1.98	2.1	2.14	2.04	2.43	2.12	1.48
Selenium, total	mg/L	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005	0.0006	0.0004	0.0003
Silicon, total	mg/L	4.73	23.2	5.48	5.24	4.9	4.79	5.49	5.32	4.3
Silver, total	mg/L	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	10.5	8.75	13	17.3	17	17.4	20.6	18.2	12.5
Strontium, total	mg/L	0.355	0.312	0.445	0.575	0.595	0.6	0.653	0.586	0.408
Sulpher, total	mg/L	14	10	17	23	22	24	27	24	14
Thallium, total	mg/L	<0.00005	0.00009	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	0.26	0.021	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Uranium, total	mg/L	0.0016	0.0016	0.0023	0.0029	0.0031	0.0032	0.0034	0.0027	0.0018
Vanadium, total	mg/L	<0.005	0.024	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	0.034	<0.005	<0.005	<0.005	<0.005	0.006	0.005	<0.005
Zirconium, total	mg/L	<0.0005	0.0041	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.066	0.085	0.043	0.013	0.011	0.008	0.008	0.019	0.03
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0004
Barium, dissolved	mg/L	0.06	0.049	0.069	0.077	0.088	0.09	0.084	0.09	0.071
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.00002	0.00003	0.0001	0.00003	0.00002	<0.00001	0.00001	0.00002	0.00002
Calcium, dissolved	mg/L	34.8	27.4	46.3	53.7	58.6	62.2	69.6	62.6	46.8
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.0125	0.0127	0.0069	0.003	0.0026	0.0022	0.0022	0.0043	0.0051
Iron, dissolved	mg/L	0.096	0.203	0.068	0.033	0.022	0.024	0.017	0.038	0.063
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	13.6	11.4	18.7	23.1	24.8	26.8	27.1	25.1	17.5
Manganese, dissolved	mg/L	0.064	0.062	0.088	0.069	0.075	0.072	0.074	0.084	0.055
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.002	0.001	0.003	0.003	0.004	0.004	0.004	0.004	0.002
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	0.002
Phosphorus, dissolved	mg/L	0.038	0.022	0.015	<0.01	<0.01	<0.01	<0.01	0.012	<0.01
Potassium, dissolved	mg/L	2.89	1.84	1.95	2.17	2.37	2.36	2.43	2.25	1.51
Selenium, dissolved	mg/L	0.0004	0.0003	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004
Silicon, dissolved	mg/L	4.71	3.67	5.09	5.01	5.16	5.58	6.59	5.63	5.61
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	9.25	7.72	13.8	16.4	18.6	20	20.7	19.1	12.9
Strontium, dissolved	mg/L	0.331	0.26	0.438	0.565	0.632	0.671	0.639	0.667	0.453
Sulpher, dissolved	mg/L	13	11	19	26	27	28	30	24	17
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0013	0.0011	0.0022	0.0027	0.0032	0.0032	0.0035	0.0032	0.0016
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**12/07/2011**	**16/07/2011**	**23/07/2011**	**31/07/2011**	**02/08/2011**	**07/08/2011**	**16/08/2011**	**28/08/2011**	**30/08/2011**	**07/09/2011**	**12/09/2011**	**19/09/2011**	**24/09/2011**
Total Suspended Solids	mg/L	<1	<1	<1	<1	3	<1	<1	<1	<1	<1	<1	<4	<4
Total Dissolved Solids	mg/L	350	250	340	310	300	230	370	310	330	340	350	340	330
pH (field)	pH units										7.76	7.66	7.75	7.71
pH (lab)	pH units	8.09	7.91	7.98	8.24	8.2	7.97	8.13	8.01	8.05	8.29	8.13	8.11	8.17
Specific Conductance, field	µS/cm													
Specific Conductance (lab)	µS/cm	533	379	543	539	456	371	525	526	532	538	538	530	524
Temperature (field)	C										3.9	1.1	2.2	1.9
Dissolved Oxygen (field)	mg/L										11.07	15.85	11.93	11.36
Dissolved Oxygen (field)	%										84.5	112.1	87	82
ORP (field)	mV													
Hardness (from total)	mg/L	261	188	259	241	208	183	234	256	225	230	252	243	225
Hardness (from dissolved)	mg/L	267	183	256	266	209	194	244	268	258	252	306	247	253
Alkalinity, total	mg/L	210	150	210	220	190	150	210	220	220	220	220	220	220
Chloride	mg/L		3.1			3.9					4.3	4.7	4.6	4.3
Fluoride	mg/L		0.33			0.41								
Sulphate, dissolved	mg/L	61	41	66	62		34		54				57	54
Ammonia	mg/L	0.008	0.005	0.014	0.014		0.019	0.016	0.009	0.007	0.008	0.017	0.009	0.015
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.109	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	1.67	0.96	1.45	1.39	0.9	0.73	0.36	1.11	0.91	1.08	1.1	1.09	1.04
Dissolved Organic Carbon	mg/L	7.3	20.7	8.5	10.2	13.8	21	<0.5	8.4	8.1	7.9	7.1	6.5	7.4
Aluminum, total	mg/L	0.02	0.09	0.021	0.026	0.096	0.051	0.07	0.013	0.026	0.012	0.012	0.19	0.012
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0002	0.0004	<0.0001	0.0002	0.0003	0.0004	0.0004	0.0003	0.0003	0.0002	0.0002	0.0003	0.0002
Barium, total	mg/L	0.086	0.07	0.088	0.088	0.076	0.075	0.088	0.087	0.074	0.082	0.085	0.083	0.079
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.00001	0.00002	<0.00001	<0.00001	0.00002	0.00002	0.00004	0.00001	0.00004	0.00001	0.00001	0.00003	<0.00001
Calcium, total	mg/L	61.1	47	61.3	57	50.8	42.2	57.7	61.3	54.2	54.6	57.7	56.9	52.7
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.005	0.0119	0.0042	0.0028	0.0096	0.0096	0.0047	0.0029	0.0025	0.0022	0.0024	0.0088	0.0022
Iron, total	mg/L	0.048	0.183	0.047	0.063	0.169	0.091	0.136	0.03	0.052	0.03	0.029	0.335	0.034
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	26.5	17.1	25.6	24.1	19.9	18.8	21.8	24.9	21.8	22.8	26.3	24.6	22.6
Manganese, total	mg/L	0.078	0.077	0.079	0.082	0.075	0.057	0.075	0.073	0.064	0.065	0.069	0.111	0.056
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.004	0.003	0.004	0.004	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, total	mg/L	0.001	0.002	0.001	0.001	0.027	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, total	mg/L	<0.01	0.012	<0.01	<0.01	0.014	0.017	<0.01		<0.01	<0.01	<0.01	0.025	<0.01
Potassium, total	mg/L	2.19	1.64	2.19	2.18	1.81	1.67	2.05	2.07	2.05	2.07	2.26	2.21	2
Selenium, total	mg/L	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004
Silicon, total	mg/L	5.71	5.51	5.51	4.89	4.95	5.11	5.25	5.69	4.95	4.87	5.42	5.56	4.96
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	19.9	12.4	19.1	18	14.9	13.9	15.8	18.1	15.6	17.4	19.8	18.2	17.2
Strontium, total	mg/L	0.635	0.437	0.632	0.603	0.51	0.425	0.586	0.63	0.559	0.592	0.622	0.576	0.562
Sulpher, total	mg/L	23	16	22	20	16	14	19	20	22	20	21	20	18
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005
Uranium, total	mg/L	0.0034	0.0016	0.0032	0.003	0.0024	0.0018	0.0031	0.0032	0.0025	0.0029	0.0032	0.0028	0.0027
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.013	<0.005	0.006	<0.005	<0.005	<0.005	<0.005
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.017	0.032	0.02	0.012	0.029	0.054	0.012	0.007	0.01	0.009	0.007	0.013	0.012
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0003	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002
Barium, dissolved	mg/L	0.09	0.067	0.085	0.092	0.08	0.073	0.086	0.087	0.085	0.091	0.093	0.087	0.083
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.00002	0.00001	0.00001	0.00002	0.00002	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	<0.00001
Calcium, dissolved	mg/L	63.5	44.7	61.4	63.7	50.1	46.9	59.9	64	61.5	60.2	77.4	58.9	62
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.0038	0.0057	0.0069	0.003	0.0064	0.0066	0.0027	0.0026	0.0023	0.0025	0.0023	0.0033	0.0022
Iron, dissolved	mg/L	0.038	0.069	0.045	0.027	0.054	0.092	0.026	0.027	0.025	0.031	0.03	0.039	0.019
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	26.4	17.3	24.9	26.1	20.4	18.6	23	26.2	25.4	24.6	27.4	24.3	23.8
Manganese, dissolved	mg/L	0.079	0.051	0.086	0.079	0.065	0.052	0.07	0.07	0.068	0.069	0.071	0.066	0.06
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.003	0.003	0.004	0.004	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, dissolved	mg/L	0.002	0.002	0.001	0.001	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	<0.001
Phosphorus, dissolved	mg/L	0.011	<0.01	<0.01	0.011	0.011	0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	2.38	1.51	2.2	2.35	1.91	1.58	2.12	2.33	2.25	2.27	2.48	2.2	2.4
Selenium, dissolved	mg/L	0.0005	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0004
Silicon, dissolved	mg/L	5.99	5.56	5.35	5.85	5.01	5.84	5.67	6.08	5.61	5.58	7.32	5.45	5.95
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	19.9	12.4	18.9	19.5	15.3	13.5	17.5	19.2	19.2	19	20.7	18.5	17.9
Strontium, dissolved	mg/L	0.608	0.426	0.674	0.657	0.538	0.456	0.593	0.631	0.627	0.642	0.688	0.607	0.617
Sulpher, dissolved	mg/L	26	14	22	24	17	15	22	23	21	22	24	20	21
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0027	0.0018	0.0032	0.0033	0.0024	0.0019	0.0027	0.0027	0.0029	0.0031	0.0031	0.003	0.0029
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	0.007	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**06/10/2011**	**17/10/2011**	**24/10/2011**	**30/10/2011**	**13/11/2011**	**22/11/2011**	**28/11/2011**	**05/12/2011**	**13/12/2011**	**18/12/2011**	**27/12/2011**
Total Suspended Solids	mg/L	<4	<4	<1	<4	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	280	270	300	320	294	316	316	298	316	310	296
pH (field)	pH units	7.6	7.68	7.46	7.5	7.53						
pH (lab)	pH units	8.27	8	8.23	8.21	8.35	7.97	8.13	7.87	8.12	8.05	8.19
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	522	498	531	530	498	545	531	537	532	531	537
Temperature (field)	C	0.1	1.3	0.1	0.2	0.7						
Dissolved Oxygen (field)	mg/L	10.33	11.07	10.34	9.52	13.14						
Dissolved Oxygen (field)	%	70.5	78.6	70.9	76.8	91.2						
ORP (field)	mV											
Hardness (from total)	mg/L	251	218	204	219	223	242	244	226	244	336	244
Hardness (from dissolved)	mg/L	265	226	249	242	207	258	262	241	246	254	260
Alkalinity, total	mg/L	220	200	220	220	201	227	223	221	221	222	224
Chloride	mg/L	4.4	5	4.4	3.7	5	4.3	4.4	4	4.1	3.9	3.9
Fluoride	mg/L							0.54			0.53	
Sulphate, dissolved	mg/L	59	52	55				57.4	58.3		54.1	
Ammonia	mg/L	0.015	0.01	0.019	0.009	0.0089	0.0106	0.0167	0.0178	0.0102	0.316	0.0231
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	1.17	1.89	1.09	1.04	2.23	1.19	1.2	0.932	1.12	1.17	1.15
Dissolved Organic Carbon	mg/L	6.9	8.3	6.4	6.1	8.84	5.18	5.7	5.37		5.2	5.35
Aluminum, total	mg/L	0.014	0.037	0.028	0.011	0.017	0.019	0.012	0.014	0.037	0.009	0.012
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0002	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Barium, total	mg/L	0.086	0.08	0.084	0.076	0.078	0.087	0.085	0.078	0.083	0.083	0.081
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00001	0.00004	0.00008	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001
Calcium, total	mg/L	59.3	54.5	42.9	50	55.6	57	57.3	52.8	58.4	89.3	56.2
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0026	0.0082	0.0028	0.0025	0.0038	0.0017	0.0024	0.0021	0.0018	0.0024	0.0017
Iron, total	mg/L	0.037	0.079	0.054	0.029	0.037	0.031	0.036	0.035	0.026	0.038	0.028
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	24.9	19.9	23.6	22.8	20.5	24.2	24.6	22.9	23.9	27.5	25.3
Manganese, total	mg/L	0.06	0.031	0.051	0.052	0.028	0.059	0.06	0.051	0.049	0.046	0.049
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.004	0.006	0.004	0.004	0.006	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, total	mg/L	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.002	0.001
Phosphorus, total	mg/L	0.012	<0.01	<0.01	0.011	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, total	mg/L	2.15	3	2.12	2.09	2.77	2.37	2.22	2.02	2.11	2.16	2.13
Selenium, total	mg/L	0.0004	0.0007	0.0004	0.0004	0.0006	0.0005	0.0004	0.0005	0.0004	0.0007	0.0005
Silicon, total	mg/L	5.42	5.53	3.96	4.76	5.58	5.81	5.57	5.32	6.09	8.65	5.8
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	18.5	18.3	18.4	17.9	18.2	17.9	18.9	17.5	18	20.2	18.8
Strontium, total	mg/L	0.64	0.573	0.627	0.577	0.614	0.587	0.637	0.564	0.614	0.633	0.59
Sulpher, total	mg/L	19	18	18	18	17.8	21.3	18.9	17.6	18.8	19.1	19.1
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.0031	0.0025	0.0031	0.0027	0.0026	0.0027	0.0032	0.003	0.0033	0.0032	0.0029
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	<0.005	0.01	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L	0.009	0.007	0.006	0.004	0.0103	0.0068	0.0072	0.0048	0.0047	0.0031	0.0032
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.0003	0.0003	0.0002	0.0002	0.0003	0.00021	0.00025	0.00021	0.00022	0.00022	0.00026
Barium, dissolved	mg/L	0.086	0.081	0.083	0.082	0.0805	0.0873	0.0839	0.0855	0.0822	0.0822	0.0872
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.00004	0.00002	0.00001	<0.00001	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	63	56.6	58.3	55.9	49.8	60.9	60.8	56.6	56.7	59.3	61.3
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.0023	0.0045	0.0021	0.0019	0.00396	0.00189	0.00234	0.00182	0.00177	0.00167	0.00171
Iron, dissolved	mg/L	0.032	0.015	0.015	0.013	0.0097	0.0208	0.0159	0.01	0.0114	0.0102	0.0111
Lead, dissolved	mg/L	0.0005	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	26.1	20.6	25	24.8	20.2	25.7	26.8	24.2	25.2	25.8	26
Manganese, dissolved	mg/L	0.069	0.026	0.048	0.055	0.0242	0.0569	0.0611	0.0486	0.0475	0.0433	0.0473
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.004	0.007	0.004	0.004	0.0053	0.0041	0.0043	0.0045	0.0042	0.0041	0.0043
Nickel, dissolved	mg/L	0.002	0.001	<0.001	0.001	0.0011	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	2.37	2.98	2.37	2.32	3.08	2.11	2.46	2.17	2.21	2.23	2.24
Selenium, dissolved	mg/L	0.0005	0.0006	0.0005	0.0005	0.00081	0.00048	0.00052	0.00054	0.00052	0.00048	0.00054
Silicon, dissolved	mg/L	6.09	6.02	5.79	6.32	4.42	7.08	6.01	5.93	5.71	5.87	6.46
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	20.3	19.2	19.6	19.6	18.1	20.1	20.8	18.7	19.2	19.6	20.2
Strontium, dissolved	mg/L	0.638	0.613	0.603	0.63	0.562	0.634	0.642	0.608	0.61	0.59	0.643
Sulpher, dissolved	mg/L	22	19	21	20	18.6	20.6	20.9	19	20.7	20.5	20.8
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.0031	0.0027	0.0028	0.003	0.00271	0.0028	0.00323	0.0032	0.00303	0.00288	0.00331
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	0.012	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**02/01/2012**	**09/01/2012**	**15/01/2012**	**22/01/2012**	**31/01/2012**	**07/02/2012**	**14/02/2012**	**20/02/2012**	**25/02/2012**	**05/03/2012**	**12/03/2012**	**19/03/2012**	**24/03/2012**	**27/03/2012**	**28/03/2012**	**02/04/2012**	**09/04/2012**	**13/04/2012**	**14/04/2012**	**15/04/2012**
Total Suspended Solids	mg/L	<4.0	<1.0	2.7	6	<4.0	<4.0	<4.0	<4.0	<4.0	3.9	5.1	4.2	2.7	2.3	2.3	9.6	13	80.4	19	18.9
Total Dissolved Solids	mg/L	298	300	314	326	310	306	304	304	320	320	288	324	314	312	332	322	292	266	292	290
pH (field)	pH units	7.45	7.28	7.48	6.02	6.04	6.34	7.43	7.46	7.51	7.39	7.42	7.57				7.29	7.58	7.64	6.77	7.61
pH (lab)	pH units	8.22	8.1	8.01	8.13	8.12	8.44	8.34	7.99	8.12	8.32	8.11	8.16	8.23	8.26	8.32	8.32	8.15	8.25	8.04	8.16
Specific Conductance, field	µS/cm	278.6	305.6	109.5	376.4	414.2	410.2	381.2	485	415.9	368.9	424.7	441.1				131.1	330.1	469.9	525.4	496.5
Specific Conductance (lab)	µS/cm	535	537	540	548	550	548	534	538	538	548	546	554	546	544	547	542	470	449	512	509
Temperature (field)	C	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0	0.1	0.1				0.2	0.2	0	0	0.1
Dissolved Oxygen (field)	mg/L	10.1	16.61		1.54	10.7	12.16	11.68	12.33	10.26	11.35	11.31	11.68				105.7	12.14	11.23	12.6	11.59
Dissolved Oxygen (field)	%	69.1	113.9	104.3	10.7	73.9	83.2	80.3	84.8	70.4	77.7	77.7	80.6				15.38	83.4	77	86.4	79.5
ORP (field)	mV																				
Hardness (from total)	mg/L	221	235	278	251	252	238	224	244	248	249	251	248	258	246	256	242	213	197	228	231
Hardness (from dissolved)	mg/L	239	259	246	262	253	246	247	237	250	247	260	243	272	256	250	235	215	200	234	226
Alkalinity, total	mg/L	225	223	223	226	228	230	229	226	218	219	229	228	230	227	227	227	198	178	207	204
Chloride	mg/L	<0.5	3.8	4.1	3.8	4.3	4.1	4	3.8	5.4	3.9	4	4.2	3.9	3.7	3.4	3.4	3.3	3.7	4.5	4.2
Fluoride	mg/L				0.55	0.55	0.55		0.58	0.55	0.56	0.49	0.56	0.55	0.55	0.57	0.57	0.51	0.42	0.51	0.48
Sulphate, dissolved	mg/L				58.7	62.2	60.7		60.4	54.8	62.3	57.3	64.8	61	62.5	56.5	59.4	47.2	48.1	50.5	48.9
Ammonia	mg/L	0.021	0.0154	0.0132	<0.0050	0.0074	<0.0050	0.0065	0.0204	0.0089	0.0102	0.0142	<0.0050	0.0063	0.01	0.0176	0.0061	0.0112	0.16	0.015	0.0057
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	0.007	0.005	<0.0050	<0.0050
Nitrate (N)	mg/L	<0.020	1.26	1.32	1.37	1.25	1.13	1.27	1.23	1.32	1.28	1.3	1.19	1.14	1.91	1.29	1.2	1.13	1.55	1.93	1.89
Dissolved Organic Carbon	mg/L			4.94	4.59	4.48	4.49	5.19	4.53	5.3	4.58		5.13	4.7	12		4.24	5.09	7.74	8	8.4
Aluminum, total	mg/L	0.013	0.012	0.017	0.163	0.023	0.015	0.073	0.034	0.049	0.029	0.076	0.09	0.006	0.045	0.039	0.08	0.75	1.55	0.452	0.463
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0006	0.00093	0.00056	0.00053
Barium, total	mg/L	0.075	0.078	0.095	0.089	0.082	0.083	0.076	0.086	0.083	0.088	0.086	0.088	0.091	0.086	0.09	0.09	0.089	0.105	0.0899	0.091
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.00001	<0.00001	0.00003	0.00001	0.00002	<0.00001	<0.00001	<0.00001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	0.00005	0.00001	0.00001	0.00002	0.000038	0.000016	0.000016
Calcium, total	mg/L	51.5	54.9	65.1	58	59.6	55	51.7	56	57.2	58.5	58.5	56	57.4	55.3	57.5	52.1	48.6	45.7	56	56.5
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.0010	<0.0010
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00104	<0.00050	<0.00050
Copper, total	mg/L	0.0018	0.0018	0.0039	0.0051	0.0036	0.0016	0.0023	0.0019	0.0065	0.0018	0.0019	0.0028	0.0021	0.0032	0.0018	0.0027	0.0095	0.0207	0.00711	0.00657
Iron, total	mg/L	0.026	0.034	0.041	0.24	0.051	0.03	0.138	0.061	0.081	0.07	0.109	0.146	0.068	0.081	0.06	0.144	0.937	2.28	0.664	0.685
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.00068	<0.00020	<0.00020
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	22.3	23.9	27.9	25.7	24.9	24.5	23.1	25.3	25.5	25	25.4	26.3	27.9	26.2	27.3	27.1	22.2	20.1	21.5	21.7
Manganese, total	mg/L	0.039	0.042	0.046	0.087	0.073	0.048	0.049	0.041	0.042	0.052	0.05	0.057	0.045	0.045	0.049	0.06	0.082	0.355	0.101	0.106
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000205	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.005	0.004	0.0044	0.0053	0.0057
Nickel, total	mg/L	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.0033	0.0014	0.0014
Phosphorus, total	mg/L	<0.01	0.015	0.041	0.019	0.015	<0.01	<0.01	0.011	0.017	0.01	<0.01	0.012	<0.01	0.019	<0.01	0.014	0.041	0.096	0.03	0.031
Potassium, total	mg/L	1.81	2.03	2.59	2.4	2.3	2.14	1.99	2.19	2.23	2.1	2.11	2.19	2.28	2.14	2.32	2.24	2.35	3.28	3.04	2.9
Selenium, total	mg/L	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0005	0.0006	0.0006	0.0006	0.0006	0.0005	0.0006	0.0005	0.0006	0.0006	0.0004	0.00044	0.00051	0.00062
Silicon, total	mg/L	5.62	5.74	6.41	6.05	5.84	5.79	5.3	5.88	5.84	5.96	6.28	5.95	6.06	5.55	6.05	5.13	6.2	7.73	6.15	6.29
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	16.8	18.2	20.8	19.3	18.8	18.4	17	18.8	19.1	18.4	18.3	19.2	20.6	19	19.8	19.1	16.1	15	17.4	17.4
Strontium, total	mg/L	0.56	0.599	0.681	0.655	0.607	0.629	0.574	0.639	0.653	0.661	0.626	0.641	0.676	0.637	0.68	0.674	0.54	0.537	0.603	0.627
Sulpher, total	mg/L	17.4	19.7	22.5	19.6	20.5	19.9	16.3	20.2	19.7	19.5	19	18.7	21.9	18.4	20.9	20.6	15.1	15.3	16	16.8
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.046	0.0729	0.0235	0.0237
Uranium, total	mg/L	0.0028	0.0029	0.0032	0.0035	0.0033	0.0031	0.0029	0.0034	0.0033	0.0033	0.0031	0.0034	0.0032	0.0032	0.0033	0.0033	0.0027	0.00261	0.00318	0.00325
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0079	<0.0050	<0.0050
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0034	0.015	0.0049	0.0056	0.0038	0.0051	0.0034	0.0039	0.0159	0.003	0.0036	0.0032	<0.0030	0.0116	<0.0030	<0.0030	0.0036	0.0062	0.0037	0.0056
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00022	0.0002	0.00021	0.00026	0.00022	0.00021	0.00023	0.00028	0.00024	0.00023	0.00019	0.00023	0.00027	0.00024	0.00019	0.00025	0.00025	0.00033	0.00031	0.00033
Barium, dissolved	mg/L	0.0835	0.0838	0.0864	0.0868	0.0828	0.0831	0.0843	0.0809	0.0802	0.0851	0.0888	0.0866	0.087	0.0868	0.0872	0.0844	0.0793	0.0767	0.0848	0.0828
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	0.000061	<0.000010	<0.000010	0.00001	<0.000010	0.000065	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	54.3	60.6	55.7	60.2	57.9	55.8	56.9	53.8	56.9	56.1	59.6	54.1	63.5	59	56.4	52.6	49.2	46.9	56.2	53.9
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00164	0.00198	0.00169	0.0022	0.00211	0.00159	0.00149	0.00163	0.0122	0.00142	0.00142	0.00167	0.00171	0.00299	0.0014	0.00172	0.00316	0.00593	0.00365	0.00397
Iron, dissolved	mg/L	0.0067	0.0223	0.0082	0.0092	0.0052	0.0103	0.0118	0.0063	0.029	0.0091	0.0093	0.0094	0.0102	0.0091	0.0061	0.0092	0.0152	0.0203	0.0163	0.028
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	25.1	26.1	25.9	27.1	26.4	25.9	25.5	24.9	26.1	26	27	26.2	27.6	26.3	26.5	25.1	22.5	20	22.7	22.2
Manganese, dissolved	mg/L	0.0405	0.0448	0.0373	0.0428	0.0548	0.0403	0.0446	0.0344	0.0381	0.0432	0.0447	0.049	0.044	0.0411	0.0436	0.0441	0.0457	0.0266	0.0494	0.0706
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0043	0.0043	0.0043	0.0044	0.0043	0.0043	0.0044	0.0043	0.0044	0.0044	0.0047	0.0045	0.0043	0.0042	0.0043	0.0045	0.004	0.0045	0.0053	0.0056
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.028	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.02	0.018	0.011	0.011
Potassium, dissolved	mg/L	2.18	2.25	2.15	2.54	2.3	2.19	2.19	2.07	2.27	2.25	2.31	2.19	2.28	2.23	2.16	2.02	2.24	3.21	2.92	2.9
Selenium, dissolved	mg/L	0.00055	0.0006	0.00065	0.0006	0.00058	0.00055	0.00055	0.00056	0.0006	0.00059	0.00059	0.00056	0.00064	0.00061	0.0006	0.00061	0.00047	0.00061	0.00071	0.00075
Silicon, dissolved	mg/L	6	6.01	5.58	6.32	5.97	5.74	6.03	5.64	5.94	5.54	6.19	6.02	6.63	5.99	6.27	5.46	5.45	4.93	5.6	5.4
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	19.3	19.6	19.7	20.4	19.8	19.3	18.7	18.5	19.4	19	19.5	19.1	19.9	19.1	18.7	17.8	16.3	15.3	18.2	18
Strontium, dissolved	mg/L	0.627	0.611	0.655	0.655	0.635	0.636	0.618	0.61	0.611	0.629	0.678	0.621	0.649	0.621	0.636	0.633	0.565	0.554	0.616	0.615
Sulpher, dissolved	mg/L	21.6	21.3	19.8	23.8	20.8	20.6	21.9	19.9	21.2	21.7	21.4	21.4	20.8	20.6	21	20.8	16.9	15.2	19.3	18.5
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00314	0.00341	0.00337	0.00306	0.00306	0.00317	0.00303	0.00308	0.00307	0.00324	0.00325	0.00309	0.00315	0.0033	0.00302	0.00304	0.00253	0.00247	0.00294	0.00299
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0054	<0.0050	0.0058	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**16/04/2012**	**17/04/2012**	**18/04/2012**	**19/04/2012**	**20/04/2012**	**21/04/2012**	**22/04/2012**	**23/04/2012**	**24/04/2012**	**25/04/2012**	**26/04/2012**	**27/04/2012**	**28/04/2012**
Total Suspended Solids	mg/L	985						6.8		4.7		4.1		
Total Dissolved Solids	mg/L	276						316		308		312		
pH (field)	pH units	7.78	7.87	7.93		7.79	7.88	7.78	7.74	7.75	7.68	7.76	7.99	7.73
pH (lab)	pH units	8.08						8.11		8.23		8.11		
Specific Conductance, field	µS/cm	476.5	481.4	519.1	514.4	586.5	508.4	495.3	495.9	488.9	192.7	484.3	470.5	454
Specific Conductance (lab)	µS/cm	463						478		479		475		
Temperature (field)	C	0	1.2	1.8	2.3	2.2	2.2	2.3	2.4	1.7	2.2	2	2.2	1.9
Dissolved Oxygen (field)	mg/L	11.97	12.36	13.41	12.58	12.3	13.03	13.4	14.32	14.38	12.98	12.78	12.51	12.75
Dissolved Oxygen (field)	%	81.9	87.5	95.5	91.9	89.6	94.9	97.7	104.6	103.2	94.6	92.5	91.1	92
ORP (field)	mV											192.8	139.8	118.3
Hardness (from total)	mg/L	263						207		208		215		
Hardness (from dissolved)	mg/L	206						222		220		217		
Alkalinity, total	mg/L	177						176		182		174		
Chloride	mg/L	4.9						5.1		5.3		4.8		
Fluoride	mg/L	0.41						0.33		0.35		0.35		
Sulphate, dissolved	mg/L	46.1						52.2		47.1		48.2		
Ammonia	mg/L	0.014						0.014		0.0093		0.013		
Nitrite (N)	mg/L	0.0075						0.0073		0.0067		0.0073		
Nitrate (N)	mg/L	3.43						4.17		4.12		3.97		
Dissolved Organic Carbon	mg/L	12.7						14.9		14.7		14.8		
Aluminum, total	mg/L	16.6						0.142		0.19		0.16		
Antimony, total	mg/L	0.00057						<0.00050		<0.00050		<0.00050		
Arsenic, total	mg/L	0.00616						0.00042		0.00042		0.00042		
Barium, total	mg/L	0.393						0.0783		0.0788		0.0827		
Beryllium, total	mg/L	0.00059						<0.00010		<0.00010		<0.00010		
Bismuth, total	mg/L	<0.0010						<0.0010		<0.0010		<0.0010		
Boron, total	mg/L	<0.05						<0.05		<0.05		<0.05		
Cadmium, total	mg/L	0.000433						0.00001		0.000024		0.000029		
Calcium, total	mg/L	64.1						53		53.4		55.6		
Chromium, total	mg/L	0.0247						<0.0010		<0.0010		<0.0010		
Cobalt, total	mg/L	0.0108						<0.00050		<0.00050		<0.00050		
Copper, total	mg/L	0.212						0.0239		0.0255		0.0256		
Iron, total	mg/L	26.8						0.221		0.261		0.24		
Lead, total	mg/L	0.00746						<0.00020		0.00069		0.00022		
Lithium, total	mg/L	0.0134						<0.0050		<0.0050		<0.0050		
Magnesium, total	mg/L	25.1						18		18		18.5		
Manganese, total	mg/L	5.02						0.0523		0.056		0.0506		
Mercury, total	mg/L	<0.000010						<0.000010		<0.000010		<0.000010		
Molybdenum, total	mg/L	0.0095						0.0053		0.0051		0.0054		
Nickel, total	mg/L	0.0295						0.0012		0.0012		0.0012		
Phosphorus, total	mg/L	0.71						0.022		0.023		0.019		
Potassium, total	mg/L	5.88						3.3		3.27		3.44		
Selenium, total	mg/L	0.00125						0.00117		0.00138		0.00155		
Silicon, total	mg/L	36.3						5.22		5.56		5.4		
Silver, total	mg/L	0.00018						<0.000020		<0.000020		<0.000020		
Sodium, total	mg/L	15.2						16		15.7		16.5		
Strontium, total	mg/L	0.626						0.583		0.567		0.613		
Sulpher, total	mg/L	14.4						16.4		14.7		16.5		
Thallium, total	mg/L	0.000137						<0.000050		<0.000050		<0.000050		
Tin, total	mg/L	<0.0050						<0.0050		<0.0050		<0.0050		
Titanium, total	mg/L	0.617						0.0068		0.0098		0.0073		
Uranium, total	mg/L	0.00353						0.002		0.00187		0.00191		
Vanadium, total	mg/L	0.0466						<0.0050		<0.0050		<0.0050		
Zinc, total	mg/L	0.0859						<0.0050		<0.0050		<0.0050		
Zirconium, total	mg/L	0.0016						<0.00050		<0.00050		<0.00050		
Aluminum, dissolved	mg/L	0.0061						0.0129		0.0138		0.0243		
Antimony, dissolved	mg/L	<0.00050						<0.00050		<0.00050		<0.00050		
Arsenic, dissolved	mg/L	0.00036						0.0004		0.00038		0.0004		
Barium, dissolved	mg/L	0.08						0.0809		0.0781		0.0836		
Beryllium, dissolved	mg/L	<0.00010						<0.00010		<0.00010		<0.00010		
Bismuth, dissolved	mg/L	<0.0010						<0.0010		<0.0010		<0.0010		
Boron, dissolved	mg/L	<0.05						<0.05		<0.05		<0.05		
Cadmium, dissolved	mg/L	<0.000010						0.000015		0.000021		0.000021		
Calcium, dissolved	mg/L	51.1						57.9		57.8		56		
Chromium, dissolved	mg/L	<0.0010						<0.0010		<0.0010		<0.0010		
Cobalt, dissolved	mg/L	<0.00050						<0.00050		<0.00050		<0.00050		
Copper, dissolved	mg/L	0.0108						0.0209		0.021		0.0235		
Iron, dissolved	mg/L	0.0246						0.0478		0.0487		0.0593		
Lead, dissolved	mg/L	<0.00020						<0.00020		<0.00020		<0.00020		
Lithium, dissolved	mg/L	<0.0050						<0.0050		<0.0050		<0.0050		
Magnesium, dissolved	mg/L	19.1						18.8		18.4		18.7		
Manganese, dissolved	mg/L	0.0054						0.0286		0.0279		0.0321		
Mercury, dissolved	mg/L	<0.000010						<0.000010		<0.000010		<0.000010		
Molydenum, dissolved	mg/L	0.0053						0.0053		0.0051		0.0051		
Nickel, dissolved	mg/L	<0.0010						0.0011		0.0011		0.0011		
Phosphorus, dissolved	mg/L	0.017						0.012		0.012		0.013		
Potassium, dissolved	mg/L	3.78						3.5		3.42		3.43		
Selenium, dissolved	mg/L	0.00118						0.00166		0.00162		0.00159		
Silicon, dissolved	mg/L	4.95						5.61		5.53		5.31		
Silver, dissolved	mg/L	<0.000020						<0.000020		<0.000020		<0.000020		
Sodium, dissolved	mg/L	16.1						16.8		16.4		16.7		
Strontium, dissolved	mg/L	0.551						0.612		0.587		0.626		
Sulpher, dissolved	mg/L	17.4						18.8		18.3		17.1		
Thallium, dissolved	mg/L	<0.000050						<0.000050		<0.000050		<0.000050		
Tin, dissolved	mg/L	<0.0050						<0.0050		<0.0050		<0.0050		
Titanium, dissolved	mg/L	<0.0050						<0.0050		<0.0050		<0.0050		
Uranium, dissolved	mg/L	0.00222						0.00177		0.00174		0.00186		
Vanadium, dissolved	mg/L	<0.0050						<0.0050		<0.0050		<0.0050		
Zinc, dissolved	mg/L	<0.0050						<0.0050		<0.0050		<0.0050		
Zirconium, dissolved	mg/L	<0.00050						<0.00050		<0.00050		<0.00050		

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		29/04/2012	30/04/2012	01/05/2012	02/05/2012	03/05/2012	07/05/2012	10/05/2012	16/05/2012	24/05/2012	02/06/2012	08/06/2012
Total Suspended Solids	mg/L						6.2		4.4	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L						278		282	284	300	298
pH (field)	pH units	7.3	7.65	7.82	7.84	7.75	7.86	7.93	7.99	7.9	7.86	7.83
pH (lab)	pH units						8.1		8.35	8.25	8.17	8.31
Specific Conductance, field	µS/cm	480.3	477.4	437.3	471.9	495.2	399.5	459.3	435.7	491.2	509.1	494.2
Specific Conductance (lab)	µS/cm						452		422	473	516	501
Temperature (field)	C	1.8	2.2	2.8	2.4	2.3	3.4	3.4	2.3	4.6	3.3	5.5
Dissolved Oxygen (field)	mg/L	13.41	12.05	11.84	12.04	12.06	9.11	13	15.19	14	11.95	11.18
Dissolved Oxygen (field)	%	96.8	87.6	87.5	88.2	87.9	69.1	97.8	110.8	109.2	89.6	88.9
ORP (field)	mV	130.6	100.6	68.5	82.2	82.8	73.5	71	39.4	8.2	27.4	-3.6
Hardness (from total)	mg/L						197		196	228	217	249
Hardness (from dissolved)	mg/L						204		196	219	244	233
Alkalinity, total	mg/L						185		180	202	219	214
Chloride	mg/L						4		3.2	3.3	3	3.5
Fluoride	mg/L						0.4		0.42	0.5	0.51	0.53
Sulphate, dissolved	mg/L						45.5		45.1	47.8	50.7	52.1
Ammonia	mg/L						0.0097		0.0068	0.021	0.079	0.073
Nitrite (N)	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L						1.26		0.876	0.799	0.722	0.619
Dissolved Organic Carbon	mg/L						10.4		13.3	10.3	6.9	7.2
Aluminum, total	mg/L						0.186		0.0877	0.0321	0.0078	0.0149
Antimony, total	mg/L						<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L						0.0004		0.00041	0.00021	0.00024	0.00025
Barium, total	mg/L						0.0734		0.0723	0.0737	0.0758	0.0832
Beryllium, total	mg/L						<0.00010		<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L						<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L						<0.05		<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L						0.000013		0.000012	0.000013	<0.000010	<0.000010
Calcium, total	mg/L						49.6		45.2	51.7	49.3	56.4
Chromium, total	mg/L						<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L						<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L						0.00801		0.00859	0.00531	0.00241	0.00306
Iron, total	mg/L						0.271		0.146	0.0648	0.02	0.0302
Lead, total	mg/L						<0.00020		<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L						17.9		20.2	24.1	22.9	26.3
Manganese, total	mg/L						0.0592		0.0433	0.0463	0.0491	0.06
Mercury, total	mg/L						<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L						0.0042		0.004	0.0037	0.0041	0.0045
Nickel, total	mg/L						0.0012		0.0016	0.0012	<0.0010	0.0011
Phosphorus, total	mg/L						0.018		0.015	0.015	<0.01	<0.01
Potassium, total	mg/L						2.44		2.1	2.13	2.08	2.15
Selenium, total	mg/L						0.00043		0.00049	0.00057	0.00041	0.00037
Silicon, total	mg/L						5.67		5.06	5.76	4.88	5.25
Silver, total	mg/L						<0.000020		<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L						14.6		15	17.4	16.7	18.8
Strontium, total	mg/L						0.509		0.516	0.546	0.583	0.665
Sulpher, total	mg/L						13		14.6	17.3	16.7	17.9
Thallium, total	mg/L						<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L						0.0085		<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	mg/L						0.00254		0.00219	0.00231	0.00262	0.00294
Vanadium, total	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L						<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L						0.0161		0.0228	0.0114	0.0071	0.0061
Antimony, dissolved	mg/L						<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L						0.00033		0.00031	0.00028	0.00028	0.00024
Barium, dissolved	mg/L						0.0772		0.0717	0.0785	0.0828	0.0789
Beryllium, dissolved	mg/L						<0.00010		<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L						<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L						<0.05		<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L						0.000015		0.000013	0.000017	<0.000010	<0.000010
Calcium, dissolved	mg/L						49.8		45.4	50.5	54.7	53.4
Chromium, dissolved	mg/L						<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L						<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L						0.00756		0.00768	0.00418	0.00274	0.00294
Iron, dissolved	mg/L						0.0457		0.0625	0.0341	0.0199	0.0158
Lead, dissolved	mg/L						<0.00020		<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L						19.3		20	22.6	26	24.1
Manganese, dissolved	mg/L						0.0481		0.0373	0.0463	0.0544	0.0568
Mercury, dissolved	mg/L						<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L						0.0045		0.0036	0.0042	0.0047	0.0042
Nickel, dissolved	mg/L						0.0011		0.0014	0.001	0.0011	0.001
Phosphorus, dissolved	mg/L						<0.01		<0.01	0.025	<0.01	<0.01
Potassium, dissolved	mg/L						2.63		1.97	2.11	2.23	2.14
Selenium, dissolved	mg/L						0.00063		0.00055	0.00049	0.0004	0.00051
Silicon, dissolved	mg/L						5.6		5.48	5.32	5.17	5.53
Silver, dissolved	mg/L						<0.000020		<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L						15.7		14.9	16.7	18.9	18
Strontium, dissolved	mg/L						0.561		0.51	0.58	0.625	0.589
Sulpher, dissolved	mg/L						16		15.9	17.1	18.2	19.7
Thallium, dissolved	mg/L						<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L						0.00242		0.00226	0.00266	0.00291	0.00297
Vanadium, dissolved	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L						<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L						<0.00050		<0.00050	<0.00050	<0.00050	<0.00050

Station Name	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date	17/06/2012	19/06/2012	22/06/2012	28/06/2012	05/07/2012	09/07/2012	18/07/2012	24/07/2012	30/07/2012	07/08/2012	16/08/2012
Total Suspended Solids	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	324	284	314	294	302	302	300	314	304	306	314
pH (field)	7.71	7.72	7.82	7.71	7.54	7.28	7.47	7.78	7.85	7.89	7.6
pH (lab)	8.24	8.41	8.13	8.19	8.42	8.47	8.32	7.96	8.28	8.33	8.39
Specific Conductance, field	542.3	559	506.1	516.7	87.4	513.8	471.4	467.3	443.8	500.8	483.3
Specific Conductance (lab)	469	488	504	522	488	525	522	511	511	510	505
Temperature (field)	3.2	3.2	5.9	2.9	1.9	2.9	2.6	3.4	2.4	5	2.6
Dissolved Oxygen (field)	11.87	11.64	10.81	11.32	11.97	12.72	9.99	11.31	12.02	11.42	10.49
Dissolved Oxygen (field)	88.6	87	86.5	84.2	87.1	94.6	73.7	86	88.6	89.5	77.1
ORP (field)	54.3	32.2		25.6	49.1	32.9	51.4	48.5	42.1	-25.7	111.2
Hardness (from total)	213	241	238	239	214	239	239	236	233	247	239
Hardness (from dissolved)	223	233	234	247	222	236	244	240	237	237	238
Alkalinity, total	198	213	215	223	216	231	226	220	226	227	224
Chloride	2.9	3.1	3.3	3.3	2.8	3.7	3	2.9	3.2	3.3	3
Fluoride	0.47	0.48	0.53	0.53	0.49	0.53	0.52	0.54	0.58	0.6	0.54
Sulphate, dissolved	46.1	47.3	52	50.9	44.1	52.2	46.8	45.3	50.2	45.7	45.9
Ammonia	0.1	0.094	0.016	0.039	0.013	0.013	0.083	0.056	0.024	0.011	0.013
Nitrite (N)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0052	<0.0050
Nitrate (N)	0.603	0.633	0.678	0.663	0.552	0.558	0.411	0.512	0.537	0.521	0.508
Dissolved Organic Carbon	9.54	8.17	6.98	5.99	8.39	5.2	5.71	5.61	6.21	5.86	5.09
Aluminum, total	0.0336	0.0163	0.0083	0.0121	0.0232	0.0105	0.0066	0.0091	0.0055	0.017	0.0068
Antimony, total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	0.00033	0.00029	0.00029	0.00027	0.00026	0.00026	0.00026	0.00026	0.00028	0.00025	0.00026
Barium, total	0.0726	0.0836	0.0841	0.0837	0.0719	0.0848	0.082	0.0833	0.0832	0.0824	0.0825
Beryllium, total	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	0.000023	0.000017	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	49.2	55.7	54.1	54.5	47.7	53.7	55.6	53.5	53.1	55.3	55.1
Chromium, total	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	0.00431	0.211	0.00281	0.00256	0.0033	0.00248	0.00218	0.00241	0.00206	0.00211	0.00201
Iron, total	0.0909	0.0437	0.0234	0.033	0.0532	0.0284	0.0202	0.0205	0.0172	0.0265	0.0186
Lead, total	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	21.9	24.8	25	25.1	23.1	25.5	24.3	24.9	24.4	26.4	24.5
Manganese, total	0.0563	0.145	0.0645	0.0687	0.0582	0.0462	0.0575	0.0593	0.0561	0.0585	0.053
Mercury, total	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	0.0037	0.0042	0.0047	0.0045	0.0039	0.0047	0.0054	0.0046	0.0045	0.0047	0.0046
Nickel, total	0.0013	0.0015	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	0.001	<0.0010
Phosphorus, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01
Potassium, total	1.9	2.13	2.2	2.09	1.81	2.1	2.09	2.13	2.11	2.24	2.11
Selenium, total	0.00042	0.00034	0.00047	0.00051	0.00046	0.00042	0.00042	0.00043	0.00047	0.00039	0.00044
Silicon, total	5.13	5.76	5.54	5.65	5.07	5.41	6.02	5.76	5.93	6.23	5.97
Silver, total	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	15.5	17.9	18.1	18.3	16.6	18.5	17.9	18.5	18.3	19.6	18.3
Strontium, total	0.549	0.632	0.649	0.63	0.547	0.641	0.621	0.631	0.613	0.602	0.618
Sulpher, total	13.6	16.4	18.4	17.2	14.2	17.8	16.6	17.4	16.9	16.9	16.8
Thallium, total	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	0.0024	0.00274	0.00299	0.00281	0.00242	0.00282	0.00272	0.00291	0.00294	0.00261	0.00268
Vanadium, total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	0.0114	0.0078	0.0057	0.0046	0.0063	0.004	0.0057	0.0066	0.0039	0.0107	0.0037
Antimony, dissolved	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	0.00032	0.00026	0.00026	0.00024	0.00025	0.00027	0.00025	0.00026	0.00024	0.00022	0.00025
Barium, dissolved	0.0786	0.0804	0.0851	0.0838	0.0885	0.0808	0.0835	0.084	0.0841	0.0829	0.0824
Beryllium, dissolved	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	0.000013	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	51.5	53.8	53.1	56.1	53	53.8	55.9	54.4	53	54.9	54.8
Chromium, dissolved	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	0.0038	0.00311	0.00276	0.00227	0.00232	0.0021	0.00219	0.00217	0.00212	0.00195	0.00196
Iron, dissolved	0.0368	0.0257	0.0178	0.0173	0.0218	0.0138	0.0162	0.0143	0.0159	0.0172	0.0166
Lead, dissolved	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	23	23.9	24.6	25.9	21.8	24.7	25.3	25.3	25.5	24.2	24.6
Manganese, dissolved	0.0567	0.0607	0.061	0.0689	0.0573	0.0423	0.0607	0.0581	0.0629	0.0535	0.0594
Mercury, dissolved	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	0.004	0.0041	0.0044	0.0046	0.0039	0.0046	0.0046	0.0047	0.0046	0.0045	0.0046
Nickel, dissolved	0.0013	0.0011	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	2.01	2.1	2.11	2.16	1.97	2.06	2.1	2.15	2.08	2.11	2.06
Selenium, dissolved	0.00041	0.00049	0.00047	0.00051	0.00044	0.00053	0.00039	0.00042	0.00047	0.00044	0.00044
Silicon, dissolved	5.66	5.71	5.35	5.75	5.93	6.11	5.97	5.89	5.8	6.05	5.95
Silver, dissolved	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	16.8	17.3	17.7	19.1	15.5	18.3	18.8	18.7	18.8	18.2	18.2
Strontium, dissolved	0.587	0.603	0.613	0.642	0.578	0.622	0.627	0.637	0.614	0.619	0.633
Sulpher, dissolved	16.8	17.1	16.9	18.2	18.1	19.4	17.6	17.4	17	17.7	17.9
Thallium, dissolved	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	0.00253	0.0026	0.003	0.00294	0.0025	0.00276	0.00277	0.00283	0.0029	0.00268	0.00268
Vanadium, dissolved	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Station Name	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date	23/08/2012	30/08/2012	03/09/2012	05/09/2012	05/09/2012	09/09/2012	17/09/2012	19/09/2012	24/09/2012	03/10/2012	12/10/2012
Total Suspended Solids	<1.0	<1.0	<1.0		<1.0	2.1	<1.0	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	326	290	296		314	250	302	296	284	308	306
pH (field)	7.61	7.99	7.7	6.45		7.6	7.71	7.6	7.83	8.89	8.18
pH (lab)	8.25	8.33	8.25		8.3	8.22	8.18	8.18	8.33	8.33	8.03
Specific Conductance, field	471.2	441.7	461.4	492.1		395.3	478.5	483.2	485.7	489.9	475.6
Specific Conductance (lab)	513	502	501		502	426	493	488	500	501	472
Temperature (field)	2.8	4	1.5	2.3		2.5	1.3	1.2	1.7	0.4	0.1
Dissolved Oxygen (field)	10	11.77	11.41	11.14		11.7	11.33	10.81	12.5	12.36	12.32
Dissolved Oxygen (field)	74.7	90	91.5	81.2		86	8.7	76.8	91	85.4	84.6
ORP (field)	18.7	-25.2	16.4	14.3		72.7	65.4	78.2	58.2	49.2	54.7
Hardness (from total)	241	236	236		236	192	214	219	227	226	229
Hardness (from dissolved)	235	238	237		225	191	233	231	231	231	
Alkalinity, total	224	221	222		226	186	215	216	217	223	211
Chloride	3.3	2.8	2.7		3.2	2.7	2.9	3.2	2.9	3.1	2.9
Fluoride	0.55	0.57	0.56		0.55	0.45	0.51	0.49	0.52	0.53	0.5
Sulphate, dissolved	46.1	45.6	46.2		48	32.1	42	45.5	43.1	46.7	42
Ammonia	0.012	0.0072	0.0069		0.017	0.073	0.082	0.11	0.017	0.0225	0.015
Nitrite (N)	<0.050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	0.51	0.491	0.483		0.519	0.338	0.488	0.507	0.541	0.445	0.502
Dissolved Organic Carbon	4.66	5.17	5.99		5.72	10.1	6.89	6.64	6.72	5.68	8.28
Aluminum, total	0.0049	0.0036	0.0046		0.0047	0.0428	0.0117	0.0052	0.0048	0.0047	0.0073
Antimony, total	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	0.00026	0.00023	0.00027		0.00024	0.00032	0.00024	0.00024	0.00025	0.00023	0.00028
Barium, total	0.0863	0.0853	0.0816		0.0816	0.0674	0.077	0.0802	0.0811	0.0781	0.0797
Beryllium, total	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	54.5	53.6	52.9		54.6	44.4	47	50	52.5	51.4	51.8
Chromium, total	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	0.00244	0.00296	0.00269		0.00227	0.00457	0.00279	0.00369	0.00223	0.00224	0.00274
Iron, total	0.0203	0.018	0.022		0.0244	0.0999	0.022	0.0274	0.0241	0.0224	0.0334
Lead, total	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	25.5	24.8	25.3		24.1	19.8	23.5	22.9	23.4	23.7	24.2
Manganese, total	0.052	0.0524	0.0562		0.0533	0.0575	0.0501	0.0477	0.047	0.0452	0.0461
Mercury, total	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	0.0048	0.0049	0.0046		0.0046	0.0037	0.0042	0.0045	0.0047	0.0047	0.0045
Nickel, total	<0.0010	<0.0010	0.0013		<0.0010	0.0018	0.0014	0.0012	<0.0010	0.0011	0.0014
Phosphorus, total	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, total	2.22	2.3	2.44		2.15	1.84	2.09	2.13	2.11	2.1	2.05
Selenium, total	0.0004	0.00042	0.00039		0.00041	0.00028	0.00037	0.00045	0.00048	0.00043	0.00048
Silicon, total	6.17	6.01	5.68		5.93	4.99	5.12	4.64	6.07	5.86	5.83
Silver, total	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	19.2	18.6	19.6		17.9	14.7	17.2	17.2	17.5	17.9	17.8
Strontium, total	0.639	0.637	0.623		0.615	0.48	0.556	0.613	0.582	0.605	0.591
Sulpher, total	17.2	17.8	16.9		16.5	10.9	15.6	15.1	14.6	16	15.7
Thallium, total	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	0.00269	0.00275	0.00276		0.00265	0.00186	0.00245	0.00259	0.00252	0.00267	0.00261
Vanadium, total	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	0.0088	0.0046	0.0035		0.0042	0.0156	0.0092	0.0047	0.0035	0.005	
Antimony, dissolved	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Arsenic, dissolved	0.00023	0.00026	0.00024		0.00026	0.00026	0.00041	0.00028	0.00022	0.00021	
Barium, dissolved	0.0837	0.0831	0.0814		0.0793	0.0706	0.0846	0.0801	0.0823	0.0803	
Beryllium, dissolved	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Bismuth, dissolved	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Boron, dissolved	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Cadmium, dissolved	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Calcium, dissolved	52.4	54.1	53		51.1	44.5	53.4	53.8	54.1	51.7	
Chromium, dissolved	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt, dissolved	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Copper, dissolved	0.00198	0.00235	0.00206		0.00236	0.00437	0.00284	0.00251	0.00222	0.00233	
Iron, dissolved	0.0168	0.0194	0.0184		0.0217	0.048	0.0202	0.0228	0.0215	0.0213	
Lead, dissolved	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Lithium, dissolved	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Magnesium, dissolved	25.3	25.1	25.3		23.7	19.5	24.1	23.6	23.3	24.8	
Manganese, dissolved	0.0498	0.0535	0.0533		0.0509	0.0495	0.0486	0.0481	0.0462	0.0452	
Mercury, dissolved	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	0.0047	0.0048	0.0047		0.0047	0.0038	0.0045	0.0045	0.0045	0.0049	
Nickel, dissolved	<0.0010	<0.0010	<0.0010		<0.0010	0.0014	0.0012	0.0011	0.0011	0.0011	
Phosphorus, dissolved	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Potassium, dissolved	2.2	2.27	2.23		2.09	1.97	2.13	2.2	2.17	2	
Selenium, dissolved	0.00048	0.00044	0.00048		0.00041	0.00034	0.00042	0.00043	0.00035	0.00037	
Silicon, dissolved	5.92	5.83	5.8		5.76	5.22	6.07	5.72	6.18	6.05	
Silver, dissolved	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	
Sodium, dissolved	18.5	18.8	18.8		18	14.7	18	17.7	17.2	18.3	
Strontium, dissolved	0.619	0.631	0.611		0.599	0.51	0.598	0.6	0.604	0.613	
Sulpher, dissolved	18.2	17.1	17.1		16.9	12.1	15.9	14.8	15.9	16.1	
Thallium, dissolved	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Tin, dissolved	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Titanium, dissolved	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Uranium, dissolved	0.00266	0.0028	0.00268		0.00252	0.00201	0.00241	0.00253	0.00246	0.00254	
Vanadium, dissolved	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Zinc, dissolved	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	0.0184	<0.0050	<0.0050	<0.0050	
Zirconium, dissolved	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	

Pre-mine operation	
Operations, no mine discharge	
Operations, with mine discharge	

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**16/10/2012**	**19/10/2012**	**25/10/2012**	**02/11/2012**	**09/11/2012**	**18/11/2012**	**24/11/2012**	**04/12/2012**	**08/12/2012**
Total Suspended Solids	mg/L	<1.0	<1.0	3.4	<1.0	<1.0	<1.0	<1.0	<1.0	
Total Dissolved Solids	mg/L	302	328	322	316	302	288	292	328	
pH (field)	pH units	7.8	8.02	7.9		7.4	7.29	7.42	7.53	6.74
pH (lab)	pH units	8.23	8.09	8.04	7.98	8.1	8.15	8.16	8.3	
Specific Conductance, field	µS/cm	485.2	491.6	506		485.4	511.8	454.6	527	496.8
Specific Conductance (lab)	µS/cm	490	489	524	517	513	518	524	549	
Temperature (field)	C	0.7	0.1	0.3		0	0.3	-0.1	0	-0.1
Dissolved Oxygen (field)	mg/L	13.75	11.55					4.83	8.11	3.78
Dissolved Oxygen (field)	%	97	79.8					34.6	55.6	26
ORP (field)	mV	44.2	39			57.6	112.5	103.1	56	152.7
Hardness (from total)	mg/L	228	249	243	245	240	242	258	264	
Hardness (from dissolved)	mg/L	224	236	238	236	242	247	234	248	
Alkalinity, total	mg/L	214	219	228	221	221	227	227	238	
Chloride	mg/L	3	3.1	3.2	3.1	3.1	3.7	3.2	3.4	
Fluoride	mg/L	0.47	0.54	0.52	0.52	0.57	0.52	0.53	0.56	
Sulphate, dissolved	mg/L	45.6	46.2	47.5	47.4	48.5	50	48.7	55.8	
Ammonia	mg/L	0.012	0.015	0.0087	0.0091	0.022	0.0068	0.013	0.019	
Nitrite (N)	mg/L	<0.0050	0.0153	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Nitrate (N)	mg/L	0.53	0.863	0.624	1.06	0.862	0.654	0.681	0.664	
Dissolved Organic Carbon	mg/L	5.99	5.86	5.09	4.97	8.4	4.85	5.01	4.92	
Aluminum, total	mg/L	0.0068	0.0052	0.0555	0.022	0.00434	0.0058	0.016	0.0203	
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00005	<0.00050	<0.00050	<0.00050	
Arsenic, total	mg/L	0.00025	0.00022	0.00032	0.00043	0.000241	0.00028	0.00021	0.00025	
Barium, total	mg/L	0.0798	0.0807	0.0836	0.0835	0.0863	0.0833	0.0867	0.0891	
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.000010	<0.00010	<0.00010	<0.00010	
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0000050	<0.0010	<0.0010	<0.0010	
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.0000050	<0.000010	<0.000010	<0.000010	
Calcium, total	mg/L	51.6	60.4	54.7	54.6	55.2	55.5	58.1	58.4	
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0001	<0.0010	<0.0010	<0.0010	
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00006	<0.00050	<0.00050	<0.00050	
Copper, total	mg/L	0.00227	0.00204	0.00313	0.00199	0.00166	0.00159	0.00226	0.00268	
Iron, total	mg/L	0.0268	0.0346	0.121	0.0568	0.0194	0.0206	0.0491	0.06	
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.0000050	<0.00020	<0.00020	0.00024	
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.00305	<0.0050	<0.0050	<0.0050	
Magnesium, total	mg/L	24.2	23.8	25.8	26.4	24.7	25	27.4	28.6	
Manganese, total	mg/L	0.0458	0.0574	0.0653	0.0638	0.0446	0.0387	0.0502	0.0828	
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0046	0.0045	0.0046	0.0045	0.00392	0.0044	0.0049	0.0048	
Nickel, total	mg/L	0.0012	0.001	0.0014	0.0013	0.000836	<0.0010	0.0012	0.0012	
Phosphorus, total	mg/L	<0.01	<0.01	0.019	0.011		<0.01	<0.01	<0.01	
Potassium, total	mg/L	2.06	2.05	2.26	2.19	2.21	2.37	2.29	2.39	
Selenium, total	mg/L	0.00039	0.00049	0.00036	0.0004	0.000406	0.00056	0.0004	0.00047	
Silicon, total	mg/L	5.82	6.71	6.05	5.9	6.09	6.43	6.37	6.51	
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.0000050	<0.000020	<0.000020	<0.000020	
Sodium, total	mg/L	17.9	17.4	18.6	18.5	17.4	18	19.1	20.2	
Strontium, total	mg/L	0.596	0.607	0.617	0.633	0.619	0.602	0.676	0.7	
Sulpher, total	mg/L	15.8	15.4	15.9	16.9	18.3	18.5	18	17.9	
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.0000020	<0.000050	<0.000050	<0.000050	
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.00020	<0.0050	<0.0050	<0.0050	
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.00050	<0.0050	<0.0050	<0.0050	
Uranium, total	mg/L	0.00267	0.00268	0.00297	0.00294	0.00275	0.00255	0.00301	0.00322	
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.00021	<0.0050	<0.0050	<0.0050	
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.00037	<0.0050	<0.0050	0.0055	
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00010	<0.00050	<0.00050	<0.00050	
Aluminum, dissolved	mg/L	0.0041	0.0048	0.004	0.0034	0.0053	0.0032	0.0048	0.0063	
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.000058	<0.00050	<0.00050	<0.00050	
Arsenic, dissolved	mg/L	0.00024	0.00026	0.00022	0.00024	0.000276	0.00024	0.00023	0.00024	
Barium, dissolved	mg/L	0.0797	0.0807	0.0869	0.0837	0.0831	0.0863	0.0827	0.0855	
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.000010	<0.00010	<0.00010	<0.00010	
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0000050	<0.0010	<0.0010	<0.0010	
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000005	<0.000010	<0.000010	<0.000010	
Calcium, dissolved	mg/L	51.4	52.6	54.3	53.3	53.8	56.8	52.4	55.4	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.00010	<0.0010	<0.0010	<0.0010	
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.000059	<0.00050	<0.00050	<0.00050	
Copper, dissolved	mg/L	0.00242	0.00205	0.00197	0.00189	0.00175	0.00172	0.00226	0.00253	
Iron, dissolved	mg/L	0.0211	0.0311	0.0233	0.0215	0.0167	0.0144	0.0193	0.0324	
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.000009	<0.00020	<0.00020	<0.00020	
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.00299	<0.0050	<0.0050	<0.0050	
Magnesium, dissolved	mg/L	23.2	25.4	24.9	25	26	25.4	25.1	26.6	
Manganese, dissolved	mg/L	0.0426	0.0604	0.0514	0.0584	0.0454	0.04	0.0399	0.0763	
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Molydenum, dissolved	mg/L	0.0045	0.0048	0.0046	0.0042	0.00417	0.0046	0.0046	0.0046	
Nickel, dissolved	mg/L	0.0011	0.0011	0.0011	0.0011	0.00082	<0.0010	<0.0010	<0.0010	
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	
Potassium, dissolved	mg/L	2.04	2.31	2.15	2.2	2.26	2.4	2.07	2.34	
Selenium, dissolved	mg/L	0.00041	0.00044	0.00051	0.00047	0.000496	0.00039	0.00046	0.00042	
Silicon, dissolved	mg/L	5.86	6.09	6.11	6.23	5.96	6.67	5.97	6.2	
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.0000050	<0.000020	<0.000020	<0.000020	
Sodium, dissolved	mg/L	17.3	18.4	18	18.2	18.9	18.6	17.7	19.2	
Strontium, dissolved	mg/L	0.587	0.619	0.634	0.619	0.611	0.619	0.629	0.675	
Sulpher, dissolved	mg/L	15.4	17.4	17.2	16.1	18.4	19.5	17.3	18.6	
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.0000020	<0.000050	<0.000050	<0.000050	
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.00020	<0.0050	<0.0050	<0.0050	
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.00050	<0.0050	<0.0050	<0.0050	
Uranium, dissolved	mg/L	0.00263	0.00304	0.00292	0.00288	0.0029	0.0027	0.00294	0.00306	
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.00020	<0.0050	<0.0050	<0.0050	
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.00067	<0.0050	<0.0050	<0.0050	
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00010	<0.00050	<0.00050	<0.00050	

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**11/12/2012**	**18/12/2012**	**27/12/2012**	**04/01/2013**	**09/01/2013**	**17/01/2013**	**22/01/2013**	**28/01/2013**	**07/02/2013**	**12/02/2013**	**19/02/2013**	**26/02/2013**
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	300	308	274	304	318	308	290	322	306	266	318	302
pH (field)	pH units	7.41	7.46	7.34	7.49	7.43	7.4	7.6	7.43				
pH (lab)	pH units	8.26	8.04	8.18	7.92	7.96	7.94	8.33	8.06	8.02	7.92	8.06	8.07
Specific Conductance, field	µS/cm	318.7	254.1	641.1	638.7	444.5	433.5	465.4	703.6				
Specific Conductance (lab)	µS/cm	529	525	524	518	524	525	527	531	526	529	530	533
Temperature (field)	C	0	0	-0.1	0	0	0.1	0	0				
Dissolved Oxygen (field)	mg/L	9.36	9.5	8.53	8.73	10.39	12.93	10.76	10.73				
Dissolved Oxygen (field)	%	64.4	65.2	55.9	59.9	71.1	103.4	74.6	73.5				
ORP (field)	mV	94.8	53.8	62.1	74.5	95	158.9	49.1	90.8				
Hardness (from total)	mg/L	254	255	238	236	235	238	243	239	248	247	243	262
Hardness (from dissolved)	mg/L	255	239	236	240	245	251	243	245	245	238	246	245
Alkalinity, total	mg/L	231	225	226	222	223	225	229	229	227	225	229	228
Chloride	mg/L	2.9	3	3.1	2.9	3.1	2.7	2.7	3.1	2.9	3	3.1	2.8
Fluoride	mg/L	0.56	0.5	0.53	0.55	0.55	0.55	0.55	0.57	0.56	0.55	0.54	0.55
Sulphate, dissolved	mg/L	49	52.4	50.9	54.5	50.4	51.8	50.2	55.1	50.7	54.6	48.9	52.4
Ammonia	mg/L	0.01	0.0085	0.016	0.062	0.053	0.025	0.017	0.045	0.029	0.026	0.13	0.021
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.647	0.647	0.671	0.554	0.599	0.717	0.699	0.706	0.717	0.73	0.703	0.747
Dissolved Organic Carbon	mg/L	4.48	4.64	4.09	4.67	4.67	4.23	4.22	4.36	4.7	4.06	4.03	4.79
Aluminum, total	mg/L	0.0121	0.012	0.0102	0.0076	0.0184	0.0224	0.0059	0.0134	0.0167	0.0064	0.0065	0.016
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00024	0.00028	0.00023	0.00019	0.00012	0.00019	0.00026	<0.00020	0.00027	0.00023	0.00022	0.00024
Barium, total	mg/L	0.0858	0.086	0.0849	0.0842	0.0794	0.0795	0.0809	0.0817	0.0811	0.085	0.0822	0.0857
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000025	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	55.5	56.4	52.7	52.2	52.2	52.4	53.9	50.3	52.4	55.1	53.6	57.7
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.0021	0.00242	0.00234	0.00193	0.00202	0.00223	0.00159	0.00186	0.00231	0.00164	0.00154	0.00188
Iron, total	mg/L	0.0316	0.0378	0.045	0.0323	0.0458	0.0533	0.0241	0.026	0.0361	0.0173	0.0176	0.0337
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00040	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	28.1	27.8	25.8	25.7	25.3	26.1	26.4	27.6	28.5	26.7	26.5	28.7
Manganese, total	mg/L	0.074	0.0668	0.0823	0.0663	0.069	0.0758	0.0502	0.0495	0.0569	0.0509	0.0505	0.0531
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0048	0.0046	0.0046	0.0045	0.0045	0.0042	0.0044	0.0047	0.0046	0.0044	0.0047	0.005
Nickel, total	mg/L	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	0.001	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L	<0.01	0.013	0.014	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	0.013
Potassium, total	mg/L	2.17	2.26	2.16	2.17	2.05	2.06	2.26	2.27	2.22	2.21	2.16	2.16
Selenium, total	mg/L	0.00046	0.00039	0.00039	0.00046	0.00044	0.00033	0.00051	0.00052	0.00039	0.00048	0.00047	0.00046
Silicon, total	mg/L	6.4	6.01	5.84	5.62	5.99	5.77	5.96	5.69	5.57	6.28	6.02	5.9
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000040	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	19.2	19.1	18.4	17.5	17.5	17.5	18	19.3	19.6	18.4	18.3	19.5
Strontium, total	mg/L	0.671	0.653	0.671	0.66	0.611	0.633	0.639	0.683	0.631	0.661	0.66	0.703
Sulpher, total	mg/L	16.7	16.5	17.4	16.7	15.9	16.6	15.8	1870	17.3	18.9	17.3	16.5
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	mg/L	0.00308	0.00302	0.0029	0.00298	0.00278	0.00285	0.00324	0.00292	0.00309	0.00277	0.00295	0.00321
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0076	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	<0.0030	0.0047	<0.0030	<0.0030	<0.0030	0.0061	0.0036	0.0033	<0.0030	0.0032	<0.0030	<0.0030
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00021	0.00025	0.0002	0.00022	0.0002	0.0003	0.00025	0.00021	0.00021	0.00024	0.00024	0.00023
Barium, dissolved	mg/L	0.0858	0.0834	0.0849	0.0829	0.0809	0.0817	0.0801	0.083	0.0856	0.0825	0.0831	0.082
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	54.8	53.4	51.8	53.5	54.2	55.3	53.6	54.4	55.7	53.9	53.1	55.3
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00175	0.00215	0.00155	0.00155	0.00159	0.00187	0.00147	0.00162	0.00223	0.00184	0.00167	0.00157
Iron, dissolved	mg/L	0.0129	0.0195	0.0242	0.0182	0.0204	0.0236	0.0141	0.0115	0.0091	0.0099	0.0082	0.0094
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	28.7	25.7	26	25.9	26.6	27.5	26.6	26.5	25.8	25.1	27.4	26.1
Manganese, dissolved	mg/L	0.0711	0.0639	0.0783	0.0597	0.0704	0.0693	0.047	0.0446	0.065	0.0478	0.048	0.0466
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0046	0.0043	0.0044	0.0041	0.0044	0.0044	0.0043	0.0047	0.0045	0.0047	0.0047	0.0047
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	2.2	2.16	2.19	2.08	2.13	2.13	2.56	2.19	2.21	2.07	2.21	2.12
Selenium, dissolved	mg/L	0.00048	0.00044	0.00048	0.00042	0.00042	0.0004	0.00037	0.00044	0.00047	0.00053	0.00046	0.00056
Silicon, dissolved	mg/L	7	5.95	6.63	6.02	6.18	6.35	5.95	6.1	6.48	5.42	5.83	5.86
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	19.9	18.2	18.7	17.8	18.1	18.4	17.7	18.4	17.6	17.3	19.1	17.9
Strontium, dissolved	mg/L	0.644	0.628	0.649	0.639	0.642	0.655	0.643	0.672	0.677	0.669	0.654	0.696
Sulpher, dissolved	mg/L	18	18.1	19.3	17.4	18.2	19.3	18.5	18.4	18.8	17.3	18.2	17.4
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00295	0.00274	0.00284	0.00274	0.00281	0.00289	0.00332	0.00297	0.00285	0.00289	0.00299	0.00308
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**04/03/2013**	**11/03/2013**	**18/03/2013**	**31/03/2013**	**01/04/2013**	**06/04/2013**	**12/04/2013**	**15/04/2013**	**21/04/2013**	**22/04/2013**	**23/04/2013**	**26/04/2013**
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	2.3	1.2	<1.0	<1.0	<1.0				
Total Dissolved Solids	mg/L	308	282	310	314	296	282	274	314				
pH (field)	pH units	7.6	7.54	7.57	7.61	7.51		7.59	7.8	8.39	8.17	9.06	7.76
pH (lab)	pH units	8.28	8.31	8.2	8.16	7.95	8.19	8.32	8.24				
Specific Conductance, field	µS/cm	479.4	399.3	512.5	483.2	482.1		508.4		431.4	439.3	486.7	487.1
Specific Conductance (lab)	µS/cm	526	521	533	522	519	524	521	528				
Temperature (field)	C	0.1	0.1	0	0.1	0.1		0.1	1.2	0	0.2	1.2	1.1
Dissolved Oxygen (field)	mg/L	9.9	11.05	9.26	8.96	10.69		11.86					
Dissolved Oxygen (field)	%	68	77.7	67.2	62.2	73.4		81.2		101.4		105.6	111.7
ORP (field)	mV	-382.3	-387.1	-391.8	-409.0			-399.4		-401.1	-420.1	-95.5	-103.3
Hardness (from total)	mg/L	251	250	242	237	241	240	248	247				
Hardness (from dissolved)	mg/L	249	234	243	241	242	244	240	238				
Alkalinity, total	mg/L	229	227	228	224	223	229	227	221				
Chloride	mg/L	2.5	3.3	2.8	3	3.2	2.8	2.5	3				
Fluoride	mg/L	0.56	0.55	0.51	0.57	0.56	0.59	0.57	0.57				
Sulphate, dissolved	mg/L	48.9	58	55.5	53.5	51.7	52.1	42.1	52.9				
Ammonia	mg/L	0.093	0.11	0.035	0.026	0.081	0.056	0.098	0.094				
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.050	<0.0050	<0.0050				
Nitrate (N)	mg/L	0.737	0.723	0.67	0.79	0.73	<0.20	0.704	0.704				
Dissolved Organic Carbon	mg/L	4.15	3.91	4.83	4.68	4.51	3.69	4.58	4.72				
Aluminum, total	mg/L	0.0055	0.0129	0.0139	0.0793	0.0462	0.0146	0.0312	0.0395				
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				
Arsenic, total	mg/L	0.00019	0.00023	0.00021	0.00029	0.00031	0.00029	0.00027	0.00023				
Barium, total	mg/L	0.0852	0.0826	0.0851	0.0803	0.0821	0.0814	0.0844	0.0866				
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010				
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	0.000014	<0.000010				
Calcium, total	mg/L	56.9	54.8	53.1	52.5	52.9	52	53.5	53.9				
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				
Copper, total	mg/L	0.00149	0.00175	0.00169	0.00336	0.00263	0.00172	0.00309	0.0025				
Iron, total	mg/L	0.0148	0.0436	0.0337	0.15	0.0751	0.0281	0.0589	0.0672				
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020				
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Magnesium, total	mg/L	26.5	27.5	26.5	25.8	26.4	26.7	27.8	27.3				
Manganese, total	mg/L	0.0516	0.0518	0.0566	0.0768	0.0713	0.0525	0.0549	0.0536				
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				
Molybdenum, total	mg/L	0.0047	0.0044	0.005	0.0044	0.0044	0.0048	0.0048	0.0051				
Nickel, total	mg/L	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010				
Phosphorus, total	mg/L	<0.01	<0.01	0.013	<0.01	0.014	<0.01	0.014	<0.01				
Potassium, total	mg/L	2.18	2.23	2.11	2.07	2.12	2.12	2.22	2.15				
Selenium, total	mg/L	0.00052	0.00034	0.00061	0.00034	0.00044	0.00057	0.00044	0.00051				
Silicon, total	mg/L	6.14	6.18	5.77	6.12	6.81	5.88	6.09	5.73				
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020				
Sodium, total	mg/L	18.1	18.1	17.5	17.3	17.8	18.2	18.8	18.5				
Strontium, total	mg/L	0.718	0.647	0.684	0.632	0.644	0.658	0.668	0.674				
Sulpher, total	mg/L	17.9	16.5	15.5	17	18.1	16.8	18.8	16.6				
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050				
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Uranium, total	mg/L	0.00307	0.00322	0.00332	0.00279	0.00283	0.00295	0.00302	0.00312				
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				
Aluminum, dissolved	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	0.007	0.0046	0.0033	<0.0030				
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				
Arsenic, dissolved	mg/L	0.00028	0.00024	0.00025	0.00021	0.00025	0.0003	0.00027	0.00024				
Barium, dissolved	mg/L	0.0862	0.085	0.0809	0.0842	0.0842	0.0821	0.082	0.0824				
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010				
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000017	<0.000010				
Calcium, dissolved	mg/L	55.1	50	55.1	53.8	54	54.4	53.2	52.1				
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				
Copper, dissolved	mg/L	0.00151	0.00163	0.00155	0.0017	0.00188	0.00189	0.0017	0.00195				
Iron, dissolved	mg/L	0.0136	0.012	0.0059	0.0067	0.009	0.0125	0.0077	0.0069				
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020				
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Magnesium, dissolved	mg/L	27	26.4	25.6	26	26	26.4	26.1	26.2				
Manganese, dissolved	mg/L	0.0479	0.0463	0.0496	0.0684	0.0601	0.0492	0.0539	0.0444				
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				
Molydenum, dissolved	mg/L	0.0048	0.0048	0.0047	0.0045	0.0047	0.0048	0.0047	0.0049				
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01				
Potassium, dissolved	mg/L	2.19	2.14	2.31	2.2	2.22	2.08	2.14	2.18				
Selenium, dissolved	mg/L	0.0005	0.00046	0.00047	0.00049	0.00051	0.00045	0.00049	0.00048				
Silicon, dissolved	mg/L	6.33	5.68	6.33	6.25	6.3	6.11	6.02	6.14				
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020				
Sodium, dissolved	mg/L	18.7	18.2	17.8	17.8	17.8	18.1	17.7	18.2				
Strontium, dissolved	mg/L	0.687	0.675	0.648	0.673	0.678	0.678	0.66	0.66				
Sulpher, dissolved	mg/L	18.1	17.2	18.5	18	18.2	17.5	17.8	17.8				
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050				
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Uranium, dissolved	mg/L	0.00298	0.00307	0.00336	0.0028	0.00291	0.00313	0.00299	0.00279				
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/04/2013**	**28/04/2013**	**29/04/2013**	**30/04/2013**	**30/04/2013**	**01/05/2013**	**02/05/2013**	**04/05/2013**	**05/05/2013**	**06/05/2013**	**07/05/2013**	**08/05/2013**	**09/05/2013**	**10/05/2013**	**11/05/2013**	**12/05/2013**	**13/05/2013**	**14/05/2013**	**15/05/2013**	**16/05/2013**	**17/05/2013**	**18/05/2013**	**19/05/2013**	**20/05/2013**	**21/05/2013**	**22/05/2013**	**23/05/2013**	**28/05/2013**	**06/06/2013**	**14/06/2013**	**17/06/2013**	**19/06/2013**	**24/06/2013**
Total Suspended Solids	mg/L					5.3		<4.0						8.3					21.2							30	19.6	20.2	8.6	36.6	14.5	<1.0	1.1	4.8
Total Dissolved Solids	mg/L					292		240						250					138							124	126	126	160	272	286	320	304	340
pH (field)	pH units	9	8.52	8.2	8.17	8.61	7.99	8	7.86	7.85	8.17	8.04	7.91	7.93	7.97	8	7.5	7.35	5.03	8	7.75	8.2	7.99	8.3	7.46	7.27	8.1	8.29	7.74	7.31	10.12	8.2	8	8.3
pH (lab)	pH units					8.28		8.27						8.09					7.74							7.71	7.72	7.65	7.97	8.38	8.23	8.3	8.29	8.34
Specific Conductance, field	µS/cm	481.3	462.2	424.1	419.6	410.5	417.1	413.6	375.6	376.1	372.6	423.4	415	398.2	360.3	379.2	159.8	223.7	137.1	262.4	14.8	162.2	230.5	294.6	126.6	118.3		127.4	216	427.1	440.5			
Specific Conductance (lab)	µS/cm					450		446						402					143							128	136	138	214	443	467	472	484	490
Temperature (field)	C	0.3	0.9	0.9	1.1	1.2	1.2	1.1	1.4	1.3	1.1	1.2	1.1	1.2	1.2	1.2	1.2	0.9	1.6	1.5	0.1	0.8	1.9	1.3	1.7	2.1	3.5	3.3	6.4	5.1	5.2	7.6	2.5	7.5
Dissolved Oxygen (field)	mg/L											12.9	12.92	12.76	13.05	13.08	13.08	12.43	11.6	11.58			12.49		12.46	12.44		12.42	11.23	10.2	9.16			
Dissolved Oxygen (field)	%	100.7	102.9	104.3	103.3	122.3	86.3		101	104.3	104.1	91	91.1	91.5	92.3	91.9	91.7	87.5	82.5	82.9	89.9	86.7	88.7	88.6	90.1	90.3		93.6	92.2	80.2	72.8			
ORP (field)	mV	-101.5	-96.8	-51.6	-101.2	2.9	-89.6	-96.5	-17.7	-20	17.6	39	2.4	53.5	9	3.5	-0.3	67	133.2	95.2	54.7	14.9	51.8	45.7	29.2	38.7		11.8	44.6	58.4	31.4			
Hardness (from total)	mg/L					213		228						188					74							62.3	62	59.6	81.9	227	209	241	229	246
Hardness (from dissolved)	mg/L					207								183												56.5	60.3	61.2	81.7	206	213	217	222	220
Alkalinity, total	mg/L					182		177						152					54.9							45.9	49.5	47.8	67	193	204	209	211	228
Chloride	mg/L					5.7								9.7												4.3	4.7	4.7	5.9	3.3	3.6	3.4	3.4	3.5
Fluoride	mg/L					0.31								0.27												0.12	0.12	0.13	0.22	0.47	0.5	0.46	0.53	0.51
Sulphate, dissolved	mg/L					41.9								38.2												<0.50	<0.50	<0.50	22.8	43.5	45.3	45.7		44.1
Ammonia	mg/L					0.02		0.019						0.032					0.083							0.034	0.034	0.041	0.07	0.02	0.019	0.03	0.0076	0.013
Nitrite (N)	mg/L					0.0074		0.0078						0.0167					0.0195							0.0223	0.029	0.0336	0.0487	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L					2.61		2.58						10.8					0.785							0.808	0.691	0.805	2.08	0.611	0.509	0.51	0.534	0.513
Dissolved Organic Carbon	mg/L					7.99								14.8												17.4		16.3	14.8	9.12	8.71	6.73	6.42	5.37
Aluminum, total	mg/L					0.167		0.169						0.297					2.26							1.22	1.14	1.1	0.538	0.273	0.143	0.128	0.043	0.0135
Antimony, total	mg/L					<0.00050		<0.00050						<0.00050					<0.00050							<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L					0.00035		0.00033						0.00038					0.00112							0.00077	0.00066	0.00059	0.0005	0.00034	0.00032	0.00039	0.00032	0.00026
Barium, total	mg/L					0.0769		0.0832						0.0748					0.0685							0.0566	0.052	0.0506	0.0504	0.0881	0.0776	0.0879	0.0766	0.084
Beryllium, total	mg/L					<0.00010		<0.00010						<0.00010					<0.00010							<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L					<0.0010		<0.0010						<0.0010					<0.0010							<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L					<0.05		<0.05						<0.05					<0.05							<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L					<0.000010		<0.000010						0.000012					0.000035							0.000031	0.000017	0.00002	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L					55		57.6						48.5					19.7							16.4	16.5	15.7	20.5	52.2	47.1	55.6	52.2	54.7
Chromium, total	mg/L					<0.0010		<0.0010						<0.0010					0.0026							0.0014	0.0012	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L					<0.00050		<0.00050						<0.00050					0.00122							0.00076	0.00061	0.00058	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L					0.0197		0.0205						0.0265					0.0822							0.0533	0.0578	0.054	0.035	0.0087	0.00616	0.00492	0.0043	0.00283
Iron, total	mg/L					0.284		0.282						0.489					3.32							1.92	1.58	1.48	0.721	0.408	0.204	0.23	0.0778	0.0272
Lead, total	mg/L					<0.00020		<0.00020						<0.00020					0.00087							0.00083	0.00043	0.00042	0.00022	<0.00020	<0.00020	<0.00020	0.00026	<0.00020
Lithium, total	mg/L					<0.0050		<0.0050						<0.0050					<0.0050							<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L					18.4		20.3						16.1					6.03							5.2	5.05	4.97	7.44	23.6	22.3	24.8	23.9	26.5
Manganese, total	mg/L					0.0521		0.0525						0.0897					0.126							0.111	0.0835	0.0861	0.0526	0.0907	0.0545	0.0807	0.0374	0.0399
Mercury, total	mg/L					<0.000010		<0.000010						<0.000010					0.00001							<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L					0.0041		0.0044						0.0035					0.0018							0.0015	0.0017	0.0019	0.0045	0.0048	0.0045	0.0055	0.0051	0.0051
Nickel, total	mg/L					<0.0010		<0.0010						0.0012					0.0032							0.0022	0.0021	0.0021	0.0015	0.0015	0.0017	0.0015	<0.0010	<0.0010
Phosphorus, total	mg/L					0.017		0.016						0.041					0.078							0.072	0.062	0.057	0.032	0.03	0.011	0.019	<0.01	0.014
Potassium, total	mg/L					2.87		3.17						2.98					2.28							2.03	1.92	2.04	3.65	2.43	2.04	2.35	2.27	2.3
Selenium, total	mg/L					0.00069		0.00067						0.00073					0.00041							0.00015	0.00034	0.00022	0.00041	0.00034	0.00027	0.00046	0.00024	0.00033
Silicon, total	mg/L					4.67		4.37						4.78					7.61							4.74	4.67	4.4	3.02	6.78	5.64	6.25	5.25	6.63
Silver, total	mg/L					<0.000020		<0.000020						<0.000020					0.000021							0.000022	<0.000020	<0.000020	<0.000020	<0.000020	0.000059	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L					15.5		17.6						13.3					4.95							5.05	5.54	5.81	9.28	16.8	15.6	17.8	17	17.2
Strontium, total	mg/L					0.556		0.587						0.497					0.194							0.168	0.178	0.22	0.587	0.656	0.584	0.662	0.65	0.66
Sulpher, total	mg/L					14		14.6						14.6					<3.0							<3.0	<3.0	<3.0	6.8	13	15.1	14.4	14.3	13.9
Thallium, total	mg/L					<0.000050		<0.000050						<0.000050					<0.000050							<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L					<0.0050		<0.0050						<0.0050					<0.0050							<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L					0.0066		0.0104						0.0152					0.0953							0.045	0.0397	0.0427	0.019	0.011	0.0061	0.0066	<0.0050	<0.0050
Uranium, total	mg/L					0.00167		0.00193						0.00145					0.00051							0.00042	0.00034	0.00032	0.00043	0.00241	0.0024	0.00279	0.00276	0.00272
Vanadium, total	mg/L					<0.0050		<0.0050						<0.0050					0.0071							<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L					<0.0050		<0.0050						<0.0050					0.0104							0.0068	0.0062	0.0056	<0.0050	<0.0050	0.0052	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L					<0.00050		<0.00050						<0.00050					0.00085							0.00051	<0.00050	<0.00050	0.0016	<0.00050	0.00081	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L					0.005								0.0153												0.057	0.0583	0.0504	0.0345	0.0097	0.0082	0.0065	0.0055	0.0039
Antimony, dissolved	mg/L					<0.00050								<0.00050												<0.0020	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L					0.00031								0.00031												<0.00040	0.00028	0.00027	0.00025	0.0003	0.00026	0.00026	0.00025	0.00023
Barium, dissolved	mg/L					0.0739								0.0694												0.0321	0.0362	0.0367	0.0456	0.0766	0.0779	0.0796	0.0788	0.0792
Beryllium, dissolved	mg/L					<0.00010								<0.00010												<0.00040	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L					<0.0010								<0.0010												<0.0040	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L					<0.05								<0.05												<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L					<0.000010								<0.000010												<0.000050	0.000013	0.00001	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L					53.8								47.8												15.4	16	16.4	21.5	47.4	49.6	49.4	50.8	49.6
Chromium, dissolved	mg/L					<0.0010								<0.0010												<0.0040	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L					<0.00050								<0.00050												<0.0020	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L					0.0137								0.0186												0.0315	0.0313	0.0289	0.0231	0.00451	0.00365	0.00301	0.00275	0.00237
Iron, dissolved	mg/L					0.0226								0.0855												0.189	0.157	0.146	0.11	0.0342	0.022	0.0429	0.0148	0.0117
Lead, dissolved	mg/L					<0.00020								<0.00020												<0.00080	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L					<0.0050								<0.0050												<0.02	<0.0050	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L					17.7								15.5												4.38	4.97	4.92	6.79	21.4	21.8	22.7	23.1	23.4
Manganese, dissolved	mg/L					0.0081								0.0439												0.0194	0.0197	0.0203	0.031	0.0374	0.0367	0.0562	0.0319	0.0358
Mercury, dissolved	mg/L					<0.000010								<0.000010												<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L					0.004								0.0033												<0.0040	0.0015	0.0015	0.0043	0.0046	0.0045	0.0047	0.0047	0.0052
Nickel, dissolved	mg/L					<0.0010								<0.0010												<0.0040	0.001	0.0011	0.001	0.0011	0.0011	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L					<0.01								0.012												<0.04	0.021	0.022	0.013	<0.01	<0.01	0.012	<0.01	<0.01
Potassium, dissolved	mg/L					2.87								2.97												1.55	1.81	2.36	3.5	2.3	2.11	2.15	2.11	2.16
Selenium, dissolved	mg/L					0.00075								0.00063												<0.00040	0.00024	0.00024	0.0004	0.00043	0.0004	0.00036	0.00039	0.0004
Silicon, dissolved	mg/L					4.15								4.03												2.25	2.33	2.36	2.15	5.39	5.72	5.89	5.95	5.66
Silver, dissolved	mg/L					<0.000020								<0.000020												<0.000080	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L					15.5								13.3												5.32	5.5	5.79	8.9	15.8	15.9	16.4	16.9	16.5
Strontium, dissolved	mg/L					0.568								0.496												0.165	0.172	0.218	0.598	0.612	0.608	0.614	0.624	0.627
Sulpher, dissolved	mg/L					14.5								12												1940	3.1	4.2	7.5	13.9	13.6	16	17.8	16.5
Thallium, dissolved	mg/L					<0.000050								<0.000050												<0.00020	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L					<0.0050								<0.0050												<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L					<0.0050								<0.0050												<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L					0.00173								0.00139												<0.00040	0.00029	0.00027	0.00041	0.00225	0.00245	0.00247	0.00259	0.00265
Vanadium, dissolved	mg/L					<0.0050								<0.0050												<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L					<0.0050								<0.0050												<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L					<0.00050								<0.00050												<0.0020	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**01/07/2013**	**10/07/2013**	**11/07/2013**	**19/07/2013**	**23/07/2013**	**30/07/2013**	**08/08/2013**	**14/08/2013**	**19/08/2013**	**21/08/2013**	**21/08/2013**	**26/08/2013**	**02/09/2013**	**12/09/2013**	**17/09/2013**	**28/09/2013**	**03/10/2013**	**08/10/2013**	**16/10/2013**	**21/10/2013**	**28/10/2013**	**05/11/2013**	**05/11/2013**	**14/11/2013**	**18/11/2013**	**30/11/2013**	**05/12/2013**	**09/12/2013**	**16/12/2013**	**23/12/2013**	**02/01/2014**	**07/01/2014**	**16/01/2014**
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	276	300	304	290	242	288	320	344	270		282	308	314	272	266	300	350	288	318	296	286		286	288	284	302	302	282	294	312	306	292	294
pH (field)	pH units	7.77	8.00	7.84	7.83	8.40	7.86	7.74	8.20	7.81	7.75		7.23	7.57	7.81	6.99	7.53	7.46	7.80	7.63	7.57	7.50	7.47	7.47	6.70	7.41	7.39	7.27	7.96	6.56	7.61	7.66	7.69	7.58
pH (lab)	pH units	8.37	8.21	8.2	8.35	8.28	8.35	8.27	8.31	8.23		8.35	8.28	8.04	8.14	8.13	8.16	8.18	8.25	8.45	8.25	8.27		8.23	8.33	8.28	8.04	8.01	8.24	8.21	8.21	8.12	8.24	7.97
Specific Conductance, field	µS/cm	472.9		479.3	460.8		470.3	489.8		493.4	495.7		442.4	487.9	505.2	350.8	456.2	479.3	449.2	459.6	489.7	495.2	500	500	440.7	523.5	517.9	478.3	458.6	514.4	506.4	473.9	439.1	456.2
Specific Conductance (lab)	µS/cm	496	479	471	496	410	474	494	490	499		497	495	489	491	486	443	478	488	487	496	496		507	514	520	521	523	523	519	515	518	515	518
Temperature (field)	C	4.4	4.7	4.5	3.7	2.8	5.6	3.2	5.4	4.5	3.9		2.6	3	3	1.9	1.5	1.5	1.1	0.2	0	0.4	0	0	0	0	0	0	0.1	0	0	0	0.1	0
Dissolved Oxygen (field)	mg/L	9.35		11.22	11.04		12.11	11.24		10.60	11.12		11.50	11.48	10.35	11.97	12.67	85.10	13.15	11.09	10.68	12.48	11.65	11.65	9.65	10.49	9.60	12.16	10.31	12.22	13.15	10.55	12.08	12.01
Dissolved Oxygen (field)	%	72.2		87.2	83.6		98.3	84.1		89.6	88.8		91.6	92.5	83.4	87.1	91.6		93.4	74.5	71.9	86.7	79.6	79.6	66	72.2	65.9	83	70.8	83.8	90.1	72.3	83	82.2
ORP (field)	mV	53.4		128.0	102.3		119.4	114.5		47.4	16.4		138.9	58.1	86.4	77.8	49.8	100.6	66.1	49.1	14.2	88.9	58.3	58.3	203.1	-207.4	-56.4	215.3	-19.0	70.1	147.4	189.4	99.1	105.8
Hardness (from total)	mg/L	231	229	234	249	209	241	258	255	246		248	239	245	251	244	222	234	242	250	236	268		231	248	261	272	266	256	229	245	250	254	234
Hardness (from dissolved)	mg/L	223	208	210	222	190	229	232	235	238		234	230	219	241	226	214	217	232	222	232	240		228	233	268	257	236	234	243	251	234	241	226
Alkalinity, total	mg/L	216	209	210	221	184	209	217	224	221		221	211	213	214	216	195	209	215	218	210	211		222	223	226		230	227	222	227	218	217	225
Chloride	mg/L	3.6	3.6	3.5	3.9	2.9	2.9	3.6	3.3	3.7		3.5	4	3.9	4.6	4.4	4.4	4.9	4.2	4.7	4.8	4.9		5	4.8	5	5.1	5.3	5.3	5.1	5.7	5.5	5.7	5.6
Fluoride	mg/L	0.51	0.52	0.52	0.54	0.45	0.54	0.55	0.54	0.53		0.53	0.51	0.54	0.53	0.57	0.47	0.52	0.52	0.54	0.55	0.55		0.55	0.57	0.55	0.51	0.52	0.55	0.55	0.58	0.53	0.59	0.59
Sulphate, dissolved	mg/L	45.7	46	46.8	46.2	33.3	41.5	47	42.2	45.6		47.2	43	41.8	45	44.5	43.1	43.5	42.9	44.3	44.2	46.7		43.9	47	49.2	50.1	46.8	49.4	48.5	48.3	53.6	49.5	49.6
Ammonia	mg/L	0.026	0.022	0.046	0.019	0.013	0.085	0.012	0.54	0.021		0.019	0.013	0.033	0.0067	0.018	0.042	0.019	0.02	0.011	0.022	0.014		0.011	0.011	0.012	0.012	0.021	0.016	0.011	0.02	0.016	0.014	0.011
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.428	0.371	0.386	0.38	0.26	0.334	0.34	0.336	0.332		0.293	0.318	0.287	0.295	0.264	0.246	0.273	0.304	0.31	0.313	0.314		0.333	0.32	0.336	0.298	0.312	0.304	0.314	0.321	0.324	0.324	0.315
Dissolved Organic Carbon	mg/L	5.48	5.65	5.62	5.67	11.5	7.06	5.33	5.39	4.89		5.2	5.05	5.52	5.27	5.87	9.3	6.66	6.59	7.21	5.88	5.44		5.17	5.53	5.11	4.26	4.88	4.48	5.02	4.37	4.67	2.51	4.15
Aluminum, total	mg/L	0.0102	0.0099	0.012	0.0274	0.0352	0.0184	0.0125	0.0337	0.0227		0.0145	0.006	0.0107	0.0083	0.01	0.0105	0.0062	0.0076	0.0114	0.0147	0.0124		0.0209	0.0133	0.009	0.0116	0.0069	0.0104	0.0084	0.0097	0.0074	0.011	0.0084
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00032	0.00031	0.00027	0.00037	0.00047	0.00032	0.00032	0.0003	0.00032		0.00031	0.00025	0.00029	0.00028	0.00034	0.00033	0.00028	0.00027	0.00026	0.00025	0.00034		0.00025	0.00023	0.00023	0.00025	0.00023	0.00023	0.00023	0.00028	0.00034	0.00033	0.00023
Barium, total	mg/L	0.0776	0.0799	0.0825	0.0885	0.0745	0.0831	0.0851	0.0888	0.0827		0.0838	0.0778	0.0811	0.0816	0.0797	0.0783	0.0809	0.0836	0.0873	0.0707	0.0842		0.077	0.0781	0.0826	0.0883	0.0809	0.0867	0.0802	0.0806	0.0817	0.0816	0.078
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	53.7	51.2	54.4	55.3	46.2	55.5	57.5	56.8	54		55.1	53	55.6	56.3	54.5	49.8	53.6	52.9	55.2	54	59.5		50.5	55.8	58.3	61.4	59.7	55.6	51.7	54.2	54.6	55.7	50.4
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00277	0.00321	0.00295	0.00298	0.00614	0.00309	0.00275	0.00261	0.00239		0.00225	0.00217	0.00252	0.00258	0.00262	0.00364	0.00265	0.00264	0.00296	0.00232	0.00225		0.00224	0.00209	0.00189	0.00216	0.00198	0.00219	0.00156	0.0023	0.00178	0.0023	0.00196
Iron, total	mg/L	0.0273	0.0301	0.044	0.0481	0.0824	0.0412	0.0265	0.0284	0.0261		0.0233	0.024	0.0292	0.0262	0.0315	0.0636	0.0255	0.0264	0.0328	0.0353	0.0369		0.0429	0.0423	0.0342	0.0531	0.0502	0.038	0.0224	0.0305	0.0233	0.0294	0.0168
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	23.2	21.7	21.9	22.8	19.7	24	24.7	24.9	24.7		24.7	24.8	23.9	25	23.7	22.2	24	24.7	23.7	24.3	25.7		23.4	24.9	28	27.8	24.6	25.1	26.1	27.5	24.8	26.5	23.9
Manganese, total	mg/L	0.0415	0.0482	0.0515	0.0358	0.0331	0.0457	0.0468	0.056	0.0535		0.0428	0.0415	0.041	0.0377	0.0391	0.0357	0.0423	0.0436	0.0456	0.0563	0.035		0.0389	0.0397	0.0484	0.0681	0.0675	0.0595	0.0432	0.0406	0.0465	0.0353	0.0305
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, dissolved	mg/L	0.0051	0.0049	0.0049	0.0049	0.0038	0.0049	0.0049	0.0053	0.005		0.0053	0.0053	0.0048	0.0051	0.0049	0.0042	0.0049	0.0044	0.0048	0.005	0.0048		0.0047	0.0047	0.0048	0.0044	0.0047	0.0045	0.0048	0.0052	0.0048	0.0048	0.0047
Nickel, dissolved	mg/L	<0.0010	0.001	<0.0010	<0.0010	0.0016	0.0011	<0.0010	<0.0020	0.0011		<0.0010	0.0015	<0.0010	<0.0010	0.0011	0.0014	0.0012	0.0011	<0.0010	<0.0010	<0.0010		0.001	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	0.013		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	2.09	1.85	1.9	2.14	1.66	2.13	2.12	2.37	2.15		2.18	2.23	2.11	2.35	2.16	1.92	2.15	2.21	2.09	2.14	2.15		2.09	2.09	2.41	2.41	2.19	2.14	2.15	2.39	2.02	2.24	1.96
Selenium, dissolved	mg/L	0.00035	0.00034	0.00038	0.00042	0.00035	0.00039	0.00036	0.00039	0.00049		0.0004	0.00034	0.00038	0.00036	0.00034	0.00035	0.00034	0.0004	0.00035	0.00034	0.00041		0.00034	0.00036	0.0004	0.00037	0.00043	0.00043	0.00039	0.00039	0.00041	0.00043	0.00039
Silicon, dissolved	mg/L	5.89	5.93	5.97	5.85	5.75	6.2	6.3	5.8	6.02		6.32	6.4	5.83	6.47	6.05	6.07	5.75	5.77	5.71	6.12	6.61		6.05	6.03	6.56	6.36	6.34	5.94	6.5	6.26	6.1	6.14	5.92
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000040	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	16.8	15.3	15.8	16.5	13.5	15.8	17	17.5	17.1		17.2	17.2	17.1	18.3	16.5	15.7	17.3	17	16	17.2	17.6		16.1	17.1	20.1	19.4	17.7	17.6	17.9	18.7	17.3	18.2	16.1
Strontium, dissolved	mg/L	0.621	0.576	0.609	0.633	0.489	0.624	0.641	0.642	0.639		0.651	0.647	0.606	0.636	0.602	0.569	0.621	0.616	0.623	0.62	0.637		0.631	0.671	0.694	0.66	0.655	0.666	0.659	0.701	0.618	0.669	0.638
Sulpher, dissolved	mg/L	16.8	15.7	16.1	16.5	12	14.6	15.4	1760	15.9		15.7	15.4	14.8	16.2	15.5	13.3	14.8	15.2	14.5	15.4	14.8		14.9	16.3	17.4	18.4	16.4	16.1	16.7	17.8	15.2	16.6	15.8
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.00010	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00259	0.00229	0.00235	0.00254	0.00187	0.0028	0.00249	0.00259	0.00247		0.00253	0.00249	0.00237	0.00243	0.00227	0.00209	0.00236	0.00222	0.00235	0.00239	0.00246		0.00241	0.00258	0.00256	0.00268	0.00249	0.00251	0.00259	0.00267	0.00272	0.00277	0.00277
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**22/01/2014**	**27/01/2014**	**03/02/2014**	**13/02/2014**	**18/02/2014**	**20/02/2014**	**21/02/2014**	**22/02/2014**	**23/02/2014**	**24/02/2014**	**25/02/2014**	**25/02/2014**	**27/02/2014**	**28/02/2014**	**01/03/2014**	**02/03/2014**	**03/03/2014**	**04/03/2014**	**05/03/2014**	**06/03/2014**	**07/03/2014**	**08/03/2014**	**09/03/2014**	**10/03/2014**	**11/03/2014**	**12/03/2014**	**13/03/2014**	**14/03/2014**	**15/03/2014**	**16/03/2014**	**17/03/2014**	**18/03/2014**	**19/03/2014**
Total Suspended Solids	mg/L	3.9	<1.0	<1.0	<1.0	<1.0	<1.0						<1.0										1.8		1.4							11.1		
Total Dissolved Solids	mg/L	308	248	274	296	282	300						244										282		274							282		
pH (field)	pH units	7.65	7.63	7.86	7.56	7.71	7.78	7.76	8.32	7.83	7.83	7.89	7.93	7.93	8.12	7.96	7.99	7.98	7.99	8.06	8.17	8.11	8.02	8.2	8	8.2	8.15	7.32	7.68	7.82	7.72	7.77	7.85	7.77
pH (lab)	pH units	8.28	8.09	8.2	8.16	8.09	8.25						8.18										8.24		8.2							8.31		
Specific Conductance, field	µS/cm	455.6	810.1	493		504.2	313	294.1	80.4	482.7	494.6	473.3	476.5	483.4	486.6	478	475.8	505.7	509.1	521.6	480	478.6	473.6	477.3	494.1	482	474.9	497.3	479.2	480.1	480.8	482.2	485.4	482.1
Specific Conductance (lab)	µS/cm	519	442	513	533	526	523						484										482		479							477		
Temperature (field)	C	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0.1	0.2	0.1	0.1	0.1	0.1	0	0.1	0	0	0.2	0.1	0.2	0.4	0.4	0.5	0.5	0.4	0.6	0.6	0.7
Dissolved Oxygen (field)	mg/L	12.18	12.58	12.98	11.37	10.07	8.14	11.27	3.14	12.33	10.98	11.13	11.3	10.52	12.28	11.08	11.71	12.12	12.01	11.33	12.43	11.99	10.6	11.09	11.47	12.52	12.14	11.74	11.02	11.58	11.65	11.47	14.23	17.3
Dissolved Oxygen (field)	%	83.7	86.3	89.1	77.9	69.1	55.8	77.3	24.3	84.1	75.3	76.6	77.4	72.3	84.4	76.1	81.2	83.9	82.4	77.8	85.3	82.1	72.7	77.7	78.7	87.2	83.9	80.1	77	80.8	80.2	80	99.2	121
ORP (field)	mV	91.9	104.5	209.2	115.1	78.9	159.5	162.2	307.9	137.4	157.6	194.6	127.8	116.6	157.8	47.2	59.2	117.1	124.3	204.1	63.7	103.8	134	95	143.6	78.8	45.9	247.3	157.6	109.3	91.6	80.4	69.2	62.2
Hardness (from total)	mg/L	240	211	244	239	250	286						226										231		234							220		
Hardness (from dissolved)	mg/L	241	204	242	232	234	246						223										217		232							222		
Alkalinity, total	mg/L	221	182	226	226	227	221						204										209		208							203		
Chloride	mg/L	5.4	10	5.6	5.2	5.7	6.6						8.1										8		8.2							8.2		
Fluoride	mg/L	0.59	0.36	0.63	0.58	0.58	0.59						0.46										0.43		0.43							0.47		
Sulphate, dissolved	mg/L	49.4	37	50.7	49.9	50.4	51.4						39.5										40.6		41.1							40.7		
Ammonia	mg/L	0.01	0.014	0.013	0.017	0.024	0.013						0.03										0.015		0.02							0.067		
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Nitrate (N)	mg/L	0.324	0.281	0.313	0.326	0.303	0.312						0.261										0.255		0.255							0.241		
Dissolved Organic Carbon	mg/L	4.48	8.64	4.57	4.96	3.77	4.62						6.41										7.28		7							7.45		
Aluminum, total	mg/L	0.0058	0.0061	0.0073	0.0064	0.012	0.0111						0.0232										0.0545		0.0416							0.271		
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050						<0.00050										<0.00050		<0.00050							<0.00050		
Arsenic, total	mg/L	0.0002	0.00042	0.00022	0.00024	0.00027	0.00026						0.00032										0.00038		0.00035							0.00046		
Barium, total	mg/L	0.0792	0.0664	0.0823	0.0819	0.0823	0.0776						0.0741										0.0763		0.0791							0.0791		
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010						<0.00010										<0.00010		<0.00010							<0.00010		
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010										<0.0010		<0.0010							<0.0010		
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05						<0.05										<0.05		<0.05							<0.05		
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010						<0.000010										<0.000010		<0.000010							<0.000010		
Calcium, total	mg/L	51.4	55.7	53.8	51.5	55	72.2						54.5										54.7		54.7							51.9		
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010										<0.0010		<0.0010							<0.0010		
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050						<0.00050										<0.00050		<0.00050							<0.00050		
Copper, total	mg/L	0.00189	0.00649	0.0016	0.00196	0.00194	0.0016						0.00487										0.00461		0.00515							0.00582		
Iron, total	mg/L	0.0141	0.0087	0.0174	0.0236	0.0306	0.036						0.062										0.111		0.093							0.411		
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020						<0.00020										<0.00020		<0.00020							<0.00020		
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Magnesium, total	mg/L	27.1	17.4	26.7	26.9	27.5	25.7						21.9										22.9		23.8							22		
Manganese, total	mg/L	0.0288	0.0657	0.0328	0.0359	0.0366	0.0359						0.0434										0.0637		0.0717							0.104		
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010						<0.000010										<0.000010		<0.000010							<0.000010		
Molybdenum, total	mg/L	0.0048	0.0055	0.0053	0.0052	0.0052	0.0052						0.0048										0.0053		0.0055							0.005		
Nickel, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010										0.0012		0.0011							0.0015		
Phosphorus, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01										<0.01		0.013							0.022		
Potassium, total	mg/L	2.09	3.06	2.24	2.16	2.02	1.99						2.57										2.86		2.88							2.58		
Selenium, total	mg/L	0.00044	0.00037	0.00043	0.00056	0.00048	0.00046						0.00033										0.00034		0.00044							0.00037		
Silicon, total	mg/L	5.56	5.4	5.61	5.65	6.14	8.03						5.45										5.38		5.41							5.88		
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	0.000032	<0.000020						<0.000020										<0.000020		<0.000020							<0.000020		
Sodium, total	mg/L	18	14.2	17.9	18.2	17.4	16.9						15.4										16.7		17							15.5		
Strontium, total	mg/L	0.65	0.558	0.681	0.692	0.677	0.673						0.59										0.631		0.651							0.589		
Sulpher, total	mg/L	13.7	8.9	16.7	17.6	14.5	15.2						14.6										12.7		11.7							14.4		
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050						<0.000050										<0.000050		<0.000050							<0.000050		
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							0.0108		
Uranium, total	mg/L	0.00274	0.00215	0.00289	0.00283	0.00281	0.00274						0.00217										0.00277		0.00284							0.00252		
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050						<0.00050										<0.00050		<0.00050							<0.00050		
Aluminum, dissolved	mg/L	<0.0030	0.0035	0.0031	<0.0030	<0.0030	<0.0030						0.0031										0.0033		0.0035							<0.0030		
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050						<0.00050										<0.00050		<0.00050							<0.00050		
Arsenic, dissolved	mg/L	0.00025	0.00039	0.00025	0.00025	0.00022	0.00022						0.00032										0.00031		0.0003							0.00029		
Barium, dissolved	mg/L	0.0829	0.0645	0.0807	0.0796	0.0804	0.0794						0.0751										0.076		0.0747							0.0763		
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010						<0.00010										<0.00010		<0.00010							<0.00010		
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010										<0.0010		<0.0010							<0.0010		
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05						<0.05										<0.05		<0.05							<0.05		
Cadmium, dissolved	mg/L	<0.000010	0.000036	<0.000010	<0.000010	<0.000010	<0.000010						<0.000010										<0.000010		<0.000010							<0.000010		
Calcium, dissolved	mg/L	53.2	54.2	53.4	48.3	49.2	53.2						53.7										52.4		58.4							53.4		
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010										<0.0010		<0.0010							<0.0010		
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050						<0.00050										<0.00050		<0.00050							<0.00050		
Copper, dissolved	mg/L	0.00158	0.00593	0.00181	0.00171	0.00168	0.00166						0.00395										0.00339		0.00344							0.00318		
Iron, dissolved	mg/L	0.0073	0.0062	0.0134	0.0138	0.015	0.0152						0.0187										0.0177		0.0163							0.0155		
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020						<0.00020										<0.00020		<0.00020							<0.00020		
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Magnesium, dissolved	mg/L	26.3	16.7	26.4	26.9	26.9	27.5						21.5										21		21.1							21.6		
Manganese, dissolved	mg/L	0.0291	0.0448	0.031	0.0346	0.0346	0.034						0.0354										0.0492		0.0603							0.0434		
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010						<0.000010										<0.000010		<0.000010							<0.000010		
Molybdenum, dissolved	mg/L	0.0049	0.005	0.0049	0.0051	0.005	0.0052						0.0053										0.0054		0.0053							0.0054		
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010										<0.0010		<0.0010							<0.0010		
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01										0.011		<0.01							<0.01		
Potassium, dissolved	mg/L	1.98	3.23	2.17	2.07	2.08	2.21						2.73										2.61		2.32							2.59		
Selenium, dissolved	mg/L	0.00042	0.00034	0.00042	0.00053	0.00036	0.00039						0.00037										0.00037		0.00038							0.00036		
Silicon, dissolved	mg/L	6.1	5.1	5.96	4.89	5.78	5.91						5.58										5.53		5.54							5.72		
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020						<0.000020										<0.000020		<0.000020							<0.000020		
Sodium, dissolved	mg/L	17.9	13.9	17.6	18.4	18.4	18.8						15.4										15.3		15							15.4		
Strontium, dissolved	mg/L	0.688	0.536	0.667	0.687	0.642	0.684						0.628										0.621		0.626							0.625		
Sulpher, dissolved	mg/L	17	10.9	17.2	15.6	16.2	17.3						13										14.5		12.7							13.8		
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050						<0.000050										<0.000050		<0.000050							<0.000050		
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Uranium, dissolved	mg/L	0.0024	0.00176	0.00273	0.00274	0.00291	0.00291						0.00235										0.00236		0.00231							0.00248		
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050										<0.0050		<0.0050							<0.0050		
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050						<0.00050										<0.00050		<0.00050							<0.00050		

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**20/03/2014**	**21/03/2014**	**22/03/2014**	**23/03/2014**	**24/03/2014**	**25/03/2014**	**26/03/2014**	**27/03/2014**	**28/03/2014**	**29/03/2014**	**30/03/2014**	**31/03/2014**	**01/04/2014**	**02/04/2014**	**02/04/2014**	**03/04/2014**	**04/04/2014**	**05/04/2014**	**06/04/2014**	**07/04/2014**	**07/04/2014**	**08/04/2014**	**09/04/2014**	**10/04/2014**	**11/04/2014**	**12/04/2014**	**13/04/2014**	**14/04/2014**	**15/04/2014**	**16/04/2014**	**17/04/2014**	**18/04/2014**	**19/04/2014**
Total Suspended Solids	mg/L								4.3							5.8					14.2	14.2									13		
Total Dissolved Solids	mg/L								286							292					268	268									272		
pH (field)	pH units	7.7	7.69	7.76	7.8	7.85	7.9	8	7.74	7.83	7.8	7.77	7.79	7.53	7.72	7.71	7.75	7.8	7.91	7.86		7.91	7.82	7.85	7.9	7.97	8.02	7.92	7.95	7.96	7.97		8.01	7.93
pH (lab)	pH units								8.3							8.29					7.94	7.94									8.21		
Specific Conductance, field	µS/cm	481.3	489.5	490.1	489.9	491.1	491.1		428.8	428.7	426.2	427.9	426.7	440.1	440.4	440.8	440.7	396.9	399.8	437.1		399.6	385.5	401.3	443.8	444.2	447.2	449.9	467.5	481.7	459.3		448.9	466.5
Specific Conductance (lab)	µS/cm								480							488					437	437									463		
Temperature (field)	C	0.8	0.6	0.7	0.6	0.5	0.5	1.9	0.5	0.5	0.5	0.6	0.7	0.8	0.6	0.6	0.7	1.4	1.5	0.4		1.8	1.9	1.8	1.7	1.6	2	1.8	1.1	0.8	1.9		2	0.9
Dissolved Oxygen (field)	mg/L	16.96	13.85	18.95	16.23	13.77	17.67		15.28	14.47	13.99	14.2	12.89	14.63	13.74	14.82	14.91	17.08	11.64	12.6		12.91	12.69	12.8	12.94	13.26	12.95	13.07	12.37	12.39	12.79		12.65	12.41
Dissolved Oxygen (field)	%	118.7	96.7	131.1	113.2	96.9	124.1		105.1	100.9	96.9	99.5	89.7	102.6	95.6	103.2	104	121.3	83.2	87.6		92.9	91.6	92.3	92.7	94.8	93.6	94.1	87.4	86.8	92.2		91.4	87
ORP (field)	mV	73.1	106.8	77.1	66.3	75.1	71.4		72.1	80.1	86.8	62.3	69.9	150.1	90.9	81.6	90.5	116.6	137.2	86.1		118.2	104.3	116.1	220.5	104	103	80.6	91.8	78.1	109.6		101.9	90.9
Hardness (from total)	mg/L								216							244					209	209									201		
Hardness (from dissolved)	mg/L								224							220					209	209									208		
Alkalinity, total	mg/L								201							210					172	172									185		
Chloride	mg/L								7.9							8.3					10	10									11		
Fluoride	mg/L								0.47							0.46					0.31	0.31									0.31		
Sulphate, dissolved	mg/L								40.4							40.2					34	34									37.1		
Ammonia	mg/L								0.022							0.019					0.066	0.066									0.13		
Nitrite (N)	mg/L								<0.0050							<0.0050					0.0097	0.0097									0.0124		
Nitrate (N)	mg/L								0.226							0.212					0.601	0.601									0.95		
Dissolved Organic Carbon	mg/L								6.94							8.16					12	12									9.23		
Aluminum, total	mg/L								0.14							0.163					0.305	0.305									0.48		
Antimony, total	mg/L								<0.00050							<0.00050					<0.00050	<0.00050									<0.00050		
Arsenic, total	mg/L								0.00026							0.0004					0.00045	0.00045									0.00045		
Barium, total	mg/L								0.0768							0.0825					0.0793	0.0793									0.0768		
Beryllium, total	mg/L								<0.00010							<0.00010					<0.00010	<0.00010									<0.00010		
Bismuth, total	mg/L								<0.0010							<0.0010					<0.0010	<0.0010									<0.0010		
Boron, total	mg/L								<0.05							<0.05					<0.05	<0.05									<0.05		
Cadmium, total	mg/L								0.000011							<0.000010					0.000013	0.000013									0.000019		
Calcium, total	mg/L								51.8							57.5					54.2	54.2									51.3		
Chromium, total	mg/L								<0.0010							<0.0010					<0.0010	<0.0010									<0.0010		
Cobalt, total	mg/L								<0.00050							<0.00050					<0.00050	<0.00050									<0.00050		
Copper, total	mg/L								0.00445							0.00506					0.0176	0.0176									0.0445		
Iron, total	mg/L								0.25							0.273					0.563	0.563									0.833		
Lead, total	mg/L								<0.00020							<0.00020					<0.00020	<0.00020									0.00023		
Lithium, total	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Magnesium, total	mg/L								21.1							24.4					17.9	17.9									17.8		
Manganese, total	mg/L								0.0546							0.0625					0.105	0.105									0.147		
Mercury, total	mg/L								<0.000010							<0.000010					<0.000010	<0.000010									<0.000010		
Molybdenum, total	mg/L								0.0048							0.0057					0.0042	0.0042									0.0043		
Nickel, total	mg/L								0.0013							0.0012					0.0016	0.0016									0.0013		
Phosphorus, total	mg/L								0.013							0.018					0.027	0.027									0.025		
Potassium, total	mg/L								2.31							2.68					3.11	3.11									3.11		
Selenium, total	mg/L								0.00027							0.00044					0.00053	0.00053									0.00066		
Silicon, total	mg/L								5.63							6.24					5.99	5.99									5.71		
Silver, total	mg/L								<0.000020							<0.000020					<0.000020	<0.000020									<0.000020		
Sodium, total	mg/L								14.5							17					13.8	13.8									14		
Strontium, total	mg/L								0.592							0.653					0.578	0.578									0.6		
Sulpher, total	mg/L								11.1							14.6					11.4	11.4									10.3		
Thallium, total	mg/L								<0.000050							<0.000050					<0.000050	<0.000050									<0.000050		
Tin, total	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Titanium, total	mg/L								0.0065							0.0069					0.0158	0.0158									0.0303		
Uranium, total	mg/L								0.00236							0.00248					0.00147	0.00147									0.0013		
Vanadium, total	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Zinc, total	mg/L								<0.0050							<0.0050					0.0058	0.0058									0.0059		
Zirconium, total	mg/L								<0.00050							<0.00050					<0.00050	<0.00050									<0.00050		
Aluminum, dissolved	mg/L								0.0034							0.0032					0.0034	0.0034									0.0056		
Antimony, dissolved	mg/L								<0.00050							<0.00050					<0.00050	<0.00050									<0.00050		
Arsenic, dissolved	mg/L								0.00034							0.00034					0.00041	0.00041									0.00038		
Barium, dissolved	mg/L								0.0797							0.075					0.0708	0.0708									0.076		
Beryllium, dissolved	mg/L								<0.00010							<0.00010					<0.00010	<0.00010									<0.00010		
Bismuth, dissolved	mg/L								<0.0010							<0.0010					<0.0010	<0.0010									<0.0010		
Boron, dissolved	mg/L								<0.05							<0.05					<0.05	<0.05									<0.05		
Cadmium, dissolved	mg/L								<0.000010							<0.000010					<0.000010	<0.000010									0.000013		
Calcium, dissolved	mg/L								53.2							52.7					55	55									54.5		
Chromium, dissolved	mg/L								<0.0010							<0.0010					<0.0010	<0.0010									<0.0010		
Cobalt, dissolved	mg/L								<0.00050							<0.00050					<0.00050	<0.00050									<0.00050		
Copper, dissolved	mg/L								0.00345							0.00337					0.0104	0.0104									0.0183		
Iron, dissolved	mg/L								0.0173							0.0175					0.0287	0.0287									0.049		
Lead, dissolved	mg/L								<0.00020							<0.00020					<0.00020	<0.00020									<0.00020		
Lithium, dissolved	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Magnesium, dissolved	mg/L								22.1							21.4					17.3	17.3									17.5		
Manganese, dissolved	mg/L								0.036							0.0373					0.0082	0.0082									0.0929		
Mercury, dissolved	mg/L								<0.000010							<0.000010					0.000014	0.000014									<0.000010		
Molybdenum, dissolved	mg/L								0.0056							0.0053					0.0045	0.0045									0.0044		
Nickel, dissolved	mg/L								0.001							<0.0010					0.0011	0.0011									<0.0010		
Phosphorus, dissolved	mg/L								<0.01							<0.01					<0.01	<0.01									<0.01		
Potassium, dissolved	mg/L								2.64							2.56					3.08	3.08									3.37		
Selenium, dissolved	mg/L								0.00031							0.00034					0.00047	0.00047									0.00052		
Silicon, dissolved	mg/L								5.82							5.6					4.81	4.81									5.12		
Silver, dissolved	mg/L								<0.000020							<0.000020					<0.000020	<0.000020									<0.000020		
Sodium, dissolved	mg/L								15.2							15.3					13.9	13.9									14.2		
Strontium, dissolved	mg/L								0.642							0.617					0.564	0.564									0.644		
Sulpher, dissolved	mg/L								13.9							14.6					11.9	11.9									13.1		
Thallium, dissolved	mg/L								<0.000050							<0.000050					<0.000050	<0.000050									<0.000050		
Tin, dissolved	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Titanium, dissolved	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Uranium, dissolved	mg/L								0.00257							0.00233					0.00143	0.00143									0.00136		
Vanadium, dissolved	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Zinc, dissolved	mg/L								<0.0050							<0.0050					<0.0050	<0.0050									<0.0050		
Zirconium, dissolved	mg/L								<0.00050							<0.00050					<0.00050	<0.00050									<0.00050		

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**20/04/2014**	**21/04/2014**	**21/04/2014**	**21/04/2014**	**22/04/2014**	**23/04/2014**	**24/04/2014**	**25/04/2014**	**26/04/2014**	**27/04/2014**	**28/04/2014**	**29/04/2014**	**30/04/2014**	**01/05/2014**	**02/05/2014**	**03/05/2014**	**04/05/2014**	**05/05/2014**	**06/05/2014**	**07/05/2014**	**08/05/2014**	**09/05/2014**	**10/05/2014**	**11/05/2014**	**12/05/2014**	**13/05/2014**	**14/05/2014**	**15/05/2014**	**16/05/2014**	**17/05/2014**	**18/05/2014**	**19/05/2014**	**20/05/2014**
Total Suspended Solids	mg/L				13							12.9							6.5						5.9			15.6			9.3			
Total Dissolved Solids	mg/L				264							214							218									208			230			
pH (field)	pH units	7.98	8.13	7.99		8.1	7.82	7.96	7.95	7.95	7.86		8.25	8.22	8.44	8.21	8.27	8	8.16	7.97	8.19	8.08	8.16	8.21	8.15	8.25	8.02	8.16	8.16	7.2	7.22	7.34	7.34	7.26
pH (lab)	pH units				8.21							8.15							8.13						8.05			7.96			7.98			
Specific Conductance, field	µS/cm	449.6	483	415.9		542.9	267.2	396.6	367.7	405.7	380.6		372	323.6	321.2	236	355.7	220.9	324.8	350.2	211.6	202	208.5	242.2	249.4	404.6	334.9	289.7	287.2		413.2	332.6	376.4	327.8
Specific Conductance (lab)	µS/cm				439							322							334									290			317			
Temperature (field)	C	1.7	2	1.9		1.7	0.8	1.7	1.9	1.8	1.8		2	2.3	2.5	2.6	3	2.9	2.4	2.6	4.1	4.8	5.6	5.6	5.7	2.8	4.3	6.2	6.5	7.3	6.2	6.4	6.6	5.1
Dissolved Oxygen (field)	mg/L	12.97	13.4	12.98		12.84	12.35	12.7	13.1	12.88	12.16		15.82	12.87	13.03	13	12.76	12.74	12.13	13.35	11.87	12.3	12.02	13.43	12.1	14.24	12.36	11.58	11.61		11.35	11.59	10.86	12.2
Dissolved Oxygen (field)	%	93.5	97	93.7		92.3	86.6	91.9	94.5	92.8	87.8		115.7	93.9	95.5	95.6	94.7	94.5	88.7	98.1	90.8	95	95.8	105.4	96.3	105.1	95.4	94.1	95.3		91.6	94.1	88.5	95.9
ORP (field)	mV	105.7	242.6	142.2		125.9	133.4	172	114.2	151.4	127.1		101.4	207.7	139.4	224.5	98.6	116.5	75.9	131.1	81.2	61.2	79.5	159.2	80.9	100.9	82.1	118.5	103.9		121.8	103.7	92.3	121.1
Hardness (from total)	mg/L				190							138							153						107			133			128			
Hardness (from dissolved)	mg/L				196							131							148									123						
Alkalinity, total	mg/L				176							116							136									99.2			113			
Chloride	mg/L				11							6.9							5									4.9						
Fluoride	mg/L				0.32							0.29							0.3									0.26						
Sulphate, dissolved	mg/L				34.7							30.6							28.9									32.9						
Ammonia	mg/L				0.11							0.13							0.041						0.088			0.15			0.051			
Nitrite (N)	mg/L				0.0117							0.0138							0.0062						0.034			0.0314			0.0304			
Nitrate (N)	mg/L				0.977							1.66							0.743						1.8			1.75			1.85			
Dissolved Organic Carbon	mg/L				9.74							11.8							15.8									17.1						
Aluminum, total	mg/L				0.514							0.699							0.248						0.257			0.543			0.312			
Antimony, total	mg/L				<0.00050							<0.00050							<0.00050						<0.00050			<0.00050			<0.00050			
Arsenic, total	mg/L				0.00045							0.00062							0.0004						0.00046			0.00067			0.00045			
Barium, total	mg/L				0.0751							0.0644							0.0671						0.0526			0.0628			0.0624			
Beryllium, total	mg/L				<0.00010							<0.00010							<0.00010						<0.00010			<0.00010			<0.00010			
Bismuth, total	mg/L				<0.0010							<0.0010							<0.0010						<0.0010			<0.0010			<0.0010			
Boron, total	mg/L				<0.05							<0.05							<0.05						<0.05			<0.05			<0.05			
Cadmium, total	mg/L				0.000015							0.000014							0.000014						0.000016			0.00003			0.000025			
Calcium, total	mg/L				48.6							35.7							37						28.2			35.3			34.1			
Chromium, total	mg/L				<0.0010							<0.0010							<0.0010						<0.0010			<0.0010			<0.0010			
Cobalt, total	mg/L				<0.00050							<0.00050							<0.00050						<0.00050			<0.00050			<0.00050			
Copper, total	mg/L				0.0481							0.0476							0.0184						0.0408			0.0401			0.0335			
Iron, total	mg/L				0.79							0.994							0.359						0.525			1.12			0.651			
Lead, total	mg/L				0.00021							0.00027							<0.00020						<0.00020			0.00027			<0.00020			
Lithium, total	mg/L				<0.0050							<0.0050							<0.0050						<0.0050			<0.0050			<0.0050			
Magnesium, total	mg/L				16.8							12							14.7						8.8			10.8			10.5			
Manganese, total	mg/L				0.151							0.0995							0.0555						0.1			0.181			0.193			
Mercury, total	mg/L				<0.000010							<0.000010							<0.000010						<0.000010			<0.000010			<0.000010			
Molybdenum, total	mg/L				0.0043							0.0056							0.0046						0.0036			0.004			0.0039			
Nickel, total	mg/L				0.0014							0.0018							0.0016						0.0016			0.0019			0.0016			
Phosphorus, total	mg/L				0.026							0.04							0.022						0.036			0.05			0.032			
Potassium, total	mg/L				3.23							4.16							2.71						3.46			3.3			3.15			
Selenium, total	mg/L				0.00076							0.00085							0.00027						0.0007			0.00057			0.00069			
Silicon, total	mg/L				5.62							4.98							4.75						3.3			4.72			3.93			
Silver, total	mg/L				<0.000020							<0.000020							<0.000020						<0.000020			<0.000020			0.000024			
Sodium, total	mg/L				13.7							13.2							11.4						8.25			10.1			10.5			
Strontium, total	mg/L				0.576							0.64							0.608						0.574			0.569			0.585			
Sulpher, total	mg/L				9.9							10.3							8.1						9.5			10.9			11.9			
Thallium, total	mg/L				<0.000050							<0.000050							<0.000050						<0.000050			<0.000050			<0.000050			
Tin, total	mg/L				<0.0050							<0.0050							<0.0050						<0.0050			<0.0050			<0.0050			
Titanium, total	mg/L				0.0261							0.0323							0.0113						0.0114			0.0325			0.0134			
Uranium, total	mg/L				0.00121							0.00082							0.00157						0.00064			0.00073			0.00077			
Vanadium, total	mg/L				<0.0050							<0.0050							<0.0050						<0.0050			<0.0050			<0.0050			
Zinc, total	mg/L				0.0055							0.0063							<0.0050						0.0108			0.0069			<0.0050			
Zirconium, total	mg/L				<0.00050							<0.00050							<0.00050						<0.00050			<0.00050			<0.00050			
Aluminum, dissolved	mg/L				0.0055							0.016							0.0209									0.0294						
Antimony, dissolved	mg/L				<0.00050							<0.00050							<0.00050									<0.00050						
Arsenic, dissolved	mg/L				0.00035							0.00033							0.00031									0.00038						
Barium, dissolved	mg/L				0.0724							0.0554							0.06									0.0518						
Beryllium, dissolved	mg/L				<0.00010							<0.00010							<0.00010									<0.00010						
Bismuth, dissolved	mg/L				<0.0010							<0.0010							<0.0010									<0.0010						
Boron, dissolved	mg/L				<0.05							<0.05							<0.05									<0.05						
Cadmium, dissolved	mg/L				0.000015							0.000011							0.000012									0.000018						
Calcium, dissolved	mg/L				51.3							34.5							36.7									33.5						
Chromium, dissolved	mg/L				<0.0010							<0.0010							<0.0010									<0.0010						
Cobalt, dissolved	mg/L				<0.00050							<0.00050							<0.00050									<0.00050						
Copper, dissolved	mg/L				0.0216							0.0227							0.014									0.0254						
Iron, dissolved	mg/L				0.0443							0.0714							0.0765									0.152						
Lead, dissolved	mg/L				<0.00020							<0.00020							<0.00020									<0.00020						
Lithium, dissolved	mg/L				<0.0050							<0.0050							<0.0050									<0.0050						
Magnesium, dissolved	mg/L				16.5							10.9							13.6									9.67						
Manganese, dissolved	mg/L				0.107							0.0587							0.0296									0.108						
Mercury, dissolved	mg/L				<0.000010							<0.000010							<0.000010									<0.000010						
Molybdenum, dissolved	mg/L				0.0046							0.0052							0.0041									0.0037						
Nickel, dissolved	mg/L				<0.0010							<0.0010							0.0012									0.001						
Phosphorus, dissolved	mg/L				<0.01							0.012							0.013									0.018						
Potassium, dissolved	mg/L				3.34							3.83							2.68									3.24						
Selenium, dissolved	mg/L				0.0006							0.00077							0.00044									0.00067						
Silicon, dissolved	mg/L				4.85							3.47							4.27									3.41						
Silver, dissolved	mg/L				<0.000020							<0.000020							<0.000020									<0.000020						
Sodium, dissolved	mg/L				13.9							12.7							10.9									9.57						
Strontium, dissolved	mg/L				0.631							0.65							0.554									0.566						
Sulpher, dissolved	mg/L				12							11							9.9									11.7						
Thallium, dissolved	mg/L				<0.000050							<0.000050							<0.000050									<0.000050						
Tin, dissolved	mg/L				<0.0050							<0.0050							<0.0050									<0.0050						
Titanium, dissolved	mg/L				<0.0050							<0.0050							<0.0050									<0.0050						
Uranium, dissolved	mg/L				0.00128							0.00077							0.00132									0.00066						
Vanadium, dissolved	mg/L				<0.0050							<0.0050							<0.0050									<0.0050						
Zinc, dissolved	mg/L				<0.0050							<0.0050							<0.0050									<0.0050						
Zirconium, dissolved	mg/L				<0.00050							<0.00050							<0.00050									<0.00050						

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**21/05/2014**	**22/05/2014**	**22/05/2014**	**23/05/2014**	**24/05/2014**	**25/05/2014**	**26/05/2014**	**27/05/2014**	**28/05/2014**	**29/05/2014**	**30/05/2014**	**31/05/2014**	**04/06/2014**	**06/06/2014**	**08/06/2014**	**11/06/2014**	**11/06/2014**	**17/06/2014**	**17/06/2014**	**24/06/2014**	**24/06/2014**	**30/06/2014**	**30/06/2014**	**09/07/2014**	**09/07/2014**	**10/07/2014**	**15/07/2014**	**15/07/2014**	**21/07/2014**	**21/07/2014**	**23/07/2014**	**31/07/2014**	**31/07/2014**				
Total Suspended Solids	mg/L			14				14.6						<1.0			<1.0	<1.0		<1.0	<1.0		<1.0			<1.0			<1.0		<1.0		<1.0			
Total Dissolved Solids	mg/L			224				224						300			288			302	298		298			278			296		300		294			
pH (field)	pH units	7.23		7.4	7.5	7.52	7.4	7.5	7.26	8.2	8.15	8.21	8.17	7.27	7.98		8.22	8.22	7.91	7.91	8.25	8.25	8.21		8.3	8.3	8.23	7.97	7.97	7.52	7.52	7.73	7.91			
pH (lab)	pH units			7.82				7.96						8.41			8.28			8.3	8.37		8.29			8.54			8.19		8.4		8.25			
Specific Conductance, field	µS/cm	333.2		330.6	358.6	357.7	365.2	370.3	402.1	415.1	506	440	436	490.2	492.6		521.6	521.6	503.6	503.6	535.7	535.7	500.9		519.7	519.7	500.8	501.5	501.5	653.2	653.2	420.3	498.7			
Specific Conductance (lab)	µS/cm			309				361						491			502			504	504		512			507			515		509		516			
Temperature (field)	C	5.6		5.6	6.4	5.7	6.5	6.9	2.8	4.6	2.1	2.2	2.8	3.8	2.2		2.8	2.8	2.8	2.8	3	3	3.1		3.6	3.6	6.3	4.2	4.2	3.4	3.4	2.2	2.1			
Dissolved Oxygen (field)	mg/L	11.6		11.6	11.33	11.51	11.3	11.37	12.71	11.33	12.01	11.55	11.82	10.65	12.55		11.57	11.57	11.34	11.34	11.86	11.86	10.63		11.79	11.79	11.17	10.87	10.87	11.8	11.8	11.9	12.19			
Dissolved Oxygen (field)	%	92.5		92.3	89.8	91.8	92	93.4	94.1	87.3	87.2	84.1	87.5	81	92.5		85.5	85.5	86.3	86.3	88.3	88.3	78.4		89.1	89.1	88.7	83.4	83.4	88.8	88.8	86.1	88.6			
ORP (field)	mV	116.3		96	84	128.2	120.7	131.5	93.7	122	101.2	114.2	117.6	75.4	103.1		138.8	138.8	66.7	66.7	75.1	75.1	81.7		72.2	72.2	156.7	102.5	102.5	196.7	196.7	103.9	57.3			
Hardness (from total)	mg/L			136				158						227			242			222	229		243			235			255		242		238			
Hardness (from dissolved)	mg/L			135				155						225			229			228	237		235			237			246		235		238			
Alkalinity, total	mg/L			95.4				113						213			219			220	224		218			221			228		226		226			
Chloride	mg/L			5.3				5.3						5.1			5.1			5.2	5		5.2			5			4.6		5		4.8			
Fluoride	mg/L			0.27				0.61						0.55			0.57			0.57	0.55		0.58			0.58			0.56		0.56		0.57			
Sulphate, dissolved	mg/L			40.7				44						44.3			44.2			42.8	45		42.8			47.6			46.2		42.9		45.7			
Ammonia	mg/L			0.17				0.18						0.025			0.022			0.1	0.019		0.021			0.021			0.034		0.015		0.0087			
Nitrite (N)	mg/L			0.0351				0.0287						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Nitrate (N)	mg/L			3.22				2.69						0.272			0.253			0.243	0.205		0.202			0.201			0.203		0.18		0.2			
Dissolved Organic Carbon	mg/L			17.9				15.7						8.26			5.43			4.49	5.13		5.95			5.51			4.54		5.64		5.13			
Aluminum, total	mg/L			1.02				0.524						0.0291			0.0081			0.0131	0.0052		0.0043			0.011			0.0187		0.0291		0.0054			
Antimony, total	mg/L			<0.00050				<0.00050						<0.00050			<0.00050			<0.00050	<0.00050		<0.00050			<0.00050			<0.00050		<0.00050		<0.00050			
Arsenic, total	mg/L			0.00086				0.0008						0.00032			0.00026			0.00024	0.00026		0.00024			0.00028			0.00024		0.00028		0.00026			
Barium, total	mg/L			0.0808				0.0859						0.0762			0.0742			0.0752	0.0752		0.0777			0.0763			0.0781		0.0774		0.0797			
Beryllium, total	mg/L			<0.00010				<0.00010						<0.00010			<0.00010			<0.00010	<0.00010		<0.00010			<0.00010			<0.00010		<0.00010		<0.00010			
Bismuth, total	mg/L			<0.0010				<0.0010						<0.0010			<0.0010			<0.0010	<0.0010		<0.0010			<0.0010			<0.0010		<0.0010		<0.0010			
Boron, total	mg/L			<0.05				<0.05						<0.05			<0.05			<0.05	<0.05		<0.05			<0.05			<0.05		<0.05		<0.05			
Cadmium, total	mg/L			0.000028				0.000028						<0.000010			<0.000010			<0.000010	<0.000010		<0.000010			<0.000010			<0.000010		0.000012		<0.000010			
Calcium, total	mg/L			36.1				41.7						50.1			52			48.5	51.2		54.4			51.2			53.2		52.4		52.6			
Chromium, total	mg/L			0.0013				<0.0010						<0.0010			<0.0010			<0.0010	<0.0010		<0.0010			<0.0010			<0.0010		<0.0010		<0.0010			
Cobalt, total	mg/L			0.00063				0.00051						<0.00050			<0.00050			<0.00050	<0.00050		<0.00050			<0.00050			<0.00050		<0.00050		<0.00050			
Copper, total	mg/L			0.0699				0.0539						0.0046			0.0032			0.00292	0.00261		0.0026			0.00271			0.0024		0.0048		0.00267			
Iron, total	mg/L			1.77				1.16						0.061			0.025			0.027	0.016		0.014			0.022			0.027		0.066		0.021			
Lead, total	mg/L			0.00051				0.00035						<0.00020			<0.00020			<0.00020	<0.00020		<0.00020			<0.00020			<0.00020		<0.00020		<0.00020			
Lithium, total	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Magnesium, total	mg/L			11.1				13.1						24.7			27.4			24.6	24.5		25.9			26			29.6		27		26			
Manganese, total	mg/L			0.251				0.322						0.0385			0.0325			0.0389	0.0359		0.0382			0.0401			0.0446		0.05		0.0466			
Mercury, total	mg/L			<0.000010				<0.000010						<0.000010			<0.000010			<0.000010	<0.000010		<0.000010			<0.000010			<0.000010		<0.000010		<0.000010			
Molybdenum, total	mg/L			0.0054				0.0057						0.0049			0.005			0.0051	0.0049		0.0052			0.005			0.0053		0.0049		0.0051			
Nickel, total	mg/L			0.0024				0.0018						0.0013			0.0012			<0.0010	<0.0010		<0.0010			<0.0010			<0.0010		<0.0010		<0.0010			
Phosphorus, total	mg/L			0.053				0.046						<0.01			<0.01			<0.01	<0.01		<0.01			<0.01			0.013		0.017		<0.01			
Potassium, total	mg/L			3.83				4.34						2.28			2.27			2.21	2.15		2.1			2.18			2.21		2.13		2.19			
Selenium, total	mg/L			0.00091				0.00095						0.00041			0.00037			0.00042	0.00039		0.00038			0.0004			0.00042		0.00041		0.00036			
Silicon, total	mg/L			5.8				4.95						5.62			5.68			5.24	5.73		5.84			5.63			6.06		6.18		5.97			
Silver, total	mg/L			<0.000020				<0.000020						<0.000020			<0.000020			0.000047	<0.000020		<0.000020			<0.000020			<0.000020		<0.000020		<0.000020			
Sodium, total	mg/L			10.7				12.6						17.1			18.2			17.1	16.7		17.1			17.6			17.3		18.7		17.4			
Strontium, total	mg/L			0.737				0.883						0.691			0.699			0.668	0.672		0.697			0.717			0.733		0.697		0.693			
Sulpher, total	mg/L			11.7				18.8						13.6			16.8			16.2	14.7		15.8			15.3			18.4		15.7		16.7			
Thallium, total	mg/L			<0.000050				<0.000050						<0.000050			<0.000050			<0.000050	<0.000050		<0.000050			<0.000050			<0.000050		<0.000050		<0.000050			
Tin, total	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Titanium, total	mg/L			0.0395				0.0222						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Uranium, total	mg/L			0.0008				0.00096						0.00248			0.00271			0.00272	0.0026		0.00268			0.00261			0.00259		0.00265		0.00265			
Vanadium, total	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Zinc, total	mg/L			0.0117				0.0074						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Zirconium, total	mg/L			<0.00050				<0.00050						<0.00050			<0.00050			<0.00050	<0.00050		<0.00050			<0.00050			<0.00050		<0.00050		<0.00050			
Aluminum, dissolved	mg/L			0.0329				0.0219						0.0235			0.0042			0.0052	0.0042		0.0036			0.0041			0.0101		0.0073		0.0076			
Antimony, dissolved	mg/L			<0.00050				<0.00050						<0.00050			<0.00050			<0.00050	<0.00050		<0.00050			<0.00050			<0.00050		<0.00050		<0.00050			
Arsenic, dissolved	mg/L			0.00056				0.00055						0.00027			0.00026			0.00025	0.00029		0.00022			0.00026			0.00024		0.00033		0.0003			
Barium, dissolved	mg/L			0.0677				0.0728						0.0744			0.0746			0.0744	0.0782		0.0758			0.0818			0.0776		0.0802		0.0777			
Beryllium, dissolved	mg/L			<0.00010				<0.00010						<0.00010			<0.00010			<0.00010	<0.00010		<0.00010			<0.00010			<0.00010		<0.00010		<0.00010			
Bismuth, dissolved	mg/L			<0.0010				<0.0010						<0.0010			<0.0010			<0.0010	<0.0010		<0.0010			<0.0010			<0.0010		<0.0010		<0.0010			
Boron, dissolved	mg/L			<0.05				<0.05						<0.05			<0.05			<0.05	<0.05		<0.05			<0.05			<0.05		<0.05		<0.05			
Cadmium, dissolved	mg/L			0.000017				0.000019						0.000011			<0.000010			<0.000010	0.00001		<0.000010			0.00001			<0.000010		<0.000010		<0.000010			
Calcium, dissolved	mg/L			36.5				41.3						50.3			50.1			49.2	53		51			51.5			53.9		52.5		51.8			
Chromium, dissolved	mg/L		<0.0010	<0.0010				<0.0010		<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010			
Cobalt, dissolved	mg/L			<0.00050				<0.00050						<0.00050			<0.00050			<0.00050	<0.00050		<0.00050			<0.00050			<0.00050		<0.00050		<0.00050			
Copper, dissolved	mg/L			0.0262				0.0232						0.00474			0.00337			0.00308	0.00251		0.00273			0.00262			0.00248		0.00312		0.00305			
Iron, dissolved	mg/L			0.257				0.265						0.0414			0.0178			0.0113	0.0115		0.0127			0.0155			0.0209		0.0136		0.0189			
Lead, dissolved	mg/L			0.00021				<0.00020						<0.00020			<0.00020			<0.00020	<0.00020		<0.00020			<0.00020			<0.00020		<0.00020		<0.00020			
Lithium, dissolved	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Magnesium, dissolved	mg/L			10.7				12.6						24.1			25.3			25.6	25.5		26.2			26.3			27		25.3		26.5			
Manganese, dissolved	mg/L			0.208				0.273						0.034			0.0312			0.0328	0.0362		0.0384			0.0412			0.0399		0.0449		0.0569			
Mercury, dissolved	mg/L			<0.000010				<0.000010						<0.000010			<0.000010			<0.000010	<0.000010		<0.000010			<0.000010			<0.000010		<0.000010		<0.000010			
Molybdenum, dissolved	mg/L			0.0057				0.0053						0.005			0.005			0.0051	0.0049		0.0051			0.005			0.0052		0.0047		0.0051			
Nickel, dissolved	mg/L			0.0012				0.0011						<0.0010			<0.0010			<0.0010	0.001		<0.0010			<0.0010			<0.0010		<0.0010		0.0011			
Phosphorus, dissolved	mg/L			0.019				0.017						<0.01			<0.01			<0.01	0.01		<0.01			<0.01			<0.01		<0.01		<0.01			
Potassium, dissolved	mg/L			3.86				4.1						2.2			2.28			2.16	2.21		2.25			2.3			2.15		2.2		2.2			
Selenium, dissolved	mg/L			0.00089				0.0009						0.00036			0.00043			0.00037	0.00037		0.00034			0.00038			0.0004		0.00035		0.00043			
Silicon, dissolved	mg/L			3.56				3.76						5.74			5.6			5.5	5.54		5.22			5.38			6.32		5.93		5.73			
Silver, dissolved	mg/L			<0.000020				<0.000020						<0.000020			<0.000020			<0.000020	<0.000020		<0.000020			<0.000020			<0.000020		<0.000020		<0.000020			
Sodium, dissolved	mg/L			11				11.6						16.5			17.5			17.7	16.8		17.6			16.9			17.7		16.7		17.4			
Strontium, dissolved	mg/L			0.751				0.843						0.683			0.708			0.666	0.699		0.704			0.692			0.671		0.679		0.686			
Sulpher, dissolved	mg/L			12.8				15.7						14.5			15.4			15.4	15.3		15.4			16.1			16.2		12.1		17.9			
Thallium, dissolved	mg/L			<0.000050				<0.000050						<0.000050			<0.000050			<0.000050	<0.000050		<0.000050			<0.000050			<0.000050		<0.000050		<0.000050			
Tin, dissolved	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Titanium, dissolved	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Uranium, dissolved	mg/L			0.00077				0.00083						0.00256			0.0024			0.00268	0.00264		0.00258			0.00251			0.00267		0.00253		0.00253			
Vanadium, dissolved	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Zinc, dissolved	mg/L			<0.0050				<0.0050						<0.0050			<0.0050			<0.0050	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050			
Zirconium, dissolved	mg/L			<0.00050				<0.00050						0.00082			<0.00050			<0.00050	<0.00050		<0.00050			<0.00050			<0.00050		<0.00050		<0.00050			

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		04/08/2014	04/08/2014	14/08/2014	14/08/2014	14/08/2014	18/08/2014	19/08/2014	26/08/2014	26/08/2014	04/09/2014	04/09/2014	04/09/2014	12/09/2014	12/09/2014	15/09/2014	15/09/2014	22/09/2014	22/09/2014	05/10/2014	05/10/2014	08/10/2014	08/10/2014	13/10/2014	13/10/2014	20/10/2014	27/10/2014	27/10/2014	05/11/2014	10/11/2014	17/11/2014	24/11/2014	02/12/2014	03/12/2014
Total Suspended Solids	mg/L	<1.0				1.1	<1.0		<1.0				283		1.5	1		4.1		13.4		<1.0		<1.0		<1.0	<1.0	1	<1.0	<1.0	2.3	1.2		1.5
Total Dissolved Solids	mg/L	276				306	302		300				306		352	344		312		302		324		314		322	316	304	324	312	338	334		302
pH (field)	pH units	7.92	7.92	7.92		7.92	7.77	7.93	7.93	7.93	7.78	7.78	7.78	7.87	7.87	7.82	7.82	7.68	7.84	7.89	7.89	7.72	7.72	7.86	7.86	7.69	7.87	7.87	7.44	7.61	7.33	7.80	7.81	8.14
pH (lab)	pH units	8.2				8.31	8.31		8.22				8.22		8.28	8.26		8.36		8.23		8.27		8.26		8.37	7.99	8.11	8.29	8.24	7.95	8.15		8.07
Specific Conductance, field	µS/cm	564.6	564.6	511.9		511.9	563.8	533.1	513	513	500.6	500.6	500.6	531.3	531.3	385.1	385.1	500.6	472.2	503.4	503.4	502	502	603.9	603.9	659.1	554	554	572.7	607.9	588.2	587	587.9	661.9
Specific Conductance (lab)	µS/cm	520				526	522		525				526		534	540		522		533		520		534		531	539	539	547	551	545	532		527
Temperature (field)	C	2.4	2.4	1.6		1.6	2.1	2.4	2.3	2.3	0.2	0.2	0.2	0.7	0.7	0.7	0.7	1.1	1.7	0	0	-1.1	-1.1	-0.2	-0.2	-0.6	-1.5	-1.5	-1.5	-1.5	-1.8	0.6	1.4	0.6
Dissolved Oxygen (field)	mg/L	11.63	11.63	11.9		11.9	12.04	11.76	12.49	12.49	14.58	14.58	14.58	11.29	11.29	10.89	10.89	11.44	11.76	11.69	11.69	12.42	12.42	11.84	11.84	11.96	12.94	12.94	12.90	13.61	11.32	13.61	11.42	14.34
Dissolved Oxygen (field)	%	85.1	85.1	85		85	87.5	86	91	91	100.4	100.4	100.4	78.9	78.9	76.2	76.2	80.8	84.7	80.3	80.3	82.7	82.7	80.8	80.8	80.3	84.7	84.7	85	88.7	73.8	91.6	82.9	98.5
ORP (field)	mV	73.2	73.2	74.8		74.8	112.2	96.5	139.2	139.2	152.4	152.4	152.4	136.1	136.1	120.6	120.6	126.8	164.7	15.2	15.2	222.4	222.4	115.1	115.1	231.3	111.1	111.1	173.4	121.3	197.9	225.9	188.0	177.20
Hardness (from total)	mg/L	241				247	244		244				254		256	271		253		269		242		264		255	241	269	267	251	236	249		236
Hardness (from dissolved)	mg/L	242				244	234		242				247		252	249		238		254		238		255		264	270	256	257	268	251	243		235
Alkalinity, total	mg/L	229				229	230		221				228		230	229		216		226		215		217		228	215	220	223	222	204	197		189
Chloride	mg/L	4.5				4.9	4.6		4.7				4.4		4.8	4.8		4.7		4.8		4.9		5.4		4.7	5.9	4.9	5.7	6.7	6.1	6.4		5.9
Fluoride	mg/L	0.56				0.55	0.52		0.56				0.54		0.54	0.57		0.58		0.54		0.52		0.52		0.54	0.56	0.56	0.55	0.58	0.47	0.14		0.44
Sulphate, dissolved	mg/L	46.8				49.4	49.6		52.5				52.4		54.4	56		57		60		60.4		63.5		81.8	64.4	65.2	55.8	67.6	73.8	77.4		77.3
Ammonia	mg/L	0.0099				0.018	0.014		0.053				0.014		0.025	0.02		0.019		0.016		0.025		0.011		0.022	0.019	0.043	0.018	0.0099	0.014	0.031		0.019
Nitrite (N)	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Nitrate (N)	mg/L	0.208				0.196	0.178		0.186				0.194		0.209	0.201		0.163		0.245		0.255		0.255		0.279	0.279	0.283	0.316	0.332	1.24	1.16		1.29
Dissolved Organic Carbon	mg/L	5.49				4.14	5.5		6.1				5.19		5.46	4.23		5.24		4.08		5.54		4.99		3.96	4.97	4.39	4.65	4.91	6.12	5.51		6.11
Aluminum, total	mg/L	0.0076				0.0111	0.0105		0.0081				0.0052		0.0129	0.0069		0.0457		0.166		0.0219		0.0243		0.0131	0.0104	0.0303	0.015	0.0229	0.0211	0.0127		0.0141
Antimony, total	mg/L	<0.00050				<0.00050	<0.00050		<0.00050				<0.00050		<0.00050	<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Arsenic, total	mg/L	0.00026				0.00023	0.00023		0.00027				0.00023		0.00051	0.0002		0.00027		0.00025		0.00026		0.00029		0.00023	0.00024	0.00022	0.00026	0.00024	0.00027	0.00028		0.00028
Barium, total	mg/L	0.0802				0.0766	0.0792		0.0818				0.0769		0.0883	0.0791		0.0832		0.087		0.0785		0.0843		0.0764	0.0824	0.0846	0.0843	0.0839	0.0813	0.0821		0.0863
Beryllium, total	mg/L	<0.00010				<0.00010	<0.00010		<0.00010				<0.00010		<0.00010	<0.00010		<0.00010		<0.00010		<0.00010		<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010
Bismuth, total	mg/L	<0.0010				<0.0010	<0.0010		<0.0010				<0.0010		<0.0010	<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Boron, total	mg/L	<0.05				<0.05	<0.05		<0.05				<0.05		<0.05	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05
Cadmium, total	mg/L	<0.000010				<0.000010	<0.000010		<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		0.000011		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010		<0.000010
Calcium, total	mg/L	53				54.5	54.3		54.1				54.1		57.5	59.7		55.8		60.4		52.5		60.9		57.7	52.1	57.1	60.7	55.3	58.7	59.9		56.9
Chromium, total	mg/L	<0.0010				<0.0010	<0.0010		<0.0010				<0.0010		<0.0010	<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	<0.0010	0.0015	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Cobalt, total	mg/L	<0.00050				<0.00050	<0.00050		<0.00050				<0.00050		<0.00050	<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Copper, total	mg/L	0.00247				0.00768	0.00247		0.00257				0.00233		0.00293	0.00237		0.00265		0.00528		0.00278		0.00234		0.00219	0.00232	0.00625	0.00217	0.00275	0.00457	0.0036		0.00342
Iron, total	mg/L	0.022				0.03	0.027		0.027				0.021		0.033	0.022		0.096		0.306		0.051		0.025		0.028	0.024	0.061	0.031	0.045	0.048	0.027		0.037
Lead, total	mg/L	<0.00020				<0.00020	<0.00020		<0.00020				<0.00020		<0.00020	<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Lithium, total	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Magnesium, total	mg/L	26.3				26.8	26.3		26.4				28.9		27.4	29.6		27.5		28.7		26.9		27.2		27	27	30.6	28.1	27.5	21.6	24.1		22.7
Manganese, total	mg/L	0.0417				0.0416	0.036		0.0387				0.0414		0.0455	0.0421		0.0655		0.0716		0.045		0.0424		0.0467	0.0515	0.046	0.0519	0.0573	0.0346			0.0436
Mercury, total	mg/L	<0.000010				<0.000010	<0.000010		<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molybdenum, total	mg/L	0.0051				0.0052	0.0048		0.0051				0.0047		0.0051	0.0047		0.005		0.0049		0.0047		0.005		0.0048	0.0049	0.0048	0.0048	0.0047	0.0053	0.0052		0.0052
Nickel, total	mg/L	<0.0010				<0.0010	<0.0010		<0.0010				0.0012		<0.0010	<0.0010		<0.0010		0.0013		<0.0010		<0.0010		<0.0010	<0.0010	0.0014	<0.0010	<0.0010	0.0011	<0.0010		0.001
Phosphorus, total	mg/L	<0.01				<0.01	<0.01		<0.01				<0.01		<0.01	0.01		0.013		0.04		<0.01		<0.01		<0.01	<0.01	0.025	<0.01	<0.01	<0.01	<0.01		<0.01
Potassium, total	mg/L	2.16				2.19	2.24		2.14				2.07		2.24	2.39		2.34		2.41		2.08		2.39		2.19	2.22	2.19	2.25	2.27	2.98	3.05		3
Selenium, total	mg/L	0.00037				0.00035	0.00033		0.00038				0.00039		0.00031	0.00033		0.00036		0.0004		0.00033		0.00041		0.00031	0.00038	0.00043	0.00035	0.00037	0.0004	0.00045		0.00047
Silicon, total	mg/L	6.04				5.86	6.03		5.8				5.48		6.38	6.33		5.94		6.89		5.35		6.85		6.13	5.21	6.06	7.4	6.05	4.76	5.35		4.58
Silver, total	mg/L	<0.000020				<0.000020	<0.000020		<0.000020				<0.000020		<0.000020	<0.000020		0.000035		<0.000020		<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020
Sodium, total	mg/L	17.6				17.6	17.3		17.5				18.5		18.1	19.1		17.4		18.2		16.9		18.2		17.5	17.6	18	18.7	17.7	17.4	18.4		17.4
Strontium, total	mg/L	0.706				0.693	0.705		0.724				0.668		0.748	0.671		0.693		0.719		0.689		0.725		0.695	0.709	0.714	0.716	0.705	0.746	0.734		0.729
Sulpher, total	mg/L	16.5				17.3	17.4		17.1				17.7		16.4	19.1		19		20.8		19.6		25.4		22.9	22.5	21.8	23.1	20.2	21.9	26.4		26
Thallium, total	mg/L	<0.000050				<0.000050	<0.000050		<0.000050				<0.000050		<0.000050	<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Tin, total	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Titanium, total	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		0.0099		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Uranium, total	mg/L	0.00275				0.00264	0.00263		0.00265				0.00258		0.00273	0.00241		0.00256		0.00259		0.00259		0.00272		0.00263	0.00269	0.00278	0.0027	0.0028	0.00217	0.00219		0.00224
Vanadium, total	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Zinc, total	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0649	0.0144		<0.0050
Zirconium, total	mg/L	<0.00050				<0.00050	<0.00050		<0.00050				<0.00050		<0.00050	<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Aluminum, dissolved	mg/L	0.0086				0.0045	0.0075		0.0041				<0.0030		0.0032	0.0059		<0.0030		0.0043		<0.0030		0.0031		0.0131	0.0053	<0.0030	0.0037	0.0045	0.0052	0.0082		0.006
Antimony, dissolved	mg/L	<0.00050				<0.00050	<0.00050		<0.00050				<0.00050		<0.00050	<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Arsenic, dissolved	mg/L	0.00032				0.00026	0.00027		0.00027				0.00025		0.00023	0.00024		0.00024		0.00025		0.00023		0.00024		0.00027	0.00025	0.00023	0.00023	0.00023	0.00027	0.00025		0.00026
Barium, dissolved	mg/L	0.0842				0.079	0.0826		0.0804				0.0829		0.0832	0.0793		0.0848		0.0773		0.0779		0.0801		0.081	0.0814	0.0809	0.0816	0.0834	0.0838	0.0813		0.0795
Beryllium, dissolved	mg/L	<0.00010				<0.00010	<0.00010		<0.00010				<0.00010		<0.00010	<0.00010		<0.00010		<0.00010		<0.00010		<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010
Bismuth, dissolved	mg/L	<0.0010				<0.0010	<0.0010		<0.0010				<0.0010		<0.0010	<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Boron, dissolved	mg/L	<0.05				<0.05	<0.05		<0.05				<0.05		<0.05	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05
Cadmium, dissolved	mg/L	<0.000010				<0.000010	<0.000010		<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010		<0.000010
Calcium, dissolved	mg/L	50.6				54.7	49.9		52.6				54.7		57.3	54.9		53.1		56.9		53.2		58.2		59.8	61.5	56.6	56.5	61.2	62.4	58.4		58.2
Chromium, dissolved	mg/L	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Cobalt, dissolved	mg/L	<0.00050				<0.00050	<0.00050		<0.00050				<0.00050		<0.00050	<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Copper, dissolved	mg/L	0.0028				0.00245	0.00245		0.00228				0.00223		0.00243	0.00239		0.00222		0.00226		0.00215		0.00213		0.00226	0.00237	0.0021	0.00172	0.00186	0.00347	0.00334		0.00322
Iron, dissolved	mg/L	0.0248				0.0141	0.0221		0.018				0.0176		0.0178	0.0166		0.0127		0.0113		0.0099		0.0097		0.0298	0.0154	0.0103	0.0117	0.0112	0.0133	0.0173		0.0145
Lead, dissolved	mg/L	<0.00020				<0.00020	<0.00020		<0.00020				<0.00020		<0.00020	<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Lithium, dissolved	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Magnesium, dissolved	mg/L	28				26.1	26.6		26.9				26.9		26.4	27.2		25.5		27.1		25.6		26.6		27.8	28.4	27.8	28.2	28	23.1	23.5		21.8
Manganese, dissolved	mg/L	0.0482				0.0392	0.0342		0.0378				0.0409		0.0424	0.0412		0.065		0.0367		0.0391		0.0383		0.0442	0.0394	0.0415	0.0446	0.0456	0.0509	0.0267		0.0318
Mercury, dissolved	mg/L	<0.000010				<0.000010	<0.000010		<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molybdenum, dissolved	mg/L	0.0055				0.0055	0.005		0.0052				0.005		0.005	0.0051		0.0049		0.0047		0.0047		0.0046		0.0049	0.0049	0.0048	0.0047	0.0051	0.0053	0.0054		0.005
Nickel, dissolved	mg/L	0.0011				<0.0010	<0.0010		<0.0010				<0.0010		<0.0010	<0.0010		<0.0010		0.0011		<0.0010		0.0012		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010		<0.0010
Phosphorus, dissolved	mg/L	<0.01				<0.01	0.01		<0.01				0.011		<0.01	0.014		<0.01		0.01		<0.01		<0.01		0.012	<0.01	<0.01	<0.01	<0.01	0.013	<0.01		<0.01
Potassium, dissolved	mg/L	2.31				2.02	2.25		2.16				2.18		2.19	2.41		2.28		2.24		2.04		2.45		2.35	2.33	2.16	2.22	2.27	3.17	3.16		3.1
Selenium, dissolved	mg/L	0.00039				0.0004	0.00039		0.00035				0.00037		0.00041	0.00031		0.0003		0.00033		0.00033		0.0003		0.00035	0.00033	0.00038	0.00032	0.00034	0.00043	0.00043		0.00037
Silicon, dissolved	mg/L	5.87				6.01	5.02		5.34				5.88		6.22	6.16		5.31		6.19		5.44		6.38		6.39	6.13	5.9	5.85	6.25	5.44	5.45		4.82
Silver, dissolved	mg/L	<0.000020				<0.000020	0.000037		<0.000020				<0.000020		<0.000020	0.000024		<0.000020		<0.000020		<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020
Sodium, dissolved	mg/L	18.2				17	17.1		17.5				17.4		17	18.7		16.9		17.7		16.3		17.8		18.3	17.8	17.9	18.3	17.9	17.9	17.4		17
Strontium, dissolved	mg/L	0.758				0.742	0.707		0.724				0.713		0.703	0.727		0.699		0.689		0.683		0.703		0.736	0.755	0.707	0.71	0.736	0.742	0.7		0.709
Sulpher, dissolved	mg/L	19.7				15.7	17.2		17.6				18.3		18.1	17.1		18.9		21		20.8		20.7		22.4	23.4	20.2	23.5	22.1	25.9	27.2		26.5
Thallium, dissolved	mg/L	<0.000050				<0.000050	<0.000050		<0.000050				<0.000050		<0.000050	<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Tin, dissolved	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Titanium, dissolved	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Uranium, dissolved	mg/L	0.00262				0.00248	0.00263		0.00267				0.0026		0.0026	0.00237		0.00254		0.00252		0.00243		0.00272		0.00253	0.00257	0.00259	0.00265	0.0027	0.00232	0.0022		0.00214
Vanadium, dissolved	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Zinc, dissolved	mg/L	<0.0050				<0.0050	<0.0050		<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Zirconium, dissolved	mg/L	<0.00050				<0.00050	<0.00050		<0.00050				<0.00050		<0.00050	<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**04/12/2014**	**05/12/2014**	**06/12/2014**	**07/12/2014**	**08/12/2014**	**09/12/2014**	**10/12/2014**	**11/12/2014**	**12/12/2014**	**13/12/2014**	**14/12/2014**	**15/12/2014**	**16/12/2014**	**19/12/2014**	**20/12/2014**	**21/12/2014**	**22/12/2014**	**02/01/2015**	**06/01/2015**	**13/01/2015**	**21/01/2015**	**29/01/2015**	**03/02/2015**	**11/02/2015**	**18/02/2015**	**26/02/2015**	**03/03/2015**	**09/03/2015**	**16/03/2015**	**25/03/2015**	**30/03/2015**	**04/04/2015**	**05/04/2015**
Total Suspended Solids	mg/L						6.4						1.5	1.7	1.3	2.3		1.1	3.6		1.5	1.7	1.2	2.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Total Dissolved Solids	mg/L						308						312	308	316	318		302	312	334	330	320	320	352	336	340	304	286	326	352	304	302		
pH (field)	pH units	7.39	7.66	7.76	7.71	7.72	7.98	7.79	7.66	7.93	7.83	7.85	7.82	7.83	7.98	7.78	7.99	7.86	7.68	7.82	7.46	8.01	8.2	7.31	7.72	7.85	7.85	7.59	7.68	7.14	7.4	7.4	7.6	7.93
pH (lab)	pH units						8.03						7.96	7.87	8.3	8.06		8.19	8.11	8.04	8.26	8.28	8.29	8.19	7.91	7.88	8.08	7.88	8.06	8.11	8.09	8.45			
Specific Conductance, field	µS/cm	555.6	561.9	586	600.2	579.9	529	507.6	510.2	515.2	522.8	537	522	466.2	561.8	574.1	572.7	568.3	613.6	604.1	580.3	572	595.6	882.7	566.8	546.5	571.6	552.4	558.6	543.6	640.2	531.8	517.7	486.4
Specific Conductance (lab)	µS/cm						496						500	501	531	527		539	560	580	552	551	551	565	564	567	551	546	564	548	526	527		
Temperature (field)	C	-1.2	-1.3	-1.2	-1.2	-0.8	1.1	1.3	1.3	1.3	1.2	1.2	1.3	1.2	-1.7	-1.9	-1.6	-1.9	-2	-2.1	-2.2	-0.1	-1.2	-2.4	2.6	3.1	0.4	0	0	0.3	1	0.3	0	1.8
Dissolved Oxygen (field)	mg/L	13.64	12.84	13.43	13.75	13.53	13.56	12.92	13.73	13.04	13.79	15.92		11.73	13.93	15.42	14.31	12.23	11.95	7.38	12.50	14.02	11.63	10.81	5.48	3.22	5.44	2.9	10.32	4.43	3.62	3.77	10.12	16.67
Dissolved Oxygen (field)	%	89.7	84.4	88.4	91.4	91.5	96.8	91.7	97.3	96.7	97.7	113	87.2	83	91.6	100.6	94.3	79.7	76.9	49.1	80.3	95.8	77.2	69.1	41.1	24.7	37.6	20	70.6	31.5	26.2	25.9	69.7	119.8
ORP (field)	mV	150.1	127.1	194.1	-26.2	166.1	42.6	72.2	126.5	248.3	131.2	211.7	211.0	131.4	168.8	220.4	112.9	143.5	77.9	86.7	59.8	102.1	119.9	123.2	127.4	102.5	124.6	109.6	177.6	123.9	63.1	162.7	75.7	110
Hardness (from total)	mg/L						227						213	208	253	262		255	254	270	263	264	265	274	270	269	250	254	265	256	250	240		
Hardness (from dissolved)	mg/L						215						210	219	247	254		261	247	275	250	261	251	257	259	260	248	253	256	251	247	243		
Alkalinity, total	mg/L						152						143	142	197	184		212	222	228	210	220	213	223	220	215	218	216	222	216	201	209		
Chloride	mg/L						7.5						7.5	7.4	6.6	6.1		5.3	4.8	5.3	5	5	5.3	5.2	5.2	5.8	5.5	5.5	5.1	5.2	5.7	5.4		
Fluoride	mg/L						0.44						0.43	0.43	0.47	0.47		0.49	0.54	0.56	0.55	0.54	0.59	0.53	0.5	0.5	0.43	0.46	0.55	0.53	0.46	0.43		
Sulphate, dissolved	mg/L						89.2						88.9	92.7	74.9	78.1		71.8	76.4	73.1	73	65.6	71.7	70.1	69.4	72.7	68.7	67.4	73.7	66.9	64.4	63.6		
Ammonia	mg/L						0.09						0.074	0.068	0.013	0.016		0.017	0.029	0.034	0.02	0.017	0.016	0.046	0.043	0.061	0.068	0.066	0.011	0.058	0.081	0.056		
Nitrite (N)	mg/L						0.0207						0.0209	0.019	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0052	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Nitrate (N)	mg/L						2.89						2.99	3.16	1.19	1.21		0.647	0.407	0.524	0.499	0.499	0.506	0.528	0.201	0.135	0.084	0.096	0.542	0.115	0.143	0.145		
Dissolved Organic Carbon	mg/L						7.1						6.63	6.43	5.77	5.03		2.53	4.09	4.37	3.12	3.64	3.22	4.65	3.77	4.39	4.92	4.61	3.91	4.15	4.41	4.79		
Aluminum, total	mg/L						0.102						0.0291	0.0283	0.0132	0.029		0.0181	0.0712	0.0278	0.019	0.0121	0.0185	0.0693	0.0069	0.0042	0.0058	0.0213	0.0079	0.0113	0.0051	0.0696		
Antimony, total	mg/L						<0.00050						<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Arsenic, total	mg/L						0.00043						0.00031	0.0003	0.00029	0.00029		0.00028	0.00025	0.00027	0.00024	0.00023	0.00024	0.00042	0.00023	0.00022	0.00021	0.00021	0.00023	0.00021	0.00022	0.00023		
Barium, total	mg/L						0.0808						0.0744	0.0735	0.0897	0.0798		0.0886	0.084	0.0899	0.0861	0.0852	0.0941	0.1	0.0979	0.098	0.107	0.0958	0.0809	0.0996	0.0958	0.0905		
Beryllium, total	mg/L						<0.00010						<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		
Bismuth, total	mg/L						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
Boron, total	mg/L						0.053						0.053	0.055	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Cadmium, total	mg/L						<0.000010						<0.000010	<0.000010	0.000013	<0.000010		<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	0.000011	0.000015	0.000011	0.000014	0.000013	<0.000010	0.000028	0.000011	0.000014		
Calcium, total	mg/L						57.8						56.2	54.9	61.4	62.7		58.6	57.2	58.1	60.2	57.6	57.9	59.8	63.3	61.2	57.5	59.2	56.6	60.2	56.5	55.6		
Chromium, total	mg/L						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
Cobalt, total	mg/L						<0.00050						<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Copper, total	mg/L						0.0103						0.00881	0.00804	0.00355	0.0036		0.00253	0.00313	0.00244	0.00226	0.00188	0.0023	0.00337	0.0033	0.00213	0.0018	0.00382	0.00331	0.00338	0.00169	0.00463		
Iron, total	mg/L						0.195						0.061	0.063	0.027	0.059		0.032	0.107	0.053	0.044	0.028	0.039	0.214	0.042	0.041	0.044	0.072	0.015	0.063	0.05	0.103		
Lead, total	mg/L						<0.00020						<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		
Lithium, total	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Magnesium, total	mg/L						20						17.6	17.3	24.3	25.6		26.4	27	30.4	27.3	29.2	29.3	30.2	27.1	28.3	26	25.9	30	25.6	26.4	24.6		
Manganese, total	mg/L						0.0932						0.0279	0.0284	0.0402	0.0385		0.0439	0.0726	0.0458	0.0419	0.038	0.0532	0.0753	0.299	0.354	0.385	0.38	0.0175	0.418	0.403	0.38		
Mercury, total	mg/L						<0.000010						<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Molybdenum, total	mg/L						0.0089						0.0096	0.0084	0.006	0.0049		0.0053	0.0048	0.0051	0.0048	0.005	0.0051	0.0056	0.004	0.0036	0.0037	0.0034	0.0046	0.0032	0.0036	0.0035		
Nickel, total	mg/L						0.001						<0.0010	<0.0010	0.0011	0.0011		<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	0.0016	0.0011	0.0011	0.0012	0.0012	<0.0010	0.0011	0.0011	0.0012		
Phosphorus, total	mg/L						0.026						0.024	0.025	<0.01	0.014		<0.01	0.015	0.02	0.011	<0.01	0.011	0.017	0.013	<0.01	<0.01	0.014	0.011	<0.01	0.011	0.011		
Potassium, total	mg/L						7.04						6.88	6.39	3.54	3.54		2.88	2.24	2.39	2.21	2.38	2.55	2.47	2.41	2.21	2.07	2.21	2.31	2.07	1.97	1.97		
Selenium, total	mg/L						0.00123						0.00105	0.00097	0.00047	0.00036		0.00039	0.00041	0.00047	0.00043	0.0004	0.0004	0.00058	0.00019	0.00013	0.00011	<0.00010	0.00036	<0.00010	<0.00010	0.0001		
Silicon, total	mg/L						2.28						1.81	1.9	5.01	6.1		6.31	5.99	5.86	6.59	6.26	6.24	6.76	6.8	6.58	6.15	6.06	6.16	6.42	6.05	5.91		
Silver, total	mg/L						<0.000020						<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000029	<0.000020	<0.000020		
Sodium, total	mg/L						19.4						19.2	18	18.8	19.4		18	17.8	18.9	17.4	18.8	18.7	19.6	17.5	17.3	17.1	17.8	18.3	17	17	15.1		
Strontium, total	mg/L						1.32						1.48	1.39	0.977	0.843		0.876	0.746	0.791	0.758	0.759	0.797	0.82	0.721	0.729	0.774	0.682	0.786	0.708	0.671	0.63		
Sulpher, total	mg/L						27.6						32.2	29.3	24.9	23.9		22.6	18.9	25.9	24.1	25.9	26	25.8	25.9	22.6	22.8	24.7	26.3	21.2	21.5	23.1		
Thallium, total	mg/L						<0.000050						<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		
Tin, total	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Titanium, total	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Uranium, total	mg/L						0.00175						0.00158	0.00159	0.00256	0.00221		0.00276	0.00277	0.00272	0.00266	0.00262	0.00307	0.00353	0.00263	0.00233	0.00245	0.00201	0.00274	0.00194	0.00192	0.00181		
Vanadium, total	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Zinc, total	mg/L						<0.0050						<0.0050	<0.0050	0.048	0.0105		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0317	<0.0050	0.0205	<0.0050	0.157		
Zirconium, total	mg/L						<0.00050						<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Aluminum, dissolved	mg/L						0.0055						<0.0030	<0.0030	0.0041	<0.0030		<0.0030	0.0078	<0.0030	0.0032	<0.0030	0.0063	<0.0030	<0.0030	<0.0030	0.0038	0.0173	0.0032	<0.0030	<0.0030	0.0049		
Antimony, dissolved	mg/L						<0.00050						<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Arsenic, dissolved	mg/L						0.00043						0.00037	0.00037	0.00027	0.00027		0.00025	0.00025	0.00023	0.00026	0.00023	0.00022	0.00022	0.00024	0.00023	0.00024	0.00022	0.0002	0.00021	0.0002	0.00022		
Barium, dissolved	mg/L						0.0752						0.0703	0.0725	0.08	0.0795		0.093	0.0849	0.0858	0.0928	0.0847	0.0856	0.0856	0.0958	0.095	0.104	0.0961	0.0806	0.0971	0.0968	0.0929		
Beryllium, dissolved	mg/L						<0.00010						<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		
Bismuth, dissolved	mg/L						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
Boron, dissolved	mg/L						0.056						0.05	0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Cadmium, dissolved	mg/L						<0.000010						<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	0.000012	0.000013	0.000016	<0.000010	0.000011	<0.000010	0.000013		
Calcium, dissolved	mg/L						56.7						55.7	57.7	61.3	62.5		61.5	56.7	62.9	54.9	57	54.1	58.1	58.5	58.9	55.2	56.3	56.6	59	56.5	56.7		
Chromium, dissolved	mg/L						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
Cobalt, dissolved	mg/L						<0.00050						<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Copper, dissolved	mg/L						0.00689						0.0072	0.00699	0.00324	0.00322		0.00227	0.00224	0.002	0.00191	0.00162	0.00179	0.0019	0.00324	0.00177	0.00204	0.00582	0.002	0.00168	0.00148	0.00213		
Iron, dissolved	mg/L						0.0116						0.0103	0.0214	0.0104	0.01		0.0078	0.0226	0.0087	0.01	0.0075	0.0088	0.0128	0.0286	0.036	0.0389	0.0662	0.0074	0.0439	0.0429	0.0412		
Lead, dissolved	mg/L						<0.00020						<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		
Lithium, dissolved	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Magnesium, dissolved	mg/L						17.9						17.1	18.1	22.9	23.8		26.2	25.7	28.8	27.3	28.9	28.3	27.1	27.4	27.5	26.8	27.3	27.9	25.2	25.6	24.7		
Manganese, dissolved	mg/L						0.0217						0.0098	0.0117	0.0305	0.0295		0.0328	0.0555	0.0404	0.0338	0.0313	0.0395	0.0546	0.292	0.351	0.398	0.392	0.0156	0.414	0.391	0.378		
Mercury, dissolved	mg/L						<0.000010						<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Molybdenum, dissolved	mg/L						0.0083						0.009	0.0087	0.0052	0.0051		0.0054	0.0051	0.0051	0.0054	0.005	0.005	0.0049	0.0041	0.0037	0.0036	0.0033	0.0047	0.0032	0.0035	0.0034		
Nickel, dissolved	mg/L						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	0.001	0.0013	0.0022	0.0012	<0.0010	0.0011	0.0014	0.0015		
Phosphorus, dissolved	mg/L						0.025						0.02	0.021	0.011	<0.01		<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.017	<0.01	<0.01	<0.01	<0.01		
Potassium, dissolved	mg/L						6.45						6.71	6.97	3.41	3.4		2.9	2.15	2.67	2.38	2.32	2.34	2.28	2.37	2.22	2.2	2.02	2.29	2.08	1.94	1.93		
Selenium, dissolved	mg/L						0.00095						0.00093	0.00089	0.00037	0.00039		0.00039	0.00038	0.00042	0.00035	0.00039	0.00035	0.00042	0.00021	0.00016	<0.00010	<0.00010	0.00041	<0.00010	<0.00010	0.00011		
Silicon, dissolved	mg/L						2.13						1.79	2.05	5.38	5.44		6.4	6.51	6.8	5.92	6.07	5.83	6.13	6.22	6.05	5.73	6.01	6.05	6.24	6.05	5.93		
Silver, dissolved	mg/L						<0.000020						<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		
Sodium, dissolved	mg/L						18.7						17.8	19.5	17.7	17.9		17.9	16.8	18.7	18.1	18.5	17.9	18.8	18	16.7	17.4	17.1	17.9	16.4	16	15.6		
Strontium, dissolved	mg/L						1.28						1.32	1.32	0.864	0.829		0.882	0.752	0.768	0.83	0.75	0.735	0.762	0.716	0.715	0.754	0.664	0.735	0.678	0.678	0.638		
Sulpher, dissolved	mg/L						32.7						30.4	33.1	28.1	28.8		25.1	22.8	27.6	23.4	25.9	23	24.9	24.7	24.5	21.5	22.8	24.1	22.7	23	22.1		
Thallium, dissolved	mg/L						<0.000050						<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		
Tin, dissolved	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Titanium, dissolved	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Uranium, dissolved	mg/L						0.00152						0.00148	0.00148	0.00224	0.00225		0.00282	0.00275	0.0028	0.00305	0.00251	0.00262	0.00275	0.00255	0.00241	0.00225	0.00198	0.00271	0.0019	0.00198	0.00184		
Vanadium, dissolved	mg/L						<0.0050						<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Zinc, dissolved	mg/L						<0.0050						<0.0050	0.008	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0056	<0.0050	0.006	<0.0050	<0.0050		
Zirconium, dissolved	mg/L						<0.00050						<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**06/04/2015**	**07/04/2015**	**08/04/2015**	**09/04/2015**	**10/04/2015**	**11/04/2015**	**13/04/2015**	**14/04/2015**	**14/04/2015**	**15/04/2015**	**16/04/2015**	**17/04/2015**	**18/04/2015**	**19/04/2015**	**20/04/2015**	**21/04/2015**	**22/04/2015**	**23/04/2015**	**24/04/2015**	**25/04/2015**	**26/04/2015**	**27/04/2015**	**28/04/2015**	**29/04/2015**	**30/04/2015**	**01/05/2015**	**02/05/2015**	**03/05/2015**	**04/05/2015**	**05/05/2015**	**06/05/2015**	**07/05/2015**	**08/05/2015**
Total Suspended Solids	mg/L	2.8								4.3							9.4						4.2												
Total Dissolved Solids	mg/L	292								272							192						240												
pH (field)	pH units	7.84	7.89	7.89	7.88	7.79	7.91	7.89	7.79	7.83	7.82	7.72	7.96	7.88	7.84	7.95	7.86	7.84	7.81	7.85	7.91	7.91	7.91	7.87	7.95	7.9	7.89	7.87	6.94	7.85	7.63	7.65	7.67	7.67
pH (lab)	pH units	8.11								8.22							8.13						8.14												
Specific Conductance, field	µS/cm	490.5	491.7	476.2	492.2	493.7	511	516.2	490.5	471.2	492.5	517.7	514.6	590.7	402.4	326.9	391.9	405.9	397.3	381.6	377.4	367.2	357.1	353.2	343.6	322.1	294.1	274.8	278.4	256.5	249.3	458.4	517.4	572.3
Specific Conductance (lab)	µS/cm	497								501							391						355												
Temperature (field)	C	2.4	2.5	2.7	2.6	2.5	0.6	0.1	2.5	2.8	2.7	2.5	2.6	1.9	2.6	2.4	2.6	2.5	2.6	2.7	2.5	2.7	2.7	2.8	2.7	2.7	3	3.3	3.1	3.7	4	1.5	2.2	2.5
Dissolved Oxygen (field)	mg/L	12.7	12.22	11.97	12.01	12.79	11.66	12.89	12.36	12.37	12.22	13.26	16.27	12.54	14.65	11.69	13.24	13.92	13.69	13.2	12.81	12.39	12.64	10.72	12.69	12.63	12.54	12.54	13.09	12.85	12.39	12.67	12.43	12.59
Dissolved Oxygen (field)	%	93.6	89.7	88.2	88.6	94.2	81.3	88.6	90.8	81.7	89.9	97.3	119.3	91.4	108.1	88.2	97.3	101.6	99.8	97.6	94.1	91.2	93.3	82.6	94.2	93.1	93.3	94	97.6	97.6	94.7	90.7	90.7	92.7
ORP (field)	mV	122	169.8	152.5	161.5	167.4	114.6	124.7	172.6	205.3	225.8	171.8	165.1	141.7	170.7	184.3	203.8	165.1	185.7	179.9	113.8	145.2	132.4	142.8	153.8	177.4	183.2		-66.5	103.4	73.4	100.3	90.1	149.7
Hardness (from total)	mg/L	197								211		230	215	267	164	125	158	156					142												
Hardness (from dissolved)	mg/L	201								201							142						138												
Alkalinity, total	mg/L	151								154							114						106												
Chloride	mg/L	7.6								9.1							8						6.9												
Fluoride	mg/L	0.39								0.38							0.27						0.28												
Sulphate, dissolved	mg/L	79.7								82.9							58.1						49.6												
Ammonia	mg/L	0.076								0.064							0.059						0.066												
Nitrite (N)	mg/L	0.0157								0.0133							0.0474						0.0345												
Nitrate (N)	mg/L	2.76								2.93							2.55						2.59												
Dissolved Organic Carbon	mg/L	6.87								5.6							9.08						8.74												
Aluminum, total	mg/L	0.06								0.128		0.12	0.13	0.0391	0.138	0.142	0.276	0.35					0.15												
Antimony, total	mg/L	<0.00050								<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					<0.00050												
Arsenic, total	mg/L	0.00048								0.00041		0.00038	0.00038	0.00035	0.00031	0.00032	0.00049	0.00038					0.00035												
Barium, total	mg/L	0.0704								0.0713		0.0751	0.0704	0.0813	0.0585	0.0475	0.0648	0.0609					0.0541												
Beryllium, total	mg/L	<0.00010								<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010					<0.00010												
Bismuth, total	mg/L	<0.0010								<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					<0.0010												
Boron, total	mg/L	0.055								0.056		0.052	<0.05	<0.05	0.059	0.059	0.078	<0.05					<0.05												
Cadmium, total	mg/L	0.000036								0.000012		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000013	0.000015					0.000015												
Calcium, total	mg/L	50.9								55.7		59.4	56.2	67.4	42.8	33	41.9	41.2					36.7												
Chromium, total	mg/L	<0.0010								<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					<0.0010												
Cobalt, total	mg/L	<0.00050								<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					<0.00050												
Copper, total	mg/L	0.0106								0.0153		0.0138	0.0131	0.00968	0.0144	0.0166	0.0185	0.0236					0.0232												
Iron, total	mg/L	0.102								0.199		0.252	0.267	0.114	0.274	0.27	0.452	0.576					0.239												
Lead, total	mg/L	<0.00020								0.00058		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	0.00021					<0.00020												
Lithium, total	mg/L	<0.0050								<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					<0.0050												
Magnesium, total	mg/L	16.9								17.6		19.8	18	24	13.7	10.3	12.9	12.9					12.3												
Manganese, total	mg/L	0.0752								0.0424		0.0496	0.0449	0.025	0.0579	0.0456	0.0846	0.12					0.0634												
Mercury, total	mg/L	<0.000010								<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010					<0.000010												
Molybdenum, total	mg/L	0.0078								0.0074		0.0079	0.0074	0.0064	0.0063	0.0058	0.0068	0.0064					0.0052												
Nickel, total	mg/L	<0.0010								<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					<0.0010												
Phosphorus, total	mg/L	0.023								0.028		0.033	0.031	0.025	0.027	0.034	0.041	0.038					0.034												
Potassium, total	mg/L	5.47								5.97		6.17	5.6	5.17	5.02	4.36	5.62	5.16					4.33												
Selenium, total	mg/L	0.00094								0.00109		0.00114	0.00125	0.00147	0.0011	0.00064	0.00115	0.00062					0.00081												
Silicon, total	mg/L	2.26								2.63		3.15	3.19	4.47	2.7	2.27	3.19	3.14					2.85												
Silver, total	mg/L	<0.000020								<0.000020		0.000031	<0.000020	<0.000020	<0.000020	0.000047	<0.000020	<0.000020					<0.000020												
Sodium, total	mg/L	18.4								20		22.6	20.9	21.7	19.7	18.8	19.9	19					16.6												
Strontium, total	mg/L	1.19								1.23		1.29	1.17	1.16	0.924	0.727	0.921	0.867					0.77												
Sulpher, total	mg/L	23.9								25.2		26.3	28.4	27.5	21.3	16	22.2	16.6					15.4												
Thallium, total	mg/L	<0.000050								<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050					<0.000050												
Tin, total	mg/L	<0.0050								<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					<0.0050												
Titanium, total	mg/L	<0.0050								0.0068		0.0062	0.0104	<0.0050	0.0079	0.007	0.013	0.0184					0.0062												
Uranium, total	mg/L	0.00154								0.00141		0.00169	0.00159	0.00223	0.00117	0.00082	0.00109	0.00107					0.00095												
Vanadium, total	mg/L	<0.0050								<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					<0.0050												
Zinc, total	mg/L	0.0137								<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					<0.0050												
Zirconium, total	mg/L	<0.00050								<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					<0.00050												
Aluminum, dissolved	mg/L	0.0041								<0.0030							0.0053						0.0082												
Antimony, dissolved	mg/L	<0.00050								<0.00050							<0.00050						<0.00050												
Arsenic, dissolved	mg/L	0.00034								0.00034							0.00026						0.00027												
Barium, dissolved	mg/L	0.0708								0.0688							0.055						0.052												
Beryllium, dissolved	mg/L	<0.00010								<0.00010							<0.00010						<0.00010												
Bismuth, dissolved	mg/L	<0.0010								<0.0010							<0.0010						<0.0010												
Boron, dissolved	mg/L	0.056								0.051							0.054						<0.05												
Cadmium, dissolved	mg/L	<0.000010								<0.000010							<0.000010						<0.000010												
Calcium, dissolved	mg/L	53.5								52.8							36.5						36												
Chromium, dissolved	mg/L	<0.0010								<0.0010							<0.0010						<0.0010												
Cobalt, dissolved	mg/L	<0.00050								<0.00050							<0.00050						<0.00050												
Copper, dissolved	mg/L	0.00687								0.00728							0.0103						0.0151												
Iron, dissolved	mg/L	0.0105								0.0097							0.017						0.0434												
Lead, dissolved	mg/L	<0.00020								<0.00020							<0.00020						<0.00020												
Lithium, dissolved	mg/L	<0.0050								<0.0050							<0.0050						<0.0050												
Magnesium, dissolved	mg/L	16.3								16.8							12.4						11.8												
Manganese, dissolved	mg/L	0.0585								0.0109							0.0223						0.0347												
Mercury, dissolved	mg/L	<0.000010								<0.000010							<0.000010						<0.000010												
Molydenum, dissolved	mg/L	0.0079								0.0076							0.0066						0.0051												
Nickel, dissolved	mg/L	<0.0010								<0.0010							<0.0010						<0.0010												
Phosphorus, dissolved	mg/L	0.019								0.02							0.014						0.019												
Potassium, dissolved	mg/L	5.96								5.91							5.09						4.21												
Selenium, dissolved	mg/L	0.00087								0.00108							0.00074						0.00065												
Silicon, dissolved	mg/L	2.32								2.47							2.16						2.62												
Silver, dissolved	mg/L	<0.000020								<0.000020							<0.000020						<0.000020												
Sodium, dissolved	mg/L	18								18.9							19.7						15.5												
Strontium, dissolved	mg/L	1.23								1.22							0.833						0.747												
Sulpher, dissolved	mg/L	25.2								25.7							20.1						18.9												
Thallium, dissolved	mg/L	<0.000050								<0.000050							<0.000050						<0.000050												
Tin, dissolved	mg/L	<0.0050								<0.0050							<0.0050						<0.0050												
Titanium, dissolved	mg/L	<0.0050								<0.0050							<0.0050						<0.0050												
Uranium, dissolved	mg/L	0.00149								0.00134							0.001						0.00091												
Vanadium, dissolved	mg/L	<0.0050								<0.0050							<0.0050						<0.0050												
Zinc, dissolved	mg/L	<0.0050								<0.0050							<0.0050						<0.0050												
Zirconium, dissolved	mg/L	<0.00050								<0.00050							<0.00050						<0.00050												

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**09/05/2015**	**10/05/2015**	**11/05/2015**	**12/05/2015**	**13/05/2015**	**14/05/2015**	**15/05/2015**	**15/05/2015**	**16/05/2015**	**17/05/2015**	**18/05/2015**	**19/05/2015**	**20/05/2015**	**21/05/2015**	**22/05/2015**	**23/05/2015**	**24/05/2015**	**25/05/2015**	**26/05/2015**	**27/05/2015**	**28/05/2015**	**29/05/2015**	**30/05/2015**	**31/05/2015**	**04/06/2015**	**09/06/2015**	**15/06/2015**	**22/06/2015**	**29/06/2015**	**07/07/2015**	**14/07/2015**	**20/07/2015**	**29/07/2015**
Total Suspended Solids	mg/L		<1.0				10.9		12.3					5.4									1.4		2	<1.0	<1.0	12.6	<1.0	<1.0	8.3	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L		334				200		188					240									314		300	318	300	318	312	310	323	284	304	318
pH (field)	pH units	7.44	7.54	7.45	7.97	7.64	7.76	7.61	7.61	7.7	7.72	7.92	7.98	7.81	7.64	7.67	7.73	7.61	7.69	7.75	7.64	7.66	7.65	7.66	7.78	7.79	7.77	7.84	7.9	7.97		7.76	7.94	7.92
pH (lab)	pH units		8.16				8.06		8.07					8.07									8.13		8.24	8.15	8.19	8.21	8.32	8.32	8.31	8.16	8.26	8.22
Specific Conductance, field	µS/cm	551.2	549.1	299.9	298.4	257.1	300.8	301.8	301.8	322.1	357	359.2	344.9	352.4	350.9	510	550.4	567.8	524.7	539.7	530.5	523.7	516.5	520.9	506.8	533.7	531.7	531.2	539.8	539.9		437.1	516.6	516.4
Specific Conductance (lab)	µS/cm		558				303		307					349									524		509	530	530	533	544	535	537	527	542	545
Temperature (field)	C	2.6	2.6	8.5	8.6	9.3	9.9	10	10	10.6	9	10.1	10.9	11.1	11.5	3.1	3.5	3.5	3.5	3.7	4	3.9	4.1	3.1	4.5	2.4	4.9	5.4	5.6	6.6		1.9	3.1	4.2
Dissolved Oxygen (field)	mg/L	13.35	13.73	11.65	10.68	10.63	9.63	9.55	9.55	10.27	10.45	10.31	9.69	8.63	8.9	11.9	12.71	12.64	12.29	12.41	11.96	11.94	11.91	11.8	11.37	12.61	11.08	10.85	12.24	10.67		13.01	10.68	12.11
Dissolved Oxygen (field)	%	96.3	101.3	99.7	91.8	91.9	85.2	85.1	85.1	90.7	90.6	91.7	87.7	78.3	84.6	89.6	96.3	95.5	93.2	94.2	91.3	94.62	91.3	88.1	88.2	92.6	86.6	86.1	96.8	85.1		94.9	80.5	93.1
ORP (field)	mV	111.4	53.6	92.6	91.7	81.4	96.9	123.4	125.4	187.6	141.5	85.4	99	76.1	80.2	145.4	105.2	141.3	100.1	132.7	139.8	125.8	114	148.5	165.3	81.2	155.6	128.7	160.7	141.3		98.5	167.3	122.4
Hardness (from total)	mg/L		223				119		124					149									252		243	249	253	305	258	241	245	246	274	270
Hardness (from dissolved)	mg/L		241				131		126					144									203		216	244	262	247	251	253	255	268	271	255
Alkalinity, total	mg/L		184				98.6		99.8					123									177		174	211	209	217	223	222	215	217	228	222
Chloride	mg/L		11				5.9		6					6.5									9.4		10	5.4	5.7	5.3	5.6	5.2	5.4	5	5.2	5.3
Fluoride	mg/L		0.41				0.23		0.23					0.27									0.38		0.36	0.51	0.54	0.54	0.56	0.52	0.54	0.53	0.55	0.48
Sulphate, dissolved	mg/L		82.3				36.2		35.4					38.7									68.8		74.8	61.6	66.6	65.6	63	64.4	62.9	61.2	60	72.9
Ammonia	mg/L		0.1				0.049		0.026					0.059									0.088		0.068	0.012	0.024	0.025	0.022	0.021	0.03	0.023	0.03	0.62
Nitrite (N)	mg/L		0.0086				0.0408		0.0427					0.042									0.021		0.0219	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L		2.79				1.49		1.49					1.62									2.19		2.14	0.385	0.355	0.365	0.31	0.252	0.275	0.274	0.279	0.21
Dissolved Organic Carbon	mg/L		7.22				10.6		9.22					9.3									6.21		8.08	3.83	3.88	4.4	4.23	5.68	3.17	2.75	4.97	3.9
Aluminum, total	mg/L		0.0199				0.059		0.0611					0.113									0.025		0.0328	0.0074	0.004	0.567	0.0045	0.0079	0.0139	0.0066	0.0127	0.0055
Antimony, total	mg/L		<0.00050				<0.00050		<0.00050					<0.00050									<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L		0.00033				0.00043		0.00041					0.00049									0.00035		0.00041	0.00025	0.00025	0.00053	0.00026	0.00022	0.00027	0.00023	0.00028	0.00029
Barium, total	mg/L		0.074				0.0461		0.0499					0.0582									0.0862		0.0891	0.0772	0.0782	0.103	0.0765	0.0743	0.0712	0.0738	0.0785	0.0913
Beryllium, total	mg/L		<0.00010				<0.00010		<0.00010					<0.00010									<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L		<0.0010				<0.0010		<0.0010					<0.0010									<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L		<0.05				<0.05		<0.05					<0.05									<0.05		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L		<0.000010				0.000011		0.00001					0.000015									<0.000010		0.000014	<0.000010	<0.000010	0.000018	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	<0.000010
Calcium, total	mg/L		56.9				31.5		32.3					39									64.9		61.6	57.6	54.9	67	56.8	53.4	54.6	54.1	60.6	60.6
Chromium, total	mg/L		<0.0010				<0.0010		<0.0010					<0.0010									<0.0010		<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L		<0.00050				<0.00050		<0.00050					<0.00050									<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L		0.00994				0.0212		0.022					0.0236									0.0123		0.0129	0.00299	0.00286	0.0202	0.00236	0.00295	0.00268	0.00258	0.0024	0.00253
Iron, total	mg/L		0.061				0.275		0.254					0.433									0.131		0.134	0.018	0.013	0.877	0.016	0.018	0.021	0.021	0.033	0.021
Lead, total	mg/L		<0.00020				<0.00020		<0.00020					<0.00020									<0.00020		<0.00020	<0.00020	<0.00020	0.00028	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L		19.8				9.66		10.5					12.5									21.9		21.7	25.4	28.1	33.4	28.1	26.2	26.4	27	29.7	28.9
Manganese, total	mg/L		0.0354				0.0832		0.0927					0.152									0.114		0.135	0.0631	0.0568	0.25	0.0583	0.0553	0.0541	0.0529	0.0527	0.0475
Mercury, total	mg/L		<0.000010				<0.000010		<0.000010					<0.000010									<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L		0.0059				0.0035		0.0034					0.0042									0.0062		0.0063	0.0046	0.0048	0.0058	0.005	0.0044	0.0048	0.0049	0.0047	0.0054
Nickel, total	mg/L		<0.0010				<0.0010		0.0016					0.0012									<0.0010		<0.0010	<0.0010	<0.0010	0.0018	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L		0.016				0.022		0.027					0.04									0.019		0.03	0.01	<0.01	0.041	<0.01	<0.01	<0.01	0.01	<0.01	0.01
Potassium, total	mg/L		4.31				3.01		3.15					3.43									5.11		5.39	2.66	2.42	3.05	2.45	2.18	2.14	2.33	2.33	2.55
Selenium, total	mg/L		0.00112				0.00061		0.00053					0.00061									0.00117		0.00087	0.00033	0.00034	0.00037	0.00038	0.00031	0.00031	0.00031	0.00031	0.00041
Silicon, total	mg/L		3.72				2.54		2.41					2.44									4.45		4.12	6.59	5.79	8.29	6.32	5.8	5.87	6.09	6.96	6.51
Silver, total	mg/L		<0.000020				<0.000020		<0.000020					0.000021									<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L		17.6				12.9		13.6					15.5									20.3		21.7	18.4	18.8	21.8	18.3	17.7	17.1	18.1	19.4	19.9
Strontium, total	mg/L		1.01				0.494		0.535					0.653									1.13		1.15	0.818	0.784	0.921	0.774	0.691	0.695	0.763	0.754	0.826
Sulpher, total	mg/L		25.1				11.9		13.1					14.2									26.4		28.1	23.5	22.7	24.5	23.5	19.5	20.2	21	20.2	23.6
Thallium, total	mg/L		<0.000050				<0.000050		<0.000050					<0.000050									<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L		<0.0050				<0.0050		<0.0050					0.0066									<0.0050		<0.0050	<0.0050	<0.0050	0.0272	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	mg/L		0.00178				0.00064		0.00071					0.00089									0.00185		0.00185	0.00241	0.0024	0.00324	0.0026	0.00259	0.00236	0.00253	0.00255	0.0027
Vanadium, total	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L		0.016				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	0.0513	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L		<0.00050				<0.00050		<0.00050					<0.00050									<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L		0.0109				0.0116		0.0103					0.0086									0.0203		0.0073	0.0039	0.0036	0.0046	0.0041	0.0063	0.004	0.0083	0.0097	0.0124
Antimony, dissolved	mg/L		<0.00050				<0.00050		<0.00050					<0.00050									<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L		0.00032				0.00032		0.00032					0.00038									0.00031		0.00034	0.00023	0.00025	0.00024	0.00026	0.00025	0.00025	0.00027	0.00026	0.00026
Barium, dissolved	mg/L		0.0772				0.0484		0.0469					0.0512									0.0733		0.0719	0.0778	0.0752	0.075	0.0792	0.0818	0.0787	0.0754	0.0795	0.0741
Beryllium, dissolved	mg/L		<0.00010				<0.00010		<0.00010					<0.00010									<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L		<0.0010				<0.0010		<0.0010					<0.0010									<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L		<0.05				<0.05		<0.05					<0.05									<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L		<0.000010				<0.000010		<0.000010					0.000012									<0.000010		0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000029
Calcium, dissolved	mg/L		62.7				35.3		32.8					38.5									50.4		55.9	56	57	54.4	57.4	59.5	55.4	57.7	58.2	55.9
Chromium, dissolved	mg/L		<0.0010				<0.0010		<0.0010					<0.0010									<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L		<0.00050				<0.00050		<0.00050					<0.00050									<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L		0.00865				0.0177		0.0169					0.0152									0.00982		0.00989	0.00295	0.00283	0.00253	0.00228	0.00261	0.00265	0.00234	0.00256	0.0021
Iron, dissolved	mg/L		0.0345				0.14		0.131					0.173									0.0681		0.0772	0.0114	0.0117	0.0114	0.017	0.0155	0.0155	0.0192	0.0194	0.0219
Lead, dissolved	mg/L		<0.00020				<0.00020		<0.00020					<0.00020									<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L		20.6				10.5		10.7					11.6									18.7		18.5	25.3	29.1	26.9	26	25.3	28.4	30.1	30.6	28.1
Manganese, dissolved	mg/L		0.0241				0.0523		0.0582					0.112									0.0913		0.107	0.0595	0.0556	0.0551	0.0555	0.057	0.0533	0.051	0.0513	0.041
Mercury, dissolved	mg/L		<0.000010				<0.000010		<0.000010					<0.000010									<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.0057				0.0036		0.0035					0.0037									0.0056		0.0057	0.0048	0.0048	0.0047	0.005	0.0049	0.0052	0.0044	0.0053	0.0055
Nickel, dissolved	mg/L		<0.0010				<0.0010		<0.0010					<0.0010									<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L		0.012				0.012		0.015					0.015									0.013		0.013	<0.01	<0.01	<0.01	0.011	0.012	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L		5.05				3.37		3.09					3.39									4.39		4.52	2.6	2.39	2.35	2.45	2.35	2.38	2.25	2.43	2.07
Selenium, dissolved	mg/L		0.00106				0.00066		0.00063					0.00057									0.00088		0.00087	0.00035	0.00036	0.00035	0.00034	0.00042	0.00032	0.00026	0.00037	0.00028
Silicon, dissolved	mg/L		4.27				2.75		2.49					2.16									3		3.7	6.32	5.9	5.97	6.72	6.38	6.02	6.54	6.91	6.23
Silver, dissolved	mg/L		<0.000020				<0.000020		<0.000020					<0.000020									<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L		19.1				13.5		13.9					13.9									17.3		17.9	16.7	18.2	18	17.2	16.9	19.2	19.3	19.5	18
Strontium, dissolved	mg/L		1.09				0.549		0.521					0.587									0.96		0.991	0.832	0.768	0.753	0.792	0.808	0.772	0.733	0.803	0.735
Sulpher, dissolved	mg/L		26.2				11		11					11.4									23.1		24.2	22.4	21.1	22	24.7	21.5	20.7	25	22.1	18.1
Thallium, dissolved	mg/L		<0.000050				<0.000050		<0.000050					<0.000050									<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L		0.00181				0.00075		0.00072					0.00079									0.00161		0.00162	0.00249	0.00247	0.00253	0.00235	0.00251	0.00255	0.0028	0.0031	0.00251
Vanadium, dissolved	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L		<0.0050				<0.0050		<0.0050					<0.0050									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L		<0.00050				<0.00050		<0.00050					<0.00050									<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**05/08/2015**	**14/08/2015**	**18/08/2015**	**24/08/2015**	**31/08/2015**	**31/08/2015**	**08/09/2015**	**15/09/2015**	**23/09/2015**	**30/09/2015**	**05/10/2015**	**05/10/2015**	**13/10/2015**	**13/10/2015**	**22/10/2015**	**28/10/2015**	**02/11/2015**	**09/11/2015**	**16/11/2015**	**23/11/2015**	**03/12/2015**	**06/12/2015**	**08/12/2015**	**19/12/2015**	**26/12/2015**
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	<1.0		4.6	16.6	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	5.6	6.1
Total Dissolved Solids	mg/L	324	324	292	320		306	312	316	298	288		342		300	292	308	314	290	334	318		284	286	292	354
pH (field)	pH units	7.95	7.8		7.83	7.77	7.77	7.8	7.83	7.79	7.88	7.8	7.8	7.81	7.81	7.85	7.78	7.57	7.86	7.63	7.56	7.67	7.78	8.22	7.6	7.48
pH (lab)	pH units	8.34	8.18	8.32	8.04		8.19	8.27	8.34	8.43	8.42		8.38		8.28	8.16	8.12	8.15	8.2	8.42	8.23		8.25	8.46	8.1	8.22
Specific Conductance, field	µS/cm	569	540.6		534.5	505.3	505.3	389.7	525	528.6	534.5	520.1	520.1	529.2	529.2	487.9	525.4	538.7	531.6	551.5	557.6	536.3	523.8	537.2	533.9	542.9
Specific Conductance (lab)	µS/cm	527	537	530	537		499	525	524	516	525		527		515	523	525	537	530	535	531		534	528	535	554
Temperature (field)	C	1.1	2.9		3.2	1.7	1.7	1.3	2.5	2	2.5	0.1	0.1	0.5	0.5	1.1	0	0	0	0	0	0.1	0.1	0.7	0	0
Dissolved Oxygen (field)	mg/L	15.17	11.57		10.64	11.58	11.58	11.36	11.06	11.6	11.57	12.74	12.74	9.55	9.55	11.05	10.34	11.95	11.11	11.03	11.51	12.14	13.08	12.1	10.71	9.5
Dissolved Oxygen (field)	%	106.9	85.7		79.5	84.2	84.2	80.5	81.4	83.9	84.6	87.5	87.5	66.4	66.4	78	70.8	81.8	76.4	75.9	79.1	83.6	89.9	83.2	73.3	66.2
ORP (field)	mV	62.8	91.4		121.6	146.9	146.9	53	84.1	64.8	53.1	57.9	57.9			103.9	31.3	19.1	10.9	59.0	84.0	53.5	27.9	22.5		30.6
Hardness (from total)	mg/L	246	257	379	240		261	250	248	261	251		257		252	265	257	279	259	266	250		234	246	223	254
Hardness (from dissolved)	mg/L	245	249	262	282		269	243	248	263	267		249		230	260	247	263	273	270	264		237	250	252	259
Alkalinity, total	mg/L	224	226	225	230		211	220	220	217	224		225		222	224	222	229	229	223	213		216	236	238	243
Chloride	mg/L	5	5.1	5	6		4.8	4.6	4.8	4.4	4.4		5.4		4.6	4.8	4.7	4.7	4.9	4.6	4.4		5.1	4.7	4.9	5.9
Fluoride	mg/L	0.56	0.54	0.56	0.56		0.54	0.57	0.56	0.54	0.56		0.56		0.54	0.55	0.58	0.54	0.57	0.56	0.54		0.55	0.52	0.56	0.52
Sulphate, dissolved	mg/L	59.5	54.1	55.4	56.6		49.4	51	49.9	55.5	50.1		57.5		49.5	48	49.2	52.5	53.7	57.1	49.2		52.7	50	49	58
Ammonia	mg/L	0.018	0.027	0.027	0.033		0.03	0.014	0.22	0.024	0.018		0.019		0.028	0.023	0.026	0.02	0.019	0.016	0.015		0.017	0.012	0.013	0.021
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.231	0.207	0.217	0.2		0.189	0.184	0.165	0.184	0.183		0.207		0.187	0.213	0.209	0.24	0.232	0.236	0.235		0.248	0.238	0.246	0.238
Dissolved Organic Carbon	mg/L	3.6	5.2	4.6	4.4		6	4.9	5.2	5.2	4.6		4.2		4.98	4.28	4.23	4.36	5.01	3.53	4.19		2.57	3.44	4.13	4.19
Aluminum, total	mg/L	0.0099	0.0103	0.0047	0.0032		0.0824	0.11	0.0108	0.0188	0.0064		0.0051		0.0076	0.008	0.0136	0.0067	0.0126	0.0121	0.0091		0.0609	0.0289	0.0152	0.0372
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00027	0.00028	0.00032	0.00025		0.00033	0.00029	0.00029	0.00026	0.0003		0.00025		0.00021	0.00028	0.00026	0.00017	0.00023	0.0003	0.00024		0.00031	0.00017	0.00023	0.00022
Barium, total	mg/L	0.0755	0.074	0.101	0.0766		0.0795	0.0778	0.0759	0.0727	0.0771		0.0772		0.0759	0.0724	0.0764	0.0776	0.0742	0.0749	0.0782		0.0742	0.0702	0.0651	0.0683
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	0.054		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	0.000014	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	0.000011
Calcium, total	mg/L	55.2	57.2	84.3	51.7		59.7	54.6	54.3	57.6	54.9		57.7		54.1	59.8	55.5	63.3	57.9	60.2	55.5		49.1	53	48	49.8
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.0021	0.00285	0.00327	0.00219		0.00531	0.00579	0.003	0.00256	0.00257		0.00212		0.00266	0.00246	0.00246	0.00205	0.00251	0.00311	0.00203		0.00203	0.00208	0.00229	0.00326
Iron, total	mg/L	0.025	0.032	0.025	0.025		0.203	0.258	0.029	0.027	0.027		0.028		0.036	0.03	0.037	0.026	0.034	0.037	0.034		0.029	0.03	0.026	0.066
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	26.3	27.7	41	26.9		27.2	27.7	27.2	28.4	27.6		27.4		28.4	28.1	28.7	29.5	27.9	28.1	27.1		27	27.6	24.9	31.5
Manganese, total	mg/L	0.0408	0.0425	0.055	0.042		0.0646	0.0611	0.0441	0.0436	0.0432		0.0416		0.0497	0.0441	0.063	0.0487	0.0503	0.0534	0.0653		0.0387	0.0414	0.0352	0.0801
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0045	0.0047	0.006	0.0047		0.0048	0.0051	0.0043	0.005	0.0048		0.0048		0.0046	0.0045	0.0052	0.0046	0.0048	0.0046	0.0049		0.0046	0.0042	0.0039	0.004
Nickel, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		0.0012	0.0011	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		0.0029	0.0015	<0.0010	0.001
Phosphorus, total	mg/L	<0.01	<0.01	<0.01	<0.01		0.023	0.021	0.013	0.011	0.015		<0.01		<0.01	<0.01	0.012	0.01	<0.01	0.017	0.01		<0.01	0.016	<0.01	0.023
Potassium, total	mg/L	2.13	2.19	3.37	2.26		2.5	2.27	2.11	2.24	2.31		2.22		2.32	2.2	2.28	2.61	2.13	2.59	2.14		2.25	2.15	1.96	2.45
Selenium, total	mg/L	0.00031	0.00033	0.00048	0.00029		0.0004	0.00033	0.00033	0.00031	0.00029		0.00033		0.00037	0.00025	0.00035	0.00034	0.00031	0.00037	0.0003		0.00038	0.00038	0.00025	0.00035
Silicon, total	mg/L	6.55	6.4	9.32	5.37		7.08	6.42	6.28	6.74	6.56		6.64		6.1	7.03	6.76	7.84	6.79	7.31	7.06		5.67	6.09	5.86	5.95
Silver, total	mg/L	0.000023	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	0.000022	<0.000020	<0.000020
Sodium, total	mg/L	18.1	20	27.7	18		18	18	18.3	20.1	18.9		18.7		19.1	19.6	19.3	19.7	18.9	18.5	18.5		18.6	17.1	16.3	20.9
Strontium, total	mg/L	0.727	0.723	0.944	0.729		0.691	0.7	0.694	0.75	0.702		0.725		0.728	0.667	0.726	0.729	0.711	0.703	0.737		0.725	0.661	0.622	0.693
Sulpher, total	mg/L	24.4	15.9	28.8	18.8		16.6	14	17.6	18.3	19.5		20.1		12.2	16.2	18.6	20.5	18.4	20	18.1		16.2	17.8	18.4	21.9
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	0.0062	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	mg/L	0.00244	0.00247	0.00303	0.00263		0.00244	0.00253	0.00233	0.0026	0.0022		0.00268		0.00258	0.00247	0.00275	0.00253	0.00255	0.00258	0.00268		0.00275	0.00237	0.00232	0.00244
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	0.0083	0.0094
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	<0.0030	0.0088	0.0088	0.0035		0.01	0.0067	0.0079	0.0185	0.0058		0.0089		0.0069	0.0046	0.0119	0.0058	0.0067	0.0068	0.0061		0.057	0.0161	0.0057	0.0303
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00024	0.00033	0.0003	0.00032		0.00033	0.00031	0.00025	0.00023	0.00022		0.00031		0.00034	0.00024	0.00024	0.0003	0.00026	0.00023	0.00027		0.00029	0.00021	0.00028	0.00022
Barium, dissolved	mg/L	0.076	0.0805	0.0768	0.0805		0.0756	0.07	0.0723	0.0789	0.0715		0.0741		0.0692	0.0738	0.0721	0.0747	0.0741	0.0778	0.076		0.0748	0.0756	0.0726	0.0784
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05		<0.05		<0.05	0.058	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	54.8	56.2	55.7	62.2		58.5	52	50.5	57.2	61.2		54		50.1	57	55.4	57.5	57.7	58.4	56.8		49	53.5	54.4	55.9
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.0021	0.00261	0.00224	0.00239		0.00432	0.00238	0.00361	0.00293	0.0025		0.00224		0.00243	0.00255	0.00233	0.00198	0.00246	0.00224	0.00267		0.00394	0.00504	0.00461	0.00236
Iron, dissolved	mg/L	0.0172	0.019	0.0356	0.0202		0.0282	0.024	0.027	0.0257	0.0221		0.0214		0.0317	0.0216	0.0175	0.0163	0.0183	0.0177	0.024		0.0182	0.0196	0.0147	0.0152
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	0.00032	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	26.4	26.4	29.7	30.7		29.9	27.5	29.6	29.2	27.8		27.8		25.5	28.7	26.4	28.9	31.4	30.2	29.7		27.8	28.4	28.2	29
Manganese, dissolved	mg/L	0.0378	0.0406	0.04	0.0433		0.0469	0.0386	0.0432	0.0442	0.042		0.0378		0.0668	0.0409	0.0532	0.0396	0.0442	0.0479	0.0618		0.0364	0.0336	0.0351	0.0643
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, dissolved	mg/L	0.0049	0.0049	0.0054	0.0049		0.0042	0.0045	0.0049	0.0048	0.0048		0.005		0.0046	0.0048	0.0049	0.0052	0.0052	0.0045	0.0048		0.0047	0.005	0.0046	0.0048
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	0.001	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01	0.01	<0.01	0.012		<0.01	<0.01	0.02	<0.01	<0.01		0.014		0.016	<0.01	0.013	0.012	0.016	<0.01	<0.01		<0.01	0.012	<0.01	<0.01
Potassium, dissolved	mg/L	2.11	2.18	2.21	2.64		2.58	2.19	2.46	2.26	2.22		1.96		1.98	2.2	2.13	2.2	2.35	2.46	2.13		2.21	2.15	2.14	2.37
Selenium, dissolved	mg/L	0.00032	0.0003	0.00027	0.0003		0.00027	0.00027	0.00022	0.00025	0.00027		0.00037		0.00029	0.00034	0.00032	0.00035	0.00026	0.0003	0.00033		0.00028	0.00048	0.00036	0.00049
Silicon, dissolved	mg/L	6.6	6.56	6.25	5.9		6.84	6.02	5.89	6.98	7.16		6.6		5.46	6.6	6.79	7.13	7.24	6.48	6.93		5.14	6.23	6.44	7.12
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	17.6	18.1	18.6	20.4		19.9	17.9	19.9	19.9	18.3		17.9		17.4	19	18.7	18.8	19.4	20	19.8		19.1	18.7	19.4	19.9
Strontium, dissolved	mg/L	0.714	0.675	0.741	0.757		0.691	0.672	0.758	0.736	0.67		0.687		0.675	0.728	0.683	0.705	0.704	0.734	0.708		0.723	0.697	0.671	0.756
Sulpher, dissolved	mg/L	20.9	22.5	18	20.9		19.4	18.3	20.8	16.5	23.5		15.2		14.6	15.8	16.2	21	20.4	15.5	16.2		14.8	16.5	16	19.2
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.0025	0.0024	0.00261	0.00276		0.00232	0.00245	0.00236	0.00258	0.00232		0.00264		0.00246	0.00235	0.00262	0.00251	0.00252	0.00291	0.00265		0.00262	0.00283	0.00258	0.00259
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**27/05/2005**	**30/06/2005**	**29/07/2005**	**30/08/2005**	**28/09/2005**	**15/10/2005**	**02/06/2006**	**08/06/2006**	**15/06/2006**	**15/06/2006**	**23/06/2006**	**28/06/2006**	**07/07/2006**	**12/07/2006**	**20/07/2006**	**26/07/2006**	**26/07/2006**	**02/08/2006**	**10/08/2006**	**25/08/2006**	**25/08/2006**	**30/08/2006**	**06/09/2006**	**13/09/2006**	**20/09/2006**	**28/09/2006**	**04/10/2006**	**12/10/2006**	**05/06/2007**	**20/06/2007**	**18/07/2007**	**24/08/2007**	**24/08/2007**
Total Suspended Solids	mg/L	30.5	14	19.7	3	361	7.5	705			53	328	103	3	<2	2	9		4	<2			<2	4	5	3		2	4	76	6	4		4
Total Dissolved Solids	mg/L	116	153	197	148	142	145	104			114	176	120	184								180	200				182		164	162	164	170		198
pH (field)	pH units																																		
pH (lab)	pH units	7.95	7.87	7.18	8.19	8.02	6.75	7.61			7.86	7.78	7.9	7.91	7.77	7.88		7.87	7.79	7.8		7.92	7.79	7.88	7.84	7.85	7.26	7.94	7.39	7.98	7.84	7.72		8.04
Specific Conductance, field	µS/cm																																		
Specific Conductance (lab)	µS/cm	152	233	323	211	190	194	98.8			193	246	213	205	238	233		259	256	259		261	258	258	254	263	266	258	266	208	230	250		246
Temperature (field)	C																																		
Dissolved Oxygen (field)	mg/L																																		
Dissolved Oxygen (field)	%																																		
ORP (field)	mV																																		
Hardness (from total)	mg/L	76.6		167	109	107	106																							108		126		122
Hardness (from dissolved)	mg/L										100	122	107	110	110	130		128	128	126		129	132	130	130	132	129	126	132		110	128		
Alkalinity, total	mg/L	36.7	117		113	95.9		49.4			95	130	106	120	120	122		121	125	125		131	129	129	128	127	128	122	130	118	116	128		139
Chloride	mg/L	<0.50	0.92	<0.50	<0.50	<0.50	<0.50	<0.5																						0.7	0.6	0.6		0.3
Fluoride	mg/L							0.155																											
Sulphate, dissolved	mg/L	<0.5	10.2		6.02	5.62		2.98			10.5	15.1		10.8	10.4	10.5		11.6	10	10		11	10.5	10.3	10	11	11	10.9	11.3	11	12.2	11.9		10.3
Ammonia	mg/L	<0.020	<0.020	<0.020	0.02	<0.020	0.021	0.062		0.027		0.028	0.01		0.014	0.012	0.016		0.015	0.014	0.027		0.012	0.011	0.011	0.008	0.011	0.079	0.024	<0.05	<0.05	<0.05	<0.05	
Nitrite (N)	mg/L	0.0018	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	0.0015																						<0.05	<0.05	<0.05		<0.05
Nitrate (N)	mg/L	0.0824	0.172	0.169	0.0226	0.0586	0.102	0.0449			0.18	0.23	0.112	0.205	0.18	0.19		0.18	0.15	0.16		0.12	0.11	0.08	0.094	0.11	0.08	0.1	0.12	<0.1	0.3	0.3		0.2
Dissolved Organic Carbon	mg/L																														8.2	14.3			
Aluminum, total	mg/L	0.489	0.153	0.506	0.0436	1.65	0.0738	11.4	0.648		1.48	5.09	1.69	0.096	0.078	0.058		0.099	0.06	0.034		0.048	0.054	0.049	0.025	0.074	0.042	0.082	0.264	1.56	0.172	0.231		0.205
Antimony, total	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	0.00037	<0.0001		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
Arsenic, total	mg/L	0.00063	0.00049	0.00055	0.00053	0.00149	0.00052	0.00496	0.00078		0.0008	0.0022	0.001	0.0004	0.0004	0.0005		0.0005	0.0006	0.0005		0.0004	0.0005	0.0004	<0.0002	0.0005	<0.0004	0.0004	0.0004	0.0008	0.0004	0.0005		0.0003
Barium, total	mg/L	0.054	0.0641	0.07	0.064	0.113	0.053	0.264	0.0586		0.082	0.167	0.09	0.07	0.067	0.065		0.072	0.07	0.072		0.069	0.07	0.07	0.037	0.07	0.073	0.074	0.076	0.084	0.066	0.071		0.075
Beryllium, total	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.0005	<0.0005		<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001
Bismuth, total	mg/L		<0.00050	<0.00050			<0.00050	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
Boron, total	mg/L	<0.10	<0.010	<0.010	<0.10	<0.10	<0.010	<0.01	<0.01		0.006	0.005	0.006	0.005	0.005	0.029		0.004	0.006	0.005		0.007	0.005	0.006	0.004	0.006	0.007	0.005	0.006	0.009	0.007	0.006		0.006
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	0.000061	<0.000050	0.000237	<0.00005		0.00002	0.00008	0.00003	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001		<0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00001	0.00003	<0.00001	0.00002		<0.00001
Calcium, total	mg/L	19.3	29.7	42.4	27.8	27.8	25.5	23.9	20.4		25.4	34.5	27.4	31.2	31	31.8		33.9	32.9	34.6		31.8	30.8	31.1	32.2	32.4	32.5	31.6	33.5	26.4	30.2	32.2		31.2
Chromium, total	mg/L	0.0016	0.00065	0.00127	<0.0010	0.0037	0.00062	0.0234	0.0016		0.0032	0.0091	0.0031	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.001	0.0008	0.0008	<0.0005	<0.0005	<0.001	<0.001	0.0007	0.0031	0.0005	0.0008		0.0008
Cobalt, total	mg/L	0.00049	0.00024	0.00042	<0.00030	0.00233	0.00018	0.00916	0.00078		0.0011	0.0037	0.001	<0.0001	<0.0001	<0.0001		0.0001	<0.0001	0.0004		<0.0002	<0.0001	0.0001	<0.0001	0.0001	<0.0002	<0.0002	0.0002	0.0012	0.0002	0.0002		0.0002
Copper, total	mg/L	0.0031	0.00162	0.0101	0.0015	0.0061	0.00147	0.0225	0.00403		0.004	0.01	0.004	0.001	0.001	0.001		0.001	0.001	<0.001		<0.002	<0.001	0.001	<0.001	0.001	<0.002	<0.002	0.002	0.003	0.002	0.002		0.002
Iron, total	mg/L	0.776	0.358	0.894	0.363	3.42	0.37	17.2	1.09		1.7	7.2	2.5	0.2	0.2	0.2		0.3	0.1	0.1		<0.2	0.1	0.1	<0.2	0.2	<0.2	<0.2	0.5	2	0.2	0.3		0.2
Lead, total	mg/L	<0.00050	0.000134	0.000332	<0.00050	0.0011	0.000061	0.00547	0.00045		0.0006	0.002	0.0007	<0.0001	<0.0001	<0.0001		0.0001	<0.0001	<0.0001		<0.0002	<0.0001	0.0002	<0.0001	0.0001	<0.0002	<0.0002	0.0002	0.0006	0.0001	0.0004		0.0001
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0079	<0.005		0.002	0.005	0.002	0.001	0.001	0.001		0.001	0.001	0.001		<0.002	0.001	0.001	<0.001	0.001	<0.002	<0.002	0.001	0.002	0.001	0.001		0.001
Magnesium, total	mg/L	6.82	10.1	14.2	9.67	9.57	8.77	10.7	7.12		8.8	12.5	9.3	10.1	9.5	11.2		11.7	10.8	11.3		10	10.3	10.3	11	11.7	11	11	11.8	10.2	9.8	11		10.7
Manganese, total	mg/L	0.0519	0.0514	0.0468	0.0368	0.314	0.0473	0.589	0.0645		0.079	0.226	0.086	0.035	0.035	0.042		0.051	0.033	0.04		0.039	0.035	0.035	0.033	0.042	0.037	0.038	0.063	0.126	0.044	0.03		0.033
Mercury, total	mg/L	<0.000020			<0.000020	<0.000020																								<0.0001	<0.0001	<0.0001		<0.0001
Molybdenum, total	mg/L	0.001	0.00119	0.00121	0.0011	<0.0010	0.000959	0.000988	0.000843		0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001		<0.002	0.001	0.001	<0.001	0.001	<0.002	<0.002	0.001	0.001	0.002	0.001		0.001
Nickel, total	mg/L	0.003	0.00141	0.00174	0.0016	0.0068	0.00176	0.0275	0.00402		0.0052	0.0117	0.0042	0.0019	0.0014	0.0011		0.0009	0.001	0.0009		0.001	0.0013	0.0013	0.0007	0.0014	0.002	0.002	0.0015	0.0033	0.0016	<0.0005		0.0014
Phosphorus, total	mg/L		<0.30	<0.30			<0.30	0.77	<0.3																					0.14	<0.05			<0.05
Potassium, total	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2		1.1	1.6	1.1	1	1	0.9		1.1	1	1.1		1.2	1	1	0.9	0.9	1.1	0.9	1	1.1	1	1		1
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.001		0.0002	0.0004	<0.0002	0.0002	0.0002	<0.0002		<0.0002	0.0005	<0.0002		<0.0004	<0.0002	0.0004	0.0002	0.0004	0.0004	0.0006	<0.0002	<0.0002	0.0003	0.0004		<0.0002
Silicon, total	mg/L		5.85	6.39			6.09	22.4	5.27		7.24	12.3	8.36	5.57	5.73	5.72		6.21	5.94	5.82		5.49	5.49	5.74	6.36	5.89	5.35	5.75	6.51	7.47	5.45	5.78		5.8
Silver, total	mg/L	<0.000020	<0.000010	<0.000020	<0.000020	<0.000020	<0.000010	0.000069	<0.00001		<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	0.0002	<0.0001		<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001
Sodium, total	mg/L	3.9	6.8	7.7	5.9	4.9	5.1	4.5	4.4		5.8	7	6	7.4	6.5	6.4		6.5	6.9	7.2		6.7	6.7	6.8	7.1	6.6	6.9	7	6.6	5.8	7.2	7.7		7.9
Strontium, total	mg/L		0.279	0.287			0.24	0.204	0.174		0.276	0.367	0.267	0.329	0.323	0.334		0.362	0.342	0.362		0.335	0.309	0.332	0.187	0.347	0.328	0.347	0.35	0.275	0.304	0.38		0.34
Sulpher, total	mg/L										3.2	4.2	3.1	3.7	3.8	3.9		4.1	3.6	4		3.3	3.5	3.7	3.6	3.7	3.6	3.5	4	3.4	4.2	4		3.3
Thallium, total	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001	<0.0001		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005
Tin, total	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	0.00036	<0.0001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001		<0.001
Titanium, total	mg/L	0.022	<0.010	0.027	<0.010	0.06	<0.010	0.378	0.015		0.0685	0.257	0.0822	0.0044	0.0036	0.0026		0.006	0.004	0.0018		<0.0010	0.003	0.0026	0.0014	0.0037	0.002	0.0042	0.0124	0.0776	0.0055	0.0096		<0.0005
Uranium, total	mg/L	0.00047	0.000769	0.0012	0.00058	0.00079	0.000547	0.00201	0.000529		0.0008	0.0014	0.0011	0.0011	0.001	0.0012		0.0012	0.001	0.0009		0.001	0.0011	0.0011	0.0006	0.0011	0.001	0.001	0.0011	0.0014	0.0014	0.0012		0.0012
Vanadium, total	mg/L	<0.030	0.0013	0.0024	<0.030	<0.030	<0.0010	0.0379	0.0035		0.0062	0.0173	0.0064	0.001	0.0009	0.0008		0.0011	0.001	0.0009		0.0009	0.0008	0.0009	0.0005	0.0009	0.0009	0.001	0.0014	0.0054	0.0016	0.0014		0.0013
Zinc, total	mg/L	<0.0050	<0.0020	<0.0050	<0.0050	0.0101	0.0017	0.0484	0.0048		0.006	0.022	0.006	<0.001	0.015	0.002		0.002	0.001	0.002		0.004	0.003	0.001	<0.001	0.005	0.008	<0.002	0.006	0.009	0.004	0.005		0.01
Zirconium, total	mg/L										0.001	0.002	0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.001	0.001	<0.001	<0.001		<0.001
Aluminum, dissolved	mg/L	0.0236	0.0086	0.0096	0.0156	0.0186	0.0155	0.0714			0.013	0.011	0.407	<0.005	0.006	0.006		0.008	0.008	0.009		0.012	0.013	0.005	0.008	0.007	0.011	<0.005	0.007		0.014	0.011		
Antimony, dissolved	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	<0.0001			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		
Arsenic, dissolved	mg/L	<0.00050	0.00042	0.00035	0.00051	0.00054	0.00048	0.00062			0.0004	0.0005	0.0008	0.0006	0.0005	0.0004		0.0004	<0.0002	0.0005		0.0004	0.0004	0.0005	0.0003	0.0005	0.0004	0.0003	0.0004		0.0004	0.0005		
Barium, dissolved	mg/L	0.045	0.0609	0.061	0.062	0.055	0.0502	0.0341			0.063	0.067	0.079	0.067	0.064	0.068		0.072	0.07	0.073		0.071	0.067	0.068	0.064	0.069	0.071	0.068	0.067		0.06	0.066		
Beryllium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.0005			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		
Bismuth, dissolved	mg/L		<0.00050	<0.00050			<0.00050	<0.0005			<0.0005	<0.0005	<0.0005	0.0007	0.0007	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005		
Boron, dissolved	mg/L	<0.10	<0.010	<0.010	<0.10	<0.10	<0.010	<0.01			0.003	0.002	0.002	0.005	0.005	0.004		<0.002	0.004	0.005		0.005	0.004	0.005	0.005	0.003	0.004	0.005	0.005		0.005	0.005		
Cadmium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.00005			<0.00001	<0.00001	0.00003	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	0.00028	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001		
Calcium, dissolved	mg/L	19.5	30	41.3	27.8	27.4	27.1	14.4			26.9	31.8	22.8	26.5	26.9	33		33.4	33.3	32.9		32.4	33.6	33.5	32.3	33.5	33.3	32.6	34		29.6	32		
Chromium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	0.00055			<0.0005	0.0007	0.0015	0.0011	0.001	0.0007		<0.0005	<0.0005	0.0007		0.0006	0.0008	0.0008	0.0009	0.0007	0.0008	<0.0005	<0.0005		0.0006	0.001		
Cobalt, dissolved	mg/L	<0.00030	<0.00010	<0.00010	<0.00030	<0.00030	0.00011	0.00033			0.0001	0.0001	0.0009	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		0.0002	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		
Copper, dissolved	mg/L	0.0018	0.00119	0.00404	0.0014	0.0016	0.00127	0.00212			0.001	<0.001	0.003	0.001	0.001	<0.001		0.002	0.001	0.001		0.001	0.002	0.002	0.001	0.001	0.001	<0.001	0.001		0.002	0.002		
Iron, dissolved	mg/L	0.136	0.07	0.105	0.292	0.32	0.253	0.546			0.09	0.09	0.06	0.06	0.06	0.11		0.1	0.07	0.08		0.08	0.1	0.1	0.11	0.09	0.08	0.11	0.09		0.05	0.04		
Lead, dissolved	mg/L	<0.00050	<0.000050	<0.000050	<0.00050	<0.00050	<0.000050	0.000054			<0.0001	<0.0001	0.0005	<0.0001	<0.0001	0.0002		<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.005			<0.001	<0.001	<0.001	0.001	0.001	0.001		<0.001	<0.001	0.001		0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001		0.001	0.001		
Magnesium, dissolved	mg/L	6.77	10.2	15.6	9.7	9.32	9.35	4.85			8.9	10.4	9.2	10.7	10.5	11.7		10.9	11	10.8		11.7	11.7	11.2	11.4	11.6	11.1	10.9	11.4		9.8	11.6		
Manganese, dissolved	mg/L	0.0193	0.0415	0.0244	0.0315	0.0414	0.0383	0.0882			0.044	0.043	0.011	0.023	0.022	0.042		0.044	0.033	0.039		0.037	0.038	0.036	0.03	0.04	0.035	0.035	0.043		0.031	0.019		
Mercury, dissolved	mg/L	<0.000020			<0.000020	<0.000020																									<0.0001	<0.0001		
Molybdenum, dissolved	mg/L	<0.0010	0.00124	0.00127	0.001	<0.0010	0.000925	0.000697			0.001	0.001	<0.001	0.002	0.001	0.001		<0.001	<0.001	0.001		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001		
Nickel, dissolved	mg/L	0.0016	0.00093	0.00095	0.0015	0.0018	0.00146	0.0022			0.001	0.0013	0.0036	0.0015	0.0007	0.0006		0.0021	0.0006	0.0006		0.0009	0.0012	0.001	0.0009	<0.0005	0.0008	0.0007	0.0006		<0.0005	0.0007		
Phosphorus, dissolved	mg/L		<0.30	<0.30			<0.30	<0.3																										
Potassium, dissolved	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2			<0.4	1.1	0.8	0.8	0.9	1		1	1.1	1		0.9	1.2	0.8	0.9	1	1.1	1.1	1.1		1	0.9		
Selenium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001			0.0002	0.0003	<0.0002	<0.0002	0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0003		<0.0002	<0.0002		
Silicon, dissolved	mg/L		5.72	5.47			6.44	4.19			5.35	5.5	6.48	6.8	5.36	6.34		5.35	5.87	5.9		6.32	5.84	6.02	5.56	5.74	5.97	5.93	6.08		5.02	6.1		
Silver, dissolved	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	<0.00001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		
Sodium, dissolved	mg/L	3.9	6.9	8.8	5.9	5.3	5.5	3.8			5.9	5.9	6.2	6.7	6.6	6.7		7	7.2	7.2		6.7	7.7	7.5	7.4	6.6	7.4	7.3	7.4		7.4	7.6		
Strontium, dissolved	mg/L		0.284	0.277			0.23	0.11			0.236	0.321	0.284	0.322	0.322	0.284		0.274	0.247	0.343		0.344	0.333	0.355	0.321	0.319	0.34	0.326	0.344		0.307	0.34		
Sulpher, dissolved	mg/L										3.5	4.3	3.4	4	4	4.1		4.2	4	4		3.8	3.7	3.7	3.5	3.9	3.8	3.7	3.9		4.2	3.9		
Thallium, dissolved	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005		
Tin, dissolved	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	<0.0001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001		
Titanium, dissolved	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01			0.0007	0.0006	0.0117	0.0007	0.0005	<0.0005		<0.0005	0.0005	0.0006		0.0005	0.0008	0.0005	0.0006	<0.0005	<0.0005	0.0007	0.0006		0.0009	0.0006		
Uranium, dissolved	mg/L	0.00036	0.000759	0.000994	0.00055	0.00038	0.000515	0.000216			0.0007	0.001	0.0009	0.0005	0.0007	0.001		0.001	0.001	0.001		0.0011	0.001	0.001	0.001	0.001	0.001	0.001	0.0011		0.0012	0.0012		
Vanadium, dissolved	mg/L	<0.030	<0.0010	<0.0010	<0.030	<0.030	<0.0010	0.0017			0.0011	0.001	0.0029	0.0013	0.0018	0.0016		0.0007	0.0013	0.0015		0.0017	0.0008	0.0018	0.0014	0.0015	0.0015	0.0011	0.0009		0.0016	0.0024		
Zinc, dissolved	mg/L	<0.0050	0.0064	0.002	<0.0050	<0.0050	<0.0010	<0.001			<0.001	0.002	0.005	0.001	<0.001	<0.001		<0.001	<0.001	0.001		0.003	0.005	0.002	0.001	<0.001	0.002	0.001	0.002		0.004	0.006		
Zirconium, dissolved	mg/L																																		

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**18/09/2007**	**30/10/2007**	**22/04/2008**	**03/06/2008**	**17/06/2008**	**06/08/2008**	**18/09/2008**	**28/10/2008**	**30/04/2009**	**08/06/2009**	**28/07/2009**	**06/08/2009**	**25/08/2009**	**31/08/2009**	**07/10/2009**	**25/10/2009**
Total Suspended Solids	mg/L	20	3	<2	<2	10		28		<2	32	4	2			7	<4
Total Dissolved Solids	mg/L	182	176	264	134	156		170		52	156	184	202			180	130
pH (field)	pH units									7.6	7.74		7.5	8.04		8.24	8.23
pH (lab)	pH units	8	7.74	8.4	8.01	7.95		7.89		6.84	7.9	8.07	8.35			7.87	8.1
Specific Conductance, field	µS/cm																
Specific Conductance (lab)	µS/cm	224	268	364	201	237		170		36	208	270	260			249	266
Temperature (field)	C									0.4	3.27		4.4	3.02		-0.8	0.2
Dissolved Oxygen (field)	mg/L																
Dissolved Oxygen (field)	%									183						109	88
ORP (field)	mV																
Hardness (from total)	mg/L		130		97												141
Hardness (from dissolved)	mg/L	110		186			123		123	20	93	137	121		110	123	126
Alkalinity, total	mg/L	124	128	187	94	115		82		12	95	128	159			116	130
Chloride	mg/L	0.46	0.96	0.8	0.38	0.42		0.57		0.38	4.1	0.82	0.39			0.61	
Fluoride	mg/L																
Sulphate, dissolved	mg/L	8.21	13	27.6	10.4	12.9		5.44		0.65	8.6	13	13			9.9	
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05									0.01
Nitrite (N)	mg/L	<0.02	0.14	0.07	0.04	0.05		<0.01									<0.005
Nitrate (N)	mg/L	0.05	<0.02	<0.02	0.03	0.14		0.03					0.18			0.12	0.15
Dissolved Organic Carbon	mg/L	11					9	17.4	11	17.6	9.2			8.2		6.9	8.7
Aluminum, total	mg/L	0.33	0.121	<0.02	0.4	0.21		0.469		0.138	0.595		0.071			0.189	0.052
Antimony, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002		<0.0002			<0.0002	<0.0005
Arsenic, total	mg/L	0.0005	0.0004	0.0005	0.0007	0.0006		0.0005		<0.0002	0.0005		0.0007			0.0004	0.0004
Barium, total	mg/L	0.067	0.076	0.073	0.061	0.064		0.06		0.012	0.069		0.081			0.067	0.077
Beryllium, total	mg/L	<0.0001	<0.0001	<0.00004	<0.00004	<0.00004		<0.00004		<0.00004	0.00004		<0.00004			<0.00004	<0.0001
Bismuth, total	mg/L	<0.0005	<0.0005					<0.0001		<0.0001	<0.0001		<0.001			<0.001	<0.001
Boron, total	mg/L	0.005	0.007	0.006	<0.005	<0.005		<0.005		<0.005	0.005		<0.005			0.008	<0.05
Cadmium, total	mg/L	<0.00001	0.00004	<0.00007	<0.00007	<0.00008		0.00002		0.00008	0.00001		<0.00001			0.00091	0.00001
Calcium, total	mg/L	27	33.5	40.2	24.4	29.2		23		5.54	27		35.1			34.2	35.7
Chromium, total	mg/L	0.0011	0.0007	<0.0005	0.0028	0.0012		0.0022		0.0012	0.0014		0.0009			0.0014	<0.001
Cobalt, total	mg/L	0.0003	0.0003	0.00007	0.0004	0.00028		0.00046		0.0001	0.00052		0.00013			0.00022	<0.0005
Copper, total	mg/L	0.003	0.012	0.004	0.002	0.001		0.003		0.013	0.003		0.001			0.006	0.0021
Iron, total	mg/L	0.5	0.3	0.05	0.78	0.4		0.91		0.19	0.92		0.126			0.357	0.141
Lead, total	mg/L	0.0002	0.0023	<0.0001	0.0002	0.0001		0.0003		0.0002	0.0003		0.0004			0.0015	<0.0002
Lithium, total	mg/L	0.002	0.001	0.002	0.001	<0.001		<0.001		<0.001	0.001		0.001			0.001	<0.005
Magnesium, total	mg/L	9.5	11.2	19	8.68	10.1		7.62		1.97	9.53		12.2			11.9	12.6
Manganese, total	mg/L	0.034	0.054	0.0257	0.0693	0.0833		0.0347		0.0153	0.0449		0.0278			0.0346	0.029
Mercury, total	mg/L	<0.0001	<0.0001	<0.00001	<0.00001			<0.00001		0.00002	<0.00001					<0.00001	<0.00002
Molybdenum, total	mg/L	0.001	0.002	0.00165	0.00131	0.00148		0.00082		0.00016	0.00141		0.0015			0.0013	0.002
Nickel, total	mg/L	0.0015	0.0008	<0.001	0.002	0.001		0.002		<0.001	0.002		0.001			0.002	0.001
Phosphorus, total	mg/L	<0.05		0.02	0.05	0.06		0.04		0.09	<0.05		0.011			<0.05	
Potassium, total	mg/L	0.9	1.6	2.56	0.94	1.01		0.68		1.5	0.9		1.1			0.7	1.02
Selenium, total	mg/L	<0.0002	0.0007	<0.0006	<0.0006	0.0008		0.0008		<0.0006	<0.0006		<0.0006			<0.0006	0.0001
Silicon, total	mg/L	6.34	5.94	3.8	2.66	4.43		7.09		1.67	5.67		5.7			6.46	7.24
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001		0.00006		<0.00001	0.00002		0.00002			<0.00001	<0.00002
Sodium, total	mg/L	7.3	8.1	11.8	6.6	7.5		5.1		1.29	6.08		7.17			7.38	7.41
Strontium, total	mg/L	0.309	0.395	0.487	0.234	0.294		0.201		0.036	0.281		0.38			0.312	0.361
Sulpher, total	mg/L	2.8	4.6							0.5	3.2		4.3			4	<3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001		<0.00001			<0.00001	<0.00005
Tin, total	mg/L	<0.001	<0.001	<0.004	<0.0001	<0.0001		<0.0001		<0.0001	<0.0001		<0.0001			<0.0001	<0.005
Titanium, total	mg/L	0.016	0.0066	0.0004	0.0128	0.0081		0.0194		0.0046	0.0256		0.0034			0.0068	<0.005
Uranium, total	mg/L	0.0008	0.0009	0.0021	0.0011	0.0014		0.0004		<0.0004	0.001		0.0014			0.0009	0.0013
Vanadium, total	mg/L	0.002	0.0011	0.00032	0.00207	0.0014		0.00224		0.00037	0.00265		0.0009			0.001	<0.005
Zinc, total	mg/L	0.008	0.013	0.004	0.004	0.007		0.009		0.008	0.002		0.003			0.008	<0.005
Zirconium, total	mg/L	<0.001	<0.001	<0.0001	0.0004	0.0004		0.0006		0.0002	0.0005		0.0002			0.0002	<0.0005
Aluminum, dissolved	mg/L	0.007		<0.02		0.02	0.014	0.07	0.009	0.053	0.013				0.01		0.007
Antimony, dissolved	mg/L	<0.0002		0.006		0.001	0.0014	0.0008	0.0009	0.0007	0.0011				0.0009		<0.0005
Arsenic, dissolved	mg/L	0.0004		<0.0002		<0.0002	0.0004	0.0003	0.0005	<0.0002	0.0003				0.0004		0.0003
Barium, dissolved	mg/L	0.059		0.075		0.056	0.068	0.043	0.061	0.01	0.052				0.056		0.067
Beryllium, dissolved	mg/L	<0.0001		<0.00004		<0.00004	<0.0001	<0.00004	<0.00004	<0.00004	<0.00004				<0.00004		<0.0001
Bismuth, dissolved	mg/L	<0.0005					<0.0005			<0.0001	<0.0001				<0.001		<0.001
Boron, dissolved	mg/L	0.004		<0.005		0.006	0.004	<0.004	0.006	<0.004	<0.004				<0.004		<0.05
Cadmium, dissolved	mg/L	<0.00001		<0.00008		<0.00008	<0.00001	<0.00001	<0.00001	0.00008	<0.00001				<0.00001		0.00004
Calcium, dissolved	mg/L	26.9		40.9			31.8	20	30.5	5.23	23.8				29.1		32.6
Chromium, dissolved	mg/L	0.0016		0.0012		0.0013	0.0006	0.0016	0.0005	0.0006	<0.0004				0.0012		<0.001
Cobalt, dissolved	mg/L	<0.0001		0.00008		0.00014	0.0001	0.00025	0.0001	0.0001	0.00013				0.0001		<0.0005
Copper, dissolved	mg/L	0.001		<0.001		0.001	0.002	0.004	0.001	0.005	0.002				0.004		0.0012
Iron, dissolved	mg/L	0.08		<0.02		0.07	0.07	0.2	0.078	0.07	0.05				0.1		0.046
Lead, dissolved	mg/L	<0.0001		<0.0001		<0.0001	<0.0001	0.0017	<0.0001	0.0001	<0.0001				0.0004		<0.0002
Lithium, dissolved	mg/L	0.001		0.002		<0.001	0.001	<0.001	<0.001	<0.001	<0.001				<0.001		<0.005
Magnesium, dissolved	mg/L	9.8		20.4			10.6	6.63	11.4	1.68	8.18				9.9		10.8
Manganese, dissolved	mg/L	0.018		0.025		0.0682	0.02	0.0198	0.0338	0.0114	0.0129				0.0128		0.024
Mercury, dissolved	mg/L	<0.0001		<0.00001			<0.0001	<0.00001	<0.00001	0.00001	<0.00001				<0.00001		<0.00002
Molydenum, dissolved	mg/L	0.002		0.00161		0.00149	0.001	0.00072	0.00108	0.00013	0.00127				0.0011		0.001
Nickel, dissolved	mg/L	0.0008		<0.001		0.001	0.001	0.001	0.001	<0.001	0.001				0.001		<0.001
Phosphorus, dissolved	mg/L			<0.01			<0.05	0.02	<0.01	0.06	0.01				0.03		
Potassium, dissolved	mg/L	0.9		2.68			1	0.53	0.8	1.5	0.7				0.9		0.95
Selenium, dissolved	mg/L	<0.0002		<0.0006		0.0022	<0.0002	<0.0006	<0.0006	<0.0006	<0.0006				<0.0006		0.0002
Silicon, dissolved	mg/L	6.17		3.97			5.81	5.8	6.6	1.48	4.13				6.04		6.3
Silver, dissolved	mg/L	<0.0001		<0.0010		<0.00001	0.00006	<0.00001	<0.00001	<0.00001	<0.00001				<0.00001		<0.00002
Sodium, dissolved	mg/L	7.2		12.6			7.4	4.92	6.4	1.2	5.3				6.8		6.68
Strontium, dissolved	mg/L	0.31		0.497		0.289	0.336	0.173	0.276	0.029	0.24				0.256		0.334
Sulpher, dissolved	mg/L	2.9					3.5			0.4	2.8				3		4
Thallium, dissolved	mg/L	<0.00005		<0.00001		<0.00001	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001				<0.00001		<0.00005
Tin, dissolved	mg/L	<0.001		<0.004		<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001				<0.0001		<0.005
Titanium, dissolved	mg/L	0.0006		0.0011		0.0015	<0.0005	0.0055	0.0011	0.0015	0.0011				0.0004		<0.005
Uranium, dissolved	mg/L	0.0006		0.0021		0.0014	0.0011	<0.0004	0.0007	<0.0004	0.0008				0.0007		0.0012
Vanadium, dissolved	mg/L	0.0044		0.00059		0.00091	0.001	0.00094	0.00067	0.00024	0.0008				0.0007		<0.005
Zinc, dissolved	mg/L	0.002		0.001		0.002	0.006	0.003	0.001	0.009	0.002				0.001		<0.005
Zirconium, dissolved	mg/L			<0.0001		0.0003		0.0004	0.0002	0.0002	0.0003				0.0002		<0.0005

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**19/04/2010**	**27/04/2010**	**29/04/2010**	**01/05/2010**	**03/05/2010**	**05/05/2010**	**07/05/2010**	**09/05/2010**	**10/05/2010**	**12/05/2010**	**14/05/2010**	**16/05/2010**	**17/05/2010**	**19/05/2010**	**21/05/2010**	**23/05/2010**	**25/05/2010**
Total Suspended Solids	mg/L	<7	<4	<4	15	12	12	18	<4	<4	<4	15	12	11	4	22	33	140
Total Dissolved Solids	mg/L	142	62	62	74	80	76	62	130	130	100	130	120	130	120	120	150	140
pH (field)	pH units	7.31	7.65	7.72	7.15	7.74		7.95	8.03	8.06		7.26	7.32	7.52	7.62	8.02	7.61	7.24
pH (lab)	pH units	7.81	7.6	7.5	7.7	7.7	7.8	7.8	8	8.1	8	8.1	8.3	8.2	8.2	8.1	8.1	7.9
Specific Conductance, field	µS/cm																	
Specific Conductance (lab)	µS/cm	167	64	66	78	85	102	113	180	163	166	149	590	160	195	191	204	211
Temperature (field)	C	1	-0.07	-0.07	-0.06	0.04		0.03	0.8	0.07		1.1	1.10	1	1	1.2	1	1.2
Dissolved Oxygen (field)	mg/L																	
Dissolved Oxygen (field)	%		59.2	8.8	102.2	90.2		83.3	129.2	133.9								
ORP (field)	mV																	
Hardness (from total)	mg/L	80	35	36.2	43.6	46.2	55.1	56	71	90.3	84.6	71.4	76.3	75.6	103	95.6	103	124
Hardness (from dissolved)	mg/L		36.3	36.2	40.8	44.9	49.1	56.9	79.9	80.9	81.6	72.6	85.6	80.4	98.6	91.5	98.1	125
Alkalinity, total	mg/L	82	32	31	40	42	53	58	86	83	83	73	260	80	98	96	100	100
Chloride	mg/L	0.91	1.4	0.9	1.2	0.8	0.9	0.8	1.2	0.6	<0.5	<0.5	0.6	<0.5	<0.5	0.8	1	0.8
Fluoride	mg/L		0.08	0.09	0.11	0.11	0.13	0.13	0.22	0.2	0.11	0.18	0.2	0.19	0.25	0.26	0.28	0.28
Sulphate, dissolved	mg/L	8.2	7	<5	<5	<0.5	<0.5	<0.5	9.1	3.9	5.4	5.2	7.6	5.6	9.7	9.3	9.9	11
Ammonia	mg/L		0.015	0.016	0.031	0.016	<0.01	0.051	<0.005	0.015	<0.05	0.034	0.068	0.037	0.02	0.017	0.013	0.07
Nitrite (N)	mg/L		<0.005	<0.01	0.008	<0.005	<0.005	0.007	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	0.025
Nitrate (N)	mg/L		<0.02	<0.04	0.07	<0.02	<0.02	0.1	0.07	0.13	0.03	<0.02	0.03	<0.02	0.06	0.05	0.06	0.08
Dissolved Organic Carbon	mg/L		22.7	19.3	19	22.2	14.5	12.8	13.2	11.7	10.4	9.2	8.8	7.2	7.5	8.7	8.2	8.1
Aluminum, total	mg/L	0.033	0.113	0.11	0.502	0.406	0.394	0.407	0.183	0.125	0.123	0.286	0.207	0.219	0.105	0.457	2.14	4.2
Antimony, total	mg/L	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0004	0.0003	0.0004	0.0006	0.0007	0.0007	0.0005	0.0004	0.0005	0.0004	0.0004	0.0004	0.0005	<0.001	0.0005	0.0014	0.002
Barium, total	mg/L	0.04	0.023	0.025	0.035	0.035	0.039	0.041	0.043	0.055	0.048	0.046	0.044	0.046	0.057	0.06	0.102	0.121
Beryllium, total	mg/L	<0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0002	<0.0002	<0.0005
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	0.006	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1
Cadmium, total	mg/L	0.00001	0.00003	0.00002	0.00002	0.00003	0.00004	0.00003	0.00005	0.00011	0.00009	0.00005	0.00005	0.00001	0.00001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	20.5	9.35	9.54	11.5	12.3	14.3	14.7	18.2	23.3	22.1	18.2	19.8	19.6	25.6	24	25	28
Chromium, total	mg/L	0.0004	<0.001	<0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.002	0.004	0.01
Cobalt, total	mg/L	0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.0028
Copper, total	mg/L	0.006	0.0055	0.0037	0.0074	0.0045	0.0058	0.0045	0.0147	0.0059	0.0075	0.0055	0.0031	0.0035	0.0049	0.003	0.008	0.013
Iron, total	mg/L	0.104	0.211	0.259	0.902	0.983	1.14	0.92	0.468	0.452	0.378	0.556	0.369	0.405	0.248	0.628	3.49	5.54
Lead, total	mg/L	0.0001	<0.0002	<0.0002	0.0003	0.0003	0.002	0.0003	0.0003	0.0003	0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	0.0013	0.0018
Lithium, total	mg/L	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01
Magnesium, total	mg/L	7.53	2.83	3.01	3.62	3.78	4.7	4.7	6.2	7.83	7.14	6.29	6.52	6.47	9.58	8	10	13
Manganese, total	mg/L	0.0207	0.007	0.01	0.03	0.033	0.03	0.039	0.016	0.018	0.021	0.042	0.037	0.045	0.019	0.035	0.13	0.158
Mercury, total	mg/L	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.00002	<0.0002	<0.0002	<0.00002
Molybdenum, total	mg/L	0.0008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.002
Nickel, total	mg/L	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.002	0.002	0.001	0.003	0.001	0.001	<0.003	0.002	0.007	0.008
Phosphorus, total	mg/L	0.1			0.052		0.058	0.049	0.027	0.03	0.022		0.041	0.031	0.024			
Potassium, total	mg/L	2.1	1.01	0.9	0.81	0.72	0.72	0.68	0.74	0.91	0.98	0.71	0.72	0.77	0.96	<1	1	2
Selenium, total	mg/L	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0002	<0.0008	<0.0008	<0.001
Silicon, total	mg/L	4.44	3.14	3.2	4.34	4.17	4.7	4.5	4.24	5.37	5.23	4.69	4.45	4.32	5.4	5.41	8.91	13.2
Silver, total	mg/L	<0.00001	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	5.17	1.89	1.91	2.25	2.55	3.03	3.01	3.97	5.1	4.83	4.05	4.02	3.92	6.7	5	5	8
Strontium, total	mg/L	0.218	0.073	0.077	0.095	0.108	0.12	0.13	0.17	0.22	0.206	0.177	0.188	0.193	0.261	0.246	0.261	0.279
Sulpher, total	mg/L	2.8	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<60	<60	<60
Thallium, total	mg/L	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00005
Tin, total	mg/L	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L		<0.005	<0.005	0.015	0.014	0.016	0.016	<0.005	<0.005	<0.005	0.008	0.008	0.01	0.007	0.016	0.086	0.143
Uranium, total	mg/L	0.0005	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003	0.0005	0.0007	0.0006	0.0005	0.0007	0.0007	0.0008	0.0009	0.0012	0.0011
Vanadium, total	mg/L	0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	0.01
Zinc, total	mg/L	0.008	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.01	0.012	0.017
Zirconium, total	mg/L	0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.019	0.075	0.065	0.053	0.047	0.038	0.028	0.023	0.021	0.017	0.096	0.012	0.018	0.016	0.013	0.017	0.024
Antimony, dissolved	mg/L	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0003	0.0003	0.0003	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0003	<0.0004	<0.0004	<0.001
Barium, dissolved	mg/L	0.039	0.022	0.023	0.025	0.027	0.03	0.034	0.044	0.046	0.046	0.044	0.045	0.043	0.049	0.05	0.053	0.065
Beryllium, dissolved	mg/L	<0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0005
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.004	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	0.00002	<0.00001	<0.00001	0.00002	<0.00001	<0.00001	0.00001	<0.00001	0.00002	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	19.9	9.79	9.79	11	12	12.9	14.7	20.5	20.7	21.1	18.7	22.3	20.9	24.4	24	25	30
Chromium, dissolved	mg/L	0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	0.00017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.006	0.0041	0.0034	0.0032	0.0027	0.0025	0.0026	0.0018	0.0022	0.0016	0.0031	0.0013	0.0012	0.0017	0.001	0.001	0.003
Iron, dissolved	mg/L	0.09	0.15	0.18	0.26	0.378	0.574	0.359	0.297	0.276	0.173	0.339	0.08	0.068	0.069	0.057	0.069	0.062
Lead, dissolved	mg/L	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	7.3	2.87	2.86	3.26	3.67	4.09	4.9	6.97	7.08	7.06	6.27	7.28	6.82	9.16	8	9	12
Manganese, dissolved	mg/L	0.0188	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.039	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Mercury, dissolved	mg/L	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.0002	<0.0002	<0.00002	<0.0002	<0.0002	<0.00002
Molydenum, dissolved	mg/L	0.0008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002
Nickel, dissolved	mg/L	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	<0.001	<0.001	<0.001	0.001	0.001	<0.003
Phosphorus, dissolved	mg/L	0.02			0.023		0.021	0.017	0.014	0.013	<0.01		<0.01	<0.01	<0.01			
Potassium, dissolved	mg/L	2.1	1.04	0.9	0.71	0.64	0.57	0.68	0.78	0.8	0.77	0.71	0.8	0.78	0.85	<1	<1	1
Selenium, dissolved	mg/L	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	<0.0008	<0.0008	<0.001
Silicon, dissolved	mg/L	4.15	2.94	2.89	3.27	3.63	3.84	3.77	4.61	4.62	5	4.35	4.68	4.22	5.24	4.98	5.24	6.05
Silver, dissolved	mg/L	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	5	1.86	1.92	2.22	2.6	2.85	3.35	4.54	4.69	4.6	4.05	4.75	4.36	6.6	6	6	8
Strontium, dissolved	mg/L	0.212	0.071	0.076	0.088	0.097	0.116	0.129	0.192	0.195	0.201	0.178	0.207	0.191	0.21	0.22	0.235	0.306
Sulpher, dissolved	mg/L	2.7	<3	<3	<3	<3	<3	<3	<3	3	<3	<3	<3	<3	3	<60	<60	<60
Thallium, dissolved	mg/L	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0005	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0006	0.0006	0.0006	0.0005	0.0007	0.0006	0.0008	0.0008	0.0009	0.0011
Vanadium, dissolved	mg/L	0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**27/05/2010**	**29/05/2010**	**31/05/2010**	**02/06/2010**	**04/06/2010**	**06/06/2010**	**14/06/2010**	**16/06/2010**	**18/06/2010**	**20/06/2010**	**22/06/2010**	**24/06/2010**	**26/06/2010**	**28/06/2010**	**05/07/2010**	**05/08/2010**	**12/09/2010**	**08/10/2010**	**27/04/2011**	**02/05/2011**	**01/06/2011**	**16/06/2011**	**01/07/2011**	**02/08/2011**	**16/08/2011**	**19/08/2011**	**12/09/2011**	**06/10/2011**	**22/11/2011**	**24/01/2012**	**25/02/2012**	**05/03/2012**	**24/04/2012**
Total Suspended Solids	mg/L	350	200	290	81	60	39	43	17	28	33	300	64	21	9	53		11	3	<1	7	23	85	150	400	22	22	1	<4	26.7	<4.0	<4.0	3.2	11.2
Total Dissolved Solids	mg/L	140	160	160	140	140	170	150	150	140	140	140	130	120	150	150	170	210	150	72	40	120	130	120	110	150	140	170	150	156	226	216	176	100
pH (field)	pH units	7.53	7.73	7.83	7.26	7.48			6.78	7.03	7.1	7.92	7.95	8.03	7.89	8.02	7.91	8.02	7.85										7.92	7.65			7.16	6.72	7.43
pH (lab)	pH units	8	8.2	8.2	8.2	8.2	8.2	8.29	8.3	8.17	8.2	8.03	8.03	8.26	8.03	8.06		7.98	8.1	7.41	7.11	8.09	8	7.76	7.67	7.9	8.12	8.03	8.07	7.96	8.13	7.99	8.17	7.63
Specific Conductance, field	µS/cm																															296.9	272.6	75.6
Specific Conductance (lab)	µS/cm	231	232	236	243	240	250	250	259	256	240	208	214	230	248	202		212	233	79	57	196	195	146	113	191	185	217	233	280	349	339	343	75
Temperature (field)	C	3	1	1.2	1.4	3.1	1.9	3.8	2.6	3	3.4	3.25	3.55	3.12	2.94	4.48	5.57	4.06	-0.18									1.9	0			0.00	0	0
Dissolved Oxygen (field)	mg/L																											18.55	12.13			10.92	11.47	15.55
Dissolved Oxygen (field)	%											107.1	105.6	107.3	105.1	104.5	78.1	84.5	100.3									133.5	83.1			74.6	78.9	106.3
ORP (field)	mV																																	
Hardness (from total)	mg/L	148	129	130	135	125	133	128	128	123	118	115	116	106	107	106	116	102	126	42.6	33.1	94	108	87.5	85.8	96.8	93.4	119	113	144	158	160	159	37
Hardness (from dissolved)	mg/L	113	111	109	113	111	128	122	120	122	112	97.6	99.7	106	114	92.5	118	107	111	42.6	31.8	92.3	97.4	77.1	58.9	97.6	93	118	110	148	169	165	161	38.7
Alkalinity, total	mg/L	110	110	120	120	120	130	130	130	130	120	110	110	120	120	100		100	120	34	27	96	92	73	54	94	92	110	120	134	165	155	154	36.2
Chloride	mg/L	<0.5	0.7	0.7	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5		0.7	<0.5	1.9	1.7	0.5			1.8			1.3	1	0.8	0.8	0.9	0.5	1.4
Fluoride	mg/L	0.3	0.32	0.32	0.31	0.31	0.32	0.35	0.35	0.34	0.31	0.25	0.28	0.3	0.29	0.22		0.22	0.23	0.1	0.08	0.24			0.14						0.43	0.42	0.42	0.1
Sulphate, dissolved	mg/L	12	12	12	12	13	12	13	14	12	10	8.2	6.4	7.8	9.7	2.5		6.4	8.8	<5	<5	6.1		<0.5					8.9		18	17.8	19	<0.50
Ammonia	mg/L	0.052	0.1	<0.05	<0.01	0.34	0.1	0.016	0.016			0.014	0.012	0.009	0.022	0.027		0.039	0.069	0.01		0.012	0.013	0.016		0.015	0.006	0.025	0.019	0.0214	0.005	0.006	0.0067	<0.0050
Nitrite (N)	mg/L	<0.005	0.011	0.023	0.023	0.014	0.013	<0.005	<0.005	<0.005	0.008	<0.005	0.007	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0101
Nitrate (N)	mg/L	0.13	0.22	0.12	0.14	0.16	0.16	0.16	0.17	0.15	0.13	0.12	0.07	0.1	0.13	0.07		0.03	0.07	<0.02	<0.02		0.1	0.05	0.06	0.06	0.04	0.05	0.11	0.136	0.324	0.289	0.195	<0.020
Dissolved Organic Carbon	mg/L	8.1	6.3	7.2	4.9	6.4		5.9	6.1	6.2	7.6	10.4	10.2	9.3	8.7	16.1	13.2	16.7	12.7	23	22	10.7	12.6	21.1	24.2	18.3	18.8	13.2	11.7	7.73	5.33	6.08	5.17	13.6
Aluminum, total	mg/L	10.3	3.93	4.54	2.91	1.64	2.05	1.1	0.43	0.504	1.17	5.52	1.21	0.503	0.298	1.59	0.22	0.273	0.064	0.101	0.25	0.454	2.48	3.4	9.23	0.403	0.444	0.08	0.065	0.407	0.01	0.018	0.043	0.766
Antimony, total	mg/L	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050
Arsenic, total	mg/L	0.006	0.0025	0.0027	0.0016	0.0012	0.0013	0.0009	0.0005	0.0006	0.0009	0.0029	0.0013	0.0005	0.0005	0.0011	0.0005	0.0005	0.0002	0.0003	0.0003	0.0005	0.0014	0.0025	0.0037	0.001	0.0009	0.0008	0.0005	0.0006	0.0004	0.0003	0.0004	0.00074
Barium, total	mg/L	0.196	0.131	0.149	0.098	0.09	0.109	0.099	0.078	0.078	0.085	0.164	0.078	0.066	0.064	0.086	0.07	0.061	0.068	0.024	0.024	0.061	0.096	0.135	0.211	0.069	0.061	0.061	0.058	0.085	0.087	0.082	0.083	0.0404
Beryllium, total	mg/L	<0.0005	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00010
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.0002	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00003	0.00005	0.00005	0.00002	0.00008	0.00022	0.00017	0.00004	0.00002	0.00005	0.00001	0.00025	0.00001	0.00003	0.00001	0.000029
Calcium, total	mg/L	31	31	31	33	31	33	31	31	30	29	28	27	26	28	27	29	27	32.2	10.9	8.66	22.9	26.4	22.2	20.7	25.4	24.1	30.1	28.4	36.4	39.5	41	39.7	9.61
Chromium, total	mg/L	0.025	0.01	0.011	0.008	0.004	0.006	0.002	<0.002	<0.002	0.003	0.012	0.003	<0.002	<0.002	0.003	<0.002	<0.002	<0.001	<0.001	<0.001	0.001	0.005	0.009	0.021	0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.0015
Cobalt, total	mg/L	0.0077	0.0038	0.004	0.0024	0.0013	0.0015	0.001	<0.0005	<0.0005	0.0009	0.0048	0.0014	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0021	0.0035	0.0064	0.0006	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00056
Copper, total	mg/L	0.027	0.013	0.013	0.008	0.009	0.006	0.004	0.002	0.002	0.006	0.014	0.005	0.002	0.002	0.01	0.003	0.003	0.0017	0.0119	0.0285	0.0027	0.0075	0.0127	0.0197	0.0143	0.0028	0.0024	0.0012	0.0108	0.0013	0.0055	0.0068	0.00635
Iron, total	mg/L	15.6	6.13	6.96	4.39	2.42	3.12	1.62	0.573	0.768	1.74	8.61	2.05	0.761	0.491	2.4	0.428	0.594	0.26	0.187	0.452	0.775	4.02	6.28	13.8	1.25	1.21	0.738	0.49	0.865	0.113	0.043	0.108	1.32
Lead, total	mg/L	0.0052	0.0025	0.0028	0.0014	0.001	0.0012	0.0006	<0.0002	0.0003	0.0007	0.0031	0.0006	0.0003	0.0003	0.0008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0012	0.0021	0.0035	0.0004	0.0002	<0.0002	<0.0002	0.0008	<0.0002	<0.0002	<0.0002	0.00029
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
Magnesium, total	mg/L	11	10	10	10	10	11	11	11	11	10	9	9	10	10	8	10	9	9.34	3.57	2.57	8.19	8.56	6.25	4.85	7.96	7.89	10.1	9.89	12.8	14.9	15.1	14.2	3.2
Manganese, total	mg/L	0.014	0.015	0.012	<0.001	0.001	0.004	0.002	0.004	<0.001	0.003	0.001	0.001	0.003	0.002	0.003	0.023	0.017	0.027	0.027	0.021	0.011	0.011	0.037	0.064	0.054	0.06	0.079	0.07	0.0626	0.0614	0.007	0.0015	0.0486
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00010	<0.00010	<0.00010
Molybdenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0013	0.0015	0.0014	0.0011	<0.0010
Nickel, dissolved	mg/L	<0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.004	<0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.001	0.0012	<0.0010	<0.0010	<0.0010	0.0012
Phosphorus, dissolved	mg/L																			0.048		0.011	0.014	0.017	0.02	0.023	0.032	0.023	0.015	0.014	0.012	0.031	<0.01	0.027
Potassium, dissolved	mg/L	1	1	<1	<1	<1	1	1	1	1	<1	<1	<1	<1	<1	<1	<1	<1	0.71	1.75	1.39	0.85	0.67	0.39	0.29	0.46	0.41	0.62	0.62	0.864	1.6	1.63	1.5	1.18
Selenium, dissolved	mg/L	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00016	0.00043	0.00034	0.00031	<0.00010
Silicon, dissolved	mg/L	5.4	5.26		5.16	4.96	5.46	5.87	5.32	5.82	5.69	5.86	5.79	6.05	6.64	6.08	6.47	7.17	6.54	3.09	2.52	5.26	6.52	6.61	5.78	6.96	6.9	7.71	6.17	8.07	7.24	6.43	5.99	2.94
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00020	<0.00020	<0.00020
Sodium, dissolved	mg/L	8	6	7	6	6	7	8	7	7	7	6	6	7	7	6	6	5	5.34	2.12	1.43	5.09	5.67	4.4	3.69	4.81	4.58	5.73	5.68	6.99	8.72	8.86	8.03	1.9
Strontium, dissolved	mg/L	0.277	0.289	0.286	0.293	0.275	0.313	0.314	0.338	0.318	0.3	0.249	0.259	0.305	0.314	0.255	0.303	0.253	0.277	0.084	0.062	0.25	0.213	0.154	0.12	0.21	0.197	0.266	0.266	0.366	0.456	0.448	0.468	0.0774
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	3	<3	<3	4	<3	<3	<3	<3	<3	<3	<3	4.6	7.3	7.3	6.1	<3.0
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.0011	0.0014	0.0014	0.0015	0.0014	0.0015	0.0015	0.0015	0.0015	0.0012	0.0008	0.0008	0.001	0.001	0.0006	0.0007	0.0005	0.0007	0.0001	<0.0001	0.0007	0.0005	0.0003	0.0002	0.0004	0.0003	0.0005	0.0006	0.00106	0.00163	0.0015	0.00145	0.00014
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	0.0083	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		06/05/2012	19/06/2012	17/07/2012	30/07/2012	08/08/2012	23/08/2012	13/09/2012	16/10/2012	02/11/2012	29/12/2012	30/04/2013	14/05/2013	19/06/2013	13/07/2013	21/08/2013	06/09/2013	21/10/2013	16/11/2013	07/12/2013	06/01/2014	23/04/2014	05/05/2014	21/06/2014	30/06/2014	04/07/2014	10/08/2014	06/09/2014	31/10/2014	05/11/2014	09/12/2014	15/01/2015	07/03/2015	14/04/2015
Total Suspended Solids	mg/L	4.2	165	34.1	9.2	3.3	1.5	15.3	9.9	2.2	<1.0	5.8	55.3	10.1	5	3.8	11.8	7.4	1.5	<1.0	<1.0	14.7	3.5	21.5	4.5	2.2	2.9	10.5	2.6	3.2	<1.0	3.2	6	<1.0
Total Dissolved Solids	mg/L	88	128	164	180	192	200	154	166	214	262	246	70	164	156	172	280	168	164	220	244	84	114	130	176	144	172	168	176	174	322	308	246	192
pH (field)	pH units	7.1	7.59	7.76	7.86	8.44	7.79	7.98	7.89		7.97	8.18	8.2	8.6	7.74	7.81	7.75	7.58	7.69	6.30	7.8	7.72	8.19	8.06	8.11	8.13	7.92	7.85	7.29	7.77	7.93	8.08	8.18	8.04
pH (lab)	pH units	5.74	8.12	8.15	8.2	8.26	8.25	8.13	8.17	7.93	8.13	8.27	7.58	8.07	8.1	8.23	8.02	8.16	8.24	8.14	8.26	7.49	7.8	8.12	8.16	8.1	8.24	8.24	8.14	8.19	8.17	8.23	8.22	8.3
Specific Conductance, field	µS/cm	88.8	202.6	244.2	235.1	268.5	264.6	224	258.9		2107	365.3	59.7		250.7	280.6	277.3	286.3	197.6		320.2	62.3	112.3	291	299.8	331.9	328	270.2	405.1	382.8	235.7	582.2	327.4	388.3
Specific Conductance (lab)	µS/cm	92.3	178	254	272	278	285	230	261	319	444	387	61.3	237	263	286	280	288	324	354	393	64.1	105	257	278	276	291	275	304	304	374	516	394	397
Temperature (field)	C	0	4.1	5.4	4.4	4.7	4.6	1.9	0.4		-0.3	0	0	4.6	3.6	4.2	4	0	-0.1	0	0	0	-0.1	1.9	2.5	3.4	2.3	1.2	-1.6	-1.6	-1.9	-2.2	0	0
Dissolved Oxygen (field)	mg/L	8.53	12.45	12.31	12.64	12.65	10.94	13.04	17.1		9.38		13.46		11.92	12.06	11.37	11.57	7.17		14.09	13.79	14.41	12.43	12.14	11.86	12.92	13.40	13.39	13.18	89.30	14.37	12.89	13.2
Dissolved Oxygen (field)	%	58.4	95.1	97.4	97.6	98.5	84.8	94.1	118.3		72.5	101.8	92.4		90	101	93.5	77.7	61.8		96.8	94.4	98.4	89.8	89.1	89.3	94.7	94.7	87.6	86.3	90.26	92.4	88.4	90.3
ORP (field)	mV	116.8	44.5	45.6	16	-6.2	-2.4	76.7	18		289.9	-50	109.7		108.7	32.7	38.1	16.6	94.7		228.2	155.2	90.3	96.2	65.3	73.2	60.6	69.9	127.8	50.6	-129.6	166.9	124.6	196.7
Hardness (from total)	mg/L	44.7	105	124	128	141	151	121	143	153	206	198	36.4	115	137	144	154	126	164	189	214	36.6	52.2	128	135	136	143	144	164	147	205	269	194	196
Hardness (from dissolved)	mg/L	46.4	91.8	128	135	141	142	116	129	158	223	192	33.3	114	132	140	138	147	153	168	202	36.1	53.4	122	129	129	133	131	159	147	189	248	187	187
Alkalinity, total	mg/L	8.45	87.4	128	138	143	147	115	132	150	207	187	29.4	113	127	143	140	138	153	166	185	30.6	48.2	122	130	132	142	140	150	148	190	252	183	195
Chloride	mg/L	<0.50	1.1	0.96	0.58	1.2	1.2	1.2	1.2	0.82	1.9	1.4	1.5	1.1	0.99	0.93	1.3	1.3	1	1.2	0.94	1.7	1.4	1.1	1.2	0.74	0.91	0.93	1.2	1.3	1.2	1.5	0.85	1.4
Fluoride	mg/L	0.12	0.17	0.23	0.28	0.29	0.27	0.18	0.19	0.29	0.43	0.53	0.064	0.25	0.26	0.27	0.24	0.25	0.35	0.31	0.48	0.076	0.096	0.3	0.33	0.37	0.33	0.27	0.33	0.33	0.46	0.66	0.56	0.44
Sulphate, dissolved	mg/L	<0.50	<0.50	4.63	5.31	5.43	5.23	3.85	7.47	14.4	29.1	24.1	<0.50	7.87	9.73	8.32	5.66	10.3	15.1	16.7	23.7	<0.50	<0.50	11.9	11.3	11.9	12.9	8.19	11.9	14	19.4	29.4	26.1	22.8
Ammonia	mg/L	0.011	0.18	0.065	0.13	0.014	0.049	0.0087	0.028	0.026	0.025	0.0082	0.066	0.04	0.023	0.051	0.017	0.048	0.027	0.025	0.0096	0.014	0.014	0.024	0.025	0.013	0.025	0.016	0.022	0.027	0.024	0.034	0.0094	0.011
Nitrite (N)	mg/L	<0.0050	0.0148	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	<0.020	0.083	0.089	0.124	0.13	0.21	0.078	0.125	0.219	0.063	0.132	<0.020	0.141	0.17	0.157	0.128	0.168	0.257	0.206	0.28	<0.020	<0.020	0.197	0.199	0.209	0.159	0.089	0.202	0.194	0.124	0.123	<0.020	0.047
Dissolved Organic Carbon	mg/L	17	16.2	13.3	12.7	12.6	10.3	16.3	12.6	8.19	10.2	4.64	15.3	10.5	9.88	9.84	11	11.9	7.47	7.3	8.8	23.7	19.3	6.61	8.47	5.84	6.95	8.54	7.27	6.25	6.91	7.69	6.66	11.1
Aluminum, total	mg/L	0.131	5.38	0.93	0.2	0.0828	0.0342	0.139	0.127	0.0576	0.0127	0.0111	1.34	0.213	0.127	0.137	0.37	0.0931	0.0389	0.0098	0.0087	0.336	0.116	0.371	0.103	0.0488	0.032	0.184	0.0103	0.0178	0.0079	0.08	0.04	0.0145
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00049	0.00232	0.00118	0.00095	0.00085	0.00093	0.0007	0.00065	0.00058	0.00042	0.00019	0.00072	0.00058	0.00063	0.0007	0.00099	0.00061	0.00052	0.00059	0.00047	0.00037	0.00049	0.00051	0.0004	0.00038	0.00049	0.00063	0.00044	0.00042	0.0005	0.00047	0.00024	0.0003
Barium, total	mg/L	0.0316	0.154	0.0843	0.0737	0.0731	0.0778	0.0629	0.0693	0.0848	0.104	0.0996	0.0462	0.0683	0.0712	0.0755	0.0815	0.0642	0.0832	0.0967	0.104	0.0261	0.0313	0.0752	0.073	0.0738	0.0748	0.0744	0.0769	0.0791	0.103	0.127	0.0879	0.0897
Beryllium, total	mg/L	<0.00010	0.00016	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000016	0.000119	0.000034	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	0.000015	0.000015	<0.000010	0.000025	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	0.000026	0.000026	<0.000010	0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000015	<0.000010	0.000022
Calcium, total	mg/L	11.1	26.4	31.7	32.1	35.7	39.1	31.2	36	37.3	49.6	47.8	9.61	29.7	35.1	35.8	38.7	31.8	39.8	46.7	54	9.56	13.1	32.1	33.2	34.5	36.1	36.3	42	37.8	51.5	64.6	46.6	43.7
Chromium, total	mg/L	<0.0010	0.0112	0.0024	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0027	<0.0010	<0.0010	<0.0010	0.0014	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	0.00326	0.00075	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00107	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00373	0.0102	0.0035	0.0045	0.00108	0.00134	0.00208	0.00144	0.00231	0.0028	0.0021	0.0084	0.00191	0.00143	0.00138	0.0017	0.00119	0.00124	0.00141	0.005	0.0116	0.00622	0.00236	0.00205	0.00139	0.00119	0.00204	0.00098	0.00099	0.0013	0.00909	0.0168	0.00514
Iron, total	mg/L	0.572	7.88	2.28	1.32	1.13	1.12	1.15	0.995	0.289	0.0724	0.0288	2.2	0.657	0.631	0.619	1.48	0.683	0.296	0.227	0.0638	0.595	0.398	0.721	0.183	0.173	0.179	0.555	0.145	0.156	0.059	0.145	0.093	0.034
Lead, total	mg/L	<0.00020	0.00178	0.00026	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00046	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00048	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	4.12	9.46	11	11.6	12.7	13	10.5	13	14.4	19.9	19	3	9.92	12.1	13.3	13.9	11.3	15.6	17.5	19.2	3.08	4.72	11.8	12.6	12	12.9	13	14.3	12.8	18.5	26.1	18.9	21.1
Manganese, total	mg/L	0.0145	0.199	0.0937	0.0683	0.0626	0.0627	0.126	0.101	0.103	0.0405	0.053	0.164	0.042	0.0336	0.0492	0.102	0.0934	0.0906	0.162	0.0284	0.053	0.0635	0.046	0.0244	0.0215	0.0286	0.0406	0.0517	0.0544	0.0452	0.0181	0.0151	0.0124
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010	0.0012	0.0015	0.0014	0.0014	0.0016	<0.0010	0.0012	0.0013	0.0012	0.0013	<0.0010	0.0014	0.0016	0.0016	0.0013	0.0011	0.0017	0.0013	0.0014	<0.0010	<0.0010	0.0015	0.0015	0.0019	0.0016	0.0016	0.0015	0.0014	0.0015	0.002	<0.0010	0.0021
Nickel, total	mg/L	0.0014	0.0107	0.0032	0.0025	0.0016	0.0016	0.0022	0.0023	0.0014	0.0016	<0.0010	0.0029	0.0019	0.0017	0.0014	0.0019	0.0016	<0.0010	0.001	<0.0010	0.0016	0.0019	0.0018	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	<0.0010	0.0011	<0.0010	0.0012	<0.0010
Phosphorus, total	mg/L	0.034	0.222	0.074	0.044	0.036	0.035	0.034	0.046	0.023	0.022	<0.01	0.116	0.028	0.027	0.028	0.044	0.027	0.026	0.021	0.014	0.075	0.049	0.037	0.025	0.021	0.018	0.034	0.02	0.016	0.017	0.022	0.028	0.026
Potassium, total	mg/L	0.912	1.09	0.824	1.14	0.894	0.929	0.589	0.748	1.16	2.29	1.95	1.18	0.872	0.856	0.951	0.968	0.754	1.14	1.52	1.92	1.44	0.841	0.995	1.04	1.14	1.08	1.02	1.28	1.13	2.04	2.93	2.61	2.99
Selenium, total	mg/L	0.00011	0.0002	0.00019	0.00022	0.00028	0.00017	0.00021	0.0002	0.00023	0.00032	0.00042	0.00011	0.00012	0.0002	0.00014	0.00017	0.00021	0.00017	0.00019	0.00043	0.0001	0.00011	0.00016	0.00018	0.00021	0.0003	0.0002	0.00016	0.00016	0.00036	0.00057	0.00059	0.00033
Silicon, total	mg/L	3.57	16.3	8.31	6.59	7.38	7.8	6.83	7.29	6.3	7.67	7.29	4.78	6.47	6.88	6.97	7.96	6.38	6.95	6.56	8.42	2.97	3.54	6.41	6.25	6.6	6.33	7.18	7.29	6.19	7.97	10	7.26	8.69
Silver, total	mg/L	<0.000020	0.00003	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000024	<0.000020	<0.000020	<0.000020	<0.000020	0.000046	<0.000020	<0.000020	<0.000020	<0.000020	0.000027	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	2.53	5.45	6.4	6.83	7.25	7.39	6	7.25	7.87	11.7	10.1	1.5	6.28	7.03	7.75	8.11	6.34	8.83	10.1	11.1	1.59	2.95	7.11	7.55	7.77	8.15	7.79	8.37	9.18	10.9	15.4	11.6	12.2
Strontium, total	mg/L	0.103	0.236	0.305	0.318	0.334	0.374	0.269	0.327	0.411	0.488	0.603	0.0703	0.275	0.341	0.364	0.364	0.303	0.436	0.476	0.569	0.0703	0.116	0.326	0.346	0.366	0.375	0.372	0.408	0.409	0.518	0.749	0.558	0.55
Sulpher, total	mg/L	<3.0	<3.0	<3.0	3.3	<3.0	<3.0	<3.0	<3.0	5.1	7.9	8.1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	5.8	1940	<3.0	<3.0	3.5	4.7	5.4	3.5	<3.0	5.4	5	9.5	12.3	9	6.3
Thallium, total	mg/L	<0.000050	0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	mg/L	<0.00010	0.00043	0.00074	0.00091	0.00096	0.00097	0.00052	0.00077	0.00135	0.00133	0.00213	<0.00010	0.00098	0.00105	0.00107	0.00088	0.00093	0.0015	0.00126	0.00185	0.00012	0.0002	0.00124	0.00132	0.00126	0.00107	0.00104	0.00134	0.00138	0.00149	0.00233	0.00103	0.00173
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0084	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00136	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W7	W7	W7	W7	W7	W7	W7
Sample Date		**31/05/2015**	**10/06/2015**	**11/07/2015**	**21/08/2015**	**22/09/2015**	**15/10/2015**	**13/12/2015**
Total Suspended Solids	mg/L	36.4	90.3	38.4	161	1.6	4.1	11.1
Total Dissolved Solids	mg/L	110	148	174	178	184	188	176
pH (field)	pH units	7.51	7.49	7.67	7.85	7.84	7.53	8.5
pH (lab)	pH units	8.11	8.09	8.17	8.08	8.19	8.06	7.93
Specific Conductance, field	µS/cm	208.1	250.2	304	278.8	279.9	290.9	370.8
Specific Conductance (lab)	µS/cm	209	246	294	283	277	290	345
Temperature (field)	C	0	0.1	1.2	3	1.9	0	0.1
Dissolved Oxygen (field)	mg/L	13.25	13.6	10.67	11.79	11.59	12.3	4.45
Dissolved Oxygen (field)	%	90.9	92.3	77.8	87.6	83.6	84.1	30.9
ORP (field)	mV	153.4	62.3	35.5	28.1	31.9	37.1	
Hardness (from total)	mg/L	104	128	145	164	137	154	188
Hardness (from dissolved)	mg/L	97	120	139	132	143	137	187
Alkalinity, total	mg/L	100	117	143	140	134	138	172
Chloride	mg/L	0.96	0.93	0.65	0.58	0.84	1.2	1
Fluoride	mg/L	0.24	0.31	0.34	0.32	0.31	0.32	0.38
Sulphate, dissolved	mg/L	7.99	9.43	12.3	8.29	9.22	10.5	16.5
Ammonia	mg/L	0.014	0.045	0.039	0.043	0.045	0.038	0.0059
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.029	0.115	0.196	0.106	0.073	0.112	0.11
Dissolved Organic Carbon	mg/L	7.28	7.01	5.55	7.4	7.3	7.45	6.57
Aluminum, total	mg/L	0.246	1.48	0.533	0.0737	0.0151	0.0969	0.0459
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00051	0.00105	0.00061	0.00062	0.00046	0.00041	0.00023
Barium, total	mg/L	0.0667	0.0969	0.0877	0.0958	0.074	0.0738	0.0842
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	0.000017	0.000011	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	26	31.3	35.7	41.6	33.9	38.7	45.7
Chromium, total	mg/L	<0.0010	0.0032	0.0016	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	0.00109	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00354	0.0038	0.00339	0.00179	0.00101	0.00161	0.00204
Iron, total	mg/L	0.503	2.3	0.946	0.287	0.162	0.268	0.089
Lead, total	mg/L	<0.00020	0.00062	0.00027	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	9.42	12.1	13.5	14.6	12.7	13.9	17.9
Manganese, total	mg/L	0.0807	0.255	0.0535	0.0349	0.0296	0.0363	0.0161
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0013	0.0017	0.0015	0.0019	0.0013	0.0014	<0.0010
Nickel, total	mg/L	0.0014	0.0035	0.0023	0.0014	<0.0010	0.001	0.0011
Phosphorus, total	mg/L	0.051	0.109	0.056	0.023	0.02	0.028	0.03
Potassium, total	mg/L	0.992	1.25	1.2	1.31	0.983	1.2	1.64
Selenium, total	mg/L	0.0001	0.00019	0.00014	0.00016	0.00011	0.00014	0.00019
Silicon, total	mg/L	5.42	7.9	7.09	7.34	6.46	7.26	8.08
Silver, total	mg/L	0.000026	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	6.48	7.23	8.36	9.58	7.96	8.29	10.4
Strontium, total	mg/L	0.301	0.324	0.405	0.494	0.353	0.417	0.43
Sulpher, total	mg/L	6.4	<3.0	3.7	7	<3.0	6	7.4
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.0088	0.0592	0.0227	<0.0050	<0.0050	0.0054	<0.0050
Uranium, total	mg/L	0.00104	0.00146	0.00177	0.00167	0.0011	0.00107	0.00086
Vanadium, total	mg/L	<0.0050	0.0053	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	0.0064	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L	<0.00050	0.00059	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0068	0.0063	0.0084	0.0109	0.0097	0.009	0.0076
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00034	0.00042	0.00036	0.00041	0.0004	0.00031	0.00027
Barium, dissolved	mg/L	0.0528	0.0677	0.0749	0.0681	0.0693	0.0695	0.0837
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	24.1	29.1	34.5	33.4	36	35.2	45.1
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00119	0.0009	0.00145	0.001	0.00084	0.001	0.00099
Iron, dissolved	mg/L	0.0818	0.0949	0.0831	0.12	0.116	0.0983	0.0485
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0005
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	8.95	11.4	12.7	11.8	12.8	11.9	18
Manganese, dissolved	mg/L	0.0644	0.187	0.0305	0.0216	0.0287	0.0282	0.0102
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0013	0.0016	0.0014	0.0014	0.0014	0.0012	<0.0010
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0023
Phosphorus, dissolved	mg/L	<0.01	0.012	0.01	0.01	0.011	<0.01	0.02
Potassium, dissolved	mg/L	0.852	1.01	1.05	0.926	0.972	0.957	1.57
Selenium, dissolved	mg/L	0.00014	0.00016	0.00013	0.00014	0.00013	0.00017	0.00021
Silicon, dissolved	mg/L	4.51	5.07	5.58	5.95	6.66	6.13	7.92
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	6.04	7.09	7.84	7.73	8.31	7.49	10.4
Strontium, dissolved	mg/L	0.249	0.305	0.372	0.37	0.372	0.355	0.424
Sulpher, dissolved	mg/L	3.1	4.1	4.1	<3.0	4	<3.0	6.2
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00098	0.00134	0.00146	0.00118	0.00115	0.00123	0.00077
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6
Sample Date		**27/05/2005**	**30/06/2005**	**29/07/2005**	**30/08/2005**	**28/09/2005**	**15/10/2005**	**02/06/2006**	**25/08/2006**	**06/09/2006**	**20/06/2007**	**18/09/2007**	**17/06/2008**	**18/09/2008**	**17/07/2012**	**30/07/2012**	**09/08/2012**	**25/08/2012**	**13/09/2012**	**13/10/2012**	**12/11/2012**	**14/05/2013**	**22/06/2013**	**12/07/2013**	**22/08/2013**	**06/09/2013**	**07/10/2013**	**16/11/2013**	**07/12/2013**	**21/02/2014**	**12/05/2014**	**12/05/2014**	**21/06/2014**	**22/07/2014**
Total Suspended Solids	mg/L	13.5	11.5	22.2	<3.0	3.5	<3.0	115		4	16	8	17	4	1130	614	566	1160	50.3	44.7	2.2	13.1	172	25.2	19.7	5.2	74.4	33.4	3.6	27	8.5	8.5	51	145
Total Dissolved Solids	mg/L	103	123	198	147	133	128	96	160		130	172	120	150	122	124	144	138	118	150	162	84	118	136	144	130	176	120	194	177	96	96	106	128
pH (field)	pH units														7.92	7.89	8.09	7.76	7.95	8.3	6.69	7.6	7.61	7.69	7.81	7.60	7.66	7.96	7.50	7.41	7.92		8.14	7.13
pH (lab)	pH units	7.91	7.41	8.01	8.17	7.95	7.92	7.64	8.01	7.86	7.77	7.95	7.82	7.8	7.98	8.09	8.17	8	8.04	7.92	7.93	7.48	8.07	7.9	8.04	7.95	8.08	8.11	8.21	8.07	7.84	7.84	7.92	8.16
Specific Conductance, field	µS/cm														193.9	174.4	217.6	196	171.5	194.5	365.5	53.6	172.6	180.5	204.1	201.8	191	196.2		235	119.8		245.6	202.7
Specific Conductance (lab)	µS/cm	127	174	319	200	192	180	112	223	212	151	194	175	174	201	202	220	212	174	193	275	55.1	195	180	205	204	191	245	326	315	102	102	191	192
Temperature (field)	C														4.8	5.2	6.4	4.7	1.9	0	-0.1	0.1	1.6	4.4	5.4	4.5	1.2	-0.1	0	0	0.3		1.4	4.2
Dissolved Oxygen (field)	mg/L														117	12.56	12.03	11.94	13.7	13.83		13.22	12.33	11.38	11.81	11.85	14.61	8.31		8.67	12.79		12.7	11.82
Dissolved Oxygen (field)	%														92.3	98.8	97.9	92.8	94.3	94.7		92.1	88.6	87.7	102.4	98.7	102.3	68.3		59.6	88.2		90.4	90.8
ORP (field)	mV														74.9	22.5	-22.9	134.6	64.9	27.8	249.6	137.8	79.4	93.3	22.8	20.4	36.2	98.6		190	89		114.8	41
Hardness (from total)	mg/L	65.4		171	106	106	98.3				81	93	86		163	145	136	161	93.1	117	155	33.8	115	95.3	106	114	106	123	182	152	52.5	52.5	105	97.9
Hardness (from dissolved)	mg/L								120	110					104	101	112	103	87.7		153	31.4	94.9	88.2	102	101	107	119	159	160	49.5	49.5	93	96.1
Alkalinity, total	mg/L	32	99.1		109	93		76.6	120	112	83	112	93	87	103	103	116	109	87.1	99.1	138	25.5	97.8	93.8	107	105	98.1	121	164	158	51.2	51.2	95.3	98.8
Chloride	mg/L	<0.50	0.73	<0.50	<0.50	0.5	0.52	<0.5			0.4	0.59	0.29	0.41	1	0.58	1.1	0.92	1.1	0.87	1.1	1.5	1.1	1	0.84	1.2	0.8	0.78	1.4	1.8	1	1	0.9	0.77
Fluoride	mg/L							0.176							0.25	0.3	0.28	0.28	0.22	0.23	0.23	0.083	0.22	0.23	0.23	0.26	0.25	0.24	0.28	0.27	0.12	0.12	0.23	0.25
Sulphate, dissolved	mg/L	11.8	<1		2.62	4.04		1.88	2.4	2.3	2.1	2.51	1.64	3.29	1.82	<0.50	0.64	<0.50	0.62	1.52	5.81	<0.50	1.88	1.27	0.53	0.62	1.89	1.48	5.36	6.58	<0.50	<0.50	0.87	<0.50
Ammonia	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.021			<0.05	<0.05	<0.05	<0.05	0.14	0.07	0.025	0.023	0.011	0.016	0.025	0.13	0.024	0.012	0.014	0.0061	0.044	0.015	0.0076	0.027	0.033	0.033	0.021	0.023
Nitrite (N)	mg/L	0.0016	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001			<0.05	<0.02	0.07	<0.01	<0.0050	0.0072	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0132	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0059	<0.0050
Nitrate (N)	mg/L	0.0316	0.0086	0.0223	<0.0050	<0.0050	0.0061	0.0241	<0.03	<0.03	0.1	<0.02	0.01	<0.01	0.026	0.052	0.022	0.045	0.034	0.042	<0.020	<0.020	0.028	<0.020	<0.020	0.03	0.042	<0.020	<0.020	0.026	<0.020	<0.020	0.042	<0.020
Dissolved Organic Carbon	mg/L													17.7	7.98	8.08		7.68	14.4	9.91	8.74	22.2	7.79	8.29	7.4	6.36	8.17	8.79	8.77	8.33	14.6	14.6	6.38	10.1
Aluminum, total	mg/L	0.229	0.17	0.598	0.0181	0.0321	0.0251	1.95	0.024	0.035	0.042	0.023	0.14	0.022	20.8	15.1	8.03	5.23	0.271	0.241	0.0243	0.65	4.63	0.506	0.0846	0.165	2.18	0.283	0.0734	2.48	0.371	0.371	2.94	0.649
Antimony, total	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	0.00017	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00072	0.00051	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00052	0.00045	0.00063	<0.00050	<0.00050	0.00043	0.00131	0.0006	0.0005	0.0004	0.0004	0.0004	<0.0002	0.00898	0.0066	0.00362	0.00395	0.00051	0.00066	0.00042	0.00068	0.00264	0.00066	0.00064	0.00067	0.00138	0.00063	0.00074	0.00181	0.00063	0.00063	0.00169	0.00073
Barium, total	mg/L	0.038	0.0462	0.0683	0.053	0.048	0.0424	0.0679	0.056	0.052	0.042	0.046	0.042	0.039	0.471	0.348	0.223	0.372	0.0533	0.0631	0.0656	0.0286	0.127	0.0579	0.0507	0.0563	0.0866	0.0637	0.0801	0.115	0.0345	0.0345	0.108	0.0582
Beryllium, total	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.0005	<0.0002	<0.0001	<0.0001	<0.0001	<0.00004	<0.00004	0.00066	0.00043	0.00031	0.00044	<0.00010	<0.00010	<0.00010	<0.00010	0.00017	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00012	<0.00010
Bismuth, total	mg/L		<0.00050	<0.00050			<0.00050	<0.0005	<0.001	<0.0005	<0.0005	<0.0005		<0.0001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.10	<0.010	<0.010	<0.10	<0.10	<0.010	<0.01	0.004	0.003	0.004	0.002	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.00005	<0.00002	<0.00001	<0.00001	<0.00001	<0.00008	<0.00001	0.000468	0.000195	0.000109	0.000219	0.000011	<0.000010	<0.000010	0.000029	0.000048	<0.000010	<0.000010	<0.000010	0.000023	<0.000010	0.00002	0.000024	0.000015	0.000015	0.000046	0.000012
Calcium, total	mg/L	17.4	24.7	41.1	28.6	28.2	25.1	18.9	31.5	29	23.2	25.8	23.8	24.6	41.2	38.1	36.7	45	25.9	30.8	43.3	9.4	30.4	26.7	29.6	31.7	29.2	33.4	49.1	40.1	14.4	14.4	28.4	26.9
Chromium, total	mg/L	<0.0010	0.00057	0.00145	<0.0010	<0.0010	<0.00050	0.00384	<0.001	0.0005	<0.0005	<0.0005	0.0011	0.001	0.0388	0.0276	0.0137	0.0085	<0.0010	<0.0010	<0.0010	0.0014	0.0094	0.0011	<0.0010	<0.0010	0.0043	<0.0010	<0.0010	0.0044	<0.0010	<0.0010	0.0058	0.0014
Cobalt, total	mg/L	<0.00030	0.00017	0.00049	<0.00030	<0.00030	0.00011	0.00127	<0.0002	0.0001	0.0001	0.0001	0.00018	0.00008	0.014	0.00922	0.00511	0.00749	<0.00050	<0.00050	<0.00050	0.0006	0.00283	<0.00050	<0.00050	<0.00050	0.00119	<0.00050	<0.00050	0.00123	<0.00050	<0.00050	0.00174	<0.00050
Copper, total	mg/L	0.0021	0.00148	0.0118	0.0012	0.0012	0.00107	0.00531	<0.002	0.001	0.002	0.001	0.001	0.001	0.0402	0.0286	0.0147	0.0247	0.00225	0.00189	0.00345	0.00697	0.00985	0.00171	0.00123	0.00119	0.0071	0.00186	0.00602	0.0152	0.00373	0.00373	0.0068	0.00315
Iron, total	mg/L	0.363	0.266	1.08	0.088	0.148	0.116	2.74	<0.2	0.1	0.1	<0.1	0.35	0.09	29.8	21.6	11.2	9.68	0.591	0.517	0.0646	1.06	6.84	0.812	0.283	0.404	3.02	0.523	0.12	3.26	0.75	0.75	4.12	0.954
Lead, total	mg/L	<0.00050	0.000134	0.00035	<0.00050	<0.00050	<0.000050	0.000851	<0.0002	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00971	0.00627	0.00343	0.00505	0.00025	0.00023	<0.00020	0.00024	0.00184	0.00021	<0.00020	<0.00020	0.00081	<0.00020	<0.00020	0.00097	<0.00020	<0.00020	0.00126	0.00029
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.005	<0.002	0.001	<0.001	0.001	<0.001	<0.001	0.0136	0.0088	0.0061	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	4.88	6.65	15.4	7.97	8.02	7.18	5.63	7.8	7.3	5.6	6.9	6.44	6.61	14.6	12.1	10.7	11.7	6.92	9.61	11.3	2.5	9.52	6.98	7.74	8.38	8	9.65	14.5	12.6	4.03	4.03	8.27	7.46
Manganese, total	mg/L	0.0169	0.0113	0.0536	0.0224	0.0267	0.0188	0.0835	0.04	0.042	0.011	0.023	0.0215	0.0098	0.771	0.513	0.376	0.619	0.0619	0.0661	0.0021	0.0637	0.161	0.0413	0.0358	0.0387	0.0965	0.0488	0.0036	0.0416	0.0531	0.0531	0.128	0.0411
Mercury, total	mg/L	<0.000020			<0.000020	<0.000020					<0.0001	<0.0001		<0.00001	<0.000010	0.000033	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010	0.000448	0.00133	<0.0010	<0.0010	0.000392	0.000411	<0.002	<0.001	<0.001	<0.001	0.00045	0.00031	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.0021	0.00135	0.00204	0.0011	0.0013	0.00131	0.00535	0.001	0.0015	0.0017	0.0012	0.001	0.001	0.0348	0.0236	0.0126	0.0192	0.005	0.0016	0.0013	0.0023	0.0102	0.0021	0.0013	0.0014	0.0039	0.0014	0.0013	0.0052	0.0019	0.0019	0.0064	0.0022
Phosphorus, total	mg/L		<0.30	<0.30			<0.30	<0.3			0.18	<0.05	0.11	0.02	0.99	0.642	0.373	0.647	0.04	0.048	0.015	0.086	0.184	0.032	0.018	0.016	0.098	0.022	0.031	0.059	0.05	0.05	0.145	0.038
Potassium, total	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<0.8	0.5	0.4	0.4	0.46	0.4	2.03	1.62	1.2	0.849	0.42	0.594	0.507	1.86	1.45	0.55	0.52	0.605	0.789	0.652	0.661	1.12	1.25	1.25	1.05	0.605
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.0004	0.0003	0.0002	<0.0002	<0.0006	<0.0006	0.00068	0.00061	0.00041	0.00016	<0.00010	0.00014	0.00011	<0.00010	0.00022	0.00012	<0.00010	0.00013	0.00015	<0.00010	0.00018	0.00017	<0.00010	<0.00010	0.00022	<0.00010
Silicon, total	mg/L		7.27	6.69			6.54	7.95	7.39	7.42	6.4	7.2	5.34	6.22	42.3	33.1	21.7	13.4	6.82	8.91	9.52	3.97	15.9	7.44	8	8.12	11.3	8.78	9.08	13.1	4.27	4.27	12.1	8.14
Silver, total	mg/L	<0.000020	<0.000010	<0.000020	<0.000020	<0.000020	<0.000010	0.000021	<0.0002	<0.0001	<0.0001	<0.0001	<0.00001	0.00008	0.000172	0.000122	0.000054	0.000021	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000045	<0.000020	0.000049	0.000035	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	2.7	4.6	8.4	4.5	4.2	4	3.4	4.8	4.6	4.3	5	4.8	4.1	4.89	4.72	4.85	4.59	4.05	5.31	6.12	1.07	4.63	4.18	4.67	4.75	4.45	5.26	7.78	6.07	2.37	2.37	4.56	4.54
Strontium, total	mg/L		0.1	0.286			0.112	0.0816	0.14	0.135	0.104	0.125	0.103	0.104	0.23	0.202	0.174	0.227	0.12	0.154	0.185	0.0391	0.15	0.129	0.134	0.142	0.136	0.163	0.225	0.192	0.0647	0.0647	0.133	0.124
Sulpher, total	mg/L								0.9	1	0.9	1			<3.0	<3.0	<3.0	<3.0	<3.0	3.2	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	4.6
Thallium, total	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	0.000147	0.000108	0.000068	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000066	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.00050	<0.00010	0.00013	<0.00050	<0.00050	<0.00010	0.0001	<0.002	<0.001	<0.001	<0.001	<0.0001	<0.0001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.010	<0.010	0.033	<0.010	<0.010	<0.010	0.077	<0.0010	0.0014	<0.0005	0.0015	0.0059	0.0015	0.747	0.529	0.299	0.063	0.0071	0.0098	<0.0050	0.024	0.2	0.0218	<0.0050	0.007	0.0916	0.0133	<0.0050	0.0919	0.0201	0.0201	0.119	0.0271
Uranium, total	mg/L	<0.00020	0.000151	0.00106	<0.00020	<0.00020	0.000129	0.000215	<0.001	<0.0005	<0.0005	<0.0005	<0.0004	<0.0004	0.0022	0.0017	0.00102	0.00167	0.00018	0.00027	0.00034	<0.00010	0.0005	0.00022	0.00017	0.0002	0.0003	0.00022	0.00046	0.00031	<0.00010	<0.00010	0.00051	0.00022
Vanadium, total	mg/L	<0.030	0.0012	0.0027	<0.030	<0.030	<0.0010	0.0066	0.0008	0.0008	0.0011	0.0007	0.00094	0.00065	0.0672	0.0475	0.0252	0.0348	<0.0050	<0.0050	<0.0050	<0.0050	0.014	<0.0050	<0.0050	<0.0050	0.0074	<0.0050	<0.0050	0.007	<0.0050	<0.0050	0.0097	<0.0050
Zinc, total	mg/L	<0.0050	<0.0030	<0.0060	<0.0050	<0.0050	<0.0010	0.0085	0.005	<0.001	0.004	0.008	0.007	0.004	0.073	0.0504	0.027	0.0392	<0.0050	<0.0050	<0.0050	0.0057	0.0169	<0.0050	<0.0050	<0.0050	0.0079	<0.0050	<0.0050	0.0112	<0.0050	<0.0050	0.0109	<0.0050
Zirconium, total	mg/L								<0.002	<0.001	<0.001	<0.001	0.0004	0.0003	0.00302	0.00202	0.00116	0.00101	<0.00050	<0.00050	<0.00050	<0.00050	0.0016	<0.00050	<0.00050	<0.00050	0.0006	<0.00050	<0.00050	0.00061	<0.00050	<0.00050	0.00116	<0.00050
Aluminum, dissolved	mg/L	0.0144	0.0056	0.007	0.0067	0.0067	0.0769	0.0252		0.008				0.012	0.0161	0.0186	0.0173	0.0138	0.0169		0.0062	0.0591	0.0095	0.0066	0.0084	0.0083	0.0132	0.0057	0.0041	0.004	0.0157	0.0157	0.015	0.0185
Antimony, dissolved	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	<0.0001		<0.0002				0.0008	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	<0.00050	0.00039	0.00026	<0.00050	<0.00050	0.00042	0.00044		0.0005				0.0004	0.00053	0.00059	0.00081	0.00081	0.00047		0.00039	0.00037	0.00053	0.00046	0.00052	0.00056	0.00051	0.00048	0.00061	0.00055	0.00042	0.00042	0.00042	0.00041
Barium, dissolved	mg/L	0.035	0.0429	0.0668	0.053	0.048	0.0419	0.0315		0.051				0.039	0.0597	0.0601	0.0681	0.063	0.0451		0.0697	0.0195	0.0493	0.0438	0.0495	0.0499	0.0518	0.0582	0.0725	0.0829	0.0285	0.0285	0.0472	0.0472
Beryllium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.0005		<0.0001				<0.00004	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L		<0.00050	<0.00050			<0.00050	<0.0005		<0.0005					<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.10	<0.010	<0.010	<0.10	<0.10	<0.010	<0.01		<0.002				<0.004	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.00005		<0.00001				<0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	17.9	25.2	46.9	29	28.8	26.7	17.8	31.7	30				23.7	29.7	28.9	31.9	28.9	24.1		41.6	8.75	26.4	24.1	28.3	28.4	30.7	33.2	44.6	44.6	13.6	13.6	25.6	27
Chromium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.0005		0.0006				0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00030	<0.00010	<0.00010	<0.00030	<0.00030	<0.00010	<0.0001		0.0001				0.00022	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.0016	0.00101	0.00247	0.001	0.0011	0.00108	0.00175		0.001				0.002	0.00105	0.00089	0.00083	0.00103	0.00145		0.00143	0.0035	0.00096	0.00095	0.00119	0.00089	0.00097	0.00084	0.00156	0.00299	0.002	0.002	0.0019	0.00254
Iron, dissolved	mg/L	0.072	<0.030	0.062	0.064	0.1	0.088	0.096		0.11				0.09	0.0679	0.0814	0.0845	0.0799	0.108		0.0235	0.183	0.0718	0.105	0.103	0.111	0.145	0.124	0.0144	0.0168	0.107	0.107	0.2	0.0998
Lead, dissolved	mg/L	<0.00050	<0.000050	0.000083	<0.00050	<0.00050	<0.000050	<0.00005		<0.0001				<0.0001	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.005		0.001				<0.001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	5.01	6.72	13.2	8.1	8.25	7.66	4.95	8.7	7.7				6.33	7.16	7.02	7.95	7.34	6.66		11.8	2.31	7.04	6.83	7.54	7.18	7.36	8.66	11.7	11.9	3.76	3.76	7.07	6.96
Manganese, dissolved	mg/L	0.00543	0.00324	0.0145	0.0211	0.0245	0.0162	0.00673		0.046				0.0099	0.0542	0.102	0.134	0.134	0.0408		0.0013	0.0433	0.0293	0.022	0.0286	0.0323	0.048	0.0399	0.0017	0.0071	0.0357	0.0357	0.0316	0.0175
Mercury, dissolved	mg/L	<0.000020			<0.000020	<0.000020								<0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	0.000448	0.000818	<0.0010	<0.0010	0.000395	0.000305		<0.001				0.00027	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, dissolved	mg/L	0.0015	0.00099	0.0006	0.0011	0.0012	0.00118	0.00182		0.0006				0.002	0.001	<0.0010	0.001	0.001	0.0014		0.0014	0.0013	0.0012	0.0011	0.0011	0.0011	0.0013	0.001	0.0011	0.0012	0.0012	0.0012	0.0014	0.0012
Phosphorus, dissolved	mg/L		<0.30	<0.30			<0.30	<0.3						0.02	<0.01	<0.01	0.011	0.012	<0.01		<0.01	0.044	<0.01	<0.01	<0.01	0.013	0.011	0.015	0.015	0.015	0.023	0.023	0.015	0.013
Potassium, dissolved	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2		0.6				0.4	0.52	0.542	0.578	0.648	0.411		0.562	1.73	0.724	0.482	0.489	0.554	0.581	0.589	0.562	0.934	1.13	1.13	0.668	0.535
Selenium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001		<0.0002				0.0012	0.00012	<0.00010	0.0001	<0.00010	<0.00010		0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00012	<0.00010	<0.00010	0.00012	<0.00010
Silicon, dissolved	mg/L		7.18	5.51			6.93	4.84		7.54				6.29	7.25	6.95	8.13	6.56	6.42		8.72	2.67	6.57	7.05	7.24	7.48	7.39	8.28	9.38	10.4	3.74	3.74	6.21	6.93
Silver, dissolved	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	<0.00001		<0.0001				<0.00001	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	2.8	4.8	7.3	4.6	4.4	4.5	3.3		4.8				4.27	4.31	4.2	4.56	4.21	3.89		6.34	0.999	3.95	4.07	4.33	4.02	4.6	4.77	6.36	6.65	2.25	2.25	4.44	4.04
Strontium, dissolved	mg/L		0.102	0.274			0.108	0.0682		0.136				0.098	0.131	0.135	0.151	0.143	0.11		0.189	0.0363	0.115	0.112	0.132	0.132	0.126	0.144	0.2	0.189	0.0631	0.0631	0.118	0.114
Sulpher, dissolved	mg/L									0.9					<3.0	<3.0	<3.0	<3.0	<3.0		<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Thallium, dissolved	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001		<0.00005				<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.00050	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	<0.0001		<0.001				<0.0001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01		0.0005				0.001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	<0.00020	0.000134	0.0014	<0.00020	<0.00020	0.000122	0.000081		<0.0005				<0.0004	0.00034	0.00039	0.00038	0.0004	0.00013		0.00032	<0.00010	0.00028	0.00017	0.00017	0.00016	0.00018	0.00019	0.00039	0.00029	<0.00010	<0.00010	0.00027	0.00017
Vanadium, dissolved	mg/L	<0.030	<0.0010	<0.0010	<0.030	<0.030	<0.0010	<0.001		0.0016				0.00073	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	0.021	0.0025	<0.0050	<0.0050	0.0015	0.003		0.002				0.003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L													0.0002	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		W6	W6	W6	W6	W6	W6	W6	W6	W6	W6
Sample Date		**20/08/2014**	**02/09/2014**	**16/10/2014**	**30/11/2014**	**31/05/2015**	**10/06/2015**	**12/07/2015**	**21/08/2015**	**22/09/2015**	**15/10/2015**
Total Suspended Solids	mg/L	157	1.8	2.1	1.7	301	56.3	79.5	103	<1.0	6.9
Total Dissolved Solids	mg/L	140	194	90	230	92	126	126	144	148	136
pH (field)	pH units	7.83	7.85	7.88	8.20	7.55	7.86	7.47	8.03	7.94	7.51
pH (lab)	pH units	8.16	8.29	8.09	7.9	7.88	8.01	8.1	7.95	8.16	8.07
Specific Conductance, field	µS/cm	243.7	249.1	226.6	339.6	191.1	185.8	204.3	206.9	205.5	198.8
Specific Conductance (lab)	µS/cm	221	337	203	362	191	193	211	206	206	210
Temperature (field)	C	5	2.2	-1.2	-1.9	1.2	3.2	3.2	3.3	2.1	-0.1
Dissolved Oxygen (field)	mg/L	11.98	13.04	13.52	4.23	12.99	12.81	10.04	12.07	12.1	12.39
Dissolved Oxygen (field)	%	94	94.9	89.4	30.6	91.8	96.1	75.2	90.5	88.1	84.6
ORP (field)	mV	39	27.8	61.1	198.1	174.1	118.2	61.1	55.8	60.3	40.2
Hardness (from total)	mg/L	114	162	99.4	177	109	98.6	109	104	111	106
Hardness (from dissolved)	mg/L	115	160	96.3	182	93.8	94.4	102	101	107	101
Alkalinity, total	mg/L	115	160	99.1	182	101	91.3	109	104	100	103
Chloride	mg/L	1.3	1.9	0.78	1.7	1.1	0.72	0.88	0.65	0.97	1.3
Fluoride	mg/L	0.25	0.36	0.22	0.3	0.22	0.25	0.24	0.25	0.25	0.24
Sulphate, dissolved	mg/L	<0.50	17.9	0.6	5.95	0.85	0.73	0.85	<0.50	0.77	1.11
Ammonia	mg/L	0.016	0.029	0.014	0.0054	0.019	0.027	0.02	0.032	0.025	0.017
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.007	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	<0.020	0.097	<0.020	<0.020	0.037	0.027	0.031	<0.020	<0.020	<0.020
Dissolved Organic Carbon	mg/L	8.54	7.15	8.14	11	8.8	7.49	5.35	9.2	9	9.41
Aluminum, total	mg/L	0.415	0.0175	0.0483	0.0392	1.76	0.641	1.41	0.515	0.0191	0.0271
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00076	0.00044	0.00052	0.00054	0.0014	0.00075	0.00108	0.00072	0.00046	0.0004
Barium, total	mg/L	0.0673	0.0718	0.0439	0.083	0.0942	0.0574	0.0828	0.067	0.0492	0.0441
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	0.000016	0.000027	<0.000010	0.000035	0.000012	<0.000010	<0.000010
Calcium, total	mg/L	31.3	39.9	27.4	47.6	30.1	27.4	30.8	28.8	30.4	29.8
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0029	0.0012	0.0027	0.0012	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00121	<0.00050	0.00102	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00216	0.00121	0.00093	0.00432	0.00473	0.00233	0.00429	0.00228	0.00121	0.0011
Iron, total	mg/L	0.741	0.16	0.211	0.065	2.57	0.927	2.23	0.849	0.137	0.142
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00094	0.00029	0.00076	0.00025	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	8.69	15	7.53	14.2	8.19	7.36	7.84	7.79	8.61	7.64
Manganese, total	mg/L	0.0562	0.0503	0.0304	0.0024	0.101	0.0371	0.0935	0.0515	0.0326	0.0244
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010	0.0018	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.0017	<0.0010	0.0013	0.0018	0.0042	0.0023	0.0038	0.0025	0.0012	0.0011
Phosphorus, total	mg/L	0.036	0.014	0.011	0.03	0.175	0.052	0.102	0.051	0.012	0.014
Potassium, total	mg/L	0.61	1.38	0.464	0.582	0.989	0.785	0.716	0.619	0.527	0.459
Selenium, total	mg/L	<0.00010	0.00015	<0.00010	<0.00010	<0.00010	0.00013	<0.00010	0.00011	<0.00010	<0.00010
Silicon, total	mg/L	8.6	6.12	7.31	8.45	10.4	8.19	9.46	7.72	8.21	8.3
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	0.00005	<0.000020	<0.000020	0.000026	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	5.22	9.28	4.39	7.55	4.45	4.45	4.18	4.64	4.94	4.3
Strontium, total	mg/L	0.152	0.443	0.114	0.234	0.146	0.128	0.142	0.151	0.13	0.129
Sulpher, total	mg/L	<3.0	7.9	<3.0	<3.0	4.3	<3.0	<3.0	<3.0	<3.0	<3.0
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.0191	<0.0050	<0.0050	<0.0050	0.0806	0.0306	0.0548	0.0231	<0.0050	<0.0050
Uranium, total	mg/L	0.00024	0.00126	0.00015	0.00083	0.00046	0.00029	0.00042	0.00024	0.00019	0.00019
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	0.0231	0.0068	<0.0050	0.0054	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00064	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0075	<0.0030	0.0058	0.0076	0.0072	0.0072	0.0068	0.0117	0.0148	0.0096
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00069	0.00042	0.00046	0.00047	0.00043	0.00042	0.00038	0.00041	0.00048	0.00044
Barium, dissolved	mg/L	0.0575	0.0678	0.0457	0.0808	0.0451	0.0447	0.0501	0.0468	0.0485	0.0444
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010
Calcium, dissolved	mg/L	31.9	38.7	26.7	50.4	26.1	26.2	28.4	28.8	30.3	27.8
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00098	0.0014	0.00081	0.00181	0.00112	0.00106	0.00095	0.00109	0.00099	0.00128
Iron, dissolved	mg/L	0.127	0.139	0.094	0.014	0.0564	0.0543	0.0603	0.082	0.112	0.0989
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	8.53	15.4	7.2	13.5	6.96	7.03	7.54	6.98	7.59	7.56
Manganese, dissolved	mg/L	0.035	0.05	0.0255	0.0015	0.0138	0.0082	0.0166	0.0191	0.0298	0.0243
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	0.0019	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, dissolved	mg/L	0.0011	0.0016	<0.0010	0.0015	0.001	0.001	0.0011	0.0012	0.0013	0.0012
Phosphorus, dissolved	mg/L	0.014	0.012	<0.01	0.015	0.011	<0.01	<0.01	<0.01	0.012	0.01
Potassium, dissolved	mg/L	0.637	1.23	0.506	0.595	0.684	0.641	0.566	0.453	0.536	0.462
Selenium, dissolved	mg/L	<0.00010	0.00011	<0.00010	<0.00010	0.00011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Silicon, dissolved	mg/L	7.8	5.87	6.83	8.95	6.35	6.73	6.89	7.61	7.69	7.32
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	4.91	9.85	4.29	7.38	4	4.14	4.48	4.25	4.42	4.41
Strontium, dissolved	mg/L	0.145	0.411	0.122	0.225	0.118	0.114	0.128	0.13	0.131	0.118
Sulpher, dissolved	mg/L	<3.0	5.9	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.0002	0.00129	0.00015	0.00082	0.0003	0.00024	0.00026	0.00019	0.00019	0.00018
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4
Sample Date		**06/05/2012**	**01/08/2012**	**08/08/2012**	**25/08/2012**	**22/06/2013**	**19/07/2013**	**22/08/2013**	**06/09/2013**	**18/10/2013**	**17/11/2013**	**23/04/2014**	**12/05/2014**	**21/06/2014**	**22/07/2014**	**20/08/2014**	**02/09/2014**	**16/10/2014**	**09/12/2014**	**31/05/2015**	**14/06/2015**	**12/07/2015**	**21/08/2015**	**22/09/2015**	**15/10/2015**
Total Suspended Solids	mg/L	1260	246	253	855	886	487	784	172	16.3	22.4	3.3	904	125	498	9.6	7.5	48.4	10.5	68	19.8	34	26.3	2.3	140
Total Dissolved Solids	mg/L	84	166	170	192	204	184	182	176	220	272	106	100	144	172	186	182	156	318	124	176	156	212	202	218
pH (field)	pH units	7.51	7.75	7.81	7.81	7.68	8.20	7.88	7.69	7.16	7.17	7.79	7.88	8.11	7.38	7.96	7.91	7.73	7.95	7.84	7.7	7.89	7.91	7.78	7.3
pH (lab)	pH units	7.59	8.04	8.14	7.94	7.97	8.12	7.98	7.93	8.24	7.9	7.68	7.83	7.98	8.08	8.23	8.29	8.14	8.14	8.01	8.24	8.15	8.09	8.22	8.2
Specific Conductance, field	µS/cm	100.1	196.8	246.3	230.8	223.8		246.6	246.2	257.1	274.1	102.1	131	404.2	251.1	340.9	375.5	301.8	431.1	245.1	289.8	280.2	299.1	286.5	316
Specific Conductance (lab)	µS/cm	88.8	228	248	254	253	253	245	248	260	477	105	103	258	236	310	307	277	520	247	293	281	302	284	320
Temperature (field)	C	0	9.3	7.8	6.3	7.3	9.6	7.7	5.3	-0.1	-0.1	0	2.4	4.1	8.7	9.1	3.5	-1.4	-1.9	4.7	8.3	10.2	3	3.2	-0.1
Dissolved Oxygen (field)	mg/L	10.69	10.45	11.52	11.18	10.58		11.35	11.56	13.73	4.27	13.56	12.52	11.7	10.52	10.7	12.84	13.62	13.34	11.5	9.89	8.26	12.18	11.9	81.1
Dissolved Oxygen (field)	%	73.1	91.3	97.1	91	87.9		103.6	98.7	92.3	28.4	93.2	91.7	89.8	90.5	92.8	96.7	90.8	86.9	89.4	84.1	73.7	90.5	88.8	94.56
ORP (field)	mV	63.9	-38.1	-54.1	-21.8	93.7		11.6	-28.8	-20.1	101.5	157.8	52	-8	6.3	-4.5	-16.1	-1.6	114.1	33.3	-5.2	13	-2.3	-23.3	-20.2
Hardness (from total)	mg/L	119	133	142	173	222	200	199	166	139	264	53.8	139	143	141	167	149	144	252	127	156	150	134	151	159
Hardness (from dissolved)	mg/L	43.9	117	125	130	126	128	123	125	129	258	53.4	48.5	127	117	160	158	135	244	119	143	141	149	153	155
Alkalinity, total	mg/L	40.1	115	126	128	120	125	118	120	126	244	47	48.6	126	115	156	156	130	173	114	146	137	149	132	153
Chloride	mg/L	0.54	0.89	<5.0	1.4	1.4	1.5	1.5	1.3	2.4	2.4	2.1	0.9	1.3	1.4	1.9	1.2	1.2	7.3	1.1	1.1	1.1	0.94	1.2	1.9
Fluoride	mg/L	0.14	0.2	0.22	0.22	0.27	0.27	0.21	0.19	0.2	0.29	0.13	0.14	0.24	0.21	0.25	0.21	0.19	0.44	0.34	0.43	0.24	0.24	0.24	0.28
Sulphate, dissolved	mg/L	<0.50	3.37	<5.0	2.19	10.6	7.45	4.75	4.27	38.1	6.33	<0.50	2.58	8.05	7.23	6.85	8.39	9.1	83.1	12.3	11.9	9.36	8.1	10.6	12.7
Ammonia	mg/L	0.088	0.089	0.09	0.005	0.36	0.26	0.2	0.12	0.08	0.28	0.024	0.26	0.17	0.13	0.065	0.069	0.075	0.045	0.064	0.052	0.074	0.044	0.039	0.055
Nitrite (N)	mg/L	<0.0050	0.0177	0.012	<0.0050	0.0066	0.0069	0.0084	<0.0050	<0.0050	<0.050	<0.0050	0.0059	0.0103	0.0105	0.0058	<0.0050	<0.0050	0.0229	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.029	0.074	0.095	<0.020	0.371	0.082	0.086	0.07	0.065	<0.20	<0.020	0.022	0.077	0.048	0.063	0.055	0.067	2.31	<0.020	0.039	0.052	0.043	0.034	0.051
Dissolved Organic Carbon	mg/L	10.5	16.2		<0.50	17.4		18.9	15.1	12.5	31.6	18.7	15.6	12.3	14.9	13	15	12.9	<0.50	11.9	11.2	11.3	14	13	12.9
Aluminum, total	mg/L	29.7	7.06	7.01	4.45	20.4	13.5	13.8	5.43	0.358	0.0856	0.189	24.8	5.06	6.12	0.219	0.0846	0.515	0.225	1.35	0.289	1.94	0.185	0.0253	0.143
Antimony, total	mg/L	0.00084	<0.00050	<0.00050	<0.00050	0.00084	0.00064	0.00058	<0.00050	<0.00050	<0.00050	<0.00050	0.00064	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.0125	0.00497	0.00635	0.00759	0.0123	0.00864	0.00939	0.00462	0.00151	0.00545	0.00053	0.0127	0.00434	0.00471	0.00189	0.00144	0.00146	0.00077	0.00134	0.00129	0.00253	0.00134	0.00098	0.00102
Barium, total	mg/L	0.56	0.24	0.261	0.373	0.539	0.373	0.438	0.189	0.0837	0.17	0.0288	0.682	0.177	0.212	0.106	0.0862	0.0876	0.107	0.103	0.0896	0.115	0.0817	0.0735	0.0812
Beryllium, total	mg/L	0.00088	0.00031	0.00033	0.00042	0.00075	0.00048	0.00055	0.00019	<0.00010	<0.00010	<0.00010	0.00111	0.00016	0.00024	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000416	0.000114	0.000107	0.000202	0.000317	0.000209	0.000308	0.000066	0.000012	0.000022	0.000015	0.00047	0.000076	0.00012	0.000011	<0.000010	0.000021	0.000016	0.000032	<0.000010	0.000049	0.00001	<0.000010	0.000012
Calcium, total	mg/L	23.9	34.3	36.5	45.6	55.7	54	51	43.1	36.9	70.5	14	30.3	36.4	36.5	43.2	38.1	37.4	61.6	32.7	41.2	38.8	34.8	39.9	42.3
Chromium, total	mg/L	0.06	0.0135	0.0148	0.0079	0.0426	0.0287	0.0268	0.0107	0.0013	0.0015	<0.0010	0.0491	0.0101	0.0114	<0.0010	<0.0010	0.0015	<0.0010	0.0027	0.001	0.0048	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	0.0178	0.00591	0.00701	0.00894	0.0172	0.0113	0.0133	0.00447	0.00101	0.00621	<0.00050	0.022	0.00399	0.00568	0.0009	0.00075	0.00098	<0.00050	0.00112	0.00063	0.00189	0.00059	<0.00050	0.00055
Copper, total	mg/L	0.0585	0.0167	0.015	0.0218	0.0479	0.0323	0.0347	0.0103	0.00263	0.00357	0.0118	0.066	0.0102	0.0151	0.00165	0.00124	0.00244	0.0146	0.00379	0.00387	0.00611	0.0021	0.00122	0.00196
Iron, total	mg/L	45.8	13.9	16.1	18.2	36.2	24.4	26.2	11	2.1	14.7	0.3	49.1	9.7	11.7	2.05	1.65	2.11	0.513	2.43	1.43	4.72	1.36	0.821	1.03
Lead, total	mg/L	0.0126	0.00303	0.00371	0.00439	0.00977	0.00631	0.00784	0.00208	<0.00020	<0.00020	<0.00020	0.0152	0.00235	0.00349	<0.00020	<0.00020	0.00037	<0.00020	0.00076	<0.00020	0.00111	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	0.0188	<0.0050	0.0057	<0.0050	0.0152	0.0106	0.0094	<0.0050	<0.0050	<0.0050	<0.0050	0.0177	<0.0050	0.0055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	14.4	11.5	12.3	14.3	20.2	15.8	17.3	14.2	11.3	21.5	4.58	15.5	12.7	12.2	14.4	12.9	12.4	23.7	11	12.9	12.8	11.4	12.5	12.9
Manganese, total	mg/L	0.936	0.868	1	1.32	1.24	0.913	1.25	0.732	0.425	3.19	0.022	1.27	0.587	0.644	0.505	0.487	0.384	0.178	0.162	0.276	0.328	0.326	0.217	0.26
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0015	<0.0010	0.001	<0.0010	0.0023	0.002	0.0014	0.0014	<0.0010	0.0011	<0.0010	<0.0010	0.0015	0.001	0.0012	0.0011	<0.0010	0.0074	<0.0010	0.001	0.0015	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.0498	0.0139	0.0151	0.0179	0.0483	0.0314	0.0352	0.0124	0.0029	0.0077	0.0023	0.0499	0.0108	0.014	0.0028	0.0027	0.0033	0.0016	0.0039	0.0023	0.0063	0.0024	0.0019	0.002
Phosphorus, total	mg/L	1.11	0.41	0.478	0.657	1.28	0.591	1.01	0.342	0.065	0.158	0.044	1.41	0.266	0.454	0.059	0.044	0.087	0.07	0.088	0.038	0.122	0.052	0.036	0.047
Potassium, total	mg/L	3.02	1.34	1.45	1.19	2.77	2.21	2.02	1.5	0.833	1.05	1.62	2.48	1.5	1.39	1.11	0.939	0.872	6.93	1.11	1.04	1.41	0.973	0.994	1.04
Selenium, total	mg/L	0.00069	0.00019	0.00021	0.00016	0.00059	0.00071	0.00053	0.00016	0.00011	0.00027	0.00017	0.0006	0.00018	0.00021	<0.00010	0.0001	0.00013	0.00079	<0.00010	<0.00010	0.00011	0.00012	<0.00010	0.00011
Silicon, total	mg/L	57.5	18.8	18	13	40.7	32	31	18.3	8.14	9.05	3.4	38.1	15.4	17.6	7.81	6.08	8.07	4.23	7.83	6.97	11	6.14	7.76	7.55
Silver, total	mg/L	0.00021	0.000056	0.000051	0.00002	0.000074	0.000087	0.000063	0.000021	0.000124	<0.000020	<0.000020	0.00018	<0.000020	0.000047	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000068	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	3.45	5.22	5.55	5.64	7.08	6.66	6.83	6.74	6.01	8.09	2.84	4.23	6.15	6.07	7.1	6.5	6.48	20.7	5.91	7.21	6.45	5.98	6.81	6.93
Strontium, total	mg/L	0.168	0.237	0.26	0.321	0.337	0.323	0.346	0.276	0.236	0.409	0.128	0.218	0.26	0.244	0.316	0.296	0.252	0.863	0.251	0.288	0.287	0.282	0.26	0.285
Sulpher, total	mg/L	<3.0	<3.0	<3.0	<3.0	3.6	<3.0	<3.0	<3.0	3.6	8.2	<3.0	<3.0	3.2	4.1	3.7	<3.0	<3.0	31.5	6.3	3.5	4.2	4.4	5.3	6.1
Thallium, total	mg/L	0.000244	0.000063	0.000066	<0.000050	<0.000050	0.000122	0.000103	0.000053	<0.000050	<0.000050	<0.000050	0.000188	0.000054	0.000063	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	1.21	0.248	0.254	0.08	0.8	0.466	0.497	0.237	0.017	0.006	0.0071	0.722	0.191	0.199	0.0112	<0.0050	0.0235	0.0107	0.0549	0.0136	0.0757	0.0078	<0.0050	0.0051
Uranium, total	mg/L	0.00209	0.00116	0.00144	0.00159	0.00305	0.00277	0.00228	0.00119	0.00079	0.00063	0.0002	0.00271	0.00149	0.00129	0.00102	0.00106	0.00089	0.0019	0.00074	0.00063	0.00122	0.00105	0.00086	0.00062
Vanadium, total	mg/L	0.0946	0.0276	0.0292	0.0377	0.0731	0.0477	0.055	0.0188	<0.0050	<0.0050	<0.0050	0.107	0.0182	0.0219	<0.0050	<0.0050	<0.0050	<0.0050	0.0052	<0.0050	0.0065	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	0.0961	0.0272	0.0279	0.0325	0.0872	0.0502	0.0597	0.0172	<0.0050	<0.0050	<0.0050	0.129	0.0228	0.0271	<0.0050	<0.0050	<0.0050	<0.0050	0.006	<0.0050	0.0101	<0.0050	0.0068	<0.0050
Zirconium, total	mg/L	0.00346	0.0016	0.00138	0.00202	0.00409	0.00309	0.003	0.00149	<0.00050	0.001	<0.00050	0.00312	0.00142	0.00145	<0.00050	<0.00050	<0.00050	<0.00050	0.00067	<0.00050	0.00092	0.00051	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0622	0.059	0.0425	0.04	0.0342	0.0317	0.0455	0.0405	0.0249	0.033	0.0434	0.0475	0.0171	0.0322	0.0153	0.0134	0.0122	0.0088	0.0106	0.0143	0.0167	0.0167	0.0278	0.0147
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00104	0.00184	0.00203	0.00197	0.00225	0.00207	0.00179	0.00196	0.00107	0.00559	0.00029	0.00124	0.00152	0.00138	0.00175	0.00142	0.00083	0.0005	0.00073	0.00104	0.00098	0.00121	0.00086	0.00071
Barium, dissolved	mg/L	0.0488	0.0984	0.0987	0.098	0.075	0.0699	0.0794	0.0798	0.0732	0.169	0.026	0.0507	0.0804	0.0843	0.0983	0.0862	0.0691	0.0921	0.0691	0.0806	0.078	0.0717	0.072	0.0754
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.000029	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000022	0.000012	0.000012	<0.000010	0.00001	<0.000010	<0.000010	<0.000010	0.000021	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	<0.000010
Calcium, dissolved	mg/L	12	31.9	33.7	35	35	36	33.1	34.2	34.5	72.1	13.7	12.7	33.4	31.1	41.9	42.6	36.6	61.5	31.7	37.6	37.9	40	40.4	41.7
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	0.00071	0.00111	0.00108	0.00113	0.00063	0.00062	0.00073	0.00092	0.00074	0.00611	<0.00050	0.00061	0.00062	0.0006	0.00077	0.00074	0.00053	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00314	0.00181	0.00132	0.00176	0.0017	0.00137	0.00143	0.00161	0.00118	0.00095	0.00952	0.00226	0.00108	0.00161	0.00132	0.00099	0.00116	0.00634	0.00105	0.00097	0.00134	0.00132	0.00115	0.00129
Iron, dissolved	mg/L	1.11	1.5	1.6	1.68	1.2	1.56	1.44	1.78	1.16	14.2	0.11	1.58	0.785	0.939	1.35	1.22	0.674	0.056	0.39	0.778	0.322	0.696	0.679	0.665
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	3.4	9.12	9.81	10.3	9.29	9.31	9.87	9.52	10.4	18.8	4.67	4.07	10.7	9.6	13.4	12.5	10.6	21.9	9.74	11.8	11.3	12	12.6	12.3
Manganese, dissolved	mg/L	0.243	0.622	0.683	0.682	0.405	0.385	0.448	0.495	0.408	3.09	0.0189	0.269	0.434	0.336	0.48	0.508	0.311	0.144	0.131	0.251	0.217	0.287	0.211	0.252
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, dissolved	mg/L	<0.0010	0.0011	0.0011	0.0012	0.0018	0.0017	0.0013	0.001	0.0012	0.0011	<0.0010	<0.0010	0.0012	<0.0010	0.0013	0.0012	<0.0010	0.0068	<0.0010	<0.0010	0.0012	<0.0010	0.001	<0.0010
Nickel, dissolved	mg/L	0.0023	0.0031	0.0027	0.0029	0.0027	0.0025	0.0027	0.0028	0.0025	0.0061	<0.0010	0.0021	0.002	0.0025	0.0027	0.0021	0.002	0.0011	0.0017	0.0017	0.002	0.0021	0.0021	0.0019
Phosphorus, dissolved	mg/L	0.037	0.049	0.047	0.06	0.041	0.04	0.043	0.048	0.036	0.117	0.027	0.036	0.028	0.032	0.034	0.035	0.022	0.04	0.016	0.022	0.022	0.022	0.027	0.019
Potassium, dissolved	mg/L	0.895	0.754	0.759	0.989	0.983	0.845	0.776	0.777	0.762	0.985	1.59	0.814	0.963	0.771	1.14	1.1	0.853	6.55	0.875	0.896	0.89	0.965	1.01	0.898
Selenium, dissolved	mg/L	<0.00010	0.00011	0.00011	<0.00010	0.00013	0.00012	0.00012	<0.00010	<0.00010	0.00024	<0.00010	<0.00010	0.00011	0.00011	<0.00010	<0.00010	<0.00010	0.00068	<0.00010	0.00011	<0.00010	<0.00010	<0.00010	<0.00010
Silicon, dissolved	mg/L	4.02	8.03	7.91	7.53	6.82	7.14	7.18	7.73	7.12	8.74	3.01	3.65	6.17	6.68	6.88	7.22	6.7	3.85	4.94	5.78	7.04	6.95	7.49	7.11
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	2.4	4.95	5.16	5.21	5.62	5.66	5.49	5.28	5.38	8.06	2.84	3.21	5.58	5.62	6.92	6.08	5.73	19.1	5.7	6.51	6.18	6.55	7.03	6.35
Strontium, dissolved	mg/L	0.0653	0.206	0.225	0.231	0.184	0.193	0.209	0.214	0.218	0.405	0.122	0.0809	0.23	0.212	0.31	0.311	0.246	0.754	0.229	0.264	0.27	0.296	0.283	0.273
Sulpher, dissolved	mg/L	<3.0	3	<3.0	<3.0	3.2	<3.0	<3.0	3.1	4.4	4.5	<3.0	<3.0	4	<3.0	3.3	3.8	4	31.6	4.6	4.3	3.5	3.7	4.4	<3.0
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00015	0.00065	0.00075	0.00076	0.00115	0.001	0.00095	0.00075	0.0007	0.00063	0.00019	0.00021	0.00102	0.00076	0.00104	0.00104	0.00086	0.00167	0.00061	0.00053	0.00101	0.001	0.00086	0.00076
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	0.00054	0.00061	0.00053	0.00058	0.00052	<0.00050	0.00058	0.00055	<0.00050	0.00111	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**26/06/2009**	**24/04/2010**	**26/04/2010**	**28/04/2010**	**30/04/2010**	**02/05/2010**	**04/05/2010**	**06/05/2010**	**08/05/2010**	**11/05/2010**	**13/05/2010**	**15/05/2010**	**18/05/2010**	**20/05/2010**	**21/05/2010**	**22/05/2010**	**24/05/2010**	**26/05/2010**	**28/05/2010**	**30/05/2010**	**01/06/2010**	**03/06/2010**	**05/06/2010**	**11/06/2010**	**13/06/2010**	**14/06/2010**	**15/06/2010**	**16/06/2010**	**17/06/2010**	**19/06/2010**	**21/06/2010**	**23/06/2010**	**25/06/2010**
Total Suspended Solids	mg/L	4	<5	6	19	14	<4	8	<4	4	8	<4	<4	5	2	3	2	9	6	8	4	2	2	<4	2	2	1	1	<1	3	16	3	14	6
Total Dissolved Solids	mg/L	190	126	56	70	76	68	130	140	130	110	120	160	150	160	160	170	150	150	180	180	170	180	180	190	180	180	190	170	180	180	200	170	150
pH (field)	pH units			7.33	7.68								7.83	7.68	8	7.88	7.91	7.58	7.54	8.02	8.06		7.86	7.87	7.9	7.72	7.45	7.4	7.28	7.33	7.42	7.55	8.04	8.09
pH (lab)	pH units	8.2	7.5	7.7	7.7	7.7	8	7.9	8	8.1	8	8.1	8.1	8.2	8.2	8.1	8.2	8	8	8.3	8.3	8.3	8.3	8.3	8.3	8.2	8.3	8.27	8.3	8.4	8.1	8.3	8.17	8.31
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm	305	98	93	77	86	126	147	166	180	203	211	227	224	228	241	240	238	265	266	276	286	296	292	295	304	301	307	308	318	300	306	268	283
Temperature (field)	C			1.2	0.04								1.1	1.7	1	1.4	1.5	1.8	1	1.4	2.2		1.8	1.4	4.2	3.4	5.6	4.2	4.3	3.1	3.9	5	3.89	3.86
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%				2.3																												111.7	109.3
ORP (field)	mV																																	
Hardness (from total)	mg/L	147	52	48.7	43.5	50.8	64.4	75.5	84.7	94.8	91.2	103	108	115	113	116	113	116	139	136	141	154	148	149	136	150	147	154	148	149	148	162	138	140
Hardness (from dissolved)	mg/L	147		47.7	41	42.6	63.5	71.6	80.6	86.6	99.9	105	113	113	118	116	117	111	141	131	134	140	130	146	138	143	143	144	141	143	139	141	118	132
Alkalinity, total	mg/L		45	45	38	42	60	70	79	87	94	98	110	110	110	120	120	110	120	130	130	140	140	140	130	140	130	140	150	140	140	140	120	130
Chloride	mg/L		0.92	1.6	1.2	1.3	1.7	1.5	1.5	1.3	1.2	1	1.5	1	1.1	3.4	1.4	0.8	1.6	1.4	1.4	1.8	2	1.4	1.8	1.7	2.8	1.8	1.4	2.5	1.8	2	1.3	1.8
Fluoride	mg/L			0.12	0.11	0.12	0.15	0.19	0.2	0.22	0.17	0.19	0.25	0.28	0.28	0.32	0.32	0.31	0.32	0.38	0.36	0.33	0.34	0.36	0.38	0.38	0.39	0.38	0.12	0.39	0.34	0.36	0.32	0.35
Sulphate, dissolved	mg/L		4.3	<0.5	<0.5	<5	<0.5	3.6	6.2	11	12	13	13	15	14	15	14	15	17	16	17	17	19	19	20	20	28	22	22	24	21	23	17	19
Ammonia	mg/L	<0.005		0.1	0.1	0.046	0.039	<0.01	<0.01	0.011	0.063	0.04	0.069	0.05	0.03	0.006	<0.005	0.017	<0.05	0.007	0.012	<0.005	0.016	<0.05	0.038	0.036	0.04	0.041	0.016	0.043	<0.05			0.014
Nitrite (N)	mg/L	<0.005		<0.005	<0.03	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	0.2		0.1	<0.1	<0.2	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	0.04	0.06	0.06	0.08	0.09	0.11	0.14	0.15	0.19	0.19	0.22	0.19	0.2	0.21	0.37	0.52	0.64	0.43	0.55
Dissolved Organic Carbon	mg/L	11.4		21.4	20.8	28.4	23.2	16.3	12.7	12.9	11.4	10.5	9.5	8	8	8	10.1	9.1	7.8	7	7.2	7	6.9		7.3	8.8	7.9	7.4	8.1	6.6	9.5	8	9.7	9.9
Aluminum, total	mg/L	0.024	0.124	0.181	0.655	0.663	0.195	0.222	0.159	0.101	0.102	0.064	0.031	0.06	0.033	0.056	0.047	0.234	0.214	0.281	0.103	0.073	0.056	0.051	0.056	0.035	0.033	0.179	0.026	0.052	0.404	0.076	0.366	0.132
Antimony, total	mg/L	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0005	0.0005	0.0005	0.0007	0.0008	0.0006	0.0007	0.0006	0.0006	0.0005	0.0004	0.0005	<0.001	<0.001	0.0005	<0.0004	0.0007	<0.001	0.0007	0.0005	0.0005	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0004	0.0004	0.0007	0.0005	0.0006	0.0005
Barium, total	mg/L	0.063	0.028	0.028	0.037	0.039	0.038	0.043	0.042	0.047	0.045	0.046	0.046	0.049	0.046	0.053	0.052	0.059	0.058	0.062	0.061	0.06	0.062	0.066	0.066	0.068	0.067	0.07	0.065	0.067	0.076	0.068	0.065	0.064
Beryllium, total	mg/L	<0.0001	<0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.053	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.00001	0.00001	0.00003	0.00009	<0.00001	0.00001	0.00004	0.00003	0.00005	0.00001	0.00007	0.00001	0.00002	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	38.3	14.9	12.8	11.8	13.7	17.1	19.9	22.4	24.7	24.1	27.4	28.6	29.3	29	30	29	31	34	35	36	40	38	38	34	38	37	39	37	37	38	40	34	36
Chromium, total	mg/L	<0.001	0.0007	<0.001	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	0.00012	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.0034	0.007	0.0064	0.0082	0.0091	0.0059	0.0087	0.0102	0.0045	0.0035	0.005	0.0024	0.0042	0.0022	0.002	0.003	0.003	0.004	0.005	0.005	0.004	0.002	0.003	0.004	0.003	0.002	0.017	0.002	0.002	0.004	0.003	0.004	0.003
Iron, total	mg/L	0.101	0.253	0.396	1.06	1.14	0.574	0.627	0.582	0.443	0.311	0.233	0.175	0.209	0.172	0.204	0.179	0.465	0.404	0.533	0.312	0.242	0.19	0.176	0.168	0.132	0.12	0.37	0.091	0.147	0.736	0.197	0.666	0.311
Lead, total	mg/L	<0.0002	0.0002	0.0002	0.0006	0.0004	0.0003	0.0004	0.0003	0.0003	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	12.5	4.72	4.08	3.42	4.04	5.27	6.3	7.01	8.03	7.52	8.43	8.77	10.1	9.99	10	10	10	13	12	12	13	13	13	12	14	13	14	13	14	13	15	13	12
Manganese, total	mg/L	0.006	0.008	0.024	0.051	0.037	0.032	0.045	0.02	0.017	0.018	0.013	0.015	0.037	0.028	0.032	0.031	0.097	0.077	0.082	0.113	0.097	0.075	0.073	0.084	0.04	0.028	0.031	0.016	0.024	0.106	0.023	0.065	0.031
Mercury, total	mg/L	0.00003	0.00001	<0.00002	<0.00002	0.00003	0.00002	<0.00002	0.00006	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.002	0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, total	mg/L	0.001	0.001	0.002	0.003	0.003	0.002	0.003	0.002	0.001	0.001	0.001	0.001	<0.003	<0.003	0.001	0.007	0.001	<0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	<0.001	0.001	0.002	0.001	0.002	0.002
Phosphorus, total	mg/L		0.09					0.051	0.034		0.028	0.022	0.02	0.019	0.021																			
Potassium, total	mg/L	1.38	1.8	1.34	1.24	1.23	1.16	1.22	1.21	1.22	1.11	1.23	1.18	1.25	1.19	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	2	1	1
Selenium, total	mg/L	0.0002	<0.0006	<0.0001	<0.0001	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0004	<0.001	<0.0008	<0.0008	<0.0008	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, total	mg/L	5.57	3.42	3.69	4.42	4.79	4.36	4.94	5.22	5.32	4.87	5.07	4.83	5.13	4.82	5.03	4.79	4.83	5.66	5.77	5.54	5.39	5.62	5.56	5.34	5.74	5.8	6.19	5.75	5.64	6.72	6.38	6.93	6.66
Silver, total	mg/L	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	8.76	2.95	2.68	2.12	2.75	3.54	4.69	4.84	5.28	4.47	5.64	5.63	6.98	6.91	6	6	6	9	8	8	9	8	8	8	9	8	9	9	9	9	10	9	9
Strontium, total	mg/L	0.339	0.107	0.096	0.083	0.098	0.129	0.151	0.177	0.192	0.206	0.212	0.233	0.249	0.239	0.269	0.255	0.27	0.31	0.326	0.343	0.382	0.362	0.372	0.36	0.391	0.382	0.408	0.368	0.366	0.373	0.383	0.321	0.359
Sulpher, total	mg/L	6	1.6	<3	<3	<3	<3	<3	<3	4	4	<3	4	4	4	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005		0.005	0.028	0.025	0.009	0.008	0.007	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	0.014	<0.01	0.014	<0.01
Uranium, total	mg/L	0.0013	<0.0004	0.0001	0.0001	0.0002	0.0002	0.0002	0.0004	0.0005	0.0006	0.0006	0.0007	0.0007	0.0006	0.0009	0.0008	0.0009	0.0009	0.0013	0.0013	0.0014	0.0014	0.0014	0.0014	0.0015	0.0015	0.0015	0.0014	0.0015	0.0013	0.0013	0.001	0.0011
Vanadium, total	mg/L	<0.005	0.0007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.005	0.002	0.007	0.01	0.009	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L	<0.0005	0.0004	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	0.008	0.052	0.059	0.07	0.064	0.039	0.029	0.021	0.019	0.013	0.013	0.011	0.007	0.008	<0.01	<0.01	<0.01	0.012	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	<0.01	0.012	<0.01	0.014	0.012
Antimony, dissolved	mg/L	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0003	0.0004	0.0005	0.0005	0.0005	<0.001	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	<0.0004	0.0004	0.0004	0.0004	<0.0004	0.0004	0.0004	0.0005	0.0005
Barium, dissolved	mg/L	0.058	0.024	0.025	0.025	0.026	0.033	0.034	0.038	0.039	0.045	0.046	0.047	0.045	0.046	0.049	0.049	0.047	0.055	0.055	0.057	0.055	0.055	0.058	0.058	0.059	0.058	0.058	0.059	0.058	0.061	0.06	0.054	0.059
Beryllium, dissolved	mg/L	<0.0001	0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.004	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.00001	<0.00001	0.00002	<0.00001	0.00002	0.00005	0.00001	0.00001	0.00006	<0.00001	0.00002	0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	38.1	13.6	12.7	11.2	11.5	16.9	19.4	21.5	22.9	26.4	27.7	30	29.1	30.1	31	31	30	35	34	35	36	35	38	35	37	36	37	37	37	36	37	31	34
Chromium, dissolved	mg/L	<0.001	<0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	0.00008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.0029	0.005	0.0044	0.0037	0.0056	0.0039	0.0032	0.003	0.004	0.0022	0.0037	0.0019	0.0018	0.0019	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.057	0.17	0.213	0.23	0.309	0.27	0.263	0.291	0.247	0.14	0.121	0.108	0.073	0.098	0.09	0.083	0.077	0.062	0.049	0.052	0.04	0.039	0.045	0.024	0.031	0.044	0.034	0.035	0.027	0.048	0.035	0.059	0.054
Lead, dissolved	mg/L	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	12.6	4.3	3.87	3.19	3.41	5.15	5.6	6.55	7.12	8.26	8.68	9.28	9.89	10.5	10	10	9	13	11	11	12	11	12	12	12	13	13	12	12	12	12	10	11
Manganese, dissolved	mg/L	0.003	0.0004	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.011	0.002	0.004	0.023	0.002	<0.001	0.004	0.007	0.004	<0.001	<0.001	<0.001	<0.001	0.003
Mercury, dissolved	mg/L	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.002	0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.002	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	<0.003	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001
Phosphorus, dissolved	mg/L		0.04					0.024	0.018		0.013	0.011	<0.01	<0.01	0.011																			
Potassium, dissolved	mg/L	1.36	1.6	1.32	1.15	0.98	1.18	1.14	1.11	1.14	1.17	1.25	1.26	1.18	1.16	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
Selenium, dissolved	mg/L	0.0002	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	<0.0008	<0.0008	<0.0008	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, dissolved	mg/L	6.21	3.03	3.51	3.12	2.96	4.05	4.33	4.72	4.77	5.25	5.21	5.32	4.99	5.2	5.15	5.2	4.61	5.48	5.39	5.4	5.34	4.7	5.46	5.59	5.72	5.65	5.85	5.36	5.31	5.74	5.75	5.47	6.12
Silver, dissolved	mg/L	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	8.76	2.8	2.58	2.12	2.41	3.53	3.69	4.37	4.91	5.55	5.8	6.22	6.89	7.22	7	7	6	9	7	7	8	7	8	9	9	10	10	9	8	8	8	7	8
Strontium, dissolved	mg/L	0.328	0.103	0.091	0.076	0.084	0.122	0.145	0.166	0.178	0.211	0.216	0.237	0.217	0.207	0.243	0.245	0.252	0.316	0.319	0.331	0.33	0.326	0.359	0.343	0.357	0.359	0.357	0.378	0.367	0.358	0.366	0.305	0.352
Sulpher, dissolved	mg/L	7	1.4	<3	<3	<3	<3	<3	3	3	4	4	5	5	5	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.0013	<0.0004	0.0001	0.0001	0.0001	0.0002	0.0002	0.0003	0.0004	0.0006	0.0006	0.0007	0.0007	0.0007	0.0008	0.0008	0.0008	0.0009	0.0012	0.0013	0.0012	0.0013	0.0014	0.0014	0.0014	0.0015	0.0014	0.0014	0.0014	0.0012	0.0012	0.001	0.001
Vanadium, dissolved	mg/L	<0.005	0.0004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.0005	0.0004	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		27/06/2010	04/07/2010	11/07/2010	18/07/2010	25/07/2010	02/08/2010	08/08/2010	15/08/2010	22/08/2010	04/09/2010	10/09/2010
Total Suspended Solids	mg/L	2	32	2	22	22	9	11	16	33	13	31
Total Dissolved Solids	mg/L	180	190	210	230	230	270	270	270	240	290	270
pH (field)	pH units	8.12	8.04	8.25	8.13	8	7.96	8.06	7.96	8.27	8.02	8.13
pH (lab)	pH units	8.07	8.04	8.12	8.11	8.01	8.17	8.17	8.23	8.26	8.12	8.11
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	289	248	327	354	324	425	418	433		416	406
Temperature (field)	C	4.35	5.63	6.74	7.06	7.06	9.56	8.54	9.14	7.3	6.95	6.52
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%	107.4	105.5	99.3	107.2	77.5	78	81.7	89.9	89.6	81.1	82.6
ORP (field)	mV											
Hardness (from total)	mg/L	131	115	151	149	151	166	180	172	157	172	180
Hardness (from dissolved)	mg/L	134	111	148	162	138	179	176	186	153	174	162
Alkalinity, total	mg/L	140	110	150	130	120	140	130	130	120	140	120
Chloride	mg/L	1.3	1.5	2.3	9	7.7	13	14	13	11	14	12
Fluoride	mg/L	0.34	0.28	0.34	0.28	0.34	0.35	0.34	0.36	0.32	0.34	
Sulphate, dissolved	mg/L	18	16	29	31	29	42	48	51	40	49	42
Ammonia	mg/L	0.014	0.074	<0.005		0.02	0.041	0.2	0.06	0.022	0.04	0.1
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	0.02	0.013	0.032	0.009	0.012	0.011	0.011	0.014
Nitrate (N)	mg/L	0.29	0.34	0.82	3.1	2.7	4.9	5.2	6.4	4	6.1	5.4
Dissolved Organic Carbon	mg/L	9.5	17	11.4	13.9	13.8	11.1	11.5	11.7	7.1	12	13.9
Aluminum, total	mg/L	0.059	0.704	0.057	0.314	0.432	0.17	0.201	0.237	0.475	0.208	0.482
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005
Arsenic, total	mg/L	0.0005	0.0009	0.0004	0.0006	0.0009	0.0004	0.0006	0.0007	0.0009	0.0006	0.0008
Barium, total	mg/L	0.061	0.069	0.066	0.08	0.084	0.09	0.088	0.092	0.093	0.092	0.099
Beryllium, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	35	30	39	39	39	44	48	46	42	46	48
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005
Copper, total	mg/L	0.002	0.008	0.003	0.004	0.005	0.004	0.006	0.004	0.006	0.004	0.006
Iron, total	mg/L	0.172	1.19	0.155	0.668	0.712	0.306	0.433	0.5	1.02	0.487	0.953
Lead, total	mg/L	0.0012	0.0003	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	0.0003
Lithium, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L	11	10	13	12	13	13	15	14	13	14	15
Manganese, total	mg/L	0.016	0.098	0.016	0.051	0.05	0.03	0.04	0.046	0.074	0.04	0.084
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.002	0.001	0.002	0.005	0.004	0.007	0.007	0.008	0.006	0.008	0.007
Nickel, total	mg/L	0.001	0.003	0.001	0.002	0.006	0.004	0.002	0.002	0.003	0.002	0.003
Phosphorus, total	mg/L											
Potassium, total	mg/L	1	<1	1	2	2	3	3	3	2	3	3
Selenium, total	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.0014	0.0015	0.002	0.0014	0.002	0.002
Silicon, total	mg/L	6.91	7.05	6.39	6.6	7.02	5.59	5.85	5.55	6.21	5.81	6.56
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	7	7	10	13	12	15	15	17	13	15	16
Strontium, total	mg/L	0.366	0.291	0.389	0.444	0.42	0.564	0.606	0.639	0.553	0.682	0.701
Sulpher, total	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	0.027	<0.01	0.016	0.015	<0.01	<0.01	<0.01	0.021	<0.01	0.019
Uranium, total	mg/L	0.001	0.0007	0.0011	0.0008	0.0007	0.0008	0.0009	0.0009	0.0007	0.0008	0.0007
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L	<0.01	0.02	0.01	0.022	0.02	0.025	0.017	0.026	0.025	0.022	0.025
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005
Arsenic, dissolved	mg/L	0.0005	<0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0007
Barium, dissolved	mg/L	0.056	0.055	0.065	0.069	0.069	0.089	0.084	0.091	0.085	0.081	0.081
Beryllium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	34	29	40	46	37	47	45	50	40	47	43
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002
Iron, dissolved	mg/L	0.045	0.111	0.055	0.096	0.106	0.056	0.066	0.089	0.142	0.124	0.142
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L	12	10	12	12	11	15	15	15	13	14	13
Manganese, dissolved	mg/L	0.003	0.004	0.005	0.003	0.007	0.005	0.009	0.009	0.01	0.014	0.014
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.002	0.001	0.002	0.005	0.004	0.007	0.007	0.008	0.007	0.008	0.008
Nickel, dissolved	mg/L	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L											
Potassium, dissolved	mg/L	1	<1	1	2	2	3	3	3	2	3	3
Selenium, dissolved	mg/L	<0.0008	<0.0008	<0.0008	0.001	0.0009	0.0014	0.0016	0.0021	0.0015	0.0021	0.0022
Silicon, dissolved	mg/L	6.63	5.71	5.98	7.14	5.67	6.05	5.43	5.52	5.52	5.56	5.27
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	8	7	9	12	11	18	17	17	13	16	16
Strontium, dissolved	mg/L	0.347	0.296	0.391	0.434	0.402	0.579	0.597	0.672	0.599	0.7	0.668
Sulpher, dissolved	mg/L	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L	0.001	0.0007	0.0012	0.0007	0.0006	0.0008	0.0008	0.0009	0.0007	0.0008	0.0007
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		17/09/2010	08/10/2010	07/11/2010	22/05/2011	25/05/2011	26/06/2011	03/07/2011	11/07/2011	19/07/2011	26/07/2011	02/08/2011
Total Suspended Solids	mg/L	8	6	<1	120	100	220	96	77	180	35	660
Total Dissolved Solids	mg/L	280	290	250	98	130	160	160	160	180	190	130
pH (field)	pH units	8.04	8.19	7.85								
pH (lab)	pH units	8.25	8.18	8.13	7.88	7.98	8.01	8.12	7.96	7.93	8.12	7.75
Specific Conductance, field	µS/cm											
Specific Conductance (lab)	µS/cm	434	448	426	166	191	235	235	260	231	267	147
Temperature (field)	C	4.11	0.14	-0.22								
Dissolved Oxygen (field)	mg/L											
Dissolved Oxygen (field)	%	98.3	104.2									
ORP (field)	mV											
Hardness (from total)	mg/L	197	207	201	86	113	114	120	137	132	147	127
Hardness (from dissolved)	mg/L	185	188	198	77.2	96.7	122	118	136	114	131	73.1
Alkalinity, total	mg/L	130	140	160	75	88	110	110	120	110	130	70
Chloride	mg/L	9.3	11	4.1	1.4	1.9						2.1
Fluoride	mg/L	0.39	0.32	0.37	0.22	0.25						0.19
Sulphate, dissolved	mg/L	46	53	39	6.9	16	12	11	13	9.9	9.9	
Ammonia	mg/L	0.017	<0.005	0.029	0.02	0.23	0.033	0.013	<0.005	0.024	0.052	
Nitrite (N)	mg/L	0.013	0.012	<0.005	0.012	0.009	0.008	<0.005	0.009	0.007	0.007	0.007
Nitrate (N)	mg/L	6.7	7.3	2.25	0.16	0.17	0.16	0.16	0.19	0.12	0.17	0.15
Dissolved Organic Carbon	mg/L	13	11	8.8	13.9	16.5	16.7	19.8	15.1	20.3	30.5	22.7
Aluminum, total	mg/L	0.198	0.136	0.024	3.15	2.91	2.04	1.43	1.11	4.55	3.13	14.9
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005
Arsenic, total	mg/L	0.0005	0.0002	0.0004	0.0022	0.0021	0.0016	0.0013	0.0012	0.0027	0.002	0.0073
Barium, total	mg/L	0.093	0.098	0.076	0.104	0.101	0.105	0.092	0.083	0.158	0.123	0.324
Beryllium, total	mg/L	<0.0002	<0.0001	<0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0005
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.0001	0.00002	<0.00001	0.00007	0.00011	0.00007	0.00005	0.00005	0.00011	0.00007	0.00033
Calcium, total	mg/L	52	54.4	52	21.8	28.6	30.1	31.4	35.6	34.4	38.8	30
Chromium, total	mg/L	<0.002	<0.001	<0.001	0.006	0.006	0.004	0.003	0.002	0.009	0.005	0.033
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	0.0023	0.0021	0.0018	0.0012	0.0009	0.003	0.0019	0.0112
Copper, total	mg/L	0.003	0.0037	0.0026	0.011	0.0118	0.0083	0.0091	0.0254	0.0121	0.0109	0.0417
Iron, total	mg/L	0.387	0.323	0.1	6.36	5.52	3.71	2.54	2.1	6.4	5.27	23.9
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	0.0015	0.0013	0.0012	0.0009	0.0009	0.0021	0.0013	0.0065
Lithium, total	mg/L	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01
Magnesium, total	mg/L	17	17.3	17.4	7.68	9.97	9.57	10.1	11.7	11.2	12.1	12.5
Manganese, total	mg/L	0.043	0.046	0.018	0.296	0.192	0.111	0.085	0.067	0.19	0.131	0.624
Mercury, total	mg/L	<0.0002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002
Molybdenum, total	mg/L	0.008	0.009	0.003	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.001
Nickel, total	mg/L	0.002	0.001	0.001	0.007	0.007	0.006	0.005	0.004	0.01	0.007	0.033
Phosphorus, total	mg/L				0.166	0.149	0.129	0.101	0.069		0.139	0.769
Potassium, total	mg/L	3	3.57	2.4	1.25	1.46	0.97	0.9	1.04	1.32	1.18	1.93
Selenium, total	mg/L	0.0022	0.0022	0.0007	0.0002	0.0003	0.0001	0.0002	0.0002	0.0003	0.0002	0.0005
Silicon, total	mg/L	6.45	5.95	6.5	9.86	11.1	8.89	8.05	8.52	15	12.6	31.5
Silver, total	mg/L	<0.0001	<0.00002	<0.00002	0.00003	0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00003	0.00011
Sodium, total	mg/L	17	19.1	13.8	4.55	5.84	6.07	6.2	7.51	6.1	7.29	5.23
Strontium, total	mg/L	0.742	0.842	0.645	0.201	0.262	0.244	0.257	0.297	0.291	0.3	0.241
Sulpher, total	mg/L	<60	24	15	<3	4	3	4	4	4	4	<3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00005	<0.00005	0.00013
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.01	<0.005	<0.005	0.114	0.114	0.07	0.051	0.042	0.189	0.112	0.584
Uranium, total	mg/L	0.0011	0.0013	0.0016	0.0007	0.001	0.0008	0.0008	0.001	0.001	0.0011	0.0017
Vanadium, total	mg/L	<0.005	<0.005	<0.005	0.012	0.01	0.009	0.006	<0.005	0.015	0.01	0.053
Zinc, total	mg/L	<0.01	<0.005	<0.005	0.011	0.011	0.01	0.009	0.012	0.015	0.011	0.056
Zirconium, total	mg/L	<0.002	<0.0005	<0.0005	0.0006	0.0009	0.0007	0.0006	0.0005	0.0016	0.001	0.0028
Aluminum, dissolved	mg/L	0.025	0.021	0.01	0.026	0.025	0.031	0.026	0.028	0.029	0.024	0.053
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0005	0.0004	0.0004	0.0008	0.0007	0.0007	0.0007	0.0007	0.0008	0.0009	0.0008
Barium, dissolved	mg/L	0.084	0.08	0.079	0.046	0.049	0.064	0.06	0.065	0.059	0.063	0.051
Beryllium, dissolved	mg/L	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.0001	0.00001	<0.00001	0.00001	0.00002	0.00004	<0.00001	0.00002	<0.00001	<0.00001	0.00002
Calcium, dissolved	mg/L	50	51.5	51.7	20.1	25.4	31.8	30.3	36.5	30.7	34.6	19.7
Chromium, dissolved	mg/L	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.002	0.0019	0.0015	0.0026	0.0023	0.0044	0.0031	0.003	0.0034	0.0035	0.005
Iron, dissolved	mg/L	0.123	0.08	0.071	1.11	0.753	0.31	0.291	0.33	0.469	0.455	0.621
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	15	14.5	16.8	6.57	8.09	10.2	10.2	10.9	9.1	10.8	5.81
Manganese, dissolved	mg/L	0.018	0.024	0.017	0.125	0.059	0.022	0.017	0.024	0.033	0.043	0.058
Mercury, dissolved	mg/L	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.008	0.008	0.004	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.001
Nickel, dissolved	mg/L	0.001	<0.001	<0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, dissolved	mg/L				0.031	0.023	0.021	0.019	0.02		0.019	0.022
Potassium, dissolved	mg/L	3	3.27	2.46	1.02	1.05	0.93	0.84	0.96	0.66	0.86	0.43
Selenium, dissolved	mg/L	0.0022	0.002	0.0007	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0001
Silicon, dissolved	mg/L	5.73	5.61	6.5	4.28	5.18	6.23	6.28	6.99	6.43	6.56	5.79
Silver, dissolved	mg/L	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	16	15.3	14.5	4.37	5.36	7.02	6.94	7.28	5.86	6.88	4.26
Strontium, dissolved	mg/L	0.736	0.726	0.721	0.179	0.227	0.26	0.249	0.277	0.233	0.279	0.149
Sulpher, dissolved	mg/L	<60	19	16	4	4	4	5	5	4	5	<3
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.001	0.0011	0.0016	0.0005	0.0007	0.0008	0.0007	0.0007	0.0007	0.0009	0.0004
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.01	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	0.006	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		13/08/2011	19/08/2011	29/08/2011	08/09/2011	12/09/2011	19/09/2011	27/09/2011	06/10/2011	11/10/2011	06/04/2012	13/04/2012
Total Suspended Solids	mg/L	130	280	42	17	20	22	43	15	3	<1.0	<1.0
Total Dissolved Solids	mg/L	190	210	180	180	170	180	190	170	170	300	218
pH (field)	pH units				7.98	7.98	7.35	7.93	7.85		7.78	
pH (lab)	pH units	8.03	8.08	8.02	8.2	8.17	8.13	8.17	8.07	8.26	8.19	8.27
Specific Conductance, field	µS/cm										380.7	
Specific Conductance (lab)	µS/cm	227	225	240	258	259	258	258	275	289	470	368
Temperature (field)	C				2.6	2.7	1.5	1.4	0	0	0	
Dissolved Oxygen (field)	mg/L				12.96	12.66	13.9	13.39	13.09	7.83	13.35	
Dissolved Oxygen (field)	%				95.5	93.6	99.1	95.5	699.4	85.2	91.3	
ORP (field)	mV											
Hardness (from total)	mg/L	117	134	112	124	125	138	122	129	131	220	163
Hardness (from dissolved)	mg/L	112	109	117	131	126	130	140	145	143	221	176
Alkalinity, total	mg/L	110	100	120	120	120	120	120	130	140	217	165
Chloride	mg/L				1.6	1.9	2	1.9	1.4	1.7	2.7	1.8
Fluoride	mg/L										0.5	0.42
Sulphate, dissolved	mg/L					9.6	10	10		13	24.8	25.9
Ammonia	mg/L	0.012	0.009	0.006	0.008	0.015	0.006	0.033	0.022	0.008	0.0094	0.076
Nitrite (N)	mg/L	0.007	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.0050
Nitrate (N)	mg/L	0.11	0.08	0.1	0.11	0.17	0.11	0.12	0.17	<0.4	<0.020	0.031
Dissolved Organic Carbon	mg/L	18.1	18.1	18.3	15.6	13.8	12.6	20	10.7	13.4	9.51	8.9
Aluminum, total	mg/L	2.79	6.85	0.388	0.292	0.305	0.386	0.797	0.378	0.092	0.016	0.0104
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050
Arsenic, total	mg/L	0.002	0.0043	0.001	0.001	0.0009	0.001	0.0011	0.0009	0.0008	0.0005	0.00045
Barium, total	mg/L	0.109	0.195	0.072	0.067	0.067	0.064	0.07	0.068	0.063	0.088	0.0611
Beryllium, total	mg/L	0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00010
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00007	0.00016	0.00003	0.00002	0.00045	0.00001	0.00002	0.00002	0.00005	0.00002	0.000018
Calcium, total	mg/L	30.9	34.8	29.8	32.2	33	36.3	31.7	34.5	33.1	54	40.4
Chromium, total	mg/L	0.006	0.016	0.001	0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.0010
Cobalt, total	mg/L	0.0022	0.0051	0.0007	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.00050
Copper, total	mg/L	0.0111	0.0205	0.0034	0.0029	0.0024	0.0036	0.0047	0.0023	0.0103	0.0039	0.00214
Iron, total	mg/L	4.97	12	1.51	1.17	1.16	1.33	1.93	1	0.565	0.062	0.0621
Lead, total	mg/L	0.0012	0.0033	0.0003	<0.0002	<0.0002	<0.0002	0.0005	0.0002	<0.0002	<0.0002	<0.00020
Lithium, total	mg/L	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
Magnesium, total	mg/L	9.63	11.5	9.1	10.5	10.4	11.5	10.4	10.3	11.7	20.6	15.2
Manganese, total	mg/L	0.166	0.308	0.111	0.122	0.128	0.132	0.139	0.091	0.114	0.004	0.0148
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000010	<0.000010
Molybdenum, total	mg/L	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	<0.0010
Nickel, total	mg/L	0.008	0.016	0.003	0.003	0.002	0.002	0.003	0.002	0.002	<0.001	<0.0010
Phosphorus, total	mg/L	0.157	0.263	0.047	0.039	0.039	0.044	0.064	0.031	0.03	0.022	0.024
Potassium, total	mg/L	0.91	1.23	0.67	0.8	0.82	0.97	0.78	0.81	0.97	2.99	2.27
Selenium, total	mg/L	0.0002	0.0004	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.00019
Silicon, total	mg/L	11.4	19	6.34	6.71	7.17	7.36	7.42	7.24	6.15	8.17	6.6
Silver, total	mg/L	0.00003	0.00005	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020
Sodium, total	mg/L	5.23	5.43	5.36	6.01	5.91	6.76	5.77	5.69	6.88	14	10.1
Strontium, total	mg/L	0.232	0.253	0.246	0.262	0.264	0.268	0.246	0.268	0.289	0.48	0.389
Sulpher, total	mg/L	<3	3	3	4	4	5	3	4	5	10.6	8.9
Thallium, total	mg/L	<0.00005	0.00006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
Titanium, total	mg/L	0.118	0.285	0.015	0.014	0.013	0.018	0.036	0.014	<0.005	<0.005	<0.0050
Uranium, total	mg/L	0.0008	0.0014	0.0006	0.0007	0.0007	0.0007	0.0007	0.0008	0.0009	0.001	0.00098
Vanadium, total	mg/L	0.01	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050
Zinc, total	mg/L	0.015	0.031	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	0.005	<0.005	<0.0050
Zirconium, total	mg/L	0.0009	0.0015	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050
Aluminum, dissolved	mg/L	0.034	0.028	0.028	0.03	0.028	0.021	0.033	0.018	0.023	0.0043	0.0057
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.0008	0.0009	0.0009	0.0009	0.0008	0.0007	0.0008	0.0006	0.0007	0.0004	0.00042
Barium, dissolved	mg/L	0.062	0.059	0.059	0.066	0.06	0.063	0.057	0.064	0.067	0.0889	0.0673
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.00001	<0.00001	0.00001	0.00001	0.00002	0.00002	0.00001	<0.00001	0.00004	0.00002	0.000023
Calcium, dissolved	mg/L	29.9	29.6	31.5	34.8	32.8	34.6	37.9	37.8	37.6	53.8	42.9
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050
Copper, dissolved	mg/L	0.0021	0.0023	0.0021	0.0022	0.0018	0.0018	0.0023	0.0017	0.0024	0.00197	0.00248
Iron, dissolved	mg/L	0.518	0.485	0.678	0.7	0.574	0.564	0.693	0.437	0.505	0.0318	0.0588
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050
Magnesium, dissolved	mg/L	9.06	8.56	9.31	10.7	10.8	10.7	11	12.3	11.8	21.1	16.8
Manganese, dissolved	mg/L	0.065	0.087	0.08	0.106	0.112	0.117	0.091	0.076	0.105	0.0031	0.0162
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0010	<0.0010
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.02	0.02	0.022	0.023	0.019	0.02	0.023	0.019	0.021	0.019	0.025
Potassium, dissolved	mg/L	0.61	0.56	0.67	0.79	0.81	0.79	0.76	0.84	0.87	2.99	2.38
Selenium, dissolved	mg/L	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00023	0.00019
Silicon, dissolved	mg/L	6.69	6.88	6.94	7.11	6.58	6.84	6.98	7.35	7.26	9.12	6.89
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020
Sodium, dissolved	mg/L	5.56	5.2	5.62	6.29	6.32	6.32	6.29	7.01	6.88	14	11.2
Strontium, dissolved	mg/L	0.223	0.207	0.237	0.278	0.273	0.268	0.249	0.303	0.315	0.487	0.424
Sulpher, dissolved	mg/L	3	<3	3	4	3	4	5	5	5	12.8	9.3
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.0006	0.0007	0.0006	0.0007	0.0007	0.0007	0.0007	0.0008	0.0009	0.00093	0.001
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		14/04/2012	15/04/2012	16/04/2012	17/04/2012	18/04/2012	19/04/2012	20/04/2012	21/04/2012	22/04/2012	23/04/2012	24/04/2012	26/04/2012	27/04/2012	28/04/2012	29/04/2012	30/04/2012	01/05/2012	02/05/2012	03/05/2012	06/05/2012	10/05/2012	12/05/2012	19/05/2012	25/05/2012	02/06/2012	09/06/2012	15/06/2012	22/06/2012	29/06/2012	08/07/2012	15/07/2012	22/07/2012	29/07/2012
Total Suspended Solids	mg/L	1.7	2.9	1.4							10.6						52.5				55.8		430	544	631	75.3	148	465	143	43.6	51.8	45.3	33.7	39.3
Total Dissolved Solids	mg/L	190	170	154							128						106				148		120	140	146	164	158	160	174	188	184	192	196	210
pH (field)	pH units	7.98	8.03	8.04	8.15	8.03	7.89	7.74	7.53	7.62	7.65	7.74	7.72	7.69	7.57	7.56	7.5	7.47	7.52	7.4	7.31	7.89	7.66	7.67	7.64	7.95	7.88	7.78	8.03	7.97	7.99	8.15	7.93	8.01
pH (lab)	pH units	8.2	8.13	8.05							7.78						7.82				7.97		7.83	7.94	7.97	8.09	8.08	8.04	8.1	8.21	8.28	8.11	8.06	8.13
Specific Conductance, field	µS/cm	347.7	291.9	249.5	243.2	220.4	203.2	168.4	155.2	124	152.8	159.6	154.3	148.8	143.5	136.8	150.4	141.5	144.2	187.7	243.7	199.7	168.3	196.5	223.4	269.9	236.7	243.8	246.1	286.7	281.9	284.3	291.1	271.7
Specific Conductance (lab)	µS/cm	340	284	240							145						150				211		156	187	212	268	247	210	244	297	290	296	305	307
Temperature (field)	C	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0.1	0.1	0	0	0	0	0.1	0.1	0.8	0.5	2.3	5.5	3.6	7.5	6.2	6.4	7.1	6.9	7.1
Dissolved Oxygen (field)	mg/L	13.2	12.58	13.85	14.28	14.81	13.71	12.87	13.7	14.62	15.6	13.56	13.74	13.5	13.53	13.84	17.7	12.89	12.87	13.19	11.05	14.22	14.06	12.98	13.26	13.09	11.95	12.22	10.76	11.53	11.55	12.29	11.14	11.46
Dissolved Oxygen (field)	%	90.5	86.2	94.7	97.8	101.4	93	88.1	93.6	100.1	106.7	92.8	94.1	92.5	92.7	94.8	87.1	88.4	88.2	90.4	75.7	97.5	96.4	90	92	95.4	94.3	92.5	69.8	93.3	93.8	101.6	91.5	94.6
ORP (field)	mV												176.6	151.5	83.4	89.7	46.3	70.3	64.2	89.6	105.1	77.7	70.4	17.4	55.4		-36.9	7.8			-19.3	-25.9		28.1
Hardness (from total)	mg/L	157	133	113							69.4						69.7				96.4		94.7	115	136	130	132	131	127	135	144	142	162	151
Hardness (from dissolved)	mg/L	160	134	115							68.6						71.6				98.9		76.8	90.9	102	132	122	103	115	146	136	150	144	152
Alkalinity, total	mg/L	154	127	109							61.2						59.8				85		71.4	86.8	101	124	119	96.7	116	139	138	143	145	154
Chloride	mg/L	1.9	1.8	1.8							1.9						1.2				2.2		1.4	1.7	1.8	1.3	2	1.4	1.5	1.5	1.6	1.6	1.5	1.8
Fluoride	mg/L	0.4	0.36	0.31							0.15						0.16				0.21		0.19	0.21	0.23	0.29	0.29	0.23	0.28	0.31	0.3	0.31	0.33	0.33
Sulphate, dissolved	mg/L	24.2	18.2	13.1							<0.50						3.23				16.5		4.39	6.6	9.44	12.2	10.4	8.53	9.59	13.1	11.9	13	11.9	11
Ammonia	mg/L	0.0089	0.013	0.0058							0.017						0.01				0.018		0.0328	0.031	0.12	0.063	0.11	0.049	0.027	0.093	0.018	0.017	0.067	0.084
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				0.0183		<0.0050	0.015	0.0244	0.0107	0.0058	<0.0050	0.0139	0.0055	<0.0050	<0.0050	<0.0050	0.008
Nitrate (N)	mg/L	<0.020	<0.020	<0.020							0.496						0.642				0.953		0.124	0.132	0.123	0.192	0.135	0.109	0.158	0.22	0.166	0.163	0.169	0.155
Dissolved Organic Carbon	mg/L	9.75	11.7	13.4							28.9						18.8				15		16	11.7	13.1	9.16	11.3	15.9	15	11.7	12.8	12.9	12.3	12.4
Aluminum, total	mg/L	0.0655	0.0172	0.0232							0.201						1.45				2.04		8.89	8.83	14.1	1.77	4.48	9.99	2.86	0.921	1.24	1.29	0.892	1.01
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050							<0.00050						<0.00050				<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00051	0.00047	0.00046							0.00052						0.00094				0.00132		0.0039	0.00485	0.00693	0.00132	0.00245	0.00474	0.00207	0.00131	0.00136	0.00126	0.00132	0.00139
Barium, total	mg/L	0.0595	0.0504	0.0448							0.0354						0.0688				0.0924		0.209	0.237	0.299	0.0931	0.133	0.249	0.116	0.0833	0.0921	0.0902	0.0926	0.0897
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010							<0.00010						<0.00010				<0.00010		0.00028	0.00034	0.0005	<0.00010	0.00016	0.00035	0.00013	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010							<0.0010						<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05							<0.05						<0.05				<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000103	0.000016	0.000018							0.000031						0.000042				0.000043		0.000141	0.000199	0.00025	0.000024	0.000067	0.000233	0.000077	0.000035	0.000049	0.000025	0.000021	0.000016
Calcium, total	mg/L	38.9	33.1	28.2							18.4						17.8				24.3		22.6	28.2	32.3	33.3	33.4	32.6	32.5	34.7	36.8	36.3	41.9	38.6
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010							<0.0010						0.0026				0.0037		0.018	0.018	0.026	0.0036	0.0084	0.0192	0.0062	0.0021	0.0027	0.0029	0.0024	0.0026
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050							<0.00050						0.00096				0.00135		0.00569	0.00683	0.00884	0.00115	0.00256	0.00663	0.0018	0.00068	0.00081	0.00082	0.00064	0.00068
Copper, total	mg/L	0.00652	0.00323	0.00369							0.00793						0.00758				0.0124		0.0203	0.0258	0.0329	0.00529	0.0287	0.0234	0.00739	0.00357	0.00403	0.00449	0.00362	0.00384
Iron, total	mg/L	0.145	0.105	0.106							0.483						2.43				3.37		14.2	14.8	22.3	3.1	7.16	15.2	5	1.91	2.43	2.5	2.09	2.26
Lead, total	mg/L	<0.00020	<0.00020	<0.00020							<0.00020						0.00065				0.00084		0.00369	0.00429	0.00584	0.00093	0.00182	0.00404	0.00116	0.00041	0.00049	0.00049	0.00037	0.00041
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				<0.0050		0.0057	0.0059	0.0089	<0.0050	<0.0050	0.0063	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	14.5	12.2	10.3							5.69						6.16				8.71		9.28	10.7	13.4	11.4	11.9	12.1	11	11.9	12.7	12.5	13.9	13.3
Manganese, total	mg/L	0.0191	0.0212	0.0266							0.0258						0.0855				0.144		0.452	0.574	0.882	0.137	0.25	0.529	0.133	0.0741	0.0869	0.0971	0.0795	0.0839
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010							<0.000010						<0.000010				<0.000010		0.000015	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010	<0.0010	<0.0010							0.0011						0.0012				0.0018		0.0011	0.0011	0.0016	0.0016	0.0015	0.0015	0.0014	0.0016	0.0015	0.0014	0.0017	0.0016
Nickel, total	mg/L	<0.0010	<0.0010	<0.0010							0.0012						0.003				0.0042		0.0159	0.0195	0.0258	0.0042	0.0081	0.0188	0.0069	0.0028	0.0033	0.0036	0.0033	0.0031
Phosphorus, total	mg/L	0.039	0.043	0.05							0.05						0.072				0.099		0.398	0.497	0.688	0.096	0.207	0.512	0.139	0.051	0.082	0.08	0.065	0.064
Potassium, total	mg/L	2.5	2.53	2.55							1.89						1.62				1.76		1.84	1.72	2.21	1.32	1.44	1.65	1.16	1.08	1.05	1.07	1.16	1.12
Selenium, total	mg/L	0.00016	0.00015	0.00012							0.00023						0.00027				0.0004		0.0003	0.00031	0.00043	0.00016	0.00027	0.00049	0.00023	0.00019	0.00014	0.00017	0.00021	0.00023
Silicon, total	mg/L	6.29	5.66	5.14							3.99						5.74				7.91		19.5	19.5	26.2	8.83	13.1	22.4	12	7.59	8.67	8.32	8.48	8.16
Silver, total	mg/L	<0.000020	<0.000020	<0.000020							<0.000020						<0.000020				0.000024		0.000066	0.000064	0.000095	<0.000020	0.000035	0.000074	0.000021	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	9.51	7.85	6.65							3.96						4.43				6.38		4.48	5.04	5.93	6.99	6.96	6.08	6.72	7.25	7.75	7.61	8.62	7.96
Strontium, total	mg/L	0.376	0.315	0.269							0.145						0.146				0.211		0.186	0.233	0.297	0.286	0.302	0.285	0.261	0.318	0.331	0.327	0.362	0.349
Sulpher, total	mg/L	7.4	6.1	4.5							<3.0						3.2				4.8		<3.0	<3.0	1510	3.3	<3.0	<3.0	<3.0	3.7	4.5	3.1	4.5	<3.0
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050							<0.000050						<0.000050				<0.000050		0.000076	0.000081	0.000126	<0.000050	<0.000050	0.000089	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050							0.0079						0.0563				0.0902		0.359	0.323	0.585	0.0754	0.177	0.358	0.115	0.0387	0.0485	0.0554	0.0391	0.0433
Uranium, total	mg/L	0.00087	0.00066	0.00056							0.00032						0.00049				0.00077		0.00105	0.00145	0.00185	0.00109	0.00112	0.00134	0.00105	0.00114	0.001	0.00101	0.00122	0.00111
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						0.0051				0.0074		0.0299	0.0324	0.0445	0.0062	0.0137	0.0309	0.0101	<0.0050	0.0051	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				0.0088		0.028	0.0344	0.0548	0.0066	0.0143	0.0331	0.0097	<0.0050	<0.0050	0.0061	<0.0050	0.0051
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050							<0.00050						0.0006				0.00112		0.00153	0.00148	0.00261	0.00056	0.00091	0.00175	0.00081	<0.00050	0.00058	0.00052	<0.00050	0.0005
Aluminum, dissolved	mg/L	0.007	0.0041	0.0141							0.0393						0.0337				0.0296		0.0343	0.0431	0.0229	0.0199	0.0242	0.0244	0.0256	0.0309	0.0217	0.0207	0.0198	0.0232
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050							<0.00050						<0.00050				<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.0004	0.00038	0.0004							0.00042						0.00056				0.0006		0.00078	0.00087	0.0008	0.00072	0.00085	0.00075	0.00072	0.00078	0.00088	0.00087	0.00087	0.00095
Barium, dissolved	mg/L	0.06	0.0505	0.0454							0.035						0.0471				0.0615		0.0528	0.057	0.0616	0.062	0.0624	0.0566	0.0644	0.0685	0.0662	0.0757	0.0714	0.0745
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010							<0.00010						<0.00010				<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010							<0.0010						<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05							<0.05						<0.05				<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.000023	0.000016	0.000023							0.000017						0.000021				0.00002		0.000013	0.000016	0.000017	0.000016	<0.000010	0.000011	0.00001	0.000016	0.000013	<0.000010	0.00001	<0.000010
Calcium, dissolved	mg/L	38.7	33.1	28.7							18.2						18.9				26		20.4	23.7	26.3	34	32.1	27.2	29.5	37.9	35.5	38.8	36.5	38.9
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010							<0.0010						<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050							<0.00050						<0.00050				<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00292	0.00281	0.00416							0.00654						0.00525				0.00687		0.00269	0.00312	0.00189	0.00359	0.00209	0.0021	0.00211	0.00426	0.00207	0.0017	0.00168	0.00189
Iron, dissolved	mg/L	0.0541	0.0622	0.0892							0.242						0.369				0.389		0.761	0.826	0.796	0.441	0.519	0.444	0.39	0.458	0.538	0.567	0.509	0.61
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020							<0.00020						<0.00020				<0.00020		<0.00020	0.00048	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	15.2	12.4	10.6							5.63						5.94				8.22		6.28	7.7	8.72	11.4	10.2	8.52	10.1	12.4	11.5	12.8	12.7	13.4
Manganese, dissolved	mg/L	0.0167	0.0199	0.0265							0.0203						0.0587				0.0898		0.163	0.157	0.226	0.0432	0.037	0.0521	0.0312	0.0233	0.0247	0.0294	0.0288	0.035
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010							<0.000010						<0.000010				<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, dissolved	mg/L	<0.0010	<0.0010	<0.0010							<0.0010						0.0011				0.0017		<0.0010	0.0012	0.0013	0.0015	0.0013	0.0011	0.0013	0.0016	0.0015	0.0019	0.0017	0.0017
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010							0.0011						0.0013				0.0014		0.0016	0.002	0.0025	0.0015	0.0017	0.0019	0.0018	0.0015	0.0016	0.0017	0.0015	0.0017
Phosphorus, dissolved	mg/L	0.038	0.04	0.053							0.03						0.024				0.029		0.031	0.032	0.023	0.021	0.021	0.02	0.018	0.024	0.024	0.023	0.022	0.025
Potassium, dissolved	mg/L	2.42	2.37	2.42							1.78						1.58				1.64		1.04	0.96	0.982	2.24	1.03	0.757	0.875	1.08	0.902	1.02	1.05	0.998
Selenium, dissolved	mg/L	0.00017	0.00015	0.00017							0.00026						0.00028				0.0004		0.0001	0.00013	0.00019	0.00015	0.00011	0.00011	0.00011	0.00013	0.00017	0.00013	0.00012	0.00015
Silicon, dissolved	mg/L	6.4	5.8	5.3							3.44						3.61				4.36		4.58	4.99	4.68	5.93	6.1	5.89	5.8	6.49	6.88	6.92	6.54	7.09
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020							<0.000020						<0.000020				<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	9.94	7.99	6.77							3.97						4.53				6.3		4.14	4.95	5.57	7.47	6.73	5.89	6.62	7.93	7.35	8.21	8.07	8.31
Strontium, dissolved	mg/L	0.379	0.31	0.259							0.148						0.144				0.211		0.155	0.193	0.218	0.286	0.255	0.21	0.264	0.328	0.305	0.352	0.341	0.346
Sulpher, dissolved	mg/L	8.6	6.4	5.1							3.3						3.7				6.1		<3.0	<3.0	3.4	4.7	4.4	3.2	3.6	4.8	4.5	4.8	4.8	4.8
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050							<0.000050						<0.000050				<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00082	0.00061	0.00049							0.00031						0.00039				0.00066		0.00049	0.00071	0.00083	0.00098	0.00091	0.0006	0.00082	0.00107	0.00091	0.00109	0.00109	0.0011
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050				<0.0050		<0.0050	0.0098	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050							<0.00050						<0.00050				<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**30/07/2012**	**08/08/2012**	**17/08/2012**	**27/08/2012**	**03/09/2012**	**13/09/2012**	**19/09/2012**	**24/09/2012**	**04/10/2012**	**12/10/2012**	**20/10/2012**
Total Suspended Solids	mg/L	34.3	36.5	28.3	34.5	76	88.7	20.9	10.3	130	7.1	1
Total Dissolved Solids	mg/L	206	202	204	200	158	178	200	208	206	230	214
pH (field)	pH units	8.01	7.92	7.65	7.98	8.16	7.83	7.89	7.91	7.44	7.74	8.6
pH (lab)	pH units	8.27	8.31	8.33	8.39	8.25	8.17	8.08	8.25	8.07	8.04	8.13
Specific Conductance, field	µS/cm	268.9	309.9	297.1	286.9	256.6	258.1	294.8	287.3	219	303.6	309.1
Specific Conductance (lab)	µS/cm	309	317	321	315	312	275	299	313	299	306	318
Temperature (field)	C	6.6	6.7	5.2	5.4	4.3	2.2	2.4	3.6	0	0	0
Dissolved Oxygen (field)	mg/L	12.19	12.53	11.74	11.67	12.12	13.7	12.5	12.86	15.93	14.25	17.38
Dissolved Oxygen (field)	%	99.3	102.8	92.3	92.2	93.4	95.1	91.5	97.2	95.23	97.4	119.9
ORP (field)	mV	-0.9	-66	23.3	46.3	-3.5	78.4	33.9	45.9	62.2	94.8	78.9
Hardness (from total)	mg/L	150	159	165	145	171	141	146	155	169	179	153
Hardness (from dissolved)	mg/L	153	156	156	174	154	137	152	153			160
Alkalinity, total	mg/L	154	157	158	158	155	131	144	150	141	149	155
Chloride	mg/L	1.3	1.6	1.5	1.8	1.3	1.8	1.8	1.4	1.5	2.2	1.6
Fluoride	mg/L	0.36	0.37	0.34	0.33	0.32	0.26	0.31	0.28	0.28	0.29	0.25
Sulphate, dissolved	mg/L	13.8	11.9	12.1	11.7	10.5	11.2	13.8	12.1	13.1	15.3	15.7
Ammonia	mg/L	0.026	0.014	0.0085	0.0084	0.0088	0.008	0.059	0.12	0.074	0.018	0.023
Nitrite (N)	mg/L	0.0062	0.0064	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0064
Nitrate (N)	mg/L	0.162	0.156	0.161	0.106	0.067	0.102	0.104	0.078	0.15	0.122	0.174
Dissolved Organic Carbon	mg/L	12	12.3	10.8	11.9	12.5	16.7	15.2	14.7	13	14.5	12.2
Aluminum, total	mg/L	0.884	1.03	0.817	0.692	0.327	0.791	0.413	0.0809	0.957	0.0823	0.0238
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00119	0.00115	0.00137	0.00116	0.00145	0.00116	0.00101	0.00086	0.00174	0.00089	0.00057
Barium, total	mg/L	0.0852	0.0888	0.0894	0.0847	0.095	0.0876	0.0711	0.0715	0.118	0.0797	0.0652
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000015	0.000019	<0.000010	0.000025	0.000015	0.000016	<0.000010	<0.000010	0.000034	0.000011	<0.000010
Calcium, total	mg/L	38.3	40.1	42.5	36.9	43.6	36.6	38.3	40.5	42.8	44.4	39.1
Chromium, total	mg/L	0.0018	0.0021	0.0018	0.0016	<0.0010	0.0017	0.0012	<0.0010	0.002	<0.0010	<0.0010
Cobalt, total	mg/L	0.00064	0.00069	0.00066	0.00067	0.00065	0.00117	<0.00050	<0.00050	0.00146	<0.00050	<0.00050
Copper, total	mg/L	0.00448	0.00301	0.0027	0.00362	0.00335	0.00461	0.00238	0.00225	0.00609	0.0026	0.00146
Iron, total	mg/L	2.03	2.18	2.17	2.01	1.8	2.43	1.34	0.935	2.86	0.652	0.525
Lead, total	mg/L	0.00041	0.00036	0.00032	0.00035	0.00031	0.00061	<0.00020	<0.00020	0.00086	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	13.2	14.2	14.3	12.9	15.2	11.9	12.2	13.1	15.1	16.7	13.5
Manganese, total	mg/L	0.0795	0.0996	0.0979	0.114	0.148	0.176	0.0968	0.0892	0.305	0.0975	0.068
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0015	0.0015	0.0017	0.0013	0.0013	<0.0010	0.0011	0.0013	0.001	0.0013	0.0012
Nickel, total	mg/L	0.0028	0.0028	0.0025	0.0044	0.0027	0.0041	0.0024	0.0021	0.0047	0.0023	0.0016
Phosphorus, total	mg/L	0.064	0.068	0.062	0.052	0.068	0.099	0.045	0.033	0.149	0.041	0.024
Potassium, total	mg/L	1.47	1.11	1.19	1.09	1.18	0.791	0.945	1.03	1.06	1.06	0.917
Selenium, total	mg/L	0.00017	0.00015	0.00011	0.00012	0.00016	0.00013	0.0001	0.00018	0.00018	0.00021	0.00018
Silicon, total	mg/L	8.02	8.63	8.51	6.97	7.57	7.19	7.25	7.23	8.72	8.12	6.6
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	8.04	8.58	8.61	7.72	9.04	6.9	7.17	8.06	8.43	9.74	7.98
Strontium, total	mg/L	0.344	0.346	0.374	0.348	0.392	0.302	0.303	0.327	0.393	0.393	0.339
Sulpher, total	mg/L	4.1	<3.0	4.2	<3.0	4.7	3.4	5.3	4.7	3.9	7.3	3.4
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.035	0.0357	0.0323	0.0262	0.0145	0.027	0.0197	<0.0050	0.0268	<0.0050	<0.0050
Uranium, total	mg/L	0.00115	0.00109	0.00121	0.00105	0.00121	0.00085	0.00087	0.00097	0.00124	0.00117	0.00101
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	<0.0050	<0.0050
Zinc, total	mg/L	0.0055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0086	<0.0050	<0.0050
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00057	<0.00050	<0.00050	0.00062	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0296	0.0238	0.0172	0.0189	0.0173	0.0196	0.0173	0.02			0.011
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050
Arsenic, dissolved	mg/L	0.00094	0.00092	0.00092	0.00092	0.00097	0.00079	0.00086	0.00082			0.00063
Barium, dissolved	mg/L	0.0744	0.0756	0.0741	0.0747	0.0729	0.0659	0.069	0.0707			0.0679
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010			<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010
Calcium, dissolved	mg/L	39.3	40.1	40.1	46.9	39.3	35.6	39.4	40.6			41.5
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050
Copper, dissolved	mg/L	0.00347	0.0016	0.00132	0.00149	0.00147	0.00175	0.0019	0.0023			0.00148
Iron, dissolved	mg/L	0.611	0.594	0.648	0.801	0.78	0.601	0.684	0.644			0.436
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Magnesium, dissolved	mg/L	13.4	13.5	13.6	13.7	13.5	11.7	13.1	12.7			13.6
Manganese, dissolved	mg/L	0.0366	0.0545	0.0539	0.068	0.0646	0.074	0.0751	0.0663			0.0672
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0016	0.0017	0.0016	0.0015	0.0015	0.0012	0.0013	0.0013			0.0013
Nickel, dissolved	mg/L	0.0015	0.0016	0.0014	0.0017	0.0017	0.0019	0.0018	0.0019			0.0016
Phosphorus, dissolved	mg/L	0.022	0.024	0.023	0.023	0.026	0.02	0.024	0.026			0.019
Potassium, dissolved	mg/L	1.03	1.1	1.05	1.1	1.11	0.796	0.948	1.07			0.96
Selenium, dissolved	mg/L	0.00014	0.00017	0.00013	<0.00010	0.00016	<0.00010	0.00013	0.00013			0.00013
Silicon, dissolved	mg/L	6.75	7.03	6.79	7.74	6.93	6.59	6.88	7.3			7.09
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020
Sodium, dissolved	mg/L	8.12	8.47	8.07	8.28	8.21	7.22	7.93	7.66			8.02
Strontium, dissolved	mg/L	0.35	0.369	0.373	0.359	0.354	0.291	0.327	0.334			0.344
Sulpher, dissolved	mg/L	4.3	5	5	4.4	4.5	4.4	4.9	4.6			5.4
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Uranium, dissolved	mg/L	0.00114	0.00116	0.00113	0.0011	0.00104	0.00079	0.00094	0.00091			0.00103
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**06/04/2013**	**12/04/2013**	**18/04/2013**	**25/04/2013**	**05/05/2013**	**07/05/2013**	**19/05/2013**	**24/05/2013**	**31/05/2013**	**08/06/2013**	**16/06/2013**
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	<1.0	2.4	4.3	58	220	660	564	194
Total Dissolved Solids	mg/L	526	376	382	268	158	168	138	134	180	172	186
pH (field)	pH units	7.99	8	8.13	8.6	7.57	8.17	8.1	9.67	7.91	7.57	8.5
pH (lab)	pH units	8.28	8.25	8.2	8.31	8	7.95	8.05	7.78	7.94	8	8.15
Specific Conductance, field	µS/cm	665.1		526.3	456.6	207.9	200.5	166.2	139.6	239	223.9	
Specific Conductance (lab)	µS/cm	770	555	595	452	230	197	179	151	233	230	266
Temperature (field)	C	0	0.1	0.1	0	0	0	0	0.1	4.1	3.6	4.5
Dissolved Oxygen (field)	mg/L	12.93					13.52	13.27	13.75	12.39	11.46	
Dissolved Oxygen (field)	%	89.9			99.8	106	92.3	91	94.5	95.3	86.6	
ORP (field)	mV	-399.3		-407.2	-189.5	17.6	55	96.2	-60	33.9	59.9	
Hardness (from total)	mg/L	397	261	274	212	120	95.1	87	86.2	184	184	146
Hardness (from dissolved)	mg/L	368	254	244	203	105	92	85.3	69	101	107	127
Alkalinity, total	mg/L	344	242	264	192	98.1	81.7	73.7	63.4	91.8	108	125
Chloride	mg/L	6	4.1	4.3	4.4	2.7	3.4	3.6	3.3	4.7	1.8	2.3
Fluoride	mg/L	0.68	0.59	0.63	0.51	0.23	0.18	0.17	0.18	0.28	0.29	0.29
Sulphate, dissolved	mg/L	96.2	61.7	60.9	43.9	16.8	7.54	9.32	7.58	18.7	9.88	11.1
Ammonia	mg/L	0.083	<0.050	0.36	0.015	0.034	0.018	0.028	0.056	0.064	0.14	0.069
Nitrite (N)	mg/L	<0.050	<0.0050	<0.0050	0.0123	<0.0050	0.006	<0.0050	0.024	0.0342	0.0158	0.0076
Nitrate (N)	mg/L	<0.20	<0.020	<0.020	0.843	0.586	0.408	0.43	0.558	1.26	0.104	0.153
Dissolved Organic Carbon	mg/L	25.6	17.9	15	13	13	18.5	15.9	12.1	12.5	12.6	13.5
Aluminum, total	mg/L	0.0213	0.0191	0.0108	0.0104	0.0497	0.0905	1.37	5.11	13	14.7	4.86
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0005	0.00067	<0.00050
Arsenic, total	mg/L	0.00085	0.00059	0.00056	0.00046	0.0004	0.00031	0.00114	0.00256	0.00659	0.00794	0.00293
Barium, total	mg/L	0.17	0.101	0.0996	0.0738	0.0456	0.0404	0.0699	0.137	0.336	0.351	0.153
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00015	0.00041	0.00046	0.00015
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000024	0.000028	0.000025	0.000021	0.000017	0.00003	0.000022	0.000057	0.000202	0.000209	0.000063
Calcium, total	mg/L	92.2	61.7	63.7	50	29.9	24.3	22.1	21.1	46.5	45.4	37.2
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0027	0.0089	0.0235	0.029	0.0096
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0011	0.00333	0.00891	0.0108	0.00344
Copper, total	mg/L	0.0062	0.00479	0.00353	0.00456	0.00709	0.0081	0.0159	0.0326	0.0488	0.0357	0.0167
Iron, total	mg/L	0.0779	0.0623	0.0468	0.051	0.175	0.24	2.41	7.74	23.2	22.6	7.9
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00059	0.00216	0.00544	0.00652	0.0021
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0096	0.0109	<0.0050
Magnesium, total	mg/L	40.5	26	27.8	21.2	11	8.35	7.71	8.13	16.4	17.1	12.9
Manganese, total	mg/L	0.0088	0.0102	0.0086	0.0171	0.0173	0.0292	0.152	0.333	0.886	0.562	0.217
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000024	<0.000010
Molybdenum, total	mg/L	<0.0010	<0.0010	<0.0010	0.0011	0.0016	0.0012	0.0012	0.0019	0.0035	0.0021	0.0017
Nickel, total	mg/L	0.0019	0.0011	0.001	<0.0010	<0.0010	<0.0010	0.0034	0.0091	0.0263	0.0304	0.0107
Phosphorus, total	mg/L	0.07	0.049	0.035	0.034	0.052	0.069	0.099	0.279	0.788	0.668	0.253
Potassium, total	mg/L	9.06	6.39	5.1	3.95	2.89	2.26	1.54	2.15	3.54	2.57	1.69
Selenium, total	mg/L	0.0003	0.00015	0.00018	0.00039	0.00028	0.00013	0.00027	0.00017	0.00076	0.0007	0.00029
Silicon, total	mg/L	18.2	13.2	13.1	8.33	4.32	3.99	6.21	12.5	32.2	31.4	15
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000033	0.000072	0.000054	0.00003
Sodium, total	mg/L	33.7	21	20.4	15.2	8.63	6.24	5.47	5.94	10.1	7.84	8.02
Strontium, total	mg/L	0.79	0.495	0.533	0.45	0.292	0.221	0.198	0.214	0.477	0.371	0.322
Sulpher, total	mg/L	30.2	18.4	17.4	1600	5.6	4	3.3	<3.0	7.1	4.5	6
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000101	0.000126	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0527	0.192	0.525	0.56	0.194
Uranium, total	mg/L	0.00183	0.0008	0.00079	0.00078	0.00051	0.00037	0.00059	0.00072	0.00189	0.00255	0.00162
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0159	0.0407	0.0479	0.017
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0181	0.047	0.0538	0.0185
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00053	0.00096	0.00231	0.00329	0.00159
Aluminum, dissolved	mg/L	0.0146	0.0104	0.0052	0.004	0.021	0.0132	0.0322	0.0239	0.0172	0.0168	0.0164
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00109	0.0006	0.00055	0.00042	0.00034	0.00037	0.00055	0.00058	0.00075	0.00124	0.00087
Barium, dissolved	mg/L	0.148	0.1	0.0933	0.0725	0.0408	0.0385	0.049	0.0433	0.0613	0.0558	0.0619
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.000027	0.00005	0.000013	0.000015	0.000023	0.00002	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	86.4	59.3	56	46.3	26.5	23.6	22.5	17.6	26.6	28.6	33
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00694	0.00439	0.00278	0.00371	0.00609	0.00612	0.00794	0.00992	0.00789	0.0021	0.00181
Iron, dissolved	mg/L	0.0619	0.0463	0.0383	0.0366	0.0856	0.0946	0.362	0.401	0.559	0.637	0.387
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	36.9	25.8	25.3	21.1	9.34	8.03	7.05	6.07	8.48	8.59	10.8
Manganese, dissolved	mg/L	0.0074	0.0099	0.0073	0.0149	0.0156	0.0219	0.102	0.153	0.207	0.102	0.0655
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	<0.0010	<0.0010	0.001	0.0013	0.0012	0.0012	0.0016	0.003	0.0016	0.0016
Nickel, dissolved	mg/L	0.0016	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	0.0011	0.0013	0.0014	0.0015
Phosphorus, dissolved	mg/L	0.061	0.041	0.026	0.025	0.065	0.036	0.02	0.022	0.021	0.022	0.02
Potassium, dissolved	mg/L	8.17	6.35	4.89	3.99	2.39	2.22	1.49	1.65	2.21	1.03	1.16
Selenium, dissolved	mg/L	0.00027	0.00013	0.00017	0.00038	0.0002	0.00017	0.00015	0.00012	0.00033	0.00013	0.00014
Silicon, dissolved	mg/L	17.6	13.3	11.6	7.89	3.97	3.65	3.61	3	3.59	4.79	5.95
Silver, dissolved	mg/L	0.000024	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	30.8	20.8	18.9	15.2	7.45	6.02	5.35	5.41	7.98	6.24	7.46
Strontium, dissolved	mg/L	0.682	0.498	0.494	0.434	0.254	0.212	0.199	0.169	0.312	0.226	0.279
Sulpher, dissolved	mg/L	30.2	19.1	16.1	15	7	4.8	4.2	3.5	6	3.3	4.5
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.0017	0.00074	0.00076	0.00068	0.00042	0.00035	0.00052	0.00036	0.0007	0.00111	0.00119
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**20/06/2013**	**25/06/2013**	**02/07/2013**	**11/07/2013**	**19/07/2013**	**24/07/2013**	**30/07/2013**	**10/08/2013**	**15/08/2013**	**22/08/2013**	**27/08/2013**
Total Suspended Solids	mg/L	109	73.4	121	255	62	169	75	37.3	38.6	60.1	90.5
Total Dissolved Solids	mg/L	200	184	186	198	206	184	178	238	214	214	244
pH (field)	pH units	8.6	8.08	7.94	8.09	8.10	8.00	8.09	8.09	8.60	8.04	7.78
pH (lab)	pH units	8.14	8.05	8.19	8.06	8.27	8.15	8.16	8.19	8.34	8.2	8.11
Specific Conductance, field	µS/cm		277.5	256.2	280.7	303.1	243.4	277.6	313		313.4	296.4
Specific Conductance (lab)	µS/cm	290	306	268	279	319	272	281	315	320	318	301
Temperature (field)	C	7.4	5.5	5.9	5.8	6.2	5.7	6.9	7	8.7	5.5	4.2
Dissolved Oxygen (field)	mg/L		12.98	11.41	11.88	11.51	11.97	12.43	11.28		12.28	11.92
Dissolved Oxygen (field)	%		102.9	91.4	94.7	93.1	95.2	102.3	92.8		104.7	97.6
ORP (field)	mV		78.6	72.9	124.7	86.0	127.5	90.4	47.3		143.8	167.4
Hardness (from total)	mg/L	157	164	174	169	167	168	159	182	181	172	174
Hardness (from dissolved)	mg/L	136	144	131	127	155	135	139	148	156	151	146
Alkalinity, total	mg/L	136	143	125	133	154	129	133	154	159	154	146
Chloride	mg/L	1.7	1.7	1.5	1.7	1.6	1.5	1.6	1.6	1.7	1.8	1.6
Fluoride	mg/L	0.35	0.36	0.3	0.32	0.36	0.3	0.31	0.35	0.34	0.33	0.29
Sulphate, dissolved	mg/L	13.6	15.6	11.9	14	14.6	9.93	11.6	12.6	14	12.7	10.2
Ammonia	mg/L	0.072	0.057	0.13	0.069	0.046	0.064	0.11	0.037	0.042	0.037	0.038
Nitrite (N)	mg/L	0.0061	<0.0050	0.0084	0.0066	0.0057	<0.050	<0.0050	<0.050	0.0066	<0.0050	<0.0050
Nitrate (N)	mg/L	0.17	0.192	0.154	0.15	0.162	<0.20	0.132	0.24	0.155	0.142	0.119
Dissolved Organic Carbon	mg/L	10.6	9.85	12.5	12	10.1	14.7	14.9	11.3	11.8	11.7	14
Aluminum, total	mg/L	2.92	1.88	8.93	5.17	1.81	7.34	2.11	1.2	0.998	2.14	2.6
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00209	0.00159	0.00481	0.00327	0.00175	0.00385	0.0019	0.00149	0.00143	0.0019	0.00193
Barium, total	mg/L	0.121	0.107	0.231	0.19	0.112	0.199	0.11	0.0935	0.0961	0.11	0.114
Beryllium, total	mg/L	0.00013	<0.00010	0.00031	0.00021	<0.00010	0.00023	<0.00010	<0.00010	<0.00010	<0.00010	0.00011
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000054	0.000033	0.000147	0.000096	0.000041	0.000113	0.000036	0.000013	0.000016	0.000034	0.000036
Calcium, total	mg/L	40.3	42.1	45.6	44	42	42.9	41.6	46.4	46.5	44.2	44.9
Chromium, total	mg/L	0.0056	0.0041	0.0181	0.0108	0.0038	0.0129	0.0043	0.0026	0.0025	0.0044	0.0055
Cobalt, total	mg/L	0.00203	0.00132	0.00599	0.00403	0.00138	0.00475	0.00147	0.0009	0.00077	0.00154	0.00181
Copper, total	mg/L	0.00808	0.00581	0.0201	0.0144	0.00573	0.0156	0.00595	0.00395	0.00361	0.00639	0.00651
Iron, total	mg/L	4.76	3.07	15.1	8.83	3.19	11.4	3.61	2.44	2.01	3.85	4.75
Lead, total	mg/L	0.00128	0.0008	0.00374	0.00239	0.00075	0.00274	0.00084	0.00046	0.00038	0.00084	0.00098
Lithium, total	mg/L	<0.0050	<0.0050	0.0068	<0.0050	<0.0050	0.0053	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	13.6	14.4	14.7	14.3	15	14.7	13.3	16.1	15.8	15	15.1
Manganese, total	mg/L	0.148	0.108	0.313	0.227	0.11	0.275	0.11	0.101	0.093	0.155	0.173
Mercury, total	mg/L	<0.000010	<0.000010	0.000023	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0019	0.0021	0.0018	0.0017	0.0017	0.0015	0.0015	0.0017	0.0019	0.0018	0.0016
Nickel, total	mg/L	0.0068	0.0048	0.0188	0.0129	0.0053	0.0142	0.0054	0.0037	0.0037	0.0055	0.0059
Phosphorus, total	mg/L	0.133	0.101	0.419	0.284	0.115	0.365	0.12	0.097	0.064	0.135	0.143
Potassium, total	mg/L	1.64	1.6	1.86	1.56	1.53	1.5	1.18	1.29	1.37	1.45	1.27
Selenium, total	mg/L	0.00019	0.00022	0.00046	0.00027	0.00021	0.00024	0.00016	0.00019	0.00022	0.0002	0.00017
Silicon, total	mg/L	12.6	10.4	24	15.2	9.76	19.7	11.7	9.24	9.03	11.5	12
Silver, total	mg/L	0.000043	<0.000020	0.000045	0.000031	0.000079	0.000028	<0.000020	<0.000020	<0.000020	0.000035	<0.000020
Sodium, total	mg/L	8.26	9.25	7.91	8.39	9.89	8.33	7.81	9.75	9.81	9.28	9.06
Strontium, total	mg/L	0.336	0.378	0.357	0.391	0.435	0.34	0.342	0.383	0.411	0.387	0.362
Sulpher, total	mg/L	3.6	6.1	3.9	3.6	4.8	3.9	4.3	5.4	5	3.6	4.7
Thallium, total	mg/L	<0.000050	<0.000050	0.00008	<0.000050	<0.000050	0.000061	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.126	0.0721	0.348	0.197	0.0827	0.274	0.0832	0.0491	0.0419	0.088	0.102
Uranium, total	mg/L	0.00161	0.0016	0.00189	0.00188	0.00158	0.00152	0.00119	0.00131	0.00151	0.00136	0.00119
Vanadium, total	mg/L	0.0098	0.0064	0.0308	0.0192	0.0074	0.0223	0.008	0.0053	<0.0050	0.0083	0.009
Zinc, total	mg/L	0.011	0.0073	0.0308	0.0195	0.0068	0.0242	0.0071	<0.0050	<0.0050	0.0084	0.0085
Zirconium, total	mg/L	0.00077	0.00059	0.0022	0.00146	0.00071	0.00164	0.00071	0.00065	<0.00050	0.00083	0.00076
Aluminum, dissolved	mg/L	0.0117	0.0126	0.0376	0.0225	0.0237	0.0239	0.0245	0.0194	0.0158	0.0185	0.0228
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00083	0.00072	0.00095	0.00088	0.00079	0.00082	0.00091	0.00086	0.0008	0.00085	0.00083
Barium, dissolved	mg/L	0.0658	0.0646	0.0644	0.0606	0.0701	0.066	0.068	0.0695	0.0728	0.0673	0.0712
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	36.5	36.2	34.2	33	40.4	35.2	36.6	38.2	40.7	38.4	37.6
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00151	0.00146	0.00266	0.00163	0.00158	0.00216	0.00213	0.00161	0.00151	0.00154	0.00149
Iron, dissolved	mg/L	0.269	0.201	0.403	0.405	0.359	0.512	0.575	0.397	0.352	0.357	0.526
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	10.9	13	11.1	10.9	13.2	11.3	11.6	12.7	13.2	13.3	12.6
Manganese, dissolved	mg/L	0.0548	0.039	0.053	0.0475	0.0315	0.0505	0.0388	0.0448	0.0484	0.0606	0.0632
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0023	0.0018	0.0017	0.0016	0.0018	0.0014	0.0015	0.0017	0.0018	0.0014	0.0014
Nickel, dissolved	mg/L	0.0012	0.0012	0.0016	0.0014	0.0013	0.0017	0.0018	0.0014	0.0014	0.0015	0.0015
Phosphorus, dissolved	mg/L	0.014	0.017	0.023	0.019	0.019	0.023	0.024	0.021	0.019	0.018	0.024
Potassium, dissolved	mg/L	1.28	1.27	1.02	0.924	1.23	0.833	1.03	1.04	1.26	1.04	0.984
Selenium, dissolved	mg/L	0.00017	0.00014	0.00016	0.00014	0.00013	0.00014	0.00014	0.00013	0.00013	0.00014	0.00012
Silicon, dissolved	mg/L	6.16	6.02	6.14	6.43	6.5	6.7	6.5	6.58	7.19	6.56	7.55
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	7.18	8.67	8.08	7.36	8.58	7.59	7.35	8.14	8.48	8.49	7.58
Strontium, dissolved	mg/L	0.312	0.335	0.259	0.275	0.363	0.274	0.28	0.345	0.366	0.345	0.332
Sulpher, dissolved	mg/L	5.4	6.4	4.2	5	5.9	4	5.4	5.6	5.4	4.4	4.3
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00139	0.00147	0.00117	0.00114	0.00132	0.00094	0.00109	0.00118	0.00125	0.0012	0.00101
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**06/09/2013**	**09/09/2013**	**18/09/2013**	**24/09/2013**	**03/10/2013**	**11/10/2013**	**18/10/2013**	**22/10/2013**	**31/10/2013**
Total Suspended Solids	mg/L	52.2	32.6	181	93.2	79.6	11.8	3.3	4.6	15.1
Total Dissolved Solids	mg/L	190	206	168	160	278	228	234	232	200
pH (field)	pH units	7.90	7.94	7.66	7.60	7.64	7.78	7.65	7.75	7.60
pH (lab)	pH units	8.05	8.13	8.13	8.18	8.16	8.18	8.28	8.2	8.19
Specific Conductance, field	µS/cm	312	318.2	294.4	291.3	306	316.4	311.9	359.6	322
Specific Conductance (lab)	µS/cm	314	318	286	290	303	323	316	361	323
Temperature (field)	C	4.3	4.4	1.5	1.6	0.2	0.1	-0.1	0.1	-0.1
Dissolved Oxygen (field)	mg/L	11.66	10.58	16.01	13.61	13.59	15.57	13.82	16.04	14.87
Dissolved Oxygen (field)	%	96.2	87.4	113.1	95.3	91.3	101.6	92.5	98	100.9
ORP (field)	mV	115.2	141.8	195.1	228.8	140.7	75.7	150.4	93.9	119.5
Hardness (from total)	mg/L	181	162	152	154	179	168	159	187	166
Hardness (from dissolved)	mg/L	154	166	145	147	152	166	157	192	160
Alkalinity, total	mg/L	151	153	139	135	142	154	153	173	154
Chloride	mg/L	2.2	2.2	2	2	2.3	2	2.2	1.8	1.8
Fluoride	mg/L	0.32	0.32	0.28	0.28	0.27	0.27	0.3	0.35	0.32
Sulphate, dissolved	mg/L	11.7	15.8	12.2	14.5	14.6	16.6	16.8	17.9	16.1
Ammonia	mg/L	0.02	0.022	0.037	0.032	0.049	0.038	0.028	0.06	0.02
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050
Nitrate (N)	mg/L	0.101	0.079	0.075	0.085	0.117	0.096	0.161	<0.20	0.174
Dissolved Organic Carbon	mg/L	12	13.2	14.5	14.9	13	14.2	11.5	11.9	10.7
Aluminum, total	mg/L	1.24	0.807	3.61	1.77	2.24	0.266	0.0895	0.129	0.327
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00153	0.00127	0.00249	0.00153	0.00179	0.00091	0.00074	0.0007	0.00069
Barium, total	mg/L	0.098	0.0875	0.132	0.0945	0.105	0.0736	0.0698	0.0757	0.0696
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000019	<0.000010	0.000068	0.000028	0.000035	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	46.8	41.1	38.7	40	46.6	43.1	40.5	48.2	42.4
Chromium, total	mg/L	0.0028	0.0019	0.0077	0.0034	0.0042	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	0.00099	0.00071	0.0027	0.00138	0.00153	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00403	0.00441	0.00928	0.00503	0.00524	0.00224	0.00191	0.00196	0.00195
Iron, total	mg/L	2.8	1.93	5.99	3.25	4.26	1.02	0.748	0.695	0.858
Lead, total	mg/L	0.00048	0.00036	0.00161	0.00072	0.00093	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	15.5	14.5	13.4	13.1	15.2	14.6	14.1	16.2	14.6
Manganese, total	mg/L	0.142	0.107	0.248	0.163	0.202	0.109	0.0895	0.0815	0.0811
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0014	0.002	0.0012	0.0011	0.0011	0.0012	0.0014	0.0014	0.0012
Nickel, total	mg/L	0.0042	0.0031	0.0091	0.0048	0.006	0.0022	0.0017	0.002	0.0019
Phosphorus, total	mg/L	0.087	0.071	0.2	0.111	0.165	0.037	0.033	0.026	0.035
Potassium, total	mg/L	1.31	1.53	1.23	0.976	1.17	0.948	1.03	1.14	1.05
Selenium, total	mg/L	0.00021	0.0002	0.00021	<0.00010	0.00013	0.00017	0.00015	0.00013	0.0001
Silicon, total	mg/L	9.91	8.07	12.5	10.1	12.8	7.38	7.39	8.03	7.33
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	9.32	9.12	7.43	7.95	8.34	8.56	8.57	9.6	8.21
Strontium, total	mg/L	0.383	0.416	0.307	0.319	0.354	0.349	0.364	0.399	0.351
Sulpher, total	mg/L	5.3	6.1	3.1	4.6	10.8	6.6	6.7	8.1	5.8
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.0491	0.0345	0.142	0.0712	0.105	0.0139	<0.0050	0.0071	0.0155
Uranium, total	mg/L	0.0012	0.00107	0.00111	0.00101	0.00102	0.00111	0.00113	0.00126	0.00104
Vanadium, total	mg/L	0.0052	<0.0050	0.0138	0.0062	0.0075	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	0.0134	0.0061	0.0078	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L	0.0006	0.00052	0.00117	0.00087	0.00062	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0181	0.0172	0.0223	0.019	0.017	0.0164	0.0115	0.0104	0.0093
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00097	0.00093	0.00085	0.00079	0.00079	0.00076	0.00067	0.00072	0.00053
Barium, dissolved	mg/L	0.0709	0.0759	0.065	0.0626	0.0636	0.0659	0.0641	0.0745	0.0652
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	40.1	43.3	38.1	38.4	39.8	43.1	40.5	50.4	40.8
Chromium, dissolved	mg/L	0.0021	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00181	0.00178	0.00178	0.0017	0.00174	0.00183	0.00148	0.0017	0.00126
Iron, dissolved	mg/L	0.631	0.585	0.482	0.533	0.615	0.547	0.571	0.477	0.255
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	13	14	12	12.4	12.8	14.1	13.5	16.1	14.1
Manganese, dissolved	mg/L	0.0704	0.0724	0.0958	0.0815	0.092	0.0927	0.0787	0.0751	0.0627
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0014	0.0017	0.0012	0.0011	0.0012	0.0011	0.0013	0.0014	0.0013
Nickel, dissolved	mg/L	0.0018	0.0018	0.0017	0.0017	0.0018	0.0025	0.0014	0.0015	0.0013
Phosphorus, dissolved	mg/L	0.024	0.022	0.021	0.022	0.026	0.026	0.021	0.024	0.015
Potassium, dissolved	mg/L	1.09	1.17	0.933	0.827	0.913	0.927	0.972	1.18	1.07
Selenium, dissolved	mg/L	0.00013	0.00014	0.00011	0.00012	0.00013	0.00013	0.00011	0.00012	0.00015
Silicon, dissolved	mg/L	7.02	7.66	7.17	7.27	7.31	6.36	6.58	7.35	6.92
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	8.05	8.89	7.54	7.51	7.82	8.57	8.09	9.78	8.55
Strontium, dissolved	mg/L	0.35	0.387	0.3	0.292	0.32	0.337	0.333	0.39	0.366
Sulpher, dissolved	mg/L	4.4	5.5	4.8	5.1	4.9	6.1	5.5	7.2	5.5
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00106	0.00118	0.00089	0.00087	0.00092	0.00097	0.00106	0.00128	0.00113
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**08/11/2013**	**14/11/2013**	**18/11/2013**	**01/12/2013**	**18/03/2014**	**25/03/2014**	**08/04/2014**	**17/04/2014**	**22/04/2014**	**01/05/2014**	**06/05/2014**	**17/05/2014**	**19/05/2014**
Total Suspended Solids	mg/L	1.2	1.7	5	29.2	<1.0	<1.0	<1.0	<1.0	3	29.9	73.3	310	385
Total Dissolved Solids	mg/L	210	216	238	244	746	572	320	222	114	112	160	176	190
pH (field)	pH units	7.95	7.82	7.96	8.70	8.35	8.26	8.15	8.21	8.07	8.14	8.23	7.31	7.44
pH (lab)	pH units	8.19	8.34	8.3	8.14	8.49	8.45	8.36	8.2	7.87	7.65	7.98	8.17	8.14
Specific Conductance, field	µS/cm	184.6	332.5	363.8	375.4	1069	882.4	441.1	364.9	175.9	139.8	199.1	299	287.4
Specific Conductance (lab)	µS/cm	361	386	389	463	1050	862	482	370	142	116	203	269	267
Temperature (field)	C	0.1	0	0	0	-0.1	0	0	0	-0.1	0	0	4.2	2.9
Dissolved Oxygen (field)	mg/L	9.12	13.89	14.31	0.67	15.69	18.33	13.19	13.58	13.85	13.91	14.15	11.98	12.42
Dissolved Oxygen (field)	%	60.9	93.5	98	4.6	107.5	126.6	90.3	92.9	94.7	95.1	97	91.9	92.2
ORP (field)	mV	118.3	176.0	-232.7	-7.5	151.5	125.9	92.7	143.8	196.4	107.7	116.5	109.6	111.6
Hardness (from total)	mg/L	189	218	206	227	521	433	220	160	69.4	60.8	95.3	165	163
Hardness (from dissolved)	mg/L	172	183	209	219	529	433	215	167	69	53.3	89.1	119	118
Alkalinity, total	mg/L	172	180	183	210	508	408	198	155	61.7	48.1	76.3	108	105
Chloride	mg/L	1.9	2	2.3	2.9	14	9.5	9.3	6.7	2.9	1.9	3.3	3.8	3.4
Fluoride	mg/L	0.37	0.39	0.39	0.41	1.1	0.96	0.47	0.34	0.16	0.13	0.2	0.28	0.27
Sulphate, dissolved	mg/L	19.4	21.8	24.8	27.6	104	77.7	41.2	28.4	<0.50	<0.50	19.9	24.1	22.7
Ammonia	mg/L	0.023	0.022	0.025	0.021	0.076	0.02	0.015	0.033	0.019	0.023	0.049	0.093	0.084
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0077	0.0193	0.0206
Nitrate (N)	mg/L	0.199	0.229	0.32	0.291	0.064	0.021	0.075	0.241	0.065	0.246	0.944	0.965	1.02
Dissolved Organic Carbon	mg/L	9.54	10.2	10.2	8.7	23.5	15.1	14.6	8.24	19.5	21	17.7	11.3	12.7
Aluminum, total	mg/L	0.0399	0.0501	0.124	0.428	0.0259	0.0149	0.0382	0.0262	0.0763	0.729	1.81	8.63	9.38
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00048	0.00059	0.00043	0.00057	0.00117	0.00095	0.00047	0.00041	0.00039	0.00087	0.00148	0.00537	0.00556
Barium, total	mg/L	0.0764	0.08	0.0757	0.102	0.187	0.162	0.076	0.0576	0.0342	0.0443	0.0827	0.265	0.264
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00033	0.00032
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	0.000014	0.000024	0.000027	0.00002	0.000013	0.000026	0.000024	0.000037	0.000187	0.000153
Calcium, total	mg/L	49.3	55.4	52.5	57.8	120	103	52.5	39.1	17.7	15.6	24	41.5	41.4
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0017	0.0033	0.0163	0.0176
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00072	0.00151	0.00739	0.00777
Copper, total	mg/L	0.00171	0.00302	0.0046	0.00962	0.0154	0.00535	0.00642	0.00544	0.0109	0.0122	0.0154	0.0414	0.0426
Iron, total	mg/L	0.276	0.328	0.419	0.8	0.126	0.074	0.085	0.128	0.208	1.42	3.03	14.9	16.7
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00037	0.00086	0.00456	0.00479
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0059	0.0052	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0063	0.0072
Magnesium, total	mg/L	16	19.3	18.2	20	53.5	42.9	21.6	15.2	6.14	5.29	8.59	14.8	14.4
Manganese, total	mg/L	0.0775	0.0853	0.0553	0.098	0.0615	0.0402	0.0132	0.0091	0.0308	0.0933	0.182	0.563	0.585
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000050	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0016	0.0016	0.0016	0.0015	0.002	0.002	0.0019	0.002	<0.0010	0.0011	0.0017	0.0024	0.0025
Nickel, total	mg/L	0.0012	0.002	0.0019	0.002	0.0016	0.0013	0.001	<0.0010	0.0013	0.003	0.0048	0.0205	0.0223
Phosphorus, total	mg/L	0.017	0.029	0.015	0.029	0.076	0.034	0.042	0.022	0.073	0.079	0.146	0.629	0.655
Potassium, total	mg/L	1.28	1.38	1.27	1.74	9	5.94	3.95	2.51	1.98	1.7	1.86	3.15	3.14
Selenium, total	mg/L	<0.00010	0.00028	0.00019	0.00022	0.00092	0.0006	0.00037	0.0008	0.00021	0.00031	0.00028	0.00056	0.00069
Silicon, total	mg/L	8.09	7.44	6.78	9.49	19.4	16	7.94	4.99	3.58	4.5	6.66	20.5	21.8
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000063	0.00006
Sodium, total	mg/L	9.21	11.9	11.5	13.2	39.6	29.9	16.3	11.3	4.42	4.14	6.42	8.82	8.75
Strontium, total	mg/L	0.423	0.468	0.45	0.534	1.1	0.984	0.48	0.417	0.163	0.142	0.271	0.454	0.463
Sulpher, total	mg/L	4.9	7.5	8.8	12.3	32.2	27.3	14.9	8.9	<3.0	<3.0	5.6	9.2	7.6
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000075	0.000075
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	0.0276	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0312	0.0765	0.348	0.385
Uranium, total	mg/L	0.00126	0.00154	0.00138	0.00159	0.00397	0.00318	0.00112	0.00089	0.00025	0.00025	0.00068	0.00182	0.00173
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.006	0.0299	0.0325
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0078	0.0105	0.0397	0.0407
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0006	0.00148	0.00172
Aluminum, dissolved	mg/L	0.0066	0.0078	0.0067	0.005	0.009	0.0065	0.0051	0.0034	0.025	0.0453	0.0316	0.0168	0.026
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00047	0.0005	0.00047	0.00038	0.00125	0.00095	0.00046	0.00034	0.00036	0.00046	0.00055	0.00077	0.00064
Barium, dissolved	mg/L	0.0725	0.0764	0.0751	0.0945	0.22	0.165	0.0757	0.0612	0.0327	0.0308	0.0486	0.0655	0.0626
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000028	0.000026	0.000018	0.000012	0.00002	0.000013	<0.000010	0.000029	<0.000010
Calcium, dissolved	mg/L	43.4	46.6	53.5	56.3	125	102	53	41.8	17.8	14	23.1	31.2	30.9
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00137	0.00158	0.00194	0.00205	0.00792	0.00475	0.00519	0.00498	0.00771	0.00793	0.00764	0.00812	0.00765
Iron, dissolved	mg/L	0.179	0.171	0.15	0.105	0.0555	0.0464	0.0275	0.0324	0.0855	0.223	0.3	0.358	0.403
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	15.5	16.1	18.4	19	52.6	43.2	20.1	15.3	5.95	4.48	7.65	10	9.9
Manganese, dissolved	mg/L	0.0741	0.0738	0.0514	0.0751	0.0648	0.0389	0.0106	0.0085	0.0265	0.053	0.102	0.0887	0.0577
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000050	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0014	0.0015	0.0015	0.0013	0.002	0.0019	0.0017	0.0021	<0.0010	<0.0010	0.0019	0.0025	0.0024
Nickel, dissolved	mg/L	0.0013	0.0014	0.0012	0.0011	0.0016	0.0011	<0.0010	<0.0010	<0.0010	0.0015	0.0016	0.0013	0.0012
Phosphorus, dissolved	mg/L	0.011	0.014	0.015	<0.01	0.069	0.031	0.027	0.012	0.038	0.027	0.024	0.028	0.021
Potassium, dissolved	mg/L	1.2	1.23	1.44	1.64	9.14	6.08	4.22	2.68	1.95	1.59	1.65	2.06	1.88
Selenium, dissolved	mg/L	0.00015	0.00017	0.00015	0.0002	0.00082	0.00055	0.00035	0.00031	0.00013	0.00013	0.00031	0.00042	0.0004
Silicon, dissolved	mg/L	7.01	6.79	7.23	8.02	21	16.1	7.69	5.25	3.34	2.81	3.74	4.17	4.29
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	9.48	9.89	12	12.3	39.5	31.2	15.5	11.4	4.13	3.79	6.5	8.1	7.71
Strontium, dissolved	mg/L	0.403	0.453	0.465	0.515	1.19	1.04	0.435	0.42	0.157	0.131	0.251	0.376	0.362
Sulpher, dissolved	mg/L	6.2	7	8.8	10.6	36.3	25.7	14.9	9.2	3.2	<3.0	4.5	7.3	7.3
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00119	0.00137	0.00136	0.00158	0.00396	0.00324	0.0011	0.00092	0.0002	0.00019	0.00055	0.00094	0.00086
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**28/05/2014**	**08/06/2014**	**14/06/2014**	**17/06/2014**	**26/06/2014**	**01/07/2014**	**10/07/2014**	**17/07/2014**	**23/07/2014**	**02/08/2014**	**14/08/2014**
Total Suspended Solids	mg/L	95.8	17.2	10.7	5.9	11.8	2.5	2.3	11.5	22.4	11.6	3.5
Total Dissolved Solids	mg/L	171	174	166	208	184	212	178	204	176	258	196
pH (field)	pH units	8.35	7.53	8.13	8.14	8.32	8.36	8.47	7.78	8	8.21	8.2
pH (lab)	pH units	8.21	8.28	8.11	8.27	8.3	8.23	8.34	8.25	8.26	8.26	8.37
Specific Conductance, field	µS/cm	301.4	271.8	296	298.3	326.1	326.3	323.5	320.9	301.8	335.7	337.1
Specific Conductance (lab)	µS/cm	242	286	290	301	318	322	326	340	303	317	346
Temperature (field)	C	2.3	3.7	4.9	4.4		6.3	6.3	6.1	5.7	6.2	4.8
Dissolved Oxygen (field)	mg/L	13.46	12.99	12.19	11.77	12.3	11.86	11.63	12.03	11.96	12.22	12.21
Dissolved Oxygen (field)	%	98.2	98.6	95.4	90.8	96.5	95.8	94.3	97.2	95.6	97.7	95.2
ORP (field)	mV	103.2	71.8	162	140.9	201	213.1	199.2	155.3	101.6	129.6	141.3
Hardness (from total)	mg/L	118	138	153	151	157	161	157	167	153	159	189
Hardness (from dissolved)	mg/L	108	134	137	139	144	160	158	165	145	155	158
Alkalinity, total	mg/L	110	133	138	143	151	154	154	158	148	153	169
Chloride	mg/L	1.9	1.8	2.1	1.8	1.1	1.8	1.8	1.7	2.4	1.6	2
Fluoride	mg/L	0.29	0.35	0.36	0.37	0.4	0.41	0.42	0.42	0.37	0.36	0.4
Sulphate, dissolved	mg/L	16.3	14.7	15.1	15.1	16.2	17.9	18.4	17.6	14.5	13.5	16.7
Ammonia	mg/L	0.038	0.033	0.034	0.046	0.04	0.034	0.024	0.012	0.024	0.013	0.015
Nitrite (N)	mg/L	0.0066	<0.0050	0.0053	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.192	0.162	0.166	0.15	0.125	0.127	0.111	0.105	0.096	0.092	0.102
Dissolved Organic Carbon	mg/L	13.3	9.86	9.71	7.96	8.19	7.47	8.15	8.44	11.4	10.5	9.36
Aluminum, total	mg/L	1.67	0.452	0.291	0.175	0.295	0.0891	0.0887	0.0488	0.591	0.315	0.0876
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00151	0.00088	0.00088	0.00071	0.00076	0.00063	0.00068	0.00065	0.00093	0.00095	0.00077
Barium, total	mg/L	0.0894	0.0685	0.0687	0.0633	0.0704	0.0651	0.0659	0.0644	0.0764	0.0766	0.0729
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000035	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000018	0.000013	0.000011	<0.000010
Calcium, total	mg/L	30.5	34.4	39	38.3	40.5	39.9	39.7	41.8	38.3	40.4	47.1
Chromium, total	mg/L	0.0035	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	<0.0010	<0.0010
Cobalt, total	mg/L	0.00136	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00905	0.00385	0.0033	0.00235	0.00259	0.00229	0.00185	0.0022	0.00325	0.00309	0.00295
Iron, total	mg/L	3.21	0.966	0.729	0.515	0.702	0.306	0.303	0.261	1.2	0.764	0.395
Lead, total	mg/L	0.00088	0.00027	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00027	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	10.2	12.7	13.6	13.3	13.6	14.8	13.9	15.3	13.9	14.1	17.3
Manganese, total	mg/L	0.122	0.0491	0.0397	0.0328	0.0411	0.0235	0.023	0.0266	0.0611	0.0424	0.0338
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0013	0.0017	0.0017	0.0017	0.0016	0.0019	0.0017	0.0017	0.0015	0.0014	0.0019
Nickel, total	mg/L	0.005	0.0022	0.0018	0.0016	0.0016	0.0014	0.0013	0.0011	0.0023	0.0018	0.0013
Phosphorus, total	mg/L	0.101	0.038	0.026	0.026	0.023	0.017	0.016	0.022	0.047	0.028	0.031
Potassium, total	mg/L	1.48	1.35	1.36	1.32	1.32	1.41	1.29	1.22	1.24	1.22	1.52
Selenium, total	mg/L	0.00018	0.0002	0.00017	0.00018	0.00013	0.00018	<0.00010	0.00018	0.00012	<0.00010	0.00011
Silicon, total	mg/L	7.91	6.13	6.7	6.26	6.56	6.11	5.76	6.24	6.92	6.81	7.3
Silver, total	mg/L	0.000022	<0.000020	<0.000020	0.000262	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	6.91	8.69	9.29	8.91	8.81	9.7	9.11	9.71	9.51	9.57	10.4
Strontium, total	mg/L	0.327	0.36	0.388	0.373	0.407	0.401	0.41	0.429	0.403	0.398	0.454
Sulpher, total	mg/L	4	<3.0	8.2	4.7	7.2	10.4	5	7	6.4	6.3	4.7
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.0626	0.0207	0.0112	0.0077	0.0124	<0.0050	<0.0050	<0.0050	0.0221	0.0114	<0.0050
Uranium, total	mg/L	0.00103	0.00119	0.00136	0.00133	0.00138	0.00147	0.00127	0.0014	0.0011	0.0012	0.00149
Vanadium, total	mg/L	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	0.0099	0.005	<0.0050	<0.0050	<0.0050	0.0066	<0.0050	0.0134	<0.0050	0.0072	<0.0050
Zirconium, total	mg/L	0.00065	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.014	0.0182	0.0106	0.0123	0.0086	0.0087	0.0082	0.0093	0.0108	0.012	0.0063
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00066	0.00061	0.00063	0.00057	0.00059	0.00058	0.0006	0.00063	0.00056	0.00075	0.00061
Barium, dissolved	mg/L	0.0546	0.0593	0.0603	0.0602	0.0615	0.0656	0.0662	0.0632	0.061	0.0685	0.0598
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	0.00003	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	27.3	34.4	35.2	35.1	37.9	40.8	40.4	40.9	36.8	38	40.2
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00276	0.00245	0.00199	0.00195	0.00149	0.00182	0.0016	0.00194	0.00199	0.00195	0.00167
Iron, dissolved	mg/L	0.375	0.199	0.183	0.186	0.126	0.142	0.141	0.201	0.232	0.226	0.219
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	9.58	11.7	11.9	12.4	12.1	14.1	13.9	15.3	13	14.6	13.9
Manganese, dissolved	mg/L	0.0337	0.0236	0.0239	0.0235	0.0197	0.0175	0.0177	0.0207	0.0174	0.0195	0.0237
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0015	0.0016	0.0016	0.0019	0.0017	0.0019	0.0018	0.0019	0.0015	0.0016	0.0017
Nickel, dissolved	mg/L	0.0014	0.0012	0.0013	0.0012	<0.0010	0.001	0.001	0.0013	0.0013	0.0013	0.0012
Phosphorus, dissolved	mg/L	0.016	0.014	0.015	0.015	0.013	0.014	0.014	0.018	0.014	0.014	0.019
Potassium, dissolved	mg/L	1.31	1.3	1.25	1.27	1.32	1.45	1.34	1.27	1.03	1.17	1.12
Selenium, dissolved	mg/L	0.00015	0.00016	0.00014	0.00011	0.00012	0.00011	0.00011	0.0001	0.00013	0.00013	0.00011
Silicon, dissolved	mg/L	4.83	5.82	5.43	5.44	5.67	6.3	5.73	5.54	6	5.97	6.26
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	6.68	8.12	8.32	8.51	8.32	9.3	8.82	10.8	8.52	9.35	8.91
Strontium, dissolved	mg/L	0.316	0.342	0.368	0.362	0.38	0.411	0.422	0.416	0.374		0.433
Sulpher, dissolved	mg/L	4.8	5.9	5.2	6.2	6	6.5	5.2	3.8	<3.0	7040	5.1
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00084	0.00112	0.00117	0.00132	0.0013	0.00141	0.00129	0.0014	0.00104	0.00106	0.00114
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**18/08/2014**	**26/08/2014**	**01/09/2014**	**11/09/2014**	**16/09/2014**	**22/09/2014**	**30/09/2014**	**07/10/2014**	**14/10/2014**	**25/10/2014**	**31/10/2014**	**06/11/2014**	**11/11/2014**	**22/11/2014**	**28/11/2014**	**05/12/2014**	**14/12/2014**	**14/03/2015**	**15/03/2015**	**02/04/2015**	**10/04/2015**	**17/04/2015**	**23/04/2015**	**01/05/2015**	**09/05/2015**	**14/05/2015**	**21/05/2015**	**28/05/2015**	**06/06/2015**	**10/06/2015**	**20/06/2015**	**25/06/2015**	**02/07/2015**
Total Suspended Solids	mg/L	3.7	9.3	1.2	2.7	11.4	55.9	175	18.9	12.3	3.7	2.3	<1.0	<1.0	86.5	<1.0	<1.0	<1.0	2.8		7.4	8.4	3.7	5.2	91.5	586	727	146	33.4	12.9	7.4	7.3	4	10.6
Total Dissolved Solids	mg/L	214	210	202	228	212	194	198	210	200	198	254	224	220	346	258	316	312	368		318	254	262	190	132	128	160	210	232	150	194	206	218	220
pH (field)	pH units	8.26	8.21	8.24	8.15	8.15	8.11	8.05	8.14	7.79	8.14	7.63	7.80	7.47	7.71	7.44	8.07	7.67		7.91	8.16	8.29	8.16	8.04	7.77	7.65	7.73	7.96	7.82	7.94	7.96	8	7.96	8.01
pH (lab)	pH units	8.31	8.25	8.38	8.31	8.22	8.32	8.13	8.19	8.2	8.14	8.2	8.12	8.13	8.14	7.82	8.08	7.91	8.36		8.23	8.18	8.17	7.86	7.85	7.99	8.03	8.09	8.23	8.17	8.22	8.14	8.21	8.26
Specific Conductance, field	µS/cm	355	250.5	338.9	347.5	231.2	310.5	308.1	320.8	334.9	342.4	387.8	392.8	430.4	580.1	506.6	404.5	535.2		553.4	509.4	412.8	443.1	304.4	166.8	196.6	243.1	318.4	363.2	304.6	321.2	345.6	345.3	334
Specific Conductance (lab)	µS/cm	346	346	344	334	334	318	303	329	320	338	372	378	386	530	1380	511	507	618		515	413	449	301	163	203	247	314	369	306	320	345	353	343
Temperature (field)	C	5.8	4.6	2.4	2.6	3	2	-0.7	-1.3	-1.4	-1.5	-1.6	-1.7	-1.8	-1.8	-1.9	-1.9	-1.9		-0.1	0	0	-0.1	0	0	0.1	6	6.4	5	3	4.5	6	5.8	5.1
Dissolved Oxygen (field)	mg/L	11.65	12.66	13.41	14.83	12.69	12.87	19.57	15.06	14.41	14.66	12.91	14.65	13.00	12.85	21.44	4.35	14.62		0.9	13.42	14.4	14.05	14.63	13.78	14.79	11.4	11.93	11.94	13.15	12.43	12	11.82	98.1
Dissolved Oxygen (field)	%	93.4	98.2	98.2	109.3	94.3	93	97.9	99.1	94.5	96.2	84.4	95.5	84.6	84.7	139.9	28.5	94.8		6.2	93.3	98.7	96.1	100.2	94.5	101.5	91.5	95.3	93.6	97.8	96.1	96.5	94.7	94.27
ORP (field)	mV	147.1	179.6	138	193.5	176.5	186.4	177.8	179.5	214.6	143.0	267.7	227.5	205.2	182.6	213.2	243.2	196.9		180.5	165.1	190.4	210.2	222.2	187	130.6	117.1	150.8	143.5	128.6	124	160.9	156.8	113.4
Hardness (from total)	mg/L	179	183	157	161	164	167	150	171	167	171	192	184	181	280	236	254	233	295		266	182	198	132	84.9	128	136	148	168	146	163	161	180	171
Hardness (from dissolved)	mg/L	165	161	169	164	161	142	141	158	156	167	188	185	200	274	211	254	225	295		242	179	194	127	76.6	91.5	104	146	152	150	154	157	178	167
Alkalinity, total	mg/L	169	163	169	166	160	151	142	159	157	156	180	183	180	246	212	219	152	291		224	136	148	96.6	63.1	80.7	93	120	145	139	141	154	161	157
Chloride	mg/L	2	1.7	1.7	2	2	1.9	2.1	1.9	1.8	1.5	2.7	2.3	2.5	4.1	3.8	5.1	7.2	4.7		3.9	5.9	8.1	5.1	3.1	2.8	3.8	4.7	4.5	1.8	2.2	1.8	2	2.4
Fluoride	mg/L	0.37	0.39	0.37	0.37	0.38	0.37	0.33	0.34	0.32	0.38	0.39	0.41	0.43	0.38	0.43	0.43	0.45	0.64		0.54	0.41	0.37	0.27	0.17	0.22	0.26	0.29	0.36	0.36	0.4	0.45	0.43	0.42
Sulphate, dissolved	mg/L	14.9	15.3	15.2	14.7	16.8	14.1	15.9	16.6	16.3	17.6	21.3	21.6	25.3	42.1	46.4	49.1	87.7	56		51.4	59.7	61.2	39.5	5.87	16.7	22.2	28.4	34.5	18.3	20.5	24.8	24.4	21.7
Ammonia	mg/L	0.017	0.023	0.039	0.013	0.034	0.016	0.018	0.026	0.016	0.035	0.024	0.0059	0.012	0.024	0.007	0.016	0.026	0.036		0.033	0.016	0.01	0.032	0.041	0.07	0.11	0.05	0.026	0.025	0.033	0.0056	0.013	0.037
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0163	<0.0050		<0.0050	0.0097	0.0133	0.0236	<0.050	0.0052	0.0111	0.0167	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.077	0.07	0.044	0.022	<0.020	<0.020	0.062	0.085	0.108	0.138	0.176	0.168	0.182	0.287	0.332	0.459	2.59	0.339		0.123	1.46	2.12	1.38	0.5	0.414	0.715	1	0.845	0.16	0.144	0.191	0.157	0.134
Dissolved Organic Carbon	mg/L	10.7	9.03	8.87	9.31	9.71	10.4	11	10.6	9.88	8.48	8.88	8.41	7.66	11.1	6.81	8.2	8.78	7.81		5.76	7.87	6.68	10.4	17.7	12.5	10.7	10.1	6.65	6.3	7.55	5.81	5.33	8.13
Aluminum, total	mg/L	0.113	0.199	0.0318	0.0186	0.02	0.975	0.638	0.128	0.224	0.0796	0.0415	0.0181	0.0172	0.566	0.0107	0.0196	0.0153	0.0741		0.206	0.111	0.242	0.129	1.92	5.47	6.87	2.54	0.476	0.26	0.18	0.15	0.11	0.267
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00072	0.00092	0.00056	0.00088	0.00068	0.00146	0.00101	0.00069	0.00072	0.00059	0.00041	0.00037	0.00039	0.00075	0.00034	0.00031	0.00035	0.00054		0.00055	0.00044	0.00052	0.00059	0.00151	0.00394	0.00424	0.00186	0.00069	0.00068	0.00061	0.0006	0.00064	0.00067
Barium, total	mg/L	0.0686	0.079	0.0635	0.0648	0.0648	0.0846	0.0752	0.0647	0.0625	0.0631	0.0696	0.0695	0.075	0.119	0.0911	0.103	0.0988	0.11		0.0915	0.0817	0.0963	0.067	0.0778	0.213	0.217	0.119	0.0867	0.0627	0.0638	0.0675	0.068	0.068
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00029	0.00029	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000019	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000014	<0.000010	<0.000010	<0.000010	0.000011		<0.000010	0.000011	0.000011	<0.000010	0.000041	0.000138	0.000137	0.000064	0.000016	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	44.4	46.3	39.1	41.6	41.4	42.7	37.2	43.8	42.2	42.5	48.6	46.7	44.2	70.4	56	63.3	60.8	74.6		64.5	45.4	49.8	34.1	21.8	32.2	33.9	37.3	43.3	37.3	41.1	42	46.4	44.1
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0021	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.004	0.0117	0.0141	0.0051	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00085	0.00061	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	0.00146	0.00511	0.00637	0.00192	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00227	0.0024	0.00144	0.00153	0.00158	0.00438	0.00363	0.0018	0.00201	0.0017	0.00166	0.00142	0.00153	0.00587	0.00201	0.00223	0.00485	0.00793		0.0161	0.00782	0.00919	0.00788	0.019	0.0326	0.0363	0.0182	0.00499	0.00305	0.00228	0.00326	0.00212	0.00258
Iron, total	mg/L	0.426	0.624	0.321	0.24	0.238	2.17	1.42	0.457	0.613	0.412	0.243	0.159	0.142	1.09	0.093	0.124	0.069	0.233		0.406	0.238	0.289	0.385	3.24	11.1	11.7	4.09	0.934	0.53	0.361	0.323	0.297	0.557
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00048	0.00036	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00029	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	0.00094	0.00356	0.00375	0.00125	0.0003	<0.00020	<0.00020	0.00085	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	16.4	16.3	14.3	13.8	14.7	14.7	13.8	15.1	14.9	15.8	17.1	16.4	17.3	25.2	23.2	23.4	19.8	26.5		25.5	16.7	17.8	11.3	7.38	11.5	12.4	13.3	14.4	12.9	14.6	13.7	15.5	14.7
Manganese, total	mg/L	0.0377	0.0522	0.032	0.0256	0.0155	0.171	0.12	0.0562	0.061	0.0562	0.0467	0.0412	0.0485	0.0931	0.0798	0.0635	0.0383	0.0963		0.096	0.127	0.128	0.0715	0.194	0.796	0.612	0.18	0.057	0.0289	0.0206	0.0188	0.0157	0.03
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0018	0.0018	0.0016	0.0014	0.0016	0.0014	0.0013	0.0014	0.0014	0.0014	0.0011	0.0014	0.0014	0.0018	0.0018	0.0019	0.0074	0.0026		0.0018	0.005	0.0053	0.0039	0.0014	0.0015	0.0022	0.0029	0.0027	0.0017	0.0018	0.002	0.0018	0.0018
Nickel, total	mg/L	0.0014	0.0021	0.0014	0.0011	0.0012	0.0029	0.0027	0.0014	0.0017	0.0012	0.0012	0.0012	0.0012	0.0035	<0.0010	<0.0010	<0.0010	0.0016		<0.0010	0.0012	<0.0010	<0.0010	0.0048	0.0135	0.0187	0.006	0.002	0.0013	0.0012	0.0014	0.0014	0.0014
Phosphorus, total	mg/L	0.024	0.039	0.014	0.017	0.019	0.077	0.065	0.021	0.035	0.015	0.021	0.016	0.015	0.054	0.01	0.021	0.025	0.026		0.03	0.019	0.03	0.027	0.136	0.521	0.672	0.181	0.051	0.025	0.024	0.014	0.013	0.024
Potassium, total	mg/L	1.53	1.49	1.23	1.2	1.33	1.52	1.09	1.12	1.21	1.12	1.27	1.23	1.4	2.23	2.11	2.04	5.49	2.93		2.81	4.25	4.55	3.54	2.01	2.2	2.68	2.87	2.41	1.52	1.74	1.58	1.85	1.54
Selenium, total	mg/L	0.00011	0.0002	0.00015	0.00012	<0.00010	0.00018	0.00012	0.00016	0.00021	0.00012	<0.00010	0.00015	0.00012	0.00029	0.00026	0.00016	0.00085	0.00038		0.00023	0.00053	0.00075	0.00047	0.00027	0.00053	0.0005	0.00045	0.00033	0.0001	0.00014	0.00014	<0.00010	0.00016
Silicon, total	mg/L	6.64	7.23	5.35	6.56	6.32	8.53	6.9	7.21	7.31	6.58	7.28	6.99	6	10.2	7.19	7.84	3.31	9.65		8.52	3.68	4.14	4.3	7.13	14.5	15.7	8.09	5.91	5.79	6.32	6.11	6.85	7.26
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000021	0.000023	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000021	0.000027	<0.000020	<0.000020	<0.000020	<0.000020	0.000035	<0.000020	<0.000020
Sodium, total	mg/L	9.78	10.2	9.3	9.14	9.43	9.15	8.48	9.2	8.91	9.25	10.4	10.4	10.8	16.1	15.3	15.6	18.7	19		17.7	16.1	17.2	13.9	6.06	6.65	9.58	12.5	11.5	9.38	10.1	11.5	10.3	9.81
Strontium, total	mg/L	0.421	0.455	0.408	0.406	0.407	0.392	0.353	0.395	0.384	0.405	0.449	0.434	0.478	0.674	0.561	0.606	0.997	0.828		0.62	0.706	0.792	0.514	0.271	0.359	0.428	0.503	0.55	0.421	0.446	0.486	0.504	0.454
Sulpher, total	mg/L	5.6	6.4	<3.0	5	4.9	3.7	5.5	5.5	7.5	3.3	8.6	8.8	6.4	19.4	16	19.1	26.5	18.5		15.8	19.2	22	7.1	4.3	4.7	10.5	12.4	11.9	7.1	5.8	6.3	8.6	8.3
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.00011		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000056	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.0052	0.0073	<0.0050	<0.0050	<0.0050	0.0359	0.0257	0.0069	0.0091	<0.0050	<0.0050	<0.0050	<0.0050	0.0287	<0.0050	<0.0050	<0.0050	<0.0050		0.0116	0.0059	0.0061	<0.0050	0.0865	0.22	0.31	0.112	0.0189	0.0143	0.0083	0.0054	0.0063	0.0116
Uranium, total	mg/L	0.00137	0.00138	0.00122	0.00121	0.0012	0.00121	0.00112	0.00117	0.00119	0.00133	0.00139	0.00136	0.00146	0.00231	0.0015	0.00155	0.00174	0.00302		0.00221	0.00148	0.00172	0.00091	0.00057	0.00119	0.0014	0.00127	0.00159	0.00132	0.00144	0.00164	0.00156	0.00149
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	0.0073	0.0211	0.026	0.0096	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0322	<0.0050	<0.0050	0.0277		<0.0050	0.0062	<0.0050	<0.0050	0.0095	0.0271	0.032	0.0108	<0.0050	<0.0050	<0.0050	0.0054	<0.0050	<0.0050
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	0.00091	0.00206	0.00146	0.00087	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.01	0.0085	0.0084	0.0065	0.0074	0.0092	0.0081	0.0084	0.0078	0.0068	0.0098	0.0067	0.0062	0.0079	0.0087	0.0062	0.0033	0.0052		0.0036	0.0058	0.0072	0.0153	0.0445	0.0262	0.0133	0.0105	0.0196	0.0079	0.0081	0.006	0.0155	0.008
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00071	0.00067	0.00058	0.00058	0.00056	0.0006	0.00058	0.00055	0.00055	0.00052	0.00044	0.00041	0.00036	0.00046	0.00032	0.00034	0.00039	0.00051		0.00044	0.00042	0.00042	0.0005	0.00052	0.00056	0.00056	0.00054	0.00043	0.00051	0.00047	0.00049	0.00053	0.00054
Barium, dissolved	mg/L	0.0707	0.0666	0.065	0.0648	0.067	0.0623	0.0562	0.0578	0.0564	0.0615	0.074	0.0704	0.0786	0.107	0.0895	0.108	0.0925	0.107		0.0915	0.0755	0.0888	0.0651	0.0428	0.0451	0.0532	0.0634	0.0671	0.0604	0.0597	0.0614	0.0671	0.0621
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00001		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	40.4	40.1	42.9	41.9	40.6	35	35.3	40.4	40.1	42.6	46.9	46.5	51.8	69.2	51.3	65.3	58.2	73.3		58.3	46.5	50.3	33.3	20.4	23.5	26.7	37.8	39.3	38.4	38.3	40	46.1	42.4
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.0023	0.00159	0.00131	0.00148	0.00128	0.00152	0.0016	0.00151	0.00156	0.00138	0.00151	0.00127	0.00145	0.00218	0.00185	0.00175	0.0041	0.00326		0.00214	0.00414	0.00433	0.00649	0.00756	0.00414	0.00628	0.00554	0.00262	0.00177	0.0016	0.00146	0.00151	0.00158
Iron, dissolved	mg/L	0.253	0.198	0.22	0.202	0.161	0.206	0.192	0.361	0.189	0.214	0.123	0.104	0.098	0.101	0.0886	0.0617	0.0481	0.0714		0.0639	0.0695	0.0629	0.182	0.236	0.217	0.173	0.172	0.0854	0.0881	0.0772	0.0643	0.0808	0.0802
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	15.6	14.8	15	14.3	14.6	13.2	12.9	13.9	13.7	14.6	17.1	16.6	17.2	24.6	20.1	22.1	19.3	27.2		23.5	15.2	16.6	10.6	6.24	7.98	9.14	12.5	13.1	13.2	14.2	13.9	15.3	14.8
Manganese, dissolved	mg/L	0.0222	0.0234	0.0302	0.0245	0.0141	0.0282	0.0343	0.0404	0.0342	0.0425	0.0439	0.039	0.0474	0.0263	0.0656	0.0656	0.0342	0.0872		0.0742	0.117	0.106	0.0675	0.0715	0.0945	0.017	0.0088	0.0093	0.0112	0.0089	0.0077	0.0086	0.0103
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0016	0.0017	0.0016	0.0015	0.0016	0.0014	0.0013	0.0012	0.0013	0.0014	0.0015	0.0014	0.0015	0.0019	0.0018	0.0021	0.0067	0.0023		0.002	0.005	0.0052	0.0041	0.0014	0.0013	0.0022	0.0029	0.0026	0.0018	0.0018	0.0019	0.002	0.0018
Nickel, dissolved	mg/L	0.001	0.0012	0.0011	0.0012	0.0011	0.0021	0.0013	0.0012	0.0011	0.0011	0.0011	<0.0010	0.001	0.0011	<0.0010	0.001	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0012	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.015	0.016	0.015	<0.01	0.015	0.015	0.014	0.017	0.014	0.014	0.014	0.011	0.016	0.016	<0.01	0.013	0.014	0.041		0.012	0.012	0.012	0.025	0.027	0.025	0.016	0.013	0.011	0.013	0.013	0.012	0.017	0.014
Potassium, dissolved	mg/L	1.37	1.31	1.41	1.3	1.42	1.37	0.987	1.04	1.15	1.11	1.39	1.31	1.38	2.28	1.77	2.02	5.33	3.2		2.58	4.23	4.66	3.45	1.77	1.64	2.12	2.65	2.13	1.6	1.6	1.51	1.9	1.47
Selenium, dissolved	mg/L	<0.00010	<0.00010	0.00011	<0.00010	<0.00010	<0.00010	<0.00010	0.00018	0.0001	0.00011	0.00014	0.00013	0.00015	0.0002	0.00013	0.00018	0.00071	0.00034		0.00029	0.00047	0.00067	0.00048	0.00021	0.00024	0.00028	0.00034	0.00037	0.00012	0.00013	0.00011	0.00017	0.0001
Silicon, dissolved	mg/L	5.77	5.56	6.39	6.05	6.14	5.24	5.55	6.44	6.69	6.64	6.89	6.57	7.07	9.5	6.39	8.13	3.24	9.76		8.17	3.93	4.3	3.77	4.04	4.26	3.66	3.71	4.03	5.94	5.46	5.72	6.19	6.25
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	9.77	9.12	9.08	9.12	9.36	8.46	8.2	8.45	8.79	8.92	10.4	10.5	10.9	15.7	12.8	14.6	18.1	18.7		16.4	14.2	16.7	13.6	5.6	6.34	9.36	12.3	10.9	9.24	9.53	10.1	10.5	9.37
Strontium, dissolved	mg/L	0.422	0.44	0.43	0.388	0.423	0.383	0.343	0.364	0.37	0.383	0.458	0.463	0.488	0.666	0.571	0.659	0.911	0.817		0.717	0.649	0.778	0.521	0.237	0.246	0.343	0.445	0.513	0.442	0.437	0.473	0.517	0.457
Sulpher, dissolved	mg/L	3.9	5.5	6.4	14.6	5.6	5.2	4.8	6.1	7.1	5.9	9.7	7.8	7.3	17.3	12.7	19.8	29	20		15.6	21.8	21.2	15	5.2	5.4	7	11.8	11.4	7.6	7.3	7.6	9.1	7.8
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00131	0.00129	0.00124	0.00117	0.00113	0.00112	0.00102	0.00114	0.00114	0.00128	0.00144	0.00141	0.00146	0.00214	0.00152	0.0017	0.00158	0.00282		0.00214	0.00143	0.00164	0.00094	0.00039	0.00055	0.00073	0.00091	0.00139	0.00133	0.00138	0.00152	0.00157	0.00145
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0083	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0334		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**09/07/2015**	**17/07/2015**	**23/07/2015**	**23/07/2015**	**27/07/2015**	**04/08/2015**	**13/08/2015**	**22/08/2015**	**25/08/2015**	**01/09/2015**	**08/09/2015**	**18/09/2015**	**25/09/2015**
Total Suspended Solids	mg/L	7.5	4.1	16.2	16.2	2.3	2.2	8.3	4	45.9	22.9	2.6	1.1	5
Total Dissolved Solids	mg/L	208	208	206	206	186	226	208	194	206	214	188	212	210
pH (field)	pH units	8.2	8.19	8.05		8.05	8.21	8.13	8.05	8.21	8	8.13	8.25	7.98
pH (lab)	pH units	8.23	8.21	8.3	8.3	8.25	8.23	8.26	8.29	8.1	8.28	8.29	8.31	8.21
Specific Conductance, field	µS/cm	336.8	337.7	366.3		348.1	196.4	404.2	342.3	334.8	300.5	331.6	335.4	338.8
Specific Conductance (lab)	µS/cm	337	347	362	362	357	360	342	345	337	304	323	329	329
Temperature (field)	C	5.6	5.4	3.7		6	5.3	-0.7	3.7	4.4	2.5	2.4	2.1	0.7
Dissolved Oxygen (field)	mg/L	11.99	11.1	11.56		11.79	12.2	20.58	12.53	13.04	13.38	13.28	12.95	13.57
Dissolved Oxygen (field)	%	95.4	88.5	86.9			96.5	136.1	94.9	100.5	98.3	97.4	94.9	94.8
ORP (field)	mV	139.3	145.2	130.1		150.1	91	134.5	147	155.3	129.9	157.3	161.9	125.3
Hardness (from total)	mg/L	165	184	171	171	181	182	158	157	171	152	164	169	169
Hardness (from dissolved)	mg/L	157	165	180	180	175	173	164	163	184	144	166	162	169
Alkalinity, total	mg/L	162	165	167	167	165	169	164	169	160	143	153	153	158
Chloride	mg/L	1.8	1.7	2.1	2.1	1.9	2	1.5	1.8	1.5	1.7	2.1	1.9	1.7
Fluoride	mg/L	0.42	0.41	0.38	0.38	0.5	0.47	0.41	0.41	0.4	0.35	0.38	0.37	0.38
Sulphate, dissolved	mg/L	19.7	19.5	22.4	22.4	21.6	20	16.1	18.2	17.9	15.1	16.5	19.1	18.1
Ammonia	mg/L	0.04	0.018	0.019	0.019	0.067	0.025	0.0091	0.029	0.04	0.02	0.013	0.017	0.037
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.111	0.143	0.106	0.106	0.126	0.115	0.082	0.069	0.071	0.045	0.035	0.035	0.081
Dissolved Organic Carbon	mg/L	9.43	7.72	6.64	6.64	6.1	7.9	8.8	9.1	8.3	13	11	9.5	10
Aluminum, total	mg/L	0.134	0.104	0.0893	0.0893	0.0357	0.0254	0.129	0.0281	0.0617	0.406	0.115	0.0191	0.0482
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00082	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00058	0.00063	0.00061	0.00061	0.00056	0.00054	0.00064	0.00063	0.00063	0.00077	0.00057	0.00054	0.00073
Barium, total	mg/L	0.0598	0.0701	0.0662	0.0662	0.0652	0.0628	0.0538	0.0651	0.0685	0.0651	0.0631	0.0568	0.0602
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000018	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	41.2	45.8	44.4	44.4	46.5	44.3	39.4	40.7	41.7	39.4	40.9	42.7	41.2
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00198	0.00198	0.00146	0.00146	0.00146	0.00126	0.00194	0.0016	0.00215	0.00318	0.00204	0.00181	0.0017
Iron, total	mg/L	0.381	0.313	0.298	0.298	0.206	0.212	0.346	0.196	0.306	0.874	0.345	0.183	0.272
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	15	16.9	14.5	14.5	15.8	17.3	14.5	13.5	16.2	13	15	15.1	16
Manganese, total	mg/L	0.019	0.0221	0.0197	0.0197	0.0131	0.0146	0.0259	0.0191	0.0243	0.0552	0.0243	0.0183	0.0264
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0016	0.0021	0.0017	0.0017	0.0017	0.0018	0.0016	0.0016	0.0016	0.0013	0.0014	0.0014	0.0013
Nickel, total	mg/L	0.0011	0.0011	0.0011	0.0011	<0.0010	<0.0010	0.0011	0.0011	0.0011	0.0018	0.0014	0.0013	0.0012
Phosphorus, total	mg/L	0.011	0.033	0.016	0.016	0.021	0.013	0.026	0.019	0.028	0.045	0.028	0.011	0.024
Potassium, total	mg/L	1.42	1.53	1.42	1.42	1.56	1.37	1.17	1.31	1.4	1.1	1.17	1.25	1.18
Selenium, total	mg/L	0.00014	0.00014	0.0001	0.0001	<0.00010	<0.00010	0.00012	<0.00010	0.00017	<0.00010	<0.00010	0.00017	0.00011
Silicon, total	mg/L	7.13	7.29	6.82	6.82	7.2	6.28	6.09	6.88	6.09	7.07	6.6	6.65	6.6
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000024	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	9	10.5	10.2	10.2	10.1	11.3	9.02	8.37	10.6	8.49	9.65	9.56	9.75
Strontium, total	mg/L	0.392	0.501	0.475	0.475	0.487	0.495	0.394	0.433	0.472	0.381	0.423	0.394	0.397
Sulpher, total	mg/L	7.6	9.2	6.5	6.5	8.4	9.8	5.4	5.9	5.9	6.3	<3.0	5.9	6.6
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	0.0058	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.005	<0.0050	<0.0050	0.0156	<0.0050	<0.0050	<0.0050
Uranium, total	mg/L	0.00141	0.00148	0.00146	0.00146	0.00157	0.00131	0.0012	0.00121	0.00141	0.00103	0.0012	0.00116	0.00103
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0091	0.0148	0.0489	0.0489	0.012	0.0105	0.0122	0.0093	0.0109	0.012	0.0165	0.018	0.0129
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00054	0.0005	0.00066	0.00066	0.00061	0.00052	0.00054	0.00064	0.0006	0.0005	0.00058	0.00047	0.00061
Barium, dissolved	mg/L	0.0644	0.0618	0.0628	0.0628	0.0646	0.0629	0.0622	0.0643	0.0645	0.0578	0.059	0.0566	0.059
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	38.7	41.6	48.4	48.4	44.6	43.9	42.9	40.5	47.1	36.8	42.4	41.3	41.5
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00158	0.00153	0.0014	0.0014	0.00128	0.00135	0.00157	0.00145	0.00158	0.00193	0.00191	0.0018	0.00183
Iron, dissolved	mg/L	0.096	0.151	0.149	0.149	0.143	0.126	0.141	0.164	0.148	0.206	0.174	0.153	0.153
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	14.6	14.8	14.4	14.4	15.5	15.4	13.9	15.1	16.2	12.6	14.6	14.3	15.8
Manganese, dissolved	mg/L	0.0088	0.0095	0.0103	0.0103	0.0086	0.0094	0.0098	0.0108	0.0105	0.0156	0.015	0.015	0.0174
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0017	0.0017	0.0017	0.0017	0.0017	0.0018	0.0016	0.0016	0.0015	0.0012	0.0014	0.0014	0.0014
Nickel, dissolved	mg/L	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.001	0.001	0.0012	0.0013	0.0011	0.0012	0.0011
Phosphorus, dissolved	mg/L	0.015	0.02	0.017	0.017	0.017	0.015	<0.01	0.017	0.018	0.011	0.022	0.017	0.031
Potassium, dissolved	mg/L	1.34	1.34	1.37	1.37	1.51	1.34	1.12	1.38	1.45	1.02	1.13	1.1	1.25
Selenium, dissolved	mg/L	0.00012	<0.00010	0.00012	0.00012	<0.00010	0.0001	0.00013	0.00014	<0.00010	0.00014	<0.00010	<0.00010	0.00012
Silicon, dissolved	mg/L	7.18	6.3	7.66	7.66	6.55	6.7	6.53	5.54	7.12	6.16	6.64	6.6	6.42
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	9.67	9.42	9.49	9.49	10.7	10.6	9.14	10.1	10.4	8.3	9.73	9.27	10.3
Strontium, dissolved	mg/L	0.437	0.442	0.448	0.448	0.471	0.478	0.422	0.452	0.447	0.357	0.378	0.402	0.403
Sulpher, dissolved	mg/L	7.1	5.6	5.5	5.5	6.5	5.3	7.4	7.7	7	6.6	7.8	6.1	7
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00155	0.00135	0.00139	0.00139	0.00135	0.00148	0.0011	0.00133	0.00136	0.00088	0.00117	0.00112	0.00118
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**29/09/2015**	**08/10/2015**	**13/10/2015**	**24/10/2015**	**28/10/2015**	**06/11/2015**	**11/11/2015**	**16/11/2015**	**25/11/2015**	**04/12/2015**	**09/12/2015**	**19/12/2015**	**22/12/2015**
Total Suspended Solids	mg/L	1.9	3.1	9.2	3.6	<1.0	<1.0	<1.0	4.1	4.2	5	4	2.1	10.9
Total Dissolved Solids	mg/L	208	218	206	218	238	214	246	274	274	294	262	312	288
pH (field)	pH units	8.01	7.78		8.11	7.89	7.86	7.68	7.58	7.67	7.53	8.2	8.1	8.8
pH (lab)	pH units	8.17	8.22	8.23	8.16	8.15	8.25	8.49	8.36	8.11	8.39	7.97	7.96	8.54
Specific Conductance, field	µS/cm	338.4	360		303.4	379.5	400.9	427.5	443.4	455.6	508.3	497.1	493.5	477.7
Specific Conductance (lab)	µS/cm	310	365	319	334	379	395	422	439	442	503	465	539	525
Temperature (field)	C	2.9	-0.2		-0.1	-0.1	0.1	0.1	0	0.9	0.1	0.3	-0.1	-0.1
Dissolved Oxygen (field)	mg/L	12.77	13.49		13.6	10.76	12.88	11.42	11.04	9.53	7.71	9.71	9.9	10.45
Dissolved Oxygen (field)	%	94.7	91.9		92.9	73.5	88.5	78.5	76.2	67.1	54.4	67	67.7	71.5
ORP (field)	mV	98.9	180.2		65.6	156.7	42.4	149.2	71.0	81.6	106.5	10.4		-505.6
Hardness (from total)	mg/L	168	185	167	159	192	201	195	225	214	272	221	282	244
Hardness (from dissolved)	mg/L	164	163	164	165	185	195	192	229	220	266	237	276	277
Alkalinity, total	mg/L	155	169	147	154	176	183	202	201	195	222	220	260	264
Chloride	mg/L	2	2.1	1.9	2	2.5	2	2.4	2.5	2.2	3	2.8	3	3.1
Fluoride	mg/L	0.38	0.39	0.37	0.38	0.42	0.42	0.43	0.43	0.4	0.44	0.45	0.51	0.51
Sulphate, dissolved	mg/L	16.6	20.9	15.2	17.2	22	25.2	25	28.7	28.3	31.4	35	32.3	30.8
Ammonia	mg/L	0.04	0.04	0.028	0.027	0.026	0.019	0.048	0.022	0.015	0.016	0.025	0.026	0.023
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.072	0.133	0.087	0.118	0.145	0.184	0.188	0.203	0.217	0.169	0.211	0.299	0.27
Dissolved Organic Carbon	mg/L	11	8.54	9.66	8.73	9.09	8.13	7.33	6.35	7.4	7.15	5.97	8.61	7.72
Aluminum, total	mg/L	0.0391	0.0138	0.0325	0.041	0.0139	0.0077	0.0144	0.0342	0.0739	0.152	0.0127	0.0107	0.128
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.00059	0.00041	0.00053	0.0005	0.00045	0.00038	0.00035	0.00041	0.00042	0.00047	0.00035	0.00043	0.0004
Barium, total	mg/L	0.0617	0.0667	0.0651	0.0561	0.0711	0.0741	0.0814	0.0814	0.0846	0.118	0.0924	0.116	0.101
Beryllium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	<0.000010	0.000018
Calcium, total	mg/L	42.6	45.4	44.2	40.7	47.6	50.1	49.3	58.7	53.1	65.9	56.9	72.5	62.7
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.00239	0.00164	0.0016	0.00217	0.00156	0.00156	0.00175	0.0125	0.00714	0.00656	0.00195	0.00235	0.00354
Iron, total	mg/L	0.269	0.145	0.208	0.229	0.124	0.087	0.103	0.164	0.305	0.346	0.089	0.091	0.375
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	15	17.4	13.8	13.9	17.7	18.3	17.6	19.1	19.8	26	19	24.4	21.3
Manganese, total	mg/L	0.0233	0.0178	0.0278	0.0287	0.0233	0.0195	0.0225	0.027	0.0357	0.0706	0.0462	0.0426	0.051
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0015	0.0014	0.0013	0.0014	0.0015	0.0013	0.0014	0.0013	0.0012	0.0016	0.0014	0.0015	0.0013
Nickel, total	mg/L	0.0012	<0.0010	0.001	0.0012	<0.0010	<0.0010	<0.0010	0.0011	0.0014	0.0014	<0.0010	<0.0010	0.0012
Phosphorus, total	mg/L	0.024	0.017	0.02	0.02	0.012	0.015	0.014	0.02	0.014	0.04	0.047	0.018	0.016
Potassium, total	mg/L	1.32	1.41	1.15	1.1	1.36	1.48	1.43	1.61	1.65	2.29	1.84	2.47	2
Selenium, total	mg/L	0.0001	0.00011	0.0001	0.00017	0.00012	0.00011	0.00014	0.00012	0.00014	0.0002	0.00016	0.00016	0.00023
Silicon, total	mg/L	6.91	6.38	7.72	6.58	7.53	7.51	6.89	8.5	7.89	8.9	8.15	10.9	8.5
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	10.1	10.1	8.83	9.13	10.7	11.8	11.3	11.8	12.5	16.5	12.7	15.7	13.8
Strontium, total	mg/L	0.415	0.447	0.426	0.397	0.468	0.504	0.531	0.535	0.527	0.771	0.582	0.759	0.656
Sulpher, total	mg/L	5.8	5.5	5.6	3.6	8.4	8.3	8.5	9.5	8.8	13.5	10.6	13	9.5
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.005	<0.0050	<0.0050	0.0074
Uranium, total	mg/L	0.00109	0.0015	0.0012	0.0012	0.00141	0.00135	0.00148	0.00149	0.0013	0.00221	0.00163	0.00172	0.0015
Vanadium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0065
Zirconium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0107	0.0108	0.0175	0.0093	0.0078	0.0085	0.009	0.0077	0.0075	0.0304	0.0077	0.0077	0.0116
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.00057	0.00045	0.00056	0.00053	0.00047	0.00038	0.00033	0.00037	0.00037	0.00054	0.00035	0.00042	0.00031
Barium, dissolved	mg/L	0.0619	0.0613	0.0577	0.0598	0.0658	0.0696	0.0774	0.0822	0.0883	0.0995	0.09	0.107	0.106
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.000010	<0.000010	0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011
Calcium, dissolved	mg/L	41.3	41.2	40.9	43	46.4	48.2	48.1	58.3	54.1	65	58.8	68.8	70.4
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00195	0.00142	0.0019	0.00233	0.00145	0.00151	0.00349	0.00245	0.0023	0.00341	0.00149	0.00265	0.00363
Iron, dissolved	mg/L	0.159	0.0953	0.145	0.124	0.108	0.0799	0.0695	0.0638	0.0657	0.0658	0.0671	0.0685	0.0785
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	14.7	14.7	14.9	13.9	16.8	18.1	17.5	20.3	20.6	25.1	21.8	25.2	24.6
Manganese, dissolved	mg/L	0.0155	0.0159	0.0173	0.0207	0.0204	0.0186	0.0193	0.0226	0.0218	0.0481	0.0442	0.041	0.032
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0014	0.0013	0.0013	0.0016	0.0014	0.0012	0.0012	0.0012	0.0011	0.0014	0.0013	0.0015	0.0013
Nickel, dissolved	mg/L	0.0011	<0.0010	0.0014	0.0012	0.001	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010
Phosphorus, dissolved	mg/L	0.019	0.019	0.015	0.013	0.012	0.012	<0.01	0.016	<0.01	0.011	0.018	0.013	0.011
Potassium, dissolved	mg/L	1.18	1.11	1.11	1.09	1.3	1.41	1.37	1.82	1.63	2.41	1.82	2.37	2.1
Selenium, dissolved	mg/L	0.00017	<0.00010	<0.00010	0.00011	<0.00010	<0.00010	0.00014	0.00013	0.00015	0.00015	0.00012	0.00016	0.00021
Silicon, dissolved	mg/L	6.47	5.77	7.61	6.92	7	6.97	5.84	7.88	8.35	9.94	8.74	9.92	9.25
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	9.62	9.82	9.14	9.61	10.8	11.4	12	12.6	12.9	16	13.3	16	15.4
Strontium, dissolved	mg/L	0.403	0.437	0.398	0.423	0.437	0.476	0.519	0.563	0.564	0.65	0.598	0.704	0.664
Sulpher, dissolved	mg/L	7.1	5.6	<3.0	5	9.3	7.8	6.9	8.4	7.5	9.1	7	12.2	9.8
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00106	0.00134	0.00116	0.00121	0.00129	0.00139	0.00178	0.00145	0.00141	0.00187	0.00155	0.00173	0.00155
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10
Sample Date		**12/05/2012**	**30/07/2012**	**10/08/2012**	**27/08/2012**	**22/06/2013**	**23/07/2013**	**22/08/2013**	**08/09/2013**	**18/10/2013**	**22/04/2014**	**20/05/2014**	**20/06/2014**	**16/08/2014**	**01/09/2014**	**16/10/2014**	**18/09/2015**	**13/10/2015**
Total Suspended Solids	mg/L	2210	995	1320	1650	43.4	199	65.5	21.7	61.2	38.9	614	23.4	18.3	2.3	5.1	<1.0	26.3
Total Dissolved Solids	mg/L	132	180	216	184	192	174	218	206	212	124	136	154	178	184	163	192	184
pH (field)	pH units	7.89	8.16	8.71	8.3	8.29	8.31	8.18	8.16	7.78	7.79	7.52	8.48	8.35	8.39	8.22	8.34	8.05
pH (lab)	pH units	7.73	8.23	8.11	8.37	8.26	8.19	8.23	8.13	8.25	7.83	7.99	8.12	8.1	8.32	8.21	8.13	8.19
Specific Conductance, field	µS/cm	144	216.7	269	257.4	242.7	227.6	304.4	213.8	262.4	151.8	172.3	295.9	295.4	291.4	329.5	289.3	281.7
Specific Conductance (lab)	µS/cm	136	254	273	284	276	251	309	289	263	113	136	262	279	288	269	284	273
Temperature (field)	C	2.4	11.2	7.4	7.4	11.7	7.8	8.2	9	0	-0.1	3.6	8.1	8.1	3.7	-1.4	2.9	-0.1
Dissolved Oxygen (field)	mg/L	13.64	9.03	12.15	11.33	9.91	11.31	11.25	10.32	14.43	14.13	13.92	10.62	11.18	12.79	14.38	12.29	12.69
Dissolved Oxygen (field)	%	99.9	3	101.3	94.1	91.1	95.3	101.4	96.1	96.2	96.4	105.1	90.3	94.6	96.6	94.8	91.1	86.7
ORP (field)	mV	45.3	44.8	-28.1	27	85.9	97.7	143.1	103.3	84.9	203.6	92.3	173.1	135	150.2	148.0	148	167.2
Hardness (from total)	mg/L	215	207	245	264	151	156	168	162	160	59.5	126	133	161	133	142	149	150
Hardness (from dissolved)	mg/L	67.2	130	135	141	148	125	160	150	136	56.8	112	128	142	149	133	144	142
Alkalinity, total	mg/L	65.1	132	146	154	143	133	159	151	136	52.7	61.3	130	140	153	135	144	135
Chloride	mg/L	1.1	1.2	0.75	2	1.3	1.3	1.6	1.3	1.5	1.9	2.6	1.2	0.75	1.2	1.1	1.4	1.5
Fluoride	mg/L	0.2	0.29	4	0.24	0.21	0.21	0.21	0.2	0.17	0.11	0.18	0.19	0.2	0.19	0.16	0.2	0.19
Sulphate, dissolved	mg/L	<0.50	<0.50	<0.50	<0.50	0.97	<0.50	<0.50	<0.50	3.24	<0.50	<0.50	1.7	<0.50	<0.50	2.78	0.85	3.16
Ammonia	mg/L	0.18	0.2	0.12	<0.0050	0.19	0.14	0.056	0.055	0.1	0.023	0.13	0.063	0.012	0.038	0.057	0.039	0.024
Nitrite (N)	mg/L	0.0114	0.0229	0.0111	0.0086	0.0198	<0.050	0.0072	0.007	<0.0050	<0.0050	0.0344	0.0123	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.047	0.184	0.184	0.095	0.152	<0.20	0.135	0.192	0.167	<0.020	<0.020	0.417	0.117	0.115	0.222	0.022	0.117
Dissolved Organic Carbon	mg/L	13.3	17.8		17.8	15.3		17.2	16.2	14.3	21.9	20.3	11.1	16.3	16.3	12	13	13.5
Aluminum, total	mg/L	39.6	21.3	21.1	24.8	1.31	4.86	0.947	0.483	1.14	0.377	13.9	0.64	0.954	0.0483	0.0865	0.0226	0.0278
Antimony, total	mg/L	0.00117	0.00096	0.00087	0.00115	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.0208	0.0123	0.0124	0.0156	0.00203	0.00386	0.00213	0.00194	0.00177	0.00059	0.0102	0.00141	0.002	0.00098	0.00097	0.00069	0.00067
Barium, total	mg/L	0.942	0.549	0.666	0.754	0.0981	0.174	0.1	0.0852	0.091	0.0344	0.305	0.0856	0.0907	0.0556	0.0576	0.0515	0.055
Beryllium, total	mg/L	0.00176	0.0008	0.00102	0.00117	<0.00010	0.00022	<0.00010	<0.00010	<0.00010	<0.00010	0.00066	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.000982	0.000365	0.000486	0.000526	0.000019	0.000071	0.000016	0.000093	0.00002	0.000038	0.000331	0.000015	0.000024	<0.000010	<0.000010	0.000012	0.000019
Calcium, total	mg/L	51.2	56.3	67.1	72.2	44.4	45.1	49.5	48	46.8	16.9	33.4	38.4	46.9	38.5	40.8	43.2	44.8
Chromium, total	mg/L	0.0779	0.0385	0.0378	0.0455	0.0022	0.0095	0.0019	0.0012	0.0024	<0.0010	0.0255	0.0014	0.002	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, total	mg/L	0.0315	0.0151	0.0185	0.0213	0.00109	0.00371	0.00099	0.00086	0.00139	0.00052	0.0135	0.00057	0.00079	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.1	0.0527	0.0597	0.0624	0.00492	0.0114	0.00344	0.00237	0.00355	0.00656	0.0405	0.00304	0.00343	0.00136	0.00116	0.00126	0.00298
Iron, total	mg/L	73.2	37.5	38.9	45.6	3.18	9.35	2.95	2.64	3.33	0.868	31.8	1.96	3.15	1.1	1.08	0.681	0.459
Lead, total	mg/L	0.0214	0.00995	0.0125	0.013	0.0006	0.00212	0.00044	0.00025	0.00054	0.00026	0.00734	0.00036	0.00046	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, total	mg/L	0.0292	0.015	0.0172	0.0198	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.012	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L	21.1	16.2	18.8	20.2	9.68	10.6	10.7	10.3	10.4	4.21	10.3	9.04	10.7	9.06	9.64	10	9.23
Manganese, total	mg/L	2.09	0.947	1.31	1.7	0.0986	0.407	0.11	0.174	0.321	0.116	1.08	0.04	0.0888	0.0149	0.0584	0.0035	0.0412
Mercury, total	mg/L	<0.000010	0.000062	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0021	0.0021	0.0017	0.0023	0.0012	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.074	0.041	0.0467	0.0524	0.0044	0.0099	0.0038	0.0032	0.0038	0.0018	0.0359	0.0028	0.0032	0.0019	0.0026	0.0019	0.0016
Phosphorus, total	mg/L	2.08	0.967	1.15	1.39	0.083	0.239	0.073	0.067	0.105	0.176	0.913	0.061	0.086	0.027	0.033	0.025	0.07
Potassium, total	mg/L	4.64	3.36	3.11	3.37	1.46	1.71	1.18	1.17	1.1	2.59	2.4	1.21	1.34	0.907	0.869	1.02	0.957
Selenium, total	mg/L	0.00116	0.00073	0.00057	0.00086	0.0001	0.00024	0.00013	0.00014	0.00015	0.00011	0.00038	<0.00010	0.00013	<0.00010	<0.00010	0.00011	<0.00010
Silicon, total	mg/L	66.7	42.7	44.2	44	8.47	15.9	8.98	7.27	8.99	3.88	28.1	7.04	8.95	5.29	6.53	6.46	7.45
Silver, total	mg/L	0.000337	0.0002	0.000187	0.000217	<0.000020	0.000021	<0.000020	<0.000020	0.000068	<0.000020	0.000053	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	4.3	6.41	6.4	6.34	6.32	6.52	6.49	6.4	6.3	2.47	4.62	5.88	6.47	5.91	6.22	6.18	6.01
Strontium, total	mg/L	0.307	0.315	0.363	0.404	0.223	0.226	0.259	0.255	0.231	0.0889	0.176	0.218	0.264	0.243	0.224	0.243	0.249
Sulpher, total	mg/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	1900	<3.0	<3.0	<3.0	<3.0	<3.0	7
Thallium, total	mg/L	0.000369	0.000202	0.000202	0.000241	<0.000050	0.000067	<0.000050	<0.000050	<0.000050	<0.000050	0.00013	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L	1.17	0.571	0.554	0.805	0.0562	0.179	0.0342	0.0166	0.0427	0.0169	0.609	0.0235	0.0351	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, total	mg/L	0.00532	0.00449	0.00407	0.00375	0.00114	0.00113	0.00119	0.00099	0.00091	0.00025	0.00188	0.00139	0.00139	0.00094	0.00089	0.00077	0.00074
Vanadium, total	mg/L	0.142	0.0653	0.0718	0.0836	0.0053	0.0156	<0.0050	<0.0050	<0.0050	<0.0050	0.056	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, total	mg/L	0.186	0.0956	0.105	0.119	0.0055	0.0198	<0.0050	<0.0050	0.0054	0.0086	0.092	0.0056	<0.0050	<0.0050	<0.0050	<0.0050	0.0059
Zirconium, total	mg/L	0.00514	0.0033	0.00332	0.00453	0.00094	0.0017	0.00065	<0.00050	0.00051	<0.00050	0.0026	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Aluminum, dissolved	mg/L	0.0583	0.0571	0.0505	0.0262	0.0785	0.0252	0.0197	0.0241	0.0108	0.0148	5.84	0.0161	0.0185	0.0123	0.0091	0.0132	0.0176
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L	0.0012	0.00142	0.00134	0.00149	0.00123	0.00116	0.00141	0.00158	0.00089	0.0004	0.00551	0.00099	0.0014	0.00106	0.00076	0.00075	0.00054
Barium, dissolved	mg/L	0.0501	0.0795	0.0786	0.0804	0.0721	0.0668	0.0724	0.0763	0.0599	0.0248	0.334	0.07	0.0675	0.061	0.0519	0.05	0.0477
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00063	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.000018	<0.000010	<0.000010	<0.000010	0.000019	<0.000010	<0.000010	0.00001	<0.000010	0.000019	0.000344	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	19.9	38.8	39.8	41.8	45.1	37.4	48	44.8	40.1	16.2	31.8	37	42.1	44.2	38.2	41.8	42.1
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0017	<0.0010	<0.0010	0.0093	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	0.00054	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0006	<0.00050	<0.00050	0.0105	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L	0.00212	0.00198	0.00189	0.00148	0.00313	0.00135	0.00134	0.00133	0.00091	0.00234	0.0339	0.00129	0.00151	0.00095	0.00099	0.00097	0.00162
Iron, dissolved	mg/L	1.55	1.15	0.883	1	0.802	0.54	0.992	1.28	0.761	0.141	19.9	0.56	1.24	0.95	0.664	0.514	0.358
Lead, dissolved	mg/L	0.00025	0.00067	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00772	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L	4.24	8.1	8.59	8.82	8.63	7.65	9.84	9.37	8.73	3.98	7.83	8.54	9	9.28	9.06	9.58	9.04
Manganese, dissolved	mg/L	0.305	0.189	0.252	0.27	0.0628	0.154	0.063	0.139	0.187	0.0771	0.969	0.0037	0.0049	0.0056	0.0405	0.0014	0.0121
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, dissolved	mg/L	<0.0010	0.0014	0.0019	0.0011	0.0012	0.001	0.0015	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, dissolved	mg/L	0.0019	0.0023	0.0022	0.0023	0.0025	0.0022	0.0023	0.0025	0.0019	<0.0010	0.0215	0.0015	0.0019	0.0018	0.0019	0.0021	0.0016
Phosphorus, dissolved	mg/L	0.035	0.039	0.034	0.038	0.053	0.025	0.032	0.043	0.027	0.067	0.73	0.029	0.037	0.031	0.025	0.021	0.027
Potassium, dissolved	mg/L	1.08	0.921	0.824	1.02	1.45	0.848	0.979	1.03	0.844	2.53	1.21	1.11	1.05	1.07	0.883	0.919	0.883
Selenium, dissolved	mg/L	0.0001	0.00014	0.0001	0.00012	0.00011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00013	<0.00010	<0.00010	<0.00010	<0.00010	0.00012	<0.00010
Silicon, dissolved	mg/L	3.83	6.28	6.7	6.39	6.15	6.42	7.14	7.01	5.99	2.94	11.7	5.63	6.1	6.53	5.74	6.29	6.96
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000066	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	2.95	5.64	5.34	5.26	6.07	5.75	6.05	5.79	5.44	2.35	4.01	5.66	5.87	5.7	5.97	6	6.3
Strontium, dissolved	mg/L	0.0919	0.189	0.2	0.214	0.195	0.177	0.242	0.254	0.201	0.0876	0.161	0.206	0.25	0.264	0.222	0.256	0.244
Sulpher, dissolved	mg/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0613	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L	0.00057	0.00243	0.00182	0.00149	0.0011	0.00075	0.00117	0.0009	0.0007	0.00016	0.00174	0.0012	0.00115	0.00102	0.00086	0.00071	0.00069
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0379	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0104	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0603	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00137	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				27/05/2005	27/05/2005	30/06/2005	28/07/2005	30/08/2005	28/09/2005	15/10/2005	05/04/2006	06/04/2006	07/04/2006	08/04/2006	09/04/2006	10/04/2006	11/04/2006	12/04/2006	13/04/2006	14/04/2006	15/04/2006	16/04/2006	17/04/2006	18/04/2006	19/04/2006	20/04/2006	21/04/2006	22/04/2006	23/04/2006	24/04/2006	25/04/2006	26/04/2006	27/04/2006
Total Suspended Solids	mg/L			20.5	79	<3.0	<3.0	3.5	9	5.5	120.0	102.0	106.0	4.1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	22.4	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.7	4.2	22.1	14.1	20.6
Total Dissolved Solids	mg/L			138	80	190	194	193	170	179	122	158	354	342	394	337	309	293	296	196	303	304	393	334	292	278	281	222	170	140	128	139	146
pH (field)	pH units	6.5-9	6.0-9.0								8.1	8.50		8.10	8.30	8.50	8.50	8.40	8.40	8.4	8.6	8.4	8.5	8.4	8.5	8.5	8.45	8.45	8.45	8.55	8.5	8.6	8.1
pH (lab)	pH units	6.5-9	6.0-9.0	8.06	8.03	8.17	8.01	8.26	7.9	8.11	8.11	8.10	8.20	8.25	8.34	8.34	8.34	8.23	8.33	8.37	8.38	8.37	8.39	8.20	8.34	8.35	8.33	8.31	8.24	8.15	7.75	7.82	7.89
Specific Conductance, field	µS/cm																																
Specific Conductance (lab)	µS/cm			198	148	287	305	268	243	249	173	161	507	519	576	507	471	462	468	465	478	496	602	520	458	442	423	348	268	212	151	161	165
Temperature (field)	C																																
Dissolved Oxygen (field)	mg/L																																
Dissolved Oxygen (field)	%																																
ORP (field)	mV																																
Hardness (from total)	mg/L			99.8	72.2		153	138	134	137																							
Hardness (from dissolved)	mg/L																																
Alkalinity, total	mg/L				67.1	140		143	115					261	273	245	224	210	218	218	222	235	286	246	222	235	203	165	135	103	77	78	75.2
Chloride	mg/L	120		<0.50	<0.5	1.23	0.66	0.53	0.72	0.88	0.81	0.65	2.60	1.50	1.79	1.57	1.37	1.32	1.32	1.29	1.32	1.48	2	1	1	1	1	1	1	1	1	1	1.13
Fluoride	mg/L	0.12									0.31	0.33	0.57	0.75	0.80	0.65	0.62	0.587	0.578	0.565	0.569	0.579	0.73	0.64	0.57	0.59	0.55	0.45	0.33	0.28	0.19	0.19	0.18
Sulphate, dissolved	mg/L				9.64	22.1		12.6	11.6					43.6	63.1	55.8	47.8	44.4	44.5	44.4	44.9	46.3	58.2	49.3	39.5	38	36.3	27	18.7	13.4	8.41	9.62	10.1
Ammonia	mg/L	0.239	0.25	0.026	<0.02	<0.020	<0.020	0.029	<0.020	<0.020	0.0067	0.0093	0.006	0.01	0.0133	0.016	0.0087	<0.0050	<0.0050	<0.0050	<0.0050	0.0173		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			
Nitrite (N)	mg/L	0.06	0.06	0.0015	<0.001	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	0.0011	0.0012	0.0012	0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Nitrate (N)	mg/L	3	9.1	0.0565	0.0339	0.0621	0.0124	0.0141	0.0458	0.133	0.0169	0.023	0.1160	0.076	0.0426	0.016	0.0134	0.0088	<0.0050	0.0102	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Organic Carbon	mg/L												18										11.1							14			
Aluminum, total	mg/L	*		0.362	1.14	0.0111	0.0127	0.0475	0.133	0.0972	5.890	7.2800	1.870	0.1490	0.031	0.0277	0.026	0.0222	0.0249	0.0214	0.0177	0.222	0.017	0.013	0.017	0.025	0.027	0.028	0.046	0.071	0.314	0.549	0.357
Antimony, total	mg/L			<0.00050	<0.0005	<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	0.00046	0.00052	0.00022	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020
Arsenic, total	mg/L	0.005		0.00075	0.00104	0.00045	0.00046	0.00063	0.00069	0.00061	0.00557	0.00632	0.00238	0.00086	0.00076	0.00064	0.00057	0.00053	0.00052	0.00053	0.00053	0.00056	0.00065	0.00061	0.00059	0.00053	0.00054	0.00047	0.00043	0.00044	0.00052	0.00060	0.00056
Barium, total	mg/L			0.058	0.053	0.0569	0.0576	0.06	0.057	0.0528	0.143	0.1600	0.131	0.0886	0.097	0.0822	0.076	0.0703	0.0712	0.0709	0.0734	0.0815	0.0951	0.0839	0.0749	0.0748	0.0716	0.0592	0.0455	0.0389	0.0360	0.0422	0.041
Beryllium, total	mg/L			<0.0010	<0.001	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth, total	mg/L					<0.00050	<0.00050			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total	mg/L	1.5		<0.10	<0.1	<0.010	<0.010	<0.10	<0.10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium, total	mg/L	*		<0.000050	<0.00005	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	0.000139	0.000167	0.000057	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium, total	mg/L			24.8	19.9	37.5	39.1	35.4	34.3	34.1	31.1	32.3	69.4	66.0	69.7	61.1	56.1	48.6	49.8	49.4	51.1	54.6	70.0	61.7	55.0	52.5	51.0	38.3	30.6	25.5	19.1	20.1	20.6
Chromium, total	mg/L	0.001		0.0012	0.0027	<0.00050	<0.00050	<0.0010	<0.0010	0.00059	0.0107	0.01270	0.00383	0.00085	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00071	0.00056
Cobalt, total	mg/L			0.00043	0.00087	<0.00010	<0.00010	<0.00030	<0.00030	0.00018	0.00385	0.00428	0.00147	0.00018	0.00011	0.00010	<0.00010	<0.00010	0.00010	<0.00010	<0.00010	0.00026	<0.00010	<0.00010	0.00011	0.00012	0.00013	0.00013	0.00014	0.00016	0.00035	0.00040	0.00039
Copper, total	mg/L	*		0.0049	0.0037	0.00207	0.00245	0.0026	0.0039	0.00404	0.0197	0.02100	0.0084	0.00150	0.0013	0.00126	0.0012	0.00125	0.00146	0.00139	0.00162	0.00453	0.00190	0.00152	0.00146	0.00185	0.00175	0.00184	0.00137	0.00164	0.00501	0.00833	0.0064
Iron, total	mg/L	0.3		0.778	1.49	0.052	0.079	0.373	0.674	0.436	8.800	10.400	<0.030	0.206	0.073	0.076	0.069	0.057	0.073	0.054	0.057	0.262	0.085	0.091	0.087	0.104	0.083	0.082	0.112	0.126	0.492	0.691	0.582
Lead, total	mg/L	*		<0.00050	0.00066	<0.000050	<0.000050	<0.00050	<0.00050	0.000078	0.00333	0.003940	0.00114	0.000088	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000137	<0.000050	<0.000050	<0.000050	0.000060	<0.000050	<0.000050	<0.000050	<0.000050	0.000166	0.000251	0.000294
Lithium, total	mg/L			<0.0050	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0053	0.0059	0.0057	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L			8.37	5.78	12.5	13.1	11.6	11	10.8	10.6	11.0	29.7	28.3	32.5	28.8	26.7	22.2	22.2	22.2	22.3	23.2	31.3	29.0	24.4	23.5	23.0	18.3	13.8	11.1	7.4	7.4	7.5
Manganese, total	mg/L			0.0505	0.0536	0.00785	0.014	0.025	0.0543	0.0368	0.1930	0.2100	0.1060	0.0485	0.0447	0.0387	0.0394	0.0410	0.0453	0.0384	0.0431	0.0468	0.0428	0.0369	0.0442	0.0481	0.0490	0.0459	0.0471	0.0425	0.0767	0.0653	0.0628
Mercury, total	mg/L	0.000026		<0.000020				<0.000020	<0.000020																								
Molybdenum, total	mg/L	0.073		<0.0010		0.00103	0.00134	0.0011	<0.0010	0.000916	0.00239	0.002260	0.00183	0.001340	0.00149	0.001410	0.00147	0.00152	0.00178	0.00156	0.00157	0.00163	0.00201	0.00164	0.00136	0.00137	0.00125	0.00115	0.00088	0.00077	0.00064	0.00079	0.00067
Nickel, total	mg/L	*		0.0026	0.0033	0.00105	0.00107	0.0016	0.002	0.00164	0.0102	0.01190	0.0044	0.00054	<0.00050	<0.00050	<0.00050	<0.00050	0.00059	<0.00050	0.00052	0.00081	0.00057	<0.00050	0.00051	0.00054	0.00056	0.00058	0.00057	0.00073	0.00118	0.00170	0.0014
Phosphorus, total	mg/L					<0.30	<0.30			<0.30	0.3300	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium, total	mg/L			<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	4.4	4.7	<2.0	4.6	4.8	4	3.6	3.6	3.4	3.7	3.7	3.6	4.4	4.1	3.8	3.7	4.0	3.3	3.0	3.1	2.8	3.3	2.7
Selenium, total	mg/L	0.001		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon, total	mg/L					5.48	5.32			5.95	14.3	18.90	5.56	10.80	10.9	9.37	8.56	7.57	7.59	8.20	8.41	8.60	10.80	9.73	8.38	8.08	7.85	6.54	5.30	4.67	4.03	4.59	4.55
Silver, total	mg/L	0.00025		<0.000020		<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	0.00007	0.000092	0.000025	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	0.000016	0.000012
Sodium, total	mg/L			4.8		8.7	8.7	6.9	6	6	2.8	3.0	18.6	17.7	22.9	19.3	17.3	15.7	15.6	15.3	15.3	15.5	20.4	17.8	15.1	14.8	14.5	11.2	8.1	6.2	3.8	4.0	4.6
Strontium, total	mg/L					0.304	0.338			0.267	0.191	0.190	0.599	0.565	0.601	0.514	0.483	0.461	0.470	0.474	0.497	0.525	0.662	0.587	0.514	0.523	0.488	0.389	0.273	0.218	0.136	0.149	0.145
Sulpher, total	mg/L																																
Thallium, total	mg/L	0.0008		<0.00020		<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	mg/L			<0.00050		<0.00010	<0.00010	<0.00050	<0.00050	<0.00010	0.00042	0.00049	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00031	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.0001
Titanium, total	mg/L			0.016	0.057	<0.010	<0.010	<0.010	<0.010	<0.010	0.266	0.379	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	0.021	0.014
Uranium, total	mg/L	0.015		0.00054	0.00096	0.00108	0.00136	0.00082	0.00059	0.000756	0.00184	0.001850	0.00342	0.002720	0.00301	0.002280	0.00206	0.00194	0.00192	0.00192	0.00198	0.00215	0.00277	0.00235	0.00211	0.00197	0.00170	0.00125	0.00079	0.00048	0.00030	0.00031	0.00033
Vanadium, total	mg/L			<0.030		<0.0010	<0.0010	<0.030	<0.030	0.001	0.0199	0.0236	0.0068	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	0.0018	0.0015
Zinc, total	mg/L	0.03		<0.0050	0.006	<0.0010	<0.0010	<0.0050	<0.0050	0.0011	0.0258	0.0324	0.0113	0.0020	0.0028	0.0015	0.0018	0.0015	0.0025	0.0014	0.0023	0.0033	0.0019	0.0010	0.0015	0.0021	0.0048	0.0026	0.0024	0.0026	0.0091	0.0124	0.0052
Zirconium, total	mg/L																																
Aluminum, dissolved	mg/L		0.1	0.0163	0.0108	0.0073	0.0071	0.0119	0.0141	0.0129			0.0549										0.0082							0.0119			
Antimony, dissolved	mg/L			<0.00050		<0.00010	<0.00010	<0.00050	<0.00050	<0.00010			0.00011										<0.00010							<0.00010			
Arsenic, dissolved	mg/L		0.005	<0.00050		0.00044	0.00044	0.00058	0.00059	0.00053			0.00106										0.00063							0.00038			
Barium, dissolved	mg/L			0.05	0.032	0.0574	0.0604	0.059	0.055	0.0492			0.108										0.093							0.037			
Beryllium, dissolved	mg/L			<0.0010		<0.00050	<0.00050	<0.0010	<0.0010	<0.00050			<0.00050										<0.00050							<0.00050			
Bismuth, dissolved	mg/L					<0.00050	<0.00050			<0.00050			<0.00050										<0.00050							<0.00050			
Boron, dissolved	mg/L			<0.10		<0.010	<0.010	<0.10	<0.10	<0.010			<0.010										<0.010							<0.010			
Cadmium, dissolved	mg/L		*	<0.000050		<0.000050	<0.000050	<0.000017	<0.000017	<0.000050			<0.000050										<0.000050							<0.000050			
Calcium, dissolved	mg/L			25.6	20.3	36.9	39.6	35.7	35.2	35.9			68.8										70.1							25.4			
Chromium, dissolved	mg/L		0.001	<0.0010		<0.00050	<0.00050	<0.0010	<0.0010	<0.00050			<0.00050										<0.00050							<0.00050			
Cobalt, dissolved	mg/L			<0.00030		<0.00010	<0.00010	<0.00030	<0.00030	<0.00010			0.00017										<0.00010							0.00011			
Copper, dissolved	mg/L		0.013	0.0033		0.0021	0.00208	0.0024	0.0025	0.00271			0.0032										0.0017							0.0013			
Iron, dissolved	mg/L		1.1	0.164		0.039	0.05	0.234	0.338	0.246			0.106										0.063							0.054			
Lead, dissolved	mg/L		0.004	<0.00050		<0.000050	<0.000050	<0.00050	<0.00050	<0.000050			<0.000050										<0.000050							<0.000050			
Lithium, dissolved	mg/L			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050										<0.0050							<0.0050			
Magnesium, dissolved	mg/L			8.72	5.19	12.3	13.2	11.7	11.2	11.5			31.4										31.4							10.9			
Manganese, dissolved	mg/L			0.00507	0.00345	0.00684	0.014	0.0152	0.0341	0.0208			0.0429										0.0420							0.0378			
Mercury, dissolved	mg/L			<0.000020				<0.000020	<0.000020																								
Molydenum, dissolved	mg/L		0.073	<0.0010		0.00108	0.00127	0.001	<0.0010	0.000859			0.00173										0.002							0.000729			
Nickel, dissolved	mg/L		0.11	0.0015		0.00102	0.00112	0.0015	0.0017	0.00141			0.0010										<0.00050							0.0006			
Phosphorus, dissolved	mg/L					<0.30	<0.30			<0.30			<0.30										<0.30							<0.30			
Potassium, dissolved	mg/L			<2.0		<2.0	<2.0	<2.0	<2.0	<2.0			6.7										4.4							3.1			
Selenium, dissolved	mg/L		0.002	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010										<0.0010							<0.0010			
Silicon, dissolved	mg/L					5.4	5.31			6.19			11.6										10.8							4.54			
Silver, dissolved	mg/L		0.0001	<0.000020		<0.000010	<0.000010	<0.000020	<0.000020	<0.000010			<0.000010										<0.000010							<0.000010			
Sodium, dissolved	mg/L			5		8.6	8.7	7	6.2	6.3			20.2										20.2							6.1			
Strontium, dissolved	mg/L					0.307	0.341			0.256			0.6										0.7							0.2			
Sulpher, dissolved	mg/L																																
Thallium, dissolved	mg/L			<0.00020		<0.00010	<0.00010	<0.00020	<0.00020	<0.00010			<0.00010										<0.00010							<0.00010			
Tin, dissolved	mg/L			<0.00050		<0.00010	<0.00010	<0.00050	<0.00050	<0.00010			<0.00010										<0.00010							<0.00010			
Titanium, dissolved	mg/L			<0.010	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010			<0.010										<0.010							<0.010			
Uranium, dissolved	mg/L				0.00081	0.0011	0.00127	0.00077	0.00055	0.000713			0.00368										0.00273							0.00048			
Vanadium, dissolved	mg/L				<0.03	<0.0010	<0.0010	<0.030	<0.030	<0.0010			<0.0010										<0.0010							<0.0010			
Zinc, dissolved	mg/L		0.03		<0.005	0.0015	0.0011	<0.0050	<0.0050	<0.0010			0.0015										0.0012							0.0018			
Zirconium, dissolved	mg/L																																

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				28/04/2006	29/04/2006	30/04/2006	01/05/2006	02/05/2006	03/05/2006	05/05/2006	06/05/2006	08/05/2006	10/05/2006	14/05/2006	17/05/2006	20/05/2006	23/05/2006	26/05/2006	29/05/2006	02/06/2006	07/06/2006	15/06/2006	15/06/2006	23/06/2006	28/06/2006	07/07/2006	12/07/2006	31/07/2006	31/07/2006	02/08/2006	23/08/2006	23/08/2006	30/08/2006
Total Suspended Solids	mg/L			20.6	17.6	17.6	23.1	51.4	116.0	141.0	110.0	40.9	98.3	232	59.6	28.1	22.1	11.4	79.9	257	47.1		2	<2	7	<2	<2		<2	<2			<2
Total Dissolved Solids	mg/L			73	144	148	161	129	102	86	88	94	101	103	115	115	129	145	119	140	142		166	222	170	204					216	220
pH (field)	pH units	6.5-9	6.0-9.0	8.1	8.3	8.5	8.3	8.3	8.2																							
pH (lab)	pH units	6.5-9	6.0-9.0	7.88	7.93	7.97	7.99	7.95	7.86	7.63	7.60	7.65	7.65	7.61	7.69	7.81	7.93	7.71	7.66	7.19	7.92		8.11	7.92	8.05	7.91	7.93		7.82	7.86		8.03	7.87
Specific Conductance, field	µS/cm																															
Specific Conductance (lab)	µS/cm			149	156	161	169	139	117	76	74	81	83.4	81.3	116	136	166	193	148	159	179		248	300	286	259	298		309	319		316	317
Temperature (field)	C																															
Dissolved Oxygen (field)	mg/L																															
Dissolved Oxygen (field)	%																															
ORP (field)	mV																															
Hardness (from total)	mg/L																															
Hardness (from dissolved)	mg/L																						139	154	142	140	143		153	10		154	154
Alkalinity, total	mg/L			71.2	76.7	74.5	79.8						34.5	32.1	63.1	70.6	72.2	94.3	82	91.8	83.4		117	132	133	135	132		142	152		148	150
Chloride	mg/L	120		1.07	1.05	1.01	0.98	0.81	0.73	<0.50	<0.50	<0.50	<0.5	<0.5	0.57	0.54	0.55	0.54	<0.5	<0.5	<0.5											
Fluoride	mg/L	0.12		0.17	0.18	0.18	0.19	0.16	0.14	0.11	0.11	0.11	0.112	0.136	0.158	0.179	0.211	0.227	0.192	0.21	0.209											
Sulphate, dissolved	mg/L			8.73	8.69	8.72	9.28						3.4	3.21	5.43	7.6	10.7	13.2	8.76	9.14	10.6		19	20.9		21.7	21.3		22.5	20.9		22.3	13.9
Ammonia	mg/L	0.239	0.25											0.05			0.0147			0.04	0.038	0.01		0.01	0.003		0.008	0.003		0.006	<0.002		0.005
Nitrite (N)	mg/L	0.06	0.06	<0.0010	<0.0010	<0.0010	<0.0010	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0012	0.0016	<0.001	<0.001	0.0016	0.0014	0.0024	0.0013											
Nitrate (N)	mg/L	3	9.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0082	0.0083	0.0171	0.0237	0.0368	0.0463	0.0415	0.0567	0.0716		0.1	0.05	0.05	0.076	0.09		0.07	0.06		<0.03	<0.03
Dissolved Organic Carbon	mg/L											25		21.6			18.5			18.4	20.9		12.6	7.7	10.7	9.6	9.6		8.8	9		7.7	7.9
Aluminum, total	mg/L	*		0.424	0.295	0.222	0.503	0.808	1.640	1.830	1.630	0.667	1.13	4.65	0.621	0.415	0.307	0.362	1.71	5.13	0.997		0.084	0.031	0.223	0.04	0.022		0.035	0.016		0.01	0.013
Antimony, total	mg/L			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00014	<0.00010	0.00015	0.00024	<0.0001	<0.0001	<0.0001	0.00017	0.00021	0.00038	0.00015		<0.0002	<0.0002	<0.0002	<0.001	<0.0002		<0.0002	<0.0002		<0.0004	<0.0002
Arsenic, total	mg/L	0.005		0.00054	0.00058	0.00055	0.00065	0.00071	0.00116	0.00120	0.00121	0.00067	0.0009	0.00242	0.00093	0.0008	0.00078	0.00076	0.00147	0.00296	0.00114		0.0006	0.0003	0.0006	<0.001	0.0004		0.0005	0.0006		<0.0004	0.0004
Barium, total	mg/L			0.038	0.039	0.040	0.046	0.048	0.064	0.063	0.060	0.0396	0.0552	0.123	0.0496	0.0472	0.0488	0.0523	0.0728	0.142	0.0605		0.057	0.063	0.062	0.065	0.062		0.064	0.066		0.063	0.06
Beryllium, total	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0001	<0.0001	<0.0001	<0.0005	<0.0001		<0.0001	<0.0001		<0.0002	<0.0001
Bismuth, total	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.002	<0.0005		<0.0005	<0.0005		<0.001	<0.0005
Boron, total	mg/L	1.5		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		0.006	0.004	0.007	0.01	0.006		0.006	0.006		0.009	0.006
Cadmium, total	mg/L	*		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000051	<0.000050	<0.000050	<0.00005	0.000096	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.000135	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00001		<0.00001	<0.00001		<0.00002	<0.00001
Calcium, total	mg/L			19.0	21.1	21.7	22.5	18.4	16.9	11.9	12.3	12.4	14.3	15.4	17.2	18.6	22.1	26.3	22.1	26.7	23.6		32.7	37.8	36.4	39.6	39.8		39.7	39.5		39.5	39.9
Chromium, total	mg/L	0.001		0.00054	0.00058	<0.00050	0.00101	0.0015	0.00297	0.00334	0.00295	0.00135	0.00218	0.00862	0.00142	0.00104	0.00082	0.00102	0.00361	0.0104	0.00238		0.0007	<0.0005	<0.0005	<0.002	<0.0005		<0.0005	<0.0005		0.001	<0.0005
Cobalt, total	mg/L			0.00035	0.00032	0.00032	0.00041	0.00069	0.0014	0.00171	0.00144	0.00062	0.00103	0.00336	0.00088	0.00062	0.00044	0.00035	0.00131	0.00364	0.00079		<0.0001	<0.0001	0.0001	<0.0005	<0.0001		<0.0001	<0.0001		<0.0002	<0.0001
Copper, total	mg/L	*		0.0070	0.0064	0.0055	0.0069	0.0086	0.0106	0.0119	0.0222	0.00803	0.0323	0.0191	0.00806	0.00753	0.00653	0.00546	0.0121	0.0214	0.0104		0.004	0.003	0.003	<0.005	0.002		0.002	0.002		0.002	0.002
Iron, total	mg/L	0.3		0.596	0.434	0.400	0.690	1.310	2.710	3.010	2.880	1.140	1.76	7.23	1.74	1.22	0.917	0.707	2.89	8.09	1.75		0.2	<0.1	0.4	<0.1	<0.1		<0.1	<0.1		<0.2	<0.1
Lead, total	mg/L	*		0.000193	0.000131	0.000125	0.000179	0.000362	0.000816	0.000926	0.000845	0.000329	0.00053	0.0022	0.000478	0.00034	0.000261	0.00019	0.000846	0.00264	0.000457		<0.0001	<0.0001	0.0001	<0.0005	<0.0001		<0.0001	<0.0001		<0.0002	<0.0001
Lithium, total	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		0.002	0.002	0.001	<0.005	0.002		0.002	0.002		0.003	0.002
Magnesium, total	mg/L			7.0	7.5	7.7	8.2	6.7	5.8	4.1	4.1	4.0	5.34	5.65	5.81	6.51	8.01	9.47	7.77	9.99	7.78		10.7	11.6	11.5	12	11.7		13.3	12.4		12	12.8
Manganese, total	mg/L			0.0492	0.0648	0.0682	0.0501	0.0921	0.1960	0.1890	0.1650	0.0706	0.174	0.266	0.101	0.0821	0.0678	0.0573	0.139	0.294	0.0631		0.008	0.02	0.018	0.013	0.014		0.014	0.013		0.02	0.011
Mercury, total	mg/L	0.000026																														
Molybdenum, total	mg/L	0.073		0.000612	0.000511	0.000607	0.00073	0.000586	0.000524	0.000382	0.000375	0.00039	0.000699	0.000593	0.000502	0.000702	0.000907	0.00107	0.000943	0.00119	0.00104		0.001	0.001	0.001	<0.005	<0.001		0.001	0.001		<0.002	0.001
Nickel, total	mg/L	*		0.0015	0.0015	0.0013	0.0018	0.0025	0.0042	0.0048	0.0044	0.00274	0.00343	0.00948	0.00334	0.00285	0.00241	0.0023	0.00535	0.0115	0.00385		0.0017	0.0013	0.0011	0.003	0.0012		0.0011	0.0012		0.001	0.0013
Phosphorus, total	mg/L			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3											
Potassium, total	mg/L			2.6	2.6	2.5	2.5	2.3	2.3	2.1	2	<2.0	<2	<2	<2	<2	<2	<2	<2	<2	<2		1.1	1.2	1.1	1.2	1.3		1.2	1.3		1.6	1.2
Selenium, total	mg/L	0.001		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.0002	<0.0002	<0.0002	<0.001	<0.0002		<0.0002	0.0002		<0.0004	0.0003
Silicon, total	mg/L			4.64	4.69	4.67	5.3	5.4	6.33	5.61	5.32	3.68	4.84	11.7	4.55	4.31	4.55	4.71	6.97	13.1	6.22		5.21	5.13	5.83	5.67	5.62		6.11	5.66		5.19	5.73
Silver, total	mg/L	0.00025		0.000014	<0.000010	0.000024	0.000014	0.000015	0.000018	0.000018	0.000025	0.000014	0.000029	0.000037	<0.00001	0.000012	<0.00001	<0.00001	0.000031	0.000066	0.000015		<0.0001	0.0002	<0.0001	<0.0005	<0.0001		<0.0001	0.0002		<0.0002	<0.0001
Sodium, total	mg/L			4.4	4.4	4.2	4.2	3.2	2.6	<2.0	<2.0	<2.0	2.4	2.3	3.6	4.2	5.2	6.1	5	5.7	4.8		7.4	7.9	7.7	9.1	8.7		8.6	9.7		9.4	9.2
Strontium, total	mg/L			0.128	0.146	0.153	0.171	0.135	0.126	0.0854	0.0827	0.082	0.0969	0.111	0.111	0.133	0.157	0.212	0.17	0.206	0.179		0.306	0.344	0.29	0.37	0.355		0.357	0.401		0.388	0.405
Sulpher, total	mg/L																						5.7	6.6	6.2	6.9	7.2		7.4	7.6		6.8	6.6
Thallium, total	mg/L	0.0008		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.00005	<0.00005	<0.00005	<0.0002	<0.00005		<0.00005	<0.00005		<0.0001	<0.00005
Tin, total	mg/L			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00019	0.00027	<0.0001	0.00013		<0.001	<0.001	<0.001	<0.005	<0.001		<0.001	<0.001		<0.002	<0.001
Titanium, total	mg/L			0.016	0.012	0.01	0.018	0.034	0.072	0.072	0.07	0.032	0.042	0.157	0.023	0.014	0.011	0.014	0.063	0.195	0.039		0.0041	0.0016	0.0192	<0.002	0.0009		0.0018	0.0008		<0.0010	0.0009
Uranium, total	mg/L	0.015		0.00026	0.00031	0.00033	0.00036	0.00030	0.00036	0.00029	0.00030	0.00020	0.000197	0.000689	0.000358	0.000391	0.000523	0.000727	0.000565	0.000992	0.000546		0.001	0.0011	0.0014	<0.002	0.0014		0.0015	0.0015		0.002	0.0016
Vanadium, total	mg/L			0.0015	0.0011	0.001	0.0017	0.0028	0.0055	0.0062	0.006	0.0026	0.0039	0.0147	0.0034	0.0026	0.0022	0.0021	0.0065	0.0173	0.0045		0.0014	0.0008	0.0016	<0.0005	0.0006		0.0007	0.0007		0.0007	0.0009
Zinc, total	mg/L	0.03		<0.0050	0.0089	0.0082	0.0048	0.0059	0.0101	0.0105	0.0099	0.0062	0.0073	0.0223	0.0049	0.0032	0.0039	<0.005	0.0084	0.022	0.0054		0.001	0.002	0.002	<0.005	0.002		0.002	<0.001		0.005	<0.001
Zirconium, total	mg/L																						<0.001	<0.001	<0.001	<0.005	<0.001		<0.001	<0.001		<0.002	<0.001
Aluminum, dissolved	mg/L		0.1									0.0654		0.0626			0.0234			0.0318			0.009	0.01	0.008	<0.005	<0.005		0.007	<0.005		0.007	0.007
Antimony, dissolved	mg/L											<0.00010		<0.0001			<0.0001			0.00013			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002	<0.0002
Arsenic, dissolved	mg/L		0.005									0.00038		0.00055			0.00054			0.00074			0.0006	0.0004	0.0006	0.0006	0.0005		0.0004	0.0005		0.0004	0.0005
Barium, dissolved	mg/L											0.026		0.0308			0.0401			0.0425			0.057	0.064	0.058	0.065	0.063		0.068	0.065		0.063	0.06
Beryllium, dissolved	mg/L											<0.00050		<0.0005			<0.0005			<0.0005			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001
Bismuth, dissolved	mg/L											<0.00050		<0.0005			<0.0005			<0.0005			<0.0005	<0.0005	<0.0005	0.0007	0.0007		<0.0005	<0.0005		<0.0005	<0.0005
Boron, dissolved	mg/L											<0.010		<0.01			<0.01			<0.01			0.003	0.002	0.004	0.006	0.006		0.006	0.006		0.006	0.006
Cadmium, dissolved	mg/L		*									<0.000050		<0.00005			<0.00005			<0.00005			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001
Calcium, dissolved	mg/L											12.2		12.8			23.1			23			36.3	40.8	33	34.7	36.1		39	3.8		39.3	40
Chromium, dissolved	mg/L		0.001									<0.00050		<0.0005			<0.0005			<0.0005			<0.0005	0.0006	0.0007	0.0012	0.0012		<0.0005	0.0006		0.0007	0.0009
Cobalt, dissolved	mg/L											0.00015		0.00026			<0.0001			0.00018			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		0.0001	<0.0001
Copper, dissolved	mg/L		0.013									0.0054		0.00582			0.00494			0.0038			0.002	0.002	0.003	0.002	0.002		<0.001	0.002		0.002	0.002
Iron, dissolved	mg/L		1.1									0.194		0.425			0.253			0.463			0.04	0.05	0.03	0.02	0.02		0.04	0.02		0.05	0.06
Lead, dissolved	mg/L		0.004									0.000091		0.000064			<0.00005			0.000063			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001
Lithium, dissolved	mg/L											<0.0050		<0.005			<0.005			<0.005			0.001	0.001	<0.001	0.002	0.002		0.001	0.002		0.002	0.002
Magnesium, dissolved	mg/L											3.8		3.79			8.14			7.73			11.7	12.6	11.4	12.9	12.9		13.5	0.9		13.4	13.1
Manganese, dissolved	mg/L											0.0209		0.0594			0.00274			0.0399			<0.005	0.016	<0.005	0.008	0.01		0.011	0.008		0.02	0.013
Mercury, dissolved	mg/L																															
Molydenum, dissolved	mg/L		0.073									0.000307		0.000441			0.000977			0.000913			0.001	0.001	0.001	0.001	0.002		<0.001	<0.001		0.001	0.001
Nickel, dissolved	mg/L		0.11									0.0014		0.00165			0.0017			0.00183			0.001	0.0014	0.0011	0.0016	0.0006		0.0005	0.0007		0.0009	0.0005
Phosphorus, dissolved	mg/L											<0.30		<0.3			<0.3			<0.3													
Potassium, dissolved	mg/L											<2.0		<2			<2			<2			0.4	1.4	1.1	1.1	1.4		1.4	0.8		1.2	1.4
Selenium, dissolved	mg/L		0.002									<0.0010		<0.001			<0.001			<0.001			<0.0002	0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002	<0.0002
Silicon, dissolved	mg/L											2.69		3.11			4.14			4.19			5.8	5.54	5.49	6.5	5.69		6.03	3.79		5.81	5.77
Silver, dissolved	mg/L		0.0001									<0.000010		<0.00001			<0.00001			<0.00001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001
Sodium, dissolved	mg/L											<2.0		2.1			4.7			5.4			8.4	8.2	7.9	8.3	8.9		8.9	9.1		9	9.3
Strontium, dissolved	mg/L											0.1		0.0801			0.162			0.162			0.288	0.344	0.304	0.358	0.37		0.256	0.289		0.39	0.37
Sulpher, dissolved	mg/L																						6.4	7.2	6.6	7.8	7.9		7.5	7.8		7.1	6.8
Thallium, dissolved	mg/L											<0.00010		<0.0001			<0.0001			<0.0001			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005
Tin, dissolved	mg/L											<0.00010		<0.0001			<0.0001			<0.0001			<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001
Titanium, dissolved	mg/L											<0.010		<0.01			<0.01			<0.01			0.0006	0.0006	0.0006	0.0009	0.0007		0.0006	<0.0005		0.0006	<0.0005
Uranium, dissolved	mg/L											0.00012		0.00015			0.00048			0.000477			0.0009	0.0012	0.0012	0.0012	0.0009		0.0015	0.0015		0.0015	0.0016
Vanadium, dissolved	mg/L											<0.0010		<0.001			<0.001			0.0015			0.0012	0.001	0.0011	0.0034	0.0019		0.0003	0.0015		0.0014	0.0016
Zinc, dissolved	mg/L		0.03									0.0024		<0.001			<0.001			0.0012			<0.001	0.004	<0.001	0.002	0.001		<0.001	<0.001		0.003	<0.001
Zirconium, dissolved	mg/L																															

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				06/09/2006	13/09/2006	20/09/2006	28/09/2006	04/10/2006	12/10/2006	18/10/2006	28/10/2006	17/04/2007	26/04/2007	19/05/2007	30/05/2007	20/06/2007	27/06/2007	04/07/2007	18/07/2007	15/08/2007	18/09/2007	17/10/2007	22/04/2008	13/05/2008	20/05/2008	03/06/2008	08/07/2008	23/07/2008	07/08/2008	28/08/2008	31/08/2008	07/09/2008	11/09/2008
Total Suspended Solids	mg/L			2	<2	<2	<2	<2	<2	<1	<2	101	98	<2	<2	<2			4	<2	10	<2	<2	5	5	<2	<2	10		59	35	48	28
Total Dissolved Solids	mg/L						124		202	187	298	320	136	172	186	188			210	238	200	192	256	128	170	154	232	178		202	206	302	264
pH (field)	pH units	6.5-9	6.0-9.0																													
pH (lab)	pH units	6.5-9	6.0-9.0	7.93	7.99	7.87	7.64	8.32	7.54	8.2	7.77	8.34	7.44	8.03	8.1	7.95			7.96	8.18	8.18	8.17	8.3	7.94	7.98	8.04	8.15	8.03		8.04	8.1	8.14	8.07
Specific Conductance, field	µS/cm																															
Specific Conductance (lab)	µS/cm			322	320	317	329	321	319	443	323	400	89	240	264	283			310	306	266	275	341	159	192	253	292	221		244	272	319	279
Temperature (field)	C																															
Dissolved Oxygen (field)	mg/L																															
Dissolved Oxygen (field)	%																															
ORP (field)	mV																															
Hardness (from total)	mg/L														127			124								120						
Hardness (from dissolved)	mg/L			161	167	164	161	160	158	160	163	216	52	116		149			161	160	129	139	162	70	89			120	153				
Alkalinity, total	mg/L			149	156	150	151	152	146	194	151	197	44	104	116	137			154	166	144	132	169	77	89	116	138	92		113	118	139	129
Chloride	mg/L	120								1.3	1.42	2.7	1.4	0.9	1	1.1			1.3	1.2	0.99	1.21	1.35	0.82	0.91	1.01	1.14	0.79		1.5	1.55	2.21	1.89
Fluoride	mg/L	0.12																														
Sulphate, dissolved	mg/L			21.3	22	22.3	20.9	23.7	20.9		22	32	3.4	15.1	19.6	21.4			21.2	21	12		26.8	8.43	10.2	15.1	20.8	10.6		15	18.5	25.4	20.8
Ammonia	mg/L	0.239	0.25	0.004	0.008	0.006	0.008	0.053	0.006	<0.05	0.01		<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05			0.1
Nitrite (N)	mg/L	0.06	0.06							<0.005	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	0.03	0.03	<0.01	0.03		0.02	<0.01	0.04	0.04
Nitrate (N)	mg/L	3	9.1	<0.03	0.003	<0.03	<0.03	0.04	0.04	0.08	0.06	<0.1	<0.1	0.6	0.8	0.9			0.5	0.3	0.04	0.34	<0.02	<0.02	0.02	0.04	0.06	0.15		0.12	0.16	0.16	0.09
Dissolved Organic Carbon	mg/L			8.5	8.1	7.8	7.7	8.2	8.1	8.2	7.7	21	27	13.6	10.2	10.4			10.4	10	13.4	11.9					9.8		9.4	22.8			
Aluminum, total	mg/L	*		0.012	0.015	0.012	0.02	0.01	0.055	0.007	0.08	3.55	2.88	0.079	0.041	0.065	0.036	4.15	0.253	0.071	0.09	0.125	0.01	0.11	0.17	0.01	0.01	0.385		1.41	0.798	0.944	0.614
Antimony, total	mg/L			<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.005		0.0004	0.0004	0.0004	0.0005	0.0005	0.0003	0.0003	0.0004	0.0022	0.001	0.0005	0.0003	0.0004	0.0005	0.0023	0.0008	0.0005	0.0006	0.0005	0.0009	0.0012	<0.0002	0.0007	0.0004	0.0007		0.001	0.0008	0.0011	0.0011
Barium, total	mg/L			0.06	0.062	0.06	0.062	0.06	0.06	0.065	0.071	0.127	0.078	0.048	0.056	0.063	0.062	0.134	0.074	0.069	0.055	0.058	0.057	0.038	0.043	0.047	0.058	0.056		0.088	0.078	0.097	0.077
Beryllium, total	mg/L			<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.00004	<0.00004	<0.00004	0.00004	<0.00004	<0.0001		0.00007	<0.00004	0.00008	<0.00004
Bismuth, total	mg/L			<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005						<0.0005					<0.0001
Boron, total	mg/L	1.5		0.006	0.007	0.006	0.008	0.007	0.006	0.005	0.006	0.008	0.004	0.007	0.007	0.008	0.007	0.008	0.007	0.006	0.005	0.005	<0.005	<0.005	<0.005	0.006	<0.005	0.241		0.007	0.008	0.013	0.01
Cadmium, total	mg/L	*		<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00001	<0.00001	<0.00001	0.00007	0.00005	<0.00002	<0.00001	<0.00001	0.00002	0.00006	0.00001	<0.00001	<0.00001	0.00001	<0.00007	<0.00007	<0.00007	<0.00007	<0.00008	0.00002		0.00006	0.00002	0.00004	<0.00001
Calcium, total	mg/L			41	42.2	40.2	41.3	38	40.4	41.2	43.6	56.5	17	30.6	33	39.2	38.2	32.6	41.6	43.4	33.3	36.8	42.6	20.4	24.2	31.2	41	30.8		37	38.9	40.9	35.6
Chromium, total	mg/L	0.001		<0.0005	<0.0005	<0.0005	<0.001	0.001	<0.0005	<0.0005	<0.0005	0.0059	0.0049	<0.001	<0.0005	0.0008	<0.0005	0.0074	0.0007	<0.0005	0.0007	0.0007	<0.0005	0.0009	0.0014	0.0024	0.0009	0.001		0.0036	0.0025	0.0033	0.0022
Cobalt, total	mg/L			<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	0.0024	0.002	<0.0002	0.0001	0.0001	0.0001	0.0027	0.0002	<0.0001	0.0002	0.0002	0.0001	0.00018	0.00023	0.00008	0.00009	0.0003		0.00104	0.00065	0.001	0.00062
Copper, total	mg/L	*		0.004	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.012	0.009	0.003	0.003	0.003	0.002	0.011	0.003	0.002	0.002	0.002	0.002	0.003	0.002	0.005	0.002	0.004		0.043	0.02	0.052	0.035
Iron, total	mg/L	0.3		<0.1	<0.1	<0.1	<0.2	<0.2	0.1	<0.1	0.1	5.1	3.7	0.2	<0.1	0.1	<0.1	6.1	0.4	<0.2	0.3	0.3	0.03	0.46	0.44	0.12	0.05	0.61		3.55	2.05	2.14	1.39
Lead, total	mg/L	*		0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	0.0001	<0.0001	0.0014	0.001	<0.0002	<0.0001	<0.0001	<0.0001	0.0016	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0008	0.0001	0.0006		0.0007	0.0004	0.0006	0.0006
Lithium, total	mg/L			0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.006	0.002	<0.002	0.001	0.002	0.002	0.005	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.001		0.002	0.002	0.002	0.002
Magnesium, total	mg/L			13	13.5	14	13	12	13.5	13.7	13.5	22.9	4.8	10	10.9	11.7	12.2	10.3	13.5	13	10.1	11	17.6	6.51	7.73	10.2	12.4	9.4		10.3	11.3	12.3	10
Manganese, total	mg/L			0.018	0.015	0.019	0.01	0.01	0.022	0.025	0.035	0.189	0.2	0.02	0.006	0.007	0.006	0.167	0.018	0.01	0.021	0.023	0.0244	0.0211	0.0223	0.0076	0.0058	0.032		0.103	0.0718	0.116	0.0852
Mercury, total	mg/L	0.000026									<0.00005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001		0.00001	<0.00001	<0.00001	0.00001
Molybdenum, total	mg/L	0.073		0.001	0.001	0.001	<0.002	<0.002	0.001	0.001	0.001	0.001	<0.002	<0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	0.00089	0.00066	0.00072	0.00097	0.00108	<0.001		0.00208	0.00273	0.00344	0.00276
Nickel, total	mg/L	*		0.0013	0.0013	0.0016	0.002	0.0024	0.0013	0.0014	0.0013	0.0066	0.0061	0.002	0.0007	0.0013	0.0011	0.0087	0.0008	0.0013	0.0018	0.0015	<0.001	0.004	0.004	<0.001	0.001	0.0042		0.01	0.006	0.002	0.003
Phosphorus, total	mg/L									0.08		0.17	0.2	0.05	<0.05	<0.05				<0.05	<0.05		0.05	0.04	0.04	0.02	0.01			0.1	0.07	0.07	0.06
Potassium, total	mg/L			1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.6	5.5	2.6	1	1.5	1.3	1.3	1.4	1.5	1	1.2	1	3.04	1.22	1.25	1.24	1.4	1		2.34	2.86	4.56	3.59
Selenium, total	mg/L	0.001		0.0003	<0.0002	0.0004	<0.0004	0.0008	<0.0002	<0.0002	<0.0002	0.0004	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0008	<0.0006	0.0006	0.0007	0.0008	0.0004		<0.0006	<0.0006	<0.0006	<0.0006
Silicon, total	mg/L			5.65	5.97	5.66	5.43	5.31	4.5	5.81	5.92	14	8.92	5.21	4.35	5.2	5.01	11	5.97	6.21	6.4	6.03	3.91	2.46	2.33	2.33	4.58	6.11		8.38	7.11	7.13	6.26
Silver, total	mg/L	0.00025		<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	0.00005	<0.00001	<0.00001	<0.00001	0.00005
Sodium, total	mg/L			9.5	9.8	8.6	8.8	8.6	8.1	8.6	10.2	15.3	3.5	6	7.6	8.4	8.9	7.3	9.5	9.6	7.6	7.2	11.4	5	6.4	8	8.8	11.7		9.4	10.4	12.6	10.5
Strontium, total	mg/L			0.399	0.409	0.398	0.371	0.368	0.385	0.445	0.43	0.555	0.12	0.252	0.302	0.339	0.347	0.258	0.426	0.373	0.298	0.31	0.457	0.166	0.196	0.267	0.361	0.259		0.26	0.295	0.351	0.304
Sulpher, total	mg/L			7.7	7.5	7.1	6.4	7	6.9	7.7	7.5	11.7	1	5.2	6.2	6.8	6.8	3.8	6.7	6.6	3.8	4.7						4					
Thallium, total	mg/L	0.0008		<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005		<0.00001	<0.00001	<0.00001	<0.00001
Tin, total	mg/L			<0.001	<0.001	<0.001	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.0001	<0.0001	0.0006	<0.0001	<0.001		<0.0001	<0.0001	<0.0001	<0.0001
Titanium, total	mg/L			0.0008	0.0008	0.0008	<0.001	0.001	0.0034	<0.0005	0.004	0.129	0.116	<0.001	0.0019	0.003	0.0017	0.146	0.0107	0.0029	0.0038	0.0026	0.0004	0.0054	0.0064	0.0013	0.0009	0.0174		0.0417	0.0357	0.042	0.0294
Uranium, total	mg/L	0.015		0.0018	0.0018	0.0016	0.002	0.002	0.0015	0.0019	0.0021	0.0017	<0.001	0.001	0.0014	0.0015	0.0016	0.0011	0.0016	0.0017	0.001	0.0011	0.0013	0.0006	0.0007	0.0012	0.0014	0.0009		0.0008	0.0009	0.001	0.0008
Vanadium, total	mg/L			0.0007	0.0007	0.0006	0.0007	0.0008	0.0007	0.0005	0.0006	0.0123	0.0084	0.001	0.0008	0.0012	0.0009	0.015	0.0018	0.0012	0.0011	0.001	0.00022	0.00104	0.00117	0.00081	0.00047	0.0021		0.00537	0.00366	0.00457	0.0031
Zinc, total	mg/L	0.03		0.001	0.002	0.001	0.004	<0.002	<0.001	0.002	0.003	0.025	0.023	0.007	0.006	0.004	0.003	0.03	0.003	0.006	0.006	0.007	0.006	0.002	0.004	0.003	0.011	0.008		0.015	0.007	0.011	0.008
Zirconium, total	mg/L			<0.001	<0.001	<0.001	<0.002	<0.002	<0.001	<0.001	<0.001	0.002	<0.002	<0.002	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.0003	0.0002	0.0002	0.0003	0.0004	<0.001		0.0006	0.0004	0.0005	0.0004
Aluminum, dissolved	mg/L		0.1	<0.005	0.005	<0.005	0.008	<0.005	0.006	0.006	0.007	0.032	0.058	0.008	<0.005	0.016			0.013	0.009	0.016	0.008	<0.02	<0.02	0.03		<0.01	0.018	0.005	0.047			
Antimony, dissolved	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002	0.001	0.0008	0.0006	0.0007		0.0007	0.0014	0.0009	0.0005			
Arsenic, dissolved	mg/L		0.005	0.0005	0.0004	0.0004	0.0004	<0.0002	0.0004	0.0003	0.0004	0.0008	0.0004	0.0005	0.0004	0.0005			0.0006	0.0005	0.0005	0.0004	0.0002	0.0011	0.0018		0.0007	0.0006	0.0003	0.0006			
Barium, dissolved	mg/L			0.06	0.057	0.059	0.061	0.059	0.058	0.064	0.067	0.071	0.028	0.048	0.053	0.061			0.065	0.067	0.055	0.054	0.056	0.035	0.038		0.056	0.049	0.063	0.06			
Beryllium, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001	<0.0001	<0.00004	<0.00004	<0.00004		<0.00004	<0.0001	<0.0001	<0.00004			
Bismuth, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005						<0.0005	0.0011				
Boron, dissolved	mg/L			0.005	0.007	0.005	0.004	0.004	0.005	0.005	0.006	0.005	0.003	0.005	0.004	0.008			0.006	0.007	0.004	0.005	<0.005	<0.005	<0.005		<0.004	0.005	0.007	0.007			
Cadmium, dissolved	mg/L		*	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00002	0.00002	<0.00001	<0.00001	<0.00001			<0.00001	<0.00001	<0.00001	<0.00001	<0.00008	<0.00008	<0.00008		<0.00008	<0.00001	<0.00001	<0.00001			
Calcium, dissolved	mg/L			42.2	40.7	42.4	42.1	41.8	41.6	42.7	42	51	14.5	29.4	32.6	39.6			41.9	42.4	34.5	37.1	38.4	18.5	23.7		39.4	31	40.8	34.2			
Chromium, dissolved	mg/L		0.001	0.0006	0.001	0.0007	0.0005	0.0005	<0.0005	0.0005	0.0069	0.0017	<0.0005	0.0011	0.0008	<0.0005			<0.0005	0.0005	0.0006	0.0007	<0.0006	<0.0006	0.0014		0.0012	<0.0005	<0.0005	0.0011			
Cobalt, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0002	0.0002	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001	<0.0001	0.00014	0.00009	0.00009		0.00006	0.0002	0.0002	0.0002			
Copper, dissolved	mg/L		0.013	0.003	0.002	0.002	0.002	<0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.003			0.004	0.003	0.002	0.001	0.002	0.002	0.003		0.002	0.004	0.002	0.013			
Iron, dissolved	mg/L		1.1	0.05	0.06	0.06	0.04	0.05	0.03	0.02	0.02	0.05	0.14	0.13	0.03	0.05			0.06	0.08	0.17	0.1	<0.02	0.12	0.11		0.02	0.11	0.04	0.33			
Lead, dissolved	mg/L		0.004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		0.0002	0.0001	0.0001	0.0002			
Lithium, dissolved	mg/L			0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	<0.001	0.001	0.002	0.001			0.002	0.002	0.002	0.002	0.002	<0.001	0.001		0.002	0.001	0.002	0.001			
Magnesium, dissolved	mg/L			13.6	13.8	14.1	13.5	13.5	13.2	13.1	14	21.5	3.9	10.4	10.8	12.1			13.8	13.2	10.5	11.3	16.1	5.71	7.22		12.1	9.4	12.3	9.65			
Manganese, dissolved	mg/L			0.018	0.012	0.02	0.013	0.012	0.018	0.025	0.028	0.046	0.045	0.01	<0.005	0.006			0.007	0.008	0.015	0.016	0.022	0.0093	0.0055		0.0049	<0.005	0.007	0.0185			
Mercury, dissolved	mg/L										<0.0001		<0.0001	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001		<0.00001	<0.00001	<0.00001		<0.00001	<0.0001	<0.0001	<0.00001			
Molydenum, dissolved	mg/L	0.073		0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001			0.001	0.001	<0.001	<0.001	0.00073	0.00055	0.00091		0.00099	0.001	0.001	0.00214			
Nickel, dissolved	mg/L	0.11		0.001	0.0009	<0.0005	0.0006	0.0008	0.0008	0.0011	0.0009	0.0011	0.0014	0.0008	<0.0005	<0.0005			<0.0005	0.0014	0.0014	<0.0005	<0.001	0.002	0.002		0.001	0.0013	0.0007	0.002			
Phosphorus, dissolved	mg/L											0.09											0.04	<0.01	<0.01		<0.01			0.02			
Potassium, dissolved	mg/L			1.4	1.3	1.4	1.4	1.4	1.3	1.4	1.4	5.2	2.3	1.3	1.4	1.4			1.2	1.3	1	1.1	2.87	0.45	1.32		1.28	0.8	1.3	1.95			
Selenium, dissolved	mg/L	0.002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	0.0002	<0.0002	<0.0006	<0.0006	<0.0006		<0.0006	<0.0002	<0.0002	<0.0006			
Silicon, dissolved	mg/L			5.75	5.27	5.76	6.13	6.02	6.05	5.82	6.07	9.97	3.46	5.29	4.33	5.05			6.2	6.06	5.98	6.22	3.67	2.02	2.01		4.49	5.58	5.48	5.69			
Silver, dissolved	mg/L	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0010	<0.0010		<0.00001	<0.00001	0.00032	<0.00001			
Sodium, dissolved	mg/L			9.8	9.6	8.9	9.5	8.7	8.3	9.7	8.8	14.7	3.2	6.3	7.5	9			9	9.8	7.5	7.3	11.1	4.47	6.15		8.54	7.6	9.7	9.13			
Strontium, dissolved	mg/L			0.407	0.372	0.366	0.39	0.378	0.39	0.42	0.407	0.483	0.099	0.248	0.29	0.351			0.368	0.371	0.308	0.317	0.419	0.154	0.203		0.344	0.262	0.374	0.247			
Sulpher, dissolved	mg/L			7.3	7.2	7.7	6.7	7.6	7	7.8	8.2	11.4	1.4	5	6.1	7			6.5	6.6	3.9	4.9						3.7	6.8				
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005			<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001	<0.00005	<0.00005	<0.00001			
Tin, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.004	<0.004	<0.004		<0.0001	<0.001	<0.001	<0.0001			
Titanium, dissolved	mg/L			0.0005	0.0007	<0.0005	0.0006	0.0008	0.0008	0.0005	0.0009	0.0028	<0.0005	0.001	0.001	0.001			0.0009	0.0008	0.0008	0.0007	0.0008	0.0007	0.0009		0.0007	0.0007	<0.0005	0.0036			
Uranium, dissolved	mg/L			0.0016	0.0016	0.0018	0.0015	0.0015	0.0015	0.0018	0.0017	0.0014	<0.0005	0.001	0.0013	0.0014			0.0015	0.0016	0.001	0.0011	0.0012	<0.0006	0.0007		0.0014	0.0008	0.0016	0.0007			
Vanadium, dissolved	mg/L			0.0019	0.0015	0.0015	0.0016	0.0012	0.0009	0.0009	0.0021	0.0043	0.0007	0.0014	0.001	0.0014			0.001	0.0018	0.0009	0.0009	0.00026	0.00057	0.00064		0.0006	0.0008	0.001	0.0014			
Zinc, dissolved	mg/L		0.03	0.001	0.001	0.002	0.002	<0.001	<0.001	0.002	0.002	0.008	0.009	0.001	0.002	0.002			0.003	0.005	0.007	0.001	0.003	0.002	0.003		0.003	0.004	0.004	0.003			
Zirconium, dissolved	mg/L																						0.0001	0.0002	0.0002		0.0004			0.0004			

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				19/09/2008	08/10/2008	29/10/2008	18/11/2008	22/04/2009	30/04/2009	05/05/2009	27/05/2009	17/06/2009	26/06/2009	27/06/2009	28/06/2009	29/06/2009	30/06/2009	01/07/2009	02/07/2009	03/07/2009	04/07/2009	05/07/2009	06/07/2009	07/07/2009	08/07/2009	08/07/2009	09/07/2009	09/07/2009	10/07/2009	10/07/2009	11/07/2009	11/07/2009	12/07/2009	12/07/2009
Total Suspended Solids	mg/L			9	3		<2	100	72	87	8	<2	8			40		21	7	10		10				9		10		9		7		6
Total Dissolved Solids	mg/L			244	162		250	222	64	52	176	138	180			230		250	270	240		240												270
pH (field)	pH units	6.5-9	6.0-9.0				8.23	8.2	7.4		7.98	8.17		8.21	8.29	7.9	8.26	8.32	8.2	8.18	8.2	8.17	8.11	8.2	8.17		8.46		8.4		8.38		8.39	
pH (lab)	pH units	6.5-9	6.0-9.0	8.12	8.03		7.88	7.92	7.07	7.03	7.98	7.98	8.2			8.2		8.3	8.2	8.3		8.2												8.3
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm			320	223		321	291	54	54	252	280	305			371		383	423	391		396												407
Temperature (field)	C						0.8	0.3	0.5		13.7	6.7		7.94	10.16	7.95	7.99	8.43	9.2	9.85	9.19	9.75	11.9	8.65	12.01		13.03		11.83		12		11.07	
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%								295					108.2	107.8	105.2	107.4	110.5	108.9	105.5	104.9	105.6	107.6	105.3	106.7		112		114.4		115.5		116.2	
ORP (field)	mV																																	
Hardness (from total)	mg/L												156			165						176												185
Hardness (from dissolved)	mg/L					169		151	30	35	117	129	147			164						182												180
Alkalinity, total	mg/L			147	113		150	134	23	24	110	122				130						150												160
Chloride	mg/L	120		2.33	1.12		1.73	1.4	0.54	0.5	0.87	1.22				2.6						2.7												2.8
Fluoride	mg/L	0.12														0.43						0.43												0.41
Sulphate, dissolved	mg/L			20.9	12.3		23.2	21.5	1.02	1.4	17.9	18				29						41												39
Ammonia	mg/L	0.239	0.25	0.12	0.07		<0.05						0.007			<0.005						<0.005												<0.005
Nitrite (N)	mg/L	0.06	0.06	<0.01	<0.01								<0.005			0.044						0.024												0.022
Nitrate (N)	mg/L	3	9.1	0.08	0.15								0.1			2.23						2.19												2.15
Dissolved Organic Carbon	mg/L			19.8	15.6	11.3			20.8			10.7	10.1			12.5																		12.2
Aluminum, total	mg/L	*		0.312	0.118		0.062	2.62	2.04	1.93	0.11	0.025	0.034			0.871						0.212												0.15
Antimony, total	mg/L			<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005			<0.0005						<0.0005												<0.0005
Arsenic, total	mg/L	0.005		0.0003	0.0006		0.0002	0.0018	0.001	0.0011	0.0005	0.0003	0.0004			0.001						0.0006												0.0005
Barium, total	mg/L			0.067	0.046		0.064	0.109	0.06	0.06	0.058	0.055	0.067			0.107						0.091												0.092
Beryllium, total	mg/L			<0.00004	<0.00004		<0.0001	0.00009	<0.00004	0.00008	<0.00004	<0.00004	<0.0001			<0.0001						<0.0001												<0.0001
Bismuth, total	mg/L			<0.0001	<0.0001		<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001			<0.001						<0.001												<0.001
Boron, total	mg/L	1.5		0.011	<0.005		0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05			<0.05						<0.05												<0.05
Cadmium, total	mg/L	*		0.00004	<0.00001		0.00003	0.00006	0.00007	0.00006	0.00094	0.00001	0.00002			0.00003						0.00002												0.00003
Calcium, total	mg/L			39.4	35.3		41.5	42.9	10	11.4	32.4	35.2	41.4			43.7						47.5												49.4
Chromium, total	mg/L	0.001		0.0017	0.0013		<0.0005	0.0052	0.0043	0.0046	0.0012	0.0005	<0.001			0.002						<0.001												<0.001
Cobalt, total	mg/L			0.00045	0.00023		<0.0001	0.00175	0.00146	0.00152	0.00018	0.00009	<0.0005			0.0007						<0.0005												<0.0005
Copper, total	mg/L	*		0.044	0.01		0.014	0.016	0.022	0.018	0.008	0.004	0.0049			0.0287						0.0231												0.0205
Iron, total	mg/L	0.3		0.72	0.38		0.1	4.08	3.45	2.98	0.26	0.06	0.07			1.37						0.427												0.301
Lead, total	mg/L	*		0.0002	0.0001		<0.0001	0.0018	0.0012	0.0011	0.0004	<0.0001	<0.0002			0.0006						0.0002												0.0002
Lithium, total	mg/L			0.002	0.001		0.003	0.004	0.002	0.002	0.001	0.001	<0.005			<0.005						<0.005												<0.005
Magnesium, total	mg/L			11.3	10.2		12.4	16.3	3.44	3.34	10.6	11.1	12.7			13.6						13.9												15.1
Manganese, total	mg/L			0.102	0.034		0.021	0.113	0.155	0.135	0.0215	0.0042	0.006			0.112						0.028												0.023
Mercury, total	mg/L	0.000026		<0.00001	<0.00001		<0.0001	0.00001	0.00002	0.00001	<0.00001	<0.00001	<0.00002			<0.00002						<0.00002												0.00003
Molybdenum, total	mg/L	0.073		0.00285	0.00099		0.001	0.00072	0.00024	0.00028	0.00173	0.00162	0.002			0.007						0.007												0.007
Nickel, total	mg/L	*		0.001	0.002		0.0014	0.004	0.004	0.005	0.002	0.001	0.001			0.003						0.001												0.001
Phosphorus, total	mg/L			0.03	<0.01			0.18	0.19	0.162	<0.05	0.014																						
Potassium, total	mg/L			4.3	1.2		1.4	3.7	2.3	1.6	1.5	1.4	1.56			3.75						3.91												3.87
Selenium, total	mg/L	0.001		0.0006	<0.0006		<0.0002	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002			0.0015						0.0015												0.0011
Silicon, total	mg/L			6.07	6.55		5.26	10.7	5.45	4.86	4.52	4.49	5.65			6.48						5.61												5.68
Silver, total	mg/L	0.00025		0.00016	<0.00001		0.00005	<0.00001	0.00004	<0.00001	<0.00001	0.00068	<0.00002			<0.00002						<0.00002												<0.00002
Sodium, total	mg/L			10.7			9.6	9.83	1.73	1.7	8.08	8.25	9.04			12.9						13.1												13.6
Strontium, total	mg/L			0.331	0.258		0.417	0.354	0.058	0.062	0.296	0.326	0.357			0.425						0.49												0.504
Sulpher, total	mg/L						7.5	7.7	0.6	0.6	5.9	6.3	6			13						22												17
Thallium, total	mg/L	0.0008		<0.00001	<0.00001		<0.00005	0.00003	0.00002	0.00002	<0.00001	<0.00001	<0.00005			<0.00005						<0.00005												<0.00005
Tin, total	mg/L			<0.0001	<0.0001		<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.005			<0.005						<0.005												<0.005
Titanium, total	mg/L			0.0142	0.006		0.0026	0.102	0.0733	0.0673	0.0059	0.0022	<0.005			0.035						0.013												0.005
Uranium, total	mg/L	0.015		0.001	0.0007		0.0016	0.0008	<0.0004	<0.0004	0.0013	0.0011	0.0014			0.0013						0.0013												0.0015
Vanadium, total	mg/L			0.00204	0.00102		0.0006	0.00751	0.00554	0.00584	0.00116	0.00066	<0.005			<0.005						<0.005												<0.005
Zinc, total	mg/L	0.03		0.008	0.008		0.008	0.015	0.07	0.016	0.007	0.004	<0.005			0.007						<0.005												0.006
Zirconium, total	mg/L			0.0005	0.0005		<0.001	0.0008	0.0006	0.0006	0.0005	0.0004	<0.0005			<0.0005						<0.0005												<0.0005
Aluminum, dissolved	mg/L		0.1	0.036	0.011	0.005	0.016	0.055	0.076	0.102	0.013	0.013	0.007			0.027						0.017												0.013
Antimony, dissolved	mg/L			0.0008	0.0003	0.001	0.0009	0.0016	0.0009	0.0011	0.0013	<0.0002	<0.0005			<0.0005						<0.0005												<0.0005
Arsenic, dissolved	mg/L		0.005	0.0007	0.0005	0.0004	0.0003	0.0005	0.0003	0.0003	0.0004	0.0004	0.0004			0.0005						0.0005												0.0005
Barium, dissolved	mg/L			0.06	0.05	0.054	0.067	0.049	0.016	0.02	0.051	0.051	0.059			0.079						0.08												0.084
Beryllium, dissolved	mg/L			<0.00004	<0.00004	<0.00004	<0.0001	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.0001			<0.0001						<0.0001												<0.0001
Bismuth, dissolved	mg/L						<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001			<0.001						<0.001												<0.001
Boron, dissolved	mg/L			0.014	0.005	0.006	0.006	<0.004	0.005	<0.004	<0.004	<0.004	<0.05			<0.05						<0.05												<0.05
Cadmium, dissolved	mg/L		*	<0.00001	0.00001	<0.00001	0.00002	0.00004	0.00104	0.00008	0.00025	<0.00001	<0.00001			0.00002						0.00002												0.00001
Calcium, dissolved	mg/L			37.6	28.5	43.9	39.4	36.6	8.18	9.87	30.4	34	39			43.2						50												48.4
Chromium, dissolved	mg/L		0.001	0.0021	0.0009	0.0008	<0.0005	0.0005	0.0008	0.0012	0.0015	<0.0004	<0.001			<0.001						<0.001												<0.001
Cobalt, dissolved	mg/L			0.00042	0.00011	0.00007	<0.0001	0.00031	0.00016	0.00021	0.00011	0.00011	<0.0005			<0.0005						<0.0005												<0.0005
Copper, dissolved	mg/L		0.013	0.015	0.006	0.004	0.005	0.006	0.01	0.006	0.01	0.003	0.0029			0.0167						0.0194												0.0163
Iron, dissolved	mg/L		1.1	0.31	0.112	0.06	0.05	0.08	0.14	0.28	0.1	0.04	0.022			0.127						0.081												0.063
Lead, dissolved	mg/L		0.004	0.0001	<0.0001	<0.0001	<0.0001	0.0003	0.0003	0.0002	0.0003	<0.0001	<0.0002			<0.0002						<0.0002												<0.0002
Lithium, dissolved	mg/L			0.001	0.001	0.002	0.002	0.002	<0.001	<0.001	0.001	0.001	<0.005			<0.005						<0.005												<0.005
Magnesium, dissolved	mg/L			11	8.47	14.4	12.5	14.5	2.25	2.55	9.89	10.8	12.1			13.6						14												14.4
Manganese, dissolved	mg/L			0.0908	0.0176	0.0091	0.016	0.0344	0.0263	0.0301	0.003	0.0033	0.003			0.003						0.004												0.003
Mercury, dissolved	mg/L			<0.00001	<0.00001	<0.00001	<0.0001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00002			<0.00002						<0.00002												<0.00002
Molydenum, dissolved	mg/L		0.073	0.00254	0.00096	0.00098	0.001	0.00072	0.00018	0.00029	0.00145	0.00142	0.002			0.008						0.007												0.007
Nickel, dissolved	mg/L		0.11	0.002	0.002	0.001	0.0012	<0.001	<0.001	0.001	0.001	0.001	0.001			0.001						<0.001												<0.001
Phosphorus, dissolved	mg/L			0.01	<0.01	0.01		0.11	0.09	0.04	<0.01	0.01																						
Potassium, dissolved	mg/L			4.03	1	1.5	1.5	3.2	2	1.5	1.4	1.4	1.45			3.55						4.09												3.81
Selenium, dissolved	mg/L		0.002	0.0013	<0.0006	<0.0006	<0.0002	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0001			0.0015						0.0014												0.0011
Silicon, dissolved	mg/L			5.42	5.6	6.72	5.69	5.91	1.87	1.99	4.16	4.29	5.5			5.14						4.86												5.35
Silver, dissolved	mg/L		0.0001	<0.00001	0.00006	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002			<0.00002						<0.00002												<0.00002
Sodium, dissolved	mg/L			11.1	5.5	9.6	10.6	9.7	1.6	1.6	7.5	8.1	8.54			13.3						13.9												13.4
Strontium, dissolved	mg/L			0.317	0.248	0.344	0.407	0.32	0.046	0.052	0.253	0.33	0.331			0.406						0.464												0.487
Sulpher, dissolved	mg/L						7.4	7.8	0.6	0.7	5.5	6.1	8			15						14												16
Thallium, dissolved	mg/L			<0.00001	0.00001	<0.00001	<0.00005	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005			<0.00005						<0.00005												<0.00005
Tin, dissolved	mg/L			<0.0001	0.0002	0.0006	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.005			<0.005						<0.005												<0.005
Titanium, dissolved	mg/L			0.0026	0.0013	0.0014	0.0011	0.0047	0.0028	0.0043	0.0011	0.0005	<0.005			<0.005						<0.005												<0.005
Uranium, dissolved	mg/L			0.0009	0.0007	0.0011	0.0017	0.0005	<0.0004	<0.0004	0.0012	0.0008	0.0014			0.0013						0.0013												0.0014
Vanadium, dissolved	mg/L			0.00156	0.00069	0.00055	0.0005	0.00053	0.00043	0.00068	0.0007	0.00051	<0.005			<0.005						<0.005												<0.005
Zinc, dissolved	mg/L		0.03	0.003	0.002	0.007	0.006	0.005	0.02	0.006	0.004	0.001	<0.005			<0.005						<0.005												<0.005
Zirconium, dissolved	mg/L			0.0004	0.0003	0.0002		0.0003	0.0002	0.0003	<0.0001	0.0002	<0.0005			<0.0005						<0.0005												<0.0005

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				13/07/2009	14/07/2009	15/07/2009	16/07/2009	17/07/2009	18/07/2009	19/07/2009	20/07/2009	21/07/2009	22/07/2009	22/07/2009	23/07/2009	24/07/2009	24/07/2009	25/07/2009	25/07/2009	26/07/2009	26/07/2009	27/07/2009	28/07/2009	29/07/2009	30/07/2009	31/07/2009	01/08/2009	01/08/2009	02/08/2009	02/08/2009	03/08/2009	03/08/2009	04/08/2009	05/08/2009
Total Suspended Solids	mg/L					11	10	8	31				5	6			17		14	8	11	8	12	<4	<4	4	5		4		<4		7	<4
Total Dissolved Solids	mg/L					260	240	230	210	220			210	230			220		240	200	230	230	224	210	200	210	230		240		240		260	240
pH (field)	pH units	6.5-9	6.0-9.0	8.4	8.42	8.36	8.41	8.3	8.61	8.34	8.19	8.34	8.43		8.32	8.37		8.39			8.43	8.4	7.94	7.9	7.79	8.36		8.1		7.87		8.13	8	8.34
pH (lab)	pH units	6.5-9	6.0-9.0			8.3	8.2	8.2	8	8.2			8.1	8			8.2		8.2	8.1	8.2	8.2	8.05	8.1	8.1	8.1	8.2		8.2		8.1		8.3	8.3
Specific Conductance, field	µS/cm																																		
Specific Conductance (lab)	µS/cm					403	404	404	331	368			348	345			366		382	344	373	375	342	351	350	362	390		395		394		405	400
Temperature (field)	C			9.72	9.76	10.33	7.93	7.62	7.81	7.86	8.9	8.39	9.09		9.37	10.47		8.44			10.19	12.02	10.69	9.17	8.84	9.48		11.13		13.65		7.96	7.97	8.35
Dissolved Oxygen (field)	mg/L																																		
Dissolved Oxygen (field)	%			114.2	110	104.7	106.7	111.2	112.4	117.5	124.5	121	122.3		110.5	115.2		111.4			116.2	150.2	152.1	86										
ORP (field)	mV																																		
Hardness (from total)	mg/L						199	194	150			158							180								180							
Hardness (from dissolved)	mg/L						179	175	131			160							159				155				186							
Alkalinity, total	mg/L						160	160	84										140				107				140							
Chloride	mg/L	120					3.1	3	8.6										5.6				5.65				6.2							
Fluoride	mg/L	0.12					0.43	0.46	0.37										0.38								0.37							
Sulphate, dissolved	mg/L						47	46	46										42				37.9				38							
Ammonia	mg/L	0.239	0.25				0.007	<0.005	0.83			0.029							0.013								0.01							
Nitrite (N)	mg/L	0.06	0.06				0.026	0.025	0.125			0.045							0.055								0.014							
Nitrate (N)	mg/L	3	9.1				1.96	2.02	5.8			2.7							2.9								1.56							
Dissolved Organic Carbon	mg/L																																		
Aluminum, total	mg/L	*					0.221	0.161	1.18			0.374							0.395								0.192							
Antimony, total	mg/L						<0.0005	<0.0005	0.0009			<0.0005							<0.0005								<0.0005							
Arsenic, total	mg/L	0.005					0.0006	0.0005	0.0015			0.0005							0.0005								0.0005							
Barium, total	mg/L						0.096	0.089	0.154			0.079							0.091								0.088							
Beryllium, total	mg/L						<0.0001	<0.0001	<0.0001			<0.0001							<0.0001								<0.0001							
Bismuth, total	mg/L						<0.001	<0.001	<0.001			<0.001							<0.001								<0.001							
Boron, total	mg/L	1.5					<0.05	<0.05	<0.05			<0.05							<0.05								<0.05							
Cadmium, total	mg/L	*					0.00003	0.00002	0.00007			0.00004							<0.00001								0.00003							
Calcium, total	mg/L						53	51.5	41.5			43.2							49.3								48.5							
Chromium, total	mg/L	0.001					0.001	<0.001	0.003			0.001							<0.001								<0.001							
Cobalt, total	mg/L						<0.0005	<0.0005	0.001			<0.0005							<0.0005								<0.0005							
Copper, total	mg/L	*					0.0352	0.0318	0.0611			0.0166							0.0243								0.0161							
Iron, total	mg/L	0.3					0.468	0.352	1.82			0.647							0.596								0.312							
Lead, total	mg/L	*					0.0002	0.0002	0.0017			0.0004							0.0005								0.0005							
Lithium, total	mg/L						<0.005	<0.005	<0.005			<0.005							<0.005								<0.005							
Magnesium, total	mg/L						16.2	15.8	11.4			12.1							13.8								14.3							
Manganese, total	mg/L						0.033	0.025	0.156			0.038							0.051								0.025							
Mercury, total	mg/L	0.000026					<0.00002	0.00016	0.00004			<0.00002							<0.00002								0.00002							
Molybdenum, total	mg/L	0.073					0.009	0.009	0.017			0.007							0.009								0.008							
Nickel, total	mg/L	*					0.002	0.001	0.004			0.002							0.002								0.001							
Phosphorus, total	mg/L																																		
Potassium, total	mg/L						4.52	4.48	3.71			2.66							3.64								3.4							
Selenium, total	mg/L	0.001					0.0014	0.0013	0.0022			0.0008							0.0013								0.0012							
Silicon, total	mg/L						6.65	5.92	6.33			5.8							5.94								5.42							
Silver, total	mg/L	0.00025					<0.00002	<0.00002	0.00002			<0.00002							<0.00002								<0.00002							
Sodium, total	mg/L						15	14.9	11.7			9.89							13.3								13.5							
Strontium, total	mg/L						0.547	0.516	0.645			0.45							0.484								0.526							
Sulpher, total	mg/L						17	21	18			15							15								17							
Thallium, total	mg/L	0.0008					<0.00005	<0.00005	<0.00005			<0.00005							<0.00005								<0.00005							
Tin, total	mg/L						<0.005	<0.005	<0.005			<0.005							<0.005								<0.005							
Titanium, total	mg/L						0.012	0.007	0.057			0.02							0.014								0.008							
Uranium, total	mg/L	0.015					0.0016	0.0015	0.0015			0.0013							0.0013								0.0012							
Vanadium, total	mg/L						<0.005	<0.005	<0.005			<0.005							<0.005								<0.005							
Zinc, total	mg/L	0.03					<0.005	<0.005	0.011			0.009							0.01								<0.005							
Zirconium, total	mg/L						<0.0005	<0.0005	0.001			<0.0005							<0.0005								<0.0005							
Aluminum, dissolved	mg/L		0.1				0.016	0.015	0.046			0.011							0.013								0.035							
Antimony, dissolved	mg/L						<0.0005	<0.0005	0.0008			<0.0005							<0.0005								<0.0005							
Arsenic, dissolved	mg/L		0.005				0.0005	0.0005	0.0009			0.0004							0.0005								0.0005							
Barium, dissolved	mg/L						0.077	0.077	0.116			0.068							0.078								0.083							
Beryllium, dissolved	mg/L						<0.0001	<0.0001	<0.0001			<0.0001							<0.0001								<0.0001							
Bismuth, dissolved	mg/L						<0.001	<0.001	<0.001			<0.001							<0.001								<0.001							
Boron, dissolved	mg/L						<0.05	<0.05	<0.05			<0.05							<0.05								<0.05							
Cadmium, dissolved	mg/L		*				0.00001	<0.00001	0.00003			0.00002							0.00002								0.00003							
Calcium, dissolved	mg/L						48.2	47.2	37.1			43							43.5								52.3							
Chromium, dissolved	mg/L		0.001				<0.001	<0.001	<0.001			<0.001							<0.001								<0.001							
Cobalt, dissolved	mg/L						<0.0005	<0.0005	<0.0005			<0.0005							<0.0005								<0.0005							
Copper, dissolved	mg/L		0.013				0.0227	0.0226	0.0192			0.0084							0.0128								0.0097							
Iron, dissolved	mg/L		1.1				0.077	0.076	0.097			0.043							0.052								0.047							
Lead, dissolved	mg/L		0.004				<0.0002	<0.0002	0.0003			<0.0002							<0.0002								<0.0002							
Lithium, dissolved	mg/L						<0.005	<0.005	<0.005			<0.005							<0.005								<0.005							
Magnesium, dissolved	mg/L						14.2	13.8	9.37			12.8							12.3								13.6							
Manganese, dissolved	mg/L						0.002	0.003	0.093			0.004							0.002								0.003							
Mercury, dissolved	mg/L						<0.00002	<0.00002	0.00003			0.00007							<0.00002								0.00004							
Molydenum, dissolved	mg/L		0.073				0.007	0.008	0.015			0.007							0.009								0.008							
Nickel, dissolved	mg/L		0.11				0.001	0.001	0.001			0.001							0.001								0.001							
Phosphorus, dissolved	mg/L																																		
Potassium, dissolved	mg/L						4.01	4.04	3.02			2.66							3.38								3.46							
Selenium, dissolved	mg/L		0.002				0.0013	0.0013	0.0021			0.0009							0.0014								0.0012							
Silicon, dissolved	mg/L						5.31	5.28	3.14			5.01							4.97								5.23							
Silver, dissolved	mg/L		0.0001				<0.00002	<0.00002	<0.00002			<0.00002							<0.00002								<0.00002							
Sodium, dissolved	mg/L						13.7	13.4	10.4			10.8							11.5								13.2							
Strontium, dissolved	mg/L						0.479	0.468	0.569			0.415							0.488								0.52							
Sulpher, dissolved	mg/L						16	16	15			13							15								15							
Thallium, dissolved	mg/L						<0.00005	<0.00005	<0.00005			<0.00005							<0.00005								<0.00005							
Tin, dissolved	mg/L						<0.005	<0.005	<0.005			<0.005							<0.005								<0.005							
Titanium, dissolved	mg/L						<0.005	<0.005	0.007			<0.005							<0.005								<0.005							
Uranium, dissolved	mg/L						0.0014	0.0014	0.0012			0.0013							0.0012								0.0013							
Vanadium, dissolved	mg/L						<0.005	<0.005	<0.005			<0.005							<0.005								<0.005							
Zinc, dissolved	mg/L		0.03				<0.005	<0.005	<0.005			<0.005							<0.005								<0.005							
Zirconium, dissolved	mg/L						<0.0005	<0.0005	0.0005			<0.0005							<0.0005								<0.0005							

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				08/08/2009	09/08/2009	10/08/2009	11/08/2009	12/08/2009	14/08/2009	15/08/2009	16/08/2009	17/08/2009	18/08/2009	19/08/2009	20/08/2009	21/08/2009	22/08/2009	23/08/2009	24/08/2009	25/08/2009	26/08/2009	27/08/2009	28/08/2009	29/08/2009	30/08/2009	31/08/2009	01/09/2009	02/09/2009	03/09/2009	04/09/2009	05/09/2009	06/09/2009	07/09/2009	08/09/2009
Total Suspended Solids	mg/L			<4			<2	<4	18	15	13	17	100	550	33	21	15	20	13	13	22	15	15	13	71	50	20	14	13	14	11	12	7	10
Total Dissolved Solids	mg/L			200			234	220	260	220	230	240	240	220	210	220	230	230	180	240	240	240	240	250	230	230	230	240	250	230	250	240	240	240
pH (field)	pH units	6.5-9	6.0-9.0		7.85	7.8			7.87	7.83	7.79	7.87	7.84	7.96	8.1	8.08	7.93	8.08	8.07	7.97	8.01	8.02	7.97	8.04	7.87	7.95	7.94	7.97	7.95	7.91	8	8.07	8.13	8.24
pH (lab)	pH units	6.5-9	6.0-9.0	8.2			8.05	8.1	8.1	8.2	8.2	8.2	8.2	8	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8	8.1	8	8	8	8.1	8.1	8.1	8.1	8.1	8	8.1	8.1
Specific Conductance, field	µS/cm																																	
Specific Conductance (lab)	µS/cm			319			302	316	364	377	376	375	369	357	363	368	374	376	381	382	370	367	379	385	382	371	380	386	391	393	394	396	393	395
Temperature (field)	C				7.17	9.6			7.49	8.64	9.35	9.75	9.06	8.26	8.23	8.22	9.54	9.42	8.62	8.8	8.72	7.82	9.69	9.13	9.51	8.61	8.01	7.67	7.23	7.83	8.06	7.39	6.87	7.05
Dissolved Oxygen (field)	mg/L																																	
Dissolved Oxygen (field)	%				93.6				102.3	146.5	102.1	110	89.4						101.8	99.8	113.2	110.7	104	103.5	102.7	105.1	106.5	104.4	105.7	101.5	106.5	106	106.2	106.6
ORP (field)	mV																																	
Hardness (from total)	mg/L			194				157		166				225			161								229							175		
Hardness (from dissolved)	mg/L						138	148		164				157			167								167							155		
Alkalinity, total	mg/L						140	140		120				120	120	120	120	120	110						110							100		
Chloride	mg/L	120					1.91	2.2		11				10	11	11	12	12	14						20							22		
Fluoride	mg/L	0.12						0.32		0.27				0.26	0.28	0.28	0.29	0.29	0.28						0.26							0.25		
Sulphate, dissolved	mg/L						24	19		38				30	32	33	35	35	34						39							42		
Ammonia	mg/L	0.239	0.25	<0.005				<0.005		0.012				<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005							<0.005		
Nitrite (N)	mg/L	0.06	0.06	<0.005				<0.005		0.04				0.014	0.023	0.024	0.024	0.025	0.029						0.023							0.012		
Nitrate (N)	mg/L	3	9.1	0.38				0.33		3.4				3.2	3.4	3.6	3.8	3.8	4						4.5							4.8		
Dissolved Organic Carbon	mg/L																									9.7								
Aluminum, total	mg/L	*		0.14			0.05	0.047		0.339				8.02			0.395								1.92							0.257		
Antimony, total	mg/L			<0.0005			<0.0002	<0.0005		<0.0005				0.0008			<0.0005								0.0006							<0.0005		
Arsenic, total	mg/L	0.005		0.0006			0.0007	0.0003		0.0005				0.0052			0.0006								0.0012							0.0005		
Barium, total	mg/L			0.086			0.056	0.069		0.096				0.287			0.092								0.151							0.1		
Beryllium, total	mg/L			<0.0001			<0.00004	<0.0001		<0.0001				0.0003			<0.0001								<0.0001							<0.0001		
Bismuth, total	mg/L			<0.001			<0.001	<0.001		<0.001				<0.001			<0.001								<0.001							<0.001		
Boron, total	mg/L	1.5		<0.05			0.009	<0.05		<0.05				<0.05			<0.05								<0.05							<0.05		
Cadmium, total	mg/L	*		0.00062			<0.00001	0.00003		0.00026				0.00018			0.00004								0.00007							0.00003		
Calcium, total	mg/L			51.6			39.5	41.7		45.8				62.8			44								61.6							48		
Chromium, total	mg/L	0.001		<0.001			0.001	<0.001		<0.001				0.014			0.001								0.003							<0.001		
Cobalt, total	mg/L			<0.0005			0.00013	<0.0005		<0.0005				0.0062			<0.0005								0.0011							<0.0005		
Copper, total	mg/L	*		0.0127			0.004	0.0113		0.0118				0.0656			0.011								0.0247							0.0056		
Iron, total	mg/L	0.3		0.371			0.204	0.124		0.625				11.7			0.614								2.24							0.411		
Lead, total	mg/L	*		0.0006			0.0003	0.0005		0.0008				0.0043			0.0009								0.0013							0.0005		
Lithium, total	mg/L			<0.005			0.002	<0.005		<0.005				0.007			<0.005								<0.005							<0.005		
Magnesium, total	mg/L			15.9			12.5	12.9		12.6				16.6			12.5								18.3							13.4		
Manganese, total	mg/L			0.026			0.014	0.012		0.056				0.443			0.049								0.165							0.046		
Mercury, total	mg/L	0.000026		<0.00002				0.00002		<0.00002				<0.00002			0.00003								<0.00002							<0.00002		
Molybdenum, total	mg/L	0.073		0.003			0.0021	0.002		0.009				0.008			0.009								0.011							0.009		
Nickel, total	mg/L	*		0.002			0.002	0.001		0.002				0.015			0.001								0.004							0.001		
Phosphorus, total	mg/L						<0.01																											
Potassium, total	mg/L			2.47			1.6	1.67		2.83				4.11			2.66								3.74							2.75		
Selenium, total	mg/L	0.001		0.0003			<0.0006	0.0003		0.0011				0.0011			0.001								0.0015							0.0012		
Silicon, total	mg/L			7.8			6	6.07		5.44				20.9			5.32								9.15							4.96		
Silver, total	mg/L	0.00025		<0.00002			<0.00001	<0.00002		<0.00002				0.00005			<0.00002								<0.00002							<0.00002		
Sodium, total	mg/L			11.6			9.12	9.29		12.5				12			12.1								19							14.9		
Strontium, total	mg/L			0.505			0.326	0.412		0.52				0.556			0.506								0.678							0.538		
Sulpher, total	mg/L			11			6.5	5		21				13			18								20							19		
Thallium, total	mg/L	0.0008		<0.00005			<0.00001	<0.00005		<0.00005				0.0001			<0.00005								<0.00005							<0.00005		
Tin, total	mg/L			<0.005			<0.0001	<0.005		<0.005				<0.005			<0.005								<0.005							<0.005		
Titanium, total	mg/L			0.005			0.0026	<0.005		0.019				0.349			0.019								0.072							0.01		
Uranium, total	mg/L	0.015		0.0015			0.0014	0.0014		0.0009				0.0013			0.0007								0.0009							0.0006		
Vanadium, total	mg/L			<0.005			0.0009	<0.005		<0.005				0.021			<0.005								0.005							<0.005		
Zinc, total	mg/L	0.03		0.007			0.002	<0.005		0.006				0.032			0.005								0.014							<0.005		
Zirconium, total	mg/L			<0.0005			0.0002	<0.0005		<0.0005				0.0015			<0.0005								<0.0005							<0.0005		
Aluminum, dissolved	mg/L		0.1				0.008	0.007		0.016				0.023			0.018								0.072							0.03		
Antimony, dissolved	mg/L						<0.0002	<0.0005		<0.0005				<0.0005			<0.0005								<0.0005							<0.0005		
Arsenic, dissolved	mg/L		0.005				0.0004	0.0004		0.0004				0.0006			0.0004								0.0003							0.0004		
Barium, dissolved	mg/L						0.053	0.06		0.078				0.087			0.086								0.092							0.088		
Beryllium, dissolved	mg/L						<0.00004	<0.0001		<0.0001				<0.0001			<0.0001								<0.0001							<0.0001		
Bismuth, dissolved	mg/L						<0.001	<0.001		<0.001				<0.001			<0.001								<0.001							<0.001		
Boron, dissolved	mg/L						<0.004	<0.05		<0.05				<0.05			<0.05								<0.05							<0.05		
Cadmium, dissolved	mg/L		*				<0.00001	<0.00001		0.00001				0.00001			0.00002								<0.00001							<0.00001		
Calcium, dissolved	mg/L						36.6	39.9		44.7				42.5			46								44.9							42.7		
Chromium, dissolved	mg/L		0.001				0.0009	<0.001		<0.001				<0.001			<0.001								<0.001							<0.001		
Cobalt, dissolved	mg/L						0.00007	<0.0005		<0.0005				<0.0005			<0.0005								<0.0005							<0.0005		
Copper, dissolved	mg/L		0.013				0.001	0.0028		0.0037				0.0036			0.0035								0.0079							0.0016		
Iron, dissolved	mg/L		1.1				0.05	0.042		0.027				0.041			0.035								0.033							0.024		
Lead, dissolved	mg/L		0.004				0.0009	<0.0002		<0.0002				<0.0002			<0.0002								<0.0002							<0.0002		
Lithium, dissolved	mg/L						0.001	<0.005		<0.005				<0.005			<0.005								<0.005							<0.005		
Magnesium, dissolved	mg/L						11.4	11.9		12.7				12.2			12.7								13.3							11.8		
Manganese, dissolved	mg/L						0.0046	0.005		0.001				<0.001			0.002								0.005							0.002		
Mercury, dissolved	mg/L							<0.00002		<0.00002				<0.00002			<0.00002								<0.00002							<0.00002		
Molydenum, dissolved	mg/L		0.073				0.0019	0.002		0.009				0.008			0.009								0.008							0.009		
Nickel, dissolved	mg/L		0.11				0.001	<0.001		<0.001				<0.001			<0.001								<0.001							<0.001		
Phosphorus, dissolved	mg/L						0.01																											
Potassium, dissolved	mg/L						1.4	1.65		2.75				2.54			2.82								2.66							2.37		
Selenium, dissolved	mg/L		0.002				<0.0006	0.0002		0.0011				0.001			0.0011								0.0011							0.0011		
Silicon, dissolved	mg/L						5.46	5.94		4.65				4.99			4.79								4.69							4.33		
Silver, dissolved	mg/L		0.0001				<0.00001	<0.00002		<0.00002				<0.00002			<0.00002								<0.00002							<0.00002		
Sodium, dissolved	mg/L						8.4	8.72		12.5				11.6			12.5								14.8							13.6		
Strontium, dissolved	mg/L						0.319	0.377		0.476				0.449			0.501								0.526							0.512		
Sulpher, dissolved	mg/L						8.1	7		15				13			16								15							15		
Thallium, dissolved	mg/L						<0.00001	<0.00005		<0.00005				<0.00005			<0.00005								<0.00005							<0.00005		
Tin, dissolved	mg/L						<0.0001	<0.005		<0.005				<0.005			<0.005								<0.005							<0.005		
Titanium, dissolved	mg/L						0.0007	<0.005		<0.005				<0.005			<0.005								<0.005							<0.005		
Uranium, dissolved	mg/L						0.0011	0.0013		0.0009				0.0008			0.0008								0.0006							0.0005		
Vanadium, dissolved	mg/L						0.0005	<0.005		<0.005				<0.005			<0.005								<0.005							<0.005		
Zinc, dissolved	mg/L		0.03				0.001	<0.005		<0.005				<0.005			<0.005								<0.005							<0.005		
Zirconium, dissolved	mg/L						0.0002	<0.0005		<0.0005				<0.0005			<0.0005								<0.0005							<0.0005		

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				09/09/2009	10/09/2009	11/09/2009	12/09/2009	13/09/2009	14/09/2009	15/09/2009	16/09/2009	17/09/2009	18/09/2009	19/09/2009	20/09/2009	21/09/2009	22/09/2009	23/09/2009	24/09/2009	25/09/2009	26/09/2009	27/09/2009	28/09/2009	29/09/2009	30/09/2009	01/10/2009	02/10/2009	03/10/2009	04/10/2009	05/10/2009	06/10/2009	07/10/2009	08/10/2009
Total Suspended Solids	mg/L			17	8	7	7	6	6	7	4	6	6	<4	<4	<4	<4	<4	5	5	4	5	5	<4	<4	5	<4	6	5	<4	7	<4	5
Total Dissolved Solids	mg/L			250	260	260	270	270	250	260	260	250	250	250	230	270	240	250	240	250	230	270	240	240	260	250	240	190	270	270	270	280	270
pH (field)	pH units	6.5-9	6.0-9.0	8.2	8.14	8.2	8.39	8.19	8.22	8.12	8.25	8.02	8.45	8.21	8.24	7.93	8.08	8.28	8.09	8.12	8.24	8.13	8.11	8.33	8.02	7.82	7.79	7.65	7.7	7.8	8.03	8.1	8.03
pH (lab)	pH units	6.5-9	6.0-9.0	8.1	8.1	8.1	7.9	8.1	8	8.1	7.9	8.1	7.6	8.1	8.1	8	8	8	8.1	8	8.1	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Specific Conductance, field	µS/cm																																
Specific Conductance (lab)	µS/cm			396	399	398	400	383	400	404	404	406	404	408	410	405	408	402	396	400	403	398	406	427	428	420	378	423	416	418	408	422	419
Temperature (field)	C			6.98	6.31	7.73	7.08	7.45	6.4	5.49	6.84	7.06	5.23	5.77	5.93	5.94	4.41	6.04	5.51	5.71	5.95	4.07	2.78	1.45	2.17	3.53	2.38	2.16	2.79	2.63	3.08	1.95	2.22
Dissolved Oxygen (field)	mg/L																																
Dissolved Oxygen (field)	%			105	106.5	108.6	111.9	109.6	109.1	110	106.1	105.7	107.6	110	109.8	110.4	108	110.5	108.3	107.9	110.3	113	112.2	77.8	40.3		99.3	114.2	105.5	118	119	119.5	117.2
ORP (field)	mV																																
Hardness (from total)	mg/L							171							188						177								183				
Hardness (from dissolved)	mg/L							170							169						168								174				
Alkalinity, total	mg/L							110																									
Chloride	mg/L	120																															
Fluoride	mg/L	0.12																															
Sulphate, dissolved	mg/L																																
Ammonia	mg/L	0.239	0.25					<0.005							<0.005						<0.005								<0.005				
Nitrite (N)	mg/L	0.06	0.06					0.019							0.014						0.012								0.014				
Nitrate (N)	mg/L	3	9.1					4.6							5.1						5.3								4.9				
Dissolved Organic Carbon	mg/L																																
Aluminum, total	mg/L	*						0.191							0.169						0.127								0.131				
Antimony, total	mg/L							<0.0005							<0.0005						<0.0005								<0.0005				
Arsenic, total	mg/L	0.005						0.0004							0.0004						0.0005								0.0004				
Barium, total	mg/L							0.104							0.105						0.101								0.101				
Beryllium, total	mg/L							<0.0001							<0.0001						<0.0001								<0.0001				
Bismuth, total	mg/L							<0.001							<0.001						<0.001								<0.001				
Boron, total	mg/L	1.5						<0.05							<0.05						<0.05								<0.05				
Cadmium, total	mg/L	*						0.00004							0.00003						0.00016								0.00016				
Calcium, total	mg/L							46.9							51.2						48.1								50.9				
Chromium, total	mg/L	0.001						<0.001							<0.001						<0.001								<0.001				
Cobalt, total	mg/L							<0.0005							<0.0005						<0.0005								<0.0005				
Copper, total	mg/L	*						0.0035							0.0034						0.0109								0.008				
Iron, total	mg/L	0.3						0.237							0.199						0.178								0.177				
Lead, total	mg/L	*						0.0004							0.0004						0.0007								0.0004				
Lithium, total	mg/L							<0.005							<0.005						<0.005								<0.005				
Magnesium, total	mg/L							13.1							14.7						13.8								13.6				
Manganese, total	mg/L							0.029							0.03						0.03								0.038				
Mercury, total	mg/L	0.000026						<0.00002							0.00003						0.00003								<0.00002				
Molybdenum, total	mg/L	0.073						0.009							0.01						0.01								0.011				
Nickel, total	mg/L	*						0.001							0.001						0.003								0.001				
Phosphorus, total	mg/L																																
Potassium, total	mg/L							2.7							2.9						2.44								2.62				
Selenium, total	mg/L	0.001						0.0012							0.0012						0.0011								0.0013				
Silicon, total	mg/L							4.9							5.3						4.62								4.6				
Silver, total	mg/L	0.00025						<0.00002							<0.00002						<0.00002								<0.00002				
Sodium, total	mg/L							14.4							15.3						14.6								13.9				
Strontium, total	mg/L							0.573							0.546						0.544								0.596				
Sulpher, total	mg/L							14							19						22								21				
Thallium, total	mg/L	0.0008						<0.00005							<0.00005						<0.00005								<0.00005				
Tin, total	mg/L							<0.005							<0.005						<0.005								<0.005				
Titanium, total	mg/L							<0.005							0.005						<0.005								<0.005				
Uranium, total	mg/L	0.015						0.0006							0.0006						0.0006								0.0007				
Vanadium, total	mg/L							<0.005							<0.005						<0.005								<0.005				
Zinc, total	mg/L	0.03						<0.005							<0.005						0.012								<0.005				
Zirconium, total	mg/L							<0.0005							<0.0005						<0.0005								<0.0005				
Aluminum, dissolved	mg/L		0.1					0.048							0.038						0.033								0.032				
Antimony, dissolved	mg/L							<0.0005							<0.0005						<0.0005								<0.0005				
Arsenic, dissolved	mg/L		0.005					0.0003							0.0004						0.0004								0.0004				
Barium, dissolved	mg/L							0.095							0.093						0.095								0.092				
Beryllium, dissolved	mg/L							<0.0001							<0.0001						<0.0001								<0.0001				
Bismuth, dissolved	mg/L							<0.001							<0.001						<0.001								<0.001				
Boron, dissolved	mg/L							<0.05							<0.05						<0.05								<0.05				
Cadmium, dissolved	mg/L		*					0.00001							0.00002						0.00002								0.00002				
Calcium, dissolved	mg/L							46.8							46.8						45.9								47.8				
Chromium, dissolved	mg/L		0.001					<0.001							<0.001						<0.001								<0.001				
Cobalt, dissolved	mg/L							<0.0005							<0.0005						<0.0005								<0.0005				
Copper, dissolved	mg/L		0.013					0.0015							0.0015						0.0015								0.0013				
Iron, dissolved	mg/L		1.1					0.032							0.029						0.03								0.025				
Lead, dissolved	mg/L		0.004					<0.0002							<0.0002						<0.0002								<0.0002				
Lithium, dissolved	mg/L							<0.005							<0.005						<0.005								<0.005				
Magnesium, dissolved	mg/L							12.8							12.7						12.9								13.2				
Manganese, dissolved	mg/L							0.01							0.013						0.013								0.017				
Mercury, dissolved	mg/L							<0.00002							0.00006						0.00003								0.00006				
Molydenum, dissolved	mg/L		0.073					0.009							0.01						0.01								0.011				
Nickel, dissolved	mg/L		0.11					<0.001							<0.001						<0.001								<0.001				
Phosphorus, dissolved	mg/L																																
Potassium, dissolved	mg/L							2.47							2.53						2.52								2.51				
Selenium, dissolved	mg/L		0.002					0.0011							0.0013						0.0012								0.0013				
Silicon, dissolved	mg/L							4.4							4.4						4.87								4.31				
Silver, dissolved	mg/L		0.0001					<0.00002							<0.00002						<0.00002								<0.00002				
Sodium, dissolved	mg/L							14.5							14.5						13.6								13.7				
Strontium, dissolved	mg/L							0.542							0.565						0.562								0.589				
Sulpher, dissolved	mg/L							16							17						17								19				
Thallium, dissolved	mg/L							<0.00005							<0.00005						<0.00005								<0.00005				
Tin, dissolved	mg/L							<0.005							<0.005						<0.005								<0.005				
Titanium, dissolved	mg/L							<0.005							<0.005						<0.005								<0.005				
Uranium, dissolved	mg/L							0.0006							0.0006						0.0006								0.0007				
Vanadium, dissolved	mg/L							<0.005							<0.005						<0.005								<0.005				
Zinc, dissolved	mg/L		0.03					<0.005							<0.005						<0.005								<0.005				
Zirconium, dissolved	mg/L							<0.0005							<0.0005						<0.0005								<0.0005				

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				**09/10/2009**	**10/10/2009**	**11/10/2009**	**12/10/2009**	**13/10/2009**	**14/10/2009**	**15/10/2009**	**16/10/2009**	**17/10/2009**	**18/10/2009**	**19/10/2009**	**20/10/2009**	**21/10/2009**	**22/10/2009**	**23/10/2009**	**24/10/2009**	**25/10/2009**	**25/10/2009**	**26/10/2009**	**27/10/2009**	**28/10/2009**	**29/10/2009**	**30/10/2009**	**05/11/2009**	**06/11/2009**	**07/04/2010**	**19/04/2010**	**20/04/2010**	**21/04/2010**	**22/04/2010**
Total Suspended Solids	mg/L			5	<4	4	6	9	9	<4	9	12	<4	<4	<4	<4	47	<4	<4	4		<4	<4	<4	<4	4		<2	34	49	12	19	8
Total Dissolved Solids	mg/L			270	260	270	260	260	240	270	240	240	240	200	180	220	200	200	210	220		230	220	210	240	230		230	382	174	148	130	130
pH (field)	pH units	6.5-9	6.0-9.0	8	8.05	8.11	8.16	8.13	8.43	8.4	7.7	8.2	8.3	8.3	8.25	8.21	8.25	8.13	8.09	8.11	8.11	8.16	8.05	8.12	7.79	7.81	7.65		7.81	7.69	7.76	6.88	6.93
pH (lab)	pH units	6.5-9	6.0-9.0	8.1	8	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.1		8.1	8.1	8.2	8.2	8.1		7.88	8.26	7.83	7.72	7.2	7.47
Specific Conductance, field	µS/cm																																
Specific Conductance (lab)	µS/cm			423	427	429	431	447	453	458	457	456	449	446	422	401	396	398	393	395		396	395	388	389	395		313	580	189	134	86	98
Temperature (field)	C			2.29	2.25	1.75	0.99	-0.08	-0.08	-0.08	-0.07	0	1.14	1.38	0.08	0.73	0.84	1.28	0.57	0.52	0.52	1.23	0.83	0.66	0.16	-0.05	1.3		1	1.1	1	1	1
Dissolved Oxygen (field)	mg/L																																
Dissolved Oxygen (field)	%			118.5	96.1	95.3		117.2	133.2	132	132.8	137.1	140	133.7	124.6	116.5	99.6	100.5	93.3	98	98	95.9	92.9	94.6	115.5	113.2							
ORP (field)	mV																																
Hardness (from total)	mg/L					170									199					189			190						280	90	66	46	52
Hardness (from dissolved)	mg/L					186									185					176			174					149					
Alkalinity, total	mg/L														130					130			130					134	250	92	64	38	43
Chloride	mg/L	120																										6.01	5	1.49	1.26	0.97	1.01
Fluoride	mg/L	0.12													0.32																		
Sulphate, dissolved	mg/L																											25	52	10	6.5	4.5	3.7
Ammonia	mg/L	0.239	0.25			<0.005									<0.005					<0.005			<0.005										
Nitrite (N)	mg/L	0.06	0.06			0.013									<0.005					<0.005			<0.005										
Nitrate (N)	mg/L	3	9.1			5.7									4.6					3.9			3.8					0.95		0.02	0.04	0.02	0.06
Dissolved Organic Carbon	mg/L																			8.2													
Aluminum, total	mg/L	*				0.144									0.056					0.108			0.056					0.03	1.26	1.08	0.224	0.625	0.09
Antimony, total	mg/L					<0.0005									<0.0005					<0.0005			<0.0005					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic, total	mg/L	0.005				0.0004									0.0003					0.0004			0.0003					0.0004	0.0011	0.0009	0.0004	0.0006	0.0003
Barium, total	mg/L					0.096									0.094					0.093			0.089					0.066	0.129	0.057	0.032	0.032	0.029
Beryllium, total	mg/L					<0.0001									<0.0001					<0.0001			<0.0001					<0.00004	0.00005	<0.00004	<0.00004	0.00005	<0.00004
Bismuth, total	mg/L					<0.001									<0.001					<0.001			<0.001					<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	1.5				<0.05									<0.05					<0.05			<0.05					0.012	0.005	0.007	<0.005	0.008	<0.005
Cadmium, total	mg/L	*				0.00005									<0.00001					0.00003			0.00005					<0.00001	0.00003	0.00004	0.00012	0.00003	0.00003
Calcium, total	mg/L					46.8									55					51			51.3					44.9	70.3	25.5	18.6	13.8	14.9
Chromium, total	mg/L	0.001				<0.001									<0.001					<0.001			<0.001					<0.0004	0.0028	0.002	0.0006	0.0009	0.0005
Cobalt, total	mg/L					<0.0005									<0.0005					<0.0005			<0.0005					0.00011	0.00118	0.00086	0.00024	0.00036	0.00018
Copper, total	mg/L	*				0.0034									0.003					0.0039			0.0036					0.002	0.018	0.014	0.008	0.007	0.006
Iron, total	mg/L	0.3				0.205									0.128					0.219			0.13					0.04	1.91	1.33	0.312	0.572	0.217
Lead, total	mg/L	*				<0.0002									<0.0002					<0.0002			<0.0002					<0.0001	0.0007	0.0005	0.0002	0.0002	0.0001
Lithium, total	mg/L					<0.005									<0.005					<0.005			<0.005					0.002	0.004	0.002	<0.001	0.001	<0.001
Magnesium, total	mg/L					12.9									15.1					14.9			15.2					14.1	29.2	8.52	5.5	4.13	4.37
Manganese, total	mg/L					0.05									0.029					0.027			0.019					0.0124	0.0888	0.103	0.0483	0.0521	0.0316
Mercury, total	mg/L	0.000026				0.00005									<0.00002					<0.00002			<0.00002					<0.00001	<0.00001	0.00001	0.00001	0.00002	0.00002
Molybdenum, total	mg/L	0.073				0.01									0.008					0.007			0.007					0.0024	0.0009	0.0006	0.0005	0.0004	0.0004
Nickel, total	mg/L	*				0.001									0.001					0.001			0.001					0.002	0.003	0.003	0.001	0.002	0.001
Phosphorus, total	mg/L																											<0.05	0.11	0.18	0.15	0.13	0.12
Potassium, total	mg/L					2.41									2.44					2.26			2.13					1.6	4.1	2.8	2.5	2.2	2.1
Selenium, total	mg/L	0.001				0.0013									0.0011					0.001			0.0009					<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silicon, total	mg/L					4.66									5.41					5.96			5.5					5.87	11.7	6.24	4.01	3.38	3.12
Silver, total	mg/L	0.00025				<0.00002									<0.00002					<0.00002			<0.00002					<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, total	mg/L					13									13.4					13.3			13.5					11.2	18.9	5.46	3.77	2.58	2.67
Strontium, total	mg/L					0.587									0.62					0.572			0.541					0.476	0.674	0.215	0.139	0.096	0.105
Sulpher, total	mg/L					21									17					15			15					8.7	17.8	3.5	2.2	1.4	1.4
Thallium, total	mg/L	0.0008				<0.00005									<0.00005					<0.00005			<0.00005					<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Tin, total	mg/L					<0.005									<0.005					<0.005			<0.005					<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium, total	mg/L					<0.005									<0.005					<0.005			<0.005										
Uranium, total	mg/L	0.015				0.0006									0.001					0.0011			0.001					0.0013	0.0018	<0.0004	<0.0004	<0.0004	<0.0004
Vanadium, total	mg/L					<0.005									<0.005					<0.005			<0.005					0.0005	0.0044	0.0032	0.0008	0.0014	0.0006
Zinc, total	mg/L	0.03				<0.005									<0.005					<0.005			<0.005					0.006	0.008	0.008	0.013	0.006	0.005
Zirconium, total	mg/L					<0.0005									<0.0005					<0.0005			<0.0005					0.0002	0.0006	0.0003	0.0002	0.0004	0.0003
Aluminum, dissolved	mg/L		0.1			0.039									0.018					0.014			0.014					0.009	<0.005	0.012	0.05	0.07	0.039
Antimony, dissolved	mg/L					<0.0005									<0.0005					<0.0005			<0.0005					0.0007	0.0021	0.0024	0.0039	0.0041	<0.0002
Arsenic, dissolved	mg/L		0.005			0.0004									0.0003					0.0003			0.0004					0.0004	0.0004	0.0004	0.0004	0.0005	0.0004
Barium, dissolved	mg/L					0.094									0.09					0.08			0.081					0.065	0.097	0.035	0.028	0.024	0.025
Beryllium, dissolved	mg/L					<0.0001									<0.0001					<0.0001			<0.0001					<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Bismuth, dissolved	mg/L					<0.001									<0.001					<0.001			<0.001					<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L					<0.05									<0.05					<0.05			<0.05					0.011	0.006	<0.004	<0.004	0.006	<0.004
Cadmium, dissolved	mg/L		*			0.00001									<0.00001					<0.00001			0.00002					0.00002	0.00005	0.00001	0.00026	<0.00001	<0.00001
Calcium, dissolved	mg/L					51.2									51.2					48.3			48					39.5	66.7	23.4	17.9	12.3	14
Chromium, dissolved	mg/L		0.001			<0.001									<0.001					<0.001			<0.001					<0.0004	0.0006	<0.0004	0.0004	<0.0004	<0.0004
Cobalt, dissolved	mg/L					<0.0005									<0.0005					<0.0005			<0.0005					0.00011	0.00032	0.00041	0.00046	0.00055	0.00002
Copper, dissolved	mg/L		0.013			0.0014									0.0016					0.0016			0.0015					0.002	0.008	0.005	0.009	0.009	0.005
Iron, dissolved	mg/L		1.1			0.029									0.029					0.026			0.042					0.03	0.04	0.06	0.14	0.15	0.14
Lead, dissolved	mg/L		0.004			<0.0002									<0.0002					<0.0002			<0.0002					0.0001	0.0002	0.0002	0.0002	0.0004	<0.0001
Lithium, dissolved	mg/L					<0.005									<0.005					<0.005			<0.005					0.002	0.003	0.001	<0.001	<0.001	<0.001
Magnesium, dissolved	mg/L					14.1									13.9					13.4			13.1					12.2	27.5	7.8	5.2	3.6	4.1
Manganese, dissolved	mg/L					0.032									0.013					0.009			0.01					0.0086	0.0337	0.0468	0.0363	0.0268	0.002
Mercury, dissolved	mg/L					<0.00002									<0.00002					<0.00002			0.00007					0.00008	<0.00001	<0.00001	<0.00001	0.00002	0.00002
Molydenum, dissolved	mg/L		0.073			0.011									0.008					0.007			0.007					0.0022	0.0014	0.0006	0.0005	0.0002	0.0002
Nickel, dissolved	mg/L		0.11			<0.001									<0.001					<0.001			<0.001					0.002	0.001	0.001	0.001	0.001	0.002
Phosphorus, dissolved	mg/L																											<0.01	<0.01	0.08	0.08	0.06	0.05
Potassium, dissolved	mg/L					2.62									2.34					2.11			2.01					1.5	4	2.5	2.3	1.9	1.9
Selenium, dissolved	mg/L		0.002			0.0014									0.0013					0.0008			0.0009					<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silicon, dissolved	mg/L					4.68									5.62					4.85			5.44					5.13	9	4.24	3.53	2.58	2.8
Silver, dissolved	mg/L		0.0001			<0.00002									<0.00002					<0.00002			<0.00002					<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L					14.9									13.3					12.1			11.7					9.2	18.8	5.2	3.6	2.4	2.6
Strontium, dissolved	mg/L					0.606									0.623					0.537			0.529					0.448	0.642	0.193	0.132	0.083	0.096
Sulpher, dissolved	mg/L					20									17					15			14					8.3	17.3	3.4	2.2	1.5	1.2
Thallium, dissolved	mg/L					<0.00005									<0.00005					<0.00005			<0.00005					<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Tin, dissolved	mg/L					<0.005									<0.005					<0.005			<0.005					<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium, dissolved	mg/L					<0.005									<0.005					<0.005			<0.005					<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L					0.0006									0.001					0.001			0.001					0.0012	0.0016	<0.0004	<0.0004	<0.0004	<0.0004
Vanadium, dissolved	mg/L					<0.005									<0.005					<0.005			<0.005					0.0004	0.0004	0.0003	0.0005	0.0004	0.0004
Zinc, dissolved	mg/L		0.03			<0.005									<0.005					<0.005			<0.005					0.002	0.004	0.005	0.006	0.007	0.008
Zirconium, dissolved	mg/L					<0.0005									<0.0005					<0.0005			<0.0005					0.0002	0.0003	0.0001	0.0001	0.0002	0.0003

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				23/04/2010	24/04/2010	25/04/2010	26/04/2010	27/04/2010	28/04/2010	29/04/2010	30/04/2010	01/05/2010	02/05/2010	03/05/2010	04/05/2010	05/05/2010	06/05/2010	07/05/2010
Total Suspended Solids	mg/L			<5	3	15	21	31	41	37	71	38	27	25	11	6	5	<4
Total Dissolved Solids	mg/L			114	120	110	60	70	70	74	70	98	94	68	72	100	130	120
pH (field)	pH units	6.5-9	6.0-9.0	7.64	7.53	7.78	7.23	7.63	7.87	7.87	7.9	7.11	7.88	7.98	7.89	7.95	8.09	8.13
pH (lab)	pH units	6.5-9	6.0-9.0	7.48	7.44	7.5	7.7	7.7	7.7	7.5	7.5	7.9	7.8	7.8	7.9	7.6	8	8.1
Specific Conductance, field	µS/cm																	
Specific Conductance (lab)	µS/cm			96	97	89	83	77	73	78	79	102	129	122	133	144	155	160
Temperature (field)	C			0		0	0.01	0	0	-0.02	0.18	0	0	0.35	0	0	0	0
Dissolved Oxygen (field)	mg/L																	
Dissolved Oxygen (field)	%			152.7	111.3	81.1	151.6	122.2	17	11.5	54	89.2	45.6	17.5	101.2	74.8	132.3	64.8
ORP (field)	mV																	
Hardness (from total)	mg/L			53	53	46	47.5	44.7	43.5	46.3	48.9	56.2	64.6	57.9	66.5	73.8	79.4	81.4
Hardness (from dissolved)	mg/L						47.6	40.6	39.1	40.9	38.5	49.8	60.3	58.3	63.5	73	77.7	78.7
Alkalinity, total	mg/L			45	45	41	42	38	36	39	39	48	58	58	64	69	74	78
Chloride	mg/L	120		0.95	0.97	0.77	1.8	1.5	1	1.1	1.7	1.6	1.4	1.5	1.6	1.3	1.1	1.2
Fluoride	mg/L	0.12					0.12	0.11	0.1	0.11	0.12	0.14	0.15	0.17	0.17	0.18	0.17	0.19
Sulphate, dissolved	mg/L			4	3.9	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.3	5.5	7.9
Ammonia	mg/L	0.239	0.25				0.045	0.025	0.55	0.026	<0.005	0.035	0.022	0.024	0.028	<0.01	0.05	0.01
Nitrite (N)	mg/L	0.06	0.06				<0.03	0.009	<0.03	0.02	<0.05	0.006	0.006	0.006	<0.05	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	3	9.1				<0.1	0.08	<0.1	<0.04	<0.2	0.03	0.09	<0.02	<0.2	<0.02	0.03	0.02
Dissolved Organic Carbon	mg/L				27.2	27.5	21.3	21.8	20.2	18.3	22.5	23.1	22	18.1	16.2	16.3	14.2	13.7
Aluminum, total	mg/L	*		0.189	0.176	0.504	0.651	1.03	1.46	0.972	2.42	1.17	0.874	0.686	0.363	0.227	0.178	0.147
Antimony, total	mg/L			<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.005		0.0005	0.0006	0.0006	0.0007	0.0009	0.0011	0.001	0.0018	0.0011	0.0013	0.0008	0.0007	0.0006	0.0007	0.0005
Barium, total	mg/L			0.03	0.032	0.034	0.039	0.047	0.053	0.05	0.082	0.056	0.052	0.053	0.044	0.04	0.043	0.041
Beryllium, total	mg/L			<0.00004	<0.00004	<0.00004	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	1.5		<0.005	<0.005	0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	*		0.00002	<0.00001	0.00001	0.00003	0.00005	0.00006	0.00025	0.00003	0.00003	0.00006	<0.00001	<0.00001	<0.00001	0.00002	<0.00001
Calcium, total	mg/L			15.7	16.2	13.9	12.8	12	11.9	12.4	12.7	15	17.5	15.5	18	19.8	21.1	21.5
Chromium, total	mg/L	0.001		0.0006	0.0007	0.001	0.001	0.002	0.003	0.002	0.005	0.003	0.002	0.002	0.001	0.001	0.001	<0.001
Cobalt, total	mg/L			0.0002	0.0002	0.00045	0.0006	0.0009	0.001	0.0008	0.002	0.0008	0.0007	0.0006	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		0.006	0.006	0.007	0.0107	0.0129	0.012	0.0101	0.0126	0.0071	0.007	0.0067	0.0049	0.0047	0.007	0.0048
Iron, total	mg/L	0.3		0.334	0.344	0.826	1.15	1.89	2.45	1.98	4.45	2.17	1.77	1.45	0.934	0.716	0.666	0.521
Lead, total	mg/L	*		0.0002	0.0002	0.0004	0.0005	0.0007	0.0008	0.0006	0.0014	0.0007	0.0006	0.0005	0.0003	0.0003	0.0002	0.0009
Lithium, total	mg/L			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L			4.66	4.74	4.28	3.74	3.59	3.37	3.7	4.15	4.53	5.06	4.64	5.26	5.91	6.47	6.71
Manganese, total	mg/L			0.0318	0.0316	0.0485	0.069	0.095	0.099	0.084	0.159	0.087	0.08	0.076	0.051	0.026	0.02	0.017
Mercury, total	mg/L	0.000026		0.00001	0.00002	0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00004	<0.00002	0.00003	0.00005	0.00006	0.00006	0.00005	<0.00002
Molybdenum, total	mg/L	0.073		0.0004	0.0004	0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel, total	mg/L	*		0.001	0.002	0.002	0.002	0.003	0.004	0.004	0.006	0.003	0.003	0.005	0.002	0.002	0.002	0.002
Phosphorus, total	mg/L			0.13	0.08	0.14						0.075				0.032	0.033	0.031
Potassium, total	mg/L			1.9	1.9	1.6	1.42	1.45	1.38	1.29	1.33	1.26	1.3	1.04	1.06	1.14	1.2	1.14
Selenium, total	mg/L	0.001		<0.0006	<0.0006	<0.0006	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001
Silicon, total	mg/L			3.57	3.67	3.8	4.42	5.32	5.77	4.93	7.42	5.78	5.4	4.8	4.75	4.82	5.01	4.61
Silver, total	mg/L	0.00025		<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002
Sodium, total	mg/L			2.99	3.1	2.65	2.24	2.17	1.98	2.34	2.29	2.8	3.31	2.96	3.55	4.08	4.46	4.44
Strontium, total	mg/L			0.105	0.11	0.098	0.092	0.085	0.083	0.09	0.093	0.109	0.135	0.119	0.14	0.155	0.171	0.17
Sulpher, total	mg/L			1.5	1.6	1.3	<3	<3	<3	<3	<3	<3	<3	<3	<3	4	<3	<3
Thallium, total	mg/L	0.0008		<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.0001	<0.0001	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L						0.025	0.04	0.062	0.03	0.074	0.038	0.03	0.026	0.01	0.008	<0.005	0.006
Uranium, total	mg/L	0.015		<0.0004	<0.0004	<0.0004	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0003	0.0003	0.0004
Vanadium, total	mg/L			0.0008	0.0008	0.0017	<0.005	<0.005	0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	0.03		0.007	0.008	0.008	0.008	0.01	0.009	0.01	0.013	0.007	0.008	0.008	<0.005	<0.005	<0.005	<0.005
Zirconium, total	mg/L			0.0003	0.0003	0.0003	<0.0005	<0.0005	0.0006	0.0006	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L		0.1	0.047	0.048	0.057	0.063	0.075	0.1	0.103	0.094	0.064	0.053	0.043	0.032	0.026	0.024	0.021
Antimony, dissolved	mg/L			0.0002	<0.0002	0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		0.005	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0006	0.0005	0.0006	0.0005	0.0005
Barium, dissolved	mg/L			0.026	0.026	0.025	0.027	0.025	0.025	0.027	0.03	0.031	0.034	0.034	0.034	0.036	0.036	0.038
Beryllium, dissolved	mg/L			<0.00004	<0.00004	<0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.004	<0.004	<0.004	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L		*	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00017	<0.00001	0.00002	<0.00001	0.00001	0.00002	<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L			14.3	14.2	12.4	13.2	11.3	10.9	11.4	10.5	13.6	16.3	15.8	17.2	19.9	21.1	21.1
Chromium, dissolved	mg/L		0.001	<0.0004	<0.0004	<0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L			0.00007	0.00007	0.00006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		0.013	0.005	0.004	0.004	0.004	0.0038	0.0047	0.0046	0.0037	0.0035	0.0031	0.0028	0.0029	0.0029	0.0026	0.0026
Iron, dissolved	mg/L		1.1	0.15	0.19	0.21	0.23	0.322	0.374	0.505	0.481	0.38	0.37	0.385	0.352	0.312	0.324	0.273
Lead, dissolved	mg/L		0.004	0.0002	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L			4.2	4.2	3.7	3.53	2.97	2.88	3.02	2.97	3.87	4.74	4.61	5	5.67	6.1	6.32
Manganese, dissolved	mg/L			0.0011	0.0014	0.0009	<0.001	<0.001	0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Mercury, dissolved	mg/L			0.00001	0.00001	0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L		0.073	0.0003	0.0004	0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel, dissolved	mg/L		0.11	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.004
Phosphorus, dissolved	mg/L			0.05	0.04	0.03						0.025				0.022	0.019	0.016
Potassium, dissolved	mg/L			1.8	1.7	1.4	1.38	1.25	1.21	1.13	0.96	1.02	1.11	1.02	1.02	1.11	1.09	1.09
Selenium, dissolved	mg/L		0.002	<0.0006	<0.0006	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Silicon, dissolved	mg/L			2.98	3.07	2.77	3.43	3.06	3.1	3.12	2.83	3.31	3.76	3.47	3.79	4.26	4.61	4.36
Silver, dissolved	mg/L		0.0001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L			2.7	2.7	2.4	2.32	2.02	2.1	2.18	2.16	2.66	3.17	3.17	3.45	3.74	4.01	4.23
Strontium, dissolved	mg/L			0.099	0.101	0.093	0.09	0.076	0.072	0.081	0.075	0.099	0.118	0.117	0.131	0.148	0.161	0.163
Sulpher, dissolved	mg/L			1.3	1.3	1.2	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	4	3
Thallium, dissolved	mg/L			<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L			<0.0004	<0.0004	<0.0004	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003	0.0004	0.0004
Vanadium, dissolved	mg/L			0.0004	0.0005	0.0006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		0.03	<0.001	0.002	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L			0.0002	0.0003	0.0003	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				08/05/2010	09/05/2010	10/05/2010	11/05/2010	12/05/2010	13/05/2010	14/05/2010	15/05/2010	16/05/2010	17/05/2010	18/05/2010	19/05/2010	20/05/2010	21/05/2010	22/05/2010
Total Suspended Solids	mg/L			5	<4	<4	<4	<4	<4	<4	<4	<4	<4	1	<1	<1	<1	7
Total Dissolved Solids	mg/L			120	140	130	110	150	110	170	170	160	170	160	150	160	160	170
pH (field)	pH units	6.5-9	6.0-9.0	8.04	8.01	8.18				7.8	7.93	7.97	7.87	7.86	7.76	7.26	7.67	7.85
pH (lab)	pH units	6.5-9	6.0-9.0	8.1	8	7.9	8	8.1	8	8.1	8.2	8.1	7.8	8.2	8.2	8.1	8.1	8.2
Specific Conductance, field	µS/cm																	
Specific Conductance (lab)	µS/cm			169	159	192	199	209	209	236	232	229	235	242	231	230	239	240
Temperature (field)	C			0	0.08	0.04				1.4	1.5	2.8	1.2	4.5	2.4	4.4	2.6	2.7
Dissolved Oxygen (field)	mg/L																	
Dissolved Oxygen (field)	%			127.2	142.1	142.5												
ORP (field)	mV																	
Hardness (from total)	mg/L			86.4	94.1	98.5	101	108	98.9	111	108	110	113	118	122	119	121	106
Hardness (from dissolved)	mg/L			84.1	87.2	93.8	99.5	104	103	112	113	113	119	122	118	118	117	117
Alkalinity, total	mg/L			81	81	89	93	98	98	110	110	110	100	110	110	110	110	110
Chloride	mg/L	120		1.1	<0.5	1.9	3.9	1.4	1.3	1.7	1.6	1.4	1.5	1.2	1.2	1.2	1.7	1.6
Fluoride	mg/L	0.12		0.2	0.2	0.23	0.17	0.16	0.22	0.24	0.23	0.24	0.24	0.27	0.28	0.26	0.29	0.31
Sulphate, dissolved	mg/L			8.1	2.7	13	13	14	14	17	15	14	15	15	16	16	16	16
Ammonia	mg/L	0.239	0.25	0.018	0.01	0.034	0.12	0.02	0.016	0.12	0.065	0.084	0.028	0.07	0.04	0.03	0.011	0.006
Nitrite (N)	mg/L	0.06	0.06	<0.005	0.007	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	3	9.1	0.02	0.12	0.11	0.04	0.03	0.08	0.05	0.04	0.03	0.05	0.03	0.05	0.03	0.05	0.05
Dissolved Organic Carbon	mg/L			13	10.2	11	10.6	10.5	9.5	9.9	8.7	9.7	9.5	9.2	8.9	8.2	7.2	7.9
Aluminum, total	mg/L	*		0.152	0.137	0.097	0.061	0.059	0.053	0.089	0.035	0.036	0.027	0.033	0.029	0.093	0.036	0.022
Antimony, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.005		0.0005	0.0006	0.0005	0.0005	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	<0.001	<0.001	<0.001	0.0004	<0.0004
Barium, total	mg/L			0.043	0.046	0.048	0.045	0.047	0.047	0.051	0.046	0.045	0.048	0.05	0.051	0.051	0.052	0.049
Beryllium, total	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002
Bismuth, total	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	1.5		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1
Cadmium, total	mg/L	*		0.00004	0.00005	0.00012	0.00003	0.00008	0.00006	0.00019	<0.00001	<0.00001	0.00002	0.00002	0.00001	<0.00001	<0.0001	<0.0001
Calcium, total	mg/L			22.9	24.9	26.1	27.2	29	26.6	29.4	28.9	29.4	30.3	30.6	31.8	30.5	32	28
Chromium, total	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.002	<0.002
Cobalt, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		0.0034	0.0089	0.0069	0.004	0.008	0.0066	0.0127	0.0031	0.0029	0.0032	0.0024	0.003	0.0032	0.003	0.002
Iron, total	mg/L	0.3		0.468	0.431	0.37	0.259	0.24	0.181	0.174	0.123	0.143	0.106	0.099	0.111	0.176	0.123	0.109
Lead, total	mg/L	*		<0.0002	0.0003	0.0003	<0.0002	0.0002	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
Magnesium, total	mg/L			7.09	7.75	8.07	7.92	8.63	7.89	9.19	8.66	8.94	9.15	10.1	10.4	10.5	10	9
Manganese, total	mg/L			0.016	0.013	0.011	0.009	0.007	0.007	0.015	0.006	0.005	0.006	0.006	0.007	0.012	0.007	0.005
Mercury, total	mg/L	0.000026		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00006	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.073		<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Nickel, total	mg/L	*		0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	<0.003	<0.003	<0.003	0.001	<0.001
Phosphorus, total	mg/L			0.032	0.027	0.03	0.018	0.018	0.018		0.016	0.012	0.013	0.017	0.017	0.021		
Potassium, total	mg/L			1.16	1.22	1.25	1.27	1.36	1.17	1.46	1.18	1.2	1.2	1.31	1.34	1.3	1	1
Selenium, total	mg/L	0.001		0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0004	0.0002	<0.0008	<0.0008
Silicon, total	mg/L			4.71	4.86	5.04	4.94	5.31	4.55	5.35	4.77	4.86	4.72	4.81	4.96	4.98	4.69	4.54
Silver, total	mg/L	0.00025		<0.00002	<0.00002	0.00004	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001
Sodium, total	mg/L			4.7	5.05	5.32	5.33	5.92	4.83	6.34	5.54	5.7	5.78	7.18	7.32	7.19	7	6
Strontium, total	mg/L			0.178	0.199	0.217	0.214	0.23	0.234	0.254	0.246	0.243	0.262	0.272	0.272	0.268	0.286	0.252
Sulpher, total	mg/L			<3	<3	4	4	<3	4	<3	5	5	3	5	5	4	<60	<60
Thallium, total	mg/L	0.0008		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L			0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.01	<0.01
Uranium, total	mg/L	0.015		0.0004	0.0005	0.0006	0.0006	0.0006	0.0007	0.0008	0.0008	0.0008	0.0009	0.0007	0.0008	0.0007	0.0009	0.0009
Vanadium, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	0.03		<0.005	<0.005	<0.005	<0.005	0.005	0.006	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
Zirconium, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002
Aluminum, dissolved	mg/L		0.1	0.019	0.016	0.016	0.014	0.014	0.012	0.018	0.01	0.015	0.011	0.008	0.007	0.007	<0.01	<0.01
Antimony, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		0.005	0.0004	0.0005	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	<0.0004	<0.0004
Barium, dissolved	mg/L			0.041	0.039	0.042	0.044	0.046	0.044	0.048	0.049	0.048	0.049	0.048	0.045	0.045	0.049	0.048
Beryllium, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1
Cadmium, dissolved	mg/L		*	<0.00001	<0.00001	0.00004	<0.00001	0.00001	0.00001	0.00005	<0.00001	0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.0001	<0.0001
Calcium, dissolved	mg/L			22.4	23.3	24.7	26.6	27.8	27.4	29.9	30.5	30.5	32	32.1	30.5	30.2	31	31
Chromium, dissolved	mg/L		0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Cobalt, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		0.013	0.0025	0.0028	0.003	0.0022	0.0023	0.0022	0.0061	0.0022	0.002	0.0027	0.0019	0.0019	0.0019	0.002	0.002
Iron, dissolved	mg/L		1.1	0.235	0.214	0.199	0.148	0.129	0.086	0.066	0.06	0.065	0.052	0.047	0.057	0.061	0.057	0.06
Lead, dissolved	mg/L		0.004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
Magnesium, dissolved	mg/L			6.85	7.05	7.81	8.04	8.44	8.35	8.93	8.96	9.05	9.45	10.2	10.1	10.4	9	10
Manganese, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury, dissolved	mg/L			<0.00002	<0.00002	<0.00002	0.00006	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002
Molydenum, dissolved	mg/L		0.073	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Nickel, dissolved	mg/L		0.11	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001
Phosphorus, dissolved	mg/L			0.017	0.014	0.012	0.011	0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Potassium, dissolved	mg/L			1.14	1.12	1.18	1.2	1.25	1.23	1.33	1.28	1.28	1.38	1.32	1.22	1.19	1	1
Selenium, dissolved	mg/L		0.002	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	<0.0008	<0.0008
Silicon, dissolved	mg/L			4.37	4.46	4.44	5.23	5.33	4.97	5.19	5.24	5.03	4.97	4.99	4.97	4.99	4.95	4.82
Silver, dissolved	mg/L		0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001
Sodium, dissolved	mg/L			4.62	4.74	5.24	5.38	5.68	5.69	6.04	6.09	6.09	6.46	7.19	7.15	7.21	7	7
Strontium, dissolved	mg/L			0.174	0.186	0.199	0.219	0.224	0.226	0.258	0.252	0.251	0.266	0.248	0.226	0.223	0.251	0.252
Sulpher, dissolved	mg/L			4	<3	5	4	4	4	6	5	5	6	6	5	5	<60	<60
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
Uranium, dissolved	mg/L			0.0004	0.0005	0.0006	0.0006	0.0007	0.0007	0.0009	0.0007	0.0008	0.0009	0.0008	0.0007	0.0008	0.0008	0.0009
Vanadium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01
Zirconium, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				23/05/2010	24/05/2010	25/05/2010	26/05/2010	27/05/2010	28/05/2010	29/05/2010	30/05/2010	31/05/2010	01/06/2010
Total Suspended Solids	mg/L			2	<1	1	37	6	20	44	1	<1	2
Total Dissolved Solids	mg/L			160	160	140	150	160	160	180	190	170	160
pH (field)	pH units	**6.5-9**	**6.0-9.0**	7.91	7.84	7.62	7.87	7.98	7.97	7.97	7.95	7.95	7.67
pH (lab)	pH units	**6.5-9**	**6.0-9.0**	8.1	8.1	8.3	7.9	8.2	8.3	8.2	8.4	8.3	8.3
Specific Conductance, field	µS/cm												
Specific Conductance (lab)	µS/cm			238	243	260	258	260	263	270	280	277	286
Temperature (field)	C			3	2.5	5.6	2.6	2.7	3.4	3.7	2.7	3.8	5.8
Dissolved Oxygen (field)	mg/L												
Dissolved Oxygen (field)	%												
ORP (field)	mV												
Hardness (from total)	mg/L			113	115	144	128	130	125	134	140	135	149
Hardness (from dissolved)	mg/L			113	114	135	129	144	132	126	135	127	138
Alkalinity, total	mg/L			110	110	120	120	120	120	130	130	130	130
Chloride	mg/L	**120**		1.8	1	1.7	1.7	1.2	1.6	2	1.6	1.5	1.9
Fluoride	mg/L	**0.12**		**0.3**	**0.31**	**0.29**	**0.29**	**0.3**	**0.37**	**0.32**	**0.35**	**0.31**	**0.28**
Sulphate, dissolved	mg/L			16	15	17	17	17	17	19	19	18	23
Ammonia	mg/L	**0.239**	**0.25**	<0.005	0.08	0.07	0.18	0.025	0.008	0.21	0.007	<0.05	0.025
Nitrite (N)	mg/L	**0.06**	**0.06**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	**3**	**9.1**	0.05	0.05	0.04	0.08	0.09	0.08	0.1	0.09	0.12	0.16
Dissolved Organic Carbon	mg/L			7.8	10.2	8.1	7.2	7.3	6.2	6	6.4	6.7	6.4
Aluminum, total	mg/L	*		0.026	0.033	0.047	0.056	**0.11**	**0.122**	**0.382**	0.028	0.025	0.045
Antimony, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	**0.005**		<0.0004	0.0004	<0.001	<0.001	0.0004	<0.0004	0.0005	<0.0004	<0.0004	<0.0004
Barium, total	mg/L			0.05	0.051	0.056	0.05	0.058	0.056	0.064	0.058	0.057	0.059
Beryllium, total	mg/L			<0.0002	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	**1.5**		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	*		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L			30	30	37	32	34	33	35	37	36	40
Chromium, total	mg/L	**0.001**		**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		0.002	0.002	**0.004**	**0.003**	0.002	**0.003**	**0.008**	0.002	0.002	0.003
Iron, total	mg/L	**0.3**		0.127	0.127	0.111	0.159	0.24	0.258	**0.64**	0.088	0.084	0.105
Lead, total	mg/L	*		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L			9	10	13	12	11	11	11	12	11	12
Manganese, total	mg/L			0.007	0.007	0.007	0.008	0.012	0.015	0.028	0.007	0.007	0.009
Mercury, total	mg/L	**0.000026**		**<0.0002**	**<0.0002**	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	**<0.0002**
Molybdenum, total	mg/L	**0.073**		0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002
Nickel, total	mg/L	*		<0.001	0.001	<0.003	<0.003	<0.001	0.001	0.002	0.001	<0.001	0.001
Phosphorus, total	mg/L												
Potassium, total	mg/L			1	1	2	1	1	1	1	1	1	2
Selenium, total	mg/L	**0.001**		<0.0008	<0.0008	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, total	mg/L			4.62	4.35	5.47	4.84	5.39	5.13	5.64	5.06	5	5.07
Silver, total	mg/L	**0.00025**		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L			6	6	9	8	7	7	7	8	7	8
Strontium, total	mg/L			0.264	0.274	0.32	0.293	0.311	0.302	0.325	0.339	0.322	0.38
Sulpher, total	mg/L			<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	**0.0008**		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01	<0.01	<0.01
Uranium, total	mg/L	**0.015**		0.0009	0.0009	0.001	0.0008	0.0011	0.0011	0.0012	0.0012	0.0012	0.0014
Vanadium, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	**0.03**		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L		**0.1**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01
Antimony, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		**0.005**	<0.0004	0.0004	<0.001	<0.001	<0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium, dissolved	mg/L			0.048	0.048	0.055	0.051	0.055	0.055	0.056	0.058	0.054	0.056
Beryllium, dissolved	mg/L			<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L		*	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L			30	31	34	33	36	35	34	36	33	37
Chromium, dissolved	mg/L		**0.001**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		**0.013**	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L		**1.1**	0.066	0.061	0.043	0.049	0.037	0.032	0.051	0.028	0.031	0.026
Lead, dissolved	mg/L		**0.004**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L			9	9	12	11	13	11	10	11	11	11
Manganese, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002
Mercury, dissolved	mg/L			<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002
Molydenum, dissolved	mg/L		**0.073**	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, dissolved	mg/L		**0.11**	0.001	<0.001	<0.003	<0.003	<0.003	<0.001	<0.001	0.002	<0.001	<0.001
Phosphorus, dissolved	mg/L												
Potassium, dissolved	mg/L			1	1	1	1	1	1	1	1	1	1
Selenium, dissolved	mg/L		**0.002**	<0.0008	<0.0008	<0.001	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, dissolved	mg/L			4.78	4.52	5.17	4.79	5.26	5.13	4.79	5.09		5.23
Silver, dissolved	mg/L		**0.0001**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L			7	6	9	8	9	7	7	7	8	8
Strontium, dissolved	mg/L			0.256	0.265	0.31	0.297	0.325	0.311	0.324	0.338	0.314	0.338
Sulpher, dissolved	mg/L			<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L			0.0008	0.0009	0.0009	0.0009	0.0009	0.0011	0.0012	0.0013	0.0011	0.0013
Vanadium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		**0.03**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	02/06/2010	03/06/2010	04/06/2010	05/06/2010	06/06/2010	10/06/2010	11/06/2010	12/06/2010	13/06/2010	14/06/2010
Total Suspended Solids	2	21	1	<4	<4	<1	<1	<1	1	<1
Total Dissolved Solids	160	190	160	180	190	180	190	190	200	190
pH (field)	7.68	7.52	7.4	7.85	7.92	7.82	7.88	7.89	7.92	6.63
pH (lab)	8.3	8.3	8.3	8.3	8.3	8.2	8.1	8.4	8.2	8.3
Specific Conductance, field										
Specific Conductance (lab)	284	293	298	296	299	298	306	304	316	310
Temperature (field)	4.1	4.4	6.2	4.7	5.2	6.8	7.9	5.5	6	6.5
Dissolved Oxygen (field)										
Dissolved Oxygen (field)										
ORP (field)										
Hardness (from total)	145	143	150	153	156	140	135	147	150	141
Hardness (from dissolved)	133	132	141	151	151	142	140	144	148	146
Alkalinity, total	130	140	140	140	150	130	140	140	140	140
Chloride	1.6	1.9	2.1	1.9	1.6	5.3	2.1	2.1	2.4	3.4
Fluoride	**0.29**	**0.29**	**0.29**	**0.3**	**0.3**	**0.31**	**0.31**	**0.31**	**0.29**	**0.3**
Sulphate, dissolved	19	20	21	21	21	24	24	23	25	63
Ammonia	<0.05	<0.005	0.042	**0.26**	0.19	0.022	0.012	0.016	0.051	0.039
Nitrite (N)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	0.13	0.14	0.13	0.13	0.12	0.05	0.04	0.03	<0.02	0.06
Dissolved Organic Carbon	5.2	6.4	6.4			6.9	7.1	7.2	7.2	6.6
Aluminum, total	0.027	**0.214**	0.042	0.028	0.032	0.037	0.023	0.016	0.029	0.019
Antimony, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	<0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium, total	0.057	0.063	0.073	0.07	0.072	0.067	0.07	0.074	0.078	0.071
Beryllium, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	39	38	40	41	41	36	35	38	39	36
Chromium, total	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	0.002	**0.004**	**0.005**	**0.005**	**0.004**	**0.006**	0.003	0.003	**0.008**	0.002
Iron, total	0.083	**0.308**	0.076	0.06	0.066	0.068	0.038	0.037	0.056	0.029
Lead, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	12	12	12	13	13	12	12	12	13	12
Manganese, total	0.007	0.019	0.019	0.012	0.011	0.014	0.013	0.013	0.015	0.011
Mercury, total	**<0.0002**	**<0.0002**	**<0.0002**			**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**
Molybdenum, total	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, total	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001
Phosphorus, total										
Potassium, total	1	2	2	2	2	2	2	2	2	2
Selenium, total	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, total	4.93	5.49	5.4	5.32	5.42	5.11	4.89	5.2	5.23	4.94
Silver, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Sodium, total	8	8	8	9	9	8	8	8	9	8
Strontium, total	0.374	0.351	0.363	0.372	0.392	0.365	0.372	0.393	0.419	0.392
Sulpher, total	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	0.0013	0.0014	0.0014	0.0015	0.0015	0.0014	0.0014	0.0015	0.0016	0.0015
Vanadium, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Antimony, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium, dissolved	0.055	0.058	0.065	0.065	0.066	0.062	0.063	0.066	0.067	0.063
Beryllium, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	36	36	38	41	41	37	36	38	39	38
Chromium, dissolved	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	0.026	<0.02	0.022	0.024	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	11	10	11	12	12	12	12	12	12	12
Manganese, dissolved	<0.001	0.002	0.01	0.009	0.007	<0.001	<0.001	<0.001	<0.001	0.003
Mercury, dissolved	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002
Nickel, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved										
Potassium, dissolved	1	1	2	2	2	2	2	2	2	2
Selenium, dissolved	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, dissolved	4.99	4.53	5.26	5.27	4.9	5.46	5.31	5.34	5.4	5.35
Silver, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	7	7	8	8	8	9	9	9	10	10
Strontium, dissolved	0.326	0.322	0.344	0.371	0.373	0.361	0.363	0.372	0.385	0.373
Sulpher, dissolved	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	0.0013	0.0013	0.0014	0.0014	0.0015	0.0013	0.0015	0.0015	0.0015	0.0015
Vanadium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	15/06/2010	16/06/2010	17/06/2010	18/06/2010	19/06/2010	20/06/2010	21/06/2010	22/06/2010	23/06/2010	24/06/2010
Total Suspended Solids	<1	<1	<1	<1	<1	<1	<1	4	1	<1
Total Dissolved Solids	180	180	170	180	170	190	200	180	170	160
pH (field)	7.42	7.32	7.1	7.13	7.31	7.19	7.19	8	7.9	7.95
pH (lab)	8.46	8.2	8.2	8.13	8.3	8.2	8.4	8.24	8.24	8.21
Specific Conductance, field										
Specific Conductance (lab)	306	320	320	351	514	302	312	297	277	281
Temperature (field)	7.2	6.5	4.6	6.1	5.3	5.7	6.4	4.54	4.76	5.02
Dissolved Oxygen (field)										
Dissolved Oxygen (field)								107.3	113.9	111
ORP (field)										
Hardness (from total)	156	154	154	144	145	140	152	136	141	144
Hardness (from dissolved)	144	144	147	143	138	139	144	134	123	133
Alkalinity, total	150	150	150	160	170	140	140	130	130	130
Chloride	2.1	2.2	2.1	2.2	10	2.3	1.9	1.7	1.5	1.9
Fluoride	**0.29**	**0.28**	**0.28**	**0.3**	**0.46**	**0.32**	**0.31**	**0.32**	**0.31**	**0.31**
Sulphate, dissolved	26	26	28	26	64	22	25	15	19	20
Ammonia	0.023	0.043	0.026		<0.005			0.009	**0.4**	<0.005
Nitrite (N)	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	0.08	0.07	0.1	0.17	**6.7**	0.41	0.36	0.43	0.36	0.38
Dissolved Organic Carbon	6.9	6.9	7.4	6.9	9.7	8.6	8	9.1	9.2	9.2
Aluminum, total	0.012	0.021	0.012	<0.01	0.027	0.012	0.035	0.056	0.035	0.02
Antimony, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0004	0.0005
Barium, total	0.076	0.074	0.074	0.068	0.069	0.064	0.067	0.062	0.061	0.062
Beryllium, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	41	40	40	38	37	37	38	37	35	37
Chromium, total	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	0.002	0.002	0.003	0.002	0.002	0.003	0.002	0.003	0.003	0.003
Iron, total	0.031	0.052	0.03	0.025	0.077	0.052	0.039	0.188	0.111	0.073
Lead, total	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	13	13	13	12	13	12	14	11	13	12
Manganese, total	0.012	0.011	0.014	0.008	0.01	0.006	0.007	0.016	0.007	0.006
Mercury, total	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**
Molybdenum, total	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, total	0.001	<0.001	0.001	<0.001	0.001	0.001	0.002	0.001	0.001	0.001
Phosphorus, total										
Potassium, total	2	2	2	1	1	1	2	1	1	1
Selenium, total	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, total	5.41	5.29	5.48	5.11	5.14	5.48	5.09	6.4	5.73	6.19
Silver, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	9	9	9	8	9	8	10	8	9	9
Strontium, total	0.43	0.405	0.397	0.37	0.372	0.352	0.38	0.359	0.345	0.371
Sulpher, total	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	0.0016	0.0015	0.0014	0.0014	0.0016	0.0013	0.0014	0.0012	0.0012	0.0011
Vanadium, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.01
Antimony, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium, dissolved	0.065	0.069	0.066	0.066	0.061	0.061	0.062	0.058	0.056	0.056
Beryllium, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	38	39	39	38	36	37	38	35	32	35
Chromium, dissolved	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	<0.02	<0.02	<0.02	<0.02	0.02	0.024	<0.02	0.032	0.037	0.032
Lead, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	12	11	12	12	12	12	12	11	10	11
Manganese, dissolved	0.007	0.004	<0.001	<0.001	<0.001	0.003	0.002	<0.001	0.002	0.003
Mercury, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, dissolved	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001
Phosphorus, dissolved										
Potassium, dissolved	2	2	2	2	1	1	1	1	1	1
Selenium, dissolved	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, dissolved	5.21	4.92	5.3	5.13	4.95	5.36	5.36	5.31	5.25	5.51
Silver, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	9	9	9	8	8	8	8	8	7	8
Strontium, dissolved	0.379	0.416	0.388	0.38	0.347	0.36	0.375	0.342	0.319	0.333
Sulpher, dissolved	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	0.0015	0.0015	0.0014	0.0014	0.0014	0.0013	0.0013	0.0011	0.0011	0.0011
Vanadium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2
Sample Date				25/06/2010	26/06/2010	26/06/2010	27/06/2010	28/06/2010	29/06/2010
Total Suspended Solids	mg/L			<1	<1		<1	<1	<1
Total Dissolved Solids	mg/L			170	160		190	190	200
pH (field)	pH units	6.5-9	6.0-9.0	7.76		7.78	7.53	7.49	7.89
pH (lab)	pH units	6.5-9	6.0-9.0	8.32	8.39		8.03	7.94	7.96
Specific Conductance, field	µS/cm								
Specific Conductance (lab)	µS/cm			291	299		308	304	309
Temperature (field)	C			4.97		5.47	5.29	5.47	7.14
Dissolved Oxygen (field)	mg/L								
Dissolved Oxygen (field)	%			104.1		106	103.3	102.6	105.5
ORP (field)	mV								
Hardness (from total)	mg/L			132	136		136	139	140
Hardness (from dissolved)	mg/L			136	139		140	139	145
Alkalinity, total	mg/L			130	140		140	140	140
Chloride	mg/L	120		1.8	1.7		1.7	1.9	1.7
Fluoride	mg/L	0.12		**0.33**	**0.32**		**0.29**	**0.28**	**0.29**
Sulphate, dissolved	mg/L			20	23		24	23	23
Ammonia	mg/L	0.239	0.25	0.01	0.017		0.011	0.019	0.018
Nitrite (N)	mg/L	0.06	0.06	<0.005	<0.005		<0.005	<0.005	<0.005
Nitrate (N)	mg/L	3	9.1	0.38	0.39		0.26	0.15	0.12
Dissolved Organic Carbon	mg/L			9.1	8.4		7.7	8.3	8.1
Aluminum, total	mg/L	*		0.014	0.01		0.012	<0.01	<0.01
Antimony, total	mg/L			<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.005		0.0004	<0.0004		<0.0004	<0.0004	<0.0004
Barium, total	mg/L			0.059	0.062		0.063	0.066	0.065
Beryllium, total	mg/L			<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L			<0.001	<0.001		<0.001	<0.001	<0.001
Boron, total	mg/L	1.5		<0.1	<0.1		<0.1	<0.1	<0.1
Cadmium, total	mg/L	*		<0.0001	<0.0001		<0.0001	<0.0001	<0.0001
Calcium, total	mg/L			35	36		37	38	36
Chromium, total	mg/L	0.001		**<0.002**	**<0.002**		**<0.002**	**<0.002**	**<0.002**
Cobalt, total	mg/L			<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		0.002	0.002		0.002	0.003	0.002
Iron, total	mg/L	0.3		0.048	0.036		0.033	0.262	0.028
Lead, total	mg/L	*		<0.0002	<0.0002		0.0032	0.0008	<0.0002
Lithium, total	mg/L			<0.01	<0.01		<0.01	<0.01	<0.01
Magnesium, total	mg/L			11	11		11	11	12
Manganese, total	mg/L			0.005	0.006		0.008	0.011	0.008
Mercury, total	mg/L	0.000026		**<0.0002**	**<0.0002**		**<0.0002**	**<0.0002**	**<0.0002**
Molybdenum, total	mg/L	0.073		0.002	0.002		0.002	0.002	0.002
Nickel, total	mg/L	*		<0.001	<0.001		0.001	0.001	<0.001
Phosphorus, total	mg/L								
Potassium, total	mg/L			1	1		1	1	1
Selenium, total	mg/L	0.001		<0.0008	<0.0008		<0.0008	<0.0008	<0.0008
Silicon, total	mg/L			5.52	5.16		5.97	6.12	5.15
Silver, total	mg/L	0.00025		<0.0001	<0.0001		<0.0001	0.0001	<0.0001
Sodium, total	mg/L			8	8		8	8	9
Strontium, total	mg/L			0.35	0.354		0.378	0.387	0.366
Sulpher, total	mg/L			<60	<60		<60	<60	<60
Thallium, total	mg/L	0.0008		<0.00005	<0.00005		<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.005	<0.005		<0.005	<0.005	<0.005
Titanium, total	mg/L			<0.01	<0.01		<0.01	<0.01	<0.01
Uranium, total	mg/L	0.015		0.0012	0.0012		0.0012	0.0012	0.0013
Vanadium, total	mg/L			<0.005	<0.005		<0.005	<0.005	<0.005
Zinc, total	mg/L	0.03		<0.01	<0.01		<0.01	<0.01	<0.01
Zirconium, total	mg/L			<0.002	<0.002		<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L		0.1	<0.01	<0.01		<0.01	<0.01	<0.01
Antimony, dissolved	mg/L			<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		0.005	<0.0004	<0.0004		<0.0004	<0.0004	<0.0004
Barium, dissolved	mg/L			0.062	0.064		0.063	0.064	0.064
Beryllium, dissolved	mg/L			<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L			<0.001	<0.001		<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.1	<0.1		<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L		*	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L			35	36		38	37	40
Chromium, dissolved	mg/L		0.001	**<0.002**	**<0.002**		**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	mg/L			<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		0.013	0.002	0.002		0.002	0.002	0.002
Iron, dissolved	mg/L		1.1	0.028	0.023		<0.02	<0.02	0.035
Lead, dissolved	mg/L		0.004	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.01	<0.01		<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L			12	12		11	11	11
Manganese, dissolved	mg/L			0.002	0.004		0.004	0.002	0.003
Mercury, dissolved	mg/L			<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L		0.073	0.002	0.002		0.002	0.002	0.002
Nickel, dissolved	mg/L		0.11	0.001	<0.001		<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L								
Potassium, dissolved	mg/L			1	1		1	2	1
Selenium, dissolved	mg/L		0.002	<0.0008	<0.0008		<0.0008	<0.0008	<0.0008
Silicon, dissolved	mg/L			5.67	5.58		6.12	5.9	5.48
Silver, dissolved	mg/L		0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L			9	9		8	8	8
Strontium, dissolved	mg/L			0.372	0.386		0.376	0.377	0.383
Sulpher, dissolved	mg/L			<60	<60		<60	<60	<60
Thallium, dissolved	mg/L			<0.00005	<0.00005		<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.005	<0.005		<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.01	<0.01		<0.01	<0.01	<0.01
Uranium, dissolved	mg/L			0.0011	0.0012		0.0012	0.0012	0.0012
Vanadium, dissolved	mg/L			<0.005	<0.005		<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		0.03	<0.01	<0.01		<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L			<0.002	<0.002		<0.002	<0.002	<0.002

Station Name	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	30/06/2010	01/07/2010	02/07/2010	03/07/2010	04/07/2010	05/07/2010	06/07/2010	07/07/2010	08/07/2010	09/07/2010	10/07/2010	11/07/2010	12/07/2010
Total Suspended Solids	<1	87	66	26	17	8	4	6	3	2	2	2	<1
Total Dissolved Solids	190	190	180	180	170	180	190	190	200	170	170	170	170
pH (field)	7.94	8.13	7.13	8.11	8.16	8.14	8.07	8.11	8.15	8.02	8.15	8.03	8.11
pH (lab)	8.02	7.86	7.85	8.05	7.98	7.98	8.03	8.07	8.11	8.03	8.11	8.22	8.06
Specific Conductance, field													
Specific Conductance (lab)	306	220	226	240	252	267	284	300	310	316	321	325	332
Temperature (field)	6.64	5.59	6.33	6.05	6.62	5.80	5.63	8.84	7.96	6.14	6.80	6.37	7.70
Dissolved Oxygen (field) mg/L													
Dissolved Oxygen (field) %	101.3	108.6	106.5	104.9	105.0	104.6	103.8	101.8	102.7	101.1	99.0	94.7	100.2
ORP (field)													
Hardness (from total)	142	113	115	107	123	135	127	141	141	146	152	151	146
Hardness (from dissolved)	141	105	102	119	118	124	132	142	144	138	140	144	149
Alkalinity, total	140	100	110	110	120	120	130	140	140	130	150	150	150
Chloride	1.6	0.9	1	1	1.1	1.2	1.4	1.7	1.9	1.8	1.7	2.1	2.4
Fluoride	**0.29**	**0.25**	**0.24**	**0.25**	**0.26**	**0.28**	**0.28**	**0.3**	**0.3**	**0.29**	**0.3**	**0.29**	**0.35**
Sulphate, dissolved	23	9.1	9.5	12	14	15	18	22	23	24	26	28	26
Ammonia	0.018	<0.05	<0.05	<0.05	<0.05	<0.05	0.018	0.014	0.011	<0.03	<0.03	0.036	0.063
Nitrite (N)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	0.04	0.1	0.16	0.18	0.27	0.34	0.38	0.45	0.49	0.53	0.53	0.4	0.53
Dissolved Organic Carbon	8.2	20.3	19.7	19.3	17	15.8	14	12.2	11.8	11	10.7	9.6	10
Aluminum, total	0.017	**1.92**	**1.31**	**0.543**	**0.367**	**0.189**	0.066	**0.115**	0.037	0.029	0.033	0.032	0.031
Antimony, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	<0.0004	0.0017	0.0011	0.0008	0.0006	0.0006	0.0005	0.0006	0.0005	<0.0004	<0.0004	<0.0004	<0.0004
Barium, total	0.068	0.092	0.084	0.066	0.064	0.067	0.063	0.073	0.07	0.073	0.07	0.072	0.069
Beryllium, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	38	29	30	27	33	35	34	37	37	39	40	40	38
Chromium, total	**<0.002**	**0.004**	**0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	<0.0005	0.0017	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	0.003	**0.016**	**0.009**	**0.006**	**0.005**	**0.005**	**0.003**	0.003	0.003	0.003	0.003	0.003	0.002
Iron, total	0.049	**3.29**	**1.88**	**0.818**	**0.657**	**0.378**	0.168	0.213	0.084	0.072	0.071	0.06	0.06
Lead, total	<0.0002	0.0013	0.0006	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	12	10	10	10	10	12	11	12	12	12	13	12	12
Manganese, total	0.012	0.279	0.137	0.067	0.045	0.028	0.016	0.019	0.011	0.012	0.013	0.014	0.011
Mercury, total	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**
Molybdenum, total	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, total	<0.001	0.006	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002
Phosphorus, total													
Potassium, total	2	1	1	<1	<1	1	1	1	1	1	2	2	1
Selenium, total	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, total	5.2	9.27	8.13	6.03	6.85	6.56	6.24	6.53	6.26	6.23	6.2	6.14	5.86
Silver, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	8	7	7	7	7	8	8	9	9	9	10	10	10
Strontium, total	0.369	0.267	0.271	0.274	0.294	0.326	0.331	0.377	0.379	0.391	0.4	0.408	0.395
Sulpher, total	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	<0.01	0.067	0.052	0.021	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	0.0012	0.0007	0.0006	0.0006	0.0007	0.0009	0.0008	0.0011	0.0011	0.0012	0.0012	0.0014	0.0014
Vanadium, total	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	<0.01	0.026	0.023	0.02	0.019	0.018	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Antimony, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	<0.0004	0.0005	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005	0.0004	0.0004	<0.0004	<0.0004	<0.0004
Barium, dissolved	0.066	0.049	0.055	0.054	0.054	0.058	0.061	0.067	0.067	0.063	0.065	0.065	0.065
Beryllium, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	38	28	29	32	31	33	34	37	38	37	38	38	39
Chromium, dissolved	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	0.002	0.003	0.002	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002
Iron, dissolved	<0.02	0.161	0.143	0.126	0.093	0.082	0.058	0.037	0.033	0.028	0.025	0.022	0.023
Lead, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	11	9	7	9	10	10	11	12	12	11	11	12	12
Manganese, dissolved	<0.001	0.002	0.002	0.001	0.003	0.003	0.002	0.004	0.004	0.004	0.005	0.004	0.003
Mercury, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, dissolved	<0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	0.001	0.001
Phosphorus, dissolved													
Potassium, dissolved	2	<1	<1	<1	<1	1	1	1	1	1	1	1	1
Selenium, dissolved	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silicon, dissolved	6.05	5.95	5.95	6.33	6.08	6.08	6.06	6.1	6.02	5.58	5.54	5.48	5.67
Silver, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	9	7	5	7	7	8	8	9	9	8	9	9	9
Strontium, dissolved	0.385	0.246	0.249	0.267	0.279	0.305	0.321	0.358	0.371	0.359	0.376	0.382	0.381
Sulpher, dissolved	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	0.0012	0.0005	0.0005	0.0006	0.0007	0.0008	0.0009	0.001	0.0012	0.0012	0.0013	0.0013	0.0013
Vanadium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	13/07/2010	14/07/2010	15/07/2010	16/07/2010	17/07/2010	18/07/2010	19/07/2010	20/07/2010	21/07/2010	22/07/2010	23/07/2010
Total Suspended Solids	<1	2	97	37	20	12	6	4	4	7	83
Total Dissolved Solids	180	220	170	200	210	240	230	230	250	240	210
pH (field)	7.82	8.31	8.26	7.9	7.85	7.75	8.25	7.98	7.47	8.19	7.82
pH (lab)	8.06	7.9	8.13	8.14	8.13	8.09	8.15	8.15	8.17	8.17	8.1
Specific Conductance, field											
Specific Conductance (lab)	330	323	270	296	312	347	372	388	394	375	301
Temperature (field)	6.11	6.87	7.64	8.37	7.21	7.27	8.18	8.76	9.23	9.25	8.09
Dissolved Oxygen (field) mg/L											
Dissolved Oxygen (field) %	95.5	99	113	106.3	108.1	107.8	104.1	97.5	85	69.6	55.2
ORP (field)											
Hardness (from total)	153	156	143	145	137	141	157	148	151	143	144
Hardness (from dissolved)	150	147	120	130	137	140	152	166	169	158	134
Alkalinity, total	160	150	110	120	120	130	130	130	130	120	120
Chloride	2.3	2.5	3.5	5.3	7.4	7.8	9.9	11	11	9.6	6.1
Fluoride	**0.28**	**0.31**	**0.26**	**0.26**	**0.28**	**0.3**	**0.29**	**0.31**	**0.34**	**0.33**	**0.33**
Sulphate, dissolved	26	24	17	21	26	28	33	38	38	34	28
Ammonia	0.02	0.009	0.02	0.1	<0.005			0.006	0.018	0.013	0.009
Nitrite (N)	<0.005	0.005	0.013	0.015	0.014	0.011	0.013	0.01	0.011	0.009	<0.005
Nitrate (N)	0.51	0.35	1.31	1.78	2.11	2.68	**3.3**	**3.6**	**3.8**	**3.3**	1.95
Dissolved Organic Carbon	9.7	9.8	17.2	15.5	15.4	13.5	12.5	12.4	12.6	14.3	13.5
Aluminum, total	0.021	0.029	**1.86**	**0.738**	**0.411**	**0.228**	0.093	0.074	0.058	0.082	**1.16**
Antimony, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	0.0005	<0.0004	0.0014	0.0009	0.0006	0.0006	0.0005	<0.0004	<0.0004	<0.0004	0.0023
Barium, total	0.069	0.072	0.101	0.077	0.07	0.074	0.076	0.075	0.077	0.069	0.099
Beryllium, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	40	41	39	38	36	38	42	41	41	39	38
Chromium, total	**<0.002**	**<0.002**	**0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	<0.0005	<0.0005	0.0016	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0011
Copper, total	0.003	0.003	**0.013**	**0.007**	**0.005**	**0.004**	0.003	0.002	0.002	0.002	**0.01**
Iron, total	0.055	0.064	**3.44**	**1.32**	**0.718**	**0.459**	0.225	0.148	0.139	0.219	**1.99**
Lead, total	<0.0002	<0.0002	0.001	0.0003	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0007
Lithium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	13	13	11	12	11	11	13	11	12	11	12
Manganese, total	0.01	0.014	0.273	0.101	0.054	0.034	0.018	0.014	0.014	0.02	0.205
Mercury, total	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**
Molybdenum, total	0.002	0.002	0.002	0.003	0.003	0.004	0.005	0.005	0.005	0.004	0.002
Nickel, total	0.001	0.001	0.005	0.003	0.002	0.002	0.001	<0.001	<0.001	0.001	0.008
Phosphorus, total											
Potassium, total	1	2	1	2	2	2	2	2	2	2	2
Selenium, total	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.001	0.0009	<0.0008
Silicon, total	6.29	5.93	10.2	7.35	6.25	6.19	6.09	5.65	5.58	5.73	7.81
Silver, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	10	9	9	10	10	12	14	13	13	13	11
Strontium, total	0.401	0.407	0.314	0.353	0.369	0.414	0.469	0.456	0.473	0.424	0.397
Sulpher, total	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	<0.01	<0.01	0.07	0.033	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	0.039
Uranium, total	0.0013	0.0014	0.0007	0.0007	0.0007	0.0008	0.0009	0.0009	0.0008	0.0008	0.0008
Vanadium, total	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005
Zinc, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	<0.01	<0.01	0.023	0.02	0.02	0.028	0.015	0.016	0.015	0.018	0.018
Antimony, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	<0.0004	<0.0004	0.0006	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005
Barium, dissolved	0.068	0.068	0.055	0.061	0.063	0.069	0.076	0.084	0.084	0.08	0.063
Beryllium, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	40	39	32	35	37	37	40	45	47	43	35
Chromium, dissolved	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.003
Iron, dissolved	0.025	0.023	0.135	0.106	0.094	0.091	0.047	0.038	0.042	0.058	0.11
Lead, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	12	12	10	10	11	12	12	13	13	12	11
Manganese, dissolved	0.004	<0.001	0.002	0.002	0.002	0.008	0.003	0.003	0.003	0.002	0.004
Mercury, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.006	0.005	0.004
Nickel, dissolved	0.001	<0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
Phosphorus, dissolved											
Potassium, dissolved	1	2	1	1	2	2	2	2	2	2	2
Selenium, dissolved	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0008	0.0009	0.001	0.0009	<0.0008
Silicon, dissolved	5.81	5.52	5.85	5.84	5.85	5.79	5.93	5.75	5.77	5.65	6.11
Silver, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	9	9	8	9	10	12	13	14	14	13	11
Strontium, dissolved	0.394	0.382	0.296	0.345	0.381	0.417	0.468	0.511	0.517	0.49	0.372
Sulpher, dissolved	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	0.0013	0.0013	0.0006	0.0007	0.0007	0.0008	0.0009	0.0009	0.0009	0.0009	0.0006
Vanadium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2
Sample Date				24/07/2010	25/07/2010	27/07/2010	28/07/2010	29/07/2010	30/07/2010
Total Suspended Solids	mg/L			20	13	5	4	5	3
Total Dissolved Solids	mg/L			230	210	230	200	220	200
pH (field)	pH units	**6.5-9**	**6.0-9.0**	7.68	8.03	8.11	8.1	8.02	7.95
pH (lab)	pH units	**6.5-9**	**6.0-9.0**	7.96	8.05	8.13	8.16	8.11	8.09
Specific Conductance, field	µS/cm								
Specific Conductance (lab)	µS/cm			301	315	348	361	345	363
Temperature (field)	C			7.08	6.97	9.09	7.71	8.51	7.88
Dissolved Oxygen (field)	mg/L								
Dissolved Oxygen (field)	%			95.8	83.3	47.5	40.7	78.9	77.4
ORP (field)	mV								
Hardness (from total)	mg/L			137	149	161	150	143	149
Hardness (from dissolved)	mg/L			136	136	154	151	155	159
Alkalinity, total	mg/L			120	120	130	130	130	130
Chloride	mg/L	**120**		6.2	6.5	7.8	9.4	13	9.3
Fluoride	mg/L	**0.12**		**0.3**	**0.27**	**0.3**	**0.32**	**0.31**	**0.33**
Sulphate, dissolved	mg/L			25	27	29	34	29	35
Ammonia	mg/L	**0.239**	**0.25**	0.017	0.02	0.017	0.22	0.016	0.023
Nitrite (N)	mg/L	**0.06**	**0.06**	0.01	0.007	0.008	<0.005	0.006	0.006
Nitrate (N)	mg/L	**3**	**9.1**	1.98	1.98	2.57	2.9	2.7	**3.3**
Dissolved Organic Carbon	mg/L			14.9	14.1	12.2	12.4	10.1	11.3
Aluminum, total	mg/L	*		**0.387**	**0.297**	**0.159**	0.08	0.094	0.074
Antimony, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	**0.005**		0.001	0.0009	0.0006	0.0004	0.0005	0.0005
Barium, total	mg/L			0.079	0.082	0.08	0.071	0.067	0.072
Beryllium, total	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	**1.5**		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	*		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L			36	39	43	39	38	39
Chromium, total	mg/L	**0.001**		**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		**0.004**	**0.006**	0.003	0.003	**0.004**	0.003
Iron, total	mg/L	**0.3**		**0.707**	**0.544**	**0.304**	0.186	0.212	0.164
Lead, total	mg/L	*		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L			12	13	13	12	12	13
Manganese, total	mg/L			0.064	0.039	0.022	0.015	0.017	0.014
Mercury, total	mg/L	**0.000026**		**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**
Molybdenum, total	mg/L	**0.073**		0.002	0.004	0.004	0.004	0.004	0.005
Nickel, total	mg/L	*		0.006	0.007	0.005	0.004	0.004	0.004
Phosphorus, total	mg/L								
Potassium, total	mg/L			2	2	2	2	2	2
Selenium, total	mg/L	**0.001**		<0.0008	<0.0008	0.0009	0.0008	<0.0008	0.0009
Silicon, total	mg/L			6.59	6.78	6.62	5.44	5.48	5.33
Silver, total	mg/L	**0.00025**		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L			10	12	12	12	11	12
Strontium, total	mg/L			0.373	0.411	0.436	0.433	0.417	0.45
Sulpher, total	mg/L			<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	**0.0008**		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L			0.014	0.011	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	**0.015**		0.0007	0.0008	0.0009	0.0008	0.0008	0.0008
Vanadium, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	**0.03**		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L		**0.1**	0.016	0.017	0.016	0.013	0.016	0.017
Antimony, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		**0.005**	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005
Barium, dissolved	mg/L			0.064	0.068	0.072	0.071	0.071	0.077
Beryllium, dissolved	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L		*	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L			36	36	41	40	41	42
Chromium, dissolved	mg/L		**0.001**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		**0.013**	0.002	0.002	0.002	0.001	0.002	0.001
Iron, dissolved	mg/L		**1.1**	0.128	0.09	0.058	0.054	0.063	0.049
Lead, dissolved	mg/L		**0.004**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L			11	11	13	12	13	13
Manganese, dissolved	mg/L			0.001	0.004	0.005	0.005	0.005	0.001
Mercury, dissolved	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L		**0.073**	0.003	0.004	0.004	0.004	0.004	0.005
Nickel, dissolved	mg/L		**0.11**	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L								
Potassium, dissolved	mg/L			2	2	2	2	2	2
Selenium, dissolved	mg/L		**0.002**	<0.0008	<0.0008	<0.0008	0.0009	0.0008	0.0009
Silicon, dissolved	mg/L			5.9	5.76	6.19	5.72	6.28	6.16
Silver, dissolved	mg/L		**0.0001**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L			11	10	13	13	13	14
Strontium, dissolved	mg/L			0.386	0.392	0.436	0.441	0.436	0.472
Sulpher, dissolved	mg/L			<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L			0.0006	0.0006	0.0008	0.0008	0.0008	0.0008
Vanadium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		**0.03**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	31/07/2010	01/08/2010	02/08/2010	03/08/2010	04/08/2010	05/08/2010	06/08/2010	07/08/2010	08/08/2010	09/08/2010	10/08/2010	11/08/2010	12/08/2010
Total Suspended Solids	3	4	3	4	3	3	3	3	3	5	3	18	9
Total Dissolved Solids	220	250	260	240	260	280	250	280	290	250	270	240	240
pH (field)	8	8.02	7.99	8.03	8.14	8.09	8.1	8.08	8.11	8.08	8.09	8.43	8.54
pH (lab)	8.2	8.17	8.19	8.14	8.1	8.15	8.19	8.13	8.17	8.21	8.25	7.97	8.1
Specific Conductance, field													
Specific Conductance (lab)	360	397	410	413	419	422	426	418	419	413	419	389	380
Temperature (field)	8.52	8.34	9.64	9.06	11.22	9.63	10.07	8.35	8.5	8.84	8.14	9.03	7.16
Dissolved Oxygen (field)													
Dissolved Oxygen (field)	77.3	77.5	78.4	79.2	85	78.8	80.1	78.8	79.9	87.3	39.8	80.8	82.8
ORP (field)													
Hardness (from total)	151	172	167	187	169	167	164	169	180	198	178	176	190
Hardness (from dissolved)	160	173	177	178	183	186	171	174	174	176	178	173	164
Alkalinity, total	130	130	140	130	130	140	130	140	130	130	140	130	130
Chloride	9.4	11	12	12	12	13	14	14	13	12	12	11	9.7
Fluoride	**0.32**	**0.33**	**0.35**	**0.35**	**0.38**	**0.35**	**0.34**	**0.33**	**0.35**	**0.33**	**0.35**	**0.33**	**0.32**
Sulphate, dissolved	31	36	41	44	42	45	45	42	44	44	45	44	37
Ammonia	0.012	0.028	0.047	0.12	0.019	0.015	**0.38**	0.025	<0.05	0.027	0.04	0.042	0.042
Nitrite (N)	<0.005	0.006	0.009	0.007	0.007	0.006	0.008	<0.005	0.006	0.006	<0.005	<0.005	<0.005
Nitrate (N)	**3.1**	**6.7**	**4.4**	**4.6**	**4.9**	**5**	**4.9**	**4.7**	**4.8**	**4.4**	**4.8**	**4.3**	**3.7**
Dissolved Organic Carbon	10.1	11.3	9.5	11	11.5	11	10	10.5	11	11.5	11.6	11.9	12.3
Aluminum, total	0.066	0.084	0.077	0.071	0.057	0.052	0.056	0.064	0.066	0.097	**0.106**	**0.32**	**0.238**
Antimony, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	0.0004	<0.0004	0.0004	<0.0004	<0.0004	0.0005	<0.0004	0.0005	0.0004	0.0005	<0.0004	0.0007	0.0005
Barium, total	0.077	0.088	0.086	0.088	0.083	0.084	0.079	0.084	0.08	0.087	0.09	0.093	0.093
Beryllium, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	40	46	43	51	45	44	43	44	49	52	45	47	50
Chromium, total	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	0.003	0.003	**0.005**	0.003	**0.004**	**0.006**	0.003	**0.004**	0.003	**0.005**	0.003	**0.005**	0.004
Iron, total	0.152	0.178	0.148	0.16	0.122	0.115	0.123	0.141	0.157	0.235	0.15	**0.697**	**0.506**
Lead, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
Lithium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	12	14	14	15	14	14	13	14	14	16	16	14	16
Manganese, total	0.014	0.016	0.016	0.013	0.013	0.013	0.015	0.013	0.013	0.02	0.016	0.069	0.045
Mercury, total	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**
Molybdenum, total	0.004	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.006
Nickel, total	0.003	0.004	0.004	0.004	0.003	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, total													
Potassium, total	2	2	3	3	3	3	3	3	3	3	3	3	3
Selenium, total	0.0009	**0.0012**	**0.0011**	**0.0014**	**0.0012**	**0.0012**	**0.0012**	**0.0012**	**0.0014**	**0.0014**	**0.0013**	**0.0013**	**0.0013**
Silicon, total	5.78	5.9	5.46	6	5.35	5.21	5.03	5.24	5.77	6.36	5.29	6.6	7.11
Silver, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	12	14	15	15	16	16	14	15	14	17	17	17	16
Strontium, total	0.463	0.535	0.523	0.575	0.53	0.536	0.54	0.566	0.552	0.606	0.611	0.575	0.585
Sulpher, total	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	<0.01
Uranium, total	0.0008	0.0009	0.0009	0.001	0.001	0.0009	0.0009	0.001	0.0009	0.0011	0.001	0.0009	0.001
Vanadium, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	0.017	0.017	0.015	0.013	0.016	0.018	0.014	0.015	0.015	0.021	0.017	0.017	0.019
Antimony, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005
Barium, dissolved	0.077	0.084	0.087	0.082	0.083	0.086	0.086	0.085	0.083	0.081	0.085	0.082	0.075
Beryllium, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	43	46	47	48	50	50	45	46	46	47	48	46	43
Chromium, dissolved	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	0.047	0.045	0.036	0.034	0.048	0.047	0.035	0.046	0.045	0.057	0.054	0.075	0.097
Lead, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	13	14	15	14	14	15	14	14	14	14	14	14	13
Manganese, dissolved	0.001	0.003	<0.001	0.002	0.007	0.007	0.008	0.006	0.006	0.006	0.005	0.005	0.005
Mercury, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	0.004	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.005
Nickel, dissolved	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved													
Potassium, dissolved	2	3	3	3	3	3	3	3	3	3	3	3	2
Selenium, dissolved	0.0009	0.0012	0.0013	0.0014	0.0014	0.0015	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0012
Silicon, dissolved	6.27	6.14	6.02	5.69	5.74	5.86	5.15	5.45	5.41	5.96	5.85	5.98	5.82
Silver, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	14	16	17	15	15	17	15	16	15	16	17	16	14
Strontium, dissolved	0.473	0.523	0.539	0.546	0.567	0.571	0.579	0.575	0.578	0.568	0.6	0.576	0.511
Sulpher, dissolved	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0008
Vanadium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Station Name	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	13/08/2010	14/08/2010	15/08/2010	16/08/2010	17/08/2010	18/08/2010	19/08/2010	20/08/2010	21/08/2010	22/08/2010	23/08/2010
Total Suspended Solids	3	7	6	5	4	310	72	53	28	19	18
Total Dissolved Solids	190	260	280	270	270	270	210	210	200	260	250
pH (field)	7.83	8.09	7.76	8.5	8.43	8.53	8.35	7.31	7.87	8.46	8.15
pH (lab)	8.07	8.07	8.23	8.23	8.23	8.23	8.14	8.04	8.24	8.28	8.23
Specific Conductance, field											
Specific Conductance (lab)	344	417	436	451	463	413	291	309	342		375
Temperature (field)	8.95	8.54	8.87	9.29	10.15	10.08	8.3	7.61	6.91	7.26	8.6
Dissolved Oxygen (field)											
Dissolved Oxygen (field)	85.9	88.1	90.1	92.7	91.1	96.7	90.6	92.8	94.7	94.8	89.1
ORP (field)											
Hardness (from total)	159	170	167	202	196	217	137	140	151	155	154
Hardness (from dissolved)	163	175	183	186	187	168	120	127	148	154	157
Alkalinity, total	130	130	130	140	140	130	110	110	120	120	120
Chloride	6.4	12	13	14	14	11	5.5	5.9	8.4	10	13
Fluoride	**0.31**	**0.34**	**0.34**	**0.34**	**0.35**	**0.33**	**0.31**	**0.28**	**0.32**	**0.31**	**0.35**
Sulphate, dissolved	32	44	50	50	55	42	25	27	30	38	41
Ammonia	0.045	0.023	0.03	0.026	0.035	0.038	<0.01	0.1	0.019	<0.005	<0.05
Nitrite (N)	<0.005	0.026	0.009	0.008	0.012	<0.005	0.006	0.006	0.009	0.005	0.006
Nitrate (N)	2.18	**4.7**	**5.7**	**5.7**	**6.4**	**4.5**	2.05	2.1	2.9	**3.6**	**3.7**
Dissolved Organic Carbon	13.1	10.9	13.4	10.9	11.6	14.3	18.9	7.1	8.8	13.6	14.2
Aluminum, total	0.063	**0.123**	**0.103**	**0.109**	0.072	**4.93**	**1.43**	**0.943**	**0.558**	**0.329**	**0.314**
Antimony, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	0.0005	0.0005	0.0006	0.0007	0.0006	0.0034	0.0012	0.001	0.0008	0.0007	0.0007
Barium, total	0.076	0.09	0.09	0.103	0.101	0.214	0.099	0.086	0.085	0.086	0.086
Beryllium, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	43	45	43	55	53	59	36	37	40	42	41
Chromium, total	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**0.01**	**0.003**	**0.003**	**<0.002**	**<0.002**	**<0.002**
Cobalt, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0044	0.0013	0.0009	0.0006	<0.0005	<0.0005
Copper, total	**0.004**	0.003	**0.004**	0.003	0.003	**0.043**	**0.012**	**0.01**	**0.007**	**0.005**	**0.005**
Iron, total	0.216	0.26	0.223	0.264	0.187	**9.57**	**2.68**	**1.9**	**1.15**	**0.73**	**0.632**
Lead, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0026	0.0007	0.0005	0.0003	<0.0002	0.0002
Lithium, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	13	14	15	16	16	17	11	12	12	12	13
Manganese, total	0.018	0.025	0.024	0.024	0.02	0.709	0.188	0.134	0.077	0.054	0.052
Mercury, total	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	**<0.0002**	<0.00002	**<0.0002**	<0.00002	**<0.0002**	**<0.0002**
Molybdenum, total	0.004	0.007	0.007	0.008	0.008	0.007	0.003	0.004	0.004	0.006	0.005
Nickel, total	0.002	0.002	0.001	0.001	0.002	0.011	0.005	0.004	0.003	0.002	0.002
Phosphorus, total											
Potassium, total	2	3	3	3	3	3	2	2	2	2	2
Selenium, total	<0.0008	**0.0015**	**0.0016**	**0.0019**	**0.0022**	**0.0021**	0.0009	0.001	**0.0012**	**0.0014**	**0.0013**
Silicon, total	6.47	5.42	4.95	6.39	5.91	16.2	9.41	7.97	7.37	6.12	5.55
Silver, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	13	14	18	20	20	15	11	11	13	12	13
Strontium, total	0.498	0.576	0.616	0.69	0.704	0.655	0.4	0.407	0.483	0.528	0.542
Sulpher, total	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	<0.01	<0.01	<0.01	<0.01	<0.01	0.205	0.058	0.038	0.022	0.014	0.011
Uranium, total	0.001	0.001	0.001	0.0011	0.0011	0.0012	0.0007	0.0006	0.0007	0.0008	0.0008
Vanadium, total	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	<0.01	<0.01	<0.01	<0.01	<0.01	0.026	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	0.014	0.017	0.021	0.019	0.015	0.017	0.02	0.022	0.018	0.019	0.018
Antimony, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	0.0005	0.0005	0.0005	0.0005	0.0004	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005
Barium, dissolved	0.072	0.086	0.087	0.092	0.094	0.085	0.061	0.066	0.073	0.075	0.075
Beryllium, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	45	47	49	50	50	45	31	34	40	42	42
Chromium, dissolved	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**	**<0.002**
Cobalt, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	0.002	0.002	0.002	0.003	0.001	0.002	0.003	0.002	0.002	0.002	0.002
Iron, dissolved	0.095	0.069	0.064	0.061	0.041	0.092	0.187	0.147	0.149	0.125	0.103
Lead, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	13	14	15	15	15	13	10	10	12	12	13
Manganese, dissolved	0.007	0.004	0.005	0.005	0.004	0.013	0.01	0.006	0.005	0.005	0.007
Mercury, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002
Molydenum, dissolved	0.004	0.006	0.007	0.008	0.008	0.007	0.003	0.004	0.005	0.005	0.005
Nickel, dissolved	0.001	0.001	0.001	<0.001	<0.001	0.001	0.002	0.002	0.001	0.001	0.001
Phosphorus, dissolved											
Potassium, dissolved	2	3	3	3	3	3	1	1	2	2	2
Selenium, dissolved	<0.0008	0.0014	0.0019	0.002	**0.0022**	0.0018	0.0008	0.001	0.0012	0.0014	0.0014
Silicon, dissolved	6.76	6.06	5.56	5.76	5.59	5.16	5.45	5.66	6.29	5.79	5.73
Silver, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	12	16	17	18	19	14	9	9	12	13	14
Strontium, dissolved	0.493	0.559	0.626	0.669	0.705	0.609	0.375	0.416	0.472	0.517	0.527
Sulpher, dissolved	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	0.0009	0.001	0.001	0.001	0.001	0.0009	0.0005	0.0006	0.0006	0.0007	0.0008
Vanadium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				24/08/2010	25/08/2010	26/08/2010	27/08/2010	28/08/2010	29/08/2010	30/08/2010	31/08/2010	01/09/2010	02/09/2010	03/09/2010	04/09/2010	05/09/2010	06/09/2010	07/09/2010	08/09/2010	09/09/2010	10/09/2010	11/09/2010	12/09/2010	13/09/2010	14/09/2010	15/09/2010	16/09/2010	17/09/2010	18/09/2010	19/09/2010	20/09/2010	21/09/2010	22/09/2010
Total Suspended Solids	mg/L			24	13	9	7	8	6	19	6	6	6	7	5	5	6	5	6	28	18	11	8	5	7	5	4	5	3	5	5	4	3
Total Dissolved Solids	mg/L			250	250	280	260	250	300	230	300	280	270	300	280	280	240	330	380	350	280	340	300	320	300	280	290	270	270	290	280	280	270
pH (field)	pH units	6.5-9	6.0-9.0	8.22	8.17	8.21	8.12	8.22	8.23	8.26	8.28	8.28	8.2	8.13	8.12	8.15	8.19	8.11	8.2	8.33	7.53	8.07	8.15	8.12	7.2	8.01	8.02	8.05	8.14	8.18	8.19	8.19	8.19
pH (lab)	pH units	6.5-9	6.0-9.0	8.2	8.13	8.17	8.2	8.21	8.01	8.17	8.07	8.09	8.17	8.12	8.16	8.11	8.15	8.15		8.11	8.16	8.13	8.11	8.26	8.22	8.22	8.22	8.23	8.08	8.09	8.13	8.09	8.11
Specific Conductance, field	µS/cm																																
Specific Conductance (lab)	µS/cm			370	417	419	420	426	435	381	443	441	428	432	413	424	431	431	435	439	398	426	427	430	439	424	432	426	432	445	443	443	453
Temperature (field)	C			5.78	7.34	6.65	6.02	5.52	6.22	5.75	7.26	6.66	6.75	7.67	7.04	5.63	8.05	6.98	7.31	7.63	6.3	5.85	6.76	5.76	4.99	4.34	4.99	3.68	4.82	2.82	2.2	1.79	1.86
Dissolved Oxygen (field)	mg/L																																
Dissolved Oxygen (field)	%			89.5	91.3	85.7	79.6	76.6	73.7	66.9	63.9	57.3	82.9	81.4	81.9	80.4	83.1	83.8	91.5	85.3	83.4	83.4	84.2	86.3	80.6	84.7	103.5	113.9	103.4	106.4	78.2	55.1	98.6
ORP (field)	mV																																
Hardness (from total)	mg/L			167	175	183	183	180	190	160	176	189	178	193	175	180	177	172	186	184	156	180	208	174	169	170	203	201	191	181	173	184	180
Hardness (from dissolved)	mg/L			167	166	170	177	182	177	165	182	181	182	179	173	176	176	187	173	187	162	179	180	177	182	178	189	188	194	192	186	185	186
Alkalinity, total	mg/L			130	120	120	120	120	120	130	130	130	130	130	130	130	130	120	130	130	120	120	120	120	120	130	130	130	130	130	130	130	130
Chloride	mg/L	120		9.1	12	14	15	15	15	9.7	16	14	15	14	15	14	14	13	13	12	11	12	13	27	13	13	12	9.2	9.2	9.8	10	11	11
Fluoride	mg/L	0.12		0.33	0.27	0.27	0.27	0.28	0.27	0.3	0.33	0.36	0.35	0.35	0.35	0.36	0.35	0.35	0.3	0.35		0.34	0.3	0.32	0.34	0.34	0.37	0.39	0.35	0.41	0.36	0.37	0.38
Sulphate, dissolved	mg/L			37	47	55	53	54	54	37	53	50	49	47	49	48	49	56	50	55	39	56	48	51	49	41	47	45	49	48	52	55	57
Ammonia	mg/L	0.239	0.25	<0.005	<0.005	0.08	0.033	0.028	0.01	0.036	0.043	0.015	0.049	0.028	0.019	0.043	0.12	0.037	0.033	<0.005	0.1	0.049	0.03	0.029	0.044	0.005	0.022	0.039	0.025	0.018	0.035	0.046	0.047
Nitrite (N)	mg/L	0.06	0.06	0.009	0.017	0.019	0.021	0.019	0.016	<0.005	0.015	0.011	0.012	0.011	0.01	0.009	0.013	0.012	0.015	0.008	0.01	0.018	0.013	0.014	0.013	<0.005	0.007	0.008	0.008	0.011	0.008	0.01	0.012
Nitrate (N)	mg/L	3	9.1	3.8	5.5	5.5	5.5	5.5	6	3.5	5.9	6.4	6.4	6.1	5.7	6.2	6.7	6.3	6	6.1	5.1	6.3	6	6.5	6.8	5.6	6.1	6.3	6.3	7	6.9	7	7
Dissolved Organic Carbon	mg/L			15.3	13.4	12.7	12	11.6	12.5	13	11.8	11.5	11.9	12.3	12.4	12.1	11.6	12.2	13.5	12.8	13.8	12.2	12.8	12.4	12.9	13.2	12.2	13.2	12.7	11.9	12.4	12.9	11.3
Aluminum, total	mg/L	*		0.431	0.371	0.212	0.16	0.146	0.143	0.346	0.151	0.211	0.141	0.167	0.103	0.118	0.148	0.111	0.134	0.518	0.331	0.204	0.172	0.103	0.159	0.021	0.102	0.141	0.069	0.09	0.079	0.087	0.069
Antimony, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.0009	0.001	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.005		0.0008	0.0006	0.0006	0.0006	0.0005	0.0006	0.0007	0.0006	0.0006	0.0005	0.0005	0.0006	0.0006	<0.0004	0.0005	0.0006	0.0007	0.0006	0.0005	0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0005	<0.0004	<0.0004	0.0006	0.0006	0.0006
Barium, total	mg/L			0.092	0.085	0.091	0.087	0.087	0.095	0.087	0.094	0.094	0.091	0.094	0.089	0.091	0.09	0.082	0.094	0.102	0.086	0.092	0.1	0.088	0.087	0.081	0.092	0.092	0.087	0.085	0.096	0.086	0.089
Beryllium, total	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, total	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	1.5		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, total	mg/L	*		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L			45	46	49	49	48	50	43	47	50	47	52	46	48	47	46	50	49	42	48	57	47	46	46	53	53	53	49	44	49	47
Chromium, total	mg/L	0.001		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.004	0.003	0.011	0.003	0.003	0.003	0.006	0.004	0.004	0.006	0.008	0.003	0.002	0.004	0.003	0.004	0.003	0.008	0.004	0.003
Iron, total	mg/L	0.3		0.956	0.488	0.457	0.392	0.352	0.341	0.754	0.322	0.354	0.297	0.38	0.269	0.334	0.306	0.266	0.297	0.984	0.641	0.443	0.021	0.252	0.329	0.11	0.248	0.305	0.226	0.254	0.196	0.217	0.172
Lead, total	mg/L	*		0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0008	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	0.029	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, total	mg/L			13	15	15	15	15	16	13	14	15	15	16	14	15	15	14	15	15	13	14	16	14	13	13	17	17	15	14	15	15	15
Manganese, total	mg/L			0.073	0.035	0.03	0.029	0.027	0.028	0.063	0.026	0.026	0.023	0.03	0.022	0.025	0.027	0.023	0.025	0.084	0.049	0.036	0.069	0.022	0.025	0.008	0.022	0.024	0.018	0.021	0.021	0.022	0.017
Mercury, total	mg/L	0.000026		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.073		0.006	0.007	0.008	0.007	0.008	0.009	0.005	0.008	0.008	0.008	0.008	0.007	0.008	0.008	0.008	0.008	0.008	0.006	0.008	0.017	0.007	0.007	0.006	0.008	0.008	0.007	0.008	0.008	0.009	0.008
Nickel, total	mg/L	*		0.003	0.002	0.003	0.002	0.001	0.002	0.002	0.001	0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.004	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.002	0.001
Phosphorus, total	mg/L																																
Potassium, total	mg/L			2	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	2	3	5	3	3	3	3	3	3	3	3	3	3
Selenium, total	mg/L	0.001		0.0014	0.0019	0.0021	0.0021	0.0021	0.0023	0.0013	0.0021	0.0022	0.002	0.0021	0.0019	0.002	0.0021	0.002	0.0022	0.0023	0.0016	0.0023	0.0044	0.0021	0.0021	0.0016	0.002	0.002	0.0022	0.0021	0.002	0.0024	0.0023
Silicon, total	mg/L			6.37	5.85	6.22	6.16	5.81	5.97	6.28	5.48	5.93	5.54	6.23	5.66	5.73	5.67	5.56	5.61	6.41	5.74	6.1	4.07	5.63	5.34	5.39	6.5	6.67	5.96	5.36	4.91	5.31	5.14
Silver, total	mg/L	0.00025		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L			13	18	16	16	17	18	12	16	17	17	18	15	16	16	16	17	16	13	16	26	15	15	15	18	17	15	15	16	16	16
Strontium, total	mg/L			0.565	0.614	0.648	0.63	0.643	0.715	0.591	0.705	0.702	0.674	0.709	0.66	0.692	0.695	0.665	0.727	0.719	0.596	0.724	1.28	0.665	0.67	0.637	0.726	0.713	0.714	0.738	0.769	0.76	0.738
Sulpher, total	mg/L			<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, total	mg/L	0.0008		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L			0.018	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, total	mg/L	0.015		0.0009	0.0008	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0008	0.0009	0.0009	0.0007	0.0008	0.0008	0.0008	0.0008	0.0008	0.001	0.0011	0.0011	0.0011	0.0012	0.0012	0.0012
Vanadium, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	0.03		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, total	mg/L			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminum, dissolved	mg/L		0.1	0.022	0.018	0.019	0.019	0.019	0.025	0.019	0.026	0.027	0.027	0.022	0.02	0.02	0.021	0.03	0.044	0.021	0.02	0.02	0.02	0.022	0.019	0.057	0.024	0.02	0.021	0.021	0.018	0.018	0.018
Antimony, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	0.0008	0.0009	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		0.005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	<0.0004	<0.0004	<0.0004
Barium, dissolved	mg/L			0.077	0.081	0.08	0.082	0.084	0.081	0.076	0.087	0.085	0.082	0.081	0.078	0.081	0.085	0.081	0.086	0.084	0.079	0.08	0.082	0.085	0.088	0.087	0.083	0.083	0.083	0.084	0.08	0.083	0.081
Beryllium, dissolved	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium, dissolved	mg/L		*	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L			45	46	46	48	49	47	45	49	48	49	47	47	48	48	50	46	50	43	49	48	48	49	48	51	50	52	51	51	49	51
Chromium, dissolved	mg/L		0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		0.013	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.002
Iron, dissolved	mg/L		1.1	0.136	0.098	0.097	0.098	0.097	0.08	0.129	0.081	0.095	0.091	0.099	0.096	0.103	0.086	0.093	0.09	0.099	0.12	0.107	0.101	0.102	0.099	0.216	0.106	0.104	0.1	0.09	0.088	0.083	0.075
Lead, dissolved	mg/L		0.004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium, dissolved	mg/L			13	12	13	14	14	14	13	14	14	14	15	13	13	13	15	14	15	13	14	15	14	15	14	15	15	15	15	14	15	14
Manganese, dissolved	mg/L			0.006	0.005	0.006	0.006	0.006	0.006	0.004	0.005	0.007	0.008	0.008	0.007	0.006	0.008	0.009	0.008	0.007	0.007	0.007	0.007	0.01	0.009	0.022	0.01	0.009	0.01	0.01	0.011	0.011	0.011
Mercury, dissolved	mg/L			<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L		0.073	0.005	0.007	0.007	0.007	0.007	0.007	0.005	0.008	0.008	0.008	0.008	0.007	0.007	0.008	0.008	0.008	0.008	0.007	0.008	0.008	0.008	0.009	0.007	0.007	0.007	0.008	0.008	0.008	0.009	0.009
Nickel, dissolved	mg/L		0.11	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001
Phosphorus, dissolved	mg/L																																
Potassium, dissolved	mg/L			2	2	2	2	3	3	2	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3
Selenium, dissolved	mg/L		0.002	0.0014	0.0022	0.0021	0.002	0.002	0.0022	0.0012	0.0021	0.0022	0.0022	0.0021	0.002	0.0021	0.0022	0.0022	0.0024	0.0022	0.0021	0.0022	0.0021	0.0023	0.0024	0.0018	0.0021	0.0021	0.0021	0.0023	0.0024	0.0023	0.0025
Silicon, dissolved	mg/L			6.32	5.84	5.54	5.39	5.46	5.41	5.69	5.32	5.48	5.46	5.39	5.57	5.62	5.45	6.03	4.98	5.91	5.48	6.06	5.96	5.68	5.61	5.77	5.84	5.89	6	5.63	5.64	5.33	5.37
Silver, dissolved	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L			14	13	15	17	18	17	15	18	17	17	17	15	15	15	17	18	17	15	16	16	17	18	17	16	16	16	17	15	18	16
Strontium, dissolved	mg/L			0.546	0.62	0.634	0.672	0.686	0.649	0.601	0.713	0.709	0.7	0.685	0.678	0.691	0.743	0.702	0.701	0.707	0.625	0.689	0.715	0.738	0.76	0.727	0.715	0.704	0.735	0.754	0.758	0.746	0.8
Sulpher, dissolved	mg/L			<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium, dissolved	mg/L			0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0009	0.0008	0.0009	0.0008	0.0007	0.0007	0.0008	0.0008	0.0008	0.0008	0.0009	0.001	0.0011	0.0011	0.0011	0.0011	0.0012
Vanadium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zirconium, dissolved	mg/L			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				23/09/2010	24/09/2010	25/09/2010	26/09/2010	27/09/2010	28/09/2010	29/09/2010	01/10/2010	02/10/2010	03/10/2010	04/10/2010	05/10/2010	06/10/2010	07/10/2010
Total Suspended Solids	mg/L			4	3	3	4	6	4	3	7	15	4	6	3	2	5
Total Dissolved Solids	mg/L			300	320	300	310	310	310	300	280	250	240	270	260	270	260
pH (field)	pH units	6.5-9	6.0-9.0	8.06	7.99	8.1	8.11	8.11	8.11	8.17					8.09	8.15	8.11
pH (lab)	pH units	6.5-9	6.0-9.0	8.04	8.08	8.04	8.1	8.1	8.14	8.15	8.12	8.12	8.04	8.09	8.1	8.1	8.21
Specific Conductance, field	µS/cm																
Specific Conductance (lab)	µS/cm			441	459	466	464	469	472	474	444	395	360	426	412	409	407
Temperature (field)	C			0.83	1.27	2.32	2.1	2.35	2.43	2.54					1.43	2.05	0.43
Dissolved Oxygen (field)	mg/L																
Dissolved Oxygen (field)	%			93.3	95.1	95.5	96.8	98.3	99.6	101.9					102.4	104.3	103.4
ORP (field)	mV																
Hardness (from total)	mg/L			188	187	194	191	185	199	204	189	184	161	180	167	189	173
Hardness (from dissolved)	mg/L			188	190	190	192	192	189	190	179	160	153	175	172	170	172
Alkalinity, total	mg/L			130	130	130	130	130	130	130	130	120	120	120	130	130	130
Chloride	mg/L	120		10	12	11	12	13	12	13	11	8.4	7.1	9.5	10	9.9	9.5
Fluoride	mg/L	0.12		0.37	0.37	0.37	0.36	0.37	0.29	0.36	0.36	0.31	0.31	0.34	0.32	0.32	0.33
Sulphate, dissolved	mg/L			55	59	61	60	62	55	56	50	39	30	47	44	48	44
Ammonia	mg/L	0.239	0.25	0.044	0.017	0.032	0.011	0.022	<0.005	0.06	0.023	0.047	0.041	0.035	0.013	0.005	0.012
Nitrite (N)	mg/L	0.06	0.06	0.014	0.014	0.019	0.019	0.019	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	3	9.1	6.7	7.7	8.1	7.8	8.2	8.4	8.6	7.3	5.4	3.6	7.3	5.5	5.4	5.6
Dissolved Organic Carbon	mg/L			12.5	11.2	11.4	10.3	10.9	10.8	11.7	12.6	13.3	13.7	13.5	12	13.2	11.4
Aluminum, total	mg/L	*		0.096	0.086	0.086	0.112	0.128	0.067	0.081	0.141	0.302	0.092	0.107	0.07	0.07	0.083
Antimony, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.005		0.0005	0.0005	0.0006	0.0003	0.0003	0.0003	0.0003	0.0003	0.0006	0.0004	0.0004	0.0006	0.0004	0.0004
Barium, total	mg/L			0.087	0.088	0.091	0.088	0.089	0.086	0.09	0.084	0.083	0.07	0.078	0.075	0.081	0.075
Beryllium, total	mg/L			<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	1.5		<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	*		0.0001	<0.00001	<0.00001	<0.00001	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00002
Calcium, total	mg/L			50	49.8	51.9	49.7	49.1	54.5	56.2	51.4	49	43.4	49.3	44.3	50.1	46
Chromium, total	mg/L	0.001		<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		0.003	0.0033	0.0033	0.0036	0.0035	0.0026	0.0028	0.0034	0.0044	0.0022	0.0027	0.0032	0.003	0.0024
Iron, total	mg/L	0.3		0.223	0.21	0.203	0.246	0.265	0.175	0.186	0.329	0.739	0.303	0.285	0.2	0.196	0.221
Lead, total	mg/L	*		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L			<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L			15	15.1	15.7	16.2	15.2	15.3	15.6	14.7	15.1	12.7	13.8	13.6	15.4	14.1
Manganese, total	mg/L			0.023	0.023	0.023	0.026	0.031	0.021	0.021	0.033	0.062	0.025	0.025	0.022	0.021	0.024
Mercury, total	mg/L	0.000026		<0.0002	0.00004	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.073		0.008	0.009	0.009	0.008	0.009	0.009	0.009	0.008	0.007	0.004	0.007	0.006	0.006	0.006
Nickel, total	mg/L	*		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.002	0.001
Phosphorus, total	mg/L																
Potassium, total	mg/L			3	3.15	3.26	3.27	3.12	3.1	3.35	3.09	2.77	2.18	2.51	2.53	3.01	2.69
Selenium, total	mg/L	0.001		0.0023	0.0023	0.0025	0.0024	0.0025	0.0027	0.0027	0.0022	0.0018	0.0013	0.0024	0.0019	0.002	0.0018
Silicon, total	mg/L			5.48	5.47	5.58	5.28	5.17	5.75	5.78	5.89	6.84	6.46	6.38	5.54	6.24	5.74
Silver, total	mg/L	0.00025		<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L			16	16.1	16.8	17.6	16.8	19.5	20.5	18.2	17.6	13.2	16.1	13.4	15	13.6
Strontium, total	mg/L			0.763	0.79	0.842	0.789	0.815	0.848	0.884	0.806	0.726	0.604	0.725	0.659	0.695	0.635
Sulpher, total	mg/L			<60	20	22	22	20	23	22	18	18	12	18	13	17	13
Thallium, total	mg/L	0.0008		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L			<0.01	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.015		0.0013	0.0013	0.0013	0.0012	0.0012	0.0012	0.0012	0.0011	0.001	0.0009	0.001	0.0011	0.0012	0.0011
Vanadium, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	0.03		<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Zirconium, total	mg/L			<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L		0.1	0.018	0.028	0.018	0.02	0.019	0.017	0.017	0.019	0.024	0.016	0.021	0.019	0.018	0.023
Antimony, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		0.005	<0.0004	0.0004	0.0004	0.0006	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005
Barium, dissolved	mg/L			0.079	0.085	0.085	0.086	0.09	0.087	0.088	0.084	0.072	0.066	0.075	0.075	0.074	0.072
Beryllium, dissolved	mg/L			<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L		*	<0.0001	<0.00001	<0.00001	<0.00001	0.00001	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00002	0.00002	0.00001
Calcium, dissolved	mg/L			50	51.2	50.8	51.3	51.5	51.3	51	47.6	43.1	41	46.8	46.7	46.4	47
Chromium, dissolved	mg/L		0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		0.013	0.002	0.0023	0.0022	0.0023	0.0023	0.0022	0.0022	0.0023	0.0019	0.0017	0.0025	0.0018	0.0018	0.0018
Iron, dissolved	mg/L		1.1	0.073	0.074	0.067	0.067	0.062	0.061	0.052	0.067	0.125	0.111	0.093	0.081	0.079	0.081
Lead, dissolved	mg/L		0.004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L			15	15.1	15.4	15.5	15.4	14.9	15.2	14.5	12.6	12.2	14.2	13.4	13.2	13.2
Manganese, dissolved	mg/L			0.011	0.011	0.011	0.012	0.013	0.014	0.014	0.015	0.014	0.011	0.012	0.012	0.012	0.012
Mercury, dissolved	mg/L			<0.0002	0.00007	0.00003	<0.00002	<0.00002	0.00004	0.00004	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L		0.073	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.006	0.004	0.007	0.006	0.006	0.006
Nickel, dissolved	mg/L		0.11	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L																
Potassium, dissolved	mg/L			3	3.03	3.16	3.26	3.29	3.15	3.47	3.09	2.48	2.17	2.65	2.7	2.73	2.62
Selenium, dissolved	mg/L		0.002	0.0023	0.0025	0.0025	0.0026	0.0026	0.0025	0.0026	0.0023	0.0017	0.0011	0.002	0.0017	0.0016	0.0017
Silicon, dissolved	mg/L			5.72	5.49	5.37	5.22	5.21	5.33	5.24	5.26	5.53	5.93	5.63	5.61	5.62	5.58
Silver, dissolved	mg/L		0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L			18	18.4	19	17.4	17.6	18.7	19.6	17.6	14.1	12.4	16.4	13.5	13.4	13.4
Strontium, dissolved	mg/L			0.703	0.798	0.816	0.821	0.878	0.836	0.859	0.8	0.654	0.578	0.691	0.696	0.659	0.637
Sulpher, dissolved	mg/L			<60	21	21	21	22	21	22	20	15	12	20	16	16	16
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L			0.0012	0.0012	0.0012	0.0013	0.0012	0.0011	0.0011	0.0011	0.0009	0.0009	0.0009	0.001	0.001	0.001
Vanadium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		0.03	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L			<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005

Station Name	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date	08/10/2010	09/10/2010	10/10/2010	11/10/2010	12/10/2010	13/10/2010	14/10/2010	15/10/2010	16/10/2010	17/10/2010	18/10/2010	19/10/2010	20/10/2010	21/10/2010	22/10/2010	23/10/2010
Total Suspended Solids	3	3	4	3	3	2	3	3	3	2	6	3	20	2	2	2
Total Dissolved Solids	260	300	290	310	270	280	300	280	280	320	320	330	300	330	340	340
pH (field)	8.15	8.16	7.85		8.11	8.31	8.27	8.18	8.2		8.28	8.33	8.25	7.87		8.17
pH (lab)	8.17	8.23	8.2	8.09	8.1	8.11	8.12	8.14	8.15	8.21	8.24	8.22	8.22	8.24	8.28	8.26
Specific Conductance, field																
Specific Conductance (lab)	415	443	447	438	453	453	458	465	475	485	481	505	475	514	540	541
Temperature (field)	-0.18	-0.1	1.47		1.17	1.49	0.66	0.5	0.31		1.96	1.23	1.33	-0.2		-0.2
Dissolved Oxygen (field)																
Dissolved Oxygen (field)	104.1	103.4	107.1		109.4	114.2	111.2	110.7	109.5		107.9	109.6	110.6	114.2		104.5
ORP (field)																
Hardness (from total)	188	202	208	176	176	194	194	197	197	201	214	218	226	238	244	243
Hardness (from dissolved)	177	184	184	183	183	206	224	217	219	201	203	207		216	222	221
Alkalinity, total	140	140	140	140	140	140	140	140	140	140	140	140	140	150	150	150
Chloride	11	11	11	11	11	11	11	12	11	13	13	13	14	14	15	15
Fluoride	0.31	0.35	0.38	0.37	0.36	0.04	0.37	0.37	0.37	0.39	0.39	0.4	0.37	0.38	0.35	0.36
Sulphate, dissolved	46	53	53	46	51	62	60	61	64	59	58	67	53	67	74	74
Ammonia	<0.005	0.014	0.061	0.039	0.058	0.027	0.015	0.032	0.026	0.092	0.088	0.082	0.064	0.075	0.05	<0.005
Nitrite (N)	<0.005	0.009	0.006	0.007	0.008	0.011	0.011	0.013	0.015	0.015	0.018	0.029	0.006	0.013	0.015	0.013
Nitrate (N)	5.3	6.7	6.4	6.4	6.6	7	7.2	7.3	7.6	7.4	7.2	8.3	6.4	7.3	8.7	8.7
Dissolved Organic Carbon	12.1	10.1	12.1	12.3	11.1	11.2	10.9	10.6	11	10	10.2	9.8		9.7	9.7	9.3
Aluminum, total	0.086	0.073	0.167	0.072	0.074	0.072	0.081	0.071	0.065	0.051	0.113	0.05	0.438	0.087	0.04	0.045
Antimony, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	0.0003	0.0003	0.0004	0.0004	0.0003	0.0004	0.0005	0.0004	0.0004	0.0004	0.0005	0.0003	0.0007	0.0004	0.0004	0.0004
Barium, total	0.088	0.095	0.092	0.077	0.078	0.082	0.085	0.086	0.088	0.087	0.093	0.089	0.103	0.094	0.102	0.108
Beryllium, total	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	0.061	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	<0.00001	0.00004	0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00001	0.00001	0.00005	0.00002	0.00004	0.00001
Calcium, total	49.5	54.2	55	47	47.1	52.2	52	53.2	52.8	52.2	56.9	57.8	59	62.4	64.6	63.4
Chromium, total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	0.0029	0.0031	0.0038	0.0024	0.0026	0.0028	0.005	0.0024	0.0041	0.0036	0.0051	0.0028	0.0062	0.0025	0.0026	0.0025
Iron, total	0.251	0.182	0.205	0.183	0.179	0.182	0.207	0.181	0.166	0.149	0.284	0.155	0.819	0.131	0.099	0.1
Lead, total	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002
Lithium, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	15.7	16.2	17.2	14.2	14.2	15.5	15.7	15.5	15.9	17.2	17.5	17.8	19.1	19.9	20.1	20.5
Manganese, total	0.026	0.022	0.025	0.022	0.022	0.022	0.029	0.025	0.026	0.029	0.04	0.029	0.101	0.022	0.019	0.02
Mercury, total	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	0.00004	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	0.007	0.008	0.008	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.009	0.008	0.007	0.007	0.009	0.009
Nickel, total	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	<0.001	0.001
Phosphorus, total																
Potassium, total	2.99	3.21	3.34	2.98	2.97	3.15	3.19	3.24	3.32	3.39	3.44	3.31	3.26	3.52	3.52	3.61
Selenium, total	0.0016	0.002	0.0021	0.0019	0.0018	0.0017	0.002	0.002	0.0021	0.0023	0.0021	0.0022	0.002	0.002	0.0024	0.0024
Silicon, total	5.91	5.87	5.96	5.2	5.21	5.85	5.59	5.55	5.51	5.81	6.29	5.98	7.2	6.41	6.11	6.06
Silver, total	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	16.5	18	17.7	16.7	16.7	18.1	18.6	18.4	19.4	21.5	21.9	22.4	21.5	20.4	23.8	24.4
Strontium, total	0.732	0.821	0.807	0.668	0.688	0.727	0.765	0.794	0.816	0.861	0.923	0.939	0.876	0.853	1	1.04
Sulpher, total	18	22	17	17	18	21	19	24	20	25	24	30	24	27	29	28
Thallium, total	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.018	<0.005	<0.005	<0.005
Uranium, total	0.0012	0.0014	0.0013	0.0011	0.0011	0.0012	0.0012	0.0012	0.0012	0.0014	0.0015	0.0014	0.0016	0.0014	0.0018	0.0018
Vanadium, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	0.007	<0.005	0.006	<0.005	<0.005	<0.005
Zirconium, total	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	0.017	0.016	0.02	0.02	0.019	0.022	0.02	0.019	0.019	0.016	0.014	0.016		0.014	0.011	0.01
Antimony, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
Arsenic, dissolved	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004		0.0004	0.0004	0.0004
Barium, dissolved	0.077	0.079	0.081	0.081	0.081	0.084	0.087	0.084	0.088	0.085	0.085	0.089		0.089	0.092	0.092
Beryllium, dissolved	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001
Bismuth, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
Boron, dissolved	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05
Cadmium, dissolved	<0.00001	0.00003	0.00002	0.00002	0.00001	0.00002	0.00001	0.00001	<0.00001	<0.00001	0.00001	0.00001		<0.00001	<0.00001	<0.00001
Calcium, dissolved	48.7	49.9	50.1	49.7	49.8	56.1	60.7	59.1	58.3	54	54.8	55.9		57.8	59.7	59.3
Chromium, dissolved	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001
Cobalt, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
Copper, dissolved	0.0016	0.002	0.002	0.0021	0.0021	0.0023	0.0024	0.0021	0.0024	0.0023	0.0019	0.0025		0.0016	0.0015	0.0014
Iron, dissolved	0.074	0.057	0.058	0.065	0.063	0.062	0.069	0.065	0.06	0.047	0.048	0.051		0.037	0.026	0.025
Lead, dissolved	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
Lithium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005
Magnesium, dissolved	13.5	14.3	14.2	14.4	14.3	15.9	17.6	16.8	17.8	16.1	16.1	16.5		17.4	17.6	17.8
Manganese, dissolved	0.012	0.013	0.013	0.013	0.014	0.015	0.016	0.018	0.018	0.018	0.016	0.019		0.016	0.013	0.013
Mercury, dissolved	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	0.00002	0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002
Molydenum, dissolved	0.006	0.007	0.007	0.007	0.007	0.008	0.009	0.008	0.009	0.008	0.008	0.008		0.007	0.008	0.008
Nickel, dissolved	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001		<0.001	<0.001	<0.001
Phosphorus, dissolved																
Potassium, dissolved	2.85	3.01	3.07	3.04	3.01	3.24	3.4	3.25	3.45	3.19	3.13	3.22		3.14	3.21	3.22
Selenium, dissolved	0.0016	0.002	0.0019	0.0019	0.0019	0.0021	0.0023	0.0023	0.0024	0.0023	0.0021	0.0023		0.0021	0.0022	0.0022
Silicon, dissolved	5.82	5.52	5.34	5.33	5.31	6.23	6.68	6.34	6	5.3	5.29	5.23		5.51	5.29	5.24
Silver, dissolved	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002
Sodium, dissolved	13.1	14.9	14.9	15	14.8	16.8	18.8	18.2	19.6	17.8	17.8	18.9		18	18.5	18.6
Strontium, dissolved	0.675	0.708	0.743	0.736	0.753	0.767	0.826	0.814	0.858	0.838	0.843	0.922		0.85	0.884	0.889
Sulpher, dissolved	16	18	19	18	18	21	23	22	23	22	21	24		24	27	28
Thallium, dissolved	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005
Tin, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005
Titanium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005
Uranium, dissolved	0.0011	0.0011	0.0013	0.0012	0.0012	0.0015	0.0016	0.0014	0.0014	0.0013	0.0013	0.0014		0.0014	0.0015	0.0016
Vanadium, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005
Zinc, dissolved	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005
Zirconium, dissolved	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				25/10/2010	26/10/2010	27/10/2010	28/10/2010	29/10/2010	30/10/2010	31/10/2010	01/11/2010	02/11/2010	07/11/2010
Total Suspended Solids	mg/L			1		2	11	4	1	1	2	<1	<1
Total Dissolved Solids	mg/L			320		340	350	310	300	290	310	290	260
pH (field)	pH units	6.5-9	6.0-9.0	8.28	8.23	8.39	8.27	8.26	8.26	8.03	7.41	7.64	7.06
pH (lab)	pH units	6.5-9	6.0-9.0	8.29		8.14	8.14	8.33	8.29	8.23	8.25	8.29	8.11
Specific Conductance, field	µS/cm												
Specific Conductance (lab)	µS/cm			535		524	528	522	503	480	461	486	424
Temperature (field)	C			-0.05	2.84	0.45	-0.19	0.08	0.08	-0.21	0.1	0.5	-0.21
Dissolved Oxygen (field)	mg/L												
Dissolved Oxygen (field)	%			95.8	94.5	81.4	85	76.9	70.5	54	82.4	74.4	
ORP (field)	mV												
Hardness (from total)	mg/L			225		228	244	222	221	211	212	215	212
Hardness (from dissolved)	mg/L			214		232	228	223	219	218	242	221	194
Alkalinity, total	mg/L			150		150	150	150	150	150	150	150	160
Chloride	mg/L	120		14		14	14	13	11	9.9	11	10	5.4
Fluoride	mg/L	0.12		**0.38**		**0.41**	**0.41**	**0.38**	**0.33**	**0.3**	**0.37**	**0.34**	**0.33**
Sulphate, dissolved	mg/L			71		76	75	71	68	56	62	62	43
Ammonia	mg/L	0.239	0.25	0.06		0.007	0.076	0.076	0.022	0.047	0.031	0.029	0.022
Nitrite (N)	mg/L	0.06	0.06	0.015		0.013	0.015	0.01	0.006	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	3	9.1	**8.8**		**8.6**	**8.9**	**8.4**	**7.6**	**5.7**	**7.2**	**5.9**	2.84
Dissolved Organic Carbon	mg/L			8.8		9	9.1	10.6	10.6	11.5	9.4	9	8.8
Aluminum, total	mg/L	*		0.039		0.054	**0.129**	**0.121**	0.055	0.032	0.07	0.027	0.018
Antimony, total	mg/L			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.005		0.0004		0.0004	0.0005	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003
Barium, total	mg/L			0.089		0.099	0.104	0.098	0.089	0.09	0.091	0.087	0.084
Beryllium, total	mg/L			<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, total	mg/L			<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	1.5		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	*		0.00001		0.00003	0.00003	0.00002	<0.00001	0.00003	0.00001	<0.00001	<0.00001
Calcium, total	mg/L			60.1		61	65.3	58	59.2	56.3	55	58.3	54.5
Chromium, total	mg/L	0.001		<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, total	mg/L			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, total	mg/L	*		0.0021		0.0026	0.0039	0.0032	0.0025	0.004	0.0025	0.0023	0.0017
Iron, total	mg/L	0.3		0.092		0.118	0.26	0.156	0.101	0.087	0.111	0.088	0.057
Lead, total	mg/L	*		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, total	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L			18.2		18.4	19.7	18.6	17.7	17.2	18	16.8	18.4
Manganese, total	mg/L			0.013		0.02	0.029	0.022	0.015	0.024	0.016	0.019	0.017
Mercury, total	mg/L	0.000026		<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	**0.00003**	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.073		0.008		0.009	0.01	0.009	0.008	0.005	0.007	0.005	0.003
Nickel, total	mg/L	*		<0.001		0.001	0.001	0.006	<0.001	0.002	<0.001	0.001	<0.001
Phosphorus, total	mg/L												
Potassium, total	mg/L			3.38		3.75	3.9	3.72	3.46	2.8	3.25	2.9	2.45
Selenium, total	mg/L	0.001		**0.0023**		**0.0023**	**0.0025**	**0.0022**	**0.0021**	**0.0017**	**0.002**	**0.0019**	0.0008
Silicon, total	mg/L			5.74		5.56	6.09	5.33	5.72	5.84	5.35	5.73	6.62
Silver, total	mg/L	0.00025		<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L			22		22.1	23.6	22.7	20.7	18.3	20	18.6	14.6
Strontium, total	mg/L			0.933		1	1.04	1	0.875	0.758	0.85	0.772	0.646
Sulpher, total	mg/L			28		28	31	25	24	20	22	22	17
Thallium, total	mg/L	0.0008		<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, total	mg/L	0.015		0.0015		0.0016	0.0017	0.0017	0.0016	0.0018	0.0018	0.0017	0.002
Vanadium, total	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, total	mg/L	0.03		<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, total	mg/L			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Aluminum, dissolved	mg/L		0.1	0.011		0.02	0.021	0.019	0.014	0.008	0.023	0.008	0.007
Antimony, dissolved	mg/L			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L		0.005	0.0004		0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0003	0.0003
Barium, dissolved	mg/L			0.088		0.091	0.091	0.09	0.086	0.088	0.089	0.087	0.08
Beryllium, dissolved	mg/L			<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L			<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L		*	<0.00001		<0.00001	<0.00001	0.00002	0.00001	<0.00001	0.00003	<0.00001	<0.00001
Calcium, dissolved	mg/L			57.8		62.6	60.1	59.6	58.3	56.5	64.7	58.4	51.2
Chromium, dissolved	mg/L		0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L		0.013	0.0016		0.0016	0.0016	0.0025	0.0021	0.002	0.0027	0.0018	0.0016
Iron, dissolved	mg/L		1.1	0.024		0.029	0.024	0.052	0.034	0.031	0.047	0.03	0.04
Lead, dissolved	mg/L		0.004	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L			16.9		18.4	18.8	17.9	17.9	18.6	19.5	18.3	16.1
Manganese, dissolved	mg/L			0.01		0.011	0.011	0.014	0.011	0.022	0.019	0.015	0.015
Mercury, dissolved	mg/L			<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00004	0.00003	<0.00002
Molydenum, dissolved	mg/L		0.073	0.008		0.008	0.009	0.008	0.008	0.005	0.008	0.006	0.003
Nickel, dissolved	mg/L		0.11	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L												
Potassium, dissolved	mg/L			3.22		3.46	3.53	3.61	3.49	2.98	3.76	3.06	2.29
Selenium, dissolved	mg/L		0.002	**0.0023**		**0.0025**	**0.0024**	**0.0024**	**0.0021**	0.0016	**0.0023**	0.0017	0.0008
Silicon, dissolved	mg/L			5.1		5.58	5.46	5.63	5.88	6.15	6.5	6.07	6.07
Silver, dissolved	mg/L		0.0001	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L			18.4		20.4	20.7	21.3	20.4	19.4	22.3	19.5	14.3
Strontium, dissolved	mg/L			0.911		0.956	0.961	0.936	0.862	0.766	0.892	0.772	0.672
Sulpher, dissolved	mg/L			26		27	27	26	25	23	26	22	16
Thallium, dissolved	mg/L			<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L			0.0015		0.0015	0.0016	0.0016	0.0016	0.0018	0.0017	0.0018	0.0019
Vanadium, dissolved	mg/L			<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L		0.03	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		16/11/2010	29/11/2010	06/12/2010	10/12/2010	14/12/2010	04/04/2011	11/04/2011	21/04/2011	27/04/2011	05/05/2011
Total Suspended Solids	mg/L	3	1	5	2	4	4	18	6	5	110
Total Dissolved Solids	mg/L	260	240	310	310	360	310	270	180	98	78
pH (field)	pH units	7.28	8.05		7.25						
pH (lab)	pH units	8.07	8.06	8.06	7.99	8.14	8.39	8.28	8.24	7.62	7.32
Specific Conductance, field	µS/cm										
Specific Conductance (lab)	µS/cm	408	414	489	463	595	533	437	301	114	79
Temperature (field)	C	-0.24	-0.24	1.11	0.21						
Dissolved Oxygen (field)	mg/L										
Dissolved Oxygen (field)	%	95	105.7	104.6	72.1						
ORP (field)	mV										
Hardness (from total)	mg/L	202	195	222	219	280	254	209	153	61.5	49.2
Hardness (from dissolved)	mg/L	184	187	237	210	287	236	201	141	57.2	40.3
Alkalinity, total	mg/L	150	150	190	170	230	230	190	140	51	36
Chloride	mg/L	6.9	5.9	7.6	4.8	9.7	4.9	3.1	2.5	2.9	2.1
Fluoride	mg/L	**0.34**	**0.32**	**0.33**	**0.33**	**0.42**	**0.5**	**0.48**	**0.36**	**0.15**	0.1
Sulphate, dissolved	mg/L	47	48	59	52	66	52	41	25	<5	<0.5
Ammonia	mg/L	0.071	0.083	0.11	0.044	0.061	0.011	0.018	0.008	0.008	0.018
Nitrite (N)	mg/L	<0.005	0.005	0.027	0.013	0.031	<0.005	0.01	<0.005	<0.005	0.007
Nitrate (N)	mg/L	2.7	2.27	2.5	2.11	2.36	0.25	0.19	0.06	<0.02	<0.02
Dissolved Organic Carbon	mg/L	7.9	10.1	9.1	9.2	10.5	10.1	7.3	15	19	
Aluminum, total	mg/L	0.049	0.017	**0.142**	0.057	0.055	**0.123**	**0.892**	**0.237**	**0.161**	**2.06**
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.0003	0.0002	0.0003	0.0003	0.0003	0.0006	0.0009	0.0005	0.0004	0.0014
Barium, total	mg/L	0.084	0.083	0.096	0.093	0.118	0.111	0.097	0.062	0.031	0.071
Beryllium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00005	0.00003	0.00016	0.00007	0.00004	0.00001	0.00004	0.00004	0.00008	0.00006
Calcium, total	mg/L	52.9	52	59.2	58.1	73.5	64.3	50.9	37.9	16	13
Chromium, total	mg/L	<0.001	<0.001	**0.002**	<0.001	<0.001	<0.001	**0.002**	<0.001	<0.001	**0.004**
Cobalt, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	0.0017
Copper, total	mg/L	**0.0043**	0.0028	**0.0763**	**0.0106**	**0.0159**	**0.0195**	**0.0124**	**0.0101**	**0.0108**	**0.0115**
Iron, total	mg/L	0.096	0.038	**0.357**	0.125	0.167	0.205	**1.21**	**0.429**	**0.304**	**3.29**
Lead, total	mg/L	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.0002	<0.0002	**0.0011**
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, total	mg/L	16.9	15.9	18.1	18	23.4	22.8	19.8	14.2	5.25	4.07
Manganese, total	mg/L	0.032	0.019	0.041	0.021	0.025	0.035	0.059	0.038	0.042	0.161
Mercury, total	mg/L	**0.00004**	<0.00002	<0.00002	**0.00003**	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.001	<0.001	<0.001
Nickel, total	mg/L	0.001	0.002	0.003	0.001	0.001	<0.001	0.002	0.001	0.001	0.005
Phosphorus, total	mg/L						0.047	0.053	0.046	0.09	0.134
Potassium, total	mg/L	2.11	2.16	3.28	2.31	3.22	3.81	3.09	2.86	2.44	1.74
Selenium, total	mg/L	0.0007	0.0006	0.0006	0.0005	0.0007	0.0003	0.0003	0.0002	0.0001	0.0002
Silicon, total	mg/L	6.55	5.94	7.16	6.88	8.86	8.73	8.47	7.03	3.83	6.51
Silver, total	mg/L	<0.00002	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	15.5	12.6	14.4	14.6	18	17	13.2	8.94	3.16	1.96
Strontium, total	mg/L	0.579	0.588	0.643	0.628	0.829	0.627	0.541	0.376	0.126	0.087
Sulpher, total	mg/L	17	15	19	15	20	19	14	7	<3	<3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	<0.005	<0.005	0.007	<0.005	<0.005	0.005	0.034	0.01	0.006	0.079
Uranium, total	mg/L	0.0021	0.0024	0.0023	0.0026	0.0032	0.0026	0.0019	0.0011	0.0002	0.0003
Vanadium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007
Zinc, total	mg/L	0.005	0.006	0.01	0.015	0.015	<0.005	<0.005	0.005	<0.005	0.011
Zirconium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0009
Aluminum, dissolved	mg/L	0.007	0.004	0.037	0.007	0.007	0.008	0.01	0.009	0.027	0.061
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0002	0.0003	0.0004	0.0003	0.0005	0.0006	0.0004	0.0004	0.0004	0.0005
Barium, dissolved	mg/L	0.08	0.077	0.097	0.086	0.122	0.101	0.078	0.055	0.028	0.031
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	<0.00001	0.00001	0.00049	0.00004	0.00003	0.00001	0.00002	0.00002	0.00002	0.00002
Calcium, dissolved	mg/L	49.4	49.4	63.8	55.5	72	57.8	48.6	35.5	15.1	11.1
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.0018	0.0017	**0.0135**	0.003	0.0043	0.0073	0.0057	0.0046	0.0065	0.0056
Iron, dissolved	mg/L	0.02	0.019	0.114	0.025	0.042	0.023	0.036	0.088	0.194	0.303
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	14.8	15.5	18.8	17.4	26.1	22.2	19.3	12.7	4.72	3.06
Manganese, dissolved	mg/L	0.022	0.017	0.039	0.013	0.021	0.028	0.029	0.028	0.03	0.061
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.001	<0.001	<0.001
Nickel, dissolved	mg/L	0.001	0.001	0.004	0.001	0.002	<0.001	<0.001	0.002	0.001	0.002
Phosphorus, dissolved	mg/L						0.04	0.029	0.024	0.053	0.031
Potassium, dissolved	mg/L	1.97	1.97	3.59	2.26	3.53	3.58	2.85	2.66	2.1	1.46
Selenium, dissolved	mg/L	0.0007	0.0006	0.0006	0.0005	0.0007	0.0004	0.0003	0.0002	<0.0001	<0.0001
Silicon, dissolved	mg/L	6.04	5.6	7.61	6.45	8.65	8.28	6.74	6.4	3.45	2.81
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	13.2	12.5	15.4	14	20.4	16.6	12.7	8.12	2.82	1.84
Strontium, dissolved	mg/L	0.559	0.57	0.712	0.618	0.849	0.576	0.527	0.36	0.116	0.071
Sulpher, dissolved	mg/L	16	16	20	18	33	19	15	7	<3	<3
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0019	0.0023	0.0025	0.0024	0.0033	0.0024	0.0018	0.0009	0.0001	0.0001
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.005	<0.005	0.016	0.014	0.02	<0.005	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		10/05/2011	15/05/2011	23/05/2011	30/05/2011	07/06/2011	13/06/2011	16/06/2011	20/06/2011	27/06/2011	03/07/2011
Total Suspended Solids	mg/L	73	140	26	18	370	76	190	250	66	61
Total Dissolved Solids	mg/L	96	98	140	150	140	160	170	170	160	150
pH (field)	pH units										
pH (lab)	pH units	7.6	7.84	8.03	8.07	7.74	8.08	8.01	7.9	7.97	8.17
Specific Conductance, field	µS/cm										
Specific Conductance (lab)	µS/cm	93		195	243	177	247	239	242	248	236
Temperature (field)	C										
Dissolved Oxygen (field)	mg/L										
Dissolved Oxygen (field)	%										
ORP (field)	mV										
Hardness (from total)	mg/L	51	81.2	92.4	110	109	129	140	150	125	111
Hardness (from dissolved)	mg/L	47.5	70.2	88.6	117	87.2	118	120	115	126	121
Alkalinity, total	mg/L	46	65	88	110	80	110	110	110	120	110
Chloride	mg/L	2	1.6	1.4	1.6						
Fluoride	mg/L	**0.13**	**0.18**	**0.22**	**0.29**	**0.24**					
Sulphate, dissolved	mg/L	<0.5	<0.5	8.6	15	7.1				13	11
Ammonia	mg/L	0.006	0.027	**0.269**	0.015	0.038		0.033		0.023	0.015
Nitrite (N)	mg/L	<0.005	0.012	0.008	<0.005	0.017	0.009	0.006	0.021	0.007	0.006
Nitrate (N)	mg/L	0.03	0.1	0.14	0.28	0.16	0.26	0.24	0.21	0.16	0.16
Dissolved Organic Carbon	mg/L	22.5	20	14.9	10.9	17.6	14.3	<0.5	15.9	16	20.3
Aluminum, total	mg/L	**1.42**	**4.11**	**1.04**	**0.524**	**6.04**	**3.67**	**7.22**	**8.07**	**1.77**	**1.2**
Antimony, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, total	mg/L	0.001	0.0023	0.0013	0.0007	0.0034	0.0022	0.0036	0.004	0.0014	0.0011
Barium, total	mg/L	0.053	0.116	0.066	0.063	0.2	0.111	0.165	0.2	0.092	0.084
Beryllium, total	mg/L	<0.0001	0.0001	<0.0001	<0.0001	0.0003	0.0001	0.0002	0.0003	<0.0001	<0.0001
Bismuth, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	0.00003	0.00008	0.00006	0.00001	0.00014	0.00009	0.00019	0.00014	0.00013	0.00004
Calcium, total	mg/L	13.4	20.8	23.9	28.5	28.7	32.7	35.5	38.3	32.8	29.3
Chromium, total	mg/L	**0.003**	**0.008**	**0.002**	0.001	**0.013**	**0.008**	**0.015**	**0.016**	**0.003**	**0.002**
Cobalt, total	mg/L	0.0011	0.0029	0.0008	<0.0005	0.0053	0.0023	0.0043	0.005	0.0012	0.001
Copper, total	mg/L	**0.0075**	**0.0157**	**0.0072**	**0.005**	**0.0228**	**0.0097**	**0.0171**	**0.0201**	**0.0126**	**0.0067**
Iron, total	mg/L	**2.22**	**6.93**	**2.43**	**1.06**	**11.3**	**5.19**	**11.1**	**13.1**	**2.99**	**2.21**
Lead, total	mg/L	0.0006	0.0019	0.0006	0.0003	**0.0036**	0.0015	0.003	0.0034	0.0009	0.0007
Lithium, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.006	<0.005	<0.005
Magnesium, total	mg/L	4.24	7.08	7.96	9.3	9.08	11.5	12.6	13.2	10.5	9.09
Manganese, total	mg/L	0.115	0.243	0.127	0.036	0.307	0.102	0.178	0.216	0.068	0.068
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	<0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.002	0.001	0.001
Nickel, total	mg/L	0.004	0.008	0.004	0.002	0.016	0.008	0.013	0.017	0.005	0.004
Phosphorus, total	mg/L	0.099	0.181	0.075	0.037	0.28	0.128	0.283	0.315	0.133	0.078
Potassium, total	mg/L	1.36	1.68	1.24	1.32	1.32	1.55	1.83	1.77	1.14	0.86
Selenium, total	mg/L	<0.0001	0.0002	0.0002	0.0002	0.0003	0.0003	0.0004	0.0003	0.0001	0.0002
Silicon, total	mg/L	5.64	11.3	6.08	5.72	15.4	12.2	18.7	20.7	8.8	7.2
Silver, total	mg/L	<0.00002	0.00003	<0.00002	<0.00002	0.00005	0.00004	0.00007	0.00006	<0.00002	<0.00002
Sodium, total	mg/L	2.46	3.88	5.19	6.23	5.16	8.43	7.88	7.29	7.03	5.7
Strontium, total	mg/L	0.095	0.169	0.226	0.283	0.228	0.289	0.28	0.317	0.272	0.241
Sulpher, total	mg/L	<3	<3	<3	4	3	5	6	4	4	4
Thallium, total	mg/L	<0.00005	0.00005	<0.00005	<0.00005	0.00005	<0.00005	0.00008	0.00007	<0.00005	<0.00005
Tin, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, total	mg/L	0.057	0.131	0.036	0.02	0.19	0.146	0.269	0.289	0.067	0.038
Uranium, total	mg/L	0.0003	0.0007	0.0007	0.001	0.0014	0.0014	0.0016	0.0016	0.0009	0.0009
Vanadium, total	mg/L	<0.005	0.013	<0.005	<0.005	0.026	0.012	0.023	0.026	0.007	0.005
Zinc, total	mg/L	0.007	0.016	0.008	<0.005	0.03	0.016	0.03	**0.031**	0.011	0.007
Zirconium, total	mg/L	0.0006	0.0009	<0.0005	<0.0005	0.0012	0.0011	0.0014	0.0016	0.0006	0.0005
Aluminum, dissolved	mg/L	0.063	0.03	0.02	0.017	0.029	0.041	0.031	0.041	0.031	0.033
Antimony, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic, dissolved	mg/L	0.0006	0.0008	0.0007	0.0005	0.0008	0.0006	0.0007	0.0006	0.0007	0.0007
Barium, dissolved	mg/L	0.035	0.045	0.052	0.055	0.048	0.06	0.053	0.06	0.062	0.06
Beryllium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Bismuth, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L	0.00002	0.00001	<0.00001	<0.00001	0.00001	0.00013	0.00002	0.00006	0.00002	<0.00001
Calcium, dissolved	mg/L	13	18.9	23.4	30.8	23.4	30.1	32.2	30.5	33.5	31.7
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper, dissolved	mg/L	0.007	0.0031	0.0019	0.0026	0.0031	0.0049	0.0025	0.0029	0.0042	0.0028
Iron, dissolved	mg/L	0.462	0.73	0.681	0.222	0.503	0.225	0.28	0.207	0.249	0.324
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Lithium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium, dissolved	mg/L	3.69	5.59	7.33	9.71	6.97	10.4	9.62	9.55	10.3	10.1
Manganese, dissolved	mg/L	0.058	0.071	0.049	0.005	0.026	0.01	0.018	0.014	0.007	0.009
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	<0.001	<0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.002	0.001
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, dissolved	mg/L	0.029	0.023	0.021	0.017	0.021	0.019	0.017	0.016	0.022	0.021
Potassium, dissolved	mg/L	1.18	1.11	1.13	1.33	0.84	1.14	1.03	0.97	0.99	0.87
Selenium, dissolved	mg/L	<0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001
Silicon, dissolved	mg/L	3.25	4.3	4.5	5.2	5.56	4.85	6.53	5.16	6.15	6.48
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	2.23	3.73	4.78	6.7	5.5	7.08	7.14	6.87	7.16	7.02
Strontium, dissolved	mg/L	0.09	0.14	0.236	0.297	0.181	0.29	0.231	0.263	0.276	0.249
Sulpher, dissolved	mg/L	<3	<3	5	5	4	5	6	5	5	5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Titanium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, dissolved	mg/L	0.0002	0.0004	0.0007	0.0009	0.0007	0.001	0.0011	0.001	0.001	0.0007
Vanadium, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005
Zirconium, dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				09/07/2011	19/07/2011	26/07/2011	02/08/2011	16/08/2011	29/08/2011	08/09/2011	12/09/2011	19/09/2011	27/09/2011	06/10/2011	11/10/2011	19/10/2011	26/10/2011	30/10/2011	03/11/2011	08/11/2011	13/11/2011	22/11/2011	28/11/2011	06/04/2012	12/04/2012	14/04/2012	15/04/2012	16/04/2012	17/04/2012	18/04/2012	19/04/2012	20/04/2012	21/04/2012
Total Suspended Solids	mg/L			76	150	43	710	120	47	13	29	29	33	<4	13	<4	15	7	4	25.8	6.3	<1.0	6.8	4.3	2	7.1	31.2	39.9					
Total Dissolved Solids	mg/L			160	170	190	130	180	180	180	170	180	210	180	160	180	180	170	150	206	210	208	238	286	260	196	170	164					
pH (field)	pH units	**6.5-9**	**6.0-9.0**							8.03	8.04	8.06	8.07	7.92	7.79	7.81	8.01	7.8	7.7	7.61	8			7.99	7.78	7.95	8.13	8.23	8.07	8.11	8	7.48	7.44
pH (lab)	pH units	**6.5-9**	**6.0-9.0**	8.03	8.02	8.12	7.86	7.97	8.06	8.23	8.11	8.17	8.17	8.08	8.01	8.13	8.14	8.18	8.17	8.2	8.32	7.98	8.14	8.23	8.23	8.19	8.14	8.08					
Specific Conductance, field	µS/cm																							411	372.1	352.7	295.5	253.7	229.1	211.4	200.4	164.4	148.2
Specific Conductance (lab)	µS/cm			246	228	267	149	227	241	257	256	253	254	291	270	293	297	311	308	313	342	371	375	442	408	344	286	246					
Temperature (field)	C									2.9	2.2	2	1.6	0	0.5	0	0	0	0	0	0			0	0.2	0	0	0	0	0	0	0	0
Dissolved Oxygen (field)	mg/L									13.22	19.17	14.88	13.89	12.61	12.83	14.06	13.57	13.72	12.67	14.67	14.8			14.42	12.9	14.04	13.29	14.39	14.68	15.32	14.44	13.46	14.88
Dissolved Oxygen (field)	%									98	139.5	101.4	99.3	86.3	89.2	96.2	93.2	93.9	86.6	100.4	101.1			98.9	88.3	96.3	91	98.5	100.4	105.1	98.7	92	101.9
ORP (field)	mV																																
Hardness (from total)	mg/L			137	126	130	149	116	123	122	137	121	119	142	129	145	148	108	148	166	163	177	175	210	177	158	137	127					
Hardness (from dissolved)	mg/L			128	111	126	76.3	106	118	132	138	127	143	146	144	153	147	147	154	177	149	183	175	206	195	162	134	117					
Alkalinity, total	mg/L			110	110	130	72	110	120	120	120	120	120	140	130	140	140	150	150	150	158	169	171	199	185	156	131	110					
Chloride	mg/L	**120**					2			1.6	1.9	1.9	1.9	2	1.3	1.4	1.4	1.3	1.6	1.4	2	2.2	2.5	3.2	2.3	2.2	1.8	2					
Fluoride	mg/L	**0.12**					**0.19**																**0.33**	**0.39**	**0.43**	**0.39**	**0.35**	**0.3**					
Sulphate, dissolved	mg/L			11	7	15						9.2	8.4	15		13							26.9	37.6	29.9	23.2	18	12.7					
Ammonia	mg/L	**0.239**	**0.25**	0.012	0.023	0.047		0.018	0.006	0.008	0.11	0.008	0.015	0.013	0.037	0.021	0.018	0.014	<0.005	0.0264	0.0168	0.0055	0.0121	0.0067	<0.0050	0.0081	0.0082	0.011					
Nitrite (N)	mg/L	**0.06**	**0.06**	0.007	0.009	0.007	0.01	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	0.005	<0.0050					
Nitrate (N)	mg/L	**3**	**9.1**	0.17	0.14	0.18	0.04	0.12	0.11	0.12	0.11	0.12	0.12	0.22	0.17	0.4	0.26	0.28	0.27	0.3	0.478	0.807	0.344	0.048	<0.020	<0.020	<0.020	<0.020					
Dissolved Organic Carbon	mg/L			16	20.1	17	22.4	<0.5	17.7	15.4	13.9	12.9	12.8	13.3	12.7	10.8	10.2	10.3		10.6	9.72	8.08	9.69	9.96	9.34	12.9	12.2	13.4					
Aluminum, total	mg/L	*		**1.88**	**3.13**	**1.71**	**18.5**	**2.29**	**0.939**	**0.299**	**0.647**	**0.703**	**0.785**	**0.184**	**0.299**	0.089	**0.342**	**0.12**	**0.107**	**0.461**	**0.112**	0.027	**0.174**	**0.236**	0.097	**0.218**	**1.01**	**1.21**					
Antimony, total	mg/L			<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050					
Arsenic, total	mg/L	**0.005**		0.0015	0.0023	0.0016	**0.0094**	0.0023	0.0014	0.001	0.0012	0.0012	0.0011	0.0007	0.0008	0.0007	0.0009	0.0004	0.0006	0.0008	0.0005	0.0004	0.0004	0.0006	0.0004	0.00061	0.00099	0.00103					
Barium, total	mg/L			0.096	0.137	0.088	0.43	0.107	0.083	0.066	0.076	0.068	0.066	0.062	0.061	0.061	0.07	0.062	0.063	0.07	0.072	0.074	0.076	0.096	0.069	0.0657	0.0716	0.0695					
Beryllium, total	mg/L			<0.0001	0.0001	<0.0001	0.0007	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010					
Bismuth, total	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010					
Boron, total	mg/L	**1.5**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					
Cadmium, total	mg/L	*		0.00003	0.00009	0.00005	**0.00048**	0.00007	0.00005	0.00002	0.00005	0.00002	0.00003	0.00004	0.00002	0.00002	0.00018	0.00002	<0.00001	0.00003	<0.00001	0.00002	0.00002	0.00002	0.00002	0.000013	0.000028	0.000036					
Calcium, total	mg/L			35.9	34.3	34.5	36.6	31.4	33.9	32.6	36.6	31.4	31.8	38.3	34.5	39.1	39.2	26.7	39.8	44.9	43.2	47	46.3	53.7	43.9	39.4	34.3	31.1					
Chromium, total	mg/L	**0.001**		**0.004**	**0.006**	**0.003**	**0.038**	**0.005**	**0.002**	<0.001	**0.002**	**0.002**	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	**0.002**	**0.0021**					
Cobalt, total	mg/L			0.0013	0.0023	0.0013	0.0147	0.002	0.001	<0.0005	0.0007	0.0007	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	0.00079	0.00093					
Copper, total	mg/L	*		**0.0074**	**0.0096**	**0.0129**	**0.0551**	**0.0095**	**0.0038**	0.0023	**0.0031**	**0.0037**	**0.0059**	**0.0032**	0.0027	**0.0033**	**0.0042**	0.0025	0.0017	**0.125**	**0.0047**	0.0018	**0.0051**	**0.0113**	**0.0055**	**0.0044**	**0.0114**	**0.0126**					
Iron, total	mg/L	**0.3**		**3.39**	**5.1**	**3.17**	**31.7**	**4.74**	**2.45**	**1.29**	**1.96**	**1.85**	**1.82**	**0.76**	**1.05**	**0.657**	**0.883**	**0.378**	**0.496**	**1.27**	**0.451**	0.135	**0.398**	**0.365**	0.158	**0.413**	**1.64**	**1.88**					
Lead, total	mg/L	*		0.0008	0.0016	0.0008	**0.009**	0.0012	0.0005	<0.0002	0.0004	0.0004	0.0004	<0.0002	<0.0002	<0.0002	**0.0065**	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.00020	0.00046	0.00051					
Lithium, total	mg/L			<0.005	<0.005	<0.005	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050					
Magnesium, total	mg/L			11.5	9.85	10.6	14	9.08	9.41	9.87	11	10.4	9.64	11.2	10.5	11.4	12.1	10.1	11.8	13.1	13.4	14.6	14.5	18.5	16.3	14.4	12.5	11.9					
Manganese, total	mg/L			0.08	0.194	0.103	1.34	0.205	0.155	0.141	0.164	0.14	0.14	0.096	0.106	0.117	0.123	0.076	0.093	0.126	0.077	0.018	0.029	0.029	0.014	0.0223	0.0582	0.0732					
Mercury, total	mg/L	**0.000026**		<0.00002	**<0.00005**	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010					
Molybdenum, total	mg/L	**0.073**		0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010					
Nickel, total	mg/L	*		0.005	0.008	0.005	0.041	0.007	0.004	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.001	0.003	0.001	0.001	0.001	0.001	<0.001	<0.0010	0.0028	0.0024					
Phosphorus, total	mg/L			0.097		0.086	0.992	0.129	0.06	0.037	0.056	0.052	0.051	0.03	0.03	0.031	0.037	0.02	0.012	0.035	0.021	<0.01	0.016	0.047	0.03	0.049	0.085	0.091					
Potassium, total	mg/L			1.11	1.11	1.01	2.22	0.9	0.81	0.81	0.87	0.91	0.8	0.89	0.8	0.93	1.08	0.86	1.08	1.15	1.17	1.46	1.48	3.92	2.65	3.01	2.92	3.06					
Selenium, total	mg/L	**0.001**		0.0003	0.0003	0.0002	0.0006	0.0002	0.0002	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00015	0.0001	0.00017					
Silicon, total	mg/L			10.1	13.2	9	36.4	10.5	8.03	6.57	8.12	7.44	7.14	6.67	6.41	7.18	7.3	4.54	6.21	7.99	7.13	6.95	6.63	8.19	6.86	6.61	7.51	7.65					
Silver, total	mg/L	**0.00025**		<0.00002	0.00003	<0.00002	0.00013	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00008	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020					
Sodium, total	mg/L			7.26	5.6	6.75	5.27	5.01	5.44	5.75	6.41	5.97	5.42	6.46	5.92	6.85	7.26	5.98	7.15	7.64	8.45	8.94	9.28	12.9	10.6	9.59	7.95	7.29					
Strontium, total	mg/L			0.285	0.269	0.268	0.288	0.228	0.257	0.253	0.261	0.244	0.226	0.288	0.264	0.294	0.297	0.301	0.338	0.361	0.385	0.425	0.447	0.444	0.385	0.349	0.302	0.281					
Sulpher, total	mg/L			5	4	3	<3	3	3	4	3	4	<3	4	4	4	6	4	4	4.5	6.5	9.7	7.9	11.4	8.4	7.6	6	4.7					
Thallium, total	mg/L	**0.0008**		<0.00005	<0.00005	<0.00005	0.00016	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050					
Tin, total	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050					
Titanium, total	mg/L			0.067	0.117	0.056	0.697	0.083	0.036	0.012	0.022	0.024	0.026	0.008	0.011	<0.005	0.012	<0.005	<0.005	0.018	<0.005	<0.005	0.008	0.011	<0.005	0.0097	0.0466	0.0503					
Uranium, total	mg/L	**0.015**		0.0011	0.0011	0.001	0.0023	0.0009	0.0008	0.0007	0.0009	0.0007	0.0007	0.0009	0.0008	0.0009	0.0012	0.001	0.001	0.0012	0.0013	0.0015	0.0017	0.0014	0.001	0.00093	0.00069	0.0006					
Vanadium, total	mg/L			0.007	0.012	0.006	0.068	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050					
Zinc, total	mg/L	**0.03**		0.008	0.012	0.008	**0.068**	0.014	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.0050	<0.0050	0.0055					
Zirconium, total	mg/L			0.0007	0.0014	0.0012	0.0033	0.0007	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050					
Aluminum, dissolved	mg/L		**0.1**	0.034	0.041	0.025	0.078	0.043	0.027	0.054	0.024	0.027	0.05	0.025	0.021	0.012	0.011	0.012	0.013	0.0215	0.0123	0.0075	0.0303	0.0066	0.013	0.006	0.0067	0.0095					
Antimony, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Arsenic, dissolved	mg/L		**0.005**	0.0007	0.0009	0.001	0.0009	0.001	0.0009	0.001	0.0009	0.0008	0.0008	0.0007	0.0007	0.0006	0.0006	0.0005	0.0005	0.0005	0.00045	0.00036	0.00041	0.0005	0.00037	0.00042	0.00046	0.00041					
Barium, dissolved	mg/L			0.063	0.062	0.061	0.051	0.064	0.061	0.064	0.066	0.061	0.06	0.06	0.062	0.061	0.063	0.065	0.065	0.07	0.0706	0.0726	0.0776	0.0895	0.0777	0.0625	0.0551	0.0481					
Beryllium, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010					
Bismuth, dissolved	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					
Boron, dissolved	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					
Cadmium, dissolved	mg/L		*	0.00006	<0.00001	<0.00001	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00002	0.00001	0.00003	<0.00001	0.00001	0.00001	0.00001	0.00006	<0.000010	<0.000010	0.000037	0.000017	0.000047	0.000012	<0.000010	0.000018					
Calcium, dissolved	mg/L			35.1	29.9	33.8	21.1	27.8	32.4	35.8	37.2	34.6	39.1	39	38.2	42.8	40	39.1	40.6	47	37.4	48.1	44	52.3	48.6	39.9	33.5	29.2					
Chromium, dissolved	mg/L		**0.001**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					
Cobalt, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Copper, dissolved	mg/L		**0.013**	0.0033	0.0026	0.0042	0.007	0.0067	0.0019	0.0051	0.0018	0.0026	0.004	0.0021	0.0024	0.0014	0.0015	0.0019	0.0018	0.0124	0.00171	0.00206	0.00283	0.00597	0.00468	0.0028	0.00358	0.00379					
Iron, dissolved	mg/L		**1.1**	0.353	0.499	0.475	0.695	0.603	0.682	0.811	0.671	0.59	0.745	0.455	0.458	0.43	0.298	0.218	0.228	0.218	0.166	0.0771	0.0907	0.0265	0.0439	0.0506	0.0561	0.0835					
Lead, dissolved	mg/L		**0.004**	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020					
Lithium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					
Magnesium, dissolved	mg/L			9.9	8.72	10	5.7	8.99	9.08	10.3	10.8	9.8	11.1	11.7	11.7	11.2	11.5	11.9	12.7	14.6	13.5	15.3	15.7	18.4	18	15.1	12.2	10.6					
Manganese, dissolved	mg/L			0.017	0.034	0.047	0.064	0.108	0.108	0.132	0.138	0.129	0.112	0.096	0.095	0.11	0.098	0.082	0.09	0.123	0.0726	0.0164	0.0193	0.0207	0.0131	0.0138	0.015	0.0229					
Mercury, dissolved	mg/L			<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010					
Molydenum, dissolved	mg/L		**0.073**	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.0013	0.0017	0.0013	0.0014	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					
Nickel, dissolved	mg/L		**0.11**	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.0018	0.0014	0.0011	0.0012	<0.0010	0.0011	<0.0010	<0.0010	<0.0010					
Phosphorus, dissolved	mg/L			0.021		0.021	0.027	0.027	0.021	0.026	0.021	0.02	0.029	0.018	0.021	0.031	0.014	0.015	0.013	0.018	0.013	<0.01	0.012	0.042	0.027	0.037	0.052	0.049					
Potassium, dissolved	mg/L			0.88	0.68	0.85	0.52	0.7	0.7	0.83	0.91	0.82	0.89	0.93	0.89	0.93	0.93	1.03	1.21	1.29	1.27	1.28	1.62	3.74	3.09	2.87	2.76	2.59					
Selenium, dissolved	mg/L		**0.002**	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.00024	0.00022	0.00022	0.00018	0.00021	0.00019	0.00018	0.00012	0.00013					
Silicon, dissolved	mg/L			6.76	6.03	6.4	6.08	5.9	6.69	6.9	7.41	6.68	6.93	6.72	7.02	7.71	7.18	7.57	6.95	7.74	5.4	8.21	6.4	8.7	7.94	6.76	5.81	5.31					
Silver, dissolved	mg/L		**0.0001**	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020					
Sodium, dissolved	mg/L			6.66	5.73	6.45	4.31	5.68	5.51	6.08	6.42	5.89	6.57	7	6.8	6.83	6.99	7.19	7.59	8.94	8.42	9.29	10.1	12.5	12.1	9.94	8.07	6.82					
Strontium, dissolved	mg/L			0.252	0.231	0.27	0.148	0.224	0.236	0.268	0.278	0.248	0.246	0.295	0.278	0.307	0.321	0.326	0.366	0.363	0.358	0.434	0.483	0.425	0.429	0.356	0.3	0.27					
Sulpher, dissolved	mg/L			4	3	4	<3	3	<3	3	3	3	4	5	5	5	5	5	5	6.1	6.8	8.4	10.1	12.4	10.3	8.5	6.5	5.2					
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050					
Tin, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					
Titanium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					
Uranium, dissolved	mg/L			0.0008	0.0008	0.0009	0.0004	0.0006	0.0007	0.0008	0.0008	0.0007	0.0007	0.001	0.0008	0.001	0.001	0.0011	0.0011	0.00118	0.00138	0.00159	0.00183	0.00137	0.00103	0.00084	0.00063	0.00051					
Vanadium, dissolved	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					
Zinc, dissolved	mg/L		**0.03**	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0062	<0.0050	<0.0050	<0.0050	<0.0050	0.008	<0.0050	<0.0050	<0.0050					
Zirconium, dissolved	mg/L			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				22/04/2012	23/04/2012	24/04/2012	25/04/2012	26/04/2012	27/04/2012	28/04/2012	29/04/2012	30/04/2012	01/05/2012	02/05/2012	03/05/2012	07/05/2012	10/05/2012	12/05/2012	18/05/2012	20/05/2012	25/05/2012	02/06/2012	06/06/2012	09/06/2012	13/06/2012	15/06/2012	19/06/2012	22/06/2012	29/06/2012	08/07/2012	11/07/2012	17/07/2012	24/07/2012
Total Suspended Solids	mg/L			29.6		32.3		202			390	597				581		619	276	207	897	301	272	540	2600	1410	1030	385	157	150	1010	557	1150
Total Dissolved Solids	mg/L			108		120		128			112	112				106		146	146	144	140	164	134	160	160	170	160	188	192	180	184	194	202
pH (field)	pH units	6.5-9	6.0-9.0	7.54	7.61	8.04	7.81	7.63	7.7	7.59	7.49	7.65	7.23	7.23	7.44	7.68	8.07	7.9	8.11	7.84	7.76	8.04	7.74	7.77	7.78	7.89	7.75	8.1	7.93	8.03	8.02	8.17	8.04
pH (lab)	pH units	6.5-9	6.0-9.0	7.68		7.8		7.74			7.8	7.81				7.81		7.74	8.04	7.98	7.91	8.1	8.09	8	8.02	8.02	8.15	8.12	8.22	8.19	8.04	8.13	8.2
Specific Conductance, field	µS/cm			119.1	136.5	126.9	155	141.2	137.3	133.3	130.8	143.6	128.6	188.9	165.6	139.6	206.6	162	196.1	208.8	220.7	261.7	309.9	246.1	241.9	239.3	268.6	250.3	280.7	257.8	266.9	282.2	266.2
Specific Conductance (lab)	µS/cm			113		125		138			129	143				146		150	203	187	211	262	257	243	234	208	234	247	287	283	277	296	291
Temperature (field)	C			0	0.2	0	0.4	0.5	0.6	0.8	0.8	0.7	0.5	2.4	0.2	1.8	1.5	2.2	2.8	2.3	2.9	3.2	5.3	5.3	4.3	4.6	5.6	9.2	7.2	6	5.8	9.4	8.1
Dissolved Oxygen (field)	mg/L			15.15	16.23	16.25	14.44	14.27	14.03	14.1	14.24	13.16	13.36	8.6	13.56	10.72	14.45	13.8	12.44		12.99	12.68	12.01	12.67	12.45	12.71	12.24	10.91	11.73	11.72	11.58	11.57	11.46
Dissolved Oxygen (field)	%			103.6	111.6	111.2	99.8	99.1	97.5	98.9	99.5	91.7	92.9	62.9	93.3	77.2	103	100.3	91.9		95.9	94.7	94.7	100	96	98.6	97.7	95.2	97.1	94.2	92.7	101.1	97
ORP (field)	mV							153.2		82.9	67.3	55.8	68	85.4	86.3	52.1	56.7	20.8	125.1	6	36.9	39.8	42.6	11.1	42.6	25.5	55.2		26.4	34.6	40.6		48.2
Hardness (from total)	mg/L			58.6		57.3		78.6			79.2	97.4				96.8		116	105	108	176	142	144	182	239	186	193	142	140	143	194	176	221
Hardness (from dissolved)	mg/L			60.8		62.7		65.9			72.3	68.9				73.4		75.6	95	97	101	123	119	121	115	105	120	117	141	136	131	151	147
Alkalinity, total	mg/L			49.5		54.9		56.9			52.1	57.8				65.6		70.3	95.8	88.7	95.8	123	123	115	108	96	110	118	137	134	134	142	141
Chloride	mg/L	120		1.7		1.9		2			1.3	1.4				2.3		1.3	1.5	1.9	2.4	1.7	2.2	2.2	1.9	2.1	2.1	1.7	2.2	1.9	1.5	1.3	1.4
Fluoride	mg/L	0.12		0.11		0.13		0.15			0.15	0.15				0.17		0.2	0.21	0.2	0.24	0.28	0.29	0.28	0.26	0.24	0.26	0.28	0.3	0.29	0.28	0.3	0.32
Sulphate, dissolved	mg/L			<0.50		<0.50		<0.50			<0.50	1.36				0.74		3.88	6.52	4.68	7.04	10.7	10.1	9.89	9.81	8.45	9.37	10	11.8	9.1	9.74	11.6	9.01
Ammonia	mg/L	0.239	0.25	0.0079		0.0051		0.018			0.031	0.042				0.048		0.0599	0.055	0.045	0.2	0.11	0.046	0.11	0.051	0.23	0.2	0.042	0.077	0.041	0.035	0.11	0.17
Nitrite (N)	mg/L	0.06	0.06	<0.0050		<0.0050		<0.0050			0.0057	0.0467				0.044		0.038	0.0188	0.0162	0.037	0.0439	0.0185	0.0089	0.0135	0.0071	0.0376	0.0067	0.0114	0.0055	<0.0050	0.0065	0.0074
Nitrate (N)	mg/L	3	9.1	0.172		0.387		0.441			0.466	0.534				0.138		0.108	0.123	0.119	0.134	0.173	0.157	0.143	0.163	0.113	0.15	0.17	0.207	0.164	0.155	0.137	0.121
Dissolved Organic Carbon	mg/L			32.4		20.8		23.1			19.1	18.3				14.3		14.1	14.1	12.5	11.7	9.71	13.2	11.2	14.2	16.4	15.2	15.2	12.3	15.6	13.9	15.9	14
Aluminum, total	mg/L	*		0.458		0.681		3.85			6.63	11				11		14.5	6.45	4.64	21	7.71	5.64	15.5	30.7	23.8	20.2	6.31	3.82	3.75	16.9	8.28	16.7
Antimony, total	mg/L			<0.00050		<0.00050		<0.00050			<0.00050	<0.00050				<0.00050		0.00053	<0.00050	<0.00050	0.00072	<0.00050	<0.00050	0.00067	0.0009	0.00085	0.0007	<0.00050	<0.00050	<0.00050	0.00069	<0.00050	0.00068
Arsenic, total	mg/L	0.005		0.00056		0.00073		0.00208			0.00333	0.00518				0.00544		0.00705	0.00365	0.00305	0.0105	0.00437	0.00331	0.00786	0.0151	0.0121	0.00913	0.00453	0.00263	0.00247	0.00854	0.00502	0.00942
Barium, total	mg/L			0.0372		0.0406		0.112			0.182	0.276				0.264		0.339	0.163	0.134	0.42	0.164	0.155	0.305	0.666	0.494	0.462	0.205	0.141	0.133	0.407	0.285	0.526
Beryllium, total	mg/L			<0.00010		<0.00010		0.00015			0.00028	0.00041				0.00044		0.00048	0.00024	0.00015	0.00076	0.00026	0.00014	0.00052	0.00114	0.00075	0.00068	0.00029	0.00014	0.00013	0.0006	0.00033	0.0008
Bismuth, total	mg/L			<0.0010		<0.0010		<0.0010			<0.0010	<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	1.5		<0.05		<0.05		<0.05			<0.05	<0.05				<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	*		0.000025		0.00004		0.000088			0.000181	0.000237				0.000245		0.000271	0.000127	0.000105	0.00054	0.000166	0.000163	0.000309	0.000717	0.000608	0.000546	0.00022	0.000103	0.000101	0.000441	0.000287	0.000553
Calcium, total	mg/L			15.8		15		20.1			20.1	23.5				23.6		27.8	26.7	27.9	41.5	35.8	37.1	45.2	56.3	44.7	48.1	36.8	36.7	37	49.7	45.7	56.9
Chromium, total	mg/L	0.001		<0.0010		0.0013		0.0069			0.0109	0.0196				0.0205		0.0283	0.0125	0.0094	0.0395	0.0133	0.0096	0.0268	0.0582	0.0451	0.036	0.0123	0.007	0.0069	0.0314	0.0149	0.0306
Cobalt, total	mg/L			<0.00050		0.00063		0.00259			0.00466	0.00766				0.00779		0.0102	0.00442	0.00333	0.0143	0.00485	0.00365	0.00946	0.0235	0.0164	0.0128	0.00521	0.00249	0.00248	0.0115	0.0062	0.0143
Copper, total	mg/L	*		0.00746		0.00654		0.0137			0.0188	0.0276				0.0332		0.0339	0.0155	0.0129	0.0504	0.0169	0.0134	0.0324	0.0782	0.0554	0.0442	0.0184	0.0102	0.00945	0.0387	0.0241	0.0476
Iron, total	mg/L	0.3		0.899		1.22		6.17			11.2	18.5				18.2		23.9	10.6	8.03	34.6	11.8	8.83	24.7	51.5	37.7	30.5	11.8	6.45	6.3	28.1	14	30
Lead, total	mg/L	*		0.00022		0.00031		0.00189			0.00353	0.00567				0.00515		0.00685	0.00293	0.00214	0.00998	0.00338	0.00243	0.00637	0.0155	0.0108	0.00856	0.0034	0.00175	0.00151	0.00766	0.00436	0.00965
Lithium, total	mg/L			<0.0050		<0.0050		<0.0050			<0.0050	0.0078				0.0078		0.0095	<0.0050	<0.0050	0.0145	0.0061	<0.0050	0.0112	0.0223	0.0164	0.0134	0.0059	<0.0050	<0.0050	0.0126	0.0066	0.0118
Magnesium, total	mg/L			4.67		4.81		6.9			7.05	9.41				9.2		11.3	9.3	9.31	17.7	12.8	12.4	16.9	23.9	18.1	17.6	12.1	11.7	12.2	17	15	19.3
Manganese, total	mg/L			0.0668		0.093		0.188			0.289	0.443				0.483		0.694	0.34	0.275	0.98	0.319	0.263	0.598	1.49	0.971	0.811	0.335	0.155	0.159	0.699	0.419	0.983
Mercury, total	mg/L	0.000026		<0.000010		<0.000010		<0.000010			<0.000010	<0.000010				<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.073		<0.0010		<0.0010		0.0011			0.0011	0.0013				0.0013		0.0013	0.0012	0.0011	0.0019	0.0015	0.0014	0.0021	0.0027	0.0019	0.002	0.0014	0.0015	0.0015	0.002	0.0015	0.0015
Nickel, total	mg/L	*		0.0018		0.0021		0.0068			0.0114	0.0189				0.019		0.0257	0.0122	0.0099	0.0382	0.014	0.0104	0.027	0.0629	0.0438	0.0345	0.0142	0.0078	0.0071	0.0308	0.0172	0.0378
Phosphorus, total	mg/L			0.086		0.074		0.168			0.281	0.465				0.475		0.642	0.29	0.211	0.849	0.279	0.26	0.636	1.65	1.22	0.898	0.335	0.158	0.158	0.775	0.456	1.11
Potassium, total	mg/L			2.09		1.67		2.26			2.16	2.67				2.43		2.53	1.69	1.51	3.4	2.21	1.9	2.99	3.67	3.39	3.04	1.68	1.51	1.34	2.57	2.05	2.45
Selenium, total	mg/L	0.001		0.00014		0.00017		0.00039			0.00041	0.00033				0.00031		0.0004	0.00036	0.00026	0.00059	0.00032	0.00027	0.00032	0.00094	0.00074	0.00056	0.00045	0.00016	0.00015	0.00066	0.00028	0.00047
Silicon, total	mg/L			4.05		4.26		11			15.8	23.4				24.3		29.7	15.7	13.5	44.4	19.9	15.9	33.3	51.1	44.6	41.5	18	12.9	12.4	35.6	20.9	33.1
Silver, total	mg/L	0.00025		<0.000020		<0.000020		0.000033			0.000052	0.00011				0.000091		0.000124	0.000051	0.000048	0.00017	0.00007	0.000046	0.000136	0.00029	0.000197	0.00015	0.000068	0.000021	0.000034	0.000136	0.000104	0.000155
Sodium, total	mg/L			2.89		3		4.14			3.73	4.43				4.33		4.59	4.91	5.03	6.52	6.81	6.79	7.75	7.59	6.9	7.67	6.55	6.92	7.1	7.53	7.59	8.11
Strontium, total	mg/L			0.12		0.115		0.161			0.146	0.174				0.176		0.216	0.196	0.201	0.304	0.266	0.281	0.339	0.426	0.347	0.387	0.271	0.297	0.299	0.37	0.362	0.44
Sulpher, total	mg/L			<3.0		<3.0		<3.0			<3.0	<3.0				<3.0		<3.0	<3.0	3	3.3	3.5	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.2	<3.0	<3.0	<3.0	<3.0
Thallium, total	mg/L	0.0008		<0.000050		<0.000050		<0.000050			0.000089	0.000129				0.000125		0.000145	0.00007	0.000052	0.000213	0.000096	0.00006	0.000177	0.000247	0.00022	0.000196	0.000066	<0.000050	<0.000050	0.000162	0.000086	0.000144
Tin, total	mg/L			<0.0050		<0.0050		<0.0050			<0.0050	<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L			0.0194		0.0281		0.127			0.207	0.36				0.35		0.532	0.226	0.179	0.711	0.269	0.204	0.597	0.961	0.815	0.669	0.215	0.142	0.13	0.561	0.268	0.503
Uranium, total	mg/L	0.015		0.00019		0.00023		0.0006			0.00092	0.00158				0.00154		0.00187	0.00115	0.0011	0.00278	0.00159	0.00132	0.002	0.00344	0.00261	0.00253	0.00172	0.00153	0.00131	0.00249	0.00211	0.00295
Vanadium, total	mg/L			<0.0050		<0.0050		0.0115			0.0199	0.0333				0.0354		0.0494	0.0214	0.0165	0.0661	0.0231	0.0172	0.0462	0.102	0.0748	0.0619	0.0231	0.0127	0.0119	0.0507	0.0272	0.0599
Zinc, total	mg/L	0.03		<0.0050		<0.0050		0.0154			0.0245	0.0417				0.0436		0.0523	0.0929	0.0175	0.0848	0.0312	0.0222	0.0604	0.136	0.0964	0.0718	0.0298	0.0163	0.0156	0.0658	0.0357	0.0775
Zirconium, total	mg/L			<0.00050		<0.00050		0.00083			0.00129	0.00186				0.00164		0.00236	0.00126	0.00107	0.00269	0.00141	0.00099	0.00314	0.00393	0.0032	0.0027	0.00136	0.00082	0.00076	0.00277	0.00174	0.0027
Aluminum, dissolved	mg/L		0.1	0.041		0.0412		0.0445			0.0426	0.0364				0.0365		0.032	0.0406	0.0201	0.0297	0.0307	0.0179	0.0397	0.0336	0.0327	0.037	0.0318	0.0301	0.0312	0.0482	0.0505	0.0332
Antimony, dissolved	mg/L			<0.00050		<0.00050		<0.00050			<0.00050	<0.00050				<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L		0.005	0.00043		0.00052		0.00056			0.00062	0.0007				0.00076		0.00084	0.00081	0.00076	0.00082	0.00069	0.00064	0.00076	0.00073	0.00077	0.0007	0.00069	0.00077	0.0009	0.00085	0.00087	0.00097
Barium, dissolved	mg/L			0.0291		0.0318		0.0403			0.044	0.0476				0.0509		0.0493	0.0539	0.0539	0.0518	0.0532	0.0551	0.0529	0.051	0.0528	0.0588	0.065	0.0673	0.067	0.0683	0.0762	0.074
Beryllium, dissolved	mg/L			<0.00010		<0.00010		<0.00010			<0.00010	<0.00010				<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L			<0.0010		<0.0010		<0.0010			<0.0010	<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L			<0.05		<0.05		<0.05			<0.05	<0.05				<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L		*	0.000024		0.000023		0.000016			0.00002	0.000017				0.000018		0.00002	0.000012	<0.000010	0.000012	0.000011	<0.000010	0.000012	<0.000010	0.000011	0.000012	<0.000010	0.000013	0.000012	0.000015	0.000016	<0.000010
Calcium, dissolved	mg/L			16.6		17.1		17.8			20.8	18.8				20.3		20.7	24.8	25.8	26.7	33	31.2	32.8	30.6	28.5	32.6	30.8	37.3	35.9	35.6	40.7	39.5
Chromium, dissolved	mg/L		0.001	<0.0010		<0.0010		<0.0010			<0.0010	<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L			<0.00050		<0.00050		<0.00050			<0.00050	<0.00050				<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L		0.013	0.0055		0.00564		0.00603			0.00498	0.00489				0.00396		0.00259	0.00239	0.0023	0.00193	0.00192	0.00194	0.00299	0.00202	0.00222	0.0021	0.00199	0.00228	0.00181	0.00183	0.00193	0.00185
Iron, dissolved	mg/L		1.1	0.271		0.403		0.363			0.656	0.609				0.761		0.905	0.852	0.597	0.628	0.369	0.346	0.421	0.332	0.432	0.437	0.349	0.374	0.489	0.49	0.48	0.516
Lead, dissolved	mg/L		0.004	<0.00020		<0.00020		<0.00020			<0.00020	<0.00020				<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L			<0.0050		<0.0050		<0.0050			<0.0050	<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L			4.7		4.89		5.21			4.96	5.29				5.54		5.8	8.03	7.92	8.42	9.9	10	9.58	9.33	8.19	9.27	9.67	11.6	11.2	10.2	11.9	11.6
Manganese, dissolved	mg/L			0.0446		0.064		0.0874			0.116	0.15				0.158		0.17	0.112	0.0422	0.19	0.0897	0.0497	0.0884	0.0886	0.105	0.0756	0.0681	0.0477	0.0504	0.111	0.0845	0.0846
Mercury, dissolved	mg/L			<0.000010		<0.000010		<0.000010			<0.000010	<0.000010				<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.073	<0.0010		<0.0010		<0.0010			<0.0010	0.0011				<0.0010		<0.0010	<0.0010	0.0011	0.0012	0.0013	0.0015	0.0013	0.0013	0.0011	0.0012	0.0016	0.0016	0.0015	0.0013	0.0017	0.0016
Nickel, dissolved	mg/L		0.11	0.0011		0.0012		0.0014			0.0015	0.002				0.0018		0.0017	0.0017	0.0019	0.0016	0.0015	0.0018	0.0018	0.0016	0.0019	0.0019	0.0017	0.0016	0.0017	0.0017	0.0016	0.0017
Phosphorus, dissolved	mg/L			0.048		0.038		0.026			0.028	0.028				0.027		0.025	0.028	0.022	0.023	0.023	0.018	0.031	0.019	0.02	0.02	0.018	0.019	0.026	0.023	0.024	0.024
Potassium, dissolved	mg/L			1.96		1.74		1.6			1.5	1.49				1.28		1.07	1.05	1.02	1.06	1.1	1.1	1.11	0.996	0.8	0.897	0.899	1.12	0.945	0.891	1.02	1.04
Selenium, dissolved	mg/L		0.002	0.00015		0.00017		0.00023			0.00029	0.00027				0.00019		0.00013	0.00012	0.00012	0.00013	0.00011	0.00012	0.00012	0.00014	0.00014	0.00015	<0.00010	0.00016	0.00015	0.00011	0.00015	0.00015
Silicon, dissolved	mg/L			3.54		3.38		3.44			4.32	3.6				4.35		4.4	4.89	4.92	4.78	5.76	5.05	5.82	5.58	5.91	6.13	5.33	6.14	6.52	5.76	6.72	6.54
Silver, dissolved	mg/L		0.0001	<0.000020		<0.000020		<0.000020			<0.000020	<0.000020				<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L			2.96		3.19		3.71			3.74	4.14				4.05		3.89	5.14	5.05	5.44	6.43	6.56	6.48	6.48	5.95	6.26	6.43	7.69	7.23	6.84	7.68	7.71
Strontium, dissolved	mg/L			0.114		0.118		0.133			0.113	0.12				0.13		0.135	0.173	0.192	0.193	0.242	0.251	0.229	0.22	0.19	0.224	0.245	0.294	0.287	0.255	0.3	0.286
Sulpher, dissolved	mg/L			<3.0		<3.0		<3.0			<3.0	3.4				<3.0		<3.0	10.4	<3.0	3.2	4.7	3.9	4.1	3.8	3.1	3.9	3.2	4.5	4.1	4	4	4
Thallium, dissolved	mg/L			<0.000050		<0.000050		<0.000050			<0.000050	<0.000050				<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L			<0.0050		<0.0050		<0.0050			<0.0050	<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L			<0.0050		<0.0050		<0.0050			<0.0050	<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L			0.00014		0.00018		0.00033			0.00032	0.00041				0.00046		0.00054	0.0007	0.00079	0.0011	0.00115	0.00104	0.00113	0.00103	0.00078	0.00089	0.00109	0.00133	0.0011	0.00119	0.00132	0.00127
Vanadium, dissolved	mg/L			<0.0050		<0.0050		<0.0050			<0.0050	<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L		0.03	<0.0050		<0.0050		<0.0050			<0.0050	<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L			<0.00050		<0.00050		<0.00050			<0.00050	<0.00050				<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				31/07/2012	07/08/2012	10/08/2012	13/08/2012	16/08/2012	23/08/2012	25/08/2012	27/08/2012	03/09/2012	12/09/2012	19/09/2012	24/09/2012	04/10/2012	12/10/2012	16/10/2012	19/10/2012	22/10/2012	11/11/2012	12/04/2013	16/04/2013	24/04/2013	27/04/2013	29/04/2013	30/04/2013	30/04/2013	07/05/2013	09/05/2013	12/05/2013	15/05/2013	19/05/2013
Total Suspended Solids	mg/L			165	2100	228	224	124	75.8	443	169	85.1	401	11.7	9.3	62.8	21	30	32.4	4.1	<1.0	2.2	25.4	7		8.5	<1.0	24.5	88.3	306	26.5	216	79
Total Dissolved Solids	mg/L			194	204	214	196	214	208	212	202	198	174	208	200	206	210	188		226	236	464	364	282		314	268	292	170	104	78	78	134
pH (field)	pH units	**6.5-9**	**6.0-9.0**	8.01	8.01	8.24	8	8.03	7.91	8.29	8.32	8.27	**6.3**	7.95	7.95	7.4	7.83	7.88	8.7	8.6	7.47	8.2	8	8.94	8.69	8.57	8.3	8.4	8.39	7.61	7.11	8.1	8.17
pH (lab)	pH units	**6.5-9**	**6.0-9.0**	8.22	8.12	8.27	8.32	8.28	8.29	8.2	8.36	8.28	8.13	8.19	8.24	8.14	8.11	8.23	8.12	8.16	8.11	8.28	8.35	8.29		8.27	8.21	8.32	7.99	7.77	7.17	7.79	8.05
Specific Conductance, field	µS/cm			279.7	300.3	301.4	290.6	295.3	292.8	285.7	279.4	278.7	269.6	288.9	295.6		309.6	293.7	300.3	350	178.8			473.6	463.2	446.8	419.8	406.9	198.8	135.2	60.4	84.2	1861
Specific Conductance (lab)	µS/cm			304	309	308	288	312	317	318	308	309	261	295	308	298	308	302	311	348	384	671	545	469		479	446	436	198	132	59.6	87.6	177
Temperature (field)	C			8.3	7.3	8.1	9.4	8.7	7	8.4	6.6	6	1.2	3.5	5.3	1	0	0.2	0	0.2	-0.1	0.2	0.2	0.1	0.2	0	-0.1	-0.1	0	0.1	0.7	0.7	0.6
Dissolved Oxygen (field)	mg/L			10.85	11.35	11.95	12.24	12.4	10.87	10.53	11.56	12.17	13.71	12.49	12.17	16.44	14.67	15.03	13.67										13.99	14.08	13.86	13.4	13.3
Dissolved Oxygen (field)	%			92.4	94.5	101.5	107.2	106.3	89.8	90	92.1	97.8	92.2	94.2	96.4	96.65	100.2	103.7	94					93.8	95.1	100.8	104.9	115.9	95.9	96.5	95.9	94.2	92.4
ORP (field)	mV			11.9	31.7	-66.2	10.2	-11.1	38.1	29.1	24.2	-5.2	60.7	45.3	52.17	67.3	88.2	54.8	70.2		94.7			-76	-95	121.6	-92.6	-45.6	40.9	62.8	34.6	86.6	73.9
Hardness (from total)	mg/L			160	176	177	156	163	158	194	162	165	153	140	157	150	178	153	170	165	185	312	250	226		222	412	214	107	80	41.1	60.6	91.4
Hardness (from dissolved)	mg/L			149	154	148	148	155	156	158	149	153	135	153	149			163		175	167	311	249	217		221	203	199	93	64.8	40	46.9	85.9
Alkalinity, total	mg/L			152	151	154	147	154	159	158	156	154	127	145	147	143	151	144	147	171	175	290	237	207		197	183	182	83.7	56.7	24.1	40.7	74.6
Chloride	mg/L	**120**		1.5	1.6	1.2	1.6	9	1.8	1.6	1.8	1.4	1.8	1.7	1.4	1.5	2.1	1.8	1.9	1.8	3.4	6.1	3.7	3.4		4.7	5.5	5.3	3.1	3.1	2.3	1.5	3.6
Fluoride	mg/L	**0.12**		**0.34**	**0.32**	**0.33**	**0.3**	**0.32**	**0.33**	**0.34**	**0.3**	**0.3**	**0.34**	**0.3**	**0.26**	**0.27**	**0.28**	**0.25**	**0.25**	**0.26**	**0.25**	**0.58**	**0.52**	**0.55**		**0.42**	**0.38**	**0.37**	**0.19**	**0.13**	0.093	0.12	**0.17**
Sulphate, dissolved	mg/L			10.2	11.7	9.48	9.09	10.3	10.7	10.4	10.3	9.73	9.56	12.5	11.9	11.4	14.5	12.6	14.9	17.6	27.4	82.8	50.5	43.5		42	46.6	41	5.97	<0.50	0.71	<0.50	7.14
Ammonia	mg/L	**0.239**	**0.25**	0.021	0.11	0.025	0.14	0.012	0.049	0.0054	0.0056	0.0066	0.009	0.16	0.11	0.098	0.011	0.017	0.089	0.016	<0.0050	0.071	0.021	0.019		0.021	0.022	0.029	0.026	0.041	0.12	0.062	0.044
Nitrite (N)	mg/L	**0.06**	**0.06**	0.0086	<0.050	0.0089	<0.050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		0.0152	0.0142	0.0218	0.0074	<0.0050	0.009	0.0067	<0.0050
Nitrate (N)	mg/L	**3**	**9.1**	0.215	<0.20	0.191	0.2	0.164	<0.20	0.103	0.119	0.106	0.082	0.105	0.06	0.145	0.158	0.163	0.169	0.25	0.232	<0.020	<0.020	0.321		1.46	1.55	1.55	0.386	0.207	<0.020	<0.020	0.397
Dissolved Organic Carbon	mg/L			12.3	11.8	12.6	11.9	11.7	13.4	16.6	13	11.4	16.7	14.9	13.7	12.8	14.9	13.9	11.9	11.8	9.46	25.9	15.7	12.7		14.9	12.8	9.74	17.6	27.1	22.2	18.4	15.5
Aluminum, total	mg/L	*		**5.11**	**5.17**	**4**	**5.16**	**3.14**	**0.754**	**2.47**	**3.41**	**0.54**	**2.11**	**0.256**	0.0923	0.0236	**0.157**	**0.246**	**0.117**	0.0449	0.0106	0.0977	**0.865**	**0.304**		**0.332**	0.0304	**0.916**	**1.74**	**3.22**	**2.04**	**4.23**	**1.95**
Antimony, total	mg/L			<0.00050	<0.00050	<0.0013	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	**0.005**		0.00314	0.00332	0.00297	0.00348	0.00228	0.00132	0.00287	0.00248	0.00146	0.00234	0.00099	0.00094	0.00061	0.00082	0.00089	0.0008	0.00057	0.00033	0.00092	0.00107	0.00063		0.0006	0.00164	0.00085	0.00116	0.00176	0.00128	0.00254	0.00147
Barium, total	mg/L			0.164	0.185	0.148	0.174	0.138	0.102	0.222	0.146	0.105	0.157	0.0677	0.0733	0.0663	0.0775	0.0716	0.075	0.069	0.0847	0.152	0.121	0.0898		0.0925	0.247	0.0956	0.0723	0.0984	0.0639	0.117	0.0853
Beryllium, total	mg/L			0.00017	0.00019	<0.00025	0.00017	<0.00010	<0.00010	0.00023	0.00016	<0.00010	0.00016	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00018	<0.00010
Bismuth, total	mg/L			<0.0010	<0.0010	<0.0025	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	**1.5**		<0.05	<0.05	<0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	0.057	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	*		0.000073	0.00009	0.000063	0.000077	0.000041	0.000021	0.000147	0.000055	0.000036	0.000097	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	0.000018	0.000013		0.000021	<0.000010	<0.000010	0.000047	0.000069	0.00005	0.000078	0.000033
Calcium, total	mg/L			41.8	45.4	46.3	39.8	42.3	41.2	52.1	42.5	42.9	41	37.6	41.8	39.1	44.9	39.2	45.2	42.8	48.6	75.7	59.8	52.4		53.5	107	52.6	27.2	20.8	10.9	15.6	23.6
Chromium, total	mg/L	**0.001**		**0.009**	**0.0091**	**0.0079**	**0.0095**	**0.0056**	**0.0012**	**0.0039**	**0.0065**	<0.0010	**0.0039**	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	**0.0017**	<0.0010		<0.0010	<0.0010	**0.0013**	**0.0028**	**0.0054**	**0.0037**	**0.0077**	**0.0035**
Cobalt, total	mg/L			0.003	0.00354	0.0031	0.00346	0.00203	0.00094	0.00374	0.0023	0.00078	0.00319	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00077	<0.00050		<0.00050	<0.00050	0.00068	0.00137	0.00225	0.00158	0.00331	0.00161
Copper, total	mg/L	*		**0.0113**	**0.0124**	**0.011**	**0.0125**	**0.00786**	**0.00424**	**0.014**	**0.00913**	**0.0041**	**0.0122**	0.00198	0.00221	0.00139	0.00262	0.00256	0.00234	0.00169	0.00207	**0.0183**	**0.028**	**0.0103**		**0.0105**	<0.00020	**0.0185**	**0.0211**	**0.017**	**0.0119**	**0.0157**	**0.016**
Iron, total	mg/L	**0.3**		**8.45**	**8.58**	**7.74**	**9.47**	**5.75**	**2.14**	**5.93**	**6.59**	**1.82**	**5.67**	**1.12**	**0.915**	**0.494**	**0.712**	**1.06**	**0.818**	**0.4**	0.0422	0.169	**1.34**	**0.447**		**0.515**	**4.96**	**1.32**	**2.71**	**4.88**	**3.4**	**7.3**	**3.57**
Lead, total	mg/L	*		0.00202	0.00222	0.00178	0.00233	0.00131	0.00062	0.00247	0.00156	0.00054	0.00222	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	0.00045	0.00036		<0.00020	<0.00020	0.00041	0.00078	0.00147	0.00097	**0.00209**	0.00096
Lithium, total	mg/L			<0.0050	<0.0050	<0.013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L			13.6	15.3	15	13.7	14	13.5	15.6	13.6	14.1	12.2	11.3	12.7	12.7	16.1	13.3	13.9	14	15.4	30	24.4	23		21.4	35.1	20.1	9.58	6.79	3.38	5.27	7.91
Manganese, total	mg/L			0.191	0.226	0.242	0.252	0.153	0.0937	0.392	0.194	0.133	0.416	0.0913	0.0814	0.0799	0.0723	0.0937	0.0947	0.032	0.0414	0.0568	0.059	0.0323		0.0279	7.14	0.0461	0.125	0.239	0.15	0.299	0.192
Mercury, total	mg/L	**0.000026**		0.000026	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	0.000015	0.00001	0.000022	<0.000010
Molybdenum, total	mg/L	**0.073**		0.0017	0.0019	<0.0025	0.0015	0.0016	0.001	<0.0010	0.0016	0.0011	<0.0010	0.0011	0.0013	0.0012	0.0013	0.001	0.0011	0.0013	0.0011	<0.0010	<0.0010	<0.0010		0.0017	0.0018	0.0018	0.0013	<0.0010	<0.0010	<0.0010	0.0013
Nickel, total	mg/L	*		0.0089	0.0103	0.0092	0.01	0.0064	0.0031	0.0096	0.0073	0.0031	0.0085	0.0021	0.0021	0.0016	0.0024	0.0022	0.002	0.0014	0.0013	0.0017	0.0024	0.0012		0.0013	0.0014	0.002	0.0037	0.006	0.0047	0.0091	0.0045
Phosphorus, total	mg/L			0.205	0.221	0.221	0.27	0.151	0.074	0.298	0.158	0.172	0.279	0.036	0.03	0.025	0.052	0.04	0.048	0.022	<0.01	0.078	0.066	0.053		0.036	0.162	0.049	0.175	0.304	0.173	0.311	0.13
Potassium, total	mg/L			1.7	1.82	1.61	1.57	1.46	1.16	1.42	1.54	1.16	0.881	0.939	1.13	0.975	1.05	0.934	1	1.03	1.59	8.7	5.55	4.51		4.74	5.96	3.64	2.73	2.44	1.79	1.8	1.65
Selenium, total	mg/L	**0.001**		0.00016	0.00028	<0.00025	0.00033	0.00018	0.00014	0.00021	0.00024	0.00014	<0.00010	0.00012	<0.00010	0.00013	0.00017	0.00013	0.00012	0.00011	0.00015	0.00021	0.00024	0.00023		0.00072	<0.00010	0.0004	0.00022	0.00031	0.0001	<0.00010	0.00029
Silicon, total	mg/L			15.5	15.8	14.4	15.5	12.3	7.65	10	12.2	7.27	8.56	6.83	7.36	6.91	8.16	6.69	7.36	6.97	6.65	15	12.4	10.4		6.99	13.4	7.79	7.43	9.46	6.36	10.8	7.37
Silver, total	mg/L	**0.00025**		0.000038	0.000038	<0.000050	0.000051	<0.000020	<0.000020	<0.000020	0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	0.000025	<0.000020	0.000027	<0.000020	0.00002
Sodium, total	mg/L			7.6	8.42	8.25	7.63	8.1	8	8.44	7.61	8.26	6.76	6.73	7.79	7.46	9.38	7.72	8.14	8.14	9.45	24.9	18.7	15.9		15.8	27.1	15.1	6.42	4	1.65	2.52	5.4
Strontium, total	mg/L			0.342	0.367	0.358	0.342	0.355	0.349	0.417	0.346	0.36	0.316	0.284	0.325	0.332	0.38	0.319	0.343	0.363	0.46	0.569	0.482	0.472		0.496	0.611	0.476	0.229	0.165	0.0709	0.113	0.197
Sulpher, total	mg/L			<3.0	4.4	1810	<3.0	3	<3.0	<3.0	<3.0	4.5	3.1	3.8	4.3	4.4	10.6	5.4	6.5	3.4	10.1	24.5	16	14.2		15.4	7.9	13.2	3.9	<3.0	<3.0	<3.0	4.5
Thallium, total	mg/L	**0.0008**		0.000059	0.000064	<0.00013	0.000056	<0.000050	<0.000050	<0.000050	0.000054	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L			<0.0050	<0.0050	<0.013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L			0.162	0.162	0.151	0.177	0.108	0.0184	0.0351	0.125	0.0162	0.0445	0.0111	<0.0050	<0.0050	0.0051	0.0074	0.0051	<0.0050	<0.0050	<0.0050	0.0353	0.0118		0.0135	<0.0050	0.0371	0.0803	0.132	0.0785	0.161	0.0705
Uranium, total	mg/L	**0.015**		0.00174	0.00199	0.00166	0.00157	0.00153	0.00138	0.00177	0.00145	0.0013	0.00122	0.0009	0.00113	0.00108	0.00133	0.0011	0.00124	0.00125	0.0019	0.00165	0.0013	0.00097		0.00111	0.00064	0.00099	0.00045	0.0004	0.00025	0.00055	0.00071
Vanadium, total	mg/L			0.0155	0.0158	0.014	0.0172	0.0104	<0.0050	0.0145	0.0113	<0.0050	0.0123	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	0.0056	0.0097	0.0071	0.0136	0.0069
Zinc, total	mg/L	**0.03**		0.02	0.02	0.02	0.0211	0.0124	0.0056	0.018	0.0144	<0.0050	0.0154	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0055	<0.0050		<0.0050	<0.0050	0.009	0.0118	0.0148	0.0114	0.0194	0.0091
Zirconium, total	mg/L			0.00151	0.00114	<0.0013	0.00106	0.00067	<0.00050	0.00102	0.00096	0.00067	0.00092	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	0.00063	0.00078	0.00072	0.00094	0.00063
Aluminum, dissolved	mg/L		**0.1**	0.0253	0.025	0.0347	0.0327	0.0229	0.0293	0.0284	0.0219	0.0184	0.0253	0.0184	0.0155			0.0129		0.0102	0.0059	0.0147	0.011	0.0077		0.0064	0.0052	0.0038	0.0141	0.0341	**0.201**	0.0446	0.029
Antimony, dissolved	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L		**0.005**	0.00093	0.00092	0.00099	0.00094	0.00088	0.00095	0.00094	0.00084	0.00095	0.00078	0.00087	0.0008			0.00069		0.00056	0.00032	0.00101	0.00075	0.00045		0.00052	0.00048	0.00041	0.00036	0.00042	0.00046	0.00052	0.00054
Barium, dissolved	mg/L			0.0742	0.0767	0.0756	0.0723	0.0739	0.0766	0.0759	0.0728	0.0718	0.0629	0.0679	0.0688			0.062		0.0727	0.0832	0.156	0.108	0.0789		0.0832	0.0764	0.0763	0.0396	0.0331	0.0285	0.0318	0.0488
Beryllium, dissolved	mg/L			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010			<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L			<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L		*	<0.000010	<0.000010	0.000016	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			0.000023		<0.000010	<0.000010	0.000011	<0.000010	0.000011		0.000013	<0.000010	0.000013	0.000015	0.000015	0.000016	<0.000010	<0.000010
Calcium, dissolved	mg/L			39.7	41.6	38.6	38.9	41.3	40.3	42.1	39.1	40.4	36.4	41.3	40.3			45		45.8	43.4	73.2	59	50.4		53.9	49.5	48.4	24.1	17.1	11.7	12.7	23
Chromium, dissolved	mg/L		**0.001**	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L		**0.013**	0.00162	0.0015	0.00195	0.00174	0.00145	0.00172	0.00188	0.00164	0.00183	0.0022	0.00183	0.00162			0.00167		0.00172	0.00196	**0.0161**	0.012	0.00426		0.00543	0.00496	0.0056	0.0056	0.00682	0.00846	0.00408	0.00725
Iron, dissolved	mg/L		**1.1**	0.5	0.61	0.591	0.579	0.557	0.625	0.51	0.609	0.683	0.56	0.699	0.558			0.546		0.3	0.0272	0.0512	0.0354	0.0393		0.0339	0.0275	0.0211	0.106	0.151	0.555	0.441	0.413
Lead, dissolved	mg/L		**0.004**	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L			12.2	12.1	12.7	12.3	12.7	13.4	12.8	12.6	12.7	10.8	12.2	11.8			12.2		14.8	14.2	31.1	24.7	22.3		21	19.3	18.9	7.98	5.36	2.6	3.68	6.94
Manganese, dissolved	mg/L			0.0574	0.0713	0.0688	0.0552	0.0526	0.0428	0.0605	0.0637	0.0705	0.0822	0.0854	0.0662			0.0604		0.0312	0.0376	0.0538	0.0297	0.0201		0.0157	0.0129	0.0111	0.0414	0.0638	0.0614	0.0822	0.0969
Mercury, dissolved	mg/L			<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		**0.073**	0.0015	0.0015	0.0015	0.0015	0.0016	0.0016	0.0016	0.0015	0.0014	<0.0010	0.0012	0.0012			0.0011		0.0014	0.001	<0.0010	<0.0010	<0.0010		0.0016	0.0017	0.0017	0.001	<0.0010	<0.0010	<0.0010	0.0012
Nickel, dissolved	mg/L		**0.11**	0.0017	0.0014	0.0017	0.0015	0.0013	0.0014	0.0014	0.0016	0.0017	0.0019	0.0017	0.0016			0.0015		0.0015	0.0012	0.0016	0.0012	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0011	0.0013	0.0015	0.0014
Phosphorus, dissolved	mg/L			0.024	0.024	0.027	0.023	0.024	0.024	0.022	0.023	0.024	0.021	0.023	0.02			0.021		0.015	<0.01	0.065	0.039	0.031		0.026	0.019	0.015	0.041	0.045	0.069	0.028	0.018
Potassium, dissolved	mg/L			1.11	1.06	1.13	1.07	1.06	1.22	1.23	1.13	1.07	0.815	0.992	1.1			0.937		1.15	1.49	8.95	5.97	4.42		4.33	3.76	3.51	2.38	2.05	1.53	1.24	1.49
Selenium, dissolved	mg/L		**0.002**	0.00011	0.00014	0.00018	0.00013	0.00015	0.00011	0.00011	0.00015	<0.00010	0.00012	<0.00010	0.00014			0.00013		0.00016	0.00017	0.00027	0.00018	0.00026		0.00064	0.00061	0.00056	0.00023	<0.00010	<0.00010	<0.00010	0.00021
Silicon, dissolved	mg/L			6.82	7.09	6.46	6.9	6.9	6.78	6.96	6.85	6.94	6.6	7.25	7.12			7.39		7.59	5.69	14.6	11.8	9.75		7.19	6.11	5.5	3.82	3.19	2.32	2.64	3.66
Silver, dissolved	mg/L		**0.0001**	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L			7.58	7.77	7.89	7.74	7.69	8.24	7.88	7.64	7.63	6.68	7.47	7.08			7.28		8.56	8.5	26.1	19.4	15.7		15.7	15.1	14.9	5.81	3.75	1.5	2.42	5.16
Strontium, dissolved	mg/L			0.313	0.318	0.317	0.31	0.344	0.346	0.338	0.326	0.333	0.263	0.309	0.315			0.311		0.386	0.448	0.613	0.498	0.434		0.491	0.462	0.466	0.205	0.13	0.0919	0.0826	0.189
Sulpher, dissolved	mg/L			4.9	4.5	3.9	4.1	4.7	4.8	4.2	3.8	4.2	3.8	4	4.4			4.5		6.2	8.8	26.1	17.5	14.7		15.9	14.8	13.9	4.5	<3.0	<3.0	<3.0	4.1
Thallium, dissolved	mg/L			<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L			0.00139	0.00138	0.00131	0.00133	0.00131	0.00136	0.00137	0.00122	0.00117	0.00081	0.00101	0.00101			0.00103		0.00128	0.00196	0.00171	0.00121	0.00082		0.00094	0.00086	0.00094	0.00034	0.00018	<0.00010	0.00016	0.00053
Vanadium, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L		**0.03**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				24/05/2013	29/05/2013	31/05/2013	06/06/2013	16/06/2013	18/06/2013	25/06/2013	02/07/2013	11/07/2013	19/07/2013	23/07/2013	30/07/2013	08/08/2013	16/08/2013	21/08/2013	22/08/2013	27/08/2013	03/09/2013	09/09/2013	18/09/2013	20/09/2013	24/09/2013	03/10/2013	11/10/2013	18/10/2013	21/10/2013	31/10/2013	08/11/2013	14/11/2013	18/11/2013
Total Suspended Solids	mg/L			134	238	324	159	99	60	21.8	221	112	17.4	707	66.7	33.5	13.4	23.9	30	55.5	74.7	16.1	118	295	48.2	17.3	32.6	6.5	2.3	19.5	2.5	39.9	290
Total Dissolved Solids	mg/L			128	146	178	156	176	194	188	162	204	202	160	192	232	204	192	214	164	214	224	184	214	156	252	208	234	202	210	234	202	256
pH (field)	pH units	6.5-9	6.0-9.0	9.42	8.1	8.41	7.56	8.8	8.4	8.03	8.03	8.15	8.16	8.16	8.14	8.23	8.10	7.71	8.02	7.82	8.01	8.02	7.62	7.91	7.57	7.57	7.81	7.81	8.15	7.98	8.04	7.78	7.73
pH (lab)	pH units	6.5-9	6.0-9.0	7.88	7.97	7.94	8.16	8.13	8.1	8.18	8.17	8.08	8.3	8.22	8.16	8.26	8.22	8.29	8.18	8.16	8.1	8.17	8.2	8.03	8.17	8.15	8.11	8.3	8.22	8.21	8.2	8.37	8.27
Specific Conductance, field	µS/cm			146.6	214.7	242.6	220.2			278.1	249.1	279.3	300.7	220.9	275.1	305.4		312.7	318.9	304.1	296.4	316.4	291.4	290	288.6	302.5	310.3	312.9	314	317	334.3	328.7	405.9
Specific Conductance (lab)	µS/cm			162	209	239	225	261	274	312	261	279	317	247	278	308	323	317	319	300	298	319	290	298	287	300	314	318	319	318	364	383	401
Temperature (field)	C			2.5	0.8	5.4	2.1	7	8.8	7.6	7.6	7.5	8.2	6.4	8.4	11	12.3	7	6.6	5.3	6.8	5	2.1	3.6	1.9	0.3	0.1	0	0.01	0	0.1	0	0
Dissolved Oxygen (field)	mg/L			13.12	14.21	11.99	13.67			11.37	10.96	11.08	11.17	11.81	11.83	9.46		11.13	11.55	11.68	10.87	10.22	12.72	14.54	13.93	14.47	15.30	15.70	13.99	15.20	13.07	14.08	12.01
Dissolved Oxygen (field)	%			96.3	99	95.6	99			95	91.5	92.4	95	95.8	100.9	83.3		97.6	99.3	96.8	95.3	85.2	89.7	108.3	96.6	96.3	100	103.9	96	101.6	90.3	98	83
ORP (field)	mV			-65.4	9.3	62.7	88.6			62.1	71.8	121.8	51.9	87.3	91.3	131.1		181.1	136.4	178.6	122.0	146.0	177.6	91.7	179.9	148.1	90.5	163.4	206.0	119.0	97.9	175.9	-235.6
Hardness (from total)	mg/L			81.2	109	140	127	144	150	159	157	157	168	193	162	170	175	168	174	167	163	169	149	205	145	158	167	161	163	173	198	211	226
Hardness (from dissolved)	mg/L			73	90.5	107	111	124	129	148	126	130	161	121	146	145	155	159	157	146	140	162	145	153	142	149	162	158	164	157	181	180	215
Alkalinity, total	mg/L			64.9	83.3	94.6	108	124	127	146	122	133	154	120	130	149	156	154	155	144	141	153	140	140	131	142	146	153	149	150	172	175	184
Chloride	mg/L	120		3.4	3.8	4.7	1.8	2.5	1.7	1.6	1.8	1.6	1.7	1.5	1.7	2	1.5	1.3	1.6	1.7	1.8	1.8	2.1	2.1	1.8	2.1	1.8	2	2	1.7	2.3	2.2	2.7
Fluoride	mg/L	0.12		0.17	0.23	0.27	0.25	0.3	0.3	0.34	0.3	0.31	0.36	0.24	0.3	0.33	0.35	0.32	0.32	0.28	0.28	0.3	0.26	0.29	0.28	0.27	0.25	0.29	0.28	0.29	0.36	0.34	0.34
Sulphate, dissolved	mg/L			7.69	13.8	19.1	9.57	10.8	12.9	15.8	11.3	13.8	15.3	10.2	10.3	13	15.2	13.2	12.3	9.23	10	14.1	12.9	14.2	14.2	13.9	15.3	16.7	14.9	14.9	20.9	26.1	28.7
Ammonia	mg/L	0.239	0.25	0.055	0.051	0.062	0.089	0.078	0.052	0.036	0.093	0.063	0.027	0.086	0.084	0.028	0.067	0.025	0.025	0.03	0.049	0.024	0.032	0.032	0.064	0.023	0.023	0.037	0.032	0.031	0.018	0.055	0.024
Nitrite (N)	mg/L	0.06	0.06	0.0227	0.024	0.0383	0.0094	0.0108	0.0077	0.0054	0.0085	0.0058	0.0056	<0.050	<0.0050	<0.050	0.0077	<0.0050	<0.0050	0.0053	0.007	<0.0050	<0.0050	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	3	9.1	0.594	1.01	1.33	0.097	0.143	0.167	0.213	0.166	0.175	0.203	<0.20	0.159	<0.20	0.238	0.14	0.157	0.13	0.122	0.088	0.087	0.06	0.096	0.129	0.123	0.182	0.186	0.197	0.259	0.262	0.257
Dissolved Organic Carbon	mg/L			12.7	13.3	5.62	14.3	13.3	11.4	9.42	12.5	12.4	9.97	15.2	15	11.1	10.9	9	11.4	12.8	13.8	12.8	13.9	15.5	15	13.3	13.6	11.2	10.1	10.4	9.99	8.86	9.84
Aluminum, total	mg/L	*		1.34	4.71	7.91	3.7	2.88	1.79	0.707	7.04	2.99	0.576	16.2	1.75	0.93	0.404	0.713	1.17	1.64	1.95	0.371	2.91	9.23	1.33	0.383	0.556	0.147	0.0514	0.429	0.0571	0.109	2.17
Antimony, total	mg/L			<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00057	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, total	mg/L	0.005		0.0014	0.00317	0.00422	0.00253	0.00226	0.0019	0.00104	0.00414	0.00208	0.00109	0.00736	0.0017	0.00138	0.00104	0.00122	0.00136	0.00167	0.00182	0.00122	0.00221	0.00529	0.00144	0.0009	0.00105	0.00082	0.00077	0.00076	0.00051	0.00047	0.00149
Barium, total	mg/L			0.0935	0.154	0.221	0.126	0.117	0.0993	0.0847	0.192	0.125	0.0873	0.359	0.1	0.0889	0.0792	0.0828	0.0872	0.0971	0.104	0.0799	0.109	0.25	0.0887	0.068	0.0774	0.0681	0.0683	0.0712	0.0741	0.0788	0.145
Beryllium, total	mg/L			<0.00010	0.00016	0.00027	0.00014	<0.00010	<0.00010	<0.00010	0.00024	<0.00010	<0.00010	0.00051	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00031	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.0001
Bismuth, total	mg/L			<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, total	mg/L	1.5		<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, total	mg/L	*		0.000053	0.000075	0.000118	0.000055	0.00004	0.000022	0.000014	0.000114	0.000046	0.000016	0.000223	0.00004	0.000015	0.00001	0.000012	0.000014	0.000029	0.000022	<0.000010	0.000036	0.000149	0.00003	0.000036	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000051
Calcium, total	mg/L			21	26.5	35.8	32.4	37	39.2	40.5	39.8	39.7	43.4	46.8	43.7	44.8	44.6	43	44.4	43.9	42.6	44.6	39.2	51.7	38.3	40.8	43.6	42.1	42.4	45.6	50.6	54.6	59.7
Chromium, total	mg/L	0.001		0.0023	0.0091	0.0142	0.0075	0.0058	0.0037	0.0016	0.0144	0.0068	0.0012	0.0313	0.0035	0.002	0.0011	0.0019	0.0022	0.0039	0.0044	0.001	0.0062	0.0185	0.0028	<0.0010	0.0015	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	0.004
Cobalt, total	mg/L			0.00187	0.00352	0.0051	0.0027	0.00207	0.00129	0.00053	0.00461	0.00207	<0.00050	0.0109	0.00115	0.00069	<0.00050	0.00058	0.00069	0.0012	0.00143	<0.00050	0.00202	0.00669	0.00105	0.00051	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00234
Copper, total	mg/L	*		0.0241	0.0263	0.0333	0.0108	0.00854	0.00729	0.00367	0.0169	0.00848	0.00364	0.0353	0.00562	0.00397	0.00304	0.00364	0.00378	0.0046	0.00562	0.00238	0.00707	0.0274	0.00512	0.00273	0.00345	0.00189	0.00185	0.0025	0.00192	0.00227	0.0101
Iron, total	mg/L	0.3		2.98	8.63	12.9	6.46	5.13	3.23	1.18	11.2	5.01	1.21	23.6	3.21	1.98	1.11	1.6	1.97	3.38	3.87	1.26	4.86	15.8	2.61	1.36	1.38	0.758	0.644	0.983	0.237	0.292	4.25
Lead, total	mg/L	*		0.00117	0.0023	0.00319	0.00163	0.00116	0.00086	0.00031	0.00307	0.0012	0.00024	0.00665	0.00069	0.00038	0.00022	0.0003	0.00036	0.00062	0.00075	<0.00020	0.00111	0.004	0.00053	<0.00020	0.00025	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00134
Lithium, total	mg/L			<0.0050	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050	0.0056	<0.0050	<0.0050	0.0103	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0065	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, total	mg/L			7	10.4	12.4	11.3	12.5	12.6	14	14	14	14.5	18.4	12.9	14.1	15.4	14.6	15.3	13.9	13.7	14.1	12.3	18.4	12	13.6	14.1	13.7	13.9	14.3	17.3	18.2	18.8
Manganese, total	mg/L			0.237	0.546	0.584	0.193	0.123	0.0819	0.0381	0.222	0.0996	0.0383	0.598	0.0757	0.0427	0.0296	0.0416	0.0523	0.103	0.134	0.0478	0.198	0.586	0.138	0.0816	0.0727	0.0603	0.0415	0.0683	0.0168	0.0288	0.199
Mercury, total	mg/L	0.000026		0.000015	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000016	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.073		<0.0010	0.0027	0.0032	0.0014	0.0017	0.0019	0.0018	0.002	0.0015	0.002	0.0017	0.0015	0.0015	0.0018	0.0017	0.0018	0.0014	0.0012	0.0017	0.0012	0.0016	0.001	0.001	0.0011	0.0011	0.0014	0.0013	0.0014	0.0014	0.001
Nickel, total	mg/L	*		0.0047	0.0098	0.0154	0.0086	0.0069	0.0048	0.0024	0.0146	0.0072	0.0026	0.0326	0.0046	0.0031	0.003	0.0028	0.0034	0.0046	0.0049	0.0023	0.0068	0.0186	0.0043	0.0035	0.0027	0.0018	0.0021	0.0026	0.0011	0.0014	0.0066
Phosphorus, total	mg/L			0.144	0.27	0.388	0.185	0.125	0.096	0.038	0.292	0.137	0.04	0.752	0.1	0.058	0.04	0.057	0.064	0.098	0.111	0.039	0.14	0.469	0.104	0.066	0.054	0.037	0.026	0.04	0.015	0.018	0.248
Potassium, total	mg/L			1.75	2.69	2.7	1.6	1.38	1.55	1.56	1.85	1.47	1.48	2.33	1.15	1.24	1.35	1.35	1.34	1.22	1.17	1.23	1.13	2.2	1.07	1.18	1.09	1.05	1.02	1.14	1.37	1.5	1.7
Selenium, total	mg/L	0.001		0.00025	0.00028	0.00039	0.00026	0.00018	0.00015	0.00015	0.00027	0.00031	0.00012	0.00048	0.00016	0.00013	<0.00010	0.00019	0.00019	0.00015	0.0003	<0.00010	0.00022	0.00039	0.00014	<0.00010	0.00017	0.00011	0.00014	0.00013	0.00018	<0.00010	0.00017
Silicon, total	mg/L			5.15	11.5	18.8	12.3	10.9	9.45	7.94	18.6	11.8	8	34.9	10.6	8.66	7.22	8.64	9.54	10.4	10.7	7.94	11.7	24.5	8.98	7.93	8	7.3	7.33	7.68	8.14	7.14	9.96
Silver, total	mg/L	0.00025		<0.000020	0.000033	<0.000040	0.000027	0.000021	<0.000020	<0.000020	0.000049	<0.000020	<0.000020	0.000123	<0.000020	<0.000020	0.000054	<0.000020	0.00003	<0.000020	<0.000020	<0.000020	<0.000020	0.000089	<0.000020	0.000023	<0.000020	<0.000020	<0.000020	<0.000020	0.000021	<0.000020	<0.000020
Sodium, total	mg/L			5.69	7.61	9	6.73	7.72	8.23	9.47	8.42	8.45	10.3	8.86	7.86	9.2	9.74	9.27	9.26	8.55	8.14	8.76	7.21	8.96	7.26	8.57	7.79	8.22	8.47	8.38	9.81	10.9	11
Strontium, total	mg/L			0.193	0.311	0.393	0.27	0.302	0.333	0.381	0.328	0.341	0.414	0.359	0.32	0.355	0.405	0.378	0.397	0.33	0.328	0.367	0.303	0.403	0.302	0.307	0.34	0.338	0.345	0.358	0.436	0.46	0.518
Sulpher, total	mg/L			3.2	5.5	<6.0	<3.0	3.7	3.3	7.1	5	4	5.3	<3.0	5	5.9	6.3	3.8	3.9	3.4	4.7	3.9	<3.0	5.5	4.2	6	5.9	4.9	3.9	5.2	8.2	8.1	7.9
Thallium, total	mg/L	0.0008		<0.000050	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050	0.000069	<0.000050	<0.000050	0.000143	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000088	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, total	mg/L			<0.0050	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, total	mg/L			0.0362	0.185	0.292	0.144	0.109	0.0726	0.0228	0.261	0.13	0.0216	0.625	0.0597	0.0335	0.0198	0.0592	0.0408	0.0614	0.0748	0.0141	0.119	0.343	0.05	0.0167	0.0253	0.0074	<0.0050	0.0174	<0.0050	0.0065	0.0717
Uranium, total	mg/L	0.015		0.00058	0.00097	0.00146	0.00114	0.00128	0.00152	0.00159	0.0018	0.00152	0.00156	0.00257	0.00123	0.00127	0.00175	0.00144	0.00142	0.00115	0.00111	0.00127	0.00107	0.0017	0.00098	0.00095	0.00116	0.00118	0.00118	0.00111	0.00149	0.00208	0.00242
Vanadium, total	mg/L			0.0075	0.0159	0.024	0.0128	0.0109	0.0074	<0.0050	0.0237	0.012	<0.0050	0.0531	0.0067	<0.0050	<0.0050	<0.0050	<0.0050	0.0062	0.0081	<0.0050	0.01	0.0292	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0079
Zinc, total	mg/L	0.03		0.0101	0.0181	0.029	0.0135	0.0129	0.008	<0.0050	0.0259	0.0113	<0.0050	0.0491	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	0.0063	0.0074	<0.0050	0.0097	0.0365	0.0055	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0139
Zirconium, total	mg/L			0.00071	0.001	0.0017	0.00104	0.00078	0.00078	<0.00050	0.00191	0.00081	<0.00050	0.00362	0.00058	0.00067	<0.00050	<0.00050	0.00059	0.00104	0.00069	<0.00050	0.00085	0.00207	0.00075	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00059
Aluminum, dissolved	mg/L		0.1	0.0241	0.0199	0.0224	0.0196	0.0168	0.0186	0.018	0.0259	0.028	0.0164	0.0346	0.0291	0.0197	0.0193	0.0184	0.0183	0.0236	0.0263	0.0179	0.0223	0.022	0.0196	0.0155	0.0206	0.0115	0.0113	0.0097	0.0072	0.0062	0.0061
Antimony, dissolved	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic, dissolved	mg/L		0.005	0.00059	0.00067	0.00085	0.00096	0.00093	0.00083	0.00063	0.00099	0.00081	0.00073	0.00081	0.00091	0.00088	0.00075	0.00077	0.00085	0.00083	0.00093	0.00097	0.00085	0.00084	0.00083	0.00081	0.00073	0.0007	0.00071	0.00055	0.00044	0.00043	0.00039
Barium, dissolved	mg/L			0.0444	0.0557	0.0607	0.0535	0.0605	0.0608	0.0663	0.0611	0.0601	0.0669	0.0598	0.0654	0.0678	0.0681	0.0666	0.0657	0.0694	0.0678	0.0739	0.0639	0.067	0.0631	0.0633	0.0636	0.063	0.068	0.064	0.0696	0.0772	0.0825
Beryllium, dissolved	mg/L			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth, dissolved	mg/L			<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron, dissolved	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cadmium, dissolved	mg/L		*	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L			19.1	24	28.6	29.2	32.8	34.3	38.2	33.2	33.6	42.5	31.4	39.3	38	41.4	42	40.9	38.5	36.1	43.7	39	42	37.7	38.7	42.9	42.3	43.8	41.2	47.1	47	56.7
Chromium, dissolved	mg/L		0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, dissolved	mg/L		0.013	0.011	0.0076	0.00769	0.00216	0.00194	0.00273	0.00201	0.00182	0.00182	0.00176	0.00227	0.00231	0.00172	0.00177	0.00168	0.00161	0.00147	0.00169	0.00165	0.00169	0.00219	0.00187	0.00167	0.00193	0.00142	0.00155	0.00134	0.00145	0.0017	0.00178
Iron, dissolved	mg/L		1.1	0.385	0.572	0.635	0.68	0.367	0.371	0.168	0.337	0.317	0.297	0.414	0.495	0.371	0.349	0.393	0.363	0.487	0.526	0.579	0.46	0.477	0.536	0.598	0.495	0.504	0.466	0.224	0.128	0.0782	0.0795
Lead, dissolved	mg/L		0.004	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Lithium, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium, dissolved	mg/L			6.16	7.43	8.74	9.22	10.2	10.6	12.7	10.4	11.2	13.3	10.4	11.5	12.2	12.6	13.2	13.3	12.1	12.1	12.8	11.5	11.7	11.6	12.7	13.2	12.8	13.3	13.1	15.4	15.3	17.9
Manganese, dissolved	mg/L			0.119	0.271	0.182	0.0652	0.0256	0.0154	0.0122	0.0165	0.0128	0.0092	0.0441	0.0149	0.0121	0.0091	0.0104	0.0129	0.0324	0.038	0.0304	0.0685	0.0644	0.0664	0.057	0.0434	0.0457	0.0382	0.0396	0.0128	0.0201	0.0294
Mercury, dissolved	mg/L			<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.073	0.0016	0.0025	0.0029	0.0014	0.0015	0.0016	0.0017	0.0017	0.0015	0.0017	0.0012	0.0014	0.0016	0.0017	0.0016	0.0015	0.0013	0.0012	0.0016	0.0011	0.0012	<0.0010	0.0012	0.001	0.0011	0.0013	0.0012	0.0013	0.0014	0.0014
Nickel, dissolved	mg/L		0.11	0.0012	0.0013	0.0013	0.0016	0.0015	0.0013	0.0012	0.0016	0.0014	0.0014	0.0018	0.0018	0.0015	0.0014	0.0013	0.0015	0.0016	0.0017	0.0017	0.0017	0.0017	0.0018	0.002	0.0016	0.0014	0.0015	0.0013	0.0012	0.0011	0.0013
Phosphorus, dissolved	mg/L			0.02	0.019	0.021	0.023	0.02	0.021	0.016	0.018	0.018	0.02	0.022	0.027	0.02	0.02	0.02	0.018	0.025	0.025	0.019	0.02	0.02	0.023	0.022	0.023	0.022	0.02	0.014	0.013	<0.01	0.014
Potassium, dissolved	mg/L			1.69	1.97	2.26	1.15	1.11	1.16	1.42	1.02	0.971	1.35	0.767	1.06	1.13	1.19	1.21	1.12	1.01	0.91	1.18	0.993	1	0.833	0.989	1.03	1.03	1.06	1.07	1.27	1.34	1.6
Selenium, dissolved	mg/L		0.002	0.00017	0.0002	0.00024	0.00012	0.00014	0.00011	0.00014	0.00014	0.00017	0.00012	0.00012	0.00014	0.00013	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012	<0.00010	0.00013	0.00011	0.00013	0.00015	0.00014	0.00015	0.00013	0.00016	0.00016	0.00015
Silicon, dissolved	mg/L			3.14	3.2	3.93	4.92	5.65	6	5.84	6.19	6.33	6.82	6.27	6.57	6.36	6.84	7.13	6.56	7.23	6.58	7.36	7.16	6.94	6.99	6.72	6.64	6.42	7.23	6.66	7.25	6.64	7.19
Silver, dissolved	mg/L		0.0001	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L			5.6	6.94	8.22	6.36	6.89	7.28	8.54	7.72	7.58	8.78	7.15	7.08	7.74	8.21	8.19	8.3	7.57	7.7	8.22	7.29	7.16	7.25	7.76	8.03	8.04	7.85	8	9.3	9.34	11.1
Strontium, dissolved	mg/L			0.172	0.268	0.304	0.229	0.268	0.283	0.358	0.249	0.275	0.361	0.228	0.273	0.332	0.369	0.359	0.35	0.327	0.298	0.367	0.29	0.293	0.28	0.313	0.324	0.322	0.348	0.349	0.417	0.465	0.499
Sulpher, dissolved	mg/L			3.5	5	6.2	3.8	4.3	4.8	6.8	5	4.4	6.2	<3.0	4.9	5.1	4.3	4.5	4.2	4.3	4	5.2	4.7	5.1	4.6	4.6	5.9	5.7	5.4	5.4	7.5	7.4	9.6
Thallium, dissolved	mg/L			<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Tin, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Titanium, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium, dissolved	mg/L			0.00042	0.00057	0.00077	0.00089	0.00116	0.00124	0.00154	0.00122	0.00121	0.0014	0.00097	0.00121	0.00129	0.00137	0.00133	0.00128	0.00111	0.00102	0.00123	0.00092	0.00097	0.00091	0.00096	0.00106	0.00115	0.00115	0.00118	0.00143	0.0019	0.00223
Vanadium, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zinc, dissolved	mg/L		0.03	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium, dissolved	mg/L			<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				17/03/2014	06/04/2014	08/04/2014	17/04/2014	21/04/2014	21/04/2014	22/04/2014	01/05/2014	05/05/2014	17/05/2014	19/05/2014	25/05/2014	26/05/2014
Total Suspended Solids	mg/L				15	1.4	152		7.7	62	145	54.4	143	472		
Total Dissolved Solids	mg/L				544	344	218		158	136	120	122	190	192		
pH (field)	pH units	**6.5-9**	**6.0-9.0**	8.33	8.38	8.37	8.41	8.2		8	8.36	8.22	7.63	7.62	7.62	
pH (lab)	pH units	**6.5-9**	**6.0-9.0**		8.37	8.43	8.28		8.12	7.9	7.67	7.84	8.17	8.19		
Specific Conductance, field	µS/cm			203.2	736	475.8	366.9	236.1		185.4	155.7	146.4	307	303	307.7	
Specific Conductance (lab)	µS/cm				799	522	365		236	144	125	136	284	281		
Temperature (field)	C			1.7	0	0	0	0		-0.1	1.1	0.3	6	3.3	3.4	
Dissolved Oxygen (field)	mg/L			12.73	13.69	12.87	14.07	14.4		13.98	14.46	14.44	12.14	12.89	13	
Dissolved Oxygen (field)	%			89.3	93.7	88.1	96.2	98.7		95.5	102.3	99.7	97.6	96.7	97.6	
ORP (field)	mV			144	131	127.6	136.2	111.7		209.1	139	117.4	113.1	117.4	138.1	
Hardness (from total)	mg/L				382	231	198		129	80.9	75.3	68.9	154	171		
Hardness (from dissolved)	mg/L				386	233	166		111	68.2	56.5	66	125	126		
Alkalinity, total	mg/L				341	215	156		99.6	62.7	52.9	60.7	108	113		
Chloride	mg/L	**120**			13	9.8	7.2		3.9	2.8	2.1	1.7	4.1	3.4		
Fluoride	mg/L	**0.12**			**0.75**	**0.52**	**0.33**		**0.22**	**0.16**	**0.13**	**0.14**	**0.27**	**0.27**		
Sulphate, dissolved	mg/L				90.2	48.2	27.4		12	<0.50	<0.50	<0.50	26.8	26		
Ammonia	mg/L	**0.239**	**0.25**		0.017	0.012	0.026		0.035	0.05	0.026	0.021	0.08	0.1		
Nitrite (N)	mg/L	**0.06**	**0.06**		<0.0050	<0.0050	0.0072		<0.0050	0.0084	<0.0050	<0.0050	0.0235	0.0182		
Nitrate (N)	mg/L	**3**	**9.1**		0.109	0.043	0.26		0.175	0.051	0.272	0.054	1.27	1.06		
Dissolved Organic Carbon	mg/L				24.9	16.7	9.53		16.2	20.7	20.9	18.5	11.5	13		
Aluminum, total	mg/L	*			**0.575**	0.0422	**4.22**		**1.11**	**1.23**	**3.12**	**0.898**	**6.58**	**11.3**		
Antimony, total	mg/L				<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Arsenic, total	mg/L	**0.005**			0.00138	0.00055	0.003		0.00082	0.00102	0.00213	0.00096	0.00418	**0.00637**		
Barium, total	mg/L				0.167	0.0829	0.148		0.0658	0.0581	0.131	0.0575	0.21	0.299		
Beryllium, total	mg/L				<0.00010	<0.00010	0.00015		<0.00010	<0.00010	0.00017	<0.00010	0.00026	0.00039		
Bismuth, total	mg/L				<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
Boron, total	mg/L	**1.5**			<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Cadmium, total	mg/L	*			0.000037	0.000015	0.000062		0.000036	0.000041	0.000101	0.000028	0.000134	0.000212		
Calcium, total	mg/L				90.6	54.6	48.5		34.3	20.8	19.5	18	38.9	41.9		
Chromium, total	mg/L	**0.001**			**0.0012**	<0.0010	**0.0072**		**0.0014**	**0.0022**	**0.0057**	**0.0018**	**0.0127**	**0.0211**		
Cobalt, total	mg/L				0.00055	<0.00050	0.00304		0.00059	0.00104	0.00315	0.00095	0.00522	0.00846		
Copper, total	mg/L	*			**0.0245**	**0.00847**	**0.0417**		**0.0362**	**0.0211**	**0.019**	**0.00701**	**0.0369**	**0.0486**		
Iron, total	mg/L	**0.3**			**0.858**	0.101	**6.54**		**1.31**	**1.87**	**5.43**	**1.71**	**10.7**	**17.7**		
Lead, total	mg/L	*			0.00029	<0.00020	0.00195		0.00032	0.00061	0.00194	0.00049	0.00325	0.00543		
Lithium, total	mg/L				0.0057	<0.0050	0.0052		<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0082		
Magnesium, total	mg/L				37.9	23	18.7		10.5	7.04	6.46	5.78	13.9	16.2		
Manganese, total	mg/L				0.0687	0.0173	0.175		0.0618	0.0973	0.394	0.139	0.476	0.684		
Mercury, total	mg/L	**0.000026**			0.000011	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Molybdenum, total	mg/L	**0.073**			0.0019	0.0014	0.0021		0.0018	<0.0010	0.0011	<0.0010	0.0026	0.0028		
Nickel, total	mg/L	*			0.0025	0.0012	0.0068		0.002	0.0031	0.008	0.0032	0.0147	0.0235		
Phosphorus, total	mg/L				0.153	0.053	0.183		0.212	0.145	0.302	0.084	0.382	0.679		
Potassium, total	mg/L				10	4.38	3.66		2.99	2.53	2.04	1.32	3.15	3.16		
Selenium, total	mg/L	**0.001**			0.00049	0.00036	0.00042		0.00028	0.00029	0.00032	0.00014	0.00067	0.00071		
Silicon, total	mg/L				15.7	8.94	13.6		6.76	5.93	7.73	5.13	15.7	22.5		
Silver, total	mg/L	**0.00025**			<0.000020	<0.000020	0.000041		<0.000020	0.000023	0.000023	<0.000020	0.000069	0.000072		
Sodium, total	mg/L				30	17.4	12.2		7.42	4.41	4.07	3.69	9.4	9.22		
Strontium, total	mg/L				0.725	0.482	0.458		0.313	0.172	0.189	0.169	0.453	0.48		
Sulpher, total	mg/L				24.9	14.3	8		3.9	<3.0	<3.0	<3.0	9.1	8.5		
Thallium, total	mg/L	**0.0008**			<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	0.000057	0.000097		
Tin, total	mg/L				<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Titanium, total	mg/L				0.0262	<0.0050	0.177		0.0367	0.0527	0.102	0.0371	0.277	0.459		
Uranium, total	mg/L	**0.015**			0.00296	0.00112	0.00113		0.00062	0.00035	0.00061	0.00042	0.0016	0.00195		
Vanadium, total	mg/L				<0.0050	<0.0050	0.0136		<0.0050	<0.0050	0.0117	<0.0050	0.0226	0.0363		
Zinc, total	mg/L	**0.03**			0.0155	<0.0050	0.0219		0.0096	0.0102	0.0194	0.006	**0.0339**	**0.0484**		
Zirconium, total	mg/L				<0.00050	<0.00050	0.00098		<0.00050	<0.00050	0.00096	<0.00050	0.00148	0.00179		
Aluminum, dissolved	mg/L		**0.1**		0.0112	0.0067	0.0055		0.012	0.0233	0.0461	0.03	0.0208	0.016		
Antimony, dissolved	mg/L				<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Arsenic, dissolved	mg/L		**0.005**		0.00122	0.00057	0.00041		0.00038	0.00036	0.00047	0.00056	0.00064	0.00062		
Barium, dissolved	mg/L				0.163	0.083	0.064		0.0459	0.0319	0.0341	0.0348	0.0659	0.063		
Beryllium, dissolved	mg/L				<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		
Bismuth, dissolved	mg/L				<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
Boron, dissolved	mg/L				<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Cadmium, dissolved	mg/L		*		0.000015	0.000014	0.00001		0.000014	0.000017	0.000012	0.000012	<0.000010	<0.000010		
Calcium, dissolved	mg/L				90.7	57.2	41.6		28.7	18.1	15.4	17.7	33.7	33.1		
Chromium, dissolved	mg/L		**0.001**		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L				<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		
Copper, dissolved	mg/L		**0.013**		0.0123	0.00648	0.0056		0.00686	0.00706	0.00713	0.00422	0.00879	0.00631		
Iron, dissolved	mg/L		**1.1**		0.0434	0.0302	0.0293		0.0865	0.103	0.269	0.302	0.345	0.357		
Lead, dissolved	mg/L		**0.004**		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		
Lithium, dissolved	mg/L				0.0053	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Magnesium, dissolved	mg/L				38.6	22	15.1		9.53	5.61	4.39	5.27	9.97	10.6		
Manganese, dissolved	mg/L				0.0489	0.0156	0.0093		0.0239	0.0366	0.073	0.0732	0.0472	0.021		
Mercury, dissolved	mg/L				<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Molydenum, dissolved	mg/L		**0.073**		0.002	0.0014	0.002		0.0013	<0.0010	0.001	<0.0010	0.0028	0.0025		
Nickel, dissolved	mg/L		**0.11**		0.0015	<0.0010	<0.0010		<0.0010	<0.0010	0.0013	0.0015	0.001	0.0012		
Phosphorus, dissolved	mg/L				0.125	0.037	0.021		0.03	0.04	0.028	0.026	0.018	0.021		
Potassium, dissolved	mg/L				9.56	4.44	2.78		2.62	2.12	1.58	1.28	2.26	1.98		
Selenium, dissolved	mg/L		**0.002**		0.0005	0.0003	0.00033		0.00019	0.00011	0.00014	0.00011	0.00047	0.00041		
Silicon, dissolved	mg/L				14.2	9.15	5.34		4.58	3.29	3	3.62	4.25	4.28		
Silver, dissolved	mg/L		**0.0001**		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		
Sodium, dissolved	mg/L				30.4	17.9	11.1		6.92	3.79	3.77	3.61	8.49	8.11		
Strontium, dissolved	mg/L				0.778	0.463	0.424		0.26	0.148	0.131	0.145	0.375	0.366		
Sulpher, dissolved	mg/L				27.8	15.6	9.2		5.5	<3.0	<3.0	<3.0	9.8	8.4		
Thallium, dissolved	mg/L				<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		
Tin, dissolved	mg/L				<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Titanium, dissolved	mg/L				<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Uranium, dissolved	mg/L				0.00291	0.00114	0.00093		0.00046	0.0002	0.00023	0.0003	0.00098	0.00098		
Vanadium, dissolved	mg/L				<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Zinc, dissolved	mg/L		**0.03**		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Zirconium, dissolved	mg/L				<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		27/05/2014	07/06/2014	12/06/2014	20/06/2014	24/06/2014	30/06/2014	01/07/2014	09/07/2014	17/07/2014	23/07/2014	23/07/2014	29/07/2014	07/08/2014	11/08/2014	13/08/2014	18/08/2014	18/08/2014
Total Suspended Solids	mg/L	187	18.2	41.2	1.3	<1.0	<1.0		2.1	64.1		11.9	19.4	4.2		4.4	11.4	
Total Dissolved Solids	mg/L	152	188	192	174	202	214		182	210		170	204	196		208	210	
pH (field)	pH units	7.43	7.57	8.28	8.35	8.43	8.3	8.31	8.35	7.51	7.58	7.78	7.97	8.08	8.12	8.16	8.22	8.22
pH (lab)	pH units	8.19	8.26	8.18	8.17	8.35	8.18		8.32	8.25		8.18	8.3	8.17		8.27	8.31	
Specific Conductance, field	µS/cm	294.4	267.3	282.5	352.8	363.9	345.5	340	378.8	301.2	326.4	265.8	335.9	366.1	368.1	351.3	352.4	352.4
Specific Conductance (lab)	µS/cm	256	270	287	311	311	333		332	349		300	320	333		345	343	
Temperature (field)	C	3.3	7.2	8.2	6.4	8.1	8.7	8.9	7.6	7.8	6.4	8.1	8.6	6.6	7.5	8	7.5	7.5
Dissolved Oxygen (field)	mg/L	12.96	11.58	10.88	12.02	11.6	10.96	11.4	10.47	11.43	11.71	11.42	11.2	13.72	10.12	11.25	11.64	11.64
Dissolved Oxygen (field)	%	98	96	92.3	97.6	97.9	94.2	98.3	87.2	96.1	94.9	96.7	95.8	111.6	84.4	95	97	97
ORP (field)	mV	65.7	96.1	132.8	131.9	137.3	127.1	198.3	111.9	152.3	76.7	83.7	131.3	211.1	122.3	138.1	154	154
Hardness (from total)	mg/L	135	131	140	155	150	167		169	174		147	162	180		194	170	
Hardness (from dissolved)	mg/L	118	130	133	147	152	158		157	169		140	160	164		167	160	
Alkalinity, total	mg/L	104	125	134	140	150	151		152	158		138	154	154		165	165	
Chloride	mg/L	2.8	1.9	2.3	2.1	2	2.4		2	2.2		1.8	1.9	1.8		1.9	2.2	
Fluoride	mg/L	**0.28**	**0.31**	**0.32**	**0.34**	**0.35**	**0.36**		**0.37**	**0.34**		**0.36**	**0.36**	**0.34**		**0.35**	**0.35**	
Sulphate, dissolved	mg/L	19.3	12.8	14.5	17.3	19.7	19.6		21.3	21.4		14.4	14.3	18.4		18.1	17.8	
Ammonia	mg/L	0.069	0.061	0.037	0.015	0.013	0.04		0.026	0.014		0.021	0.011	0.014		0.014	0.015	
Nitrite (N)	mg/L	0.0243	0.0114	0.0087	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Nitrate (N)	mg/L	0.759	0.193	0.153	0.094	0.054	0.049		0.068	0.075		0.092	0.123	0.118		0.107	0.063	
Dissolved Organic Carbon	mg/L	17.9	11.5	10.8	8.27	8.4	9.24		6.95	8.31		<0.50	8.48	10.4		9.07	10.8	
Aluminum, total	mg/L	**3.69**	**0.859**	**1.15**	0.0617	0.0321	0.0509		**0.124**	0.0374		**0.376**	**0.428**	**0.156**		0.0948	0.0756	
Antimony, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		0.0018	<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	
Arsenic, total	mg/L	0.00275	0.00114	0.00127	0.00056	0.00053	0.00052		0.00054	0.00045		0.00091	0.00091	0.00072		0.00068	0.00066	
Barium, total	mg/L	0.147	0.0772	0.089	0.0634	0.065	0.0693		0.0739	0.0721		0.0708	0.0734	0.0754		0.0765	0.0648	
Beryllium, total	mg/L	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010		<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	
Bismuth, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	
Boron, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05		<0.05	<0.05	<0.05		<0.05	<0.05	
Cadmium, total	mg/L	0.000078	<0.000010	0.00002	<0.000010	<0.000010	0.00002		0.00002	<0.000010		<0.000010	0.000012	<0.000010		<0.000010	<0.000010	
Calcium, total	mg/L	34.4	34.2	35.1	39.7	36.8	43.1		43.6	45.6		38	42.7	46.7		49.8	43.8	
Chromium, total	mg/L	**0.0073**	**0.0016**	**0.0024**	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	
Cobalt, total	mg/L	0.00295	0.00068	0.00081	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	
Copper, total	mg/L	**0.0212**	**0.00561**	**0.00528**	0.00302	0.00228	0.00341		**0.0243**	0.00272		0.00301	0.00342	0.00219		0.0025	0.00192	
Iron, total	mg/L	**6.61**	**1.83**	**2.32**	0.247	0.2	0.119		0.281	0.112		**0.835**	**0.932**	**0.492**		**0.323**	0.282	
Lead, total	mg/L	0.00199	0.00046	0.00055	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020		0.00022	0.00021	<0.00020		<0.00020	<0.00020	
Lithium, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Magnesium, total	mg/L	11.9	11	12.7	13.5	14.2	14.3		14.7	14.6		12.7	13.5	15.4		16.9	14.7	
Manganese, total	mg/L	0.21	0.0419	0.0481	0.0126	0.0115	0.0164		0.0221	0.0256		0.029	0.045	0.0191		0.0183	0.0152	
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0022	0.0015	0.0013	0.0017	0.0016	0.0016		0.0017	0.0015		0.0017	0.0014	0.0015		0.0016	0.0016	
Nickel, total	mg/L	0.0088	0.0029	0.0033	0.0013	0.0016	0.0011		0.0012	0.0011		0.002	0.0021	0.0013		0.0013	0.0011	
Phosphorus, total	mg/L	0.195	0.056	0.058	0.014	<0.01	0.025		0.024	0.014		0.028	0.026	0.03		0.022	0.01	
Potassium, total	mg/L	2.31	1.42	1.63	1.43	1.43	1.57		1.56	1.49		1.24	1.37	1.5		1.75	1.57	
Selenium, total	mg/L	0.00037	0.00019	0.00011	0.00013	0.00011	0.00013		0.00014	0.00013		0.0001	0.00018	0.0001		0.00013	<0.00010	
Silicon, total	mg/L	11.1	6.91	6.6	5.5	3.9	5.49		5.37	5.53		6.32	7.03	7.74		7.47	6.16	
Silver, total	mg/L	0.000028	<0.000020	<0.000020	<0.000020	<0.000020	0.000044		<0.000020	<0.000020		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	
Sodium, total	mg/L	8.79	7.76	8.31	8.44	9.44	9.51		9.87	9.82		8.86	9.08	9.69		10.2	8.9	
Strontium, total	mg/L	0.411	0.313	0.347	0.385	0.381	0.416		0.447	0.441		0.38	0.393	0.429		0.469	0.4	
Sulpher, total	mg/L	8.7	3.1	5.3	5.1	7.2	7.6		6.8	7.9		5.3	4.4	6.9		6.2	6.8	
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	
Tin, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Titanium, total	mg/L	0.137	0.0373	0.0419	<0.0050	<0.0050	<0.0050		0.007	<0.0050		0.0129	0.0159	0.0066		<0.0050	<0.0050	
Uranium, total	mg/L	0.0012	0.00118	0.00135	0.00156	0.00159	0.00159		0.00163	0.00186		0.0012	0.00141	0.00162		0.00205	0.00161	
Vanadium, total	mg/L	0.0135	<0.0050	0.0052	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Zinc, total	mg/L	0.0191	0.0077	0.0084	<0.0050	<0.0050	0.0053		0.007	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Zirconium, total	mg/L	0.00091	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	
Aluminum, dissolved	mg/L	0.014	0.0149	0.0112	0.0137	0.0118	0.0118		0.0091	0.0062		0.0131	0.0181	0.0162		0.0081	0.0094	
Antimony, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	
Arsenic, dissolved	mg/L	0.00061	0.00065	0.00061	0.00052	0.0005	0.00045		0.00045	0.00044		0.00066	0.00045	0.00062		0.00063	0.00057	
Barium, dissolved	mg/L	0.0678	0.0587	0.0631	0.0632	0.0668	0.0684		0.0697	0.0701		0.0562	0.0627	0.0664		0.0723	0.0663	
Beryllium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010		<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	
Bismuth, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	
Boron, dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05		<0.05	<0.05	<0.05		<0.05	<0.05	
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		0.000014	<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	
Calcium, dissolved	mg/L	31.5	34.5	34.8	37.8	39.6	41.1		40.9	43.1		35.6	42.2	42.4		44.3	39.8	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010
Cobalt, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	
Copper, dissolved	mg/L	0.00522	0.0026	0.00192	0.00223	0.00206	0.0022		0.0023	0.0021		0.00226	0.00195	0.00267		0.00169	0.0022	
Iron, dissolved	mg/L	0.345	0.205	0.142	0.116	0.103	0.0555		0.0616	0.0533		0.189	0.221	0.223		0.142	0.158	
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	
Lithium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Magnesium, dissolved	mg/L	9.64	10.7	11.1	12.9	12.9	13.4		13.4	14.9		12.3	13.1	14.2		13.7	14.6	
Manganese, dissolved	mg/L	0.0042	0.0122	0.0128	0.0089	0.0093	0.015		0.0148	0.0221		0.0066	0.0063	0.0091		0.0107	0.0087	
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	
Molydenum, dissolved	mg/L	0.0022	0.0014	0.0014	0.0016	0.0016	0.0016		0.0015	0.0013		0.0014	0.0013	0.0016		0.0016	0.0015	
Nickel, dissolved	mg/L	0.0015	0.0013	0.0013	0.001	0.0011	0.0019		<0.0010	0.0012		0.0013	0.0013	0.0013		0.0011	0.001	
Phosphorus, dissolved	mg/L	0.016	0.015	0.012	0.01	<0.01	<0.01		<0.01	<0.01		0.02	0.014	0.045		0.012	0.014	
Potassium, dissolved	mg/L	1.89	1.23	1.32	1.38	1.41	1.52		1.46	1.45		1.09	1.41	1.41		1.54	1.58	
Selenium, dissolved	mg/L	0.0003	0.00011	0.00012	0.00013	0.00012	0.00011		0.00013	0.00021		0.00019	0.00011	0.00017		<0.00010	<0.00010	
Silicon, dissolved	mg/L	4.62	5.93	5.19	5.09	4.99	4.58		5.03	4.88		6.09	6.67	6.45		6.5	5.53	
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	
Sodium, dissolved	mg/L	7.61	7.44	8.19	8.9	8.84	8.95		8.54	9.98		8.16	9.17	9.94		8.87	9.38	
Strontium, dissolved	mg/L	0.363	0.307	0.329	0.375	0.387	0.418		0.42	0.419		0.349	0.363	0.4		0.443	0.427	
Sulpher, dissolved	mg/L	8.2	4.7	4.6	6	6.2	6.7		6.8	3.2		6.9	5.7	6.5		6.3	7.7	
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	
Tin, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Titanium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Uranium, dissolved	mg/L	0.00053	0.00113	0.00123	0.00148	0.00153	0.00156		0.00156	0.00179		0.00112	0.00123	0.00144		0.00167	0.0016	
Vanadium, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	
Zirconium, dissolved	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				26/08/2014	26/08/2014	01/09/2014	01/09/2014	03/09/2014	11/09/2014	11/09/2014	16/09/2014	16/09/2014	22/09/2014	22/09/2014	30/09/2014	30/09/2014	07/10/2014	07/10/2014	14/10/2014	25/10/2014	31/10/2014	06/11/2014	12/11/2014	11/12/2014	12/12/2014	13/12/2014	14/12/2014	15/12/2014	16/12/2014	19/12/2014	20/12/2014	21/12/2014	05/04/2015
Total Suspended Solids	mg/L			7.3			2		2.4		3.3		19.7		6.9		5.3		<1.0	1	<1.0	3.2	1.1	1.6				1.1	1.4	1.4	1.3		<1.0
Total Dissolved Solids	mg/L			216			202		236		224		210		192		210		198	202	228	246	224	282				348	316	294	288		328
pH (field)	pH units	6.5-9	6.0-9.0	8.21	8.21	8.22	8.22	8.26	7.89	7.89	8.10	8.10	8.21	8.21	8.13	8.13	8.16	8.16	7.80	7.77	7.69	7.85	7.91	8.04	7.97	7.88	7.94	7.81	7.81	7.92	7.62	7.97	8.29
pH (lab)	pH units	6.5-9	6.0-9.0	8.22			8.33		8.34		8.2		8.34		8.13		8.19		8.23	8.15	8.23	8.17	8.1	7.91				8.04	7.97	8.18	8.04		8.28
Specific Conductance, field	µS/cm			359.9	359.9	340.5	340.5	340.3	335.5	335.5	312.2	312.2	323.1	323.1	303.7	303.7	319.8	319.8	339.2	381	381.4	363.8	484.3	554.1	579.7	605.9	607.7	518.4	517.7	512.9	523	474.3	534.8
Specific Conductance (lab)	µS/cm			339			343		336		339		325		296		324		321	333	377	377	385	510				554	507	467	449		541
Temperature (field)	C			5.9	5.9	2.9	2.9	3.5	3.9	3.9	4.2	4.2	3	3	-0.1	-0.1	-1.2	-1.2	-0.8	-1.2	-1.4	-1.7	-1.1	-1.9	-1.9	-1.4	-1.9	-2	-1.9	-2	-1.9	-1.9	-0.1
Dissolved Oxygen (field)	mg/L			12.36	12.36	13.51	13.51	13.45	14.84	14.84	12.23	12.23	12.96	12.96	14.54	14.54	15.21	15.21	14.74	14.07	14.34	14.72	13.66	14.87	14.85	15.13	19.09		12.60	15.63	15.70	14.69	15.39
Dissolved Oxygen (field)	%			99.1	99.1	100.1	100.1	101.7	113.1	113.1	93.7	93.7	96.5	96.5	99	99	100.7	100.7	98.5	93.1	94.17	96	90.8	96.3	96	98.2	124.4	84.4	81.6	101.2	108.4	95.4	105.3
ORP (field)	mV			193.3	193.3	141.1	141.1	154.5	196.6	196.6	167.6	167.6	180.4	180.4	149.8	149.8	148.7	148.7	200.5	158.2	257.4	214.4	195.3	96.0	252.4	106.3	154.2	213.8	154.8	151.5	191.1	99.1	158.5
Hardness (from total)	mg/L			165			163		169		169		177		155		169		164	169	176	189	181	229				250	247	211	221		281
Hardness (from dissolved)	mg/L			158			169		160		160		152		139		165		158	164	204	183	191	227				254	231	235	210		254
Alkalinity, total	mg/L			160			166		165		160		162		139		157		155	155	181	179	173	159				176	158	173	165		233
Chloride	mg/L	120		1.5			1.8		2		2.1		1.8		3.1		1.9		1.8	2.1	2.1	3.3	2.7					7.9	7.1	5.7	4.6		4.5
Fluoride	mg/L	0.12		0.35			0.34		0.36		0.36		0.36		0.31		0.31		0.3	0.35	0.34	0.36	0.34	0.43				0.47	0.43	0.025	0.33		0.54
Sulphate, dissolved	mg/L			14.8			16		16.1		17.4		14.4		15		16.7		15.7	17.7	20.5	22.7	26.1					92.5	86.7	60.8	54.5		51.8
Ammonia	mg/L	0.239	0.25	0.061			0.039		0.016		0.022		0.019		0.013		0.023		0.0063	0.026	0.0091	<0.0050	0.018	0.037				0.0083	0.013	0.0091	0.0091		0.011
Nitrite (N)	mg/L	0.06	0.06	<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0174				0.0128	0.0124	0.0052	<0.0050		<0.0050
Nitrate (N)	mg/L	3	9.1	0.072			0.056		<0.020		<0.020		<0.020		0.058		0.088		0.143	0.151	0.175	0.165	0.173	2.03				2.6	2.38	1.36	1.05		0.128
Dissolved Organic Carbon	mg/L			10.2			9.45		9.18		9.7		11		12		10.4		10.2	8.22	8.52	8.39	8.55	8.47				9.5	8.5	7.92	7.59		9.6
Aluminum, total	mg/L	*		0.18			0.0209		0.0266		0.029		0.315		0.168		0.0544		0.0318	0.02	0.0142	0.163	0.0628	0.0472				0.007	0.0179	0.0208	0.0095		0.0519
Antimony, total	mg/L			<0.00050			<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Arsenic, total	mg/L	0.005		0.00074			0.00055		0.00077		0.00041		0.00087		0.00073		0.00058		0.00063	0.00056	0.00032	0.00051	0.00037	0.00055				0.00039	0.0004	0.00031	0.00033		0.00052
Barium, total	mg/L			0.0698			0.0614		0.0651		0.0674		0.0707		0.0629		0.0618		0.0578	0.0622	0.0666	0.0717	0.0711	0.0925				0.105	0.106	0.0941	0.0851		0.107
Beryllium, total	mg/L			<0.00010			<0.00010		<0.00010		<0.00010		<0.00010		<0.00010		<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010				<0.00010	<0.00010	<0.00010	<0.00010		<0.00010
Bismuth, total	mg/L			<0.0010			<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Boron, total	mg/L	1.5		<0.05			<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05	<0.05	<0.05		<0.05
Cadmium, total	mg/L	*		<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	0.000017	<0.000010		<0.000010
Calcium, total	mg/L			42.8			40.9		43.7		43.2		45.4		39.9		44		42.5	43.5	44.6	50.5	46.3	56.7				63.7	64.9	55.5	58.2		65.8
Chromium, total	mg/L	0.001		<0.0010			<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Cobalt, total	mg/L			<0.00050			<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Copper, total	mg/L	*		0.0021			0.00154		0.0017		0.00208		0.00293		0.00267		0.002		0.00159	0.00276	0.00163	0.0021	0.0023	0.00522				0.00432	0.00566	0.00362	0.00238		0.00822
Iron, total	mg/L	0.3		0.536			0.273		0.213		0.198		0.874		0.61		0.297		0.252	0.266	0.083	0.286	0.168	0.1				0.037	0.055	0.05	0.033		0.145
Lead, total	mg/L	*		<0.00020			<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020				<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Lithium, total	mg/L			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	0.0052	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Magnesium, total	mg/L			14.1			14.7		14.5		14.9		15.3		13.5		14.5		14.1	14.6	15.8	15.2	15.7	21.2				22	20.6	17.7	18.5		28.4
Manganese, total	mg/L			0.0244			0.0103		0.0099		0.0109		0.0496		0.0365		0.0175		0.0125	0.0091	0.0121	0.0218	0.0242	0.0364				0.0158	0.0151	0.0162	0.0241		0.0322
Mercury, total	mg/L	0.000026		<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molybdenum, total	mg/L	0.073		0.0014			0.0015		0.0015		0.0015		0.0014		0.0013		0.0013		0.0012	0.0013	0.0012	0.0012	0.0012	0.0049				0.0058	0.0064	0.0037	0.0023		0.0021
Nickel, total	mg/L	*		0.0016			0.0012		0.0011		0.0012		0.0017		0.0018		0.0013		0.0013	0.0012	0.0011	0.0011	0.0012	<0.0010				<0.0010	<0.0010	<0.0010	0.0013		<0.0010
Phosphorus, total	mg/L			0.024			0.015		<0.01		0.024		0.036		0.029		0.022		0.02	0.011	0.016	0.031	0.019	0.027				0.025	0.032	0.013	0.015		0.045
Potassium, total	mg/L			1.47			1.32		1.4		1.63		1.74		1.14		1.19		1.23	1.16	1.35	1.66	1.54	4.24				5.45	5.5	3.45	3.22		3.95
Selenium, total	mg/L	0.001		0.00018			0.00014		<0.00010		0.00011		0.00011		0.00015		0.00012		0.00015	<0.00010	<0.00010	<0.00010	0.00015	0.00067				0.00072	0.00074	0.00043	0.00032		0.00042
Silicon, total	mg/L			6.54			5.38		6.71		6.17		7.52		6.55		6.85		6.87	6.33	6.46	6.95	6.45	4.16				4.5	4.45	4.76	6.59		8.77
Silver, total	mg/L	0.00025		<0.000020			<0.000020		<0.000020		<0.000020		0.000031		0.000036		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020				<0.000020	<0.000020	<0.000020	0.000026		<0.000020
Sodium, total	mg/L			9.04			9.2		9.39		9.58		9.21		8.33		8.72		8.58	8.86	9.19	16	10	18				18.7	18.3	13.9	15.2		19.9
Strontium, total	mg/L			0.404			0.419		0.422		0.421		0.391		0.344		0.384		0.374	0.397	0.458	0.535	0.47	0.662				0.876	0.904	0.787	0.626		0.674
Sulpher, total	mg/L			8.1			4.9		3.4		5.8		4.5		3.7		5.3		7.2	3.5	5.8	8.6	9.9	25.5				31.9	26.7	21.4	19.4		15.7
Thallium, total	mg/L	0.0008		<0.000050			<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050				<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Tin, total	mg/L			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Titanium, total	mg/L			0.006			<0.0050		<0.0050		<0.0050		0.0106		0.0069		<0.0050		<0.0050	<0.0050	<0.0050	0.0072	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Uranium, total	mg/L	0.015		0.00159			0.00157		0.00158		0.00166		0.00141		0.00117		0.00136		0.00139	0.00153	0.0019	0.00188	0.00223	0.002				0.00222	0.00216	0.00243	0.00221		0.00235
Vanadium, total	mg/L			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Zinc, total	mg/L	0.03		<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0304				<0.0050	<0.0050	0.0479	0.0233		<0.0050
Zirconium, total	mg/L			<0.00050			<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050				<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Aluminum, dissolved	mg/L		0.1	0.0086			0.0069		0.0075		0.0087		0.0081		0.0088		0.0076		0.0086	0.0085	0.0058	0.0065	0.0056	0.0053				<0.0030	<0.0030	0.0032	0.0038		0.0122
Antimony, dissolved	mg/L			<0.00050			<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050				<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Arsenic, dissolved	mg/L		0.005	0.00064			0.00055		0.00048		0.00049		0.00057		0.00055		0.00054		0.0005	0.00051	0.00038	0.00035	0.00031	0.0004				0.00039	0.00039	0.00034	0.00029		0.00052
Barium, dissolved	mg/L			0.0641			0.0651		0.0636		0.0658		0.0605		0.0558		0.0574		0.0564	0.0587	0.0692	0.0679	0.0732	0.092				0.105	0.0939	0.083	0.0853		0.0939
Beryllium, dissolved	mg/L			<0.00010			<0.00010		<0.00010		<0.00010		<0.00010		<0.00010		<0.00010		<0.00010	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010				<0.00010	<0.00010	<0.00010	<0.00010		<0.00010
Bismuth, dissolved	mg/L			<0.0010			<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Boron, dissolved	mg/L			<0.05			<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05	<0.1	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05	<0.05	<0.05		<0.05
Cadmium, dissolved	mg/L		*	<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Calcium, dissolved	mg/L			40.4			43.5		40.9		39.9		39.2		36.2		44		41.7	42	54	47.7	50	57.9				65.1	59.9	61.8	55.4		62.6
Chromium, dissolved	mg/L		0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Cobalt, dissolved	mg/L			<0.00050			<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050				<0.00050	<0.00050	<0.00050	<0.00050		<0.00050
Copper, dissolved	mg/L		0.013	0.00164			0.0015		0.00173		0.00148		0.00147		0.00157		0.00155		0.00137	0.002	0.00169	0.00135	0.0016	0.00336				0.00435	0.0037	0.00273	0.00221		0.00566
Iron, dissolved	mg/L		1.1	0.232			0.174		0.155		0.113		0.158		0.205		0.182		0.163	0.193	0.0609	0.0548	0.0481	0.0323				0.0277	0.0284	0.0263	0.0235		0.0472
Lead, dissolved	mg/L		0.004	<0.00020			<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020	<0.00040	<0.00020	<0.00020	<0.00020	<0.00020				<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Lithium, dissolved	mg/L			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Magnesium, dissolved	mg/L			14			14.6		13.9		14.7		13.3		11.9		13.4		13	14.5	16.8	15.4	16.1	20.1				22.2	19.7	19.7	17.4		23.7
Manganese, dissolved	mg/L			0.0073			0.0085		0.0085		0.0099		0.0095		0.0154		0.0109		0.0095	0.0078	0.0125	0.0102	0.0177	0.0342				0.0147	0.0124	0.0146	0.0238		0.0263
Mercury, dissolved	mg/L			<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molydenum, dissolved	mg/L		0.073	0.0015			0.0016		0.0014		0.0015		0.0013		0.0011		0.0012		0.0012	<0.0020	0.0014	0.0012	0.0012	0.0053				0.0059	0.0056	0.0031	0.0023		0.0019
Nickel, dissolved	mg/L		0.11	0.0011			0.0011		0.0012		0.001		0.0012		0.0016		0.0014		0.0011	<0.0020	<0.0010	<0.0010	0.001	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Phosphorus, dissolved	mg/L			0.016			0.012		<0.01		<0.01		0.01		0.012		0.013		0.011	<0.02	<0.01	<0.01	<0.01	0.02				0.016	0.019	<0.01	<0.01		0.027
Potassium, dissolved	mg/L			1.4			1.41		1.46		1.61		1.59		1.01		1.08		1.22	1	1.57	1.41	1.54	4.25				5.54	5.18	3.7	3.06		3.49
Selenium, dissolved	mg/L		0.002	0.00011			0.00012		<0.00010		<0.00010		<0.00010		<0.00010		0.00012		<0.00010	0.00026	0.00011	0.00012	<0.00010	0.00066				0.00069	0.00069	0.00038	0.00031		0.0003
Silicon, dissolved	mg/L			5.44			6.12		5.75		5.65		5.6		5.65		6.8		6.69	5.79	7.56	6.18	6.5	4.24				4.54	4.03	5.66	5.62		8.33
Silver, dissolved	mg/L		0.0001	<0.000020			<0.000020		<0.000020		<0.000020		<0.000020		<0.000020		<0.000020		<0.000020	<0.000040	<0.000020	<0.000020	<0.000020	<0.000020				<0.000020	<0.000020	<0.000020	<0.000020		<0.000020
Sodium, dissolved	mg/L			8.81			8.9		8.95		9.26		8.29		7.58		8.4		8.29	9.04	10.4	9.68	10.6	16.9				19.3	17.9	15.1	12.6		16.3
Strontium, dissolved	mg/L			0.422			0.432		0.41		0.446		0.383		0.332		0.37		0.36	0.392	0.476	0.457	0.499	0.706				0.844	0.787	0.689	0.641		0.633
Sulpher, dissolved	mg/L			5.7			6.7		5.4		6.1		5.1		5		6.2		6.4	1670	8	7.4	7.7	25.6				30.3	28.6	25.4	19.2		16.6
Thallium, dissolved	mg/L			<0.000050			<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050				<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Tin, dissolved	mg/L			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Titanium, dissolved	mg/L			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Uranium, dissolved	mg/L			0.00154			0.00159		0.00154		0.00149		0.00127		0.00111		0.00133		0.00131	0.00149	0.00197	0.0019	0.00216	0.00209				0.00209	0.00185	0.00214	0.00227		0.00204
Vanadium, dissolved	mg/L			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Zinc, dissolved	mg/L		0.03	<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Zirconium, dissolved	mg/L			<0.00050			<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050		<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050				<0.00050	<0.00050	<0.00050	<0.00050		<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				10/04/2015	14/04/2015	14/04/2015	20/04/2015	30/04/2015	09/05/2015	14/05/2015	19/05/2015	28/05/2015	05/06/2015	11/06/2015	15/06/2015	25/06/2015	29/06/2015	02/07/2015	09/07/2015	17/07/2015	23/07/2015	23/07/2015	27/07/2015	04/08/2015	13/08/2015	22/08/2015	25/08/2015	01/09/2015	08/09/2015	18/09/2015	18/09/2015	22/09/2015	22/09/2015
Total Suspended Solids	mg/L			2.3		<1.0	4.7	219	150	102	36.3	8.7	2.6	<1.0	1.3	4.3	<1.0	3	2	1.1	1.2	1.2	<1.0	<1.0	2.6	1.3	13.6	12.2	1	<1.0			<1.0
Total Dissolved Solids	mg/L			242		210	124	136	152	160	158	214	142	196	198	212	228	216	172	208	192	192	214	246	204	202	202	204	188	222			226
pH (field)	pH units	6.5-9	6.0-9.0	8.34	8.34	8.34	8.06	7.92	7.6	7.75	7.89	7.89	7.74	7.7	7.87	7.77	7.88	7.83	7.83	7.8	7.8		7.78	7.97	8.09	7.89	8.12	8.06	8.11	8.06	8.06	7.88	7.88
pH (lab)	pH units	6.5-9	6.0-9.0	8.15		8.31	7.98	7.67	7.94	8.06	8.16	8.23	8.16	8.05	8.23	8.11	8.29	8.16	8.17	8.15	8.24	8.24	8.15	8.24	8.28	8.22	8.24	8.27	8.29	8.28			8.24
Specific Conductance, field	µS/cm			402.6	331.7	331.7	190.2	154	213.1	246.3	236	355.9	309	335.6	347.3	367.8	350.3		350.8	358.3	377.9		153.4	360.1	343.1	345.2	252.2	305.4	336.9	339	339	339.4	339.4
Specific Conductance (lab)	µS/cm			405		386	190	156	217	251	235	362	309	334	351	371	350	348	350	356	366	366	362	366	346	347	345	307	333	337			335
Temperature (field)	C			-0.1			0	0.3	2.5	5.4	4.2	7.4	6.7	5.7	6.5	7.9	7.6	7.2	5.2	5.3	5.1		7.2	7	6.7	4.6	5.6	3.2	3.3	2.3	2.3	2.4	2.4
Dissolved Oxygen (field)	mg/L			14.32	13.69	13.69	14.28	14.22	14.29	12.36	11.97	11.56	10.94	11.42	10.82	10.3	11.38	11.76	12.58	11.29	11		11.08	11.69	11.59	8.55	12.84	13.5	13.13	12.41	12.41	12.53	12.53
Dissolved Oxygen (field)	%			97.9	93.8	93.8	97.6	98.2	104.8	97.9	91.2	96	89.7	89.5	88.8	87.1	95.2		99.7	89.2	86.5		92.5	96.4	94.9	66.3	101.6	100.6	98.5	90.7	90.7	91.8	91.8
ORP (field)	mV			175.8	213.6	213.6	176.8	199.3	133.3	135.6	70.9	146.6	131.9	142.7	154.9	143.5	171.3		172.7	151.4	160.5		165.8	126.2	163.4	144.7	165.9	125.2	171.3	167.5	167.5	143.4	143.4
Hardness (from total)	mg/L			197		194	89.4	83.9	115	112	105	181	148	170	172	196	158	165	171	167	172	172	185	179	176	163	175	154	181	164			169
Hardness (from dissolved)	mg/L			173		174	83.8	71.6	101	107	105	149	153	166	164	195	183	168	178	163	172	172	173	174	168	168	187	168	165	169			167
Alkalinity, total	mg/L			134		169	76.6	59.5	85.3	94	101	145	138	143	154	160	161	154	161	164	164	164	161	165	164	166	163	143	154	153			153
Chloride	mg/L	120		5.2		3.3	2.7	2.9	2.8	3.6	2.1	4.2	2.2	2.5	2.4	3	2.5	2.5	2.3	2.3	2.4	2.4	2.8	2.3	1.6	1.8	1.7	1.7	2.2	2			2.4
Fluoride	mg/L	0.12		**0.38**		**0.41**	**0.18**	**0.16**	**0.21**	**0.25**	**0.29**	**0.33**	**0.35**	**0.36**	**0.34**	**0.29**	**0.35**	**0.36**	**0.37**	**0.35**	**0.3**	**0.3**	**0.34**	**0.39**	**0.38**	**0.39**	**0.39**	**0.35**	**0.38**	**0.36**			**0.37**
Sulphate, dissolved	mg/L			55		32.9	14	0.56	17.7	22.4	14.7	26	20.1	24.4	28.2	32	23.6	25.5	22.8	24	25.4	25.4	26.5	25	18	18.5	18.8	16.9	17.4	18.9			18
Ammonia	mg/L	0.239	0.25	0.0059		0.013	0.034	0.09	0.028	0.031	0.029	0.035	0.0057	0.02	0.03	0.016	0.03	0.011	0.015	0.031	0.018	0.018	0.046	0.031	0.039	0.026	0.018	0.027	0.043	0.0099			0.033
Nitrite (N)	mg/L	0.06	0.06	0.0089		<0.0050	0.0096	<0.050	<0.0050	0.0106	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Nitrate (N)	mg/L	3	9.1	1.38		0.205	0.425	0.35	0.452	0.698	0.191	0.746	0.114	0.142	0.181	0.112	0.125	0.119	0.124	0.096	0.079	0.079	0.081	0.086	0.052	0.056	0.056	0.049	<0.020	<0.020			0.023
Dissolved Organic Carbon	mg/L			8.52		11.3	0.61	23.1	14.6	11.3	11.8	6.94	6.7	7.26	4	6.31	9.25	7.18	9.49	7.14	8.44	8.44	7.63	7.7	8.4	8.4	7.9	12	10	8.8			8.3
Aluminum, total	mg/L	*		0.0792		0.0682	**0.137**	**3.17**	**2.89**	**1.58**	**0.718**	**0.111**	0.0607	0.0435	0.0203	**0.399**	0.025	0.043	0.0441	0.0219	**0.276**	**0.276**	0.0137	0.017	0.0576	0.0197	**0.149**	**0.208**	0.0273	0.0154			0.0131
Antimony, total	mg/L			<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00112	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050
Arsenic, total	mg/L	0.005		0.0005		0.00054	0.00051	0.00224	0.00234	0.00148	0.001	0.00056	0.00047	0.00046	0.00039	0.00061	0.00042	0.00042	0.00043	0.00043	0.00054	0.00054	0.00038	0.00041	0.00055	0.00054	0.00069	0.00068	0.00055	0.00048			0.00042
Barium, total	mg/L			0.0804		0.0749	0.0461	0.12	0.118	0.0896	0.0622	0.0843	0.0603	0.0679	0.0692	0.09	0.065	0.0651	0.0634	0.071	0.0752	0.0752	0.0716	0.0707	0.0639	0.0643	0.0707	0.0629	0.0612	0.0567			0.0581
Beryllium, total	mg/L			<0.00010		<0.00010	<0.00010	0.00014	0.00016	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010			<0.00010
Bismuth, total	mg/L			<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010
Boron, total	mg/L	1.5		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05
Cadmium, total	mg/L	*		0.000012		0.000016	0.000016	0.00007	0.000054	0.000039	0.000016	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	0.000012	<0.000010	<0.000010	<0.000010	0.000012	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010
Calcium, total	mg/L			49		49.2	22.5	21.6	29.8	29.1	27.8	46.3	38.1	43.5	44.6	53.1	40.8	42.9	43.3	44.1	46.8	46.8	48.8	47.9	44.3	43.7	44.6	39.6	45.5	42.9			43.3
Chromium, total	mg/L	0.001		<0.0010		<0.0010	<0.0010	**0.0062**	**0.0065**	**0.0034**	**0.0017**	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010
Cobalt, total	mg/L			<0.00050		<0.00050	<0.00050	0.00272	0.00216	0.00134	0.00058	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00054	<0.00050	<0.00050	<0.00050			<0.00050
Copper, total	mg/L	*		**0.00687**		**0.0194**	**0.00753**	**0.022**	**0.0165**	**0.0137**	**0.00572**	0.00395	0.0024	0.00231	0.00221	0.00355	0.00204	0.00185	0.00229	0.00157	0.00276	0.00276	0.00173	0.00247	0.00237	0.00153	0.00288	0.00329	0.00274	0.00179			0.00163
Iron, total	mg/L	0.3		0.175		0.283	**0.41**	**5.62**	**5.33**	**3.03**	**1.57**	0.273	0.17	0.118	0.069	**0.648**	0.088	0.111	0.139	0.084	**0.459**	**0.459**	0.069	0.091	0.207	0.111	**0.364**	**0.547**	0.146	0.128			0.121
Lead, total	mg/L	*		<0.00020		<0.00020	<0.00020	0.0017	0.00154	0.00087	0.00037	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020
Lithium, total	mg/L			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Magnesium, total	mg/L			18.2		17.4	8.07	7.28	9.97	9.45	8.72	15.8	12.7	14.9	14.6	15.3	13.7	14	15.3	13.9	13.5	13.5	15.4	14.4	15.9	13.1	15.5	13.5	16.3	13.9			14.7
Manganese, total	mg/L			0.108		0.0597	0.0775	0.361	0.352	0.176	0.0664	0.0222	0.0116	0.0142	0.0142	0.0788	0.014	0.016	0.0154	0.0172	0.0398	0.0398	0.0241	0.0165	0.014	0.0094	0.0168	0.0309	0.0096	0.0067			0.0066
Mercury, total	mg/L	0.000026		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010
Molybdenum, total	mg/L	0.073		0.0049		0.0024	0.0017	0.0012	0.0015	0.0018	0.0014	0.0026	0.0017	0.0017	0.0015	0.0013	0.0014	0.0015	0.0016	0.0014	0.0015	0.0015	0.0013	0.0016	0.0016	0.0015	0.0017	0.0014	0.0016	0.0012			0.0014
Nickel, total	mg/L	*		<0.0010		<0.0010	0.0012	0.0077	0.0069	0.0047	0.0025	0.0012	0.0011	0.0014	<0.0010	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0013	<0.0010	<0.0010	0.001	<0.0010	0.0013	0.0014	0.001	0.0011			0.0011
Phosphorus, total	mg/L			0.024		0.032	0.039	0.239	0.18	0.117	0.076	0.024	0.016	0.018	0.01	0.041	0.015	<0.01	0.011	0.014	0.026	0.026	0.012	0.018	0.017	<0.01	0.022	0.028	0.016	<0.01			0.011
Potassium, total	mg/L			4.73		3.43	2.8	2.2	2.01	1.98	1.55	2.63	1.64	1.77	1.76	1.94	1.54	1.66	1.7	1.53	1.61	1.61	1.69	1.43	1.41	1.45	1.5	1.18	1.38	1.38			1.35
Selenium, total	mg/L	0.001		0.00054		0.00025	0.0003	0.00032	0.00042	0.00029	0.00023	0.00036	0.00016	0.00013	<0.00010	0.00012	0.00012	0.00014	0.0001	0.0001	0.00011	0.00011	<0.00010	0.00014	<0.00010	0.00013	0.00013	0.00016	0.00015	<0.00010			0.00014
Silicon, total	mg/L			4.05		7.15	3.81	9.13	9.79	6.65	5.61	5.45	5.34	5.96	6.26	7.43	5.64	6.04	6.97	6.32	7.17	7.17	6.96	6.56	6.45	7.57	6.31	6.79	6.82	6.57			6.8
Silver, total	mg/L	0.00025		<0.000020		<0.000020	<0.000020	0.000021	<0.000020	<0.000020	0.000041	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000037	<0.000020	0.000036	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020
Sodium, total	mg/L			17.4		12.8	7.3	4.96	6.61	8.68	6.49	12.4	9.28	10.1	10.2	10.6	9.96	9.62	10	9.6	9.82	9.82	10.2	10.3	10	8.71	10.3	9.05	10	8.84			9.29
Strontium, total	mg/L			0.678		0.588	0.272	0.251	0.309	0.339	0.31	0.571	0.425	0.489	0.481	0.535	0.442	0.472	0.428	0.47	0.459	0.459	0.485	0.475	0.477	0.446	0.485	0.387	0.441	0.396			0.417
Sulpher, total	mg/L			22		11.4	6.6	3.4	5.6	5.8	4.9	13.6	8.7	10.2	8.2	9.2	8.3	8.9	7.5	8.4	12.6	12.6	9.3	9.3	7.9	6.8	7	5.6	5.8	6.4			8
Thallium, total	mg/L	0.0008		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050
Tin, total	mg/L			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Titanium, total	mg/L			0.0105		0.0064	0.0055	0.133	0.115	0.0732	0.0341	<0.0050	<0.0050	<0.0050	<0.0050	0.015	<0.0050	<0.0050	<0.0050	<0.0050	0.0125	0.0125	<0.0050	<0.0050	<0.0050	<0.0050	0.0066	0.0094	<0.0050	<0.0050			<0.0050
Uranium, total	mg/L	0.015		0.00155		0.00145	0.00048	0.00063	0.00093	0.00084	0.00074	0.00171	0.00138	0.00166	0.00181	0.00169	0.00184	0.00168	0.0018	0.00175	0.00187	0.00187	0.00189	0.00195	0.00174	0.00144	0.00172	0.00116	0.00145	0.00132			0.00153
Vanadium, total	mg/L			<0.0050		<0.0050	<0.0050	0.0116	0.0097	0.0063	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Zinc, total	mg/L	0.03		0.0072		<0.0050	<0.0050	0.0151	0.0132	0.0075	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0139	<0.0050			<0.0050
Zirconium, total	mg/L			<0.00050		<0.00050	<0.00050	0.00089	0.00087	0.00081	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050
Aluminum, dissolved	mg/L		0.1	0.0057		0.011	0.0131	0.0389	0.0225	0.0144	0.0124	0.017	0.0091	0.0061	0.0073	0.0147	0.0188	0.0078	0.0078	0.0132	0.0136	0.0136	0.0112	0.0104	0.014	0.0105	0.014	0.0151	0.0165	0.0106			0.007
Antimony, dissolved	mg/L			<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050
Arsenic, dissolved	mg/L		0.005	0.00042		0.00054	0.0004	0.00051	0.00049	0.00056	0.0005	0.00041	0.00046	0.00039	0.00039	0.00038	0.00041	0.0004	0.00043	0.00047	0.00044	0.00044	0.00045	0.00039	0.00048	0.00055	0.0005	0.00071	0.0005	0.00045			0.00045
Barium, dissolved	mg/L			0.0718		0.0672	0.0427	0.0423	0.0477	0.0516	0.0464	0.0661	0.0657	0.0661	0.0686	0.081	0.0689	0.0667	0.0693	0.0681	0.0693	0.0693	0.0686	0.0677	0.0649	0.0654	0.0674	0.0647	0.0586	0.0592			0.0585
Beryllium, dissolved	mg/L			<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010			<0.00010
Bismuth, dissolved	mg/L			<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010
Boron, dissolved	mg/L			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05
Cadmium, dissolved	mg/L		*	0.000011		0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010
Calcium, dissolved	mg/L			44.6		42.6	21.8	19.5	26.6	27.6	27.9	38.1	40	42.6	42.8	53.2	48.1	43.5	48	41.6	46	46	46.2	46.1	42.6	42.2	49.4	43.6	42	43.6			43.4
Chromium, dissolved	mg/L		0.001	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010
Cobalt, dissolved	mg/L			<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050
Copper, dissolved	mg/L		0.013	0.00427		0.00638	0.00542	0.00651	0.00392	0.006	0.00264	0.00258	0.00201	0.00184	0.00176	0.00194	0.00165	0.00166	0.00152	0.00185	0.00151	0.00151	0.00146	0.00169	0.00188	0.00183	0.00182	0.00232	0.00208	0.00194			0.00165
Iron, dissolved	mg/L		1.1	0.0652		0.128	0.165	0.236	0.218	0.203	0.261	0.0547	0.0615	0.0414	0.0339	0.0466	0.0407	0.0404	0.0491	0.056	0.0512	0.0512	0.0542	0.0527	0.0738	0.109	0.0886	0.19	0.101	0.107			0.107
Lead, dissolved	mg/L		0.004	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020
Lithium, dissolved	mg/L			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Magnesium, dissolved	mg/L			15		16.3	7.1	5.54	8.33	9.29	8.54	13.1	12.8	14.4	13.8	15.1	15.2	14.4	14.2	14.3	14	14	13.9	14.3	15	15.2	15.5	14.4	14.7	14.7			14.4
Manganese, dissolved	mg/L			0.0916		0.0538	0.0617	0.107	0.0636	0.0099	0.0043	0.0045	0.0078	0.0101	0.0126	0.0271	0.0107	0.0118	0.0101	0.0149	0.018	0.018	0.0222	0.0148	0.0073	0.0079	0.0068	0.0061	0.0057	0.0066			0.0056
Mercury, dissolved	mg/L			<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010
Molydenum, dissolved	mg/L		0.073	0.0046		0.0022	0.0017	0.0012	0.0013	0.0022	0.0014	0.0023	0.0017	0.0016	0.0015	0.0012	0.0017	0.0015	0.0014	0.0014	0.0014	0.0014	0.0013	0.0014	0.0016	0.0013	0.0016	0.0015	0.0014	0.0012			0.0013
Nickel, dissolved	mg/L		0.11	<0.0010		<0.0010	<0.0010	0.0013	0.0012	0.0011	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0014	0.0011	0.0012			<0.0010
Phosphorus, dissolved	mg/L			0.017		0.019	0.022	0.033	0.02	0.016	0.017	<0.01	0.01	<0.01	<0.01	0.01	0.011	<0.01	0.01	0.011	0.013	0.013	0.015	<0.01	<0.01	0.012	0.01	0.021	0.015	<0.01			0.012
Potassium, dissolved	mg/L			4.16		3.39	2.7	1.77	1.76	2.09	1.48	2.05	1.75	1.64	1.66	2.02	1.73	1.64	1.86	1.56	1.67	1.67	1.66	1.56	1.35	1.57	1.58	1.28	1.21	1.34			1.27
Selenium, dissolved	mg/L		0.002	0.00049		0.00028	0.00022	0.00016	0.00018	0.00024	0.00015	0.00026	0.00012	0.00012	0.0001	0.00015	0.00019	0.00011	0.00012	0.00011	0.00012	0.00012	<0.00010	<0.00010	<0.00010	<0.00010	0.00011	<0.00010	0.00011	0.00011			<0.00010
Silicon, dissolved	mg/L			4.01		6.5	3.72	4.25	4.34	3.68	4.37	4.04	5.9	5.61	5.82	6.44	6.47	6.12	7.33	6.08	6.78	6.78	6.22	6.12	6.16	5.66	6.94	7.06	6.48	6.9			6.74
Silver, dissolved	mg/L		0.0001	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020
Sodium, dissolved	mg/L			13.9		11.7	6.99	4.71	6.8	9.2	6.64	10.7	9.22	9.72	9.71	10.4	10.1	9.96	9.85	9.88	9.52	9.52	10.8	10.2	10.4	10.4	9.85	9.65	9.63	9.49			9.52
Strontium, dissolved	mg/L			0.628		0.556	0.261	0.209	0.274	0.327	0.307	0.49	0.455	0.434	0.461	0.537	0.481	0.459	0.451	0.441	0.463	0.463	0.472	0.464	0.443	0.471	0.476	0.411	0.424	0.409			0.41
Sulpher, dissolved	mg/L			21.9		11.1	4.8	5.7	5.9	6.8	4.9	10.8	8.2	9	8.7	9.6	9.3	9	7.6	8	11.2	11.2	11.9	7.1	8.5	6.1	5.3	5.3	8.2	7			6
Thallium, dissolved	mg/L			<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050
Tin, dissolved	mg/L			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Titanium, dissolved	mg/L			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Uranium, dissolved	mg/L			0.00138		0.00137	0.00046	0.00036	0.00066	0.00079	0.00078	0.00147	0.00148	0.00156	0.00165	0.00174	0.00171	0.00172	0.0018	0.00171	0.00179	0.00179	0.00171	0.00186	0.00146	0.00162	0.00171	0.00117	0.00142	0.00133			0.00144
Vanadium, dissolved	mg/L			<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Zinc, dissolved	mg/L		0.03	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050
Zirconium, dissolved	mg/L			<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

Station Name		CCME Guidelines Protection of Aquatic Life	QZ14-031 Water Quality Objectives	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date				**28/09/2015**	**28/09/2015**	**05/10/2015**	**05/10/2015**	**13/10/2015**	**13/10/2015**	**20/10/2015**	**26/10/2015**	**02/11/2015**	**02/11/2015**	**11/11/2015**
Total Suspended Solids	mg/L			<1.0	<1.0		<1.0		<1.0	1.2	<1.0		2.4	2.7
Total Dissolved Solids	mg/L			218	216		236		206	208	210		248	202
pH (field)	pH units	6.5-9	6.0-9.0	7.87	8.12	7.92	7.92	7.72	7.72	7.77	7.94	7.80	7.80	8.03
pH (lab)	pH units	6.5-9	6.0-9.0	8.19	8.21		8.28		8.17	8.29	8.1		8.21	8.33
Specific Conductance, field	µS/cm			350	349.1	352.9	352.9	328.9	328.9	341	345.3	394.7	394.7	415.09
Specific Conductance (lab)	µS/cm			339	332		360		325	340	367		394	388
Temperature (field)	C			1.9	2.2	0	0	0.3	0.3	0.5	0.2	0.5	0.5	1
Dissolved Oxygen (field)	mg/L			12.47	13.2	14.49	14.49	11.27	11.27	13.49	12.33	13.52	13.52	13.61
Dissolved Oxygen (field)	%			91.7	96	99.1	99.1	78.5	78.5	93.5	86	94.6	94.6	96
ORP (field)	mV			180.2	173	142.7	142.7	199	199	6	41.7	108.3	108.3	136.4
Hardness (from total)	mg/L			169	177		178		163	166	189		182	172
Hardness (from dissolved)	mg/L			168	170		172		146	161	179		199	175
Alkalinity, total	mg/L			160	169		165		153	155	166		180	175
Chloride	mg/L	120		1.9	1.9		2.2		2	1.9	2.5		2.4	2.7
Fluoride	mg/L	0.12		0.36	0.37		0.37		0.34	0.35	0.37		0.35	0.32
Sulphate, dissolved	mg/L			17.6	18.1		20.4		16.1	19.8	21.7		26	27.7
Ammonia	mg/L	0.239	0.25	0.024	0.047		0.013		0.02	0.019	0.016		0.019	0.041
Nitrite (N)	mg/L	0.06	0.06	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Nitrate (N)	mg/L	3	9.1	0.042	0.036		0.086		0.077	0.097	0.117		0.153	0.12
Dissolved Organic Carbon	mg/L			11	11		8.7		9.83	8.83	8.15		7.75	7.32
Aluminum, total	mg/L	*		0.0122	0.0173		0.0067		0.0127	0.0133	0.0102		0.0129	0.185
Antimony, total	mg/L			<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050
Arsenic, total	mg/L	0.005		0.00056	0.00075		0.00043		0.00049	0.00044	0.00046		0.00036	0.00039
Barium, total	mg/L			0.0625	0.0598		0.0644		0.0558	0.0562	0.0655		0.0697	0.0737
Beryllium, total	mg/L			<0.00010	<0.00010		<0.00010		<0.00010	<0.00010	<0.00010		<0.00010	<0.00010
Bismuth, total	mg/L			<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Boron, total	mg/L	1.5		<0.05	<0.05		<0.05		<0.05	<0.05	<0.05		<0.05	<0.05
Cadmium, total	mg/L	*		<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Calcium, total	mg/L			42.4	45.4		46		40.5	43	48		47.6	45.1
Chromium, total	mg/L	0.001		<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Cobalt, total	mg/L			<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050
Copper, total	mg/L	*		0.0018	0.002		0.00153		0.00155	0.00143	0.00173		0.00165	0.00377
Iron, total	mg/L	0.3		0.111	0.129		0.065		0.151	0.096	0.065		0.063	0.387
Lead, total	mg/L	*		<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Lithium, total	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Magnesium, total	mg/L			15.4	15.4		15.3		15	14.3	16.8		15.3	14.4
Manganese, total	mg/L			0.0067	0.007		0.008		0.0061	0.0054	0.0092		0.0129	0.0328
Mercury, total	mg/L	0.000026		<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molybdenum, total	mg/L	0.073		0.0014	0.0014		0.0014		0.0012	0.0013	0.0012		0.0013	0.001
Nickel, total	mg/L	*		<0.0010	0.001		<0.0010		0.0012	<0.0010	0.0011		<0.0010	0.0013
Phosphorus, total	mg/L			<0.01	0.013		0.012		0.014	0.012	<0.01		0.014	0.025
Potassium, total	mg/L			1.4	1.41		1.4		1.32	1.24	1.48		1.61	1.41
Selenium, total	mg/L	0.001		<0.00010	<0.00010		<0.00010		<0.00010	<0.00010	<0.00010		0.0001	<0.00010
Silicon, total	mg/L			6.34	6.87		6.63		6.28	6.7	6.82		6.36	6.4
Silver, total	mg/L	0.00025		<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, total	mg/L			10	9.7		10		8.82	11.7	11.4		10.2	9.66
Strontium, total	mg/L			0.406	0.415		0.459		0.392	0.417	0.44		0.492	0.453
Sulpher, total	mg/L			7.6	6.3		8.3		3.4	7.1	5.7		8.1	7.6
Thallium, total	mg/L	0.0008		<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Tin, total	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Titanium, total	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	0.0117
Uranium, total	mg/L	0.015		0.00126	0.00126		0.00164		0.00148	0.00128	0.00181		0.00198	0.00207
Vanadium, total	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Zinc, total	mg/L	0.03		<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	0.0069
Zirconium, total	mg/L			<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050
Aluminum, dissolved	mg/L		0.1	0.0084	0.0078		0.0097		0.0099	0.0085	0.0065		0.0093	0.0091
Antimony, dissolved	mg/L			<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050
Arsenic, dissolved	mg/L		0.005	0.00041	0.00045		0.0005		0.00047	0.00042	0.00038		0.0004	0.00025
Barium, dissolved	mg/L			0.0606	0.06		0.0603		0.0531	0.059	0.0672		0.0691	0.0747
Beryllium, dissolved	mg/L			<0.00010	<0.00010		<0.00010		<0.00010	<0.00010	<0.00010		<0.00010	<0.00010
Bismuth, dissolved	mg/L			<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Boron, dissolved	mg/L			<0.05	<0.05		<0.05		<0.05	<0.05	<0.05		<0.05	<0.05
Cadmium, dissolved	mg/L		*	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Calcium, dissolved	mg/L			42.1	42.7		43.3		36.3	40.9	46.6		51.6	45.7
Chromium, dissolved	mg/L		0.001	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Cobalt, dissolved	mg/L			<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050
Copper, dissolved	mg/L		0.013	0.00176	0.00162		0.00183		0.00147	0.00149	0.00186		0.00187	0.00213
Iron, dissolved	mg/L		1.1	0.0803	0.0786		0.0595		0.0926	0.0693	0.046		0.0437	0.0362
Lead, dissolved	mg/L		0.004	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Lithium, dissolved	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Magnesium, dissolved	mg/L			15.4	15.4		15.6		13.4	14.3	15.3		17.1	14.8
Manganese, dissolved	mg/L			0.0058	0.0055		0.0072		0.0043	0.0042	0.0092		0.0112	0.0156
Mercury, dissolved	mg/L			<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.073	0.0014	0.0014		0.0014		0.0012	0.0013	0.0013		0.0015	0.0012
Nickel, dissolved	mg/L		0.11	0.0012	<0.0010		<0.0010		<0.0010	0.001	0.0012		0.0011	0.0012
Phosphorus, dissolved	mg/L			0.013	0.015		0.011		0.012	<0.01	0.011		0.011	<0.01
Potassium, dissolved	mg/L			1.37	1.41		1.3		1.06	1.28	1.39		1.6	1.36
Selenium, dissolved	mg/L		0.002	0.00014	0.00013		<0.00010		<0.00010	0.00011	<0.00010		0.0001	0.00015
Silicon, dissolved	mg/L			6.77	6.74		6.56		5.52	6.41	6.8		7.26	5.05
Silver, dissolved	mg/L		0.0001	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, dissolved	mg/L			9.61	9.94		9.97		8.85	8.79	10.1		11.3	10.8
Strontium, dissolved	mg/L			0.39	0.416		0.42		0.374	0.412	0.467		0.498	0.506
Sulpher, dissolved	mg/L			7	7.7		7		5	8.1	7.9		9.3	8.7
Thallium, dissolved	mg/L			<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Tin, dissolved	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Titanium, dissolved	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Uranium, dissolved	mg/L			0.00129	0.00127		0.0016		0.00131	0.00128	0.00169		0.00192	0.00228
Vanadium, dissolved	mg/L			<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Zinc, dissolved	mg/L		0.03	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Zirconium, dissolved	mg/L			<0.00050	<0.00050		<0.00050		<0.00050	<0.00050	<0.00050		<0.00050	<0.00050

Pre-mine operation
Operations, no mine discharge
Operations, with mine discharge

APPENDIX B

OUTLIER IDENTIFICATION – MINTO CREEK SURFACE WATER QUALITY

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**27/05/2005**	**27/05/2005**	**30/06/2005**	**28/07/2005**	**30/08/2005**	**28/09/2005**	**15/10/2005**	**08/04/2006**	**09/04/2006**	**10/04/2006**	**11/04/2006**	**12/04/2006**	**13/04/2006**	**14/04/2006**	**15/04/2006**	**16/04/2006**	**17/04/2006**	**18/04/2006**	**19/04/2006**	**20/04/2006**	**21/04/2006**	**22/04/2006**
pH (field)	pH units								8.10	8.30	8.50	8.50	8.40	8.40	8.4	8.6	8.4	8.5	8.4	8.5	8.5	8.45	8.45
pH (lab)	pH units	8.06	8.03	8.17	8.01	8.26	7.9	8.11	8.25	8.34	8.34	8.34	8.23	8.33	8.37	8.38	8.37	8.39	8.20	8.34	8.35	8.33	8.31
Hardness (from dissolved)	mg/L																						
Hardness (from total)	mg/L	99.8	72.2		153	138	134	137															
Total Dissolved Solids	mg/L	138	80	190	194	193	170	179	342	394	337	309	293	296	196	303	304	393	334	292	278	281	222
Total Suspended Solids	mg/L	20.5	79	<3.0	<3.0	3.5	9	5.5	4.1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	22.4	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Alkalinity, total	mg/L		67.1	140		143	115		261	273	245	224	210	218	218	222	235	286	246	222	235	203	165
Sulphate, dissolved	mg/L		9.64	22.1		12.6	11.6		43.6	63.1	55.8	47.8	44.4	44.5	44.4	44.9	46.3	58.2	49.3	39.5	38	36.3	27
Chloride	mg/L	<0.50	<0.5	1.23	0.66	0.53	0.72	0.88	1.50	1.79	1.57	1.37	1.32	1.32	1.29	1.32	1.48	2	1	1	1	1	1
Fluoride	mg/L								0.75	0.80	0.65	0.62	0.587	0.578	0.565	0.569	0.579	0.73	0.64	0.57	0.59	0.55	0.45
Nitrite (N)	mg/L	0.0015	<0.001	<0.0010	<0.0010	<0.0010	0.001	<0.0010	0.0012	0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nitrate (N)	mg/L	0.0565	0.0339	0.0621	0.0124	0.0141	0.0458	0.133	0.076	0.0426	0.016	0.0134	0.0088	<0.0050	0.0102	<0.0050	<0.0050	0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ammonia	mg/L	0.026	<0.02	<0.020	<0.020	0.029	<0.020	<0.020	0.01	0.0133	0.016	0.0087	<0.0050	<0.0050	<0.0050	<0.0050	0.0173	0	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum, total	mg/L	0.362	1.14	0.0111	0.0127	0.0475	0.133	0.0972	0.1490	0.031	0.0277	0.026	0.0222	0.0249	0.0214	0.0177	0.222	0.017	0.013	0.017	0.025	0.027	0.028
Arsenic, total	mg/L	0.00075	0.00104	0.00045	0.00046	0.00063	0.00069	0.00061	0.00086	0.00076	0.00064	0.00057	0.00053	0.00052	0.00053	0.00053	0.00056	0.00065	0.00061	0.00059	0.00053	0.00054	0.00047
Cadmium, total	mg/L	<0.000050	<0.00005	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium, total	mg/L	24.8	19.9	37.5	39.1	35.4	34.3	34.1	66.0	69.7	61.1	56.1	48.6	49.8	49.4	51.1	54.6	70.0	61.7	55.0	52.5	51.0	38.3
Chromium, total	mg/L	0.0012	0.0027	<0.00050	<0.00050	<0.0010	<0.0010	0.00059	0.00085	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.0049	0.0037	0.00207	0.00245	0.0026	0.0039	0.00404	0.00150	0.0013	0.00126	0.0012	0.00125	0.00146	0.00139	0.00162	0.00453	0.00190	0.00152	0.00146	0.00185	0.00175	0.00184
Iron, total	mg/L	0.778	1.49	0.052	0.079	0.373	0.674	0.436	0.206	0.073	0.076	0.069	0.057	0.073	0.054	0.057	0.262	0.085	0.091	0.087	0.104	0.083	0.082
Lead, total	mg/L	<0.00050	0.00066	<0.000050	<0.000050	<0.00050	<0.00050	0.000078	0.000088	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000137	<0.000050	<0.000050	<0.000050	0.000060	<0.000050	<0.000050
Magnesium, total	mg/L	8.37	5.78	12.5	13.1	11.6	11	10.8	28.3	32.5	28.8	26.7	22.2	22.2	22.2	22.3	23.2	31.3	29.0	24.4	23.5	23.0	18.3
Manganese, total	mg/L	0.0505	0.0536	0.00785	0.014	0.025	0.0543	0.0368	0.0485	0.0447	0.0387	0.0394	0.0410	0.0453	0.0384	0.0431	0.0468	0.0428	0.0369	0.0442	0.0481	0.0490	0.0459
Mercury, total	mg/L	<0.000020				<0.000020	<0.000020																
Molybdenum, total	mg/L	<0.0010		0.00103	0.00134	0.0011	<0.0010	0.000916	0.001340	0.00149	0.001410	0.00147	0.00152	0.00178	0.00156	0.00157	0.00163	0.00201	0.00164	0.00136	0.00137	0.00125	0.00115
Nickel, total	mg/L	0.0026	0.0033	0.00105	0.00107	0.0016	0.002	0.00164	0.00054	<0.00050	<0.00050	<0.00050	<0.00050	0.00059	<0.00050	0.00052	0.00081	0.00057	<0.00050	0.00051	0.00054	0.00056	0.00058
Phosphorus, total	mg/L			<0.30	<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium, total	mg/L	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	4.6	4.8	4	3.6	3.6	3.4	3.7	3.7	3.6	4.4	4.1	3.8	3.7	4.0	3.3
Selenium, total	mg/L	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver, total	mg/L	<0.000020		<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	mg/L	4.8		8.7	8.7	6.9	6	6	17.7	22.9	19.3	17.3	15.7	15.6	15.3	15.3	15.5	20.4	17.8	15.1	14.8	14.5	11.2
Thallium, total	mg/L	<0.00020		<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Zinc, total	mg/L	<0.0050	0.006	<0.0010	<0.0010	<0.0050	<0.0050	0.0011	0.0020	0.0028	0.0015	0.0018	0.0015	0.0025	0.0014	0.0023	0.0033	0.0019	0.0010	0.0015	0.0021	0.0048	0.0026
Aluminum, dissolved	mg/L	0.0163	0.0108	0.0073	0.0071	0.0119	0.0141	0.0129										0.0082					
Arsenic, dissolved	mg/L	<0.00050		0.00044	0.00044	0.00058	0.00059	0.00053										0.00063					
Cadmium, dissolved	mg/L	<0.000050		<0.000050	<0.000050	<0.000017	<0.000017	<0.000050										<0.000050					
Calcium, dissolved	mg/L	25.6	20.3	36.9	39.6	35.7	35.2	35.9										70.1					
Chromium, dissolved	mg/L	<0.0010		<0.00050	<0.00050	<0.0010	<0.0010	<0.00050										<0.00050					
Copper, dissolved	mg/L	0.0033		0.0021	0.00208	0.0024	0.0025	0.00271										0.0017					
Iron, dissolved	mg/L	0.164		0.039	0.05	0.234	0.338	0.246										0.063					
Lead, dissolved	mg/L	<0.00050		<0.000050	<0.000050	<0.00050	<0.00050	<0.000050										<0.000050					
Magnesium, dissolved	mg/L	8.72	5.19	12.3	13.2	11.7	11.2	11.5										31.4					
Manganese, dissolved	mg/L	0.00507	0.00345	0.00684	0.014	0.0152	0.0341	0.0208										0.0420					
Mercury, dissolved	mg/L	<0.000020				<0.000020	<0.000020																
Molydenum, dissolved	mg/L	<0.0010		0.00108	0.00127	0.001	<0.0010	0.000859										0.002					
Nickel, dissolved	mg/L	0.0015		0.00102	0.00112	0.0015	0.0017	0.00141										<0.00050					
Phosphorus, dissolved	mg/L			<0.30	<0.30			<0.30										<0.30					
Potassium, dissolved	mg/L	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0										4.4					
Selenium, dissolved	mg/L	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010										<0.0010					
Silver, dissolved	mg/L	<0.000020		<0.000010	<0.000010	<0.000020	<0.000020	<0.000010										<0.000010					
Sodium, dissolved	mg/L	5		8.6	8.7	7	6.2	6.3										20.2					
Thallium, dissolved	mg/L	<0.00020		<0.00010	<0.00010	<0.00020	<0.00020	<0.00010										<0.00010					
Zinc, dissolved	mg/L		<0.005	0.0015	0.0011	<0.0050	<0.0050	<0.0010										0.0012					

Data omitted from calculation of summary statistics.

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**23/04/2006**	**24/04/2006**	**25/04/2006**	**26/04/2006**	**27/04/2006**	**28/04/2006**	**29/04/2006**	**30/04/2006**	**01/05/2006**	**02/05/2006**	**03/05/2006**	**05/05/2006**	**06/05/2006**	**08/05/2006**	**10/05/2006**	**14/05/2006**	**17/05/2006**	**20/05/2006**	**23/05/2006**	**26/05/2006**	**29/05/2006**	**02/06/2006**
pH (field)	pH units	8.45	8.55	8.5	8.6	8.1	8.1	8.3	8.5	8.3	8.3	8.2											
pH (lab)	pH units	8.24	8.15	7.75	7.82	7.89	7.88	7.93	7.97	7.99	7.95	7.86	7.63	7.60	7.65	7.65	7.61	7.69	7.81	7.93	7.71	7.66	7.19
Hardness (from dissolved)	mg/L																						
Hardness (from total)	mg/L																						
Total Dissolved Solids	mg/L	170	140	128	139	146	73	144	148	161	129	102	86	88	94	101	103	115	115	129	145	119	140
Total Suspended Solids	mg/L	3.7	4.2	22.1	14.1	20.6	20.6	17.6	17.6	23.1	51.4	116.0	141.0	110.0	40.9	98.3	232	59.6	28.1	22.1	11.4	79.9	257
Alkalinity, total	mg/L	135	103	77	78	75.2	71.2	76.7	74.5	79.8						34.5	32.1	63.1	70.6	72.2	94.3	82	91.8
Sulphate, dissolved	mg/L	18.7	13.4	8.41	9.62	10.1	8.73	8.69	8.72	9.28						3.4	3.21	5.43	7.6	10.7	13.2	8.76	9.14
Chloride	mg/L	1	1	1	1	1.13	1.07	1.05	1.01	0.98	0.81	0.73	<0.50	<0.50	<0.50	<0.5	<0.5	0.57	0.54	0.55	0.54	<0.5	<0.5
Fluoride	mg/L	0.33	0.28	0.19	0.19	0.18	0.17	0.18	0.18	0.19	0.16	0.14	0.11	0.11	0.11	0.112	0.136	0.158	0.179	0.211	0.227	0.192	0.21
Nitrite (N)	mg/L	0	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0012	0.0016	<0.001	<0.001	0.0016	0.0014	0.0024
Nitrate (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0082	0.0083	0.0171	0.0237	0.0368	0.0463	0.0415	0.0567
Ammonia	mg/L	<0.005	0												0		0.05			0.0147			0.04
Aluminum, total	mg/L	0.046	0.071	0.314	0.549	0.357	0.424	0.295	0.222	0.503	0.808	1.640	1.830	1.630	0.667	1.13	4.65	0.621	0.415	0.307	0.362	1.71	5.13
Arsenic, total	mg/L	0.00043	0.00044	0.00052	0.00060	0.00056	0.00054	0.00058	0.00055	0.00065	0.00071	0.00116	0.00120	0.00121	0.00067	0.0009	0.00242	0.00093	0.0008	0.00078	0.00076	0.00147	0.00296
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000051	<0.000050	<0.000050	<0.00005	0.000096	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.000135
Calcium, total	mg/L	30.6	25.5	19.1	20.1	20.6	19.0	21.1	21.7	22.5	18.4	16.9	11.9	12.3	12.4	14.3	15.4	17.2	18.6	22.1	26.3	22.1	26.7
Chromium, total	mg/L	<0.00050	<0.00050	<0.00050	0.00071	0.00056	0.00054	0.00058	<0.00050	0.00101	0.0015	0.00297	0.00334	0.00295	0.00135	0.00218	0.00862	0.00142	0.00104	0.00082	0.00102	0.00361	0.0104
Copper, total	mg/L	0.00137	0.00164	0.00501	0.00833	0.0064	0.0070	0.0064	0.0055	0.0069	0.0086	0.0106	0.0119	0.0222	0.00803	0.0323	0.0191	0.00806	0.00753	0.00653	0.00546	0.0121	0.0214
Iron, total	mg/L	0.112	0.126	0.492	0.691	0.582	0.596	0.434	0.400	0.690	1.310	2.710	3.010	2.880	1.140	1.76	7.23	1.74	1.22	0.917	0.707	2.89	8.09
Lead, total	mg/L	<0.000050	<0.000050	0.000166	0.000251	0.000294	0.000193	0.000131	0.000125	0.000179	0.000362	0.000816	0.000926	0.000845	0.000329	0.00053	0.0022	0.000478	0.00034	0.000261	0.00019	0.000846	0.00264
Magnesium, total	mg/L	13.8	11.1	7.4	7.4	7.5	7.0	7.5	7.7	8.2	6.7	5.8	4.1	4.1	4.0	5.34	5.65	5.81	6.51	8.01	9.47	7.77	9.99
Manganese, total	mg/L	0.0471	0.0425	0.0767	0.0653	0.0628	0.0492	0.0648	0.0682	0.0501	0.0921	0.1960	0.1890	0.1650	0.0706	0.174	0.266	0.101	0.0821	0.0678	0.0573	0.139	0.294
Mercury, total	mg/L																						
Molybdenum, total	mg/L	0.00088	0.00077	0.00064	0.00079	0.00067	0.000612	0.000511	0.000607	0.00073	0.000586	0.000524	0.000382	0.000375	0.00039	0.000699	0.000593	0.000502	0.000702	0.000907	0.00107	0.000943	0.00119
Nickel, total	mg/L	0.00057	0.00073	0.00118	0.00170	0.0014	0.0015	0.0015	0.0013	0.0018	0.0025	0.0042	0.0048	0.0044	0.00274	0.00343	0.00948	0.00334	0.00285	0.00241	0.0023	0.00535	0.0115
Phosphorus, total	mg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Potassium, total	mg/L	3.0	3.1	2.8	3.3	2.7	2.6	2.6	2.5	2.5	2.3	2.3	2.1	2	<2.0	<2	<2	<2	<2	<2	<2	<2	<2
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silver, total	mg/L	<0.000010	<0.000010	0.000012	0.000016	0.000012	0.000014	<0.000010	0.000024	0.000014	0.000015	0.000018	0.000018	0.000025	0.000014	0.000029	0.000037	<0.00001	0.000012	<0.00001	<0.00001	0.000031	0.000066
Sodium, total	mg/L	8.1	6.2	3.8	4.0	4.6	4.4	4.4	4.2	4.2	3.2	2.6	<2.0	<2.0	<2.0	2.4	2.3	3.6	4.2	5.2	6.1	5	5.7
Thallium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Zinc, total	mg/L	0.0024	0.0026	0.0091	0.0124	0.0052	<0.0050	0.0089	0.0082	0.0048	0.0059	0.0101	0.0105	0.0099	0.0062	0.0073	0.0223	0.0049	0.0032	0.0039	<0.005	0.0084	0.022
Aluminum, dissolved	mg/L		0.0119												0.0654		0.0626			0.0234			0.0318
Arsenic, dissolved	mg/L		0.00038												0.00038		0.00055			0.00054			0.00074
Cadmium, dissolved	mg/L		<0.000050												<0.000050		<0.00005			<0.00005			<0.00005
Calcium, dissolved	mg/L		25.4												12.2		12.8			23.1			23
Chromium, dissolved	mg/L		<0.00050												<0.00050		<0.0005			<0.0005			<0.0005
Copper, dissolved	mg/L		0.0013												0.0054		0.00582			0.00494			0.0038
Iron, dissolved	mg/L		0.054												0.194		0.425			0.253			0.463
Lead, dissolved	mg/L		<0.000050												0.000091		0.000064			<0.00005			0.000063
Magnesium, dissolved	mg/L		10.9												3.8		3.79			8.14			7.73
Manganese, dissolved	mg/L		0.0378												0.0209		0.0594			0.00274			0.0399
Mercury, dissolved	mg/L																						
Molybdenum, dissolved	mg/L		0.000729												0.000307		0.000441			0.000977			0.000913
Nickel, dissolved	mg/L		0.0006												0.0014		0.00165			0.0017			0.00183
Phosphorus, dissolved	mg/L		<0.30												<0.30		<0.3			<0.3			<0.3
Potassium, dissolved	mg/L		3.1												<2.0		<2			<2			<2
Selenium, dissolved	mg/L		<0.0010												<0.0010		<0.001			<0.001			<0.001
Silver, dissolved	mg/L		<0.000010												<0.000010		<0.00001			<0.00001			<0.00001
Sodium, dissolved	mg/L		6.1												<2.0		2.1			4.7			5.4
Thallium, dissolved	mg/L		<0.00010												<0.00010		<0.0001			<0.0001			<0.0001
Zinc, dissolved	mg/L		0.0018												0.0024		<0.001			<0.001			0.0012

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**07/06/2006**	**15/06/2006**	**15/06/2006**	**23/06/2006**	**28/06/2006**	**07/07/2006**	**12/07/2006**	**31/07/2006**	**31/07/2006**	**02/08/2006**	**23/08/2006**	**23/08/2006**	**30/08/2006**	**06/09/2006**	**13/09/2006**	**20/09/2006**	**28/09/2006**	**04/10/2006**	**12/10/2006**	**18/10/2006**	**28/10/2006**	**17/04/2007**
pH (field)	pH units																						
pH (lab)	pH units	7.92		8.11	7.92	8.05	7.91	7.93		7.82	7.86		8.03	7.87	7.93	7.99	7.87	7.64	8.32	7.54	8.2	7.77	8.34
Hardness (from dissolved)	mg/L			139	154	142	140	143		153	10		154	154	161	167	164	161	160	158	160	163	216
Hardness (from total)	mg/L																						
Total Dissolved Solids	mg/L	142		166	222	170	204						216	220				124		202	187	298	320
Total Suspended Solids	mg/L	47.1		2	<2	7	<2	<2		<2	<2			<2	2	<2	<2	<2	<2	<2	<1	<2	101
Alkalinity, total	mg/L	83.4		117	132	133	135	132		142	152		148	150	149	156	150	151	152	146	194	151	197
Sulphate, dissolved	mg/L	10.6		19	20.9		21.7	21.3		22.5	20.9		22.3	13.9	21.3	22	22.3	20.9	23.7	20.9		22	32
Chloride	mg/L	<0.5																			1.3	1.42	2.7
Fluoride	mg/L	0.209																					
Nitrite (N)	mg/L	0.0013																			<0.005	<0.03	<0.05
Nitrate (N)	mg/L	0.0716		0.1	0.05	0.05	0.076	0.09		0.07	0.06		<0.03	<0.03	<0.03	0.003	<0.03	<0.03	0.04	0.04	0.08	0.06	<0.1
Ammonia	mg/L	0.038	0.01		0.01	0.003		0.008	0.003		0.006	<0.002		0.005	0.004	0.008	0.006	0.008	0.053	0.006	<0.05	0.01	
Aluminum, total	mg/L	0.997		0.084	0.031	0.223	0.04	0.022		0.035	0.016		0.01	0.013	0.012	0.015	0.012	0.02	0.01	0.055	0.007	0.08	3.55
Arsenic, total	mg/L	0.00114		0.0006	0.0003	0.0006	<0.001	0.0004		0.0005	0.0006		<0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0003	0.0003	0.0004	0.0022
Cadmium, total	mg/L	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00001		<0.00001	<0.00001		<0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00001	<0.00001	<0.00001	0.00007
Calcium, total	mg/L	23.6		32.7	37.8	36.4	39.6	39.8		39.7	39.5		39.5	39.9	41	42.2	40.2	41.3	38	40.4	41.2	43.6	56.5
Chromium, total	mg/L	0.00238		0.0007	<0.0005	<0.0005	<0.002	<0.0005		<0.0005	<0.0005		0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	0.001	<0.0005	<0.0005	<0.0005	0.0059
Copper, total	mg/L	0.0104		0.004	0.003	0.003	<0.005	0.002		0.002	0.002		0.002	0.002	0.004	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.012
Iron, total	mg/L	1.75		0.2	<0.1	0.4	<0.1	<0.1		<0.1	<0.1		<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	0.1	<0.1	0.1	5.1
Lead, total	mg/L	0.000457		<0.0001	<0.0001	0.0001	<0.0005	<0.0001		<0.0001	<0.0001		<0.0002	<0.0001	0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	0.0001	<0.0001	0.0014
Magnesium, total	mg/L	7.78		10.7	11.6	11.5	12	11.7		13.3	12.4		12	12.8	13	13.5	14	13	12	13.5	13.7	13.5	22.9
Manganese, total	mg/L	0.0631		0.008	0.02	0.018	0.013	0.014		0.014	0.013		0.02	0.011	0.018	0.015	0.019	0.01	0.01	0.022	0.025	0.035	0.189
Mercury, total	mg/L																					<0.00005	<0.0001
Molybdenum, total	mg/L	0.00104		0.001	0.001	0.001	<0.005	<0.001		0.001	0.001		<0.002	0.001	0.001	0.001	0.001	<0.002	<0.002	0.001	0.001	0.001	0.001
Nickel, total	mg/L	0.00385		0.0017	0.0013	0.0011	0.003	0.0012		0.0011	0.0012		0.001	0.0013	0.0013	0.0013	0.0016	0.002	0.0024	0.0013	0.0014	0.0013	0.0066
Phosphorus, total	mg/L	<0.3																			0.08		0.17
Potassium, total	mg/L	<2		1.1	1.2	1.1	1.2	1.3		1.2	1.3		1.6	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.6	5.5
Selenium, total	mg/L	<0.001		0.0002	<0.0002	<0.0002	<0.001	<0.0002		<0.0002	0.0002		<0.0004	0.0003	0.0003	<0.0002	0.0004	<0.0004	0.0008	<0.0002	<0.0002	<0.0002	0.0004
Silver, total	mg/L	0.000015		<0.0001	0.0002	<0.0001	<0.0005	<0.0001		<0.0001	0.0002		<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	4.8		7.4	7.9	7.7	9.1	8.7		8.6	9.7		9.4	9.2	9.5	9.8	8.6	8.8	8.6	8.1	8.6	10.2	15.3
Thallium, total	mg/L	<0.0001		<0.00005	<0.00005	<0.00005	<0.0002	<0.00005		<0.00005	<0.00005		<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.0054		0.001	0.002	0.002	<0.005	0.002		0.002	<0.001		0.005	<0.001	0.001	0.002	0.001	0.004	<0.002	<0.001	0.002	0.003	0.025
Aluminum, dissolved	mg/L			0.009	0.01	0.008	<0.005	<0.005		0.007	<0.005		0.007	0.007	<0.005	0.005	<0.005	0.008	<0.005	0.006	0.006	0.007	0.032
Arsenic, dissolved	mg/L			0.0006	0.0004	0.0006	0.0006	0.0005		0.0004	0.0005		0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	<0.0002	0.0004	0.0003	0.0004	0.0008
Cadmium, dissolved	mg/L			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00002
Calcium, dissolved	mg/L			36.3	40.8	33	34.7	36.1		39	3.8		39.3	40	42.2	40.7	42.4	42.1	41.8	41.6	42.7	42	51
Chromium, dissolved	mg/L			<0.0005	0.0006	0.0007	0.0012	0.0012		<0.0005	0.0006		0.0007	0.0009	0.0006	0.001	0.0007	0.0005	0.0005	<0.0005	0.0005	0.0069	0.0017
Copper, dissolved	mg/L			0.002	0.002	0.003	0.002	0.002		<0.001	0.002		0.002	0.002	0.003	0.002	0.002	0.002	<0.001	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L			0.04	0.05	0.03	0.02	0.02		0.04	0.02		0.05	0.06	0.05	0.06	0.06	0.04	0.05	0.03	0.02	0.02	0.05
Lead, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Magnesium, dissolved	mg/L			11.7	12.6	11.4	12.9	12.9		13.5	0.9		13.4	13.1	13.6	13.8	14.1	13.5	13.5	13.2	13.1	14	21.5
Manganese, dissolved	mg/L			<0.005	0.016	<0.005	0.008	0.01		0.011	0.008		0.02	0.013	0.018	0.012	0.02	0.013	0.012	0.018	0.025	0.028	0.046
Mercury, dissolved	mg/L																					<0.0001	
Molydenum, dissolved	mg/L			0.001	0.001	0.001	0.001	0.002		<0.001	<0.001		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001
Nickel, dissolved	mg/L			0.001	0.0014	0.0011	0.0016	0.0006		0.0005	0.0007		0.0009	0.0005	0.001	0.0009	<0.0005	0.0006	0.0008	0.0008	0.0011	0.0009	0.0011
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L			0.4	1.4	1.1	1.1	1.4		1.4	0.8		1.2	1.4	1.4	1.3	1.4	1.4	1.4	1.3	1.4	1.4	5.2
Selenium, dissolved	mg/L			<0.0002	0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004
Silver, dissolved	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L			8.4	8.2	7.9	8.3	8.9		8.9	9.1		9	9.3	9.8	9.6	8.9	9.5	8.7	8.3	9.7	8.8	14.7
Thallium, dissolved	mg/L			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L			<0.001	0.004	<0.001	0.002	0.001		<0.001	<0.001		0.003	<0.001	0.001	0.001	0.002	0.002	<0.001	<0.001	0.002	0.002	0.008

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**26/04/2007**	**19/05/2007**	**30/05/2007**	**20/06/2007**	**27/06/2007**	**04/07/2007**	**18/07/2007**	**15/08/2007**	**18/09/2007**	**17/10/2007**	**22/04/2008**	**13/05/2008**	**20/05/2008**	**03/06/2008**	**08/07/2008**	**23/07/2008**	**07/08/2008**	**28/08/2008**	**31/08/2008**	**07/09/2008**	**11/09/2008**	**19/09/2008**
pH (field)	pH units																						
pH (lab)	pH units	7.44	8.03	8.1	7.95			7.96	8.18	8.18	8.17	8.3	7.94	7.98	8.04	8.15	8.03		8.04	8.1	8.14	8.07	8.12
Hardness (from dissolved)	mg/L	52	116		149			161	160	129	139	162	70	89			120	153					
Hardness (from total)	mg/L			127			124								120								
Total Dissolved Solids	mg/L	136	172	186	188			210	238	200	192	256	128	170	154	232	178		202	206	302	264	244
Total Suspended Solids	mg/L	98	<2	<2	<2			4	<2	10	<2	<2	5	5	<2	<2	10		59	35	48	28	9
Alkalinity, total	mg/L	44	104	116	137			154	166	144	132	169	77	89	116	138	92		113	118	139	129	147
Sulphate, dissolved	mg/L	3.4	15.1	19.6	21.4			21.2	21	12		26.8	8.43	10.2	15.1	20.8	10.6		15	18.5	25.4	20.8	20.9
Chloride	mg/L	1.4	0.9	1	1.1			1.3	1.2	0.99	1.21	1.35	0.82	0.91	1.01	1.14	0.79		1.5	1.55	2.21	1.89	2.33
Fluoride	mg/L																						
Nitrite (N)	mg/L	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	0.03	0.03	<0.01	0.03		0.02	<0.01	0.04	0.04	<0.01
Nitrate (N)	mg/L	<0.1	0.6	0.8	0.9			0.5	0.3	0.04	0.34	<0.02	<0.02	0.02	0.04	0.06	0.15		0.12	0.16	0.16	0.09	0.08
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05			0.1	0.12
Aluminum, total	mg/L	2.88	0.079	0.041	0.065	0.036	4.15	0.253	0.071	0.09	0.125	0.01	0.11	0.17	0.01	0.01	0.385		1.41	0.798	0.944	0.614	0.312
Arsenic, total	mg/L	0.001	0.0005	0.0003	0.0004	0.0005	0.0023	0.0008	0.0005	0.0006	0.0005	0.0009	0.0012	<0.0002	0.0007	0.0004	0.0007		0.001	0.0008	0.0011	0.0011	0.0003
Cadmium, total	mg/L	0.00005	<0.00002	<0.00001	<0.00001	0.00002	0.00006	0.00001	<0.00001	<0.00001	0.00001	<0.00007	<0.00007	<0.00007	<0.00007	<0.00008	0.00002		0.00006	0.00002	0.00004	<0.00001	0.00004
Calcium, total	mg/L	17	30.6	33	39.2	38.2	32.6	41.6	43.4	33.3	36.8	42.6	20.4	24.2	31.2	41	30.8		37	38.9	40.9	35.6	39.4
Chromium, total	mg/L	0.0049	<0.001	<0.0005	0.0008	<0.0005	0.0074	0.0007	<0.0005	0.0007	0.0007	<0.0005	0.0009	0.0014	0.0024	0.0009	0.001		0.0036	0.0025	0.0033	0.0022	0.0017
Copper, total	mg/L	0.009	0.003	0.003	0.003	0.002	0.011	0.003	0.002	0.002	0.002	0.002	0.003	0.002	0.005	0.002	0.004		0.043	0.02	0.052	0.035	0.044
Iron, total	mg/L	3.7	0.2	<0.1	0.1	<0.1	6.1	0.4	<0.2	0.3	0.3	0.03	0.46	0.44	0.12	0.05	0.61		3.55	2.05	2.14	1.39	0.72
Lead, total	mg/L	0.001	<0.0002	<0.0001	<0.0001	<0.0001	0.0016	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0008	0.0001	0.0006		0.0007	0.0004	0.0006	0.0006	0.0002
Magnesium, total	mg/L	4.8	10	10.9	11.7	12.2	10.3	13.5	13	10.1	11	17.6	6.51	7.73	10.2	12.4	9.4		10.3	11.3	12.3	10	11.3
Manganese, total	mg/L	0.2	0.02	0.006	0.007	0.006	0.167	0.018	0.01	0.021	0.023	0.0244	0.0211	0.0223	0.0076	0.0058	0.032		0.103	0.0718	0.116	0.0852	0.102
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001		0.00001	<0.00001	<0.00001	0.00001	<0.00001
Molybdenum, total	mg/L	<0.002	<0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	0.00089	0.00066	0.00072	0.00097	0.00108	<0.001		0.00208	0.00273	0.00344	0.00276	0.00285
Nickel, total	mg/L	0.0061	0.002	0.0007	0.0013	0.0011	0.0087	0.0008	0.0013	0.0018	0.0015	<0.001	0.004	0.004	<0.001	0.001	0.0042		0.01	0.006	0.002	0.003	0.001
Phosphorus, total	mg/L	0.2	0.05	<0.05	<0.05				<0.05	<0.05		0.05	0.04	0.04	0.02	0.01			0.1	0.07	0.07	0.06	0.03
Potassium, total	mg/L	2.6	1	1.5	1.3	1.3	1.4	1.5	1	1.2	1	3.04	1.22	1.25	1.24	1.4	1		2.34	2.86	4.56	3.59	4.3
Selenium, total	mg/L	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0008	<0.0006	0.0006	0.0007	0.0008	0.0004		<0.0006	<0.0006	<0.0006	<0.0006	0.0006
Silver, total	mg/L	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	0.00005		<0.00001	<0.00001	<0.00001	0.00005	0.00016
Sodium, total	mg/L	3.5	6	7.6	8.4	8.9	7.3	9.5	9.6	7.6	7.2	11.4	5	6.4	8	8.8	11.7		9.4	10.4	12.6	10.5	10.7
Thallium, total	mg/L	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Zinc, total	mg/L	0.023	0.007	0.006	0.004	0.003	0.03	0.003	0.006	0.006	0.007	0.006	0.002	0.004	0.003	0.011	0.008		0.015	0.007	0.011	0.008	0.008
Aluminum, dissolved	mg/L	0.058	0.008	<0.005	0.016			0.013	0.009	0.016	0.008	<0.02	<0.02	0.03		<0.01	0.018	0.005	0.047				0.036
Arsenic, dissolved	mg/L	0.0004	0.0005	0.0004	0.0005			0.0006	0.0005	0.0005	0.0004	0.0002	0.0011	0.0018		0.0007	0.0006	0.0003	0.0006				0.0007
Cadmium, dissolved	mg/L	0.00002	<0.00001	<0.00001	<0.00001			<0.00001	<0.00001	<0.00001	<0.00001	<0.00008	<0.00008	<0.00008		<0.00008	<0.00001	<0.00001	<0.00001				<0.00001
Calcium, dissolved	mg/L	14.5	29.4	32.6	39.6			41.9	42.4	34.5	37.1	38.4	18.5	23.7		39.4	31	40.8	34.2				37.6
Chromium, dissolved	mg/L	<0.0005	0.0011	0.0008	<0.0005			<0.0005	0.0005	0.0006	0.0007	<0.0006	<0.0006	0.0014		0.0012	<0.0005	<0.0005	0.0011				0.0021
Copper, dissolved	mg/L	0.003	0.003	0.004	0.003			0.004	0.003	0.002	0.001	0.002	0.002	0.003		0.002	0.004	0.002	0.013				0.015
Iron, dissolved	mg/L	0.14	0.13	0.03	0.05			0.06	0.08	0.17	0.1	<0.02	0.12	0.11		0.02	0.11	0.04	0.33				0.31
Lead, dissolved	mg/L	0.0003	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		0.0002	0.0001	0.0001	0.0002				0.0001
Magnesium, dissolved	mg/L	3.9	10.4	10.8	12.1			13.8	13.2	10.5	11.3	16.1	5.71	7.22		12.1	9.4	12.3	9.65				11
Manganese, dissolved	mg/L	0.045	0.01	<0.005	0.006			0.007	0.008	0.015	0.016	0.022	0.0093	0.0055		0.0049	<0.005	0.007	0.0185				0.0908
Mercury, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001		<0.00001	<0.00001	<0.00001		<0.00001	<0.0001	<0.0001	<0.00001				<0.00001
Molydenum, dissolved	mg/L	<0.001	0.001	0.001	0.001			0.001	0.001	<0.001	<0.001	0.00073	0.00055	0.00091		0.00099	0.001	0.001	0.00214				0.00254
Nickel, dissolved	mg/L	0.0014	0.0008	<0.0005	<0.0005			<0.0005	0.0014	0.0014	<0.0005	<0.001	0.002	0.002		0.001	0.0013	0.0007	0.002				0.002
Phosphorus, dissolved	mg/L	0.09										0.04	<0.01	<0.01		<0.01			0.02				0.01
Potassium, dissolved	mg/L	2.3	1.3	1.4	1.4			1.2	1.3	1	1.1	2.87	0.45	1.32		1.28	0.8	1.3	1.95				4.03
Selenium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	0.0002	<0.0002	<0.0006	<0.0006	<0.0006		<0.0006	<0.0002	<0.0002	<0.0006				0.0013
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001			<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.0010	<0.0010		<0.00001	<0.00001	0.00032	<0.00001				<0.00001
Sodium, dissolved	mg/L	3.2	6.3	7.5	9			9	9.8	7.5	7.3	11.1	4.47	6.15		8.54	7.6	9.7	9.13				11.1
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005			<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001	<0.00005	<0.00005	<0.00001				<0.00001
Zinc, dissolved	mg/L	0.009	0.001	0.002	0.002			0.003	0.005	0.007	0.001	0.003	0.002	0.003		0.003	0.004	0.004	0.003				0.003

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**08/10/2008**	**29/10/2008**	**18/11/2008**	**22/04/2009**	**30/04/2009**	**05/05/2009**	**27/05/2009**	**17/06/2009**	**26/06/2009**	**27/06/2009**	**28/06/2009**	**29/06/2009**	**30/06/2009**	**30/06/2009**	**01/07/2009**	**02/07/2009**	**03/07/2009**	**04/07/2009**	**05/07/2009**	**06/07/2009**	**07/07/2009**	**08/07/2009**
pH (field)	pH units			8.23	8.2	7.4		7.98	8.17		8.21	8.29	7.9	8.26		8.32	8.2	8.18	8.2	8.17	8.11	8.2	8.17
pH (lab)	pH units	8.03		7.88	7.92	7.07	7.03	7.98	7.98	8.2			8.2			8.3	8.2	8.3		8.2			
Hardness (from dissolved)	mg/L		169		151	30	35	117	129	147			164							182			
Hardness (from total)	mg/L									156			165							176			
Total Dissolved Solids	mg/L	162		250	222	64	52	176	138	180			230			250	270	240		240			
Total Suspended Solids	mg/L	3		<2	100	72	87	8	<2	8			40			21	7	10		10			
Alkalinity, total	mg/L	113		150	134	23	24	110	122				130							150			
Sulphate, dissolved	mg/L	12.3		23.2	21.5	1.02	1.4	17.9	18				29							41			
Chloride	mg/L	1.12		1.73	1.4	0.54	0.5	0.87	1.22				2.6							2.7			
Fluoride	mg/L												0.43							0.43			
Nitrite (N)	mg/L	<0.01								<0.005			0.044							0.024			
Nitrate (N)	mg/L	0.15								0.1			2.23							2.19			
Ammonia	mg/L	0.07		<0.05						0.007			<0.005							<0.005			
Aluminum, total	mg/L	0.118		0.062	2.62	2.04	1.93	0.11	0.025	0.034			0.871							0.212			
Arsenic, total	mg/L	0.0006		0.0002	0.0018	0.001	0.0011	0.0005	0.0003	0.0004			0.001							0.0006			
Cadmium, total	mg/L	<0.00001		0.00003	0.00006	0.00007	0.00006	0.00094	0.00001	0.00002			0.00003							0.00002			
Calcium, total	mg/L	35.3		41.5	42.9	10	11.4	32.4	35.2	41.4			43.7							47.5			
Chromium, total	mg/L	0.0013		<0.0005	0.0052	0.0043	0.0046	0.0012	0.0005	<0.001			0.002							<0.001			
Copper, total	mg/L	0.01		0.014	0.016	0.022	0.018	0.008	0.004	0.0049			0.0287							0.0231			
Iron, total	mg/L	0.38		0.1	4.08	3.45	2.98	0.26	0.06	0.07			1.37							0.427			
Lead, total	mg/L	0.0001		<0.0001	0.0018	0.0012	0.0011	0.0004	<0.0001	<0.0002			0.0006							0.0002			
Magnesium, total	mg/L	10.2		12.4	16.3	3.44	3.34	10.6	11.1	12.7			13.6							13.9			
Manganese, total	mg/L	0.034		0.021	0.113	0.155	0.135	0.0215	0.0042	0.006			0.112							0.028			
Mercury, total	mg/L	<0.00001		<0.0001	0.00001	0.00002	0.00001	<0.00001	<0.00001	<0.00002			<0.00002							<0.00002			
Molybdenum, total	mg/L	0.00099		0.001	0.00072	0.00024	0.00028	0.00173	0.00162	0.002			0.007							0.007			
Nickel, total	mg/L	0.002		0.0014	0.004	0.004	0.005	0.002	0.001	0.001			0.003							0.001			
Phosphorus, total	mg/L	<0.01			0.18	0.19	0.162	<0.05	0.014														
Potassium, total	mg/L	1.2		1.4	3.7	2.3	1.6	1.5	1.4	1.56			3.75							3.91			
Selenium, total	mg/L	<0.0006		<0.0002	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002			0.0015							0.0015			
Silver, total	mg/L	<0.00001		0.00005	<0.00001	0.00004	<0.00001	<0.00001	0.00068	<0.00002			<0.00002							<0.00002			
Sodium, total	mg/L			9.6	9.83	1.73	1.7	8.08	8.25	9.04			12.9							13.1			
Thallium, total	mg/L	<0.00001		<0.00005	0.00003	0.00002	0.00002	<0.00001	<0.00001	<0.00005			<0.00005							<0.00005			
Zinc, total	mg/L	0.008		0.008	0.015	0.07	0.016	0.007	0.004	<0.005			0.007							<0.005			
Aluminum, dissolved	mg/L	0.011	0.005	0.016	0.055	0.076	0.102	0.013	0.013	0.007			0.027							0.017			
Arsenic, dissolved	mg/L	0.0005	0.0004	0.0003	0.0005	0.0003	0.0003	0.0004	0.0004	0.0004			0.0005							0.0005			
Cadmium, dissolved	mg/L	0.00001	<0.00001	0.00002	0.00004	0.00104	0.00008	0.00025	<0.00001	<0.00001			0.00002							0.00002			
Calcium, dissolved	mg/L	28.5	43.9	39.4	36.6	8.18	9.87	30.4	34	39			43.2							50			
Chromium, dissolved	mg/L	0.0009	0.0008	<0.0005	0.0005	0.0008	0.0012	0.0015	<0.0004	<0.001			<0.001							<0.001			
Copper, dissolved	mg/L	0.006	0.004	0.005	0.006	0.01	0.006	0.01	0.003	0.0029			0.0167							0.0194			
Iron, dissolved	mg/L	0.112	0.06	0.05	0.08	0.14	0.28	0.1	0.04	0.022			0.127							0.081			
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0003	0.0003	0.0002	0.0003	<0.0001	<0.0002			<0.0002							<0.0002			
Magnesium, dissolved	mg/L	8.47	14.4	12.5	14.5	2.25	2.55	9.89	10.8	12.1			13.6							14			
Manganese, dissolved	mg/L	0.0176	0.0091	0.016	0.0344	0.0263	0.0301	0.003	0.0033	0.003			0.003							0.004			
Mercury, dissolved	mg/L	<0.00001	<0.00001	<0.0001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00002			<0.00002							<0.00002			
Molydenum, dissolved	mg/L	0.00096	0.00098	0.001	0.00072	0.00018	0.00029	0.00145	0.00142	0.002			0.008							0.007			
Nickel, dissolved	mg/L	0.002	0.001	0.0012	<0.001	<0.001	0.001	0.001	0.001	0.001			0.001							<0.001			
Phosphorus, dissolved	mg/L	<0.01	0.01		0.11	0.09	0.04	<0.01	0.01														
Potassium, dissolved	mg/L	1	1.5	1.5	3.2	2	1.5	1.4	1.4	1.45			3.55							4.09			
Selenium, dissolved	mg/L	<0.0006	<0.0006	<0.0002	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0001			0.0015							0.0014			
Silver, dissolved	mg/L	0.00006	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002			<0.00002							<0.00002			
Sodium, dissolved	mg/L	5.5	9.6	10.6	9.7	1.6	1.6	7.5	8.1	8.54			13.3							13.9			
Thallium, dissolved	mg/L	0.00001	<0.00001	<0.00005	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005			<0.00005							<0.00005			
Zinc, dissolved	mg/L	0.002	0.007	0.006	0.005	0.02	0.006	0.004	0.001	<0.005			<0.005							<0.005			

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**08/07/2009**	**09/07/2009**	**09/07/2009**	**10/07/2009**	**10/07/2009**	**11/07/2009**	**11/07/2009**	**12/07/2009**	**12/07/2009**	**13/07/2009**	**14/07/2009**	**15/07/2009**	**16/07/2009**	**17/07/2009**	**18/07/2009**	**19/07/2009**	**20/07/2009**	**21/07/2009**	**22/07/2009**	**22/07/2009**	**23/07/2009**	**24/07/2009**
pH (field)	pH units		8.46		8.4		8.38		8.39		8.4	8.42	8.36	8.41	8.3	8.61	8.34	8.19	8.34	8.43		8.32	8.37
pH (lab)	pH units									8.3			8.3	8.2	8.2	8	8.2			8.1	8		
Hardness (from dissolved)	mg/L									180				179	175	131			160				
Hardness (from total)	mg/L									185				199	194	150			158				
Total Dissolved Solids	mg/L									270			260	240	230	210	220			210	230		
Total Suspended Solids	mg/L	9		10		9		7		6			11	10	8	31				5	6		
Alkalinity, total	mg/L									160				160	160	84							
Sulphate, dissolved	mg/L									39				47	46	46							
Chloride	mg/L									2.8				3.1	3	8.6							
Fluoride	mg/L									0.41				0.43	0.46	0.37							
Nitrite (N)	mg/L									0.022				0.026	0.025	0.125			0.045				
Nitrate (N)	mg/L									2.15				1.96	2.02	5.8			2.7				
Ammonia	mg/L									<0.005				0.007	<0.005	0.83			0.029				
Aluminum, total	mg/L									0.15				0.221	0.161	1.18			0.374				
Arsenic, total	mg/L									0.0005				0.0006	0.0005	0.0015			0.0005				
Cadmium, total	mg/L									0.00003				0.00003	0.00002	0.00007			0.00004				
Calcium, total	mg/L									49.4				53	51.5	41.5			43.2				
Chromium, total	mg/L									<0.001				0.001	<0.001	0.003			0.001				
Copper, total	mg/L									0.0205				0.0352	0.0318	0.0611			0.0166				
Iron, total	mg/L									0.301				0.468	0.352	1.82			0.647				
Lead, total	mg/L									0.0002				0.0002	0.0002	0.0017			0.0004				
Magnesium, total	mg/L									15.1				16.2	15.8	11.4			12.1				
Manganese, total	mg/L									0.023				0.033	0.025	0.156			0.038				
Mercury, total	mg/L									0.00003				<0.00002	0.00016	0.00004			<0.00002				
Molybdenum, total	mg/L									0.007				0.009	0.009	0.017			0.007				
Nickel, total	mg/L									0.001				0.002	0.001	0.004			0.002				
Phosphorus, total	mg/L																						
Potassium, total	mg/L									3.87				4.52	4.48	3.71			2.66				
Selenium, total	mg/L									0.0011				0.0014	0.0013	0.0022			0.0008				
Silver, total	mg/L									<0.00002				<0.00002	<0.00002	0.00002			<0.00002				
Sodium, total	mg/L									13.6				15	14.9	11.7			9.89				
Thallium, total	mg/L									<0.00005				<0.00005	<0.00005	<0.00005			<0.00005				
Zinc, total	mg/L									0.006				<0.005	<0.005	0.011			0.009				
Aluminum, dissolved	mg/L									0.013				0.016	0.015	0.046			0.011				
Arsenic, dissolved	mg/L									0.0005				0.0005	0.0005	0.0009			0.0004				
Cadmium, dissolved	mg/L									0.00001				0.00001	<0.00001	0.00003			0.00002				
Calcium, dissolved	mg/L									48.4				48.2	47.2	37.1			43				
Chromium, dissolved	mg/L									<0.001				<0.001	<0.001	<0.001			<0.001				
Copper, dissolved	mg/L									0.0163				0.0227	0.0226	0.0192			0.0084				
Iron, dissolved	mg/L									0.063				0.077	0.076	0.097			0.043				
Lead, dissolved	mg/L									<0.0002				<0.0002	<0.0002	0.0003			<0.0002				
Magnesium, dissolved	mg/L									14.4				14.2	13.8	9.37			12.8				
Manganese, dissolved	mg/L									0.003				0.002	0.003	0.093			0.004				
Mercury, dissolved	mg/L									<0.00002				<0.00002	<0.00002	0.00003			0.00007				
Molydenum, dissolved	mg/L									0.007				0.007	0.008	0.015			0.007				
Nickel, dissolved	mg/L									<0.001				0.001	0.001	0.001			0.001				
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L									3.81				4.01	4.04	3.02			2.66				
Selenium, dissolved	mg/L									0.0011				0.0013	0.0013	0.0021			0.0009				
Silver, dissolved	mg/L									<0.00002				<0.00002	<0.00002	<0.00002			<0.00002				
Sodium, dissolved	mg/L									13.4				13.7	13.4	10.4			10.8				
Thallium, dissolved	mg/L									<0.00005				<0.00005	<0.00005	<0.00005			<0.00005				
Zinc, dissolved	mg/L									<0.005				<0.005	<0.005	<0.005			<0.005				

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**24/07/2009**	**25/07/2009**	**25/07/2009**	**26/07/2009**	**26/07/2009**	**27/07/2009**	**28/07/2009**	**29/07/2009**	**30/07/2009**	**31/07/2009**	**01/08/2009**	**01/08/2009**	**02/08/2009**	**02/08/2009**	**03/08/2009**	**03/08/2009**	**04/08/2009**	**05/08/2009**	**08/08/2009**	**09/08/2009**	**10/08/2009**	**11/08/2009**
pH (field)	pH units		8.39			8.43	8.4	7.94	7.9	7.79	8.36		8.1		7.87		8.13	8	8.34		7.85	7.8	
pH (lab)	pH units	8.2		8.2	8.1	8.2	8.2	8.05	8.1	8.1	8.1	8.2		8.2		8.1		8.3	8.3	8.2			8.05
Hardness (from dissolved)	mg/L			159				155				186											138
Hardness (from total)	mg/L			180								180								194			
Total Dissolved Solids	mg/L	220		240	200	230	230	224	210	200	210	230		240		240		260	240	200			234
Total Suspended Solids	mg/L	17		14	8	11	8	12	<4	<4	4	5		4		<4		7	<4	<4			<2
Alkalinity, total	mg/L			140				107				140											140
Sulphate, dissolved	mg/L			42				37.9				38											24
Chloride	mg/L			5.6				5.65				6.2											1.91
Fluoride	mg/L			0.38								0.37											
Nitrite (N)	mg/L			0.055								0.014								<0.005			
Nitrate (N)	mg/L			2.9								1.56								0.38			
Ammonia	mg/L			0.013								0.01								<0.005			
Aluminum, total	mg/L			0.395								0.192								0.14			0.05
Arsenic, total	mg/L			0.0005								0.0005								0.0006			0.0007
Cadmium, total	mg/L			<0.00001								0.00003								0.00062			<0.00001
Calcium, total	mg/L			49.3								48.5								51.6			39.5
Chromium, total	mg/L			<0.001								<0.001								<0.001			0.001
Copper, total	mg/L			0.0243								0.0161								0.0127			0.004
Iron, total	mg/L			0.596								0.312								0.371			0.204
Lead, total	mg/L			0.0005								0.0005								0.0006			0.0003
Magnesium, total	mg/L			13.8								14.3								15.9			12.5
Manganese, total	mg/L			0.051								0.025								0.026			0.014
Mercury, total	mg/L			<0.00002								0.00002								<0.00002			
Molybdenum, total	mg/L			0.009								0.008								0.003			0.0021
Nickel, total	mg/L			0.002								0.001								0.002			0.002
Phosphorus, total	mg/L																						<0.01
Potassium, total	mg/L			3.64								3.4								2.47			1.6
Selenium, total	mg/L			0.0013								0.0012								0.0003			<0.0006
Silver, total	mg/L			<0.00002								<0.00002								<0.00002			<0.00001
Sodium, total	mg/L			13.3								13.5								11.6			9.12
Thallium, total	mg/L			<0.00005								<0.00005								<0.00005			<0.00001
Zinc, total	mg/L			0.01								<0.005								0.007			0.002
Aluminum, dissolved	mg/L			0.013								0.035											0.008
Arsenic, dissolved	mg/L			0.0005								0.0005											0.0004
Cadmium, dissolved	mg/L			0.00002								0.00003											<0.00001
Calcium, dissolved	mg/L			43.5								52.3											36.6
Chromium, dissolved	mg/L			<0.001								<0.001											0.0009
Copper, dissolved	mg/L			0.0128								0.0097											0.001
Iron, dissolved	mg/L			0.052								0.047											0.05
Lead, dissolved	mg/L			<0.0002								<0.0002											0.0009
Magnesium, dissolved	mg/L			12.3								13.6											11.4
Manganese, dissolved	mg/L			0.002								0.003											0.0046
Mercury, dissolved	mg/L			<0.00002								0.00004											
Molybdenum, dissolved	mg/L			0.009								0.008											0.0019
Nickel, dissolved	mg/L			0.001								0.001											0.001
Phosphorus, dissolved	mg/L																						0.01
Potassium, dissolved	mg/L			3.38								3.46											1.4
Selenium, dissolved	mg/L			0.0014								0.0012											<0.0006
Silver, dissolved	mg/L			<0.00002								<0.00002											<0.00001
Sodium, dissolved	mg/L			11.5								13.2											8.4
Thallium, dissolved	mg/L			<0.00005								<0.00005											<0.00001
Zinc, dissolved	mg/L			<0.005								<0.005											0.001

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**12/08/2009**	**14/08/2009**	**15/08/2009**	**16/08/2009**	**17/08/2009**	**18/08/2009**	**19/08/2009**	**20/08/2009**	**21/08/2009**	**22/08/2009**	**23/08/2009**	**24/08/2009**	**25/08/2009**	**26/08/2009**	**27/08/2009**	**28/08/2009**	**29/08/2009**	**30/08/2009**	**31/08/2009**	**01/09/2009**	**02/09/2009**	**03/09/2009**
pH (field)	pH units		7.87	7.83	7.79	7.87	7.84	7.96	8.1	8.08	7.93	8.08	8.07	7.97	8.01	8.02	7.97	8.04	7.87	7.95	7.94	7.97	7.95
pH (lab)	pH units	8.1	8.1	8.2	8.2	8.2	8.2	8	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8	8.1	8	8	8	8.1	8.1	8.1
Hardness (from dissolved)	mg/L	148		164				157			167								167				
Hardness (from total)	mg/L	157		166				225			161								229				
Total Dissolved Solids	mg/L	220	260	220	230	240	240	220	210	220	230	230	180	240	240	240	240	250	230	230	230	240	250
Total Suspended Solids	mg/L	<4	18	15	13	17	100	550	33	21	15	20	13	13	22	15	15	13	71	50	20	14	13
Alkalinity, total	mg/L	140		120				120	120	120	120	120	110						110				
Sulphate, dissolved	mg/L	19		38				30	32	33	35	35	34						39				
Chloride	mg/L	2.2		11				10	11	11	12	12	14						20				
Fluoride	mg/L	0.32		0.27				0.26	0.28	0.28	0.29	0.29	0.28						0.26				
Nitrite (N)	mg/L	<0.005		0.04				0.014	0.023	0.024	0.024	0.025	0.029						0.023				
Nitrate (N)	mg/L	0.33		3.4				3.2	3.4	3.6	3.8	3.8	4						4.5				
Ammonia	mg/L	<0.005		0.012				<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005				
Aluminum, total	mg/L	0.047		0.339				8.02			0.395								1.92				
Arsenic, total	mg/L	0.0003		0.0005				0.0052			0.0006								0.0012				
Cadmium, total	mg/L	0.00003		0.00026				0.00018			0.00004								0.00007				
Calcium, total	mg/L	41.7		45.8				62.8			44								61.6				
Chromium, total	mg/L	<0.001		<0.001				0.014			0.001								0.003				
Copper, total	mg/L	0.0113		0.0118				0.0656			0.011								0.0247				
Iron, total	mg/L	0.124		0.625				11.7			0.614								2.24				
Lead, total	mg/L	0.0005		0.0008				0.0043			0.0009								0.0013				
Magnesium, total	mg/L	12.9		12.6				16.6			12.5								18.3				
Manganese, total	mg/L	0.012		0.056				0.443			0.049								0.165				
Mercury, total	mg/L	0.00002		<0.00002				<0.00002			0.00003								<0.00002				
Molybdenum, total	mg/L	0.002		0.009				0.008			0.009								0.011				
Nickel, total	mg/L	0.001		0.002				0.015			0.001								0.004				
Phosphorus, total	mg/L																						
Potassium, total	mg/L	1.67		2.83				4.11			2.66								3.74				
Selenium, total	mg/L	0.0003		0.0011				0.0011			0.001								0.0015				
Silver, total	mg/L	<0.00002		<0.00002				0.00005			<0.00002								<0.00002				
Sodium, total	mg/L	9.29		12.5				12			12.1								19				
Thallium, total	mg/L	<0.00005		<0.00005				0.0001			<0.00005								<0.00005				
Zinc, total	mg/L	<0.005		0.006				0.032			0.005								0.014				
Aluminum, dissolved	mg/L	0.007		0.016				0.023			0.018								0.072				
Arsenic, dissolved	mg/L	0.0004		0.0004				0.0006			0.0004								0.0003				
Cadmium, dissolved	mg/L	<0.00001		0.00001				0.00001			0.00002								<0.00001				
Calcium, dissolved	mg/L	39.9		44.7				42.5			46								44.9				
Chromium, dissolved	mg/L	<0.001		<0.001				<0.001			<0.001								<0.001				
Copper, dissolved	mg/L	0.0028		0.0037				0.0036			0.0035								0.0079				
Iron, dissolved	mg/L	0.042		0.027				0.041			0.035								0.033				
Lead, dissolved	mg/L	<0.0002		<0.0002				<0.0002			<0.0002								<0.0002				
Magnesium, dissolved	mg/L	11.9		12.7				12.2			12.7								13.3				
Manganese, dissolved	mg/L	0.005		0.001				<0.001			0.002								0.005				
Mercury, dissolved	mg/L	<0.00002		<0.00002				<0.00002			<0.00002								<0.00002				
Molydenum, dissolved	mg/L	0.002		0.009				0.008			0.009								0.008				
Nickel, dissolved	mg/L	<0.001		<0.001				<0.001			<0.001								<0.001				
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	1.65		2.75				2.54			2.82								2.66				
Selenium, dissolved	mg/L	0.0002		0.0011				0.001			0.0011								0.0011				
Silver, dissolved	mg/L	<0.00002		<0.00002				<0.00002			<0.00002								<0.00002				
Sodium, dissolved	mg/L	8.72		12.5				11.6			12.5								14.8				
Thallium, dissolved	mg/L	<0.00005		<0.00005				<0.00005			<0.00005								<0.00005				
Zinc, dissolved	mg/L	<0.005		<0.005				<0.005			<0.005								<0.005				

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**04/09/2009**	**05/09/2009**	**06/09/2009**	**07/09/2009**	**08/09/2009**	**09/09/2009**	**10/09/2009**	**11/09/2009**	**12/09/2009**	**13/09/2009**	**14/09/2009**	**15/09/2009**	**16/09/2009**	**17/09/2009**	**18/09/2009**	**19/09/2009**	**20/09/2009**	**21/09/2009**	**22/09/2009**	**23/09/2009**	**24/09/2009**	**25/09/2009**
pH (field)	pH units	7.91	8	8.07	8.13	8.24	8.2	8.14	8.2	8.39	8.19	8.22	8.12	8.25	8.02	8.45	8.21	8.24	7.93	8.08	8.28	8.09	8.12
pH (lab)	pH units	8.1	8.1	8	8.1	8.1	8.1	8.1	8.1	7.9	8.1	8	8.1	7.9	8.1	7.6	8.1	8.1	8	8	8	8.1	8
Hardness (from dissolved)	mg/L			155							170							169					
Hardness (from total)	mg/L			175							171							188					
Total Dissolved Solids	mg/L	230	250	240	240	240	250	260	260	270	270	250	260	260	250	250	250	230	270	240	250	240	250
Total Suspended Solids	mg/L	14	11	12	7	10	17	8	7	7	6	6	7	4	6	6	<4	<4	<4	<4	<4	5	5
Alkalinity, total	mg/L			100							110												
Sulphate, dissolved	mg/L			42																			
Chloride	mg/L			22																			
Fluoride	mg/L			0.25																			
Nitrite (N)	mg/L			0.012							0.019							0.014					
Nitrate (N)	mg/L			4.8							4.6							5.1					
Ammonia	mg/L			<0.005							<0.005							<0.005					
Aluminum, total	mg/L			0.257							0.191							0.169					
Arsenic, total	mg/L			0.0005							0.0004							0.0004					
Cadmium, total	mg/L			0.00003							0.00004							0.00003					
Calcium, total	mg/L			48							46.9							51.2					
Chromium, total	mg/L			<0.001							<0.001							<0.001					
Copper, total	mg/L			0.0056							0.0035							0.0034					
Iron, total	mg/L			0.411							0.237							0.199					
Lead, total	mg/L			0.0005							0.0004							0.0004					
Magnesium, total	mg/L			13.4							13.1							14.7					
Manganese, total	mg/L			0.046							0.029							0.03					
Mercury, total	mg/L			<0.00002							<0.00002							0.00003					
Molybdenum, total	mg/L			0.009							0.009							0.01					
Nickel, total	mg/L			0.001							0.001							0.001					
Phosphorus, total	mg/L																						
Potassium, total	mg/L			2.75							2.7							2.9					
Selenium, total	mg/L			0.0012							0.0012							0.0012					
Silver, total	mg/L			<0.00002							<0.00002							<0.00002					
Sodium, total	mg/L			14.9							14.4							15.3					
Thallium, total	mg/L			<0.00005							<0.00005							<0.00005					
Zinc, total	mg/L			<0.005							<0.005							<0.005					
Aluminum, dissolved	mg/L			0.03							0.048							0.038					
Arsenic, dissolved	mg/L			0.0004							0.0003							0.0004					
Cadmium, dissolved	mg/L			<0.00001							0.00001							0.00002					
Calcium, dissolved	mg/L			42.7							46.8							46.8					
Chromium, dissolved	mg/L			<0.001							<0.001							<0.001					
Copper, dissolved	mg/L			0.0016							0.0015							0.0015					
Iron, dissolved	mg/L			0.024							0.032							0.029					
Lead, dissolved	mg/L			<0.0002							<0.0002							<0.0002					
Magnesium, dissolved	mg/L			11.8							12.8							12.7					
Manganese, dissolved	mg/L			0.002							0.01							0.013					
Mercury, dissolved	mg/L			<0.00002							<0.00002							0.00006					
Molydenum, dissolved	mg/L			0.009							0.009							0.01					
Nickel, dissolved	mg/L			<0.001							<0.001							<0.001					
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L			2.37							2.47							2.53					
Selenium, dissolved	mg/L			0.0011							0.0011							0.0013					
Silver, dissolved	mg/L			<0.00002							<0.00002							<0.00002					
Sodium, dissolved	mg/L			13.6							14.5							14.5					
Thallium, dissolved	mg/L			<0.00005							<0.00005							<0.00005					
Zinc, dissolved	mg/L			<0.005							<0.005							<0.005					

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**26/09/2009**	**27/09/2009**	**28/09/2009**	**29/09/2009**	**30/09/2009**	**01/10/2009**	**02/10/2009**	**03/10/2009**	**04/10/2009**	**05/10/2009**	**06/10/2009**	**07/10/2009**	**08/10/2009**	**09/10/2009**	**10/10/2009**	**11/10/2009**	**12/10/2009**	**13/10/2009**	**14/10/2009**	**15/10/2009**	**16/10/2009**	**17/10/2009**
pH (field)	pH units	8.24	8.13	8.11	8.33	8.02	7.82	7.79	7.65	7.7	7.8	8.03	8.1	8.03	8	8.05	8.11	8.16	8.13	8.43	8.4	7.7	8.2
pH (lab)	pH units	8.1	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Hardness (from dissolved)	mg/L	168								174							186						
Hardness (from total)	mg/L	177								183							170						
Total Dissolved Solids	mg/L	230	270	240	240	260	250	240	190	270	270	270	280	270	270	260	270	260	260	240	270	240	240
Total Suspended Solids	mg/L	4	5	5	<4	<4	5	<4	6	5	<4	7	<4	5	5	<4	4	6	9	9	<4	9	12
Alkalinity, total	mg/L																						
Sulphate, dissolved	mg/L																						
Chloride	mg/L																						
Fluoride	mg/L																						
Nitrite (N)	mg/L	0.012								0.014							0.013						
Nitrate (N)	mg/L	5.3								4.9							5.7						
Ammonia	mg/L	<0.005								<0.005							<0.005						
Aluminum, total	mg/L	0.127								0.131							0.144						
Arsenic, total	mg/L	0.0005								0.0004							0.0004						
Cadmium, total	mg/L	0.00016								0.00016							0.00005						
Calcium, total	mg/L	48.1								50.9							46.8						
Chromium, total	mg/L	<0.001								<0.001							<0.001						
Copper, total	mg/L	0.0109								0.008							0.0034						
Iron, total	mg/L	0.178								0.177							0.205						
Lead, total	mg/L	0.0007								0.0004							<0.0002						
Magnesium, total	mg/L	13.8								13.6							12.9						
Manganese, total	mg/L	0.03								0.038							0.05						
Mercury, total	mg/L	0.00003								<0.00002							0.00005						
Molybdenum, total	mg/L	0.01								0.011							0.01						
Nickel, total	mg/L	0.003								0.001							0.001						
Phosphorus, total	mg/L																						
Potassium, total	mg/L	2.44								2.62							2.41						
Selenium, total	mg/L	0.0011								0.0013							0.0013						
Silver, total	mg/L	<0.00002								<0.00002							<0.00002						
Sodium, total	mg/L	14.6								13.9							13						
Thallium, total	mg/L	<0.00005								<0.00005							<0.00005						
Zinc, total	mg/L	0.012								<0.005							<0.005						
Aluminum, dissolved	mg/L	0.033								0.032							0.039						
Arsenic, dissolved	mg/L	0.0004								0.0004							0.0004						
Cadmium, dissolved	mg/L	0.00002								0.00002							0.00001						
Calcium, dissolved	mg/L	45.9								47.8							51.2						
Chromium, dissolved	mg/L	<0.001								<0.001							<0.001						
Copper, dissolved	mg/L	0.0015								0.0013							0.0014						
Iron, dissolved	mg/L	0.03								0.025							0.029						
Lead, dissolved	mg/L	<0.0002								<0.0002							<0.0002						
Magnesium, dissolved	mg/L	12.9								13.2							14.1						
Manganese, dissolved	mg/L	0.013								0.017							0.032						
Mercury, dissolved	mg/L	0.00003								0.00006							<0.00002						
Molydenum, dissolved	mg/L	0.01								0.011							0.011						
Nickel, dissolved	mg/L	<0.001								<0.001							<0.001						
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	2.52								2.51							2.62						
Selenium, dissolved	mg/L	0.0012								0.0013							0.0014						
Silver, dissolved	mg/L	<0.00002								<0.00002							<0.00002						
Sodium, dissolved	mg/L	13.6								13.7							14.9						
Thallium, dissolved	mg/L	<0.00005								<0.00005							<0.00005						
Zinc, dissolved	mg/L	<0.005								<0.005							<0.005						

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**18/10/2009**	**19/10/2009**	**20/10/2009**	**21/10/2009**	**22/10/2009**	**23/10/2009**	**24/10/2009**	**25/10/2009**	**25/10/2009**	**26/10/2009**	**27/10/2009**	**28/10/2009**	**29/10/2009**	**30/10/2009**	**05/11/2009**	**06/11/2009**	**07/04/2010**	**19/04/2010**	**20/04/2010**	**21/04/2010**	**22/04/2010**	**23/04/2010**
pH (field)	pH units	8.3	8.3	8.25	8.21	8.25	8.13	8.09	8.11	8.11	8.16	8.05	8.12	7.79	7.81	7.65		7.81	7.69	7.76	6.88	6.93	7.64
pH (lab)	pH units	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.1		8.1	8.1	8.2	8.2	8.1		7.88	8.26	7.83	7.72	7.2	7.47	7.48
Hardness (from dissolved)	mg/L			185					176			174					149						
Hardness (from total)	mg/L			199					189			190						280	90	66	46	52	53
Total Dissolved Solids	mg/L	240	200	180	220	200	200	210	220		230	220	210	240	230		230	382	174	148	130	130	114
Total Suspended Solids	mg/L	<4	<4	<4	<4	47	<4	<4	4		<4	<4	<4	<4	4		<2	34	49	12	19	8	<5
Alkalinity, total	mg/L			130					130			130					134	250	92	64	38	43	45
Sulphate, dissolved	mg/L																25	52	10	6.5	4.5	3.7	4
Chloride	mg/L																6.01	5	1.49	1.26	0.97	1.01	0.95
Fluoride	mg/L			0.32																			
Nitrite (N)	mg/L			<0.005					<0.005			<0.005											
Nitrate (N)	mg/L			4.6					3.9			3.8					0.95		0.02	0.04	0.02	0.06	
Ammonia	mg/L			<0.005					<0.005			<0.005											
Aluminum, total	mg/L			0.056					0.108			0.056					0.03	1.26	1.08	0.224	0.625	0.09	0.189
Arsenic, total	mg/L			0.0003					0.0004			0.0003					0.0004	0.0011	0.0009	0.0004	0.0006	0.0003	0.0005
Cadmium, total	mg/L			<0.00001					0.00003			0.00005					<0.00001	0.00003	0.00004	0.00012	0.00003	0.00003	0.00002
Calcium, total	mg/L			55					51			51.3					44.9	70.3	25.5	18.6	13.8	14.9	15.7
Chromium, total	mg/L			<0.001					<0.001			<0.001					<0.0004	0.0028	0.002	0.0006	0.0009	0.0005	0.0006
Copper, total	mg/L			0.003					0.0039			0.0036					0.002	0.018	0.014	0.008	0.007	0.006	0.006
Iron, total	mg/L			0.128					0.219			0.13					0.04	1.91	1.33	0.312	0.572	0.217	0.334
Lead, total	mg/L			<0.0002					<0.0002			<0.0002					<0.0001	0.0007	0.0005	0.0002	0.0002	0.0001	0.0002
Magnesium, total	mg/L			15.1					14.9			15.2					14.1	29.2	8.52	5.5	4.13	4.37	4.66
Manganese, total	mg/L			0.029					0.027			0.019					0.0124	0.0888	0.103	0.0483	0.0521	0.0316	0.0318
Mercury, total	mg/L			<0.00002					<0.00002			<0.00002					<0.00001	<0.00001	0.00001	0.00001	0.00002	0.00002	0.00001
Molybdenum, total	mg/L			0.008					0.007			0.007					0.0024	0.0009	0.0006	0.0005	0.0004	0.0004	0.0004
Nickel, total	mg/L			0.001					0.001			0.001					0.002	0.003	0.003	0.001	0.002	0.001	0.001
Phosphorus, total	mg/L																<0.05	0.11	0.18	0.15	0.13	0.12	0.13
Potassium, total	mg/L			2.44					2.26			2.13					1.6	4.1	2.8	2.5	2.2	2.1	1.9
Selenium, total	mg/L			0.0011					0.001			0.0009					<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silver, total	mg/L			<0.00002					<0.00002			<0.00002					<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, total	mg/L			13.4					13.3			13.5					11.2	18.9	5.46	3.77	2.58	2.67	2.99
Thallium, total	mg/L			<0.00005					<0.00005			<0.00005					<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Zinc, total	mg/L			<0.005					<0.005			<0.005					0.006	0.008	0.008	0.013	0.006	0.005	0.007
Aluminum, dissolved	mg/L			0.018					0.014			0.014					0.009	<0.005	0.012	0.05	0.07	0.039	0.047
Arsenic, dissolved	mg/L			0.0003					0.0003			0.0004					0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004
Cadmium, dissolved	mg/L			<0.00001					<0.00001			0.00002					0.00002	0.00005	0.00001	0.00026	<0.00001	<0.00001	0.00002
Calcium, dissolved	mg/L			51.2					48.3			48					39.5	66.7	23.4	17.9	12.3	14	14.3
Chromium, dissolved	mg/L			<0.001					<0.001			<0.001					<0.0004	0.0006	<0.0004	0.0004	<0.0004	<0.0004	<0.0004
Copper, dissolved	mg/L			0.0016					0.0016			0.0015					0.002	0.008	0.005	0.009	0.009	0.005	0.005
Iron, dissolved	mg/L			0.029					0.026			0.042					0.03	0.04	0.06	0.14	0.15	0.14	0.15
Lead, dissolved	mg/L			<0.0002					<0.0002			<0.0002					0.0001	0.0002	0.0002	0.0002	0.0004	<0.0001	0.0002
Magnesium, dissolved	mg/L			13.9					13.4			13.1					12.2	27.5	7.8	5.2	3.6	4.1	4.2
Manganese, dissolved	mg/L			0.013					0.009			0.01					0.0086	0.0337	0.0468	0.0363	0.0268	0.002	0.0011
Mercury, dissolved	mg/L			<0.00002					<0.00002			0.00007					0.00008	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00001
Molydenum, dissolved	mg/L			0.008					0.007			0.007					0.0022	0.0014	0.0006	0.0005	0.0002	0.0002	0.0003
Nickel, dissolved	mg/L			<0.001					<0.001			<0.001					0.002	0.001	0.001	0.001	0.001	0.002	0.001
Phosphorus, dissolved	mg/L																<0.01	<0.01	0.08	0.08	0.06	0.05	0.05
Potassium, dissolved	mg/L			2.34					2.11			2.01					1.5	4	2.5	2.3	1.9	1.9	1.8
Selenium, dissolved	mg/L			0.0013					0.0008			0.0009					<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silver, dissolved	mg/L			<0.00002					<0.00002			<0.00002					<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L			13.3					12.1			11.7					9.2	18.8	5.2	3.6	2.4	2.6	2.7
Thallium, dissolved	mg/L			<0.00005					<0.00005			<0.00005					<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Zinc, dissolved	mg/L			<0.005					<0.005			<0.005					0.002	0.004	0.005	0.006	0.007	0.008	<0.001

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**24/04/2010**	**25/04/2010**	**26/04/2010**	**27/04/2010**	**28/04/2010**	**29/04/2010**	**30/04/2010**	**01/05/2010**	**02/05/2010**	**03/05/2010**	**04/05/2010**	**05/05/2010**	**06/05/2010**	**07/05/2010**	**08/05/2010**	**09/05/2010**	**10/05/2010**	**11/05/2010**	**12/05/2010**	**13/05/2010**	**14/05/2010**	**15/05/2010**
pH (field)	pH units	7.53	7.78	7.23	7.63	7.87	7.87	7.9	7.11	7.88	7.98	7.89	7.95	8.09	8.13	8.04	8.01	8.18				7.8	7.93
pH (lab)	pH units	7.44	7.5	7.7	7.7	7.7	7.5	7.5	7.9	7.8	7.8	7.9	7.6	8	8.1	8.1	8	7.9	8	8.1	8	8.1	8.2
Hardness (from dissolved)	mg/L			47.6	40.6	39.1	40.9	38.5	49.8	60.3	58.3	63.5	73	77.7	78.7	84.1	87.2	93.8	99.5	104	103	112	113
Hardness (from total)	mg/L	53	46	47.5	44.7	43.5	46.3	48.9	56.2	64.6	57.9	66.5	73.8	79.4	81.4	86.4	94.1	98.5	101	108	98.9	111	108
Total Dissolved Solids	mg/L	120	110	60	70	70	74	70	98	94	68	72	100	130	120	120	140	130	110	150	110	170	170
Total Suspended Solids	mg/L	3	15	21	31	41	37	71	38	27	25	11	6	5	<4	5	<4	<4	<4	<4	<4	<4	<4
Alkalinity, total	mg/L	45	41	42	38	36	39	39	48	58	58	64	69	74	78	81	81	89	93	98	98	110	110
Sulphate, dissolved	mg/L	3.9	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.3	5.5	7.9	8.1	2.7	13	13	14	14	17	15
Chloride	mg/L	0.97	0.77	1.8	1.5	1	1.1	1.7	1.6	1.4	1.5	1.6	1.3	1.1	1.2	1.1	<0.5	1.9	3.9	1.4	1.3	1.7	1.6
Fluoride	mg/L			0.12	0.11	0.1	0.11	0.12	0.14	0.15	0.17	0.17	0.18	0.17	0.19	0.2	0.2	0.23	0.17	0.16	0.22	0.24	0.23
Nitrite (N)	mg/L			<0.03	0.009	<0.03	0.02	<0.05	0.006	0.006	0.006	<0.05	<0.005	<0.005	<0.005	<0.005	0.007	0.009	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L			<0.1	0.08	<0.1	<0.04	<0.2	0.03	0.09	<0.02	<0.2	<0.02	0.03	0.02	0.02	0.12	0.11	0.04	0.03	0.08	0.05	0.04
Ammonia	mg/L			0.045	0.025	0.55	0.026	<0.005	0.035	0.022	0.024	0.028	<0.01	0.05	0.01	0.018	0.01	0.034	0.12	0.02	0.016	0.12	0.065
Aluminum, total	mg/L	0.176	0.504	0.651	1.03	1.46	0.972	2.42	1.17	0.874	0.686	0.363	0.227	0.178	0.147	0.152	0.137	0.097	0.061	0.059	0.053	0.089	0.035
Arsenic, total	mg/L	0.0006	0.0006	0.0007	0.0009	0.0011	0.001	0.0018	0.0011	0.0013	0.0008	0.0007	0.0006	0.0007	0.0005	0.0005	0.0006	0.0005	0.0005	0.0004	0.0004	0.0005	0.0004
Cadmium, total	mg/L	<0.00001	0.00001	0.00003	0.00005	0.00006	0.00025	0.00003	0.00003	0.00006	<0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00004	0.00005	0.00012	0.00003	0.00008	0.00006	0.00019	<0.00001
Calcium, total	mg/L	16.2	13.9	12.8	12	11.9	12.4	12.7	15	17.5	15.5	18	19.8	21.1	21.5	22.9	24.9	26.1	27.2	29	26.6	29.4	28.9
Chromium, total	mg/L	0.0007	0.001	0.001	0.002	0.003	0.002	0.005	0.003	0.002	0.002	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.006	0.007	0.0107	0.0129	0.012	0.0101	0.0126	0.0071	0.007	0.0067	0.0049	0.0047	0.007	0.0048	0.0034	0.0089	0.0069	0.004	0.008	0.0066	0.0127	0.0031
Iron, total	mg/L	0.344	0.826	1.15	1.89	2.45	1.98	4.45	2.17	1.77	1.45	0.934	0.716	0.666	0.521	0.468	0.431	0.37	0.259	0.24	0.181	0.174	0.123
Lead, total	mg/L	0.0002	0.0004	0.0005	0.0007	0.0008	0.0006	0.0014	0.0007	0.0006	0.0005	0.0003	0.0003	0.0002	0.0009	<0.0002	0.0003	0.0003	<0.0002	0.0002	0.0003	0.0003	<0.0002
Magnesium, total	mg/L	4.74	4.28	3.74	3.59	3.37	3.7	4.15	4.53	5.06	4.64	5.26	5.91	6.47	6.71	7.09	7.75	8.07	7.92	8.63	7.89	9.19	8.66
Manganese, total	mg/L	0.0316	0.0485	0.069	0.095	0.099	0.084	0.159	0.087	0.08	0.076	0.051	0.026	0.02	0.017	0.016	0.013	0.011	0.009	0.007	0.007	0.015	0.006
Mercury, total	mg/L	0.00002	0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00004	<0.00002	0.00003	0.00005	0.00006	0.00006	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00006	<0.0002
Molybdenum, total	mg/L	0.0004	0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
Nickel, total	mg/L	0.002	0.002	0.002	0.003	0.004	0.004	0.006	0.003	0.003	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.001
Phosphorus, total	mg/L	0.08	0.14						0.075				0.032	0.033	0.031	0.032	0.027	0.03	0.018	0.018	0.018		0.016
Potassium, total	mg/L	1.9	1.6	1.42	1.45	1.38	1.29	1.33	1.26	1.3	1.04	1.06	1.14	1.2	1.14	1.16	1.22	1.25	1.27	1.36	1.17	1.46	1.18
Selenium, total	mg/L	<0.0006	<0.0006	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001
Silver, total	mg/L	<0.00001	<0.00001	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	0.00004	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	3.1	2.65	2.24	2.17	1.98	2.34	2.29	2.8	3.31	2.96	3.55	4.08	4.46	4.44	4.7	5.05	5.32	5.33	5.92	4.83	6.34	5.54
Thallium, total	mg/L	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.008	0.008	0.008	0.01	0.009	0.01	0.013	0.007	0.008	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.006	0.014	<0.005
Aluminum, dissolved	mg/L	0.048	0.057	0.063	0.075	0.1	0.103	0.094	0.064	0.053	0.043	0.032	0.026	0.024	0.021	0.019	0.016	0.016	0.014	0.014	0.012	0.018	0.01
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0006	0.0005	0.0006	0.0005	0.0005	0.0004	0.0005	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004
Cadmium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00017	<0.00001	0.00002	<0.00001	0.00001	0.00002	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	0.00004	<0.00001	0.00001	0.00001	0.00005	<0.00001
Calcium, dissolved	mg/L	14.2	12.4	13.2	11.3	10.9	11.4	10.5	13.6	16.3	15.8	17.2	19.9	21.1	21.1	22.4	23.3	24.7	26.6	27.8	27.4	29.9	30.5
Chromium, dissolved	mg/L	<0.0004	<0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.004	0.004	0.004	0.0038	0.0047	0.0046	0.0037	0.0035	0.0031	0.0028	0.0029	0.0029	0.0026	0.0026	0.0025	0.0028	0.003	0.0022	0.0023	0.0022	0.0061	0.0022
Iron, dissolved	mg/L	0.19	0.21	0.23	0.322	0.374	0.505	0.481	0.38	0.37	0.385	0.352	0.312	0.324	0.273	0.235	0.214	0.199	0.148	0.129	0.086	0.066	0.06
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	4.2	3.7	3.53	2.97	2.88	3.02	2.97	3.87	4.74	4.61	5	5.67	6.1	6.32	6.85	7.05	7.81	8.04	8.44	8.35	8.93	8.96
Manganese, dissolved	mg/L	0.0014	0.0009	<0.001	<0.001	0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury, dissolved	mg/L	0.00001	0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00006	<0.00002	<0.00002	<0.00002	<0.0002
Molydenum, dissolved	mg/L	0.0004	0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L	0.04	0.03						0.025				0.022	0.019	0.016	0.017	0.014	0.012	0.011	0.01	<0.01		<0.01
Potassium, dissolved	mg/L	1.7	1.4	1.38	1.25	1.21	1.13	0.96	1.02	1.11	1.02	1.02	1.11	1.09	1.09	1.14	1.12	1.18	1.2	1.25	1.23	1.33	1.28
Selenium, dissolved	mg/L	<0.0006	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	2.7	2.4	2.32	2.02	2.1	2.18	2.16	2.66	3.17	3.17	3.45	3.74	4.01	4.23	4.62	4.74	5.24	5.38	5.68	5.69	6.04	6.09
Thallium, dissolved	mg/L	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.002	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**16/05/2010**	**17/05/2010**	**18/05/2010**	**19/05/2010**	**20/05/2010**	**21/05/2010**	**22/05/2010**	**23/05/2010**	**24/05/2010**	**25/05/2010**	**26/05/2010**	**27/05/2010**	**28/05/2010**	**29/05/2010**	**30/05/2010**	**31/05/2010**	**01/06/2010**	**02/06/2010**	**03/06/2010**	**04/06/2010**	**05/06/2010**	**06/06/2010**
pH (field)	pH units	7.97	7.87	7.86	7.76	7.26	7.67	7.85	7.91	7.84	7.62	7.87	7.98	7.97	7.97	7.95	7.95	7.67	7.68	7.52	7.4	7.85	7.92
pH (lab)	pH units	8.1	7.8	8.2	8.2	8.1	8.1	8.2	8.1	8.1	8.3	7.9	8.2	8.3	8.2	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Hardness (from dissolved)	mg/L	113	119	122	118	118	117	117	113	114	135	129	144	132	126	135	127	138	133	132	141	151	151
Hardness (from total)	mg/L	110	113	118	122	119	121	106	113	115	144	128	130	125	134	140	135	746	723	143	150	153	156
Total Dissolved Solids	mg/L	160	170	160	150	160	160	170	160	160	140	150	160	160	180	190	170	160	160	190	160	180	190
Total Suspended Solids	mg/L	<4	<4	1	<1	<1	<1	7	2	<1	1	37	6	20	44	1	<1	2	2	21	1	<4	<4
Alkalinity, total	mg/L	110	100	110	110	110	110	110	110	110	120	120	120	120	130	130	130	130	130	140	140	140	150
Sulphate, dissolved	mg/L	14	15	15	16	16	16	16	16	15	17	17	17	17	19	19	18	23	19	20	21	21	21
Chloride	mg/L	1.4	1.5	1.2	1.2	1.2	1.7	1.6	1.8	1	1.7	1.7	1.2	1.6	2	1.6	1.5	1.9	1.6	1.9	2.1	1.9	1.6
Fluoride	mg/L	0.24	0.24	0.27	0.28	0.26	0.29	0.31	0.3	0.31	0.29	0.29	0.3	0.37	0.32	0.35	0.31	0.28	0.29	0.29	0.29	0.3	0.3
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	0.03	0.05	0.03	0.05	0.03	0.05	0.05	0.05	0.05	0.04	0.08	0.09	0.08	0.1	0.09	0.12	0.16	0.13	0.14	0.13	0.13	0.12
Ammonia	mg/L	0.084	0.028	0.07	0.04	0.03	0.011	0.006	<0.005	0.08	0.07	0.18	0.025	0.008	0.21	0.007	<0.05	0.025	<0.05	<0.005	0.042	0.26	0.19
Aluminum, total	mg/L	0.036	0.027	0.033	0.029	0.093	0.036	0.022	0.026	0.033	0.047	0.056	0.11	0.122	0.382	0.028	0.025	0.045	0.027	0.214	0.042	0.028	0.032
Arsenic, total	mg/L	0.0004	0.0004	<0.001	<0.001	<0.001	0.0004	<0.0004	<0.0004	0.0004	<0.001	<0.001	0.0004	<0.0004	0.0005	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	<0.0004	<0.0004	<0.0004
Cadmium, total	mg/L	<0.00001	0.00002	0.00002	0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	29.4	30.3	30.6	31.8	30.5	32	28	30	30	37	32	34	33	35	37	36	40	39	38	40	41	41
Chromium, total	mg/L	<0.001	<0.001	0.001	0.001	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.0029	0.0032	0.0024	0.003	0.0032	0.003	0.002	0.002	0.002	0.004	0.003	0.002	0.003	0.008	0.002	0.002	0.003	0.002	0.004	0.005	0.005	0.004
Iron, total	mg/L	0.143	0.106	0.099	0.111	0.176	0.123	0.109	0.127	0.127	0.111	0.159	0.24	0.258	0.64	0.088	0.084	0.105	0.083	0.308	0.076	0.06	0.066
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	8.94	9.15	10.1	10.4	10.5	10	9	9	10	13	12	11	11	11	12	11	12	12	12	12	13	13
Manganese, total	mg/L	0.005	0.006	0.006	0.007	0.012	0.007	0.005	0.007	0.007	0.007	0.008	0.012	0.015	0.028	0.007	0.007	0.009	0.007	0.019	0.019	0.012	0.011
Mercury, total	mg/L	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002		
Molybdenum, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, total	mg/L	0.001	0.001	<0.003	<0.003	<0.003	0.001	<0.001	<0.001	0.001	<0.003	<0.003	<0.001	0.001	0.002	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	0.001
Phosphorus, total	mg/L	0.012	0.013	0.017	0.017	0.021																	
Potassium, total	mg/L	1.2	1.2	1.31	1.34	1.3	1	1	1	1	2	1	1	1	1	1	1	2	1	2	2	2	2
Selenium, total	mg/L	0.0002	0.0002	0.0002	0.0004	0.0002	<0.0008	<0.0008	<0.0008	<0.0008	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silver, total	mg/L	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	5.7	5.78	7.18	7.32	7.19	7	6	6	6	9	8	7	7	7	8	7	8	8	8	8	9	9
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.015	0.011	0.008	0.007	0.007	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0003	0.0003	0.0004	<0.0004	<0.0004	<0.0004	0.0004	<0.001	<0.001	<0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Cadmium, dissolved	mg/L	0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	30.5	32	32.1	30.5	30.2	31	31	30	31	34	33	36	35	34	36	33	37	36	36	38	41	41
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.002	0.0027	0.0019	0.0019	0.0019	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.065	0.052	0.047	0.057	0.061	0.057	0.06	0.066	0.061	0.043	0.049	0.037	0.032	0.051	0.028	0.031	0.026	0.026	<0.02	0.022	0.024	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	9.05	9.45	10.2	10.1	10.4	9	10	9	9	12	11	13	11	10	11	11	11	11	10	11	12	12
Manganese, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	<0.001	0.002	0.01	0.009	0.007
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002		
Molydenum, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, dissolved	mg/L	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.003	<0.003	<0.003	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01																	
Potassium, dissolved	mg/L	1.28	1.38	1.32	1.22	1.19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
Selenium, dissolved	mg/L	0.0001	0.0001	0.0002	0.0002	0.0002	<0.0008	<0.0008	<0.0008	<0.0008	<0.001	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	6.09	6.46	7.19	7.15	7.21	7	7	7	6	9	8	9	7	7	7	8	8	7	7	8	8	8
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**10/06/2010**	**11/06/2010**	**12/06/2010**	**13/06/2010**	**14/06/2010**	**15/06/2010**	**16/06/2010**	**17/06/2010**	**18/06/2010**	**19/06/2010**	**20/06/2010**	**21/06/2010**	**22/06/2010**	**23/06/2010**	**24/06/2010**	**25/06/2010**	**26/06/2010**	**26/06/2010**	**27/06/2010**	**28/06/2010**	**29/06/2010**	**30/06/2010**
pH (field)	pH units	7.82	7.88	7.89	7.92	6.63	7.42	7.32	7.1	7.13	7.31	7.19	7.19	8	7.9	7.95	7.76		7.78	7.53	7.49	7.89	7.94
pH (lab)	pH units	8.2	8.1	8.4	8.2	8.3	8.46	8.2	8.2	8.13	8.3	8.2	8.4	8.24	8.24	8.21	8.32	8.39		8.03	7.94	7.96	8.02
Hardness (from dissolved)	mg/L	142	140	144	148	146	144	144	147	143	138	139	144	134	123	133	136	139		140	139	145	141
Hardness (from total)	mg/L	140	135	147	150	141	156	154	154	144	145	140	152	136	141	144	132	136		136	139	140	142
Total Dissolved Solids	mg/L	180	190	190	200	190	180	180	170	180	170	190	200	180	170	160	170	160		190	190	200	190
Total Suspended Solids	mg/L	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	4	1	<1	<1	<1		<1	<1	<1	<1
Alkalinity, total	mg/L	130	140	140	140	140	150	150	150	160	170	140	140	130	130	130	130	140		140	140	140	140
Sulphate, dissolved	mg/L	24	24	23	25	63	26	26	28	26	64	22	25	15	19	20	20	23		24	23	23	23
Chloride	mg/L	5.3	2.1	2.1	2.4	3.4	2.1	2.2	2.1	2.2	10	2.3	1.9	1.7	1.5	1.9	1.8	1.7		1.7	1.9	1.7	1.6
Fluoride	mg/L	0.31	0.31	0.31	0.29	0.3	0.29	0.28	0.28	0.3	0.46	0.32	0.31	0.32	0.31	0.31	0.33	0.32		0.29	0.28	0.29	0.29
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	0.05	0.04	0.03	<0.02	0.06	0.08	0.07	0.1	0.17	6.7	0.41	0.36	0.43	0.36	0.38	0.38	0.39		0.26	0.15	0.12	0.04
Ammonia	mg/L	0.022	0.012	0.016	0.051	0.039	0.023	0.043	0.026	<0.5	<0.005	<0.5	<0.5	0.009	0.4	<0.005	0.01	0.017		0.011	0.019	0.018	0.018
Aluminum, total	mg/L	0.037	0.023	0.016	0.029	0.019	0.012	0.021	0.012	<0.01	0.027	0.012	0.035	0.056	0.035	0.02	0.014	0.01		0.012	<0.01	<0.01	0.017
Arsenic, total	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0004	0.0005	0.0004	<0.0004		<0.0004	<0.0004	<0.0004	<0.0004
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	36	35	38	39	36	41	40	40	38	37	37	38	37	35	37	35	36		37	38	36	38
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.006	0.003	0.003	0.008	0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.002	0.003	0.003	0.003	0.002	0.002		0.002	0.003	0.002	0.003
Iron, total	mg/L	0.068	0.038	0.037	0.056	0.029	0.031	0.052	0.03	0.025	0.077	0.052	0.039	0.188	0.111	0.073	0.048	0.036		0.033	0.262	0.028	0.049
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		0.0032	0.0008	<0.0002	<0.0002
Magnesium, total	mg/L	12	12	12	13	12	13	13	13	12	13	12	14	11	13	12	11	11		11	11	12	12
Manganese, total	mg/L	0.014	0.013	0.013	0.015	0.011	0.012	0.011	0.014	0.008	0.01	0.006	0.007	0.016	0.007	0.006	0.005	0.006		0.008	0.011	0.008	0.012
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002		0.002	0.002	0.002	0.002
Nickel, total	mg/L	0.001	<0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	0.002	0.001	0.001	0.001	<0.001	<0.001		0.001	0.001	<0.001	<0.001
Phosphorus, total	mg/L																						
Potassium, total	mg/L	2	2	2	2	2	2	2	2	1	1	1	2	1	1	1	1	1		1	1	1	2
Selenium, total	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008		<0.0008	<0.0008	<0.0008	<0.0008
Silver, total	mg/L	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	0.0001	<0.0001	<0.0001
Sodium, total	mg/L	8	8	8	9	8	9	9	9	8	9	8	10	8	9	9	8	8		8	8	9	8
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Arsenic, dissolved	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004		<0.0004	<0.0004	<0.0004	<0.0004
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	37	36	38	39	38	38	39	39	38	36	37	38	35	32	35	35	36		38	37	40	38
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002		0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.024	<0.02	0.032	0.037	0.032	0.028	0.023		<0.02	<0.02	0.035	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	12	12	12	12	12	12	11	12	12	12	12	12	11	10	11	12	12		11	11	11	11
Manganese, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	0.003	0.007	0.004	<0.001	<0.001	<0.001	0.003	0.002	<0.001	0.002	0.003	0.002	0.004		0.004	0.002	0.003	<0.001
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002		0.002	0.002	0.002	0.002
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	<0.001		<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1		1	2	1	2
Selenium, dissolved	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008		<0.0008	<0.0008	<0.0008	<0.0008
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	9	9	9	10	10	9	9	9	8	8	8	8	8	7	8	9	9		8	8	8	9
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**01/07/2010**	**02/07/2010**	**03/07/2010**	**04/07/2010**	**05/07/2010**	**06/07/2010**	**07/07/2010**	**08/07/2010**	**09/07/2010**	**10/07/2010**	**11/07/2010**	**12/07/2010**	**13/07/2010**	**14/07/2010**	**15/07/2010**	**16/07/2010**	**17/07/2010**	**18/07/2010**	**19/07/2010**	**20/07/2010**	**21/07/2010**	**22/07/2010**
pH (field)	pH units	8.13	7.13	8.11	8.16	8.14	8.07	8.11	8.15	8.02	8.15	8.03	8.11	7.82	8.31	8.26	7.9	7.85	7.75	8.25	7.98	7.47	8.19
pH (lab)	pH units	7.86	7.85	8.05	7.98	7.98	8.03	8.07	8.11	8.03	8.11	8.22	8.06	8.06	7.9	8.13	8.14	8.13	8.09	8.15	8.15	8.17	8.17
Hardness (from dissolved)	mg/L	105	102	119	118	124	132	142	144	138	140	144	149	150	147	120	130	137	140	152	166	169	158
Hardness (from total)	mg/L	113	115	107	123	135	127	141	141	146	152	151	146	153	156	143	145	137	141	157	148	151	143
Total Dissolved Solids	mg/L	190	180	180	170	180	190	190	200	170	170	170	170	180	220	170	200	210	240	230	230	250	240
Total Suspended Solids	mg/L	87	66	26	17	8	4	6	3	2	2	2	<1	<1	2	97	37	20	12	6	4	4	7
Alkalinity, total	mg/L	100	110	110	120	120	130	140	140	130	150	150	150	160	150	110	120	120	130	130	130	130	120
Sulphate, dissolved	mg/L	9.1	9.5	12	14	15	18	22	23	24	26	28	26	26	24	17	21	26	28	33	38	38	34
Chloride	mg/L	0.9	1	1	1.1	1.2	1.4	1.7	1.9	1.8	1.7	2.1	2.4	2.3	2.5	3.5	5.3	7.4	7.8	9.9	11	11	9.6
Fluoride	mg/L	0.25	0.24	0.25	0.26	0.28	0.28	0.3	0.3	0.29	0.3	0.29	0.35	0.28	0.31	0.26	0.26	0.28	0.3	0.29	0.31	0.34	0.33
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.013	0.015	0.014	0.011	0.013	0.01	0.011	0.009
Nitrate (N)	mg/L	0.1	0.16	0.18	0.27	0.34	0.38	0.45	0.49	0.53	0.53	0.4	0.53	0.51	0.35	1.31	1.78	2.11	2.68	3.3	3.6	3.8	3.3
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.018	0.014	0.011	<0.03	<0.03	0.036	0.063	0.02	0.009	0.02	0.1	<0.005			0.006	0.018	0.013
Aluminum, total	mg/L	1.92	1.31	0.543	0.367	0.189	0.066	0.115	0.037	0.029	0.033	0.032	0.031	0.021	0.029	1.86	0.738	0.411	0.228	0.093	0.074	0.058	0.082
Arsenic, total	mg/L	0.0017	0.0011	0.0008	0.0006	0.0006	0.0005	0.0006	0.0005	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	<0.0004	0.0014	0.0009	0.0006	0.0006	0.0005	<0.0004	<0.0004	<0.0004
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	29	30	27	33	35	34	37	37	39	40	40	38	40	41	39	38	36	38	42	41	41	39
Chromium, total	mg/L	0.004	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.016	0.009	0.006	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.013	0.007	0.005	0.004	0.003	0.002	0.002	0.002
Iron, total	mg/L	3.29	1.88	0.818	0.657	0.378	0.168	0.213	0.084	0.072	0.071	0.06	0.06	0.055	0.064	3.44	1.32	0.718	0.459	0.225	0.148	0.139	0.219
Lead, total	mg/L	0.0013	0.0006	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.001	0.0003	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	10	10	10	10	12	11	12	12	12	13	12	12	13	13	11	12	11	11	13	11	12	11
Manganese, total	mg/L	0.279	0.137	0.067	0.045	0.028	0.016	0.019	0.011	0.012	0.013	0.014	0.011	0.01	0.014	0.273	0.101	0.054	0.034	0.018	0.014	0.014	0.02
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.005	0.005	0.005	0.004
Nickel, total	mg/L	0.006	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.005	0.003	0.002	0.002	0.001	<0.001	<0.001	0.001
Phosphorus, total	mg/L																						
Potassium, total	mg/L	1	1	<1	<1	1	1	1	1	1	2	2	1	1	2	1	2	2	2	2	2	2	2
Selenium, total	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.001	0.0009
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	7	7	7	7	8	8	9	9	9	10	10	10	10	9	9	10	10	12	14	13	13	13
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.026	0.023	0.02	0.019	0.018	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.023	0.02	0.02	0.028	0.015	0.016	0.015	0.018
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0006	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005	0.0005
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	28	29	32	31	33	34	37	38	37	38	38	39	40	39	32	35	37	37	40	45	47	43
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.003	0.002	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.161	0.143	0.126	0.093	0.082	0.058	0.037	0.033	0.028	0.025	0.022	0.023	0.025	0.023	0.135	0.106	0.094	0.091	0.047	0.038	0.042	0.058
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	9	7	9	10	10	11	12	12	11	11	12	12	12	12	10	10	11	12	12	13	13	12
Manganese, dissolved	mg/L	0.002	0.002	0.001	0.003	0.003	0.002	0.004	0.004	0.004	0.005	0.004	0.003	0.004	<0.001	0.002	0.002	0.002	0.008	0.003	0.003	0.003	0.002
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.006	0.005
Nickel, dissolved	mg/L	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	<1	<1	<1	<1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	2	2	2	2
Selenium, dissolved	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0008	0.0009	0.001	0.0009
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	7	5	7	7	8	8	9	9	8	9	9	9	9	9	8	9	10	12	13	14	14	13
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**23/07/2010**	**24/07/2010**	**25/07/2010**	**27/07/2010**	**28/07/2010**	**29/07/2010**	**30/07/2010**	**31/07/2010**	**01/08/2010**	**02/08/2010**	**03/08/2010**	**04/08/2010**	**05/08/2010**	**06/08/2010**	**07/08/2010**	**08/08/2010**	**09/08/2010**	**10/08/2010**	**11/08/2010**	**12/08/2010**	**13/08/2010**	**14/08/2010**
pH (field)	pH units	7.82	7.68	8.03	8.11	8.1	8.02	7.95	8	8.02	7.99	8.03	8.14	8.09	8.1	8.08	8.11	8.08	8.09	8.43	8.54	7.83	8.09
pH (lab)	pH units	8.1	7.96	8.05	8.13	8.16	8.11	8.09	8.2	8.17	8.19	8.14	8.1	8.15	8.19	8.13	8.17	8.21	8.25	7.97	8.1	8.07	8.07
Hardness (from dissolved)	mg/L	134	136	136	154	151	155	159	160	173	177	178	183	186	171	174	174	176	178	173	164	163	175
Hardness (from total)	mg/L	144	137	149	161	150	143	149	151	172	167	187	169	167	164	169	180	198	178	176	190	159	170
Total Dissolved Solids	mg/L	210	230	210	230	200	220	200	220	250	260	240	260	280	250	280	290	250	270	240	240	190	260
Total Suspended Solids	mg/L	83	20	13	5	4	5	3	3	4	3	4	3	3	3	3	3	5	3	18	9	3	7
Alkalinity, total	mg/L	120	120	120	130	130	130	130	130	130	140	130	130	140	130	140	130	130	140	130	130	130	130
Sulphate, dissolved	mg/L	28	25	27	29	34	29	35	31	36	41	44	42	45	45	42	44	44	45	44	37	32	44
Chloride	mg/L	6.1	6.2	6.5	7.8	9.4	13	9.3	9.4	11	12	12	12	13	14	14	13	12	12	11	9.7	6.4	12
Fluoride	mg/L	0.33	0.3	0.27	0.3	0.32	0.31	0.33	0.32	0.33	0.35	0.35	0.38	0.35	0.34	0.33	0.35	0.33	0.35	0.33	0.32	0.31	0.34
Nitrite (N)	mg/L	<0.005	0.01	0.007	0.008	<0.005	0.006	0.006	<0.005	0.006	0.009	0.007	0.007	0.006	0.008	<0.005	0.006	0.006	<0.005	<0.005	<0.005	<0.005	0.026
Nitrate (N)	mg/L	1.95	1.98	1.98	2.57	2.9	2.7	3.3	3.1	6.7	4.4	4.6	4.9	5	4.9	4.7	4.8	4.4	4.8	4.3	3.7	2.18	4.7
Ammonia	mg/L	0.009	0.017	0.02	0.017	0.22	0.016	0.023	0.012	0.028	0.047	0.12	0.019	0.015	0.38	0.025	<0.05	0.027	0.04	0.042	0.042	0.045	0.023
Aluminum, total	mg/L	1.16	0.387	0.297	0.159	0.08	0.094	0.074	0.066	0.084	0.077	0.071	0.057	0.052	0.056	0.064	0.066	0.097	0.106	0.32	0.238	0.063	0.123
Arsenic, total	mg/L	0.0023	0.001	0.0009	0.0006	0.0004	0.0005	0.0005	0.0004	<0.0004	0.0004	<0.0004	<0.0004	0.0005	<0.0004	0.0005	0.0004	0.0005	<0.0004	0.0007	0.0005	0.0005	0.0005
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	38	36	39	43	39	38	39	40	46	43	51	45	44	43	44	49	52	45	47	50	43	45
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.01	0.004	0.006	0.003	0.003	0.004	0.003	0.003	0.003	0.005	0.003	0.004	0.006	0.003	0.004	0.003	0.005	0.003	0.005	0.004	0.004	0.003
Iron, total	mg/L	1.99	0.707	0.544	0.304	0.186	0.212	0.164	0.152	0.178	0.148	0.16	0.122	0.115	0.123	0.141	0.157	0.235	0.15	0.697	0.506	0.216	0.26
Lead, total	mg/L	0.0007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	12	12	13	13	12	12	13	12	14	14	15	14	14	13	14	14	16	16	14	16	13	14
Manganese, total	mg/L	0.205	0.064	0.039	0.022	0.015	0.017	0.014	0.014	0.016	0.016	0.013	0.013	0.013	0.015	0.013	0.013	0.02	0.016	0.069	0.045	0.018	0.025
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.002	0.002	0.004	0.004	0.004	0.004	0.005	0.004	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.006	0.004	0.007
Nickel, total	mg/L	0.008	0.006	0.007	0.005	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, total	mg/L																						
Potassium, total	mg/L	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	2	3
Selenium, total	mg/L	<0.0008	<0.0008	<0.0008	0.0009	0.0008	<0.0008	0.0009	0.0009	0.0012	0.0011	0.0014	0.0012	0.0012	0.0012	0.0012	0.0014	0.0014	0.0013	0.0013	0.0013	<0.0008	0.0015
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	11	10	12	12	12	11	12	12	14	15	15	16	16	14	15	14	17	17	17	16	13	14
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.018	0.016	0.017	0.016	0.013	0.016	0.017	0.017	0.017	0.015	0.013	0.016	0.018	0.014	0.015	0.015	0.021	0.017	0.017	0.019	0.014	0.017
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	35	36	36	41	40	41	42	43	46	47	48	50	50	45	46	46	47	48	46	43	45	47
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.003	0.002	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.11	0.128	0.09	0.058	0.054	0.063	0.049	0.047	0.045	0.036	0.034	0.048	0.047	0.035	0.046	0.045	0.057	0.054	0.075	0.097	0.095	0.069
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	11	11	11	13	12	13	13	13	14	15	14	14	15	14	14	14	14	14	14	13	13	14
Manganese, dissolved	mg/L	0.004	0.001	0.004	0.005	0.005	0.005	0.001	0.001	0.003	<0.001	0.002	0.007	0.007	0.008	0.006	0.006	0.006	0.005	0.005	0.005	0.007	0.004
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.004	0.003	0.004	0.004	0.004	0.004	0.005	0.004	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.006	0.006	0.006	0.006	0.005	0.004	0.006
Nickel, dissolved	mg/L	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	3
Selenium, dissolved	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.0008	0.0009	0.0009	0.0012	0.0013	0.0014	0.0014	0.0015	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.0012	<0.0008	0.0014
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	11	11	10	13	13	13	14	14	16	17	15	15	17	15	16	15	16	17	16	14	12	16
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**15/08/2010**	**16/08/2010**	**17/08/2010**	**18/08/2010**	**19/08/2010**	**20/08/2010**	**21/08/2010**	**22/08/2010**	**23/08/2010**	**24/08/2010**	**25/08/2010**	**26/08/2010**	**27/08/2010**	**28/08/2010**	**29/08/2010**	**30/08/2010**	**31/08/2010**	**01/09/2010**	**02/09/2010**	**03/09/2010**	**04/09/2010**	**05/09/2010**
pH (field)	pH units	7.76	8.5	8.43	8.53	8.35	7.31	7.87	8.46	8.15	8.22	8.17	8.21	8.12	8.22	8.23	8.26	8.28	8.28	8.2	8.13	8.12	8.15
pH (lab)	pH units	8.23	8.23	8.23	8.23	8.14	8.04	8.24	8.28	8.23	8.2	8.13	8.17	8.2	8.21	8.01	8.17	8.07	8.09	8.17	8.12	8.16	8.11
Hardness (from dissolved)	mg/L	183	186	187	168	120	127	148	154	157	167	166	170	177	182	177	165	182	181	182	179	173	176
Hardness (from total)	mg/L	167	202	196	217	137	140	151	155	154	167	175	183	183	180	190	160	176	189	178	193	175	180
Total Dissolved Solids	mg/L	280	270	270	270	210	210	200	260	250	250	250	280	260	250	300	230	300	280	270	300	280	280
Total Suspended Solids	mg/L	6	5	4	310	72	53	28	19	18	24	13	9	7	8	6	19	6	6	6	7	5	5
Alkalinity, total	mg/L	130	140	140	130	110	110	120	120	120	130	120	120	120	120	120	130	130	130	130	130	130	130
Sulphate, dissolved	mg/L	50	50	55	42	25	27	30	38	41	37	47	55	53	54	54	37	53	50	49	47	49	48
Chloride	mg/L	13	14	14	11	5.5	5.9	8.4	10	13	9.1	12	14	15	15	15	9.7	16	14	15	14	15	14
Fluoride	mg/L	0.34	0.34	0.35	0.33	0.31	0.28	0.32	0.31	0.35	0.33	0.27	0.27	0.27	0.28	0.27	0.3	0.33	0.36	0.35	0.35	0.35	0.36
Nitrite (N)	mg/L	0.009	0.008	0.012	<0.005	0.006	0.006	0.009	0.005	0.006	0.009	0.017	0.019	0.021	0.019	0.016	<0.005	0.015	0.011	0.012	0.011	0.01	0.009
Nitrate (N)	mg/L	5.7	5.7	6.4	4.5	2.05	2.1	2.9	3.6	3.7	3.8	5.5	5.5	5.5	5.5	6	3.5	5.9	6.4	6.4	6.1	5.7	6.2
Ammonia	mg/L	0.03	0.026	0.035	0.038	<0.01	0.1	0.019	<0.005	<0.05	<0.005	<0.005	0.08	0.033	0.028	0.01	0.036	0.043	0.015	0.049	0.028	0.019	0.043
Aluminum, total	mg/L	0.103	0.109	0.072	4.93	1.43	0.943	0.558	0.329	0.314	0.431	0.371	0.212	0.16	0.146	0.143	0.346	0.151	0.211	0.141	0.167	0.103	0.118
Arsenic, total	mg/L	0.0006	0.0007	0.0006	0.0034	0.0012	0.001	0.0008	0.0007	0.0007	0.0008	0.0006	0.0006	0.0006	0.0005	0.0006	0.0007	0.0006	0.0006	0.0005	0.0005	0.0006	0.0006
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	43	55	53	59	36	37	40	42	41	45	46	49	49	48	50	43	47	50	47	52	46	48
Chromium, total	mg/L	<0.002	<0.002	<0.002	0.01	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.004	0.003	0.003	0.043	0.012	0.01	0.007	0.005	0.005	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.004	0.003	0.011
Iron, total	mg/L	0.223	0.264	0.187	9.57	2.68	1.9	1.15	0.73	0.632	0.956	0.488	0.457	0.392	0.352	0.341	0.754	0.322	0.354	0.297	0.38	0.269	0.334
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	0.0026	0.0007	0.0005	0.0003	<0.0002	0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0008
Magnesium, total	mg/L	15	16	16	17	11	12	12	12	13	13	15	15	15	15	16	13	14	15	15	16	14	15
Manganese, total	mg/L	0.024	0.024	0.02	0.709	0.188	0.134	0.077	0.054	0.052	0.073	0.035	0.03	0.029	0.027	0.028	0.063	0.026	0.026	0.023	0.03	0.022	0.025
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.007	0.008	0.008	0.007	0.003	0.004	0.004	0.006	0.005	0.006	0.007	0.008	0.007	0.008	0.009	0.005	0.008	0.008	0.008	0.008	0.007	0.008
Nickel, total	mg/L	0.001	0.001	0.002	0.011	0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.003	0.002	0.001	0.002	0.002	0.001	0.003	0.002	0.002	0.001	0.002
Phosphorus, total	mg/L																						
Potassium, total	mg/L	3	3	3	3	2	2	2	2	2	2	3	3	3	3	3	2	3	3	3	3	3	3
Selenium, total	mg/L	0.0016	0.0019	0.0022	0.0021	0.0009	0.001	0.0012	0.0014	0.0013	0.0014	0.0019	0.0021	0.0021	0.0021	0.0023	0.0013	0.0021	0.0022	0.002	0.0021	0.0019	0.002
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	18	20	20	15	11	11	13	12	13	13	18	16	16	17	18	12	16	17	17	18	15	16
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	0.00006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	0.026	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.021	0.019	0.015	0.017	0.02	0.022	0.018	0.019	0.018	0.022	0.018	0.019	0.019	0.019	0.025	0.019	0.026	0.027	0.027	0.022	0.02	0.02
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0004	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	49	50	50	45	31	34	40	42	42	45	46	46	48	49	47	45	49	48	49	47	47	48
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.002	0.003	0.001	0.002	0.003	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.064	0.061	0.041	0.092	0.187	0.147	0.149	0.125	0.103	0.136	0.098	0.097	0.098	0.097	0.08	0.129	0.081	0.095	0.091	0.099	0.096	0.103
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	15	15	15	13	10	10	12	12	13	13	12	13	14	14	14	13	14	14	14	15	13	13
Manganese, dissolved	mg/L	0.005	0.005	0.004	0.013	0.01	0.006	0.005	0.005	0.007	0.006	0.005	0.006	0.006	0.006	0.006	0.004	0.005	0.007	0.008	0.008	0.007	0.006
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.007	0.008	0.008	0.007	0.003	0.004	0.005	0.005	0.005	0.005	0.007	0.007	0.007	0.007	0.007	0.005	0.008	0.008	0.008	0.008	0.007	0.007
Nickel, dissolved	mg/L	0.001	<0.001	<0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.002	0.001	0.001	0.001
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	3	3	3	3	1	1	2	2	2	2	2	2	2	3	3	2	3	3	3	3	3	3
Selenium, dissolved	mg/L	0.0019	0.002	0.0022	0.0018	0.0008	0.001	0.0012	0.0014	0.0014	0.0014	0.0022	0.0021	0.002	0.002	0.0022	0.0012	0.0021	0.0022	0.0022	0.0021	0.002	0.0021
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	17	18	19	14	9	9	12	13	14	14	13	15	17	18	17	15	18	17	17	17	15	15
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**06/09/2010**	**07/09/2010**	**08/09/2010**	**09/09/2010**	**10/09/2010**	**11/09/2010**	**12/09/2010**	**13/09/2010**	**14/09/2010**	**15/09/2010**	**16/09/2010**	**17/09/2010**	**18/09/2010**	**19/09/2010**	**20/09/2010**	**21/09/2010**	**22/09/2010**	**23/09/2010**	**24/09/2010**	**25/09/2010**	**26/09/2010**	**27/09/2010**
pH (field)	pH units	8.19	8.11	8.2	8.33	7.53	8.07	8.15	8.12	7.2	8.01	8.02	8.05	8.14	8.18	8.19	8.19	8.19	8.06	7.99	8.1	8.11	8.11
pH (lab)	pH units	8.15	8.15		8.11	8.16	8.13	8.11	8.26	8.22	8.22	8.22	8.23	8.08	8.09	8.13	8.09	8.11	8.04	8.08	8.04	8.1	8.1
Hardness (from dissolved)	mg/L	176	187	173	187	162	179	180	177	182	178	189	188	194	192	186	185	186	188	190	190	192	192
Hardness (from total)	mg/L	177	172	186	184	156	180	208	174	169	170	203	201	191	181	173	184	180	188	187	194	191	185
Total Dissolved Solids	mg/L	240	330	380	350	280	340	300	320	300	280	290	270	270	290	280	280	270	300	320	300	310	310
Total Suspended Solids	mg/L	6	5	6	28	18	11	8	5	7	5	4	5	3	5	5	4	3	4	3	3	4	6
Alkalinity, total	mg/L	130	120	130	130	120	120	120	120	120	130	130	130	130	130	130	130	130	130	130	130	130	130
Sulphate, dissolved	mg/L	49	56	50	55	39	56	48	51	49	41	47	45	49	48	52	55	57	55	59	61	60	62
Chloride	mg/L	14	13	13	12	11	12	13	27	13	13	12	9.2	9.2	9.8	10	11	11	10	12	11	12	13
Fluoride	mg/L	0.35	0.35	0.3	0.35		0.34	0.3	0.32	0.34	0.34	0.37	0.39	0.35	0.41	0.36	0.37	0.38	0.37	0.37	0.37	0.36	0.37
Nitrite (N)	mg/L	0.013	0.012	0.015	0.008	0.01	0.018	0.013	0.014	0.013	<0.005	0.007	0.008	0.008	0.011	0.008	0.01	0.012	0.014	0.014	0.019	0.019	0.019
Nitrate (N)	mg/L	6.7	6.3	6	6.1	5.1	6.3	6	6.5	6.8	5.6	6.1	6.3	6.3	7	6.9	7	7	6.7	7.7	8.1	7.8	8.2
Ammonia	mg/L	0.12	0.037	0.033	<0.005	0.1	0.049	0.03	0.029	0.044	0.005	0.022	0.039	0.025	0.018	0.035	0.046	0.047	0.044	0.017	0.032	0.011	0.022
Aluminum, total	mg/L	0.148	0.111	0.134	0.518	0.331	0.204	0.172	0.103	0.159	0.021	0.102	0.141	0.069	0.09	0.079	0.087	0.069	0.096	0.086	0.086	0.112	0.128
Arsenic, total	mg/L	<0.0004	0.0005	0.0006	0.0007	0.0006	0.0005	0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0005	<0.0004	<0.0004	0.0006	0.0006	0.0006	0.0005	0.0005	0.0006	0.0003	0.0003
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.00001	<0.00001	<0.00001	0.00004
Calcium, total	mg/L	47	46	50	49	42	48	57	47	46	46	53	53	53	49	44	49	47	50	49.8	51.9	49.7	49.1
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.003	0.003	0.003	0.006	0.004	0.004	0.006	0.008	0.003	0.002	0.004	0.003	0.004	0.003	0.008	0.004	0.003	0.003	0.0033	0.0033	0.0036	0.0035
Iron, total	mg/L	0.306	0.266	0.297	0.984	0.641	0.443	0.021	0.252	0.329	0.11	0.248	0.305	0.226	0.254	0.196	0.217	0.172	0.223	0.21	0.203	0.246	0.265
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	0.029	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	15	14	15	15	13	14	16	14	13	13	17	17	15	14	15	15	15	15	15.1	15.7	16.2	15.2
Manganese, total	mg/L	0.027	0.023	0.025	0.084	0.049	0.036	0.069	0.022	0.025	0.008	0.022	0.024	0.018	0.021	0.021	0.022	0.017	0.023	0.023	0.023	0.026	0.031
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00004	<0.00002	0.00003	<0.00002
Molybdenum, total	mg/L	0.008	0.008	0.008	0.008	0.006	0.008	0.017	0.007	0.007	0.006	0.008	0.008	0.007	0.008	0.008	0.009	0.008	0.008	0.009	0.009	0.008	0.009
Nickel, total	mg/L	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.004	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, total	mg/L																						
Potassium, total	mg/L	3	3	3	3	2	3	5	3	3	3	3	3	3	3	3	3	3	3	3.15	3.26	3.27	3.12
Selenium, total	mg/L	0.0021	0.002	0.0022	0.0023	0.0016	0.0023	0.0044	0.0021	0.0021	0.0016	0.002	0.002	0.0022	0.0021	0.002	0.0024	0.0023	0.0023	0.0023	0.0025	0.0024	0.0025
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	16	16	17	16	13	16	26	15	15	15	18	17	15	15	16	16	16	16	16.1	16.8	17.6	16.8
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.021	0.03	0.044	0.021	0.02	0.02	0.02	0.022	0.019	0.057	0.024	0.02	0.021	0.021	0.018	0.018	0.018	0.018	0.028	0.018	0.02	0.019
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	0.0006	0.0005
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L	48	50	46	50	43	49	48	48	49	48	51	50	52	51	51	49	51	50	51.2	50.8	51.3	51.5
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.0023	0.0022	0.0023	0.0023
Iron, dissolved	mg/L	0.086	0.093	0.09	0.099	0.12	0.107	0.101	0.102	0.099	0.216	0.106	0.104	0.1	0.09	0.088	0.083	0.075	0.073	0.074	0.067	0.067	0.062
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	13	15	14	15	13	14	15	14	15	14	15	15	15	15	14	15	14	15	15.1	15.4	15.5	15.4
Manganese, dissolved	mg/L	0.008	0.009	0.008	0.007	0.007	0.007	0.007	0.01	0.009	0.022	0.01	0.009	0.01	0.01	0.011	0.011	0.011	0.011	0.011	0.011	0.012	0.013
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00007	0.00003	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.008	0.008	0.008	0.008	0.007	0.008	0.008	0.008	0.009	0.007	0.007	0.007	0.008	0.008	0.008	0.009	0.009	0.008	0.009	0.009	0.009	0.009
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	<0.001
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3.03	3.16	3.26	3.29
Selenium, dissolved	mg/L	0.0022	0.0022	0.0024	0.0022	0.0021	0.0022	0.0021	0.0023	0.0024	0.0018	0.0021	0.0021	0.0021	0.0023	0.0024	0.0023	0.0025	0.0023	0.0025	0.0025	0.0026	0.0026
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	15	17	18	17	15	16	16	17	18	17	16	16	16	17	15	18	16	18	18.4	19	17.4	17.6
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**28/09/2010**	**29/09/2010**	**01/10/2010**	**02/10/2010**	**03/10/2010**	**04/10/2010**	**05/10/2010**	**06/10/2010**	**07/10/2010**	**08/10/2010**	**09/10/2010**	**10/10/2010**	**11/10/2010**	**12/10/2010**	**13/10/2010**	**14/10/2010**	**15/10/2010**	**16/10/2010**	**17/10/2010**	**18/10/2010**	**19/10/2010**	**20/10/2010**
pH (field)	pH units	8.11	8.17					8.09	8.15	8.11	8.15	8.16	7.85		8.11	8.31	8.27	8.18	8.2		8.28	8.33	8.25
pH (lab)	pH units	8.14	8.15	8.12	8.12	8.04	8.09	8.1	8.1	8.21	8.17	8.23	8.2	8.09	8.1	8.11	8.12	8.14	8.15	8.21	8.24	8.22	8.22
Hardness (from dissolved)	mg/L	189	190	179	160	153	175	172	170	172	177	184	184	183	183	206	224	217	219	201	203	207	
Hardness (from total)	mg/L	199	204	189	184	161	180	167	189	173	188	202	208	176	176	194	194	197	197	201	214	218	226
Total Dissolved Solids	mg/L	310	300	280	250	240	270	260	270	260	260	300	290	310	270	280	300	280	280	320	320	330	300
Total Suspended Solids	mg/L	4	3	7	15	4	6	3	2	5	3	3	4	3	3	2	3	3	3	2	6	3	20
Alkalinity, total	mg/L	130	130	130	120	120	120	130	130	130	140	140	140	140	140	140	140	140	140	140	140	140	140
Sulphate, dissolved	mg/L	55	56	50	39	30	47	44	48	44	46	53	53	46	51	62	60	61	64	59	58	67	53
Chloride	mg/L	12	13	11	8.4	7.1	9.5	10	9.9	9.5	11	11	11	11	11	11	11	12	11	13	13	13	14
Fluoride	mg/L	0.29	0.36	0.36	0.31	0.31	0.34	0.32	0.32	0.33	0.31	0.35	0.38	0.37	0.36	0.04	0.37	0.37	0.37	0.39	0.39	0.4	0.37
Nitrite (N)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	0.009	0.006	0.007	0.008	0.011	0.011	0.013	0.015	0.015	0.018	0.029	0.006
Nitrate (N)	mg/L	8.4	8.6	7.3	5.4	3.6	7.3	5.5	5.4	5.6	5.3	6.7	6.4	6.4	6.6	7	7.2	7.3	7.6	7.4	7.2	8.3	6.4
Ammonia	mg/L	<0.005	0.06	0.023	0.047	0.041	0.035	0.013	0.005	0.012	<0.005	0.014	0.061	0.039	0.058	0.027	0.015	0.032	0.026	0.092	0.088	0.082	0.064
Aluminum, total	mg/L	0.067	0.081	0.141	0.302	0.092	0.107	0.07	0.07	0.083	0.086	0.073	0.167	0.072	0.074	0.072	0.081	0.071	0.065	0.051	0.113	0.05	0.438
Arsenic, total	mg/L	0.0003	0.0003	0.0003	0.0006	0.0004	0.0004	0.0006	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0003	0.0004	0.0005	0.0004	0.0004	0.0004	0.0005	0.0003	0.0007
Cadmium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00002	<0.00001	0.00004	0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00001	0.00001	0.00005
Calcium, total	mg/L	54.5	56.2	51.4	49	43.4	49.3	44.3	50.1	46	49.5	54.2	55	47	47.1	52.2	52	53.2	52.8	52.2	56.9	57.8	59
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.0026	0.0028	0.0034	0.0044	0.0022	0.0027	0.0032	0.003	0.0024	0.0029	0.0031	0.0038	0.0024	0.0026	0.0028	0.005	0.0024	0.0041	0.0036	0.0051	0.0028	0.0062
Iron, total	mg/L	0.175	0.186	0.329	0.739	0.303	0.285	0.2	0.196	0.221	0.251	0.182	0.205	0.183	0.179	0.182	0.207	0.181	0.166	0.149	0.284	0.155	0.819
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003
Magnesium, total	mg/L	15.3	15.6	14.7	15.1	12.7	13.8	13.6	15.4	14.1	15.7	16.2	17.2	14.2	14.2	15.5	15.7	15.5	15.9	17.2	17.5	17.8	19.1
Manganese, total	mg/L	0.021	0.021	0.033	0.062	0.025	0.025	0.022	0.021	0.024	0.026	0.022	0.025	0.022	0.022	0.022	0.029	0.025	0.026	0.029	0.04	0.029	0.101
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	0.00004	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.009	0.009	0.008	0.007	0.004	0.007	0.006	0.006	0.006	0.007	0.008	0.008	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.009	0.008	0.007
Nickel, total	mg/L	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002
Phosphorus, total	mg/L																						
Potassium, total	mg/L	3.1	3.35	3.09	2.77	2.18	2.51	2.53	3.01	2.69	2.99	3.21	3.34	2.98	2.97	3.15	3.19	3.24	3.32	3.39	3.44	3.31	3.26
Selenium, total	mg/L	0.0027	0.0027	0.0022	0.0018	0.0013	0.0024	0.0019	0.002	0.0018	0.0016	0.002	0.0021	0.0019	0.0018	0.0017	0.002	0.002	0.0021	0.0023	0.0021	0.0022	0.002
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	19.5	20.5	18.2	17.6	13.2	16.1	13.4	15	13.6	16.5	18	17.7	16.7	16.7	18.1	18.6	18.4	19.4	21.5	21.9	22.4	21.5
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	0.007	<0.005	0.006
Aluminum, dissolved	mg/L	0.017	0.017	0.019	0.024	0.016	0.021	0.019	0.018	0.023	0.017	0.016	0.02	0.02	0.019	0.022	0.02	0.019	0.019	0.016	0.014	0.016	
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	
Cadmium, dissolved	mg/L	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00002	0.00002	0.00001	<0.00001	0.00003	0.00002	0.00002	0.00001	0.00002	0.00001	0.00001	<0.00001	<0.00001	0.00001	0.00001	
Calcium, dissolved	mg/L	51.3	51	47.6	43.1	41	46.8	46.7	46.4	47	48.7	49.9	50.1	49.7	49.8	56.1	60.7	59.1	58.3	54	54.8	55.9	
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper, dissolved	mg/L	0.0022	0.0022	0.0023	0.0019	0.0017	0.0025	0.0018	0.0018	0.0018	0.0016	0.002	0.002	0.0021	0.0021	0.0023	0.0024	0.0021	0.0024	0.0023	0.0019	0.0025	
Iron, dissolved	mg/L	0.061	0.052	0.067	0.125	0.111	0.093	0.081	0.079	0.081	0.074	0.057	0.058	0.065	0.063	0.062	0.069	0.065	0.06	0.047	0.048	0.051	
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Magnesium, dissolved	mg/L	14.9	15.2	14.5	12.6	12.2	14.2	13.4	13.2	13.2	13.5	14.3	14.2	14.4	14.3	15.9	17.6	16.8	17.8	16.1	16.1	16.5	
Manganese, dissolved	mg/L	0.014	0.014	0.015	0.014	0.011	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.014	0.015	0.016	0.018	0.018	0.018	0.016	0.019	
Mercury, dissolved	mg/L	0.00004	0.00004	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	0.00002	0.00002	<0.00002	<0.00002	<0.00002	
Molydenum, dissolved	mg/L	0.009	0.009	0.008	0.006	0.004	0.007	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.008	0.009	0.008	0.009	0.008	0.008	0.008	
Nickel, dissolved	mg/L	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	
Phosphorus, dissolved	mg/L																						
Potassium, dissolved	mg/L	3.15	3.47	3.09	2.48	2.17	2.65	2.7	2.73	2.62	2.85	3.01	3.07	3.04	3.01	3.24	3.4	3.25	3.45	3.19	3.13	3.22	
Selenium, dissolved	mg/L	0.0025	0.0026	0.0023	0.0017	0.0011	0.002	0.0017	0.0016	0.0017	0.0016	0.002	0.0019	0.0019	0.0019	0.0021	0.0023	0.0023	0.0024	0.0023	0.0021	0.0023	
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	
Sodium, dissolved	mg/L	18.7	19.6	17.6	14.1	12.4	16.4	13.5	13.4	13.4	13.1	14.9	14.9	15	14.8	16.8	18.8	18.2	19.6	17.8	17.8	18.9	
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**21/10/2010**	**22/10/2010**	**23/10/2010**	**24/10/2010**	**25/10/2010**	**26/10/2010**	**27/10/2010**	**28/10/2010**	**29/10/2010**	**30/10/2010**	**31/10/2010**	**01/11/2010**	**02/11/2010**	**07/11/2010**	**16/11/2010**	**29/11/2010**	**06/12/2010**	**10/12/2010**	**14/12/2010**	**04/04/2011**	**11/04/2011**	**21/04/2011**
pH (field)	pH units	7.87		8.17		8.28	8.23	8.39	8.27	8.26	8.26	8.03	7.41	7.64	7.06	7.28	8.05		7.25				
pH (lab)	pH units	8.24	8.28	8.26	8.15	8.29		8.14	8.14	8.33	8.29	8.23	8.25	8.29	8.11	8.07	8.06	8.06	7.99	8.14	8.39	8.28	8.24
Hardness (from dissolved)	mg/L	216	222	221	215	214		232	228	223	219	218	242	221	194	184	187	237	210	287	236	201	141
Hardness (from total)	mg/L	238	244	243	233	225		228	244	222	221	211	212	215	212	202	195	222	219	280	254	209	153
Total Dissolved Solids	mg/L	330	340	340	330	320		340	350	310	300	290	310	290	260	260	240	310	310	360	310	270	180
Total Suspended Solids	mg/L	2	2	2	2	1		2	11	4	1	1	2	<1	<1	3	1	5	2	4	4	18	6
Alkalinity, total	mg/L	150	150	150	140	150		150	150	150	150	150	150	150	160	150	150	190	170	230	230	190	140
Sulphate, dissolved	mg/L	67	74	74	72	71		76	75	71	68	56	62	62	43	47	48	59	52	66	52	41	25
Chloride	mg/L	14	15	15	14	14		14	14	13	11	9.9	11	10	5.4	6.9	5.9	7.6	4.8	9.7	4.9	3.1	2.5
Fluoride	mg/L	0.38	0.35	0.36	0.36	0.38		0.41	0.41	0.38	0.33	0.3	0.37	0.34	0.33	0.34	0.32	0.33	0.33	0.42	0.5	0.48	0.36
Nitrite (N)	mg/L	0.013	0.015	0.013	0.013	0.015		0.013	0.015	0.01	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.027	0.013	0.031	<0.005	0.01	<0.005
Nitrate (N)	mg/L	7.3	8.7	8.7	8.8	8.8		8.6	8.9	8.4	7.6	5.7	7.2	5.9	2.84	2.7	2.27	2.5	2.11	2.36	0.25	0.19	0.06
Ammonia	mg/L	0.075	0.05	<0.005	0.047	0.06		0.007	0.076	0.076	0.022	0.047	0.031	0.029	0.022	0.071	0.083	0.11	0.044	0.061	0.011	0.018	0.008
Aluminum, total	mg/L	0.087	0.04	0.045	0.052	0.039		0.054	0.129	0.121	0.055	0.032	0.07	0.027	0.018	0.049	0.017	0.142	0.057	0.055	0.123	0.892	0.237
Arsenic, total	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004		0.0004	0.0005	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0006	0.0009	0.0005
Cadmium, total	mg/L	0.00002	0.00004	0.00001	0.00002	0.00001		0.00003	0.00003	0.00002	<0.00001	0.00003	0.00001	<0.00001	<0.00001	0.00005	0.00003	0.00016	0.00007	0.00004	0.00001	0.00004	0.00004
Calcium, total	mg/L	62.4	64.6	63.4	62.1	60.1		61	65.3	58	59.2	56.3	55	58.3	54.5	52.9	52	59.2	58.1	73.5	64.3	50.9	37.9
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.002	<0.001
Copper, total	mg/L	0.0025	0.0026	0.0025	0.0024	0.0021		0.0026	0.0039	0.0032	0.0025	0.004	0.0025	0.0023	0.0017	0.0043	0.0028	0.0763	0.0106	0.0159	0.0195	0.0124	0.0101
Iron, total	mg/L	0.131	0.099	0.1	0.106	0.092		0.118	0.26	0.156	0.101	0.087	0.111	0.088	0.057	0.096	0.038	0.357	0.125	0.167	0.205	1.21	0.429
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.0002
Magnesium, total	mg/L	19.9	20.1	20.5	19	18.2		18.4	19.7	18.6	17.7	17.2	18	16.8	18.4	16.9	15.9	18.1	18	23.4	22.8	19.8	14.2
Manganese, total	mg/L	0.022	0.019	0.02	0.014	0.013		0.02	0.029	0.022	0.015	0.024	0.016	0.019	0.017	0.032	0.019	0.041	0.021	0.025	0.035	0.059	0.038
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	0.00004	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.007	0.009	0.009	0.009	0.008		0.009	0.01	0.009	0.008	0.005	0.007	0.005	0.003	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.001
Nickel, total	mg/L	0.002	<0.001	0.001	<0.001	<0.001		0.001	0.001	0.006	<0.001	0.002	<0.001	0.001	<0.001	0.001	0.002	0.003	0.001	0.001	<0.001	0.002	0.001
Phosphorus, total	mg/L																				0.047	0.053	0.046
Potassium, total	mg/L	3.52	3.52	3.61	3.54	3.38		3.75	3.9	3.72	3.46	2.8	3.25	2.9	2.45	2.11	2.16	3.28	2.31	3.22	3.81	3.09	2.86
Selenium, total	mg/L	0.002	0.0024	0.0024	0.0025	0.0023		0.0023	0.0025	0.0022	0.0021	0.0017	0.002	0.0019	0.0008	0.0007	0.0006	0.0006	0.0005	0.0007	0.0003	0.0003	0.0002
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	20.4	23.8	24.4	22.9	22		22.1	23.6	22.7	20.7	18.3	20	18.6	14.6	15.5	12.6	14.4	14.6	18	17	13.2	8.94
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.006	0.01	0.015	0.015	<0.005	<0.005	0.005
Aluminum, dissolved	mg/L	0.014	0.011	0.01	0.012	0.011		0.02	0.021	0.019	0.014	0.008	0.023	0.008	0.007	0.007	0.004	0.037	0.007	0.007	0.008	0.01	0.009
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004		0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0003	0.0003	0.0002	0.0003	0.0004	0.0003	0.0005	0.0006	0.0004	0.0004
Cadmium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	0.00002	0.00001	<0.00001	0.00003	<0.00001	<0.00001	<0.00001	0.00001	0.00049	0.00004	0.00003	0.00001	0.00002	0.00002
Calcium, dissolved	mg/L	57.8	59.7	59.3	57.6	57.8		62.6	60.1	59.6	58.3	56.5	64.7	58.4	51.2	49.4	49.4	63.8	55.5	72	57.8	48.6	35.5
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.0016	0.0015	0.0014	0.0016	0.0016		0.0016	0.0016	0.0025	0.0021	0.002	0.0027	0.0018	0.0016	0.0018	0.0017	0.0135	0.003	0.0043	0.0073	0.0057	0.0046
Iron, dissolved	mg/L	0.037	0.026	0.025	0.024	0.024		0.029	0.024	0.052	0.034	0.031	0.047	0.03	0.04	0.02	0.019	0.114	0.025	0.042	0.023	0.036	0.088
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	17.4	17.6	17.8	17.3	16.9		18.4	18.8	17.9	17.9	18.6	19.5	18.3	16.1	14.8	15.5	18.8	17.4	26.1	22.2	19.3	12.7
Manganese, dissolved	mg/L	0.016	0.013	0.013	0.01	0.01		0.011	0.011	0.014	0.011	0.022	0.019	0.015	0.015	0.022	0.017	0.039	0.013	0.021	0.028	0.029	0.028
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00004	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.007	0.008	0.008	0.008	0.008		0.008	0.009	0.008	0.008	0.005	0.008	0.006	0.003	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.001
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	0.001	0.004	0.001	0.002	<0.001	<0.001	0.002
Phosphorus, dissolved	mg/L																				0.04	0.029	0.024
Potassium, dissolved	mg/L	3.14	3.21	3.22	3.32	3.22		3.46	3.53	3.61	3.49	2.98	3.76	3.06	2.29	1.97	1.97	3.59	2.26	3.53	3.58	2.85	2.66
Selenium, dissolved	mg/L	0.0021	0.0022	0.0022	0.0023	0.0023		0.0025	0.0024	0.0024	0.0021	0.0016	0.0023	0.0017	0.0008	0.0007	0.0006	0.0006	0.0005	0.0007	0.0004	0.0003	0.0002
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	18	18.5	18.6	18.6	18.4		20.4	20.7	21.3	20.4	19.4	22.3	19.5	14.3	13.2	12.5	15.4	14	20.4	16.6	12.7	8.12
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	0.014	0.02	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**27/04/2011**	**05/05/2011**	**10/05/2011**	**15/05/2011**	**23/05/2011**	**30/05/2011**	**07/06/2011**	**13/06/2011**	**16/06/2011**	**20/06/2011**	**27/06/2011**	**03/07/2011**	**09/07/2011**	**19/07/2011**	**26/07/2011**	**02/08/2011**	**16/08/2011**	**29/08/2011**	**08/09/2011**	**12/09/2011**	**19/09/2011**	**27/09/2011**
pH (field)	pH units																			8.03	8.04	8.06	8.07
pH (lab)	pH units	7.62	7.32	7.6	7.84	8.03	8.07	7.74	8.08	8.01	7.9	7.97	8.17	8.03	8.02	8.12	7.86	7.97	8.06	8.23	8.11	8.17	8.17
Hardness (from dissolved)	mg/L	57.2	40.3	47.5	70.2	88.6	117	87.2	118	120	115	126	121	128	111	126	76.3	106	118	132	138	127	143
Hardness (from total)	mg/L	61.5	49.2	51	81.2	92.4	110	109	129	140	150	125	111	137	126	130	149	116	123	122	137	121	119
Total Dissolved Solids	mg/L	98	78	96	98	140	150	140	160	170	170	160	150	160	170	190	130	180	180	180	170	180	210
Total Suspended Solids	mg/L	5	110	73	140	26	18	370	76	190	250	66	61	76	150	43	710	120	47	13	29	29	33
Alkalinity, total	mg/L	51	36	46	65	88	110	80	110	110	110	120	110	110	110	130	72	110	120	120	120	120	120
Sulphate, dissolved	mg/L	<5	<0.5	<0.5	<0.5	8.6	15	7.1				13	11	11	7	15						9.2	8.4
Chloride	mg/L	2.9	2.1	2	1.6	1.4	1.6										2			1.6	1.9	1.9	1.9
Fluoride	mg/L	0.15	0.1	0.13	0.18	0.22	0.29	0.24									0.19						
Nitrite (N)	mg/L	<0.005	0.007	<0.005	0.012	0.008	<0.005	0.017	0.009	0.006	0.021	0.007	0.006	0.007	0.009	0.007	0.01	0.008	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	<0.02	<0.02	0.03	0.1	0.14	0.28	0.16	0.26	0.24	0.21	0.16	0.16	0.17	0.14	0.18	0.04	0.12	0.11	0.12	0.11	0.12	0.12
Ammonia	mg/L	0.008	0.018	0.006	0.027	0.269	0.015	0.038		0.033		0.023	0.015	0.012	0.023	0.047		0.018	0.006	0.008	0.11	0.008	0.015
Aluminum, total	mg/L	0.161	2.06	1.42	4.11	1.04	0.524	6.04	3.67	7.22	8.07	1.77	1.2	1.88	3.13	1.71	18.5	2.29	0.939	0.299	0.647	0.703	0.785
Arsenic, total	mg/L	0.0004	0.0014	0.001	0.0023	0.0013	0.0007	0.0034	0.0022	0.0036	0.004	0.0014	0.0011	0.0015	0.0023	0.0016	0.0094	0.0023	0.0014	0.001	0.0012	0.0012	0.0011
Cadmium, total	mg/L	0.00008	0.00006	0.00003	0.00008	0.00006	0.00001	0.00014	0.00009	0.00019	0.00014	0.00013	0.00004	0.00003	0.00009	0.00005	0.00048	0.00007	0.00005	0.00002	0.00005	0.00002	0.00003
Calcium, total	mg/L	16	13	13.4	20.8	23.9	28.5	28.7	32.7	35.5	38.3	32.8	29.3	35.9	34.3	34.5	36.6	31.4	33.9	32.6	36.6	31.4	31.8
Chromium, total	mg/L	<0.001	0.004	0.003	0.008	0.002	0.001	0.013	0.008	0.015	0.016	0.003	0.002	0.004	0.006	0.003	0.038	0.005	0.002	<0.001	0.002	0.002	0.002
Copper, total	mg/L	0.0108	0.0115	0.0075	0.0157	0.0072	0.005	0.0228	0.0097	0.0171	0.0201	0.0126	0.0067	0.0074	0.0096	0.0129	0.0551	0.0095	0.0038	0.0023	0.0031	0.0037	0.0059
Iron, total	mg/L	0.304	3.29	2.22	6.93	2.43	1.06	11.3	5.19	11.1	13.1	2.99	2.21	3.39	5.1	3.17	31.7	4.74	2.45	1.29	1.96	1.85	1.82
Lead, total	mg/L	<0.0002	0.0011	0.0006	0.0019	0.0006	0.0003	0.0036	0.0015	0.003	0.0034	0.0009	0.0007	0.0008	0.0016	0.0008	0.009	0.0012	0.0005	<0.0002	0.0004	0.0004	0.0004
Magnesium, total	mg/L	5.25	4.07	4.24	7.08	7.96	9.3	9.08	11.5	12.6	13.2	10.5	9.09	11.5	9.85	10.6	14	9.08	9.41	9.87	11	10.4	9.64
Manganese, total	mg/L	0.042	0.161	0.115	0.243	0.127	0.036	0.307	0.102	0.178	0.216	0.068	0.068	0.08	0.194	0.103	1.34	0.205	0.155	0.141	0.164	0.14	0.14
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	<0.001
Nickel, total	mg/L	0.001	0.005	0.004	0.008	0.004	0.002	0.016	0.008	0.013	0.017	0.005	0.004	0.005	0.008	0.005	0.041	0.007	0.004	0.002	0.003	0.003	0.003
Phosphorus, total	mg/L	0.09	0.134	0.099	0.181	0.075	0.037	0.28	0.128	0.283	0.315	0.133	0.078	0.097		0.086	0.992	0.129	0.06	0.037	0.056	0.052	0.051
Potassium, total	mg/L	2.44	1.74	1.36	1.68	1.24	1.32	1.32	1.55	1.83	1.77	1.14	0.86	1.11	1.11	1.01	2.22	0.9	0.81	0.81	0.87	0.91	0.8
Selenium, total	mg/L	0.0001	0.0002	<0.0001	0.0002	0.0002	0.0002	0.0003	0.0003	0.0004	0.0003	0.0001	0.0002	0.0003	0.0003	0.0002	0.0006	0.0002	0.0002	0.0001	0.0001	<0.0001	0.0001
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	0.00005	0.00004	0.00007	0.00006	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	0.00013	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	3.16	1.96	2.46	3.88	5.19	6.23	5.16	8.43	7.88	7.29	7.03	5.7	7.26	5.6	6.75	5.27	5.01	5.44	5.75	6.41	5.97	5.42
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	0.00005	<0.00005	<0.00005	0.00005	<0.00005	0.00008	0.00007	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00016	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	0.011	0.007	0.016	0.008	<0.005	0.03	0.016	0.03	0.031	0.011	0.007	0.008	0.012	0.008	0.068	0.014	<0.005	<0.005	<0.005	<0.005	0.007
Aluminum, dissolved	mg/L	0.027	0.061	0.063	0.03	0.02	0.017	0.029	0.041	0.031	0.041	0.031	0.033	0.034	0.041	0.025	0.078	0.043	0.027	0.054	0.024	0.027	0.05
Arsenic, dissolved	mg/L	0.0004	0.0005	0.0006	0.0008	0.0007	0.0005	0.0008	0.0006	0.0007	0.0006	0.0007	0.0007	0.0007	0.0009	0.001	0.0009	0.001	0.0009	0.001	0.0009	0.0008	0.0008
Cadmium, dissolved	mg/L	0.00002	0.00002	0.00002	0.00001	<0.00001	<0.00001	0.00001	0.00013	0.00002	0.00006	0.00002	<0.00001	0.00006	<0.00001	<0.00001	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00002
Calcium, dissolved	mg/L	15.1	11.1	13	18.9	23.4	30.8	23.4	30.1	32.2	30.5	33.5	31.7	35.1	29.9	33.8	21.1	27.8	32.4	35.8	37.2	34.6	39.1
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.0065	0.0056	0.007	0.0031	0.0019	0.0026	0.0031	0.0049	0.0025	0.0029	0.0042	0.0028	0.0033	0.0026	0.0042	0.007	0.0067	0.0019	0.0051	0.0018	0.0026	0.004
Iron, dissolved	mg/L	0.194	0.303	0.462	0.73	0.681	0.222	0.503	0.225	0.28	0.207	0.249	0.324	0.353	0.499	0.475	0.695	0.603	0.682	0.811	0.671	0.59	0.745
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	4.72	3.06	3.69	5.59	7.33	9.71	6.97	10.4	9.62	9.55	10.3	10.1	9.9	8.72	10	5.7	8.99	9.08	10.3	10.8	9.8	11.1
Manganese, dissolved	mg/L	0.03	0.061	0.058	0.071	0.049	0.005	0.026	0.01	0.018	0.014	0.007	0.009	0.017	0.034	0.047	0.064	0.108	0.108	0.132	0.138	0.129	0.112
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001
Nickel, dissolved	mg/L	0.001	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, dissolved	mg/L	0.053	0.031	0.029	0.023	0.021	0.017	0.021	0.019	0.017	0.016	0.022	0.021	0.021		0.021	0.027	0.027	0.021	0.026	0.021	0.02	0.029
Potassium, dissolved	mg/L	2.1	1.46	1.18	1.11	1.13	1.33	0.84	1.14	1.03	0.97	0.99	0.87	0.88	0.68	0.85	0.52	0.7	0.7	0.83	0.91	0.82	0.89
Selenium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	2.82	1.84	2.23	3.73	4.78	6.7	5.5	7.08	7.14	6.87	7.16	7.02	6.66	5.73	6.45	4.31	5.68	5.51	6.08	6.42	5.89	6.57
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**06/10/2011**	**11/10/2011**	**19/10/2011**	**26/10/2011**	**30/10/2011**	**03/11/2011**	**08/11/2011**	**13/11/2011**	**22/11/2011**	**28/11/2011**	**06/04/2012**	**12/04/2012**	**14/04/2012**	**15/04/2012**	**16/04/2012**	**17/04/2012**	**18/04/2012**	**19/04/2012**	**20/04/2012**	**21/04/2012**	**22/04/2012**	**23/04/2012**
pH (field)	pH units	7.92	7.79	7.81	8.01	7.8	7.7	7.61	8			7.99	7.78	7.95	8.13	8.23	8.07	8.11	8	7.48	7.44	7.54	7.61
pH (lab)	pH units	8.08	8.01	8.13	8.14	8.18	8.17	8.2	8.32	7.98	8.14	8.23	8.23	8.19	8.14	8.08						7.68	
Hardness (from dissolved)	mg/L	146	144	153	147	147	154	177	149	183	175	206	195	162	134	117						60.8	
Hardness (from total)	mg/L	142	129	145	148	108	148	166	163	177	175	210	177	158	137	127						58.6	
Total Dissolved Solids	mg/L	180	160	180	180	170	150	206	210	208	238	286	260	196	170	164						108	
Total Suspended Solids	mg/L	<4	13	<4	15	7	4	25.8	6.3	<1.0	6.8	4.3	2	7.1	31.2	39.9						29.6	
Alkalinity, total	mg/L	140	130	140	140	150	150	150	158	169	171	199	185	156	131	110						49.5	
Sulphate, dissolved	mg/L	15		13							26.9	37.6	29.9	23.2	18	12.7						<0.50	
Chloride	mg/L	2	1.3	1.4	1.4	1.3	1.6	1.4	2	2.2	2.5	3.2	2.3	2.2	1.8	2						1.7	
Fluoride	mg/L										0.33	0.39	0.43	0.39	0.35	0.3						0.11	
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	0.005	<0.0050						<0.0050	
Nitrate (N)	mg/L	0.22	0.17	0.4	0.26	0.28	0.27	0.3	0.478	0.807	0.344	0.048	<0.020	<0.020	<0.020	<0.020						0.172	
Ammonia	mg/L	0.013	0.037	0.021	0.018	0.014	<0.005	0.0264	0.0168	0.0055	0.0121	0.0067	<0.0050	0.0081	0.0082	0.011						0.0079	
Aluminum, total	mg/L	0.184	0.299	0.089	0.342	0.12	0.107	0.461	0.112	0.027	0.174	0.236	0.097	0.218	1.01	1.21						0.458	
Arsenic, total	mg/L	0.0007	0.0008	0.0007	0.0009	0.0004	0.0006	0.0008	0.0005	0.0004	0.0004	0.0006	0.0004	0.00061	0.00099	0.00103						0.00056	
Cadmium, total	mg/L	0.00004	0.00002	0.00002	0.00018	0.00002	<0.00001	0.00003	<0.00001	0.00002	0.00002	0.00002	0.00002	0.000013	0.000028	0.000036						0.000025	
Calcium, total	mg/L	38.3	34.5	39.1	39.2	26.7	39.8	44.9	43.2	47	46.3	53.7	43.9	39.4	34.3	31.1						15.8	
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	0.002	0.0021						<0.0010	
Copper, total	mg/L	0.0032	0.0027	0.0033	0.0042	0.0025	0.0017	0.125	0.0047	0.0018	0.0051	0.0113	0.0055	0.0044	0.0114	0.0126						0.00746	
Iron, total	mg/L	0.76	1.05	0.657	0.883	0.378	0.496	1.27	0.451	0.135	0.398	0.365	0.158	0.413	1.64	1.88						0.899	
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	0.0065	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.00020	0.00046	0.00051						0.00022	
Magnesium, total	mg/L	11.2	10.5	11.4	12.1	10.1	11.8	13.1	13.4	14.6	14.5	18.5	16.3	14.4	12.5	11.9						4.67	
Manganese, total	mg/L	0.096	0.106	0.117	0.123	0.076	0.093	0.126	0.077	0.018	0.029	0.029	0.014	0.0223	0.0582	0.0732						0.0668	
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010						<0.000010	
Molybdenum, total	mg/L	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010						<0.0010	
Nickel, total	mg/L	0.002	0.002	0.002	0.002	0.001	0.001	0.003	0.001	0.001	0.001	0.001	<0.001	<0.0010	0.0028	0.0024						0.0018	
Phosphorus, total	mg/L	0.03	0.03	0.031	0.037	0.02	0.012	0.035	0.021	<0.01	0.016	0.047	0.03	0.049	0.085	0.091						0.086	
Potassium, total	mg/L	0.89	0.8	0.93	1.08	0.86	1.08	1.15	1.17	1.46	1.48	3.92	2.65	3.01	2.92	3.06						2.09	
Selenium, total	mg/L	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00015	0.0001	0.00017						0.00014	
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00008	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020						<0.000020	
Sodium, total	mg/L	6.46	5.92	6.85	7.26	5.98	7.15	7.64	8.45	8.94	9.28	12.9	10.6	9.59	7.95	7.29						2.89	
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050						<0.000050	
Zinc, total	mg/L	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.0050	<0.0050	0.0055						<0.0050	
Aluminum, dissolved	mg/L	0.025	0.021	0.012	0.011	0.012	0.013	0.0215	0.0123	0.0075	0.0303	0.0066	0.013	0.006	0.0067	0.0095						0.041	
Arsenic, dissolved	mg/L	0.0007	0.0007	0.0006	0.0006	0.0005	0.0005	0.0005	0.00045	0.00036	0.00041	0.0005	0.00037	0.00042	0.00046	0.00041						0.00043	
Cadmium, dissolved	mg/L	0.00001	0.00003	<0.00001	0.00001	0.00001	0.00001	0.00006	<0.000010	<0.000010	0.000037	0.000017	0.000047	0.000012	<0.000010	0.000018						0.000024	
Calcium, dissolved	mg/L	39	38.2	42.8	40	39.1	40.6	47	37.4	48.1	44	52.3	48.6	39.9	33.5	29.2						16.6	
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010	
Copper, dissolved	mg/L	0.0021	0.0024	0.0014	0.0015	0.0019	0.0018	0.0124	0.00171	0.00206	0.00283	0.00597	0.00468	0.0028	0.00358	0.00379						0.0055	
Iron, dissolved	mg/L	0.455	0.458	0.43	0.298	0.218	0.228	0.218	0.166	0.0771	0.0907	0.0265	0.0439	0.0506	0.0561	0.0835						0.271	
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020						<0.00020	
Magnesium, dissolved	mg/L	11.7	11.7	11.2	11.5	11.9	12.7	14.6	13.5	15.3	15.7	18.4	18	15.1	12.2	10.6						4.7	
Manganese, dissolved	mg/L	0.096	0.095	0.11	0.098	0.082	0.09	0.123	0.0726	0.0164	0.0193	0.0207	0.0131	0.0138	0.015	0.0229						0.0446	
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010						<0.000010	
Molydenum, dissolved	mg/L	0.001	<0.001	0.001	0.001	0.001	0.001	0.0013	0.0017	0.0013	0.0014	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010	
Nickel, dissolved	mg/L	0.002	0.002	0.001	0.001	0.001	0.001	0.0018	0.0014	0.0011	0.0012	<0.0010	0.0011	<0.0010	<0.0010	<0.0010						0.0011	
Phosphorus, dissolved	mg/L	0.018	0.021	0.031	0.014	0.015	0.013	0.018	0.013	<0.01	0.012	0.042	0.027	0.037	0.052	0.049						0.048	
Potassium, dissolved	mg/L	0.93	0.89	0.93	0.93	1.03	1.21	1.29	1.27	1.28	1.62	3.74	3.09	2.87	2.76	2.59						1.96	
Selenium, dissolved	mg/L	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.00024	0.00022	0.00022	0.00018	0.00021	0.00019	0.00018	0.00012	0.00013						0.00015	
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020						<0.000020	
Sodium, dissolved	mg/L	7	6.8	6.83	6.99	7.19	7.59	8.94	8.42	9.29	10.1	12.5	12.1	9.94	8.07	6.82						2.96	
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050						<0.000050	
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0062	<0.0050	<0.0050	<0.0050	<0.0050	0.008	<0.0050	<0.0050	<0.0050						<0.0050	

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**24/04/2012**	**25/04/2012**	**26/04/2012**	**27/04/2012**	**28/04/2012**	**29/04/2012**	**30/04/2012**	**01/05/2012**	**02/05/2012**	**03/05/2012**	**07/05/2012**	**10/05/2012**	**12/05/2012**	**18/05/2012**	**20/05/2012**	**25/05/2012**	**02/06/2012**	**06/06/2012**	**09/06/2012**	**13/06/2012**	**15/06/2012**	**19/06/2012**
pH (field)	pH units	8.04	7.81	7.63	7.7	7.59	7.49	7.65	7.23	7.23	7.44	7.68	8.07	7.9	8.11	7.84	7.76	8.04	7.74	7.77	7.78	7.89	7.75
pH (lab)	pH units	7.8		7.74			7.8	7.81				7.81		7.74	8.04	7.98	7.91	8.1	8.09	8	8.02	8.02	8.15
Hardness (from dissolved)	mg/L	62.7		65.9			72.3	68.9				73.4		75.6	95	97	101	123	119	121	115	105	120
Hardness (from total)	mg/L	57.3		78.6			79.2	97.4				96.8		116	105	108	176	142	144	182	239	186	193
Total Dissolved Solids	mg/L	120		128			112	112				106		146	146	144	140	164	134	160	160	170	160
Total Suspended Solids	mg/L	32.3		202			390	597				581		619	276	207	897	301	272	540	2600	1410	1030
Alkalinity, total	mg/L	54.9		56.9			52.1	57.8				65.6		70.3	95.8	88.7	95.8	123	123	115	108	96	110
Sulphate, dissolved	mg/L	<0.50		<0.50			<0.50	1.36				0.74		3.88	6.52	4.68	7.04	10.7	10.1	9.89	9.81	8.45	9.37
Chloride	mg/L	1.9		2			1.3	1.4				2.3		1.3	1.5	1.9	2.4	1.7	2.2	2.2	1.9	2.1	2.1
Fluoride	mg/L	0.13		0.15			0.15	0.15				0.17		0.2	0.21	0.2	0.24	0.28	0.29	0.28	0.26	0.24	0.26
Nitrite (N)	mg/L	<0.0050		<0.0050			0.0057	0.0467				0.044		0.038	0.0188	0.0162	0.037	0.0439	0.0185	0.0089	0.0135	0.0071	0.0376
Nitrate (N)	mg/L	0.387		0.441			0.466	0.534				0.138		0.108	0.123	0.119	0.134	0.173	0.157	0.143	0.163	0.113	0.15
Ammonia	mg/L	0.0051		0.018			0.031	0.042				0.048		0.0599	0.055	0.045	0.2	0.11	0.046	0.11	0.051	0.23	0.2
Aluminum, total	mg/L	0.681		3.85			6.63	11				11		14.5	6.45	4.64	21	7.71	5.64	15.5	30.7	23.8	20.2
Arsenic, total	mg/L	0.00073		0.00208			0.00333	0.00518				0.00544		0.00705	0.00365	0.00305	0.0105	0.00437	0.00331	0.00786	0.0151	0.0121	0.00913
Cadmium, total	mg/L	0.00004		0.000088			0.000181	0.000237				0.000245		0.000271	0.000127	0.000105	0.00054	0.000166	0.000163	0.000309	0.000717	0.000608	0.000546
Calcium, total	mg/L	15		20.1			20.1	23.5				23.6		27.8	26.7	27.9	41.5	35.8	37.1	45.2	56.3	44.7	48.1
Chromium, total	mg/L	0.0013		0.0069			0.0109	0.0196				0.0205		0.0283	0.0125	0.0094	0.0395	0.0133	0.0096	0.0268	0.0582	0.0451	0.036
Copper, total	mg/L	0.00654		0.0137			0.0188	0.0276				0.0332		0.0339	0.0155	0.0129	0.0504	0.0169	0.0134	0.0324	0.0782	0.0554	0.0442
Iron, total	mg/L	1.22		6.17			11.2	18.5				18.2		23.9	10.6	8.03	34.6	11.8	8.83	24.7	51.5	37.7	30.5
Lead, total	mg/L	0.00031		0.00189			0.00353	0.00567				0.00515		0.00685	0.00293	0.00214	0.00998	0.00338	0.00243	0.00637	0.0155	0.0108	0.00856
Magnesium, total	mg/L	4.81		6.9			7.05	9.41				9.2		11.3	9.3	9.31	17.7	12.8	12.4	16.9	23.9	18.1	17.6
Manganese, total	mg/L	0.093		0.188			0.289	0.443				0.483		0.694	0.34	0.275	0.98	0.319	0.263	0.598	1.49	0.971	0.811
Mercury, total	mg/L	<0.000010		<0.000010			<0.000010	<0.000010				<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010		0.0011			0.0011	0.0013				0.0013		0.0013	0.0012	0.0011	0.0019	0.0015	0.0014	0.0021	0.0027	0.0019	0.002
Nickel, total	mg/L	0.0021		0.0068			0.0114	0.0189				0.019		0.0257	0.0122	0.0099	0.0382	0.014	0.0104	0.027	0.0629	0.0438	0.0345
Phosphorus, total	mg/L	0.074		0.168			0.281	0.465				0.475		0.642	0.29	0.211	0.849	0.279	0.26	0.636	1.65	1.22	0.898
Potassium, total	mg/L	1.67		2.26			2.16	2.67				2.43		2.53	1.69	1.51	3.4	2.21	1.9	2.99	3.67	3.39	3.04
Selenium, total	mg/L	0.00017		0.00039			0.00041	0.00033				0.00031		0.0004	0.00036	0.00026	0.00059	0.00032	0.00027	0.00032	0.00094	0.00074	0.00056
Silver, total	mg/L	<0.000020		0.000033			0.000052	0.00011				0.000091		0.000124	0.000051	0.000048	0.00017	0.00007	0.000046	0.000136	0.00029	0.000197	0.00015
Sodium, total	mg/L	3		4.14			3.73	4.43				4.33		4.59	4.91	5.03	6.52	6.81	6.79	7.75	7.59	6.9	7.67
Thallium, total	mg/L	<0.000050		<0.000050			0.000089	0.000129				0.000125		0.000145	0.00007	0.000052	0.000213	0.000096	0.00006	0.000177	0.000247	0.00022	0.000196
Zinc, total	mg/L	<0.0050		0.0154			0.0245	0.0417				0.0436		0.0523	0.0929	0.0175	0.0848	0.0312	0.0222	0.0604	0.136	0.0964	0.0718
Aluminum, dissolved	mg/L	0.0412		0.0445			0.0426	0.0364				0.0365		0.032	0.0406	0.0201	0.0297	0.0307	0.0179	0.0397	0.0336	0.0327	0.037
Arsenic, dissolved	mg/L	0.00052		0.00056			0.00062	0.0007				0.00076		0.00084	0.00081	0.00076	0.00082	0.00069	0.00064	0.00076	0.00073	0.00077	0.0007
Cadmium, dissolved	mg/L	0.000023		0.000016			0.00002	0.000017				0.000018		0.00002	0.000012	<0.000010	0.000012	0.000011	<0.000010	0.000012	<0.000010	0.000011	0.000012
Calcium, dissolved	mg/L	17.1		17.8			20.8	18.8				20.3		20.7	24.8	25.8	26.7	33	31.2	32.8	30.6	28.5	32.6
Chromium, dissolved	mg/L	<0.0010		<0.0010			<0.0010	<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00564		0.00603			0.00498	0.00489				0.00396		0.00259	0.00239	0.0023	0.00193	0.00192	0.00194	0.00299	0.00202	0.00222	0.0021
Iron, dissolved	mg/L	0.403		0.363			0.656	0.609				0.761		0.905	0.852	0.597	0.628	0.369	0.346	0.421	0.332	0.432	0.437
Lead, dissolved	mg/L	<0.00020		<0.00020			<0.00020	<0.00020				<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	4.89		5.21			4.96	5.29				5.54		5.8	8.03	7.92	8.42	9.9	10	9.58	9.33	8.19	9.27
Manganese, dissolved	mg/L	0.064		0.0874			0.116	0.15				0.158		0.17	0.112	0.0422	0.19	0.0897	0.0497	0.0884	0.0886	0.105	0.0756
Mercury, dissolved	mg/L	<0.000010		<0.000010			<0.000010	<0.000010				<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010		<0.0010			<0.0010	0.0011				<0.0010		<0.0010	<0.0010	0.0011	0.0012	0.0013	0.0015	0.0013	0.0013	0.0011	0.0012
Nickel, dissolved	mg/L	0.0012		0.0014			0.0015	0.002				0.0018		0.0017	0.0017	0.0019	0.0016	0.0015	0.0018	0.0018	0.0016	0.0019	0.0019
Phosphorus, dissolved	mg/L	0.038		0.026			0.028	0.028				0.027		0.025	0.028	0.022	0.023	0.023	0.018	0.031	0.019	0.02	0.02
Potassium, dissolved	mg/L	1.74		1.6			1.5	1.49				1.28		1.07	1.05	1.02	1.06	1.1	1.1	1.11	0.996	0.8	0.897
Selenium, dissolved	mg/L	0.00017		0.00023			0.00029	0.00027				0.00019		0.00013	0.00012	0.00012	0.00013	0.00011	0.00012	0.00012	0.00014	0.00014	0.00015
Silver, dissolved	mg/L	<0.000020		<0.000020			<0.000020	<0.000020				<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	3.19		3.71			3.74	4.14				4.05		3.89	5.14	5.05	5.44	6.43	6.56	6.48	6.48	5.95	6.26
Thallium, dissolved	mg/L	<0.000050		<0.000050			<0.000050	<0.000050				<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050		<0.0050			<0.0050	<0.0050				<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**22/06/2012**	**29/06/2012**	**08/07/2012**	**11/07/2012**	**17/07/2012**	**24/07/2012**	**31/07/2012**	**07/08/2012**	**10/08/2012**	**13/08/2012**	**16/08/2012**	**23/08/2012**	**25/08/2012**	**27/08/2012**	**03/09/2012**	**12/09/2012**	**19/09/2012**	**24/09/2012**	**04/10/2012**	**12/10/2012**	**16/10/2012**	**19/10/2012**
pH (field)	pH units	8.1	7.93	8.03	8.02	8.17	8.04	8.01	8.01	8.24	8	8.03	7.91	8.29	8.32	8.27	6.3	7.95	7.95	7.4	7.83	7.88	8.7
pH (lab)	pH units	8.12	8.22	8.19	8.04	8.13	8.2	8.22	8.12	8.27	8.32	8.28	8.29	8.2	8.36	8.28	8.13	8.19	8.24	8.14	8.11	8.23	8.12
Hardness (from dissolved)	mg/L	117	141	136	131	151	147	149	154	148	148	155	156	158	149	153	135	153	149			163	
Hardness (from total)	mg/L	142	140	143	194	176	221	160	176	177	156	163	158	194	162	165	153	140	157	150	178	153	170
Total Dissolved Solids	mg/L	188	192	180	184	194	202	194	204	214	196	214	208	212	202	198	174	208	200	206	210	188	
Total Suspended Solids	mg/L	385	157	150	1010	557	1150	165	2100	228	224	124	75.8	443	169	85.1	401	11.7	9.3	62.8	21	30	32.4
Alkalinity, total	mg/L	118	137	134	134	142	141	152	151	154	147	154	159	158	156	154	127	145	147	143	151	144	147
Sulphate, dissolved	mg/L	10	11.8	9.1	9.74	11.6	9.01	10.2	11.7	9.48	9.09	10.3	10.7	10.4	10.3	9.73	9.56	12.5	11.9	11.4	14.5	12.6	14.9
Chloride	mg/L	1.7	2.2	1.9	1.5	1.3	1.4	1.5	1.6	1.2	1.6	9	1.8	1.6	1.8	1.4	1.8	1.7	1.4	1.5	2.1	1.8	1.9
Fluoride	mg/L	0.28	0.3	0.29	0.28	0.3	0.32	0.34	0.32	0.33	0.3	0.32	0.33	0.34	0.3	0.3	0.34	0.3	0.26	0.27	0.28	0.25	0.25
Nitrite (N)	mg/L	0.0067	0.0114	0.0055	<0.0050	0.0065	0.0074	0.0086	<0.050	0.0089	<0.050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.17	0.207	0.164	0.155	0.137	0.121	0.215	<0.20	0.191	0.2	0.164	<0.20	0.103	0.119	0.106	0.082	0.105	0.06	0.145	0.158	0.163	0.169
Ammonia	mg/L	0.042	0.077	0.041	0.035	0.11	0.17	0.021	0.11	0.025	0.14	0.012	0.049	0.0054	0.0056	0.0066	0.009	0.16	0.11	0.098	0.011	0.017	0.089
Aluminum, total	mg/L	6.31	3.82	3.75	16.9	8.28	16.7	5.11	5.17	4	5.16	3.14	0.754	2.47	3.41	0.54	2.11	0.256	0.0923	0.0236	0.157	0.246	0.117
Arsenic, total	mg/L	0.00453	0.00263	0.00247	0.00854	0.00502	0.00942	0.00314	0.00332	0.00297	0.00348	0.00228	0.00132	0.00287	0.00248	0.00146	0.00234	0.00099	0.00094	0.00061	0.00082	0.00089	0.0008
Cadmium, total	mg/L	0.00022	0.000103	0.000101	0.000441	0.000287	0.000553	0.000073	0.00009	0.000063	0.000077	0.000041	0.000021	0.000147	0.000055	0.000036	0.000097	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010
Calcium, total	mg/L	36.8	36.7	37	49.7	45.7	56.9	41.8	45.4	46.3	39.8	42.3	41.2	52.1	42.5	42.9	41	37.6	41.8	39.1	44.9	39.2	45.2
Chromium, total	mg/L	0.0123	0.007	0.0069	0.0314	0.0149	0.0306	0.009	0.0091	0.0079	0.0095	0.0056	0.0012	0.0039	0.0065	<0.0010	0.0039	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0184	0.0102	0.00945	0.0387	0.0241	0.0476	0.0113	0.0124	0.011	0.0125	0.00786	0.00424	0.014	0.00913	0.0041	0.0122	0.00198	0.00221	0.00139	0.00262	0.00256	0.00234
Iron, total	mg/L	11.8	6.45	6.3	28.1	14	30	8.45	8.58	7.74	9.47	5.75	2.14	5.93	6.59	1.82	5.67	1.12	0.915	0.494	0.712	1.06	0.818
Lead, total	mg/L	0.0034	0.00175	0.00151	0.00766	0.00436	0.00965	0.00202	0.00222	0.00178	0.00233	0.00131	0.00062	0.00247	0.00156	0.00054	0.00222	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	<0.00020
Magnesium, total	mg/L	12.1	11.7	12.2	17	15	19.3	13.6	15.3	15	13.7	14	13.5	15.6	13.6	14.1	12.2	11.3	12.7	12.7	16.1	13.3	13.9
Manganese, total	mg/L	0.335	0.155	0.159	0.699	0.419	0.983	0.191	0.226	0.242	0.252	0.153	0.0937	0.392	0.194	0.133	0.416	0.0913	0.0814	0.0799	0.0723	0.0937	0.0947
Mercury, total	mg/L	<0.000010	0.000013	<0.000010	<0.000010	<0.000010	<0.000010	0.000026	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0014	0.0015	0.0015	0.002	0.0015	0.0015	0.0017	0.0019	<0.0025	0.0015	0.0016	0.001	<0.0010	0.0016	0.0011	<0.0010	0.0011	0.0013	0.0012	0.0013	0.001	0.0011
Nickel, total	mg/L	0.0142	0.0078	0.0071	0.0308	0.0172	0.0378	0.0089	0.0103	0.0092	0.01	0.0064	0.0031	0.0096	0.0073	0.0031	0.0085	0.0021	0.0021	0.0016	0.0024	0.0022	0.002
Phosphorus, total	mg/L	0.335	0.158	0.158	0.775	0.456	1.11	0.205	0.221	0.221	0.27	0.151	0.074	0.298	0.158	0.172	0.279	0.036	0.03	0.025	0.052	0.04	0.048
Potassium, total	mg/L	1.68	1.51	1.34	2.57	2.05	2.45	1.7	1.82	1.61	1.57	1.46	1.16	1.42	1.54	1.16	0.881	0.939	1.13	0.975	1.05	0.934	1
Selenium, total	mg/L	0.00045	0.00016	0.00015	0.00066	0.00028	0.00047	0.00016	0.00028	<0.00025	0.00033	0.00018	0.00014	0.00021	0.00024	0.00014	<0.00010	0.00012	<0.00010	0.00013	0.00017	0.00013	0.00012
Silver, total	mg/L	0.000068	0.000021	0.000034	0.000136	0.000104	0.000155	0.000038	0.000038	<0.000050	0.000051	<0.000020	<0.000020	<0.000020	0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	6.55	6.92	7.1	7.53	7.59	8.11	7.6	8.42	8.25	7.63	8.1	8	8.44	7.61	8.26	6.76	6.73	7.79	7.46	9.38	7.72	8.14
Thallium, total	mg/L	0.000066	<0.000050	<0.000050	0.000162	0.000086	0.000144	0.000059	0.000064	<0.00013	0.000056	<0.000050	<0.000050	<0.000050	0.000054	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0298	0.0163	0.0156	0.0658	0.0357	0.0775	0.02	0.02	0.02	0.0211	0.0124	0.0056	0.018	0.0144	<0.0050	0.0154	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0318	0.0301	0.0312	0.0482	0.0505	0.0332	0.0253	0.025	0.0347	0.0327	0.0229	0.0293	0.0284	0.0219	0.0184	0.0253	0.0184	0.0155			0.0129	
Arsenic, dissolved	mg/L	0.00069	0.00077	0.0009	0.00085	0.00087	0.00097	0.00093	0.00092	0.00099	0.00094	0.00088	0.00095	0.00094	0.00084	0.00095	0.00078	0.00087	0.0008			0.00069	
Cadmium, dissolved	mg/L	<0.000010	0.000013	0.000012	0.000015	0.000016	<0.000010	<0.000010	<0.000010	0.000016	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			0.000023	
Calcium, dissolved	mg/L	30.8	37.3	35.9	35.6	40.7	39.5	39.7	41.6	38.6	38.9	41.3	40.3	42.1	39.1	40.4	36.4	41.3	40.3			45	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010	
Copper, dissolved	mg/L	0.00199	0.00228	0.00181	0.00183	0.00193	0.00185	0.00162	0.0015	0.00195	0.00174	0.00145	0.00172	0.00188	0.00164	0.00183	0.0022	0.00183	0.00162			0.00167	
Iron, dissolved	mg/L	0.349	0.374	0.489	0.49	0.48	0.516	0.5	0.61	0.591	0.579	0.557	0.625	0.51	0.609	0.683	0.56	0.699	0.558			0.546	
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020	
Magnesium, dissolved	mg/L	9.67	11.6	11.2	10.2	11.9	11.6	12.2	12.1	12.7	12.3	12.7	13.4	12.8	12.6	12.7	10.8	12.2	11.8			12.2	
Manganese, dissolved	mg/L	0.0681	0.0477	0.0504	0.111	0.0845	0.0846	0.0574	0.0713	0.0688	0.0552	0.0526	0.0428	0.0605	0.0637	0.0705	0.0822	0.0854	0.0662			0.0604	
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Molydenum, dissolved	mg/L	0.0016	0.0016	0.0015	0.0013	0.0017	0.0016	0.0015	0.0015	0.0015	0.0015	0.0016	0.0016	0.0016	0.0015	0.0014	<0.0010	0.0012	0.0012			0.0011	
Nickel, dissolved	mg/L	0.0017	0.0016	0.0017	0.0017	0.0016	0.0017	0.0017	0.0014	0.0017	0.0015	0.0013	0.0014	0.0014	0.0016	0.0017	0.0019	0.0017	0.0016			0.0015	
Phosphorus, dissolved	mg/L	0.018	0.019	0.026	0.023	0.024	0.024	0.024	0.024	0.027	0.023	0.024	0.024	0.022	0.023	0.024	0.021	0.023	0.02			0.021	
Potassium, dissolved	mg/L	0.899	1.12	0.945	0.891	1.02	1.04	1.11	1.06	1.13	1.07	1.06	1.22	1.23	1.13	1.07	0.815	0.992	1.1			0.937	
Selenium, dissolved	mg/L	<0.00010	0.00016	0.00015	0.00011	0.00015	0.00015	0.00011	0.00014	0.00018	0.00013	0.00015	0.00011	0.00011	0.00015	<0.00010	0.00012	<0.00010	0.00014			0.00013	
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020	
Sodium, dissolved	mg/L	6.43	7.69	7.23	6.84	7.68	7.71	7.58	7.77	7.89	7.74	7.69	8.24	7.88	7.64	7.63	6.68	7.47	7.08			7.28	
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050	
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050	

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**22/10/2012**	**11/11/2012**	**12/04/2013**	**16/04/2013**	**24/04/2013**	**27/04/2013**	**29/04/2013**	**30/04/2013**	**30/04/2013**	**07/05/2013**	**09/05/2013**	**12/05/2013**	**15/05/2013**	**19/05/2013**	**24/05/2013**	**29/05/2013**	**31/05/2013**	**06/06/2013**	**16/06/2013**	**18/06/2013**	**25/06/2013**	**02/07/2013**
pH (field)	pH units	8.6	7.47	8.2	8	8.94	8.69	8.57	8.3	8.4	8.39	7.61	7.11	8.1	8.17	9.42	8.1	8.41	7.56	8.8	8.4	8.03	8.03
pH (lab)	pH units	8.16	8.11	8.28	8.35	8.29		8.27	8.21	8.32	7.99	7.77	7.17	7.79	8.05	7.88	7.97	7.94	8.16	8.13	8.1	8.18	8.17
Hardness (from dissolved)	mg/L	175	167	311	249	217		221	203	199	93	64.8	40	46.9	85.9	73	90.5	107	111	124	129	148	126
Hardness (from total)	mg/L	165	185	312	250	226		222	412	214	107	80	41.1	60.6	91.4	81.2	109	140	127	144	150	159	157
Total Dissolved Solids	mg/L	226	236	464	364	282		314	268	292	170	104	78	78	134	128	146	178	156	176	194	188	162
Total Suspended Solids	mg/L	4.1	<1.0	2.2	25.4	7.0		8.5	<1.0	24.5	88.3	306.0	26.5	216.0	79.0	134.0	238.0	324.0	159.0	99.0	60.0	21.8	221.0
Alkalinity, total	mg/L	171	175	290	237	207		197	183	182	83.7	56.7	24.1	40.7	74.6	64.9	83.3	94.6	108	124	127	146	122
Sulphate, dissolved	mg/L	17.6	27.4	82.8	50.5	43.5		42	46.6	41	5.97	<0.50	0.71	<0.50	7.14	7.69	13.8	19.1	9.57	10.8	12.9	15.8	11.3
Chloride	mg/L	1.8	3.4	6.1	3.7	3.4		4.7	5.5	5.3	3.1	3.1	2.3	1.5	3.6	3.4	3.8	4.7	1.8	2.5	1.7	1.6	1.8
Fluoride	mg/L	0.26	0.25	0.58	0.52	0.55		0.42	0.38	0.37	0.19	0.13	0.093	0.12	0.17	0.17	0.23	0.27	0.25	0.3	0.3	0.34	0.3
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		0.0152	0.0142	0.0218	0.0074	<0.0050	0.0090	0.0067	<0.0050	0.0227	0.0240	0.0383	0.0094	0.0108	0.0077	0.0054	0.0085
Nitrate (N)	mg/L	0.25	0.232	<0.020	<0.020	0.321		1.46	1.55	1.55	0.386	0.207	<0.020	<0.020	0.397	0.594	1.01	1.33	0.097	0.143	0.167	0.213	0.166
Ammonia	mg/L	0.016	<0.0050	0.0710	0.0210	0.0190		0.0210	0.0220	0.0290	0.0260	0.0410	0.1200	0.0620	0.0440	0.0550	0.0510	0.0620	0.0890	0.0780	0.0520	0.0360	0.0930
Aluminum, total	mg/L	0.0449	0.0106	0.0977	0.865	0.304		0.332	0.0304	0.916	1.74	3.22	2.04	4.23	1.95	1.34	4.71	7.91	3.7	2.88	1.79	0.707	7.04
Arsenic, total	mg/L	0.00057	0.00033	0.00092	0.00107	0.00063		0.0006	0.00164	0.00085	0.00116	0.00176	0.00128	0.00254	0.00147	0.0014	0.00317	0.00422	0.00253	0.00226	0.0019	0.00104	0.00414
Cadmium, total	mg/L	<0.000010	<0.000010	0.000012	0.000018	0.000013		0.000021	<0.000010	<0.000010	0.000047	0.000069	0.000050	0.000078	0.000033	0.000053	0.000075	0.000118	0.000055	0.000040	0.000022	0.000014	0.000114
Calcium, total	mg/L	42.8	48.6	75.7	59.8	52.4		53.5	107	52.6	27.2	20.8	10.9	15.6	23.6	21	26.5	35.8	32.4	37	39.2	40.5	39.8
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	0.0017	<0.0010		<0.0010	<0.0010	0.0013	0.0028	0.0054	0.0037	0.0077	0.0035	0.0023	0.0091	0.0142	0.0075	0.0058	0.0037	0.0016	0.0144
Copper, total	mg/L	0.00169	0.00207	0.0183	0.028	0.0103		0.0105	<0.00020	0.0185	0.0211	0.017	0.0119	0.0157	0.016	0.0241	0.0263	0.0333	0.0108	0.00854	0.00729	0.00367	0.0169
Iron, total	mg/L	0.4	0.0422	0.169	1.34	0.447		0.515	4.96	1.32	2.71	4.88	3.4	7.3	3.57	2.98	8.63	12.9	6.46	5.13	3.23	1.18	11.2
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	0.00045	0.00036		<0.00020	<0.00020	0.00041	0.00078	0.00147	0.00097	0.00209	0.00096	0.00117	0.00230	0.00319	0.00163	0.00116	0.00086	0.00031	0.00307
Magnesium, total	mg/L	14	15.4	30	24.4	23		21.4	35.1	20.1	9.58	6.79	3.38	5.27	7.91	7	10.4	12.4	11.3	12.5	12.6	14	14
Manganese, total	mg/L	0.032	0.0414	0.0568	0.059	0.0323		0.0279	7.14	0.0461	0.125	0.239	0.15	0.299	0.192	0.237	0.546	0.584	0.193	0.123	0.0819	0.0381	0.222
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	0.000015	0.000010	0.000022	<0.000010	0.000015	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000016
Molybdenum, total	mg/L	0.0013	0.0011	<0.0010	<0.0010	<0.0010		0.0017	0.0018	0.0018	0.0013	<0.0010	<0.0010	<0.0010	0.0013	<0.0010	0.0027	0.0032	0.0014	0.0017	0.0019	0.0018	0.002
Nickel, total	mg/L	0.0014	0.0013	0.0017	0.0024	0.0012		0.0013	0.0014	0.002	0.0037	0.006	0.0047	0.0091	0.0045	0.0047	0.0098	0.0154	0.0086	0.0069	0.0048	0.0024	0.0146
Phosphorus, total	mg/L	0.022	<0.01	0.078	0.066	0.053		0.036	0.162	0.049	0.175	0.304	0.173	0.311	0.13	0.144	0.27	0.388	0.185	0.125	0.096	0.038	0.292
Potassium, total	mg/L	1.03	1.59	8.7	5.55	4.51		4.74	5.96	3.64	2.73	2.44	1.79	1.8	1.65	1.75	2.69	2.7	1.6	1.38	1.55	1.56	1.85
Selenium, total	mg/L	0.00011	0.00015	0.00021	0.00024	0.00023		0.00072	<0.00010	0.0004	0.00022	0.00031	0.0001	<0.00010	0.00029	0.00025	0.00028	0.00039	0.00026	0.00018	0.00015	0.00015	0.00027
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	0.000025	<0.000020	0.000027	<0.000020	0.000020	<0.000020	0.000033	<0.000040	0.000027	0.000021	<0.000020	<0.000020	0.000049
Sodium, total	mg/L	8.14	9.45	24.9	18.7	15.9		15.8	27.1	15.1	6.42	4	1.65	2.52	5.4	5.69	7.61	9	6.73	7.72	8.23	9.47	8.42
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050	0.000069
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	0.0055	<0.0050		<0.0050	<0.0050	0.0090	0.0118	0.0148	0.0114	0.0194	0.0091	0.0101	0.0181	0.0290	0.0135	0.0129	0.0080	<0.0050	0.0259
Aluminum, dissolved	mg/L	0.0102	0.0059	0.0147	0.011	0.0077		0.0064	0.0052	0.0038	0.0141	0.0341	0.201	0.0446	0.029	0.0241	0.0199	0.0224	0.0196	0.0168	0.0186	0.018	0.0259
Arsenic, dissolved	mg/L	0.00056	0.00032	0.00101	0.00075	0.00045		0.00052	0.00048	0.00041	0.00036	0.00042	0.00046	0.00052	0.00054	0.00059	0.00067	0.00085	0.00096	0.00093	0.00083	0.00063	0.00099
Cadmium, dissolved	mg/L	<0.000010	<0.000010	0.000011	<0.000010	0.000011		0.000013	<0.000010	0.000013	0.000015	0.000015	0.000016	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	45.8	43.4	73.2	59	50.4		53.9	49.5	48.4	24.1	17.1	11.7	12.7	23	19.1	24	28.6	29.2	32.8	34.3	38.2	33.2
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00172	0.00196	0.0161	0.012	0.00426		0.00543	0.00496	0.0056	0.0056	0.00682	0.00846	0.00408	0.00725	0.011	0.0076	0.00769	0.00216	0.00194	0.00273	0.00201	0.00182
Iron, dissolved	mg/L	0.3	0.0272	0.0512	0.0354	0.0393		0.0339	0.0275	0.0211	0.106	0.151	0.555	0.441	0.413	0.385	0.572	0.635	0.68	0.367	0.371	0.168	0.337
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	14.8	14.2	31.1	24.7	22.3		21	19.3	18.9	7.98	5.36	2.6	3.68	6.94	6.16	7.43	8.74	9.22	10.2	10.6	12.7	10.4
Manganese, dissolved	mg/L	0.0312	0.0376	0.0538	0.0297	0.0201		0.0157	0.0129	0.0111	0.0414	0.0638	0.0614	0.0822	0.0969	0.119	0.271	0.182	0.0652	0.0256	0.0154	0.0122	0.0165
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0014	0.001	<0.0010	<0.0010	<0.0010		0.0016	0.0017	0.0017	0.001	<0.0010	<0.0010	<0.0010	0.0012	0.0016	0.0025	0.0029	0.0014	0.0015	0.0016	0.0017	0.0017
Nickel, dissolved	mg/L	0.0015	0.0012	0.0016	0.0012	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0011	0.0013	0.0015	0.0014	0.0012	0.0013	0.0013	0.0016	0.0015	0.0013	0.0012	0.0016
Phosphorus, dissolved	mg/L	0.015	<0.01	0.065	0.039	0.031		0.026	0.019	0.015	0.041	0.045	0.069	0.028	0.018	0.02	0.019	0.021	0.023	0.02	0.021	0.016	0.018
Potassium, dissolved	mg/L	1.15	1.49	8.95	5.97	4.42		4.33	3.76	3.51	2.38	2.05	1.53	1.24	1.49	1.69	1.97	2.26	1.15	1.11	1.16	1.42	1.02
Selenium, dissolved	mg/L	0.00016	0.00017	0.00027	0.00018	0.00026		0.00064	0.00061	0.00056	0.00023	<0.00010	<0.00010	<0.00010	0.00021	0.00017	0.0002	0.00024	0.00012	0.00014	0.00011	0.00014	0.00014
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	8.56	8.5	26.1	19.4	15.7		15.7	15.1	14.9	5.81	3.75	1.5	2.42	5.16	5.6	6.94	8.22	6.36	6.89	7.28	8.54	7.72
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**11/07/2013**	**19/07/2013**	**23/07/2013**	**30/07/2013**	**08/08/2013**	**16/08/2013**	**21/08/2013**	**22/08/2013**	**27/08/2013**	**03/09/2013**	**09/09/2013**	**18/09/2013**	**20/09/2013**	**24/09/2013**	**03/10/2013**	**11/10/2013**	**18/10/2013**	**21/10/2013**	**31/10/2013**	**08/11/2013**	**14/11/2013**	**18/11/2013**
pH (field)	pH units	8.15	8.16	8.16	8.14	8.23	8.1	7.71	8.02	7.82	8.01	8.02	7.62	7.91	7.57	7.57	7.81	7.81	8.15	7.98	8.04	7.78	7.73
pH (lab)	pH units	8.08	8.3	8.22	8.16	8.26	8.22	8.29	8.18	8.16	8.1	8.17	8.2	8.03	8.17	8.15	8.11	8.3	8.22	8.21	8.2	8.37	8.27
Hardness (from dissolved)	mg/L	130	161	121	146	145	155	159	157	146	140	162	145	153	142	149	162	158	164	157	181	180	215
Hardness (from total)	mg/L	157	168	193	162	170	175	168	174	167	163	169	149	205	145	158	167	161	163	173	198	211	226
Total Dissolved Solids	mg/L	204	202	160	192	232	204	192	214	164	214	224	184	214	156	252	208	234	202	210	234	202	256
Total Suspended Solids	mg/L	112.0	17.4	707.0	66.7	33.5	13.4	23.9	30.0	55.5	74.7	16.1	118.0	295.0	48.2	17.3	32.6	6.5	2.3	19.5	2.5	39.9	290.0
Alkalinity, total	mg/L	133	154	120	130	149	156	154	155	144	141	153	140	140	131	142	146	153	149	150	172	175	184
Sulphate, dissolved	mg/L	13.8	15.3	10.2	10.3	13	15.2	13.2	12.3	9.23	10	14.1	12.9	14.2	14.2	13.9	15.3	16.7	14.9	14.9	20.9	26.1	28.7
Chloride	mg/L	1.6	1.7	1.5	1.7	2	1.5	1.3	1.6	1.7	1.8	1.8	2.1	2.1	1.8	2.1	1.8	2	2	1.7	2.3	2.2	2.7
Fluoride	mg/L	0.31	0.36	0.24	0.3	0.33	0.35	0.32	0.32	0.28	0.28	0.3	0.26	0.29	0.28	0.27	0.25	0.29	0.28	0.29	0.36	0.34	0.34
Nitrite (N)	mg/L	0.0058	0.0056	<0.050	<0.0050	<0.050	0.0077	<0.0050	<0.0050	0.0053	0.0070	<0.0050	<0.0050	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.175	0.203	<0.20	0.159	<0.20	0.238	0.14	0.157	0.13	0.122	0.088	0.087	0.06	0.096	0.129	0.123	0.182	0.186	0.197	0.259	0.262	0.257
Ammonia	mg/L	0.0630	0.0270	0.0860	0.0840	0.0280	0.0670	0.0250	0.0250	0.0300	0.0490	0.0240	0.0320	0.0320	0.0640	0.0230	0.0230	0.0370	0.0320	0.0310	0.0180	0.0550	0.0240
Aluminum, total	mg/L	2.99	0.576	16.2	1.75	0.93	0.404	0.713	1.17	1.64	1.95	0.371	2.91	9.23	1.33	0.383	0.556	0.147	0.0514	0.429	0.0571	0.109	2.17
Arsenic, total	mg/L	0.00208	0.00109	0.00736	0.0017	0.00138	0.00104	0.00122	0.00136	0.00167	0.00182	0.00122	0.00221	0.00529	0.00144	0.0009	0.00105	0.00082	0.00077	0.00076	0.00051	0.00047	0.00149
Cadmium, total	mg/L	0.000046	0.000016	0.000223	0.000040	0.000015	0.000010	0.000012	0.000014	0.000029	0.000022	<0.000010	0.000036	0.000149	0.000030	0.000036	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000051
Calcium, total	mg/L	39.7	43.4	46.8	43.7	44.8	44.6	43	44.4	43.9	42.6	44.6	39.2	51.7	38.3	40.8	43.6	42.1	42.4	45.6	50.6	54.6	59.7
Chromium, total	mg/L	0.0068	0.0012	0.0313	0.0035	0.0020	0.0011	0.0019	0.0022	0.0039	0.0044	0.0010	0.0062	0.0185	0.0028	<0.0010	0.0015	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	0.0040
Copper, total	mg/L	0.00848	0.00364	0.0353	0.00562	0.00397	0.00304	0.00364	0.00378	0.0046	0.00562	0.00238	0.00707	0.0274	0.00512	0.00273	0.00345	0.00189	0.00185	0.0025	0.00192	0.00227	0.0101
Iron, total	mg/L	5.01	1.21	23.6	3.21	1.98	1.11	1.6	1.97	3.38	3.87	1.26	4.86	15.8	2.61	1.36	1.38	0.758	0.644	0.983	0.237	0.292	4.25
Lead, total	mg/L	0.00120	0.00024	0.00665	0.00069	0.00038	0.00022	0.00030	0.00036	0.00062	0.00075	<0.00020	0.00111	0.00400	0.00053	<0.00020	0.00025	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00134
Magnesium, total	mg/L	14	14.5	18.4	12.9	14.1	15.4	14.6	15.3	13.9	13.7	14.1	12.3	18.4	12	13.6	14.1	13.7	13.9	14.3	17.3	18.2	18.8
Manganese, total	mg/L	0.0996	0.0383	0.598	0.0757	0.0427	0.0296	0.0416	0.0523	0.103	0.134	0.0478	0.198	0.586	0.138	0.0816	0.0727	0.0603	0.0415	0.0683	0.0168	0.0288	0.199
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0015	0.002	0.0017	0.0015	0.0015	0.0018	0.0017	0.0018	0.0014	0.0012	0.0017	0.0012	0.0016	0.001	0.001	0.0011	0.0011	0.0014	0.0013	0.0014	0.0014	0.001
Nickel, total	mg/L	0.0072	0.0026	0.0326	0.0046	0.0031	0.003	0.0028	0.0034	0.0046	0.0049	0.0023	0.0068	0.0186	0.0043	0.0035	0.0027	0.0018	0.0021	0.0026	0.0011	0.0014	0.0066
Phosphorus, total	mg/L	0.137	0.04	0.752	0.1	0.058	0.04	0.057	0.064	0.098	0.111	0.039	0.14	0.469	0.104	0.066	0.054	0.037	0.026	0.04	0.015	0.018	0.248
Potassium, total	mg/L	1.47	1.48	2.33	1.15	1.24	1.35	1.35	1.34	1.22	1.17	1.23	1.13	2.2	1.07	1.18	1.09	1.05	1.02	1.14	1.37	1.5	1.7
Selenium, total	mg/L	0.00031	0.00012	0.00048	0.00016	0.00013	<0.00010	0.00019	0.00019	0.00015	0.0003	<0.00010	0.00022	0.00039	0.00014	<0.00010	0.00017	0.00011	0.00014	0.00013	0.00018	<0.00010	0.00017
Silver, total	mg/L	<0.000020	<0.000020	0.000123	<0.000020	<0.000020	0.000054	<0.000020	0.000030	<0.000020	<0.000020	<0.000020	<0.000020	0.000089	<0.000020	0.000023	<0.000020	<0.000020	<0.000020	<0.000020	0.000021	<0.000020	<0.000020
Sodium, total	mg/L	8.45	10.3	8.86	7.86	9.2	9.74	9.27	9.26	8.55	8.14	8.76	7.21	8.96	7.26	8.57	7.79	8.22	8.47	8.38	9.81	10.9	11
Thallium, total	mg/L	<0.000050	<0.000050	0.000143	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000088	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0113	<0.0050	0.0491	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	0.0063	0.0074	<0.0050	0.0097	0.0365	0.0055	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0139
Aluminum, dissolved	mg/L	0.028	0.0164	0.0346	0.0291	0.0197	0.0193	0.0184	0.0183	0.0236	0.0263	0.0179	0.0223	0.022	0.0196	0.0155	0.0206	0.0115	0.0113	0.0097	0.0072	0.0062	0.0061
Arsenic, dissolved	mg/L	0.00081	0.00073	0.00081	0.00091	0.00088	0.00075	0.00077	0.00085	0.00083	0.00093	0.00097	0.00085	0.00084	0.00083	0.00081	0.00073	0.0007	0.00071	0.00055	0.00044	0.00043	0.00039
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	33.6	42.5	31.4	39.3	38	41.4	42	40.9	38.5	36.1	43.7	39	42	37.7	38.7	42.9	42.3	43.8	41.2	47.1	47	56.7
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00182	0.00176	0.00227	0.00231	0.00172	0.00177	0.00168	0.00161	0.00147	0.00169	0.00165	0.00169	0.00219	0.00187	0.00167	0.00193	0.00142	0.00155	0.00134	0.00145	0.0017	0.00178
Iron, dissolved	mg/L	0.317	0.297	0.414	0.495	0.371	0.349	0.393	0.363	0.487	0.526	0.579	0.46	0.477	0.536	0.598	0.495	0.504	0.466	0.224	0.128	0.0782	0.0795
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	11.2	13.3	10.4	11.5	12.2	12.6	13.2	13.3	12.1	12.1	12.8	11.5	11.7	11.6	12.7	13.2	12.8	13.3	13.1	15.4	15.3	17.9
Manganese, dissolved	mg/L	0.0128	0.0092	0.0441	0.0149	0.0121	0.0091	0.0104	0.0129	0.0324	0.038	0.0304	0.0685	0.0644	0.0664	0.057	0.0434	0.0457	0.0382	0.0396	0.0128	0.0201	0.0294
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0015	0.0017	0.0012	0.0014	0.0016	0.0017	0.0016	0.0015	0.0013	0.0012	0.0016	0.0011	0.0012	<0.0010	0.0012	0.001	0.0011	0.0013	0.0012	0.0013	0.0014	0.0014
Nickel, dissolved	mg/L	0.0014	0.0014	0.0018	0.0018	0.0015	0.0014	0.0013	0.0015	0.0016	0.0017	0.0017	0.0017	0.0017	0.0018	0.002	0.0016	0.0014	0.0015	0.0013	0.0012	0.0011	0.0013
Phosphorus, dissolved	mg/L	0.018	0.02	0.022	0.027	0.02	0.02	0.02	0.018	0.025	0.025	0.019	0.02	0.02	0.023	0.022	0.023	0.022	0.02	0.014	0.013	<0.01	0.014
Potassium, dissolved	mg/L	0.971	1.35	0.767	1.06	1.13	1.19	1.21	1.12	1.01	0.91	1.18	0.993	1	0.833	0.989	1.03	1.03	1.06	1.07	1.27	1.34	1.6
Selenium, dissolved	mg/L	0.00017	0.00012	0.00012	0.00014	0.00013	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012	<0.00010	0.00013	0.00011	0.00013	0.00015	0.00014	0.00015	0.00013	0.00016	0.00016	0.00015
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	7.58	8.78	7.15	7.08	7.74	8.21	8.19	8.3	7.57	7.7	8.22	7.29	7.16	7.25	7.76	8.03	8.04	7.85	8	9.3	9.34	11.1
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**17/03/2014**	**06/04/2014**	**08/04/2014**	**17/04/2014**	**21/04/2014**	**21/04/2014**	**22/04/2014**	**01/05/2014**	**05/05/2014**	**17/05/2014**	**19/05/2014**	**25/05/2014**	**26/05/2014**	**27/05/2014**	**07/06/2014**	**12/06/2014**	**20/06/2014**	**24/06/2014**	**30/06/2014**	**01/07/2014**	**09/07/2014**	**17/07/2014**
pH (field)	pH units	8.33	8.38	8.37	8.41	8.2		8	8.36	8.22	7.63	7.62	7.62		7.43	7.57	8.28	8.35	8.43	8.3	8.31	8.35	7.51
pH (lab)	pH units		8.37	8.43	8.28		8.12	7.9	7.67	7.84	8.17	8.19			8.19	8.26	8.18	8.17	8.35	8.18		8.32	8.25
Hardness (from dissolved)	mg/L		386	233	166		111	68.2	56.5	66	125	126			118	130	133	147	152	158		157	169
Hardness (from total)	mg/L		382	231	198		129	80.9	75.3	68.9	154	171			135	131	140	155	150	167		169	174
Total Dissolved Solids	mg/L		544	344	218		158	136	120	122	190	192			152	188	192	174	202	214		182	210
Total Suspended Solids	mg/L		15.0	1.4	152.0		7.7	62.0	145.0	54.4	143.0	472.0			187.0	18.2	41.2	1.3	<1.0	<1.0		2.1	64.1
Alkalinity, total	mg/L		341	215	156		99.6	62.7	52.9	60.7	108	113			104	125	134	140	150	151		152	158
Sulphate, dissolved	mg/L		90.2	48.2	27.4		12	<0.50	<0.50	<0.50	26.8	26			19.3	12.8	14.5	17.3	19.7	19.6		21.3	21.4
Chloride	mg/L		13	9.8	7.2		3.9	2.8	2.1	1.7	4.1	3.4			2.8	1.9	2.3	2.1	2	2.4		2	2.2
Fluoride	mg/L		0.75	0.52	0.33		0.22	0.16	0.13	0.14	0.27	0.27			0.28	0.31	0.32	0.34	0.35	0.36		0.37	0.34
Nitrite (N)	mg/L		<0.0050	<0.0050	0.0072		<0.0050	0.0084	<0.0050	<0.0050	0.0235	0.0182			0.0243	0.0114	0.0087	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Nitrate (N)	mg/L		0.109	0.043	0.26		0.175	0.051	0.272	0.054	1.27	1.06			0.759	0.193	0.153	0.094	0.054	0.049		0.068	0.075
Ammonia	mg/L		0.0170	0.0120	0.0260		0.0350	0.0500	0.0260	0.0210	0.0800	0.1000			0.0690	0.0610	0.0370	0.0150	0.0130	0.0400		0.0260	0.0140
Aluminum, total	mg/L		0.575	0.0422	4.22		1.11	1.23	3.12	0.898	6.58	11.3			3.69	0.859	1.15	0.0617	0.0321	0.0509		0.124	0.0374
Arsenic, total	mg/L		0.00138	0.00055	0.003		0.00082	0.00102	0.00213	0.00096	0.00418	0.00637			0.00275	0.00114	0.00127	0.00056	0.00053	0.00052		0.00054	0.00045
Cadmium, total	mg/L		0.000037	0.000015	0.000062		0.000036	0.000041	0.000101	0.000028	0.000134	0.000212			0.000078	<0.000010	0.000020	<0.000010	<0.000010	0.000020		0.000020	<0.000010
Calcium, total	mg/L		90.6	54.6	48.5		34.3	20.8	19.5	18	38.9	41.9			34.4	34.2	35.1	39.7	36.8	43.1		43.6	45.6
Chromium, total	mg/L		0.0012	<0.0010	0.0072		0.0014	0.0022	0.0057	0.0018	0.0127	0.0211			0.0073	0.0016	0.0024	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, total	mg/L		0.0245	0.00847	0.0417		0.0362	0.0211	0.019	0.00701	0.0369	0.0486			0.0212	0.00561	0.00528	0.00302	0.00228	0.00341		0.0243	0.00272
Iron, total	mg/L		0.858	0.101	6.54		1.31	1.87	5.43	1.71	10.7	17.7			6.61	1.83	2.32	0.247	0.2	0.119		0.281	0.112
Lead, total	mg/L		0.00029	<0.00020	0.00195		0.00032	0.00061	0.00194	0.00049	0.00325	0.00543			0.00199	0.00046	0.00055	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, total	mg/L		37.9	23	18.7		10.5	7.04	6.46	5.78	13.9	16.2			11.9	11	12.7	13.5	14.2	14.3		14.7	14.6
Manganese, total	mg/L		0.0687	0.0173	0.175		0.0618	0.0973	0.394	0.139	0.476	0.684			0.21	0.0419	0.0481	0.0126	0.0115	0.0164		0.0221	0.0256
Mercury, total	mg/L		0.000011	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molybdenum, total	mg/L		0.0019	0.0014	0.0021		0.0018	<0.0010	0.0011	<0.0010	0.0026	0.0028			0.0022	0.0015	0.0013	0.0017	0.0016	0.0016		0.0017	0.0015
Nickel, total	mg/L		0.0025	0.0012	0.0068		0.002	0.0031	0.008	0.0032	0.0147	0.0235			0.0088	0.0029	0.0033	0.0013	0.0016	0.0011		0.0012	0.0011
Phosphorus, total	mg/L		0.153	0.053	0.183		0.212	0.145	0.302	0.084	0.382	0.679			0.195	0.056	0.058	0.014	<0.01	0.025		0.024	0.014
Potassium, total	mg/L		10	4.38	3.66		2.99	2.53	2.04	1.32	3.15	3.16			2.31	1.42	1.63	1.43	1.43	1.57		1.56	1.49
Selenium, total	mg/L		0.00049	0.00036	0.00042		0.00028	0.00029	0.00032	0.00014	0.00067	0.00071			0.00037	0.00019	0.00011	0.00013	0.00011	0.00013		0.00014	0.00013
Silver, total	mg/L		<0.000020	<0.000020	0.000041		<0.000020	0.000023	0.000023	<0.000020	0.000069	0.000072			0.000028	<0.000020	<0.000020	<0.000020	<0.000020	0.000044		<0.000020	<0.000020
Sodium, total	mg/L		30	17.4	12.2		7.42	4.41	4.07	3.69	9.4	9.22			8.79	7.76	8.31	8.44	9.44	9.51		9.87	9.82
Thallium, total	mg/L		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	0.000057	0.000097			<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, total	mg/L		0.0155	<0.0050	0.0219		0.0096	0.0102	0.0194	0.0060	0.0339	0.0484			0.0191	0.0077	0.0084	<0.0050	<0.0050	0.0053		0.0070	<0.0050
Aluminum, dissolved	mg/L		0.0112	0.0067	0.0055		0.012	0.0233	0.0461	0.03	0.0208	0.016			0.014	0.0149	0.0112	0.0137	0.0118	0.0118		0.0091	0.0062
Arsenic, dissolved	mg/L		0.00122	0.00057	0.00041		0.00038	0.00036	0.00047	0.00056	0.00064	0.00062			0.00061	0.00065	0.00061	0.00052	0.0005	0.00045		0.00045	0.00044
Cadmium, dissolved	mg/L		0.000015	0.000014	0.000010		0.000014	0.000017	0.000012	0.000012	<0.000010	<0.000010			<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		0.000014	<0.000010
Calcium, dissolved	mg/L		90.7	57.2	41.6		28.7	18.1	15.4	17.7	33.7	33.1			31.5	34.5	34.8	37.8	39.6	41.1		40.9	43.1
Chromium, dissolved	mg/L		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L		0.0123	0.00648	0.0056		0.00686	0.00706	0.00713	0.00422	0.00879	0.00631			0.00522	0.0026	0.00192	0.00223	0.00206	0.0022		0.0023	0.0021
Iron, dissolved	mg/L		0.0434	0.0302	0.0293		0.0865	0.103	0.269	0.302	0.345	0.357			0.345	0.205	0.142	0.116	0.103	0.0555		0.0616	0.0533
Lead, dissolved	mg/L		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, dissolved	mg/L		38.6	22	15.1		9.53	5.61	4.39	5.27	9.97	10.6			9.64	10.7	11.1	12.9	12.9	13.4		13.4	14.9
Manganese, dissolved	mg/L		0.0489	0.0156	0.0093		0.0239	0.0366	0.073	0.0732	0.0472	0.021			0.0042	0.0122	0.0128	0.0089	0.0093	0.015		0.0148	0.0221
Mercury, dissolved	mg/L		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.002	0.0014	0.002		0.0013	<0.0010	0.001	<0.0010	0.0028	0.0025			0.0022	0.0014	0.0014	0.0016	0.0016	0.0016		0.0015	0.0013
Nickel, dissolved	mg/L		0.0015	<0.0010	<0.0010		<0.0010	<0.0010	0.0013	0.0015	0.001	0.0012			0.0015	0.0013	0.0013	0.001	0.0011	0.0019		<0.0010	0.0012
Phosphorus, dissolved	mg/L		0.125	0.037	0.021		0.03	0.04	0.028	0.026	0.018	0.021			0.016	0.015	0.012	0.01	<0.01	<0.01		<0.01	<0.01
Potassium, dissolved	mg/L		9.56	4.44	2.78		2.62	2.12	1.58	1.28	2.26	1.98			1.89	1.23	1.32	1.38	1.41	1.52		1.46	1.45
Selenium, dissolved	mg/L		0.0005	0.0003	0.00033		0.00019	0.00011	0.00014	0.00011	0.00047	0.00041			0.0003	0.00011	0.00012	0.00013	0.00012	0.00011		0.00013	0.00021
Silver, dissolved	mg/L		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, dissolved	mg/L		30.4	17.9	11.1		6.92	3.79	3.77	3.61	8.49	8.11			7.61	7.44	8.19	8.9	8.84	8.95		8.54	9.98
Thallium, dissolved	mg/L		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, dissolved	mg/L		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**23/07/2014**	**23/07/2014**	**29/07/2014**	**07/08/2014**	**11/08/2014**	**13/08/2014**	**18/08/2014**	**18/08/2014**	**26/08/2014**	**26/08/2014**	**01/09/2014**	**01/09/2014**	**03/09/2014**	**11/09/2014**	**11/09/2014**	**16/09/2014**	**16/09/2014**	**22/09/2014**	**22/09/2014**	**30/09/2014**	**30/09/2014**	**07/10/2014**
pH (field)	pH units	7.58	7.78	7.97	8.08	8.12	8.16	8.22	8.22	8.21	8.21	8.22	8.22	8.26	7.89	7.89	8.1	8.1	8.21	8.21	8.13	8.13	8.16
pH (lab)	pH units		8.18	8.3	8.17		8.27	8.31		8.22			8.33		8.34		8.2		8.34		8.13		8.19
Hardness (from dissolved)	mg/L		140	160	164		167	160		158			169		160		160		152		139		165
Hardness (from total)	mg/L		147	162	180		194	170		165			163		169		169		177		155		169
Total Dissolved Solids	mg/L		170	204	196		208	210		216			202		236		224		210		192		210
Total Suspended Solids	mg/L		11.9	19.4	4.2		4.4	11.4		7.3			2.0		2.4		3.3		19.7		6.9		5.3
Alkalinity, total	mg/L		138	154	154		165	165		160			166		165		160		162		139		157
Sulphate, dissolved	mg/L		14.4	14.3	18.4		18.1	17.8		14.8			16		16.1		17.4		14.4		15		16.7
Chloride	mg/L		1.8	1.9	1.8		1.9	2.2		1.5			1.8		2		2.1		1.8		3.1		1.9
Fluoride	mg/L		0.36	0.36	0.34		0.35	0.35		0.35			0.34		0.36		0.36		0.36		0.31		0.31
Nitrite (N)	mg/L		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050
Nitrate (N)	mg/L		0.092	0.123	0.118		0.107	0.063		0.072			0.056		<0.020		<0.020		<0.020		0.058		0.088
Ammonia	mg/L		0.0210	0.0110	0.0140		0.0140	0.0150		0.0610			0.0390		0.0160		0.0220		0.0190		0.0130		0.0230
Aluminum, total	mg/L		0.376	0.428	0.156		0.0948	0.0756		0.18			0.0209		0.0266		0.029		0.315		0.168		0.0544
Arsenic, total	mg/L		0.00091	0.00091	0.00072		0.00068	0.00066		0.00074			0.00055		0.00077		0.00041		0.00087		0.00073		0.00058
Cadmium, total	mg/L		<0.000010	0.000012	<0.000010		<0.000010	<0.000010		<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010
Calcium, total	mg/L		38	42.7	46.7		49.8	43.8		42.8			40.9		43.7		43.2		45.4		39.9		44
Chromium, total	mg/L		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010		<0.0010			<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010
Copper, total	mg/L		0.00301	0.00342	0.00219		0.0025	0.00192		0.0021			0.00154		0.0017		0.00208		0.00293		0.00267		0.002
Iron, total	mg/L		0.835	0.932	0.492		0.323	0.282		0.536			0.273		0.213		0.198		0.874		0.61		0.297
Lead, total	mg/L		0.00022	0.00021	<0.00020		<0.00020	<0.00020		<0.00020			<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020
Magnesium, total	mg/L		12.7	13.5	15.4		16.9	14.7		14.1			14.7		14.5		14.9		15.3		13.5		14.5
Manganese, total	mg/L		0.029	0.045	0.0191		0.0183	0.0152		0.0244			0.0103		0.0099		0.0109		0.0496		0.0365		0.0175
Mercury, total	mg/L		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010		<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010
Molybdenum, total	mg/L		0.0017	0.0014	0.0015		0.0016	0.0016		0.0014			0.0015		0.0015		0.0015		0.0014		0.0013		0.0013
Nickel, total	mg/L		0.002	0.0021	0.0013		0.0013	0.0011		0.0016			0.0012		0.0011		0.0012		0.0017		0.0018		0.0013
Phosphorus, total	mg/L		0.028	0.026	0.03		0.022	0.01		0.024			0.015		<0.01		0.024		0.036		0.029		0.022
Potassium, total	mg/L		1.24	1.37	1.5		1.75	1.57		1.47			1.32		1.4		1.63		1.74		1.14		1.19
Selenium, total	mg/L		0.0001	0.00018	0.0001		0.00013	<0.00010		0.00018			0.00014		<0.00010		0.00011		0.00011		0.00015		0.00012
Silver, total	mg/L		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020		<0.000020			<0.000020		<0.000020		<0.000020		0.000031		0.000036		<0.000020
Sodium, total	mg/L		8.86	9.08	9.69		10.2	8.9		9.04			9.2		9.39		9.58		9.21		8.33		8.72
Thallium, total	mg/L		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050		<0.000050			<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050
Zinc, total	mg/L		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050
Aluminum, dissolved	mg/L		0.0131	0.0181	0.0162		0.0081	0.0094		0.0086			0.0069		0.0075		0.0087		0.0081		0.0088		0.0076
Arsenic, dissolved	mg/L		0.00066	0.00045	0.00062		0.00063	0.00057		0.00064			0.00055		0.00048		0.00049		0.00057		0.00055		0.00054
Cadmium, dissolved	mg/L		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010		<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010
Calcium, dissolved	mg/L		35.6	42.2	42.4		44.3	39.8		40.4			43.5		40.9		39.9		39.2		36.2		44
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L		0.00226	0.00195	0.00267		0.00169	0.0022		0.00164			0.0015		0.00173		0.00148		0.00147		0.00157		0.00155
Iron, dissolved	mg/L		0.189	0.221	0.223		0.142	0.158		0.232			0.174		0.155		0.113		0.158		0.205		0.182
Lead, dissolved	mg/L		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020		<0.00020			<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020
Magnesium, dissolved	mg/L		12.3	13.1	14.2		13.7	14.6		14			14.6		13.9		14.7		13.3		11.9		13.4
Manganese, dissolved	mg/L		0.0066	0.0063	0.0091		0.0107	0.0087		0.0073			0.0085		0.0085		0.0099		0.0095		0.0154		0.0109
Mercury, dissolved	mg/L		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010		<0.000010			<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010
Molydenum, dissolved	mg/L		0.0014	0.0013	0.0016		0.0016	0.0015		0.0015			0.0016		0.0014		0.0015		0.0013		0.0011		0.0012
Nickel, dissolved	mg/L		0.0013	0.0013	0.0013		0.0011	0.001		0.0011			0.0011		0.0012		0.001		0.0012		0.0016		0.0014
Phosphorus, dissolved	mg/L		0.02	0.014	0.045		0.012	0.014		0.016			0.012		<0.01		<0.01		0.01		0.012		0.013
Potassium, dissolved	mg/L		1.09	1.41	1.41		1.54	1.58		1.4			1.41		1.46		1.61		1.59		1.01		1.08
Selenium, dissolved	mg/L		0.00019	0.00011	0.00017		<0.00010	<0.00010		0.00011			0.00012		<0.00010		<0.00010		<0.00010		<0.00010		0.00012
Silver, dissolved	mg/L		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020		<0.000020			<0.000020		<0.000020		<0.000020		<0.000020		<0.000020		<0.000020
Sodium, dissolved	mg/L		8.16	9.17	9.94		8.87	9.38		8.81			8.9		8.95		9.26		8.29		7.58		8.4
Thallium, dissolved	mg/L		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050		<0.000050			<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050
Zinc, dissolved	mg/L		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050			<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**07/10/2014**	**14/10/2014**	**25/10/2014**	**31/10/2014**	**06/11/2014**	**12/11/2014**	**11/12/2014**	**12/12/2014**	**13/12/2014**	**14/12/2014**	**15/12/2014**	**16/12/2014**	**19/12/2014**	**20/12/2014**	**21/12/2014**	**05/04/2015**	**10/04/2015**	**14/04/2015**	**14/04/2015**	**20/04/2015**	**30/04/2015**	**09/05/2015**
pH (field)	pH units	8.16	7.8	7.77	7.69	7.85	7.91	8.04	7.97	7.88	7.94	7.81	7.81	7.92	7.62	7.97	8.29	8.34	8.34	8.34	8.06	7.92	7.6
pH (lab)	pH units		8.23	8.15	8.23	8.17	8.1	7.91				8.04	7.97	8.18	8.04		8.28	8.15		8.31	7.98	7.67	7.94
Hardness (from dissolved)	mg/L		158	164	204	183	191	227				254	231	235	210		254	173		174	83.8	71.6	101
Hardness (from total)	mg/L		164	169	176	189	181	229				250	247	211	221		281	197		194	89.4	83.9	115
Total Dissolved Solids	mg/L		198	202	228	246	224	282				348	316	294	288		328	242		210	124	136	152
Total Suspended Solids	mg/L		<1.0	1.0	<1.0	3.2	1.1	1.6				1.1	1.4	1.4	1.3		<1.0	2.3		<1.0	4.7	219.0	150.0
Alkalinity, total	mg/L		155	155	181	179	173	159				176	158	173	165		233	134		169	76.6	59.5	85.3
Sulphate, dissolved	mg/L		15.7	17.7	20.5	22.7	26.1					92.5	86.7	60.8	54.5		51.8	55		32.9	14	0.56	17.7
Chloride	mg/L		1.8	2.1	2.1	3.3	2.7					7.9	7.1	5.7	4.6		4.5	5.2		3.3	2.7	2.9	2.8
Fluoride	mg/L		0.3	0.35	0.34	0.36	0.34	0.43				0.47	0.43	0.025	0.33		0.54	0.38		0.41	0.18	0.16	0.21
Nitrite (N)	mg/L		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0174				0.0128	0.0124	0.0052	<0.0050		<0.0050	0.0089		<0.0050	0.0096	<0.050	<0.0050
Nitrate (N)	mg/L		0.143	0.151	0.175	0.165	0.173	2.03				2.6	2.38	1.36	1.05		0.128	1.38		0.205	0.425	0.35	0.452
Ammonia	mg/L		0.0063	0.0260	0.0091	<0.0050	0.0180	0.0370				0.0083	0.0130	0.0091	0.0091		0.0110	0.0059		0.0130	0.0340	0.0900	0.0280
Aluminum, total	mg/L		0.0318	0.02	0.0142	0.163	0.0628	0.0472				0.007	0.0179	0.0208	0.0095		0.0519	0.0792		0.0682	0.137	3.17	2.89
Arsenic, total	mg/L		0.00063	0.00056	0.00032	0.00051	0.00037	0.00055				0.00039	0.0004	0.00031	0.00033		0.00052	0.0005		0.00054	0.00051	0.00224	0.00234
Cadmium, total	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	0.000017	<0.000010		<0.000010	0.000012		0.000016	0.000016	0.000070	0.000054
Calcium, total	mg/L		42.5	43.5	44.6	50.5	46.3	56.7				63.7	64.9	55.5	58.2		65.8	49		49.2	22.5	21.6	29.8
Chromium, total	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	0.0062	0.0065
Copper, total	mg/L		0.00159	0.00276	0.00163	0.0021	0.0023	0.00522				0.00432	0.00566	0.00362	0.00238		0.00822	0.00687		0.0194	0.00753	0.022	0.0165
Iron, total	mg/L		0.252	0.266	0.083	0.286	0.168	0.1				0.037	0.055	0.05	0.033		0.145	0.175		0.283	0.41	5.62	5.33
Lead, total	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020				<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020		<0.00020	<0.00020	0.00170	0.00154
Magnesium, total	mg/L		14.1	14.6	15.8	15.2	15.7	21.2				22	20.6	17.7	18.5		28.4	18.2		17.4	8.07	7.28	9.97
Manganese, total	mg/L		0.0125	0.0091	0.0121	0.0218	0.0242	0.0364				0.0158	0.0151	0.0162	0.0241		0.0322	0.108		0.0597	0.0775	0.361	0.352
Mercury, total	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L		0.0012	0.0013	0.0012	0.0012	0.0012	0.0049				0.0058	0.0064	0.0037	0.0023		0.0021	0.0049		0.0024	0.0017	0.0012	0.0015
Nickel, total	mg/L		0.0013	0.0012	0.0011	0.0011	0.0012	<0.0010				<0.0010	<0.0010	<0.0010	0.0013		<0.0010	<0.0010		<0.0010	0.0012	0.0077	0.0069
Phosphorus, total	mg/L		0.02	0.011	0.016	0.031	0.019	0.027				0.025	0.032	0.013	0.015		0.045	0.024		0.032	0.039	0.239	0.18
Potassium, total	mg/L		1.23	1.16	1.35	1.66	1.54	4.24				5.45	5.5	3.45	3.22		3.95	4.73		3.43	2.8	2.2	2.01
Selenium, total	mg/L		0.00015	<0.00010	<0.00010	<0.00010	0.00015	0.00067				0.00072	0.00074	0.00043	0.00032		0.00042	0.00054		0.00025	0.0003	0.00032	0.00042
Silver, total	mg/L		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020				<0.000020	<0.000020	<0.000020	0.000026		<0.000020	<0.000020		<0.000020	<0.000020	0.000021	<0.000020
Sodium, total	mg/L		8.58	8.86	9.19	16	10	18				18.7	18.3	13.9	15.2		19.9	17.4		12.8	7.3	4.96	6.61
Thallium, total	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050				<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0304				<0.0050	<0.0050	0.0479	0.0233		<0.0050	0.0072		<0.0050	<0.0050	0.0151	0.0132
Aluminum, dissolved	mg/L		0.0086	0.0085	0.0058	0.0065	0.0056	0.0053				<0.0030	<0.0030	0.0032	0.0038		0.0122	0.0057		0.011	0.0131	0.0389	0.0225
Arsenic, dissolved	mg/L		0.0005	0.00051	0.00038	0.00035	0.00031	0.0004				0.00039	0.00039	0.00034	0.00029		0.00052	0.00042		0.00054	0.0004	0.00051	0.00049
Cadmium, dissolved	mg/L		<0.000010	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	0.000011		0.000012	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L		41.7	42	54	47.7	50	57.9				65.1	59.9	61.8	55.4		62.6	44.6		42.6	21.8	19.5	26.6
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L		0.00137	0.002	0.00169	0.00135	0.0016	0.00336				0.00435	0.0037	0.00273	0.00221		0.00566	0.00427		0.00638	0.00542	0.00651	0.00392
Iron, dissolved	mg/L		0.163	0.193	0.0609	0.0548	0.0481	0.0323				0.0277	0.0284	0.0263	0.0235		0.0472	0.0652		0.128	0.165	0.236	0.218
Lead, dissolved	mg/L		<0.00020	<0.00040	<0.00020	<0.00020	<0.00020	<0.00020				<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L		13	14.5	16.8	15.4	16.1	20.1				22.2	19.7	19.7	17.4		23.7	15		16.3	7.1	5.54	8.33
Manganese, dissolved	mg/L		0.0095	0.0078	0.0125	0.0102	0.0177	0.0342				0.0147	0.0124	0.0146	0.0238		0.0263	0.0916		0.0538	0.0617	0.107	0.0636
Mercury, dissolved	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010				<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.0012	<0.0020	0.0014	0.0012	0.0012	0.0053				0.0059	0.0056	0.0031	0.0023		0.0019	0.0046		0.0022	0.0017	0.0012	0.0013
Nickel, dissolved	mg/L		0.0011	<0.0020	<0.0010	<0.0010	0.001	<0.0010				<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	0.0013	0.0012
Phosphorus, dissolved	mg/L		0.011	<0.02	<0.01	<0.01	<0.01	0.02				0.016	0.019	<0.01	<0.01		0.027	0.017		0.019	0.022	0.033	0.02
Potassium, dissolved	mg/L		1.22	1	1.57	1.41	1.54	4.25				5.54	5.18	3.7	3.06		3.49	4.16		3.39	2.7	1.77	1.76
Selenium, dissolved	mg/L		<0.00010	0.00026	0.00011	0.00012	<0.00010	0.00066				0.00069	0.00069	0.00038	0.00031		0.0003	0.00049		0.00028	0.00022	0.00016	0.00018
Silver, dissolved	mg/L		<0.000020	<0.000040	<0.000020	<0.000020	<0.000020	<0.000020				<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L		8.29	9.04	10.4	9.68	10.6	16.9				19.3	17.9	15.1	12.6		16.3	13.9		11.7	6.99	4.71	6.8
Thallium, dissolved	mg/L		<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050				<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L		<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050				<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**14/05/2015**	**19/05/2015**	**28/05/2015**	**05/06/2015**	**11/06/2015**	**15/06/2015**	**25/06/2015**	**29/06/2015**	**02/07/2015**	**09/07/2015**	**17/07/2015**	**23/07/2015**	**23/07/2015**	**27/07/2015**	**04/08/2015**	**13/08/2015**	**22/08/2015**	**25/08/2015**	**01/09/2015**	**08/09/2015**	**18/09/2015**	**18/09/2015**
pH (field)	pH units	7.75	7.89	7.89	7.74	7.7	7.87	7.77	7.88	7.83	7.83	7.8	7.8		7.78	7.97	8.09	7.89	8.12	8.06	8.11	8.06	8.06
pH (lab)	pH units	8.06	8.16	8.23	8.16	8.05	8.23	8.11	8.29	8.16	8.17	8.15	8.24	8.24	8.15	8.24	8.28	8.22	8.24	8.27	8.29	8.28	
Hardness (from dissolved)	mg/L	107	105	149	153	166	164	195	183	168	178	163	172	172	173	174	168	168	187	168	165	169	
Hardness (from total)	mg/L	112	105	181	148	170	172	196	158	165	171	167	172	172	185	179	176	163	175	154	181	164	
Total Dissolved Solids	mg/L	160	158	214	142	196	198	212	228	216	172	208	192	192	214	246	204	202	202	204	188	222	
Total Suspended Solids	mg/L	102.0	36.3	8.7	2.6	<1.0	1.3	4.3	<1.0	3.0	2.0	1.1	1.2	1.2	<1.0	<1.0	2.6	1.3	13.6	12.2	1.0	<1.0	
Alkalinity, total	mg/L	94	101	145	138	143	154	160	161	154	161	164	164	164	161	165	164	166	163	143	154	153	
Sulphate, dissolved	mg/L	22.4	14.7	26	20.1	24.4	28.2	32	23.6	25.5	22.8	24	25.4	25.4	26.5	25	18	18.5	18.8	16.9	17.4	18.9	
Chloride	mg/L	3.6	2.1	4.2	2.2	2.5	2.4	3	2.5	2.5	2.3	2.3	2.4	2.4	2.8	2.3	1.6	1.8	1.7	1.7	2.2	2	
Fluoride	mg/L	0.25	0.29	0.33	0.35	0.36	0.34	0.29	0.35	0.36	0.37	0.35	0.3	0.3	0.34	0.39	0.38	0.39	0.39	0.35	0.38	0.36	
Nitrite (N)	mg/L	0.0106	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Nitrate (N)	mg/L	0.698	0.191	0.746	0.114	0.142	0.181	0.112	0.125	0.119	0.124	0.096	0.079	0.079	0.081	0.086	0.052	0.056	0.056	0.049	<0.020	<0.020	
Ammonia	mg/L	0.0310	0.0290	0.0350	0.0057	0.0200	0.0300	0.0160	0.0300	0.0110	0.0150	0.0310	0.0180	0.0180	0.0460	0.0310	0.0390	0.0260	0.0180	0.0270	0.0430	0.0099	
Aluminum, total	mg/L	1.58	0.718	0.111	0.0607	0.0435	0.0203	0.399	0.025	0.043	0.0441	0.0219	0.276	0.276	0.0137	0.017	0.0576	0.0197	0.149	0.208	0.0273	0.0154	
Arsenic, total	mg/L	0.00148	0.001	0.00056	0.00047	0.00046	0.00039	0.00061	0.00042	0.00042	0.00043	0.00043	0.00054	0.00054	0.00038	0.00041	0.00055	0.00054	0.00069	0.00068	0.00055	0.00048	
Cadmium, total	mg/L	0.000039	0.000016	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	0.000012	<0.000010	<0.000010	<0.000010	0.000012	<0.000010	<0.000010	<0.000010	<0.000010	
Calcium, total	mg/L	29.1	27.8	46.3	38.1	43.5	44.6	53.1	40.8	42.9	43.3	44.1	46.8	46.8	48.8	47.9	44.3	43.7	44.6	39.6	45.5	42.9	
Chromium, total	mg/L	0.0034	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Copper, total	mg/L	0.0137	0.00572	0.00395	0.0024	0.00231	0.00221	0.00355	0.00204	0.00185	0.00229	0.00157	0.00276	0.00276	0.00173	0.00247	0.00237	0.00153	0.00288	0.00329	0.00274	0.00179	
Iron, total	mg/L	3.03	1.57	0.273	0.17	0.118	0.069	0.648	0.088	0.111	0.139	0.084	0.459	0.459	0.069	0.091	0.207	0.111	0.364	0.547	0.146	0.128	
Lead, total	mg/L	0.00087	0.00037	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Magnesium, total	mg/L	9.45	8.72	15.8	12.7	14.9	14.6	15.3	13.7	14	15.3	13.9	13.5	13.5	15.4	14.4	15.9	13.1	15.5	13.5	16.3	13.9	
Manganese, total	mg/L	0.176	0.0664	0.0222	0.0116	0.0142	0.0142	0.0788	0.014	0.016	0.0154	0.0172	0.0398	0.0398	0.0241	0.0165	0.014	0.0094	0.0168	0.0309	0.0096	0.0067	
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0018	0.0014	0.0026	0.0017	0.0017	0.0015	0.0013	0.0014	0.0015	0.0016	0.0014	0.0015	0.0015	0.0013	0.0016	0.0016	0.0015	0.0017	0.0014	0.0016	0.0012	
Nickel, total	mg/L	0.0047	0.0025	0.0012	0.0011	0.0014	<0.0010	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0013	<0.0010	<0.0010	0.001	<0.0010	0.0013	0.0014	0.001	0.0011	
Phosphorus, total	mg/L	0.117	0.076	0.024	0.016	0.018	0.01	0.041	0.015	<0.01	0.011	0.014	0.026	0.026	0.012	0.018	0.017	<0.01	0.022	0.028	0.016	<0.01	
Potassium, total	mg/L	1.98	1.55	2.63	1.64	1.77	1.76	1.94	1.54	1.66	1.7	1.53	1.61	1.61	1.69	1.43	1.41	1.45	1.5	1.18	1.38	1.38	
Selenium, total	mg/L	0.00029	0.00023	0.00036	0.00016	0.00013	<0.00010	0.00012	0.00012	0.00014	0.0001	0.0001	0.00011	0.00011	<0.00010	0.00014	<0.00010	0.00013	0.00013	0.00016	0.00015	<0.00010	
Silver, total	mg/L	<0.000020	0.000041	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000037	<0.000020	0.000036	<0.000020	<0.000020	<0.000020	<0.000020	
Sodium, total	mg/L	8.68	6.49	12.4	9.28	10.1	10.2	10.6	9.96	9.62	10	9.6	9.82	9.82	10.2	10.3	10	8.71	10.3	9.05	10	8.84	
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Zinc, total	mg/L	0.0075	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0139	<0.0050	
Aluminum, dissolved	mg/L	0.0144	0.0124	0.017	0.0091	0.0061	0.0073	0.0147	0.0188	0.0078	0.0078	0.0132	0.0136	0.0136	0.0112	0.0104	0.014	0.0105	0.014	0.0151	0.0165	0.0106	
Arsenic, dissolved	mg/L	0.00056	0.0005	0.00041	0.00046	0.00039	0.00039	0.00038	0.00041	0.0004	0.00043	0.00047	0.00044	0.00044	0.00045	0.00039	0.00048	0.00055	0.0005	0.00071	0.0005	0.00045	
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Calcium, dissolved	mg/L	27.6	27.9	38.1	40	42.6	42.8	53.2	48.1	43.5	48	41.6	46	46	46.2	46.1	42.6	42.2	49.4	43.6	42	43.6	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Copper, dissolved	mg/L	0.006	0.00264	0.00258	0.00201	0.00184	0.00176	0.00194	0.00165	0.00166	0.00152	0.00185	0.00151	0.00151	0.00146	0.00169	0.00188	0.00183	0.00182	0.00232	0.00208	0.00194	
Iron, dissolved	mg/L	0.203	0.261	0.0547	0.0615	0.0414	0.0339	0.0466	0.0407	0.0404	0.0491	0.056	0.0512	0.0512	0.0542	0.0527	0.0738	0.109	0.0886	0.19	0.101	0.107	
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Magnesium, dissolved	mg/L	9.29	8.54	13.1	12.8	14.4	13.8	15.1	15.2	14.4	14.2	14.3	14	14	13.9	14.3	15	15.2	15.5	14.4	14.7	14.7	
Manganese, dissolved	mg/L	0.0099	0.0043	0.0045	0.0078	0.0101	0.0126	0.0271	0.0107	0.0118	0.0101	0.0149	0.018	0.018	0.0222	0.0148	0.0073	0.0079	0.0068	0.0061	0.0057	0.0066	
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Molydenum, dissolved	mg/L	0.0022	0.0014	0.0023	0.0017	0.0016	0.0015	0.0012	0.0017	0.0015	0.0014	0.0014	0.0014	0.0014	0.0013	0.0014	0.0016	0.0013	0.0016	0.0015	0.0014	0.0012	
Nickel, dissolved	mg/L	0.0011	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0014	0.0011	0.0012	
Phosphorus, dissolved	mg/L	0.016	0.017	<0.01	0.01	<0.01	<0.01	0.01	0.011	<0.01	0.01	0.011	0.013	0.013	0.015	<0.01	<0.01	0.012	0.01	0.021	0.015	<0.01	
Potassium, dissolved	mg/L	2.09	1.48	2.05	1.75	1.64	1.66	2.02	1.73	1.64	1.86	1.56	1.67	1.67	1.66	1.56	1.35	1.57	1.58	1.28	1.21	1.34	
Selenium, dissolved	mg/L	0.00024	0.00015	0.00026	0.00012	0.00012	0.0001	0.00015	0.00019	0.00011	0.00012	0.00011	0.00012	0.00012	<0.00010	<0.00010	<0.00010	<0.00010	0.00011	<0.00010	0.00011	0.00011	
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	
Sodium, dissolved	mg/L	9.2	6.64	10.7	9.22	9.72	9.71	10.4	10.1	9.96	9.85	9.88	9.52	9.52	10.8	10.2	10.4	10.4	9.85	9.65	9.63	9.49	
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	

Data omitted from calculation of summary statistics

Station Name		W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2	W2
Sample Date		**22/09/2015**	**22/09/2015**	**28/09/2015**	**28/09/2015**	**05/10/2015**	**05/10/2015**	**13/10/2015**	**13/10/2015**	**20/10/2015**	**26/10/2015**	**02/11/2015**	**02/11/2015**	**11/11/2015**
pH (field)	pH units	7.88	7.88	7.87	8.12	7.92	7.92	7.72	7.72	7.77	7.94	7.8	7.8	8.03
pH (lab)	pH units		8.24	8.19	8.21		8.28		8.17	8.29	8.1		8.21	8.33
Hardness (from dissolved)	mg/L		167	168	170		172		146	161	179		199	175
Hardness (from total)	mg/L		169	169	177		178		163	166	189		182	172
Total Dissolved Solids	mg/L		226	218	216		236		206	208	210		248	202
Total Suspended Solids	mg/L		<1.0	<1.0	<1.0		<1.0		<1.0	1.2	<1.0		2.4	2.7
Alkalinity, total	mg/L		153	160	169		165		153	155	166		180	175
Sulphate, dissolved	mg/L		18	17.6	18.1		20.4		16.1	19.8	21.7		26	27.7
Chloride	mg/L		2.4	1.9	1.9		2.2		2	1.9	2.5		2.4	2.7
Fluoride	mg/L		0.37	0.36	0.37		0.37		0.34	0.35	0.37		0.35	0.32
Nitrite (N)	mg/L		<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Nitrate (N)	mg/L		0.023	0.042	0.036		0.086		0.077	0.097	0.117		0.153	0.12
Ammonia	mg/L		0.0330	0.0240	0.0470		0.0130		0.0200	0.0190	0.0160		0.0190	0.0410
Aluminum, total	mg/L		0.0131	0.0122	0.0173		0.0067		0.0127	0.0133	0.0102		0.0129	0.185
Arsenic, total	mg/L		0.00042	0.00056	0.00075		0.00043		0.00049	0.00044	0.00046		0.00036	0.00039
Cadmium, total	mg/L		<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Calcium, total	mg/L		43.3	42.4	45.4		46		40.5	43	48		47.6	45.1
Chromium, total	mg/L		<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, total	mg/L		0.00163	0.0018	0.002		0.00153		0.00155	0.00143	0.00173		0.00165	0.00377
Iron, total	mg/L		0.121	0.111	0.129		0.065		0.151	0.096	0.065		0.063	0.387
Lead, total	mg/L		<0.00020	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, total	mg/L		14.7	15.4	15.4		15.3		15	14.3	16.8		15.3	14.4
Manganese, total	mg/L		0.0066	0.0067	0.007		0.008		0.0061	0.0054	0.0092		0.0129	0.0328
Mercury, total	mg/L		<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molybdenum, total	mg/L		0.0014	0.0014	0.0014		0.0014		0.0012	0.0013	0.0012		0.0013	0.001
Nickel, total	mg/L		0.0011	<0.0010	0.001		<0.0010		0.0012	<0.0010	0.0011		<0.0010	0.0013
Phosphorus, total	mg/L		0.011	<0.01	0.013		0.012		0.014	0.012	<0.01		0.014	0.025
Potassium, total	mg/L		1.35	1.4	1.41		1.4		1.32	1.24	1.48		1.61	1.41
Selenium, total	mg/L		0.00014	<0.00010	<0.00010		<0.00010		<0.00010	<0.00010	<0.00010		0.0001	<0.00010
Silver, total	mg/L		<0.000020	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, total	mg/L		9.29	10	9.7		10		8.82	11.7	11.4		10.2	9.66
Thallium, total	mg/L		<0.000050	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, total	mg/L		<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	0.0069
Aluminum, dissolved	mg/L		0.007	0.0084	0.0078		0.0097		0.0099	0.0085	0.0065		0.0093	0.0091
Arsenic, dissolved	mg/L		0.00045	0.00041	0.00045		0.0005		0.00047	0.00042	0.00038		0.0004	0.00025
Cadmium, dissolved	mg/L		<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Calcium, dissolved	mg/L		43.4	42.1	42.7		43.3		36.3	40.9	46.6		51.6	45.7
Chromium, dissolved	mg/L		<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, dissolved	mg/L		0.00165	0.00176	0.00162		0.00183		0.00147	0.00149	0.00186		0.00187	0.00213
Iron, dissolved	mg/L		0.107	0.0803	0.0786		0.0595		0.0926	0.0693	0.046		0.0437	0.0362
Lead, dissolved	mg/L		<0.00020	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, dissolved	mg/L		14.4	15.4	15.4		15.6		13.4	14.3	15.3		17.1	14.8
Manganese, dissolved	mg/L		0.0056	0.0058	0.0055		0.0072		0.0043	0.0042	0.0092		0.0112	0.0156
Mercury, dissolved	mg/L		<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.0013	0.0014	0.0014		0.0014		0.0012	0.0013	0.0013		0.0015	0.0012
Nickel, dissolved	mg/L		<0.0010	0.0012	<0.0010		<0.0010		<0.0010	0.001	0.0012		0.0011	0.0012
Phosphorus, dissolved	mg/L		0.012	0.013	0.015		0.011		0.012	<0.01	0.011		0.011	<0.01
Potassium, dissolved	mg/L		1.27	1.37	1.41		1.3		1.06	1.28	1.39		1.6	1.36
Selenium, dissolved	mg/L		<0.00010	0.00014	0.00013		<0.00010		<0.00010	0.00011	<0.00010		0.0001	0.00015
Silver, dissolved	mg/L		<0.000020	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, dissolved	mg/L		9.52	9.61	9.94		9.97		8.85	8.79	10.1		11.3	10.8
Thallium, dissolved	mg/L		<0.000050	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, dissolved	mg/L		<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050		<0.0050	<0.0050

Data omitted from calculation of summary statistics

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/05/2005**	**30/06/2005**	**29/07/2005**	**29/08/2005**	**28/09/2005**	**15/10/2005**	**02/03/2006**	**04/04/2006**	**05/04/2006**	**06/04/2006**	**07/04/2006**	**08/04/2006**	**09/04/2006**	**10/04/2006**	**11/04/2006**	**12/04/2006**	**13/04/2006**	**14/04/2006**	**15/04/2006**	**16/04/2006**	**17/04/2006**
pH (field)	pH units									8.50	8.40		7.70	8.50	8.45	8.5	8.5	8.5	8.6	8.6	8.55	8.6
pH (lab)	pH units	7.99	8.22	8.06	8.24	7.99	8.08	7.31	8.04	8.45	8.43	8.36	8.28	8.28	8.30	8.31	8.29	8.32	8.33	8.38	8.39	8.41
Hardness (from dissolved)	mg/L																					
Hardness (from total)	mg/L	93.9		166	135	129	134	236														
Total Dissolved Solids	mg/L	141	224	198	182	174	176	279	487	940	442	354	288	252	256	276	305	361	316	363	554	585
Total Suspended Solids	mg/L	8.5	<3.0	25.7	7.5	8	<3.0	<3.0	<3.0	18.6	3.6	5.6	6.4	6.4	8.9	5.4	6.9	4.4	<3.0	<3.0	3.4	<3.0
Alkalinity, total	mg/L	61.2	153		122	101		193					190	164	165	177	197	224	220	239	364	368
Sulphate, dissolved	mg/L	2.4	45.5		25.5	23.9		50.4					58.1	53.1	56.2	63.1	74.9	84.2	78.9	81.5	124	136
Chloride	mg/L	<0.50	0.86	<0.50	<0.50	<0.50	<0.50	6.20	2.82	2.38	2.09	2.08	1.58	1.46	1.1	0.95	1.18	1.47	1.41	1.33	2.27	2.24
Fluoride	mg/L								0.513	0.87	0.519	0.42	0.336	0.34	0.314	0.32	0.360	0.387	0.402	0.405	0.532	0.570
Nitrite (N)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0019	<0.0010	0.0016	0.0017	0.0017	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	0.0012
Nitrate (N)	mg/L	0.0121	0.0519	0.0284	<0.0050	0.0132	0.0393	1.6500	0.1160	<0.0050	<0.0050	0.0125	0.0640	<0.0050	0.0146	0.0225	0.0094	0.0061	<0.0050	0.249	0.0992	0.0694
Ammonia	mg/L	<0.020	<0.020	<0.020	0.042	<0.020	0.023	0.07	0.018	0.016	0.0093	0.0073	0.01	0.0107	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0120	0.0300	0.0480
Aluminum, total	mg/L	0.152	0.0313	0.732	0.267	0.236	0.09	0.0059	0.034	0.3840	0.101	0.1560	0.323	0.3160	0.444	0.1990	0.173	0.280	0.0407	0.0423	0.0419	0.0653
Arsenic, total	mg/L	<0.00050	0.00037	0.00081	0.00054	0.00055	0.00045	0.00019	0.00061	0.00103	0.00055	0.00048	0.0005	0.00047	0.00049	0.00039	0.00038	0.00043	0.00033	0.00031	0.00046	0.00055
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.000050	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium, total	mg/L	20.9	39.1	37.3	30.8	28.7	29.4	63.2	75.6	102.0	60.3	51.8	41.9	40.3	38.8	39.9	41.9	47.8	47.6	49.1	70.5	80.0
Chromium, total	mg/L	<0.0010	0.0005	0.002	<0.0010	<0.0010	<0.00050	<0.00050	<0.00050	<0.0010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper, total	mg/L	0.0078	0.00374	0.0149	0.0086	0.01	0.00855	0.00171	0.0032	0.00542	0.0053	0.00629	0.0067	0.01000	0.0084	0.00768	0.00919	0.00966	0.00626	0.00613	0.00670	0.00687
Iron, total	mg/L	0.32	0.081	1.32	0.698	0.794	0.497	<0.030	0.279	0.357	0.133	0.129	0.354	0.325	0.430	0.271	0.178	0.291	<0.030	0.030	0.034	0.071
Lead, total	mg/L	<0.00050	0.000292	0.000359	<0.00050	<0.00050	<0.000050	<0.000050	<0.000050	0.000120	<0.000050	0.000057	0.000212	0.000142	0.000168	0.000096	0.000103	0.000113	<0.000050	<0.000050	0.000059	0.000074
Magnesium, total	mg/L	9.03	17.6	17.2	13.2	12	12.5	18.7	45.80	104.0	44.80	36.2	28.80	24.5	25.60	28.3	26.4	31.3	30.7	33.5	51.2	62.4
Manganese, total	mg/L	0.023	0.0084	0.0641	0.0806	0.12	0.124	0.00158	0.3090	0.03450	0.0216	0.02160	0.0286	0.02770	0.0298	0.02890	0.0347	0.0475	0.0237	0.0261	0.0362	0.0371
Mercury, total	mg/L	<0.000020			<0.000020	<0.000020																
Molybdenum, total	mg/L	0.0011	0.00163	0.0019	0.0014	0.0012	0.00126	0.00128	0.0033	0.00574	0.0045	0.00345	0.0027	0.00278	0.0026	0.00273	0.00365	0.00384	0.00400	0.00355	0.00481	0.00525
Nickel, total	mg/L	0.0017	0.00087	0.00257	0.0017	0.0018	0.00136	<0.00050	0.0009	<0.0010	<0.00050	<0.00050	0.0005	<0.00050	0.0005	<0.00050	<0.00050	0.00075	<0.00050	<0.00050	0.00084	0.00070
Phosphorus, total	mg/L		<0.30	<0.30			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium, total	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5.3	11.1	6.4	4.8	3.6	3.7	3.4	3.5	4.0	4.0	4.5	4.3	6.2	6.4
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0021	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver, total	mg/L	<0.000020	<0.000010	<0.000030	0.000027	0.000029	<0.000010	<0.000010	<0.000010	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	mg/L	4.9	12.1	9.4	7.8	7.1	7	10.5	28.7	67.2	28.3	22.7	16.1	13.9	14.8	16.5	16.8	20.7	19.7	21.1	32.4	35.9
Thallium, total	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010	<0.00010	<0.00020	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Zinc, total	mg/L	<0.0050	<0.0020	<0.0070	<0.0050	<0.0050	<0.0010	0.0021	<0.0030	<0.0040	<0.0030	0.0016	0.0031	0.0025	0.0028	0.002	0.0027	0.0036	0.0016	0.0031	0.0029	<0.0030
Aluminum, dissolved	mg/L	0.0267	0.008	0.0113	0.0184	0.0257	0.0223	0.0033				0.0122										0.0161
Arsenic, dissolved	mg/L	<0.00050	0.00034	0.00041	<0.00050	<0.00050	0.00043	0.00020				0.00042										0.00051
Cadmium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.000050				<0.000050										<0.000050
Calcium, dissolved	mg/L	22	38.5	38	31.8	30.4	31.6	63.6				51.3										82.5
Chromium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.00050				<0.00050										<0.00050
Copper, dissolved	mg/L	0.0066	0.00336	0.00478	0.005	0.0057	0.00608	0.00163				0.00428										0.00648
Iron, dissolved	mg/L	0.116	0.042	0.134	0.306	0.421	0.39	<0.030				<0.030										<0.030
Lead, dissolved	mg/L	<0.00050	0.000241	<0.000050	<0.00050	<0.00050	<0.000050	<0.000050				<0.000050										<0.000050
Magnesium, dissolved	mg/L	9.48	17.4	17.3	13.6	12.8	13.4	18.6				35.7										64.3
Manganese, dissolved	mg/L	0.0094	0.0052	0.0311	0.0657	0.102	0.112	0.00139				0.01780										0.03540
Mercury, dissolved	mg/L	<0.000020			<0.000020	<0.000020																
Molydenum, dissolved	mg/L	<0.0010	0.00163	0.00158	0.0013	0.0011	0.00122	0.00127				0.00353										0.00504
Nickel, dissolved	mg/L	0.0014	0.00078	0.00115	0.0014	0.0014	0.00121	<0.00050				<0.00050										0.00065
Phosphorus, dissolved	mg/L		<0.30	<0.30			<0.30	<0.30				<0.30										<0.30
Potassium, dissolved	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				4.8										6.6
Selenium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				<0.0010										<0.0010
Silver, dissolved	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	<0.000010				<0.000010										<0.000010
Sodium, dissolved	mg/L	5.2	11.7	9.7	8	7.7	7.5	10.4				22.4										36.7
Thallium, dissolved	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010				<0.00010										<0.00010
Zinc, dissolved	mg/L	<0.0050	0.0116	0.0015	<0.0050	<0.0050	0.0018	0.0088				0.0017										0.0017

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**18/04/2006**	**19/04/2006**	**20/04/2006**	**21/04/2006**	**22/04/2006**	**23/04/2006**	**24/04/2006**	**25/04/2006**	**26/04/2006**	**27/04/2006**	**28/04/2006**	**29/04/2006**	**30/04/2006**	**01/05/2006**	**02/05/2006**	**03/05/2006**	**04/05/2006**	**05/05/2006**	**06/05/2006**	**08/05/2006**	**10/05/2006**
pH (field)	pH units	8.6	8.6	8.5	8.45	8.5	8.55	8.45	8.6	8.4	8	7.9	8.5	8.4	8.3	8.2	8.2	8.2				
pH (lab)	pH units	8.18	8.32	8.33	8.31	8.31	8.25	8.16	7.63	7.81	7.90	7.85	7.94	7.93	7.94	7.87	7.80		7.53	7.52	7.43	7.51
Hardness (from dissolved)	mg/L																					
Hardness (from total)	mg/L																					
Total Dissolved Solids	mg/L	504	294	285	266	266	210	182	165	174	168	174	177	159	170	137	126		100	102	122	118
Total Suspended Solids	mg/L	3.7	4.2	4.2	<3.0	7.7	12.7	11.7	16.1	6.6	6.6	<3.0	4.1	3.1	4.6	4.9	30.9		40.4	82.9	18.4	13.8
Alkalinity, total	mg/L	337	208	201	178	182	152	103	84.4	75.4	84.2	73.1	87.4	77.9	81.6							29.9
Sulphate, dissolved	mg/L	120	65.6	60.3	55	58.6	42.7	35.3	26.4	29.9	28.5	23.9	29.3	25.4	24.7							5.48
Chloride	mg/L	2.03	1.00	0.95	0.80	0.84	0.64	0.88	1.15	0.88	0.83	0.73	0.72	0.63	0.64	0.60	0.55		<0.50	<0.50	<0.50	<0.5
Fluoride	mg/L	0.574	0.369	0.356	0.315	0.292	0.233	0.238	0.203	0.167	0.17	0.14	0.15	0.15	0.16	0.122	0.126		0.064	0.069	0.063	0.078
Nitrite (N)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.001
Nitrate (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.005
Ammonia	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020													<0.020	
Aluminum, total	mg/L	0.1790	0.2040	0.2750	0.2170	0.2120	0.5360	0.8480	0.3940	0.3300	0.2690	0.2100	0.2130	0.2090	0.2250	0.2090	1.0200		1.0700	2.1300	0.7740	0.316
Arsenic, total	mg/L	0.00064	0.00039	0.00041	0.00037	0.00035	0.00040	0.00057	0.00048	0.00045	0.00042	0.00039	0.00040	0.00037	0.00037	0.00036	0.00076		0.00065	0.00101	0.00057	0.00045
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	0.000134
Calcium, total	mg/L	66.8	43.3	41.2	38.9	37.7	29.2	24.0	20.1	20.0	21.0	19.4	24.0	22.4	23.0	17.5	16.4		10.5	11.4	11.1	12.2
Chromium, total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00061	0.00102	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00156		0.00162	0.00238	0.001	0.00074
Copper, total	mg/L	0.00904	0.00565	0.00878	0.00818	0.00780	0.01180	0.02790	0.02680	0.03210	0.02970	0.03150	0.03320	0.03010	0.03040	0.03040	0.03670		0.03480	0.10100	0.04150	0.0213
Iron, total	mg/L	0.185	0.247	0.279	0.201	0.220	0.590	0.913	0.370	0.366	0.285	0.261	0.256	0.251	0.259	0.327	1.460		1.530	3.200	1.200	0.504
Lead, total	mg/L	0.000051	0.000153	0.000142	0.000198	0.000074	0.000195	0.000289	0.000078	0.000086	0.000068	0.000091	0.000060	0.000078	0.000062	0.000117	0.000461		0.000461	0.000760	0.000285	0.000183
Magnesium, total	mg/L	51.4	31.5	31.9	28.6	28.4	22.8	17.4	10.5	11.2	11.8	10.6	13.1	11.7	11.7	8.1	7.8		4.3	4.8	4.0	4.32
Manganese, total	mg/L	0.0509	0.0342	0.0296	0.0325	0.0342	0.0451	0.0465	0.0112	0.0506	0.04950	0.03960	0.03600	0.03570	0.03110	0.0302	0.0711		0.0925	0.1380	0.0599	0.0708
Mercury, total	mg/L																					
Molybdenum, total	mg/L	0.00470	0.00278	0.00268	0.00235	0.00239	0.00177	0.00187	0.00139	0.00109	0.00116	0.00089	0.00118	0.00113	0.00100	0.00080	0.00085		0.00047	0.00056	0.00041	0.000454
Nickel, total	mg/L	0.00080	<0.00050	<0.00050	<0.00050	0.00050	0.00067	0.00110	0.00087	0.00099	0.00096	0.00110	0.00117	0.00110	0.00106	0.00119	0.00212		0.00223	0.00304	0.00212	0.00183
Phosphorus, total	mg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.30	<0.30	<0.3
Potassium, total	mg/L	8.7	4.3	4.1	3.8	3.4	2.8	3.4	6.6	3.4	3.1	3.1	3.2	3	2.9	2.6	2.8		2.1	2.4	2.1	2
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.001
Silver, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000021	<0.000010	0.00001	0.000016	0.00001	0.000012	0.00001	<0.000010	0.000013	0.000022		0.00002	0.00003	0.000017	0.000028
Sodium, total	mg/L	29.6	18.5	18.1	16.1	16.4	12.6	10.6	8.5	9.9	9.9	7.5	7.7	5.4	5.3	3.4	3.3		<2.0	<2.0	<2.0	<2
Thallium, total	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.0001
Zinc, total	mg/L	0.0025	0.0031	0.0035	0.0031	0.0094	0.0031	0.0047	0.0023	0.0027	0.0028	0.0236	0.0035	0.0138	0.0037	0.0050	0.0053		0.0192	0.0137	0.0079	0.0051
Aluminum, dissolved	mg/L							0.0710													0.1240	
Arsenic, dissolved	mg/L							0.00033													0.00031	
Cadmium, dissolved	mg/L							<0.000050													<0.000050	
Calcium, dissolved	mg/L							24.3													11.1	
Chromium, dissolved	mg/L							<0.00050													<0.00050	
Copper, dissolved	mg/L							0.01350													0.01850	
Iron, dissolved	mg/L							0.134													0.220	
Lead, dissolved	mg/L							<0.000050													0.000052	
Magnesium, dissolved	mg/L							17.7													3.8	
Manganese, dissolved	mg/L							0.03240													0.02550	
Mercury, dissolved	mg/L																					
Molydenum, dissolved	mg/L							0.00204													0.00032	
Nickel, dissolved	mg/L							0.00056													0.00136	
Phosphorus, dissolved	mg/L							<0.30													<0.30	
Potassium, dissolved	mg/L							3.3													<2.0	
Selenium, dissolved	mg/L							<0.0010													<0.0010	
Silver, dissolved	mg/L							<0.000010													<0.000010	
Sodium, dissolved	mg/L							10.9													<2.0	
Thallium, dissolved	mg/L							<0.00010													<0.00010	
Zinc, dissolved	mg/L							0.0017													0.0057	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		14/05/2006	17/05/2006	20/05/2006	23/05/2006	26/05/2006	29/05/2006	02/06/2006	07/06/2006	15/06/2006	15/06/2006	23/06/2006	28/06/2006	07/07/2006	12/07/2006	20/07/2006	26/07/2006	26/07/2006	02/08/2006	10/08/2006	25/08/2006	25/08/2006
pH (field)	pH units																					
pH (lab)	pH units	7.6	7.59	7.75	7.89	7.71	7.64	7.42	7.59		7.95	7.83	7.88	7.93	7.7	7.92		7.93	8	7.82		7.94
Hardness (from dissolved)	mg/L										169	190	163	179	183	208		209	163	202		204
Hardness (from total)	mg/L																					
Total Dissolved Solids	mg/L	116	131	126	133	139	120	129	134		196	266	212	249								282
Total Suspended Solids	mg/L	46.8	7.1	6.1	17.8	5.9	13.4	26.4	7.1		<2	4	4	14	<2	16		<2	18	6		4
Alkalinity, total	mg/L	35.5	43.2	55.4	68.4	74	55.2	68.7	69.7		134	164	138	158	164	174		171	182	183		175
Sulphate, dissolved	mg/L	6.85	7.66	10.3	15.4	19	11.9	12.2	14.3		34	47		38	39	42		45	40	45		43
Chloride	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5													
Fluoride	mg/L	0.158	0.105	0.136	0.149	0.143	0.122	0.127	0.126													
Nitrite (N)	mg/L	<0.001	<0.001	<0.001	<0.001	0.0015	<0.001	<0.001	0.0011													
Nitrate (N)	mg/L	<0.005	<0.005	<0.005	<0.005	0.013	0.0075	<0.005	0.0179		0.12	<0.03	0.025	0.086	0.11	<0.03		0.04	0.12	0.12		<0.03
Ammonia	mg/L	0.049			0.012			0.022	0.043	0.013		0.007	<0.002		0.006	0.006	0.007		0.016	0.013	0.02	
Aluminum, total	mg/L	1.66	0.357	0.0881	0.281	0.125	0.195	0.847	0.17		0.032	0.067	0.065	0.16	0.014	0.594		0.183	0.138	0.306		0.19
Arsenic, total	mg/L	0.00118	0.00056	0.00045	0.00056	0.00051	0.00055	0.00079	0.00054		0.0004	0.0004	0.0004	<0.001	0.0003	0.0006		0.0004	0.0006	0.0005		0.0004
Cadmium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001		<0.00002
Calcium, total	mg/L	14	14.9	17.1	19.5	21.7	16.7	18.8	19.6		36.5	45.2	38.1	45.2	46.7	47.3		50.4	48.4	54.7		48.3
Chromium, total	mg/L	0.00318	0.00067	<0.0005	0.00061	0.00056	0.00071	0.00183	<0.0005		<0.0005	<0.0005	<0.0005	<0.002	<0.0005	0.0006		<0.0005	<0.0005	<0.0005		<0.001
Copper, total	mg/L	0.013	0.0224	0.0147	0.0144	0.0117	0.022	0.0204	0.0279		0.009	0.005	0.012	0.008	0.004	0.01		0.005	0.004	0.014		0.004
Iron, total	mg/L	2.44	0.82	0.261	0.629	0.299	0.385	1.38	0.342		0.1	<0.1	0.2	0.1	<0.1	0.7		0.3	0.3	0.4		0.3
Lead, total	mg/L	0.00116	0.000183	<0.00005	0.000193	0.000084	0.000131	0.000386	0.000087		<0.0001	<0.0001	<0.0001	<0.0005	<0.0001	0.0002		0.0001	<0.0001	0.0002		<0.0002
Magnesium, total	mg/L	4.26	5.82	6.8	8.8	9.4	6.42	7.65	7.53		14.8	17.3	15.1	17.1	16.8	20.7		20.1	18.8	20.4		19
Manganese, total	mg/L	0.135	0.0965	0.0107	0.0543	0.0187	0.0172	0.0641	0.0201		0.011	0.008	0.01	0.012	0.008	0.043		0.021	0.057	0.104		0.046
Mercury, total	mg/L																					
Molybdenum, total	mg/L	0.000581	0.000681	0.000956	0.000992	0.000868	0.000815	0.000915	0.000802		0.002	0.002	0.002	<0.005	0.001	0.002		0.002	0.002	0.002		<0.002
Nickel, total	mg/L	0.0046	0.00221	0.00187	0.00211	0.00209	0.00238	0.00354	0.00212		0.0014	0.0011	0.0009	0.003	0.001	0.0019		0.0009	0.0011	0.0014		0.002
Phosphorus, total	mg/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3													
Potassium, total	mg/L	<2	<2	<2	<2	<2	<2	<2	<2		1.3	1.4	1.3	1.3	1.4	1.6		1.7	1.6	1.8		1.7
Selenium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002		<0.0002	0.0003	0.0003		<0.0004
Silver, total	mg/L	0.000023	0.000012	<0.00001	<0.00001	0.000013	0.000017	0.000019	<0.00001		<0.0001	0.0002	<0.0001	<0.0005	<0.0001	<0.0001		<0.0001	0.0002	<0.0001		<0.0002
Sodium, total	mg/L	2.1	3.4	3.5	5.4	5.7	4.3	4.7	4.6		9.6	11	10.2	11.6	11.1	12.6		11.6	13.5	13.2		13
Thallium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.00005	<0.00005	<0.00005	<0.0002	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.0001
Zinc, total	mg/L	0.0085	0.0029	<0.001	0.0023	0.0018	<0.005	0.0052	0.0016		<0.001	0.001	0.002	<0.005	0.002	0.003		0.003	0.002	0.004		0.005
Aluminum, dissolved	mg/L	0.0846			0.0383			0.0507			0.009	0.006	0.015	<0.005	<0.005	0.007		<0.005	0.017	0.021		0.009
Arsenic, dissolved	mg/L	0.0004			0.00043			0.00049			0.0004	0.0004	0.0004	0.0004	0.0004	0.0003		0.0002	0.0005	0.0006		0.0004
Cadmium, dissolved	mg/L	<0.00005			<0.00005			<0.00005			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	0.00001		<0.00001
Calcium, dissolved	mg/L	13.8			19			19.1			40.7	46.6	39	40.9	42.6	48.6		51.5	45.7	50.1		48.1
Chromium, dissolved	mg/L	<0.0005			<0.0005			<0.0005			<0.0005	0.0006	0.0005	0.0014	0.0014	<0.0005		<0.0005	0.0007	0.0011		0.0007
Copper, dissolved	mg/L	0.0146			0.0102			0.0116			0.005	0.003	0.008	0.005	0.004	0.004		0.002	0.003	0.006		0.003
Iron, dissolved	mg/L	0.285			0.167			0.198			0.04	0.03	0.03	0.03	0.02	0.04		0.03	0.08	0.04		0.04
Lead, dissolved	mg/L	0.00007			<0.00005			<0.00005			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001
Magnesium, dissolved	mg/L	4.32			8.52			7.63			16.3	18	16.9	18.8	18.6	21.2		19.6	11.9	18.8		20.4
Manganese, dissolved	mg/L	0.0901			0.0292			0.00826			<0.005	0.006	<0.005	<0.005	0.005	0.01		0.012	0.135	0.085		0.041
Mercury, dissolved	mg/L																					
Molydenum, dissolved	mg/L	0.000572			0.00101			0.000854			0.001	0.002	0.002	0.002	0.002	0.001		<0.001	0.001	0.002		0.001
Nickel, dissolved	mg/L	0.00159			0.00152			0.00204			0.0009	0.001	0.0012	0.0014	<0.0005	<0.0005		<0.0005	0.0008	0.0007		0.0009
Phosphorus, dissolved	mg/L	<0.3			<0.3			<0.3														
Potassium, dissolved	mg/L	<2			<2			<2			0.6	1.4	1.4	1.2	1.5	1.6		1.7	2.1	1.7		1.5
Selenium, dissolved	mg/L	<0.001			<0.001			<0.001			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
Silver, dissolved	mg/L	<0.00001			<0.00001			<0.00001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001
Sodium, dissolved	mg/L	2.3			5.3			4.9			10.8	11	10.2	11.3	11	13.1		13	13.6	13.3		12.2
Thallium, dissolved	mg/L	<0.0001			<0.0001			<0.0001			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.00005
Zinc, dissolved	mg/L	0.0024			<0.001			0.0013			<0.001	0.003	0.002	0.001	<0.001	<0.001		0.001	0.002	0.003		0.003

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**30/08/2006**	**06/09/2006**	**13/09/2006**	**20/09/2006**	**29/09/2006**	**04/10/2006**	**12/10/2006**	**18/10/2006**	**28/10/2006**	**01/11/2006**	**09/11/2006**	**16/11/2006**	**23/11/2006**	**30/11/2006**	**06/12/2006**	**13/12/2006**	**20/12/2006**	**28/12/2006**	**04/01/2007**	**10/01/2007**	**17/04/2007**
pH (field)	pH units																					
pH (lab)	pH units	7.86	7.92	7.96	8.02	7.74	7.93	7.61	8.19	7.44	7.1	7.49	7.22	8.29	7.45	8.15	8.28	7.46	7.5	7.63	8.36	7.91
Hardness (from dissolved)	mg/L	192	210	215	216	210	203	210	216	224	226	234	267	244	230		229	223	236	233		246
Hardness (from total)	mg/L															238					239	
Total Dissolved Solids	mg/L	294				160		280	247	130	290	304	324	320	296	240	320	308	308	298	288	332
Total Suspended Solids	mg/L	<2	<2	4	2	<2	<2	<2	<1	14	<2	<2	<2	<2	12	5	33	3	14	18	4	24
Alkalinity, total	mg/L	178	186	183	190	191	180	184	152	205	210	214	248	202	215	204	208	210	206	193	204	203
Sulphate, dissolved	mg/L	39	38	42.9	42	43	43	42		42	42	42	40	46	44	41	42	42	43	43	42	48
Chloride	mg/L								0.9	1.12	1.06	1.21	1.46			1.13	1.28	1.5	1.9	2.18	2.39	4
Fluoride	mg/L																					
Nitrite (N)	mg/L								<0.005	<0.03	<0.03	<0.03	<0.03	<0.1	<0.005	<0.03	<0.1	<0.1	<0.1	<0.03	<0.03	<0.05
Nitrate (N)	mg/L	<0.03	<0.03	0.008	<0.03	<0.03	<0.03	<0.03	0.05	0.25	0.23	0.23	0.03	0.31	0.39	0.37	0.46	0.5	0.5	0.56	0.59	0.2
Ammonia	mg/L	0.004	0.003	0.006	0.004	0.006	0.073	0.006	<0.05	0.029	<0.05	0.071	0.1	0.032	<0.05	0.017	<0.002	0.002	<0.002	<0.05	<0.05	
Aluminum, total	mg/L	0.064	0.05	0.16	0.138	0.03	0.081	0.047	0.006	0.114	0.96	0.031	0.008	0.064	0.505	0.213	0.516	0.13	0.49	0.562	0.226	1.46
Arsenic, total	mg/L	0.0003	0.0004	0.0004	0.0005	0.0004	<0.0004	0.0002	0.0003	0.0004	0.009	0.0003	0.0002	<0.0004	0.0006	0.0004	0.0003	0.0006	0.0004	0.0004	<0.0002	0.0012
Cadmium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00001	<0.00001	<0.00001	<0.00025	<0.00001	<0.00001	<0.00002	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	0.00001	0.00003
Calcium, total	mg/L	47.1	49.2	49.8	51.2	51.1	46.2	52	54.3	50.4	49.8	53	64.4	52.1	51.5	50.9	50.2	47.9	51.6	52.9	50.5	60.6
Chromium, total	mg/L	0.0008	0.0007	0.0005	0.0005	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.001	0.002	0.0007	0.0011	<0.0005	0.0005	0.0008	0.0006	0.0016
Copper, total	mg/L	0.005	0.004	0.005	0.004	0.004	0.004	0.005	0.003	0.002	0.05	0.002	0.001	0.004	0.005	0.002	0.003	0.002	0.002	0.002	0.002	0.016
Iron, total	mg/L	0.1	0.1	0.3	0.2	<0.2	<0.2	<0.1	<0.1	0.2	0.1	0.1	0.3	<0.2	0.7	0.3	0.6	0.2	0.6	0.6	0.3	1.8
Lead, total	mg/L	<0.0001	0.0001	0.0001	0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	0.003	0.0001	<0.0001	0.0007	0.0031	0.0003	0.0003	<0.0001	0.0002	0.0002	0.0003	0.0004
Magnesium, total	mg/L	17.8	18.5	18.8	21.3	20.4	18	20.8	20.8	24.8	24	26.9	29.2	26.7	27.7	26.8	27.4	25.3	27.4	28	27.4	23.6
Manganese, total	mg/L	0.032	0.036	0.038	0.029	0.03	0.047	0.047	0.073	0.297	0.308	0.399	2.26	0.14	0.021	0.018	0.023	0.012	0.027	0.024	0.013	0.692
Mercury, total	mg/L									<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	<0.002	<0.002	0.002	0.002	0.002	0.06	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nickel, total	mg/L	0.0014	0.0015	0.0014	0.0015	0.002	0.0025	0.0012	0.0013	<0.0005	0.03	0.0011	0.0014	0.0023	0.0016	0.0015	0.0014	0.0007	<0.0005	0.0012	0.0007	0.0023
Phosphorus, total	mg/L								0.06		<0.05		0.06		<0.05	<0.02	0.03	<0.02	0.02	0.02	<0.05	0.09
Potassium, total	mg/L	1.4	1.5	1.5	1.7	1.6	1.4	1.4	1.4	1.9	1.8	1.9	2	2	2.1	2.2	2	2	2.4	2.2	2	3
Selenium, total	mg/L	0.0002	0.0004	<0.0002	0.0004	<0.0004	0.0006	<0.0002	<0.0002	0.0002	0.008	0.0004	<0.0002	0.0005	0.0007	0.0003	0.0006	0.0003	0.0006	0.0006	<0.0002	<0.0002
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.002	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	11.4	11.9	12.2	12.1	13	12	11.6	11.1	15.8	14.9	14.2	14	15	14.8	15.5	15.1	14.1	15.2	15.5	14.6	14.1
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.001	<0.00005	<0.00005	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.002	0.002	0.003	0.003	0.003	0.002	0.001	0.002	0.003	0.05	0.004	0.002	0.01	0.044	0.008	0.01	0.005	0.005	0.007	0.002	0.007
Aluminum, dissolved	mg/L	0.007	<0.005	0.006	0.006	0.009	<0.005	0.007	0.005	<0.005	0.006	<0.005	0.006	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	0.026
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0003	0.0003	0.0004	0.0005	0.0004	0.0004	0.0004	0.0003	0.0002	0.0006	0.0003	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003	<0.0002	0.0011
Cadmium, dissolved	mg/L	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00003	0.00001	<0.00001	0.00002	0.00003	0.00005	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L	46.9	51.7	50.6	52.2	51.3	49.4	51.7	54.8	48.4	48.5	51.6	63.1	53.3	49.3	50.9	47.6	47	50.2	48.8	51	59.3
Chromium, dissolved	mg/L	0.0016	0.0008	0.002	0.0007	0.0006	0.0006	<0.0005	<0.0005	0.0098	0.0008	0.0014	0.0009	0.0014	0.0014	0.0018	0.0006	0.0012	0.0005	<0.0005	0.0008	0.0008
Copper, dissolved	mg/L	0.004	0.004	0.003	0.003	0.003	0.002	0.003	0.003	0.001	0.002	0.001	0.002	0.003	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	0.008
Iron, dissolved	mg/L	0.05	0.05	0.05	0.06	0.03	0.06	0.05	0.03	0.06	0.05	<0.01	0.29	0.06	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.27
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001
Magnesium, dissolved	mg/L	18.1	19.7	20.3	20.9	20	19.3	19.6	19.2	25	25.6	25.6	26.5	27	26	26.2	26.8	25.6	26.9	27	26.9	23.8
Manganese, dissolved	mg/L	0.027	0.03	0.018	0.021	0.032	0.038	0.046	0.069	0.27	0.307	0.334	2.16	0.136	0.006	0.006	0.008	0.007	0.016	0.007	0.008	0.785
Mercury, dissolved	mg/L									<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.001
Nickel, dissolved	mg/L	0.0007	0.001	0.0008	<0.0005	<0.0005	0.0006	0.0006	0.001	<0.0005	0.0025	0.0009	0.0008	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	0.0014
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	1.4	1.6	1.6	1.6	1.6	1.6	1.4	1.4	1.7	1.8	1.9	1.7	2	2	2	1.9	1.9	1.5	2	2	2.8
Selenium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	0.0004	<0.0002	0.0006	<0.0002	0.0004	0.0004	0.0004	<0.0002	0.0004	0.0006	0.0004	<0.0002	<0.0002
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	11.4	12.7	13.4	12.1	13.2	12.7	12.6	11.9	14	13.9	15.4	15.3	16.3	15.9	15.8	15.2	14.2	16.6	14.7	15.1	14.1
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	<0.001	0.005	0.002	0.002	0.002	0.005	0.004	0.012	0.003	0.001	0.006	0.001	0.003

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/04/2007**	**04/05/2007**	**11/05/2007**	**19/05/2007**	**25/05/2007**	**30/05/2007**	**05/06/2007**	**13/06/2007**	**20/06/2007**	**27/06/2007**	**28/06/2007**	**04/07/2007**	**05/07/2007**	**11/07/2007**	**18/07/2007**	**25/07/2007**	**26/07/2007**	**01/08/2007**	**09/08/2007**	**15/08/2007**	**24/08/2007**
pH (field)	pH units																					
pH (lab)	pH units	7.92	7.97	7.91	7.8	7.91	7.89	7.88	7.91	7.75		7.86		7.86	7.9	7.8	7.78		8.08	7.85	8.03	8.03
Hardness (from dissolved)	mg/L	167	142	167	173	167			174	178		184		175	180	193	199		188	199	202	
Hardness (from total)	mg/L						168	168					172									198
Total Dissolved Solids	mg/L	274	252	280	250	236	260	238	232	244		256		258	248	284	270		304	262	318	288
Total Suspended Solids	mg/L	2	6	<2	10	34	13	9	6	6		7		6	<2	<2	4		<2	10	6	<2
Alkalinity, total	mg/L	130	106	118	128	127	126	128	144	147		153		159	162	169	175		175	183	191	198
Sulphate, dissolved	mg/L	31	22.1	25.9	27.4	25	25	26	26	26		27		27	28	29	30		31	32	32	34
Chloride	mg/L	2.5	1.7	1.9	2	1.8	1.7	1.9	1.9	1.7		1.9		1.8	1.8	0.4	5		2	2	2.4	2.1
Fluoride	mg/L																					
Nitrite (N)	mg/L	<0.05	0.16	0.19	0.06	<0.05	<0.05	0.08	<0.05	<0.05		0.08		<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05
Nitrate (N)	mg/L	1.6	2.9	4	4.5	4.6	4.8	5.2	4.8	4.4		3.5		3	3	2.9	2.4		2	1.5	1.8	1.5
Ammonia	mg/L	<0.05	0.07	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05		<0.05			<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05
Aluminum, total	mg/L	0.212	0.31	0.17	0.485	1.14	0.708	0.62	0.36	0.579	0.12	0.295	0.346	0.258	0.136	0.184	0.041	0.051	0.119	0.218	0.18	0.036
Arsenic, total	mg/L	0.0005	0.0008	0.0009	0.0007	0.0005	0.0006	0.0007	0.0004	0.0006	0.0005	0.0007	0.0005	0.0005	0.0006	0.0005	0.0005	0.0004	0.0006	0.0005	0.0004	0.0005
Cadmium, total	mg/L	0.00003	0.00003	<0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00004	<0.00001	0.00001	0.00001	<0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00001	0.00002
Calcium, total	mg/L	45.1	38.9	43.9	48.4	44.8	45.7	46	45.6	49.1	47.5	47.8	46.4	47.4	49.4	51.5	49.7	50.5	51.3	50.6	54.2	53.1
Chromium, total	mg/L	0.001	0.001	0.001	<0.001	0.0021	0.0014	0.0006	0.001	0.0012	<0.0005	0.0011	0.0005	<0.0005	0.0005	0.0006	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005
Copper, total	mg/L	0.01	0.02	0.02	0.02	0.02	0.014	0.014	0.018	0.015	0.014	0.014	0.014	0.015	0.013	0.013	0.011	0.012	0.013	0.007	0.009	0.005
Iron, total	mg/L	0.2	0.4	0.2	0.7	1.4	0.8	0.7	0.4	0.6	0.2	0.4	0.4	0.3	0.2	0.3	<0.1	0.1	0.2	0.3	0.2	<0.1
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	0.0003	0.0004	0.0002	0.0003	0.0002	0.0002	<0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0007	0.0001	0.0001	0.0003
Magnesium, total	mg/L	12	11	13	15	13	13.2	12.8	13.4	13.3	13.6	13.5	13.7	13.9	14.3	15.4	14.8	14.8	16.1	15.5	15.9	16
Manganese, total	mg/L	0.054	0.057	0.062	0.11	0.088	0.06	0.062	0.038	0.048	0.03	0.045	0.042	0.04	0.036	0.037	0.047	0.047	0.067	0.05	0.053	0.066
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002
Nickel, total	mg/L	0.002	0.0022	<0.001	0.0023	0.001	0.0016	0.0016	0.0008	0.0022	0.0014	0.0017	0.0018	0.0015	0.0011	0.0009	<0.0005	0.0009	0.0018	0.0013	0.0012	0.0006
Phosphorus, total	mg/L	0.14	0.09	0.06	0.07	0.06	<0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05		<0.05		<0.05	<0.05	<0.05	<0.05
Potassium, total	mg/L	2.4	2.4	2.1	2	2.1	1.9	2	2	1.9	2	2.1	2	2	2	2.3	2.2	2.2	1.9	1.9	2.1	1.8
Selenium, total	mg/L	0.0007	0.001	<0.0004	<0.0004	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	<0.0002	<0.0002	<0.0002	0.0008	0.0003	<0.0002	0.0006	<0.0002	0.0003	0.0002	<0.0002
Silver, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	8.9	7.7	7.8	8.3	8.9	9.4	9.1	9.4	9	9.4	9.4	9.6	9.5	9.9	10.7	10.6	10.5	10.4	11	11.2	10.6
Thallium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.01	0.01	0.007	0.02	0.009	0.008	0.006	0.007	0.005	0.004	0.004	0.003	0.004	0.003	0.006	0.006	0.006	0.008	0.008	0.012	0.009
Aluminum, dissolved	mg/L	0.041	0.045	0.026	0.009	0.017	0.009		0.014	0.013		0.006		0.011	0.01	0.01	0.009	0.009	0.009	<0.005	0.025	
Arsenic, dissolved	mg/L	0.0005	0.0007	0.0005	0.0007	0.0004	0.0004		0.0004	0.0006		0.0008		0.0005	0.0006	0.0004	0.0005	0.0005	0.0002	0.0004	0.0003	
Cadmium, dissolved	mg/L	0.00002	0.00003	<0.00001	0.00001	<0.00001	<0.00001		0.00001	<0.00001		<0.00001		<0.00001	<0.00001	0.00001	<0.00001	0.00002	0.00001	0.00001	0.00001	
Calcium, dissolved	mg/L	46.1	38.6	45.7	45.8	45.1	43.9		47	49.2		49.8		47.7	48.8	51.7	54.3	53.6	50.6	53.9	54	
Chromium, dissolved	mg/L	0.0005	0.0009	0.0008	0.0008	0.001	0.0012		0.0008	0.0008		0.001		<0.0005	0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	
Copper, dissolved	mg/L	0.007	0.014	0.018	0.016	0.014	0.012		0.014	0.014		0.013		0.013	0.011	0.012	0.01	0.01	0.01	0.007	0.008	
Iron, dissolved	mg/L	0.09	0.08	0.07	0.11	0.05	0.06		0.04	0.04		0.03		0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04	
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001		<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	
Magnesium, dissolved	mg/L	12.6	11.1	12.9	14.2	13.1	12.7		13.8	13.5		14.4		13.5	14	15.6	15.4	15.1	14.8	15.7	16.3	
Manganese, dissolved	mg/L	0.05	0.048	0.057	0.094	0.058	0.05		0.031	0.038		<0.005		0.033	0.031	0.032	0.044	0.043	0.058	0.044	0.047	
Mercury, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	
Molydenum, dissolved	mg/L	0.002	0.002	0.003	0.002	0.002	0.002		0.002	0.003		0.003		0.003	0.003	0.004	0.003	0.003	0.003	0.002	0.003	
Nickel, dissolved	mg/L	0.0015	0.0011	0.0006	<0.0005	<0.0005	<0.0005		<0.0005	0.0009		<0.0005		0.0014	<0.0005	<0.0005	<0.0005	<0.0005	0.0034	<0.0005	<0.0005	
Phosphorus, dissolved	mg/L	0.1																				
Potassium, dissolved	mg/L	2.6	2.2	2.2	2	1.9	1.9		1.9	2		2		2	1.8	2	2.2	2.2	2	1.8	2	
Selenium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002		<0.0002	<0.0002		0.0002		<0.0002	<0.0002	0.0002	<0.0002	0.0005	0.0004	<0.0002	0.0003	
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		0.0001	<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Sodium, dissolved	mg/L	9.6	7.2	8.3	8.6	8.9	9.6		9.7	9.6		10		9.6	9.8	10.2	11.4	10.8	10.8	11.1	11.6	
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
Zinc, dissolved	mg/L	0.004	0.003	0.005	0.003	0.002	0.003		0.002	0.004		0.002		0.003	0.002	0.002	0.002	0.003	0.007	0.008	0.008	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**29/08/2007**	**06/09/2007**	**11/09/2007**	**17/09/2007**	**25/09/2007**	**03/10/2007**	**10/10/2007**	**17/10/2007**	**22/10/2007**	**30/10/2007**	**08/11/2007**	**13/11/2007**	**20/11/2007**	**27/11/2007**	**06/12/2007**	**11/12/2007**	**18/12/2007**	**18/12/2007**	**26/12/2007**	**03/01/2008**	**09/01/2008**
pH (field)	pH units																					
pH (lab)	pH units	8.08	8.08	8.05	8.07	8.05	8.13	8.06	8.06	8.09	7.93	7.76	8.19	7.94	8.02	7.91	7.86		8.06	7.82	7.97	7.87
Hardness (from dissolved)	mg/L	206		217	208	211	218	228	224	233	221	221	232	239	235	251			241		255	257
Hardness (from total)	mg/L		218														232			230		
Total Dissolved Solids	mg/L	304	300	310	318	302	276	290	300	290	288	304	320	328	316	316	322		352	330	322	338
Total Suspended Solids	mg/L	<2	5	4	26	<2	<2	3	<2	<2	<2	<2	<2	4	<2	<2	4		2	<5	<2	<2
Alkalinity, total	mg/L	202	209	208	204	202	184	183	184	182	186	194	203	208	215	216	211		214	233	228	228
Sulphate, dissolved	mg/L	34	36	35.2	36.5	37.5	36	38		39.7	39.1	40.6	41.2		40.9	41.1	39.9		39.3	38.4	40.2	40.2
Chloride	mg/L	2.4	2.8	2.98	3.17	2.89	3.06	2.7	2.7	2.7	3.44	3.37	3.45	4.13	3.62	3.92	3.74		3.77	3.77	3.93	6.97
Fluoride	mg/L																					
Nitrite (N)	mg/L	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	4.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
Nitrate (N)	mg/L	1.6	2.8	3.17	3.41	2.27	2.82	3.5	3.75	4.08	<0.02	3.08	2.55	2.61	2.23	1.8	1.58		1.5	1.39	1.34	1.16
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05
Aluminum, total	mg/L	0.12	0.578	0.148	0.395	0.036	0.137	0.124	0.035	0.045	0.025	0.045	0.153	0.257	0.032	0.084	0.174		0.046	0.106	0.121	0.092
Arsenic, total	mg/L	0.0006	0.0006	0.0006	0.0006	0.0003	0.0004	0.0004	0.0003	0.0002	<0.0002	<0.0002	0.0004	0.0005	0.0006	<0.0002	<0.0002		0.0005	0.0002	0.0006	0.0002
Cadmium, total	mg/L	0.00002	0.00001	0.00001	0.00001	0.00002	0.00002	<0.00001	0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002		<0.00001	<0.00001	0.00002	0.00001
Calcium, total	mg/L	51.1	59.3	58.7	55.1	52.2	51.4	57.8	57.7	56.5	55.8	55.8	57.6	61.4	57.4	61.1	58		57.7	58.3	62.1	64.7
Chromium, total	mg/L	0.0006	0.0011	0.001	0.0008	0.0006	0.0008	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0008	0.0005	<0.0005	0.0006		0.0007	0.0005	0.0005	<0.0005
Copper, total	mg/L	0.007	0.012	0.01	0.011	0.005	0.006	0.008	0.009	0.004	0.004	0.004	0.005	0.011	0.004	0.004	0.004		0.004	0.004	0.004	0.004
Iron, total	mg/L	0.2	0.7	0.2	0.5	<0.1	0.2	0.2	<0.1	<0.1	<0.1	<0.1	0.2	0.3	0.2	0.1	0.2		<0.1	0.1	0.2	0.2
Lead, total	mg/L	<0.0001	0.0002	<0.0001	0.0002	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0003	0.0001	<0.0001	0.0006		<0.0001	0.0002	0.0003	<0.0001
Magnesium, total	mg/L	16.2	17	16.7	16.8	16.6	16.7	17.6	18.2	17.8	17.7	19.3	19.8	19.6	19.9	21.9	21.1		21.4	20.5	21.9	22.9
Manganese, total	mg/L	0.071	0.143	0.097	0.108	0.073	0.125	0.057	0.064	0.064	0.062	0.074	0.088	0.079	0.079	0.079	0.079		0.055	0.07	0.11	0.123
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.002	0.004	0.003	0.004	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.005	0.002	0.002	0.002		0.002	0.002	0.002	0.003
Nickel, total	mg/L	0.0011	0.0021	0.0021	0.0015	0.0011	0.0011	0.0008	0.0011	<0.0005	0.0007	0.0013	0.0015	<0.0005	0.001	0.0008	0.0009		<0.0005	0.0011	0.0009	0.0013
Phosphorus, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05		0.12		<0.02	<0.05		<0.05	<0.05	0.07		<0.05	<0.05	<0.05	<0.05
Potassium, total	mg/L	2	2.4	2.4	2.5	1.9	1.9	2.3	2	1.9	1.8	2	2	2.6	1.9	2	2.2		2	1.9	2	2
Selenium, total	mg/L	0.0003	0.0006	0.0004	0.0005	0.0004	0.0003	0.0008	0.0005	<0.0002	<0.0002	<0.0002	0.0005	0.0004	0.001	0.0007	0.0003		<0.0002	<0.0002	0.0002	0.0005
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	11.4	12.1	12.5	13	11.8	11.6	13.6	12.4	12.6	12.7	13.7	13.5	14.8	13.6	14.6	14.9		14.5	14.2	14.7	15.3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.008	0.01	0.003	0.009	0.006	0.008	0.011	0.007	0.006	0.007	0.005	0.012	0.01	0.006	0.005	0.007		0.005	0.006	0.005	0.005
Aluminum, dissolved	mg/L	0.006	0.008	0.007	0.01	0.005	0.007	0.011	<0.005	0.006	0.005	0.008	0.005	0.008	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
Arsenic, dissolved	mg/L	0.0005	0.0006	0.0004	0.0004	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0005	0.0003	0.0003	0.0005		0.0005	0.0005	0.0004	0.0003
Cadmium, dissolved	mg/L	0.00001	<0.00001	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001		<0.00001	<0.00001	<0.00001	<0.00001
Calcium, dissolved	mg/L	54.9	57.4	58.2	55.5	55.1	56.5	60.5	58.8	60.8	58.7	55.8	59.6	62.6	60.2	63.1	63		60.9	64.4	64.4	64.9
Chromium, dissolved	mg/L	0.0005	0.001	0.0006	<0.0005	0.0006	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	0.0005		<0.0005	0.0024	0.0005	<0.0005
Copper, dissolved	mg/L	0.005	0.008	0.008	0.008	0.004	0.005	0.007	0.004	0.004	0.004	0.004	0.003	0.007	0.004	0.003	0.004		0.003	0.003	0.003	0.003
Iron, dissolved	mg/L	0.03	0.06	0.03	0.04	0.03	0.08	0.03	0.05	0.02	0.02	0.03	0.03	0.02	0.03	0.01	0.02		0.01	<0.01	0.05	0.05
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		0.0001	<0.0001	<0.0001	<0.0001
Magnesium, dissolved	mg/L	16.8	17.4	17.4	16.9	17.8	18.8	18.7	18.8	19.7	18.2	19.9	20.3	20	20.6	22.8	22		21.7	23.2	23	23.1
Manganese, dissolved	mg/L	0.07	0.113	0.08	0.071	0.076	0.127	0.054	0.063	0.061	0.065	0.073	0.078	0.067	0.079	0.067	0.067		0.054	<0.005	0.105	0.117
Mercury, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Molydenum, dissolved	mg/L	0.002	0.003	0.003	0.003	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.004	0.002	0.002	0.002		0.002	0.007	0.002	0.002
Nickel, dissolved	mg/L	<0.0005	0.0008	0.0015	0.0009	<0.0005	0.0011	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	0.001	<0.0005	<0.0005		<0.0005	0.0009	<0.0005	0.0008
Phosphorus, dissolved	mg/L						<0.05															
Potassium, dissolved	mg/L	1.8	2.3	2.2	2.4	2	2	2.2	2	1.8	1.9	2	1.8	2.5	1.8	2	2		2	2.1	2	2
Selenium, dissolved	mg/L	<0.0002	0.0005	0.0005	0.0002	<0.0002	<0.0002	0.0004	0.0002	<0.0002	0.0004	0.0003	0.0002	0.0003	0.0003	0.0003	<0.0002		<0.0002	<0.0002	0.0002	0.0002
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	11.3	12.4	12.3	12.6	12.2	12	12.9	12.7	12.5	12.8	14.4	13.8	14.5	13.8	14.9	14.7		14.8	15.2	15	15
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.002	0.006	0.003	0.008	0.007	0.007	0.009	0.002	0.003	0.002	0.002	0.002	0.004	0.002	0.004	0.002		0.003	0.002	0.002	0.003

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**15/01/2008**	**22/01/2008**	**30/01/2008**	**07/02/2008**	**13/02/2008**	**20/02/2008**	**27/02/2008**	**03/03/2008**	**14/03/2008**	**19/03/2008**	**26/03/2008**	**03/04/2008**	**10/04/2008**	**10/04/2008**	**17/04/2008**	**22/04/2008**	**01/05/2008**	**04/05/2008**	**05/05/2008**	**08/05/2008**	**11/05/2008**
pH (field)	pH units																					
pH (lab)	pH units	7.78	7.83	7.89	7.84	7.96	7.85	7.87	7.84	8.03	8.1	8.02	8.08		8.07	8.02	8.05	7.67	7.75	7.86	7.86	7.92
Hardness (from dissolved)	mg/L	258	266	266		288							271		270	280	261				191	236
Hardness (from total)	mg/L						256				272	276									184	
Total Dissolved Solids	mg/L	336	348	346	364	360	350	358	360	356	352	350	362		370	372	378	264	304	302	304	338
Total Suspended Solids	mg/L	2	<2	10	8	<2	<2	8	4	<2	<2	<2	3		<2	6	2	15	<5	9	3	<2
Alkalinity, total	mg/L	243	232	238	250	259	252	248	254	253	254	254	253		254	258	252	83	178	170	190	210
Sulphate, dissolved	mg/L	40.1	39.8	39.8	42.6	42.3	42.4	43.4	42	42.6	44.2	44.8	49.3		50.6	50.7	49.8	11.7	34.5	27.9	31.7	35
Chloride	mg/L	4.25	4.22	0.14	4.41	4.66	4.59	4.6	4.85	4.56	4.65	4.61	3.38		3.45	4.73	4.74	1.43	2.12	2.81	3.18	3.53
Fluoride	mg/L																					
Nitrite (N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nitrate (N)	mg/L	1.1	1.02	0.88	0.86	0.77	0.78	0.76	0.72	0.69	0.7	0.68	0.69		0.61	0.53	0.47	0.1	0.52	0.19	0.23	0.23
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Aluminum, total	mg/L	0.136	0.094	0.451	0.389	0.068	0.04	0.105	0.157	0.118	<0.1	0.09	0.985		0.107	0.08	0.11	0.3	0.24	0.22	0.14	0.24
Arsenic, total	mg/L	0.0002	0.0005	0.0005	0.0007	0.0003	0.0005	0.0003	0.0005	0.0002	0.001	0.0004	0.0003		0.0004	0.0004	0.0004	0.0024	0.0003	0.0004	<0.0002	0.0009
Cadmium, total	mg/L	<0.00001	0.00001	0.00002	0.00001	0.00001	0.00001	0.00001	<0.00001	0.00001	<0.0004	0.00001	0.00002		<0.00001	<0.00001	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007
Calcium, total	mg/L	62.5	66	65	63.3	70.2	64.2	66.6	67.8	66.4	69	70.6	68.3		66.9	70.9	63.4	17.9	40.8	41.4	47.3	59.6
Chromium, total	mg/L	0.0006	0.0007	0.0008	0.0007	0.0009	0.0006	<0.0005	0.0009	0.0014	<0.002	0.0016	0.0012		0.0012	<0.0005	0.001	0.0013	<0.0005	<0.0005	<0.0005	0.0005
Copper, total	mg/L	0.004	0.004	0.006	0.006	0.004	0.004	0.006	0.004	0.004	<0.005	0.005	0.014		0.004	0.004	0.004	0.007	0.006	0.008	0.006	0.009
Iron, total	mg/L	0.2	0.2	0.6	0.5	0.2	0.1	0.2	0.2	0.2	0.2	0.2	1.2		0.2	0.2	0.2	0.42	0.38	0.35	0.25	0.43
Lead, total	mg/L	0.0002	<0.0001	0.0002	0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0005	<0.0001	0.0002		<0.0001	<0.0001	<0.0001	0.0001	0.0002	0.0003	<0.0001	<0.0001
Magnesium, total	mg/L	22.5	23	22.5	24.8	24.9	23.3	23.8	24	23.2	24.1	24.2	24.4		23.9	25	22.1	6.41	18.1	14.2	16	20.8
Manganese, total	mg/L	0.136	0.151	0.213	0.185	0.117	0.104	0.122	0.123	0.108	0.111	0.108	0.157		0.122	0.12	0.11	0.0308	0.0569	0.0818	0.0897	0.132
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.01	<0.0001	<0.0001		<0.0001	<0.0001	<0.00001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum, total	mg/L	0.002	0.002	0.003	0.003	0.002	0.002	0.003	0.002	0.002	0.0017	0.003	0.002		0.003	0.002	0.00216	0.00057	0.00165	0.00132	0.00157	0.00198
Nickel, total	mg/L	0.0012	0.0012	0.0017	0.0016	0.0014	0.0012	0.0014	0.0026	0.0023	<0.005	0.0012	0.0018		0.0006	<0.0005	0.003	0.005	0.004	0.004	0.004	0.005
Phosphorus, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					0.02	0.07	0.04	0.04	0.03	0.04
Potassium, total	mg/L	2.1	2	2.1	2.4	2.3	2.1	2.2	2.1	2.2	2.2	1.9	2.3		2.1	2.1	1.98	1.42	1.69	1.63	1.64	1.98
Selenium, total	mg/L	0.0005	0.0003	0.0004	0.0005	0.0004	0.0006	0.0002	0.0006	0.0004	0.005	0.0006	0.0004		0.0004	0.0002	<0.0006	0.0012	<0.0006	<0.0006	<0.0006	0.0009
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	0.00027	<0.00001	<0.001	<0.00001	0.00008		<0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	15.6	15.5	15.2	16.7	16.3	16	17.2	16.3	16.1	16.6	16.4	15.8		16.4	16.6	14.7	4.2	11.5	9.7	11.1	14.7
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	0.00006	<0.00001	<0.00001	<0.00001	0.00001	0.00001
Zinc, total	mg/L	0.006	0.007	0.007	0.007	0.007	0.006	0.008	0.007	0.007	0.01	0.007	0.005		0.004	0.009	0.005	0.005	0.007	0.005	0.008	0.009
Aluminum, dissolved	mg/L	0.007	<0.005	0.006	0.008	<0.005	0.006	<0.005	0.008	<0.005	<0.02	0.005	0.012		0.009	0.005	<0.02	0.08	0.03		0.03	<0.02
Arsenic, dissolved	mg/L	0.0004	0.0005	<0.0002	0.0006	0.0003	0.0005	0.0003	0.0004	0.0004	0.0002	0.0004	0.0003		0.0003	0.0003	0.0004	0.0005	<0.0002		0.0003	0.001
Cadmium, dissolved	mg/L	0.00001	0.00001	0.00002	0.00001	<0.00001	0.00002	<0.00001	0.00001	0.00001	<0.00007	<0.00001	0.00002		0.00001	<0.00001	<0.00008	<0.00008	<0.00008		<0.00008	<0.00008
Calcium, dissolved	mg/L	65.3	67.3	67.6	69.3	72.1	69.6	70.9	70.5	71.2		74.3	65.9		66.5	70.7	65.9	21.7	43.9		49.9	59.8
Chromium, dissolved	mg/L	0.0005	0.0008	0.0006	0.0005	0.0013	0.0011	<0.0005	<0.0005	0.0013	0.0016	0.0015	0.0012		0.001	<0.0005	<0.0006	0.0007	0.0018		0.002	0.0029
Copper, dissolved	mg/L	0.003	0.003	0.003	0.004	0.004	0.005	0.003	0.003	0.003	0.002	0.004	0.003		0.005	0.004	0.002	0.007	0.006		0.006	0.006
Iron, dissolved	mg/L	0.06	0.07	0.1	0.1	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.05		0.04	0.05	0.04	0.12	0.1		0.1	0.11
Lead, dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0002	<0.0001	<0.0001		0.0004	<0.0001	<0.0001	<0.0001	0.0001		<0.0001	<0.0001
Magnesium, dissolved	mg/L	22.9	23.7	23.7	26.2	26.2	25.6	25	25	25.2		25.9	24.9		25.2	25.2	23.5	7.07	18.8		16.2	21
Manganese, dissolved	mg/L	0.131	0.145	0.164	0.179	0.117	0.113	0.123	0.12	0.104	0.103	0.112	0.124		0.117	0.113	0.11	0.0248	0.0508		0.0892	0.123
Mercury, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.01	<0.0001	<0.0001		<0.0001	<0.0001	<0.00001	0.00002	<0.00001		<0.00001	<0.00001
Molydenum, dissolved	mg/L	0.003	0.002	0.002	0.003	0.002	0.002	0.003	0.003	0.002	0.00221	0.002	0.002		0.002	0.002	0.00218	0.00066	0.00154		0.0015	0.00183
Nickel, dissolved	mg/L	0.001	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.001	0.0018	0.001	0.001	0.0011	0.0012		<0.0005	<0.0005	0.001	0.003	0.002		0.003	0.002
Phosphorus, dissolved	mg/L												<0.03			<0.05	0.01	0.04	0.02		0.02	0.02
Potassium, dissolved	mg/L	2	2	2	2.4	2.4	5.4	2.1	2.1	2		2.2	2.1		5.6	2.1	2.12	1.52	1.86		1.68	1.98
Selenium, dissolved	mg/L	<0.0002	0.0003	<0.0002	0.0004	0.0004	0.0003	<0.0002	0.0004	0.0003	<0.0006	0.0006	0.0005		0.0003	<0.0002	<0.0006	<0.0006	<0.0006		<0.0006	<0.0006
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.001	<0.00001	<0.00001		<0.00001	<0.00001	<0.0010	<0.001	<0.0010		<0.0010	<0.0010
Sodium, dissolved	mg/L	14.8	15.8	15.7	17.2	17.4	16.9	16.6	16.5	17.2		16.7	16.6		16.8	16.6	16	4.61	12.5		11.1	13.5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	<0.00005	<0.00005		<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001	0.00001
Zinc, dissolved	mg/L	0.003	0.002	0.002	0.005	0.004	0.006	0.002	0.003	0.003	0.003	0.006	0.003		0.006	0.005	<0.001	0.006	0.004		0.005	0.003

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**13/05/2008**	**15/05/2008**	**18/05/2008**	**20/05/2008**	**27/05/2008**	**29/05/2008**	**03/06/2008**	**05/06/2008**	**11/06/2008**	**17/06/2008**	**25/06/2008**	**03/07/2008**	**08/07/2008**	**15/07/2008**	**22/07/2008**	**30/07/2008**	**06/08/2008**	**12/08/2008**	**21/08/2008**	**25/08/2008**	**26/08/2008**
pH (field)	pH units																					
pH (lab)	pH units	8.07	8.02	8.04	7.84	8.01	8.22	8	8.2	8.03	7.98	8.14	8.08	8.15	8.01	7.96	7.89		8.09	8.15		
Hardness (from dissolved)	mg/L	232	257	238	246	247	260						273			259		269				
Hardness (from total)	mg/L							272	288													
Total Dissolved Solids	mg/L	338	340	324	364	336	352	328	368	338	332	422	282	368	340	310	330		330	384		
Total Suspended Solids	mg/L	<2	<3	7	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<3	<2	<5		<3	<2		
Alkalinity, total	mg/L	241	247	233	246	244	257	261	261	261	258	258	264	266	233	250	273		249	270		
Sulphate, dissolved	mg/L	40.3	41	37.8	41.3	36.3	39.2	40.8	40.4	41.2	37.9	38.2	37.7	36.9	35.9	32.8	3.29		30.5	29.3		
Chloride	mg/L	4.42	0.19	0.13	4.39	4.37	4.72	4.29	4.23	4.35	4.04	3.86	3.86	3.93	3.77	3.79	3.66		4.17	3.86		
Fluoride	mg/L																					
Nitrite (N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01		
Nitrate (N)	mg/L	0.28	0.26	0.24	0.26	0.2	0.22	0.21	0.2	0.19	0.21	0.14	0.15	0.13	0.12	0.14	0.13		0.16	0.11		
Ammonia	mg/L	<0.05	0.006	0.009	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Aluminum, total	mg/L	0.07	0.04	0.19	0.05	0.02	<0.01	0.01	0.02	0.02	0.03	0.01	0.01	<0.01	0.017	0.026	0.02	0.015	0.01	0.04	4.69	1.1
Arsenic, total	mg/L	0.0007	<0.0002	0.0008	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	0.0009	<0.0002	0.0011	0.0009	0.0003	0.0004	0.0004	0.0004	0.0005	0.0004	0.0026	0.0013
Cadmium, total	mg/L	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00008	<0.00008	<0.00008	0.00002	<0.00008	0.00002	<0.00001	<0.00008	0.00001	<0.00008	<0.00008	0.0001	0.00004
Calcium, total	mg/L	64.7	62.5	58.5	66.8	55.6	61.2	68.8	73.1	79.8	67.1	70	68.1	73.2	64.5	63.8	70.5	67.4	72.2	71.2	53.5	49.8
Chromium, total	mg/L	<0.0005	0.0028	0.0015	0.0011	0.0012	0.0017	0.0032	0.0018	0.0013	0.001	0.0033	<0.0005	0.0013	0.0008	<0.0005	0.0005	0.0006	0.0023	0.0021	0.0084	0.0027
Copper, total	mg/L	0.006	0.004	0.007	0.006	0.004	0.003	0.003	0.004	0.004	0.003	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.003	0.003	0.072	0.046
Iron, total	mg/L	0.23	0.13	0.36	0.16	0.09	0.07	0.11	0.12	0.11	0.11	0.09	0.06	0.11	0.08	0.09	0.16	0.12	0.11	0.12	6.61	1.89
Lead, total	mg/L	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0022	0.0006
Magnesium, total	mg/L	23.2	20.9	19.9	23.1	19.9	21.4	24.5	25.8	27.8	23.7	24.8	24.7	26	23.4	22.8	24.9	24.5	26	25.8	15.2	13.8
Manganese, total	mg/L	0.131	0.106	0.0977	0.0982	0.0845	0.0882	0.112	0.11	0.117	0.0911	0.0883	0.078	0.0932	0.082	0.09	0.115	0.11	0.102	0.0966	0.618	0.42
Mercury, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.01	<0.01	<0.01	<0.00001	<0.0001	<0.00001	0.0001	<0.0001	<0.00001	<0.0001	<0.00001	<0.00001	0.00002	<0.00001
Molybdenum, total	mg/L	0.00202	0.00209	0.00209	0.00223	0.00202	0.0022	0.00225	0.00243	0.00248	0.0023	0.00235	0.003	0.00239	0.003	0.002	0.0026	0.002	0.00252	0.00262	0.00585	0.00658
Nickel, total	mg/L	0.003	0.002	0.004	0.002	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.0005	0.001	0.0028	0.0008	0.002	0.0014	0.001	0.002	0.024	0.008
Phosphorus, total	mg/L	0.03	0.01	0.03	0.03	0.01	0.01	0.02	<0.05	<0.05	<0.05	0.03		0.01			0.01		0.04	0.04	0.25	0.08
Potassium, total	mg/L	2.06	1.92	1.82	2.15	1.72	1.85	2.1	2.2	2.4	2.08	2.08	2	2.13	1.9	1.8	2.1	1.9	2.13	2.14	5.26	6.58
Selenium, total	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0012	<0.0006	<0.0002	<0.0006	<0.0002	<0.0002	<0.0006	0.0005	<0.0006	<0.0006	0.0008	<0.0006
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00005	<0.00001	<0.00001	<0.00001	0.00004	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00022	<0.00001	<0.00001	<0.00001
Sodium, total	mg/L	16.1	15	15	16.1	14.2	15.2	17.3	18.6	19.2	16.9	17.6	16.6	16.5	16.5	16.3	17.9	16.6	18.1	18.1	15.8	16.2
Thallium, total	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00001	<0.00005	<0.00001	<0.00001	0.00006	0.00002
Zinc, total	mg/L	0.004	0.006	0.005	0.004	0.003	0.003	0.002	0.002	0.005	0.006	0.004	0.006	0.005	0.006	0.003	0.006	0.005	0.004	0.003	0.025	0.009
Aluminum, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.01	<0.01	<0.01	<0.01	0.009	0.01	0.005	0.007	<0.01	<0.005	<0.01	<0.01		
Arsenic, dissolved	mg/L	0.0012	<0.0002	0.0003	0.0008	0.0007	0.0005		<0.0002	0.0003	0.0005	<0.0002	0.0004	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003		
Cadmium, dissolved	mg/L	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008		<0.00008	<0.00008	<0.00008	<0.00008	0.00001	<0.00008	0.00002	<0.00001	<0.00008	<0.00001	<0.00008	<0.00008		
Calcium, dissolved	mg/L	58.8	66.7	61.4	63.8	63.1	66.4					68	68.9	72	67.1	65.7	67.8	67.6	69.8	65.6		
Chromium, dissolved	mg/L	<0.0006	0.0013	0.0026	0.0015	0.0011	0.0008		0.0039	0.001	0.002	0.0039	<0.0005	0.0018	0.0005	<0.0005	0.0008	0.0006	0.002	0.0011		
Copper, dissolved	mg/L	0.004	0.004	0.005	0.005	0.004	0.003		0.003	0.003	0.003	0.004	0.003	0.004	0.004	0.005	0.004	0.003	0.003	0.004		
Iron, dissolved	mg/L	0.07	0.09	0.06	0.07	0.04	0.04		0.05	0.05	0.04	0.04	0.05	0.07	0.08	0.05	0.09	0.1	0.08	0.08		
Lead, dissolved	mg/L	<0.0001	<0.0001	0.0001	0.0002	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	0.0002	<0.0001	0.0001	<0.0001	0.0001	<0.0001		
Magnesium, dissolved	mg/L	20.8	21.9	20.6	21	21.8	22.8					23.7	24.6	25	24.2	23.1	23.9	24.2	25	22.9		
Manganese, dissolved	mg/L	0.0979	0.106	0.0926	0.0998	0.0885	0.0886		0.103	0.104	0.0844	0.083	0.084	0.0893	0.082	0.067	0.111	0.106	0.103	0.0899		
Mercury, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.01	<0.01	<0.01	<0.00001	<0.0001	<0.00001	<0.0001	<0.0001	<0.00001	<0.0001	<0.00001	<0.00001		
Molydenum, dissolved	mg/L	0.00205	0.00223	0.00217	0.00241	0.00208	0.00207		0.00227	0.00238	0.00237	0.00233	0.003	0.00229	0.002	0.002	0.00245	0.002	0.00258	0.00231		
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.002	0.001	0.001		0.001	0.001	0.001	0.001	<0.0005	0.001	<0.0005	0.0007	0.001	<0.0005	0.001	0.001		
Phosphorus, dissolved	mg/L	<0.01	0.01	<0.01	<0.01	<0.01	<0.01					0.01		<0.01			<0.01	<0.05	0.01	<0.01		
Potassium, dissolved	mg/L	1.28	1.98	1.9	2.19	2.02	2.03					1.94	2	2.09	2	1.8	2.04	1.9	2.06	1.96		
Selenium, dissolved	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006		<0.0006	<0.0006	0.0008	<0.0006	<0.0002	<0.0006	<0.0002	<0.0002	<0.0006	<0.0002	<0.0006	<0.0006		
Silver, dissolved	mg/L	<0.0010	<0.001	<0.0010	<0.0010	<0.0010	<0.0010		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00002	<0.00001	<0.00001		
Sodium, dissolved	mg/L	14.5	15.4	14.7	15.1	15.4	16.2					16.7	17.4	16.2	17.7	16.4	16.8	16.9	17.3	15.8		
Thallium, dissolved	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00001	<0.00005	0.00001	<0.00001		
Zinc, dissolved	mg/L	0.002	0.002	0.002	0.004	0.002	0.003		0.002	0.002	0.002	0.003	0.006	0.003	0.004	0.003	0.006	0.004	0.003	0.002		

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**26/08/2008**	**27/08/2008**	**28/08/2008**	**29/08/2008**	**30/08/2008**	**01/09/2008**	**03/09/2008**	**04/09/2008**	**05/09/2008**	**06/09/2008**	**07/09/2008**	**10/09/2008**	**17/09/2008**	**22/09/2008**	**24/09/2008**	**30/09/2008**	**08/10/2008**	**17/10/2008**	**24/10/2008**	**28/10/2008**	**04/11/2008**
pH (field)	pH units																					8.5
pH (lab)	pH units		8.09	7.99	8.03	7.95	8.04	8.07	7.97	8	8.02	7.95	7.89	7.94	7.99	7.96	7.78	7.98	7.86	7.94		7.7
Hardness (from dissolved)	mg/L																219			276	304	255
Hardness (from total)	mg/L															194						
Total Dissolved Solids	mg/L		292	290	288	284	270	300	128	306	304	300	330	376	338	376	362	296	334	356		384
Total Suspended Solids	mg/L		70	40	98	58	18	8	10	30	8	27	25	23	24	32	7	<2	<5	4		<2
Alkalinity, total	mg/L		154	161	131	156	156	171	170	164	170	162	177	189	191	174	203	222	232	246		239
Sulphate, dissolved	mg/L		36.6	34.8	33.8	33.1	34.7	34.6	34.4	35	34.2	35.9	32	31.8	29.7	49.6	42.3	35.8	36.5	39		40
Chloride	mg/L		3.42	3.51	3.47	3.26	3.14	3.18	3.24	3.14	3.15	3.23	3.27	3.75	3.82	3.33	3.26	3.01	3.22	0.54		0.82
Fluoride	mg/L																					
Nitrite (N)	mg/L		0.07	0.05	0.04	0.06	0.07	0.06	0.06	0.07	0.07	0.07	<0.01	<0.01	<0.01	0.12	0.08	<0.01	<0.01			
Nitrate (N)	mg/L		0.47	0.24	0.16	0.27	0.34	0.28	0.17	0.19	0.28	0.17	0.08	0.07	0.04	1.96	0.91	0.12	0.11			
Ammonia	mg/L		0.17	0.3			0.23	0.22					0.38	0.36	0.37		0.3	0.13	<0.05	<0.05		<0.05
Aluminum, total	mg/L	1.64	2.14	1.46	1.79	1.65	0.523	0.382	0.462	0.717	0.254	0.709	1.04	0.771	0.921	2.2	0.3	0.095	0.025	0.012		0.01
Arsenic, total	mg/L	0.0016	0.0014	0.001	0.0012	0.001	0.0006	0.0006	0.0009	0.0006	0.0008	0.0009	0.0012	0.0007	0.001	0.0013	0.0006	0.0005	0.0004	0.0004		0.0005
Cadmium, total	mg/L	0.00005	0.00006	0.00009	0.0001	0.00008	0.00003	0.00003	0.00006	0.00004	0.00003	0.00005	0.00007	0.00009	0.00009	0.00012	0.00005	0.00002	0.00001	<0.00001		0.00001
Calcium, total	mg/L	48.8	60.8	53.3	50.9	50.7	51.2	53.2	47	45.7	45.6	45.1	48.9	48.9	50.3	53	57.8	61.9	59.1	75.5		64
Chromium, total	mg/L	0.0038	0.0032	0.0021	0.0043	0.0029	0.0019	0.0018	0.0016	0.0024	0.0016	0.0021	0.0024	0.0024	0.0022	0.0022	0.0008	0.0008	0.0008	<0.0004		<0.0005
Copper, total	mg/L	0.048	0.078	0.14	0.119	0.121	0.059	0.063	0.097	0.098	0.061	0.115	0.144	0.149	0.166	0.259	0.056	0.009	0.007	0.008		0.005
Iron, total	mg/L	2.54	4.53	3.35	4.67	3.84	1.56	0.94	0.99	1.43	0.69	1.78	1.92	1.89	1.84	3.49	0.69	0.23	0.18	0.2		0.15
Lead, total	mg/L	0.001	0.0008	0.0006	0.0009	0.0008	0.0003	0.0003	0.0003	0.0008	0.0003	0.0006	0.0006	0.0006	0.0005	0.0009	0.0002	0.0004	0.001	<0.0001		<0.0001
Magnesium, total	mg/L	13.4	16.5	13.4	13.7	14	13.9	14.4	13.2	12.7	12.8	13.1	13.3	14	15.1	15.1	18.7	22.9	21.7	27.1		23.1
Manganese, total	mg/L	0.391	0.525	0.461	0.518	0.541	0.528	0.442	0.454	0.406	0.374	0.553	0.616	0.629	0.844	0.79	0.503	0.306	0.237	0.21		0.19
Mercury, total	mg/L	0.00001	0.00001	0.00001	<0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.00001	<0.00001	0.00001		<0.0001
Molybdenum, total	mg/L	0.00645	0.00682	0.00667	0.00595	0.00618	0.00694	0.00699	0.00621	0.00578	0.00588	0.00555	0.00591	0.00536	0.00627	0.013	0.006	0.00289	0.00259	0.00292		0.003
Nickel, total	mg/L	0.011	0.012	0.008	0.012	0.01	0.005	<0.001	<0.001	0.001	<0.001	0.001	0.004	0.004	0.003	0.0056	0.0027	0.002	0.002	0.002		0.0015
Phosphorus, total	mg/L	0.15	0.12	0.09	0.12	0.11	0.06	0.05	0.04	0.05	0.02	0.06	0.07	0.07	0.05	0.07	<0.05	<0.01	0.015	<0.01		
Potassium, total	mg/L	6.28	7.01	8.04	9.61	8.57	7.18	6.9	7	7.07	6.19	7.82	8.4	8.34	7.47	7.9	4.1	2.4	2	2.7		2.1
Selenium, total	mg/L	<0.0006	0.0007	<0.0006	0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0008	0.0031	0.0012	0.0008	<0.0006	<0.0006		<0.0002
Silver, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00014	0.00019	0.00008	0.00016	0.00003	0.00008	<0.00001	<0.00001		0.00002
Sodium, total	mg/L	16.2	18.1	17.9	17.4	17.6	16.5	15.8	16.1	15.2	14.6	16.6	17.5	17.3	16	18.3	16.8		15	20		16.9
Thallium, total	mg/L	0.00002	0.00002	0.00004	0.00003	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	0.00002	<0.00005	<0.00005	0.00003	<0.00001	<0.00001		<0.00005
Zinc, total	mg/L	0.013	0.016	0.014	0.022	0.016	0.012	0.008	0.012	0.012	0.011	0.01	0.011	0.012	0.014	0.031	0.014	0.016	0.007	0.007		0.008
Aluminum, dissolved	mg/L		0.01	0.045			0.025						0.04	0.058	0.049		0.017	0.007	0.011	<0.005	<0.005	0.007
Arsenic, dissolved	mg/L		0.0006	0.0007			0.0009						0.0009	0.0008	0.0008		0.0006	0.0005	0.0006	0.0004	0.0003	0.0004
Cadmium, dissolved	mg/L		0.00002	0.00003			<0.00001						0.00002	0.00002	0.00008		0.00003	0.00003	0.00003	<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L		56.1	53.1			46.9						46.5	47.6	49.8		57	53.9	61.9	69.5	74	64
Chromium, dissolved	mg/L		0.0024	0.0013			0.0009						0.0006	0.0022	0.0007		0.0008	0.0022	0.0006	0.0008	0.0007	<0.0005
Copper, dissolved	mg/L		0.028	0.029			0.014						0.022	0.023	0.029		0.022	0.008	0.006	0.006	0.004	0.005
Iron, dissolved	mg/L		0.19	0.44			0.62						0.58	0.44	0.64		0.17	0.142	0.171	0.085	0.167	0.13
Lead, dissolved	mg/L		<0.0001	0.0002			0.0001						0.0002	0.0001	0.0004		<0.0001	0.0002	0.001	<0.0001	<0.0001	0.0001
Magnesium, dissolved	mg/L		15.1	13.4			13						13	13.4	14.7		18.7	20.3	22.6	24.8	28.9	23.2
Manganese, dissolved	mg/L		0.21	0.406			0.538						0.63	0.668	0.77		0.489	0.24	0.243	0.209	0.201	0.188
Mercury, dissolved	mg/L		0.00001	<0.00001			<0.00001						<0.00001	<0.00001	<0.00001		<0.0001	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Molydenum, dissolved	mg/L		0.00727	0.00625			0.00647						0.00477	0.00422	0.00531		0.006	0.00268	0.00236	0.00302	0.00232	0.003
Nickel, dissolved	mg/L		0.003	0.003			<0.001						0.003	0.002	0.006		0.0018	0.004	0.002	0.002	0.002	0.0015
Phosphorus, dissolved	mg/L		0.02	0.01			0.01						<0.01	<0.01	<0.01			<0.01	<0.01	0.02	<0.01	
Potassium, dissolved	mg/L		6.28	7.65			7.07						8.04	8.06	7.14		4.3	2.1	2.3	2.4	2.6	3.2
Selenium, dissolved	mg/L		0.0008	0.0012			<0.0006						0.0012	0.0037	0.0008		0.0013	0.0006	<0.0006	<0.0006	<0.0006	<0.0002
Silver, dissolved	mg/L		<0.00001	<0.00001			<0.00001						<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L		17	18.3			16.6						16.9	16.2	15.5		17.8	13.9	15.1	17.5	19.1	16.8
Thallium, dissolved	mg/L		0.00001	<0.00001			<0.00001						<0.00001	<0.00001	0.00001		<0.00005	0.00005	0.00021	<0.00001	<0.00001	<0.00005
Zinc, dissolved	mg/L		0.002	0.004			0.003						0.004	0.006	0.024		0.005	0.004	0.012	0.012	0.002	0.005

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**12/11/2008**	**18/11/2008**	**24/11/2008**	**26/11/2008**	**05/12/2008**	**10/12/2008**	**18/12/2008**	**24/12/2008**	**02/01/2009**	**09/01/2009**	**15/01/2009**	**20/01/2009**	**28/01/2009**	**02/02/2009**	**12/02/2009**	**15/02/2009**	**18/02/2009**	**19/02/2009**	**06/03/2009**	**14/03/2009**	**20/03/2009**
pH (field)	pH units	8.2	7.96	8.32	8.32	8.15	7.24		7.17	6.98	7.17	7.6	7.3	7.12	6.95	6.9		6.59		7.63	7.13	
pH (lab)	pH units	8.01	7.82		8.12	7.71	7.66	7.7	7.88	7.71	7.81	7.85	7.99	7.9	7.96		7.64		7.8	7.88	7.75	7.77
Hardness (from dissolved)	mg/L	260						288	162	277	278	264	330	330	307		261				252	276
Hardness (from total)	mg/L																		299	252		
Total Dissolved Solids	mg/L	388	414		238	392	386	362	422	390	448	420	398	392	330		396		414	380	398	388
Total Suspended Solids	mg/L	<2	7		44	<2	4	2	30	4	6	6	3	4	4		<2		8	11	4	2
Alkalinity, total	mg/L	255	261		129	254	243	261	256	254	251	226	253	258	229		251		275	212	220	224
Sulphate, dissolved	mg/L	43.1	46.2		27.5	51.8	49.7	59.2	61.3	57.6	71.8	77.5	75.8	74.8	67.8		68.5		76.8	84.2	82.9	83.6
Chloride	mg/L	1.6	3.3		1.97	4.14	3.27	3.25	5.9	4.6	3.1	3.5	3.68	3.64	3.28		3.2		2.7	3.9	3.9	4.89
Fluoride	mg/L																					
Nitrite (N)	mg/L																					
Nitrate (N)	mg/L																					
Ammonia	mg/L	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05														
Aluminum, total	mg/L	0.018	0.069		0.014	<0.005	0.015	0.013	0.016	0.066	0.026	0.096	0.075	0.018	0.02		0.011		0.041	0.153	0.039	0.07
Arsenic, total	mg/L	0.0004	0.0005		0.0003	0.0004	0.0004	0.0003	0.0004	0.0003	0.0004	0.0005	0.0003	0.0002	<0.0002		<0.0002		0.0003	0.0004	0.0003	0.0007
Cadmium, total	mg/L	0.00001	0.00001		0.00001	<0.00001	0.00001	<0.00001	0.00001	0.00001	0.00001	0.00003	0.00002	<0.00001	<0.00001		0.00001		0.00002	0.00002	0.00003	0.00006
Calcium, total	mg/L	67.4	69		24.7	69.7	69.7	69.6	66.4	63.8	68.3	71.1					69.3		73.2	65.5		80.4
Chromium, total	mg/L	0.0008	<0.0005		<0.0004	0.0004	<0.0004	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.001	0.0008	0.0011		0.0007		0.0005	0.001	0.0004	0.0008
Copper, total	mg/L	0.006	0.018		0.004	0.004	0.004	0.005	0.005	0.006	0.013	0.029	0.008	0.006	0.005		0.003		0.017	0.027	0.01	0.027
Iron, total	mg/L	0.14	0.29		0.11	0.18	0.23	0.14	0.17	0.18	0.1	0.18					0.09		0.18	0.26		0.19
Lead, total	mg/L	<0.0001	<0.0001		0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	0.0001	0.0002	<0.0001	<0.0001		<0.0001		0.0002	0.0003	0.0002	0.0004
Magnesium, total	mg/L	24.3	25.6		9.68	27.5	26.6	27.5	25.3	27.9	27.8	23.8					28.6		31.7	23.7		27.8
Manganese, total	mg/L	0.185	0.234		0.0745	0.227	0.24	0.165	0.221	0.132	0.114	0.154	0.129	0.112	0.102		0.0965		0.128	0.0601	0.0354	0.0498
Mercury, total	mg/L	<0.0001	<0.0001		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum, total	mg/L	0.003	0.003		0.00092	0.00232	0.00242	0.003	0.002	0.002	0.003	0.005	0.00241	0.00232	0.002		0.00195		0.00218	0.00412	0.00465	0.00488
Nickel, total	mg/L	0.0014	0.0017		<0.001	0.001	0.002	0.0008	0.0011	0.0011	0.0019	0.0026	0.001	0.001	0.001		<0.001		0.001	0.002	0.002	0.002
Phosphorus, total	mg/L				0.01	0.019	<0.01		<0.05	<0.05	<0.05	<0.05	0.07	0.08	0.06		<0.05		<0.05	<0.05	<0.05	0.05
Potassium, total	mg/L	2.1	2.2		0.7	2.2	2.1	2.2	2.1	2.3	3.1	3.8					2.5		2.5	3.4		3.9
Selenium, total	mg/L	<0.0002	<0.0002		<0.0006	0.0006	<0.0006	0.0002	<0.0002	0.0003	0.001	0.0012	<0.0006	<0.0006	<0.0006		<0.0006		<0.0006	<0.0006	<0.0006	<0.0006
Silver, total	mg/L	0.00002	0.00005		<0.00001	<0.00001	<0.00001	<0.00001	0.00007	0.00025	0.00008	0.00012	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001
Sodium, total	mg/L	16.4	17.4		6.04	16.6	16.8	18.4	16.7	18.2	19.9	19.3					18.6		20.9	20.4		22
Thallium, total	mg/L	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001
Zinc, total	mg/L	0.006	0.006		0.002	0.003	<0.001	0.008	0.006	0.007	0.005	0.01	0.055	0.011	0.007		0.006		0.024	0.022	0.016	0.031
Aluminum, dissolved	mg/L	0.016	0.01		<0.005	<0.005	<0.005	0.009	0.006	0.006	0.008	0.01	<0.005	<0.005	<0.005		<0.005		<0.005	<0.005	0.006	0.006
Arsenic, dissolved	mg/L	0.0014	0.0004		0.0004	0.0003	0.0003	0.0002	<0.0002	0.0003	0.0004	0.0004	0.0002	0.0002	0.0002		0.0003		0.0004	0.0004	0.0003	0.0004
Cadmium, dissolved	mg/L	0.00002	<0.00001		<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	0.00001	0.00002	<0.00001	0.00002	<0.00001		<0.00001		<0.00001	0.00002	0.00001	0.00004
Calcium, dissolved	mg/L	63.4	65.4		64.7	69.7	69.1	67.9	36.2	63.8	66.2	67.1	77.6	77.7	72.3		70.7		69.2	62.9	63.5	69
Chromium, dissolved	mg/L	<0.0005	<0.0005		0.0011	0.0016	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	0.0009	0.0006		0.0005		0.0006	0.0007	0.0005	0.0006
Copper, dissolved	mg/L	0.009	0.007		0.003	0.003	0.003	0.005	0.004	0.004	0.006	0.01	0.004	0.008	0.003		0.003		0.003	0.008	0.008	0.01
Iron, dissolved	mg/L	0.13	0.15		0.146	0.175	0.192	0.12	0.02	0.11	0.08	0.05	0.08	0.09	0.1		0.08		0.08	0.04	0.04	0.03
Lead, dissolved	mg/L	0.0004	<0.0001		<0.0001	<0.0001	<0.0001	0.0014	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0002	0.0002		<0.0001		0.0002	0.0002	0.0002	0.0003
Magnesium, dissolved	mg/L	24.7	26.1		24.3	27.1	26.2	28.8	17.4	28.6	27.3	23.5	33.2	33.2	30.7		20.5		30.7	22.9	22.8	25.1
Manganese, dissolved	mg/L	0.18	0.226		0.213	0.229	0.245	0.165	0.114	0.134	0.11	0.139	0.114	0.109	0.0997		0.1		0.127	0.0537	0.036	0.0482
Mercury, dissolved	mg/L	<0.0001	<0.0001		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001
Molydenum, dissolved	mg/L	0.003	0.002		0.00234	0.00244	0.00236	0.003	0.001	0.002	0.003	0.005	0.00233	0.00229	0.00199		0.00198		0.0023	0.00402	0.00459	0.00489
Nickel, dissolved	mg/L	0.0009	0.0006		0.001	0.001	0.001	<0.0005	0.0007	0.0011	0.0014	0.0019	0.001	0.001	<0.001		<0.001		0.001	0.002	0.002	0.002
Phosphorus, dissolved	mg/L				0.02	0.01	<0.01						0.02	<0.01	0.02		<0.01		0.01	0.01	0.02	0.02
Potassium, dissolved	mg/L	3	2.2		1.9	2	1.9	2.3	1.5	2.2	3	3.6	2.9	4.5	2.6		3.8		2.4	3.4	3.1	3.6
Selenium, dissolved	mg/L	<0.0002	<0.0002		0.001	0.0011	0.001	<0.0002	<0.0002	0.0002	0.0008	0.001	<0.0006	<0.0006	<0.0006		<0.0006		<0.0006	<0.0006	0.0007	<0.0006
Silver, dissolved	mg/L	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L	18	18.7		15.9	16.3	17	19.7	12	18.3	19.6	19.3	20.2	20.9	19.1		19.7		20.3	19.6	19	20.8
Thallium, dissolved	mg/L	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		0.00001		<0.00001	<0.00001	<0.00001	<0.00001
Zinc, dissolved	mg/L	0.007	0.003		0.002	0.002	0.004	0.003	0.004	0.004	0.005	0.006	0.006	0.022	0.005		0.005		0.008	0.013	0.007	0.014

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		06/04/2009	21/04/2009	30/04/2009	02/05/2009	04/05/2009	06/05/2009	09/05/2009	18/05/2009	27/05/2009	03/06/2009	07/06/2009	11/06/2009	18/06/2009	26/06/2009	28/06/2009	29/06/2009	30/06/2009	01/07/2009	02/07/2009	03/07/2009	04/07/2009
pH (field)	pH units	7.8	8.2	7.63				7.41	7.25	7.75	7.97		7.88	8		7.87	7.84	8.17	8.17	8.14	8.11	8.13
pH (lab)	pH units		7.81	7.44	7.62	7.8	8.17	7.83	7.86	7.99	8.05	8.05	8.04	7.97	8.2		8.2		8.2	8.1	8.2	
Hardness (from dissolved)	mg/L		246	95	147			198	224	221	213	203	206	198	225		227					
Hardness (from total)	mg/L														227		238					
Total Dissolved Solids	mg/L		314	170	200	180	310	298	308	308	302	302	310	286	270		290		270	260	290	
Total Suspended Solids	mg/L		<2	58	21	32	74	14	5	13	4	<2	7	8	<4		<4		18	<4	5	
Alkalinity, total	mg/L		192	63	98	94	163	192	171	180	182	152	171	176			180					
Sulphate, dissolved	mg/L		58.9	24	34.4				53.3	54.4	53.2	58.7	55.5	42.2			50					
Chloride	mg/L		2.8	1.5	2.13	2.3	3.5	2.2	3.63	2.93	3.4	3.1	3.5	2.84			3					
Fluoride	mg/L																0.44					
Nitrite (N)	mg/L					<0.005	0.079	<0.005							<0.005		0.008					
Nitrate (N)	mg/L					0.3	0.19	0.48							0.69		0.79					
Ammonia	mg/L														0.011		0.013					
Aluminum, total	mg/L		0.138	1.66	0.605	0.862	0.091	0.551	0.051	0.314	0.175	0.147	0.138	0.306	0.017		0.169					
Arsenic, total	mg/L		0.0004	0.0007	0.0006	0.0004	<0.0002	0.0004	0.0004	0.0005	0.0006	0.0006	0.0004	0.0004	0.0004		0.0004					
Cadmium, total	mg/L		0.00001	0.00014	0.00114	0.00003	0.00002	0.00003	0.00002	0.00078	0.0285	0.00003	0.00001	0.00002	0.00001		0.00003					
Calcium, total	mg/L		62.8	26	37.9	30.9	39.8	50.3	64	58.3	62.7	53.4	56.1	53.9	60.4		63.3					
Chromium, total	mg/L		0.0005	0.0027	0.0012	0.002	<0.0005	0.0021	0.0013	0.0013	0.0011	0.0005	0.0005	0.0006	<0.001		<0.001					
Copper, total	mg/L		0.013	0.052	0.014	0.03	0.029	0.014	0.011	0.017	0.028	0.076	0.019	0.014	0.0077		0.0138					
Iron, total	mg/L		0.17	3.22	0.96	0.98	0.14	0.7	0.09	0.45	0.27	0.35	0.63	0.39	0.062		0.219					
Lead, total	mg/L		0.0002	0.0008	0.0004	0.0003	<0.0001	0.0002	0.0002	0.0003	0.0016	0.0004	<0.0001	0.0002	<0.0002		<0.0002					
Magnesium, total	mg/L		22.7	8.97	12	9.4	13.9	21.5	19.7	18.8	19.3	16	17.4	16.9	18.6		19.5					
Manganese, total	mg/L		0.0158	0.348	0.155	0.15	0.037	0.082	0.0532	0.18	0.126	0.201	0.243	0.0864	0.056		0.07					
Mercury, total	mg/L		<0.00001	0.00002	0.00002	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	0.00001		<0.00001	0.00002		0.00002					
Molybdenum, total	mg/L		0.00222	0.00163	0.00238	0.002	0.002	0.003	0.00524	0.00583	0.00541	0.00982	0.0056	0.00496	0.006		0.006					
Nickel, total	mg/L		0.001	0.004	0.002	0.002	<0.0005	0.0018	0.002	0.002	0.002	0.002	0.002	0.002	0.001		0.002					
Phosphorus, total	mg/L		<0.05	0.12	0.08		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	0.026								
Potassium, total	mg/L		2.5	3.2	3	2.3	1.6	2.6	3.2	3.3	3.5	5.8	4	2.9	3.17		3.63					
Selenium, total	mg/L		<0.0006	<0.0006	<0.0006	<0.0002	0.0007	0.0006	<0.0006	<0.0006	<0.0006	0.0013	<0.0006	<0.0006	0.0006		0.0007					
Silver, total	mg/L		<0.00001	0.00008	<0.00001	0.00003	0.00002	0.00002	<0.00001	<0.00001	<0.00001	0.00018	<0.00001	0.00038	<0.00002		<0.00002					
Sodium, total	mg/L		14.8	8.27	10.9	8.2	11.1	15.1	17.2	16.6	21	17.4	16.6	15.1	16.4		17					
Thallium, total	mg/L		<0.00001	0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005		<0.00005					
Zinc, total	mg/L		0.011	0.019	0.012	0.014	0.003	0.006	0.006	0.007	0.032	0.008	0.004	0.004	<0.005		<0.005					
Aluminum, dissolved	mg/L		0.02	0.077	0.066			0.019	0.014	0.069	0.086	0.022	0.028	0.01	0.003		0.004					
Arsenic, dissolved	mg/L		0.0003	0.0004	0.0004			0.0003	0.0004	0.0003	0.0003	0.0006	0.0003	0.0004	0.0003		0.0003					
Cadmium, dissolved	mg/L		0.00013	0.00036	0.00008			<0.00001	0.00002	0.0437	0.00574	0.00007	0.00007	0.00001	<0.00001		<0.00001					
Calcium, dissolved	mg/L		61.6	24.6	38.2			47	59.7	59	56.4	54.3	54.8	52.5	59.3		59.5					
Chromium, dissolved	mg/L		0.0004	0.001	0.0018			0.0008	0.0017	<0.0004	0.0006	<0.0004	0.0007	0.0004	<0.001		<0.001					
Copper, dissolved	mg/L		0.014	0.012	0.01			0.008	0.008	0.016	0.044	0.067	0.022	0.01	0.0067		0.0095					
Iron, dissolved	mg/L		0.02	0.3	0.1			0.09	0.04	0.07	0.22	0.16	0.08	0.06	0.025		0.024					
Lead, dissolved	mg/L		0.0002	0.0001	0.0002			<0.0001	0.0001	0.0004	0.0005	0.0003	0.0002	0.0001	<0.0002		<0.0002					
Magnesium, dissolved	mg/L		22.3	8.1	12.6			19.7	18.3	18	17.6	16.3	16.8	16.4	18.7		18.9					
Manganese, dissolved	mg/L		0.0257	0.145	0.0998			0.079	0.049	0.128	0.0953	0.193	0.12	0.0575	0.047		0.037					
Mercury, dissolved	mg/L		<0.00001	0.00001	0.00001			<0.0001	<0.00001	<0.00001	<0.00001	<0.00001		0.00001	<0.00002		<0.00002					
Molydenum, dissolved	mg/L		0.00204	0.00156	0.00217			0.004	0.00455	0.00491	0.00502	0.00958	0.00562	0.00477	0.006		0.006					
Nickel, dissolved	mg/L		<0.001	0.002	0.002			0.0012	0.002	0.002	0.002	0.002	0.002	0.002	0.001		0.001					
Phosphorus, dissolved	mg/L		0.02	0.03	0.04				<0.01	0.03	<0.01	<0.01	<0.01	<0.01								
Potassium, dissolved	mg/L		2.9	2.7	3			2.6	3	3.2	2.9	5.9	4.4	2.8	3.03		3.32					
Selenium, dissolved	mg/L		<0.0006	<0.0006	<0.0006			0.0004	<0.0006	<0.0006	<0.0006	0.0017	0.0009	<0.0006	0.0005		0.0006					
Silver, dissolved	mg/L		<0.00001	<0.00001	<0.00001			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002		<0.00002					
Sodium, dissolved	mg/L		14.4	7	10.4			14.6	15.9	17.1	15.6	17.7	16.7	14.8	16.6		16.6					
Thallium, dissolved	mg/L		0.00004	<0.00001	<0.00001			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005		<0.00005					
Zinc, dissolved	mg/L		0.005	0.005	0.008			0.004	0.004	0.016	0.009	0.005	0.012	0.002	<0.005		<0.005					

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		05/07/2009	06/07/2009	07/07/2009	08/07/2009	08/07/2009	09/07/2009	09/07/2009	10/07/2009	10/07/2009	11/07/2009	11/07/2009	12/07/2009	12/07/2009	13/07/2009	14/07/2009	15/07/2009	16/07/2009	17/07/2009	18/07/2009	19/07/2009	20/07/2009
pH (field)	pH units	8.22	7.98	8.24	8.13		8.48		8.22		8.17		8.39		8.03	8.26	8.26	8.49	8.26	8.29	8.38	8.29
pH (lab)	pH units	8.2												8.3			8.2	8.2	8.2	8.2		
Hardness (from dissolved)	mg/L	193												193				182	183	177		
Hardness (from total)	mg/L	191												192				195	205	185		
Total Dissolved Solids	mg/L	270												330			270	260	260	250		
Total Suspended Solids	mg/L	4				<4		6		4		7		<4			6	13	<4	8		
Alkalinity, total	mg/L	150												160				150	160	160		
Sulphate, dissolved	mg/L	55												52				53	53	47		
Chloride	mg/L	3.6												3.4				3.6	3.6	3.1		
Fluoride	mg/L	0.44												0.47				0.49	0.5	0.46		
Nitrite (N)	mg/L	0.059												0.079				0.086	0.084	0.024		
Nitrate (N)	mg/L	3.3												3.1				3.2	2.6	1.91		
Ammonia	mg/L	0.062												0.101				0.12	0.112	<0.005		
Aluminum, total	mg/L	0.192												0.144				0.191	0.288	0.181		
Arsenic, total	mg/L	0.0005												0.0005				0.0004	0.0005	0.0005		
Cadmium, total	mg/L	0.00006												0.00006				0.0001	0.00006	0.00003		
Calcium, total	mg/L	52.1												51.8				53.1	55.6	49.4		
Chromium, total	mg/L	<0.001												<0.001				<0.001	<0.001	<0.001		
Copper, total	mg/L	0.0737												0.0723				0.0899	0.103	0.031		
Iron, total	mg/L	0.373												0.392				0.397	0.573	0.354		
Lead, total	mg/L	0.0005												0.0005				0.0004	0.0007	<0.0002		
Magnesium, total	mg/L	14.7												15.2				15.2	16.2	15		
Manganese, total	mg/L	0.171												0.285				0.362	0.42	0.028		
Mercury, total	mg/L	<0.00002												<0.00002				<0.00002	0.00007	0.00007		
Molybdenum, total	mg/L	0.011												0.011				0.012	0.012	0.008		
Nickel, total	mg/L	0.001												0.002				0.002	0.002	0.002		
Phosphorus, total	mg/L																					
Potassium, total	mg/L	5.75												5.42				6.09	6.38	4.23		
Selenium, total	mg/L	0.002												0.002				0.0019	0.002	0.0012		
Silver, total	mg/L	<0.00002												<0.00002				<0.00002	<0.00002	<0.00002		
Sodium, total	mg/L	15.5												15.7				16.3	17.2	14.2		
Thallium, total	mg/L	<0.00005												<0.00005				<0.00005	<0.00005	<0.00005		
Zinc, total	mg/L	0.006												0.006				0.006	0.007	<0.005		
Aluminum, dissolved	mg/L	0.031												0.034				0.03	0.03	0.021		
Arsenic, dissolved	mg/L	0.0004												0.0005				0.0004	0.0005	0.0005		
Cadmium, dissolved	mg/L	0.00004												0.00006				0.00006	0.00005	<0.00001		
Calcium, dissolved	mg/L	54												52.6				50	49.9	47.9		
Chromium, dissolved	mg/L	<0.001												<0.001				<0.001	<0.001	<0.001		
Copper, dissolved	mg/L	0.0622												0.0586				0.0613	0.0615	0.0222		
Iron, dissolved	mg/L	0.132												0.142				0.116	0.118	0.076		
Lead, dissolved	mg/L	<0.0002												<0.0002				<0.0002	<0.0002	<0.0002		
Magnesium, dissolved	mg/L	14.2												14.9				14	14.1	14.1		
Manganese, dissolved	mg/L	0.141												0.254				0.264	0.327	0.004		
Mercury, dissolved	mg/L	<0.00002												<0.00002				<0.00002	<0.00002	<0.00002		
Molydenum, dissolved	mg/L	0.011												0.011				0.011	0.011	0.008		
Nickel, dissolved	mg/L	0.001												0.001				0.002	0.002	0.001		
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	5.8												5.38				5.63	5.6	4.06		
Selenium, dissolved	mg/L	0.002												0.0018				0.0019	0.0019	0.0013		
Silver, dissolved	mg/L	<0.00002												<0.00002				<0.00002	<0.00002	<0.00002		
Sodium, dissolved	mg/L	16.1												15.6				15.4	15.7	13.7		
Thallium, dissolved	mg/L	<0.00005												<0.00005				<0.00005	<0.00005	<0.00005		
Zinc, dissolved	mg/L	<0.005												<0.005				<0.005	<0.005	<0.005		

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		21/07/2009	22/07/2009	22/07/2009	23/07/2009	24/07/2009	24/07/2009	25/07/2009	25/07/2009	26/07/2009	26/07/2009	27/07/2009	28/07/2009	29/07/2009	30/07/2009	31/07/2009	01/08/2009	01/08/2009	02/08/2009	02/08/2009	03/08/2009	03/08/2009
pH (field)	pH units	8.5	8.96		8.58	8.4		8.47			8.28	8.21	7.83	7.93	7.8			7.98		8.1		7.98
pH (lab)	pH units		8	8			8.1		8	8	8.1	7.8	7.85	8.2	7.9	8.1	8.2		8.1		8	
Hardness (from dissolved)	mg/L	137							155				140				208					
Hardness (from total)	mg/L	146							187								191					
Total Dissolved Solids	mg/L		200	200			240		250	220	240	190	222	290	230	260	270		240		240	
Total Suspended Solids	mg/L		20	23			19		15	41	16	31	50	7	22	<4	<4		<4		<4	
Alkalinity, total	mg/L								120				86				150					
Sulphate, dissolved	mg/L								50				45				47					
Chloride	mg/L								8.1				5.78				7					
Fluoride	mg/L								0.39								0.44					
Nitrite (N)	mg/L	0.11							0.107								0.103					
Nitrate (N)	mg/L	5.3							4.5								2.2					
Ammonia	mg/L	0.62							0.471								0.187					
Aluminum, total	mg/L	0.78							0.771								0.231					
Arsenic, total	mg/L	0.001							0.0009								0.0004					
Cadmium, total	mg/L	0.00009							0.00003								0.00005					
Calcium, total	mg/L	41.6							52.2								51.5					
Chromium, total	mg/L	0.002							0.001								<0.001					
Copper, total	mg/L	0.0431							0.0652								0.0478					
Iron, total	mg/L	0.965							1.03								0.347					
Lead, total	mg/L	0.0017							0.0011								0.0016					
Magnesium, total	mg/L	10.3							13.7								15.1					
Manganese, total	mg/L	0.12							0.311								0.434					
Mercury, total	mg/L	<0.00002							<0.00002								<0.00002					
Molybdenum, total	mg/L	0.015							0.015								0.013					
Nickel, total	mg/L	0.002							0.002								0.002					
Phosphorus, total	mg/L																					
Potassium, total	mg/L	3.37							5.15								5.42					
Selenium, total	mg/L	0.002							0.0023								0.0019					
Silver, total	mg/L	<0.00002							<0.00002								<0.00002					
Sodium, total	mg/L	10.5							15.1								16.6					
Thallium, total	mg/L	<0.00005							<0.00005								<0.00005					
Zinc, total	mg/L	0.009							0.009								0.005					
Aluminum, dissolved	mg/L	0.042							0.03								0.076					
Arsenic, dissolved	mg/L	0.0008							0.0007								0.0005					
Cadmium, dissolved	mg/L	0.00002							0.00004								0.00004					
Calcium, dissolved	mg/L	38.7							43.2								58.4					
Chromium, dissolved	mg/L	<0.001							<0.001								<0.001					
Copper, dissolved	mg/L	0.0205							0.0237								0.0277					
Iron, dissolved	mg/L	0.101							0.069								0.086					
Lead, dissolved	mg/L	0.0005							<0.0002								<0.0002					
Magnesium, dissolved	mg/L	9.93							11.3								15.2					
Manganese, dissolved	mg/L	0.08							0.252								0.422					
Mercury, dissolved	mg/L	0.00006							0.00002								0.00003					
Molydenum, dissolved	mg/L	0.014							0.015								0.013					
Nickel, dissolved	mg/L	0.001							0.001								0.001					
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	3.03							4.37								5.69					
Selenium, dissolved	mg/L	0.002							0.0021								0.002					
Silver, dissolved	mg/L	<0.00002							<0.00002								<0.00002					
Sodium, dissolved	mg/L	10.6							12.8								17					
Thallium, dissolved	mg/L	<0.00005							<0.00005								<0.00005					
Zinc, dissolved	mg/L	<0.005							<0.005								<0.005					

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		04/08/2009	05/08/2009	08/08/2009	09/08/2009	10/08/2009	11/08/2009	12/08/2009	14/08/2009	15/08/2009	16/08/2009	17/08/2009	18/08/2009	19/08/2009	20/08/2009	21/08/2009	22/08/2009	23/08/2009	24/08/2009	25/08/2009	26/08/2009	27/08/2009
pH (field)	pH units	8.06	8.16		7.88	7.96			8	7.87	7.83	7.93	7.85	7.96	8.09	8.03	7.98	7.98	7.96	7.88	7.96	7.92
pH (lab)	pH units	8.2	8.2	8.2			8.02	8.1	8.1	8	8.1	8.1	8.2	8	8.1	8.1	8	8.1	8.2	7.7	7.8	8
Hardness (from dissolved)	mg/L						208	222		169				170			169					
Hardness (from total)	mg/L			241				236		160				164			173					
Total Dissolved Solids	mg/L	260	240	290			326	300	270	230	250	250	260	260	260	260	250	250	240	280	270	270
Total Suspended Solids	mg/L	<4	4	<4			<2	<4	6	<4	<4	<4	<4	5	<4	5	7	7	6	6	5	4
Alkalinity, total	mg/L						197	190		100				100	100	100	100	100	100			
Sulphate, dissolved	mg/L						49.8	45		48				42	43	44	45	45	45			
Chloride	mg/L						5.48	6.5		17				17	17	17	17	19	20			
Fluoride	mg/L							0.42		0.29				0.25	0.26	0.26	0.26	0.26	0.25			
Nitrite (N)	mg/L			0.006				0.005		0.154				0.194	0.176	0.185	0.191	<0.005	0.219			
Nitrate (N)	mg/L			0.69				0.74		5.1				5.5	5.2	5.4	5.6	0.19	5.4			
Ammonia	mg/L			0.015				0.013		0.309				0.235	0.27	0.246	0.264	0.273	0.257			
Aluminum, total	mg/L			0.05			0.026	0.039		0.194				0.177			0.306					
Arsenic, total	mg/L			0.0004			0.0006	0.0003		0.0005				0.0005			0.0005					
Cadmium, total	mg/L			0.00021			0.00001	0.00002		0.00004				0.00001			0.00004					
Calcium, total	mg/L			62.9			59.6	61.7		45.2				46			48.1					
Chromium, total	mg/L			<0.001			0.0008	<0.001		<0.001				<0.001			<0.001					
Copper, total	mg/L			0.0113			0.006	0.0092		0.0164				0.0138			0.0186					
Iron, total	mg/L			0.121			0.067	0.098		0.178				0.16			0.364					
Lead, total	mg/L			0.0005			0.0003	0.0008		0.0005				<0.0002			0.0006					
Magnesium, total	mg/L			20.5			19.8	19.9		11.5				12			12.9					
Manganese, total	mg/L			0.192			0.16	0.153		0.226				0.217			0.239					
Mercury, total	mg/L			<0.00002				<0.00002		<0.00002				<0.00002			0.00003					
Molybdenum, total	mg/L			0.006			0.0048	0.005		0.014				0.015			0.015					
Nickel, total	mg/L			0.002			0.002	0.002		0.001				0.001			0.002					
Phosphorus, total	mg/L						0.016															
Potassium, total	mg/L			3.11			2.8	2.91		3.78				3.6			3.71					
Selenium, total	mg/L			0.0004			<0.0006	0.0004		0.0018				0.0019			0.0019					
Silver, total	mg/L			<0.00002			<0.00001	<0.00002		<0.00002				<0.00002			<0.00002					
Sodium, total	mg/L			17.3			16.9	16.6		14.4				14.5			15.1					
Thallium, total	mg/L			<0.00005			<0.00001	<0.00005		<0.00005				<0.00005			<0.00005					
Zinc, total	mg/L			0.007			0.002	0.007		<0.005				0.007			<0.005					
Aluminum, dissolved	mg/L						0.013	0.012		0.06				0.078			0.062					
Arsenic, dissolved	mg/L						0.0004	0.0004		0.0005				0.0005			0.0005					
Cadmium, dissolved	mg/L						0.00002	0.00001		0.00001				0.00002			0.00002					
Calcium, dissolved	mg/L						54	59		47				47.6			47.6					
Chromium, dissolved	mg/L						0.0011	<0.001		<0.001				<0.001			<0.001					
Copper, dissolved	mg/L						0.003	0.0051		0.0062				0.0057			0.0057					
Iron, dissolved	mg/L						0.05	0.037		0.014				0.017			0.021					
Lead, dissolved	mg/L						0.0004	<0.0002		<0.0002				<0.0002			<0.0002					
Magnesium, dissolved	mg/L						17.8	18.3		12.6				12.4			12.1					
Manganese, dissolved	mg/L						0.136	0.141		0.199				0.184			0.211					
Mercury, dissolved	mg/L							<0.00002		<0.00002				<0.00002			<0.00002					
Molydenum, dissolved	mg/L						0.0044	0.005		0.015				0.015			0.015					
Nickel, dissolved	mg/L						0.002	0.002		0.001				0.001			<0.001					
Phosphorus, dissolved	mg/L						<0.01															
Potassium, dissolved	mg/L						2.5	2.83		3.92				3.78			3.66					
Selenium, dissolved	mg/L						<0.0006	0.0003		0.0019				0.0019			0.0019					
Silver, dissolved	mg/L						<0.00001	<0.00002		<0.00002				<0.00002			<0.00002					
Sodium, dissolved	mg/L						15.4	15.8		15.5				15.3			14.6					
Thallium, dissolved	mg/L						<0.00001	<0.00005		<0.00005				<0.00005			<0.00005					
Zinc, dissolved	mg/L						0.001	<0.005		<0.005				<0.005			<0.005					

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**28/08/2009**	**29/08/2009**	**30/08/2009**	**31/08/2009**	**01/09/2009**	**02/09/2009**	**03/09/2009**	**04/09/2009**	**05/09/2009**	**06/09/2009**	**07/09/2009**	**08/09/2009**	**09/09/2009**	**10/09/2009**	**11/09/2009**	**12/09/2009**	**13/09/2009**	**14/09/2009**	**15/09/2009**	**16/09/2009**	**17/09/2009**
pH (field)	pH units	7.86	7.86	7.89	7.86	7.85	7.89	7.88	8.06	7.96	7.97	7.99	8.09	8.15	8.1	8.14	8.33	8.16	8.2	8.03	8.24	8.05
pH (lab)	pH units	8	7.9	8	8	8	8	8	8	8	7.9	8	7.9	8	8	8	8	8	8	7.6	7.6	7.9
Hardness (from dissolved)	mg/L			177							168							187				
Hardness (from total)	mg/L			199							182							183				
Total Dissolved Solids	mg/L	280	290	280	280	280	280	280	270	280	290	280	290	270	280	270	280	300	290	250	290	270
Total Suspended Solids	mg/L	6	5	6	5	<4	<4	<4	<4	<4	4	<4	4	<4	<4	4	<4	5	<4	<4	<4	<4
Alkalinity, total	mg/L			88							86							87				
Sulphate, dissolved	mg/L			51							53											
Chloride	mg/L			30							31											
Fluoride	mg/L			0.21							0.23											
Nitrite (N)	mg/L			0.29							0.321							0.347				
Nitrate (N)	mg/L			6.7							6.2							7				
Ammonia	mg/L			0.266							0.265							0.216				
Aluminum, total	mg/L			0.534							0.253							0.391				
Arsenic, total	mg/L			0.0003							0.0004							0.0004				
Cadmium, total	mg/L			0.0001							0.00004							0.00007				
Calcium, total	mg/L			55.1							51.5							51.5				
Chromium, total	mg/L			<0.001							<0.001							<0.001				
Copper, total	mg/L			0.0173							0.008							0.0054				
Iron, total	mg/L			0.15							0.099							0.083				
Lead, total	mg/L			0.0007							0.0005							0.0005				
Magnesium, total	mg/L			14.9							13							13.2				
Manganese, total	mg/L			0.293							0.284							0.298				
Mercury, total	mg/L			<0.00002							<0.00002							<0.00002				
Molybdenum, total	mg/L			0.015							0.014							0.016				
Nickel, total	mg/L			0.002							0.001							0.001				
Phosphorus, total	mg/L																					
Potassium, total	mg/L			3.87							3.54							3.47				
Selenium, total	mg/L			0.002							0.0018							0.0019				
Silver, total	mg/L			<0.00002							<0.00002							<0.00002				
Sodium, total	mg/L			20.6							18.5							18.1				
Thallium, total	mg/L			<0.00005							<0.00005							<0.00005				
Zinc, total	mg/L			0.011							<0.005							0.006				
Aluminum, dissolved	mg/L			0.109							0.074							0.072				
Arsenic, dissolved	mg/L			0.0003							0.0004							0.0003				
Cadmium, dissolved	mg/L			<0.00001							0.00001							<0.00001				
Calcium, dissolved	mg/L			49.1							47.3							53.3				
Chromium, dissolved	mg/L			<0.001							<0.001							<0.001				
Copper, dissolved	mg/L			0.0073							0.0019							0.0012				
Iron, dissolved	mg/L			0.007							0.007							0.007				
Lead, dissolved	mg/L			<0.0002							<0.0002							<0.0002				
Magnesium, dissolved	mg/L			13.2							12.2							13				
Manganese, dissolved	mg/L			0.252							0.25							0.275				
Mercury, dissolved	mg/L			<0.00002							0.00002							0.00003				
Molydenum, dissolved	mg/L			0.013							0.014							0.015				
Nickel, dissolved	mg/L			<0.001							<0.001							<0.001				
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L			3.46							3.23							3.4				
Selenium, dissolved	mg/L			0.0018							0.0018							0.002				
Silver, dissolved	mg/L			<0.00002							<0.00002							<0.00002				
Sodium, dissolved	mg/L			18.8							17.4							18.3				
Thallium, dissolved	mg/L			<0.00005							<0.00005							<0.00005				
Zinc, dissolved	mg/L			<0.005							<0.005							<0.005				

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**18/09/2009**	**19/09/2009**	**20/09/2009**	**21/09/2009**	**22/09/2009**	**23/09/2009**	**24/09/2009**	**25/09/2009**	**26/09/2009**	**27/09/2009**	**28/09/2009**	**29/09/2009**	**30/09/2009**	**01/10/2009**	**02/10/2009**	**03/10/2009**	**04/10/2009**	**05/10/2009**	**06/10/2009**	**07/10/2009**	**08/10/2009**
pH (field)	pH units	8.27	8.16	8.28	8.25	8.46	8.18	8.07	8.09	8.17	8.02	8.06	8.18	8.04	7.96	7.88	7.78	7.9	7.8	7.93	7.79	7.97
pH (lab)	pH units	8	8	8	7.8	8	7.9	7.8	8	8	8	8.1	8.1	8.1	8.1	8	8	8	8	8.1	8.1	8
Hardness (from dissolved)	mg/L			184						186								187				228
Hardness (from total)	mg/L			202						190								197				
Total Dissolved Solids	mg/L	300	260	260	280	270	250	270	270	290	320	270	280	300	330	320	270	300	300	320	310	310
Total Suspended Solids	mg/L	<4	<4	<4	<4	5	5	4	<4	<4	4	4	4	5	7	<4	<4	<4	<4	<4	<4	<4
Alkalinity, total	mg/L																					95
Sulphate, dissolved	mg/L																					252
Chloride	mg/L																					6.1
Fluoride	mg/L																					
Nitrite (N)	mg/L			0.253						0.162								0.1				
Nitrate (N)	mg/L			6.9						8.1								8.2				18.7
Ammonia	mg/L			0.118						0.105								0.123				
Aluminum, total	mg/L			0.391						0.243								0.258				0.628
Arsenic, total	mg/L			0.0004						0.0004								0.0004				0.0012
Cadmium, total	mg/L			0.0002						0.00009								0.00006				0.00083
Calcium, total	mg/L			56.4						53.7								56.3				70.8
Chromium, total	mg/L			<0.001						<0.001								<0.001				0.001
Copper, total	mg/L			0.0066						0.0061								0.0071				0.14
Iron, total	mg/L			0.07						0.057								0.08				0.57
Lead, total	mg/L			<0.0002						0.0005								0.0005				0.0013
Magnesium, total	mg/L			14.8						13.6								13.7				18.8
Manganese, total	mg/L			0.303						0.283								0.295				0.146
Mercury, total	mg/L			0.00003						0.00002								0.00003				<0.00001
Molybdenum, total	mg/L			0.016						0.016								0.018				0.102
Nickel, total	mg/L			0.001						0.003								0.001				0.002
Phosphorus, total	mg/L																					<0.05
Potassium, total	mg/L			3.79						3.14								3.42				58
Selenium, total	mg/L			0.0019						0.002								0.0021				0.0324
Silver, total	mg/L			<0.00002						<0.00002								<0.00002				0.00004
Sodium, total	mg/L			19.5						17.8								17.1				103
Thallium, total	mg/L			<0.00005						<0.00005								<0.00005				<0.00001
Zinc, total	mg/L			0.008						<0.005								<0.005				0.008
Aluminum, dissolved	mg/L			0.082						0.054								0.063				0.02
Arsenic, dissolved	mg/L			0.0004						0.0003								0.0004				0.0011
Cadmium, dissolved	mg/L			0.00012						0.00002								0.00003				0.00021
Calcium, dissolved	mg/L			52.3						52.3								52.8				63.5
Chromium, dissolved	mg/L			<0.001						<0.001								<0.001				<0.0004
Copper, dissolved	mg/L			0.0035						0.0014								0.0013				0.014
Iron, dissolved	mg/L			0.011						0.006								0.006				<0.01
Lead, dissolved	mg/L			<0.0002						<0.0002								<0.0002				<0.0001
Magnesium, dissolved	mg/L			13						13.3								13.5				17
Manganese, dissolved	mg/L			0.292						0.284								0.276				0.13
Mercury, dissolved	mg/L			0.00004						0.00004								0.0001				<0.00001
Molydenum, dissolved	mg/L			0.016						0.017								0.018				0.103
Nickel, dissolved	mg/L			0.001						0.001								0.001				0.002
Phosphorus, dissolved	mg/L																					0.02
Potassium, dissolved	mg/L			3.38						3.33								3.32				50
Selenium, dissolved	mg/L			0.0022						0.002								0.0021				0.0348
Silver, dissolved	mg/L			<0.00002						<0.00002								<0.00002				<0.00001
Sodium, dissolved	mg/L			18.4						17.3								17				94.4
Thallium, dissolved	mg/L			<0.00005						<0.00005								<0.00005				<0.00001
Zinc, dissolved	mg/L			0.006						<0.005								<0.005				<0.001

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		09/10/2009	10/10/2009	11/10/2009	12/10/2009	13/10/2009	14/10/2009	15/10/2009	16/10/2009	17/10/2009	18/10/2009	19/10/2009	20/10/2009	21/10/2009	22/10/2009	23/10/2009	24/10/2009	25/10/2009	25/10/2009	26/10/2009	27/10/2009	28/10/2009
pH (field)	pH units	7.85	7.81	7.99	8.11	8.03	8.07	8.13	7.8	7.97	8.05	8.04	8.01	7.92	7.98	7.99	8.05	8.12	8.12	7.82	7.7	7.9
pH (lab)	pH units	8	8	7.7	8	8	8	8	8.1	8	8	8	8.1	8	8	8	8	8		8.1	8.1	8.1
Hardness (from dissolved)	mg/L			201									216					218			212	
Hardness (from total)	mg/L			206									223					234			231	
Total Dissolved Solids	mg/L	310	330	310	300	280	270	270	250	270	260	270	270	280	280	290	270	260		290	310	300
Total Suspended Solids	mg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4		<4	<4	<4
Alkalinity, total	mg/L												110					110			120	
Sulphate, dissolved	mg/L																					
Chloride	mg/L																					
Fluoride	mg/L												0.33									
Nitrite (N)	mg/L			0.099									0.092					0.08			0.08	
Nitrate (N)	mg/L			8.6									8.8					8.5			8.5	
Ammonia	mg/L			0.174									0.224					0.206			0.211	
Aluminum, total	mg/L			0.275									0.119					0.093			0.101	
Arsenic, total	mg/L			0.0004									0.0003					0.0004			0.0003	
Cadmium, total	mg/L			0.00003									0.00004					0.00003			0.00002	
Calcium, total	mg/L			58.6									63.8					65.5			64.3	
Chromium, total	mg/L			<0.001									<0.001					<0.001			<0.001	
Copper, total	mg/L			0.0056									0.0091					0.0094			0.0102	
Iron, total	mg/L			0.214									0.098					0.09			0.11	
Lead, total	mg/L			<0.0002									<0.0002					<0.0002			<0.0002	
Magnesium, total	mg/L			14.5									15.4					17.2			17.1	
Manganese, total	mg/L			0.325									0.314					0.336			0.317	
Mercury, total	mg/L			0.00004									<0.00002					<0.00002			0.00002	
Molybdenum, total	mg/L			0.018									0.018					0.018			0.017	
Nickel, total	mg/L			0.001									<0.001					0.001			0.001	
Phosphorus, total	mg/L																					
Potassium, total	mg/L			3.58									3.71					3.85			3.76	
Selenium, total	mg/L			0.0024									0.0021					0.002			0.0023	
Silver, total	mg/L			<0.00002									<0.00002					<0.00002			<0.00002	
Sodium, total	mg/L			17.7									17.8					20.1			19.8	
Thallium, total	mg/L			<0.00005									<0.00005					<0.00005			<0.00005	
Zinc, total	mg/L			<0.005									<0.005					<0.005			0.006	
Aluminum, dissolved	mg/L			0.062									0.032					0.029			0.021	
Arsenic, dissolved	mg/L			0.0003									0.0003					0.0003			0.0003	
Cadmium, dissolved	mg/L			0.00002									0.00002					0.00004			0.00003	
Calcium, dissolved	mg/L			57									61.4					62.6			60.9	
Chromium, dissolved	mg/L			<0.001									<0.001					<0.001			<0.001	
Copper, dissolved	mg/L			0.0014									0.0026					0.0023			0.0027	
Iron, dissolved	mg/L			0.01									0.008					0.018			0.02	
Lead, dissolved	mg/L			<0.0002									<0.0002					<0.0002			<0.0002	
Magnesium, dissolved	mg/L			14.4									15.2					14.9			14.5	
Manganese, dissolved	mg/L			0.301									0.296					0.309			0.298	
Mercury, dissolved	mg/L			<0.0002									0.00008					<0.00002			0.00009	
Molydenum, dissolved	mg/L			0.018									0.017					0.017			0.016	
Nickel, dissolved	mg/L			0.001									<0.001					<0.001			0.001	
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L			3.48									3.65					3.51			3.53	
Selenium, dissolved	mg/L			0.0021									0.0023					0.0021			0.0021	
Silver, dissolved	mg/L			<0.00002									<0.00002					<0.00002			<0.00002	
Sodium, dissolved	mg/L			18.3									18.6					18			17.6	
Thallium, dissolved	mg/L			<0.00005									<0.00005					<0.00005			<0.00005	
Zinc, dissolved	mg/L			<0.005									<0.005					<0.005			<0.005	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**29/10/2009**	**30/10/2009**	**05/11/2009**	**09/11/2009**	**16/11/2009**	**25/11/2009**	**25/11/2009**	**02/12/2009**	**04/12/2009**	**09/12/2009**	**15/12/2009**	**01/01/2010**	**05/01/2010**	**11/01/2010**	**19/01/2010**	**27/01/2010**	**01/02/2010**	**09/02/2010**	**16/02/2010**	**24/02/2010**	**02/03/2010**
pH (field)	pH units	8.09	8.01	7.53	7.56	8.34	7.39		7.71		7.67	7.41	7.94	7.99	7.25	7.05	7.05	6.82	7.35	6.98	6.9	6.94
pH (lab)	pH units	8.1	8.1	7.67	7.79	7.68		7.79	7.83	7.9	8.27	7.7	7.69	7.96	7.89	7.7	7.59	7.56	7.66	7.66	7.87	7.77
Hardness (from dissolved)	mg/L			224	243	230		240	240	235	259	192	275	272	438	795						
Hardness (from total)	mg/L													272		795	332	337	253	246	244	251
Total Dissolved Solids	mg/L	310	290	340	132	358		340	336	291	356	298	346	404	396	1110	456	468	328	366	350	376
Total Suspended Solids	mg/L	<4	5	<2	<2	<3		4	<2		<5	<3	7	<5	8	7	22	6	<5	<5	<5	<5
Alkalinity, total	mg/L			172	175	186		184	182	205	199	194	203	172	210	596	248	259	207	203	202	207
Sulphate, dissolved	mg/L			55.7	59.6	50.7		56	56.5	58.9	60.7	59	95.2	90.7	82.4	220	88.6	80.5	64.3	62	61.8	68
Chloride	mg/L			14.9	14.3	16.6		16.1	13	11	12.5	12.7	16.4	19.6	17.5	4.89	25.2	18.4	10.8	10	10.4	11.5
Fluoride	mg/L																					
Nitrite (N)	mg/L									0.005												
Nitrate (N)	mg/L			1.85	1.57	1.38	1.15		1.12	1.13	1.33	1.07	1.47	6.83	1.54	3.73	0.72	0.43	1.14	1.08		1.55
Ammonia	mg/L																					
Aluminum, total	mg/L			0.058	0.082	0.044		0.083	0.032	0.103	0.018	0.032	0.07	0.021	0.379	0.063	0.05	0.028	0.016	0.012	0.01	0.023
Arsenic, total	mg/L			0.0004	0.0005	0.0006		0.0004	0.0004	0.0004	0.0003	<0.0002	0.0003	0.0004	0.0005	0.0018	0.0021	0.0018	0.0003	<0.0002	0.0004	0.0003
Cadmium, total	mg/L			0.00002	0.00002	0.00002		0.00003	<0.00001	0.00002	<0.00001	0.0137	0.00031	0.00044	0.372	0.00296	0.00035	0.00009	<0.00001	0.00002	<0.00001	0.00001
Calcium, total	mg/L			62.1	60.1	62.7		61.5	58.3	60.6	57.9	61.1	74.6	72.6	105	206	81.3	86.2	74.8	60.3	63.7	64.5
Chromium, total	mg/L			<0.0004	<0.0004	0.0009		<0.0004	<0.0004	0.0005	<0.0004	0.0007	0.0006	0.0005	0.0014	0.0011	0.0008	0.0007	0.0004	<0.0004	<0.0004	<0.0004
Copper, total	mg/L			0.003	0.004	0.004		0.003	0.003	0.008	0.003	0.002	0.038	0.008	0.025	0.018	0.054	0.012	0.002	0.002	0.002	0.002
Iron, total	mg/L			0.115	0.172	0.126		0.145	0.166	0.27	0.098	0.148	0.155	0.022	0.324	1.25	1.77	1.6	0.155	0.143	0.126	0.135
Lead, total	mg/L			0.0001	0.0001	<0.0001		0.0001	0.0001	0.0001	<0.0001	0.0007	0.0007	0.0006	0.0316	0.0004	0.0002	0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Magnesium, total	mg/L			22.7	21.1	22.8		22.7	22.4	21.8	22.4	23.5	25.8	23.7	26.7	79.4	32.6	32.3	28	26.2	26.9	26.4
Manganese, total	mg/L			0.342	0.333	0.34		0.358	0.373	0.394	0.383	0.366	0.0322	0.462	0.0304	1.39	1.86	2.37	0.233			0.217
Mercury, total	mg/L			<0.00001	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molybdenum, total	mg/L			0.0038	0.0034	0.0033		0.0032	0.0031	0.003	0.0032	0.0028	0.0029	0.0064	0.0024	0.0089	0.0032	0.0036	0.0022	0.0022	0.0023	0.0031
Nickel, total	mg/L			0.003	0.003	0.002		0.002	0.002	0.0013	0.002	0.002	0.002	0.003	0.004	0.006	0.003	0.003	0.002	0.001	0.001	<0.001
Phosphorus, total	mg/L			<0.05	<0.05	0.07		0.08	0.05		<0.05	0.06	<0.05	<0.05	<0.05	0.15	0.12	0.12	0.05	<0.05	<0.05	<0.05
Potassium, total	mg/L			2.4	2	2.2		2.1	2.1	2	2.2	2.3	3	4.2	2.8	7.3	3	2.6	2.3	2	2.2	2.3
Selenium, total	mg/L			<0.0006	<0.0006	<0.0006		<0.0006	<0.0006	0.0002	<0.0006	<0.0006	<0.0006	0.0015	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silver, total	mg/L			<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00003	<0.00001	0.00003	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, total	mg/L			16.7	18.5	17.9		17.4	16.7	16.6	16.6	16	19.8	20.8	19.7	56	24.6	23.1	18.6	16.8	17.7	18.2
Thallium, total	mg/L			<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Zinc, total	mg/L			0.004	0.007	0.003		0.008	0.008	0.004	0.003	0.005	0.021	0.01	0.062	0.014	0.008	0.004	0.003	0.002	0.004	0.015
Aluminum, dissolved	mg/L			0.017	0.005	0.015		0.007	0.007	0.004	0.007	0.014	<0.005	0.014	0.297	<0.005	0.005	0.008	<0.005	<0.005	<0.005	<0.005
Arsenic, dissolved	mg/L			0.0003	0.0003	0.0004		0.0004	0.0002	0.0005	0.0004	0.0003	0.0002	0.0004	0.0005	0.0012	0.0011	0.0011	<0.0002	0.0002	0.0003	<0.0002
Cadmium, dissolved	mg/L			0.00002	0.00001	0.00004		0.00011	<0.00001	0.00001	0.00001	0.0125	<0.00001	0.00373	0.565	0.0006	0.00021	0.00003	0.00002	<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L			56.3	61.6	57.4		59.7	59.6	61.6	63.4	47.4	72	70.9	130	197	79.2	83.5	59.8	57.6	57.8	60.4
Chromium, dissolved	mg/L			<0.0004	<0.0004	0.001		0.0005	<0.0004	0.0005	<0.0004	<0.0004	0.0006	<0.0004	0.001	0.0016	0.0008	0.0007	<0.0004	<0.0004	<0.0004	0.0004
Copper, dissolved	mg/L			0.002	0.002	0.004		0.003	0.003	0.002	0.003	0.004	0.004	0.005	0.02	0.01	0.007	0.003	0.002	0.003	0.002	0.003
Iron, dissolved	mg/L			0.07	0.09	0.09		0.09	0.13	0.14	0.12	0.13	0.03	0.02	0.16	0.13	0.31	0.75	0.11	0.126	0.1	0.1
Lead, dissolved	mg/L			0.0001	0.0001	0.0001		0.0004	<0.0001	0.0001	0.0003	0.0005	0.0003	0.0002	0.0603	0.0007	0.0003	0.0002	0.0002	0.0004	0.0002	0.0003
Magnesium, dissolved	mg/L			20.2	21.7	21		22	22.2	22.2	24.5	17.8	23.2	23.1	27.4	73.6	32.7	31.3	25.2	24.9	24.3	24.4
Manganese, dissolved	mg/L			0.328	0.323	0.33		0.33	0.363	0.391	0.355	0.386	0.0261	0.37	0.0294	1.29	1.7	1.97	0.213	0.216	0.176	0.221
Mercury, dissolved	mg/L			<0.00001	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Molydenum, dissolved	mg/L			0.0037	0.0034	0.0033		0.003	0.0029	0.003	0.003	0.0026	0.0026	0.0056	0.0024	0.0094	0.0032	0.0034	0.0022	0.0021	0.0022	0.0026
Nickel, dissolved	mg/L			0.002	0.003	0.002		0.002	0.001	0.0008	0.002	0.002	0.002	0.002	0.004	0.006	0.002	0.003	0.002	0.002	0.001	0.001
Phosphorus, dissolved	mg/L			<0.01	<0.01	<0.01		<0.01	<0.01		<0.01	0.02	<0.01	<0.01	0.16	0.02	0.02	0.02	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L			2.1	2	2		2	2	2	2.2	2.2	4.3	4.2	2.8	7.6	2.9	2.4	2.2	2	2.1	2.1
Selenium, dissolved	mg/L			<0.0006	<0.0006	<0.0006		<0.0006	<0.0006	0.0002	<0.0006	<0.0006	<0.0006	0.0011	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Silver, dissolved	mg/L			<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L			15.5	19.6	16		16.9	15.3	16.7	17.9	13	22.4	20.4	22.1	56.1	23	20.3	17	16.1	16	16.4
Thallium, dissolved	mg/L			<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Zinc, dissolved	mg/L			0.002	0.003	0.004		0.004	0.004	0.003	0.003	0.009	0.01	0.008	0.091	0.01	0.006	0.004	0.003	0.004	0.004	0.003

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		10/03/2010	15/03/2010	24/03/2010	31/03/2010	05/04/2010	13/04/2010	19/04/2010	20/04/2010	21/04/2010	22/04/2010	23/04/2010	24/04/2010	25/04/2010	26/04/2010	27/04/2010	28/04/2010	29/04/2010	30/04/2010	01/05/2010	02/05/2010	03/05/2010
pH (field)	pH units	7.08	7.02	7.3	6.62	7.02	6.72	6.57	6.94	7	6.92	7.29	7.71	7.52	7.41	7.49	7.58	7.64	7.65	7.07	7.65	7.71
pH (lab)	pH units	7.78	7.81	7.83	7.93	7.96	7.97	7.86	7.97	7.4	7.58	7.59	7.69	7.68	7.9	7.8	7.9	7.8	8	8	8.3	8
Hardness (from dissolved)	mg/L														138	118	125	148	148	173	205	197
Hardness (from total)	mg/L	268	261	264	221	262	247	214	228	151	156	148	144	142	134	118	116	142	167	190	200	198
Total Dissolved Solids	mg/L	354	390	368	368	360	360	296	328	292	272	260	264	272	260	120	230	230	260	300	260	300
Total Suspended Solids	mg/L	<5	<3	<3	<3	<3	<5	<5	<5	8	<5	<5	<5	<2	<4	<4	<4	<4	<4	<4	<4	<4
Alkalinity, total	mg/L	205	211	220	192	201	220	177	193	109	115	109	106	108	100	86	89	110	120	140	150	160
Sulphate, dissolved	mg/L	72.8	65	68.2	75.8	68.5	70.3	56.6	60.8	33.1	31.4	30.6	29	28	27	2.9	5.9	38	39	53	63	61
Chloride	mg/L	10.9	11.2	10.9	9.68	10.2	11	8.66	9.21	4.96	5.04	4.77	4.61	4.56	5.5	5	4.7	5.5	5.7	7.1	8.3	8.3
Fluoride	mg/L														0.22	0.2	0.19	0.23	0.23	0.26	0.29	0.31
Nitrite (N)	mg/L														0.006	0.012	<0.03	<0.01	<0.05	0.006	0.005	<0.005
Nitrate (N)	mg/L	1.38	1.41	1.38	1.34	1.41	1.44	1.11	1.14	0.59	0.62			0.61	0.56	0.44	0.5	0.58	0.7	0.88	1.01	1.03
Ammonia	mg/L														0.012	0.022	0.08	<0.03	<0.005	0.042	0.022	0.022
Aluminum, total	mg/L	0.012	0.009	0.008	0.046	0.012	0.013	0.082	0.074	0.258	0.219	0.133	0.178	0.148	0.15	0.191	0.143	0.14	0.11	0.087	0.057	0.082
Arsenic, total	mg/L	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0005	0.0004	0.0006	0.0006	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004
Cadmium, total	mg/L	0.0001	0.00003	0.00001	0.0105	0.00002	0.00001	0.00001	<0.00001	0.00003	0.00003	0.00003	0.00078	0.00002	0.00006	0.00009	0.00003	0.00003	<0.00001	0.00001	<0.00001	0.00002
Calcium, total	mg/L	72.8	66.1	65.3	60.9	65.2	65.9	55.4	57.6	38.6	41.3	39.7	40.6	38.5	34.3	30.1	30.5	35.8	42.9	48.4	50.8	50.3
Chromium, total	mg/L	<0.0004	<0.0004	<0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	0.0009	0.0008	0.0008	0.0009	0.0006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.002	0.002	0.002	0.005	0.004	0.002	0.008	0.006	0.017	0.015	0.014	0.016	0.027	0.0147	0.019	0.0133	0.0108	0.0121	0.0095	0.0075	0.0078
Iron, total	mg/L	0.194	0.102	0.093	0.115	0.087	0.146	0.12	0.112	0.231	0.204	0.212	0.245	0.212	0.239	0.292	0.223	0.208	0.211	0.171	0.15	0.165
Lead, total	mg/L	0.0001	<0.0001	<0.0001	0.0022	<0.0001	0.0002	0.0003	0.0001	0.0002	0.0002	0.0001	0.0004	0.0014	0.0003	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002
Magnesium, total	mg/L	29.7	26.9	27.6	24.7	26.2	26	20.5	22.3	14.1	15.3	14.7	14.8	14.1	11.8	10.3	9.6	12.7	14.5	16.8	17.7	17.5
Manganese, total	mg/L	0.203	0.164	0.165	0.171	0.132	0.13	0.146	0.149	0.0994	0.0944	0.0965	0.0942	0.0736	0.071	0.066	0.067	0.073	0.106	0.095	0.094	0.098
Mercury, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00002	0.00001	0.00003	0.00002	0.00002	<0.00002	<0.00002	0.00004	<0.00002	0.00002	0.00005
Molybdenum, total	mg/L	0.0024	0.0024	0.0024	0.0025	0.0026	0.0027	0.0023	0.0025	0.0018	0.0017	0.0016	0.0016	0.0014	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.002
Phosphorus, total	mg/L	0.07	0.05	0.06	<0.05	0.06	<0.05	0.06	0.06	0.13	0.1	0.08	0.07	0.08						0.025		
Potassium, total	mg/L	2.5	2.4	2.6	2.6	2.3	2.3	2.2	2.4	2.4	2.2	2.1	2.2	1.9	1.63	1.63	1.48	1.52	1.68	1.8	1.79	1.72
Selenium, total	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002
Silver, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	20.8	18.8	18.1	16.7	17.7	17.5	14.1	15	8.64	9.24	9.36	9.41	8.86	7.36	6.39	5.99	8.02	9.58	11.2	12.3	11.9
Thallium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.003	0.007	0.002	0.005	0.008	0.005	0.013	0.022	0.007	0.005	0.005	0.002	0.002	0.006	0.008	0.006	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.025	<0.005	0.016	<0.005	<0.005	0.008	<0.005	<0.005	0.148	0.054	0.082	0.08	0.089	0.092	0.097	0.098	0.071	0.068	0.053	0.038	0.028
Arsenic, dissolved	mg/L	0.0003	0.0002	0.0004	0.0003	<0.0002	0.0002	<0.0002	0.0002	0.0005	0.0006	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004
Cadmium, dissolved	mg/L	0.00582	0.00004	0.00002	<0.00001	0.00002	0.00001	0.00001	0.00002	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00001	0.00002
Calcium, dissolved	mg/L	64.5	62.6	62.5	52.6	63.1	59.8	53.5	56	38	38.6	36.8	35.8	35.6	35.8	31.1	33	38.6	38.1	44.4	52.8	50.3
Chromium, dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0006	0.0006	<0.0004	0.0004	0.0004	0.0005	0.0004	0.0006	0.0006	0.0006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.004	0.002	0.002	0.002	0.003	0.005	0.005	0.005	0.025	0.012	0.012	0.012	0.011	0.0128	0.0113	0.011	0.0094	0.0086	0.0074	0.0064	0.0058
Iron, dissolved	mg/L	0.12	0.08	0.09	0.03	0.07	0.07	0.05	0.07	0.29	0.14	0.15	0.15	0.15	0.184	0.164	0.157	0.15	0.132	0.12	0.108	0.101
Lead, dissolved	mg/L	0.0018	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002	0.0002	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	26	25.5	26.1	21.7	25.3	23.8	19.6	21.5	13.7	14.4	13.5	13.1	13	11.7	9.87	10.4	12.4	12.7	15.1	17.7	17.3
Manganese, dissolved	mg/L	0.193	0.152	0.172	0.141	0.134	0.113	0.127	0.142	0.0978	0.0055	0.0289	0.0108	0.0412	0.009	0.029	0.022	0.051	0.039	0.036	0.072	0.077
Mercury, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00001	<0.00001	0.00002	0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.0024	0.0022	0.0024	0.0022	0.0024	0.0025	0.0022	0.0024	0.0014	0.0014	0.0014	0.0014	0.0014	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002
Nickel, dissolved	mg/L	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	0.04	0.04	0.03	0.03						0.016		
Potassium, dissolved	mg/L	2.2	2.3	2.2	2.8	2.2	2	2.2	2.2	2.5	2	1.9	1.8	1.8	1.74	1.59	1.64	1.62	1.53	1.66	1.83	1.78
Selenium, dissolved	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	18.2	18	17.6	13.4	17.2	14.9	13.3	14.2	8.4	8.6	8.6	8.3	8.3	7.56	6.2	6.58	8.19	8.6	10.3	12	12
Thallium, dissolved	mg/L	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.007	0.004	0.002	<0.001	0.002	0.004	0.003	0.004	0.009	0.002	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		04/05/2010	05/05/2010	06/05/2010	07/05/2010	08/05/2010	09/05/2010	10/05/2010	11/05/2010	12/05/2010	13/05/2010	14/05/2010	15/05/2010	16/05/2010	17/05/2010	18/05/2010	19/05/2010	20/05/2010	21/05/2010	22/05/2010	23/05/2010	24/05/2010
pH (field)	pH units	7.63	7.69	7.72	7.77	7.7	7.78	7.8				7.79	7.8	7.78	7.77	7.82	7.66	7.6	7.83	7.62	7.69	7.64
pH (lab)	pH units	8.1	8.1	8.1	8	8.1	8.1	8.1	8.2	8.3	8.2	8.3	8.2	8.3	8.1	8.4	8.4	8.4	8.2	8.2	8.1	8.4
Hardness (from dissolved)	mg/L	212	217	231	230	242	241	251	268	228	275	216	264	213	268	247	268	273	233	245	246	264
Hardness (from total)	mg/L	211	229	226	243	264	240	268	258	237	252	212	239	211	251	263	276	287	241	235	236	262
Total Dissolved Solids	mg/L	330	290	310	310	300	340	340	330	290	310	280	340	270	340	330	330	340	330	340	350	340
Total Suspended Solids	mg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	44	<1	1	1	4	2	<1
Alkalinity, total	mg/L	170	170	180	180	190	200	200	200	180	200	170	200	140	190	190	200	200	190	200	200	210
Sulphate, dissolved	mg/L	65	66	70	73	69	72	70	74	62	78	62	73	57	84	67	74	87	63	68	67	69
Chloride	mg/L	8.5	8.6	9	9.9	9.2	9.8	10	10	8.8	10	8.9	9.8	8	10	9.3	10	10	9.3	11	11	9.4
Fluoride	mg/L	0.33	0.32	0.3	0.33	0.35	0.37	0.37	0.24	0.22	0.34	0.33	0.35	0.3	0.35	0.35	0.37	0.39	0.39	0.41	0.41	0.42
Nitrite (N)	mg/L	<0.005	0.006	0.006	0.007	0.006	<0.005	0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	1.14	1.05	1.1	1.11	1.18	1.45	1.46	1.35	1.09	0.91	1.06	1.29	1	1.28	1.21	1.33	1.31	1.18	1.24	1.31	1.3
Ammonia	mg/L	0.023	<0.01	0.04	0.01	0.013	0.008	0.017	0.043	<0.05	0.013	0.059	0.067	0.06	0.011	0.05	0.05	0.04	0.009	0.02	0.015	0.19
Aluminum, total	mg/L	0.047	0.057	0.049	0.044	0.045	0.14	0.072	0.026	0.055	0.028	0.051	0.021	0.075	0.018	0.114	0.017	0.026	0.03	0.078	0.023	0.017
Arsenic, total	mg/L	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.001	<0.001	<0.001	<0.0004	<0.0004	<0.0004	<0.0004
Cadmium, total	mg/L	<0.00001	0.00597	0.00002	<0.00001	0.00004	0.00005	0.00001	0.00008	0.00004	0.00003	<0.00001	0.00002	<0.00001	0.00002	0.00003	0.00003	0.00002	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	53.3	59.1	57.1	61.5	67.1	61.5	68.7	67.2	61.3	65.8	54.3	61.9	55.3	65.5	64.8	67.8	70.8	62	60	61	67
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.0069	0.0087	0.0075	0.0064	0.0058	0.0361	0.0048	0.0046	0.0048	0.0039	0.0037	0.0049	0.0058	0.0034	0.0065	0.0033	0.0037	0.004	0.006	0.003	0.003
Iron, total	mg/L	0.134	0.154	0.136	0.121	0.123	0.232	0.155	0.106	0.124	0.092	0.114	0.084	0.146	0.084	0.207	0.08	0.092	0.086	0.197	0.098	0.071
Lead, total	mg/L	0.0002	0.0008	<0.0002	0.0009	<0.0002	0.0008	0.0002	<0.0002	<0.0002	0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	18.8	19.8	20.2	21.7	23.5	20.9	23.4	22	20.3	21.4	18.5	20.4	17.6	21.3	24.6	25.8	26.9	21	20	21	23
Manganese, total	mg/L	0.087	0.126	0.11	0.128	0.121	0.095	0.099	0.092	0.117	0.095	0.119	0.102	0.138	0.12	0.162	0.123	0.13	0.133	0.143	0.121	0.132
Mercury, total	mg/L	0.00004	<0.00002	0.00004	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.004
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.003	<0.003	<0.003	<0.001	<0.001	0.004	0.001
Phosphorus, total	mg/L		0.032	0.02	0.018	0.017	0.035	0.013	<0.01	0.011	0.015		0.01	0.017	<0.01	0.024	0.016	0.015				
Potassium, total	mg/L	1.76	2.07	1.91	2.06	2.27	1.99	2.22	2.18	2.1	2.17	1.78	1.99	1.82	2.07	2.28	2.29	2.39	2	2	2	2
Selenium, total	mg/L	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0005	0.0002	<0.001	<0.0008	<0.0008	<0.0008	<0.0008
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00007	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	12.8	12.9	14.9	14.6	16	14.4	16.3	16.3	15	14.2	13.1	14	11.9	14.5	18.3	19.1	19.9	14	14	14	16
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	0.011	<0.005	<0.005	<0.005	0.028	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.026	0.019	0.016	0.015	0.014	0.011	0.009	0.008	0.008	0.007	0.007	0.013	0.007	0.01	0.007	0.004	0.004	<0.01	<0.01	<0.01	<0.01
Arsenic, dissolved	mg/L	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0003	<0.0004	<0.0004	<0.0004	<0.0004
Cadmium, dissolved	mg/L	0.00002	<0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00002	0.00001	0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00001	0.00001	0.00002	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	53.9	55.3	59.2	58.4	61.4	61.4	63.1	69.5	59.7	71.5	56.6	68.8	55.8	69.7	62.6	68.4	67.7	61	64	64	69
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.0051	0.0047	0.0042	0.0038	0.0035	0.0031	0.003	0.0027	0.003	0.0025	0.0031	0.0028	0.0026	0.0023	0.0026	0.0026	0.0023	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.091	0.08	0.076	0.068	0.067	0.06	0.059	0.056	0.045	0.048	0.047	0.069	0.034	0.037	0.032	0.033	0.036	0.027	0.022	0.025	0.025
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	18.9	19.1	20.2	20.4	21.6	21.2	22.7	23	19.3	23.5	18.3	22.3	17.8	22.8	22.1	23.5	25.2	20	21	21	22
Manganese, dissolved	mg/L	0.074	0.053	0.051	0.062	0.066	0.066	0.07	0.057	0.079	0.066	0.083	0.11	0.097	0.107	0.034	0.054	0.056	0.077	0.041	0.073	0.085
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00007	<0.00002	0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L		0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Potassium, dissolved	mg/L	1.83	1.86	1.98	1.95	2.08	1.99	2.05	2.2	1.98	2.27	1.92	2.23	1.9	2.3	2.05	2.17	2.17	2	2	2	2
Selenium, dissolved	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0003	0.0002	0.0003	<0.0008	<0.0008	<0.0008	<0.0008
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	13.2	13	13.6	13.9	15.2	15.3	16.1	16.6	13.8	17	13.2	16.1	12.8	16.6	16.4	18.2	19	15	16	16	16
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**25/05/2010**	**26/05/2010**	**27/05/2010**	**28/05/2010**	**29/05/2010**	**30/05/2010**	**31/05/2010**	**01/06/2010**	**02/06/2010**	**03/06/2010**	**04/06/2010**	**05/06/2010**	**06/06/2010**	**07/06/2010**	**10/06/2010**	**11/06/2010**	**12/06/2010**	**13/06/2010**	**14/06/2010**	**15/06/2010**	**16/06/2010**
pH (field)	pH units	7.3	7.84	7.58	7.56	7.69	7.78	7.73	7.5	7.5	7.73	7.5	7.19	7.76		7.72	7.56	7.54	7.55		7.03	7.32
pH (lab)	pH units	8.2	8.4	8.2	8.5	8.5	8.4	8.2	8.5	8.5	8.5	8.4	8.4	8.4	8.53	8.4	8.3	8.6	8.3	8.51	8.57	8.3
Hardness (from dissolved)	mg/L	288	266	281	248	262	213	237	277	255	256	226	288	263	237	234	232	240	252	240	242	243
Hardness (from total)	mg/L	282	249	279	261	274	215	254	1540	1430	265	247	264	258	236	242	235	249	263	234	258	260
Total Dissolved Solids	mg/L	310	310	320	370	380	310	370	320	330	380	290	350	320	330	310	320	340	350	330	340	310
Total Suspended Solids	mg/L	<1	30	2	2	2	4	3	4	3	1	3	<4	<4	6	2	5	3	3	2	2	20
Alkalinity, total	mg/L	210	200	210	200	210	170	200	210	210	210	190	210	210	200	190	190	210	210	210	210	210
Sulphate, dissolved	mg/L	69	65	67	68	77	55	69	68	68	70	60	71	64	64	65	63	69	69	64	65	69
Chloride	mg/L	9.9	9.2	10	10	11	7.2	9.7	9.9	10	10	9	9.4	9	9	12	9.3	9.1	10	9.3	8.9	9.7
Fluoride	mg/L	0.39	0.39	0.4	0.44	0.4	0.37	0.39	0.37	0.4	0.37	0.35	0.38	0.38	0.39	0.38	0.36	0.37	0.38	0.39	0.38	0.38
Nitrite (N)	mg/L	<0.005	<0.005	0.006	<0.005	<0.005	0.005	0.007	0.006	0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.006	0.009	0.007	0.007	<0.005	<0.005	0.006
Nitrate (N)	mg/L	1.23	1.19	1.28	0.95	1.25	0.87	1.14	1.24	1.2	1.2	1.02	1.16	1.12	1.1	1.01	1.02	1	1.06	1.03	1.06	1.15
Ammonia	mg/L	0.19	0.042	0.021	0.014	0.11	0.015	<0.05	0.037	0.056	0.04	0.058	0.08	<0.05	0.03	0.02	0.038	0.013	0.043	0.032	0.03	0.043
Aluminum, total	mg/L	0.018	0.198	0.031	0.036	0.029	0.059	0.054	0.111	0.03	0.033	0.047	0.021	0.019	0.087	0.055	0.122	0.054	0.052	0.057	0.032	0.56
Arsenic, total	mg/L	<0.001	0.0004	<0.001	0.0004	0.0004	<0.0004	0.0004	0.0005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	0.0005
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	68	64	67	66	70	55	65	80	75	68	64	67	65	58	60	59	62	66	58	64	65
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.003	0.009	0.003	0.003	0.003	0.004	0.003	0.005	0.002	0.003	0.003	0.002	0.002	0.005	0.004	0.005	0.007	0.003	0.004	0.003	0.01
Iron, total	mg/L	0.086	0.365	0.148	0.15	0.178	0.211	0.168	0.26	0.14	0.12	0.17	0.103	0.101	0.209	0.161	0.206	0.17	0.155	0.157	0.127	0.799
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0003
Magnesium, total	mg/L	27	22	27	23	24	19	22	26	24	23	21	24	23	22	22	21	23	24	22	24	24
Manganese, total	mg/L	0.153	0.358	0.271	0.301	0.282	0.344	0.316	0.316	0.253	0.21	0.297	0.239	0.237	0.334	0.338	0.509	0.514	0.349	0.325	0.277	0.284
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.003	0.004	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, total	mg/L	<0.003	0.001	<0.003	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
Phosphorus, total	mg/L																					
Potassium, total	mg/L	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2
Selenium, total	mg/L	<0.001	<0.0008	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	20	15	21	17	17	14	16	19	18	16	15	16	16	15	16	15	16	17	15	17	17
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic, dissolved	mg/L	<0.001	<0.001	<0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	71	65	68	64	69	56	59	71	66	67	59	74	68	59	58	58	60	63	60	60	62
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.001	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.025	0.038	0.042	0.026	0.044	0.035	0.031	0.021	0.025	<0.02	0.023	0.044	0.038	0.095	<0.02	<0.02	<0.02	<0.02	0.023	0.036	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	27	25	27	21	22	18	22	24	22	21	19	25	23	22	21	21	22	23	22	22	21
Manganese, dissolved	mg/L	0.061	0.202	0.143	0.096	0.15	0.113	0.17	0.063	0.045	0.039	0.1	0.203	0.195	0.009	0.012	<0.001	<0.001	0.069	0.153	0.158	0.054
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.004	0.004	0.004	0.003	0.004	0.003	0.003	0.004	0.004	0.004	0.003	0.004	0.004	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, dissolved	mg/L	<0.003	<0.003	<0.003	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Selenium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	20	19	21	16	16	13	16	17	16	15	14	18	16	17	17	17	18	18	18	18	17
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**17/06/2010**	**18/06/2010**	**19/06/2010**	**20/06/2010**	**21/06/2010**	**22/06/2010**	**23/06/2010**	**24/06/2010**	**25/06/2010**	**26/06/2010**	**26/06/2010**	**27/06/2010**	**28/06/2010**	**29/06/2010**	**30/06/2010**	**01/07/2010**	**02/07/2010**	**03/07/2010**	**04/07/2010**	**05/07/2010**	**06/07/2010**
pH (field)	pH units	6.92	7.1	7.21	6.91	6.55	7.81	7.81	7.81	7.88	7.72		7.69	7.7	7.72	7.7	7.86	7.85	7.87	7.91	7.93	7.91
pH (lab)	pH units	8.4	8.23	8.3	8.3	8.3	8.11	8.35	8.27	8.43		8.45	8	8.09	7.92	7.92	7.92	7.98	7.95	8.03	8.01	7.95
Hardness (from dissolved)	mg/L	225	233	207	232	231	238	226	236	231		255	239	240	241	239	224	228	227	229	204	211
Hardness (from total)	mg/L	230	229	235	213	254	235	287	256	245		242	259	241	243	236	232	226	228	216	244	232
Total Dissolved Solids	mg/L	310	340	330	350	330	330	340	320	290		300	340	320	350	340	340	330	340	340	340	360
Total Suspended Solids	mg/L	4	2	1	2	2	2	1	<1	<1		2	<1	<1	<1	<1	1	1	2	<1	<1	<1
Alkalinity, total	mg/L	180	180	180	190	180	190	190	180	190		210	210	210	210	210	180	180	180	180	180	180
Sulphate, dissolved	mg/L	67	69	71	64	67	67	67	70	68		65	65	71	68	66	64	63	64	70	69	64
Chloride	mg/L	10	10	11	10	9.7	9.8	9.8	9.7	9.5		9.5	9	9.2	9	8.6	8.9	8.7	8.8	9	9.1	8.9
Fluoride	mg/L	0.43	0.41	0.42	0.42	0.41	0.41	0.42	0.44	0.45		0.41	0.38	0.37	0.38	0.38	0.4	0.4	0.4	0.41	0.41	0.41
Nitrite (N)	mg/L	<0.005	0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	4.2	4.1	4.5	4.4	4.2	4.2	4.2	4.2	4.5		2.06	1.68	1.54	1.48	1.4	4.3	4.3	4.6	4.8	4.8	4.6
Ammonia	mg/L	0.036	<0.5	<0.05	<0.5	<0.5	0.018	<0.5	0.011	<0.005		0.016	0.038	0.031	0.031	0.015	<0.05	<0.05	<0.05	<0.05	<0.05	0.011
Aluminum, total	mg/L	0.1	0.039	0.035	0.029	0.061	0.029	0.03	0.029	0.02		0.041	0.027	0.019	0.014	0.014	0.045	0.028	0.065	0.02	0.019	0.013
Arsenic, total	mg/L	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	59	60	60	55	64	63	76	66	62		62	64	62	61	60	61	59	59	57	64	62
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.004	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004		0.003	0.003	0.003	0.002	0.002	0.006	0.004	0.005	0.004	0.004	0.004
Iron, total	mg/L	0.168	0.079	0.065	0.059	0.103	0.068	0.07	0.059	0.049		0.123	0.118	0.109	0.094	0.092	0.091	0.069	0.112	0.06	0.058	0.044
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	20	19	21	19	23	19	24	22	22		21	24	21	22	21	19	19	19	18	20	19
Manganese, total	mg/L	0.166	0.106	0.086	0.066	0.07	0.064	0.061	0.059	0.059		0.138	0.155	0.168	0.159	0.145	0.055	0.053	0.064	0.05	0.054	0.054
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.005		0.004	0.004	0.004	0.004	0.003	0.005	0.005	0.005	0.004	0.005	0.005
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	<0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	3	3	3	3	3	3	3	3	3		2	2	2	2	2	3	3	3	3	3	3
Selenium, total	mg/L	0.0011	0.0008	<0.0008	0.0008	<0.0008	0.0009	0.001	0.0009	<0.0008		<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.0009	0.0009	0.0009	0.001	0.001
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	17	17	18	16	20	17	21	20	20		16	18	15	16	15	17	17	17	16	19	19
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.013	0.012	<0.01	0.01	<0.01
Arsenic, dissolved	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	<0.0004
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	57	61	55	61	61	63	60	63	60		67	61	60	61	61	59	60	60	60	54	52
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003		0.002	0.002	0.002	0.002	0.002	0.004	0.004	0.004	0.004	0.004	0.004
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	0.037	<0.02	0.021	<0.02	0.029	0.033	0.027	0.028	0.039	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	20	20	17	19	19	20	19	19	20		22	21	22	22	21	18	19	19	19	17	20
Manganese, dissolved	mg/L	0.001	<0.001	0.005	0.055	0.006	0.021	0.024	0.043	0.044		0.117	0.073	0.056	0.058	0.019	0.029	0.038	0.043	0.044	0.034	0.039
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005		0.004	0.004	0.003	0.004	0.004	0.005	0.005	0.005	0.005	0.004	0.005
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	3	3	3	3	3	3	3	3	3		3	2	2	2	2	3	3	3	3	3	3
Selenium, dissolved	mg/L	<0.0008	0.0009	<0.0008	0.0008	<0.0008	<0.0008	<0.0008	0.0008	<0.0008		0.0013	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.0009	0.001	0.001	<0.0008	0.0009
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	18	17	16	17	17	18	17	18	18		17	16	16	16	16	17	18	18	18	15	18
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		07/07/2010	08/07/2010	09/07/2010	10/07/2010	11/07/2010	12/07/2010	13/07/2010	14/07/2010	15/07/2010	16/07/2010	17/07/2010	18/07/2010	19/07/2010	20/07/2010	21/07/2010	22/07/2010	23/07/2010	24/07/2010	25/07/2010	26/07/2010	27/07/2010
pH (field)	pH units	7.94	8.02	7.97	7.97	8.02	8.01	7.92	8.05	7.98	8.02	7.88	8.01	8.07	8.02	7.78	7.89	7.79	7.84	7.79	7.91	7.88
pH (lab)	pH units	8.04	7.92	8.17	8.27	8.23	8.09	8.03	7.94	8.1	8.11	8.14	8.07	8.08	8.15	8.13	8.1	8.01	8.01	8.04	8.12	7.98
Hardness (from dissolved)	mg/L	237	235	220	217	228	227	226	229	227	205	208	198	195	202	208	204		202	205	201	204
Hardness (from total)	mg/L	237	236	229	228	232	229	246	236	220	212	389	191	198	182	179	189	193	197	209	190	203
Total Dissolved Solids	mg/L	360	350	300	300	300	290	320	390	350	330	310	360	340	340	340	330	340	310	360	360	330
Total Suspended Solids	mg/L	1	<1	<1	<1	2	<1	<1	<1	3	2	4	<1	<1	<1	<1	<1	1	<1	1	<1	<1
Alkalinity, total	mg/L	190	180	170	180	180	190	190	190	120	130	130	130	130	120	120	120	130	130	130	130	120
Sulphate, dissolved	mg/L	63	66	67	66	65	64	64	63	75	71	68	70	71	71	72	69	66	70	72	72	70
Chloride	mg/L	9	9.1	8.6	8.6	8.7	8.5	8.5	8.9	23	24	24	25	25	26	26	24	22	23	24	24	26
Fluoride	mg/L	0.42	0.42	0.42	0.43	0.42	0.46	0.41	0.44	0.37	0.36	0.36	0.36	0.35	0.37	0.4	0.38	0.39	0.39	0.48	0.39	0.35
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	0.008	0.137	0.145	0.135	0.15	0.16	0.148	0.144	0.126	0.111	0.119	0.129	0.129	0.15
Nitrate (N)	mg/L	4.7	4.7	4.8	4.8	4.7	4.7	4.8	4.6	9.4	9.2	8.6	9.2	9.1	8.9	9.1	8.8	7.9	8.5	8.8	9.1	9.4
Ammonia	mg/L	0.011	0.014	<0.03	<0.03	0.041	0.022	0.026	0.041	0.33	0.26	0.099			0.1	0.096	0.096	0.1	0.067	0.074	0.15	0.043
Aluminum, total	mg/L	0.015	0.015	0.013	0.012	0.023	0.021	0.014	0.029	0.16	5.28	0.357	0.109	0.112	0.101	0.117	0.142	0.184	0.145	0.17	0.125	0.16
Arsenic, total	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	0.0007	<0.0004	0.0006	<0.0004	<0.0004	<0.0004	0.0012	0.0007	0.0006	<0.0004	0.0004
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	62	62	61	60	61	59	65	61	60	57	105	52	54	51	50	52	52	53	55	51	54
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.073	0.006	0.024	0.005	0.005	0.004	0.004	0.005	0.005	0.004	0.006	0.006	0.005
Iron, total	mg/L	0.047	0.048	0.044	0.042	0.052	0.045	0.048	0.051	0.134	0.162	0.33	0.034	0.029	<0.02	0.021	0.025	0.063	0.033	0.066	0.037	0.028
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	20	20	19	19	19	20	20	20	17	17	31	15	15	14	13	14	16	16	17	15	16
Manganese, total	mg/L	0.054	0.052	0.051	0.054	0.053	0.053	0.054	0.055	0.043	0.032	0.108	0.021	0.019	0.02	0.022	0.027	0.029	0.021	0.03	0.017	0.022
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.005	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.014	0.014	0.022	0.012	0.013	0.012	0.012	0.014	0.011	0.011	0.012	0.011	0.013
Nickel, total	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	<0.001	0.003	0.139	0.003	<0.001	<0.001	0.001	<0.001	<0.001	0.005	0.004	0.005	0.003	0.004
Phosphorus, total	mg/L																					
Potassium, total	mg/L	3	3	3	3	3	3	3	3	5	5	8	4	5	4	4	4	4	5	5	4	5
Selenium, total	mg/L	0.001	0.0013	0.0011	0.0011	0.001	0.0009	0.001	0.001	0.0027	0.0022	0.0037	0.0022	0.0024	0.0023	0.0024	0.0025	0.0022	0.0025	0.0025	0.0025	0.0027
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	20	20	19	19	20	20	20	19	24	24	42	25	26	23	22	24	22	23	24	22	24
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.054	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.065	0.093	0.081	0.097	0.102	0.1	0.108	0.108		0.077	0.073	0.077	0.094
Arsenic, dissolved	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	0.0005	0.0005	0.0004	<0.0004	0.0005	0.0005	0.0005		<0.0004	0.0004	<0.0004	<0.0004
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	61	62	58	58	60	60	61	60	65	56	56	54	53	56	58	57		55	55	54	55
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.004		0.002	0.002	0.002	0.002
Iron, dissolved	mg/L	0.022	0.021	<0.02	<0.02	0.028	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	20	19	18	18	19	19	18	19	16	16	16	16	15	15	15	15		16	16	16	16
Manganese, dissolved	mg/L	0.041	0.041	0.041	0.04	0.04	0.022	0.023	0.013	0.014	0.015	0.023	0.015	0.014	0.014	0.014	0.015		0.019	0.024	0.015	0.018
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	0.0003	<0.0002
Molydenum, dissolved	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.014	0.014	0.013	0.013	0.013	0.014	0.014	0.014		0.013	0.013	0.013	0.014
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		0.001	0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5	5		5	5	5	5
Selenium, dissolved	mg/L	0.0011	0.0011	0.001	0.0009	0.001	0.001	0.001	0.001	0.0032	0.0025	0.0025	0.0025	0.0024	0.0025	0.0026	0.0025		0.0025	0.0026	0.0026	0.0028
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	19	19	18	17	18	18	17	18	24	24	24	26	25	24	24	23		26	24	27	28
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**28/07/2010**	**29/07/2010**	**30/07/2010**	**31/07/2010**	**01/08/2010**	**02/08/2010**	**03/08/2010**	**04/08/2010**	**05/08/2010**	**06/08/2010**	**07/08/2010**	**08/08/2010**	**09/08/2010**	**10/08/2010**	**11/08/2010**	**12/08/2010**	**13/08/2010**	**14/08/2010**	**15/08/2010**	**16/08/2010**	**17/08/2010**
pH (field)	pH units	7.74	7.82	7.8	7.81	7.84	7.83	7.84	7.85	7.87	7.85	7.96	7.89	7.87	7.9	7.94	7.97	7.84	7.86	7.84	7.93	7.87
pH (lab)	pH units	8.15	8.02	7.95	8.09	8.13	8.11	7.96	8.09	8.09	8.17	8.03	8.05	8.22	8.15	8.04	8.11	7.81	7.98	8.16	8.2	8.2
Hardness (from dissolved)	mg/L	198	211	209	210	214	213	208	217	215	205	245	206	219	221	219	220	221	224	223	219	218
Hardness (from total)	mg/L	203	194	192	198	207	198	218	205	202	196	208	211	247	239	226	247	213	207	223	233	223
Total Dissolved Solids	mg/L	320	330	330	340	330	340	330	350	360	340	360	370	320	370	320	360	330	340	360	330	340
Total Suspended Solids	mg/L	1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	1	<1	<1	3	<1	<1	<1	1	1
Alkalinity, total	mg/L	130	130	130	130	130	130		130	130	130	130	130	130	130	130	130	130	130	130	130	130
Sulphate, dissolved	mg/L	69	71	73	69	70	70		5.9	74	76	75	73	80	78	77	78	84	83	87	86	86
Chloride	mg/L	26	27	26	27	25	25		0.6	25	25	24	26	27	29	30	26	24	26	26	26	24
Fluoride	mg/L	0.37	0.36	0.36	0.36	0.39	0.39		0.29	0.38	0.36	0.36	0.38	0.38	0.37	0.37	0.39	0.4	0.39	0.4	0.38	0.42
Nitrite (N)	mg/L	0.114	0.124	0.117	0.127	0.102	0.11		<0.005	0.091	0.091	0.096	0.105	0.086	0.018	0.019	0.026	0.089	0.116	0.134	0.163	0.171
Nitrate (N)	mg/L	9	10.4	10.5	10.1	9.6	10		0.07	10.4	10.2	10.4	10.6	10.5	10.2	1.05	11.1	11.1	11.4	11.7	11.8	12.3
Ammonia	mg/L	0.1	<0.005	0.048	0.043	0.052	0.066	0.045	<0.005	0.033	<0.05	0.033	0.07	0.053	0.07	0.092	0.13	0.14	0.12	0.079	0.059	0.084
Aluminum, total	mg/L	0.151	0.124	0.123	0.14	0.124	0.13	0.115	0.111	0.109	0.101	0.106	0.105	0.138	0.107	0.099	0.13	0.077	0.119	0.108	0.12	0.131
Arsenic, total	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	<0.0004	0.0005	0.0005	0.0006	0.0006	0.0007
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	54	52	52	53	56	53	60	55	55	54	56	58	68	64	62	67	57	57	61	63	61
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.007	0.004	0.005	0.005	0.005	0.005	0.004	0.006	0.002	0.005	0.005	0.007	0.006
Iron, total	mg/L	0.034	0.021	<0.02	<0.02	0.026	0.023	<0.02	0.032	0.035	0.023	<0.02	0.02	0.041	0.031	0.02	0.032	<0.02	0.032	0.023	0.033	0.023
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	16	15	15	16	16	16	17	16	16	15	16	16	19	19	17	20	17	16	17	18	17
Manganese, total	mg/L	0.036	0.02	0.021	0.023	0.023	0.023	0.021	0.023	0.021	0.02	0.023	0.023	0.03	0.036	0.038	0.05	0.026	0.04	0.045	0.047	0.043
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.013	0.013	0.013	0.015	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.014	0.015	0.015	0.014	0.015	0.014	0.016	0.016	0.017	0.017
Nickel, total	mg/L	0.003	0.004	0.003	0.003	0.003	0.003	0.004	0.002	0.003	0.001	0.001	0.001	0.003	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	5	5	5	5	5
Selenium, total	mg/L	0.0027	0.0027	0.0027	0.0029	0.0029	0.0028	0.003	0.0027	0.0026	0.0027	0.003	0.003	0.0044	0.0033	0.003	0.0039	0.0031	0.0038	0.0038	0.0041	0.0042
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	23	23	22	24	24	24	24	25	25	22	23	23	29	30	29	30	26	24	29	30	29
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.168	0.095	0.069	0.027	0.028	0.016	0.018	<0.01
Aluminum, dissolved	mg/L	0.089	0.093	0.099	0.093	0.101	0.082	0.063	0.079	0.076	0.073	0.076	0.073	0.086	0.057	0.072	0.072	0.074	0.072	0.071	0.077	0.079
Arsenic, dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004	<0.0004	<0.0004	<0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	<0.0004	<0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	54	58	57	57	58	58	57	59	59	55	71	55	60	60	60	60	60	60	61	60	60
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.004	0.002	0.004	0.004	0.004	0.002
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	16	16	16	17	17	17	16	17	17	16	17	17	17	17	17	17	17	18	17	17	17
Manganese, dissolved	mg/L	0.033	0.019	0.02	0.021	0.008	0.019	0.019	0.022	0.021	0.021	0.022	0.022	0.023	0.029	0.035	0.039	0.011	0.039	0.041	0.039	0.037
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.013	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.016	0.016	0.016	0.017
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	5	5	5	5	5	5
Selenium, dissolved	mg/L	0.0026	0.003	0.003	0.003	0.0028	0.003	0.003	0.0031	0.0031	0.0032	0.0041	0.0032	0.0034	0.0031	0.0031	0.0036	0.0033	0.0038	0.0041	0.0042	0.0044
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	26	29	28	28	28	28	24	25	25	25	25	26	28	29	29	26	27	29	26	28	28
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.143	0.084	0.061	0.022	0.027	0.015	0.013	<0.01

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		18/08/2010	19/08/2010	20/08/2010	21/08/2010	22/08/2010	23/08/2010	24/08/2010	25/08/2010	26/08/2010	27/08/2010	28/08/2010	29/08/2010	30/08/2010	31/08/2010	01/09/2010	02/09/2010	03/09/2010	05/09/2010	07/09/2010	08/09/2010	09/09/2010
pH (field)	pH units	7.95	7.87	7.59	7.88	8.04	7.99	7.95	7.9	8.05	8.09	8.09	8	8	8	7.98	7.77	7.91	7.91	7.83	8.14	7.98
pH (lab)	pH units	8.15	8.15	8.25	8.22	8.28	8.17	8.13	8.03	8.08	8.15	8.12	7.94	8.11	7.99	8.06	8.11	8.07	8.03	8.1		7.98
Hardness (from dissolved)	mg/L	226	206	205	218	223	204	218	207	215	222	221	218	225	225	222	226	223	218	232	218	230
Hardness (from total)	mg/L	221	226	218	222	224	245	215	221	217	212	231	227	229	225	219	231	226	228	217	222	223
Total Dissolved Solids	mg/L	360	380	350	350	380	370	360	370	350	360	350	390	370	370	380	360	370	370	440	510	500
Total Suspended Solids	mg/L	3	3	2	1	2	<1	<1	1	<1	1	1	1	1	1	5	<1	<1	<1	<1	1	1
Alkalinity, total	mg/L	120	120	120	120	120	130	120	120	110	120	120	120	120	120	120	140	120	120	150	120	120
Sulphate, dissolved	mg/L	84	84	81	81	93	84	89	120	96	95	95	94	94	90	85	80	89	88	73	88	86
Chloride	mg/L	24	24	25	27	28	30	26	27	29	29	29	29	29	29	29	23	28	26	16	26	25
Fluoride	mg/L	0.42	0.44	0.39	0.4	0.4	0.39	0.39	0.34	0.31	0.32	0.32	0.33	0.37	0.36	0.42	0.44	0.43	0.42	0.44	0.4	0.4
Nitrite (N)	mg/L	0.111	0.118	0.118	0.123	0.113	0.063	0.158	0.133	0.122	0.12	0.137	0.129	0.119	0.116	0.129	0.07	0.128	0.13	0.025	0.123	0.116
Nitrate (N)	mg/L	11.8	11.7	11.6	11.1	11.2	10.3	12.5	12.5	12.1	11.8	12.4	12.4	11.8	11.7	13	10.3	12.9	13	8.6	12.7	13.1
Ammonia	mg/L	0.15	0.14	0.2	0.096	0.076	0.035	0.083	0.14	0.21	0.16	0.2	0.14	0.2	0.068	0.12	0.08	0.1	0.083	0.075	0.19	0.14
Aluminum, total	mg/L	0.151	0.114	0.119	0.099	0.108	0.148	0.184	0.169	0.188	0.187	0.221	0.216	0.233	0.226	0.202	0.142	0.177	0.18	0.097	0.212	0.21
Arsenic, total	mg/L	0.0005	<0.0004	0.0004	<0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005	<0.0004	0.0005	0.0004
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	60	61	59	60	62	72	59	59	58	57	64	62	63	61	59	62	61	62	58	60	61
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.008	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.008	0.007	0.008	0.008	0.007	0.005	0.006	0.006	0.003	0.006	0.006
Iron, total	mg/L	0.107	0.056	0.037	0.029	0.034	0.031	0.028	0.023	0.033	0.021	0.031	<0.02	0.028	0.025	0.023	0.037	<0.02	<0.02	0.031	0.023	0.024
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	17	17	17	17	17	16	16	18	17	17	18	18	17	18	17	18	18	18	18	17	17
Manganese, total	mg/L	0.05	0.052	0.043	0.042	0.041	0.03	0.046	0.049	0.055	0.049	0.054	0.047	0.048	0.046	0.043	0.067	0.047	0.049	0.07	0.06	0.061
Mercury, total	mg/L	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.017	0.017	0.016	0.016	0.016	0.014	0.017	0.016	0.017	0.016	0.017	0.017	0.018	0.017	0.017	0.012	0.017	0.016	0.01	0.018	0.018
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.001	<0.001	0.001	<0.001	0.001	0.001	0.002	0.001	<0.001	0.001	<0.001	0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	5	5	6	4	5	5
Selenium, total	mg/L	0.0043	0.0046	0.004	0.004	0.0043	0.0041	0.0044	0.0043	0.0043	0.0041	0.0048	0.0047	0.0047	0.0043	0.0043	0.0033	0.0043	0.0045	0.0024	0.0045	0.0048
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	26	28	26	27	26	25	26	31	26	26	27	28	26	27	27	24	27	27	22	27	26
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	0.013	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.064	0.061	0.062	0.062	0.062	0.087	0.094	0.075	0.078	0.097	0.091	0.108	0.121	0.112	0.097	0.075	0.088	0.073	0.094	0.093	0.086
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0005	0.0004	<0.0004	0.0005	0.0005	0.0005	0.0004	0.0005	0.0006	0.0005	0.0005	0.0005	0.0004	0.0005	0.0006	<0.0004	0.0006	0.0006
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	65	57	57	60	62	56	60	57	58	61	61	60	62	62	61	61	61	60	61	58	63
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.005	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.004	0.003	0.004	0.004	0.003	0.004	0.004
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.023	<0.02	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	16	16	15	17	17	16	17	15	17	17	17	16	17	17	17	18	17	16	19	18	18
Manganese, dissolved	mg/L	0.045	0.048	0.041	0.041	0.039	0.026	0.041	0.046	0.05	0.041	0.043	0.04	0.036	0.035	0.039	0.064	0.044	0.043	0.072	0.055	0.056
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.016	0.017	0.015	0.016	0.016	0.014	0.017	0.015	0.017	0.017	0.017	0.016	0.017	0.016	0.016	0.012	0.016	0.016	0.01	0.018	0.017
Nickel, dissolved	mg/L	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5
Selenium, dissolved	mg/L	0.0051	0.0046	0.0043	0.004	0.0043	0.0033	0.0044	0.0049	0.0045	0.0042	0.0044	0.0047	0.0045	0.0042	0.0046	0.0034	0.0045	0.0046	0.0026	0.0053	0.0047
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	25	25	24	28	26	26	28	24	27	29	29	26	29	29	27	24	27	26	23	29	28
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**11/09/2010**	**12/09/2010**	**13/09/2010**	**15/09/2010**	**17/09/2010**	**19/09/2010**	**21/09/2010**	**23/09/2010**	**25/09/2010**	**27/09/2010**	**29/09/2010**	**01/10/2010**	**03/10/2010**	**05/10/2010**	**07/10/2010**	**09/10/2010**	**11/10/2010**	**12/10/2010**	**13/10/2010**	**15/10/2010**	**17/10/2010**
pH (field)	pH units	7.89	7.94	7.93	7.82	7.91	7.99	7.98	7.97	7.94	7.91	7.96			7.95	8.08	8.03	7.9	8.05	8.08	8.01	
pH (lab)	pH units	8.05	8	8.2	8.18	8.21	8.02	8.05	8.05	8.02	7.97	8.14	8.04	8.06	8.1	8.21	8.21	8.03	8.06	8.1	8.08	8.15
Hardness (from dissolved)	mg/L	229	236	227	231	240	238	258	230	237	233	227	233	234	231	232	275	239	238	267	269	257
Hardness (from total)	mg/L	232	217	223	206	255	222	227	235	227	219	237	233	240	234	233	253	224	271	250	242	249
Total Dissolved Solids	mg/L	510	440	390	380	410	390	400	400	390	400	400	400	390	380	390	390	410	400	400	380	430
Total Suspended Solids	mg/L	<1	1	1	<1	<1	<1	<1	<1	<1	<1	3	5	3	<1	2	1	4	2	<1	<1	<1
Alkalinity, total	mg/L	110	120	120	120	130	130	130	130	130	130	130	130	140	140	150	140	140	160	150	140	140
Sulphate, dissolved	mg/L	88	91	95	86	83	86	92	87	100	100	87	90	86	89	83	86	82	83	99	97	110
Chloride	mg/L	26	27	27	27	18	19	19	20	21	23	20	22	22	22	22	22	21	20	21	24	26
Fluoride	mg/L	0.39	0.37	0.39	0.18	0.52	0.51	0.48	0.49	0.47	0.45	0.47	0.46	0.43	0.42	0.44	0.44	0.48	0.48	0.47	0.44	0.49
Nitrite (N)	mg/L	0.136	0.129	0.142	0.137	0.117	0.115	0.119	0.124	0.134	0.117	0.12	0.11	0.1	0.076	0.074	0.088	0.079	0.056	0.087	0.093	0.112
Nitrate (N)	mg/L	14.1	13.5	14	13.6	13.8	14	13.9	14.1	14.8	14.7	15.1	14.9	13.2	12.7	12.4	13.4	13.1	10.9	13.9	14.1	14.8
Ammonia	mg/L	0.19	0.2	0.084	0.11	0.13	0.12	0.12	0.17	0.19	0.2	0.2	0.25	0.14	0.024	0.038	0.08	0.16	0.13	0.089	0.2	0.37
Aluminum, total	mg/L	0.198	0.18	0.175	0.127	0.173	0.126	0.128	0.163	0.147	0.15	0.195	0.17	0.128	0.134	0.138	0.13	0.083	0.126	0.119	0.095	0.082
Arsenic, total	mg/L	<0.0004	0.0005	<0.0004	<0.0004	0.0005	<0.0004	0.0005	0.0005	0.0005	0.0002	0.0003	0.0002	0.0003	0.0004	0.0003	0.0001	0.0003	0.0003	0.0004	0.0003	0.0004
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.00002	<0.00001	0.00002	0.00002	0.00002	0.00002	0.00001	0.00003	<0.00001	0.00003	<0.00001	0.00001	0.00002
Calcium, total	mg/L	63	60	61	56	69	61	61	64	62.2	58.7	65.2	63.8	65.2	63.7	63.2	68.7	60.4	72.1	68.5	66	67.6
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.006	0.007	0.021	0.004	0.007	0.006	0.007	0.008	0.0072	0.007	0.0075	0.0069	0.0065	0.0061	0.0063	0.0073	0.0049	0.0075	0.0107	0.0056	0.0061
Iron, total	mg/L	0.039	0.042	0.025	<0.02	0.022	<0.02	<0.02	0.021	0.016	0.016	0.067	0.024	0.067	0.022	0.033	0.016	0.102	0.057	0.031	0.014	0.015
Lead, total	mg/L	<0.0002	0.0002	0.0935	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	18	16	17	16	20	17	18	18	17.3	17.7	18	17.9	18.7	18.2	18.3	19.7	17.7	22	19.1	18.7	19.6
Manganese, total	mg/L	0.081	0.07	0.076	0.066	0.082	0.07	0.081	0.087	0.084	0.084	0.091	0.091	0.106	0.08	0.081	0.09	0.226	0.111	0.091	0.091	0.097
Mercury, total	mg/L	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002
Molybdenum, total	mg/L	0.02	0.019	0.018	0.015	0.019	0.017	0.018	0.019	0.018	0.017	0.018	0.019	0.015	0.014	0.013	0.016	0.012	0.011	0.016	0.016	0.016
Nickel, total	mg/L	0.001	0.001	0.01	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.003	<0.001	<0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	5	5	5	5	6	5	5	5	5.37	5.15	5.32	5.43	5.08	6.13	6.02	6.13	4.77	5.53	5.9	5.73	5.46
Selenium, total	mg/L	0.0053	0.0048	0.0048	0.0041	0.0048	0.0045	0.0047	0.0049	0.0045	0.0043	0.0049	0.0046	0.0045	0.0042	0.0038	0.0043	0.0031	0.0031	0.004	0.004	0.0046
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	27	27	26	24	29	24	26	26	24.4	25.1	30	29.4	28	23.7	23.5	28.4	24.6	25.7	29.1	29.5	31.3
Thallium, total	mg/L	<0.00005	<0.00005	0.00011	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	0.049	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.046
Aluminum, dissolved	mg/L	0.071	0.072	0.079	0.067	0.083	0.074	0.073	0.078	0.073	0.069	0.071	0.061	0.042	0.074	0.063	0.059	0.049	0.036	0.068	0.057	0.05
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	<0.0004	<0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00001	0.00002	0.00001	0.00001	0.00001	0.00002	0.00002	0.00003	0.00002	0.00001	<0.00001	<0.00001	0.00001
Calcium, dissolved	mg/L	63	65	63	63	66	65	74	62	63.9	62.3	62.6	64.2	63.7	63.4	63.9	81.6	65.4	65.2	73.9	74.1	70.4
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.004	0.003	0.004	0.003	0.004	0.004	0.004	0.005	0.0051	0.0046	0.0046	0.0046	0.0034	0.0041	0.004	0.0043	0.0037	0.003	0.0047	0.0044	0.0047
Iron, dissolved	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.006	0.005	0.007	0.005	0.016	0.008	0.007	0.008	0.049	0.011	0.009	0.01	0.011
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	18	18	17	18	18	18	18	18	18.9	18.8	17.2	17.6	18.1	17.7	17.5	17.4	18.4	18.2	20	20.4	19.7
Manganese, dissolved	mg/L	0.072	0.068	0.077	0.075	0.073	0.071	0.073	0.077	0.086	0.088	0.094	0.093	0.09	0.078	0.069	0.081	0.217	0.081	0.09	0.095	0.092
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00006	<0.00002	<0.00002	0.00004	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00004	<0.00002
Molydenum, dissolved	mg/L	0.019	0.018	0.019	0.018	0.018	0.018	0.018	0.018	0.019	0.019	0.018	0.016	0.015	0.014	0.013	0.015	0.013	0.01	0.017	0.017	0.016
Nickel, dissolved	mg/L	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	5	5	5	6	5	5	5	6	5.79	5.58	5.36	5.6	5.15	6.19	5.94	5.74	5.04	5.04	5.84	5.92	5.69
Selenium, dissolved	mg/L	0.0051	0.005	0.0051	0.0048	0.0049	0.0049	0.0056	0.0048	0.005	0.0046	0.0049	0.0049	0.0041	0.0039	0.0037	0.0051	0.0035	0.0028	0.0045	0.0045	0.0045
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	28	28	30	31	26	27	28	29	31	28.5	28.4	29.2	27.3	24.3	23.6	24.1	22.9	21.2	27.8	29.6	29.1
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**19/10/2010**	**20/10/2010**	**21/10/2010**	**22/10/2010**	**23/10/2010**	**25/10/2010**	**26/10/2010**	**27/10/2010**	**29/10/2010**	**31/10/2010**	**02/11/2010**	**04/11/2010**	**07/11/2010**	**11/11/2010**	**16/11/2010**	**19/11/2010**	**21/11/2010**	**24/11/2010**	**26/11/2010**	**27/11/2010**	**28/11/2010**
pH (field)	pH units			8.02					8.08	8.12	8.18	7.8		7.8	7.6	7.8				7.63	7.49	7.58
pH (lab)	pH units	8.22	8.19	8.23	8.27	8.11	8.1	8.08	8.14	8.24	8.22	8.28	8.14	8.08	8.18	8.19		8.19	8.13	8.08	8.15	8.14
Hardness (from dissolved)	mg/L	248		270	268	270	266	265	259	261	262	268	257	268	260	260			247	259	266	275
Hardness (from total)	mg/L	260	294	312	261	284	273	286	280	260	260	218	289	285	262	273	259	273	265	271	276	273
Total Dissolved Solids	mg/L	420	460	460	460	450	430	430	430	400	380	360	370	380	370	380		340	330	370	380	370
Total Suspended Solids	mg/L	<1	<1	<1	<1	<1	<4	<1	<1	<1	<1	<1	<1	<1	<1	1		<1	<1	2	4	2
Alkalinity, total	mg/L	140	150	150	150	140	150	150	150	160	160	180	180	180	190	190		190	190	190	190	180
Sulphate, dissolved	mg/L	91	120	110	110	110	110	110	110	94	90	81	80	80	77	86		85	90	84	84	71
Chloride	mg/L	25	24	24	24	24	23	22	22	20	17	9.3	8	7.5	8.7	7.8		8	7.3	7	7.2	5.9
Fluoride	mg/L	0.45	0.44	0.44	0.42	0.43	0.38	0.46	0.45	0.38	0.42	0.42	0.41	0.45	0.38	0.42		0.44	0.45	0.44	0.46	0.5
Nitrite (N)	mg/L	0.094	0.107	0.1	0.109	0.111		0.108	0.112	0.112	0.097	0.013	0.007	0.005	0.006	0.007		0.007	0.008	0.008	0.009	0.009
Nitrate (N)	mg/L	13.8	14	14.1	15.2	15.1		14.2	14.2	13.7	13.4	8.6	8.1	8	8.2	8.2		8.1	8.2	8.1	8	8
Ammonia	mg/L	0.2	0.22	0.24	0.27	0.27	0.27	0.25	0.25	0.16	0.15	0.087	0.024	0.017	0.074	0.069		0.077	0.034	0.079	0.069	0.061
Aluminum, total	mg/L	0.085	0.087	0.118	0.083	0.087	0.108	0.117	0.103	0.155	0.106	0.022	0.042	0.023	0.02	0.021	0.022	0.021	0.022	0.22	0.09	0.021
Arsenic, total	mg/L	0.0003	0.0004	0.0004	0.0003	0.0004	0.0004	0.0005	0.0003	0.0003	0.0003	0.0002	0.0004	0.0004	0.0002	0.0002	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003
Cadmium, total	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00001	0.00004	0.00001	0.00001	0.00002	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00001	<0.00001
Calcium, total	mg/L	69.7	79.1	85.2	72.1	77.7	73500	77.2	76.4	69.9	71.4	54.3	73.3	72.7	68.6	70.3	66.1	69.5	68.4	70.4	72.1	72.5
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Copper, total	mg/L	0.0061	0.0057	0.006	0.0049	0.0054	0.0064	0.0068	0.0059	0.0069	0.0067	0.003	0.0035	0.0034	0.0036	0.0036	0.0047	0.0037	0.0038	0.0078	0.0058	0.0074
Iron, total	mg/L	0.014	0.015	0.017	0.013	0.011	0.012	0.021	0.018	0.024	0.02	0.036	0.051	0.031	0.035	0.034	0.036	0.034	0.039	0.349	0.146	0.042
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	20.8	23.4	24.2	19.6	21.8	21700	22.7	21.7	20.7	19.9	20	25.8	25.1	22	23.6	22.8	24.2	22.9	23.2	23.3	22.4
Manganese, total	mg/L	0.101	0.102	0.103	0.093	0.102	0.111	0.107	0.105	0.107	0.101	0.108	0.119	0.116	0.106	0.111	0.098	0.103	0.097	0.171	0.134	0.376
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.015	0.016	0.017	0.017	0.017	0.018	0.017	0.017	0.015	0.014	0.006	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007
Nickel, total	mg/L	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.002	0.001	0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	6.08	5.83	6.37	5.12	5.58	6.42	6.24	5.96	6.07	5.47	3.55	4.19	4.02	3.64	3.74	3.49	3.66	3.48	3.76	3.75	4.52
Selenium, total	mg/L	0.004	0.0041	0.0044	0.0041	0.0041	0.0046	0.0043	0.0041	0.004	0.0039	0.0017	0.0019	0.0019	0.0018	0.0018	0.0018	0.0019	0.0018	0.0019	0.0019	0.0026
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	32.4	33.7	32.2	30.3	33	35.3	32.2	31.6	30.2	28.1	22	23.8	23.5	22.4	23.8	22.2	23.2	21.9	20.5	20.5	20.9
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.006	0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.048		0.064	0.059	0.057	0.069	0.081	0.08	0.066	0.063	0.02	0.014	0.01	0.01	0.01			0.006	0.009	0.007	0.006
Arsenic, dissolved	mg/L	0.0003		0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003			0.0004	0.0003	0.0003	0.0003
Cadmium, dissolved	mg/L	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00002	0.00004	0.00002	0.00002	<0.00001	<0.00001	<0.00001			0.00002	0.00001	0.00001	<0.00001
Calcium, dissolved	mg/L	67.9		73.4	73.6	74.2	71900	71.9	70.1	69.6	70.6	70	66.9	68.3	67.6	67.8			64.4	67.6	68.8	71
Chromium, dissolved	mg/L	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.0039		0.0028	0.0026	0.0026	0.0031	0.0027	0.0029	0.0041	0.0049	0.0025	0.0027	0.003	0.0028	0.0026			0.0026	0.0027	0.0029	0.0029
Iron, dissolved	mg/L	0.008		<0.005	<0.005	<0.005	<0.005	0.007	0.005	0.011	0.014	0.027	0.023	0.022	0.017	0.012			0.008	0.009	0.012	0.01
Lead, dissolved	mg/L	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	19.1		21.1	20.6	20.5	21000	20.8	20.4	21.1	20.8	22.7	21.8	23.8	22.2	22.1			20.9	21.9	22.9	23.7
Manganese, dissolved	mg/L	0.089		0.095	0.093	0.094	0.091	0.088	0.093	0.101	0.099	0.116	0.107	0.114	0.106	0.101			0.088	0.076	0.092	0.099
Mercury, dissolved	mg/L	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002			<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.015		0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.014	0.007	0.007	0.006	0.006	0.006			0.005	0.006	0.006	0.006
Nickel, dissolved	mg/L	<0.001		0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.001	<0.001			0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	5.7		5.53	5.31	5.34	5.49	5.39	5.39	5.99	5.65	4.02	3.77	3.97	3.79	3.66			3.26	3.31	3.43	3.5
Selenium, dissolved	mg/L	0.0041		0.0041	0.0041	0.0041	0.0041	0.0041	0.004	0.004	0.0039	0.002	0.0019	0.0019	0.0019	0.0018			0.0018	0.0018	0.0019	0.0019
Silver, dissolved	mg/L	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002			<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	27.4		28.1	27.9	27.9	26.8	27.6	27.9	30.5	29.1	24.4	22.3	24.1	22.7	22.3			18.5	19.8	20.5	21.2
Thallium, dissolved	mg/L	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005			<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		29/11/2010	30/11/2010	01/12/2010	02/12/2010	03/12/2010	04/12/2010	05/12/2010	06/12/2010	07/12/2010	08/12/2010	10/12/2010	11/12/2010	13/12/2010	14/12/2010	19/12/2010	23/12/2010	24/12/2010	28/12/2010	30/12/2010	01/01/2011	03/01/2011
pH (field)	pH units	7.69	7.62	7.32	7.58	7.39	7.7	7.64	7.62	7.56	7.5	7.6						7.37	7.22	7.82	7.6	7.66
pH (lab)	pH units	8.13	8.09	8.27	8.27	8.22	8.23	8.19	8.21	8.2	8.19	8.18	8.17	8.2	8.18	8.03	8.15	8.11	8.08	8.1	8.11	7.99
Hardness (from dissolved)	mg/L	270	274	269	285	280	291	288	288	283	269	269	318	268	307		302	271	269	274	273	272
Hardness (from total)	mg/L	274	277	273	269	276	275	287	261	269	281	304	324	306	265	270	271	283	289	302	288	262
Total Dissolved Solids	mg/L	350	310	370	370	360	360	360	390	370	400	400	390	400	380	370	400	400	410	400	400	390
Total Suspended Solids	mg/L	1	13	2	1	1	<1	<1	<1	21	1	1	1	1	<1	2	1	2	1	<1	1	1
Alkalinity, total	mg/L	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	200	200	190	190
Sulphate, dissolved	mg/L	86	85	92	91	86	88	89	88	89	90	87	86	89	90	90	92	85	86	85	87	88
Chloride	mg/L	7.2	7.1	8.2	8	8	7.3	7.3	7.4	7.2	7.7	9	7.2	7.2	7.7	7.6	7.3	7.2	7.1	6.9	7	7.6
Fluoride	mg/L	0.46	0.47	0.43	0.46	0.47	0.45	0.46	0.45	0.47	0.42	0.45	0.43	0.45	0.43	0.43	0.45	0.46	0.48	0.48	0.49	0.44
Nitrite (N)	mg/L	0.009	0.008	0.007	0.006	0.006	0.005	<0.005	0.005	0.008	0.006	0.007	0.006	0.007	0.008	0.009	0.008	0.009	0.01	0.009	0.009	<0.005
Nitrate (N)	mg/L	8.1	7.8	8.1	8.3	11	8.2	8.2	8.2	8.1	8	8	8	8.1	7.9	8	8.1	8.7	8.9	8.9	8.7	8.5
Ammonia	mg/L	0.076	0.081	0.058	0.062	0.072	0.085	0.081	0.049	0.066	0.016	0.025	0.051	<0.005	0.015	0.009	<0.05	<0.05	<0.005	<0.005	<0.005	<0.05
Aluminum, total	mg/L	0.021	0.101	0.065	0.051	0.044	0.05	0.032	0.022	0.414	0.03	0.028	0.029	0.03	0.023	0.062	0.021	0.061	0.044	0.028	0.04	0.026
Arsenic, total	mg/L	0.0003	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0002	0.0003	0.0004	0.0003	0.0003	0.0004	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0004	<0.0001
Cadmium, total	mg/L	0.00003	0.00004	0.00006	0.00018	0.00003	0.00001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00021	<0.00001	0.00003	0.00003	0.00002	0.00002	<0.00001
Calcium, total	mg/L	71.3	71.8	72.1	71.3	73.4	72.9	76.7	67.8	69	72.7	78.2	83.4	78.9	68.1	68.6	68.3	70.7	72.9	77	72.5	67.9
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.0033	0.0054	0.0065	0.0065	0.008	0.0044	0.0045	0.0038	0.0108	0.0032	0.0033	0.0035	0.0036	0.0032	0.0155	0.0033	0.0085	0.0038	0.0039	0.0035	0.0032
Iron, total	mg/L	0.041	0.166	0.113	0.096	0.075	0.074	0.056	0.039	0.648	0.052	0.052	0.041	0.056	0.055	0.153	0.045	0.093	0.061	0.041	0.053	0.051
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	23.3	23.8	22.6	22	22.4	22.6	23.3	22.3	23.4	24.2	26.5	28.1	26.5	23	23.9	24.4	25.8	25.9	26.7	25.9	22.4
Manganese, total	mg/L	0.107	0.158	0.131	0.115	0.114	0.115	0.112	0.096	0.176	0.108	0.12	0.075	0.117	0.099	0.115	0.1	0.114	0.106	0.109	0.108	0.101
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.007	0.006	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	<0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	3.69	3.78	3.62	3.53	3.51	3.61	3.71	3.35	3.5	3.6	3.85	4.09	3.81	3.31	3.42	3.44	3.73	3.64	3.76	3.76	3.41
Selenium, total	mg/L	0.002	0.0019	0.0019	0.0022	0.0022	0.0021	0.0021	0.0019	0.0019	0.0019	0.0019	0.002	0.002	0.0019	0.0019	0.0017	0.0019	0.0019	0.0021	0.0019	0.0019
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	0.00004	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	20.3	21	20.1	19.7	20	20.1	20.3	19.7	20.2	21.9	23.5	25.1	23.8	19.6	20.5	20.9	23.2	23.1	23.7	23.1	19.8
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.006	0.007	0.006	0.018	0.023	0.016	0.016	0.021	0.038	0.011	0.011	0.009	0.009	0.015		0.006	0.013	0.02	0.019	0.009	0.006
Arsenic, dissolved	mg/L	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0003		0.0004	0.0003	0.0003	0.0003	0.0003	0.0003
Cadmium, dissolved	mg/L	<0.00001	0.00001	0.00002	0.00009	0.0001	0.0001	0.00029	0.0005	0.00003	<0.00001	<0.00001	0.00002	0.00001	0.00001		0.00001	0.00003	0.00001	0.00001	0.00001	<0.00001
Calcium, dissolved	mg/L	70.1	69.2	68.6	74.2	72.1	75.5	74.8	76.1	73.7	68.9	68.6	80.8	68	79.6		76.3	68.1	67.9	69.4	69	71.1
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.0028	0.003	0.0029	0.0036	0.0042	0.0044	0.0058	0.0076	0.0042	0.0044	0.0029	0.0038	0.0033	0.0042		0.0033	0.0046	0.0042	0.0031	0.0033	0.0028
Iron, dissolved	mg/L	0.011	0.011	0.012	0.041	0.046	0.037	0.042	0.036	0.077	0.015	0.021	0.02	0.021	0.032		0.01	0.03	0.034	0.019	0.016	0.017
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	23.1	24.6	23.7	24.3	24.4	24.8	24.5	23.9	24	23.7	23.6	28.3	23.9	26.4		27.2	24.6	24.1	24.6	24.5	22.9
Manganese, dissolved	mg/L	0.097	0.097	0.095	0.11	0.111	0.108	0.101	0.099	0.106	0.084	0.104	0.119	0.101	0.112		0.097	0.108	0.103	0.099	0.095	0.087
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.006	0.006	0.005	0.006	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.007	0.005	0.006		0.006	0.005	0.005	0.005	0.005	0.006
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001	<0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	3.43	3.7	3.55	3.6	3.73	3.76	3.82	3.95	3.63	3.53	3.49	4.26	3.64	3.88		3.92	3.55	3.53	3.48	3.48	3.42
Selenium, dissolved	mg/L	0.0019	0.0019	0.0018	0.0019	0.0019	0.002	0.0019	0.0019	0.0018	0.0019	0.002	0.0022	0.002	0.0021		0.002	0.0019	0.0019	0.002	0.002	0.002
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	20.9	22.4	21.2	21.7	21.8	22.4	22	21.3	21.1	21.7	20.9	25	21.2	24.2		24.3	22.2	21.8	22.4	22.1	20.5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		05/01/2011	08/01/2011	10/01/2011	12/01/2011	13/01/2011	14/01/2011	17/01/2011	18/01/2011	22/01/2011	23/01/2011	28/01/2011	30/01/2011	01/02/2011	03/02/2011	04/02/2011	05/02/2011	06/02/2011	07/02/2011	08/02/2011	09/02/2011	10/02/2011
pH (field)	pH units	7.71	7.64	7.31			7.2	7.38	7.21		6.67	7.47	7.42	7.44	7.48	7.52	7.63	7.31	7.16	6.6		
pH (lab)	pH units	8	7.99			8.07		7.83		7.78		8.38	8.35	8.1	8.12		8.13	8.06		7.84	7.84	
Hardness (from dissolved)	mg/L	274	261			252		302		276		268	277	259	261		277	253		249	249	
Hardness (from total)	mg/L	268	263	282	326	309	91.1	330	263	280	260	256	256	303	255	306	322	303	291	291	303	307
Total Dissolved Solids	mg/L	390	350			360		350		350		330	330	310	350		400	370		370	370	
Total Suspended Solids	mg/L	<1	1			2		6		3		<1	1	2	2		5	75		1	1	
Alkalinity, total	mg/L	200	210			220		210		210		220	220	220	220		210	220		220	220	
Sulphate, dissolved	mg/L	89	77			78		76		78		72	72		79			85		82	82	
Chloride	mg/L	7.2	6.1			3.8		5.5		4.8		5.3	4.7	5.8	4.8		7.1	8.9		6.2	6.2	
Fluoride	mg/L	0.47	0.4			0.46		0.42		0.41		0.43	0.43	0.47	0.47		0.49	0.45		0.45	0.45	
Nitrite (N)	mg/L	<0.005	<0.005			<0.005		0.006		<0.005		<0.005	<0.005	<0.005	<0.005		0.011	<0.005		<0.005	<0.005	
Nitrate (N)	mg/L	8.4	4.1			3.6		3.4		3.2		3.2	3.2	2.92	2.97		8.4	3.7		3.6	3.6	
Ammonia	mg/L	<0.05	0.009			<0.005		0.006		0.11		0.019	0.014	0.022	<0.005		0.015	0.017		0.019	0.019	
Aluminum, total	mg/L	0.034	0.032	0.025	0.035	0.034	0.739	0.114	0.086	0.027	0.019	0.029	0.005	0.009	0.048	0.084	0.054	0.048	0.068	0.068	0.035	0.056
Arsenic, total	mg/L	<0.0001	<0.0001	<0.0001	0.0003	0.0002	0.0044	0.0003	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0003	0.0001	0.0003	0.0003	0.0002	0.0001
Cadmium, total	mg/L	<0.00001	<0.00001	<0.00001	0.00003	0.00002	0.00015	0.0001	<0.00001	0.00002	<0.00001	0.00009	0.00003	0.00002	0.00002	<0.00001	<0.00001	0.00001	0.00002	0.00002	0.00002	0.00002
Calcium, total	mg/L	69.8	65.3	69.8	79.6	75.2	23.7	81.6	63.1	66.7	64.3	63.1	62.5	74.1	61	73.4	82.6	70.8	68.7	68.7	71.5	73.9
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001
Copper, total	mg/L	0.0058	0.0056	0.0022	0.003	0.0024	0.0543	0.0236	0.0068	0.0035	0.0016	0.0029	0.0016	0.0025	0.0048	0.0069	0.0046	0.0025	0.0149	0.0149	0.0029	0.0033
Iron, total	mg/L	0.064	0.081	0.062	0.08	0.061	1.46	0.214	0.162	0.077	0.054	0.072	0.022	0.033	0.088	0.16	0.094	0.08	0.132	0.132	0.064	0.118
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0029	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	22.8	24.2	26.1	31	29.5	7.75	30.6	25.7	27.4	24.3	24	24.3	28.8	25	29.7	28.2	30.7	29	29	30.2	29.7
Manganese, total	mg/L	0.093	0.142	0.164	0.184	0.166	0.122	0.195	0.184	0.157	0.127	0.134	0.139	0.159	0.127	0.151	0.118	0.135	0.141	0.141	0.138	0.158
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.006	0.004	0.005	0.005	0.004	0.002	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.004	0.004	0.006	0.004	0.004	0.004	0.004	0.004
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.006	0.002	0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	3.48	2.62	2.69	2.86	2.71	10.6	2.76	2.33	2.4	2.15	2.02	2.03	2.75	2.16	2.9	4.36	2.49	2.39	2.39	2.44	2.55
Selenium, total	mg/L	0.002	0.001	0.0009	0.0009	0.0008	0.0003	0.0009	0.0008	0.0007	0.0007	0.0007	0.0007	0.0008	0.0007	0.0008	0.0019	0.0008	0.001	0.001	0.0008	0.0008
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00031	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	20.2	19.6	20.6	24.2	22.8	54.6	23.8	21.4	22.4	20.1	18.4	18.2	21.2	19.2	22.3	24.4	26.1	24.4	24.4	25.4	23.1
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.064	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.016	0.012			0.005		0.037		<0.003		0.005	0.011	0.004	0.006		0.058	0.017		0.007	0.007	
Arsenic, dissolved	mg/L	0.0003	0.0003			0.0002		0.0002		0.0002		0.0002	0.0002	0.0002	0.0002		0.0003	0.0002		0.0002	0.0002	
Cadmium, dissolved	mg/L	0.00003	0.00001			0.00002		0.00005		0.00002		0.00002	0.00002	0.00003	0.00001		0.00005	0.00002		0.00001	0.00001	
Calcium, dissolved	mg/L	70.7	65.1			60.8		72.4		65.9		63.9	66.9	61.8	62.4		69.8	62.2		60.7	60.7	
Chromium, dissolved	mg/L	<0.001	<0.001			<0.001		<0.001		<0.001		<0.001	<0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Copper, dissolved	mg/L	0.0036	0.0021			0.0016		0.0031		0.0017		0.0014	0.0015	0.0018	0.0017		0.0049	0.0029		0.0019	0.0019	
Iron, dissolved	mg/L	0.038	0.044			0.016		0.076		0.01		0.018	0.021	0.015	0.016		0.035	0.039		0.022	0.022	
Lead, dissolved	mg/L	<0.0002	<0.0002			<0.0002		<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002	<0.0002	
Magnesium, dissolved	mg/L	23.6	23.9			24.3		29.4		27		26.4	26.7	25.5	25.5		25	23.8		23.7	23.7	
Manganese, dissolved	mg/L	0.086	0.128			0.139		0.171		0.141		0.125	0.139	0.138	0.113		0.093	0.108		0.109	0.109	
Mercury, dissolved	mg/L	<0.00002	<0.00002			<0.00002		<0.00002		<0.00002		<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002		<0.00002	<0.00002	
Molydenum, dissolved	mg/L	0.006	0.004			0.004		0.004		0.004		0.003	0.004	0.003	0.004		0.005	0.004		0.004	0.004	
Nickel, dissolved	mg/L	<0.001	<0.001			<0.001		<0.001		<0.001		<0.001	<0.001	<0.001	<0.001		0.001	<0.001		<0.001	<0.001	
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	3.52	2.57			2.35		2.61		2.46		2.26	2.27	2.18	2.23		3.45	2.27		2.17	2.17	
Selenium, dissolved	mg/L	0.002	0.001			0.0007		0.0007		0.0007		0.0007	0.0007	0.0007	0.0007		0.0017	0.0008		0.0008	0.0008	
Silver, dissolved	mg/L	<0.00002	<0.00002			<0.00002		<0.00002		<0.00002		<0.00002	<0.00002	<0.00002	<0.00002		<0.00002	<0.00002		<0.00002	<0.00002	
Sodium, dissolved	mg/L	21.1	19.4			21.1		22.8		22.2		20.5	20.3	19.3	19.7		22.2	20.5		20	20	
Thallium, dissolved	mg/L	<0.00005	<0.00005			<0.00005		<0.00005		<0.00005		<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Zinc, dissolved	mg/L	<0.005	<0.005			<0.005		<0.005		<0.005		<0.005	<0.005	<0.005	<0.005		0.013	<0.005		<0.005	<0.005	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		11/02/2011	12/02/2011	13/02/2011	14/02/2011	15/02/2011	26/02/2011	02/03/2011	03/03/2011	05/03/2011	08/03/2011	13/03/2011	16/03/2011	19/03/2011	22/03/2011	27/03/2011	29/03/2011	31/03/2011	02/04/2011	09/04/2011	15/04/2011	21/04/2011
pH (field)	pH units																					
pH (lab)	pH units	8.05		7.99		7.85	7.92	7.93	7.89	7.89	7.88	7.98	7.73	7.09	8.32	8.28	8.13	8.06	8.13	7.85	8.1	8.22
Hardness (from dissolved)	mg/L	263		264		266	284	284	288	303	305	479	1720	3050	298	288	258	260	269	264	257	272
Hardness (from total)	mg/L	295	322	310	313	295	273	278	281	318	331	529	1650	3040	320	309	272	267	274	280	268	285
Total Dissolved Solids	mg/L	320		330		350	370	370	370	390	380	640	2100	2900	350	370	330	350	350	360	350	310
Total Suspended Solids	mg/L	2		2		2	1	3	3	2	2	18	41	460	110	4	10	6	2	3	21	2
Alkalinity, total	mg/L	210		210		220	220	230	230	230	230	400	1200	1600	250	230	210	210	220	210	210	220
Sulphate, dissolved	mg/L	74		75		77	85	82	79	83	81	150	510	940	81	83	75	79	78	79	77	84
Chloride	mg/L	5.5		6.6		5.7	5.2	5	5.7	8.2	6.1	11	35	74	7.5	5.9	6.1	5.6	5.7	5.8	4.4	5.9
Fluoride	mg/L	0.46		0.46		0.47	0.46	0.47	0.48	0.5	0.49	0.81	1.94	4.71	0.49	0.48	0.49	0.51	0.48	0.47	0.49	0.51
Nitrite (N)	mg/L	<0.005		<0.005		<0.005	0.005	0.006	0.006	0.006	0.005	0.016	0.12	0.268	0.07	0.007	0.008	0.006	0.007	0.009	0.011	0.007
Nitrate (N)	mg/L	3.5		3.6		3.6	3.6	3.6	3.6	3.5	3.5	6.4	19.5	289	1.39	3.8	4.3	3.7	4.1	4	3.5	3.9
Ammonia	mg/L	0.034		0.043		0.029	0.03	0.037	0.026	0.044	0.02	0.06	0.19	0.38	0.18	0.005	<0.005	0.007	0.009	<0.005	0.013	0.007
Aluminum, total	mg/L	0.034	0.237	0.029	0.037	0.018	0.005	0.037	0.029	0.044	0.024	0.301	0.01	0.284	1.89	0.099	0.093	0.147	0.145	0.077	0.186	0.065
Arsenic, total	mg/L	0.0002	0.0001	0.0001	0.0002	0.0003	0.0002	0.0002	0.0002	0.0004	0.0003	0.0005	0.0013	0.0025	0.0012	0.0003	0.0003	0.0002	0.0002	0.0003	0.0004	0.0003
Cadmium, total	mg/L	0.00003	0.00002	<0.00001	0.00002	<0.00001	0.00002	0.00006	0.00006	0.00003	0.00002	0.0001	0.00016	0.0003	0.0002	0.00011	0.00004	0.00008	<0.00001	<0.00001	0.0001	0.00002
Calcium, total	mg/L	70.6	76.9	73.8	74.3	70.1	66	67.3	67.4	78.5	80.9	124	371	657	73	74.2	65.1	64.5	65.9	66	62.9	67.5
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.009
Copper, total	mg/L	0.0059	0.0036	0.0028	0.0037	0.0024	0.0021	0.0153	0.0105	0.0099	0.0057	0.114	0.0158	0.128	0.0819	0.0434	0.0114	0.0127	0.0059	0.0098	0.0156	0.0051
Iron, total	mg/L	0.07	0.069	0.057	0.075	0.059	0.01	0.076	0.061	0.093	0.051	0.594	0.02	0.621	3.07	0.19	0.145	0.227	0.194	0.13	0.27	0.185
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	0.0002	0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	28.8	31.5	30.4	30.9	29	26.2	26.7	27.3	29.5	31.3	53.2	177	340	33.4	30	26.6	25.7	26.5	27.9	27	28.3
Manganese, total	mg/L	0.149	0.152	0.148	0.155	0.151	0.123	0.13	0.129	0.14	0.127	0.196	1.55	3.38	2.19	0.082	0.08	0.075	0.08	0.082	0.117	0.13
Mercury, total	mg/L	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.005	0.007	0.023	0.042	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005
Nickel, total	mg/L	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.005	0.01	0.007	0.001	<0.001	0.001	<0.001	<0.001	0.001	0.006
Phosphorus, total	mg/L														0.164	0.02	0.021	0.053	0.016	0.018	0.032	0.018
Potassium, total	mg/L	2.38	2.71	2.54	2.58	2.47	2.31	2.51	2.51	2.62	2.78	5.19	17.4	34.2	2.8	2.57	2.63	2.65	2.4	2.5	2.61	2.43
Selenium, total	mg/L	0.0009	0.0009	0.0008	0.0009	0.0008	0.0007	0.0006	0.0006	0.001	0.0008	0.0013	0.0038	0.0066	0.0004	0.0008	0.0006	0.0006	0.0007	0.0007	0.0006	0.0007
Silver, total	mg/L	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	0.00004	<0.00002	0.00007	<0.00002	0.00007	0.00005	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	22.6	25.2	24	24.2	21.5	21	21.5	21.9	21.9	22.8	41.2	142	274	22.7	22.5	20.3	19.8	21.2	20.4	19.7	20.3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	0.008	0.009	<0.005	0.1	0.016	0.036	0.02	0.005	0.014	0.06	<0.005	<0.005	0.027	<0.005
Aluminum, dissolved	mg/L	0.006		0.008		0.008	<0.003	<0.003	<0.003	0.024	0.004	0.071	0.006	0.151	0.009	0.016	0.018	0.009	0.005	0.005	0.005	0.004
Arsenic, dissolved	mg/L	0.0002		0.0002		0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0012	0.0022	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cadmium, dissolved	mg/L	0.00008		0.00002		0.00009	0.00002	0.00002	0.00003	0.00007	0.00002	0.00011	0.00018	0.00038	0.00008	0.0001	0.00003	0.00002	<0.00001	<0.00001	0.00008	0.00003
Calcium, dissolved	mg/L	63.4		61.9		62.4	68.6	67.6	69.2	70.5	71	108	393	676	69.7	69.1	60.8	63.1	65.3	64	60.2	65.1
Chromium, dissolved	mg/L	<0.001		<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.0026		0.0025		0.0043	0.0017	0.0027	0.0027	0.0064	0.0029	0.0211	0.0143	0.0502	0.0037	0.0027	0.0043	0.003	0.0021	0.0024	0.0035	0.0021
Iron, dissolved	mg/L	0.03		0.036		0.026	<0.005	<0.005	<0.005	0.045	0.011	0.154	0.015	0.362	0.045	0.03	0.033	0.013	0.011	0.011	0.013	0.012
Lead, dissolved	mg/L	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	25.5		26.5		26.8	27.3	27.9	27.9	30.9	31	50.7	179	331	30.2	28.1	25.7	24.8	25.7	25.2	25.8	26.6
Manganese, dissolved	mg/L	0.138		0.13		0.135	0.097	0.089	0.107	0.132	0.12	0.173	1.47	3.26	1.42	0.075	0.071	0.06	0.061	0.072	0.093	0.12
Mercury, dissolved	mg/L	<0.00002		<0.00002		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.004		0.004		0.004	0.003	0.004	0.003	0.004	0.003	0.007	0.018	0.024	0.003	0.003	0.004	0.004	0.004	0.004	0.003	0.004
Nickel, dissolved	mg/L	<0.001		<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.005	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Phosphorus, dissolved	mg/L														<0.01	<0.01	0.018	0.014	<0.01	0.01	0.012	0.012
Potassium, dissolved	mg/L	2.25		2.19		2.4	2.36	2.53	2.41	3.21	2.67	5.22	18.6	35.5	2.47	2.4	2.56	2.33	2.24	2.29	2.34	2.36
Selenium, dissolved	mg/L	0.0008		0.0008		0.0008	0.0007	0.0007	0.0007	0.0007	0.0008	0.0012	0.0039	0.0069	0.0003	0.0007	0.0007	0.0007	0.0007	0.0007	0.0006	0.0007
Silver, dissolved	mg/L	<0.00002		<0.00002		0.00003	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	19.4		19.7		19.8	20.2	20.7	20.9	22.4	23.4	38.5	145	266	21.4	20.9	19.8	18.2	20.5	17.8	18.4	19.2
Thallium, dissolved	mg/L	<0.00005		<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005		<0.005		<0.005	<0.005	<0.005	0.011	0.01	<0.005	0.083	0.015	0.035	<0.005	<0.005	0.034	0.008	<0.005	<0.005	0.023	<0.005

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/04/2011**	**05/05/2011**	**14/05/2011**	**24/05/2011**	**29/05/2011**	**04/06/2011**	**16/06/2011**	**27/06/2011**	**01/07/2011**	**12/07/2011**	**16/07/2011**	**23/07/2011**	**31/07/2011**	**02/08/2011**	**07/08/2011**	**16/08/2011**	**28/08/2011**	**30/08/2011**	**07/09/2011**	**12/09/2011**	**19/09/2011**
pH (field)	pH units																			7.76	7.66	7.75
pH (lab)	pH units	7.85	7.61	8.13	8.25	8.12	8.04	8.21	8.2	8.05	8.09	7.91	7.98	8.24	8.2	7.97	8.13	8.01	8.05	8.29	8.13	8.11
Hardness (from dissolved)	mg/L	143	115	192	229	248	266	285	260	189	267	183	256	266	209	194	244	268	258	252	306	247
Hardness (from total)	mg/L	156	142	186	236	232	239	271	244	162	261	188	259	241	208	183	234	256	225	230	252	243
Total Dissolved Solids	mg/L	240	270	290	320	340	330	360	320	170	350	250	340	310	300	230	370	310	330	340	350	340
Total Suspended Solids	mg/L	3	93	10	<2	5	1	<1	3	2	<1	<1	<1	<1	3	<1	<1	<1	<1	<1	<1	<4
Alkalinity, total	mg/L	110	95	150	190	200	210	220	210	160	210	150	210	220	190	150	210	220	220	220	220	220
Sulphate, dissolved	mg/L	39	38	62	77	73	74		70	53	61	41	66	62		34		54				57
Chloride	mg/L	4.6	3.1	4.2	4.7	4.9						3.1			3.9					4.3	4.7	4.6
Fluoride	mg/L	0.28	0.23	0.37	0.44	0.49	0.48					0.33			0.41							
Nitrite (N)	mg/L	0.013	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.109	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	1.42	1.39	2.4	2.78	3.1	3	2.52	1.68	1.25	1.67	0.96	1.45	1.39	0.9	0.73	0.36	1.11	0.91	1.08	1.1	1.09
Ammonia	mg/L	0.016	0.012	0.011	0.015	0.016	0.016	0.007	0.019	0.007	0.008	0.005	0.014	0.014		0.019	0.016	0.009	0.007	0.008	0.017	0.009
Aluminum, total	mg/L	0.127	10.8	0.454	0.045	0.076	0.02	0.123	0.041	0.09	0.02	0.09	0.021	0.026	0.096	0.051	0.07	0.013	0.026	0.012	0.012	0.19
Arsenic, total	mg/L	0.0004	0.004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0002	0.0004	<0.0001	0.0002	0.0003	0.0004	0.0004	0.0003	0.0003	0.0002	0.0002	0.0003
Cadmium, total	mg/L	0.00006	0.00011	0.00003	0.00002	<0.00001	0.00003	0.00004	0.00003	0.00005	<0.00001	0.00002	<0.00001	<0.00001	0.00002	0.00002	0.00004	0.00001	0.00004	0.00001	0.00001	0.00003
Calcium, total	mg/L	37	31.5	44.6	55.3	55.5	56.9	62.9	58.4	37.5	61.1	47	61.3	57	50.8	42.2	57.7	61.3	54.2	54.6	57.7	56.9
Chromium, total	mg/L	<0.001	0.017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.0168	0.0312	0.0143	0.0046	0.006	0.0022	0.0028	0.0089	0.008	0.005	0.0119	0.0042	0.0028	0.0096	0.0096	0.0047	0.0029	0.0025	0.0022	0.0024	0.0088
Iron, total	mg/L	0.168	13.5	0.611	0.098	0.235	0.044	0.154	0.099	0.142	0.048	0.183	0.047	0.063	0.169	0.091	0.136	0.03	0.052	0.03	0.029	0.335
Lead, total	mg/L	<0.0002	0.0028	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	15.6	15.4	18.2	23.7	22.6	23.6	27.6	23.8	16.7	26.5	17.1	25.6	24.1	19.9	18.8	21.8	24.9	21.8	22.8	26.3	24.6
Manganese, total	mg/L	0.081	0.204	0.147	0.077	0.097	0.07	0.078	0.09	0.064	0.078	0.077	0.079	0.082	0.075	0.057	0.075	0.073	0.064	0.065	0.069	0.111
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.002	0.002	0.003	0.004	0.004	0.004	0.005	0.004	0.003	0.004	0.003	0.004	0.004	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, total	mg/L	0.002	0.016	0.002	0.002	0.002	<0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.027	0.004	0.002	0.001	0.001	0.001	0.001	0.001
Phosphorus, total	mg/L	0.082	0.146	0.042	0.011	0.017	<0.01	0.017	0.016	0.022	<0.01	0.012	<0.01	<0.01	0.014	0.017	<0.01		<0.01	<0.01	<0.01	0.025
Potassium, total	mg/L	3.47	3	1.98	2.1	2.14	2.04	2.43	2.12	1.48	2.19	1.64	2.19	2.18	1.81	1.67	2.05	2.07	2.05	2.07	2.26	2.21
Selenium, total	mg/L	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005	0.0006	0.0004	0.0003	0.0005	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0005
Silver, total	mg/L	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	10.5	8.75	13	17.3	17	17.4	20.6	18.2	12.5	19.9	12.4	19.1	18	14.9	13.9	15.8	18.1	15.6	17.4	19.8	18.2
Thallium, total	mg/L	<0.00005	0.00009	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	0.034	<0.005	<0.005	<0.005	<0.005	0.006	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.013	<0.005	0.006	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.066	0.085	0.043	0.013	0.011	0.008	0.008	0.019	0.03	0.017	0.032	0.02	0.012	0.029	0.054	0.012	0.007	0.01	0.009	0.007	0.013
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0004	0.0003	0.0004	0.0003	0.0003	0.0003	0.0004	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002
Cadmium, dissolved	mg/L	0.00002	0.00003	0.0001	0.00003	0.00002	<0.00001	0.00001	0.00002	0.00002	0.00002	0.00001	0.00001	0.00002	0.00002	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002
Calcium, dissolved	mg/L	34.8	27.4	46.3	53.7	58.6	62.2	69.6	62.6	46.8	63.5	44.7	61.4	63.7	50.1	46.9	59.9	64	61.5	60.2	77.4	58.9
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.0125	0.0127	0.0069	0.003	0.0026	0.0022	0.0022	0.0043	0.0051	0.0038	0.0057	0.0069	0.003	0.0064	0.0066	0.0027	0.0026	0.0023	0.0025	0.0023	0.0033
Iron, dissolved	mg/L	0.096	0.203	0.068	0.033	0.022	0.024	0.017	0.038	0.063	0.038	0.069	0.045	0.027	0.054	0.092	0.026	0.027	0.025	0.031	0.03	0.039
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	13.6	11.4	18.7	23.1	24.8	26.8	27.1	25.1	17.5	26.4	17.3	24.9	26.1	20.4	18.6	23	26.2	25.4	24.6	27.4	24.3
Manganese, dissolved	mg/L	0.064	0.062	0.088	0.069	0.075	0.072	0.074	0.084	0.055	0.079	0.051	0.086	0.079	0.065	0.052	0.07	0.07	0.068	0.069	0.071	0.066
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.002	0.001	0.003	0.003	0.004	0.004	0.004	0.004	0.002	0.003	0.003	0.004	0.004	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.002	0.001	0.001	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L	0.038	0.022	0.015	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	0.011	<0.01	<0.01	0.011	0.011	0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	2.89	1.84	1.95	2.17	2.37	2.36	2.43	2.25	1.51	2.38	1.51	2.2	2.35	1.91	1.58	2.12	2.33	2.25	2.27	2.48	2.2
Selenium, dissolved	mg/L	0.0004	0.0003	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004	0.0005	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	9.25	7.72	13.8	16.4	18.6	20	20.7	19.1	12.9	19.9	12.4	18.9	19.5	15.3	13.5	17.5	19.2	19.2	19	20.7	18.5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**24/09/2011**	**06/10/2011**	**17/10/2011**	**24/10/2011**	**30/10/2011**	**13/11/2011**	**22/11/2011**	**28/11/2011**	**05/12/2011**	**13/12/2011**	**18/12/2011**	**27/12/2011**	**02/01/2012**	**09/01/2012**	**15/01/2012**	**22/01/2012**	**31/01/2012**	**07/02/2012**	**14/02/2012**	**20/02/2012**	**25/02/2012**
pH (field)	pH units	7.71	7.6	7.68	7.46	7.5	7.53							7.45	7.28	7.48	6.02	6.04	6.34	7.43	7.46	7.51
pH (lab)	pH units	8.17	8.27	8	8.23	8.21	8.35	7.97	8.13	7.87	8.12	8.05	8.19	8.22	8.1	8.01	8.13	8.12	8.44	8.34	7.99	8.12
Hardness (from dissolved)	mg/L	253	265	226	249	242	207	258	262	241	246	254	260	239	259	246	262	253	246	247	237	250
Hardness (from total)	mg/L	225	251	218	204	219	223	242	244	226	244	336	244	221	235	278	251	252	238	224	244	248
Total Dissolved Solids	mg/L	330	280	270	300	320	294	316	316	298	316	310	296	298	300	314	326	310	306	304	304	320
Total Suspended Solids	mg/L	<4	<4	<4	<1	<4	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<4.0	<1.0	2.7	6	<4.0	<4.0	<4.0	<4.0	<4.0
Alkalinity, total	mg/L	220	220	200	220	220	201	227	223	221	221	222	224	225	223	223	226	228	230	229	226	218
Sulphate, dissolved	mg/L	54	59	52	55				57.4	58.3		54.1					58.7	62.2	60.7		60.4	54.8
Chloride	mg/L	4.3	4.4	5	4.4	3.7	5	4.3	4.4	4	4.1	3.9	3.9	<0.5	3.8	4.1	3.8	4.3	4.1	4	3.8	5.4
Fluoride	mg/L								0.54			0.53					0.55	0.55	0.55		0.58	0.55
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	1.04	1.17	1.89	1.09	1.04	2.23	1.19	1.2	0.932	1.12	1.17	1.15	<0.020	1.26	1.32	1.37	1.25	1.13	1.27	1.23	1.32
Ammonia	mg/L	0.015	0.015	0.01	0.019	0.009	0.0089	0.0106	0.0167	0.0178	0.0102	0.316	0.0231	0.021	0.0154	0.0132	<0.0050	0.0074	<0.0050	0.0065	0.0204	0.0089
Aluminum, total	mg/L	0.012	0.014	0.037	0.028	0.011	0.017	0.019	0.012	0.014	0.037	0.009	0.012	0.013	0.012	0.017	0.163	0.023	0.015	0.073	0.034	0.049
Arsenic, total	mg/L	0.0002	0.0002	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002
Cadmium, total	mg/L	<0.00001	0.00001	0.00004	0.00008	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00001	0.00002	<0.00001	<0.00001	<0.00001	0.00002
Calcium, total	mg/L	52.7	59.3	54.5	42.9	50	55.6	57	57.3	52.8	58.4	89.3	56.2	51.5	54.9	65.1	58	59.6	55	51.7	56	57.2
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.0022	0.0026	0.0082	0.0028	0.0025	0.0038	0.0017	0.0024	0.0021	0.0018	0.0024	0.0017	0.0018	0.0018	0.0039	0.0051	0.0036	0.0016	0.0023	0.0019	0.0065
Iron, total	mg/L	0.034	0.037	0.079	0.054	0.029	0.037	0.031	0.036	0.035	0.026	0.038	0.028	0.026	0.034	0.041	0.24	0.051	0.03	0.138	0.061	0.081
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	22.6	24.9	19.9	23.6	22.8	20.5	24.2	24.6	22.9	23.9	27.5	25.3	22.3	23.9	27.9	25.7	24.9	24.5	23.1	25.3	25.5
Manganese, total	mg/L	0.056	0.06	0.031	0.051	0.052	0.028	0.059	0.06	0.051	0.049	0.046	0.049	0.039	0.042	0.046	0.087	0.073	0.048	0.049	0.041	0.042
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.004	0.004	0.006	0.004	0.004	0.006	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004
Nickel, total	mg/L	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.002	0.001	<0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Phosphorus, total	mg/L	<0.01	0.012	<0.01	<0.01	0.011	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	0.041	0.019	0.015	<0.01	<0.01	0.011	0.017
Potassium, total	mg/L	2	2.15	3	2.12	2.09	2.77	2.37	2.22	2.02	2.11	2.16	2.13	1.81	2.03	2.59	2.4	2.3	2.14	1.99	2.19	2.23
Selenium, total	mg/L	0.0004	0.0004	0.0007	0.0004	0.0004	0.0006	0.0005	0.0004	0.0005	0.0004	0.0007	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0005	0.0006	0.0006
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	17.2	18.5	18.3	18.4	17.9	18.2	17.9	18.9	17.5	18	20.2	18.8	16.8	18.2	20.8	19.3	18.8	18.4	17	18.8	19.1
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	<0.005	0.01	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.012	0.009	0.007	0.006	0.004	0.0103	0.0068	0.0072	0.0048	0.0047	0.0031	0.0032	0.0034	0.015	0.0049	0.0056	0.0038	0.0051	0.0034	0.0039	0.0159
Arsenic, dissolved	mg/L	0.0002	0.0003	0.0003	0.0002	0.0002	0.0003	0.00021	0.00025	0.00021	0.00022	0.00022	0.00026	0.00022	0.0002	0.00021	0.00026	0.00022	0.00021	0.00023	0.00028	0.00024
Cadmium, dissolved	mg/L	<0.00001	0.00004	0.00002	0.00001	<0.00001	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	0.000061
Calcium, dissolved	mg/L	62	63	56.6	58.3	55.9	49.8	60.9	60.8	56.6	56.7	59.3	61.3	54.3	60.6	55.7	60.2	57.9	55.8	56.9	53.8	56.9
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0022	0.0023	0.0045	0.0021	0.0019	0.00396	0.00189	0.00234	0.00182	0.00177	0.00167	0.00171	0.00164	0.00198	0.00169	0.0022	0.00211	0.00159	0.00149	0.00163	0.0122
Iron, dissolved	mg/L	0.019	0.032	0.015	0.015	0.013	0.0097	0.0208	0.0159	0.01	0.0114	0.0102	0.0111	0.0067	0.0223	0.0082	0.0092	0.0052	0.0103	0.0118	0.0063	0.029
Lead, dissolved	mg/L	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	23.8	26.1	20.6	25	24.8	20.2	25.7	26.8	24.2	25.2	25.8	26	25.1	26.1	25.9	27.1	26.4	25.9	25.5	24.9	26.1
Manganese, dissolved	mg/L	0.06	0.069	0.026	0.048	0.055	0.0242	0.0569	0.0611	0.0486	0.0475	0.0433	0.0473	0.0405	0.0448	0.0373	0.0428	0.0548	0.0403	0.0446	0.0344	0.0381
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.004	0.004	0.007	0.004	0.004	0.0053	0.0041	0.0043	0.0045	0.0042	0.0041	0.0043	0.0043	0.0043	0.0043	0.0044	0.0043	0.0043	0.0044	0.0043	0.0044
Nickel, dissolved	mg/L	<0.001	0.002	0.001	<0.001	0.001	0.0011	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.028
Potassium, dissolved	mg/L	2.4	2.37	2.98	2.37	2.32	3.08	2.11	2.46	2.17	2.21	2.23	2.24	2.18	2.25	2.15	2.54	2.3	2.19	2.19	2.07	2.27
Selenium, dissolved	mg/L	0.0004	0.0005	0.0006	0.0005	0.0005	0.00081	0.00048	0.00052	0.00054	0.00052	0.00048	0.00054	0.00055	0.0006	0.00065	0.0006	0.00058	0.00055	0.00055	0.00056	0.0006
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	17.9	20.3	19.2	19.6	19.6	18.1	20.1	20.8	18.7	19.2	19.6	20.2	19.3	19.6	19.7	20.4	19.8	19.3	18.7	18.5	19.4
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.005	0.012	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0054	<0.0050	0.0058

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		05/03/2012	12/03/2012	19/03/2012	24/03/2012	27/03/2012	28/03/2012	02/04/2012	09/04/2012	13/04/2012	14/04/2012	15/04/2012	16/04/2012	17/04/2012	18/04/2012	20/04/2012	21/04/2012	22/04/2012	23/04/2012	24/04/2012	25/04/2012	26/04/2012
pH (field)	pH units	7.39	7.42	7.57				7.29	7.58	7.64	6.77	7.61	7.78	7.87	7.93	7.79	7.88	7.78	7.74	7.75	7.68	7.76
pH (lab)	pH units	8.32	8.11	8.16	8.23	8.26	8.32	8.32	8.15	8.25	8.04	8.16	8.08					8.11		8.23		8.11
Hardness (from dissolved)	mg/L	247	260	243	272	256	250	235	215	200	234	226	206					222		220		217
Hardness (from total)	mg/L	249	251	248	258	246	256	242	213	197	228	231	263					207		208		215
Total Dissolved Solids	mg/L	320	288	324	314	312	332	322	292	266	292	290	276					316		308		312
Total Suspended Solids	mg/L	3.9	5.1	4.2	2.7	2.3	2.3	9.6	13	80.4	19	18.9	985					6.8		4.7		4.1
Alkalinity, total	mg/L	219	229	228	230	227	227	227	198	178	207	204	177					176		182		174
Sulphate, dissolved	mg/L	62.3	57.3	64.8	61	62.5	56.5	59.4	47.2	48.1	50.5	48.9	46.1					52.2		47.1		48.2
Chloride	mg/L	3.9	4	4.2	3.9	3.7	3.4	3.4	3.3	3.7	4.5	4.2	4.9					5.1		5.3		4.8
Fluoride	mg/L	0.56	0.49	0.56	0.55	0.55	0.57	0.57	0.51	0.42	0.51	0.48	0.41					0.33		0.35		0.35
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	0.007	0.005	<0.0050	<0.0050	0.0075					0.0073		0.0067		0.0073
Nitrate (N)	mg/L	1.28	1.3	1.19	1.14	1.91	1.29	1.2	1.13	1.55	1.93	1.89	3.43					4.17		4.12		3.97
Ammonia	mg/L	0.0102	0.0142	<0.0050	0.0063	0.01	0.0176	0.0061	0.0112	0.16	0.015	0.0057	0.014					0.014		0.0093		0.013
Aluminum, total	mg/L	0.029	0.076	0.09	0.006	0.045	0.039	0.08	0.75	1.55	0.452	0.463	16.6					0.142		0.19		0.16
Arsenic, total	mg/L	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0006	0.00093	0.00056	0.00053	0.00616					0.00042		0.00042		0.00042
Cadmium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	0.00005	0.00001	0.00001	0.00002	0.000038	0.000016	0.000016	0.000433					0.00001		0.000024		0.000029
Calcium, total	mg/L	58.5	58.5	56	57.4	55.3	57.5	52.1	48.6	45.7	56	56.5	64.1					53		53.4		55.6
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.0010	<0.0010	0.0247					<0.0010		<0.0010		<0.0010
Copper, total	mg/L	0.0018	0.0019	0.0028	0.0021	0.0032	0.0018	0.0027	0.0095	0.0207	0.00711	0.00657	0.212					0.0239		0.0255		0.0256
Iron, total	mg/L	0.07	0.109	0.146	0.068	0.081	0.06	0.144	0.937	2.28	0.664	0.685	26.8					0.221		0.261		0.24
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.00068	<0.00020	<0.00020	0.00746					<0.00020		0.00069		0.00022
Magnesium, total	mg/L	25	25.4	26.3	27.9	26.2	27.3	27.1	22.2	20.1	21.5	21.7	25.1					18		18		18.5
Manganese, total	mg/L	0.052	0.05	0.057	0.045	0.045	0.049	0.06	0.082	0.355	0.101	0.106	5.02					0.0523		0.056		0.0506
Mercury, total	mg/L	<0.000010	0.000205	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010					<0.000010		<0.000010		<0.000010
Molybdenum, total	mg/L	0.004	0.004	0.004	0.005	0.004	0.004	0.005	0.004	0.0044	0.0053	0.0057	0.0095					0.0053		0.0051		0.0054
Nickel, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.0033	0.0014	0.0014	0.0295					0.0012		0.0012		0.0012
Phosphorus, total	mg/L	0.01	<0.01	0.012	<0.01	0.019	<0.01	0.014	0.041	0.096	0.03	0.031	0.71					0.022		0.023		0.019
Potassium, total	mg/L	2.1	2.11	2.19	2.28	2.14	2.32	2.24	2.35	3.28	3.04	2.9	5.88					3.3		3.27		3.44
Selenium, total	mg/L	0.0006	0.0006	0.0005	0.0006	0.0005	0.0006	0.0006	0.0004	0.00044	0.00051	0.00062	0.00125					0.00117		0.00138		0.00155
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	0.00018					<0.000020		<0.000020		<0.000020
Sodium, total	mg/L	18.4	18.3	19.2	20.6	19	19.8	19.1	16.1	15	17.4	17.4	15.2					16		15.7		16.5
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	0.000137					<0.000050		<0.000050		<0.000050
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0079	<0.0050	<0.0050	0.0859					<0.0050		<0.0050		<0.0050
Aluminum, dissolved	mg/L	0.003	0.0036	0.0032	<0.0030	0.0116	<0.0030	<0.0030	0.0036	0.0062	0.0037	0.0056	0.0061					0.0129		0.0138		0.0243
Arsenic, dissolved	mg/L	0.00023	0.00019	0.00023	0.00027	0.00024	0.00019	0.00025	0.00025	0.00033	0.00031	0.00033	0.00036					0.0004		0.00038		0.0004
Cadmium, dissolved	mg/L	<0.000010	<0.000010	0.00001	<0.000010	0.000065	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010					0.000015		0.000021		0.000021
Calcium, dissolved	mg/L	56.1	59.6	54.1	63.5	59	56.4	52.6	49.2	46.9	56.2	53.9	51.1					57.9		57.8		56
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					<0.0010		<0.0010		<0.0010
Copper, dissolved	mg/L	0.00142	0.00142	0.00167	0.00171	0.00299	0.0014	0.00172	0.00316	0.00593	0.00365	0.00397	0.0108					0.0209		0.021		0.0235
Iron, dissolved	mg/L	0.0091	0.0093	0.0094	0.0102	0.0091	0.0061	0.0092	0.0152	0.0203	0.0163	0.028	0.0246					0.0478		0.0487		0.0593
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020					<0.00020		<0.00020		<0.00020
Magnesium, dissolved	mg/L	26	27	26.2	27.6	26.3	26.5	25.1	22.5	20	22.7	22.2	19.1					18.8		18.4		18.7
Manganese, dissolved	mg/L	0.0432	0.0447	0.049	0.044	0.0411	0.0436	0.0441	0.0457	0.0266	0.0494	0.0706	0.0054					0.0286		0.0279		0.0321
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010					<0.000010		<0.000010		<0.000010
Molydenum, dissolved	mg/L	0.0044	0.0047	0.0045	0.0043	0.0042	0.0043	0.0045	0.004	0.0045	0.0053	0.0056	0.0053					0.0053		0.0051		0.0051
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					0.0011		0.0011		0.0011
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.02	0.018	0.011	0.011	0.017					0.012		0.012		0.013
Potassium, dissolved	mg/L	2.25	2.31	2.19	2.28	2.23	2.16	2.02	2.24	3.21	2.92	2.9	3.78					3.5		3.42		3.43
Selenium, dissolved	mg/L	0.00059	0.00059	0.00056	0.00064	0.00061	0.0006	0.00061	0.00047	0.00061	0.00071	0.00075	0.00118					0.00166		0.00162		0.00159
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020					<0.000020		<0.000020		<0.000020
Sodium, dissolved	mg/L	19	19.5	19.1	19.9	19.1	18.7	17.8	16.3	15.3	18.2	18	16.1					16.8		16.4		16.7
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050					<0.000050		<0.000050		<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					<0.0050		<0.0050		<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**27/04/2012**	**28/04/2012**	**29/04/2012**	**30/04/2012**	**01/05/2012**	**02/05/2012**	**03/05/2012**	**07/05/2012**	**10/05/2012**	**16/05/2012**	**24/05/2012**	**02/06/2012**	**08/06/2012**	**17/06/2012**	**19/06/2012**	**22/06/2012**	**28/06/2012**	**05/07/2012**	**09/07/2012**	**18/07/2012**	**24/07/2012**
pH (field)	pH units	7.99	7.73	7.3	7.65	7.82	7.84	7.75	7.86	7.93	7.99	7.9	7.86	7.83	7.71	7.72	7.82	7.71	7.54	7.28	7.47	7.78
pH (lab)	pH units								8.1		8.35	8.25	8.17	8.31	8.24	8.41	8.13	8.19	8.42	8.47	8.32	7.96
Hardness (from dissolved)	mg/L								204		196	219	244	233	223	233	234	247	222	236	244	240
Hardness (from total)	mg/L								197		196	228	217	249	213	241	238	239	214	239	239	236
Total Dissolved Solids	mg/L								278		282	284	300	298	324	284	314	294	302	302	300	314
Total Suspended Solids	mg/L								6.2		4.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0
Alkalinity, total	mg/L								185		180	202	219	214	198	213	215	223	216	231	226	220
Sulphate, dissolved	mg/L								45.5		45.1	47.8	50.7	52.1	46.1	47.3	52	50.9	44.1	52.2	46.8	45.3
Chloride	mg/L								4		3.2	3.3	3	3.5	2.9	3.1	3.3	3.3	2.8	3.7	3	2.9
Fluoride	mg/L								0.4		0.42	0.5	0.51	0.53	0.47	0.48	0.53	0.53	0.49	0.53	0.52	0.54
Nitrite (N)	mg/L								<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L								1.26		0.876	0.799	0.722	0.619	0.603	0.633	0.678	0.663	0.552	0.558	0.411	0.512
Ammonia	mg/L								0.0097		0.0068	0.021	0.079	0.073	0.1	0.094	0.016	0.039	0.013	0.013	0.083	0.056
Aluminum, total	mg/L								0.186		0.0877	0.0321	0.0078	0.0149	0.0336	0.0163	0.0083	0.0121	0.0232	0.0105	0.0066	0.0091
Arsenic, total	mg/L								0.0004		0.00041	0.00021	0.00024	0.00025	0.00033	0.00029	0.00029	0.00027	0.00026	0.00026	0.00026	0.00026
Cadmium, total	mg/L								0.000013		0.000012	0.000013	<0.000010	<0.000010	0.000023	0.000017	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010
Calcium, total	mg/L								49.6		45.2	51.7	49.3	56.4	49.2	55.7	54.1	54.5	47.7	53.7	55.6	53.5
Chromium, total	mg/L								<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L								0.00801		0.00859	0.00531	0.00241	0.00306	0.00431	0.211	0.00281	0.00256	0.0033	0.00248	0.00218	0.00241
Iron, total	mg/L								0.271		0.146	0.0648	0.02	0.0302	0.0909	0.0437	0.0234	0.033	0.0532	0.0284	0.0202	0.0205
Lead, total	mg/L								<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L								17.9		20.2	24.1	22.9	26.3	21.9	24.8	25	25.1	23.1	25.5	24.3	24.9
Manganese, total	mg/L								0.0592		0.0433	0.0463	0.0491	0.06	0.0563	0.145	0.0645	0.0687	0.0582	0.0462	0.0575	0.0593
Mercury, total	mg/L								<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L								0.0042		0.004	0.0037	0.0041	0.0045	0.0037	0.0042	0.0047	0.0045	0.0039	0.0047	0.0054	0.0046
Nickel, total	mg/L								0.0012		0.0016	0.0012	<0.0010	0.0011	0.0013	0.0015	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L								0.018		0.015	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, total	mg/L								2.44		2.1	2.13	2.08	2.15	1.9	2.13	2.2	2.09	1.81	2.1	2.09	2.13
Selenium, total	mg/L								0.00043		0.00049	0.00057	0.00041	0.00037	0.00042	0.00034	0.00047	0.00051	0.00046	0.00042	0.00042	0.00043
Silver, total	mg/L								<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L								14.6		15	17.4	16.7	18.8	15.5	17.9	18.1	18.3	16.6	18.5	17.9	18.5
Thallium, total	mg/L								<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L								<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L								0.0161		0.0228	0.0114	0.0071	0.0061	0.0114	0.0078	0.0057	0.0046	0.0063	0.004	0.0057	0.0066
Arsenic, dissolved	mg/L								0.00033		0.00031	0.00028	0.00028	0.00024	0.00032	0.00026	0.00026	0.00024	0.00025	0.00027	0.00025	0.00026
Cadmium, dissolved	mg/L								0.000015		0.000013	0.000017	<0.000010	<0.000010	0.000013	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L								49.8		45.4	50.5	54.7	53.4	51.5	53.8	53.1	56.1	53	53.8	55.9	54.4
Chromium, dissolved	mg/L								<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L								0.00756		0.00768	0.00418	0.00274	0.00294	0.0038	0.00311	0.00276	0.00227	0.00232	0.0021	0.00219	0.00217
Iron, dissolved	mg/L								0.0457		0.0625	0.0341	0.0199	0.0158	0.0368	0.0257	0.0178	0.0173	0.0218	0.0138	0.0162	0.0143
Lead, dissolved	mg/L								<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L								19.3		20	22.6	26	24.1	23	23.9	24.6	25.9	21.8	24.7	25.3	25.3
Manganese, dissolved	mg/L								0.0481		0.0373	0.0463	0.0544	0.0568	0.0567	0.0607	0.061	0.0689	0.0573	0.0423	0.0607	0.0581
Mercury, dissolved	mg/L								<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L								0.0045		0.0036	0.0042	0.0047	0.0042	0.004	0.0041	0.0044	0.0046	0.0039	0.0046	0.0046	0.0047
Nickel, dissolved	mg/L								0.0011		0.0014	0.001	0.0011	0.001	0.0013	0.0011	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L								<0.01		<0.01	0.025	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L								2.63		1.97	2.11	2.23	2.14	2.01	2.1	2.11	2.16	1.97	2.06	2.1	2.15
Selenium, dissolved	mg/L								0.00063		0.00055	0.00049	0.0004	0.00051	0.00041	0.00049	0.00047	0.00051	0.00044	0.00053	0.00039	0.00042
Silver, dissolved	mg/L								<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L								15.7		14.9	16.7	18.9	18	16.8	17.3	17.7	19.1	15.5	18.3	18.8	18.7
Thallium, dissolved	mg/L								<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L								<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		30/07/2012	07/08/2012	16/08/2012	23/08/2012	30/08/2012	03/09/2012	05/09/2012	05/09/2012	09/09/2012	17/09/2012	19/09/2012	24/09/2012	03/10/2012	12/10/2012	16/10/2012	19/10/2012	25/10/2012	02/11/2012	09/11/2012	18/11/2012	24/11/2012
pH (field)	pH units	7.85	7.89	7.6	7.61	7.99	7.7	6.45		7.6	7.71	7.6	7.83	8.89	8.18	7.8	8.02	7.9		7.4	7.29	7.42
pH (lab)	pH units	8.28	8.33	8.39	8.25	8.33	8.25		8.3	8.22	8.18	8.18	8.33	8.33	8.03	8.23	8.09	8.04	7.98	8.1	8.15	8.16
Hardness (from dissolved)	mg/L	237	237	238	235	238	237		225	191	233	231	231	231		224	236	238	236	242	247	234
Hardness (from total)	mg/L	233	247	239	241	236	236		236	192	214	219	227	226	229	228	249	243	245	240	242	258
Total Dissolved Solids	mg/L	304	306	314	326	290	296		314	250	302	296	284	308	306	302	328	322	316	302	288	292
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	2.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	<1.0	<1.0
Alkalinity, total	mg/L	226	227	224	224	221	222		226	186	215	216	217	223	211	214	219	228	221	221	227	227
Sulphate, dissolved	mg/L	50.2	45.7	45.9	46.1	45.6	46.2		48	32.1	42	45.5	43.1	46.7	42	45.6	46.2	47.5	47.4	48.5	50	48.7
Chloride	mg/L	3.2	3.3	3	3.3	2.8	2.7		3.2	2.7	2.9	3.2	2.9	3.1	2.9	3	3.1	3.2	3.1	3.1	3.7	3.2
Fluoride	mg/L	0.58	0.6	0.54	0.55	0.57	0.56		0.55	0.45	0.51	0.49	0.52	0.53	0.5	0.47	0.54	0.52	0.52	0.57	0.52	0.53
Nitrite (N)	mg/L	<0.0050	0.0052	<0.0050	<0.050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0153	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.537	0.521	0.508	0.51	0.491	0.483		0.519	0.338	0.488	0.507	0.541	0.445	0.502	0.53	0.863	0.624	1.06	0.862	0.654	0.681
Ammonia	mg/L	0.024	0.011	0.013	0.012	0.0072	0.0069		0.017	0.073	0.082	0.11	0.017	0.0225	0.015	0.012	0.015	0.0087	0.0091	0.022	0.0068	0.013
Aluminum, total	mg/L	0.0055	0.017	0.0068	0.0049	0.0036	0.0046		0.0047	0.0428	0.0117	0.0052	0.0048	0.0047	0.0073	0.0068	0.0052	0.0555	0.022	0.00434	0.0058	0.016
Arsenic, total	mg/L	0.00028	0.00025	0.00026	0.00026	0.00023	0.00027		0.00024	0.00032	0.00024	0.00024	0.00025	0.00023	0.00028	0.00025	0.00022	0.00032	0.00043	0.000241	0.00028	0.00021
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.0000050	<0.000010	<0.000010
Calcium, total	mg/L	53.1	55.3	55.1	54.5	53.6	52.9		54.6	44.4	47	50	52.5	51.4	51.8	51.6	60.4	54.7	54.6	55.2	55.5	58.1
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0001	<0.0010	<0.0010
Copper, total	mg/L	0.00206	0.00211	0.00201	0.00244	0.00296	0.00269		0.00227	0.00457	0.00279	0.00369	0.00223	0.00224	0.00274	0.00227	0.00204	0.00313	0.00199	0.00166	0.00159	0.00226
Iron, total	mg/L	0.0172	0.0265	0.0186	0.0203	0.018	0.022		0.0244	0.0999	0.022	0.0274	0.0241	0.0224	0.0334	0.0268	0.0346	0.121	0.0568	0.0194	0.0206	0.0491
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.0000050	<0.00020	<0.00020
Magnesium, total	mg/L	24.4	26.4	24.5	25.5	24.8	25.3		24.1	19.8	23.5	22.9	23.4	23.7	24.2	24.2	23.8	25.8	26.4	24.7	25	27.4
Manganese, total	mg/L	0.0561	0.0585	0.053	0.052	0.0524	0.0562		0.0533	0.0575	0.0501	0.0477	0.047	0.0452	0.0461	0.0458	0.0574	0.0653	0.0638	0.0446	0.0387	0.0502
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molybdenum, total	mg/L	0.0045	0.0047	0.0046	0.0048	0.0049	0.0046		0.0046	0.0037	0.0042	0.0045	0.0047	0.0047	0.0045	0.0046	0.0045	0.0046	0.0045	0.00392	0.0044	0.0049
Nickel, total	mg/L	<0.0010	0.001	<0.0010	<0.0010	<0.0010	0.0013		<0.0010	0.0018	0.0014	0.0012	<0.0010	0.0011	0.0014	0.0012	0.001	0.0014	0.0013	0.000836	<0.0010	0.0012
Phosphorus, total	mg/L	<0.01	0.011	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	0.011		<0.01	<0.01
Potassium, total	mg/L	2.11	2.24	2.11	2.22	2.3	2.44		2.15	1.84	2.09	2.13	2.11	2.1	2.05	2.06	2.05	2.26	2.19	2.21	2.37	2.29
Selenium, total	mg/L	0.00047	0.00039	0.00044	0.0004	0.00042	0.00039		0.00041	0.00028	0.00037	0.00045	0.00048	0.00043	0.00048	0.00039	0.00049	0.00036	0.0004	0.000406	0.00056	0.0004
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.0000050	<0.000020	<0.000020
Sodium, total	mg/L	18.3	19.6	18.3	19.2	18.6	19.6		17.9	14.7	17.2	17.2	17.5	17.9	17.8	17.9	17.4	18.6	18.5	17.4	18	19.1
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.0000020	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.00037	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0039	0.0107	0.0037	0.0088	0.0046	0.0035		0.0042	0.0156	0.0092	0.0047	0.0035	0.005		0.0041	0.0048	0.004	0.0034	0.0053	0.0032	0.0048
Arsenic, dissolved	mg/L	0.00024	0.00022	0.00025	0.00023	0.00026	0.00024		0.00026	0.00026	0.00041	0.00028	0.00022	0.00021		0.00024	0.00026	0.00022	0.00024	0.000276	0.00024	0.00023
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	0.000005	<0.000010	<0.000010
Calcium, dissolved	mg/L	53	54.9	54.8	52.4	54.1	53		51.1	44.5	53.4	53.8	54.1	51.7		51.4	52.6	54.3	53.3	53.8	56.8	52.4
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.00010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00212	0.00195	0.00196	0.00198	0.00235	0.00206		0.00236	0.00437	0.00284	0.00251	0.00222	0.00233		0.00242	0.00205	0.00197	0.00189	0.00175	0.00172	0.00226
Iron, dissolved	mg/L	0.0159	0.0172	0.0166	0.0168	0.0194	0.0184		0.0217	0.048	0.0202	0.0228	0.0215	0.0213		0.0211	0.0311	0.0233	0.0215	0.0167	0.0144	0.0193
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	0.000009	<0.00020	<0.00020
Magnesium, dissolved	mg/L	25.5	24.2	24.6	25.3	25.1	25.3		23.7	19.5	24.1	23.6	23.3	24.8		23.2	25.4	24.9	25	26	25.4	25.1
Manganese, dissolved	mg/L	0.0629	0.0535	0.0594	0.0498	0.0535	0.0533		0.0509	0.0495	0.0486	0.0481	0.0462	0.0452		0.0426	0.0604	0.0514	0.0584	0.0454	0.04	0.0399
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0046	0.0045	0.0046	0.0047	0.0048	0.0047		0.0047	0.0038	0.0045	0.0045	0.0045	0.0049		0.0045	0.0048	0.0046	0.0042	0.00417	0.0046	0.0046
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	0.0014	0.0012	0.0011	0.0011	0.0011		0.0011	0.0011	0.0011	0.0011	0.00082	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01
Potassium, dissolved	mg/L	2.08	2.11	2.06	2.2	2.27	2.23		2.09	1.97	2.13	2.2	2.17	2		2.04	2.31	2.15	2.2	2.26	2.4	2.07
Selenium, dissolved	mg/L	0.00047	0.00044	0.00044	0.00048	0.00044	0.00048		0.00041	0.00034	0.00042	0.00043	0.00035	0.00037		0.00041	0.00044	0.00051	0.00047	0.000496	0.00039	0.00046
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.0000050	<0.000020	<0.000020
Sodium, dissolved	mg/L	18.8	18.2	18.2	18.5	18.8	18.8		18	14.7	18	17.7	17.2	18.3		17.3	18.4	18	18.2	18.9	18.6	17.7
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.0000020	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	0.0184	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	0.00067	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**04/12/2012**	**08/12/2012**	**11/12/2012**	**18/12/2012**	**27/12/2012**	**04/01/2013**	**09/01/2013**	**17/01/2013**	**22/01/2013**	**28/01/2013**	**07/02/2013**	**12/02/2013**	**19/02/2013**	**26/02/2013**	**04/03/2013**	**11/03/2013**	**18/03/2013**	**31/03/2013**	**01/04/2013**	**06/04/2013**	**12/04/2013**
pH (field)	pH units	7.53	6.74	7.41	7.46	7.34	7.49	7.43	7.4	7.6	7.43					7.6	7.54	7.57	7.61	7.51		7.59
pH (lab)	pH units	8.3		8.26	8.04	8.18	7.92	7.96	7.94	8.33	8.06	8.02	7.92	8.06	8.07	8.28	8.31	8.2	8.16	7.95	8.19	8.32
Hardness (from dissolved)	mg/L	248		255	239	236	240	245	251	243	245	245	238	246	245	249	234	243	241	242	244	240
Hardness (from total)	mg/L	264		254	255	238	236	235	238	243	239	248	247	243	262	251	250	242	237	241	240	248
Total Dissolved Solids	mg/L	328		300	308	274	304.0	318.0	308.0	290.0	322.0	306.0	266.0	318.0	302.0	308.0	282.0	310.0	314.0	296.0	282.0	274.0
Total Suspended Solids	mg/L	<1.0		<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	1.2	<1.0	<1.0
Alkalinity, total	mg/L	238		231	225	226	222	223	225	229	229	227	225	229	228	229	227	228	224	223	229	227
Sulphate, dissolved	mg/L	55.8		49	52.4	50.9	54.5	50.4	51.8	50.2	55.1	50.7	54.6	48.9	52.4	48.9	58	55.5	53.5	51.7	52.1	42.1
Chloride	mg/L	3.4		2.9	3	3.1	2.9	3.1	2.7	2.7	3.1	2.9	3	3.1	2.8	2.5	3.3	2.8	3	3.2	2.8	2.5
Fluoride	mg/L	0.56		0.56	0.5	0.53	0.5500	0.5500	0.5500	0.5500	0.5700	0.5600	0.5500	0.5400	0.5500	0.5600	0.5500	0.5100	0.5700	0.5600	0.5900	0.5700
Nitrite (N)	mg/L	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.050	<0.0050
Nitrate (N)	mg/L	0.664		0.647	0.647	0.671	0.554	0.599	0.717	0.699	0.706	0.717	0.73	0.703	0.747	0.737	0.723	0.67	0.79	0.73	<0.20	0.704
Ammonia	mg/L	0.019		0.01	0.0085	0.016	0.062	0.053	0.025	0.017	0.045	0.029	0.026	0.13	0.021	0.093	0.11	0.035	0.026	0.081	0.056	0.098
Aluminum, total	mg/L	0.0203		0.0121	0.012	0.0102	0.0076	0.0184	0.0224	0.0059	0.0134	0.0167	0.0064	0.0065	0.016	0.0055	0.0129	0.0139	0.0793	0.0462	0.0146	0.0312
Arsenic, total	mg/L	0.00025		0.00024	0.00028	0.00023	0.000190	0.000120	0.000190	0.000260	<0.00020	0.000270	0.000230	0.000220	0.000240	0.000190	0.000230	0.000210	0.000290	0.000310	0.000290	0.000270
Cadmium, total	mg/L	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000025	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	0.000014
Calcium, total	mg/L	58.4		55.5	56.4	52.7	52.2000	52.2000	52.4000	53.9000	50.3000	52.4000	55.1000	53.6000	57.7000	56.9000	54.8000	53.1000	52.5000	52.9000	52.0000	53.5000
Chromium, total	mg/L	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.00268		0.0021	0.00242	0.00234	0.00193	0.00202	0.00223	0.00159	0.00186	0.00231	0.00164	0.00154	0.00188	0.00149	0.00175	0.00169	0.00336	0.00263	0.00172	0.00309
Iron, total	mg/L	0.06		0.0316	0.0378	0.045	0.03230	0.04580	0.05330	0.02410	0.02600	0.03610	0.01730	0.01760	0.03370	0.01480	0.04360	0.03370	0.15000	0.07510	0.02810	0.05890
Lead, total	mg/L	0.00024		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00040	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	28.6		28.1	27.8	25.8	25.7	25.3	26.1	26.4	27.6	28.5	26.7	26.5	28.7	26.5	27.5	26.5	25.8	26.4	26.7	27.8
Manganese, total	mg/L	0.0828		0.074	0.0668	0.0823	0.066300	0.069000	0.075800	0.050200	0.049500	0.056900	0.050900	0.050500	0.053100	0.051600	0.051800	0.056600	0.076800	0.071300	0.052500	0.054900
Mercury, total	mg/L	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0048		0.0048	0.0046	0.0046	0.0045	0.0045	0.0042	0.0044	0.0047	0.0046	0.0044	0.0047	0.0050	0.0047	0.0044	0.0050	0.0044	0.0044	0.0048	0.0048
Nickel, total	mg/L	0.0012		0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L	<0.01		<0.01	0.013	0.014	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	0.013	<0.01	0.014	<0.01	0.014
Potassium, total	mg/L	2.39		2.17	2.26	2.16	2.17	2.05	2.06	2.26	2.27	2.22	2.21	2.16	2.16	2.18	2.23	2.11	2.07	2.12	2.12	2.22
Selenium, total	mg/L	0.00047		0.00046	0.00039	0.00039	0.000460	0.000440	0.000330	0.000510	0.000520	0.000390	0.000480	0.000470	0.000460	0.000520	0.000340	0.000610	0.000340	0.000440	0.000570	0.000440
Silver, total	mg/L	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000040	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	20.2		19.2	19.1	18.4	17.500000	17.500000	17.500000	18.000000	19.300000	19.600000	18.400000	18.300000	19.500000	18.100000	18.100000	17.500000	17.300000	17.800000	18.200000	18.800000
Thallium, total	mg/L	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0055		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0076	<0.0050	<0.01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0063		<0.0030	0.0047	<0.0030	<0.0030	<0.0030	0.0061	0.0036	0.0033	<0.0030	0.0032	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.007	0.0046	0.0033
Arsenic, dissolved	mg/L	0.00024		0.00021	0.00025	0.0002	0.000220	0.000200	0.000300	0.000250	0.000210	0.000210	0.000240	0.000240	0.000230	0.000280	0.000240	0.000250	0.000210	0.000250	0.000300	0.000270
Cadmium, dissolved	mg/L	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000017
Calcium, dissolved	mg/L	55.4		54.8	53.4	51.8	53.5000	54.2000	55.3000	53.6000	54.4000	55.7000	53.9000	53.1000	55.3000	55.1000	50.0000	55.1000	53.8000	54.0000	54.4000	53.2000
Chromium, dissolved	mg/L	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00253		0.00175	0.00215	0.00155	0.00155	0.00159	0.00187	0.00147	0.00162	0.00223	0.00184	0.00167	0.00157	0.00151	0.00163	0.00155	0.0017	0.00188	0.00189	0.0017
Iron, dissolved	mg/L	0.0324		0.0129	0.0195	0.0242	0.01820	0.02040	0.02360	0.01410	0.01150	0.00910	0.00990	0.00820	0.00940	0.01360	0.01200	0.00590	0.00670	0.00900	0.01250	0.00770
Lead, dissolved	mg/L	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	26.6		28.7	25.7	26	25.9	26.6	27.5	26.6	26.5	25.8	25.1	27.4	26.1	27	26.4	25.6	26	26	26.4	26.1
Manganese, dissolved	mg/L	0.0763		0.0711	0.0639	0.0783	0.059700	0.070400	0.069300	0.047000	0.044600	0.065000	0.047800	0.048000	0.046600	0.047900	0.046300	0.049600	0.068400	0.060100	0.049200	0.053900
Mercury, dissolved	mg/L	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0046		0.0046	0.0043	0.0044	0.0041	0.0044	0.0044	0.0043	0.0047	0.0045	0.0047	0.0047	0.0047	0.0048	0.0048	0.0047	0.0045	0.0047	0.0048	0.0047
Nickel, dissolved	mg/L	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01
Potassium, dissolved	mg/L	2.34		2.2	2.16	2.19	2.08	2.13	2.13	2.56	2.19	2.21	2.07	2.21	2.12	2.19	2.14	2.31	2.2	2.22	2.08	2.14
Selenium, dissolved	mg/L	0.00042		0.00048	0.00044	0.00048	0.000420	0.000420	0.000400	0.000370	0.000440	0.000470	0.000530	0.000460	0.000560	0.000500	0.000460	0.000470	0.000490	0.000510	0.000450	0.000490
Silver, dissolved	mg/L	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	19.2		19.9	18.2	18.7	17.800000	18.100000	18.400000	17.700000	18.400000	17.600000	17.300000	19.100000	17.900000	18.700000	18.200000	17.800000	17.800000	17.800000	18.100000	17.700000
Thallium, dissolved	mg/L	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**15/04/2013**	**21/04/2013**	**22/04/2013**	**23/04/2013**	**26/04/2013**	**27/04/2013**	**28/04/2013**	**29/04/2013**	**30/04/2013**	**30/04/2013**	**01/05/2013**	**02/05/2013**	**04/05/2013**	**05/05/2013**	**06/05/2013**	**07/05/2013**	**08/05/2013**	**09/05/2013**	**10/05/2013**	**11/05/2013**	**12/05/2013**
pH (field)	pH units	7.8	8.39	8.17	9.06	7.76	9	8.52	8.2	8.17	8.61	7.99	8	7.86	7.85	8.17	8.04	7.91	7.93	7.97	8	7.5
pH (lab)	pH units	8.24									8.28		8.27						8.09			
Hardness (from dissolved)	mg/L	238									207								183			
Hardness (from total)	mg/L	247									213		228						188			
Total Dissolved Solids	mg/L	314.0									292.0		240.0						250.0			
Total Suspended Solids	mg/L	<1.0									5.3		<4.0						8.3			
Alkalinity, total	mg/L	221									182		177						152			
Sulphate, dissolved	mg/L	52.9									41.9								38.2			
Chloride	mg/L	3									5.7								9.7			
Fluoride	mg/L	0.5700									0.3100								0.2700			
Nitrite (N)	mg/L	<0.0050									0.0074		0.0078						0.0167			
Nitrate (N)	mg/L	0.704									2.61		2.58						10.8			
Ammonia	mg/L	0.094									0.02		0.019						0.032			
Aluminum, total	mg/L	0.0395									0.167		0.169						0.297			
Arsenic, total	mg/L	0.000230									0.000350		0.000330						0.000380			
Cadmium, total	mg/L	<0.000010									<0.000010		<0.000010						0.000012			
Calcium, total	mg/L	53.9000									55.0000		57.6000						48.5000			
Chromium, total	mg/L	<0.0010									<0.0010		<0.0010						<0.0010			
Copper, total	mg/L	0.0025									0.0197		0.0205						0.0265			
Iron, total	mg/L	0.06720									0.28400		0.28200						0.48900			
Lead, total	mg/L	<0.00020									<0.00020		<0.00020						<0.00020			
Magnesium, total	mg/L	27.3									18.4		20.3						16.1			
Manganese, total	mg/L	0.053600									0.052100		0.052500						0.089700			
Mercury, total	mg/L	<0.000010									<0.000010		<0.000010						<0.000010			
Molybdenum, total	mg/L	0.0051									0.0041		0.0044						0.0035			
Nickel, total	mg/L	<0.0010									<0.0010		<0.0010						0.0012			
Phosphorus, total	mg/L	<0.01									0.017		0.016						0.041			
Potassium, total	mg/L	2.15									2.87		3.17						2.98			
Selenium, total	mg/L	0.000510									0.000690		0.000670						0.000730			
Silver, total	mg/L	<0.000020									<0.000020		<0.000020						<0.000020			
Sodium, total	mg/L	18.500000									15.500000		17.600000						13.300000			
Thallium, total	mg/L	<0.000050									<0.000050		<0.000050						<0.000050			
Zinc, total	mg/L	<0.0050									<0.0050		<0.0050						<0.0050			
Aluminum, dissolved	mg/L	<0.0030									0.005								0.0153			
Arsenic, dissolved	mg/L	0.000240									0.000310								0.000310			
Cadmium, dissolved	mg/L	<0.000010									<0.000010								<0.000010			
Calcium, dissolved	mg/L	52.1000									53.8000								47.8000			
Chromium, dissolved	mg/L	<0.0010									<0.0010								<0.0010			
Copper, dissolved	mg/L	0.00195									0.0137								0.0186			
Iron, dissolved	mg/L	0.00690									0.02260								0.08550			
Lead, dissolved	mg/L	<0.00020									<0.00020								<0.00020			
Magnesium, dissolved	mg/L	26.2									17.7								15.5			
Manganese, dissolved	mg/L	0.044400									0.008100								0.043900			
Mercury, dissolved	mg/L	<0.000010									<0.000010								<0.000010			
Molydenum, dissolved	mg/L	0.0049									0.0040								0.0033			
Nickel, dissolved	mg/L	<0.0010									<0.0010								<0.0010			
Phosphorus, dissolved	mg/L	<0.01									<0.01								0.012			
Potassium, dissolved	mg/L	2.18									2.87								2.97			
Selenium, dissolved	mg/L	0.000480									0.000750								0.000630			
Silver, dissolved	mg/L	<0.000020									<0.000020								<0.000020			
Sodium, dissolved	mg/L	18.200000									15.500000								13.300000			
Thallium, dissolved	mg/L	<0.000050									<0.000050								<0.000050			
Zinc, dissolved	mg/L	<0.0050									<0.0050								<0.0050			

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		13/05/2013	14/05/2013	15/05/2013	16/05/2013	17/05/2013	18/05/2013	19/05/2013	20/05/2013	21/05/2013	22/05/2013	23/05/2013	28/05/2013	06/06/2013	14/06/2013	17/06/2013	19/06/2013	24/06/2013	01/07/2013	10/07/2013	11/07/2013	19/07/2013
pH (field)	pH units	7.35	5.03	8	7.75	8.2	7.99	8.3	7.46	7.27	8.1	8.29	7.74	7.31	10.12	8.2	8	8.3	7.77	8	7.84	7.83
pH (lab)	pH units		7.74							7.71	7.72	7.65	7.97	8.38	8.23	8.3	8.29	8.34	8.37	8.21	8.2	8.35
Hardness (from dissolved)	mg/L									56.5	60.3	61.2	81.7	206	213	217	222	220	223	208	210	222
Hardness (from total)	mg/L		74							62.3	62	59.6	81.9	227	209	241	229	246	231	229	234	249
Total Dissolved Solids	mg/L		138.0							124.0	126.0	126.0	160.0	272.0	286.0	320.0	304.0	340.0	276.0	300.0	304.0	290.0
Total Suspended Solids	mg/L		21.2							30	19.6	20.2	8.6	36.6	14.5	<1.0	1.1	4.8	<1.0	<1.0	<1.0	<1.0
Alkalinity, total	mg/L		54.9							45.9	49.5	47.8	67	193	204	209	211	228	216	209	210	221
Sulphate, dissolved	mg/L									<0.50	<0.50	<0.50	22.8	43.5	45.3	45.7		44.1	45.7	46	46.8	46.2
Chloride	mg/L									4.3	4.7	4.7	5.9	3.3	3.6	3.4	3.4	3.5	3.6	3.6	3.5	3.9
Fluoride	mg/L									0.1200	0.1200	0.1300	0.2200	0.4700	0.5000	0.4600	0.5300	0.5100	0.5100	0.5200	0.5200	0.5400
Nitrite (N)	mg/L		0.0195							0.0223	0.029	0.0336	0.0487	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L		0.785							0.808	0.691	0.805	2.08	0.611	0.509	0.51	0.534	0.513	0.428	0.371	0.386	0.38
Ammonia	mg/L		0.083							0.034	0.034	0.041	0.07	0.02	0.019	0.03	0.0076	0.013	0.026	0.022	0.046	0.019
Aluminum, total	mg/L		2.26							1.22	1.14	1.1	0.538	0.273	0.143	0.128	0.043	0.0135	0.0102	0.0099	0.012	0.0274
Arsenic, total	mg/L		0.001120							0.000770	0.000660	0.000590	0.000500	0.000340	0.000320	0.000390	0.000320	0.000260	0.000320	0.000310	0.000270	0.000370
Cadmium, total	mg/L		0.000035							0.000031	0.000017	0.00002	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L		19.7000							16.4000	16.5000	15.7000	20.5000	52.2000	47.1000	55.6000	52.2000	54.7000	53.7000	51.2000	54.4000	55.3000
Chromium, total	mg/L		0.0026							0.0014	0.0012	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L		0.0822							0.0533	0.0578	0.054	0.035	0.0087	0.00616	0.00492	0.0043	0.00283	0.00277	0.00321	0.00295	0.00298
Iron, total	mg/L		3.32000							1.92000	1.58000	1.48000	0.72100	0.40800	0.20400	0.23000	0.07780	0.02720	0.02730	0.03010	0.04400	0.04810
Lead, total	mg/L		0.00087							0.00083	0.00043	0.00042	0.00022	<0.00020	<0.00020	<0.00020	0.00026	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L		6.03							5.2	5.05	4.97	7.44	23.6	22.3	24.8	23.9	26.5	23.6	24.4	23.7	27
Manganese, total	mg/L		0.126000							0.111000	0.083500	0.086100	0.052600	0.090700	0.054500	0.080700	0.037400	0.039900	0.045200	0.055300	0.057400	0.040300
Mercury, total	mg/L		0.00001							<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L		0.0018							0.0015	0.0017	0.0019	0.0045	0.0048	0.0045	0.0055	0.0051	0.0051	0.0054	0.0050	0.0049	0.0053
Nickel, total	mg/L		0.0032							0.0022	0.0021	0.0021	0.0015	0.0015	0.0017	0.0015	<0.0010	<0.0010	0.0011	0.0014	0.001	0.0013
Phosphorus, total	mg/L		0.078							0.072	0.062	0.057	0.032	0.03	0.011	0.019	<0.01	0.014	<0.01	<0.01	<0.01	0.011
Potassium, total	mg/L		2.28							2.03	1.92	2.04	3.65	2.43	2.04	2.35	2.27	2.3	2.11	2.26	2.2	2.34
Selenium, total	mg/L		0.000410							0.000150	0.000340	0.000220	0.000410	0.000340	0.000270	0.000460	0.000240	0.000330	0.000340	0.000310	0.000330	0.000440
Silver, total	mg/L		0.000021							0.000022	<0.000020	<0.000020	<0.000020	<0.000020	0.000059	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000067
Sodium, total	mg/L		4.950000							5.050000	5.540000	5.810000	9.280000	16.800000	15.600000	17.800000	17.000000	17.200000	17.400000	17.000000	16.200000	19.000000
Thallium, total	mg/L		<0.000050							<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L		0.0104							0.0068	0.0062	0.0056	<0.0050	<0.0050	0.0052	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L									0.057	0.0583	0.0504	0.0345	0.0097	0.0082	0.0065	0.0055	0.0039	0.0049	0.0047	0.0054	0.0043
Arsenic, dissolved	mg/L									<0.00040	0.000280	0.000270	0.000250	0.000300	0.000260	0.000260	0.000250	0.000230	0.000270	0.000250	0.000250	0.000220
Cadmium, dissolved	mg/L									<0.000050	0.000013	0.00001	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L									15.4000	16.0000	16.4000	21.5000	47.4000	49.6000	49.4000	50.8000	49.6000	51.0000	47.6000	47.9000	51.1000
Chromium, dissolved	mg/L									<0.0040	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L									0.0315	0.0313	0.0289	0.0231	0.00451	0.00365	0.00301	0.00275	0.00237	0.00248	0.00244	0.00254	0.00225
Iron, dissolved	mg/L									0.18900	0.15700	0.14600	0.11000	0.03420	0.02200	0.04290	0.01480	0.01170	0.01360	0.01970	0.02220	0.01490
Lead, dissolved	mg/L									<0.00080	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L									4.38	4.97	4.92	6.79	21.4	21.8	22.7	23.1	23.4	23.2	21.7	21.9	22.8
Manganese, dissolved	mg/L									0.019400	0.019700	0.020300	0.031000	0.037400	0.036700	0.056200	0.031900	0.035800	0.041500	0.048200	0.051500	0.035800
Mercury, dissolved	mg/L									<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L									<0.0040	0.0015	0.0015	0.0043	0.0046	0.0045	0.0047	0.0047	0.0052	0.0051	0.0049	0.0049	0.0049
Nickel, dissolved	mg/L									<0.0040	0.001	0.0011	0.001	0.0011	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010
Phosphorus, dissolved	mg/L									<0.04	0.021	0.022	0.013	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L									1.55	1.81	2.36	3.5	2.3	2.11	2.15	2.11	2.16	2.09	1.85	1.9	2.14
Selenium, dissolved	mg/L									<0.00040	0.000240	0.000240	0.000400	0.000430	0.000400	0.000360	0.000390	0.000400	0.000350	0.000340	0.000380	0.000420
Silver, dissolved	mg/L									<0.000080	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L									5.320000	5.500000	5.790000	8.900000	15.800000	15.900000	16.400000	16.900000	16.500000	16.800000	15.300000	15.800000	16.500000
Thallium, dissolved	mg/L									<0.00020	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L									<0.02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**23/07/2013**	**30/07/2013**	**08/08/2013**	**14/08/2013**	**19/08/2013**	**21/08/2013**	**21/08/2013**	**26/08/2013**	**02/09/2013**	**12/09/2013**	**17/09/2013**	**28/09/2013**	**03/10/2013**	**08/10/2013**	**16/10/2013**	**21/10/2013**	**28/10/2013**	**05/11/2013**	**05/11/2013**	**14/11/2013**	**18/11/2013**
pH (field)	pH units	8.4	7.86	7.74	8.2	7.81	7.75		7.23	7.57	7.81	6.99	7.53	7.46	7.8	7.63	7.57	7.5	7.47	7.47	6.7	7.41
pH (lab)	pH units	8.28	8.35	8.27	8.31	8.23		8.35	8.28	8.04	8.14	8.13	8.16	8.18	8.25	8.45	8.25	8.27		8.23	8.33	8.28
Hardness (from dissolved)	mg/L	190	229	232	235	238		234	230	219	241	226	214	217	232	222	232	240		228	233	268
Hardness (from total)	mg/L	209	241	258	255	246		248	239	245	251	244	222	234	242	250	236	268		231	248	261
Total Dissolved Solids	mg/L	242.0	288.0	320.0	344.0	270.0		282.0	308.0	314.0	272.0	266.0	300.0	350.0	288.0	318.0	296.0	286.0		286.0	288.0	284.0
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1		<1.0	<1.0	<1.0
Alkalinity, total	mg/L	184	209	217	224	221		221	211	213	214	216	195	209	215	218	210	211		222	223	226
Sulphate, dissolved	mg/L	33.3	41.5	47	42.2	45.6		47.2	43	41.8	45	44.5	43.1	43.5	42.9	44.3	44.2	46.7		43.9	47	49.2
Chloride	mg/L	2.9	2.9	3.6	3.3	3.7		3.5	4	3.9	4.6	4.4	4.4	4.9	4.2	4.7	4.8	4.9		5	4.8	5
Fluoride	mg/L	0.4500	0.5400	0.5500	0.5400	0.5300		0.5300	0.5100	0.5400	0.5300	0.5700	0.4700	0.5200	0.5200	0.5400	0.5500	0.5500		0.5500	0.5700	0.5500
Nitrite (N)	mg/L	<0.050	<0.0050	<0.050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.26	0.334	0.34	0.336	0.332		0.293	0.318	0.287	0.295	0.264	0.246	0.273	0.304	0.31	0.313	0.314		0.333	0.32	0.336
Ammonia	mg/L	0.013	0.085	0.012	0.54	0.021		0.019	0.013	0.033	0.0067	0.018	0.042	0.019	0.02	0.011	0.022	0.014		0.011	0.011	0.012
Aluminum, total	mg/L	0.0352	0.0184	0.0125	0.0337	0.0227		0.0145	0.006	0.0107	0.0083	0.01	0.0105	0.0062	0.0076	0.0114	0.0147	0.0124		0.0209	0.0133	0.009
Arsenic, total	mg/L	0.000470	0.000320	0.000320	0.000300	0.000320		0.000310	0.000250	0.000290	0.000280	0.000340	0.000330	0.000280	0.000270	0.000260	0.000250	0.000340		0.000250	0.000230	0.000230
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	0.00001	<0.000010
Calcium, total	mg/L	46.2000	55.5000	57.5000	56.8000	54.0000		55.1000	53.0000	55.6000	56.3000	54.5000	49.8000	53.6000	52.9000	55.2000	54.0000	59.5000		50.5000	55.8000	58.3000
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.00614	0.00309	0.00275	0.00261	0.00239		0.00225	0.00217	0.00252	0.00258	0.00262	0.00364	0.00265	0.00264	0.00296	0.00232	0.00225		0.00224	0.00209	0.00189
Iron, total	mg/L	0.08240	0.04120	0.02650	0.02840	0.02610		0.02330	0.02400	0.02920	0.02620	0.03150	0.06360	0.02550	0.02640	0.03280	0.03530	0.03690		0.04290	0.04230	0.03420
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	22.8	24.9	27.8	27.4	27		26.8	25.9	25.8	26.8	26.3	23.8	24.3	26.8	27.2	24.6	29.1		25.5	26.4	28
Manganese, total	mg/L	0.039000	0.049500	0.052000	0.065200	0.054500		0.048000	0.043100	0.044900	0.039800	0.041100	0.041000	0.043200	0.048900	0.054100	0.057000	0.042700		0.043600	0.044300	0.052300
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0039	0.0046	0.0051	0.0054	0.0055		0.0051	0.0042	0.0052	0.0052	0.0052	0.0046	0.0050	0.0053	0.0053	0.0052	0.0052		0.0049	0.0047	0.0049
Nickel, total	mg/L	0.0019	0.0012	0.0011	0.0014	0.0011		<0.0010	<0.0010	0.0011	0.0011	0.0012	0.0016	0.0012	0.0013	0.0012	0.001	0.0011		0.001	<0.0010	<0.0010
Phosphorus, total	mg/L	0.014	0.011	0.012	<0.01	<0.01		0.011	<0.01	<0.01	<0.01	<0.01	0.168	<0.01	<0.01	0.011	<0.01	<0.01		<0.01	<0.01	0.01
Potassium, total	mg/L	1.83	2.13	2.25	2.33	2.22		2.24	2.28	2.13	2.38	2.35	2.19	2.13	2.23	2.25	2.16	2.36		2.09	2.07	2.43
Selenium, total	mg/L	0.000440	0.000360	0.000300	0.000340	0.000450		0.000460	0.000360	0.000380	0.000350	0.000190	0.000340	0.000370	0.000410	0.000460	0.000390	0.000320		0.000400	0.000380	0.000380
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000032	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	16.600000	16.900000	19.600000	19.000000	18.000000		17.800000	18.300000	17.900000	18.700000	18.400000	16.900000	16.400000	18.600000	18.200000	17.300000	19.900000		17.100000	18.000000	19.300000
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0133	0.0108	0.0055	0.0082	0.0107		0.0033	0.0036	0.0043	0.0038	0.0034	0.0068	0.0045	0.0044	0.0056	0.0037	0.0063		0.0032	0.0032	<0.0030
Arsenic, dissolved	mg/L	0.000310	0.000270	0.000260	0.000290	0.000320		0.000250	0.000230	0.000270	0.000270	0.000260	0.000260	0.000270	0.000250	0.000250	0.000260	0.000470		0.000240	0.000260	0.000230
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000020	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	43.3000	52.2000	52.3000	53.2000	54.7000		52.9000	51.4000	48.1000	55.2000	51.3000	49.0000	47.4000	52.1000	49.9000	52.7000	53.6000		52.6000	52.3000	61.0000
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00479	0.00349	0.0022	0.00372	0.00228		0.00194	0.0022	0.00243	0.00236	0.00239	0.00308	0.00254	0.00243	0.00235	0.0021	0.00215		0.00215	0.00188	0.0018
Iron, dissolved	mg/L	0.04610	0.02900	0.01800	0.02200	0.01770		0.01720	0.01950	0.01850	0.01830	0.02300	0.02690	0.02120	0.02240	0.02300	0.02020	0.01960		0.01690	0.01600	0.02260
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00040	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	19.7	24	24.7	24.9	24.7		24.7	24.8	23.9	25	23.7	22.2	24	24.7	23.7	24.3	25.7		23.4	24.9	28
Manganese, dissolved	mg/L	0.033100	0.045700	0.046800	0.056000	0.053500		0.042800	0.041500	0.041000	0.037700	0.039100	0.035700	0.042300	0.043600	0.045600	0.056300	0.035000		0.038900	0.039700	0.048400
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0038	0.0049	0.0049	0.0053	0.0050		0.0053	0.0053	0.0048	0.0051	0.0049	0.0042	0.0049	0.0044	0.0048	0.0050	0.0048		0.0047	0.0047	0.0048
Nickel, dissolved	mg/L	0.0016	0.0011	<0.0010	<0.0020	0.0011		<0.0010	0.0015	<0.0010	<0.0010	0.0011	0.0014	0.0012	0.0011	<0.0010	<0.0010	0.0011		0.001	0.001	<0.0010
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.02	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	0.013
Potassium, dissolved	mg/L	1.66	2.13	2.12	2.37	2.15		2.18	2.23	2.11	2.35	2.16	1.92	2.15	2.21	2.09	2.14	2.15		2.09	2.09	2.41
Selenium, dissolved	mg/L	0.000350	0.000390	0.000360	0.000390	0.000490		0.000400	0.000340	0.000380	0.000360	0.000340	0.000350	0.000340	0.000400	0.000350	0.000340	0.000410		0.000340	0.000360	0.000400
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000040	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	13.500000	15.800000	17.000000	17.500000	17.100000		17.200000	17.200000	17.100000	18.300000	16.500000	15.700000	17.300000	17.000000	16.000000	17.200000	17.600000		16.100000	17.100000	20.100000
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.00010	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.01	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**30/11/2013**	**05/12/2013**	**09/12/2013**	**16/12/2013**	**23/12/2013**	**02/01/2014**	**07/01/2014**	**16/01/2014**	**22/01/2014**	**27/01/2014**	**03/02/2014**	**13/02/2014**	**18/02/2014**	**20/02/2014**	**21/02/2014**	**22/02/2014**	**23/02/2014**	**24/02/2014**	**25/02/2014**	**25/02/2014**	**27/02/2014**
pH (field)	pH units	7.39	7.27	7.96	6.56	7.61	7.66	7.69	7.58	7.65	7.63	7.86	7.56	7.71	7.78	7.76	8.32	7.83	7.83	7.89	7.93	7.93
pH (lab)	pH units	8.04	8.01	8.24	8.21	8.21	8.12	8.24	7.97	8.28	8.09	8.2	8.16	8.09	8.25						8.18	
Hardness (from dissolved)	mg/L	257	236	234	243	251	234	241	226	241	204	242	232	234	246						223	
Hardness (from total)	mg/L	272	266	256	229	245	250	254	234	240	211	244	239	250	286						226	
Total Dissolved Solids	mg/L	302.0	302.0	282.0	294.0	312.0	306.0	292.0	294.0	308.0	248.0	274.0	296.0	282.0	300.0						244.0	
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.9	<1.0	<1.0	<1.0	<1.0	<1.0						<1.0	
Alkalinity, total	mg/L		230	227	222	227	218	217	225	221	182	226	226	227	221						204	
Sulphate, dissolved	mg/L	50.1	46.8	49.4	48.5	48.3	53.6	49.5	49.6	49.4	37	50.7	49.9	50.4	51.4						39.5	
Chloride	mg/L	5.1	5.3	5.3	5.1	5.7	5.5	5.7	5.6	5.4	10	5.6	5.2	5.7	6.6						8.1	
Fluoride	mg/L	0.5100	0.5200	0.5500	0.5500	0.5800	0.5300	0.5900	0.5900	0.5900	0.3600	0.6300	0.5800	0.5800	0.5900						0.4600	
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050	
Nitrate (N)	mg/L	0.298	0.312	0.304	0.314	0.321	0.324	0.324	0.315	0.324	0.281	0.313	0.326	0.303	0.312						0.261	
Ammonia	mg/L	0.012	0.021	0.016	0.011	0.02	0.016	0.014	0.011	0.01	0.014	0.013	0.017	0.024	0.013						0.03	
Aluminum, total	mg/L	0.0116	0.0069	0.0104	0.0084	0.0097	0.0074	0.011	0.0084	0.0058	0.0061	0.0073	0.0064	0.012	0.0111						0.0232	
Arsenic, total	mg/L	0.000250	0.000230	0.000230	0.000230	0.000280	0.000340	0.000330	0.000230	0.000200	0.000420	0.000220	0.000240	0.000270	0.000260						0.000320	
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010						<0.000010	
Calcium, total	mg/L	61.4000	59.7000	55.6000	51.7000	54.2000	54.6000	55.7000	50.4000	51.4000	55.7000	53.8000	51.5000	55.0000	72.2000						54.5000	
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010	
Copper, total	mg/L	0.00216	0.00198	0.00219	0.00156	0.0023	0.00178	0.0023	0.00196	0.00189	0.00649	0.0016	0.00196	0.00194	0.0016						0.00487	
Iron, total	mg/L	0.05310	0.05020	0.03800	0.02240	0.03050	0.02330	0.02940	0.01680	0.01410	0.00870	0.01740	0.02360	0.03060	0.03600						0.06200	
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020						<0.00020	
Magnesium, total	mg/L	28.8	28.4	28.5	24.3	26.6	27.5	28	26.2	27.1	17.4	26.7	26.9	27.5	25.7						21.9	
Manganese, total	mg/L	0.073800	0.073700	0.069700	0.044900	0.046400	0.045200	0.040300	0.032000	0.028800	0.065700	0.032800	0.035900	0.036600	0.035900						0.043400	
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010						<0.000010	
Molybdenum, total	mg/L	0.0049	0.0045	0.0048	0.0045	0.0049	0.0048	0.0049	0.0048	0.0048	0.0055	0.0053	0.0052	0.0052	0.0052						0.0048	
Nickel, total	mg/L	0.001	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010	
Phosphorus, total	mg/L		<0.01	0.016	<0.01	<0.01	<0.01	0.024	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	
Potassium, total	mg/L	2.29	2.58	2.26	2.21	2.23	2.31	2.29	2.1	2.09	3.06	2.24	2.16	2.02	1.99						2.57	
Selenium, total	mg/L	0.000290	0.000420	0.000350	0.000410	0.000450	0.000390	0.000390	0.000380	0.000440	0.000370	0.000430	0.000560	0.000480	0.000460						0.000330	
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000068	0.00005	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000032	<0.000020						<0.000020	
Sodium, total	mg/L	19.500000	19.000000	19.200000	16.800000	17.800000	18.300000	18.700000	17.400000	18.000000	14.200000	17.900000	18.200000	17.400000	16.900000						15.400000	
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050						<0.000050	
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050	
Aluminum, dissolved	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	0.0063	0.0053	<0.0030	<0.0030	<0.0030	0.0035	0.0031	<0.0030	<0.0030	<0.0030						0.0031	
Arsenic, dissolved	mg/L	0.000240	0.000230	0.000230	0.000230	0.000240	0.000230	0.000220	0.000240	0.000250	0.000390	0.000250	0.000250	0.000220	0.000220						0.000320	
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000036	<0.000010	<0.000010	<0.000010	<0.000010						<0.000010	
Calcium, dissolved	mg/L	56.9000	54.0000	52.4000	54.2000	55.2000	52.7000	52.9000	51.1000	53.2000	54.2000	53.4000	48.3000	49.2000	53.2000						53.7000	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010	
Copper, dissolved	mg/L	0.00177	0.00155	0.00173	0.00285	0.00178	0.00229	0.00169	0.00152	0.00158	0.00593	0.00181	0.00171	0.00168	0.00166						0.00395	
Iron, dissolved	mg/L	0.03110	0.03150	0.02370	0.01600	0.01240	0.01680	0.00960	0.00800	0.00730	0.00620	0.01340	0.01380	0.01500	0.01520						0.01870	
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020						<0.00020	
Magnesium, dissolved	mg/L	27.8	24.6	25.1	26.1	27.5	24.8	26.5	23.9	26.3	16.7	26.4	26.9	26.9	27.5						21.5	
Manganese, dissolved	mg/L	0.068100	0.067500	0.059500	0.043200	0.040600	0.046500	0.035300	0.030500	0.029100	0.044800	0.031000	0.034600	0.034600	0.034000						0.035400	
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010						<0.000010	
Molydenum, dissolved	mg/L	0.0044	0.0047	0.0045	0.0048	0.0052	0.0048	0.0048	0.0047	0.0049	0.0050	0.0049	0.0051	0.0050	0.0052						0.0053	
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010						<0.0010	
Phosphorus, dissolved	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	
Potassium, dissolved	mg/L	2.41	2.19	2.14	2.15	2.39	2.02	2.24	1.96	1.98	3.23	2.17	2.07	2.08	2.21						2.73	
Selenium, dissolved	mg/L	0.000370	0.000430	0.000430	0.000390	0.000390	0.000410	0.000430	0.000390	0.000420	0.000340	0.000420	0.000530	0.000360	0.000390						0.000370	
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020						<0.000020	
Sodium, dissolved	mg/L	19.400000	17.700000	17.600000	17.900000	18.700000	17.300000	18.200000	16.100000	17.900000	13.900000	17.600000	18.400000	18.400000	18.800000						15.400000	
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050						<0.000050	
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050						<0.0050	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**28/02/2014**	**01/03/2014**	**02/03/2014**	**03/03/2014**	**04/03/2014**	**05/03/2014**	**06/03/2014**	**07/03/2014**	**08/03/2014**	**09/03/2014**	**10/03/2014**	**11/03/2014**	**12/03/2014**	**13/03/2014**	**14/03/2014**	**15/03/2014**	**16/03/2014**	**17/03/2014**	**18/03/2014**	**19/03/2014**	**20/03/2014**
pH (field)	pH units	8.12	7.96	7.99	7.98	7.99	8.06	8.17	8.11	8.02	8.2	8	8.2	8.15	7.32	7.68	7.82	7.72	7.77	7.85	7.77	7.7
pH (lab)	pH units									8.24		8.2							8.31			
Hardness (from dissolved)	mg/L									217		232							222			
Hardness (from total)	mg/L									231		234							220			
Total Dissolved Solids	mg/L									282.0		274.0							282.0			
Total Suspended Solids	mg/L									1.8		1.4							11.1			
Alkalinity, total	mg/L									209		208							203			
Sulphate, dissolved	mg/L									40.6		41.1							40.7			
Chloride	mg/L									8		8.2							8.2			
Fluoride	mg/L									0.4300		0.4300							0.4700			
Nitrite (N)	mg/L									<0.0050		<0.0050							<0.0050			
Nitrate (N)	mg/L									0.255		0.255							0.241			
Ammonia	mg/L									0.015		0.02							0.067			
Aluminum, total	mg/L									0.0545		0.0416							0.271			
Arsenic, total	mg/L									0.000380		0.000350							0.000460			
Cadmium, total	mg/L									<0.000010		<0.000010							<0.000010			
Calcium, total	mg/L									54.7000		54.7000							51.9000			
Chromium, total	mg/L									<0.0010		<0.0010							<0.0010			
Copper, total	mg/L									0.00461		0.00515							0.00582			
Iron, total	mg/L									0.11100		0.09300							0.41100			
Lead, total	mg/L									<0.00020		<0.00020							<0.00020			
Magnesium, total	mg/L									22.9		23.8							22			
Manganese, total	mg/L									0.063700		0.071700							0.104000			
Mercury, total	mg/L									<0.000010		<0.000010							<0.000010			
Molybdenum, total	mg/L									0.0053		0.0055							0.0050			
Nickel, total	mg/L									0.0012		0.0011							0.0015			
Phosphorus, total	mg/L									<0.01		0.013							0.022			
Potassium, total	mg/L									2.86		2.88							2.58			
Selenium, total	mg/L									0.000340		0.000440							0.000370			
Silver, total	mg/L									<0.000020		<0.000020							<0.000020			
Sodium, total	mg/L									16.700000		17.000000							15.500000			
Thallium, total	mg/L									<0.000050		<0.000050							<0.000050			
Zinc, total	mg/L									<0.0050		<0.0050							<0.0050			
Aluminum, dissolved	mg/L									0.0033		0.0035							<0.0030			
Arsenic, dissolved	mg/L									0.000310		0.000300							0.000290			
Cadmium, dissolved	mg/L									<0.000010		<0.000010							<0.000010			
Calcium, dissolved	mg/L									52.4000		58.4000							53.4000			
Chromium, dissolved	mg/L									<0.0010		<0.0010							<0.0010			
Copper, dissolved	mg/L									0.00339		0.00344							0.00318			
Iron, dissolved	mg/L									0.01770		0.01630							0.01550			
Lead, dissolved	mg/L									<0.00020		<0.00020							<0.00020			
Magnesium, dissolved	mg/L									21		21.1							21.6			
Manganese, dissolved	mg/L									0.049200		0.060300							0.043400			
Mercury, dissolved	mg/L									<0.000010		<0.000010							<0.000010			
Molydenum, dissolved	mg/L									0.0054		0.0053							0.0054			
Nickel, dissolved	mg/L									<0.0010		<0.0010							<0.0010			
Phosphorus, dissolved	mg/L									0.011		<0.01							<0.01			
Potassium, dissolved	mg/L									2.61		2.32							2.59			
Selenium, dissolved	mg/L									0.000370		0.000380							0.000360			
Silver, dissolved	mg/L									<0.000020		<0.000020							<0.000020			
Sodium, dissolved	mg/L									15.300000		15.000000							15.400000			
Thallium, dissolved	mg/L									<0.000050		<0.000050							<0.000050			
Zinc, dissolved	mg/L									<0.0050		<0.0050							<0.0050			

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		21/03/2014	22/03/2014	23/03/2014	24/03/2014	25/03/2014	26/03/2014	27/03/2014	28/03/2014	29/03/2014	30/03/2014	31/03/2014	01/04/2014	02/04/2014	02/04/2014	03/04/2014	04/04/2014	05/04/2014	06/04/2014	07/04/2014	07/04/2014	08/04/2014
pH (field)	pH units	7.69	7.76	7.8	7.85	7.9	8	7.74	7.83	7.8	7.77	7.79	7.53	7.72	7.71	7.75	7.8	7.91	7.86		7.91	7.82
pH (lab)	pH units							8.3							8.29					7.94	7.94	
Hardness (from dissolved)	mg/L							224							220					209	209	
Hardness (from total)	mg/L							216							244					209	209	
Total Dissolved Solids	mg/L							286.0							292.0					268.0	268.0	
Total Suspended Solids	mg/L							4.3							5.8					14.2	14.2	
Alkalinity, total	mg/L							201							210					172	172	
Sulphate, dissolved	mg/L							40.4							40.2					34	34	
Chloride	mg/L							7.9							8.3					10	10	
Fluoride	mg/L							0.4700							0.4600					0.3100	0.3100	
Nitrite (N)	mg/L							<0.0050							<0.0050					0.0097	0.0097	
Nitrate (N)	mg/L							0.226							0.212					0.601	0.601	
Ammonia	mg/L							0.022							0.019					0.066	0.066	
Aluminum, total	mg/L							0.14							0.163					0.305	0.305	
Arsenic, total	mg/L							0.000260							0.000400					0.000450	0.000450	
Cadmium, total	mg/L							0.000011							<0.000010					0.000013	0.000013	
Calcium, total	mg/L							51.8000							57.5000					54.2000	54.2000	
Chromium, total	mg/L							<0.0010							<0.0010					<0.0010	<0.0010	
Copper, total	mg/L							0.00445							0.00506					0.0176	0.0176	
Iron, total	mg/L							0.25000							0.27300					0.56300	0.56300	
Lead, total	mg/L							<0.00020							<0.00020					<0.00020	<0.00020	
Magnesium, total	mg/L							21.1							24.4					17.9	17.9	
Manganese, total	mg/L							0.054600							0.062500					0.105000	0.105000	
Mercury, total	mg/L							<0.000010							<0.000010					<0.000010	<0.000010	
Molybdenum, total	mg/L							0.0048							0.0057					0.0042	0.0042	
Nickel, total	mg/L							0.0013							0.0012					0.0016	0.0016	
Phosphorus, total	mg/L							0.013							0.018					0.027	0.027	
Potassium, total	mg/L							2.31							2.68					3.11	3.11	
Selenium, total	mg/L							0.000270							0.000440					0.000530	0.000530	
Silver, total	mg/L							<0.000020							<0.000020					<0.000020	<0.000020	
Sodium, total	mg/L							14.500000							17.000000					13.800000	13.800000	
Thallium, total	mg/L							<0.000050							<0.000050					<0.000050	<0.000050	
Zinc, total	mg/L							<0.0050							<0.0050					0.0058	0.0058	
Aluminum, dissolved	mg/L							0.0034							0.0032					0.0034	0.0034	
Arsenic, dissolved	mg/L							0.000340							0.000340					0.000410	0.000410	
Cadmium, dissolved	mg/L							<0.000010							<0.000010					<0.000010	<0.000010	
Calcium, dissolved	mg/L							53.2000							52.7000					55.0000	55.0000	
Chromium, dissolved	mg/L							<0.0010							<0.0010					<0.0010	<0.0010	
Copper, dissolved	mg/L							0.00345							0.00337					0.0104	0.0104	
Iron, dissolved	mg/L							0.01730							0.01750					0.02870	0.02870	
Lead, dissolved	mg/L							<0.00020							<0.00020					<0.00020	<0.00020	
Magnesium, dissolved	mg/L							22.1							21.4					17.3	17.3	
Manganese, dissolved	mg/L							0.036000							0.037300					0.008200	0.008200	
Mercury, dissolved	mg/L							<0.000010							<0.000010					0.000014	0.000014	
Molydenum, dissolved	mg/L							0.0056							0.0053					0.0045	0.0045	
Nickel, dissolved	mg/L							0.001							<0.0010					0.0011	0.0011	
Phosphorus, dissolved	mg/L							<0.01							<0.01					<0.01	<0.01	
Potassium, dissolved	mg/L							2.64							2.56					3.08	3.08	
Selenium, dissolved	mg/L							0.000310							0.000340					0.000470	0.000470	
Silver, dissolved	mg/L							<0.000020							<0.000020					<0.000020	<0.000020	
Sodium, dissolved	mg/L							15.200000							15.300000					13.900000	13.900000	
Thallium, dissolved	mg/L							<0.000050							<0.000050					<0.000050	<0.000050	
Zinc, dissolved	mg/L							<0.0050							<0.0050					<0.0050	<0.0050	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		09/04/2014	10/04/2014	11/04/2014	12/04/2014	13/04/2014	14/04/2014	15/04/2014	16/04/2014	17/04/2014	18/04/2014	19/04/2014	20/04/2014	21/04/2014	21/04/2014	21/04/2014	22/04/2014	23/04/2014	24/04/2014	25/04/2014	26/04/2014	27/04/2014
pH (field)	pH units	7.85	7.9	7.97	8.02	7.92	7.95	7.96	7.97		8.01	7.93	7.98	8.13	7.99		8.1	7.82	7.96	7.95	7.95	7.86
pH (lab)	pH units									8.21						8.21						
Hardness (from dissolved)	mg/L									208						196						
Hardness (from total)	mg/L									201						190						
Total Dissolved Solids	mg/L									272.0						264.0						
Total Suspended Solids	mg/L									13						13						
Alkalinity, total	mg/L									185						176						
Sulphate, dissolved	mg/L									37.1						34.7						
Chloride	mg/L									11						11						
Fluoride	mg/L									0.3100						0.3200						
Nitrite (N)	mg/L									0.0124						0.0117						
Nitrate (N)	mg/L									0.95						0.977						
Ammonia	mg/L									0.13						0.11						
Aluminum, total	mg/L									0.48						0.514						
Arsenic, total	mg/L									0.000450						0.000450						
Cadmium, total	mg/L									0.000019						0.000015						
Calcium, total	mg/L									51.3000						48.6000						
Chromium, total	mg/L									<0.0010						<0.0010						
Copper, total	mg/L									0.0445						0.0481						
Iron, total	mg/L									0.83300						0.79000						
Lead, total	mg/L									0.00023						0.00021						
Magnesium, total	mg/L									17.8						16.8						
Manganese, total	mg/L									0.147000						0.151000						
Mercury, total	mg/L									<0.000010						<0.000010						
Molybdenum, total	mg/L									0.0043						0.0043						
Nickel, total	mg/L									0.0013						0.0014						
Phosphorus, total	mg/L									0.025						0.026						
Potassium, total	mg/L									3.11						3.23						
Selenium, total	mg/L									0.000660						0.000760						
Silver, total	mg/L									<0.000020						<0.000020						
Sodium, total	mg/L									14.000000						13.700000						
Thallium, total	mg/L									<0.000050						<0.000050						
Zinc, total	mg/L									0.0059						0.0055						
Aluminum, dissolved	mg/L									0.0056						0.0055						
Arsenic, dissolved	mg/L									0.000380						0.000350						
Cadmium, dissolved	mg/L									0.000013						0.000015						
Calcium, dissolved	mg/L									54.5000						51.3000						
Chromium, dissolved	mg/L									<0.0010						<0.0010						
Copper, dissolved	mg/L									0.0183						0.0216						
Iron, dissolved	mg/L									0.04900						0.04430						
Lead, dissolved	mg/L									<0.00020						<0.00020						
Magnesium, dissolved	mg/L									17.5						16.5						
Manganese, dissolved	mg/L									0.092900						0.107000						
Mercury, dissolved	mg/L									<0.000010						<0.000010						
Molydenum, dissolved	mg/L									0.0044						0.0046						
Nickel, dissolved	mg/L									<0.0010						<0.0010						
Phosphorus, dissolved	mg/L									<0.01						<0.01						
Potassium, dissolved	mg/L									3.37						3.34						
Selenium, dissolved	mg/L									0.000520						0.000600						
Silver, dissolved	mg/L									<0.000020						<0.000020						
Sodium, dissolved	mg/L									14.200000						13.900000						
Thallium, dissolved	mg/L									<0.000050						<0.000050						
Zinc, dissolved	mg/L									<0.0050						<0.0050						

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**28/04/2014**	**29/04/2014**	**30/04/2014**	**01/05/2014**	**02/05/2014**	**03/05/2014**	**04/05/2014**	**05/05/2014**	**06/05/2014**	**07/05/2014**	**08/05/2014**	**09/05/2014**	**10/05/2014**	**11/05/2014**	**12/05/2014**	**13/05/2014**	**14/05/2014**	**15/05/2014**	**16/05/2014**	**17/05/2014**	**18/05/2014**
pH (field)	pH units		8.25	8.22	8.44	8.21	8.27	8	8.16	7.97	8.19	8.08	8.16	8.21	8.15	8.25	8.02	8.16	8.16	7.2	7.22	7.34
pH (lab)	pH units	8.15							8.13						8.05			7.96			7.98	
Hardness (from dissolved)	mg/L	131							148									123				
Hardness (from total)	mg/L	138							153						107			133			128	
Total Dissolved Solids	mg/L	214.0							218.0									208.0			230.0	
Total Suspended Solids	mg/L	12.9							6.5						5.9			15.6			9.3	
Alkalinity, total	mg/L	116							136									99.2			113	
Sulphate, dissolved	mg/L	30.6							28.9									32.9				
Chloride	mg/L	6.9							5									4.9				
Fluoride	mg/L	0.2900							0.3000									0.2600				
Nitrite (N)	mg/L	0.0138							0.0062						0.034			0.0314			0.0304	
Nitrate (N)	mg/L	1.66							0.743						1.8			1.75			1.85	
Ammonia	mg/L	0.13							0.041						0.088			0.15			0.051	
Aluminum, total	mg/L	0.699							0.248						0.257			0.543			0.312	
Arsenic, total	mg/L	0.000620							0.000400						0.000460			0.000670			0.000450	
Cadmium, total	mg/L	0.000014							0.000014						0.000016			0.00003			0.000025	
Calcium, total	mg/L	35.7000							37.0000						28.2000			35.3000			34.1000	
Chromium, total	mg/L	<0.0010							<0.0010						<0.0010			<0.0010			<0.0010	
Copper, total	mg/L	0.0476							0.0184						0.0408			0.0401			0.0335	
Iron, total	mg/L	0.99400							0.35900						0.52500			1.12000			0.65100	
Lead, total	mg/L	0.00027							<0.00020						<0.00020			0.00027			<0.00020	
Magnesium, total	mg/L	12							14.7						8.8			10.8			10.5	
Manganese, total	mg/L	0.099500							0.055500						0.100000			0.181000			0.193000	
Mercury, total	mg/L	<0.000010							<0.000010						<0.000010			<0.000010			<0.000010	
Molybdenum, total	mg/L	0.0056							0.0046						0.0036			0.0040			0.0039	
Nickel, total	mg/L	0.0018							0.0016						0.0016			0.0019			0.0016	
Phosphorus, total	mg/L	0.04							0.022						0.036			0.05			0.032	
Potassium, total	mg/L	4.16							2.71						3.46			3.3			3.15	
Selenium, total	mg/L	0.000850							0.000270						0.000700			0.000570			0.000690	
Silver, total	mg/L	<0.000020							<0.000020						<0.000020			<0.000020			0.000024	
Sodium, total	mg/L	13.200000							11.400000						8.250000			10.100000			10.500000	
Thallium, total	mg/L	<0.000050							<0.000050						<0.000050			<0.000050			<0.000050	
Zinc, total	mg/L	0.0063							<0.0050						0.0108			0.0069			<0.0050	
Aluminum, dissolved	mg/L	0.016							0.0209									0.0294				
Arsenic, dissolved	mg/L	0.000330							0.000310									0.000380				
Cadmium, dissolved	mg/L	0.000011							0.000012									0.000018				
Calcium, dissolved	mg/L	34.5000							36.7000									33.5000				
Chromium, dissolved	mg/L	<0.0010							<0.0010									<0.0010				
Copper, dissolved	mg/L	0.0227							0.014									0.0254				
Iron, dissolved	mg/L	0.07140							0.07650									0.15200				
Lead, dissolved	mg/L	<0.00020							<0.00020									<0.00020				
Magnesium, dissolved	mg/L	10.9							13.6									9.67				
Manganese, dissolved	mg/L	0.058700							0.029600									0.108000				
Mercury, dissolved	mg/L	<0.000010							<0.000010									<0.000010				
Molydenum, dissolved	mg/L	0.0052							0.0041									0.0037				
Nickel, dissolved	mg/L	<0.0010							0.0012									0.001				
Phosphorus, dissolved	mg/L	0.012							0.013									0.018				
Potassium, dissolved	mg/L	3.83							2.68									3.24				
Selenium, dissolved	mg/L	0.000770							0.000440									0.000670				
Silver, dissolved	mg/L	<0.000020							<0.000020									<0.000020				
Sodium, dissolved	mg/L	12.700000							10.900000									9.570000				
Thallium, dissolved	mg/L	<0.000050							<0.000050									<0.000050				
Zinc, dissolved	mg/L	<0.0050							<0.0050									<0.0050				

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		19/05/2014	20/05/2014	21/05/2014	22/05/2014	22/05/2014	23/05/2014	24/05/2014	25/05/2014	26/05/2014	27/05/2014	28/05/2014	29/05/2014	30/05/2014	31/05/2014	04/06/2014	06/06/2014	08/06/2014	11/06/2014	11/06/2014	17/06/2014	17/06/2014
pH (field)	pH units	7.34	7.26	7.23		7.4	7.5	7.52	7.4	7.5	7.26	8.2	8.15	8.21	8.17	7.27	7.98		8.22	8.22	7.91	7.91
pH (lab)	pH units					7.82				7.96						8.41				8.28		8.3
Hardness (from dissolved)	mg/L					135				155						225				229		228
Hardness (from total)	mg/L					136				158						227				242		222
Total Dissolved Solids	mg/L					224.0				224.0						300.0				288.0		302.0
Total Suspended Solids	mg/L					14				14.6						<1.0				<1.0		<1.0
Alkalinity, total	mg/L					95.4				113						213				219		220
Sulphate, dissolved	mg/L					40.7				44						44.3				44.2		42.8
Chloride	mg/L					5.3				5.3						5.1				5.1		5.2
Fluoride	mg/L					0.2700				0.6100						0.5500				0.5700		0.5700
Nitrite (N)	mg/L					0.0351				0.0287						<0.0050				<0.0050		<0.0050
Nitrate (N)	mg/L					3.22				2.69						0.272				0.253		0.243
Ammonia	mg/L					0.17				0.18						0.025				0.022		0.1
Aluminum, total	mg/L					1.02				0.524						0.0291				0.0081		0.0131
Arsenic, total	mg/L					0.000860				0.000800						0.000320				0.000260		0.000240
Cadmium, total	mg/L					0.000028				0.000028						<0.000010				<0.000010		<0.000010
Calcium, total	mg/L					36.1000				41.7000						50.1000				52.0000		48.5000
Chromium, total	mg/L					0.0013				<0.0010						<0.0010				<0.0010		<0.0010
Copper, total	mg/L					0.0699				0.0539						0.0046				0.0032		0.00292
Iron, total	mg/L					1.77000				1.16000						0.06100				0.02500		0.02700
Lead, total	mg/L					0.00051				0.00035						<0.00020				<0.00020		<0.00020
Magnesium, total	mg/L					11.1				13.1						24.7				27.4		24.6
Manganese, total	mg/L					0.251000				0.322000						0.038500				0.032500		0.038900
Mercury, total	mg/L					<0.000010				<0.000010						<0.000010				<0.000010		<0.000010
Molybdenum, total	mg/L					0.0054				0.0057						0.0049				0.0050		0.0051
Nickel, total	mg/L					0.0024				0.0018						0.0013				0.0012		<0.0010
Phosphorus, total	mg/L					0.053				0.046						<0.01				<0.01		<0.01
Potassium, total	mg/L					3.83				4.34						2.28				2.27		2.21
Selenium, total	mg/L					0.000910				0.000950						0.000410				0.000370		0.000420
Silver, total	mg/L					<0.000020				<0.000020						<0.000020				<0.000020		0.000047
Sodium, total	mg/L					10.700000				12.600000						17.100000				18.200000		17.100000
Thallium, total	mg/L					<0.000050				<0.000050						<0.000050				<0.000050		<0.000050
Zinc, total	mg/L					0.0117				0.0074						<0.0050				<0.0050		<0.0050
Aluminum, dissolved	mg/L					0.0329				0.0219						0.0235				0.0042		0.0052
Arsenic, dissolved	mg/L					0.000560				0.000550						0.000270				0.000260		0.000250
Cadmium, dissolved	mg/L					0.000017				0.000019						0.000011				<0.000010		<0.000010
Calcium, dissolved	mg/L					36.5000				41.3000						50.3000				50.1000		49.2000
Chromium, dissolved	mg/L				<0.0010	<0.0010				<0.0010		<0.0010				<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L					0.0262				0.0232						0.00474				0.00337		0.00308
Iron, dissolved	mg/L					0.25700				0.26500						0.04140				0.01780		0.01130
Lead, dissolved	mg/L					0.00021				<0.00020						<0.00020				<0.00020		<0.00020
Magnesium, dissolved	mg/L					10.7				12.6						24.1				25.3		25.6
Manganese, dissolved	mg/L					0.208000				0.273000						0.034000				0.031200		0.032800
Mercury, dissolved	mg/L					<0.000010				<0.000010						<0.000010				<0.000010		<0.000010
Molydenum, dissolved	mg/L					0.0057				0.0053						0.0050				0.0050		0.0051
Nickel, dissolved	mg/L					0.0012				0.0011						<0.0010				<0.0010		<0.0010
Phosphorus, dissolved	mg/L					0.019				0.017						<0.01				<0.01		<0.01
Potassium, dissolved	mg/L					3.86				4.1						2.2				2.28		2.16
Selenium, dissolved	mg/L					0.000890				0.000900						0.000360				0.000430		0.000370
Silver, dissolved	mg/L					<0.000020				<0.000020						<0.000020				<0.000020		<0.000020
Sodium, dissolved	mg/L					11.000000				11.600000						16.500000				17.500000		17.700000
Thallium, dissolved	mg/L					<0.000050				<0.000050						<0.000050				<0.000050		<0.000050
Zinc, dissolved	mg/L					<0.0050				<0.0050						<0.0050				<0.0050		<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**24/06/2014**	**24/06/2014**	**30/06/2014**	**30/06/2014**	**09/07/2014**	**09/07/2014**	**10/07/2014**	**15/07/2014**	**15/07/2014**	**21/07/2014**	**21/07/2014**	**23/07/2014**	**31/07/2014**	**31/07/2014**	**04/08/2014**	**04/08/2014**	**14/08/2014**	**14/08/2014**	**14/08/2014**	**18/08/2014**	**19/08/2014**
pH (field)	pH units	8.25	8.25	8.21		8.3	8.3	8.23	7.97	7.97	7.52	7.52	7.73	7.91		7.92	7.92	7.92		7.92	7.77	7.93
pH (lab)	pH units	8.37		8.29			8.54			8.19		8.4		8.25		8.2				8.31	8.31	
Hardness (from dissolved)	mg/L	237		235			237			246		235		238		242				244	234	
Hardness (from total)	mg/L	229		243			235			255		242		238		241				247	244	
Total Dissolved Solids	mg/L	298.0		298.0			278.0			296.0		300.0		294.0		276.0				306.0	302.0	
Total Suspended Solids	mg/L	<1.0		<1.0			<1.0			<1.0		<1.0		<1.0		<1.0				1.1	<1.0	
Alkalinity, total	mg/L	224		218			221			228		226		226		229				229	230	
Sulphate, dissolved	mg/L	45		42.8			47.6			46.2		42.9		45.7		46.8				49.4	49.6	
Chloride	mg/L	5		5.2			5			4.6		5		4.8		4.5				4.9	4.6	
Fluoride	mg/L	0.5500		0.5800			0.5800			0.5600		0.5600		0.5700		0.5600				0.5500	0.5200	
Nitrite (N)	mg/L	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050				<0.0050	<0.0050	
Nitrate (N)	mg/L	0.205		0.202			0.201			0.203		0.18		0.2		0.208				0.196	0.178	
Ammonia	mg/L	0.019		0.021			0.021			0.034		0.015		0.0087		0.0099				0.018	0.014	
Aluminum, total	mg/L	0.0052		0.0043			0.011			0.0187		0.0291		0.0054		0.0076				0.0111	0.0105	
Arsenic, total	mg/L	0.000260		0.000240			0.000280			0.000240		0.000280		0.000260		0.000260				0.000230	0.000230	
Cadmium, total	mg/L	<0.000010		<0.000010			<0.000010			<0.000010		0.000012		<0.000010		<0.000010				<0.000010	<0.000010	
Calcium, total	mg/L	51.2000		54.4000			51.2000			53.2000		52.4000		52.6000		53.0000				54.5000	54.3000	
Chromium, total	mg/L	<0.0010		<0.0010			<0.0010			<0.0010		<0.0010		<0.0010		<0.0010				<0.0010	<0.0010	
Copper, total	mg/L	0.00261		0.0026			0.00271			0.0024		0.0048		0.00267		0.00247				0.00768	0.00247	
Iron, total	mg/L	0.01600		0.01400			0.02200			0.02700		0.06600		0.02100		0.02200				0.03000	0.02700	
Lead, total	mg/L	<0.00020		<0.00020			<0.00020			<0.00020		<0.00020		<0.00020		<0.00020				<0.00020	<0.00020	
Magnesium, total	mg/L	24.5		25.9			26			29.6		27		26		26.3				26.8	26.3	
Manganese, total	mg/L	0.035900		0.038200			0.040100			0.044600		0.050000		0.046600		0.041700				0.041600	0.036000	
Mercury, total	mg/L	<0.000010		<0.000010			<0.000010			<0.000010		<0.000010		<0.000010		<0.000010				<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0049		0.0052			0.0050			0.0053		0.0049		0.0051		0.0051				0.0052	0.0048	
Nickel, total	mg/L	<0.0010		<0.0010			<0.0010			<0.0010		<0.0010		<0.0010		<0.0010				<0.0010	<0.0010	
Phosphorus, total	mg/L	<0.01		<0.01			<0.01			0.013		0.017		<0.01		<0.01				<0.01	<0.01	
Potassium, total	mg/L	2.15		2.1			2.18			2.21		2.13		2.19		2.16				2.19	2.24	
Selenium, total	mg/L	0.000390		0.000380			0.000400			0.000420		0.000410		0.000360		0.000370				0.000350	0.000330	
Silver, total	mg/L	<0.000020		<0.000020			<0.000020			<0.000020		<0.000020		<0.000020		<0.000020				<0.000020	<0.000020	
Sodium, total	mg/L	16.700000		17.100000			17.600000			17.300000		18.700000		17.400000		17.600000				17.600000	17.300000	
Thallium, total	mg/L	<0.000050		<0.000050			<0.000050			<0.000050		<0.000050		<0.000050		<0.000050				<0.000050	<0.000050	
Zinc, total	mg/L	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050				<0.0050	<0.0050	
Aluminum, dissolved	mg/L	0.0042		0.0036			0.0041			0.0101		0.0073		0.0076		0.0086				0.0045	0.0075	
Arsenic, dissolved	mg/L	0.000290		0.000220			0.000260			0.000240		0.000330		0.000300		0.000320				0.000260	0.000270	
Cadmium, dissolved	mg/L	0.00001		<0.000010			0.00001			<0.000010		<0.000010		<0.000010		<0.000010				<0.000010	<0.000010	
Calcium, dissolved	mg/L	53.0000		51.0000			51.5000			53.9000		52.5000		51.8000		50.6000				54.7000	49.9000	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00251		0.00273			0.00262			0.00248		0.00312		0.00305		0.0028				0.00245	0.00245	
Iron, dissolved	mg/L	0.01150		0.01270			0.01550			0.02090		0.01360		0.01890		0.02480				0.01410	0.02210	
Lead, dissolved	mg/L	<0.00020		<0.00020			<0.00020			<0.00020		<0.00020		<0.00020		<0.00020				<0.00020	<0.00020	
Magnesium, dissolved	mg/L	25.5		26.2			26.3			27		25.3		26.5		28				26.1	26.6	
Manganese, dissolved	mg/L	0.036200		0.038400			0.041200			0.039900		0.044900		0.056900		0.048200				0.039200	0.034200	
Mercury, dissolved	mg/L	<0.000010		<0.000010			<0.000010			<0.000010		<0.000010		<0.000010		<0.000010				<0.000010	<0.000010	
Molydenum, dissolved	mg/L	0.0049		0.0051			0.0050			0.0052		0.0047		0.0051		0.0055				0.0055	0.0050	
Nickel, dissolved	mg/L	0.001		<0.0010			<0.0010			<0.0010		<0.0010		0.0011		0.0011				<0.0010	<0.0010	
Phosphorus, dissolved	mg/L	0.01		<0.01			<0.01			<0.01		<0.01		<0.01		<0.01				<0.01	0.01	
Potassium, dissolved	mg/L	2.21		2.25			2.3			2.15		2.2		2.2		2.31				2.02	2.25	
Selenium, dissolved	mg/L	0.000370		0.000340			0.000380			0.000400		0.000350		0.000430		0.000390				0.000400	0.000390	
Silver, dissolved	mg/L	<0.000020		<0.000020			<0.000020			<0.000020		<0.000020		<0.000020		<0.000020				<0.000020	0.000037	
Sodium, dissolved	mg/L	16.800000		17.600000			16.900000			17.700000		16.700000		17.400000		18.200000				17.000000	17.100000	
Thallium, dissolved	mg/L	<0.000050		<0.000050			<0.000050			<0.000050		<0.000050		<0.000050		<0.000050				<0.000050	<0.000050	
Zinc, dissolved	mg/L	<0.0050		<0.0050			<0.0050			<0.0050		<0.0050		<0.0050		<0.0050				<0.0050	<0.0050	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**26/08/2014**	**26/08/2014**	**04/09/2014**	**04/09/2014**	**04/09/2014**	**12/09/2014**	**12/09/2014**	**15/09/2014**	**15/09/2014**	**22/09/2014**	**22/09/2014**	**05/10/2014**	**05/10/2014**	**08/10/2014**	**08/10/2014**	**13/10/2014**	**13/10/2014**	**20/10/2014**	**27/10/2014**	**27/10/2014**	**05/11/2014**
pH (field)	pH units	7.93	7.93	7.78	7.78	7.78	7.87	7.87	7.82	7.82	7.68	7.84	7.89	7.89	7.72	7.72	7.86	7.86	7.69	7.87	7.87	7.44
pH (lab)	pH units	8.22				8.22		8.28	8.26		8.36		8.23		8.27		8.26		8.37	7.99	8.11	8.29
Hardness (from dissolved)	mg/L	242				247		252	249		238		254		238		255		264	270	256	257
Hardness (from total)	mg/L	244				254		256	271		253		269		242		264		255	241	269	267
Total Dissolved Solids	mg/L	300.0				306.0		352.0	344.0		312.0		302.0		324.0		314.0		322.0	316.0	304.0	324.0
Total Suspended Solids	mg/L	<1.0				283		1.5	1		4.1		13.4		<1.0		<1.0		<1.0	<1.0	1	<1.0
Alkalinity, total	mg/L	221				228		230	229		216		226		215		217		228	215	220	223
Sulphate, dissolved	mg/L	52.5				52.4		54.4	56		57		60		60.4		63.5		81.8	64.4	65.2	55.8
Chloride	mg/L	4.7				4.4		4.8	4.8		4.7		4.8		4.9		5.4		4.7	5.9	4.9	5.7
Fluoride	mg/L	0.5600				0.5400		0.5400	0.5700		0.5800		0.5400		0.5200		0.5200		0.5400	0.5600	0.5600	0.5500
Nitrite (N)	mg/L	<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.186				0.194		0.209	0.201		0.163		0.245		0.255		0.255		0.279	0.279	0.283	0.316
Ammonia	mg/L	0.053				0.014		0.025	0.02		0.019		0.016		0.025		0.011		0.022	0.019	0.043	0.018
Aluminum, total	mg/L	0.0081				0.0052		0.0129	0.0069		0.0457		0.166		0.0219		0.0243		0.0131	0.0104	0.0303	0.015
Arsenic, total	mg/L	0.000270				0.000230		0.000510	0.000200		0.000270		0.000250		0.000260		0.000290		0.000230	0.000240	0.000220	0.000260
Cadmium, total	mg/L	<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		0.000011		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	54.1000				54.1000		57.5000	59.7000		55.8000		60.4000		52.5000		60.9000		57.7000	52.1000	57.1000	60.7000
Chromium, total	mg/L	<0.0010				<0.0010		<0.0010	<0.0010		<0.0010		<0.0010		<0.0010		<0.0010		<0.0010	<0.0010	0.0015	<0.0010
Copper, total	mg/L	0.00257				0.00233		0.00293	0.00237		0.00265		0.00528		0.00278		0.00234		0.00219	0.00232	0.00625	0.00217
Iron, total	mg/L	0.02700				0.02100		0.03300	0.02200		0.09600		0.30600		0.05100		0.02500		0.02800	0.02400	0.06100	0.03100
Lead, total	mg/L	<0.00020				<0.00020		<0.00020	<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	26.4				28.9		27.4	29.6		27.5		28.7		26.9		27.2		27	27	30.6	28.1
Manganese, total	mg/L	0.038700				0.041400		0.045500	0.042100		0.065500		0.071600		0.045000		0.042400		0.046700	0.051500	0.046000	0.051100
Mercury, total	mg/L	<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0051				0.0047		0.0051	0.0047		0.0050		0.0049		0.0047		0.0050		0.0048	0.0049	0.0048	0.0048
Nickel, total	mg/L	<0.0010				0.0012		<0.0010	<0.0010		<0.0010		0.0013		<0.0010		<0.0010		<0.0010	<0.0010	0.0014	<0.0010
Phosphorus, total	mg/L	<0.01				<0.01		<0.01	0.01		0.013		0.04		<0.01		<0.01		<0.01	<0.01	0.025	<0.01
Potassium, total	mg/L	2.14				2.07		2.24	2.39		2.34		2.41		2.08		2.39		2.19	2.22	2.19	2.25
Selenium, total	mg/L	0.000380				0.000390		0.000310	0.000330		0.000360		0.000400		0.000330		0.000410		0.000310	0.000380	0.000430	0.000350
Silver, total	mg/L	<0.000020				<0.000020		<0.000020	<0.000020		0.000035		<0.000020		<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	17.500000				18.500000		18.100000	19.100000		17.400000		18.200000		16.900000		18.200000		17.500000	17.600000	18.000000	18.700000
Thallium, total	mg/L	<0.000050				<0.000050		<0.000050	<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0041				<0.0030		0.0032	0.0059		<0.0030		0.0043		<0.0030		0.0031		0.0131	0.0053	<0.0030	0.0037
Arsenic, dissolved	mg/L	0.000270				0.000250		0.000230	0.000240		0.000240		0.000250		0.000230		0.000240		0.000270	0.000250	0.000230	0.000230
Cadmium, dissolved	mg/L	<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	52.6000				54.7000		57.3000	54.9000		53.1000		56.9000		53.2000		58.2000		59.8000	61.5000	56.6000	56.5000
Chromium, dissolved	mg/L	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00228				0.00223		0.00243	0.00239		0.00222		0.00226		0.00215		0.00213		0.00226	0.00237	0.0021	0.00172
Iron, dissolved	mg/L	0.01800				0.01760		0.01780	0.01660		0.01270		0.01130		0.00990		0.00970		0.02980	0.01540	0.01030	0.01170
Lead, dissolved	mg/L	<0.00020				<0.00020		<0.00020	<0.00020		<0.00020		<0.00020		<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	26.9				26.9		26.4	27.2		25.5		27.1		25.6		26.6		27.8	28.4	27.8	28.2
Manganese, dissolved	mg/L	0.037800				0.040900		0.042400	0.041200		0.065000		0.036700		0.039100		0.038300		0.044200	0.039400	0.041500	0.044600
Mercury, dissolved	mg/L	<0.000010				<0.000010		<0.000010	<0.000010		<0.000010		<0.000010		<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0052				0.0050		0.0050	0.0051		0.0049		0.0047		0.0047		0.0046		0.0049	0.0049	0.0048	0.0047
Nickel, dissolved	mg/L	<0.0010				<0.0010		<0.0010	<0.0010		<0.0010		0.0011		<0.0010		0.0012		<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	<0.01				0.011		<0.01	0.014		<0.01		0.01		<0.01		<0.01		0.012	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	2.16				2.18		2.19	2.41		2.28		2.24		2.04		2.45		2.35	2.33	2.16	2.22
Selenium, dissolved	mg/L	0.000350				0.000370		0.000410	0.000310		0.000300		0.000330		0.000330		0.000300		0.000350	0.000330	0.000380	0.000320
Silver, dissolved	mg/L	<0.000020				<0.000020		<0.000020	0.000024		<0.000020		<0.000020		<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	17.500000				17.400000		17.000000	18.700000		16.900000		17.700000		16.300000		17.800000		18.300000	17.800000	17.900000	18.300000
Thallium, dissolved	mg/L	<0.000050				<0.000050		<0.000050	<0.000050		<0.000050		<0.000050		<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050				<0.0050		<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**10/11/2014**	**17/11/2014**	**24/11/2014**	**02/12/2014**	**03/12/2014**	**04/12/2014**	**05/12/2014**	**06/12/2014**	**07/12/2014**	**08/12/2014**	**09/12/2014**	**10/12/2014**	**11/12/2014**	**12/12/2014**	**13/12/2014**	**14/12/2014**	**15/12/2014**	**16/12/2014**	**19/12/2014**	**20/12/2014**	**21/12/2014**
pH (field)	pH units	7.61	7.33	7.8	7.81	8.14	7.39	7.66	7.76	7.71	7.72	7.98	7.79	7.66	7.93	7.83	7.85	7.82	7.83	7.98	7.78	7.99
pH (lab)	pH units	8.24	7.95	8.15		8.07						8.03						7.96	7.87	8.3	8.06	
Hardness (from dissolved)	mg/L	268	251	243		235						215						210	219	247	254	
Hardness (from total)	mg/L	251	236	249		236						227						213	208	253	262	
Total Dissolved Solids	mg/L	312.0	338.0	334.0		302.0						308.0						312.0	308.0	316.0	318.0	
Total Suspended Solids	mg/L	<1.0	2.3	1.2		1.5						6.4						1.5	1.7	1.3	2.3	
Alkalinity, total	mg/L	222	204	197		189						152						143	142	197	184	
Sulphate, dissolved	mg/L	67.6	73.8	77.4		77.3						89.2						88.9	92.7	74.9	78.1	
Chloride	mg/L	6.7	6.1	6.4		5.9						7.5						7.5	7.4	6.6	6.1	
Fluoride	mg/L	0.5800	0.4700	0.1400		0.4400						0.4400						0.4300	0.4300	0.4700	0.4700	
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050		<0.0050						0.0207						0.0209	0.019	<0.0050	<0.0050	
Nitrate (N)	mg/L	0.332	1.24	1.16		1.29						2.89						2.99	3.16	1.19	1.21	
Ammonia	mg/L	0.0099	0.014	0.031		0.019						0.09						0.074	0.068	0.013	0.016	
Aluminum, total	mg/L	0.0229	0.0211	0.0127		0.0141						0.102						0.0291	0.0283	0.0132	0.029	
Arsenic, total	mg/L	0.000240	0.000270	0.000280		0.000280						0.000430						0.000310	0.000300	0.000290	0.000290	
Cadmium, total	mg/L	<0.000010	0.000011	<0.000010		<0.000010						<0.000010						<0.000010	<0.000010	0.000013	<0.000010	
Calcium, total	mg/L	55.3000	58.7000	59.9000		56.9000						57.8000						56.2000	54.9000	61.4000	62.7000	
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010		<0.0010						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010	
Copper, total	mg/L	0.00275	0.00457	0.0036		0.00342						0.0103						0.00881	0.00804	0.00355	0.0036	
Iron, total	mg/L	0.04500	0.04800	0.02700		0.03700						0.19500						0.06100	0.06300	0.02700	0.05900	
Lead, total	mg/L	<0.00020	<0.00020	<0.00020		<0.00020						<0.00020						<0.00020	<0.00020	<0.00020	<0.00020	
Magnesium, total	mg/L	27.5	21.6	24.1		22.7						20						17.6	17.3	24.3	25.6	
Manganese, total	mg/L	0.051900	0.057300	0.034600		0.043600						0.093200						0.027900	0.028400	0.040200	0.038500	
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010		<0.000010						<0.000010						<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0047	0.0053	0.0052		0.0052						0.0089						0.0096	0.0084	0.0060	0.0049	
Nickel, total	mg/L	<0.0010	0.0011	<0.0010		0.001						0.001						<0.0010	<0.0010	0.0011	0.0011	
Phosphorus, total	mg/L	<0.01	<0.01	<0.01		<0.01						0.026						0.024	0.025	<0.01	0.014	
Potassium, total	mg/L	2.27	2.98	3.05		3						7.04						6.88	6.39	3.54	3.54	
Selenium, total	mg/L	0.000370	0.000400	0.000450		0.000470						0.001230						0.001050	0.000970	0.000470	0.000360	
Silver, total	mg/L	<0.000020	<0.000020	<0.000020		<0.000020						<0.000020						<0.000020	<0.000020	<0.000020	<0.000020	
Sodium, total	mg/L	17.700000	17.400000	18.400000		17.400000						19.400000						19.200000	18.000000	18.800000	19.400000	
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050		<0.000050						<0.000050						<0.000050	<0.000050	<0.000050	<0.000050	
Zinc, total	mg/L	<0.0050	0.0649	0.0144		<0.0050						<0.0050						<0.0050	<0.0050	0.0480	0.0105	
Aluminum, dissolved	mg/L	0.0045	0.0052	0.0082		0.006						0.0055						<0.0030	<0.0030	0.0041	<0.0030	
Arsenic, dissolved	mg/L	0.000230	0.000270	0.000250		0.000260						0.000430						0.000370	0.000370	0.000270	0.000270	
Cadmium, dissolved	mg/L	<0.000010	0.000011	<0.000010		<0.000010						<0.000010						<0.000010	<0.000010	<0.000010	<0.000010	
Calcium, dissolved	mg/L	61.2000	62.4000	58.4000		58.2000						56.7000						55.7000	57.7000	61.3000	62.5000	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010		<0.0010						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010	
Copper, dissolved	mg/L	0.00186	0.00347	0.00334		0.00322						0.00689						0.0072	0.00699	0.00324	0.00322	
Iron, dissolved	mg/L	0.01120	0.01330	0.01730		0.01450						0.01160						0.01030	0.02140	0.01040	0.01000	
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020		<0.00020						<0.00020						<0.00020	<0.00020	<0.00020	<0.00020	
Magnesium, dissolved	mg/L	28	23.1	23.5		21.8						17.9						17.1	18.1	22.9	23.8	
Manganese, dissolved	mg/L	0.045600	0.050900	0.026700		0.031800						0.021700						0.009800	0.011700	0.030500	0.029500	
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010		<0.000010						<0.000010						<0.000010	<0.000010	<0.000010	<0.000010	
Molydenum, dissolved	mg/L	0.0051	0.0053	0.0054		0.0050						0.0083						0.0090	0.0087	0.0052	0.0051	
Nickel, dissolved	mg/L	<0.0010	0.0011	<0.0010		<0.0010						<0.0010						<0.0010	<0.0010	<0.0010	<0.0010	
Phosphorus, dissolved	mg/L	<0.01	0.013	<0.01		<0.01						0.025						0.02	0.021	0.011	<0.01	
Potassium, dissolved	mg/L	2.27	3.17	3.16		3.1						6.45						6.71	6.97	3.41	3.4	
Selenium, dissolved	mg/L	0.000340	0.000430	0.000430		0.000370						0.000950						0.000930	0.000890	0.000370	0.000390	
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020		<0.000020						<0.000020						<0.000020	<0.000020	<0.000020	<0.000020	
Sodium, dissolved	mg/L	17.900000	17.900000	17.400000		17.000000						18.700000						17.800000	19.500000	17.700000	17.900000	
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050		<0.000050						<0.000050						<0.000050	<0.000050	<0.000050	<0.000050	
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050		<0.0050						<0.0050						<0.0050	0.0080	<0.0050	<0.0050	

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**22/12/2014**	**02/01/2015**	**06/01/2015**	**13/01/2015**	**21/01/2015**	**29/01/2015**	**03/02/2015**	**11/02/2015**	**18/02/2015**	**26/02/2015**	**03/03/2015**	**09/03/2015**	**16/03/2015**	**25/03/2015**	**30/03/2015**	**04/04/2015**	**05/04/2015**	**06/04/2015**	**07/04/2015**	**08/04/2015**	**09/04/2015**
pH (field)	pH units	7.86	7.68	7.82	7.46	8.01	8.2	7.31	7.72	7.85	7.85	7.59	7.68	7.14	7.4	7.4	7.6	7.93	7.84	7.89	7.89	7.88
pH (lab)	pH units	8.19	8.11	8.04	8.26	8.28	8.29	8.19	7.91	7.88	8.08	7.88	8.06	8.11	8.09	8.45			8.11			
Hardness (from dissolved)	mg/L	261	247	275	250	261	251	257	259	260	248	253	256	251	247	243			201			
Hardness (from total)	mg/L	255	254	270	263	264	265	274	270	269	250	254	265	256	250	240			197			
Total Dissolved Solids	mg/L	302.0	312.0	334.0	330.0	320.0	320.0	352.0	336.0	340.0	304.0	286.0	326.0	352.0	304.0	302.0			292.0			
Total Suspended Solids	mg/L	1.1	3.6		1.5	1.7	1.2	2.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			2.8			
Alkalinity, total	mg/L	212	222	228	210	220	213	223	220	215	218	216	222	216	201	209			151			
Sulphate, dissolved	mg/L	71.8	76.4	73.1	73	65.6	71.7	70.1	69.4	72.7	68.7	67.4	73.7	66.9	64.4	63.6			79.7			
Chloride	mg/L	5.3	4.8	5.3	5	5	5.3	5.2	5.2	5.8	5.5	5.5	5.1	5.2	5.7	5.4			7.6			
Fluoride	mg/L	0.4900	0.5400	0.5600	0.5500	0.5400	0.5900	0.5300	0.5000	0.5000	0.4300	0.4600	0.5500	0.5300	0.4600	0.4300			0.3900			
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0052	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			0.0157			
Nitrate (N)	mg/L	0.647	0.407	0.524	0.499	0.499	0.506	0.528	0.201	0.135	0.084	0.096	0.542	0.115	0.143	0.145			2.76			
Ammonia	mg/L	0.017	0.029	0.034	0.02	0.017	0.016	0.046	0.043	0.061	0.068	0.066	0.011	0.058	0.081	0.056			0.076			
Aluminum, total	mg/L	0.0181	0.0712	0.0278	0.019	0.0121	0.0185	0.0693	0.0069	0.0042	0.0058	0.0213	0.0079	0.0113	0.0051	0.0696			0.06			
Arsenic, total	mg/L	0.000280	0.000250	0.000270	0.000240	0.000230	0.000240	0.000420	0.000230	0.000220	0.000210	0.000210	0.000230	0.000210	0.000220	0.000230			0.000480			
Cadmium, total	mg/L	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	0.000011	0.000015	0.000011	0.000014	0.000013	<0.000010	0.000028	0.000011	0.000014			0.000036			
Calcium, total	mg/L	58.6000	57.2000	58.1000	60.2000	57.6000	57.9000	59.8000	63.3000	61.2000	57.5000	59.2000	56.6000	60.2000	56.5000	55.6000			50.9000			
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010			
Copper, total	mg/L	0.00253	0.00313	0.00244	0.00226	0.00188	0.0023	0.00337	0.0033	0.00213	0.0018	0.00382	0.00331	0.00338	0.00169	0.00463			0.0106			
Iron, total	mg/L	0.03200	0.10700	0.05300	0.04400	0.02800	0.03900	0.21400	0.04200	0.04100	0.04400	0.07200	0.01500	0.06300	0.05000	0.10300			0.10200			
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020			
Magnesium, total	mg/L	26.4	27	30.4	27.3	29.2	29.3	30.2	27.1	28.3	26	25.9	30	25.6	26.4	24.6			16.9			
Manganese, total	mg/L	0.043900	0.072600	0.045800	0.041900	0.038000	0.053200	0.075300	0.299000	0.354000	0.385000	0.380000	0.017500	0.418000	0.403000	0.380000			0.075200			
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010			
Molybdenum, total	mg/L	0.0053	0.0048	0.0051	0.0048	0.0050	0.0051	0.0056	0.0040	0.0036	0.0037	0.0034	0.0046	0.0032	0.0036	0.0035			0.0078			
Nickel, total	mg/L	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	0.0016	0.0011	0.0011	0.0012	0.0012	<0.0010	0.0011	0.0011	0.0012			<0.0010			
Phosphorus, total	mg/L	<0.01	0.015	0.02	0.011	<0.01	0.011	0.017	0.013	<0.01	<0.01	0.014	0.011	<0.01	0.011	0.011			0.023			
Potassium, total	mg/L	2.88	2.24	2.39	2.21	2.38	2.55	2.47	2.41	2.21	2.07	2.21	2.31	2.07	1.97	1.97			5.47			
Selenium, total	mg/L	0.000390	0.000410	0.000470	0.000430	0.000400	0.000400	0.000580	0.000190	0.000130	0.000110	<0.00010	0.000360	<0.00010	<0.00010	0.000100			0.000940			
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000029	<0.000020	<0.000020			<0.000020			
Sodium, total	mg/L	18.000000	17.800000	18.900000	17.400000	18.800000	18.700000	19.600000	17.500000	17.300000	17.100000	17.800000	18.300000	17.000000	17.000000	15.100000			18.400000			
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050			
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0317	<0.0050	0.0205	<0.0050	0.1570			0.0137			
Aluminum, dissolved	mg/L	<0.0030	0.0078	<0.0030	0.0032	<0.0030	0.0063	<0.0030	<0.0030	<0.0030	0.0038	0.0173	0.0032	<0.0030	<0.0030	0.0049			0.0041			
Arsenic, dissolved	mg/L	0.000250	0.000250	0.000230	0.000260	0.000230	0.000220	0.000220	0.000240	0.000230	0.000240	0.000220	0.000200	0.000210	0.000200	0.000220			0.000340			
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	0.000012	0.000013	0.000016	<0.000010	0.000011	<0.000010	0.000013			<0.000010			
Calcium, dissolved	mg/L	61.5000	56.7000	62.9000	54.9000	57.0000	54.1000	58.1000	58.5000	58.9000	55.2000	56.3000	56.6000	59.0000	56.5000	56.7000			53.5000			
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010			
Copper, dissolved	mg/L	0.00227	0.00224	0.002	0.00191	0.00162	0.00179	0.0019	0.00324	0.00177	0.00204	0.00582	0.002	0.00168	0.00148	0.00213			0.00687			
Iron, dissolved	mg/L	0.00780	0.02260	0.00870	0.01000	0.00750	0.00880	0.01280	0.02860	0.03600	0.03890	0.06620	0.00740	0.04390	0.04290	0.04120			0.01050			
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020			
Magnesium, dissolved	mg/L	26.2	25.7	28.8	27.3	28.9	28.3	27.1	27.4	27.5	26.8	27.3	27.9	25.2	25.6	24.7			16.3			
Manganese, dissolved	mg/L	0.032800	0.055500	0.040400	0.033800	0.031300	0.039500	0.054600	0.292000	0.351000	0.398000	0.392000	0.015600	0.414000	0.391000	0.378000			0.058500			
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010			
Molydenum, dissolved	mg/L	0.0054	0.0051	0.0051	0.0054	0.0050	0.0050	0.0049	0.0041	0.0037	0.0036	0.0033	0.0047	0.0032	0.0035	0.0034			0.0079			
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	0.001	0.0013	0.0022	0.0012	<0.0010	0.0011	0.0014	0.0015			<0.0010			
Phosphorus, dissolved	mg/L	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.017	<0.01	<0.01	<0.01	<0.01			0.019			
Potassium, dissolved	mg/L	2.9	2.15	2.67	2.38	2.32	2.34	2.28	2.37	2.22	2.2	2.02	2.29	2.08	1.94	1.93			5.96			
Selenium, dissolved	mg/L	0.000390	0.000380	0.000420	0.000350	0.000390	0.000350	0.000420	0.000210	0.000160	<0.00010	<0.00010	0.000410	<0.00010	<0.00010	0.000110			0.000870			
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020			
Sodium, dissolved	mg/L	17.900000	16.800000	18.700000	18.100000	18.500000	17.900000	18.800000	18.000000	16.700000	17.400000	17.100000	17.900000	16.400000	16.000000	15.600000			18.000000			
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050			
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0056	<0.0050	0.0060	<0.0050	<0.0050			<0.0050			

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**10/04/2015**	**11/04/2015**	**13/04/2015**	**14/04/2015**	**14/04/2015**	**15/04/2015**	**16/04/2015**	**17/04/2015**	**18/04/2015**	**19/04/2015**	**20/04/2015**	**21/04/2015**	**22/04/2015**	**23/04/2015**	**24/04/2015**	**25/04/2015**	**26/04/2015**	**27/04/2015**	**28/04/2015**	**29/04/2015**	**30/04/2015**
pH (field)	pH units	7.79	7.91	7.89	7.79	7.83	7.82	7.72	7.96	7.88	7.84	7.95	7.86	7.84	7.81	7.85	7.91	7.91	7.91	7.87	7.95	7.9
pH (lab)	pH units					8.22							8.13						8.14			
Hardness (from dissolved)	mg/L					201							142						138			
Hardness (from total)	mg/L					211		230	215	267	164	125	158	156					142			
Total Dissolved Solids	mg/L					272.0							192.0						240.0			
Total Suspended Solids	mg/L					4.3							9.4						4.2			
Alkalinity, total	mg/L					154							114						106			
Sulphate, dissolved	mg/L					82.9							58.1						49.6			
Chloride	mg/L					9.1							8						6.9			
Fluoride	mg/L					0.3800							0.2700						0.2800			
Nitrite (N)	mg/L					0.0133							0.0474						0.0345			
Nitrate (N)	mg/L					2.93							2.55						2.59			
Ammonia	mg/L					0.064							0.059						0.066			
Aluminum, total	mg/L					0.128		0.12	0.13	0.0391	0.138	0.142	0.276	0.35					0.15			
Arsenic, total	mg/L					0.000410		0.000380	0.000380	0.000350	0.000310	0.000320	0.000490	0.000380					0.000350			
Cadmium, total	mg/L					0.000012		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000013	0.000015					0.000015			
Calcium, total	mg/L					55.7000		59.4000	56.2000	67.4000	42.8000	33.0000	41.9000	41.2000					36.7000			
Chromium, total	mg/L					<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					<0.0010			
Copper, total	mg/L					0.0153		0.0138	0.0131	0.00968	0.0144	0.0166	0.0185	0.0236					0.0232			
Iron, total	mg/L					0.19900		0.25200	0.26700	0.11400	0.27400	0.27000	0.45200	0.57600					0.23900			
Lead, total	mg/L					0.00058		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	0.00021					<0.00020			
Magnesium, total	mg/L					17.6		19.8	18	24	13.7	10.3	12.9	12.9					12.3			
Manganese, total	mg/L					0.042400		0.049600	0.044900	0.025000	0.057900	0.045600	0.084600	0.120000					0.063400			
Mercury, total	mg/L					<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010					<0.000010			
Molybdenum, total	mg/L					0.0074		0.0079	0.0074	0.0064	0.0063	0.0058	0.0068	0.0064					0.0052			
Nickel, total	mg/L					<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010					<0.0010			
Phosphorus, total	mg/L					0.028		0.033	0.031	0.025	0.027	0.034	0.041	0.038					0.034			
Potassium, total	mg/L					5.97		6.17	5.6	5.17	5.02	4.36	5.62	5.16					4.33			
Selenium, total	mg/L					0.001090		0.001140	0.001250	0.001470	0.001100	0.000640	0.001150	0.000620					0.000810			
Silver, total	mg/L					<0.000020		0.000031	<0.000020	<0.000020	<0.000020	0.000047	<0.000020	<0.000020					<0.000020			
Sodium, total	mg/L					20.000000		22.600000	20.900000	21.700000	19.700000	18.800000	19.900000	19.000000					16.600000			
Thallium, total	mg/L					<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050					<0.000050			
Zinc, total	mg/L					<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050					<0.0050			
Aluminum, dissolved	mg/L					<0.0030							0.0053						0.0082			
Arsenic, dissolved	mg/L					0.000340							0.000260						0.000270			
Cadmium, dissolved	mg/L					<0.000010							<0.000010						<0.000010			
Calcium, dissolved	mg/L					52.8000							36.5000						36.0000			
Chromium, dissolved	mg/L					<0.0010							<0.0010						<0.0010			
Copper, dissolved	mg/L					0.00728							0.0103						0.0151			
Iron, dissolved	mg/L					0.00970							0.01700						0.04340			
Lead, dissolved	mg/L					<0.00020							<0.00020						<0.00020			
Magnesium, dissolved	mg/L					16.8							12.4						11.8			
Manganese, dissolved	mg/L					0.010900							0.022300						0.034700			
Mercury, dissolved	mg/L					<0.000010							<0.000010						<0.000010			
Molydenum, dissolved	mg/L					0.0076							0.0066						0.0051			
Nickel, dissolved	mg/L					<0.0010							<0.0010						<0.0010			
Phosphorus, dissolved	mg/L					0.02							0.014						0.019			
Potassium, dissolved	mg/L					5.91							5.09						4.21			
Selenium, dissolved	mg/L					0.001080							0.000740						0.000650			
Silver, dissolved	mg/L					<0.000020							<0.000020						<0.000020			
Sodium, dissolved	mg/L					18.900000							19.700000						15.500000			
Thallium, dissolved	mg/L					<0.000050							<0.000050						<0.000050			
Zinc, dissolved	mg/L					<0.0050							<0.0050						<0.0050			

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		01/05/2015	02/05/2015	03/05/2015	04/05/2015	05/05/2015	06/05/2015	07/05/2015	08/05/2015	09/05/2015	10/05/2015	11/05/2015	12/05/2015	13/05/2015	14/05/2015	15/05/2015	15/05/2015	16/05/2015	17/05/2015	18/05/2015	19/05/2015	20/05/2015
pH (field)	pH units	7.89	7.87	6.94	7.85	7.63	7.65	7.67	7.67	7.44	7.54	7.45	7.97	7.64	7.76	7.61	7.61	7.7	7.72	7.92	7.98	7.81
pH (lab)	pH units										8.16				8.06		8.07					8.07
Hardness (from dissolved)	mg/L										241				131		126					144
Hardness (from total)	mg/L										223				119		124					149
Total Dissolved Solids	mg/L										334.0				200.0		188.0					240.0
Total Suspended Solids	mg/L										<1.0				10.9		12.3					5.4
Alkalinity, total	mg/L										184				98.6		99.8					123
Sulphate, dissolved	mg/L										82.3				36.2		35.4					38.7
Chloride	mg/L										11				5.9		6					6.5
Fluoride	mg/L										0.4100				0.2300		0.2300					0.2700
Nitrite (N)	mg/L										0.0086				0.0408		0.0427					0.042
Nitrate (N)	mg/L										2.79				1.49		1.49					1.62
Ammonia	mg/L										0.1				0.049		0.026					0.059
Aluminum, total	mg/L										0.0199				0.059		0.0611					0.113
Arsenic, total	mg/L										0.000330				0.000430		0.000410					0.000490
Cadmium, total	mg/L										<0.000010				0.000011		0.00001					0.000015
Calcium, total	mg/L										56.9000				31.5000		32.3000					39.0000
Chromium, total	mg/L										<0.0010				<0.0010		<0.0010					<0.0010
Copper, total	mg/L										0.00994				0.0212		0.022					0.0236
Iron, total	mg/L										0.06100				0.27500		0.25400					0.43300
Lead, total	mg/L										<0.00020				<0.00020		<0.00020					<0.00020
Magnesium, total	mg/L										19.8				9.66		10.5					12.5
Manganese, total	mg/L										0.035400				0.083200		0.092700					0.152000
Mercury, total	mg/L										<0.000010				<0.000010		<0.000010					<0.000010
Molybdenum, total	mg/L										0.0059				0.0035		0.0034					0.0042
Nickel, total	mg/L										<0.0010				<0.0010		0.0016					0.0012
Phosphorus, total	mg/L										0.016				0.022		0.027					0.04
Potassium, total	mg/L										4.31				3.01		3.15					3.43
Selenium, total	mg/L										0.001120				0.000610		0.000530					0.000610
Silver, total	mg/L										<0.000020				<0.000020		<0.000020					0.000021
Sodium, total	mg/L										17.600000				12.900000		13.600000					15.500000
Thallium, total	mg/L										<0.000050				<0.000050		<0.000050					<0.000050
Zinc, total	mg/L										0.0160				<0.0050		<0.0050					<0.0050
Aluminum, dissolved	mg/L										0.0109				0.0116		0.0103					0.0086
Arsenic, dissolved	mg/L										0.000320				0.000320		0.000320					0.000380
Cadmium, dissolved	mg/L										<0.000010				<0.000010		<0.000010					0.000012
Calcium, dissolved	mg/L										62.7000				35.3000		32.8000					38.5000
Chromium, dissolved	mg/L										<0.0010				<0.0010		<0.0010					<0.0010
Copper, dissolved	mg/L										0.00865				0.0177		0.0169					0.0152
Iron, dissolved	mg/L										0.03450				0.14000		0.13100					0.17300
Lead, dissolved	mg/L										<0.00020				<0.00020		<0.00020					<0.00020
Magnesium, dissolved	mg/L										20.6				10.5		10.7					11.6
Manganese, dissolved	mg/L										0.024100				0.052300		0.058200					0.112000
Mercury, dissolved	mg/L										<0.000010				<0.000010		<0.000010					<0.000010
Molydenum, dissolved	mg/L										0.0057				0.0036		0.0035					0.0037
Nickel, dissolved	mg/L										<0.0010				<0.0010		<0.0010					<0.0010
Phosphorus, dissolved	mg/L										0.012				0.012		0.015					0.015
Potassium, dissolved	mg/L										5.05				3.37		3.09					3.39
Selenium, dissolved	mg/L										0.001060				0.000660		0.000630					0.000570
Silver, dissolved	mg/L										<0.000020				<0.000020		<0.000020					<0.000020
Sodium, dissolved	mg/L										19.100000				13.500000		13.900000					13.900000
Thallium, dissolved	mg/L										<0.000050				<0.000050		<0.000050					<0.000050
Zinc, dissolved	mg/L										<0.0050				<0.0050		<0.0050					<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**21/05/2015**	**22/05/2015**	**23/05/2015**	**24/05/2015**	**25/05/2015**	**26/05/2015**	**27/05/2015**	**28/05/2015**	**29/05/2015**	**30/05/2015**	**31/05/2015**	**04/06/2015**	**09/06/2015**	**15/06/2015**	**22/06/2015**	**29/06/2015**	**07/07/2015**	**14/07/2015**	**20/07/2015**	**29/07/2015**	**05/08/2015**
pH (field)	pH units	7.64	7.67	7.73	7.61	7.69	7.75	7.64	7.66	7.65	7.66	7.78	7.79	7.77	7.84	7.9	7.97		7.76	7.94	7.92	7.95
pH (lab)	pH units									8.13		8.24	8.15	8.19	8.21	8.32	8.32	8.31	8.16	8.26	8.22	8.34
Hardness (from dissolved)	mg/L									203		216	244	262	247	251	253	255	268	271	255	245
Hardness (from total)	mg/L									252		243	249	253	305	258	241	245	246	274	270	246
Total Dissolved Solids	mg/L									314.0		300.0	318.0	300.0	318.0	312.0	310.0	323.0	284.0	304.0	318.0	324.0
Total Suspended Solids	mg/L									1.4		2	<1.0	<1.0	12.6	<1.0	<1.0	8.3	<1.0	<1.0	<1.0	<1.0
Alkalinity, total	mg/L									177		174	211	209	217	223	222	215	217	228	222	224
Sulphate, dissolved	mg/L									68.8		74.8	61.6	66.6	65.6	63	64.4	62.9	61.2	60	72.9	59.5
Chloride	mg/L									9.4		10	5.4	5.7	5.3	5.6	5.2	5.4	5	5.2	5.3	5
Fluoride	mg/L									0.3800		0.3600	0.5100	0.5400	0.5400	0.5600	0.5200	0.5400	0.5300	0.5500	0.4800	0.5600
Nitrite (N)	mg/L									0.021		0.0219	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L									2.19		2.14	0.385	0.355	0.365	0.31	0.252	0.275	0.274	0.279	0.21	0.231
Ammonia	mg/L									0.088		0.068	0.012	0.024	0.025	0.022	0.021	0.03	0.023	0.03	0.62	0.018
Aluminum, total	mg/L									0.025		0.0328	0.0074	0.004	0.567	0.0045	0.0079	0.0139	0.0066	0.0127	0.0055	0.0099
Arsenic, total	mg/L									0.000350		0.000410	0.000250	0.000250	0.000530	0.000260	0.000220	0.000270	0.000230	0.000280	0.000290	0.000270
Cadmium, total	mg/L									<0.000010		0.000014	<0.000010	<0.000010	0.000018	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L									64.9000		61.6000	57.6000	54.9000	67.0000	56.8000	53.4000	54.6000	54.1000	60.6000	60.6000	55.2000
Chromium, total	mg/L									<0.0010		<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L									0.0123		0.0129	0.00299	0.00286	0.0202	0.00236	0.00295	0.00268	0.00258	0.0024	0.00253	0.0021
Iron, total	mg/L									0.13100		0.13400	0.01800	0.01300	0.87700	0.01600	0.01800	0.02100	0.02100	0.03300	0.02100	0.02500
Lead, total	mg/L									<0.00020		<0.00020	<0.00020	<0.00020	0.00028	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L									21.9		21.7	25.4	28.1	33.4	28.1	26.2	26.4	27	29.7	28.9	26.3
Manganese, total	mg/L									0.114000		0.135000	0.063100	0.056800	0.250000	0.058300	0.055300	0.054100	0.052900	0.052700	0.047500	0.040800
Mercury, total	mg/L									<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L									0.0062		0.0063	0.0046	0.0048	0.0058	0.0050	0.0044	0.0048	0.0049	0.0047	0.0054	0.0045
Nickel, total	mg/L									<0.0010		<0.0010	<0.0010	<0.0010	0.0018	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L									0.019		0.03	0.01	<0.01	0.041	<0.01	<0.01	<0.01	0.01	<0.01	0.01	<0.01
Potassium, total	mg/L									5.11		5.39	2.66	2.42	3.05	2.45	2.18	2.14	2.33	2.33	2.55	2.13
Selenium, total	mg/L									0.001170		0.000870	0.000330	0.000340	0.000370	0.000380	0.000310	0.000310	0.000310	0.000310	0.000410	0.000310
Silver, total	mg/L									<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000023
Sodium, total	mg/L									20.300000		21.700000	18.400000	18.800000	21.800000	18.300000	17.700000	17.100000	18.100000	19.400000	19.900000	18.100000
Thallium, total	mg/L									<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L									<0.0050		<0.0050	0.0513	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L									0.0203		0.0073	0.0039	0.0036	0.0046	0.0041	0.0063	0.004	0.0083	0.0097	0.0124	<0.0030
Arsenic, dissolved	mg/L									0.000310		0.000340	0.000230	0.000250	0.000240	0.000260	0.000250	0.000250	0.000270	0.000260	0.000260	0.000240
Cadmium, dissolved	mg/L									<0.000010		0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000029	<0.000010
Calcium, dissolved	mg/L									50.4000		55.9000	56.0000	57.0000	54.4000	57.4000	59.5000	55.4000	57.7000	58.2000	55.9000	54.8000
Chromium, dissolved	mg/L									<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L									0.00982		0.00989	0.00295	0.00283	0.00253	0.00228	0.00261	0.00265	0.00234	0.00256	0.0021	0.0021
Iron, dissolved	mg/L									0.06810		0.07720	0.01140	0.01170	0.01140	0.01700	0.01550	0.01550	0.01920	0.01940	0.02190	0.01720
Lead, dissolved	mg/L									<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L									18.7		18.5	25.3	29.1	26.9	26	25.3	28.4	30.1	30.6	28.1	26.4
Manganese, dissolved	mg/L									0.091300		0.107000	0.059500	0.055600	0.055100	0.055500	0.057000	0.053300	0.051000	0.051300	0.041000	0.037800
Mercury, dissolved	mg/L									<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L									0.0056		0.0057	0.0048	0.0048	0.0047	0.0050	0.0049	0.0052	0.0044	0.0053	0.0055	0.0049
Nickel, dissolved	mg/L									<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L									0.013		0.013	<0.01	<0.01	<0.01	0.011	0.012	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L									4.39		4.52	2.6	2.39	2.35	2.45	2.35	2.38	2.25	2.43	2.07	2.11
Selenium, dissolved	mg/L									0.000880		0.000870	0.000350	0.000360	0.000350	0.000340	0.000420	0.000320	0.000260	0.000370	0.000280	0.000320
Silver, dissolved	mg/L									<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L									17.300000		17.900000	16.700000	18.200000	18.000000	17.200000	16.900000	19.200000	19.300000	19.500000	18.000000	17.600000
Thallium, dissolved	mg/L									<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L									<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3
Sample Date		**14/08/2015**	**18/08/2015**	**24/08/2015**	**31/08/2015**	**31/08/2015**	**08/09/2015**	**15/09/2015**	**23/09/2015**	**30/09/2015**	**05/10/2015**	**05/10/2015**	**13/10/2015**	**13/10/2015**	**22/10/2015**	**28/10/2015**	**02/11/2015**	**09/11/2015**	**16/11/2015**	**23/11/2015**	**03/12/2015**	**06/12/2015**
pH (field)	pH units	7.8		7.83	7.77	7.77	7.8	7.83	7.79	7.88	7.8	7.8	7.81	7.81	7.85	7.78	7.57	7.86	7.63	7.56	7.67	7.78
pH (lab)	pH units	8.18	8.32	8.04		8.19	8.27	8.34	8.43	8.42		8.38		8.28	8.16	8.12	8.15	8.2	8.42	8.23		8.25
Hardness (from dissolved)	mg/L	249	262	282		269	243	248	263	267		249		230	260	247	263	273	270	264		237
Hardness (from total)	mg/L	257	379	240		261	250	248	261	251		257		252	265	257	279	259	266	250		234
Total Dissolved Solids	mg/L	324.0	292.0	320.0		306.0	312.0	316.0	298.0	288.0		342.0		300.0	292.0	308.0	314.0	290.0	334.0	318.0		284.0
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0		4.6	16.6	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0
Alkalinity, total	mg/L	226	225	230		211	220	220	217	224		225		222	224	222	229	229	223	213		216
Sulphate, dissolved	mg/L	54.1	55.4	56.6		49.4	51	49.9	55.5	50.1		57.5		49.5	48	49.2	52.5	53.7	57.1	49.2		52.7
Chloride	mg/L	5.1	5	6		4.8	4.6	4.8	4.4	4.4		5.4		4.6	4.8	4.7	4.7	4.9	4.6	4.4		5.1
Fluoride	mg/L	0.5400	0.5600	0.5600		0.5400	0.5700	0.5600	0.5400	0.5600		0.5600		0.5400	0.5500	0.5800	0.5400	0.5700	0.5600	0.5400		0.5500
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Nitrate (N)	mg/L	0.207	0.217	0.2		0.189	0.184	0.165	0.184	0.183		0.207		0.187	0.213	0.209	0.24	0.232	0.236	0.235		0.248
Ammonia	mg/L	0.027	0.027	0.033		0.03	0.014	0.22	0.024	0.018		0.019		0.028	0.023	0.026	0.02	0.019	0.016	0.015		0.017
Aluminum, total	mg/L	0.0103	0.0047	0.0032		0.0824	0.11	0.0108	0.0188	0.0064		0.0051		0.0076	0.008	0.0136	0.0067	0.0126	0.0121	0.0091		0.0609
Arsenic, total	mg/L	0.000280	0.000320	0.000250		0.000330	0.000290	0.000290	0.000260	0.000300		0.000250		0.000210	0.000280	0.000260	0.000170	0.000230	0.000300	0.000240		0.000310
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010		<0.000010	0.000014	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Calcium, total	mg/L	57.2000	84.3000	51.7000		59.7000	54.6000	54.3000	57.6000	54.9000		57.7000		54.1000	59.8000	55.5000	63.3000	57.9000	60.2000	55.5000		49.1000
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Copper, total	mg/L	0.00285	0.00327	0.00219		0.00531	0.00579	0.003	0.00256	0.00257		0.00212		0.00266	0.00246	0.00246	0.00205	0.00251	0.00311	0.00203		0.00203
Iron, total	mg/L	0.03200	0.02500	0.02500		0.20300	0.25800	0.02900	0.02700	0.02700		0.02800		0.03600	0.03000	0.03700	0.02600	0.03400	0.03700	0.03400		0.02900
Lead, total	mg/L	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Magnesium, total	mg/L	27.7	41	26.9		27.2	27.7	27.2	28.4	27.6		27.4		28.4	28.1	28.7	29.5	27.9	28.1	27.1		27
Manganese, total	mg/L	0.042500	0.055000	0.042000		0.064600	0.061100	0.044100	0.043600	0.043200		0.041600		0.049700	0.044100	0.063000	0.048700	0.050300	0.053400	0.065300		0.038700
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molybdenum, total	mg/L	0.0047	0.0060	0.0047		0.0048	0.0051	0.0043	0.0050	0.0048		0.0048		0.0046	0.0045	0.0052	0.0046	0.0048	0.0046	0.0049		0.0046
Nickel, total	mg/L	<0.0010	<0.0010	<0.0010		0.0012	0.0011	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		0.0029
Phosphorus, total	mg/L	<0.01	<0.01	<0.01		0.023	0.021	0.013	0.011	0.015		<0.01		<0.01	<0.01	0.012	0.01	<0.01	0.017	0.01		<0.01
Potassium, total	mg/L	2.19	3.37	2.26		2.5	2.27	2.11	2.24	2.31		2.22		2.32	2.2	2.28	2.61	2.13	2.59	2.14		2.25
Selenium, total	mg/L	0.000330	0.000480	0.000290		0.000400	0.000330	0.000330	0.000310	0.000290		0.000330		0.000370	0.000250	0.000350	0.000340	0.000310	0.000370	0.000300		0.000380
Silver, total	mg/L	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020
Sodium, total	mg/L	20.000000	27.700000	18.000000		18.000000	18.000000	18.300000	20.100000	18.900000		18.700000		19.100000	19.600000	19.300000	19.700000	18.900000	18.500000	18.500000		18.600000
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050
Aluminum, dissolved	mg/L	0.0088	0.0088	0.0035		0.01	0.0067	0.0079	0.0185	0.0058		0.0089		0.0069	0.0046	0.0119	0.0058	0.0067	0.0068	0.0061		0.057
Arsenic, dissolved	mg/L	0.000330	0.000300	0.000320		0.000330	0.000310	0.000250	0.000230	0.000220		0.000310		0.000340	0.000240	0.000240	0.000300	0.000260	0.000230	0.000270		0.000290
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Calcium, dissolved	mg/L	56.2000	55.7000	62.2000		58.5000	52.0000	50.5000	57.2000	61.2000		54.0000		50.1000	57.0000	55.4000	57.5000	57.7000	58.4000	56.8000		49.0000
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Copper, dissolved	mg/L	0.00261	0.00224	0.00239		0.00432	0.00238	0.00361	0.00293	0.0025		0.00224		0.00243	0.00255	0.00233	0.00198	0.00246	0.00224	0.00267		0.00394
Iron, dissolved	mg/L	0.01900	0.03560	0.02020		0.02820	0.02400	0.02700	0.02570	0.02210		0.02140		0.03170	0.02160	0.01750	0.01630	0.01830	0.01770	0.02400		0.01820
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Magnesium, dissolved	mg/L	26.4	29.7	30.7		29.9	27.5	29.6	29.2	27.8		27.8		25.5	28.7	26.4	28.9	31.4	30.2	29.7		27.8
Manganese, dissolved	mg/L	0.040600	0.040000	0.043300		0.046900	0.038600	0.043200	0.044200	0.042000		0.037800		0.066800	0.040900	0.053200	0.039600	0.044200	0.047900	0.061800		0.036400
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molydenum, dissolved	mg/L	0.0049	0.0054	0.0049		0.0042	0.0045	0.0049	0.0048	0.0048		0.0050		0.0046	0.0048	0.0049	0.0052	0.0052	0.0045	0.0048		0.0047
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	0.001	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Phosphorus, dissolved	mg/L	0.01	<0.01	0.012		<0.01	<0.01	0.02	<0.01	<0.01		0.014		0.016	<0.01	0.013	0.012	0.016	<0.01	<0.01		<0.01
Potassium, dissolved	mg/L	2.18	2.21	2.64		2.58	2.19	2.46	2.26	2.22		1.96		1.98	2.2	2.13	2.2	2.35	2.46	2.13		2.21
Selenium, dissolved	mg/L	0.000300	0.000270	0.000300		0.000270	0.000270	0.000220	0.000250	0.000270		0.000370		0.000290	0.000340	0.000320	0.000350	0.000260	0.000300	0.000330		0.000280
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020
Sodium, dissolved	mg/L	18.100000	18.600000	20.400000		19.900000	17.900000	19.900000	19.900000	18.300000		17.900000		17.400000	19.000000	18.700000	18.800000	19.400000	20.000000	19.800000		19.100000
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050

Data omitted from calculation of summary statistics.

Station Name		W3	W3	W3
Sample Date		**08/12/2015**	**19/12/2015**	**26/12/2015**
pH (field)	pH units	8.22	7.6	7.48
pH (lab)	pH units	8.46	8.1	8.22
Hardness (from dissolved)	mg/L	250	252	259
Hardness (from total)	mg/L	246	223	254
Total Dissolved Solids	mg/L	286.0	292.0	354.0
Total Suspended Solids	mg/L	<1.0	5.6	6.1
Alkalinity, total	mg/L	236	238	243
Sulphate, dissolved	mg/L	50	49	58
Chloride	mg/L	4.7	4.9	5.9
Fluoride	mg/L	0.5200	0.5600	0.5200
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.238	0.246	0.238
Ammonia	mg/L	0.012	0.013	0.021
Aluminum, total	mg/L	0.0289	0.0152	0.0372
Arsenic, total	mg/L	0.000170	0.000230	0.000220
Cadmium, total	mg/L	<0.000010	<0.000010	0.000011
Calcium, total	mg/L	53.0000	48.0000	49.8000
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.00208	0.00229	0.00326
Iron, total	mg/L	0.03000	0.02600	0.06600
Lead, total	mg/L	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	27.6	24.9	31.5
Manganese, total	mg/L	0.041400	0.035200	0.080100
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0042	0.0039	0.0040
Nickel, total	mg/L	0.0015	<0.0010	0.001
Phosphorus, total	mg/L	0.016	<0.01	0.023
Potassium, total	mg/L	2.15	1.96	2.45
Selenium, total	mg/L	0.000380	0.000250	0.000350
Silver, total	mg/L	0.000022	<0.000020	<0.000020
Sodium, total	mg/L	17.100000	16.300000	20.900000
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	0.0083	0.0094
Aluminum, dissolved	mg/L	0.0161	0.0057	0.0303
Arsenic, dissolved	mg/L	0.000210	0.000280	0.000220
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	53.5000	54.4000	55.9000
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00504	0.00461	0.00236
Iron, dissolved	mg/L	0.01960	0.01470	0.01520
Lead, dissolved	mg/L	<0.00020	0.00032	<0.00020
Magnesium, dissolved	mg/L	28.4	28.2	29
Manganese, dissolved	mg/L	0.033600	0.035100	0.064300
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0050	0.0046	0.0048
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.012	<0.01	<0.01
Potassium, dissolved	mg/L	2.15	2.14	2.37
Selenium, dissolved	mg/L	0.000480	0.000360	0.000490
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	18.700000	19.400000	19.900000
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**26/06/2009**	**24/04/2010**	**26/04/2010**	**28/04/2010**	**30/04/2010**	**02/05/2010**	**04/05/2010**	**06/05/2010**	**08/05/2010**	**11/05/2010**	**13/05/2010**	**15/05/2010**	**18/05/2010**	**20/05/2010**	**21/05/2010**	**22/05/2010**	**24/05/2010**	**26/05/2010**	**28/05/2010**	**30/05/2010**	**01/06/2010**
pH (field)	pH units			7.33	7.68								7.83	7.68	8	7.88	7.91	7.58	7.54	8.02	8.06	7.62
pH (lab)	pH units	8.2	7.5	7.7	7.7	7.7	8	7.9	8	8.1	8	8.1	8.1	8.2	8.2	8.1	8.2	8	8	8.3	8.3	8.3
Hardness (from dissolved)	mg/L	147		47.7	41	42.6	63.5	71.6	80.6	86.6	99.9	105	113	113	118	116	117	111	141	131	134	140
Hardness (from total)	mg/L	147	52	48.7	43.5	50.8	64.4	75.5	84.7	94.8	91.2	103	108	115	113	116	113	116	139	136	141	771
Total Dissolved Solids	mg/L	190	126	56	70	76	68	130	140	130	110	120	160	150	160	160	170	150	150	180	180	170
Total Suspended Solids	mg/L	4	<5	6	19	14	<4	8	<4	4	8	<4	<4	5	2	3	2	9	6	8	4	2
Alkalinity, total	mg/L		45	45	38	42	60	70	79	87	94	98	110	110	110	120	120	110	120	130	130	140
Sulphate, dissolved	mg/L		4.3	<0.5	<0.5	<5	<0.5	3.6	6.2	11	12	13	13	15	14	15	14	15	17	16	17	17
Chloride	mg/L		0.92	1.6	1.2	1.3	1.7	1.5	1.5	1.3	1.2	1	1.5	1	1.1	3.4	1.4	0.8	1.6	1.4	1.4	1.8
Fluoride	mg/L			0.12	0.11	0.12	0.15	0.19	0.2	0.22	0.17	0.19	0.25	0.28	0.28	0.32	0.32	0.31	0.32	0.38	0.36	0.33
Nitrite (N)	mg/L	<0.005		<0.005	<0.03	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	0.2		0.1	<0.1	<0.2	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	0.04	0.06	0.06	0.08	0.09	0.11	0.14
Ammonia	mg/L	<0.005		0.1	0.1	0.046	0.039	<0.01	<0.01	0.011	0.063	0.04	0.069	0.05	0.03	0.006	<0.005	0.017	<0.05	0.007	0.012	<0.005
Aluminum, total	mg/L	0.024	0.124	0.181	0.655	0.663	0.195	0.222	0.159	0.101	0.102	0.064	0.031	0.06	0.033	0.056	0.047	0.234	0.214	0.281	0.103	0.073
Arsenic, total	mg/L	0.0005	0.0005	0.0005	0.0007	0.0008	0.0006	0.0007	0.0006	0.0006	0.0005	0.0004	0.0005	<0.001	<0.001	0.0005	<0.0004	0.0007	<0.001	0.0007	0.0005	0.0005
Cadmium, total	mg/L	<0.00001	0.00001	0.00003	0.00009	<0.00001	0.00001	0.00004	0.00003	0.00005	0.00001	0.00007	0.00001	0.00002	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	38.3	14.9	12.8	11.8	13.7	17.1	19.9	22.4	24.7	24.1	27.4	28.6	29.3	29	30	29	31	34	35	36	40
Chromium, total	mg/L	<0.001	0.0007	<0.001	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.0034	0.007	0.0064	0.0082	0.0091	0.0059	0.0087	0.0102	0.0045	0.0035	0.005	0.0024	0.0042	0.0022	0.002	0.003	0.003	0.004	0.005	0.005	0.004
Iron, total	mg/L	0.101	0.253	0.396	1.06	1.14	0.574	0.627	0.582	0.443	0.311	0.233	0.175	0.209	0.172	0.204	0.179	0.465	0.404	0.533	0.312	0.242
Lead, total	mg/L	<0.0002	0.0002	0.0002	0.0006	0.0004	0.0003	0.0004	0.0003	0.0003	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	12.5	4.72	4.08	3.42	4.04	5.27	6.3	7.01	8.03	7.52	8.43	8.77	10.1	9.99	10	10	10	13	12	12	13
Manganese, total	mg/L	0.006	0.008	0.024	0.051	0.037	0.032	0.045	0.02	0.017	0.018	0.013	0.015	0.037	0.028	0.032	0.031	0.097	0.077	0.082	0.113	0.097
Mercury, total	mg/L	0.00003	0.00001	<0.00002	<0.00002	0.00003	0.00002	<0.00002	0.00006	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002
Molybdenum, total	mg/L	0.002	0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002
Nickel, total	mg/L	0.001	0.001	0.002	0.003	0.003	0.002	0.003	0.002	0.001	0.001	0.001	0.001	<0.003	<0.003	0.001	0.007	0.001	<0.003	0.002	0.001	0.001
Phosphorus, total	mg/L		0.09					0.051	0.034		0.028	0.022	0.02	0.019	0.021							
Potassium, total	mg/L	1.38	1.8	1.34	1.24	1.23	1.16	1.22	1.21	1.22	1.11	1.23	1.18	1.25	1.19	1	1	1	1	1	1	2
Selenium, total	mg/L	0.0002	<0.0006	<0.0001	<0.0001	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0004	<0.001	<0.0008	<0.0008	<0.0008	<0.001	<0.0008	<0.0008	<0.0008
Silver, total	mg/L	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	8.76	2.95	2.68	2.12	2.75	3.54	4.69	4.84	5.28	4.47	5.64	5.63	6.98	6.91	6	6	6	9	8	8	9
Thallium, total	mg/L	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	0.002	0.007	0.01	0.009	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.008	0.052	0.059	0.07	0.064	0.039	0.029	0.021	0.019	0.013	0.013	0.011	0.007	0.008	<0.01	<0.01	<0.01	0.012	0.011	<0.01	<0.01
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0003	0.0004	0.0005	0.0005	0.0005	<0.001	0.0005	0.0005	0.0004
Cadmium, dissolved	mg/L	<0.00001	<0.00001	0.00002	<0.00001	0.00002	0.00005	0.00001	0.00001	0.00006	<0.00001	0.00002	0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	38.1	13.6	12.7	11.2	11.5	16.9	19.4	21.5	22.9	26.4	27.7	30	29.1	30.1	31	31	30	35	34	35	36
Chromium, dissolved	mg/L	<0.001	<0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.0029	0.005	0.0044	0.0037	0.0056	0.0039	0.0032	0.003	0.004	0.0022	0.0037	0.0019	0.0018	0.0019	0.002	0.002	0.002	0.002	0.002	0.002	0.003
Iron, dissolved	mg/L	0.057	0.17	0.213	0.23	0.309	0.27	0.263	0.291	0.247	0.14	0.121	0.108	0.073	0.098	0.09	0.083	0.077	0.062	0.049	0.052	0.04
Lead, dissolved	mg/L	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	12.6	4.3	3.87	3.19	3.41	5.15	5.6	6.55	7.12	8.26	8.68	9.28	9.89	10.5	10	10	9	13	11	11	12
Manganese, dissolved	mg/L	0.003	0.0004	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.011	0.002
Mercury, dissolved	mg/L	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.0002
Molydenum, dissolved	mg/L	0.002	0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.002	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	<0.003	0.001	0.001	0.001
Phosphorus, dissolved	mg/L		0.04					0.024	0.018		0.013	0.011	<0.01	<0.01	0.011							
Potassium, dissolved	mg/L	1.36	1.6	1.32	1.15	0.98	1.18	1.14	1.11	1.14	1.17	1.25	1.26	1.18	1.16	1	1	1	1	1	1	2
Selenium, dissolved	mg/L	0.0002	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	<0.0008	<0.0008	<0.0008	<0.001	<0.0008	<0.0008	<0.0008
Silver, dissolved	mg/L	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	8.76	2.8	2.58	2.12	2.41	3.53	3.69	4.37	4.91	5.55	5.8	6.22	6.89	7.22	7	7	6	9	7	7	8
Thallium, dissolved	mg/L	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**03/06/2010**	**05/06/2010**	**11/06/2010**	**13/06/2010**	**14/06/2010**	**15/06/2010**	**16/06/2010**	**17/06/2010**	**19/06/2010**	**21/06/2010**	**23/06/2010**	**25/06/2010**	**27/06/2010**	**04/07/2010**	**11/07/2010**	**18/07/2010**	**25/07/2010**	**02/08/2010**	**08/08/2010**	**15/08/2010**	**22/08/2010**
pH (field)	pH units	7.86	7.87	7.9	7.72	7.45	7.4	7.28	7.33	7.42	7.55	8.04	8.09	8.12	8.04	8.25	8.13	8	7.96	8.06	7.96	8.27
pH (lab)	pH units	8.3	8.3	8.3	8.2	8.3	8.27	8.3	8.4	8.1	8.3	8.17	8.31	8.07	8.04	8.12	8.11	8.01	8.17	8.17	8.23	8.26
Hardness (from dissolved)	mg/L	130	146	138	143	143	144	141	143	139	141	118	132	134	111	148	162	138	179	176	186	153
Hardness (from total)	mg/L	148	149	136	150	147	154	148	149	148	162	138	140	131	115	151	149	151	166	180	172	157
Total Dissolved Solids	mg/L	180	180	190	180	180	190	170	180	180	200	170	150	180	190	210	230	230	270	270	270	240
Total Suspended Solids	mg/L	2	<4	2	2	1	1	<1	3	16	3	14	6	2	32	2	22	22	9	11	16	33
Alkalinity, total	mg/L	140	140	130	140	130	140	150	140	140	140	120	130	140	110	150	130	120	140	130	130	120
Sulphate, dissolved	mg/L	19	19	20	20	28	22	22	24	21	23	17	19	18	16	29	31	29	42	48	51	40
Chloride	mg/L	2	1.4	1.8	1.7	2.8	1.8	1.4	2.5	1.8	2	1.3	1.8	1.3	1.5	2.3	9	7.7	13	14	13	11
Fluoride	mg/L	0.34	0.36	0.38	0.38	0.39	0.38	0.12	0.39	0.34	0.36	0.32	0.35	0.34	0.28	0.34	0.28	0.34	0.35	0.34	0.36	0.32
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.02	0.013	0.032	0.009	0.012	0.011
Nitrate (N)	mg/L	0.15	0.19	0.19	0.22	0.19	0.2	0.21	0.37	0.52	0.64	0.43	0.55	0.29	0.34	0.82	3.1	2.7	4.9	5.2	6.4	4
Ammonia	mg/L	0.016	<0.05	0.038	0.036	0.04	0.041	0.016	0.043	<0.05	<0.5	<0.5	0.014	0.014	0.074	<0.005		0.02	0.041	0.2	0.06	0.022
Aluminum, total	mg/L	0.056	0.051	0.056	0.035	0.033	0.179	0.026	0.052	0.404	0.076	0.366	0.132	0.059	0.704	0.057	0.314	0.432	0.17	0.201	0.237	0.475
Arsenic, total	mg/L	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0004	0.0004	0.0007	0.0005	0.0006	0.0005	0.0005	0.0009	0.0004	0.0006	0.0009	0.0004	0.0006	0.0007	0.0009
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	38	38	34	38	37	39	37	37	38	40	34	36	35	30	39	39	39	44	48	46	42
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.002	0.003	0.004	0.003	0.002	0.017	0.002	0.002	0.004	0.003	0.004	0.003	0.002	0.008	0.003	0.004	0.005	0.004	0.006	0.004	0.006
Iron, total	mg/L	0.19	0.176	0.168	0.132	0.12	0.37	0.091	0.147	0.736	0.197	0.666	0.311	0.172	1.19	0.155	0.668	0.712	0.306	0.433	0.5	1.02
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0012	0.0003	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0003
Magnesium, total	mg/L	13	13	12	14	13	14	13	14	13	15	13	12	11	10	13	12	13	13	15	14	13
Manganese, total	mg/L	0.075	0.073	0.084	0.04	0.028	0.031	0.016	0.024	0.106	0.023	0.065	0.031	0.016	0.098	0.016	0.051	0.05	0.03	0.04	0.046	0.074
Mercury, total	mg/L	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.005	0.004	0.007	0.007	0.008	0.006
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.002	<0.001	0.001	0.002	0.001	0.002	0.002	0.001	0.003	0.001	0.002	0.006	0.004	0.002	0.002	0.003
Phosphorus, total	mg/L																					
Potassium, total	mg/L	1	1	1	1	1	2	1	1	1	2	1	1	1	<1	1	2	2	3	3	3	2
Selenium, total	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0009	0.0014	0.0015	0.002	0.0014
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	8	8	8	9	8	9	9	9	9	10	9	9	7	7	10	13	12	15	15	17	13
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	<0.01	0.012	<0.01	0.014	0.012	<0.01	0.02	0.01	0.022	0.02	0.025	0.017	0.026	0.025
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	<0.0004	0.0004	0.0004	0.0004	<0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	<0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001
Calcium, dissolved	mg/L	35	38	35	37	36	37	37	37	36	37	31	34	34	29	40	46	37	47	45	50	40
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.002
Iron, dissolved	mg/L	0.039	0.045	0.024	0.031	0.044	0.034	0.035	0.027	0.048	0.035	0.059	0.054	0.045	0.111	0.055	0.096	0.106	0.056	0.066	0.089	0.142
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	11	12	12	12	13	13	12	12	12	12	10	11	12	10	12	12	11	15	15	15	13
Manganese, dissolved	mg/L	0.004	0.023	0.002	<0.001	0.004	0.007	0.004	<0.001	<0.001	<0.001	<0.001	0.003	0.003	0.004	0.005	0.003	0.007	0.005	0.009	0.009	0.01
Mercury, dissolved	mg/L	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.005	0.004	0.007	0.007	0.008	0.007
Nickel, dissolved	mg/L	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	1	1	1	1	1	1	1	1	1	1	1	1	1	<1	1	2	2	3	3	3	2
Selenium, dissolved	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.001	0.0009	0.0014	0.0016	0.0021	0.0015
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	7	8	9	9	10	10	9	8	8	8	7	8	8	7	9	12	11	18	17	17	13
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**04/09/2010**	**10/09/2010**	**17/09/2010**	**08/10/2010**	**07/11/2010**	**22/05/2011**	**25/05/2011**	**26/06/2011**	**03/07/2011**	**11/07/2011**	**19/07/2011**	**26/07/2011**	**02/08/2011**	**13/08/2011**	**19/08/2011**	**29/08/2011**	**08/09/2011**	**12/09/2011**	**19/09/2011**	**27/09/2011**	**06/10/2011**
pH (field)	pH units	8.02	8.13	8.04	8.19	7.85												7.98	7.98	7.35	7.93	7.85
pH (lab)	pH units	8.12	8.11	8.25	8.18	8.13	7.88	7.98	8.01	8.12	7.96	7.93	8.12	7.75	8.03	8.08	8.02	8.2	8.17	8.13	8.17	8.07
Hardness (from dissolved)	mg/L	174	162	185	188	198	77.2	96.7	122	118	136	114	131	73.1	112	109	117	131	126	130	140	145
Hardness (from total)	mg/L	172	180	197	207	201	86	113	114	120	137	132	147	127	117	134	112	124	125	138	122	129
Total Dissolved Solids	mg/L	290	270	280	290	250	98	130	160	160	160	180	190	130	190	210	180	180	170	180	190	170
Total Suspended Solids	mg/L	13	31	8	6	<1	120	100	220	96	77	180	35	660	130	280	42	17	20	22	43	15
Alkalinity, total	mg/L	140	120	130	140	160	75	88	110	110	120	110	130	70	110	100	120	120	120	120	120	130
Sulphate, dissolved	mg/L	49	42	46	53	39	6.9	16	12	11	13	9.9	9.9						9.6	10	10	
Chloride	mg/L	14	12	9.3	11	4.1	1.4	1.9						2.1				1.6	1.9	2	1.9	1.4
Fluoride	mg/L	0.34		0.39	0.32	0.37	0.22	0.25						0.19								
Nitrite (N)	mg/L	0.011	0.014	0.013	0.012	<0.005	0.012	0.009	0.008	<0.005	0.009	0.007	0.007	0.007	0.007	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L	6.1	5.4	6.7	7.3	2.25	0.16	0.17	0.16	0.16	0.19	0.12	0.17	0.15	0.11	0.08	0.1	0.11	0.17	0.11	0.12	0.17
Ammonia	mg/L	0.04	0.1	0.017	<0.005	0.029	0.02	0.23	0.033	0.013	<0.005	0.024	0.052		0.012	0.009	0.006	0.008	0.015	0.006	0.033	0.022
Aluminum, total	mg/L	0.208	0.482	0.198	0.136	0.024	3.15	2.91	2.04	1.43	1.11	4.55	3.13	14.9	2.79	6.85	0.388	0.292	0.305	0.386	0.797	0.378
Arsenic, total	mg/L	0.0006	0.0008	0.0005	0.0002	0.0004	0.0022	0.0021	0.0016	0.0013	0.0012	0.0027	0.002	0.0073	0.002	0.0043	0.001	0.001	0.0009	0.001	0.0011	0.0009
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	0.00002	<0.00001	0.00007	0.00011	0.00007	0.00005	0.00005	0.00011	0.00007	0.00033	0.00007	0.00016	0.00003	0.00002	0.00045	0.00001	0.00002	0.00002
Calcium, total	mg/L	46	48	52	54.4	52	21.8	28.6	30.1	31.4	35.6	34.4	38.8	30	30.9	34.8	29.8	32.2	33	36.3	31.7	34.5
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.001	<0.001	0.006	0.006	0.004	0.003	0.002	0.009	0.005	0.033	0.006	0.016	0.001	0.001	<0.001	0.001	0.002	<0.001
Copper, total	mg/L	0.004	0.006	0.003	0.0037	0.0026	0.011	0.0118	0.0083	0.0091	0.0254	0.0121	0.0109	0.0417	0.0111	0.0205	0.0034	0.0029	0.0024	0.0036	0.0047	0.0023
Iron, total	mg/L	0.487	0.953	0.387	0.323	0.1	6.36	5.52	3.71	2.54	2.1	6.4	5.27	23.9	4.97	12	1.51	1.17	1.16	1.33	1.93	1
Lead, total	mg/L	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.0015	0.0013	0.0012	0.0009	0.0009	0.0021	0.0013	0.0065	0.0012	0.0033	0.0003	<0.0002	<0.0002	<0.0002	0.0005	0.0002
Magnesium, total	mg/L	14	15	17	17.3	17.4	7.68	9.97	9.57	10.1	11.7	11.2	12.1	12.5	9.63	11.5	9.1	10.5	10.4	11.5	10.4	10.3
Manganese, total	mg/L	0.04	0.084	0.043	0.046	0.018	0.296	0.192	0.111	0.085	0.067	0.19	0.131	0.624	0.166	0.308	0.111	0.122	0.128	0.132	0.139	0.091
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.008	0.007	0.008	0.009	0.003	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001
Nickel, total	mg/L	0.002	0.003	0.002	0.001	0.001	0.007	0.007	0.006	0.005	0.004	0.01	0.007	0.033	0.008	0.016	0.003	0.003	0.002	0.002	0.003	0.002
Phosphorus, total	mg/L						0.166	0.149	0.129	0.101	0.069		0.139	0.769	0.157	0.263	0.047	0.039	0.039	0.044	0.064	0.031
Potassium, total	mg/L	3	3	3	3.57	2.4	1.25	1.46	0.97	0.9	1.04	1.32	1.18	1.93	0.91	1.23	0.67	0.8	0.82	0.97	0.78	0.81
Selenium, total	mg/L	0.002	0.002	0.0022	0.0022	0.0007	0.0002	0.0003	0.0001	0.0002	0.0002	0.0003	0.0002	0.0005	0.0002	0.0004	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	0.00003	0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00003	0.00011	0.00003	0.00005	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002
Sodium, total	mg/L	15	16	17	19.1	13.8	4.55	5.84	6.07	6.2	7.51	6.1	7.29	5.23	5.23	5.43	5.36	6.01	5.91	6.76	5.77	5.69
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00005	<0.00005	0.00013	<0.00005	0.00006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.005	<0.005	0.011	0.011	0.01	0.009	0.012	0.015	0.011	0.056	0.015	0.031	<0.005	<0.005	0.008	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.022	0.025	0.025	0.021	0.01	0.026	0.025	0.031	0.026	0.028	0.029	0.024	0.053	0.034	0.028	0.028	0.03	0.028	0.021	0.033	0.018
Arsenic, dissolved	mg/L	0.0005	0.0007	0.0005	0.0004	0.0004	0.0008	0.0007	0.0007	0.0007	0.0007	0.0008	0.0009	0.0008	0.0008	0.0009	0.0009	0.0009	0.0008	0.0007	0.0008	0.0006
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.00001	<0.00001	0.00001	0.00002	0.00004	<0.00001	0.00002	<0.00001	<0.00001	0.00002	0.00001	<0.00001	0.00001	0.00001	0.00002	0.00002	0.00001	<0.00001
Calcium, dissolved	mg/L	47	43	50	51.5	51.7	20.1	25.4	31.8	30.3	36.5	30.7	34.6	19.7	29.9	29.6	31.5	34.8	32.8	34.6	37.9	37.8
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.002	0.002	0.002	0.0019	0.0015	0.0026	0.0023	0.0044	0.0031	0.003	0.0034	0.0035	0.005	0.0021	0.0023	0.0021	0.0022	0.0018	0.0018	0.0023	0.0017
Iron, dissolved	mg/L	0.124	0.142	0.123	0.08	0.071	1.11	0.753	0.31	0.291	0.33	0.469	0.455	0.621	0.518	0.485	0.678	0.7	0.574	0.564	0.693	0.437
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	14	13	15	14.5	16.8	6.57	8.09	10.2	10.2	10.9	9.1	10.8	5.81	9.06	8.56	9.31	10.7	10.8	10.7	11	12.3
Manganese, dissolved	mg/L	0.014	0.014	0.018	0.024	0.017	0.125	0.059	0.022	0.017	0.024	0.033	0.043	0.058	0.065	0.087	0.08	0.106	0.112	0.117	0.091	0.076
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.008	0.008	0.008	0.008	0.004	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001
Nickel, dissolved	mg/L	0.001	0.001	0.001	<0.001	<0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, dissolved	mg/L						0.031	0.023	0.021	0.019	0.02		0.019	0.022	0.02	0.02	0.022	0.023	0.019	0.02	0.023	0.019
Potassium, dissolved	mg/L	3	3	3	3.27	2.46	1.02	1.05	0.93	0.84	0.96	0.66	0.86	0.43	0.61	0.56	0.67	0.79	0.81	0.79	0.76	0.84
Selenium, dissolved	mg/L	0.0021	0.0022	0.0022	0.002	0.0007	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	16	16	16	15.3	14.5	4.37	5.36	7.02	6.94	7.28	5.86	6.88	4.26	5.56	5.2	5.62	6.29	6.32	6.32	6.29	7.01
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**11/10/2011**	**06/04/2012**	**13/04/2012**	**14/04/2012**	**15/04/2012**	**16/04/2012**	**17/04/2012**	**18/04/2012**	**19/04/2012**	**20/04/2012**	**21/04/2012**	**22/04/2012**	**23/04/2012**	**24/04/2012**	**26/04/2012**	**27/04/2012**	**28/04/2012**	**29/04/2012**	**30/04/2012**	**01/05/2012**	**02/05/2012**
pH (field)	pH units	12.41	7.78		7.98	8.03	8.04	8.15	8.03	7.89	7.74	7.53	7.62	7.65	7.74	7.72	7.69	7.57	7.56	7.5	7.47	7.52
pH (lab)	pH units	8.26	8.19	8.27	8.2	8.13	8.05							7.78						7.82		
Hardness (from dissolved)	mg/L	143	221	176	160	134	115							68.6						71.6		
Hardness (from total)	mg/L	131	220	163	157	133	113							69.4						69.7		
Total Dissolved Solids	mg/L	170	300	218	190	170	154							128						106		
Total Suspended Solids	mg/L	3	<1.0	<1.0	1.7	2.9	1.4							10.6						52.5		
Alkalinity, total	mg/L	140	217	165	154	127	109							61.2						59.8		
Sulphate, dissolved	mg/L	13	24.8	25.9	24.2	18.2	13.1							<0.50						3.23		
Chloride	mg/L	1.7	2.7	1.8	1.9	1.8	1.8							1.9						1.2		
Fluoride	mg/L		0.5	0.42	0.4	0.36	0.31							0.15						0.16		
Nitrite (N)	mg/L	<0.05	<0.005	<0.0050	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050		
Nitrate (N)	mg/L	<0.4	<0.020	0.031	<0.020	<0.020	<0.020							0.496						0.642		
Ammonia	mg/L	0.008	0.0094	0.076	0.0089	0.013	0.0058							0.017						0.01		
Aluminum, total	mg/L	0.092	0.016	0.0104	0.0655	0.0172	0.0232							0.201						1.45		
Arsenic, total	mg/L	0.0008	0.0005	0.00045	0.00051	0.00047	0.00046							0.00052						0.00094		
Cadmium, total	mg/L	0.00005	0.00002	0.000018	0.000103	0.000016	0.000018							0.000031						0.000042		
Calcium, total	mg/L	33.1	54	40.4	38.9	33.1	28.2							18.4						17.8		
Chromium, total	mg/L	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010							<0.0010						0.0026		
Copper, total	mg/L	0.0103	0.0039	0.00214	0.00652	0.00323	0.00369							0.00793						0.00758		
Iron, total	mg/L	0.565	0.062	0.0621	0.145	0.105	0.106							0.483						2.43		
Lead, total	mg/L	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020							<0.00020						0.00065		
Magnesium, total	mg/L	11.7	20.6	15.2	14.5	12.2	10.3							5.69						6.16		
Manganese, total	mg/L	0.114	0.004	0.0148	0.0191	0.0212	0.0266							0.0258						0.0855		
Mercury, total	mg/L	<0.00002	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010							<0.000010						<0.000010		
Molybdenum, total	mg/L	0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010							0.0011						0.0012		
Nickel, total	mg/L	0.002	<0.001	<0.0010	<0.0010	<0.0010	<0.0010							0.0012						0.003		
Phosphorus, total	mg/L	0.03	0.022	0.024	0.039	0.043	0.05							0.05						0.072		
Potassium, total	mg/L	0.97	2.99	2.27	2.5	2.53	2.55							1.89						1.62		
Selenium, total	mg/L	0.0002	0.0002	0.00019	0.00016	0.00015	0.00012							0.00023						0.00027		
Silver, total	mg/L	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020							<0.000020						<0.000020		
Sodium, total	mg/L	6.88	14	10.1	9.51	7.85	6.65							3.96						4.43		
Thallium, total	mg/L	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050							<0.000050						<0.000050		
Zinc, total	mg/L	0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050		
Aluminum, dissolved	mg/L	0.023	0.0043	0.0057	0.007	0.0041	0.0141							0.0393						0.0337		
Arsenic, dissolved	mg/L	0.0007	0.0004	0.00042	0.0004	0.00038	0.0004							0.00042						0.00056		
Cadmium, dissolved	mg/L	0.00004	0.00002	0.000023	0.000023	0.000016	0.000023							0.000017						0.000021		
Calcium, dissolved	mg/L	37.6	53.8	42.9	38.7	33.1	28.7							18.2						18.9		
Chromium, dissolved	mg/L	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010							<0.0010						<0.0010		
Copper, dissolved	mg/L	0.0024	0.00197	0.00248	0.00292	0.00281	0.00416							0.00654						0.00525		
Iron, dissolved	mg/L	0.505	0.0318	0.0588	0.0541	0.0622	0.0892							0.242						0.369		
Lead, dissolved	mg/L	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020							<0.00020						<0.00020		
Magnesium, dissolved	mg/L	11.8	21.1	16.8	15.2	12.4	10.6							5.63						5.94		
Manganese, dissolved	mg/L	0.105	0.0031	0.0162	0.0167	0.0199	0.0265							0.0203						0.0587		
Mercury, dissolved	mg/L	<0.00002	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010							<0.000010						<0.000010		
Molydenum, dissolved	mg/L	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010							<0.0010						0.0011		
Nickel, dissolved	mg/L	0.002	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010							0.0011						0.0013		
Phosphorus, dissolved	mg/L	0.021	0.019	0.025	0.038	0.04	0.053							0.03						0.024		
Potassium, dissolved	mg/L	0.87	2.99	2.38	2.42	2.37	2.42							1.78						1.58		
Selenium, dissolved	mg/L	0.0001	0.00023	0.00019	0.00017	0.00015	0.00017							0.00026						0.00028		
Silver, dissolved	mg/L	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020							<0.000020						<0.000020		
Sodium, dissolved	mg/L	6.88	14	11.2	9.94	7.99	6.77							3.97						4.53		
Thallium, dissolved	mg/L	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050							<0.000050						<0.000050		
Zinc, dissolved	mg/L	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050							<0.0050						<0.0050		

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		03/05/2012	06/05/2012	10/05/2012	12/05/2012	19/05/2012	25/05/2012	02/06/2012	09/06/2012	15/06/2012	22/06/2012	29/06/2012	08/07/2012	15/07/2012	22/07/2012	29/07/2012	30/07/2012	08/08/2012	17/08/2012	27/08/2012	03/09/2012	13/09/2012
pH (field)	pH units	7.4	7.31	7.89	7.66	7.67	7.64	7.95	7.88	7.78	8.03	7.97	7.99	8.15	7.93	8.01	8.01	7.92	7.65	7.98	8.16	7.83
pH (lab)	pH units		7.97		7.83	7.94	7.97	8.09	8.08	8.04	8.1	8.21	8.28	8.11	8.06	8.13	8.27	8.31	8.33	8.39	8.25	8.17
Hardness (from dissolved)	mg/L		98.9		76.8	90.9	102	132	122	103	115	146	136	150	144	152	153	156	156	174	154	137
Hardness (from total)	mg/L		96.4		94.7	115	136	130	132	131	127	135	144	142	162	151	150	159	165	145	171	141
Total Dissolved Solids	mg/L		148		120	140	146	164	158	160	174	188	184	192	196	210	206	202	204	200	158	178
Total Suspended Solids	mg/L		55.8		430	544	631	75.3	148	465	143	43.6	51.8	45.3	33.7	39.3	34.3	36.5	28.3	34.5	76	88.7
Alkalinity, total	mg/L		85		71.4	86.8	101	124	119	96.7	116	139	138	143	145	154	154	157	158	158	155	131
Sulphate, dissolved	mg/L		16.5		4.39	6.6	9.44	12.2	10.4	8.53	9.59	13.1	11.9	13	11.9	11	13.8	11.9	12.1	11.7	10.5	11.2
Chloride	mg/L		2.2		1.4	1.7	1.8	1.3	2	1.4	1.5	1.5	1.6	1.6	1.5	1.8	1.3	1.6	1.5	1.8	1.3	1.8
Fluoride	mg/L		0.21		0.19	0.21	0.23	0.29	0.29	0.23	0.28	0.31	0.3	0.31	0.33	0.33	0.36	0.37	0.34	0.33	0.32	0.26
Nitrite (N)	mg/L		0.0183		<0.0050	0.015	0.0244	0.0107	0.0058	<0.0050	0.0139	0.0055	<0.0050	<0.0050	<0.0050	0.008	0.0062	0.0064	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L		0.953		0.124	0.132	0.123	0.192	0.135	0.109	0.158	0.22	0.166	0.163	0.169	0.155	0.162	0.156	0.161	0.106	0.067	0.102
Ammonia	mg/L		0.018		0.0328	0.031	0.12	0.063	0.11	0.049	0.027	0.093	0.018	0.017	0.067	0.084	0.026	0.014	0.0085	0.0084	0.0088	0.008
Aluminum, total	mg/L		2.04		8.89	8.83	14.1	1.77	4.48	9.99	2.86	0.921	1.24	1.29	0.892	1.01	0.884	1.03	0.817	0.692	0.327	0.791
Arsenic, total	mg/L		0.00132		0.0039	0.00485	0.00693	0.00132	0.00245	0.00474	0.00207	0.00131	0.00136	0.00126	0.00132	0.00139	0.00119	0.00115	0.00137	0.00116	0.00145	0.00116
Cadmium, total	mg/L		0.000043		0.000141	0.000199	0.00025	0.000024	0.000067	0.000233	0.000077	0.000035	0.000049	0.000025	0.000021	0.000016	0.000015	0.000019	<0.000010	0.000025	0.000015	0.000016
Calcium, total	mg/L		24.3		22.6	28.2	32.3	33.3	33.4	32.6	32.5	34.7	36.8	36.3	41.9	38.6	38.3	40.1	42.5	36.9	43.6	36.6
Chromium, total	mg/L		0.0037		0.018	0.018	0.026	0.0036	0.0084	0.0192	0.0062	0.0021	0.0027	0.0029	0.0024	0.0026	0.0018	0.0021	0.0018	0.0016	<0.0010	0.0017
Copper, total	mg/L		0.0124		0.0203	0.0258	0.0329	0.00529	0.0287	0.0234	0.00739	0.00357	0.00403	0.00449	0.00362	0.00384	0.00448	0.00301	0.0027	0.00362	0.00335	0.00461
Iron, total	mg/L		3.37		14.2	14.8	22.3	3.1	7.16	15.2	5	1.91	2.43	2.5	2.09	2.26	2.03	2.18	2.17	2.01	1.8	2.43
Lead, total	mg/L		0.00084		0.00369	0.00429	0.00584	0.00093	0.00182	0.00404	0.00116	0.00041	0.00049	0.00049	0.00037	0.00041	0.00041	0.00036	0.00032	0.00035	0.00031	0.00061
Magnesium, total	mg/L		8.71		9.28	10.7	13.4	11.4	11.9	12.1	11	11.9	12.7	12.5	13.9	13.3	13.2	14.2	14.3	12.9	15.2	11.9
Manganese, total	mg/L		0.144		0.452	0.574	0.882	0.137	0.25	0.529	0.133	0.0741	0.0869	0.0971	0.0795	0.0839	0.0795	0.0996	0.0979	0.114	0.148	0.176
Mercury, total	mg/L		<0.000010		0.000015	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L		0.0018		0.0011	0.0011	0.0016	0.0016	0.0015	0.0015	0.0014	0.0016	0.0015	0.0014	0.0017	0.0016	0.0015	0.0015	0.0017	0.0013	0.0013	<0.0010
Nickel, total	mg/L		0.0042		0.0159	0.0195	0.0258	0.0042	0.0081	0.0188	0.0069	0.0028	0.0033	0.0036	0.0033	0.0031	0.0028	0.0028	0.0025	0.0044	0.0027	0.0041
Phosphorus, total	mg/L		0.099		0.398	0.497	0.688	0.096	0.207	0.512	0.139	0.051	0.082	0.08	0.065	0.064	0.064	0.068	0.062	0.052	0.068	0.099
Potassium, total	mg/L		1.76		1.84	1.72	2.21	1.32	1.44	1.65	1.16	1.08	1.05	1.07	1.16	1.12	1.47	1.11	1.19	1.09	1.18	0.791
Selenium, total	mg/L		0.0004		0.0003	0.00031	0.00043	0.00016	0.00027	0.00049	0.00023	0.00019	0.00014	0.00017	0.00021	0.00023	0.00017	0.00015	0.00011	0.00012	0.00016	0.00013
Silver, total	mg/L		0.000024		0.000066	0.000064	0.000095	<0.000020	0.000035	0.000074	0.000021	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L		6.38		4.48	5.04	5.93	6.99	6.96	6.08	6.72	7.25	7.75	7.61	8.62	7.96	8.04	8.58	8.61	7.72	9.04	6.9
Thallium, total	mg/L		<0.000050		0.000076	0.000081	0.000126	<0.000050	<0.000050	0.000089	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L		0.0088		0.028	0.0344	0.0548	0.0066	0.0143	0.0331	0.0097	<0.0050	<0.0050	0.0061	<0.0050	0.0051	0.0055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L		0.0296		0.0343	0.0431	0.0229	0.0199	0.0242	0.0244	0.0256	0.0309	0.0217	0.0207	0.0198	0.0232	0.0296	0.0238	0.0172	0.0189	0.0173	0.0196
Arsenic, dissolved	mg/L		0.0006		0.00078	0.00087	0.0008	0.00072	0.00085	0.00075	0.00072	0.00078	0.00088	0.00087	0.00087	0.00095	0.00094	0.00092	0.00092	0.00092	0.00097	0.00079
Cadmium, dissolved	mg/L		0.00002		0.000013	0.000016	0.000017	0.000016	<0.000010	0.000011	0.00001	0.000016	0.000013	<0.000010	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L		26		20.4	23.7	26.3	34	32.1	27.2	29.5	37.9	35.5	38.8	36.5	38.9	39.3	40.1	40.1	46.9	39.3	35.6
Chromium, dissolved	mg/L		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L		0.00687		0.00269	0.00312	0.00189	0.00359	0.00209	0.0021	0.00211	0.00426	0.00207	0.0017	0.00168	0.00189	0.00347	0.0016	0.00132	0.00149	0.00147	0.00175
Iron, dissolved	mg/L		0.389		0.761	0.826	0.796	0.441	0.519	0.444	0.39	0.458	0.538	0.567	0.509	0.61	0.611	0.594	0.648	0.801	0.78	0.601
Lead, dissolved	mg/L		<0.00020		<0.00020	0.00048	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L		8.22		6.28	7.7	8.72	11.4	10.2	8.52	10.1	12.4	11.5	12.8	12.7	13.4	13.4	13.5	13.6	13.7	13.5	11.7
Manganese, dissolved	mg/L		0.0898		0.163	0.157	0.226	0.0432	0.037	0.0521	0.0312	0.0233	0.0247	0.0294	0.0288	0.035	0.0366	0.0545	0.0539	0.068	0.0646	0.074
Mercury, dissolved	mg/L		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.0017		<0.0010	0.0012	0.0013	0.0015	0.0013	0.0011	0.0013	0.0016	0.0015	0.0019	0.0017	0.0017	0.0016	0.0017	0.0016	0.0015	0.0015	0.0012
Nickel, dissolved	mg/L		0.0014		0.0016	0.002	0.0025	0.0015	0.0017	0.0019	0.0018	0.0015	0.0016	0.0017	0.0015	0.0017	0.0015	0.0016	0.0014	0.0017	0.0017	0.0019
Phosphorus, dissolved	mg/L		0.029		0.031	0.032	0.023	0.021	0.021	0.02	0.018	0.024	0.024	0.023	0.022	0.025	0.022	0.024	0.023	0.023	0.026	0.02
Potassium, dissolved	mg/L		1.64		1.04	0.96	0.982	2.24	1.03	0.757	0.875	1.08	0.902	1.02	1.05	0.998	1.03	1.1	1.05	1.1	1.11	0.796
Selenium, dissolved	mg/L		0.0004		0.0001	0.00013	0.00019	0.00015	0.00015	0.00011	0.00011	0.00013	0.00017	0.00013	0.00012	0.00015	0.00014	0.00017	0.00013	<0.00010	0.00016	<0.00010
Silver, dissolved	mg/L		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L		6.3		4.14	4.95	5.57	7.47	6.73	5.89	6.62	7.93	7.35	8.21	8.07	8.31	8.12	8.47	8.07	8.28	8.21	7.22
Thallium, dissolved	mg/L		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L		<0.0050		<0.0050	0.0098	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**19/09/2012**	**24/09/2012**	**04/10/2012**	**12/10/2012**	**20/10/2012**	**06/04/2013**	**12/04/2013**	**18/04/2013**	**25/04/2013**	**05/05/2013**	**07/05/2013**	**19/05/2013**	**24/05/2013**	**31/05/2013**	**08/06/2013**	**16/06/2013**	**20/06/2013**	**25/06/2013**	**02/07/2013**	**11/07/2013**	**19/07/2013**
pH (field)	pH units	7.89	7.91	7.44	7.74	8.6	7.99	8	8.13	8.6	7.57	8.17	8.1	9.67	7.91	7.57	8.5	8.6	8.08	7.94	8.09	8.1
pH (lab)	pH units	8.08	8.25	8.07	8.04	8.13	8.28	8.25	8.2	8.31	8	7.95	8.05	7.78	7.94	8	8.15	8.14	8.05	8.19	8.06	8.27
Hardness (from dissolved)	mg/L	152	153			160	368	254	244	203	105	92	85.3	69	101	107	127	136	144	131	127	155
Hardness (from total)	mg/L	146	155	169	179	153	397	261	274	212	120	95.1	87	86.2	184	184	146	157	164	174	169	167
Total Dissolved Solids	mg/L	200	208	206	230	214	526	376	382	268	158	168	138	134	180	172	186	200	184	186	198	206
Total Suspended Solids	mg/L	20.9	10.3	130	7.1	1	<1.0	<1.0	<1.0	<1.0	2.4	4.3	58	220	660	564	194	109	73.4	121	255	62
Alkalinity, total	mg/L	144	150	141	149	155	344	242	264	192	98.1	81.7	73.7	63.4	91.8	108	125	136	143	125	133	154
Sulphate, dissolved	mg/L	13.8	12.1	13.1	15.3	15.7	96.2	61.7	60.9	43.9	16.8	7.54	9.32	7.58	18.7	9.88	11.1	13.6	15.6	11.9	14	14.6
Chloride	mg/L	1.8	1.4	1.5	2.2	1.6	6	4.1	4.3	4.4	2.7	3.4	3.6	3.3	4.7	1.8	2.3	1.7	1.7	1.5	1.7	1.6
Fluoride	mg/L	0.31	0.28	0.28	0.29	0.25	0.68	0.59	0.63	0.51	0.23	0.18	0.17	0.18	0.28	0.29	0.29	0.35	0.36	0.3	0.32	0.36
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0064	<0.050	<0.0050	<0.0050	0.0123	<0.0050	0.006	<0.0050	0.024	0.0342	0.0158	0.0076	0.0061	<0.0050	0.0084	0.0066	0.0057
Nitrate (N)	mg/L	0.104	0.078	0.15	0.122	0.174	<0.20	<0.020	<0.020	0.843	0.586	0.408	0.43	0.558	1.26	0.104	0.153	0.17	0.192	0.154	0.15	0.162
Ammonia	mg/L	0.059	0.12	0.074	0.018	0.023	0.083	<0.050	0.36	0.015	0.034	0.018	0.028	0.056	0.064	0.14	0.069	0.072	0.057	0.13	0.069	0.046
Aluminum, total	mg/L	0.413	0.0809	0.957	0.0823	0.0238	0.0213	0.0191	0.0108	0.0104	0.0497	0.0905	1.37	5.11	13	14.7	4.86	2.92	1.88	8.93	5.17	1.81
Arsenic, total	mg/L	0.00101	0.00086	0.00174	0.00089	0.00057	0.00085	0.00059	0.00056	0.00046	0.0004	0.00031	0.00114	0.00256	0.00659	0.00794	0.00293	0.00209	0.00159	0.00481	0.00327	0.00175
Cadmium, total	mg/L	<0.000010	<0.000010	0.000034	0.000011	<0.000010	0.000024	0.000028	0.000025	0.000021	0.000017	0.000030	0.000022	0.000057	0.000202	0.000209	0.000063	0.000054	0.000033	0.000147	0.000096	0.000041
Calcium, total	mg/L	38.3	40.5	42.8	44.4	39.1	92.2	61.7	63.7	50	29.9	24.3	22.1	21.1	46.5	45.4	37.2	40.3	42.1	45.6	44	42
Chromium, total	mg/L	0.0012	<0.0010	0.002	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0027	0.0089	0.0235	0.0290	0.0096	0.0056	0.0041	0.0181	0.0108	0.0038
Copper, total	mg/L	0.00238	0.00225	0.00609	0.0026	0.00146	0.0062	0.00479	0.00353	0.00456	0.00709	0.0081	0.0159	0.0326	0.0488	0.0357	0.0167	0.00808	0.00581	0.0201	0.0144	0.00573
Iron, total	mg/L	1.34	0.935	2.86	0.652	0.525	0.0779	0.0623	0.0468	0.051	0.175	0.24	2.41	7.74	23.2	22.6	7.9	4.76	3.07	15.1	8.83	3.19
Lead, total	mg/L	<0.00020	<0.00020	0.00086	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00059	0.00216	0.00544	0.00652	0.00210	0.00128	0.00080	0.00374	0.00239	0.00075
Magnesium, total	mg/L	12.2	13.1	15.1	16.7	13.5	40.5	26	27.8	21.2	11	8.35	7.71	8.13	16.4	17.1	12.9	13.6	14.4	14.7	14.3	15
Manganese, total	mg/L	0.0968	0.0892	0.305	0.0975	0.068	0.0088	0.0102	0.0086	0.0171	0.0173	0.0292	0.152	0.333	0.886	0.562	0.217	0.148	0.108	0.313	0.227	0.11
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000024	<0.000010	<0.000010	<0.000010	0.000023	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0011	0.0013	0.001	0.0013	0.0012	<0.0010	<0.0010	<0.0010	0.0011	0.0016	0.0012	0.0012	0.0019	0.0035	0.0021	0.0017	0.0019	0.0021	0.0018	0.0017	0.0017
Nickel, total	mg/L	0.0024	0.0021	0.0047	0.0023	0.0016	0.0019	0.0011	0.001	<0.0010	<0.0010	<0.0010	0.0034	0.0091	0.0263	0.0304	0.0107	0.0068	0.0048	0.0188	0.0129	0.0053
Phosphorus, total	mg/L	0.045	0.033	0.149	0.041	0.024	0.07	0.049	0.035	0.034	0.052	0.069	0.099	0.279	0.788	0.668	0.253	0.133	0.101	0.419	0.284	0.115
Potassium, total	mg/L	0.945	1.03	1.06	1.06	0.917	9.06	6.39	5.1	3.95	2.89	2.26	1.54	2.15	3.54	2.57	1.69	1.64	1.6	1.86	1.56	1.53
Selenium, total	mg/L	0.0001	0.00018	0.00018	0.00021	0.00018	0.0003	0.00015	0.00018	0.00039	0.00028	0.00013	0.00027	0.00017	0.00076	0.0007	0.00029	0.00019	0.00022	0.00046	0.00027	0.00021
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000033	0.000072	0.000054	0.000030	0.000043	<0.000020	0.000045	0.000031	0.000079
Sodium, total	mg/L	7.17	8.06	8.43	9.74	7.98	33.7	21	20.4	15.2	8.63	6.24	5.47	5.94	10.1	7.84	8.02	8.26	9.25	7.91	8.39	9.89
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000101	0.000126	<0.000050	<0.000050	<0.000050	0.000080	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	0.0086	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0181	0.0470	0.0538	0.0185	0.0110	0.0073	0.0308	0.0195	0.0068
Aluminum, dissolved	mg/L	0.0173	0.02			0.011	0.0146	0.0104	0.0052	0.004	0.021	0.0132	0.0322	0.0239	0.0172	0.0168	0.0164	0.0117	0.0126	0.0376	0.0225	0.0237
Arsenic, dissolved	mg/L	0.00086	0.00082			0.00063	0.00109	0.0006	0.00055	0.00042	0.00034	0.00037	0.00055	0.00058	0.00075	0.00124	0.00087	0.00083	0.00072	0.00095	0.00088	0.00079
Cadmium, dissolved	mg/L	<0.000010	<0.000010			<0.000010	0.000027	0.000050	0.000013	0.000015	0.000023	0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	39.4	40.6			41.5	86.4	59.3	56	46.3	26.5	23.6	22.5	17.6	26.6	28.6	33	36.5	36.2	34.2	33	40.4
Chromium, dissolved	mg/L	<0.0010	<0.0010			<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0019	0.0023			0.00148	0.00694	0.00439	0.00278	0.00371	0.00609	0.00612	0.00794	0.00992	0.00789	0.0021	0.00181	0.00151	0.00146	0.00266	0.00163	0.00158
Iron, dissolved	mg/L	0.684	0.644			0.436	0.0619	0.0463	0.0383	0.0366	0.0856	0.0946	0.362	0.401	0.559	0.637	0.387	0.269	0.201	0.403	0.405	0.359
Lead, dissolved	mg/L	<0.00020	<0.00020			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	13.1	12.7			13.6	36.9	25.8	25.3	21.1	9.34	8.03	7.05	6.07	8.48	8.59	10.8	10.9	13	11.1	10.9	13.2
Manganese, dissolved	mg/L	0.0751	0.0663			0.0672	0.0074	0.0099	0.0073	0.0149	0.0156	0.0219	0.102	0.153	0.207	0.102	0.0655	0.0548	0.039	0.053	0.0475	0.0315
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0013	0.0013			0.0013	<0.0010	<0.0010	<0.0010	0.001	0.0013	0.0012	0.0012	0.0016	0.003	0.0016	0.0016	0.0023	0.0018	0.0017	0.0016	0.0018
Nickel, dissolved	mg/L	0.0018	0.0019			0.0016	0.0016	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	0.0011	0.0013	0.0014	0.0015	0.0012	0.0012	0.0016	0.0014	0.0013
Phosphorus, dissolved	mg/L	0.024	0.026			0.019	0.061	0.041	0.026	0.025	0.065	0.036	0.02	0.022	0.021	0.022	0.02	0.014	0.017	0.023	0.019	0.019
Potassium, dissolved	mg/L	0.948	1.07			0.96	8.17	6.35	4.89	3.99	2.39	2.22	1.49	1.65	2.21	1.03	1.16	1.28	1.27	1.02	0.924	1.23
Selenium, dissolved	mg/L	0.00013	0.00013			0.00013	0.00027	0.00013	0.00017	0.00038	0.0002	0.00017	0.00015	0.00012	0.00033	0.00013	0.00014	0.00017	0.00014	0.00016	0.00014	0.00013
Silver, dissolved	mg/L	<0.000020	<0.000020			<0.000020	0.000024	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	7.93	7.66			8.02	30.8	20.8	18.9	15.2	7.45	6.02	5.35	5.41	7.98	6.24	7.46	7.18	8.67	8.08	7.36	8.58
Thallium, dissolved	mg/L	<0.000050	<0.000050			<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050			<0.0050	<0.0050	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**24/07/2013**	**30/07/2013**	**10/08/2013**	**15/08/2013**	**22/08/2013**	**27/08/2013**	**06/09/2013**	**09/09/2013**	**18/09/2013**	**24/09/2013**	**03/10/2013**	**11/10/2013**	**18/10/2013**	**22/10/2013**	**31/10/2013**	**08/11/2013**	**14/11/2013**	**18/11/2013**	**01/12/2013**	**18/03/2014**	**25/03/2014**
pH (field)	pH units	8	8.09	8.09	8.6	8.04	7.78	7.9	7.94	7.66	7.6	7.64	7.78	7.65	7.75	7.6	7.95	7.82	7.96	8.7	8.35	8.26
pH (lab)	pH units	8.15	8.16	8.19	8.34	8.2	8.11	8.05	8.13	8.13	8.18	8.16	8.18	8.28	8.2	8.19	8.19	8.34	8.3	8.14	8.49	8.45
Hardness (from dissolved)	mg/L	135	139	148	156	151	146	154	166	145	147	152	166	157	192	160	172	183	209	219	529	433
Hardness (from total)	mg/L	168	159	182	181	172	174	181	162	152	154	179	168	159	187	166	189	218	206	227	521	433
Total Dissolved Solids	mg/L	184	178	238	214	214	244	190	206	168	160	278	228	234	232	200	210	216	238	244	746	572
Total Suspended Solids	mg/L	169	75	37.3	38.6	60.1	90.5	52.2	32.6	181	93.2	79.6	11.8	3.3	4.6	15.1	1.2	1.7	5	29.2	<1.0	<1.0
Alkalinity, total	mg/L	129	133	154	159	154	146	151	153	139	135	142	154	153	173	154	172	180	183	210	508	408
Sulphate, dissolved	mg/L	9.93	11.6	12.6	14	12.7	10.2	11.7	15.8	12.2	14.5	14.6	16.6	16.8	17.9	16.1	19.4	21.8	24.8	27.6	104	77.7
Chloride	mg/L	1.5	1.6	1.6	1.7	1.8	1.6	2.2	2.2	2	2	2.3	2	2.2	1.8	1.8	1.9	2	2.3	2.9	14	9.5
Fluoride	mg/L	0.3	0.31	0.35	0.34	0.33	0.29	0.32	0.32	0.28	0.28	0.27	0.27	0.3	0.35	0.32	0.37	0.39	0.39	0.41	1.1	0.96
Nitrite (N)	mg/L	<0.050	<0.0050	<0.050	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	<0.20	0.132	0.24	0.155	0.142	0.119	0.101	0.079	0.075	0.085	0.117	0.096	0.161	<0.20	0.174	0.199	0.229	0.32	0.291	0.064	0.021
Ammonia	mg/L	0.064	0.11	0.037	0.042	0.037	0.038	0.02	0.022	0.037	0.032	0.049	0.038	0.028	0.06	0.02	0.023	0.022	0.025	0.021	0.076	0.02
Aluminum, total	mg/L	7.34	2.11	1.2	0.998	2.14	2.6	1.24	0.807	3.61	1.77	2.24	0.266	0.0895	0.129	0.327	0.0399	0.0501	0.124	0.428	0.0259	0.0149
Arsenic, total	mg/L	0.00385	0.0019	0.00149	0.00143	0.0019	0.00193	0.00153	0.00127	0.00249	0.00153	0.00179	0.00091	0.00074	0.0007	0.00069	0.00048	0.00059	0.00043	0.00057	0.00117	0.00095
Cadmium, total	mg/L	0.000113	0.000036	0.000013	0.000016	0.000034	0.000036	0.000019	<0.000010	0.000068	0.000028	0.000035	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000014	0.000024	0.000027
Calcium, total	mg/L	42.9	41.6	46.4	46.5	44.2	44.9	46.8	41.1	38.7	40	46.6	43.1	40.5	48.2	42.4	49.3	55.4	52.5	57.8	120	103
Chromium, total	mg/L	0.0129	0.0043	0.0026	0.0025	0.0044	0.0055	0.0028	0.0019	0.0077	0.0034	0.0042	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010
Copper, total	mg/L	0.0156	0.00595	0.00395	0.00361	0.00639	0.00651	0.00403	0.00441	0.00928	0.00503	0.00524	0.00224	0.00191	0.00196	0.00195	0.00171	0.00302	0.0046	0.00962	0.0154	0.00535
Iron, total	mg/L	11.4	3.61	2.44	2.01	3.85	4.75	2.8	1.93	5.99	3.25	4.26	1.02	0.748	0.695	0.858	0.276	0.328	0.419	0.8	0.126	0.074
Lead, total	mg/L	0.00274	0.00084	0.00046	0.00038	0.00084	0.00098	0.00048	0.00036	0.00161	0.00072	0.00093	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	<0.00020
Magnesium, total	mg/L	14.7	13.3	16.1	15.8	15	15.1	15.5	14.5	13.4	13.1	15.2	14.6	14.1	16.2	14.6	16	19.3	18.2	20	53.5	42.9
Manganese, total	mg/L	0.275	0.11	0.101	0.093	0.155	0.173	0.142	0.107	0.248	0.163	0.202	0.109	0.0895	0.0815	0.0811	0.0775	0.0853	0.0553	0.098	0.0615	0.0402
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0015	0.0015	0.0017	0.0019	0.0018	0.0016	0.0014	0.002	0.0012	0.0011	0.0011	0.0012	0.0014	0.0014	0.0012	0.0016	0.0016	0.0016	0.0015	0.002	0.002
Nickel, total	mg/L	0.0142	0.0054	0.0037	0.0037	0.0055	0.0059	0.0042	0.0031	0.0091	0.0048	0.006	0.0022	0.0017	0.002	0.0019	0.0012	0.002	0.0019	0.002	0.0016	0.0013
Phosphorus, total	mg/L	0.365	0.12	0.097	0.064	0.135	0.143	0.087	0.071	0.2	0.111	0.165	0.037	0.033	0.026	0.035	0.017	0.029	0.015	0.029	0.076	0.034
Potassium, total	mg/L	1.5	1.18	1.29	1.37	1.45	1.27	1.31	1.53	1.23	0.976	1.17	0.948	1.03	1.14	1.05	1.28	1.38	1.27	1.74	9	5.94
Selenium, total	mg/L	0.00024	0.00016	0.00019	0.00022	0.0002	0.00017	0.00021	0.0002	0.00021	<0.00010	0.00013	0.00017	0.00015	0.00013	0.0001	<0.00010	0.00028	0.00019	0.00022	0.00092	0.0006
Silver, total	mg/L	0.000028	<0.000020	<0.000020	<0.000020	0.000035	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	8.33	7.81	9.75	9.81	9.28	9.06	9.32	9.12	7.43	7.95	8.34	8.56	8.57	9.6	8.21	9.21	11.9	11.5	13.2	39.6	29.9
Thallium, total	mg/L	0.000061	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0242	0.0071	<0.0050	<0.0050	0.0084	0.0085	<0.0050	<0.0050	0.0134	0.0061	0.0078	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0239	0.0245	0.0194	0.0158	0.0185	0.0228	0.0181	0.0172	0.0223	0.019	0.017	0.0164	0.0115	0.0104	0.0093	0.0066	0.0078	0.0067	0.005	0.009	0.0065
Arsenic, dissolved	mg/L	0.00082	0.00091	0.00086	0.0008	0.00085	0.00083	0.00097	0.00093	0.00085	0.00079	0.00079	0.00076	0.00067	0.00072	0.00053	0.00047	0.0005	0.00047	0.00038	0.00125	0.00095
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000028	0.000026
Calcium, dissolved	mg/L	35.2	36.6	38.2	40.7	38.4	37.6	40.1	43.3	38.1	38.4	39.8	43.1	40.5	50.4	40.8	43.4	46.6	53.5	56.3	125	102
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0021	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00216	0.00213	0.00161	0.00151	0.00154	0.00149	0.00181	0.00178	0.00178	0.0017	0.00174	0.00183	0.00148	0.0017	0.00126	0.00137	0.00158	0.00194	0.00205	0.00792	0.00475
Iron, dissolved	mg/L	0.512	0.575	0.397	0.352	0.357	0.526	0.631	0.585	0.482	0.533	0.615	0.547	0.571	0.477	0.255	0.179	0.171	0.15	0.105	0.0555	0.0464
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	11.3	11.6	12.7	13.2	13.3	12.6	13	14	12	12.4	12.8	14.1	13.5	16.1	14.1	15.5	16.1	18.4	19	52.6	43.2
Manganese, dissolved	mg/L	0.0505	0.0388	0.0448	0.0484	0.0606	0.0632	0.0704	0.0724	0.0958	0.0815	0.092	0.0927	0.0787	0.0751	0.0627	0.0741	0.0738	0.0514	0.0751	0.0648	0.0389
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012
Molydenum, dissolved	mg/L	0.0014	0.0015	0.0017	0.0018	0.0014	0.0014	0.0014	0.0017	0.0012	0.0011	0.0012	0.0011	0.0013	0.0014	0.0013	0.0014	0.0015	0.0015	0.0013	0.002	0.0019
Nickel, dissolved	mg/L	0.0017	0.0018	0.0014	0.0014	0.0015	0.0015	0.0018	0.0018	0.0017	0.0017	0.0018	0.0025	0.0014	0.0015	0.0013	0.0013	0.0014	0.0012	0.0011	0.0016	0.0011
Phosphorus, dissolved	mg/L	0.023	0.024	0.021	0.019	0.018	0.024	0.024	0.022	0.021	0.022	0.026	0.026	0.021	0.024	0.015	0.011	0.014	0.015	<0.01	0.069	0.031
Potassium, dissolved	mg/L	0.833	1.03	1.04	1.26	1.04	0.984	1.09	1.17	0.933	0.827	0.913	0.927	0.972	1.18	1.07	1.2	1.23	1.44	1.64	9.14	6.08
Selenium, dissolved	mg/L	0.00014	0.00014	0.00013	0.00013	0.00014	0.00012	0.00013	0.00014	0.00011	0.00012	0.00013	0.00013	0.00011	0.00012	0.00015	0.00015	0.00017	0.00015	0.0002	0.00082	0.00055
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	7.59	7.35	8.14	8.48	8.49	7.58	8.05	8.89	7.54	7.51	7.82	8.57	8.09	9.78	8.55	9.48	9.89	12	12.3	39.5	31.2
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**08/04/2014**	**17/04/2014**	**22/04/2014**	**01/05/2014**	**06/05/2014**	**17/05/2014**	**19/05/2014**	**28/05/2014**	**08/06/2014**	**14/06/2014**	**17/06/2014**	**26/06/2014**	**01/07/2014**	**10/07/2014**	**17/07/2014**	**23/07/2014**	**02/08/2014**	**14/08/2014**	**18/08/2014**	**26/08/2014**	**01/09/2014**
pH (field)	pH units	8.15	8.21	8.07	8.14	8.23	7.31	7.44	8.35	7.53	8.13	8.14	8.32	8.36	8.47	7.78	8	8.21	8.2	8.26	8.21	8.24
pH (lab)	pH units	8.36	8.2	7.87	7.65	7.98	8.17	8.14	8.21	8.28	8.11	8.27	8.3	8.23	8.34	8.25	8.26	8.26	8.37	8.31	8.25	8.38
Hardness (from dissolved)	mg/L	215	167	69	53.3	89.1	119	118	108	134	137	139	144	160	158	165	145	155	158	165	161	169
Hardness (from total)	mg/L	220	160	69.4	60.8	95.3	165	163	118	138	153	151	157	161	157	167	153	159	189	179	183	157
Total Dissolved Solids	mg/L	320	222	114	112	160	176	190	171	174	166	208	184	212	178	204	176	258	196	214	210	202
Total Suspended Solids	mg/L	<1.0	<1.0	3	29.9	73.3	310	385	95.8	17.2	10.7	5.9	11.8	2.5	2.3	11.5	22.4	11.6	3.5	3.7	9.3	1.2
Alkalinity, total	mg/L	198	155	61.7	48.1	76.3	108	105	110	133	138	143	151	154	154	158	148	153	169	169	163	169
Sulphate, dissolved	mg/L	41.2	28.4	<0.50	<0.50	19.9	24.1	22.7	16.3	14.7	15.1	15.1	16.2	17.9	18.4	17.6	14.5	13.5	16.7	14.9	15.3	15.2
Chloride	mg/L	9.3	6.7	2.9	1.9	3.3	3.8	3.4	1.9	1.8	2.1	1.8	1.1	1.8	1.8	1.7	2.4	1.6	2	2	1.7	1.7
Fluoride	mg/L	0.47	0.34	0.16	0.13	0.2	0.28	0.27	0.29	0.35	0.36	0.37	0.4	0.41	0.42	0.42	0.37	0.36	0.4	0.37	0.39	0.37
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0077	0.0193	0.0206	0.0066	<0.0050	0.0053	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.075	0.241	0.065	0.246	0.944	0.965	1.02	0.192	0.162	0.166	0.15	0.125	0.127	0.111	0.105	0.096	0.092	0.102	0.077	0.07	0.044
Ammonia	mg/L	0.015	0.033	0.019	0.023	0.049	0.093	0.084	0.038	0.033	0.034	0.046	0.04	0.034	0.024	0.012	0.024	0.013	0.015	0.017	0.023	0.039
Aluminum, total	mg/L	0.0382	0.0262	0.0763	0.729	1.81	8.63	9.38	1.67	0.452	0.291	0.175	0.295	0.0891	0.0887	0.0488	0.591	0.315	0.0876	0.113	0.199	0.0318
Arsenic, total	mg/L	0.00047	0.00041	0.00039	0.00087	0.00148	0.00537	0.00556	0.00151	0.00088	0.00088	0.00071	0.00076	0.00063	0.00068	0.00065	0.00093	0.00095	0.00077	0.00072	0.00092	0.00056
Cadmium, total	mg/L	0.000020	0.000013	0.000026	0.000024	0.000037	0.000187	0.000153	0.000035	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000018	0.000013	0.000011	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	52.5	39.1	17.7	15.6	24	41.5	41.4	30.5	34.4	39	38.3	40.5	39.9	39.7	41.8	38.3	40.4	47.1	44.4	46.3	39.1
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	0.0017	0.0033	0.0163	0.0176	0.0035	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.00642	0.00544	0.0109	0.0122	0.0154	0.0414	0.0426	0.00905	0.00385	0.0033	0.00235	0.00259	0.00229	0.00185	0.0022	0.00325	0.00309	0.00295	0.00227	0.0024	0.00144
Iron, total	mg/L	0.085	0.128	0.208	1.42	3.03	14.9	16.7	3.21	0.966	0.729	0.515	0.702	0.306	0.303	0.261	1.2	0.764	0.395	0.426	0.624	0.321
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	0.00037	0.00086	0.00456	0.00479	0.00088	0.00027	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00027	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	21.6	15.2	6.14	5.29	8.59	14.8	14.4	10.2	12.7	13.6	13.3	13.6	14.8	13.9	15.3	13.9	14.1	17.3	16.4	16.3	14.3
Manganese, total	mg/L	0.0132	0.0091	0.0308	0.0933	0.182	0.563	0.585	0.122	0.0491	0.0397	0.0328	0.0411	0.0235	0.023	0.0266	0.0611	0.0424	0.0338	0.0377	0.0522	0.032
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000050	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0019	0.002	<0.0010	0.0011	0.0017	0.0024	0.0025	0.0013	0.0017	0.0017	0.0017	0.0016	0.0019	0.0017	0.0017	0.0015	0.0014	0.0019	0.0018	0.0018	0.0016
Nickel, total	mg/L	0.001	<0.0010	0.0013	0.003	0.0048	0.0205	0.0223	0.005	0.0022	0.0018	0.0016	0.0016	0.0014	0.0013	0.0011	0.0023	0.0018	0.0013	0.0014	0.0021	0.0014
Phosphorus, total	mg/L	0.042	0.022	0.073	0.079	0.146	0.629	0.655	0.101	0.038	0.026	0.026	0.023	0.017	0.016	0.022	0.047	0.028	0.031	0.024	0.039	0.014
Potassium, total	mg/L	3.95	2.51	1.98	1.7	1.86	3.15	3.14	1.48	1.35	1.36	1.32	1.32	1.41	1.29	1.22	1.24	1.22	1.52	1.53	1.49	1.23
Selenium, total	mg/L	0.00037	0.0008	0.00021	0.00031	0.00028	0.00056	0.00069	0.00018	0.0002	0.00017	0.00018	0.00013	0.00018	<0.00010	0.00018	0.00012	<0.00010	0.00011	0.00011	0.0002	0.00015
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000063	0.000060	0.000022	<0.000020	<0.000020	0.000262	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	16.3	11.3	4.42	4.14	6.42	8.82	8.75	6.91	8.69	9.29	8.91	8.81	9.7	9.11	9.71	9.51	9.57	10.4	9.78	10.2	9.3
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000075	0.000075	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	0.0058	0.0078	0.0105	0.0397	0.0407	0.0099	0.0050	<0.0050	<0.0050	<0.0050	0.0066	<0.0050	0.0134	<0.0050	0.0072	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0051	0.0034	0.025	0.0453	0.0316	0.0168	0.026	0.014	0.0182	0.0106	0.0123	0.0086	0.0087	0.0082	0.0093	0.0108	0.012	0.0063	0.01	0.0085	0.0084
Arsenic, dissolved	mg/L	0.00046	0.00034	0.00036	0.00046	0.00055	0.00077	0.00064	0.00066	0.00061	0.00063	0.00057	0.00059	0.00058	0.0006	0.00063	0.00056	0.00075	0.00061	0.00071	0.00067	0.00058
Cadmium, dissolved	mg/L	0.000018	0.000012	0.000020	0.000013	<0.000010	0.000029	<0.000010	<0.000010	0.000030	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	53	41.8	17.8	14	23.1	31.2	30.9	27.3	34.4	35.2	35.1	37.9	40.8	40.4	40.9	36.8	38	40.2	40.4	40.1	42.9
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00519	0.00498	0.00771	0.00793	0.00764	0.00812	0.00765	0.00276	0.00245	0.00199	0.00195	0.00149	0.00182	0.0016	0.00194	0.00199	0.00195	0.00167	0.0023	0.00159	0.00131
Iron, dissolved	mg/L	0.0275	0.0324	0.0855	0.223	0.3	0.358	0.403	0.375	0.199	0.183	0.186	0.126	0.142	0.141	0.201	0.232	0.226	0.219	0.253	0.198	0.22
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	20.1	15.3	5.95	4.48	7.65	10	9.9	9.58	11.7	11.9	12.4	12.1	14.1	13.9	15.3	13	14.6	13.9	15.6	14.8	15
Manganese, dissolved	mg/L	0.0106	0.0085	0.0265	0.053	0.102	0.0887	0.0577	0.0337	0.0236	0.0239	0.0235	0.0197	0.0175	0.0177	0.0207	0.0174	0.0195	0.0237	0.0222	0.0234	0.0302
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000050	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0017	0.0021	<0.0010	<0.0010	0.0019	0.0025	0.0024	0.0015	0.0016	0.0016	0.0019	0.0017	0.0019	0.0018	0.0019	0.0015	0.0016	0.0017	0.0016	0.0017	0.0016
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	0.0015	0.0016	0.0013	0.0012	0.0014	0.0012	0.0013	0.0012	<0.0010	0.001	0.001	0.0013	0.0013	0.0013	0.0012	0.001	0.0012	0.0011
Phosphorus, dissolved	mg/L	0.027	0.012	0.038	0.027	0.024	0.028	0.021	0.016	0.014	0.015	0.015	0.013	0.014	0.014	0.018	0.014	0.014	0.019	0.015	0.016	0.015
Potassium, dissolved	mg/L	4.22	2.68	1.95	1.59	1.65	2.06	1.88	1.31	1.3	1.25	1.27	1.32	1.45	1.34	1.27	1.03	1.17	1.12	1.37	1.31	1.41
Selenium, dissolved	mg/L	0.00035	0.00031	0.00013	0.00013	0.00031	0.00042	0.0004	0.00015	0.00016	0.00014	0.00011	0.00012	0.00011	0.00011	0.0001	0.00013	0.00013	0.00011	<0.00010	<0.00010	0.00011
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	15.5	11.4	4.13	3.79	6.5	8.1	7.71	6.68	8.12	8.32	8.51	8.32	9.3	8.82	10.8	8.52	9.35	8.91	9.77	9.12	9.08
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**11/09/2014**	**16/09/2014**	**22/09/2014**	**30/09/2014**	**07/10/2014**	**14/10/2014**	**25/10/2014**	**31/10/2014**	**06/11/2014**	**11/11/2014**	**22/11/2014**	**28/11/2014**	**05/12/2014**	**14/12/2014**	**14/03/2015**	**15/03/2015**	**02/04/2015**	**10/04/2015**	**17/04/2015**	**23/04/2015**	**01/05/2015**
pH (field)	pH units	8.15	8.15	8.11	8.05	8.14	7.79	8.14	7.63	7.8	7.47	7.71	7.44	8.07	7.67		7.91	8.16	8.29	8.16	8.04	7.77
pH (lab)	pH units	8.31	8.22	8.32	8.13	8.19	8.2	8.14	8.2	8.12	8.13	8.14	7.82	8.08	7.91	8.36		8.23	8.18	8.17	7.86	7.85
Hardness (from dissolved)	mg/L	164	161	142	141	158	156	167	188	185	200	274	211	254	225	295		242	179	194	127	76.6
Hardness (from total)	mg/L	161	164	167	150	171	167	171	192	184	181	280	236	254	233	295		266	182	198	132	84.9
Total Dissolved Solids	mg/L	228	212	194	198	210	200	198	254	224	220	346	258	316	312	368		318	254	262	190	132
Total Suspended Solids	mg/L	2.7	11.4	55.9	175	18.9	12.3	3.7	2.3	<1.0	<1.0	86.5	<1.0	<1.0	<1.0	2.8		7.4	8.4	3.7	5.2	91.5
Alkalinity, total	mg/L	166	160	151	142	159	157	156	180	183	180	246	212	219	152	291		224	136	148	96.6	63.1
Sulphate, dissolved	mg/L	14.7	16.8	14.1	15.9	16.6	16.3	17.6	21.3	21.6	25.3	42.1	46.4	49.1	87.7	56		51.4	59.7	61.2	39.5	5.87
Chloride	mg/L	2	2	1.9	2.1	1.9	1.8	1.5	2.7	2.3	2.5	4.1	3.8	5.1	7.2	4.7		3.9	5.9	8.1	5.1	3.1
Fluoride	mg/L	0.37	0.38	0.37	0.33	0.34	0.32	0.38	0.39	0.41	0.43	0.38	0.43	0.43	0.45	0.64		0.54	0.41	0.37	0.27	0.17
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0163	<0.0050		<0.0050	0.0097	0.0133	0.0236	<0.050
Nitrate (N)	mg/L	0.022	<0.020	<0.020	0.062	0.085	0.108	0.138	0.176	0.168	0.182	0.287	0.332	0.459	2.59	0.339		0.123	1.46	2.12	1.38	0.5
Ammonia	mg/L	0.013	0.034	0.016	0.018	0.026	0.016	0.035	0.024	0.0059	0.012	0.024	0.007	0.016	0.026	0.036		0.033	0.016	0.01	0.032	0.041
Aluminum, total	mg/L	0.0186	0.02	0.975	0.638	0.128	0.224	0.0796	0.0415	0.0181	0.0172	0.566	0.0107	0.0196	0.0153	0.0741		0.206	0.111	0.242	0.129	1.92
Arsenic, total	mg/L	0.00088	0.00068	0.00146	0.00101	0.00069	0.00072	0.00059	0.00041	0.00037	0.00039	0.00075	0.00034	0.00031	0.00035	0.00054		0.00055	0.00044	0.00052	0.00059	0.00151
Cadmium, total	mg/L	<0.000010	<0.000010	0.000019	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000014	<0.000010	<0.000010	<0.000010	0.000011		<0.000010	0.000011	0.000011	<0.000010	0.000041
Calcium, total	mg/L	41.6	41.4	42.7	37.2	43.8	42.2	42.5	48.6	46.7	44.2	70.4	56	63.3	60.8	74.6		64.5	45.4	49.8	34.1	21.8
Chromium, total	mg/L	<0.0010	<0.0010	0.0021	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0040
Copper, total	mg/L	0.00153	0.00158	0.00438	0.00363	0.0018	0.00201	0.0017	0.00166	0.00142	0.00153	0.00587	0.00201	0.00223	0.00485	0.00793		0.0161	0.00782	0.00919	0.00788	0.019
Iron, total	mg/L	0.24	0.238	2.17	1.42	0.457	0.613	0.412	0.243	0.159	0.142	1.09	0.093	0.124	0.069	0.233		0.406	0.238	0.289	0.385	3.24
Lead, total	mg/L	<0.00020	<0.00020	0.00048	0.00036	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00029	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	0.00094
Magnesium, total	mg/L	13.8	14.7	14.7	13.8	15.1	14.9	15.8	17.1	16.4	17.3	25.2	23.2	23.4	19.8	26.5		25.5	16.7	17.8	11.3	7.38
Manganese, total	mg/L	0.0256	0.0155	0.171	0.12	0.0562	0.061	0.0562	0.0467	0.0412	0.0485	0.0931	0.0798	0.0635	0.0383	0.0963		0.096	0.127	0.128	0.0715	0.194
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0014	0.0016	0.0014	0.0013	0.0014	0.0014	0.0014	0.0011	0.0014	0.0014	0.0018	0.0018	0.0019	0.0074	0.0026		0.0018	0.005	0.0053	0.0039	0.0014
Nickel, total	mg/L	0.0011	0.0012	0.0029	0.0027	0.0014	0.0017	0.0012	0.0012	0.0012	0.0012	0.0035	<0.0010	<0.0010	<0.0010	0.0016		<0.0010	0.0012	<0.0010	<0.0010	0.0048
Phosphorus, total	mg/L	0.017	0.019	0.077	0.065	0.021	0.035	0.015	0.021	0.016	0.015	0.054	0.01	0.021	0.025	0.026		0.03	0.019	0.03	0.027	0.136
Potassium, total	mg/L	1.2	1.33	1.52	1.09	1.12	1.21	1.12	1.27	1.23	1.4	2.23	2.11	2.04	5.49	2.93		2.81	4.25	4.55	3.54	2.01
Selenium, total	mg/L	0.00012	<0.00010	0.00018	0.00012	0.00016	0.00021	0.00012	<0.00010	0.00015	0.00012	0.00029	0.00026	0.00016	0.00085	0.00038		0.00023	0.00053	0.00075	0.00047	0.00027
Silver, total	mg/L	<0.000020	<0.000020	0.000021	0.000023	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	9.14	9.43	9.15	8.48	9.2	8.91	9.25	10.4	10.4	10.8	16.1	15.3	15.6	18.7	19		17.7	16.1	17.2	13.9	6.06
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000110		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0322	<0.0050	<0.0050	0.0277		<0.0050	0.0062	<0.0050	<0.0050	0.0095
Aluminum, dissolved	mg/L	0.0065	0.0074	0.0092	0.0081	0.0084	0.0078	0.0068	0.0098	0.0067	0.0062	0.0079	0.0087	0.0062	0.0033	0.0052		0.0036	0.0058	0.0072	0.0153	0.0445
Arsenic, dissolved	mg/L	0.00058	0.00056	0.0006	0.00058	0.00055	0.00055	0.00052	0.00044	0.00041	0.00036	0.00046	0.00032	0.00034	0.00039	0.00051		0.00044	0.00042	0.00042	0.0005	0.00052
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	41.9	40.6	35	35.3	40.4	40.1	42.6	46.9	46.5	51.8	69.2	51.3	65.3	58.2	73.3		58.3	46.5	50.3	33.3	20.4
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00148	0.00128	0.00152	0.0016	0.00151	0.00156	0.00138	0.00151	0.00127	0.00145	0.00218	0.00185	0.00175	0.0041	0.00326		0.00214	0.00414	0.00433	0.00649	0.00756
Iron, dissolved	mg/L	0.202	0.161	0.206	0.192	0.361	0.189	0.214	0.123	0.104	0.098	0.101	0.0886	0.0617	0.0481	0.0714		0.0639	0.0695	0.0629	0.182	0.236
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	14.3	14.6	13.2	12.9	13.9	13.7	14.6	17.1	16.6	17.2	24.6	20.1	22.1	19.3	27.2		23.5	15.2	16.6	10.6	6.24
Manganese, dissolved	mg/L	0.0245	0.0141	0.0282	0.0343	0.0404	0.0342	0.0425	0.0439	0.039	0.0474	0.0263	0.0656	0.0656	0.0342	0.0872		0.0742	0.117	0.106	0.0675	0.0715
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0015	0.0016	0.0014	0.0013	0.0012	0.0013	0.0014	0.0015	0.0014	0.0015	0.0019	0.0018	0.0021	0.0067	0.0023		0.002	0.005	0.0052	0.0041	0.0014
Nickel, dissolved	mg/L	0.0012	0.0011	0.0021	0.0013	0.0012	0.0011	0.0011	0.0011	<0.0010	0.001	0.0011	<0.0010	0.001	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0012
Phosphorus, dissolved	mg/L	<0.01	0.015	0.015	0.014	0.017	0.014	0.014	0.014	0.011	0.016	0.016	<0.01	0.013	0.014	0.041		0.012	0.012	0.012	0.025	0.027
Potassium, dissolved	mg/L	1.3	1.42	1.37	0.987	1.04	1.15	1.11	1.39	1.31	1.38	2.28	1.77	2.02	5.33	3.2		2.58	4.23	4.66	3.45	1.77
Selenium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	0.00018	0.0001	0.00011	0.00014	0.00013	0.00015	0.0002	0.00013	0.00018	0.00071	0.00034		0.00029	0.00047	0.00067	0.00048	0.00021
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	9.12	9.36	8.46	8.2	8.45	8.79	8.92	10.4	10.5	10.9	15.7	12.8	14.6	18.1	18.7		16.4	14.2	16.7	13.6	5.6
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0083	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0334		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**09/05/2015**	**14/05/2015**	**21/05/2015**	**28/05/2015**	**06/06/2015**	**06/06/2015**	**10/06/2015**	**20/06/2015**	**25/06/2015**	**02/07/2015**	**09/07/2015**	**17/07/2015**	**23/07/2015**	**23/07/2015**	**27/07/2015**	**04/08/2015**	**13/08/2015**	**22/08/2015**	**25/08/2015**	**01/09/2015**	**08/09/2015**
pH (field)	pH units	7.65	7.73	7.96	7.82	7.94		7.96	8	7.96	8.01	8.2	8.19	8.05		8.05	8.21	8.13	8.05	8.21	8	8.13
pH (lab)	pH units	7.99	8.03	8.09	8.23		8.17	8.22	8.14	8.21	8.26	8.23	8.21	8.3	8.3	8.25	8.23	8.26	8.29	8.1	8.28	8.29
Hardness (from dissolved)	mg/L	91.5	104	146	152		150	154	157	178	167	157	165	180	180	175	173	164	163	184	144	166
Hardness (from total)	mg/L	128	136	148	168		146	163	161	180	171	165	184	171	171	181	182	158	157	171	152	164
Total Dissolved Solids	mg/L	128	160	210	232		150	194	206	218	220	208	208	206	206	186	226	208	194	206	214	188
Total Suspended Solids	mg/L	586	727	146	33.4		12.9	7.4	7.3	4	10.6	7.5	4.1	16.2	16.2	2.3	2.2	8.3	4	45.9	22.9	2.6
Alkalinity, total	mg/L	80.7	93	120	145		139	141	154	161	157	162	165	167	167	165	169	164	169	160	143	153
Sulphate, dissolved	mg/L	16.7	22.2	28.4	34.5		18.3	20.5	24.8	24.4	21.7	19.7	19.5	22.4	22.4	21.6	20	16.1	18.2	17.9	15.1	16.5
Chloride	mg/L	2.8	3.8	4.7	4.5		1.8	2.2	1.8	2	2.4	1.8	1.7	2.1	2.1	1.9	2	1.5	1.8	1.5	1.7	2.1
Fluoride	mg/L	0.22	0.26	0.29	0.36		0.36	0.4	0.45	0.43	0.42	0.42	0.41	0.38	0.38	0.5	0.47	0.41	0.41	0.4	0.35	0.38
Nitrite (N)	mg/L	0.0052	0.0111	0.0167	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.414	0.715	1	0.845		0.16	0.144	0.191	0.157	0.134	0.111	0.143	0.106	0.106	0.126	0.115	0.082	0.069	0.071	0.045	0.035
Ammonia	mg/L	0.07	0.11	0.05	0.026		0.025	0.033	0.0056	0.013	0.037	0.04	0.018	0.019	0.019	0.067	0.025	0.0091	0.029	0.04	0.02	0.013
Aluminum, total	mg/L	5.47	6.87	2.54	0.476		0.26	0.18	0.15	0.11	0.267	0.134	0.104	0.0893	0.0893	0.0357	0.0254	0.129	0.0281	0.0617	0.406	0.115
Arsenic, total	mg/L	0.00394	0.00424	0.00186	0.00069		0.00068	0.00061	0.0006	0.00064	0.00067	0.00058	0.00063	0.00061	0.00061	0.00056	0.00054	0.00064	0.00063	0.00063	0.00077	0.00057
Cadmium, total	mg/L	0.000138	0.000137	0.000064	0.000016		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000018	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L	32.2	33.9	37.3	43.3		37.3	41.1	42	46.4	44.1	41.2	45.8	44.4	44.4	46.5	44.3	39.4	40.7	41.7	39.4	40.9
Chromium, total	mg/L	0.0117	0.0141	0.0051	0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0326	0.0363	0.0182	0.00499		0.00305	0.00228	0.00326	0.00212	0.00258	0.00198	0.00198	0.00146	0.00146	0.00146	0.00126	0.00194	0.0016	0.00215	0.00318	0.00204
Iron, total	mg/L	11.1	11.7	4.09	0.934		0.53	0.361	0.323	0.297	0.557	0.381	0.313	0.298	0.298	0.206	0.212	0.346	0.196	0.306	0.874	0.345
Lead, total	mg/L	0.00356	0.00375	0.00125	0.00030		<0.00020	<0.00020	0.00085	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	<0.00020
Magnesium, total	mg/L	11.5	12.4	13.3	14.4		12.9	14.6	13.7	15.5	14.7	15	16.9	14.5	14.5	15.8	17.3	14.5	13.5	16.2	13	15
Manganese, total	mg/L	0.796	0.612	0.18	0.057		0.0289	0.0206	0.0188	0.0157	0.03	0.019	0.0221	0.0197	0.0197	0.0131	0.0146	0.0259	0.0191	0.0243	0.0552	0.0243
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0015	0.0022	0.0029	0.0027		0.0017	0.0018	0.002	0.0018	0.0018	0.0016	0.0021	0.0017	0.0017	0.0017	0.0018	0.0016	0.0016	0.0016	0.0013	0.0014
Nickel, total	mg/L	0.0135	0.0187	0.006	0.002		0.0013	0.0012	0.0014	0.0014	0.0014	0.0011	0.0011	0.0011	0.0011	<0.0010	<0.0010	0.0011	0.0011	0.0011	0.0018	0.0014
Phosphorus, total	mg/L	0.521	0.672	0.181	0.051		0.025	0.024	0.014	0.013	0.024	0.011	0.033	0.016	0.016	0.021	0.013	0.026	0.019	0.028	0.045	0.028
Potassium, total	mg/L	2.2	2.68	2.87	2.41		1.52	1.74	1.58	1.85	1.54	1.42	1.53	1.42	1.42	1.56	1.37	1.17	1.31	1.4	1.1	1.17
Selenium, total	mg/L	0.00053	0.0005	0.00045	0.00033		0.0001	0.00014	0.00014	<0.00010	0.00016	0.00014	0.00014	0.0001	0.0001	<0.00010	<0.00010	0.00012	<0.00010	0.00017	<0.00010	<0.00010
Silver, total	mg/L	0.000021	0.000027	<0.000020	<0.000020		<0.000020	<0.000020	0.000035	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000024	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	6.65	9.58	12.5	11.5		9.38	10.1	11.5	10.3	9.81	9	10.5	10.2	10.2	10.1	11.3	9.02	8.37	10.6	8.49	9.65
Thallium, total	mg/L	<0.000050	0.000056	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0271	0.0320	0.0108	<0.0050		<0.0050	<0.0050	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0262	0.0133	0.0105	0.0196		0.0079	0.0081	0.006	0.0155	0.008	0.0091	0.0148	0.0489	0.0489	0.012	0.0105	0.0122	0.0093	0.0109	0.012	0.0165
Arsenic, dissolved	mg/L	0.00056	0.00056	0.00054	0.00043		0.00051	0.00047	0.00049	0.00053	0.00054	0.00054	0.0005	0.00066	0.00066	0.00061	0.00052	0.00054	0.00064	0.0006	0.0005	0.00058
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	23.5	26.7	37.8	39.3		38.4	38.3	40	46.1	42.4	38.7	41.6	48.4	48.4	44.6	43.9	42.9	40.5	47.1	36.8	42.4
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00414	0.00628	0.00554	0.00262		0.00177	0.0016	0.00146	0.00151	0.00158	0.00158	0.00153	0.0014	0.0014	0.00128	0.00135	0.00157	0.00145	0.00158	0.00193	0.00191
Iron, dissolved	mg/L	0.217	0.173	0.172	0.0854		0.0881	0.0772	0.0643	0.0808	0.0802	0.096	0.151	0.149	0.149	0.143	0.126	0.141	0.164	0.148	0.206	0.174
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	7.98	9.14	12.5	13.1		13.2	14.2	13.9	15.3	14.8	14.6	14.8	14.4	14.4	15.5	15.4	13.9	15.1	16.2	12.6	14.6
Manganese, dissolved	mg/L	0.0945	0.017	0.0088	0.0093		0.0112	0.0089	0.0077	0.0086	0.0103	0.0088	0.0095	0.0103	0.0103	0.0086	0.0094	0.0098	0.0108	0.0105	0.0156	0.015
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0013	0.0022	0.0029	0.0026		0.0018	0.0018	0.0019	0.002	0.0018	0.0017	0.0017	0.0017	0.0017	0.0017	0.0018	0.0016	0.0016	0.0015	0.0012	0.0014
Nickel, dissolved	mg/L	0.0012	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.001	0.001	0.0012	0.0013	0.0011
Phosphorus, dissolved	mg/L	0.025	0.016	0.013	0.011		0.013	0.013	0.012	0.017	0.014	0.015	0.02	0.017	0.017	0.017	0.015	<0.01	0.017	0.018	0.011	0.022
Potassium, dissolved	mg/L	1.64	2.12	2.65	2.13		1.6	1.6	1.51	1.9	1.47	1.34	1.34	1.37	1.37	1.51	1.34	1.12	1.38	1.45	1.02	1.13
Selenium, dissolved	mg/L	0.00024	0.00028	0.00034	0.00037		0.00012	0.00013	0.00011	0.00017	0.0001	0.00012	<0.00010	0.00012	0.00012	<0.00010	0.0001	0.00013	0.00014	<0.00010	0.00014	<0.00010
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	6.34	9.36	12.3	10.9		9.24	9.53	10.1	10.5	9.37	9.67	9.42	9.49	9.49	10.7	10.6	9.14	10.1	10.4	8.3	9.73
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1	MC1
Sample Date		**18/09/2015**	**25/09/2015**	**29/09/2015**	**08/10/2015**	**13/10/2015**	**24/10/2015**	**28/10/2015**	**06/11/2015**	**11/11/2015**	**16/11/2015**	**25/11/2015**	**04/12/2015**	**09/12/2015**	**19/12/2015**	**22/12/2015**
pH (field)	pH units	8.25	7.98	8.01	7.78		8.11	7.89	7.86	7.68	7.58	7.67	7.53	8.2	8.1	8.8
pH (lab)	pH units	8.31	8.21	8.17	8.22	8.23	8.16	8.15	8.25	8.49	8.36	8.11	8.39	7.97	7.96	8.54
Hardness (from dissolved)	mg/L	162	169	164	163	164	165	185	195	192	229	220	266	237	276	277
Hardness (from total)	mg/L	169	169	168	185	167	159	192	201	195	225	214	272	221	282	244
Total Dissolved Solids	mg/L	212	210	208	218	206	218	238	214	246	274	274	294	262	312	288
Total Suspended Solids	mg/L	1.1	5	1.9	3.1	9.2	3.6	<1.0	<1.0	<1.0	4.1	4.2	5	4	2.1	10.9
Alkalinity, total	mg/L	153	158	155	169	147	154	176	183	202	201	195	222	220	260	264
Sulphate, dissolved	mg/L	19.1	18.1	16.6	20.9	15.2	17.2	22	25.2	25	28.7	28.3	31.4	35	32.3	30.8
Chloride	mg/L	1.9	1.7	2	2.1	1.9	2	2.5	2	2.4	2.5	2.2	3	2.8	3	3.1
Fluoride	mg/L	0.37	0.38	0.38	0.39	0.37	0.38	0.42	0.42	0.43	0.43	0.4	0.44	0.45	0.51	0.51
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.035	0.081	0.072	0.133	0.087	0.118	0.145	0.184	0.188	0.203	0.217	0.169	0.211	0.299	0.27
Ammonia	mg/L	0.017	0.037	0.04	0.04	0.028	0.027	0.026	0.019	0.048	0.022	0.015	0.016	0.025	0.026	0.023
Aluminum, total	mg/L	0.0191	0.0482	0.0391	0.0138	0.0325	0.041	0.0139	0.0077	0.0144	0.0342	0.0739	0.152	0.0127	0.0107	0.128
Arsenic, total	mg/L	0.00054	0.00073	0.00059	0.00041	0.00053	0.0005	0.00045	0.00038	0.00035	0.00041	0.00042	0.00047	0.00035	0.00043	0.0004
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	<0.000010	0.000018
Calcium, total	mg/L	42.7	41.2	42.6	45.4	44.2	40.7	47.6	50.1	49.3	58.7	53.1	65.9	56.9	72.5	62.7
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.00181	0.0017	0.00239	0.00164	0.0016	0.00217	0.00156	0.00156	0.00175	0.0125	0.00714	0.00656	0.00195	0.00235	0.00354
Iron, total	mg/L	0.183	0.272	0.269	0.145	0.208	0.229	0.124	0.087	0.103	0.164	0.305	0.346	0.089	0.091	0.375
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	15.1	16	15	17.4	13.8	13.9	17.7	18.3	17.6	19.1	19.8	26	19	24.4	21.3
Manganese, total	mg/L	0.0183	0.0264	0.0233	0.0178	0.0278	0.0287	0.0233	0.0195	0.0225	0.027	0.0357	0.0706	0.0462	0.0426	0.051
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0014	0.0013	0.0015	0.0014	0.0013	0.0014	0.0015	0.0013	0.0014	0.0013	0.0012	0.0016	0.0014	0.0015	0.0013
Nickel, total	mg/L	0.0013	0.0012	0.0012	<0.0010	0.001	0.0012	<0.0010	<0.0010	<0.0010	0.0011	0.0014	0.0014	<0.0010	<0.0010	0.0012
Phosphorus, total	mg/L	0.011	0.024	0.024	0.017	0.02	0.02	0.012	0.015	0.014	0.02	0.014	0.04	0.047	0.018	0.016
Potassium, total	mg/L	1.25	1.18	1.32	1.41	1.15	1.1	1.36	1.48	1.43	1.61	1.65	2.29	1.84	2.47	2
Selenium, total	mg/L	0.00017	0.00011	0.0001	0.00011	0.0001	0.00017	0.00012	0.00011	0.00014	0.00012	0.00014	0.0002	0.00016	0.00016	0.00023
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	9.56	9.75	10.1	10.1	8.83	9.13	10.7	11.8	11.3	11.8	12.5	16.5	12.7	15.7	13.8
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0065
Aluminum, dissolved	mg/L	0.018	0.0129	0.0107	0.0108	0.0175	0.0093	0.0078	0.0085	0.009	0.0077	0.0075	0.0304	0.0077	0.0077	0.0116
Arsenic, dissolved	mg/L	0.00047	0.00061	0.00057	0.00045	0.00056	0.00053	0.00047	0.00038	0.00033	0.00037	0.00037	0.00054	0.00035	0.00042	0.00031
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011
Calcium, dissolved	mg/L	41.3	41.5	41.3	41.2	40.9	43	46.4	48.2	48.1	58.3	54.1	65	58.8	68.8	70.4
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0018	0.00183	0.00195	0.00142	0.0019	0.00233	0.00145	0.00151	0.00349	0.00245	0.0023	0.00341	0.00149	0.00265	0.00363
Iron, dissolved	mg/L	0.153	0.153	0.159	0.0953	0.145	0.124	0.108	0.0799	0.0695	0.0638	0.0657	0.0658	0.0671	0.0685	0.0785
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	<0.00020
Magnesium, dissolved	mg/L	14.3	15.8	14.7	14.7	14.9	13.9	16.8	18.1	17.5	20.3	20.6	25.1	21.8	25.2	24.6
Manganese, dissolved	mg/L	0.015	0.0174	0.0155	0.0159	0.0173	0.0207	0.0204	0.0186	0.0193	0.0226	0.0218	0.0481	0.0442	0.041	0.032
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0014	0.0014	0.0014	0.0013	0.0013	0.0016	0.0014	0.0012	0.0012	0.0012	0.0011	0.0014	0.0013	0.0015	0.0013
Nickel, dissolved	mg/L	0.0012	0.0011	0.0011	<0.0010	0.0014	0.0012	0.001	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010
Phosphorus, dissolved	mg/L	0.017	0.031	0.019	0.019	0.015	0.013	0.012	0.012	<0.01	0.016	<0.01	0.011	0.018	0.013	0.011
Potassium, dissolved	mg/L	1.1	1.25	1.18	1.11	1.11	1.09	1.3	1.41	1.37	1.82	1.63	2.41	1.82	2.37	2.1
Selenium, dissolved	mg/L	<0.00010	0.00012	0.00017	<0.00010	<0.00010	0.00011	<0.00010	<0.00010	0.00014	0.00013	0.00015	0.00015	0.00012	0.00016	0.00021
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	9.27	10.3	9.62	9.82	9.14	9.61	10.8	11.4	12	12.6	12.9	16	13.3	16	15.4
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistics.

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**27/05/2005**	**30/06/2005**	**29/07/2005**	**30/08/2005**	**28/09/2005**	**15/10/2005**	**02/06/2006**	**08/06/2006**	**15/06/2006**	**15/06/2006**	**23/06/2006**	**28/06/2006**	**07/07/2006**	**12/07/2006**	**20/07/2006**	**26/07/2006**	**26/07/2006**	**02/08/2006**	**10/08/2006**	**25/08/2006**	**25/08/2006**
pH (field)	pH units																					
pH (lab)	pH units	7.95	7.87	7.18	8.19	8.02	6.75	7.61			7.86	7.78	7.9	7.91	7.77	7.88		7.87	7.79	7.8		7.92
Hardness (from dissolved)	mg/L										100	122	107	110	110	130		128	128	126		129
Hardness (from total)	mg/L	76.6		167	109	107	106															
Total Dissolved Solids	mg/L	116	153	197	148	142	145	104			114	176	120	184								180
Total Suspended Solids	mg/L	30.5	14	19.7	3	361	7.5	705			53	328	103	3	<2	2		9	4	<2		
Alkalinity, total	mg/L	36.7	117		113	95.9		49.4			95	130	106	120	120	122		121	125	125		131
Sulphate, dissolved	mg/L	<0.5	10.2		6.02	5.62		2.98			10.5	15.1		10.8	10.4	10.5		11.6	10	10		11
Chloride	mg/L	<0.50	0.92	<0.50	<0.50	<0.50	<0.50	<0.5														
Fluoride	mg/L							0.155														
Nitrite (N)	mg/L	0.0018	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	0.0015														
Nitrate (N)	mg/L	0.0824	0.172	0.169	0.0226	0.0586	0.102	0.0449			0.18	0.23	0.112	0.205	0.18	0.19		0.18	0.15	0.16		0.12
Ammonia	mg/L	<0.020	<0.020	<0.020	0.02	<0.020	0.021	0.062		0.027		0.028	0.01		0.014	0.012	0.016		0.015	0.014	0.027	
Aluminum, total	mg/L	0.489	0.153	0.506	0.0436	1.65	0.0738	11.4	0.648		1.48	5.09	1.69	0.096	0.078	0.058		0.099	0.06	0.034		0.048
Arsenic, total	mg/L	0.00063	0.00049	0.00055	0.00053	0.00149	0.00052	0.00496	0.00078		0.0008	0.0022	0.001	0.0004	0.0004	0.0005		0.0005	0.0006	0.0005		0.0004
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	0.000061	<0.000050	0.000237	<0.00005		0.00002	0.00008	0.00003	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001		<0.00002
Calcium, total	mg/L	19.3	29.7	42.4	27.8	27.8	25.5	23.9	20.4		25.4	34.5	27.4	31.2	31	31.8		33.9	32.9	34.6		31.8
Chromium, total	mg/L	0.0016	0.00065	0.00127	<0.0010	0.0037	0.00062	0.0234	0.0016		0.0032	0.0091	0.0031	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.001
Copper, total	mg/L	0.0031	0.00162	0.0101	0.0015	0.0061	0.00147	0.0225	0.00403		0.004	0.01	0.004	0.001	0.001	0.001		0.001	0.001	<0.001		<0.002
Iron, total	mg/L	0.776	0.358	0.894	0.363	3.42	0.37	17.2	1.09		1.7	7.2	2.5	0.2	0.2	0.2		0.3	0.1	0.1		<0.2
Lead, total	mg/L	<0.00050	0.000134	0.000332	<0.00050	0.0011	0.000061	0.00547	0.00045		0.0006	0.002	0.0007	<0.0001	<0.0001	<0.0001		0.0001	<0.0001	<0.0001		<0.0002
Magnesium, total	mg/L	6.82	10.1	14.2	9.67	9.57	8.77	10.7	7.12		8.8	12.5	9.3	10.1	9.5	11.2		11.7	10.8	11.3		10
Manganese, total	mg/L	0.0519	0.0514	0.0468	0.0368	0.314	0.0473	0.589	0.0645		0.079	0.226	0.086	0.035	0.035	0.042		0.051	0.033	0.04		0.039
Mercury, total	mg/L	<0.000020			<0.000020	<0.000020																
Molybdenum, total	mg/L	0.001	0.00119	0.00121	0.0011	<0.0010	0.000959	0.000988	0.000843		0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001		<0.002
Nickel, total	mg/L	0.003	0.00141	0.00174	0.0016	0.0068	0.00176	0.0275	0.00402		0.0052	0.0117	0.0042	0.0019	0.0014	0.0011		0.0009	0.001	0.0009		0.001
Phosphorus, total	mg/L		<0.30	<0.30			<0.30	0.77	<0.3													
Potassium, total	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2		1.1	1.6	1.1	1	1	0.9		1.1	1	1.1		1.2
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.001		0.0002	0.0004	<0.0002	0.0002	0.0002	<0.0002		<0.0002	0.0005	<0.0002		<0.0004
Silver, total	mg/L	<0.000020	<0.000010	<0.000020	<0.000020	<0.000020	<0.000010	0.000069	<0.00001		<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	0.0002	<0.0001		<0.0002
Sodium, total	mg/L	3.9	6.8	7.7	5.9	4.9	5.1	4.5	4.4		5.8	7	6	7.4	6.5	6.4		6.5	6.9	7.2		6.7
Thallium, total	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001	<0.0001		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.0001
Zinc, total	mg/L	<0.0050	<0.0020	<0.0050	<0.0050	0.0101	0.0017	0.0484	0.0048		0.006	0.022	0.006	<0.001	0.015	0.002		0.002	0.001	0.002		0.004
Aluminum, dissolved	mg/L	0.0236	0.0086	0.0096	0.0156	0.0186	0.0155	0.0714			0.013	0.011	0.407	<0.005	0.006	0.006		0.008	0.008	0.009		0.012
Arsenic, dissolved	mg/L	<0.00050	0.00042	0.00035	0.00051	0.00054	0.00048	0.00062			0.0004	0.0005	0.0008	0.0006	0.0005	0.0004		0.0004	<0.0002	0.0005		0.0004
Cadmium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.00005			<0.00001	<0.00001	0.00003	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001		<0.00001
Calcium, dissolved	mg/L	19.5	30	41.3	27.8	27.4	27.1	14.4			26.9	31.8	22.8	26.5	26.9	33		33.4	33.3	32.9		32.4
Chromium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	0.00055			<0.0005	0.0007	0.0015	0.0011	0.001	0.0007		<0.0005	<0.0005	0.0007		0.0006
Copper, dissolved	mg/L	0.0018	0.00119	0.00404	0.0014	0.0016	0.00127	0.00212			0.001	<0.001	0.003	0.001	0.001	<0.001		0.002	0.001	0.001		0.001
Iron, dissolved	mg/L	0.136	0.07	0.105	0.292	0.32	0.253	0.546			0.09	0.09	0.06	0.06	0.06	0.11		0.1	0.07	0.08		0.08
Lead, dissolved	mg/L	<0.00050	<0.000050	<0.000050	<0.00050	<0.00050	<0.000050	0.000054			<0.0001	<0.0001	0.0005	<0.0001	<0.0001	0.0002		<0.0001	<0.0001	<0.0001		<0.0001
Magnesium, dissolved	mg/L	6.77	10.2	15.6	9.7	9.32	9.35	4.85			8.9	10.4	9.2	10.7	10.5	11.7		10.9	11	10.8		11.7
Manganese, dissolved	mg/L	0.0193	0.0415	0.0244	0.0315	0.0414	0.0383	0.0882			0.044	0.043	0.011	0.023	0.022	0.042		0.044	0.033	0.039		0.037
Mercury, dissolved	mg/L	<0.000020			<0.000020	<0.000020																
Molydenum, dissolved	mg/L	<0.0010	0.00124	0.00127	0.001	<0.0010	0.000925	0.000697			0.001	0.001	<0.001	0.002	0.001	0.001		<0.001	<0.001	0.001		0.001
Nickel, dissolved	mg/L	0.0016	0.00093	0.00095	0.0015	0.0018	0.00146	0.0022			0.001	0.0013	0.0036	0.0015	0.0007	0.0006		0.0021	0.0006	0.0006		0.0009
Phosphorus, dissolved	mg/L		<0.30	<0.30			<0.30	<0.3														
Potassium, dissolved	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2			<0.4	1.1	0.8	0.8	0.9	1		1	1.1	1		0.9
Selenium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001			0.0002	0.0003	<0.0002	<0.0002	0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
Silver, dissolved	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	<0.00001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001		<0.0001
Sodium, dissolved	mg/L	3.9	6.9	8.8	5.9	5.3	5.5	3.8			5.9	5.9	6.2	6.7	6.6	6.7		7	7.2	7.2		6.7
Thallium, dissolved	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005		<0.00005
Zinc, dissolved	mg/L	<0.0050	0.0064	0.002	<0.0050	<0.0050	<0.0010	<0.001			<0.001	0.002	0.005	0.001	<0.001	<0.001		<0.001	<0.001	0.001		0.003

Data omitted from calculation of summary statistics.

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**30/08/2006**	**06/09/2006**	**13/09/2006**	**20/09/2006**	**28/09/2006**	**04/10/2006**	**12/10/2006**	**05/06/2007**	**20/06/2007**	**18/07/2007**	**24/08/2007**	**24/08/2007**	**18/09/2007**	**30/10/2007**	**22/04/2008**	**03/06/2008**	**17/06/2008**	**06/08/2008**	**18/09/2008**	**28/10/2008**	**30/04/2009**
pH (field)	pH units																					7.6
pH (lab)	pH units	7.79	7.88	7.84	7.85	7.26	7.94	7.39	7.98	7.84	7.72		8.04	8	7.74	8.4	8.01	7.95		7.89		6.84
Hardness (from dissolved)	mg/L	132	130	130	132	129	126	132		110	128			110		186			123		123	20
Hardness (from total)	mg/L								108		126		122		130		97					
Total Dissolved Solids	mg/L	200				182		164	162	164	170		198	182	176	264	134	156		170		52
Total Suspended Solids	mg/L	<2	4	5	3		2	4	76	6	4		4	20	3	<2	<2	10		28		<2
Alkalinity, total	mg/L	129	129	128	127	128	122	130	118	116	128		139	124	128	187	94	115		82		12
Sulphate, dissolved	mg/L	10.5	10.3	10	11	11	10.9	11.3	11	12.2	11.9		10.3	8.21	13	27.6	10.4	12.9		5.44		0.65
Chloride	mg/L								0.7	0.6	0.6		0.3	0.46	0.96	0.8	0.38	0.42		0.57		0.38
Fluoride	mg/L																					
Nitrite (N)	mg/L								<0.05	<0.05	<0.05		<0.05	<0.02	0.14	0.07	0.04	0.05		<0.01		
Nitrate (N)	mg/L	0.11	0.08	0.094	0.11	0.08	0.1	0.12	<0.1	0.3	0.3		0.2	0.05	<0.02	<0.02	0.03	0.14		0.03		
Ammonia	mg/L	0.012	0.011	0.011	0.008	0.011	0.079	0.024	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Aluminum, total	mg/L	0.054	0.049	0.025	0.074	0.042	0.082	0.264	1.56	0.172	0.231		0.205	0.33	0.121	<0.02	0.4	0.21		0.469		0.138
Arsenic, total	mg/L	0.0005	0.0004	<0.0002	0.0005	<0.0004	0.0004	0.0004	0.0008	0.0004	0.0005		0.0003	0.0005	0.0004	0.0005	0.0007	0.0006		0.0005		<0.0002
Cadmium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00001	0.00003	<0.00001	0.00002		<0.00001	<0.00001	0.00004	<0.00007	<0.00007	<0.00008		0.00002		0.00008
Calcium, total	mg/L	30.8	31.1	32.2	32.4	32.5	31.6	33.5	26.4	30.2	32.2		31.2	27	33.5	40.2	24.4	29.2		23		5.54
Chromium, total	mg/L	0.0008	0.0008	<0.0005	<0.0005	<0.001	<0.001	0.0007	0.0031	0.0005	0.0008		0.0008	0.0011	0.0007	<0.0005	0.0028	0.0012		0.0022		0.0012
Copper, total	mg/L	<0.001	0.001	<0.001	0.001	<0.002	<0.002	0.002	0.003	0.002	0.002		0.002	0.003	0.012	0.004	0.002	0.001		0.003		0.013
Iron, total	mg/L	0.1	0.1	<0.2	0.2	<0.2	<0.2	0.5	2	0.2	0.3		0.2	0.5	0.3	0.05	0.78	0.4		0.91		0.19
Lead, total	mg/L	<0.0001	0.0002	<0.0001	0.0001	<0.0002	<0.0002	0.0002	0.0006	0.0001	0.0004		0.0001	0.0002	0.0023	<0.0001	0.0002	0.0001		0.0003		0.0002
Magnesium, total	mg/L	10.3	10.3	11	11.7	11	11	11.8	10.2	9.8	11		10.7	9.5	11.2	19	8.68	10.1		7.62		1.97
Manganese, total	mg/L	0.035	0.035	0.033	0.042	0.037	0.038	0.063	0.126	0.044	0.03		0.033	0.034	0.054	0.0257	0.0693	0.0833		0.0347		0.0153
Mercury, total	mg/L								<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.01		<0.00001		0.00002
Molybdenum, total	mg/L	0.001	0.001	<0.001	0.001	<0.002	<0.002	0.001	0.001	0.002	0.001		0.001	0.001	0.002	0.00165	0.00131	0.00148		0.00082		0.00016
Nickel, total	mg/L	0.0013	0.0013	0.0007	0.0014	0.002	0.002	0.0015	0.0033	0.0016	<0.0005		0.0014	0.0015	0.0008	<0.001	0.002	0.001		0.002		<0.001
Phosphorus, total	mg/L								0.14	<0.05			<0.05	<0.05		0.02	0.05	0.06		0.04		0.09
Potassium, total	mg/L	1	1	0.9	0.9	1.1	0.9	1	1.1	1	1		1	0.9	1.6	2.56	0.94	1.01		0.68		1.5
Selenium, total	mg/L	<0.0002	0.0004	0.0002	0.0004	0.0004	0.0006	<0.0002	<0.0002	0.0003	0.0004		<0.0002	<0.0002	0.0007	<0.0006	<0.0006	0.0008		0.0008		<0.0006
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001		0.00006		<0.00001
Sodium, total	mg/L	6.7	6.8	7.1	6.6	6.9	7	6.6	5.8	7.2	7.7		7.9	7.3	8.1	11.8	6.6	7.5		5.1		1.29
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001
Zinc, total	mg/L	0.003	0.001	<0.001	0.005	0.008	<0.002	0.006	0.009	0.004	0.005		0.01	0.008	0.013	0.004	0.004	0.007		0.009		0.008
Aluminum, dissolved	mg/L	0.013	0.005	0.008	0.007	0.011	<0.005	0.007		0.014	0.011			0.007		<0.02		0.02	0.014	0.07	0.009	0.053
Arsenic, dissolved	mg/L	0.0004	0.0005	0.0003	0.0005	0.0004	0.0003	0.0004		0.0004	0.0005			0.0004		<0.0002		<0.0002	0.0004	0.0003	0.0005	<0.0002
Cadmium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00028	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001			<0.00001		<0.00008		<0.00008	<0.00001	<0.00001	<0.00001	0.00008
Calcium, dissolved	mg/L	33.6	33.5	32.3	33.5	33.3	32.6	34		29.6	32			26.9		40.9			31.8	20	30.5	5.23
Chromium, dissolved	mg/L	0.0008	0.0008	0.0009	0.0007	0.0008	<0.0005	<0.0005		0.0006	0.001			0.0016		0.0012		0.0013	0.0006	0.0016	0.0005	0.0006
Copper, dissolved	mg/L	0.002	0.002	0.001	0.001	0.001	<0.001	0.001		0.002	0.002			0.001		<0.001		0.001	0.002	0.004	0.001	0.005
Iron, dissolved	mg/L	0.1	0.1	0.11	0.09	0.08	0.11	0.09		0.05	0.04			0.08		<0.02		0.07	0.07	0.2	0.078	0.07
Lead, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001			<0.0001		<0.0001		<0.0001	<0.0001	0.0017	<0.0001	0.0001
Magnesium, dissolved	mg/L	11.7	11.2	11.4	11.6	11.1	10.9	11.4		9.8	11.6			9.8		20.4			10.6	6.63	11.4	1.68
Manganese, dissolved	mg/L	0.038	0.036	0.03	0.04	0.035	0.035	0.043		0.031	0.019			0.018		0.025		0.0682	0.02	0.0198	0.0338	0.0114
Mercury, dissolved	mg/L									<0.0001	<0.0001			<0.0001		<0.00001		<0.01	<0.0001	<0.00001	<0.00001	0.00001
Molydenum, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001			0.002		0.00161		0.00149	0.001	0.00072	0.00108	0.00013
Nickel, dissolved	mg/L	0.0012	0.001	0.0009	<0.0005	0.0008	0.0007	0.0006		<0.0005	0.0007			0.0008		<0.001		0.001	0.001	0.001	0.001	<0.001
Phosphorus, dissolved	mg/L															<0.01			<0.05	0.02	<0.01	0.06
Potassium, dissolved	mg/L	1.2	0.8	0.9	1	1.1	1.1	1.1		1	0.9			0.9		2.68			1	0.53	0.8	1.5
Selenium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0003		<0.0002	<0.0002			<0.0002		<0.0006		0.0022	<0.0002	<0.0006	<0.0006	<0.0006
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001			<0.0001		<0.0010		<0.00001	0.00006	<0.00001	<0.00001	<0.00001
Sodium, dissolved	mg/L	7.7	7.5	7.4	6.6	7.4	7.3	7.4		7.4	7.6			7.2		12.6			7.4	4.92	6.4	1.2
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005			<0.00005		<0.00001		<0.00001	<0.00005	<0.00001	<0.00001	<0.00001
Zinc, dissolved	mg/L	0.005	0.002	0.001	<0.001	0.002	0.001	0.002		0.004	0.006			0.002		0.001		0.002	0.006	0.003	0.001	0.009

Data omitted from calculation of summary statistic

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**08/06/2009**	**28/07/2009**	**06/08/2009**	**24/08/2009**	**25/08/2009**	**31/08/2009**	**07/10/2009**	**25/10/2009**	**19/04/2010**	**27/04/2010**	**29/04/2010**	**01/05/2010**	**03/05/2010**	**05/05/2010**	**07/05/2010**	**09/05/2010**	**10/05/2010**	**12/05/2010**	**14/05/2010**	**16/05/2010**	**17/05/2010**
pH (field)	pH units	7.74		7.5		8.04		8.24	8.23	731	7.65	7.72	7.15	7.74		7.95	8.03	8.06		7.26	7.32	7.52
pH (lab)	pH units	7.9	8.07	8.35				7.87	8.1	7.81	7.6	7.5	7.7	7.7	7.8	7.8	8	8.1	8	8.1	8.3	8.2
Hardness (from dissolved)	mg/L	93	137	121			110	123	126		36.3	36.2	40.8	44.9	49.1	56.9	79.9	80.9	81.6	72.6	85.6	80.4
Hardness (from total)	mg/L								141	80	35	36.2	43.6	46.2	55.1	56	71	90.3	84.6	71.4	76.3	75.6
Total Dissolved Solids	mg/L	156	184	202				180	130	142	62	62	74	80	76	62	130	130	100	130	120	130
Total Suspended Solids	mg/L	32	4	2				7	<4	<7	<4	<4	15	12	12	18	<4	<4	<4	15	12	11
Alkalinity, total	mg/L	95	128	159				116	130	82	32	31	40	42	53	58	86	83	83	73	260	80
Sulphate, dissolved	mg/L	8.6	13	13				9.9		8.2	7	<5	<5	<0.5	<0.5	<0.5	9.1	3.9	5.4	5.2	7.6	5.6
Chloride	mg/L	4.1	0.82	0.39				0.61		0.91	1.4	0.9	1.2	0.8	0.9	0.8	1.2	0.6	<0.5	<0.5	0.6	<0.5
Fluoride	mg/L										0.08	0.09	0.11	0.11	0.13	0.13	0.22	0.2	0.11	0.18	0.2	0.19
Nitrite (N)	mg/L								<0.005		<0.005	<0.01	0.008	<0.005	<0.005	0.007	<0.005	0.006	<0.005	<0.005	<0.005	<0.005
Nitrate (N)	mg/L			0.18				0.12	0.15		<0.02	<0.04	0.07	<0.02	<0.02	0.1	0.07	0.13	0.03	<0.02	0.03	<0.02
Ammonia	mg/L								0.01		0.015	0.016	0.031	0.016	<0.01	0.051	<0.005	0.015	<0.05	0.034	0.068	0.037
Aluminum, total	mg/L	0.595		0.071				0.189	0.052	0.033	0.113	0.11	0.502	0.406	0.394	0.407	0.183	0.125	0.123	0.286	0.207	0.219
Arsenic, total	mg/L	0.0005		0.0007				0.0004	0.0004	0.0004	0.0003	0.0004	0.0006	0.0007	0.0007	0.0005	0.0004	0.0005	0.0004	0.0004	0.0004	0.0005
Cadmium, total	mg/L	0.00001		<0.00001				0.00091	0.00001	0.00001	0.00003	0.00002	0.00002	0.00003	0.00004	0.00003	0.00005	0.00011	0.00009	0.00005	0.00005	0.00001
Calcium, total	mg/L	27		35.1				34.2	35.7	20.5	9.35	9.54	11.5	12.3	14.3	14.7	18.2	23.3	22.1	18.2	19.8	19.6
Chromium, total	mg/L	0.0014		0.0009				0.0014	<0.001	0.0004	<0.001	<0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001
Copper, total	mg/L	0.003		0.001				0.006	0.0021	0.006	0.0055	0.0037	0.0074	0.0045	0.0058	0.0045	0.0147	0.0059	0.0075	0.0055	0.0031	0.0035
Iron, total	mg/L	0.92		0.126				0.357	0.141	0.104	0.211	0.259	0.902	0.983	1.14	0.92	0.468	0.452	0.378	0.556	0.369	0.405
Lead, total	mg/L	0.0003		0.0004				0.0015	<0.0002	0.0001	<0.0002	<0.0002	0.0003	0.0003	0.002	0.0003	0.0003	0.0003	0.0002	0.0002	<0.0002	0.0002
Magnesium, total	mg/L	9.53		12.2				11.9	12.6	7.53	2.83	3.01	3.62	3.78	4.7	4.7	6.2	7.83	7.14	6.29	6.52	6.47
Manganese, total	mg/L	0.0449		0.0278				0.0346	0.029	0.0207	0.007	0.01	0.03	0.033	0.03	0.039	0.016	0.018	0.021	0.042	0.037	0.045
Mercury, total	mg/L	<0.00001						<0.00001	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.00141		0.0015				0.0013	0.002	0.0008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.001
Nickel, total	mg/L	0.002		0.001				0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.002	0.002	0.001	0.003	0.001	0.001
Phosphorus, total	mg/L	<0.05		0.011				<0.05		0.1			0.052		0.058	0.049	0.027	0.03	0.022		0.041	0.031
Potassium, total	mg/L	0.9		1.1				0.7	1.02	2.1	1.01	0.9	0.81	0.72	0.72	0.68	0.74	0.91	0.98	0.71	0.72	0.77
Selenium, total	mg/L	<0.0006		<0.0006				<0.0006	0.0001	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002
Silver, total	mg/L	0.00002		0.00002				<0.00001	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	6.08		7.17				7.38	7.41	5.17	1.89	1.91	2.25	2.55	3.03	3.01	3.97	5.1	4.83	4.05	4.02	3.92
Thallium, total	mg/L	<0.00001		<0.00001				<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.002		0.003				0.008	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.005	0.007	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	0.013					0.01		0.007	0.019	0.075	0.065	0.053	0.047	0.038	0.028	0.023	0.021	0.017	0.096	0.012	0.018
Arsenic, dissolved	mg/L	0.0003					0.0004		0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004
Cadmium, dissolved	mg/L	<0.00001					<0.00001		0.00004	0.00002	<0.00001	<0.00001	0.00002	<0.00001	<0.00001	0.00001	<0.00001	0.00002	<0.00001	0.00001	<0.00001	<0.00001
Calcium, dissolved	mg/L	23.8					29.1		32.6	19.9	9.79	9.79	11	12	12.9	14.7	20.5	20.7	21.1	18.7	22.3	20.9
Chromium, dissolved	mg/L	<0.0004					0.0012		<0.001	0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.002					0.004		0.0012	0.006	0.0041	0.0034	0.0032	0.0027	0.0025	0.0026	0.0018	0.0022	0.0016	0.0031	0.0013	0.0012
Iron, dissolved	mg/L	0.05					0.1		0.046	0.09	0.15	0.18	0.26	0.378	0.574	0.359	0.297	0.276	0.173	0.339	0.08	0.068
Lead, dissolved	mg/L	<0.0001					0.0004		<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	8.18					9.9		10.8	7.3	2.87	2.86	3.26	3.67	4.09	4.9	6.97	7.08	7.06	6.27	7.28	6.82
Manganese, dissolved	mg/L	0.0129					0.0128		0.024	0.0188	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.039	<0.001	<0.001
Mercury, dissolved	mg/L	<0.00001					<0.00001		<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.00127					0.0011		0.001	0.0008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001
Nickel, dissolved	mg/L	0.001					0.001		<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	<0.001	<0.001
Phosphorus, dissolved	mg/L	0.01					0.03			0.02			0.023		0.021	0.017	0.014	0.013	<0.01		<0.01	<0.01
Potassium, dissolved	mg/L	0.7					0.9		0.95	2.1	1.04	0.9	0.71	0.64	0.57	0.68	0.78	0.8	0.77	0.71	0.8	0.78
Selenium, dissolved	mg/L	<0.0006					<0.0006		0.0002	<0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Silver, dissolved	mg/L	<0.00001					<0.00001		<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	5.3					6.8		6.68	5	1.86	1.92	2.22	2.6	2.85	3.35	4.54	4.69	4.6	4.05	4.75	4.36
Thallium, dissolved	mg/L	<0.00001					<0.00001		<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.002					0.001		<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Data omitted from calculation of summary statistic

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**19/05/2010**	**21/05/2010**	**23/05/2010**	**25/05/2010**	**27/05/2010**	**29/05/2010**	**31/05/2010**	**02/06/2010**	**04/06/2010**	**06/06/2010**	**14/06/2010**	**16/06/2010**	**18/06/2010**	**20/06/2010**	**22/06/2010**	**24/06/2010**	**26/06/2010**	**28/06/2010**	**05/07/2010**	**05/08/2010**	**12/09/2010**
pH (field)	pH units	7.62	8.02	7.61	7.24	7.53	7.73	7.83	7.26	7.48			6.78	7.03	7.1	7.92	7.95	8.03	7.89	8.02	7.91	8.02
pH (lab)	pH units	8.2	8.1	8.1	7.9	8	8.2	8.2	8.2	8.2	8.2	8.29	8.3	8.17	8.2	8.03	8.03	8.26	8.03	8.06	8.09	7.98
Hardness (from dissolved)	mg/L	98.6	91.5	98.1	125	113	111	109	113	111	128	122	120	122	112	97.6	99.7	106	114	92.5	118	107
Hardness (from total)	mg/L	103	95.6	103	124	148	129	130	676	125	133	128	128	123	118	115	116	106	107	106	116	102
Total Dissolved Solids	mg/L	120	120	150	140	140	160	160	140	140	170	150	150	140	140	140	130	120	150	150	170	210
Total Suspended Solids	mg/L	4	22	33	140	350	200	290	81	60	39	43	17	28	33	300	64	21	9	53	11	11
Alkalinity, total	mg/L	98	96	100	100	110	110	120	120	120	130	130	130	130	120	110	110	120	120	100	120	100
Sulphate, dissolved	mg/L	9.7	9.3	9.9	11	12	12	12	12	13	12	13	14	12	10	8.2	6.4	7.8	9.7	2.5	73	6.4
Chloride	mg/L	<0.5	0.8	1	0.8	<0.5	0.7	0.7	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	25	0.7
Fluoride	mg/L	0.25	0.26	0.28	0.28	0.3	0.32	0.32	0.31	0.31	0.32	0.35	0.35	0.34	0.31	0.25	0.28	0.3	0.29	0.22	0.36	0.22
Nitrite (N)	mg/L	<0.005	<0.005	0.006	0.025	<0.005	0.011	0.023	0.023	0.014	0.013	<0.005	<0.005	<0.005	0.008	<0.005	0.007	<0.005	<0.005	<0.005	0.103	<0.005
Nitrate (N)	mg/L	0.06	0.05	0.06	0.08	0.13	0.22	0.12	0.14	0.16	0.16	0.16	0.17	0.15	0.13	0.12	0.07	0.1	0.13	0.07	10.5	0.03
Ammonia	mg/L	0.02	0.017	0.013	0.07	0.052	0.1	<0.05	<0.01	0.34	0.1	0.016	0.016	<0.5	<0.5	0.014	0.012	0.009	0.022	0.027	0.14	0.039
Aluminum, total	mg/L	0.105	0.457	2.14	4.2	10.3	3.93	4.54	2.91	1.64	2.05	1.1	0.43	0.504	1.17	5.52	1.21	0.503	0.298	1.59	0.22	0.273
Arsenic, total	mg/L	<0.001	0.0005	0.0014	0.002	0.006	0.0025	0.0027	0.0016	0.0012	0.0013	0.0009	0.0005	0.0006	0.0009	0.0029	0.0013	0.0005	0.0005	0.0011	0.0005	0.0005
Cadmium, total	mg/L	0.00001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	25.6	24	25	28	31	31	31	33	31	33	31	31	30	29	28	27	26	28	27	29	27
Chromium, total	mg/L	0.001	<0.002	0.004	0.01	0.025	0.01	0.011	0.008	0.004	0.006	0.002	<0.002	<0.002	0.003	0.012	0.003	<0.002	<0.002	0.003	<0.002	<0.002
Copper, total	mg/L	0.0049	0.003	0.008	0.013	0.027	0.013	0.013	0.008	0.009	0.006	0.004	0.002	0.002	0.006	0.014	0.005	0.002	0.002	0.01	0.003	0.003
Iron, total	mg/L	0.248	0.628	3.49	5.54	15.6	6.13	6.96	4.39	2.42	3.12	1.62	0.573	0.768	1.74	8.61	2.05	0.761	0.491	2.4	0.428	0.594
Lead, total	mg/L	<0.0002	0.0002	0.0013	0.0018	0.0052	0.0025	0.0028	0.0014	0.001	0.0012	0.0006	<0.0002	0.0003	0.0007	0.0031	0.0006	0.0003	0.0003	0.0008	<0.0002	<0.0002
Magnesium, total	mg/L	9.58	8	10	13	17	13	13	13	11	12	12	12	11	11	11	12	10	9	9	10	9
Manganese, total	mg/L	0.019	0.035	0.13	0.158	0.391	0.248	0.226	0.148	0.081	0.091	0.073	0.036	0.042	0.059	0.26	0.067	0.032	0.021	0.078	0.029	0.026
Mercury, total	mg/L	<0.00002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	<0.001
Nickel, total	mg/L	<0.003	0.002	0.007	0.008	0.03	0.013	0.015	0.009	0.006	0.006	0.004	0.002	0.002	0.004	0.016	0.006	0.002	0.002	0.005	0.003	0.002
Phosphorus, total	mg/L	0.024																				
Potassium, total	mg/L	0.96	<1	1	2	3	2	2	2	1	2	1	1	1	1	2	1	<1	<1	<1	<1	<1
Selenium, total	mg/L	0.0002	<0.0008	<0.0008	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silver, total	mg/L	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	6.7	5	5	8	8	6	7	8	7	7	7	7	7	7	6	8	6	6	6	6	5
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	0.00005	0.00017	0.00006	0.00007	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00007	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.01	0.012	0.017	0.049	0.021	0.023	0.011	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	0.027	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.016	0.013	0.017	0.024	0.028	0.017	0.02	0.012	0.013	<0.01	0.011	<0.01	<0.01	0.014	0.033	0.018	0.012	<0.01	0.019	0.011	0.016
Arsenic, dissolved	mg/L	0.0003	<0.0004	<0.0004	<0.001	<0.001	0.0005	<0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	<0.0004	0.0004	<0.0004	<0.0004	0.0004	0.0005
Cadmium, dissolved	mg/L	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	24.4	24	25	30	27	29	27	29	29	33	31	30	30	28	25	25	26	29	23	30	28
Chromium, dissolved	mg/L	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.0017	0.001	0.001	0.003	0.003	0.002	0.002	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.001
Iron, dissolved	mg/L	0.069	0.057	0.069	0.062	0.069	0.051	0.05	0.03	0.03	0.024	0.025	0.026	0.023	0.028	0.082	0.056	0.038	0.028	0.104	0.112	0.231
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	9.16	8	9	12	11	10	10	10	10	11	11	11	11	10	9	9	10	10	8	10	9
Manganese, dissolved	mg/L	<0.001	<0.001	<0.001	0.001	0.014	0.015	0.012	<0.001	0.001	0.004	0.002	0.004	<0.001	0.003	0.001	0.001	0.003	0.002	0.003	0.023	0.017
Mercury, dissolved	mg/L	<0.00002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Nickel, dissolved	mg/L	<0.001	0.001	0.001	<0.003	<0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.004	<0.001	0.001	0.001	0.002
Phosphorus, dissolved	mg/L	<0.01																				
Potassium, dissolved	mg/L	0.85	<1	<1	1	1	1	<1	<1	<1	1	1	1	1	<1	<1	<1	<1	<1	<1	<1	<1
Selenium, dissolved	mg/L	0.0003	<0.0008	<0.0008	<0.001	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Silver, dissolved	mg/L	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	6.6	6	6	8	8	6	7	6	6	7	8	7	7	7	6	6	7	7	6	6	5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data omitted from calculation of summary statistic

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**08/10/2010**	**27/04/2011**	**02/05/2011**	**01/06/2011**	**16/06/2011**	**01/07/2011**	**02/08/2011**	**16/08/2011**	**19/08/2011**	**12/09/2011**	**06/10/2011**	**22/11/2011**	**24/01/2012**	**25/02/2012**	**05/03/2012**	**24/04/2012**	**06/05/2012**	**19/06/2012**	**17/07/2012**	**30/07/2012**	**08/08/2012**
pH (field)	pH units	7.85									7.92	7.65			7.16	6.72	7.43	7.1	7.59	7.76	7.86	8.44
pH (lab)	pH units	8.1	7.41	7.11	8.09	8	7.76	7.67	7.9	8.12	8.03	8.07	7.96	8.13	7.99	8.17	7.63	5.74	8.12	8.15	8.2	8.26
Hardness (from dissolved)	mg/L	111	42.6	31.8	92.3	97.4	77.1	58.9	97.6	93	118	110	148	169	165	161	38.7	46.4	91.8	128	135	141
Hardness (from total)	mg/L	126	42.6	33.1	94	108	87.5	85.8	96.8	93.4	119	113	144	158	160	159	37	44.7	105	124	128	141
Total Dissolved Solids	mg/L	150	72	40	120	130	120	110	150	140	170	150	156	226	216	176	100	88	128	164	180	192
Total Suspended Solids	mg/L	3	<1	7	23	85	150	400	22	22	1	<4	26.7	<4.0	<4.0	3.2	11.2	4.2	165	34.1	9.2	3.3
Alkalinity, total	mg/L	120	34	27	96	92	73	54	94	92	110	120	134	165	155	154	36.2	8.45	87.4	128	138	143
Sulphate, dissolved	mg/L	8.8	<5	<5	6.1		<0.5					8.9		18	17.8	19	<0.50	<0.50	<0.50	4.63	5.31	5.43
Chloride	mg/L	<0.5	1.9	1.7	0.5			1.8			1.3	1	0.8	0.8	0.9	0.5	1.4	<0.50	1.1	0.96	0.58	1.2
Fluoride	mg/L	0.23	0.1	0.08	0.24			0.14						0.43	0.42	0.42	0.1	0.12	0.17	0.23	0.28	0.29
Nitrite (N)	mg/L	<0.005	<0.005	<0.005		<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0101	<0.0050	0.0148	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.07	<0.02	<0.02		0.1	0.05	0.06	0.06	0.04	0.05	0.11	0.136	0.324	0.289	0.195	<0.020	<0.020	0.083	0.089	0.124	0.13
Ammonia	mg/L	0.069	0.01		0.012	0.013	0.016		0.015	0.006	0.025	0.019	0.0214	0.005	0.006	0.0067	<0.0050	0.011	0.18	0.065	0.13	0.014
Aluminum, total	mg/L	0.064	0.101	0.25	0.454	2.48	3.4	9.23	0.403	0.444	0.08	0.065	0.407	0.01	0.018	0.043	0.766	0.131	5.38	0.93	0.2	0.0828
Arsenic, total	mg/L	0.0002	0.0003	0.0003	0.0005	0.0014	0.0025	0.0037	0.001	0.0009	0.0008	0.0005	0.0006	0.0004	0.0003	0.0004	0.00074	0.00049	0.00232	0.00118	0.00095	0.00085
Cadmium, total	mg/L	0.00003	0.00005	0.00005	0.00002	0.00008	0.00022	0.00017	0.00004	0.00002	0.00005	0.00001	0.00025	0.00001	0.00003	0.00001	0.000029	0.000016	0.000119	0.000034	0.000014	<0.000010
Calcium, total	mg/L	32.2	10.9	8.66	22.9	26.4	22.2	20.7	25.4	24.1	30.1	28.4	36.4	39.5	41	39.7	9.61	11.1	26.4	31.7	32.1	35.7
Chromium, total	mg/L	<0.001	<0.001	<0.001	0.001	0.005	0.009	0.021	0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.0015	<0.0010	0.0112	0.0024	<0.0010	<0.0010
Copper, total	mg/L	0.0017	0.0119	0.0285	0.0027	0.0075	0.0127	0.0197	0.0143	0.0028	0.0024	0.0012	0.0108	0.0013	0.0055	0.0068	0.00635	0.00373	0.0102	0.0035	0.0045	0.00108
Iron, total	mg/L	0.26	0.187	0.452	0.775	4.02	6.28	13.8	1.25	1.21	0.738	0.49	0.865	0.113	0.043	0.108	1.32	0.572	7.88	2.28	1.32	1.13
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	0.0002	0.0012	0.0021	0.0035	0.0004	0.0002	<0.0002	<0.0002	0.0008	<0.0002	<0.0002	<0.0002	0.00029	<0.00020	0.00178	0.00026	<0.00020	<0.00020
Magnesium, total	mg/L	11.1	3.72	2.78	8.93	10.2	7.82	8.29	8.1	8.05	10.6	10.2	12.8	14.5	13.9	14.6	3.17	4.12	9.46	11	11.6	12.7
Manganese, total	mg/L	0.036	0.03	0.039	0.035	0.097	0.162	0.304	0.081	0.078	0.083	0.073	0.093	0.06	0.004	0.005	0.0582	0.0145	0.199	0.0937	0.0683	0.0626
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0010	<0.0010	0.0012	0.0015	0.0014	0.0014
Nickel, total	mg/L	0.002	<0.001	0.001	0.002	0.008	0.012	0.019	0.003	0.003	0.002	0.001	0.002	<0.001	<0.001	<0.001	0.0019	0.0014	0.0107	0.0032	0.0025	0.0016
Phosphorus, total	mg/L		0.067		0.043	0.226	0.267	0.412	0.058	0.043	0.033	0.023	0.077	0.014	0.012	0.016	0.048	0.034	0.222	0.074	0.044	0.036
Potassium, total	mg/L	0.77	1.88	1.46	0.86	1.04	0.76	1.11	0.53	0.47	0.6	0.62	1.09	1.57	1.51	1.46	1.2	0.912	1.09	0.824	1.14	0.894
Selenium, total	mg/L	<0.0001	<0.0001	<0.0001	0.0001	0.0002	0.0003	0.0003	0.0001	0.0001	0.0002	0.0001	0.0002	0.0003	0.0003	0.0004	<0.00010	0.00011	0.0002	0.00019	0.00022	0.00028
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00008	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	0.00003	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	6.52	2.16	1.51	5.45	5.94	5.16	4.04	4.64	4.62	6.09	5.59	6.69	8.39	8.08	8.36	1.84	2.53	5.45	6.4	6.83	7.25
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00008	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	0.00005	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.005	<0.005	0.019	<0.005	0.013	0.016	0.029	0.017	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.0050	<0.0050	0.015	<0.0050	0.0063	<0.0050
Aluminum, dissolved	mg/L	0.011	0.057	0.076	0.013	0.022	0.034	0.051	0.036	0.033	0.024	0.013	0.0076	0.0053	0.0211	0.0031	0.0499	0.0442	0.0265	0.0197	0.0171	0.0184
Arsenic, dissolved	mg/L	0.0004	0.0003	0.0002	0.0003	0.0004	0.0007	0.0007	0.0007	0.0008	0.0007	0.0006	0.0004	0.00041	0.00033	0.00039	0.00048	0.00044	0.0007	0.00086	0.00095	0.001
Cadmium, dissolved	mg/L	<0.00001	0.00003	0.00004	<0.00001	<0.00001	0.00001	0.00002	<0.00001	0.00001	0.00001	0.00003	<0.000010	0.000035	0.000064	<0.000010	0.000023	0.000016	<0.000010	0.000012	<0.000010	<0.000010
Calcium, dissolved	mg/L	29.2	11.2	8.48	23.5	24.9	20.6	15.6	26	24.2	30.8	27.9	38.3	43	41.2	41.2	10.2	11.9	23.5	33	33.9	35.9
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0012	0.0077	0.007	0.0016	0.0019	0.0031	0.0041	0.0019	0.002	0.0016	0.0012	0.00109	0.00114	0.0154	0.00122	0.00523	0.00273	0.00163	0.00127	0.00123	0.00112
Iron, dissolved	mg/L	0.127	0.148	0.169	0.099	0.207	0.441	0.614	0.593	0.556	0.616	0.346	0.167	0.0944	0.0488	0.0124	0.475	0.462	0.56	0.965	0.964	1.06
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	0.00024	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	9.34	3.57	2.57	8.19	8.56	6.25	4.85	7.96	7.89	10.1	9.89	12.8	14.9	15.1	14.2	3.2	4.04	8.07	11	12.1	12.6
Manganese, dissolved	mg/L	0.027	0.027	0.021	0.011	0.011	0.037	0.064	0.054	0.06	0.079	0.07	0.0626	0.0614	0.007	0.0015	0.0486	0.0113	0.0433	0.0366	0.0534	0.0554
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.0013	0.0015	0.0014	0.0011	<0.0010	<0.0010	0.0013	0.0015	0.0015	0.0016
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.001	0.0012	<0.0010	<0.0010	<0.0010	0.0012	0.0012	0.002	0.0016	0.0015	0.0017
Phosphorus, dissolved	mg/L		0.048		0.011	0.014	0.017	0.02	0.023	0.032	0.023	0.015	0.014	0.012	0.031	<0.01	0.027	0.021	0.02	0.035	0.032	0.033
Potassium, dissolved	mg/L	0.71	1.75	1.39	0.85	0.67	0.39	0.29	0.46	0.41	0.62	0.62	0.864	1.6	1.63	1.5	1.18	0.948	0.583	0.791	0.833	0.882
Selenium, dissolved	mg/L	0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00016	0.00043	0.00034	0.00031	<0.00010	<0.00010	0.00015	0.00013	0.00016	0.00014
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	5.34	2.12	1.43	5.09	5.67	4.4	3.69	4.81	4.58	5.73	5.68	6.99	8.72	8.86	8.03	1.9	2.44	5.29	6.55	6.98	7.09
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.005	0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	<0.0050	0.0083	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistic

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**23/08/2012**	**13/09/2012**	**16/10/2012**	**02/11/2012**	**29/12/2012**	**30/04/2013**	**14/05/2013**	**19/06/2013**	**13/07/2013**	**21/08/2013**	**06/09/2013**	**21/10/2013**	**16/11/2013**	**07/12/2013**	**06/01/2014**	**23/04/2014**	**05/05/2014**	**21/06/2014**	**30/06/2014**	**04/07/2014**	**10/08/2014**
pH (field)	pH units	7.79	7.98	7.89		7.97	8.18	8.2	8.6	7.74	7.81	7.75	7.58	7.69	6.3	7.8	7.72	8.19	8.06	8.11	8.13	
pH (lab)	pH units	8.25	8.13	8.17	7.93	8.13	8.27	7.58	8.07	8.1	8.23	8.02	8.16	8.24	8.14	8.26	7.49	7.8	8.12	8.16	8.1	8.24
Hardness (from dissolved)	mg/L	142	116	129	158	223	192	33.3	114	132	140	138	147	153	168	202	36.1	53.4	122	129	129	133
Hardness (from total)	mg/L	151	121	143	153	206	198	36.4	115	137	144	154	126	164	189	214	36.6	52.2	128	135	136	143
Total Dissolved Solids	mg/L	200	154	166	214	262	246	70	164	156	172	280	168	164	220	244	84	114	130	176	144	172
Total Suspended Solids	mg/L	1.5	15.3	9.9	2.2	<1.0	5.8	55.3	10.1	5.0	3.8	11.8	7.4	1.5	<1.0	<1.0	14.7	3.5	21.5	4.5	2.2	2.9
Alkalinity, total	mg/L	147	115	132	150	207	187	29.4	113	127	143	140	138	153	166	185	30.6	48.2	122	130	132	142
Sulphate, dissolved	mg/L	5.23	3.85	7.47	14.4	29.1	24.1	<0.50	7.87	9.73	8.32	5.66	10.3	15.1	16.7	23.7	<0.50	<0.50	11.9	11.3	11.9	12.9
Chloride	mg/L	1.2	1.2	1.2	0.82	1.9	1.4	1.5	1.1	0.99	0.93	1.3	1.3	1	1.2	0.94	1.7	1.4	1.1	1.2	0.74	0.91
Fluoride	mg/L	0.27	0.18	0.19	0.29	0.43	0.53	0.064	0.25	0.26	0.27	0.24	0.25	0.35	0.31	0.48	0.076	0.096	0.3	0.33	0.37	0.33
Nitrite (N)	mg/L	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.21	0.078	0.125	0.219	0.063	0.132	<0.020	0.141	0.17	0.157	0.128	0.168	0.257	0.206	0.28	<0.020	<0.020	0.197	0.199	0.209	0.159
Ammonia	mg/L	0.049	0.0087	0.028	0.026	0.025	0.0082	0.066	0.04	0.023	0.051	0.017	0.048	0.027	0.025	0.0096	0.014	0.014	0.024	0.025	0.013	0.025
Aluminum, total	mg/L	0.0342	0.139	0.127	0.0576	0.0127	0.0111	1.34	0.213	0.127	0.137	0.37	0.0931	0.0389	0.0098	0.0087	0.336	0.116	0.371	0.103	0.0488	0.032
Arsenic, total	mg/L	0.00093	0.0007	0.00065	0.00058	0.00042	0.00019	0.00072	0.00058	0.00063	0.0007	0.00099	0.00061	0.00052	0.00059	0.00047	0.00037	0.00049	0.00051	0.0004	0.00038	0.00049
Cadmium, total	mg/L	<0.000010	<0.000010	<0.000010	0.000015	0.000015	<0.000010	0.000025	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	0.000026	0.000026	<0.000010	0.000012	<0.000010	<0.000010
Calcium, total	mg/L	39.1	31.2	36	37.3	49.6	47.8	9.61	29.7	35.1	35.8	38.7	31.8	39.8	46.7	54	9.56	13.1	32.1	33.2	34.5	36.1
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0027	<0.0010	<0.0010	<0.0010	0.0014	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.00134	0.00208	0.00144	0.00231	0.0028	0.0021	0.0084	0.00191	0.00143	0.00138	0.0017	0.00119	0.00124	0.00141	0.005	0.0116	0.00622	0.00236	0.00205	0.00139	0.00119
Iron, total	mg/L	1.12	1.15	0.995	0.289	0.0724	0.0288	2.2	0.657	0.631	0.619	1.48	0.683	0.296	0.227	0.0638	0.595	0.398	0.721	0.183	0.173	0.179
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00046	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00048	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	13	10.5	13	14.4	19.9	19	3	9.92	12.1	13.3	13.9	11.3	15.6	17.5	19.2	3.08	4.72	11.8	12.6	12	12.9
Manganese, total	mg/L	0.0627	0.126	0.101	0.103	0.0405	0.053	0.164	0.042	0.0336	0.0492	0.102	0.0934	0.0906	0.162	0.0284	0.053	0.0635	0.046	0.0244	0.0215	0.0286
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0016	<0.0010	0.0012	0.0013	0.0012	0.0013	<0.0010	0.0014	0.0016	0.0016	0.0013	0.0011	0.0017	0.0013	0.0014	<0.0010	<0.0010	0.0015	0.0015	0.0019	0.0016
Nickel, total	mg/L	0.0016	0.0022	0.0023	0.0014	0.0016	<0.0010	0.0029	0.0019	0.0017	0.0014	0.0019	0.0016	<0.0010	0.001	<0.0010	0.0016	0.0019	0.0018	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L	0.035	0.034	0.046	0.023	0.022	<0.01	0.116	0.028	0.027	0.028	0.044	0.027	0.026	0.021	0.014	0.075	0.049	0.037	0.025	0.021	0.018
Potassium, total	mg/L	0.929	0.589	0.748	1.16	2.29	1.95	1.18	0.872	0.856	0.951	0.968	0.754	1.14	1.52	1.92	1.44	0.841	0.995	1.04	1.14	1.08
Selenium, total	mg/L	0.00017	0.00021	0.0002	0.00023	0.00032	0.00042	0.00011	0.00012	0.0002	0.00014	0.00017	0.00021	0.00017	0.00019	0.00043	0.0001	0.00011	0.00016	0.00018	0.00021	0.0003
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000024	<0.000020	<0.000020	<0.000020	<0.000020	0.000046	<0.000020	<0.000020	<0.000020	<0.000020	0.000027	<0.000020	<0.000020
Sodium, total	mg/L	7.39	6	7.25	7.87	11.7	10.1	1.5	6.28	7.03	7.75	8.11	6.34	8.83	10.1	11.1	1.59	2.95	7.11	7.55	7.77	8.15
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	0.0055	<0.0050	0.0062	<0.0050	<0.0050	0.0059	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0088	0.0059	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0178	0.0239	0.0114	0.0095	0.0061	0.0031	0.0436	0.0134	0.0138	0.0122	0.016	0.0093	0.0053	0.0035	0.004	0.063	0.0384	0.0232	0.008	0.0061	0.0058
Arsenic, dissolved	mg/L	0.00088	0.00074	0.0006	0.00053	0.00051	0.00025	0.00029	0.00051	0.00053	0.00056	0.00081	0.00067	0.00048	0.00053	0.00055	0.00027	0.00046	0.00037	0.00033	0.00035	0.00032
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	0.000031	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000019	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	35.7	30.1	33.2	39.3	56.1	46.8	8.81	30	34.9	35.2	34.9	38	39.4	43.3	51.5	9.4	13.9	29.9	32.2	31.9	32.9
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0017	0.00244	0.00094	0.00236	0.00232	0.00108	0.00365	0.00124	0.00121	0.00101	0.00113	0.00111	0.0008	0.00078	0.00165	0.00887	0.00445	0.00109	0.00132	0.00088	0.00098
Iron, dissolved	mg/L	0.978	0.734	0.603	0.183	0.0301	0.0143	0.306	0.291	0.416	0.3	0.663	0.549	0.169	0.109	0.0409	0.115	0.248	0.0916	0.0614	0.0621	0.123
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	13	9.91	11.2	14.6	20.2	18.3	2.75	9.47	11	12.7	12.3	12.6	13.3	14.5	17.9	3.05	4.53	11.4	11.9	12	12.4
Manganese, dissolved	mg/L	0.057	0.0956	0.073	0.101	0.0374	0.0528	0.103	0.0339	0.026	0.0355	0.081	0.1	0.0809	0.143	0.0275	0.0264	0.0521	0.0195	0.0193	0.0169	0.0239
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0016	<0.0010	0.0011	0.0013	0.0012	0.0013	<0.0010	0.0016	0.0015	0.0015	0.0013	0.0012	0.0016	0.0011	0.0015	<0.0010	<0.0010	0.0015	0.0015	0.0015	0.0018
Nickel, dissolved	mg/L	0.0016	0.0036	0.0015	0.0012	0.0011	<0.0010	0.001	0.0012	0.0013	0.0012	0.0016	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	0.0016	0.001	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.031	0.023	0.021	0.031	<0.01	<0.01	0.027	0.019	0.016	0.017	0.026	0.025	0.017	<0.01	0.017	0.035	0.025	<0.01	0.011	0.011	<0.01
Potassium, dissolved	mg/L	0.942	0.567	0.675	1.34	2.54	1.92	1.03	0.955	0.91	0.934	0.887	0.878	1.15	1.38	1.89	1.46	0.807	0.925	1.06	1.05	0.961
Selenium, dissolved	mg/L	0.00015	0.00014	0.00014	0.00018	0.00045	0.00043	<0.00010	0.00019	0.00015	0.00015	0.00017	0.00017	0.00024	0.00024	0.00028	0.00012	<0.00010	0.00016	0.00014	0.00014	0.00015
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	7.35	5.77	6.34	8.07	12.2	10.1	1.52	5.88	6.52	7.34	7.31	7.03	7.71	8.17	10.7	1.54	2.84	7.26	7.41	7.28	7.19
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0084	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistic

Station Name		W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7	W7
Sample Date		**10/08/2014**	**06/09/2014**	**31/10/2014**	**05/11/2014**	**09/12/2014**	**15/01/2015**	**07/03/2015**	**14/04/2015**	**31/05/2015**	**10/06/2015**	**11/07/2015**	**21/08/2015**	**22/09/2015**	**15/10/2015**	**13/12/2015**
pH (field)	pH units	7.92	7.85	7.29	7.77	7.93	8.08	8.18	8.04	7.51	7.49	7.67	7.85	7.84	7.53	8.5
pH (lab)	pH units		8.24	8.14	8.19	8.17	8.23	8.22	8.3	8.11	8.09	8.17	8.08	8.19	8.06	7.93
Hardness (from dissolved)	mg/L		131	159	147	189	248	187	187	97	120	139	132	143	137	187
Hardness (from total)	mg/L		144	164	147	205	269	194	196	104	128	145	164	137	154	188
Total Dissolved Solids	mg/L		168	176	174	322	308	246	192	110	148	174	178	184	188	176
Total Suspended Solids	mg/L		10.5	2.6	3.2	<1.0	3.2	6.0	<1.0	36.4	90.3	38.4	161.0	1.6	4.1	11.1
Alkalinity, total	mg/L		140	150	148	190	252	183	195	100	117	143	140	134	138	172
Sulphate, dissolved	mg/L		8.19	11.9	14	19.4	29.4	26.1	22.8	7.99	9.43	12.3	8.29	9.22	10.5	16.5
Chloride	mg/L		0.93	1.2	1.3	1.2	1.5	0.85	1.4	0.96	0.93	0.65	0.58	0.84	1.2	1
Fluoride	mg/L		0.27	0.33	0.33	0.46	0.66	0.56	0.44	0.24	0.31	0.34	0.32	0.31	0.32	0.38
Nitrite (N)	mg/L		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L		0.089	0.202	0.194	0.124	0.123	<0.020	0.047	0.029	0.115	0.196	0.106	0.073	0.112	0.11
Ammonia	mg/L		0.016	0.022	0.027	0.024	0.034	0.0094	0.011	0.014	0.045	0.039	0.043	0.045	0.038	0.0059
Aluminum, total	mg/L		0.184	0.0103	0.0178	0.0079	0.08	0.04	0.0145	0.246	1.48	0.533	0.0737	0.0151	0.0969	0.0459
Arsenic, total	mg/L		0.00063	0.00044	0.00042	0.0005	0.00047	0.00024	0.0003	0.00051	0.00105	0.00061	0.00062	0.00046	0.00041	0.00023
Cadmium, total	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	0.000015	<0.000010	0.000022	<0.000010	0.000017	0.000011	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L		36.3	42	37.8	51.5	64.6	46.6	43.7	26	31.3	35.7	41.6	33.9	38.7	45.7
Chromium, total	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0032	0.0016	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L		0.00204	0.00098	0.00099	0.0013	0.00909	0.0168	0.00514	0.00354	0.0038	0.00339	0.00179	0.00101	0.00161	0.00204
Iron, total	mg/L		0.555	0.145	0.156	0.059	0.145	0.093	0.034	0.503	2.3	0.946	0.287	0.162	0.268	0.089
Lead, total	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00062	0.00027	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L		13	14.3	12.8	18.5	26.1	18.9	21.1	9.42	12.1	13.5	14.6	12.7	13.9	17.9
Manganese, total	mg/L		0.0406	0.0517	0.0544	0.0452	0.0181	0.0151	0.0124	0.0807	0.255	0.0535	0.0349	0.0296	0.0363	0.0161
Mercury, total	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L		0.0016	0.0015	0.0014	0.0015	0.002	<0.0010	0.0021	0.0013	0.0017	0.0015	0.0019	0.0013	0.0014	<0.0010
Nickel, total	mg/L		0.0013	<0.0010	0.0011	<0.0010	0.0012	<0.0010	<0.0010	0.0014	0.0035	0.0023	0.0014	<0.0010	0.001	0.0011
Phosphorus, total	mg/L		0.034	0.02	0.016	0.017	0.022	0.028	0.026	0.051	0.109	0.056	0.023	0.02	0.028	0.03
Potassium, total	mg/L		1.02	1.28	1.13	2.04	2.93	2.61	2.99	0.992	1.25	1.2	1.31	0.983	1.2	1.64
Selenium, total	mg/L		0.0002	0.00016	0.00016	0.00036	0.00057	0.00059	0.00033	0.0001	0.00019	0.00014	0.00016	0.00011	0.00014	0.00019
Silver, total	mg/L		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000026	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L		7.79	8.37	9.18	10.9	15.4	11.6	12.2	6.48	7.23	8.36	9.58	7.96	8.29	10.4
Thallium, total	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L		0.0061	<0.0050	<0.0050	<0.0050	0.0106	<0.0050	<0.0050	<0.0050	0.0064	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L		0.007	0.0051	0.0067	0.0051	0.0037	<0.0030	0.0068	0.0068	0.0063	0.0084	0.0109	0.0097	0.009	0.0076
Arsenic, dissolved	mg/L		0.00038	0.00037	0.00036	0.00043	0.00042	0.0002	0.00032	0.00034	0.00042	0.00036	0.00041	0.0004	0.00031	0.00027
Cadmium, dissolved	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L		33	39.8	36.1	47.3	59.2	45.4	43.2	24.1	29.1	34.5	33.4	36	35.2	45.1
Chromium, dissolved	mg/L		<0.0010	<0.0010	0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L		0.00081	0.00074	0.00083	0.0012	0.00166	0.00127	0.00357	0.00119	0.0009	0.00145	0.001	0.00084	0.001	0.00099
Iron, dissolved	mg/L		0.2	0.129	0.122	0.0461	0.0103	0.0102	0.0187	0.0818	0.0949	0.0831	0.12	0.116	0.0983	0.0485
Lead, dissolved	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00050
Magnesium, dissolved	mg/L		11.9	14.5	13.9	17.2	24.2	17.9	19.1	8.95	11.4	12.7	11.8	12.8	11.9	18
Manganese, dissolved	mg/L		0.0235	0.0512	0.05	0.0398	0.0134	0.0069	0.0111	0.0644	0.187	0.0305	0.0216	0.0287	0.0282	0.0102
Mercury, dissolved	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.0014	0.0015	0.0016	0.0014	0.0017	<0.0010	0.0018	0.0013	0.0016	0.0014	0.0014	0.0014	0.0012	<0.0010
Nickel, dissolved	mg/L		<0.0010	<0.0010	0.0015	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0023
Phosphorus, dissolved	mg/L		0.012	0.014	0.011	0.011	<0.01	<0.01	0.013	<0.01	0.012	0.01	0.01	0.011	<0.01	0.02
Potassium, dissolved	mg/L		0.931	1.23	1.12	1.86	2.6	2.57	2.73	0.852	1.01	1.05	0.926	0.972	0.957	1.57
Selenium, dissolved	mg/L		0.00017	0.0002	0.00015	0.00029	0.00058	0.00046	0.00038	0.00014	0.00016	0.00013	0.00014	0.00013	0.00017	0.00021
Silver, dissolved	mg/L		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L		7.48	8.51	8.05	9.93	14.8	10.5	11.2	6.04	7.09	7.84	7.73	8.31	7.49	10.4
Thallium, dissolved	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Data omitted from calculation of summary statistic

Station Name		W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6
Sample Date		**27/05/2005**	**30/06/2005**	**29/07/2005**	**30/08/2005**	**28/09/2005**	**15/10/2005**	**02/06/2006**	**25/08/2006**	**06/09/2006**	**20/06/2007**	**18/09/2007**	**17/06/2008**	**18/09/2008**	**17/07/2012**	**30/07/2012**	**09/08/2012**	**25/08/2012**	**13/09/2012**	**13/10/2012**	**12/11/2012**
pH (field)	pH units														7.92	7.89	8.09	7.76	7.95	8.3	6.69
pH (lab)	pH units	7.91	7.41	8.01	8.17	7.95	7.92	7.64	8.01	7.86	7.77	7.95	7.82	7.8	7.98	8.09	8.17	8	8.04	7.92	7.93
Hardness (from dissolved)	mg/L								120	110					104	101	112	103	87.7		153
Hardness (from total)	mg/L	65.4		171	106	106	98.3				81	93	86		163	145	136	161	93.1	117	155
Total Dissolved Solids	mg/L	103	123	198	147	133	128	96	160		130	172	120	150	122	124	144	138	118	150	162
Total Suspended Solids	mg/L	13.5	11.5	22.2	<3.0	3.5	<3.0	115		4	16	8	17	4	1130	614	566	1160	50.3	44.7	2.2
Alkalinity, total	mg/L	32	99.1		109	93		76.6	120	112	83	112	93	87	103	103	116	109	87.1	99.1	138
Sulphate, dissolved	mg/L	11.8	<1		2.62	4.04		1.88	2.4	2.3	2.1	2.51	1.64	3.29	1.82	<0.50	0.64	<0.50	0.62	1.52	5.81
Chloride	mg/L	<0.50	0.73	<0.50	<0.50	0.5	0.52	<0.5			0.4	0.59	0.29	0.41	1	0.58	1.1	0.92	1.1	0.87	1.1
Fluoride	mg/L							0.176							0.25	0.3	0.28	0.28	0.22	0.23	0.23
Nitrite (N)	mg/L	0.0016	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001			<0.05	<0.02	0.07	<0.01	<0.0050	0.0072	0.0066	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.0316	0.0086	0.0223	<0.0050	<0.0050	0.0061	0.0241	<0.03	<0.03	0.1	<0.02	0.01	<0.01	0.026	0.052	0.022	0.045	0.034	0.042	<0.020
Ammonia	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.021			<0.05	<0.05	<0.05	<0.05	0.14	0.07	0.025	0.023	0.011	0.016	0.025
Aluminum, total	mg/L	0.229	0.17	0.598	0.0181	0.0321	0.0251	1.95	0.024	0.035	0.042	0.023	0.14	0.022	20.8	15.1	8.03	5.23	0.271	0.241	0.0243
Arsenic, total	mg/L	0.00052	0.00045	0.00063	<0.00050	<0.00050	0.00043	0.00131	0.0006	0.0005	0.0004	0.0004	0.0004	<0.0002	0.00898	0.0066	0.00362	0.00395	0.00051	0.00066	0.00042
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.00005	<0.00002	<0.00001	<0.00001	<0.00001	<0.00008	<0.00001	0.000468	0.000195	0.000109	0.000219	0.000011	<0.000010	<0.000010
Calcium, total	mg/L	17.4	24.7	41.1	28.6	28.2	25.1	18.9	31.5	29	23.2	25.8	23.8	24.6	41.2	38.1	36.7	45	25.9	30.8	43.3
Chromium, total	mg/L	<0.0010	0.00057	0.00145	<0.0010	<0.0010	<0.00050	0.00384	<0.001	0.0005	<0.0005	<0.0005	0.0011	0.001	0.0388	0.0276	0.0137	0.0085	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0021	0.00148	0.0118	0.0012	0.0012	0.00107	0.00531	<0.002	0.001	0.002	0.001	0.001	0.001	0.0402	0.0286	0.0147	0.0247	0.00225	0.00189	0.00345
Iron, total	mg/L	0.363	0.266	1.08	0.088	0.148	0.116	2.74	<0.2	0.1	0.1	<0.1	0.35	0.09	29.8	21.6	11.2	9.68	0.591	0.517	0.0646
Lead, total	mg/L	<0.00050	0.000134	0.00035	<0.00050	<0.00050	<0.000050	0.000851	<0.0002	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00971	0.00627	0.00343	0.00505	0.00025	0.00023	<0.00020
Magnesium, total	mg/L	4.88	6.65	15.4	7.97	8.02	7.18	5.63	7.8	7.3	5.6	6.9	6.44	6.61	14.6	12.1	10.7	11.7	6.92	9.61	11.3
Manganese, total	mg/L	0.0169	0.0113	0.0536	0.0224	0.0267	0.0188	0.0835	0.04	0.042	0.011	0.023	0.0215	0.0098	0.771	0.513	0.376	0.619	0.0619	0.0661	0.0021
Mercury, total	mg/L	<0.000020			<0.000020	<0.000020					<0.0001	<0.0001	<0.01	<0.00001	<0.000010	0.000033	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010	0.000448	0.00133	<0.0010	<0.0010	0.000392	0.000411	<0.002	<0.001	<0.001	<0.001	0.00045	0.00031	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.0021	0.00135	0.00204	0.0011	0.0013	0.00131	0.00535	0.001	0.0015	0.0017	0.0012	0.001	0.001	0.0348	0.0236	0.0126	0.0192	0.005	0.0016	0.0013
Phosphorus, total	mg/L		<0.30	<0.30			<0.30	<0.3			0.18	<0.05	0.11	0.02	0.99	0.642	0.373	0.647	0.04	0.048	0.015
Potassium, total	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<0.8	0.5	0.4	0.4	0.46	0.4	2.03	1.62	1.2	0.849	0.42	0.594	0.507
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.0004	0.0003	0.0002	<0.0002	<0.0006	<0.0006	0.00068	0.00061	0.00041	0.00016	<0.00010	0.00014	0.00011
Silver, total	mg/L	<0.000020	<0.000010	<0.000020	<0.000020	<0.000020	<0.000010	0.000021	<0.0002	<0.0001	<0.0001	<0.0001	<0.00001	0.00008	0.000172	0.000122	0.000054	0.000021	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	2.7	4.6	8.4	4.5	4.2	4	3.4	4.8	4.6	4.3	5	4.8	4.1	4.89	4.72	4.85	4.59	4.05	5.31	6.12
Thallium, total	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	0.000147	0.000108	0.000068	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0030	<0.0060	<0.0050	<0.0050	<0.0010	0.0085	0.005	<0.001	0.004	0.008	0.007	0.004	0.073	0.0504	0.027	0.0392	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0144	0.0056	0.007	0.0067	0.0067	0.0769	0.0252		0.008				0.012	0.0161	0.0186	0.0173	0.0138	0.0169		0.0062
Arsenic, dissolved	mg/L	<0.00050	0.00039	0.00026	<0.00050	<0.00050	0.00042	0.00044		0.0005				0.0004	0.00053	0.00059	0.00081	0.00081	0.00047		0.00039
Cadmium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.00005		<0.00001				<0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Calcium, dissolved	mg/L	17.9	25.2	46.9	29	28.8	26.7	17.8	31.7	30				23.7	29.7	28.9	31.9	28.9	24.1		41.6
Chromium, dissolved	mg/L	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010	<0.00050	<0.0005		0.0006				0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Copper, dissolved	mg/L	0.0016	0.00101	0.00247	0.001	0.0011	0.00108	0.00175		0.001				0.002	0.00105	0.00089	0.00083	0.00103	0.00145		0.00143
Iron, dissolved	mg/L	0.072	<0.030	0.062	0.064	0.1	0.088	0.096		0.11				0.09	0.0679	0.0814	0.0845	0.0799	0.108		0.0235
Lead, dissolved	mg/L	<0.00050	<0.000050	0.000083	<0.00050	<0.00050	<0.000050	<0.00005		<0.0001				<0.0001	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Magnesium, dissolved	mg/L	5.01	6.72	13.2	8.1	8.25	7.66	4.95	8.7	7.7				6.33	7.16	7.02	7.95	7.34	6.66		11.8
Manganese, dissolved	mg/L	0.00543	0.00324	0.0145	0.0211	0.0245	0.0162	0.00673		0.046				0.0099	0.0542	0.102	0.134	0.134	0.0408		0.0013
Mercury, dissolved	mg/L	<0.000020			<0.000020	<0.000020								<0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	0.000448	0.000818	<0.0010	<0.0010	0.000395	0.000305		<0.001				0.00027	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Nickel, dissolved	mg/L	0.0015	0.00099	0.0006	0.0011	0.0012	0.00118	0.00182		0.0006				0.002	0.001	<0.0010	0.001	0.001	0.0014		0.0014
Phosphorus, dissolved	mg/L		<0.30	<0.30			<0.30	<0.3						0.02	<0.01	<0.01	0.011	0.012	<0.01		<0.01
Potassium, dissolved	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2		0.6				0.4	0.52	0.542	0.578	0.648	0.411		0.562
Selenium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001		<0.0002				0.0012	0.00012	<0.00010	0.0001	<0.00010	<0.00010		0.0001
Silver, dissolved	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	<0.00001		<0.0001				<0.00001	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020
Sodium, dissolved	mg/L	2.8	4.8	7.3	4.6	4.4	4.5	3.3		4.8				4.27	4.31	4.2	4.56	4.21	3.89		6.34
Thallium, dissolved	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.0001		<0.00005				<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Zinc, dissolved	mg/L	<0.0050	0.021	0.0025	<0.0050	<0.0050	0.0015	0.003		0.002				0.003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050

Data omitted from calculation of summary statistics.

W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6	W6
14/05/2013	22/06/2013	12/07/2013	22/08/2013	06/09/2013	07/10/2013	16/11/2013	07/12/2013	21/02/2014	12/05/2014	12/05/2014	21/06/2014	22/07/2014	20/08/2014	02/09/2014	16/10/2014	30/11/2014	31/05/2015	31/05/2015	10/06/2015	12/07/2015	21/08/2015	22/09/2015	15/10/2015
7.6	7.61	7.69	7.81	7.6	7.66	7.96	7.5	7.41	7.92		8.14	7.13	7.83	7.85	7.88	8.2		7.55	7.86	7.47	8.03	7.94	7.51
7.48	8.07	7.9	8.04	7.95	8.08	8.11	8.21	8.07	7.84	7.84	7.92	8.16	8.16	8.29	8.09	7.9	7.88		8.01	8.1	7.95	8.16	8.07
31.4	94.9	88.2	102	101	107	119	159	160	49.5	49.5	93	96.1	115	160	96.3	182	93.8		94.4	102	101	107	101
33.8	115	95.3	106	114	106	123	182	152	52.5	52.5	105	97.9	114	162	99.4	177	109		98.6	109	104	111	106
84	118	136	144	130	176	120	194	177	96	96	106	128	140	194	90	230	92		126	126	144	148	136
13.1	172	25.2	19.7	5.2	74.4	33.4	3.6	27	8.5	8.5	51	145	157	1.8	2.1	1.7	301		56.3	79.5	103	<1.0	6.9
25.5	97.8	93.8	107	105	98.1	121	164	158	51.2	51.2	95.3	98.8	115	160	99.1	182	101		91.3	109	104	100	103
<0.50	1.88	1.27	0.53	0.62	1.89	1.48	5.36	6.58	<0.50	<0.50	0.87	<0.50	<0.50	17.9	0.6	5.95	0.85		0.73	0.85	<0.50	0.77	1.11
1.5	1.1	1	0.84	1.2	0.8	0.78	1.4	1.8	1	1	0.9	0.77	1.3	1.9	0.78	1.7	1.1		0.72	0.88	0.65	0.97	1.3
0.083	0.22	0.23	0.23	0.26	0.25	0.24	0.28	0.27	0.12	0.12	0.23	0.25	0.25	0.36	0.22	0.3	0.22		0.25	0.24	0.25	0.25	0.24
<0.0050	0.0132	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0059	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		0.0070	<0.0050	<0.0050	<0.0050	<0.0050
<0.020	0.028	<0.020	<0.020	0.030	0.042	<0.020	<0.020	0.026	<0.020	<0.020	0.042	<0.020	<0.020	0.097	<0.020	<0.020	0.037		0.027	0.031	<0.020	<0.020	<0.020
0.13	0.024	0.012	0.014	0.0061	0.044	0.015	0.0076	0.027	0.033	0.033	0.021	0.023	0.016	0.029	0.014	0.0054	0.019		0.027	0.02	0.032	0.025	0.017
0.65	4.63	0.506	0.0846	0.165	2.18	0.283	0.0734	2.48	0.371	0.371	2.94	0.649	0.415	0.0175	0.0483	0.0392	1.76		0.641	1.41	0.515	0.0191	0.0271
0.00068	0.00264	0.00066	0.00064	0.00067	0.00138	0.00063	0.00074	0.00181	0.00063	0.00063	0.00169	0.00073	0.00076	0.00044	0.00052	0.00054	0.0014		0.00075	0.00108	0.00072	0.00046	0.0004
0.000029	0.000048	<0.000010	<0.000010	<0.000010	0.000023	<0.000010	0.000020	0.000024	0.000015	0.000015	0.000046	0.000012	<0.000010	<0.000010	<0.000010	0.000016	0.000027		<0.000010	0.000035	0.000012	<0.000010	<0.000010
9.4	30.4	26.7	29.6	31.7	29.2	33.4	49.1	40.1	14.4	14.4	28.4	26.9	31.3	39.9	27.4	47.6	30.1		27.4	30.8	28.8	30.4	29.8
0.0014	0.0094	0.0011	<0.0010	<0.0010	0.0043	<0.0010	<0.0010	0.0044	<0.0010	<0.0010	0.0058	0.0014	<0.0010	<0.0010	<0.0010	<0.0010	0.0029		0.0012	0.0027	0.0012	<0.0010	<0.0010
0.00697	0.00985	0.00171	0.00123	0.00119	0.0071	0.00186	0.00602	0.0152	0.00373	0.00373	0.0068	0.00315	0.00216	0.00121	0.00093	0.00432	0.00473		0.00233	0.00429	0.00228	0.00121	0.0011
1.06	6.84	0.812	0.283	0.404	3.02	0.523	0.12	3.26	0.75	0.75	4.12	0.954	0.741	0.16	0.211	0.065	2.57		0.927	2.23	0.849	0.137	0.142
0.00024	0.00184	0.00021	<0.00020	<0.00020	0.00081	<0.00020	<0.00020	0.00097	<0.00020	<0.00020	0.00126	0.00029	<0.00020	<0.00020	<0.00020	<0.00020	0.00094		0.00029	0.00076	0.00025	<0.00020	<0.00020
2.5	9.52	6.98	7.74	8.38	8	9.65	14.5	12.6	4.03	4.03	8.27	7.46	8.69	15	7.53	14.2	8.19		7.36	7.84	7.79	8.61	7.64
0.0637	0.161	0.0413	0.0358	0.0387	0.0965	0.0488	0.0036	0.0416	0.0531	0.0531	0.128	0.0411	0.0562	0.0503	0.0304	0.0024	0.101		0.0371	0.0935	0.0515	0.0326	0.0244
<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0018	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
0.0023	0.0102	0.0021	0.0013	0.0014	0.0039	0.0014	0.0013	0.0052	0.0019	0.0019	0.0064	0.0022	0.0017	<0.0010	0.0013	0.0018	0.0042		0.0023	0.0038	0.0025	0.0012	0.0011
0.086	0.184	0.032	0.018	0.016	0.098	0.022	0.031	0.059	0.05	0.05	0.145	0.038	0.036	0.014	0.011	0.03	0.175		0.052	0.102	0.051	0.012	0.014
1.86	1.45	0.55	0.52	0.605	0.789	0.652	0.661	1.12	1.25	1.25	1.05	0.605	0.61	1.38	0.464	0.582	0.989		0.785	0.716	0.619	0.527	0.459
<0.00010	0.00022	0.00012	<0.00010	0.00013	0.00015	<0.00010	0.00018	0.00017	<0.00010	<0.00010	0.00022	<0.00010	<0.00010	0.00015	<0.00010	<0.00010	<0.00010		0.00013	<0.00010	0.00011	<0.00010	<0.00010
<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000045	<0.000020	0.000049	0.000035	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000050	<0.000020		<0.000020	0.000026	<0.000020	<0.000020	<0.000020
1.07	4.63	4.18	4.67	4.75	4.45	5.26	7.78	6.07	2.37	2.37	4.56	4.54	5.22	9.28	4.39	7.55	4.45		4.45	4.18	4.64	4.94	4.3
<0.000050	0.000066	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
0.0057	0.0169	<0.0050	<0.0050	<0.0050	0.0079	<0.0050	<0.0050	0.0112	<0.0050	<0.0050	0.0109	<0.0050	<0.0050	<0.0050	<0.0050	0.0231	0.0068		<0.0050	0.0054	<0.0050	<0.0050	<0.0050
0.0591	0.0095	0.0066	0.0084	0.0083	0.0132	0.0057	0.0041	0.004	0.0157	0.0157	0.015	0.0185	0.0075	<0.0030	0.0058	0.0076	0.0072		0.0072	0.0068	0.0117	0.0148	0.0096
0.00037	0.00053	0.00046	0.00052	0.00056	0.00051	0.00048	0.00061	0.00055	0.00042	0.00042	0.00042	0.00041	0.00069	0.00042	0.00046	0.00047	0.00043		0.00042	0.00038	0.00041	0.00048	0.00044
0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	0.000010	<0.000010	<0.000010
8.75	26.4	24.1	28.3	28.4	30.7	33.2	44.6	44.6	13.6	13.6	25.6	27	31.9	38.7	26.7	50.4	26.1		26.2	28.4	28.8	30.3	27.8
<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
0.0035	0.00096	0.00095	0.00119	0.00089	0.00097	0.00084	0.00156	0.00299	0.002	0.002	0.0019	0.00254	0.00098	0.0014	0.00081	0.00181	0.00112		0.00106	0.00095	0.00109	0.00099	0.00128
0.183	0.0718	0.105	0.103	0.111	0.145	0.124	0.0144	0.0168	0.107	0.107	0.2	0.0998	0.127	0.139	0.094	0.014	0.0564		0.0543	0.0603	0.082	0.112	0.0989
<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
2.31	7.04	6.83	7.54	7.18	7.36	8.66	11.7	11.9	3.76	3.76	7.07	6.96	8.53	15.4	7.2	13.5	6.96		7.03	7.54	6.98	7.59	7.56
0.0433	0.0293	0.022	0.0286	0.0323	0.048	0.0399	0.0017	0.0071	0.0357	0.0357	0.0316	0.0175	0.035	0.05	0.0255	0.0015	0.0138		0.0082	0.0166	0.0191	0.0298	0.0243
<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0019	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
0.0013	0.0012	0.0011	0.0011	0.0011	0.0013	0.001	0.0011	0.0012	0.0012	0.0012	0.0014	0.0012	0.0011	0.0016	<0.0010	0.0015	0.001		0.001	0.0011	0.0012	0.0013	0.0012
0.044	<0.01	<0.01	<0.01	0.013	0.011	0.015	0.015	0.015	0.023	0.023	0.015	0.013	0.014	0.012	<0.01	0.015	0.011		<0.01	<0.01	<0.01	0.012	0.01
1.73	0.724	0.482	0.489	0.554	0.581	0.589	0.562	0.934	1.13	1.13	0.668	0.535	0.637	1.23	0.506	0.595	0.684		0.641	0.566	0.453	0.536	0.462
<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00012	<0.00010	<0.00010	0.00012	<0.00010	<0.00010	0.00011	<0.00010	<0.00010	0.00011		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
0.999	3.95	4.07	4.33	4.02	4.6	4.77	6.36	6.65	2.25	2.25	4.44	4.04	4.91	9.85	4.29	7.38	4		4.14	4.48	4.25	4.42	4.41
<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4	C4
Sample Date		**06/05/2012**	**01/08/2012**	**08/08/2012**	**25/08/2012**	**22/06/2013**	**19/07/2013**	**22/08/2013**	**06/09/2013**	**18/10/2013**	**17/11/2013**	**23/04/2014**	**12/05/2014**	**21/06/2014**	**22/07/2014**	**20/08/2014**	**02/09/2014**	**16/10/2014**	**09/12/2014**	**31/05/2015**	**14/06/2015**	**12/07/2015**	**21/08/2015**	**22/09/2015**	**15/10/2015**
pH (field)	pH units	7.51	7.75	7.81	7.81	7.68	8.2	7.88	7.69	7.16	7.17	7.79	7.88	8.11	7.38	7.96	7.91	7.73	7.95	7.84	7.7	7.89	7.91	7.78	7.3
pH (lab)	pH units	7.59	8.04	8.14	7.94	7.97	8.12	7.98	7.93	8.24	7.9	7.68	7.83	7.98	8.08	8.23	8.29	8.14	8.14	8.01	8.24	8.15	8.09	8.22	8.2
Hardness (from dissolved)	mg/L	43.9	117	125	130	126	128	123	125	129	258	53.4	48.5	127	117	160	158	135	244	119	143	141	149	153	155
Hardness (from total)	mg/L	119	133	142	173	222	200	199	166	139	264	53.8	139	143	141	167	149	144	252	127	156	150	134	151	159
Total Dissolved Solids	mg/L	84	166	170	192	204	184	182	176	220	272	106	100	144	172	186	182	156	318	124	176	156	212	202	218
Total Suspended Solids	mg/L	1260.0	246.0	253.0	855.0	886.0	487.0	784.0	172.0	16.3	22.4	3.3	904.0	125.0	498.0	9.6	7.5	48.4	10.5	68.0	19.8	34.0	26.3	2.3	140.0
Alkalinity, total	mg/L	40.1	115	126	128	120	125	118	120	126	244	47	48.6	126	115	156	156	130	173	114	146	137	149	132	153
Sulphate, dissolved	mg/L	<0.50	3.37	<5.0	2.19	10.6	7.45	4.75	4.27	38.1	6.33	<0.50	2.58	8.05	7.23	6.85	8.39	9.1	83.1	12.3	11.9	9.36	8.1	10.6	12.7
Chloride	mg/L	0.54	0.89	<5.0	1.4	1.4	1.5	1.5	1.3	2.4	2.4	2.1	0.9	1.3	1.4	1.9	1.2	1.2	7.3	1.1	1.1	1.1	0.94	1.2	1.9
Fluoride	mg/L	0.14	0.2	0.22	0.22	0.27	0.27	0.21	0.19	0.2	0.29	0.13	0.14	0.24	0.21	0.25	0.21	0.19	0.44	0.34	0.43	0.24	0.24	0.24	0.28
Nitrite (N)	mg/L	<0.0050	0.0177	0.0120	<0.0050	0.0066	0.0069	0.0084	<0.0050	<0.0050	<0.050	<0.0050	0.0059	0.0103	0.0105	0.0058	<0.0050	<0.0050	0.0229	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.029	0.074	0.095	<0.020	0.371	0.082	0.086	0.07	0.065	<0.20	<0.020	0.022	0.077	0.048	0.063	0.055	0.067	2.31	<0.020	0.039	0.052	0.043	0.034	0.051
Ammonia	mg/L	0.088	0.089	0.09	0.005	0.36	0.26	0.2	0.12	0.08	0.28	0.024	0.26	0.17	0.13	0.065	0.069	0.075	0.045	0.064	0.052	0.074	0.044	0.039	0.055
Aluminum, total	mg/L	29.7	7.06	7.01	4.45	20.4	13.5	13.8	5.43	0.358	0.0856	0.189	24.8	5.06	6.12	0.219	0.0846	0.515	0.225	1.35	0.289	1.94	0.185	0.0253	0.143
Arsenic, total	mg/L	0.0125	0.00497	0.00635	0.00759	0.0123	0.00864	0.00939	0.00462	0.00151	0.00545	0.00053	0.0127	0.00434	0.00471	0.00189	0.00144	0.00146	0.00077	0.00134	0.00129	0.00253	0.00134	0.00098	0.00102
Cadmium, total	mg/L	0.000416	0.000114	0.000107	0.000202	0.000317	0.000209	0.000308	0.000066	0.000012	0.000022	0.000015	0.00047	0.000076	0.00012	0.000011	<0.000010	0.000021	0.000016	0.000032	<0.000010	0.000049	0.00001	<0.000010	0.000012
Calcium, total	mg/L	23.9	34.3	36.5	45.6	55.7	54	51	43.1	36.9	70.5	14	30.3	36.4	36.5	43.2	38.1	37.4	61.6	32.7	41.2	38.8	34.8	39.9	42.3
Chromium, total	mg/L	0.0600	0.0135	0.0148	0.0079	0.0426	0.0287	0.0268	0.0107	0.0013	0.0015	<0.0010	0.0491	0.0101	0.0114	<0.0010	<0.0010	0.0015	<0.0010	0.0027	0.0010	0.0048	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0585	0.0167	0.015	0.0218	0.0479	0.0323	0.0347	0.0103	0.00263	0.00357	0.0118	0.066	0.0102	0.0151	0.00165	0.00124	0.00244	0.0146	0.00379	0.00387	0.00611	0.0021	0.00122	0.00196
Iron, total	mg/L	45.8	13.9	16.1	18.2	36.2	24.4	26.2	11	2.1	14.7	0.3	49.1	9.7	11.7	2.05	1.65	2.11	0.513	2.43	1.43	4.72	1.36	0.821	1.03
Lead, total	mg/L	0.01260	0.00303	0.00371	0.00439	0.00977	0.00631	0.00784	0.00208	<0.00020	<0.00020	<0.00020	0.01520	0.00235	0.00349	<0.00020	<0.00020	0.00037	<0.00020	0.00076	<0.00020	0.00111	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	14.4	11.5	12.3	14.3	20.2	15.8	17.3	14.2	11.3	21.5	4.58	15.5	12.7	12.2	14.4	12.9	12.4	23.7	11	12.9	12.8	11.4	12.5	12.9
Manganese, total	mg/L	0.936	0.868	1	1.32	1.24	0.913	1.25	0.732	0.425	3.19	0.022	1.27	0.587	0.644	0.505	0.487	0.384	0.178	0.162	0.276	0.328	0.326	0.217	0.26
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000018	0.000015	0.000033	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0015	<0.0010	0.001	<0.0010	0.0023	0.002	0.0014	0.0014	<0.0010	0.0011	<0.0010	<0.0010	0.0015	0.001	0.0012	0.0011	<0.0010	0.0074	<0.0010	0.001	0.0015	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.0498	0.0139	0.0151	0.0179	0.0483	0.0314	0.0352	0.0124	0.0029	0.0077	0.0023	0.0499	0.0108	0.014	0.0028	0.0027	0.0033	0.0016	0.0039	0.0023	0.0063	0.0024	0.0019	0.002
Phosphorus, total	mg/L	1.11	0.41	0.478	0.657	1.28	0.591	1.01	0.342	0.065	0.158	0.044	1.41	0.266	0.454	0.059	0.044	0.087	0.07	0.088	0.038	0.122	0.052	0.036	0.047
Potassium, total	mg/L	3.02	1.34	1.45	1.19	2.77	2.21	2.02	1.5	0.833	1.05	1.62	2.48	1.5	1.39	1.11	0.939	0.872	6.93	1.11	1.04	1.41	0.973	0.994	1.04
Selenium, total	mg/L	0.00069	0.00019	0.00021	0.00016	0.00059	0.00071	0.00053	0.00016	0.00011	0.00027	0.00017	0.0006	0.00018	0.00021	<0.00010	0.0001	0.00013	0.00079	<0.00010	<0.00010	0.00011	0.00012	<0.00010	0.00011
Silver, total	mg/L	0.000210	0.000056	0.000051	0.000020	0.000074	0.000087	0.000063	0.000021	0.000124	<0.000020	<0.000020	0.000180	<0.000020	0.000047	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000068	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	3.45	5.22	5.55	5.64	7.08	6.66	6.83	6.74	6.01	8.09	2.84	4.23	6.15	6.07	7.1	6.5	6.48	20.7	5.91	7.21	6.45	5.98	6.81	6.93
Thallium, total	mg/L	0.000244	0.000063	0.000066	<0.000050	<0.000050	0.000122	0.000103	0.000053	<0.000050	<0.000050	<0.000050	0.000188	0.000054	0.000063	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0961	0.0272	0.0279	0.0325	0.0872	0.0502	0.0597	0.0172	<0.0050	<0.0050	<0.0050	0.1290	0.0228	0.0271	<0.0050	<0.0050	<0.0050	<0.0050	0.0060	<0.0050	0.0101	<0.0050	0.0068	<0.0050
Aluminum, dissolved	mg/L	0.0622	0.059	0.0425	0.04	0.0342	0.0317	0.0455	0.0405	0.0249	0.033	0.0434	0.0475	0.0171	0.0322	0.0153	0.0134	0.0122	0.0088	0.0106	0.0143	0.0167	0.0167	0.0278	0.0147
Arsenic, dissolved	mg/L	0.00104	0.00184	0.00203	0.00197	0.00225	0.00207	0.00179	0.00196	0.00107	0.00559	0.00029	0.00124	0.00152	0.00138	0.00175	0.00142	0.00083	0.0005	0.00073	0.00104	0.00098	0.00121	0.00086	0.00071
Cadmium, dissolved	mg/L	0.000029	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000022	0.000012	0.000012	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	0.000021	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	<0.000010
Calcium, dissolved	mg/L	12	31.9	33.7	35	35	36	33.1	34.2	34.5	72.1	13.7	12.7	33.4	31.1	41.9	42.6	36.6	61.5	31.7	37.6	37.9	40	40.4	41.7
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00314	0.00181	0.00132	0.00176	0.0017	0.00137	0.00143	0.00161	0.00118	0.00095	0.00952	0.00226	0.00108	0.00161	0.00132	0.00099	0.00116	0.00634	0.00105	0.00097	0.00134	0.00132	0.00115	0.00129
Iron, dissolved	mg/L	1.11	1.5	1.6	1.68	1.2	1.56	1.44	1.78	1.16	14.2	0.11	1.58	0.785	0.939	1.35	1.22	0.674	0.056	0.39	0.778	0.322	0.696	0.679	0.665
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	3.4	9.12	9.81	10.3	9.29	9.31	9.87	9.52	10.4	18.8	4.67	4.07	10.7	9.6	13.4	12.5	10.6	21.9	9.74	11.8	11.3	12	12.6	12.3
Manganese, dissolved	mg/L	0.243	0.622	0.683	0.682	0.405	0.385	0.448	0.495	0.408	3.09	0.0189	0.269	0.434	0.336	0.48	0.508	0.311	0.144	0.131	0.251	0.217	0.287	0.211	0.252
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	0.0011	0.0011	0.0012	0.0018	0.0017	0.0013	0.001	0.0012	0.0011	<0.0010	<0.0010	0.0012	<0.0010	0.0013	0.0012	<0.0010	0.0068	<0.0010	<0.0010	0.0012	<0.0010	0.001	<0.0010
Nickel, dissolved	mg/L	0.0023	0.0031	0.0027	0.0029	0.0027	0.0025	0.0027	0.0028	0.0025	0.0061	<0.0010	0.0021	0.002	0.0025	0.0027	0.0021	0.002	0.0011	0.0017	0.0017	0.002	0.0021	0.0021	0.0019
Phosphorus, dissolved	mg/L	0.037	0.049	0.047	0.06	0.041	0.04	0.043	0.048	0.036	0.117	0.027	0.036	0.028	0.032	0.034	0.035	0.022	0.04	0.016	0.022	0.022	0.022	0.027	0.019
Potassium, dissolved	mg/L	0.895	0.754	0.759	0.989	0.983	0.845	0.776	0.777	0.762	0.985	1.59	0.814	0.963	0.771	1.14	1.1	0.853	6.55	0.875	0.896	0.89	0.965	1.01	0.898
Selenium, dissolved	mg/L	<0.00010	0.00011	0.00011	<0.00010	0.00013	0.00012	0.00012	<0.00010	<0.00010	0.00024	<0.00010	<0.00010	0.00011	0.00011	<0.00010	<0.00010	<0.00010	0.00068	<0.00010	0.00011	<0.00010	<0.00010	<0.00010	<0.00010
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	2.4	4.95	5.16	5.21	5.62	5.66	5.49	5.28	5.38	8.06	2.84	3.21	5.58	5.62	6.92	6.08	5.73	19.1	5.7	6.51	6.18	6.55	7.03	6.35
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10	C10
Sample Date		12/05/2012	30/07/2012	10/08/2012	27/08/2012	22/06/2013	23/07/2013	22/08/2013	08/09/2013	18/10/2013	22/04/2014	20/05/2014	20/06/2014	16/08/2014	01/09/2014	16/10/2014	18/09/2015	13/10/2015
pH (field)	pH units	7.89	8.16	8.71	8.3	8.29	8.31	8.18	8.16	7.78	7.79	7.52	8.48	8.35	8.39	8.22	8.34	8.05
pH (lab)	pH units	7.73	8.23	8.11	8.37	8.26	8.19	8.23	8.13	8.25	7.83	7.99	8.12	8.1	8.32	8.21	8.13	8.19
Hardness (from dissolved)	mg/L	67.2	130	135	141	148	125	160	150	136	56.8	112	128	142	149	133	144	142
Hardness (from total)	mg/L	215	207	245	264	151	156	168	162	160	59.5	126	133	161	133	142	149	150
Total Dissolved Solids	mg/L	132	180	216	184	192	174	218	206	212	124	136	154	178	184	163	192	184
Total Suspended Solids	mg/L	2210.0	995.0	1320.0	1650.0	43.4	199.0	65.5	21.7	61.2	38.9	614.0	23.4	18.3	2.3	5.1	<1.0	26.3
Alkalinity, total	mg/L	65.1	132	146	154	143	133	159	151	136	52.7	61.3	130	140	153	135	144	135
Sulphate, dissolved	mg/L	<0.50	<0.50	<0.50	<0.50	0.97	<0.50	<0.50	<0.50	3.24	<0.50	<0.50	1.7	<0.50	<0.50	2.78	0.85	3.16
Chloride	mg/L	1.1	1.2	0.75	2	1.3	1.3	1.6	1.3	1.5	1.9	2.6	1.2	0.75	1.2	1.1	1.4	1.5
Fluoride	mg/L	0.2	0.29	4	0.24	0.21	0.21	0.21	0.2	0.17	0.11	0.18	0.19	0.2	0.19	0.16	0.2	0.19
Nitrite (N)	mg/L	0.0114	0.0229	0.0111	0.0086	0.0198	<0.050	0.0072	0.0070	<0.0050	<0.0050	0.0344	0.0123	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	0.047	0.184	0.184	0.095	0.152	<0.20	0.135	0.192	0.167	<0.020	<0.020	0.417	0.117	0.115	0.222	0.022	0.117
Ammonia	mg/L	0.18	0.2	0.12	<0.0050	0.19	0.14	0.056	0.055	0.1	0.023	0.13	0.063	0.012	0.038	0.057	0.039	0.024
Aluminum, total	mg/L	39.6	21.3	21.1	24.8	1.31	4.86	0.947	0.483	1.14	0.377	13.9	0.64	0.954	0.0483	0.0865	0.0226	0.0278
Arsenic, total	mg/L	0.0208	0.0123	0.0124	0.0156	0.00203	0.00386	0.00213	0.00194	0.00177	0.00059	0.0102	0.00141	0.002	0.00098	0.00097	0.00069	0.00067
Cadmium, total	mg/L	0.000982	0.000365	0.000486	0.000526	0.000019	0.000071	0.000016	0.000093	0.00002	0.000038	0.000331	0.000015	0.000024	<0.000010	<0.000010	0.000012	0.000019
Calcium, total	mg/L	51.2	56.3	67.1	72.2	44.4	45.1	49.5	48	46.8	16.9	33.4	38.4	46.9	38.5	40.8	43.2	44.8
Chromium, total	mg/L	0.0779	0.0385	0.0378	0.0455	0.0022	0.0095	0.0019	0.0012	0.0024	<0.0010	0.0255	0.0014	0.0020	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.1	0.0527	0.0597	0.0624	0.00492	0.0114	0.00344	0.00237	0.00355	0.00656	0.0405	0.00304	0.00343	0.00136	0.00116	0.00126	0.00298
Iron, total	mg/L	73.2	37.5	38.9	45.6	3.18	9.35	2.95	2.64	3.33	0.868	31.8	1.96	3.15	1.1	1.08	0.681	0.459
Lead, total	mg/L	0.02140	0.00995	0.01250	0.01300	0.00060	0.00212	0.00044	0.00025	0.00054	0.00026	0.00734	0.00036	0.00046	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	21.1	16.2	18.8	20.2	9.68	10.6	10.7	10.3	10.4	4.21	10.3	9.04	10.7	9.06	9.64	10	9.23
Manganese, total	mg/L	2.09	0.947	1.31	1.7	0.0986	0.407	0.11	0.174	0.321	0.116	1.08	0.04	0.0888	0.0149	0.0584	0.0035	0.0412
Mercury, total	mg/L	<0.000010	0.000062	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0021	0.0021	0.0017	0.0023	0.0012	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.074	0.041	0.0467	0.0524	0.0044	0.0099	0.0038	0.0032	0.0038	0.0018	0.0359	0.0028	0.0032	0.0019	0.0026	0.0019	0.0016
Phosphorus, total	mg/L	2.08	0.967	1.15	1.39	0.083	0.239	0.073	0.067	0.105	0.176	0.913	0.061	0.086	0.027	0.033	0.025	0.07
Potassium, total	mg/L	4.64	3.36	3.11	3.37	1.46	1.71	1.18	1.17	1.1	2.59	2.4	1.21	1.34	0.907	0.869	1.02	0.957
Selenium, total	mg/L	0.00116	0.00073	0.00057	0.00086	0.0001	0.00024	0.00013	0.00014	0.00015	0.00011	0.00038	<0.00010	0.00013	<0.00010	<0.00010	0.00011	<0.00010
Silver, total	mg/L	0.000337	0.000200	0.000187	0.000217	<0.000020	0.000021	<0.000020	<0.000020	0.000068	<0.000020	0.000053	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	4.3	6.41	6.4	6.34	6.32	6.52	6.49	6.4	6.3	2.47	4.62	5.88	6.47	5.91	6.22	6.18	6.01
Thallium, total	mg/L	0.000369	0.000202	0.000202	0.000241	<0.000050	0.000067	<0.000050	<0.000050	<0.000050	<0.000050	0.000130	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.1860	0.0956	0.1050	0.1190	0.0055	0.0198	<0.0050	<0.0050	0.0054	0.0086	0.0920	0.0056	<0.0050	<0.0050	<0.0050	<0.0050	0.0059
Aluminum, dissolved	mg/L	0.0583	0.0571	0.0505	0.0262	0.0785	0.0252	0.0197	0.0241	0.0108	0.0148	5.84	0.0161	0.0185	0.0123	0.0091	0.0132	0.0176
Arsenic, dissolved	mg/L	0.0012	0.00142	0.00134	0.00149	0.00123	0.00116	0.00141	0.00158	0.00089	0.0004	0.00551	0.00099	0.0014	0.00106	0.00076	0.00075	0.00054
Cadmium, dissolved	mg/L	0.000018	<0.000010	<0.000010	<0.000010	0.000019	<0.000010	<0.000010	0.000010	<0.000010	0.000019	0.000344	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	19.9	38.8	39.8	41.8	45.1	37.4	48	44.8	40.1	16.2	31.8	37	42.1	44.2	38.2	41.8	42.1
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0017	<0.0010	<0.0010	0.0093	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00212	0.00198	0.00189	0.00148	0.00313	0.00135	0.00134	0.00133	0.00091	0.00234	0.0339	0.00129	0.00151	0.00095	0.00099	0.00097	0.00162
Iron, dissolved	mg/L	1.55	1.15	0.883	1	0.802	0.54	0.992	1.28	0.761	0.141	19.9	0.56	1.24	0.95	0.664	0.514	0.358
Lead, dissolved	mg/L	0.00025	0.00067	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00772	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	4.24	8.1	8.59	8.82	8.63	7.65	9.84	9.37	8.73	3.98	7.83	8.54	9	9.28	9.06	9.58	9.04
Manganese, dissolved	mg/L	0.305	0.189	0.252	0.27	0.0628	0.154	0.063	0.139	0.187	0.0771	0.969	0.0037	0.0049	0.0056	0.0405	0.0014	0.0121
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	0.0014	0.0019	0.0011	0.0012	0.001	0.0015	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, dissolved	mg/L	0.0019	0.0023	0.0022	0.0023	0.0025	0.0022	0.0023	0.0025	0.0019	<0.0010	0.0215	0.0015	0.0019	0.0018	0.0019	0.0021	0.0016
Phosphorus, dissolved	mg/L	0.035	0.039	0.034	0.038	0.053	0.025	0.032	0.043	0.027	0.067	0.73	0.029	0.037	0.031	0.025	0.021	0.027
Potassium, dissolved	mg/L	1.08	0.921	0.824	1.02	1.45	0.848	0.979	1.03	0.844	2.53	1.21	1.11	1.05	1.07	0.883	0.919	0.883
Selenium, dissolved	mg/L	0.0001	0.00014	0.0001	0.00012	0.00011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00013	<0.00010	<0.00010	<0.00010	<0.00010	0.00012	<0.00010
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000066	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	2.95	5.64	5.34	5.26	6.07	5.75	6.05	5.79	5.44	2.35	4.01	5.66	5.87	5.7	5.97	6	6.3
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0104	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0603	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8
Sample Date		**27/05/2005**	**30/06/2005**	**29/07/2005**	**30/08/2005**	**28/09/2005**	**15/10/2005**	**08/05/2006**	**14/05/2006**	**17/05/2006**	**20/05/2006**	**23/05/2006**	**29/05/2006**	**02/06/2006**	**08/06/2006**	**15/06/2006**	**15/06/2006**	**23/06/2006**	**28/06/2006**	**07/07/2006**	**12/07/2006**	**02/08/2006**
pH (field)	pH units																					
pH (lab)	pH units	7.78	7.83	7.45	8.12	7.96	7.06	7.34	7.45	7.51	7.65	7.69	7.6	7.58	7.97		7.82	7.4	7.84	7.69	7.6	7.56
Hardness (from dissolved)	mg/L																120	93	113	83	134	120
Hardness (from total)	mg/L	62.3		116	99.8	95	99.4															
Total Dissolved Solids	mg/L	111	144	141	147	135	140	116	107	105	116	113	104	110	127		150	154	138	224		
Total Suspended Solids	mg/L	<3.0	<3.0	24.7	<3.0	<3.0	5.5	9.4	12.8	<3	70.6	<3	<3	5.4	<3		8	<2	18	<2	<2	4
Alkalinity, total	mg/L	174	89		99.2	74.7			27.6	32.3	39	42.1	41.6	48	46.4		89	84	92	87	114	108
Sulphate, dissolved	mg/L	166	<1		5.1	7.72			1.92	2.14	4.22	4.97	4.88	5.35	5.07		32	7.9		7.6	39	6.5
Chloride	mg/L	<0.50	0.86	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5							
Fluoride	mg/L							0.049	0.133	0.088	0.096	0.098	0.098	0.098	0.091							
Nitrite (N)	mg/L	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001							
Nitrate (N)	mg/L	0.0225	<0.0050	<0.0050	<0.0050	<0.0050	0.0374	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.03	<0.03	<0.002	<0.002	0.06	<0.03
Ammonia	mg/L	<0.020	0.041	<0.020	0.023	<0.020	0.026	<0.020	0.037					0.034	0.042	0.02		0.026	0.003		0.025	0.009
Aluminum, total	mg/L	0.0506	0.0807	0.033	0.0688	0.0509	0.116	0.176	0.137	0.0681	0.0744	0.0523	0.0798	0.116	0.0604		0.242	0.039	0.321	0.045	0.045	0.088
Arsenic, total	mg/L	<0.00050	0.00048	0.00047	0.00052	<0.00050	0.00054	0.00034	0.00046	0.00037	0.00035	0.00038	0.0004	0.00045	0.00042		0.0004	0.0004	0.0006	0.0005	0.0004	0.0006
Cadmium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.000050	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Calcium, total	mg/L	16.9	24.3	30.9	25.6	24.7	25.1	8.15	11.6	12.3	14.7	15.5	15.1	16.2	16.2		29.1	24.1	30.9	26.2	40.3	30.6
Chromium, total	mg/L	<0.0010	0.00073	0.00056	<0.0010	<0.0010	<0.00050	<0.00050	0.00053	<0.0005	<0.0005	<0.0005	0.00052	0.00064	<0.0005		0.0008	0.0007	<0.0005	0.0006	<0.0005	0.0008
Copper, total	mg/L	0.0143	0.0103	0.00891	0.0094	0.0088	0.0104	0.0168	0.019	0.0185	0.0176	0.0168	0.0164	0.0175	0.0175		0.034	0.013	0.043	0.012	0.01	0.01
Iron, total	mg/L	0.23	0.503	0.435	0.722	0.706	0.887	0.442	0.5	0.198	0.181	0.195	0.232	0.323	0.269		0.6	0.2	1.1	0.4	0.4	0.4
Lead, total	mg/L	<0.00050	0.000066	0.000059	<0.00050	<0.00050	0.000064	0.000099	0.000082	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001
Magnesium, total	mg/L	5.03	7.57	9.43	8.04	7.45	7.41	2.23	3.22	3.59	4.22	4.2	4.44	4.81	4.57		8.3	6.8	8	7.3	10.7	9
Manganese, total	mg/L	0.00512	0.0445	0.0268	0.0447	0.0487	0.24	0.051	0.0952	0.0016	0.00117	0.00374	0.00652	0.0155	0.00631		0.135	0.018	0.154	0.018	0.204	0.026
Mercury, total	mg/L	<0.000020			<0.000020	<0.000020																
Molybdenum, total	mg/L	<0.0010	0.000512	0.000565	<0.0010	<0.0010	0.00171	0.000212	0.000367	0.000408	0.000471	0.000513	0.000496	0.000471	0.00054		0.003	<0.001	0.002	<0.001	0.003	<0.001
Nickel, total	mg/L	0.0018	0.00172	0.00146	0.0018	0.0017	0.00109	0.00138	0.00193	0.00204	0.002	0.002	0.00196	0.00211	0.00194		0.0019	0.0021	0.0016	0.0023	0.001	0.0018
Phosphorus, total	mg/L		<0.30	<0.30			<0.30	<0.30	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3							
Potassium, total	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	<2	<2	<2	<2	<2		1.2	<0.4	1.2	<0.4	1.4	<0.4
Selenium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004
Silver, total	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	<0.000010	0.000014	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.0001	0.0002	<0.0001	<0.0001	<0.0001	0.0003
Sodium, total	mg/L	2.6	4.5	3.9	3.8	3.7	4.5	<2.0	<2	2.3	2.3	2.2	3	3.2	2.8		5.5	4.3	5.3	4.7	7.4	5.1
Thallium, total	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.0050	<0.0020	0.0011	<0.0050	<0.0050	0.0011	0.0047	0.0027	0.0019	<0.001	<0.001	<0.001	0.0014	0.002		0.002	<0.001	0.002	<0.001	0.002	0.002
Aluminum, dissolved	mg/L	0.0427	0.0193	0.0201	0.0259	0.0305	0.0258	0.0919	0.0709					0.0642			0.023	0.024	0.15	0.017	0.006	0.015
Arsenic, dissolved	mg/L	<0.00050	0.00043	0.00045	<0.00050	<0.00050	0.0005	0.00025	0.00037					0.0004			0.0004	0.0004	0.0006	0.0006	0.0004	0.0004
Cadmium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000017	<0.000017	<0.000050	<0.000050	<0.00005					<0.00005			<0.00001	<0.00001	0.00001	0.00003	0.00002	<0.00001
Calcium, dissolved	mg/L	16.6	24.8	30.9	26.3	25.3	26.8	8.55	12.1					16.3			32.4	25.4	26.9	21	34.7	31.4
Chromium, dissolved	mg/L	<0.0010	0.00061	0.00052	<0.0010	<0.0010	<0.00050	<0.00050	<0.0005					0.00052			<0.0005	0.0009	0.0008	0.0007	0.0008	0.0006
Copper, dissolved	mg/L	0.0141	0.00942	0.00863	0.0081	0.0081	0.00561	0.0159	0.0174					0.017			0.013	0.011	0.042	0.011	0.007	0.007
Iron, dissolved	mg/L	0.194	0.249	0.352	0.544	0.556	0.711	0.196	0.291					0.188			0.28	0.22	0.34	0.31	0.19	0.28
Lead, dissolved	mg/L	<0.00050	<0.000050	<0.000050	<0.00050	<0.00050	<0.000050	<0.000050	<0.00005					<0.00005			<0.0001	<0.0001	0.0002	<0.0001	0.0023	<0.0001
Magnesium, dissolved	mg/L	5.05	7.68	9.39	8.28	7.73	7.92	2.33	3.35					4.85			9	7.2	8.4	7.4	11.5	9.3
Manganese, dissolved	mg/L	0.00284	0.0142	0.0206	0.0296	0.0387	0.223	0.034	0.0782					0.00329			0.133	0.018	0.098	0.012	0.147	0.02
Mercury, dissolved	mg/L	<0.000020			<0.000020	<0.000020																
Molydenum, dissolved	mg/L	<0.0010	0.000547	0.000589	<0.0010	<0.0010	0.00169	0.000179	0.000363					0.000474			0.002	<0.001	0.002	<0.001	0.003	<0.001
Nickel, dissolved	mg/L	0.0018	0.00144	0.00157	0.0016	0.0015	0.00096	0.00113	0.00185					0.00204			0.001	0.002	0.002	0.0023	0.0011	0.0011
Phosphorus, dissolved	mg/L		<0.30	<0.30			<0.30	<0.30	<0.3					<0.3								
Potassium, dissolved	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2					<2			0.5	0.4	1.3	<0.4	1.2	<0.4
Selenium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.001					<0.001			0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Silver, dissolved	mg/L	<0.000020	<0.000010	<0.000010	<0.000020	<0.000020	0.000031	<0.000010	<0.00001					<0.00001			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	2.6	4.5	3.9	3.9	3.9	4.8	<2.0	<2					3.2			5.8	3.5	5.8	4.4	7.3	5.4
Thallium, dissolved	mg/L	<0.00020	<0.00010	<0.00010	<0.00020	<0.00020	<0.00010	<0.00010	<0.0001					<0.0001			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.0050	0.0012	0.0019	<0.0050	<0.0050	<0.0010	0.0042	0.0019					0.0017			<0.001	<0.001	0.002	0.003	<0.001	<0.001

Station Name		W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8
Sample Date		**10/08/2006**	**06/09/2006**	**13/09/2006**	**20/09/2006**	**04/10/2006**	**28/12/2006**	**03/05/2008**	**07/05/2008**	**27/05/2008**	**10/05/2009**	**28/05/2009**	**04/06/2009**	**07/06/2009**	**10/06/2009**	**16/06/2009**	**29/06/2009**	**06/07/2009**	**13/07/2009**	**27/07/2009**	**05/08/2009**	**10/08/2009**
pH (field)	pH units											7.4	7.57		7.27	7.94	7.5	7.37	7.35			8.16
pH (lab)	pH units	7.58	7.83	7.71	7.7	7.89					7.8	7.8	7.91	7.7	7.71		7.7		7.8	8.07	7.76	
Hardness (from dissolved)	mg/L	120	146	154	154	145	236	64		303	348	389	157	550	171		470		611	728	697	
Hardness (from total)	mg/L								426													
Total Dissolved Solids	mg/L										610	648	208	820	280		634		<5	1040	1030	
Total Suspended Solids	mg/L	<2	<2	<2	<2	<2					12	14	<5	12	5		15		6	6	10	
Alkalinity, total	mg/L	118	152	145	142	143					162	180	135	237	144		226		261	303	332	
Sulphate, dissolved	mg/L	4	7.4	8	7	6.8						96.3	42.2	144	48.1		140		124	155	132	
Chloride	mg/L										3.5	3.61	3.8	3.98	6.9		3.75		4.37	1.12	5.41	
Fluoride	mg/L																					
Nitrite (N)	mg/L										2.53											
Nitrate (N)	mg/L	<0.03	<0.03	0.003	<0.03	<0.03					41.6											
Ammonia	mg/L	0.009	0.004	0.005	0.006	0.03																
Aluminum, total	mg/L	0.026	0.022	0.025	0.018	0.02		3.41	1.77	0.48	0.116	0.438	0.112	0.615	0.118		0.445		0.145	0.709	0.187	
Arsenic, total	mg/L	0.0004	0.0004	0.0004	0.0005	0.0004		<0.0002	0.0003	0.0006	0.0004	0.0004	0.0004	0.0006	0.0005		0.0006		0.0003	0.0008	0.0009	
Cadmium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002		0.00035	0.00016	0.00014	0.00009	0.00024	0.00003	0.00011	0.00001		0.00011		0.00011	0.0002	0.0002	
Calcium, total	mg/L	33.4	36.3	37.5	38.4	37.9		12.1	115	78.9	107	125	46.3	170	49		145		185	228	223	
Chromium, total	mg/L	<0.0005	0.0006	0.0005	0.0006	0.001		0.0028	0.0016	0.0029	0.001	0.0006	<0.0004	0.0008	0.0005		0.0008		0.002	0.001	0.0012	
Copper, total	mg/L	0.008	0.006	0.006	0.006	0.006		0.395	0.247	0.201	0.123	0.264	0.031	0.188	0.027		0.201		0.235	0.466	0.393	
Iron, total	mg/L	0.3	0.4	0.4	0.3	0.3		9.89	4.92	4.09	0.18	0.91	1.09	1.27	1.21		1.21		0.36	1.95	0.487	
Lead, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002		0.0022	0.0005	0.0007	<0.0001	0.0003	<0.0001	0.0002	0.0001		0.0002		<0.0001	0.0003	0.0005	
Magnesium, total	mg/L	9.8	11	11.4	12.8	12		4.1	33.7	17.7	19.2	23.1	13	28.8	13.9		25.9		32.3	41.7	42	
Manganese, total	mg/L	0.093	0.033	0.042	0.05	0.053		0.259	0.401	0.224	0.157	0.496	0.9	0.659	0.878		0.582		0.796	1.23	1.36	
Mercury, total	mg/L							0.00004	<0.00001	0.00002	<0.0001	<0.00001	<0.00001	0.00002			0.00002		<0.00001	0.00001		
Molybdenum, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.002		0.0025	0.0211	0.011	0.012	0.00918	0.00481	0.00893	0.00581		0.0108		0.00656	0.0063	0.007	
Nickel, total	mg/L	0.0017	0.0015	0.0015	0.0017	0.0026		0.071	0.037	0.002	0.0024	0.002	<0.001	0.002	0.001		0.002		0.002	0.004	0.004	
Phosphorus, total	mg/L							0.2	0.2	0.27	<0.05	0.06	<0.05	0.078	0.017		0.058		0.056	0.109	0.056	
Potassium, total	mg/L	0.4	0.6	0.7	0.6	<0.8		2.51	9.23	4.23	7.7	6.5	2.4	6.6	2.8		6.7		6.9	7.1	6.9	
Selenium, total	mg/L	<0.0002	0.0002	<0.0002	0.0003	<0.0004		<0.0006	0.005	0.0016	0.004	0.0051	<0.0006	0.0049	<0.0006		0.0058		0.0039	0.003	0.0034	
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002		0.0009	0.0001	<0.0001	0.00003	<0.00001	<0.00001	0.00018	<0.00001		0.00066		0.00036	0.00027	0.00007	
Sodium, total	mg/L	5.3	5.8	6	5.6	6		2.2	24.1	12.5	20	20.4	12.1	25.5	13.5		24.9		23.4	25.4	23.6	
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001		0.00013	0.00004	<0.00001	<0.00005	0.00001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	0.00001	<0.00001	
Zinc, total	mg/L	0.001	0.003	<0.001	0.001	<0.002		0.047	0.032	0.02	0.007	0.013	0.022	0.012	0.024		0.013		0.01	0.019	0.023	
Aluminum, dissolved	mg/L	0.022	0.012	0.015	0.015	0.012	<0.005	0.05		0.99	0.009	0.021	0.029	0.023	0.014		<0.005		0.054	<0.005	0.021	
Arsenic, dissolved	mg/L	0.0004	0.0005	0.0004	0.0004	0.0005	0.0002	0.0003		0.0006	0.0006	0.0004	0.0003	0.0005	0.0004		0.0006		0.0005	0.0005	0.0007	
Cadmium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	0.00011	<0.00001	<0.00008		0.00008	0.00009	0.00211	0.00002	0.00011	<0.00001		0.0001		0.00014	0.00017	0.00017	
Calcium, dissolved	mg/L	31.6	38.8	39.1	40.4	38.5	50.2	18.4		89.1	107	120	43.2	172	46.6		146		191	224	213	
Chromium, dissolved	mg/L	0.0014	0.001	0.0009	0.001	0.0007	0.0011	0.0014		0.0012	0.0006	<0.0004	<0.0004	0.0004	<0.0004		<0.0004		<0.0004	0.0013	0.0014	
Copper, dissolved	mg/L	0.008	0.007	0.006	0.006	0.005	<0.001	0.05		0.038	0.096	0.165	0.024	0.107	0.018		0.1		0.207	0.31	0.333	
Iron, dissolved	mg/L	0.29	0.39	0.37	0.29	0.27	<0.01	0.09		0.15	0.02	0.06	0.61	0.1	0.5		0.04		0.17	0.1	0.17	
Lead, dissolved	mg/L	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001		<0.0001	<0.0001	0.0002	<0.0001	0.0001	<0.0001		<0.0001		<0.0001	0.0004	0.0005	
Magnesium, dissolved	mg/L	9.2	11.9	12.6	13	11.9	26.9	4.29		19.6	19.8	21.8	11.9	29	13.2		25.9		32.4	40.6	40.2	
Manganese, dissolved	mg/L	0.077	0.037	0.041	0.053	0.049	0.013	0.0611		0.13	0.147	0.396	0.848	0.642	0.811		0.575		0.854	1.12	1.09	
Mercury, dissolved	mg/L						<0.0001	0.00001		<0.00001	<0.0001	<0.00001	<0.00001	0.00001			0.00002		<0.00001	<0.00001		
Molydenum, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.00354		0.0124	0.013	0.00799	0.00459	0.00898	0.00534		0.0113		0.0062	0.0062	0.0063	
Nickel, dissolved	mg/L	0.0015	0.0014	0.0013	0.0007	0.0017	<0.0005	0.002		0.001	0.0014	0.002	<0.001	0.002	0.001		0.002		0.002	0.003	0.004	
Phosphorus, dissolved	mg/L							<0.01		0.02		0.02	0.01	0.02	<0.01		0.02		0.03	0.03	0.04	
Potassium, dissolved	mg/L	0.4	0.5	0.7	0.6	0.6	1.5	2.05		4.6	7.6	6.1	2.2	6.6	2.4		6.5		6.4	6.6	6.6	
Selenium, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006		0.0029	0.0041	0.0041	<0.0006	0.0049	<0.0006		0.0061		<0.0006	0.0034	0.0033	
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0010		<0.001	0.00002	<0.00001	<0.00001	0.00015	<0.00001		0.00022		0.00076	0.00036	0.00001	
Sodium, dissolved	mg/L	5.3	6.2	6.3	5.7	6	16.6	4.33		14.1	20.2	20.1	10.9	25.7	12.9		24.7		22.6	24.2	23	
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00001		<0.00001	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001	
Zinc, dissolved	mg/L	0.001	0.001	<0.001	0.001	<0.001	0.001	0.001		0.005	0.005	0.007	0.004	0.006	0.004		0.006		0.006	0.005	0.005	

Station Name		W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8
Sample Date		**11/08/2009**	**19/08/2009**	**31/08/2009**	**07/09/2009**	**18/09/2009**	**23/09/2009**	**05/10/2009**	**12/10/2009**	**19/10/2009**	**19/04/2010**	**20/04/2010**	**21/04/2010**	**22/04/2010**	**23/04/2010**	**25/04/2010**	**26/04/2010**	**27/04/2010**	**28/04/2010**	**29/04/2010**	**30/04/2010**	**01/05/2010**
pH (field)	pH units		8.15		8.2	7.19	8.01	7.8	7.35	8.06	7.33	6.62					7.89	7.56	7.96	8		7.52
pH (lab)	pH units	7.98	7.73	7.73	7.77	7.87	7.85	7.57	7.78	7.84	7.89	7.94	7.49	7.78	7.68	7.54	8	7.9	8.2	7.9	8	8.1
Hardness (from dissolved)	mg/L	401	768	726	386	543	528	609	528	276							440	81	524	216	563	196
Hardness (from total)	mg/L										397	626	82	249	110	92	439	83.3	535	218	627	198
Total Dissolved Solids	mg/L	490	1010	1120	1170	730	738	910	774	520	532	860	164	400	186	140	570	120	710	470	780	440
Total Suspended Solids	mg/L	<3	6	8	14	8	12	16	22	<2	13	10	77	45	20	36	36	9	8	24	11	5
Alkalinity, total	mg/L	247	372	325	330	390	278	261	263	168	237	390	80	182	109	98	300	84	360	140	390	140
Sulphate, dissolved	mg/L	68	184	157	60	79.3	129	174	132	103	95.2	138	8.2	34.6	10	2	92	<0.5	110	100	130	93
Chloride	mg/L	4.81	5.4	5.27	4.97	2.64	3.74	4.49	4.51	8.78	<0.02	53.2	3.16	8.56	6.56	3.31	30	3.8	30	24	31	21
Fluoride	mg/L																0.24	0.18	0.25	1.85	0.25	1.38
Nitrite (N)	mg/L																1.63	<0.005	2.08	0.96	2.39	0.76
Nitrate (N)	mg/L	12.1	60.3	75.2	69.4	15.9	39.7	48.4	41.1	19.8		18.6	<0.01	10.1			12.4	0.04	15.8	21.9	22.1	17.8
Ammonia	mg/L																2.4	0.25	0.45	0.41	0.52	0.45
Aluminum, total	mg/L	0.062	0.12	0.22	0.072	0.086	0.224	0.413	0.625	0.068	0.31	0.081	2.31	1.84	0.351	0.396	0.327	0.077	0.144	1.33	0.335	0.367
Arsenic, total	mg/L	0.0007	0.0005	0.0008	0.001	0.0012	0.0007	0.0005	0.0009	0.0005	0.0005	0.0009	0.0005	0.001	0.0008	0.001	0.0007	0.0008	0.0007	0.0007	0.0008	0.0005
Cadmium, total	mg/L	0.00005	0.00023	0.00019	0.0002	0.0001	0.00014	0.00011	0.0001	0.00013	0.00012	0.00013	0.00018	0.00008	0.00034	0.00006	0.00017	0.00004	0.00017	0.00016	0.00019	<0.00001
Calcium, total	mg/L	108	216	239	238	128	166	197	172	80.1	116	194	28	72	39.5	29.3	131	24.3	162	66.8	189	58.4
Chromium, total	mg/L	0.001	0.0008	0.0005	0.0012	0.0014	0.0013	0.0014	0.0007	<0.0004	0.0006	0.0009	0.0007	0.0013	0.0006	0.0005	<0.001	<0.001	<0.001	0.001	0.001	0.001
Copper, total	mg/L	0.133	0.415	0.374	0.349	0.079	0.179	0.21	0.19	0.045	0.14	0.12	0.428	0.202	0.083	0.113	0.227	0.0472	0.203	0.201	0.319	0.0358
Iron, total	mg/L	0.71	0.403	0.6	0.41	1.21	0.541	1	1.41	0.316	0.702	0.61	2.55	1.61	0.769	1.41	0.968	0.612	0.688	2.61	1.12	0.645
Lead, total	mg/L	0.0004	0.0004	0.0002	0.0004	0.0005	0.0007	0.0006	0.0002	0.0001	0.0002	0.0001	0.0008	0.0006	0.0004	0.0002	0.0004	<0.0002	0.0002	0.0005	0.0003	0.0003
Magnesium, total	mg/L	25.2	42.2	43.8	42.4	56.8	31.4	33.8	31	20.3	23.9	41.6	6.52	19.9	8.92	6.96	26.9	5.49	31.6	12.3	37.7	12.7
Manganese, total	mg/L	0.965	1.98	2.14	2.48	1.86	1.06	1.51	1.73	0.571	2.2	3.51	0.312	0.544	0.715	0.733	2.43	0.627	2.82	0.601	3.47	0.376
Mercury, total	mg/L		0.00002	0.00003	0.00003	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	<0.00001	<0.00001	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	0.00003
Molybdenum, total	mg/L	0.0059	0.0063	0.006	0.006	0.0067	0.0214	0.0059	0.0063	0.0231	0.0081	0.0105	0.0007	0.0062	0.0023	0.0022	0.009	0.002	0.01	0.055	0.012	0.037
Nickel, total	mg/L	0.002	0.003	0.003	0.003	0.003	0.002	0.006	0.006	0.002	0.002	0.004	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.003	0.002
Phosphorus, total	mg/L	0.031	0.055	0.077	0.045	0.064	<0.05	<0.05	<0.05	<0.05	0.1	0.1	0.84	0.18	0.14	0.12					0.126	
Potassium, total	mg/L	4.2	6.1	7	6.8	5.4	7.1	6.4	6.2	10.7	4.6	6.5	3.8	4.5	3.8	3.1	4.62	2.99	5.65	23.1	6.39	17.5
Selenium, total	mg/L	<0.0006	0.0026	0.003	0.0033	0.0022	0.0052	0.0049	0.0034	0.0055	0.0023	0.0032	<0.0006	0.0018	<0.0006	<0.0006	0.0017	<0.0001	0.0022	0.0056	0.0024	0.0054
Silver, total	mg/L	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00002	0.00005	<0.00001	0.00004	0.00002	0.0002	<0.00001	<0.00001	0.00002	<0.00002	<0.00002	0.00003	0.00007	0.00007	<0.00002
Sodium, total	mg/L	18.5	23.5	28	28.9	28.1	26	28.3	25.2	31.1	14.3	25.2	3.53	11	5.22	3.53	17.8	2.82	20.8	56.1	25	45.2
Thallium, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00012	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.004	0.009	0.015	0.005	0.012	0.009	0.011	0.013	0.008	0.022	0.024	0.028	0.011	0.016	0.007	0.009	<0.005	0.007	0.016	0.008	0.005
Aluminum, dissolved	mg/L	<0.005	<0.005	0.01	0.022	0.027	<0.005	<0.005	<0.005	0.017	0.022	0.013	<0.005	0.016	<0.005	<0.005	0.004	0.007	0.004	0.014	0.003	0.01
Arsenic, dissolved	mg/L	0.0006	0.001	0.0005	0.0005	0.0009	0.0005	0.0005	0.0006	0.0085	0.0004	0.0005	0.0003	0.0008	0.0005	0.0008	0.0006	0.0007	0.0008	0.0005	0.0007	0.0005
Cadmium, dissolved	mg/L	0.00008	0.00021	0.00018	0.00006	0.00008	0.00008	0.00009	0.00011	0.00016	0.00024	0.00011	0.00004	0.00003	<0.00001	0.00001	0.00003	<0.00001	0.00013	0.00007	0.00017	0.00003
Calcium, dissolved	mg/L	118	231	224	97.3	125	161	190	164	78	118	185	24	68.9	31.6	26.5	132	23.8	157	66.6	168	58
Chromium, dissolved	mg/L	<0.0004	0.0053	0.0014	0.0016	0.0018	0.001	0.0008	0.0004	<0.0004	0.0008	0.0012	<0.0004	<0.0004	<0.0004	<0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.13	0.352	0.345	0.064	0.061	0.134	0.137	0.115	0.038	0.053	0.069	0.063	0.152	0.036	0.023	0.112	0.0235	0.139	0.026	0.151	0.0172
Iron, dissolved	mg/L	0.07	0.05	0.09	0.24	0.47	0.02	0.02	0.03	0.22	0.13	0.19	0.03	0.14	0.12	0.2	0.124	0.186	0.151	0.089	0.146	0.096
Lead, dissolved	mg/L	<0.0001	<0.0001	0.0005	0.0007	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	0.0007	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	25.7	46.4	40.6	34.6	56.2	30.7	32.9	29	19.8	24.9	39.6	5.4	18.8	7.2	6.2	26.6	5.21	32.1	12	35	12.4
Manganese, dissolved	mg/L	0.998	2.04	2.16	1.55	1.88	1.07	1.39	1.62	0.556	2.09	3.21	0.0646	0.476	0.241	0.299	2.29	0.002	2.76	0.529	3.05	0.272
Mercury, dissolved	mg/L		0.00003	0.00003	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	0.00003	<0.00002	<0.00002	<0.00002	0.00003	<0.00002
Molydenum, dissolved	mg/L	0.0057	0.006	0.0056	0.005	0.0064	0.0214	0.0058	0.0062	0.0236	0.0077	0.0097	0.0004	0.0061	0.002	0.002	0.009	0.002	0.01	0.059	0.01	0.039
Nickel, dissolved	mg/L	0.002	0.005	0.004	0.002	0.003	0.003	0.005	0.005	0.002	0.002	0.003	0.001	0.002	0.001	0.001	0.005	0.001	0.008	<0.001	0.007	<0.001
Phosphorus, dissolved	mg/L	0.03	0.03	0.03	0.02	0.04	<0.01	0.02	0.02	0.02	0.02	0.04	0.03	0.04	0.02	0.01					0.031	
Potassium, dissolved	mg/L	4.3	7	6.6	4.3	5.4	6.9	6.3	5.7	10.2	4.4	6.1	3	4.1	2.7	2.8	4.59	3.02	5.61	22.9	5.77	17.2
Selenium, dissolved	mg/L	0.0019	0.0053	0.0034	0.0011	0.0023	0.006	0.0058	0.0039	0.0059	0.0019	0.003	<0.0006	0.0018	<0.0006	<0.0006	0.0019	<0.0001	0.0023	0.0058	0.0024	0.0057
Silver, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00008	<0.00002	0.00004	<0.00002	0.00002	<0.00002
Sodium, dissolved	mg/L	18.7	25.2	25.7	19.9	25.7	24	26.6	24.4	29.8	15.3	24.3	3	10.7	4.1	3.2	17.8	2.8	21.5	60.8	23.3	46.5
Thallium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.007	<0.001	0.007	0.004	0.002	0.002	0.002	0.002	0.01	0.005	0.005	0.003	0.003	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Station Name		W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8
Sample Date		**02/05/2010**	**03/05/2010**	**04/05/2010**	**05/05/2010**	**06/05/2010**	**07/05/2010**	**08/05/2010**	**09/05/2010**	**10/05/2010**	**13/05/2010**	**17/05/2010**	**20/05/2010**	**24/05/2010**	**27/05/2010**	**31/05/2010**	**03/06/2010**	**14/06/2010**	**17/06/2010**	**21/06/2010**	**25/06/2010**	**04/07/2010**
pH (field)	pH units	7.58	7.6	7.65		7.52						6.67	7.42	7.61	7.65	7.89	7.85	7.19	6.94	7.24	7.66	7.88
pH (lab)	pH units	8.2	8	8.1	8.1	8.1	8.1	8.2	8.2	8.3	8.2	8	8	7.9	8.1	8.1	8	8	8.4	8.1	8.12	8.04
Hardness (from dissolved)	mg/L	215	216	206	223	222	377	596	363	321	416	670	919	801	786	785	720	776	246	791	759	313
Hardness (from total)	mg/L	202	210	216	230	212	377	692	376	323	388	661	793	789	803	872	800	873	250	853	844	338
Total Dissolved Solids	mg/L	350	420	380	410	410	520	890	510	430	500	950	1100	1100	1000	1200	1200	1200	460	1300	1100	590
Total Suspended Solids	mg/L	<4	10	<4	<4	<4	39	42	18	12	6	27	5	15	74	5	41	4	5	3	2	96
Alkalinity, total	mg/L	150	150	160	160	150	260	410	240	220	280	440	470	440	410	350	420	350	180	410	440	180
Sulphate, dissolved	mg/L	73	88	77	85	92	93	120	90	80	100	140	150	130	120	150	130	140	95	140	130	130
Chloride	mg/L	15	20	17	18	20	13	28	13	12	13	26	29	34	24	28	24	40	21	54	32	17
Fluoride	mg/L	1.03	1.27	1.11	1.19	1.42	0.34	0.27	0.3	0.27	0.34	0.28	0.31	0.29	0.32	0.32	0.3	0.32	1.31	0.3	0.28	1.17
Nitrite (N)	mg/L	0.58	0.65	0.57	0.53	0.69	0.076	2.51	0.068	0.065	0.047	2.4	2.76		2.78		2.93	2.5	0.39	2.13	1.83	0.398
Nitrate (N)	mg/L	11.6	17.2	13.6	14.7	18.3	14.1	27.6	14.9	11.9	13.8	34	36.5		43		59	62	20.3	75	64	31.5
Ammonia	mg/L	0.28	0.48	0.32	0.34	0.39	0.21	0.47	0.14	0.086	0.32	0.75	0.61		0.82		0.87	0.82	0.2	4.2	0.68	0.5
Aluminum, total	mg/L	0.123	0.112	0.101	0.099	0.082	0.201	0.356	0.517	0.42	0.19	0.179	0.029	0.343	0.246	0.052	0.419	0.101	0.131	0.06	0.076	2.37
Arsenic, total	mg/L	0.0005	0.0004	0.0004	0.0005	0.0005	0.0007	0.0009	0.0008	0.0007	0.0007	0.0009	<0.001	0.0009	0.0008	0.0009	0.001	0.0009	<0.0004	0.0007	0.0008	0.0007
Cadmium, total	mg/L	0.00004	0.00008	0.00011	0.00006	0.00004	0.00011	0.00028	0.00012	0.00022	0.00009	0.00036	0.00029	0.0004	0.0003	0.0003	0.0003	0.0003	<0.0001	0.0002	0.0002	0.0001
Calcium, total	mg/L	59	61.5	63	67.3	62.3	107	209	99.4	84.8	110	201	232	238	241	261	241	260	70	244	250	98
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.0291	0.0251	0.0378	0.0288	0.025	0.135	0.388	0.123	0.0933	0.13	0.368	0.332	0.461	0.466	0.441	0.434	0.391	0.045	0.298	0.319	0.308
Iron, total	mg/L	0.382	0.24	0.368	0.349	0.251	0.393	1.22	1.05	0.645	0.34	0.775	0.43	1.09	0.958	0.608	1.32	0.721	0.248	0.46	0.674	4.68
Lead, total	mg/L	0.0002	<0.0002	0.0016	0.0007	<0.0002	0.0004	0.0003	0.0003	0.0003	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	0.0008
Magnesium, total	mg/L	13.2	13.7	14.1	15	13.8	27.1	41.1	31	27.1	27.6	39	51.9	47	49	53	48	54	19	59	53	23
Manganese, total	mg/L	0.411	0.321	0.374	0.417	0.382	0.624	3.67	0.288	0.266	0.753	3.67	3.99	4.14	3.96	4.39	3.96	4.07	0.592	3.23	3.45	0.677
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00003	0.00003	0.00003	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.028	0.036	0.029	0.03	0.041	0.01	0.012	0.009	0.007	0.012	0.012	0.013	0.014	0.014	0.015	0.014	0.014	0.037	0.012	0.011	0.037
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.001	0.002	0.001	0.004	<0.003	0.004	0.003	0.003	0.004	0.004	0.001	0.003	0.003	0.002
Phosphorus, total	mg/L		0.024	0.032	0.032	0.024	0.053		0.074	0.048	0.049	0.102	0.077									
Potassium, total	mg/L	14.1	17.7	16.3	17.4	20.8	4.89	7.32	5.03	4.3	5.09	6.87	7.71	8	8	8	8	8	20	8	7	19
Selenium, total	mg/L	0.0039	0.0062	0.0047	0.0052	0.0073	0.0038	0.0026	0.0039	0.0031	0.0037	0.0026	0.003	0.0031	0.0031	0.004	0.0038	0.0033	0.006	0.0038	0.003	0.0069
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00005	<0.00002	<0.00002	<0.00002	0.00004	0.00005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002
Sodium, total	mg/L	35	44.6	37.4	40.8	53.2	19	27.1	20.4	17.7	19.1	25.1	36	30	32	35	30	33	46	35	33	42
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	0.006	<0.005	<0.005	0.005	0.008	0.011	0.007	<0.005	0.006	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.025
Aluminum, dissolved	mg/L	0.008	0.008	0.009	0.009	0.01	0.01	0.005	0.007	0.008	0.007	0.004	0.006	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01	<0.01	0.016
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0006	0.0007	0.0006	0.0006	0.0007	0.0008	<0.001	0.0009	<0.001	0.001	0.0009	0.0007	<0.0004	0.0008	0.0006	<0.0004
Cadmium, dissolved	mg/L	0.00004	0.00002	0.00003	0.00005	0.00004	0.00007	0.00023	0.00006	0.00018	0.00007	0.00028	0.00031	0.0003	0.0002	0.0003	0.0002	0.0002	<0.0001	0.0002	0.0002	0.0001
Calcium, dissolved	mg/L	63.7	64.2	60.1	65.5	66.7	105	178	95	84.6	118	201	273	244	225	236	216	227	71	235	222	89
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.0197	0.0177	0.019	0.0168	0.0173	0.115	0.242	0.0683	0.0621	0.115	0.265	0.341	0.321	0.344	0.337	0.283	0.254	0.031	0.226	0.228	0.058
Iron, dissolved	mg/L	0.124	0.07	0.095	0.078	0.081	0.064	0.127	0.038	0.033	0.058	0.091	0.117	0.092	0.121	0.108	0.098	0.125	0.066	0.082	0.099	<0.02
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	13.6	13.4	13.5	14.3	13.6	28.1	37	30.5	26.7	29.6	40.8	57.5	47	54	47	44	51	17	49	50	22
Manganese, dissolved	mg/L	0.316	0.269	0.268	0.289	0.309	0.601	3.14	0.243	0.219	0.782	3.6	5.04	3.93	3.85	3.98	3.56	3.18	0.456	2.98	3.2	0.55
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.028	0.037	0.029	0.031	0.042	0.01	0.011	0.009	0.007	0.013	0.012	0.015	0.014	0.013	0.014	0.019	0.013	0.037	0.011	0.012	0.04
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.009	0.001	0.001	0.001	0.009	<0.003	0.003	<0.003	0.003	0.003	0.003	0.001	0.003	0.005	0.001
Phosphorus, dissolved	mg/L		<0.01	<0.01	<0.01	<0.01	0.022		0.017	0.013	0.019	0.031	0.041									
Potassium, dissolved	mg/L	13.9	17.2	14.6	16.3	20.6	4.91	6.19	4.73	4.25	5.49	7.19	9.03	8	7	8	7	7	19	8	7	19
Selenium, dissolved	mg/L	0.0039	0.0067	0.005	0.0053	0.0073	0.0039	0.0024	0.0038	0.0032	0.0042	0.0027	0.004	0.0028	0.004	0.0039	0.0038	0.0028	0.0064	0.0038	0.0027	0.0063
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	0.00002	0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	35.9	45.2	37.9	42.2	51.1	20.2	24.7	20.7	17.6	22.7	27.3	40.3	31	37	30	27	35	46	28	31	45
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Station Name		W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8
Sample Date		**11/07/2010**	**18/07/2010**	**25/07/2010**	**02/08/2010**	**09/08/2010**	**15/08/2010**	**22/08/2010**	**29/08/2010**	**05/09/2010**	**09/09/2010**	**16/09/2010**	**23/09/2010**	**07/10/2010**	**01/04/2011**	**07/04/2011**	**21/04/2011**	**30/04/2011**	**06/05/2011**	**13/05/2011**	**20/05/2011**	**25/05/2011**
pH (field)	pH units	7.97	7.93	7.65	7.5	7.56	7.61	7.97	7.97	7.65	7.92	7.55	7.63	7.61								
pH (lab)	pH units	8.18	8	7.89	7.99	8.15	8.13	8.23	7.76	7.93	7.94	8.19	7.97	8.15	7.87	7.86	8.15	8.24	8.04	8.08	8.05	8.1
Hardness (from dissolved)	mg/L	616	557	682	747	737	741	785	163	622	646	606	586	562	213	229	276	558	243	505	178	655
Hardness (from total)	mg/L	620	622	748	730	1220	735	709	162	636	661	711	611	575	222	229	345	522	237	315	176	756
Total Dissolved Solids	mg/L	970	1000	1400	1400	1200	1200	1400	450	1000	1200	920	1000	920	450	550	390	780	320	530	260	940
Total Suspended Solids	mg/L	110	660	120	19	660	19	82	30	110	55	42	32	68	7	3	150	16	56	9	12	21
Alkalinity, total	mg/L	290	280	200	210	230	230	180	120	230	220	220	240	240	130	140	180	330	200	190	140	350
Sulphate, dissolved	mg/L	170	140	160	160	230	250	250	130	200	200	190	180	200	110	120	74	180	65	120	57	190
Chloride	mg/L	14	12	7.8	7.8	8.9	9.4	8.7	16	7.2	6.6	6.3	6.9	6.5	29	28	2.7	7.8	2.8	4.3	3.2	8.7
Fluoride	mg/L	0.36	0.31	0.34	0.29	0.25	0.24	0.33	1.67	0.37	0.32	0.29	0.29	0.29	1.43	1.5	0.42	0.38	0.37	0.47	0.34	0.33
Nitrite (N)	mg/L	1.32	1.51	1.9	0.009	0.61	1.24	0.64	0.407	0.62	0.369	0.337	0.361	0.331	0.83	0.63	0.177	0.499	0.03	0.177	0.109	0.265
Nitrate (N)	mg/L	65	69	106	116	103	97	99	16.1	72	70	69	60	59	26.3	31	19.2	27.9	5.1	41	8.5	46
Ammonia	mg/L	0.91		1.4	0.9	0.46	0.48	0.62	0.24	0.72	0.53	0.54	0.64	0.57	1.1	1.5	0.094	0.161	0.042	0.41	0.802	0.141
Aluminum, total	mg/L	3.97	12.2	3.57	0.51	65.4	0.376	2.05	0.94	2.03	1.55	1.18	0.826	1.56	0.202	0.133	4.4	0.168	0.97	0.028	0.268	0.008
Arsenic, total	mg/L	0.0007	0.0016	0.0009	<0.0004	0.0212	0.0004	0.0007	0.0006	0.0005	<0.0004	0.0005	0.0006	0.0006	0.0004	0.0005	0.0007	0.0005	0.0007	0.0003	0.0004	0.0007
Cadmium, total	mg/L	0.0003	0.0006	0.0003	0.0001	0.0035	0.0002	0.0002	<0.0001	0.0002	0.0002	0.0002	0.0002	0.00019	0.00005	0.00005	0.00044	0.00016	0.00008	0.00015	0.00009	0.00013
Calcium, total	mg/L	183	180	223	222	327	222	216	45	187	200	215	185	174	63.9	63.2	89.5	150	58	88.1	47.3	221
Chromium, total	mg/L	0.003	0.008	<0.002	<0.002	0.11	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.531	1.42	0.293	0.131	6.08	0.159	0.265	0.07	0.271	0.321	0.291	0.203	0.267	0.037	0.0286	1.56	0.25	0.156	0.0966	0.155	0.217
Iron, total	mg/L	7.98	28.8	6.75	1.13	183	0.916	5.08	0.831	4.24	3.49	2.36	1.96	3.31	0.394	0.321	7.77	0.315	1.57	0.054	0.65	0.063
Lead, total	mg/L	0.001	0.0039	0.0007	<0.0002	0.0287	<0.0002	0.0005	0.0004	0.0005	0.0005	0.0003	0.0002	0.0005	<0.0002	<0.0002	0.0022	<0.0002	0.0005	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	40	42	46	43	97	44	41	12	41	40	42	36	34.5	15.1	17.4	29.6	36	22.3	23	14	49.5
Manganese, total	mg/L	1.5	1.72	1.37	0.919	6.11	1.02	1.03	0.195	0.846	0.892	0.955	0.941	1.1	0.564	0.638	0.462	1.41	0.206	0.332	2.06	1.9
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.013	0.01	0.015	0.009	0.01	0.007	0.013	0.056	0.018	0.013	0.008	0.009	0.009	0.059	0.067	0.017	0.015	0.009	0.014	0.019	0.013
Nickel, total	mg/L	0.004	0.007	0.007	0.003	0.104	0.002	0.003	0.001	0.002	0.002	0.002	0.002	0.002	<0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.002
Phosphorus, total	mg/L														0.026	0.017	0.4	0.056	0.068	0.034	0.12	0.035
Potassium, total	mg/L	10	13	12	9	38	8	10	34	9	9	9	7	7.83	20.7	25.9	6.77	6.09	4	5.18	6.34	7.9
Selenium, total	mg/L	0.0042	0.0041	0.009	0.0079	0.0123	0.0093	0.0131	0.0136	0.0129	0.014	0.0125	0.0124	0.0126	0.0124	0.0154	0.0046	0.0039	0.0019	0.0155	0.0012	0.0059
Silver, total	mg/L	0.0004	0.0012	0.0002	<0.0001	0.0039	<0.0001	0.0002	<0.0001	0.0002	0.0002	0.0001	<0.0001	0.00013	0.00002	<0.00002	0.0012	0.00004	0.0001	<0.00002	0.00007	0.00002
Sodium, total	mg/L	30	29	28	28	32	29	27	51	26	26	29	25	24.2	62.8	63.1	17.1	22.9	16.6	15	12.6	29.7
Thallium, total	mg/L	<0.00005	0.00016	<0.00005	<0.00005	0.0011	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.041	0.124	0.036	<0.01	0.823	<0.01	0.03	<0.01	0.024	0.02	0.014	0.013	0.02	0.009	<0.005	0.043	<0.005	0.008	<0.005	<0.005	<0.005
Aluminum, dissolved	mg/L	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	0.011	0.1	<0.01	0.011	<0.01	<0.01	0.008	0.012	0.077	0.006	0.004	0.013	0.144	0.007	0.005
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0004	0.0004	<0.0004	0.0005	0.0005	0.0005	0.0006	0.0004	<0.0004	<0.0004	0.0005	0.0005	0.0005	0.0002	0.0005	0.0004	0.0004	0.0003	0.0006
Cadmium, dissolved	mg/L	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	<0.0001	0.0001	0.0002	0.0002	0.0001	0.00017	0.00006	0.00006	0.00009	0.00018	0.00003	0.00022	0.00006	0.00012
Calcium, dissolved	mg/L	190	167	207	225	225	224	244	46	188	195	184	177	171	61.4	65	70.5	163	59.8	139	48.6	189
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.14	0.163	0.073	0.075	0.096	0.121	0.08	0.008	0.082	0.094	0.115	0.1	0.112	0.014	0.0132	0.0791	0.207	0.0887	0.323	0.0566	0.195
Iron, dissolved	mg/L	<0.02	<0.02	0.069	0.028	<0.02	0.037	0.054	<0.02	0.032	0.173	<0.02	0.021	0.022	0.055	0.042	0.019	0.056	0.05	0.344	0.062	0.042
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	35	34	40	45	43	44	43	12	37	39	35	35	33.1	14.5	16.2	24.4	36.7	22.7	38.6	13.8	44.3
Manganese, dissolved	mg/L	1.35	1.19	1.16	0.95	1	1.02	0.936	0.157	0.719	0.815	0.778	0.832	0.985	0.558	0.621	0.241	1.48	0.168	0.543	1.98	1.7
Mercury, dissolved	mg/L	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.013	0.011	0.015	0.009	0.008	0.008	0.012	0.057	0.018	0.011	0.007	0.009	0.009	0.063	0.064	0.014	0.013	0.008	0.018	0.018	0.013
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.007	0.001	<0.001	0.003	0.002	0.004	0.001	0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.002	0.002
Phosphorus, dissolved	mg/L														<0.01	<0.01	0.025	0.025	0.018	0.073	0.03	0.02
Potassium, dissolved	mg/L	9	9	10	10	9	8	9	32	8	8	7	7	6.92	18.9	25.9	5.24	6.14	3.79	7.31	6.44	6.95
Selenium, dissolved	mg/L	0.0043	0.0038	0.0091	0.0085	0.0096	0.0099	0.0133	0.0139	0.0139	0.0146	0.0117	0.0127	0.0128	0.0124	0.0158	0.0038	0.0042	0.0019	0.0114	0.0009	0.0055
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00007	<0.00002	<0.00002
Sodium, dissolved	mg/L	26	26	26	31	29	28	29	53	24	26	25	27	23.7	58.1	58.5	15.1	23.2	17.9	20.6	12.3	26.5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	0.022	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005

Station Name		W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8
Sample Date		**10/06/2011**	**17/06/2011**	**24/06/2011**	**30/06/2011**	**08/07/2011**	**15/07/2011**	**21/07/2011**	**31/07/2011**	**05/08/2011**	**08/08/2011**	**09/08/2011**	**10/08/2011**	**11/08/2011**	**12/08/2011**	**13/08/2011**	**14/08/2011**	**15/08/2011**	**16/08/2011**	**17/08/2011**	**18/08/2011**	**19/08/2011**
pH (field)	pH units																					
pH (lab)	pH units	8.24	8	8.06	7.87	7.91	7.92	7.91	8.11	7.94	7.96	7.79	8.02	8.2	8.21	8.04	7.92	8	7.95	8.09	7.97	8.02
Hardness (from dissolved)	mg/L	663	391	589	495	555	550	492	657	642	649	679	645	524	575	108	552	579	590	607	633	382
Hardness (from total)	mg/L	810	423	538	482	531	592	644	663	659	566	642	613	548	539	104	540	565	574	584	619	383
Total Dissolved Solids	mg/L	1000	500	870	790	820	910	800	1000	1000	1100	1200	1100	950	1100	150	1000	1100	1100	1100	1100	560
Total Suspended Solids	mg/L	70	3	46	15	33	87	130	64	2	24	7	98	15	24	23	43	56	13	6	14	6
Alkalinity, total	mg/L	360	370	220	210	220	210	210	240	230	220	220	230	220	220	98	230	230	230	230	240	310
Sulphate, dissolved	mg/L	190		150	150	150	200	160	190	190												
Chloride	mg/L	7.7					6.3															
Fluoride	mg/L	0.33					0.33															
Nitrite (N)	mg/L	0.159	0.03	0.122	0.108	0.102	0.087	0.068	0.087	0.095	0.09	0.103	0.112	0.088	0.094	0.028	0.102	0.094	0.121	0.134	0.141	0.014
Nitrate (N)	mg/L	50	6	53	53	53	59	56	67	69	23	48	86	63	68	0.06	69	69	72	74	75	10.5
Ammonia	mg/L	0.124		0.227	0.135	0.005	0.11	0.044	0.083	0.12	0.071	0.07			0.112	0.011	0.09	0.095	0.067	0.085	0.079	0.026
Aluminum, total	mg/L	0.217	0.077	0.938	0.206	0.749	1.98	7.21	0.28	0.045	0.858	0.484	0.477	0.501	0.321	1.48	0.68	2.34	0.415	0.31	0.17	0.152
Arsenic, total	mg/L	0.0007	0.0005	0.0005	0.0004	0.0006	0.0007	0.0013	0.0004	0.0005	0.0005	0.0004	0.0005	0.0004	0.0004	0.0007	0.0005	0.0008	0.0005	0.0004	0.0004	0.0005
Cadmium, total	mg/L	0.0002	0.00021	0.00014	0.00009	0.0001	0.00022	0.00043	0.00014	0.00009	0.00013	0.00013	0.00013	0.0001	0.00011	0.00003	0.00009	0.00019	0.00014	0.00013	0.00017	0.00026
Calcium, total	mg/L	236	92.1	162	146	158	180	195	201	194	170	197	186	163	164	31.6	164	173	175	178	182	91.1
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.216	0.179	0.185	0.12	0.161	0.302	0.887	0.164	0.126	0.188	0.142	0.165	0.153	0.14	0.134	0.182	0.322	0.17	0.152	0.143	0.15
Iron, total	mg/L	0.581	0.365	2.27	0.47	1.59	4.54	20.1	0.674	0.112	1.79	1.47	1.1	0.913	0.519	2.75	1.2	5.59	0.834	0.607	0.336	0.315
Lead, total	mg/L	0.0002	<0.0002	0.0003	<0.0002	0.0004	0.0007	0.0019	0.0002	<0.0002	0.0003	<0.0002	0.0002	<0.0002	<0.0002	0.0005	0.0003	0.0008	0.0003	<0.0002	0.001	0.0002
Magnesium, total	mg/L	53.9	46.9	32.4	28.3	33	34.6	38.2	38.9	42.3	34.5	36.2	36	34	31.7	6.04	31.9	32.5	33.4	33.6	40.2	37.7
Manganese, total	mg/L	1.74	0.887	0.45	0.396	0.514	0.796	1.05	0.839	0.796	0.621	0.689	0.776	0.496	0.517	0.224	0.533	0.682	0.67	0.681	0.765	0.357
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.014	0.007	0.01	0.013	0.011	0.011	0.011	0.006	0.007	0.008	0.007	0.007	0.008	0.007	0.002	0.007	0.008	0.006	0.006	0.006	0.006
Nickel, total	mg/L	0.003	0.002	0.001	<0.001	0.001	0.002	0.004	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.002	0.003
Phosphorus, total	mg/L	0.054	0.036	0.101	0.048	0.053	0.126		0.054	0.031	0.053	0.033	0.047	0.032	0.025	0.113	0.031	0.153	0.035	0.029	0.027	0.036
Potassium, total	mg/L	8.58	5.21	7.11	6.91	7.57	9.3	11.3	7.71	8.14	7.55	7.59	7.14	7.02	6.66	1.67	6.75	7.55	6.95	6.74	7.56	4.81
Selenium, total	mg/L	0.0055	0.002	0.0135	0.0133	0.0118	0.0112	0.0144	0.0135	0.0129	0.0106	0.0119	0.0137	0.0123	0.0117	<0.0001	0.0123	0.0128	0.013	0.0128	0.0129	0.0051
Silver, total	mg/L	0.00005	0.00003	0.00009	0.00003	0.00006	0.00014	0.00047	<0.00002	<0.00002	0.00007	0.00005	0.00004	0.00004	0.00003	0.00007	0.00005	0.00017	0.00003	0.00004	0.00002	0.00003
Sodium, total	mg/L	31.8	29.2	22.5	21.7	22.6	26.3	25.2	26.1	29.6	23.6	24.7	24.4	22.7	21.6	3.2	21.7	20.7	22.6	22.4	27.4	25.2
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00012	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.007	<0.005	0.013	0.005	0.011	0.025	0.09	0.009	<0.005	0.008	0.007	0.007	0.005	0.005	0.017	0.007	0.033	0.016	<0.005	0.009	0.009
Aluminum, dissolved	mg/L	0.005	0.006	0.034	0.005	0.013	0.007	0.008	0.01	0.016	0.013	0.02	0.009	0.005	0.005	0.008	0.007	0.011	0.006	0.006	0.007	0.008
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0028	0.0004	0.0003	0.0003	0.0004	0.0004	0.0003	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005
Cadmium, dissolved	mg/L	0.00012	0.00016	0.00042	0.00007	0.00014	0.00013	0.00009	0.00013	0.00012	0.00012	0.00012	0.00013	0.00009	0.00011	0.00001	0.00011	0.00011	0.00013	0.00013	0.00015	0.00011
Calcium, dissolved	mg/L	194	82	180	151	169	161	148	198	193	201	212	196	155	177	33.2	168	175	177	184	193	89.5
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.154	0.131	0.0936	0.0751	0.0872	0.0986	0.098	0.127	0.113	0.106	0.109	0.106	0.103	0.0999	0.0226	0.0969	0.158	0.117	0.115	0.128	0.133
Iron, dissolved	mg/L	0.052	0.106	0.106	0.1	0.033	0.027	0.014	0.045	0.052	0.023	0.062	0.034	0.016	0.02	0.085	0.374	0.027	0.025	0.056	0.036	0.056
Lead, dissolved	mg/L	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	43.3	45.2	34.1	28.5	32.3	35.7	29.5	39.2	39	36.1	36	37.7	33.5	32.7	6.06	32.1	34.5	36	36	36.6	38.5
Manganese, dissolved	mg/L	1.35	0.847	0.426	0.401	0.479	0.607	0.4	0.865	0.755	0.569	0.631	0.678	0.486	0.509	0.134	0.527	0.555	0.653	0.691	0.792	0.364
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.013	0.007	0.01	0.011	0.01	0.01	0.01	0.006	0.006	0.007	0.006	0.007	0.008	0.007	0.003	0.007	0.006	0.006	0.006	0.006	0.006
Nickel, dissolved	mg/L	0.003	0.001	0.004	<0.001	0.002	0.001	<0.001	0.001	0.002	0.001	0.002	0.002	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L	0.019	0.022	0.027	0.024	0.02	0.02		0.017	0.015	0.012	0.014	0.014	0.014	<0.01	<0.01	0.014	0.014	0.015	0.011	0.013	0.023
Potassium, dissolved	mg/L	7.14	5.03	7.36	6.7	7.33	8.48	6.53	7.74	7.23	7.03	6.97	6.99	7.29	6.78	1.34	7.18	7.68	7.14	7.12	6.9	4.1
Selenium, dissolved	mg/L	0.0046	0.0021	0.0154	0.014	0.0124	0.0117	0.0123	0.014	0.0132	0.013	0.0135	0.0137	0.0129	0.0143	<0.0001	0.0139	0.0144	0.0132	0.0136	0.0132	0.0055
Silver, dissolved	mg/L	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	26.2	29.1	24.6	21.1	22.4	28	20.9	26.7	26.6	25.1	25.1	25.6	22.9	22.8	3.56	21.6	23	24.2	24.5	23.9	25
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	0.013	<0.005	0.014	<0.005	<0.005	<0.005	0.01	<0.005	0.013	<0.005	<0.005	<0.005	0.006	<0.005	0.032	<0.005	<0.005	<0.005	<0.005

Station Name		W8	W8	W8	W8	W8	W8	W8	W8	W8	W8	W8
Sample Date		**20/08/2011**	**21/08/2011**	**27/08/2011**	**10/09/2011**	**16/09/2011**	**23/09/2011**	**30/09/2011**	**29/10/2013**	**07/11/2013**	**15/11/2013**	**29/11/2013**
pH (field)	pH units				7.38	7.71	7.62	7.41	7.64	7.02	7.78	7.7
pH (lab)	pH units	8.01	8.1	7.94	7.95		8.01	7.96	8.08	8.14	8.13	7.99
Hardness (from dissolved)	mg/L	675	712	751	887	726	780	786	1090	1140	1110	1280
Hardness (from total)	mg/L	651	689	689	692	679	675	725	1150	1180	1200	1200
Total Dissolved Solids	mg/L	1100	1100	1200	1100	1200	1200	1100	1660	1680	1550	1310
Total Suspended Solids	mg/L	18	6	7	21	130	15	80	176	140	134	
Alkalinity, total	mg/L	250	260	270	240		300	320	459	542	542	
Sulphate, dissolved	mg/L			180			230	230	255	275	307	310
Chloride	mg/L				9.8		9	9.4	210	210	210	200
Fluoride	mg/L								0.32	0.37	0.4	0.4
Nitrite (N)	mg/L	0.175	0.178	0.171	0.083		0.083	0.076	3.62	4.14	3.99	4.5
Nitrate (N)	mg/L	80	82	83	80		74	67	8.16	7.51	6.28	5.23
Ammonia	mg/L	0.087	0.098	0.108	0.118	0.11	0.071	0.06	2.1	1.9	2.3	2.3
Aluminum, total	mg/L	0.311	0.285	0.034	0.562	413	0.531	1.73	2.92	1.65	2.76	0.558
Arsenic, total	mg/L	0.0005	0.0009	0.0005	0.0004	0.5	0.0005	0.0007	0.00122	0.00122	0.00163	0.00134
Cadmium, total	mg/L	0.00015	0.00015	0.00015	0.00017	0.2	0.00026	0.00028	0.00013	0.00008	0.000117	0.000052
Calcium, total	mg/L	196	208	207	209	207	196	214	306	319	323	320
Chromium, total	mg/L	<0.001	<0.001	0.009	<0.001	<1	<0.001	0.002	0.0026	0.0018	0.0026	0.0016
Copper, total	mg/L	0.149	0.16	0.147	0.19	170	0.289	0.31	0.655	0.279	0.459	0.283
Iron, total	mg/L	0.709	0.743	0.157	1.27	1010	1.3	4.05	7.55	4.4	9.52	3.29
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	0.0002	0.3	0.0003	0.0005	0.00247	0.00157	0.00264	0.00114
Magnesium, total	mg/L	39.1	41.3	41.8	41.3	39.2	45.1	46.2	92.7	93.2	96.4	96.9
Manganese, total	mg/L	0.82	0.867	0.895	0.763	879	1.06	1.04	2.85	2.97	3.4	3.4
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.006	0.006	0.006	0.006	6	0.006	0.006	0.0259	0.0283	0.0268	0.0293
Nickel, total	mg/L	0.002	0.002	0.002	0.002	2	0.002	0.003	0.0044	0.0041	0.0058	0.0058
Phosphorus, total	mg/L	0.039	0.039		0.059	47	0.083	0.122	0.405	0.192	0.486	
Potassium, total	mg/L	7.17	7.57	6.99	7.59	7.61	7.95	8.19	11.5	11.6	13.5	12.2
Selenium, total	mg/L	0.0123	0.013	0.0123	0.0144	12.4	0.0111	0.0103	0.00288	0.0028	0.00274	0.00305
Silver, total	mg/L	0.00003	0.00003	<0.00002	0.00007	0.05	0.00007	0.00015	0.000303	0.000399	0.000194	0.000161
Sodium, total	mg/L	24.9	26.2	25.9	27.5	25.9	29.8	29	48.8	48.6	52.5	51.3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.05	<0.00005	<0.00005	0.000136	0.000107	0.000146	0.000108
Zinc, total	mg/L	0.013	0.007	<0.005	0.008	12	0.012	0.024	11.5	8.89	12.5	9.56
Aluminum, dissolved	mg/L	0.006	0.01	0.005	0.006	0.027	0.019	0.022	0.0152	0.0043	<0.0030	0.0043
Arsenic, dissolved	mg/L	0.0004	0.0005	0.0003	0.0003	0.0003	0.0004	0.0004	0.00075	0.00083	0.00148	0.00105
Cadmium, dissolved	mg/L	0.00014	0.00014	0.00016	0.00017	0.00021	0.00023	0.0002	0.000031	0.000028	0.000017	0.000028
Calcium, dissolved	mg/L	204	216	227	283	220	235	237	285	304	292	334
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.128	0.131	0.137	0.132	0.169	0.182	0.201	0.0233	0.0226	0.0208	0.0166
Iron, dissolved	mg/L	0.034	0.057	0.039	0.045	0.084	0.077	0.081	0.347	0.378	0.455	0.826
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	40.5	41.8	44.8	44.1	43.1	47.1	46.9	92.9	92.3	92.4	108
Manganese, dissolved	mg/L	0.819	0.849	0.914	0.77	0.807	0.94	1.04	2.53	2.81	2.95	3.71
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.006	0.006	0.005	0.005	0.005	0.006	0.005	0.0272	0.0259	0.0254	0.0291
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.001	0.002	0.003	0.002	0.0035	0.0038	0.004	0.0049
Phosphorus, dissolved	mg/L	0.016	0.014		0.013	0.02	0.023	0.011	0.017	0.02	0.025	
Potassium, dissolved	mg/L	7.06	7.62	7.79	8.01	7.31	8.11	7.96	10.4	10.7	11.6	13.3
Selenium, dissolved	mg/L	0.0126	0.0131	0.0126	0.0193	0.0135	0.0123	0.0116	0.0024	0.00255	0.00249	0.00278
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	0.000023	0.000032	0.000033
Sodium, dissolved	mg/L	25.3	26.9	28.2	29.5	28.9	31.7	30.8	49.6	49	49.6	56.6
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.000056	0.000052	0.000056	0.000061
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	0.008	0.011	0.007	6.75	7.21	8.04	9.49

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**03/05/2008**	**07/05/2008**	**01/05/2009**	**02/05/2009**	**10/05/2009**	**28/05/2009**	**04/06/2009**	**07/06/2009**	**10/06/2009**	**16/06/2009**	**29/06/2009**	**06/07/2009**	**13/07/2009**	**27/07/2009**	**06/08/2009**	**10/08/2009**	**11/08/2009**	**19/08/2009**	**21/08/2009**	**31/08/2009**	**07/09/2009**
pH (field)	pH units			7.1			7.44	7.69		7.76	7.98	8	8.13	6.87		8.26	8.27		8.33			8.54
pH (lab)	pH units				7.45	7.76	7.92	7.86	8.09	7.8		7.98		8.18	8.32	8.13		8.15	7.94	8.2	7.95	8.08
Hardness (from dissolved)	mg/L	57			156	191	336	406	401	454		359		334	398	371		377	349	436	508	648
Hardness (from total)	mg/L		94																	438		
Total Dissolved Solids	mg/L				254	308	476	658	578	758		514		<5	498	516		536	496	540	648	600
Total Suspended Solids	mg/L				6540	311	146	502	11	127		10		4	6	4		8	21	10	28	14
Alkalinity, total	mg/L				212	195	328	192	227	190		219		228	332	339		388	310	390	373	336
Sulphate, dissolved	mg/L				24.7		54.3	114	103	138		93		67.6	66.4	55.2		51.1	58.5	52	98.2	131
Chloride	mg/L				1.4	1.6	1.04	5	3.75	5.8		3.34		4.01	0.64	3.18		1.52	3	2.6	3.09	3.38
Fluoride	mg/L																			0.3		
Nitrite (N)	mg/L					0.106														0.33		
Nitrate (N)	mg/L					1.58												0.8	3.95	7.4	14.8	14.9
Ammonia	mg/L																			0.015		
Aluminum, total	mg/L	0.69	3.43		151	44.2	10.7	19	0.268	2.39		0.31		0.069	0.179	0.15		0.242	0.661	0.287	0.874	0.104
Arsenic, total	mg/L	<0.0002	0.0019		0.015	0.0046	0.002	0.0011	0.0007	0.0009		0.0005		0.0003	0.001	0.0008		0.0013	0.0009	0.001	0.0013	0.001
Cadmium, total	mg/L	<0.00007	<0.00007		0.00464	0.00093	0.0115	0.00059	0.00007	0.00029		0.00006		0.00003	0.00004	0.00005		0.00008	0.00008	0.00009	0.00009	0.00006
Calcium, total	mg/L	12.4	20.3		133	62.8	75.6	141	117	147		101		90.7	87.8	88.5		84.9	80.1	100	124	116
Chromium, total	mg/L	0.0024	0.0057		0.0854	0.0234	0.0067	0.007	0.0007	0.0019		0.0007		0.0005	0.0012	0.0012		0.0013	0.0013	0.001	0.0017	0.0014
Copper, total	mg/L	0.03	0.053		30	5.85	1.63	1.79	0.101	0.91		0.123		0.077	0.109	0.084		0.174	0.143	0.109	0.125	0.083
Iron, total	mg/L	0.96	4.82		365	64.6	18.3	28.2	0.72	6.12		0.86		0.34	0.864	0.528		0.807	1.16	1.03	2.07	0.788
Lead, total	mg/L	0.0005	0.0018		0.043	0.0092	0.004	0.003	<0.0001	0.0011		0.0001		<0.0001	0.0006	0.0004		0.0005	0.0006	0.0005	0.0007	0.0004
Magnesium, total	mg/L	6.89	10.6		99.6	31.1	45.9	30.8	26.9	26		25.4		24.3	45.5	40.2		50.1	33.2	45.7	56	41.6
Manganese, total	mg/L	0.0514	0.105		6.78	1.58	1.33	1.02	0.696	0.508		0.727		0.771	0.972	1.04		1.06	1.32	1.63	1.78	1.46
Mercury, total	mg/L	0.00002	0.00002		0.00021	<0.0001	0.00003	0.00004	<0.00001			0.00001		<0.00001	<0.00001				<0.00001	0.00005	0.00001	<0.00001
Molybdenum, total	mg/L	0.00034	0.00058		0.0142	0.02	0.00884	0.00718	0.0079	0.00862		0.00847		0.00645	0.0081	0.0053		0.007	0.0062	0.007	0.0051	0.005
Nickel, total	mg/L	0.008	0.042		0.32	0.015	0.005	0.006	0.002	0.003		0.002		0.002	0.002	0.002		0.003	0.002	0.002	0.003	0.002
Phosphorus, total	mg/L	0.09	0.13		3.55	0.96	0.21	0.47	0.056	0.171		0.372		<0.01	0.041	0.034		0.062	0.053		0.105	0.047
Potassium, total	mg/L	1.97	3.55		60.2	18	11	12.1	5.6	7.2		5.7		4.8	6.1	4.9		5.7	4.7	5.73	6	5
Selenium, total	mg/L	<0.0006	<0.0006		0.0077	0.003	<0.003	0.0062	0.0031	0.0077		0.0028		<0.0006	0.0008	<0.0006		<0.0006	<0.0006	0.0015	0.0014	<0.0006
Silver, total	mg/L	<0.0001	<0.0001		0.0121	0.00485	<0.00005	0.00055	0.00012	0.00015		0.00034		0.00013	0.0001	0.00003		0.00005	<0.00001	0.00003	<0.00001	<0.00001
Sodium, total	mg/L	4.6	7.7		26.4	20.7	28.1	22.9	22.2	21.9		21.6		20.1	27.8	23.9		24.4	19.4	22.2	25.9	24.1
Thallium, total	mg/L	<0.00001	0.00003		0.00135	0.00033	0.00011	0.00017	<0.00001	0.00003		<0.00001		<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00005	<0.00001	<0.00001
Zinc, total	mg/L	0.009	0.018		1.59	0.348	0.1	0.15	0.008	0.033		0.008		0.003	0.013	0.005		0.007	0.008	0.007	0.015	0.009
Aluminum, dissolved	mg/L	0.05			0.028	0.024	0.088	0.092	0.007	0.021		0.007		0.023	0.016	0.019		0.051	0.009	0.007	0.022	0.013
Arsenic, dissolved	mg/L	<0.0002			0.0004	0.0007	0.0008	0.0004	0.0006	0.0004		0.0006		0.0005	0.0008	0.0004		0.0014	0.0008	0.0009	0.001	0.0005
Cadmium, dissolved	mg/L	<0.00008			0.00007	0.00008	0.00097	0.00015	0.00005	0.00014		0.00006		0.00004	0.00004	0.00003		0.00009	0.00004	0.00006	0.00005	0.00017
Calcium, dissolved	mg/L	11.6			43.6	46.5	65.9	127	117	142		102		93.6	86.6	85.2		77.6	82.2	99.3	114	201
Chromium, dissolved	mg/L	0.0018			<0.0004	<0.0005	0.0011	<0.0004	<0.0004	0.0007		<0.0004		<0.0004	0.0013	0.0014		0.0014	0.0015	<0.001	0.0016	0.001
Copper, dissolved	mg/L	0.023			0.094	0.172	0.121	0.164	0.067	0.171		0.071		0.068	0.08	0.069		0.084	0.066	0.0676	0.064	0.272
Iron, dissolved	mg/L	0.09			0.05	0.06	0.31	0.24	0.11	0.07		0.14		0.2	0.3	0.26		0.44	0.17	0.262	0.37	0.09
Lead, dissolved	mg/L	<0.0001			<0.0001	<0.0001	0.0003	<0.0001	<0.0001	0.0003		<0.0001		<0.0001	0.0005	0.0005		0.0001	0.0005	<0.0002	0.0005	0.0005
Magnesium, dissolved	mg/L	6.74			11.5	18.1	41.8	21.7	26.5	24		25.6		24.3	44.2	38.4		44.5	34.9	45.6	54.6	35.8
Manganese, dissolved	mg/L	0.0178			0.255	0.345	0.858	0.392	0.662	0.352		0.7		0.805	0.945	0.896		1.05	1.33	1.53	1.8	2.39
Mercury, dissolved	mg/L	0.00002			<0.00001	<0.0001	<0.00001	<0.00001	0.00001			0.00001		<0.00001	<0.00001				<0.00001	<0.00002	<0.00001	0.00002
Molydenum, dissolved	mg/L	0.00033			0.0192	0.017	0.00877	0.00885	0.00768	0.00882		0.00841		0.00629	0.0083	0.0057		0.0066	0.0059	0.007	0.0054	0.0052
Nickel, dissolved	mg/L	0.002			0.005	0.0046	0.003	0.002	0.002	0.002		0.002		0.001	0.002	0.002		0.003	0.002	0.002	0.003	0.003
Phosphorus, dissolved	mg/L	0.03			0.02		0.03	0.02	0.01	0.01		0.02		0.01	0.01	<0.01		0.04	0.03		0.05	0.03
Potassium, dissolved	mg/L	2.05			11.2	8.1	6.9	6.2	5.4	6.2		5.5		4.4	5.8	4.7		5.4	5.1	5.58	5.6	5.9
Selenium, dissolved	mg/L	<0.0006			0.001	0.0012	0.0008	0.0057	0.0027	0.0075		0.0032		<0.0006	0.0008	0.0006		0.0016	0.0007	0.0015	0.0022	0.0032
Silver, dissolved	mg/L	<0.0010			<0.00001	0.00005	<0.00001	<0.00001	0.00002	<0.00001		<0.00001		0.00025	0.00014	<0.00001		<0.00001	<0.00001	<0.00002	<0.00001	<0.00001
Sodium, dissolved	mg/L	5.28			14.9	15.9	23.6	19.5	22.2	21.7		21.8		18.5	26.5	23		23.9	20.1	22.4	24.8	24.6
Thallium, dissolved	mg/L	<0.00001			<0.00001	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001		<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00005	<0.00001	<0.00001
Zinc, dissolved	mg/L	0.004			0.002	0.002	0.005	0.004	0.004	0.005		0.004		0.005	0.003	0.002		0.025	0.002	<0.005	0.006	0.004

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**18/09/2009**	**23/09/2009**	**30/09/2009**	**05/10/2009**	**12/10/2009**	**19/10/2009**	**09/11/2009**	**16/11/2009**	**19/04/2010**	**20/04/2010**	**21/04/2010**	**22/04/2010**	**23/04/2010**	**24/04/2010**	**25/04/2010**	**26/04/2010**	**27/04/2010**	**28/04/2010**	**29/04/2010**	**30/04/2010**	**01/05/2010**
pH (field)	pH units	7.4	8.46	8.06	8.04	8.04	7.73	7.25	7.49	7.3	6.98						7.84	7.84	7.89	7.93		7.95
pH (lab)	pH units	7.86	8.11	7.99	8	8.1	8.04	7.88	7.86	8.16	8.13	7.68	7.84	7.75	7.82	7.85	8.1	8	8.1	8	8.1	8.2
Hardness (from dissolved)	mg/L	546	435	489	383	408	349	381	358								225	92.1	235	240	268	252
Hardness (from total)	mg/L									130	393	276	303	244	266	248	226	221	239	249	291	274
Total Dissolved Solids	mg/L	726	606	646	520	578	568	534	566	196	560	416	438	404	448	410	370	240	350	360	430	400
Total Suspended Solids	mg/L	10	26	8	2	5	2	<2	7	31	18	79	21	82	136	99	39	14	63	75	47	110
Alkalinity, total	mg/L	389	288	303	261	303	235	274	273	122	332	202	224	158	157	159	140	150	150	150	170	170
Sulphate, dissolved	mg/L	84.8	88.3	95.6	75.5	74.3	95	89.5	87.5	14	59.3	46	45.2	49.5	66	55.1	57	51	53	55	72	71
Chloride	mg/L	2.79	3.43	4.01	3.69	4.12	6.95	6.54	7.01	5.96	14.2	9.98	24.8	6.96	7.86	7.17	6	5.9	5.9	6.1	6.8	7.9
Fluoride	mg/L																0.36	0.32	0.29	0.31	0.37	0.3
Nitrite (N)	mg/L																0.21	0.121	0.14	0.12	0.125	0.118
Nitrate (N)	mg/L	17	21.8	21.9	13.8	13.7	18.3	10.8	15.8		10	11.8	7.59				11.7	11.1	11.4	11.2	13.9	13.2
Ammonia	mg/L																0.12	0.039	0.083	0.2	0.16	0.1
Aluminum, total	mg/L	0.078	0.544	0.22	0.083	0.151	0.096	0.059	0.069	0.096	0.126	2.39	0.87	2.03	5.19	3.7	1.07	1.11	1.37	1.36	0.494	2.9
Arsenic, total	mg/L	0.0013	0.0009	0.0007	0.0005	0.0008	0.0007	0.0007	0.0006	0.0003	0.0009	0.0012	0.0007	0.0011	0.0019	0.0014	0.001	0.001	0.0012	0.0012	0.0009	0.0016
Cadmium, total	mg/L	0.0001	0.0001	0.00009	0.00003	0.00007	0.0001	0.00017	0.00011	0.00003	0.00006	0.0001	0.00018	0.00008	0.00011	0.00014	0.00008	0.00009	0.00017	0.00012	0.00008	0.00011
Calcium, total	mg/L	138	125	134	108	114	97.1	110	99.6	32.2	109	80.1	103	78	85.8	81	63	60.8	66	68.9	83.6	74.6
Chromium, total	mg/L	0.0016	0.0027	0.0016	0.0012	0.0005	0.0005	0.0005	0.0005	<0.0004	0.0004	0.0019	0.0009	0.0017	0.0033	0.0025	0.001	0.002	0.002	0.002	0.001	0.005
Copper, total	mg/L	0.093	0.092	0.104	0.066	0.09	0.072	0.066	0.068	0.05	0.074	0.205	0.154	0.238	0.403	0.529	0.209	0.155	0.324	0.188	0.172	0.325
Iron, total	mg/L	1.31	1.2	0.746	0.555	0.456	0.383	0.41	0.353	0.137	0.256	2.39	0.989	2.57	5.7	4.8	1.83	1.83	2.71	2.46	0.773	5.43
Lead, total	mg/L	0.0004	0.0017	0.0008	0.0003	<0.0001	0.0003	0.0001	0.0001	0.0001	0.0002	0.0008	0.0003	0.0008	0.0016	0.0012	0.0005	0.0006	0.001	0.0008	0.0004	0.0018
Magnesium, total	mg/L	56.5	33.7	39	31.2	34.6	27.6	33	31.6	12.3	35.1	23.6	22.1	21.6	23	21.1	16.7	16.8	18.1	18.6	19.9	21.4
Manganese, total	mg/L	2.2	0.899	1.6	1.18	1.42	0.945	1.11	0.943	0.232	0.542	0.681	1.66	0.566	0.77	0.675	0.334	0.282	0.38	0.318	0.397	0.384
Mercury, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	0.00002	<0.00001	0.00002	0.00002	0.00002	<0.00002	0.00002	<0.00002	0.00003	<0.00002	0.00007
Molybdenum, total	mg/L	0.0071	0.0165	0.006	0.0049	0.0057	0.0165	0.0103	0.013	0.0013	0.0048	0.0068	0.0049	0.0083	0.0121	0.0127	0.011	0.008	0.008	0.008	0.014	0.008
Nickel, total	mg/L	0.003	0.004	0.005	0.003	0.004	0.003	0.003	0.003	<0.001	0.002	0.003	0.003	0.003	0.004	0.004	0.002	0.002	0.003	0.003	0.002	0.005
Phosphorus, total	mg/L	0.073	0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.08	0.08	0.11	0.22	0.1	0.25	0.35	0.42					0.049	
Potassium, total	mg/L	5.8	6.3	5.2	4.3	4.7	8.6	7.6	7.8	3.4	5.7	5.1	5	5	5.3	5.3	4.14	4.21	4.45	4.36	4.52	4.84
Selenium, total	mg/L	0.003	0.0038	0.0025	0.0015	0.0013	0.0041	0.0024	0.0026	<0.0006	0.002	0.0024	0.0009	0.0025	0.0044	0.0041	0.0035	0.003	0.003	0.0033	0.0043	0.0038
Silver, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00002	0.00001	<0.00001	0.00005	0.0002	0.00012	0.00004	0.00002	0.00006	0.00004	0.00005	0.0001
Sodium, total	mg/L	28.4	22.1	24.6	20.7	22.4	28.4	31.3	30.4	7.3	20.5	13.2	12.9	13.2	15.2	14.9	12.5	11.9	12.4	12.6	16	14.7
Thallium, total	mg/L	<0.00001	0.00014	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00002	0.00003	0.00003	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00005
Zinc, total	mg/L	0.012	0.006	0.009	0.003	0.006	0.007	0.014	0.011	0.016	0.008	0.021	0.01	0.018	0.028	0.031	0.014	0.009	0.018	0.014	0.008	0.028
Aluminum, dissolved	mg/L	0.023	<0.005	<0.005	<0.005	<0.005	0.067	<0.005	0.11	<0.005	0.017	0.006	<0.005	0.016	0.011	0.016	0.021	0.038	0.023	0.019	0.015	0.021
Arsenic, dissolved	mg/L	0.0012	0.0008	0.0008	0.0005	0.0005	0.0066	0.0006	0.0005	0.0003	0.0009	0.001	0.0006	0.0007	0.0008	0.0007	0.0007	0.0004	0.0007	0.0006	0.0007	0.0006
Cadmium, dissolved	mg/L	0.0001	0.00006	0.00007	0.00003	0.00005	0.00012	0.00008	0.0013	0.00002	0.00006	0.00002	0.00004	0.00004	0.00004	0.00004	0.00005	0.00003	0.00006	0.00005	0.00009	0.00008
Calcium, dissolved	mg/L	130	120	132	103	110	94.8	102	94.1	31.7	103	74.8	87.9	67.3	74.4	69.5	63	25.7	64.8	66.4	78.5	69.8
Chromium, dissolved	mg/L	0.0019	0.0016	0.0009	0.0008	0.0006	<0.0004	0.0004	0.001	0.002	0.0008	<0.0004	<0.0004	0.0006	0.0006	0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.072	0.059	0.069	0.048	0.062	0.07	0.052	0.084	0.032	0.051	0.115	0.064	0.128	0.131	0.193	0.109	0.0322	0.124	0.103	0.128	0.108
Iron, dissolved	mg/L	0.55	0.07	0.1	0.08	0.05	0.41	0.15	0.28	0.02	0.09	0.1	0.1	0.12	0.1	0.1	0.095	0.065	0.098	0.086	0.081	0.072
Lead, dissolved	mg/L	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0005	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	53.9	32.7	39.1	30.4	32.7	27.2	30.6	29.8	12.4	33.1	21.7	20.3	18.6	19.6	18	16.5	6.76	17.7	18	17.6	19
Manganese, dissolved	mg/L	2.24	0.897	1.5	1.16	1.32	0.897	1.07	0.956	0.195	0.524	0.534	1.5	0.379	0.447	0.412	0.249	0.019	0.239	0.231	0.344	0.208
Mercury, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.007	0.0169	0.0058	0.005	0.0057	0.0167	0.0099	0.013	0.0013	0.0046	0.0065	0.0045	0.008	0.0125	0.012	0.011	0.004	0.008	0.008	0.014	0.008
Nickel, dissolved	mg/L	0.003	0.003	0.004	0.003	0.004	0.003	0.003	0.003	<0.001	0.002	0.002	0.002	0.002	0.001	0.002	0.001	<0.001	0.001	0.001	<0.001	0.001
Phosphorus, dissolved	mg/L	0.05	0.01	0.02	0.02	0.02	0.02	<0.01	0.05	0.02	0.03	0.03	0.02	0.04	0.03	0.02					0.022	
Potassium, dissolved	mg/L	5.6	5.8	5.5	4.5	4.5	8.2	7	7.5	3.2	5.5	4.4	4.5	4.1	4.2	4.1	4	1.8	4.06	3.88	4.13	3.86
Selenium, dissolved	mg/L	0.0024	0.0045	0.003	0.0015	0.0015	0.0042	0.0025	0.0026	<0.0006	0.0024	0.0022	0.0008	0.0024	0.0041	0.0035	0.0036	0.0004	0.0033	0.0035	0.0042	0.0039
Silver, dissolved	mg/L	0.00003	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	25.6	21.3	24.1	19	21.4	26.9	30.4	28.2	7.3	19.7	12.4	11.9	11.6	14.4	13.5	12.8	4.02	12.9	12.9	14.7	14.2
Thallium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.003	0.001	0.002	0.001	0.002	0.009	0.006	0.017	<0.001	0.007	0.002	0.003	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		02/05/2010	03/05/2010	04/05/2010	05/05/2010	06/05/2010	07/05/2010	08/05/2010	09/05/2010	10/05/2010	13/05/2010	17/05/2010	20/05/2010	24/05/2010	27/05/2010	31/05/2010	03/06/2010	14/06/2010	17/06/2010	25/06/2010	04/07/2010	11/07/2010
pH (field)	pH units	8	8.07		7.52				7.82			7.94	7.6	7.39	7.72	7.52	7.63	7.31	7.08	7.99	7.5	8.09
pH (lab)	pH units	8.2	8	8.1	8.2	8.2	8.4	7.8	8.1	8.2	8.1	8.4	8.5	8.4	8.5	8.2	8.4	8.5	8.2	8.6	7.94	8.41
Hardness (from dissolved)	mg/L	284	293	285	327	328	378	371	217	120	286	371	428	408	400	404	334	316	460	403	338	412
Hardness (from total)	mg/L	280	282	299	318	331	361	411	230	124	264	365	439	417	418	421	1740	310	456	426	352	450
Total Dissolved Solids	mg/L	400	440	430	460	480	520	550	470	160	400	530	620	610	490	570	470	540	610	530	520	600
Total Suspended Solids	mg/L	48	30	29	19	34	120	13	7	<4	18	20	8	6	24	41	7	4	4	4	4	2
Alkalinity, total	mg/L	180	180	190	210	210	250	260	150	120	190	280	300	310	310	330	240	250	400	360	220	320
Sulphate, dissolved	mg/L	68	80	80	83	85	92	89	97	14	94	88	94	79	71	80	82	92	74	76	110	91
Chloride	mg/L	8.8	11	11	13	12	15	13	22	6.9	19	16	17	17	11	11	15	18	11	9.3	4.8	7.8
Fluoride	mg/L	0.28	0.29	0.28	0.29	0.3	0.34	0.37	1.6	0.44	0.98	0.33	0.4	0.42	0.39	0.4	0.86	0.84	0.38	0.38	0.37	0.37
Nitrite (N)	mg/L	0.12	0.103	0.088	0.084	0.074	0.079	0.089	0.55	0.055	0.485	0.064	0.09	0.374	0.098		0.253	0.159	0.015	0.018	0.113	0.035
Nitrate (N)	mg/L	12.8	14.3	13.1	13.6	14.1	15.3	14	19.6	0.65	15	10.5	10.4	8.8	8.2		14	14.3	10.5	10.9	20.1	23.2
Ammonia	mg/L	0.1	0.15	0.04	0.07	0.06	0.17	0.18	0.36	0.065	0.62	0.18	0.28	0.32	0.32		0.31	0.22	0.15	0.05	0.19	0.045
Aluminum, total	mg/L	1.96	0.563	0.974	0.514	0.672	0.202	0.202	0.082	0.08	0.329	0.149	0.126	0.069	0.532	0.16	0.264	0.089	0.099	0.047	0.14	0.032
Arsenic, total	mg/L	0.0014	0.0006	0.0009	0.0007	0.0008	0.0007	0.0008	0.0004	0.0006	0.0005	0.0006	<0.001	0.0008	<0.001	0.0007	0.0005	0.0004	0.0007	0.0008	0.0006	0.0006
Cadmium, total	mg/L	0.00012	0.0012	0.00008	0.00007	0.00007	0.00005	0.00011	0.00008	0.00025	0.00009	0.00008	0.00005	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	76	76.1	80.5	84	87	98.6	115	68	36	77.6	100	111	110	103	106	96	80	108	102	95	108
Chromium, total	mg/L	0.004	0.001	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.189	0.0897	0.122	0.1	0.137	0.0877	0.149	0.0208	0.0243	0.106	0.101	0.117	0.119	0.191	0.136	0.073	0.07	0.107	0.116	0.162	0.129
Iron, total	mg/L	3.35	0.869	1.67	0.854	1.33	0.342	0.343	0.251	0.229	1.1	0.292	0.284	0.181	1.11	0.369	0.389	0.204	0.221	0.161	0.356	0.144
Lead, total	mg/L	0.0009	0.0004	0.0013	0.0003	0.0004	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, total	mg/L	21.8	22.5	23.8	26.2	27.6	27.9	30	14.7	8.35	17	27.8	39.1	34	39	38	26	27	45	42	28	44
Manganese, total	mg/L	0.315	0.252	0.28	0.272	0.281	0.356	0.758	0.364	0.425	1.07	0.463	0.609	0.699	0.831	0.849	0.569	0.476	0.779	0.663	0.976	0.728
Mercury, total	mg/L	<0.00002	0.00005	<0.00002	0.00007	0.00004	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.008	0.007	0.007	0.007	0.008	0.011	0.012	0.049	0.01	0.032	0.01	0.013	0.013	0.011	0.011	0.025	0.021	0.009	0.008	0.012	0.009
Nickel, total	mg/L	0.004	0.002	0.003	0.002	0.002	<0.001	0.002	0.001	0.002	0.001	0.001	<0.003	0.001	<0.003	0.002	0.002	0.001	0.002	0.001	0.001	0.001
Phosphorus, total	mg/L		0.069	0.138	0.066	0.122	0.044		0.025	0.034	0.049	0.036	0.045									
Potassium, total	mg/L	4.51	4.02	4.32	4.35	4.65	4.56	5.43	24.8	5.1	16	4.45	5.73	5	6	6	13	12	6	6	6	7
Selenium, total	mg/L	0.0037	0.0036	0.0034	0.0036	0.0037	0.0036	0.0041	0.0079	0.0004	0.0043	0.003	0.003	0.0028	0.003	0.002	0.0032	0.0034	0.002	0.0022	0.0048	0.0034
Silver, total	mg/L	0.00004	<0.00002	<0.00002	0.00002	0.00004	0.00003	0.00004	<0.00002	<0.00002	<0.00002	0.00003	0.00005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	15.8	15.6	15.5	18.9	19.6	18	21.8	56.4	11.8	35	19.2	28	23	28	26	39	34	26	25	18	30
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.016	0.006	0.009	0.006	0.008	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.015	0.011	0.011	0.009	0.01	0.008	0.009	0.009	0.007	0.006	0.011	0.007	<0.01	<0.01	<0.01	0.022	0.02	<0.01	0.01	0.061	<0.01
Arsenic, dissolved	mg/L	0.0006	0.0006	0.0005	0.0006	0.0006	0.0006	0.0006	0.0004	0.0006	0.0004	0.0005	<0.001	0.0007	<0.001	0.0007	0.0005	<0.0004	0.0007	0.0005	0.0006	0.0006
Cadmium, dissolved	mg/L	0.00005	0.00006	0.00004	0.00003	0.00005	0.00005	0.00007	0.00006	0.00007	0.00006	0.00005	0.00006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Calcium, dissolved	mg/L	78.1	80.1	75.4	88.2	88.1	102	104	63.5	35.3	84.6	99.9	112	110	97	105	93	82	113	100	86	110
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.082	0.0674	0.0589	0.071	0.0773	0.0794	0.124	0.0125	0.0175	0.0279	0.0693	0.0986	0.093	0.117	0.105	0.043	0.047	0.09	0.089	0.147	0.097
Iron, dissolved	mg/L	0.055	0.043	0.042	0.043	0.039	0.046	0.058	0.049	0.073	0.12	0.036	0.064	0.056	0.064	0.058	0.03	0.053	0.06	0.067	0.138	0.063
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	21.6	22.6	23.5	25.9	26.3	29.8	27	14.2	7.85	18.1	29.4	36	32	38	34	25	27	43	37	30	34
Manganese, dissolved	mg/L	0.203	0.219	0.192	0.243	0.225	0.35	0.683	0.298	0.336	0.855	0.439	0.601	0.655	0.765	0.809	0.328	0.416	0.744	0.604	0.961	0.62
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.008	0.008	0.007	0.007	0.008	0.011	0.011	0.049	0.01	0.036	0.011	0.015	0.013	0.011	0.011	0.024	0.02	0.009	0.009	0.013	0.01
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	0.002	0.001	0.005	<0.003	0.001	<0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L		0.018	0.02	0.023	0.02	0.022		<0.01	0.013	<0.01	0.015	0.017									
Potassium, dissolved	mg/L	4.16	4.11	3.87	4.38	4.34	4.75	4.94	23	4.98	16.9	4.59	5.78	5	6	6	12	12	6	6	6	6
Selenium, dissolved	mg/L	0.0039	0.004	0.0038	0.0037	0.0037	0.0039	0.0038	0.0078	0.0004	0.0048	0.0033	0.004	0.0027	0.003	0.002	0.0038	0.0032	0.0019	0.0018	0.0047	0.0038
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	15.9	16.3	16.4	17.7	18	20	20.4	56.4	11.4	42.2	20.6	28.2	22	28	24	36	40	26	23	20	22
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**18/07/2010**	**25/07/2010**	**02/08/2010**	**09/08/2010**	**15/08/2010**	**22/08/2010**	**29/08/2010**	**05/09/2010**	**09/09/2010**	**16/09/2010**	**23/09/2010**	**07/10/2010**	**01/04/2011**	**07/04/2011**	**21/04/2011**	**25/04/2011**	**30/04/2011**	**06/05/2011**	**13/05/2011**	**21/05/2011**	**25/05/2011**
pH (field)	pH units	8.09	7.94	7.89	7.86	8.03	8.06	7.8	7.97	8.06	8.08	8.16	8.16									
pH (lab)	pH units	8.19	8.04	8.2	8.35	8.33	8.47	7.95	8.22	8.24	8.35	8.26	8.41	7.94	7.78	8.03	8.13	8.14	8.09	8.37	8.33	8.19
Hardness (from dissolved)	mg/L	363	371	480	482	474	475	439	442	463	448	446	403	215	219	313	288	220	227	302	323	347
Hardness (from total)	mg/L	358	415	537	533	458	432	415	455	452	467	425	448	218	231	335	306	236	237	292	321	404
Total Dissolved Solids	mg/L	580	560	630	610	640	650	640	640	780	420	610	550	450	520	370	390	320	290	380	430	480
Total Suspended Solids	mg/L	4	60	2	19	19	100	10	3	25	9	3	4	3	1	3	11	42	37	18	100	30
Alkalinity, total	mg/L	270	220	310	350	350	270	270	360	350	370	380	390	130	140	290	240	170	190	240	280	280
Sulphate, dissolved	mg/L	97	110	110	100	100	120	120	97	100	86	83	79	110	110	76	75	71	56	73	74	80
Chloride	mg/L	5.7	4.7	8.3	6.2	5.7	7.1	5.1	5.9	4.4	3.5	4.4	2.6	27	26	2.8	3	4.7	2.8	3.1	3.8	4.6
Fluoride	mg/L	0.35	0.42	0.39	0.37	0.36	0.44	0.4	0.4	0.39	0.41	0.37	0.37	1.19	1.24	0.4	0.38	0.42	0.35	0.38	0.38	0.4
Nitrite (N)	mg/L	0.074	0.142	0.06	0.068	0.114	0.61	0.068	0.044	0.051	0.033	0.016	0.012	0.57	0.56	0.017	0.04	0.058	0.029	0.026	0.077	0.025
Nitrate (N)	mg/L	23	22.8	29	23.5	23	32	27	19.3	8.9	15.1	10.4	7.7	23.3	30	4.9	6.6	7.8	4.8	6.5	6.8	8.6
Ammonia	mg/L		0.28	0.15	0.062	0.11	0.22	0.09	0.15	0.039	0.093	0.06	0.041	0.51	0.8	0.085	0.084	0.161	0.051	0.019	0.007	0.042
Aluminum, total	mg/L	0.103	1.41	0.084	0.437	0.539	2.56	0.139	0.132	0.912	0.106	0.107	0.13	0.086	0.032	0.222	0.473	1.52	0.846	0.514	2.19	0.669
Arsenic, total	mg/L	0.0006	0.0014	0.0006	0.0008	0.0009	0.0013	0.0007	0.0005	0.0005	0.0006	0.0006	0.0004	0.0004	0.0004	0.0003	0.0004	0.0007	0.0007	0.0007	0.0016	0.0009
Cadmium, total	mg/L	<0.0001	0.0002	0.0001	0.0002	0.0002	0.0002	<0.0001	0.0002	0.0001	0.0002	0.0002	0.0001	0.00005	0.00003	0.00009	0.0001	0.00011	0.00007	0.00013	0.0002	0.00005
Calcium, total	mg/L	94	111	149	142	119	120	116	109	110	109	99	101	63	65.4	78.3	76.1	60.3	58.3	72.7	77.1	91.5
Chromium, total	mg/L	<0.002	0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.001
Copper, total	mg/L	0.111	0.147	0.173	0.202	0.191	0.332	0.124	0.139	0.228	0.138	0.138	0.139	0.0445	0.0219	0.137	0.16	0.304	0.217	0.149	0.301	0.0856
Iron, total	mg/L	0.216	2.04	0.2	0.834	0.887	4.69	0.262	0.277	1.59	0.262	0.27	0.343	0.162	0.073	0.371	0.618	1.77	1.44	0.86	3.4	1.19
Lead, total	mg/L	<0.0002	0.0009	<0.0002	0.0003	0.0003	0.001	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0006	0.0005	0.0003	0.0014	0.0004
Magnesium, total	mg/L	30	34	40	43	39	32	30	44	43	47	43	47.5	14.7	16.5	34	28.1	20.7	22.1	26.9	31.3	42.7
Manganese, total	mg/L	0.618	0.648	1.02	0.994	0.882	0.871	0.594	0.753	0.758	0.694	0.677	0.66	0.211	0.126	0.348	0.399	0.365	0.233	0.35	0.779	0.19
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.01	0.014	0.011	0.01	0.009	0.013	0.01	0.008	0.008	0.007	0.007	0.006	0.035	0.04	0.006	0.008	0.014	0.009	0.008	0.007	0.011
Nickel, total	mg/L	0.002	0.009	0.003	0.003	0.003	0.004	0.001	0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.006	0.002
Phosphorus, total	mg/L													0.029	0.02	0.035	0.046	0.075	0.075	0.052	0.198	0.077
Potassium, total	mg/L	5	6	7	7	6	7	6	6	6	6	5	5.43	17.5	21.8	4.39	4.55	4.28	4.11	4.67	4.91	5.59
Selenium, total	mg/L	0.0047	0.0064	0.0069	0.0064	0.0053	0.0084	0.0051	0.0039	0.0039	0.003	0.0023	0.0022	0.0105	0.0131	0.0017	0.0021	0.0026	0.0018	0.0024	0.0023	0.003
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.00003	<0.00002	<0.00002	0.00006	0.00008	0.00016	0.00014	0.00007	0.00011	0.00004
Sodium, total	mg/L	21	23	27	26	25	20	22	26	26	28	26	28	59.9	60	24.4	20.6	16.5	16.3	18.9	20.1	26.1
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	0.015	<0.01	<0.01	<0.01	0.022	<0.01	<0.01	0.011	<0.01	<0.01	<0.005	0.008	<0.005	<0.005	<0.005	0.009	0.007	0.005	0.016	<0.005
Aluminum, dissolved	mg/L	0.013	<0.01	<0.01	0.012	0.01	0.011	<0.01	0.012	<0.01	<0.01	<0.01	0.008	0.017	0.005	0.003	0.006	0.008	0.01	0.01	0.014	0.008
Arsenic, dissolved	mg/L	0.0006	0.0007	0.0006	0.0007	0.0007	0.0007	0.0008	0.0007	0.0005	0.0006	0.0005	0.0005	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0005	0.0006	0.0006
Cadmium, dissolved	mg/L	<0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.00017	0.00005	0.00003	0.00007	0.00007	0.00006	0.00003	0.00007	0.00014	0.00003
Calcium, dissolved	mg/L	96	102	130	128	124	133	122	110	112	105	103	91.3	62.4	62.8	76	74.1	58.3	55.6	74.2	80.7	78.8
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.099	0.096	0.146	0.138	0.153	0.121	0.117	0.115	0.114	0.117	0.12	0.102	0.0169	0.0145	0.0844	0.0897	0.123	0.0775	0.11	0.133	0.0468
Iron, dissolved	mg/L	0.055	0.083	0.065	0.07	0.07	0.068	0.034	0.065	0.043	0.076	0.094	0.065	0.026	0.017	0.035	0.041	0.045	0.043	0.057	0.128	0.043
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	30	28	38	40	40	34	33	41	44	45	46	42.5	14.3	15.2	30	24.9	18	21.5	28.4	29.6	36.4
Manganese, dissolved	mg/L	0.654	0.506	0.962	0.884	0.875	0.822	0.618	0.687	0.733	0.659	0.691	0.588	0.203	0.119	0.314	0.361	0.288	0.173	0.331	0.658	0.134
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.011	0.014	0.011	0.01	0.009	0.014	0.011	0.009	0.008	0.007	0.007	0.005	0.035	0.036	0.005	0.007	0.011	0.008	0.007	0.008	0.01
Nickel, dissolved	mg/L	0.001	0.002	0.002	0.002	0.006	0.002	0.001	0.004	0.002	0.004	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001
Phosphorus, dissolved	mg/L													<0.01	<0.01	0.013	0.012	0.017	0.016	0.018	0.026	0.02
Potassium, dissolved	mg/L	5	5	7	7	6	7	6	5	7	6	6	4.8	16.2	21.3	4.03	3.78	3.56	3.84	4.46	4.45	4.75
Selenium, dissolved	mg/L	0.0054	0.0069	0.0071	0.0059	0.0059	0.0093	0.0055	0.0042	0.0043	0.003	0.0024	0.002	0.0109	0.0129	0.0018	0.0021	0.0026	0.0017	0.0025	0.0026	0.0026
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	0.00003	<0.00002	0.00003	0.00003	0.00002
Sodium, dissolved	mg/L	21	20	26	26	23	22	25	24	27	26	31	24.9	54.7	54.4	21.5	18.3	14.5	17.2	19.9	19.5	22.8
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		10/06/2011	17/06/2011	24/06/2011	30/06/2011	08/07/2011	15/07/2011	21/07/2011	31/07/2011	05/08/2011	08/08/2011	09/08/2011	10/08/2011	11/08/2011	12/08/2011	13/08/2011	14/08/2011	15/08/2011	16/08/2011	17/08/2011	18/08/2011	19/08/2011
pH (field)	pH units																					
pH (lab)	pH units	8.42	7.91	8.28	7.98	7.88	7.99	7.97	8.21	8.04	7.8	7.85	8.09	8.3	8.06	8.06	8	8.1	8.09	8.19	8.06	7.87
Hardness (from dissolved)	mg/L	383	676	391	319	377	350	371	437	405	397	380	372	423	381	375	384	387	376	411	407	691
Hardness (from total)	mg/L	415	758	358	299	379	368	385	389	430	362	362	336	357	358	367	381	369	376	366	378	694
Total Dissolved Solids	mg/L	490	990	480	410	510	470	550	550	520	570	540	550	540	640	640	620	630	660	700	580	1200
Total Suspended Solids	mg/L	35	170	25	49	44	270	43	3	19	30	16	13	12	15	7	7	94	70	10	8	21
Alkalinity, total	mg/L	330	360	330	280	310	300	270	310	280	240	240	250	260	280	280	290	300	300	310	300	250
Sulphate, dissolved	mg/L	71		63	55	85	73	100	97	94												
Chloride	mg/L	<0.5					3.5															
Fluoride	mg/L	0.41					0.34															
Nitrite (N)	mg/L	0.02	0.328	0.013	0.017	0.012	0.022	0.024	0.016	0.026	0.046	0.038	0.031	0.022	0.023	0.021	0.017	0.018	0.02	0.017	0.016	0.157
Nitrate (N)	mg/L	6.2	54	5.6	6.1	5.9	8.5	16.6	14.6	14.4	7.8	12.8	14.2	13.9	15.2	14.6	14	17.7	13.3	12.5	11.1	72
Ammonia	mg/L	0.029		0.032	0.019	0.04	0.008	0.024	0.042	0.043	0.022	0.009			0.039	0.043	0.038	0.035	0.038	0.042	0.018	0.076
Aluminum, total	mg/L	1.48	1.23	0.498	0.956	2.54	3.63	0.225	0.077	0.637	0.777	0.693	0.468	0.981	0.42	0.236	0.187	0.991	0.65	0.333	0.328	4.1
Arsenic, total	mg/L	0.0012	0.0008	0.0007	0.0009	0.0011	0.0028	0.0006	0.0005	0.0008	0.0007	0.0008	0.0007	0.0007	0.0006	0.0005	0.0005	0.0009	0.0007	0.0006	0.0005	0.001
Cadmium, total	mg/L	0.00012	0.00023	0.00013	0.00013	0.00018	0.00026	0.00015	0.00016	0.00017	0.00015	0.00015	0.00014	0.00013	0.00012	0.00014	0.00012	0.00016	0.00016	0.00012	0.00013	0.00036
Calcium, total	mg/L	90.5	225	78.7	68.1	82.9	86.8	91	88.1	94.5	89.5	88	81.7	84.8	87.4	87.9	93.7	89.1	88.8	86	84	209
Chromium, total	mg/L	0.003	0.001	0.001	0.001	0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.004
Copper, total	mg/L	0.121	0.334	0.0945	0.226	0.305	0.442	0.161	0.168	0.217	0.22	0.232	0.2	0.214	0.175	0.16	0.151	0.191	0.212	0.158	0.161	0.495
Iron, total	mg/L	2.43	2.53	0.95	1.68	4.18	5.82	0.339	0.203	0.834	1.25	1.01	0.755	1.44	0.689	0.415	0.377	1.69	1.27	0.508	0.488	10.1
Lead, total	mg/L	0.0007	0.0004	0.0005	0.0005	0.0009	0.002	<0.0002	<0.0002	0.0003	0.0003	0.0004	0.0002	0.0005	0.0003	<0.0002	<0.0002	0.0005	0.0004	<0.0002	<0.0002	0.0015
Magnesium, total	mg/L	46	47.8	39.3	31.2	41.7	36.8	38.3	41.1	47.1	33.6	34.5	32	35.1	33.8	35.9	35.7	35.6	37.6	36.8	40.8	41.6
Manganese, total	mg/L	0.398	1.42	0.194	0.438	0.557	0.689	0.416	0.438	0.447	0.335	0.35	0.337	0.357	0.36	0.374	0.368	0.427	0.433	0.384	0.373	1.08
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.008	0.012	0.006	0.006	0.006	0.006	0.008	0.006	0.008	0.008	0.009	0.008	0.007	0.007	0.007	0.006	0.007	0.007	0.007	0.007	0.005
Nickel, total	mg/L	0.004	0.003	0.003	0.003	0.002	0.007	0.001	0.001	0.002	0.003	0.002	0.001	0.002	0.002	0.002	0.001	0.003	0.002	0.002	0.002	0.005
Phosphorus, total	mg/L	0.099	0.127	0.058	0.115	0.167	0.521		0.038	0.058	0.054	0.046	0.037	0.095	0.039	0.036	0.035	0.086	0.071	0.035	0.045	0.494
Potassium, total	mg/L	5.6	8.25	4.6	4.52	5.76	5.74	5.8	5.09	6.51	5.84	5.79	4.96	5.17	4.75	4.73	4.61	4.86	5.12	4.86	5.14	9.1
Selenium, total	mg/L	0.002	0.0051	0.0019	0.0023	0.0031	0.0034	0.0064	0.0061	0.0073	0.0069	0.0074	0.0081	0.0074	0.0069	0.0067	0.0069	0.0063	0.0066	0.0059	0.0051	0.0134
Silver, total	mg/L	0.00004	0.00013	0.00004	0.00005	0.00012	0.00052	0.00002	<0.00002	0.00004	0.00005	0.00007	0.00005	0.00006	0.00003	0.00002	0.00002	0.00005	0.00005	0.00003	0.00003	0.00023
Sodium, total	mg/L	28.6	29.6	25.2	19.8	26.1	22.2	23.7	24.8	31.1	23.4	23.8	21.8	23.3	22.8	23.9	23.5	22.6	25	24.8	28.1	25.6
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00007
Zinc, total	mg/L	0.009	0.024	0.017	0.011	0.026	0.021	<0.005	<0.005	<0.005	0.007	0.01	0.005	0.008	0.007	0.009	<0.005	0.01	0.344	<0.005	0.006	0.054
Aluminum, dissolved	mg/L	0.025	0.062	0.008	0.016	0.013	0.014	0.016	0.013	0.03	0.015	0.019	0.022	0.011	0.012	0.008	0.009	0.009	0.01	0.007	0.007	0.028
Arsenic, dissolved	mg/L	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0.0006	0.0005
Cadmium, dissolved	mg/L	0.00014	0.00014	0.00008	0.00009	0.00012	0.0002	0.00013	0.00015	0.00018	0.00012	0.00012	0.00014	0.00012	0.00013	0.00012	0.00012	0.00013	0.00013	0.00012	0.00012	0.00015
Calcium, dissolved	mg/L	83.2	199	85.3	74.3	84.2	77.6	84.7	98.9	94.5	103	96.4	91.8	110	92	91.1	90.8	90.9	87.3	98.3	98.2	211
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.0678	0.193	0.0679	0.163	0.144	0.167	0.144	0.162	0.162	0.155	0.151	0.153	0.15	0.147	0.136	0.132	0.129	0.129	0.133	0.144	0.13
Iron, dissolved	mg/L	0.08	0.129	0.056	0.1	0.09	0.075	0.074	0.08	0.11	0.091	0.084	0.083	0.092	0.069	0.069	0.061	0.056	0.057	0.058	0.056	0.055
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0002
Magnesium, dissolved	mg/L	42.5	43.5	43.2	32.4	40.6	37.9	38.7	46.2	41.1	34.1	33.7	34.8	35.7	36.7	35.9	38.2	38.8	38.4	40.2	39.4	39.7
Manganese, dissolved	mg/L	0.289	1.18	0.17	0.378	0.351	0.441	0.403	0.487	0.403	0.296	0.312	0.333	0.336	0.385	0.375	0.397	0.394	0.409	0.393	0.402	0.79
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.008	0.011	0.006	0.006	0.005	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.006	0.006
Nickel, dissolved	mg/L	0.001	0.003	0.001	0.001	0.002	0.003	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.002
Phosphorus, dissolved	mg/L	0.026	0.038	0.019	0.031	0.033	0.042		0.031	0.03	0.026	0.025	0.025	0.024	0.024	0.021	0.026	0.023	0.025	0.021	0.025	0.029
Potassium, dissolved	mg/L	5.15	6.85	4.96	4.6	5.11	5.34	5.3	5.69	5.36	5.14	5.14	5.09	5.35	5.48	5.09	5.28	5.37	5.27	5	4.95	6.26
Selenium, dissolved	mg/L	0.0018	0.005	0.002	0.0026	0.003	0.0038	0.0073	0.0067	0.0073	0.0083	0.0082	0.0084	0.0111	0.0086	0.0079	0.0072	0.007	0.0069	0.0068	0.0063	0.014
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	27.4	27.9	28	20.9	25.3	24.3	24.3	28.5	27.2	23.9	23.7	23.6	24.2	25.2	24.2	25.1	25.5	26.3	26.8	26.4	28.2
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	0.014	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	0.006

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**20/08/2011**	**21/08/2011**	**27/08/2011**	**03/09/2011**	**10/09/2011**	**16/09/2011**	**23/09/2011**	**30/09/2011**	**08/10/2011**	**08/11/2011**	**21/11/2011**	**28/11/2011**	**05/12/2011**	**20/09/2012**	**25/09/2012**	**12/10/2012**	**19/10/2012**	**25/10/2012**	**05/11/2012**	**09/11/2012**	**18/11/2012**
pH (field)	pH units				7.68	7.64	7.59	7.66	7.62	7.6	7.64				7.49	7.3	7.35	7.52	8.2		8.2	7.48
pH (lab)	pH units	8.22	8.3	7.93	8.37	8.18	8.07	8.2	8.21	8.24	8.26	8.09	8.24	7.77	7.87	8.2	7.92	7.92	8.05	8.35	8.19	8.23
Hardness (from dissolved)	mg/L	377	405	421	407	450	418	401	414	483	448	465	406	422	470	434		428	450	509	477	482
Hardness (from total)	mg/L	354	375	392	350	412	368	376	381	411	411	424	392	369	423	470	502	452	447	472	471	432
Total Dissolved Solids	mg/L	540	550	520	540	560	510	530	500	510	518	524	524	506	752	584	576	556	752	602	796	650
Total Suspended Solids	mg/L	7	6	5	2	1	2	7	<4	1	10.6	6.3	2.4	<4.0	23.3	5.1	20.3	34.6	19.9	8.2	8.8	12
Alkalinity, total	mg/L	310	310	320	350	360	360	370	370	370	380	394	393	392	358	332	370	391	381	406	296	429
Sulphate, dissolved	mg/L			91			87	85	85				92.3	83.3	131	150	107	97.4	118	110	179	94.4
Chloride	mg/L				3.8	4.6	3.2	2.9	3.8	3.8	3.4	3.8	3.3	3.2	4.7	4.6	3.5	2.9	3.8	3.6	6.7	3.3
Fluoride	mg/L												0.43		0.49	0.42	0.41	0.36	0.42	0.42	0.54	0.39
Nitrite (N)	mg/L	0.015	0.013	0.015	0.006	0.005	0.007	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.007	0.0233	0.0373	0.0111	0.0114	0.0136	0.0108	0.036	0.0075
Nitrate (N)	mg/L	9.9	9.7	12.1	7	8.8	7.7	6.3	5.3	5.5	6.07	5.29	4.37	3.54	12.4	24.9	9.41	6	13.5	9.8	33.3	5.56
Ammonia	mg/L	0.02	0.013	0.048	0.042	0.032	0.019	0.028	0.055	0.009	0.0273	0.0222	0.028	0.0351	0.11	0.041	0.03	0.051	0.037	0.024	0.031	0.02
Aluminum, total	mg/L	0.148	0.167	0.203	0.042	0.043	126	0.049	0.047	0.029	0.195	0.079	0.077	0.058	0.707	0.596	0.465	0.101	0.179	0.208	0.21	0.27
Arsenic, total	mg/L	0.0005	0.0007	0.0006	0.0004	0.0004	0.4	0.0004	0.0004	0.0003	0.0005	0.0003	0.0003	0.0003	0.00064	0.00059	0.00053	0.00042	0.00049	0.00047	0.000413	0.00034
Cadmium, total	mg/L	0.0001	0.00012	0.00014	0.00009	0.00009	0.14	0.00012	0.00007	0.00008	0.00017	0.00014	0.0001	0.00009	0.000174	0.00013	0.000154	0.000117	0.000083	0.00015	0.000129	0.000121
Calcium, total	mg/L	80.8	87.5	90.9	75.9	87.2	78.3	73.2	81	87.6	78.2	83.6	76.1	72.1	95.6	98.3	105	93.7	90.9	101	103	87.8
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<1	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	0.02	0.00024	<0.0010
Copper, total	mg/L	0.142	0.151	0.175	0.103	0.108	124	0.141	0.0986	0.0989	0.146	0.145	0.147	0.145	0.184	0.23	0.176	0.118	0.109	0.1	0.133	0.133
Iron, total	mg/L	0.262	0.321	0.429	0.107	0.106	264	0.127	0.118	0.1	0.373	0.229	0.21	0.186	1.31	1.28	0.909	0.23	0.433	0.436	0.503	0.591
Lead, total	mg/L	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.4	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00034	0.00058	0.00054	<0.00020	<0.00020	0.00033	0.00032	0.00027
Magnesium, total	mg/L	37	38.1	40.2	39.1	47.3	41.9	46.9	43.5	46.7	52.3	52.4	49.1	45.8	44.7	54.6	58.3	53	53.4	53.5	51.6	51.8
Manganese, total	mg/L	0.345	0.347	0.39	0.264	0.298	314	0.308	0.226	0.233	0.303	0.359	0.351	0.34	0.478	0.487	0.459	0.421	0.365	0.358	0.379	0.351
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molybdenum, total	mg/L	0.006	0.006	0.007	0.005	0.005	5	0.006	0.005	0.004	0.005	0.005	0.005	0.004	0.007	0.0064	0.0085	0.0072	0.0066	0.0075	0.00801	0.0063
Nickel, total	mg/L	0.001	0.001	0.001	<0.001	0.001	2	0.001	0.001	<0.001	0.002	<0.001	0.001	<0.001	0.0053	0.0023	0.0013	0.0012	0.0013	0.0109	0.000744	<0.0010
Phosphorus, total	mg/L	0.035	0.03		0.023	0.023	28	0.025	0.021	0.016	0.047	0.03	0.019	0.022	0.078	0.161	0.128	0.046	0.043	0.043		0.047
Potassium, total	mg/L	4.63	4.87	4.68	4.24	4.62	4.62	4.64	4.08	4.2	4.66	4.97	4.33	4.01	5.14	5.42	5.82	5.11	5.01	5.2	5.22	4.49
Selenium, total	mg/L	0.0045	0.0048	0.0056	0.0037	0.0036	3.2	0.0027	0.0022	0.0026	0.0024	0.0026	0.002	0.0019	0.00589	0.00523	0.0052	0.00482	0.00424	0.00526	0.00699	0.00419
Silver, total	mg/L	0.00002	0.00002	0.00003	<0.00002	<0.00002	<0.02	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	0.000021	<0.000040	0.000039	0.000021	<0.000020	0.0001	0.000013	0.000023
Sodium, total	mg/L	24.4	25.1	25.8	25.6	29.8	26.5	30.1	26.7	28.6	32.5	31.8	30.2	28.3	28.2	34.1	37.1	32.3	33.1	33.3	32.4	31.3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.05	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050	0.000015	<0.000050
Zinc, total	mg/L	<0.005	<0.005	0.006	<0.005	<0.005	9	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	1.65	1.14	1.85	1.33	0.446	1.94	1.86	0.928
Aluminum, dissolved	mg/L	0.009	0.008	0.006	0.008	0.007	0.005	0.012	0.014	0.011	0.0065	0.0125	0.0126	0.011	0.0159	0.004		0.0051	0.0042	0.157	0.00262	0.004
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0004	0.0004	0.0004	0.0003	0.0004	0.0003	0.0004	0.0003	0.00035	0.00033	0.00025	0.00038	0.00039		0.00036	0.00038	0.00043	0.000288	0.0003
Cadmium, dissolved	mg/L	0.00011	0.00011	0.00015	0.00009	0.0001	0.00011	0.00012	0.00007	0.00009	0.000114	0.000284	0.000128	0.000098	0.000168	0.000123		0.000104	0.000089	0.000102	0.000142	0.000119
Calcium, dissolved	mg/L	89.6	94.2	98.3	91.6	96.4	88.1	85	86.5	107	88.9	91.6	83.4	82.6	105	93.5		89.8	92.4	119	105	97.6
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	0.0001	<0.0010
Copper, dissolved	mg/L	0.129	0.134	0.146	0.102	0.103	0.124	0.125	0.104	0.108	0.112	0.141	0.123	0.136	0.126	0.0959		0.0804	0.0843	0.136	0.0998	0.0928
Iron, dissolved	mg/L	0.05	0.046	0.054	0.036	0.033	0.033	0.05	0.042	0.045	0.0249	0.0678	0.0515	0.0488	0.075	0.0312		0.0388	0.0419	0.336	0.022	0.031
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	0.00033	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	0.00021	0.000013	<0.00020
Magnesium, dissolved	mg/L	37.3	41.2	42.7	43.2	51	48.1	45.8	48	52.6	55	57.4	47.9	52.4	50.4	48.7		49.5	53.2	51.5	52.4	54.8
Manganese, dissolved	mg/L	0.355	0.366	0.375	0.302	0.325	0.334	0.323	0.252	0.251	0.285	0.379	0.341	0.353	0.468	0.431		0.386	0.362	0.36	0.36	0.345
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molydenum, dissolved	mg/L	0.006	0.007	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.0055	0.0053	0.0048	0.0047	0.0085	0.007		0.0067	0.0074	0.0093	0.00875	0.0076
Nickel, dissolved	mg/L	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.0019	<0.0010		<0.0010	<0.0010	<0.0010	0.000677	<0.0010
Phosphorus, dissolved	mg/L	0.022	0.022		0.021	0.023	0.019	0.023	0.016	0.02	0.017	0.023	0.019	0.012	0.019	0.022		0.022	0.021	0.058		0.02
Potassium, dissolved	mg/L	4.03	5.05	5.26	4.7	5	4.65	4.41	4.5	4.87	4.8	4.9	4.78	4.41	5.46	5.22		4.94	4.84	5.34	5.14	4.95
Selenium, dissolved	mg/L	0.0051	0.0049	0.0057	0.0036	0.0041	0.0034	0.0031	0.0026	0.003	0.00297	0.00278	0.00237	0.00216	0.00763	0.00522		0.00474	0.00577	0.0093	0.00785	0.00544
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	0.000007	<0.000020
Sodium, dissolved	mg/L	24.2	27.4	28	28.7	32.2	30.6	31.6	29.7	33.2	34.3	35.8	28.3	32.2	32.8	31.2		30.9	33.6	33.6	33.9	34
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	0.000007	<0.000050
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.0050	0.0058	<0.0050	<0.0050	2.12	1.89		1.13	0.791	3.76	1.87	1.31

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**11/12/2012**	**28/12/2012**	**02/01/2013**	**09/01/2013**	**14/01/2013**	**22/01/2013**	**03/02/2013**	**07/02/2013**	**13/02/2013**	**21/02/2013**	**27/02/2013**	**04/03/2013**	**14/03/2013**	**19/03/2013**	**29/03/2013**	**01/04/2013**	**06/04/2013**	**13/04/2013**	**17/04/2013**	**25/04/2013**	**02/05/2013**
pH (field)	pH units	7.47		7.36	7.58	7.54	7.75						7.53	7.54	7.41	7.73	7.48	7.74	7.7	7.2	7.2	8.01
pH (lab)	pH units	8.27	8.19	8.27	7.97	8.04	8.41	8.14	8.05	7.95	8.08	8.16	8.23	8.25	8.24	8.15	7.95	8.22	8.07	7.81	8.18	8.02
Hardness (from dissolved)	mg/L	487	461	446	451	435	462	449	463	450	475	461	472	501	507	488	519	627	510	1190	607	433
Hardness (from total)	mg/L	470	442	453	434	484	446	461	466	428	457	454	464	522	496	485	497	606	526	642	482	494
Total Dissolved Solids	mg/L	628	448	530	570	566	578	552	578	564	628	542	578	568	580	612	628	722	670	2810	588	598
Total Suspended Solids	mg/L	15.7	24.9	4.9	<4.0	9	10.7	12.2	14.6	1.2	3.6	13.5	3.8	18.9	37.3	6.3	11.8	4.5	16.6	28.8	12.2	39.5
Alkalinity, total	mg/L	435	434	445	443	440	447	451	450	444	446	452	461	460	466	482	499	557	490	498	494	403
Sulphate, dissolved	mg/L	90.1	96.4	86.6	93.4	85.1	87.4	87	88	99.6	89.4	81.5	78.1	87.5	87.9	89.1	92	123	104	102	90.4	84.1
Chloride	mg/L	2.9	2.8	2.9	3.2	2.7	2.8	2.8	3	3.2	2.7	2.6	2.7	3.1	3	3.6	4.4	6.4	3.8	1300	180	22
Fluoride	mg/L	0.4	0.38	0.38	0.39	0.38	0.37	0.38	0.39	0.34	0.38	0.35	0.37	0.37	0.33	0.39	0.37	0.4	0.37	0.34	0.4	0.38
Nitrite (N)	mg/L	0.0085	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0112	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	0.005	<0.050	0.0054	0.0275	0.0237	0.0323
Nitrate (N)	mg/L	4.17	3.23	3.04	2.49	2.56	2.45	2.18	2.5	3.44	2.19	1.63	1.73	1.71	1.87	2.06	2.61	6.58	1.64	3.06	3.1	1.8
Ammonia	mg/L	0.012	0.014	0.11	0.03	0.036	0.063	0.086	0.066	0.068	0.18	0.086	0.058	0.042	0.054	0.094	0.031	0.089	0.057	0.14	0.041	0.065
Aluminum, total	mg/L	0.197	0.929	0.749	0.0843	0.353	0.61	0.25	0.376	0.266	0.0663	0.0588	0.0303	0.0556	0.184	1.32	0.106	0.534	0.196	2.29	0.277	3.72
Arsenic, total	mg/L	0.00033	0.0004	0.00046	0.00023	0.0004	0.00043	0.00036	0.00039	0.00024	0.00025	0.00025	0.00021	0.00025	0.00025	0.00057	0.00052	0.00068	0.00054	0.00175	0.00053	0.00195
Cadmium, total	mg/L	0.000094	0.000136	0.000124	0.000102	0.000097	0.000087	0.000128	0.000083	0.000102	0.000111	0.000096	0.000139	0.000102	0.000126	0.000144	0.000117	0.000108	0.000118	0.000153	0.000129	0.000141
Calcium, total	mg/L	88.8	82.1	82.8	81.4	81.7	80.5	79.7	78.8	75.5	82.6	77.4	82.6	105	86.7	89.5	97	139	113	157	104	108
Chromium, total	mg/L	<0.0010	0.0013	0.0017	<0.0010	<0.0010	0.0016	<0.0010	0.0016	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	0.001	0.0029	<0.0010	0.0018	<0.0010	0.0064	0.0011	0.0088
Copper, total	mg/L	0.124	0.206	0.228	0.122	0.146	0.214	0.177	0.172	0.153	0.134	0.114	0.144	0.15	0.189	0.494	0.146	0.21	0.179	0.142	0.129	0.203
Iron, total	mg/L	0.41	2.11	1.73	0.268	0.691	1.25	0.573	0.801	0.591	0.225	0.174	0.141	0.21	0.474	3.16	0.435	2	0.558	3.99	0.622	5.47
Lead, total	mg/L	<0.00020	0.00093	0.00104	<0.00020	0.00036	0.00097	0.00035	0.00072	0.00047	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	0.00118	<0.00020	0.00048	0.00026	0.00104	<0.00020	0.00179
Magnesium, total	mg/L	60.2	57.6	59.8	56.1	68	59.5	63.7	65.4	58	61	63.3	62.6	63.2	67.8	63.5	62	62.9	59.4	60.6	53.8	54.7
Manganese, total	mg/L	0.34	0.34	0.321	0.282	0.296	0.299	0.314	0.293	0.279	0.313	0.296	0.348	0.346	0.417	0.566	0.599	1.04	0.966	0.849	1.11	1.28
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0056	0.0046	0.0045	0.0041	0.004	0.0038	0.004	0.0034	0.003	0.0034	0.0033	0.0042	0.0072	0.0039	0.0037	0.0029	0.0054	0.0048	0.0071	0.0067	0.0062
Nickel, total	mg/L	0.0013	<0.0010	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	0.0011	0.0016	<0.0010	0.0064	0.0015	0.0088
Phosphorus, total	mg/L	0.023	0.101	0.159	0.02	0.042	0.091	0.046	0.053	0.043	0.023	0.018	0.016	0.016	0.03	0.21	0.046	0.099	0.068	0.103	0.042	0.128
Potassium, total	mg/L	4.73	4.75	4.94	4.4	5.24	5.62	5.04	4.78	4.24	4.5	4.3	4.59	5.13	4.83	4.95	4.66	5.79	5.36	5.55	5.29	6.31
Selenium, total	mg/L	0.00336	0.00211	0.00216	0.00216	0.00205	0.00174	0.00212	0.0015	0.00166	0.0018	0.00174	0.00187	0.003	0.00209	0.00166	0.00153	0.0026	0.00178	0.00178	0.00178	0.0018
Silver, total	mg/L	<0.000020	0.000023	0.000037	<0.000020	0.000022	0.000038	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000136	0.00002	<0.000020	<0.000020	0.000078	0.000021	0.0002
Sodium, total	mg/L	36.3	33	34.5	32.8	39.7	33.1	35.3	37.3	32.3	33.7	35	35.1	36.6	36.6	34	33.7	34	35.2	37	32.5	32
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000058	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000053
Zinc, total	mg/L	0.811	1.95	1.92	0.918	1.14	2.42	1.9	1.3	1.67	1.35	1.28	2.66	5.39	1.13	3.99	1.33	2.49	1.93	0.909	0.465	2.9
Aluminum, dissolved	mg/L	0.0071	0.004	0.0159	<0.0030	0.0034	0.0097	<0.0030	0.004	0.0051	<0.0030	0.0032	<0.0030	<0.0030	0.0031	<0.0030	0.0139	0.0065	0.0031	<0.0030	0.0113	0.0052
Arsenic, dissolved	mg/L	0.00039	0.00029	0.00036	0.00027	0.00026	0.0003	0.00026	0.00026	0.00027	0.00026	0.00027	0.00027	0.00014	0.00023	0.00029	0.00054	0.00094	0.00047	0.00057	0.00055	0.00051
Cadmium, dissolved	mg/L	0.000112	0.000088	0.000128	0.000106	0.000081	0.000103	0.000101	0.000082	0.000111	0.000117	0.000099	0.000119	0.000115	0.000135	0.00013	0.000112	0.000161	0.000084	0.000254	0.000142	0.000103
Calcium, dissolved	mg/L	91.2	83.7	84.7	77.6	78.6	84.1	76.7	83.8	87	83.3	80.5	84.1	93.3	92.7	88.9	104	153	109	333	135	97.6
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0878	0.0965	0.0899	0.103	0.0894	0.114	0.111	0.0897	0.106	0.112	0.097	0.12	0.114	0.132	0.12	0.0995	0.122	0.103	0.0773	0.125	0.0832
Iron, dissolved	mg/L	0.0366	0.0273	0.0482	0.0204	0.0257	0.0509	0.0248	0.0367	0.0323	0.0359	0.032	0.0354	0.0361	0.0395	0.0504	0.0715	0.098	0.0629	0.152	0.104	0.0913
Lead, dissolved	mg/L	<0.00020	<0.00020	0.0002	<0.00020	0.00048	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	63	61.1	57	62.5	57.9	61.2	62.5	61.6	59.9	64.9	63	63.7	65	66.9	64.6	62.7	59.3	57.5	86.2	65.4	46
Manganese, dissolved	mg/L	0.326	0.307	0.267	0.309	0.267	0.304	0.302	0.273	0.3	0.313	0.29	0.33	0.311	0.412	0.51	0.577	0.991	0.883	1	1.31	0.864
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0056	0.0049	0.0046	0.0043	0.0041	0.0042	0.004	0.0035	0.0045	0.0034	0.0033	0.0044	0.0044	0.0034	0.0035	0.0038	0.006	0.005	0.0071	0.0068	0.0052
Nickel, dissolved	mg/L	0.002	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	0.0021	0.0013	<0.0010
Phosphorus, dissolved	mg/L	0.012	0.013	0.13	0.013	0.019	0.013	0.014	0.028	0.012	0.013	0.011	0.014	<0.01	<0.01	0.017	0.033	0.048	0.031	0.022	0.019	0.033
Potassium, dissolved	mg/L	4.69	4.69	4.97	4.86	4.49	5.56	4.68	4.81	4.73	4.73	4.46	4.76	4.88	5.3	4.85	5.18	5.52	4.99	7.58	5.56	5.15
Selenium, dissolved	mg/L	0.00305	0.00237	0.00252	0.00215	0.0021	0.00198	0.00202	0.00166	0.00223	0.00185	0.00174	0.00215	0.00272	0.00159	0.00182	0.00181	0.00333	0.00185	0.00181	0.00171	0.00194
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.00003	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000034	<0.000020
Sodium, dissolved	mg/L	37.6	36.2	34.3	36.1	34.5	34.1	36	34.3	34.3	36.3	34.6	35.9	36.1	37.6	35.6	34.6	33.1	34.1	59.5	36.2	29.8
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	0.739	0.75	0.697	0.885	1.15	2.14	1.42	0.505	1.97	1.28	1.28	2.39	3.08	0.753	1.07	1.55	1.23	1.35	2.19	3.36	0.593

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**12/05/2013**	**17/05/2013**	**25/05/2013**	**30/05/2013**	**08/06/2013**	**15/06/2013**	**18/06/2013**	**24/06/2013**	**01/07/2013**	**11/07/2013**	**19/07/2013**	**23/07/2013**	**31/07/2013**	**09/08/2013**	**15/08/2013**	**19/08/2013**	**26/08/2013**	**02/09/2013**	**12/09/2013**	**17/09/2013**	**28/09/2013**
pH (field)	pH units	7.4	7.5	8.63	7.35	7.01	6.2	8	8	7.28	8	7.37	8.5	7.36	7.27	7.8	7.41	7.34	7.29	7.15	7.12	7
pH (lab)	pH units	7.64	7.92	7.99	8.07	7.86	8.13	8.17	8.35	8.29	8.06	8.08	8.21	8.11	7.98	8.29	8.04	8.17	7.82	8.17	7.8	8.14
Hardness (from dissolved)	mg/L	85.2	236	325	357	368	366	392	434	460	421	477	579	411	436	477	512	471	452	494	456	430
Hardness (from total)	mg/L	96	250	383	407	363	425	426	474	462	454	515	584	442	508	481	506	501	494	512	553	428
Total Dissolved Solids	mg/L	174	316	464	502	486	564	666	766	612	668	746	566	568	784	688	658	706	706	680	744	620
Total Suspended Solids	mg/L	165	8.9	49.3	19	24.8	9.3	17.2	17	5.3	9.1	2.5	4.7	14.9	6.7	5.7	9.9	6.1	2.2	3.8	6.4	4.9
Alkalinity, total	mg/L	64.3	176	269	255	312	327	345	358	359	359	369	309	266	323	347	349	347	306	316	328	307
Sulphate, dissolved	mg/L	6.15	69.3	96.6	97.8	104	111	125	131	144	146	148	136	143	154	151	150	169	138	165	164	154
Chloride	mg/L	2.3	7.6	6.9	6.9	6.8	7.8	13	7.3	9.1	8.6	9.2	9	7.7	7.9	7.7	8.7	9	7.7	11	9.9	8.8
Fluoride	mg/L	0.24	0.37	0.41	0.44	0.41	0.41	0.43	0.42	0.42	0.42	0.47	0.45	0.53	0.5	0.48	0.48	0.44	0.45	0.48	0.5	0.46
Nitrite (N)	mg/L	<0.0050	0.0152	0.0082	0.0091	0.0189	0.0117	0.0622	0.0201	0.0099	0.009	0.0244	<0.050	0.0063	<0.050	<0.0050	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	0.01
Nitrate (N)	mg/L	0.534	2.38	3.48	3.4	4.23	4.03	5.74	7.45	8.75	8.8	11.2	9.1	18.4	12.3	11.3	11.1	13.3	15.2	14	12	9.39
Ammonia	mg/L	0.081	0.037	0.042	0.038	0.025	0.03	0.034	0.0106	0.032	0.019	0.032	0.082	0.34	0.03	1.6	0.03	0.024	0.03	0.0153	0.02	0.022
Aluminum, total	mg/L	2.25	0.292	0.239	0.106	0.276	0.0797	0.535	0.296	0.0367	0.166	0.0549	0.0451	0.183	3.76	0.0698	0.188	0.0552	0.059	0.665	0.139	0.212
Arsenic, total	mg/L	0.00078	0.00074	0.00049	0.00054	0.0007	0.0006	0.00073	0.00061	0.00051	0.0005	0.00047	0.00057	0.0006	0.00184	0.00053	0.00055	0.00045	0.00063	0.00078	0.00074	0.00056
Cadmium, total	mg/L	0.000067	0.000098	0.000236	0.000182	0.00014	0.000151	0.000118	0.000158	0.000194	0.000133	0.000263	0.000305	0.000164	0.000197	0.000142	0.000128	0.000142	0.000116	0.000144	0.000097	0.000105
Calcium, total	mg/L	28	64	92.6	101	82.3	93.9	93.5	101	108	101	119	149	104	118	110	122	118	123	123	134	104
Chromium, total	mg/L	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0062	<0.0010	<0.0010	<0.0010	<0.0010	0.0019	<0.0010	<0.0010
Copper, total	mg/L	0.399	0.186	0.211	0.186	0.173	0.162	0.182	0.138	0.139	0.129	0.147	0.178	0.142	0.337	0.121	0.115	0.115	0.122	0.168	0.109	0.109
Iron, total	mg/L	3.21	0.603	0.605	0.376	0.528	0.253	0.984	0.561	0.177	0.374	0.194	0.198	0.392	6.67	0.182	0.327	0.183	0.238	1.42	0.318	0.562
Lead, total	mg/L	0.00111	0.00025	<0.00020	<0.00020	0.00026	<0.00020	0.00054	0.0003	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00231	<0.00020	<0.00020	<0.00020	<0.00020	0.0006	<0.00020	0.00024
Magnesium, total	mg/L	6.36	21.8	37	37.4	38.1	46.4	46.7	54.1	46.5	49	52.9	51.3	44.5	51.8	50.1	49	50.3	45.3	49.8	53	40.7
Manganese, total	mg/L	0.145	0.51	0.786	0.74	0.465	0.561	0.519	0.469	0.499	0.403	0.468	0.62	0.422	0.534	0.362	0.329	0.387	0.312	0.369	0.371	0.367
Mercury, total	mg/L	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0039	0.0083	0.0093	0.0088	0.0062	0.0075	0.0072	0.0065	0.0087	0.0073	0.0109	0.0123	0.0125	0.0112	0.011	0.0111	0.0099	0.0119	0.0132	0.013	0.0107
Nickel, total	mg/L	0.0018	0.0014	0.0013	0.0012	0.0012	0.0013	0.0018	0.0015	<0.0010	0.0012	0.0014	0.001	0.001	0.0057	<0.0010	<0.0010	<0.0010	0.0011	0.0013	0.0012	0.0028
Phosphorus, total	mg/L	0.154	0.059	0.05	0.042	0.053	0.04	0.065	0.051	0.033	0.035	0.027	0.031	0.042	0.24	0.025	0.033	0.034	0.047	0.095	0.054	0.064
Potassium, total	mg/L	3.25	4.12	5.03	4.81	5.21	5.09	5.6	6	5.33	5.37	5.7	6.06	6.03	6.39	5.33	5.34	5.51	5.68	5.66	6.14	4.97
Selenium, total	mg/L	0.00104	0.00338	0.00459	0.00495	0.0042	0.004	0.00486	0.00567	0.0084	0.00825	0.0112	0.0122	0.0113	0.0122	0.0133	0.0167	0.0137	0.0155	0.0154	0.015	0.0116
Silver, total	mg/L	0.000119	0.000031	0.00003	0.000021	<0.000020	0.000052	<0.000020	0.000058	<0.000020	<0.000020	0.000038	<0.000020	<0.000020	0.000181	<0.000020	<0.000020	<0.000020	0.00002	0.000024	0.000027	0.00002
Sodium, total	mg/L	5.56	15.3	24.9	25.7	25.9	31.4	31.5	34.5	32.6	33.3	36.6	37.4	28.5	35.7	34.2	32.7	34	33	34.2	36.2	29.8
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.00006	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.578	0.611	1.27	1.97	0.893	1.6	1.66	1.7	1.11	0.596	3.47	3.49	0.501	2.9	0.711	1.84	0.697	0.837	2.06	0.393	0.699
Aluminum, dissolved	mg/L	0.0541	0.0177	0.0077	0.0063	0.0063	0.0058	0.0178	0.0058	0.0083	0.0051	0.007	0.007	0.0086	0.0046	0.0042	0.07	0.0041	0.0046	0.0043	0.0037	0.0052
Arsenic, dissolved	mg/L	0.00056	0.00057	0.0006	0.00056	0.00059	0.00054	0.00045	0.00045	0.00044	0.00042	0.00033	0.00054	0.0005	0.00046	0.00042	0.00046	0.00043	0.00056	0.00055	0.00052	0.00049
Cadmium, dissolved	mg/L	0.00005	0.000107	0.000113	0.000179	0.000154	0.000112	0.000127	0.000164	0.000153	0.000153	0.000236	0.000305	0.00015	0.000137	0.00013	0.000154	0.000131	0.00012	0.000094	0.00009	0.000129
Calcium, dissolved	mg/L	24.6	59.4	80.8	86.3	83	82.9	86.3	98	106	92.5	113	155	99.3	103	113	126	110	110	123	113	102
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.236	0.159	0.111	0.15	0.142	0.108	0.114	0.104	0.0967	0.0912	0.121	0.157	0.111	0.0769	0.0942	0.0898	0.0919	0.0999	0.084	0.0788	0.0874
Iron, dissolved	mg/L	0.153	0.144	0.11	0.149	0.0927	0.0791	0.0856	0.0503	0.0899	0.0573	0.061	0.073	0.0775	0.043	0.0627	0.227	0.0626	0.0633	0.0576	0.0598	0.0645
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	5.76	21.3	30	34.4	39.1	38.5	42.9	45.9	47.5	46.1	47	46.8	39.7	43.6	47	47.8	47.9	43.2	45.7	42.2	42.5
Manganese, dissolved	mg/L	0.0817	0.465	0.47	0.691	0.571	0.411	0.46	0.41	0.455	0.381	0.419	0.578	0.35	0.354	0.336	0.314	0.36	0.296	0.32	0.314	0.419
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0034	0.0087	0.0072	0.0078	0.0071	0.0061	0.0065	0.0077	0.0073	0.0078	0.0095	0.0112	0.0124	0.011	0.0106	0.0101	0.0105	0.0103	0.0125	0.0107	0.0098
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.049	0.038	0.049	0.032	0.03	0.033	0.042	0.031	0.025	0.02	0.018	0.012	0.027	0.033	0.023	0.023	0.027	0.04	0.035	0.036	0.034
Potassium, dissolved	mg/L	2.44	4.3	5.01	4.83	5.16	5.02	4.98	5.21	5.63	4.8	5.4	5.94	5.33	5.23	5.13	5.23	5.29	5.11	6.62	4.97	4.75
Selenium, dissolved	mg/L	0.00127	0.00337	0.00376	0.00487	0.00418	0.0041	0.00432	0.00587	0.00832	0.00934	0.0108	0.0129	0.0115	0.0125	0.0141	0.018	0.0137	0.0151	0.0159	0.0139	0.0104
Silver, dissolved	mg/L	0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000043	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000022	<0.000020	<0.000020
Sodium, dissolved	mg/L	5.18	15.8	23.8	24.1	26.8	26.6	29.2	31.4	32.6	31	32	32.4	27.9	31.4	32.1	33.1	32.2	31.1	33	29	28.6
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	0.191	0.176	0.312	1.14	1.09	0.587	1.58	2.2	0.665	0.588	3.19	3.88	0.32	0.998	0.598	1.86	0.6	0.723	1.02	0.297	0.314

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**04/10/2013**	**09/10/2013**	**17/10/2013**	**22/10/2013**	**29/10/2013**	**02/11/2013**	**07/11/2013**	**15/11/2013**	**19/11/2013**	**29/11/2013**	**06/12/2013**	**09/12/2013**	**16/12/2013**	**23/12/2013**	**02/01/2014**	**07/01/2014**	**17/01/2014**	**21/01/2014**	**28/01/2014**	**03/02/2014**	**13/02/2014**
pH (field)	pH units		7.09	7.29	7.31	7.2	7.31	7.46	8.03	7.55	7.53	7.72	7.86	6.41	7.57	7.55	7.78	7.59	7.61	7.51	7.68	7.55
pH (lab)	pH units	8.11	8.02	8.41	8.08		8	8.2	8.3	8.19	8	7.96	8.17	8.16	8.2	8.1	8.26	7.96	8.36	8.26	8.1	8.13
Hardness (from dissolved)	mg/L	437	508	473	508		521	530	581	497	587	588	538	506	537	500	510	507	536	567	528	501
Hardness (from total)	mg/L	486	528	511	510		574	548	604	468	645	571	563	498	504	507	528	521	509	569	563	535
Total Dissolved Solids	mg/L	624	672	666	634		658	756	782	768	652	782	706	646	628	612	610	642	672	564	660	670
Total Suspended Solids	mg/L	17.1	7.4	14.3	4.1		21.7	7.2	4.6	13.2	11.4	4.4	22.5	6.9	2.7	8.6	5.8	14.2	10.6	11	28.8	7.7
Alkalinity, total	mg/L	312	329	331	349		362	366	357	282		383	469	468	463	444	454	478	473	476	481	490
Sulphate, dissolved	mg/L	146	150	176	163		150	172	225	218	195	198	139	121	117	109	115	114	126	123	112	115
Chloride	mg/L	9.3	9.9	11	10		10	11	16	17	11	15	9.2	6.7	5.7	4.9	5.7	6.3	6.1	6.3	5.6	5.7
Fluoride	mg/L	0.51	0.46	0.54	0.49		0.45	0.47	0.51	0.54	0.41	0.49	0.43	0.42	0.42	0.38	0.42	0.43	0.43	0.4	0.45	0.41
Nitrite (N)	mg/L	0.0106	0.0161	0.0296	0.0116		<0.050	0.009	0.0532	0.0143	0.0102	0.0234	0.0124	0.0194	<0.0050	0.0092	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0134
Nitrate (N)	mg/L	9.83	10.1	13.8	11		9.88	12.6	17.2	21.4	13.1	17.1	9.09	4.76	3.63	2.89	3.59	3.23	3.85	4.15	3.18	3.66
Ammonia	mg/L	0.029	0.053	0.033	0.12		0.023	0.035	0.018	0.03	0.036	0.067	0.028	0.024	0.023	0.017	0.014	0.014	0.029	0.017	0.045	0.021
Aluminum, total	mg/L	0.0572	0.0965	0.174	0.098		0.697	0.443	0.233	0.17	0.137	0.126	0.0874	0.0362	0.13	0.0864	0.0589	0.292	0.1	0.045	0.0861	0.304
Arsenic, total	mg/L	0.00051	0.00057	0.00055	0.00056		0.00079	0.00068	0.00057	0.0007	0.00087	0.00066	0.00056	0.00043	0.00048	0.00041	0.00041	0.00055	0.00048	0.0005	0.00041	0.00054
Cadmium, total	mg/L	0.000128	0.000232	0.000157	0.000149		0.000236	0.000178	0.000236	0.000164	0.000233	0.000293	0.000223	0.000206	0.000148	0.000143	0.000175	0.000208	0.00013	0.000239	0.00016	0.000219
Calcium, total	mg/L	110	131	117	125		146	138	154	128	177	153	124	106	102	103	109	109	106	123	120	111
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	0.0019	<0.0010	0.0028	0.0031	<0.0010	<0.0010	0.005
Copper, total	mg/L	0.108	0.151	0.119	0.109		0.197	0.168	0.184	0.148	0.185	0.197	0.204	0.156	0.166	0.137	0.147	0.234	0.148	0.182	0.139	0.254
Iron, total	mg/L	0.233	0.267	0.377	0.25		1.53	0.895	0.615	0.455	0.53	0.551	0.489	0.304	0.555	0.365	0.343	1.11	0.48	0.532	0.625	1.87
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		0.00055	0.00041	0.00023	0.00027	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00092	0.00023	<0.00020	<0.00020	0.00067
Magnesium, total	mg/L	51.1	48.9	53	48.1		50.7	49.5	53.1	35.8	49	45.7	61.5	56.6	60.5	60.7	62.2	60.4	59.1	63.5	63.7	63
Manganese, total	mg/L	0.486	0.492	0.436	0.373		0.505	0.47	0.593	0.363	0.746	1.04	0.958	0.708	0.57	0.513	0.573	0.621	0.548	0.815	0.656	0.699
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0106	0.013	0.0115	0.0117		0.0118	0.0113	0.0133	0.0131	0.0133	0.014	0.008	0.0061	0.0056	0.0052	0.0054	0.0055	0.0053	0.0061	0.0056	0.0053
Nickel, total	mg/L	0.0011	<0.0010	<0.0010	<0.0010		0.0014	0.0011	0.0013	<0.0010	0.0012	0.0014	0.0012	0.0012	0.0011	0.0011	<0.0010	0.0018	0.0015	0.0013	<0.0010	0.0015
Phosphorus, total	mg/L	0.042	0.043	0.049	0.044		0.092	0.077	0.058	0.079		0.05	0.053	0.037	0.043	0.039	0.032	0.09	0.067	0.04	0.039	0.072
Potassium, total	mg/L	5.37	5.87	5.54	5.35		6.09	6.07	6.28	5.25	6.74	6.17	5.88	5.43	5.11	5.38	5.4	5.53	4.68	5.27	5.62	5.2
Selenium, total	mg/L	0.00842	0.013	0.0106	0.0109		0.0118	0.0107	0.0129	0.0109	0.0126	0.0119	0.00503	0.0035	0.00259	0.00228	0.00268	0.00238	0.00216	0.00297	0.00242	0.00213
Silver, total	mg/L	0.000026	0.000027	0.000041	<0.000020		<0.000020	0.000108	0.000028	<0.000020	0.000046	0.000023	<0.000020	0.000044	<0.000020	0.000037	<0.000020	0.000024	0.000022	<0.000020	<0.000020	0.000084
Sodium, total	mg/L	34.2	33.8	35.5	34.2		35.4	34	37.8	31.9	39.2	35.1	37	34	36.2	38.2	38.2	38.4	37.4	38	37.9	39.3
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.953	4.32	4.42	3.04		2.5	2.02	2.63	1.54	1.68	2.93	0.976	1.89	0.767	0.614	0.759	1.73	0.594	0.853	0.525	1.28
Aluminum, dissolved	mg/L	0.0057	0.0034	0.0042	0.0042		0.0048	0.0695	0.0039	0.0053	0.0059	0.0037	0.0043	0.0033	0.0043	0.0032	<0.0030	0.0087	0.0033	0.0033	0.004	0.0044
Arsenic, dissolved	mg/L	0.00053	0.00046	0.00051	0.00057		0.0005	0.00051	0.0009	0.00078	0.0008	0.00055	0.00051	0.00038	0.0004	0.00035	0.00039	0.00047	0.00042	0.00039	0.00038	0.00037
Cadmium, dissolved	mg/L	0.0001	0.000196	0.000135	0.000237		0.000208	0.000189	0.000151	0.000189	0.000192	0.000361	0.000217	0.000198	0.000151	0.000134	0.000162	0.000134	0.000171	0.000212	0.000144	0.000203
Calcium, dissolved	mg/L	105	125	112	130		131	133	146	136	159	158	122	111	110	107	104	109	112	125	110	100
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0774	0.123	0.0823	0.126		0.12	0.12	0.0963	0.136	0.126	0.193	0.161	0.123	0.122	0.1	0.113	0.104	0.125	0.14	0.108	0.13
Iron, dissolved	mg/L	0.0614	0.0467	0.0505	0.0633		0.0627	0.0586	0.0683	0.0585	0.108	0.164	0.0893	0.0764	0.107	0.0864	0.0926	0.104	0.114	0.14	0.102	0.126
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	42.5	47.6	46.9	44.4		47	47.9	52.2	38.2	46.4	47.1	56.8	55.4	63.7	56.8	60.7	56.7	61.9	61.7	61.6	60.7
Manganese, dissolved	mg/L	0.363	0.488	0.4	0.41		0.438	0.408	0.481	0.384	0.635	1.17	0.95	0.684	0.657	0.522	0.557	0.572	0.679	0.836	0.649	0.718
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum, dissolved	mg/L	0.0117	0.0103	0.0107	0.0122		0.0108	0.0116	0.013	0.0144	0.0118	0.0145	0.0081	0.0064	0.0062	0.0053	0.0057	0.0059	0.006	0.0063	0.005	0.006
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0022	0.0014	0.0013	<0.0010	0.001	0.0011	<0.0010	0.0012	0.001	0.0011	0.001	0.0011
Phosphorus, dissolved	mg/L	0.038	0.034	0.029	0.028		0.03	0.03	0.037	0.055		0.04	0.026	0.021	0.026	0.033	0.02	0.031	0.034	0.03	0.024	0.022
Potassium, dissolved	mg/L	5.15	5.64	5.24	5.32		5.77	5.47	6.22	5.49	6.19	6.27	5.7	4.91	5.62	4.81	5.31	4.98	5.5	5.66	5.17	5.1
Selenium, dissolved	mg/L	0.00998	0.0137	0.0108	0.0143		0.0125	0.0107	0.0124	0.013	0.0111	0.0131	0.00546	0.00352	0.00306	0.00238	0.00281	0.00233	0.00301	0.00321	0.00227	0.0026
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	0.000024		<0.000020	<0.000020	<0.000020	0.000061	0.000021	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	31.1	34.5	32.6	33.7		33.1	32.7	37.2	33.3	36.4	36.4	35.4	34.1	39	35.9	38	35.9	38.4	37.9	37.6	37.9
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	1.56	3.93	4.02	4.17		1.91	1.71	1.17	1.51	0.607	2.98	0.805	1.62	0.901	0.568	0.608	0.675	0.489	0.751	0.4	0.802

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**18/02/2014**	**27/02/2014**	**06/03/2014**	**14/03/2014**	**21/03/2014**	**27/03/2014**	**02/04/2014**	**07/04/2014**	**16/04/2014**	**22/04/2014**	**02/05/2014**	**06/05/2014**	**15/05/2014**	**23/05/2014**	**29/05/2014**	**05/06/2014**	**11/06/2014**	**17/06/2014**	**26/06/2014**	**30/06/2014**	**10/07/2014**
pH (field)	pH units	7.57	7.59	7.92	7.4	7.5	7.46	7.28	7.33	7.46	7.52	7.77	7.7	8.03	6.94	7.74	7.55	7.79	7.6	7.84	7.74	7.7
pH (lab)	pH units	8.09	8.06	8.17	8.14	8.27	8.31	8.29	8.18	7.91	7.92	7.66	8.1	7.85	8.49	8.17	8.14	8.05	8.04	7.96	7.94	8.4
Hardness (from dissolved)	mg/L	534	532	531	533	543	545	572	571	332	124	202	218	328	294	399	344	348	367	381	491	440
Hardness (from total)	mg/L	528	550	507	590	549	527	590	552	362	123	220	224	391	293	367	343	348	403	411	484	466
Total Dissolved Solids	mg/L	680	680	676	666	678	668	680	710	418	324	312	298	576	459	517	526	520	624	576	648	638
Total Suspended Solids	mg/L	10.6	20.7	9.1	7.5	9.2	6.5	9.8	19.6	9.2	31.3	19	18	6.1	5.7	22.3	16.8	15.8	5.6	82.6	16.9	16
Alkalinity, total	mg/L	512	497	511	518	511	509	548	561	240	144	148	154	256	252	241	255	262	268	298	296	326
Sulphate, dissolved	mg/L	112	106	120	102	98.5	97.8	97	96.2	104	64.3	52.4	50.4	111	103	135	118	121	123	134	143	163
Chloride	mg/L	6.3	5.7	6.2	5.4	5.2	5.4	5.6	6.7	3.5	5.7	3.5	3.4	6.2	4.9	7	7.2	7.8	8.2	8.7	9.8	11
Fluoride	mg/L	0.42	0.41	0.44	0.42	0.41	0.4	0.41	0.44	0.37	0.37	0.3	0.31	0.58	0.47	0.59	0.6	0.66	0.62	0.61	0.59	0.54
Nitrite (N)	mg/L	0.046	0.0064	0.016	0.0077	0.0091	0.0107	0.0133	0.0331	0.0126	0.0928	0.0166	0.0228	0.0085	0.0176	0.0137	0.011	0.0187	0.0192	0.0288	0.0651	0.119
Nitrate (N)	mg/L	3.58	3.03	3.89	2.4	2.23	1.76	1.81	2.4	2.42	3.62	2.44	2.17	6.63	5.66	8.23	8.34	7.95	8.51	9.24	11	12.7
Ammonia	mg/L	0.027	0.031	0.018	0.029	0.072	0.033	0.048	0.035	0.19	0.022	0.029	0.088	0.021	0.041	0.027	0.036	0.032	0.047	0.041	0.49	0.058
Aluminum, total	mg/L	0.561	0.0815	0.485	0.06	0.149	0.0775	0.124	0.119	0.171	1.4	0.888	2.12	0.275	0.798	0.217	1.92	1	0.789	0.167	0.0281	0.0913
Arsenic, total	mg/L	0.00071	0.00044	0.00045	0.00046	0.00041	0.00036	0.00061	0.00045	0.00065	0.00099	0.00093	0.0014	0.00052	0.00073	0.0005	0.0009	0.00081	0.00081	0.00056	0.00085	0.00076
Cadmium, total	mg/L	0.00017	0.000259	0.000168	0.000277	0.000215	0.000188	0.000292	0.000238	0.00015	0.000092	0.000147	0.000144	0.000337	0.000134	0.000311	0.00024	0.00022	0.000225	0.000241	0.000176	0.000213
Calcium, total	mg/L	106	112	99.3	118	105	103	120	116	95.7	34.9	60.6	57.1	103	71.9	95.5	87.9	86	104	106	134	120
Chromium, total	mg/L	0.0024	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0015	0.0013	0.0029	<0.0010	<0.0010	<0.0010	0.002	0.0023	0.0031	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.286	0.184	0.229	0.213	0.208	0.17	0.235	0.212	0.121	0.491	0.208	0.474	0.266	0.294	0.22	0.532	0.483	0.298	0.187	0.131	0.175
Iron, total	mg/L	2.95	0.73	1.63	1.06	0.985	0.942	1.1	1.15	0.536	2.18	1.31	4.42	0.841	1.6	0.652	4.45	3.79	2.12	0.505	0.155	1.79
Lead, total	mg/L	0.00071	<0.00020	0.0003	<0.00020	<0.00020	<0.00020	0.00029	<0.00020	<0.00020	0.00083	0.00048	0.00152	0.00021	0.00061	<0.00020	0.00168	0.00126	0.00098	0.00027	<0.00020	0.00033
Magnesium, total	mg/L	64	65.4	62.9	71.4	69.9	65.5	70.8	63.4	29.9	8.66	16.7	19.7	32.4	27.5	31.2	30	32.4	34.5	35.5	36.1	40.1
Manganese, total	mg/L	0.657	0.828	0.657	1.09	0.914	0.791	1.25	1.39	0.624	0.139	0.328	0.418	0.768	0.373	0.528	0.486	0.537	0.54	0.642	0.428	0.586
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000050	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.005	0.0052	0.0051	0.0058	0.0047	0.0048	0.0061	0.0056	0.0078	0.0045	0.0061	0.0058	0.0137	0.0077	0.0134	0.0131	0.0162	0.0145	0.0155	0.0125	0.013
Nickel, total	mg/L	0.0018	0.0015	0.0017	0.0016	0.0016	0.0014	0.0014	0.0015	<0.0010	0.0017	0.002	0.0032	0.0012	0.0016	<0.0010	0.0019	0.0019	0.0016	<0.0010	0.0013	0.0011
Phosphorus, total	mg/L	0.099	0.036	0.061	0.048	0.05	0.044	0.047	0.044	0.066	0.127	0.073	0.161	0.05	0.093	0.069	0.165	0.18	0.117	0.051	0.099	0.069
Potassium, total	mg/L	4.91	5.25	4.75	6.2	5.36	4.96	5.43	5.2	4.35	3.38	3.49	3.95	4.8	4.28	4.72	5.14	5.34	5.31	5.54	5.35	5.78
Selenium, total	mg/L	0.00192	0.00229	0.00176	0.00189	0.00166	0.00171	0.00306	0.00155	0.00442	0.00222	0.00351	0.00389	0.0085	0.00479	0.00868	0.0072	0.00767	0.00679	0.00889	0.00881	0.00806
Silver, total	mg/L	0.000072	<0.000020	0.000032	<0.000020	0.00004	0.000031	0.00003	<0.000020	0.000029	0.000123	0.000072	0.000131	0.000048	0.000079	0.000031	0.000122	0.000089	0.0164	0.000024	0.000023	<0.000020
Sodium, total	mg/L	36.9	38.6	36.5	40.4	39.2	36.9	40.3	34.9	21.8	8.69	13.3	15.7	25.3	21.4	24.6	24.6	26.4	28.5	28.7	29.8	31.1
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000059	<0.000050
Zinc, total	mg/L	1.43	1.67	0.799	1.85	1.58	1.08	2.3	0.971	0.443	0.204	0.384	1.1	1.92	1.15	1.37	1.23	1.97	2.51	1.85	5.66	1.43
Aluminum, dissolved	mg/L	0.0036	0.0033	<0.0030	<0.0030	0.0036	0.0046	0.0054	0.0036	0.0051	0.044	0.0249	0.023	0.0102	0.0205	0.0094	0.006	0.0075	0.0064	0.0096	0.0082	0.0072
Arsenic, dissolved	mg/L	0.00037	0.00033	0.00036	0.00035	0.00032	0.00033	0.00036	0.00033	0.00057	0.00064	0.00064	0.00056	0.00052	0.00055	0.00043	0.00045	0.00053	0.00052	0.0005	0.00078	0.00062
Cadmium, dissolved	mg/L	0.000152	0.000233	0.000122	0.000231	0.000248	0.00018	0.000204	0.000194	0.000122	0.000056	0.000112	0.000099	0.000203	0.000112	0.000295	0.000143	0.000176	0.000184	0.000213	0.000153	0.000178
Calcium, dissolved	mg/L	102	110	101	109	106	107	120	121	86.8	36.5	55.9	57.6	86.7	74.1	108	87.8	89.2	95.2	98.8	135	115
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.11	0.132	0.0991	0.135	0.127	0.11	0.116	0.13	0.0945	0.235	0.167	0.149	0.144	0.122	0.144	0.104	0.112	0.116	0.108	0.114	0.103
Iron, dissolved	mg/L	0.135	0.124	0.127	0.121	0.141	0.118	0.157	0.147	0.0778	0.177	0.154	0.143	0.102	0.111	0.0698	0.065	0.0701	0.0713	0.094	0.0799	0.0817
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	67.5	62.5	67.6	63.5	67.3	67.7	66.3	65.2	28.1	8.12	15.1	18	27.1	26.5	31.7	30.2	30.3	31.4	32.7	37.3	37.1
Manganese, dissolved	mg/L	0.678	0.801	0.645	0.91	0.975	0.835	1.02	1.48	0.672	0.11	0.25	0.277	0.521	0.334	0.629	0.441	0.465	0.505	0.618	0.444	0.524
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000050	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0051	0.0055	0.0045	0.0057	0.0054	0.005	0.0051	0.0052	0.008	0.0045	0.0055	0.0052	0.0091	0.0073	0.0147	0.014	0.0147	0.015	0.015	0.0133	0.0127
Nickel, dissolved	mg/L	0.001	0.0011	0.001	0.0012	0.0012	0.0011	0.0012	0.0012	<0.0010	<0.0010	<0.0010	0.0011	0.0015	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	0.0011	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.024	0.023	0.025	0.02	0.02	0.025	0.025	0.025	0.04	0.052	0.047	0.043	0.036	0.048	0.036	0.03	0.03	0.04	0.037	0.09	0.051
Potassium, dissolved	mg/L	5.54	5.12	5.34	5.26	5.12	5.37	5.53	5.32	4.49	2.98	3.4	3.33	4.54	4.35	4.69	4.56	4.86	5.14	5.71	5.86	5.91
Selenium, dissolved	mg/L	0.00211	0.00212	0.00175	0.00213	0.00211	0.00172	0.00186	0.00137	0.00411	0.00229	0.00303	0.00313	0.00604	0.00467	0.0084	0.00747	0.00679	0.00637	0.00712	0.00744	0.00806
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	0.000021	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000027	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	41.2	36.6	39.2	37	37	38.4	38.4	38.7	21.6	8.26	13.2	15.3	22.2	21.8	26.4	24.9	26.6	27	26.9	30.7	28.6
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	0.524	1.41	0.316	1.23	1.53	0.892	1.77	0.618	0.223	0.21	0.323	0.174	0.867	0.961	3.71	0.716	2.3	2.22	1.12	5.17	1

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**15/07/2014**	**21/07/2014**	**29/07/2014**	**06/08/2014**	**14/08/2014**	**18/08/2014**	**26/08/2014**	**05/09/2014**	**12/09/2014**	**15/09/2014**	**25/09/2014**	**01/10/2014**	**08/10/2014**	**13/10/2014**	**21/10/2014**	**28/10/2014**	**05/11/2014**	**10/11/2014**	**17/11/2014**	**25/11/2014**	**05/12/2014**
pH (field)	pH units	7.27	7.7	6.88	7.22	7.3	7.27	7.36	7.77	7.21	7.1	7.22	7.11	7.23	7.15	7.19	7.25	7.16	7.14	7.07	7.32	7.2
pH (lab)	pH units	7.8	8.09	8.07	7.97	8.07	8.12	7.83	8.12	7.95	7.98	8.16	7.95	8.01	8.16	8.05	7.66	8.08	8.27	7.8	7.83	8.14
Hardness (from dissolved)	mg/L	482	473	470	519	520	524	541	569	566	582	568	518	512	557	622	612	641	646	717	656	739
Hardness (from total)	mg/L	487	497	521	536	610	579	576	635	562	643	613	565	545	579	618	629	640	668	638	639	766
Total Dissolved Solids	mg/L	738	690	766	740	780	812	834	794	941	820	800	896	780	845	901	770	914	904	972	934	1020
Total Suspended Solids	mg/L	62.2	15.5	3.8	23.2	32.2	31	3.3	6.2	12.3	3.6	4	4.8	3.7	17.7	6.2	6.3	7.6	7.8	4.4	6.2	9.5
Alkalinity, total	mg/L	363	324	352	317	328	345	332	380	398	393	366	362	344	350	382	361	375	387	422	434	474
Sulphate, dissolved	mg/L	174	165	151	174	188	197	170	193	186	162	193	185	187	218	219	229	249	260	225	253	240
Chloride	mg/L	29	9	9.6	9.4	11	11	11	11	9.5	11	9.2	11	12	13	18	14	15	14	13	15	14
Fluoride	mg/L	0.55	0.51	0.54	0.5	0.53	0.52	0.54	0.52	0.47	0.52	0.5	0.56	0.51	0.55	0.57	0.63	0.61	0.64	0.6	0.6	0.56
Nitrite (N)	mg/L	0.538	0.0547	0.0172	0.0115	0.0109	0.0135	0.0233	0.0124	0.0096	0.0165	0.0086	0.0135	0.0132	0.0193	0.324	0.0175	0.0257	0.0252	0.0264	0.0857	0.0452
Nitrate (N)	mg/L	13.9	15.5	11.6	12.1	15.8	14.6	16.5	14.1	12.9	14.1	13.2	13.3	13.2	15.2	16.1	16.3	15.4	16.1	15.9	1.47	14.6
Ammonia	mg/L	0.048	0.09	0.033	0.032	0.16	0.044	0.08	0.29	0.034	0.03	0.03	0.04	0.048	0.047	0.059	0.065	0.085	0.1	0.051	0.051	0.075
Aluminum, total	mg/L	1.79	0.0966	0.374	0.261	0.831	0.739	0.125	0.066	0.0585	0.0238	0.0829	0.0762	0.11	0.058	0.108	0.0459	0.0985	0.0718	0.0285	0.0766	0.03
Arsenic, total	mg/L	0.00113	0.00059	0.00079	0.00068	0.00094	0.0007	0.00071	0.00078	0.00089	0.00057	0.00066	0.00063	0.00059	0.00064	0.00073	0.00065	0.00062	0.00066	0.00066	0.00064	0.00077
Cadmium, total	mg/L	0.000337	0.000264	0.000239	0.000216	0.00026	0.000273	0.000231	0.000272	0.000195	0.000236	0.000281	0.000429	0.000381	0.000341	0.000317	0.000372	0.00027	0.000248	0.000267	0.000382	0.000307
Calcium, total	mg/L	125	132	131	139	166	154	157	172	147	172	165	145	143	154	165	168	175	179	171	170	207
Chromium, total	mg/L	0.0019	<0.0010	0.0011	<0.0010	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010
Copper, total	mg/L	0.598	0.179	0.253	0.177	0.304	0.264	0.153	0.172	0.166	0.15	0.176	0.214	0.216	0.18	0.213	0.206	0.174	0.141	0.139	0.183	0.153
Iron, total	mg/L	4.15	0.615	1.32	0.799	2.2	2.05	0.442	0.416	0.456	0.497	0.933	0.914	2.09	0.611	1.62	0.749	1.52	1.2	0.98	1.05	1.19
Lead, total	mg/L	0.00175	0.00023	0.00059	0.00036	0.00104	0.00074	0.00025	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00026	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	42.4	40.5	47.4	45.7	47.8	47	44.5	49.9	47.1	51.8	49	49	45.7	47	49.6	50.7	49.2	53.5	51.5	52.1	60.4
Manganese, total	mg/L	0.679	0.599	0.851	0.79	0.825	0.956	0.657	0.947	0.963	1.07	0.941	1.41	1.38	1.37	1.5	1.16	1.7	1.66	1.88	1.89	2.69
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0143	0.013	0.0125	0.0135	0.0163	0.0158	0.0159	0.0168	0.0128	0.0136	0.0149	0.0149	0.0149	0.0141	0.0163	0.0178	0.0169	0.0178	0.0174	0.0169	0.0189
Nickel, total	mg/L	0.002	0.0011	0.0018	0.0014	0.0019	0.0016	0.0014	0.0013	0.0014	0.0013	0.0012	0.0017	0.0014	0.0013	0.0028	0.0013	0.0013	0.0014	0.0013	0.001	0.0029
Phosphorus, total	mg/L	0.192	0.061	0.074	0.086	0.116	0.111	0.071	0.069	0.061	0.053	0.061	0.054	0.056	0.052	0.058	0.054	0.047	0.061	0.048	0.051	0.06
Potassium, total	mg/L	6.31	5.57	6.01	6.74	7.1	6.83	6.33	7.02	6.25	6.65	6.95	6.49	6.21	7.17	6.59	6.94	7.24	7.04	6.69	6.97	7.9
Selenium, total	mg/L	0.00878	0.00868	0.0081	0.00847	0.0149	0.0137	0.0153	0.0144	0.0126	0.0131	0.0164	0.0128	0.012	0.0136	0.0127	0.0155	0.0149	0.0157	0.0135	0.0138	0.0115
Silver, total	mg/L	0.000143	0.000028	0.000029	0.000021	0.00007	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000038	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000021	<0.000020	<0.000020	0.000035
Sodium, total	mg/L	31.8	32.1	34.2	35.1	36.1	34.5	34.3	36.1	34.6	36.7	38.4	35.4	34.1	35.3	37.6	41.5	36.2	37.2	36.8	38	42.5
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	2.18	2.75	1.83	1.79	5.61	2.38	1.43	0.982	0.648	0.906	0.562	4.16	0.959	2.08	1.46	1.55	0.63	1.25	0.559	1.59	1.08
Aluminum, dissolved	mg/L	0.0068	0.009	0.0055	0.008	0.0044	0.0088	0.0072	<0.0030	0.0089	0.0095	0.0064	0.0065	0.0055	0.024	0.0085	0.0171	0.0074	0.0066	0.0073	0.0066	0.013
Arsenic, dissolved	mg/L	0.0006	0.00057	0.00045	0.00073	0.00057	0.00061	0.00058	0.00051	0.00054	0.0006	0.00065	0.00051	0.0005	0.00056	0.00056	0.00048	0.00053	0.00056	0.00051	0.00054	0.00059
Cadmium, dissolved	mg/L	0.000187	0.00022	0.000202	0.00022	0.000149	0.000243	0.000227	0.00021	0.000238	0.000266	0.000261	0.000392	0.000352	0.000374	0.000291	0.000294	0.000237	0.000258	0.000216	0.000242	0.000323
Calcium, dissolved	mg/L	123	128	115	133	140	135	144	149	150	150	152	135	136	146	171	165	171	172	198	174	198
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.126	0.131	0.123	0.129	0.0885	0.127	0.121	0.122	0.144	0.125	0.132	0.156	0.159	0.15	0.132	0.131	0.0953	0.103	0.0959	0.109	0.121
Iron, dissolved	mg/L	0.103	0.0974	0.113	0.08	0.0769	0.12	0.113	0.154	0.18	0.179	0.182	0.231	0.212	0.2	0.214	0.263	0.455	0.307	0.276	0.287	0.291
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	42.1	37.4	44.4	45.1	41.1	45.5	44.1	48.2	46.8	50.3	45.6	43.7	42.1	46.6	47.5	48.9	52.1	52.5	53.8	54.1	59.4
Manganese, dissolved	mg/L	0.632	0.496	0.724	0.727	0.614	0.806	0.709	0.845	1.1	1.05	0.94	1.32	1.33	1.46	1.45	1.48	1.56	1.57	1.76	1.96	2.35
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0127	0.012	0.0111	0.0136	0.0154	0.0154	0.0158	0.014	0.0139	0.0146	0.014	0.0142	0.0142	0.0142	0.0156	0.0171	0.0168	0.0172	0.0166	0.0174	0.0187
Nickel, dissolved	mg/L	0.0013	0.001	0.0015	0.0012	<0.0010	0.0011	0.0012	0.0011	0.0014	0.0012	0.0011	0.0017	0.0012	0.0013	0.0013	0.0013	0.0012	0.0013	0.0014	0.0014	0.0015
Phosphorus, dissolved	mg/L	0.046	0.059	0.039	0.044	0.049	0.045	0.051	0.057	0.032	0.049	0.035	0.033	0.034	0.038	0.037	0.032	0.026	0.025	0.024	0.021	0.029
Potassium, dissolved	mg/L	5.76	5.81	5.58	5.9	5.45	6.15	6.36	6.05	6.14	6.57	6.11	6.27	6.05	7.03	6.53	6.24	6.92	6.68	7.24	7.05	7.53
Selenium, dissolved	mg/L	0.0082	0.0102	0.00705	0.00938	0.0138	0.0133	0.0157	0.0157	0.012	0.0135	0.0141	0.0125	0.0118	0.0128	0.0128	0.0131	0.014	0.0145	0.0133	0.0116	0.012
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	31.1	29.8	32	34.9	32.6	34.4	32.7	35.8	33.6	35.9	33.6	32.6	33.2	34.6	37.4	36.7	37.4	39	37.8	37.4	41.1
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	0.687	1.98	1.3	1.89	0.833	0.925	1.25	0.217	0.988	1.18	0.49	3.83	0.772	1.41	1.25	0.659	0.624	1.18	0.376	1.24	1.12

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**11/12/2014**	**18/12/2014**	**22/12/2014**	**02/01/2015**	**06/01/2015**	**13/01/2015**	**21/01/2015**	**29/01/2015**	**03/02/2015**	**10/02/2015**	**18/02/2015**	**26/02/2015**	**03/03/2015**	**09/03/2015**	**17/03/2015**	**25/03/2015**	**30/03/2015**	**06/04/2015**	**18/04/2015**	**21/04/2015**	**29/04/2015**
pH (field)	pH units	7.2	7.22	7.33	7.24	7.2	7.2	7.34	7.33	7.32	7.43	7.2	7.35	7.27	7.17	7.57	7.36	7.33	7.23	7.14	7.11	7.13
pH (lab)	pH units	8.28	8.12	7.84	7.97	7.86	8.11	8.14	8.29	8.12	7.67	7.76	8.09	8.05	7.93	8.06	8.13	7.76	7.59	7.81	7.83	7.71
Hardness (from dissolved)	mg/L	741	697	762	768	793	733	778	807	814	782	772	792	817	852	838	844	867	450	555	583	599
Hardness (from total)	mg/L	738	778	731	790	764	773	838	870	793	855	868	808	828	805	831	883	905	442	526	601	569
Total Dissolved Solids	mg/L	962	1000	929	982	1000	990	1000	1010	1030	1010	1020	1020	1010	1070	1080	1050	1100	706	698	754	792
Total Suspended Solids	mg/L	14.8	7.6	5.2	7.7		12.3	7.4	12	16.5	11.6	13	14.7	16.7	13.7	13.8	27	16.8	9	8.5	6.4	5.7
Alkalinity, total	mg/L	491	500	487	508	574	517	601	607	629	643	662	693	668	690	712	732	712	275	423	445	495
Sulphate, dissolved	mg/L	243	301	209	256	189	261	193	190	202	172	177	167	175	174	153	147	130	185	170	173	164
Chloride	mg/L	16	16	16	15	16	16	16	16	17	17	19	18	17	17	19	18	18	7.4	10	11	12
Fluoride	mg/L	0.61	0.57	0.61	0.6	0.6	0.64	0.56	0.6	0.56	0.58	0.64	0.55	0.57	0.56	0.54	0.55	0.5	0.65	0.6	0.64	0.53
Nitrite (N)	mg/L	0.065	0.0809	0.117	0.181	0.208	0.226	0.227	0.194	0.196	0.275	0.224	0.221	0.19	0.219	0.262	0.218	0.179	0.0326	0.0401	0.0445	0.0585
Nitrate (N)	mg/L	14.3	14.4	15.2	14.5	12	13.5	12.3	9.9	10.9	8.73	6.76	8.17	9.65	8.06	6.59	5.56	3.86	13.1	6.56	5.73	4.62
Ammonia	mg/L	0.1	0.078	0.1	0.18	0.15	0.18	0.24	0.27	0.25	0.35	0.41	0.35	0.28	0.34	0.37	0.38	0.35	0.052	0.069	0.13	0.18
Aluminum, total	mg/L	0.0394	0.0413	0.0718	0.0185	0.0364	0.0691	0.0723	0.0248	0.165	0.0592	0.0534	0.483	0.0416	0.091	0.0444	0.101	0.132	0.108	0.128	0.055	0.177
Arsenic, total	mg/L	0.00068	0.00066	0.00078	0.00078	0.0008	0.00092	0.00089	0.00087	0.00081	0.00093	0.0009	0.00121	0.00093	0.00082	0.0009	0.00097	0.00105	0.0004	0.00043	0.00052	0.00058
Cadmium, total	mg/L	0.000392	0.000332	0.00043	0.000325	0.000412	0.000406	0.000403	0.000389	0.000621	0.000681	0.00084	0.000611	0.000558	0.0005	0.000543	0.000595	0.000458	0.000316	0.000294	0.000334	0.000377
Calcium, total	mg/L	199	208	193	208	204	205	219	222	210	223	219	213	218	204	214	225	234	120	138	159	148
Chromium, total	mg/L	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0016	0.0013	0.0014	0.0022	0.0011	0.0013	0.0011	0.0014	0.0015	<0.0010	<0.0010	<0.0010	0.0011
Copper, total	mg/L	0.161	0.166	0.222	0.155	0.191	0.226	0.24	0.199	0.306	0.374	0.451	0.414	0.263	0.264	0.255	0.335	0.288	0.154	0.178	0.167	0.22
Iron, total	mg/L	2.24	1.21	1.64	1.6	1.65	1.68	2.23	2.09	2.73	2.88	3.6	6.56	2.73	2.77	3.21	4.11	3.31	0.657	1.11	1	1.56
Lead, total	mg/L	<0.00020	<0.00020	0.00051	<0.00020	<0.00020	<0.00020	0.00026	<0.00020	0.00042	0.00023	<0.00020	0.00104	<0.00020	0.00025	0.0003	0.00027	0.00046	<0.00020	0.00024	<0.00020	0.00032
Magnesium, total	mg/L	58.8	62.7	60.2	65.5	62	63.5	70.5	76.9	65.2	72.2	77.7	67.2	68.9	72	72.3	77.6	77.9	34.8	44	49.5	48.3
Manganese, total	mg/L	2.62	2.73	2.8	3.51	3.56	3.68	4.9	5.44	4.37	5.97	6.51	5.82	5.71	5.69	6.38	7.3	7.31	1.6	2.28	3.21	2.98
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0187	0.0175	0.0195	0.0182	0.0192	0.018	0.0163	0.0161	0.0188	0.0187	0.0206	0.0163	0.0176	0.0159	0.0168	0.0161	0.0124	0.0181	0.0141	0.0128	0.0134
Nickel, total	mg/L	0.0039	0.0021	0.0015	0.0018	0.0023	0.0018	0.0022	0.0033	0.0024	0.0024	0.0357	0.0024	0.0068	0.0024	0.0024	0.0022	0.0022	<0.0010	0.0013	0.0012	0.0016
Phosphorus, total	mg/L	0.045	0.078	0.077	0.066	0.073	0.082	0.088	0.087	0.084	0.081	0.096	0.136	0.085	0.094	0.109	0.101	0.116	0.035	0.049	0.036	0.046
Potassium, total	mg/L	7.42	7.88	7.92	7.67	7.37	7.11	7.36	8.3	7.37	7.89	8.28	7.85	7.27	7.01	7.28	7.29	7.75	5.41	5.79	6.68	6.35
Selenium, total	mg/L	0.0134	0.00874	0.0105	0.00921	0.00772	0.00726	0.00514	0.00438	0.00652	0.0051	0.00653	0.00397	0.00579	0.00333	0.00487	0.00285	0.00207	0.011	0.00768	0.00506	0.00638
Silver, total	mg/L	<0.000020	<0.000020	0.000023	<0.000020	0.000036	0.000029	0.000034	0.000029	0.000026	0.000049	0.000029	0.000096	0.000024	0.000034	<0.000020	0.000047	0.000042	<0.000020	<0.000020	<0.000020	0.000035
Sodium, total	mg/L	39.9	42.2	42	43.7	42.1	42.8	43.3	45.9	41.3	46.5	46.5	41.6	42.9	41.3	43.1	43.8	45.2	27	32.1	34	33.1
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	1.71	1.03	1.63	1.58	1.63	1.86	1.22	1.34	1.7	2.26	1.19	3.09	1.44	1.65	2.79	1.56	0.847	0.439	0.796	0.664	1.18
Aluminum, dissolved	mg/L	0.0059	0.0062	0.0054	0.0091	0.0095	0.0074	0.0121	0.0061	0.0062	0.0064	0.0077	0.011	0.0067	0.012	0.0067	0.012	0.0077	0.0038	0.006	0.0068	0.0061
Arsenic, dissolved	mg/L	0.00054	0.00049	0.00046	0.00053	0.00069	0.00056	0.00052	0.00063	0.0006	0.0007	0.00065	0.00136	0.00063	0.0006	0.00062	0.00063	0.00062	0.00037	0.0004	0.00041	0.00044
Cadmium, dissolved	mg/L	0.000333	0.000326	0.000263	0.000316	0.000394	0.000382	0.000369	0.000358	0.000486	0.000577	0.000672	0.000502	0.000487	0.000455	0.000501	0.0005	0.000463	0.000274	0.000281	0.000283	0.000354
Calcium, dissolved	mg/L	200	191	205	204	215	189	203	207	213	199	196	201	213	225	216	218	224	124	147	151	158
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.12	0.132	0.114	0.115	0.138	0.144	0.133	0.143	0.186	0.229	0.259	0.161	0.18	0.162	0.167	0.186	0.177	0.104	0.107	0.129	0.133
Iron, dissolved	mg/L	0.304	0.314	0.243	0.325	0.326	0.294	0.293	0.373	0.462	0.392	0.473	0.513	0.563	0.648	0.501	0.558	0.457	0.101	0.16	0.18	0.194
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	58.7	53.8	61	62.8	62.4	63.4	66.1	70.3	68.6	69.5	68.7	70.4	69.1	70.6	72.8	73	74.8	34	45.3	49.8	49.5
Manganese, dissolved	mg/L	2.48	2.74	2.75	3.54	3.27	3.37	4.54	5.01	4.88	5.71	6.16	5.7	5.74	6.25	5.96	6.61	7.03	1.58	2.41	2.86	2.92
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0186	0.0187	0.019	0.0166	0.0184	0.0196	0.0161	0.015	0.0168	0.0175	0.0174	0.0159	0.0165	0.0161	0.0177	0.0158	0.0118	0.0157	0.0147	0.0125	0.013
Nickel, dissolved	mg/L	0.0014	0.0022	0.0015	0.0035	0.0019	0.002	0.0019	0.0024	0.0023	0.0029	0.0026	0.004	0.0049	0.0023	0.002	0.0024	0.0022	<0.0010	0.0014	0.0013	0.0014
Phosphorus, dissolved	mg/L	0.031	0.012	0.027	0.03	0.029	0.034	0.031	0.032	0.027	0.031	0.045	0.04	0.048	0.049	0.043	0.05	0.038	0.01	0.02	0.023	0.018
Potassium, dissolved	mg/L	7.16	7.3	7.97	7.39	7.71	7.53	7.17	7.48	6.88	7.33	6.99	7.12	6.81	7.08	7.58	7.26	7.06	5.54	6.78	6.35	6.92
Selenium, dissolved	mg/L	0.01	0.0093	0.0106	0.00715	0.00738	0.00889	0.00503	0.00403	0.00474	0.00413	0.00386	0.0047	0.00343	0.00291	0.00495	0.00251	0.00218	0.0111	0.00647	0.00486	0.00646
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000042	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	40.4	40.2	42.8	44.4	41.2	43.1	41.4	43.7	43.6	45	39.3	42.4	41.7	42.1	44	42.2	42.2	26.5	33.6	34.7	34.2
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	1.49	1.11	1.47	1.96	1.55	3.72	0.954	1.24	1.54	1.94	1.02	1.96	1.4	1.22	1.37	1.32	0.962	0.324	0.734	0.528	1

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**11/06/2015**	**15/06/2015**	**22/06/2015**	**29/06/2015**	**06/07/2015**	**06/07/2015**	**16/07/2015**	**20/07/2015**	**29/07/2015**	**05/08/2015**	**14/08/2015**	**20/08/2015**	**24/08/2015**	**01/09/2015**	**02/09/2015**	**08/09/2015**	**15/09/2015**	**23/09/2015**	**02/10/2015**	**08/10/2015**	**16/10/2015**
pH (field)	pH units	6.94	7.07	7.28	21.6	7.21		7.04	7.26	7.21	7.65	7.57	7.3	7.4	7.22	7	7.16	7.08	7.01	7.3	7.13	6.81
pH (lab)	pH units	7.7	8.01	7.89	7.93		7.97	7.71	7.82	7.91	7.95	7.66	7.56	7.47	7.82	7.94	7.87	7.93	8.24	8.18	8.1	8.23
Hardness (from dissolved)	mg/L	472	494	541	575		520	510	569	579	546	522	545	595	470	519	546	536	585	613	576	572
Hardness (from total)	mg/L	472	510	536	509		552	526	557	606	558	568	571	605	427	518	565	518	571	685	611	572
Total Dissolved Solids	mg/L	624	676	792	776		768	722	790	896	860	804	820	858	762	784	802	786	774	926	874	838
Total Suspended Solids	mg/L	20.2	7.1	6.2	6.9		5	6.1	7.2	19.4	10.2	10.5	5.2	5	3.4	4.2	4.8	2.3	5.4	4	4.1	8.1
Alkalinity, total	mg/L	299	351	347	364		343	357	364	366	352	367	375	344	280	283	258	253	286	302	343	333
Sulphate, dissolved	mg/L	173	179	189	188		192	180	192	210	205	186	210	218	207	218	236	248	248	222	272	236
Chloride	mg/L	10	10	11	11		9.6	8.8	8.7	11	11	11	9.9	11	6.6	7.7	9.1	8.9	9.3	10	11	10
Fluoride	mg/L	0.61	0.61	0.66	0.59		0.46	0.5	0.52	0.59	0.65	0.58	0.51	0.59	0.44	0.49	0.54	0.57	0.56	0.55	0.54	0.57
Nitrite (N)	mg/L	0.0233	0.0307	0.0226	0.0208		0.0132	0.0146	0.0126	0.0127	0.0184	0.0128	0.0166	0.0147	0.109	0.102	0.0404	0.022	0.0152	0.0181	0.0207	0.0441
Nitrate (N)	mg/L	8.32	8.38	8.06	7.5		12.1	10.7	10.5	9.44	9.94	9.36	10.4	10.6	9.73	10.7	13.1	11.8	10.9	10.1	10.1	10.6
Ammonia	mg/L	0.066	0.059	0.061	0.1		0.071	0.087	0.084	0.091	0.065	0.072	0.13	0.061	0.097	0.043	0.048	0.029	0.091	0.073	0.086	0.11
Aluminum, total	mg/L	0.303	0.106	0.0865	0.121		0.216	0.0542	0.111	0.0747	0.0422	0.0855	0.125	0.0475	0.0369	0.0529	0.0335	0.0436	0.0308	0.0516	0.015	0.049
Arsenic, total	mg/L	0.00049	0.0005	0.00047	0.00051		0.00056	0.00045	0.00054	0.00056	0.00043	0.00068	0.0007	0.00048	0.00054	0.00066	0.00053	0.00046	0.00054	0.00045	0.00052	0.00047
Cadmium, total	mg/L	0.000324	0.000299	0.000386	0.000243		0.000176	0.00022	0.00023	0.000297	0.000406	0.000419	0.000277	0.000295	0.000193	0.000226	0.000137	0.000125	0.000251	0.000353	0.000171	0.000192
Calcium, total	mg/L	127	140	147	140		154	141	147	165	153	146	152	166	116	138	161	148	159	184	169	160
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.215	0.173	0.204	0.175		0.158	0.158	0.173	0.179	0.196	0.255	0.17	0.171	0.108	0.146	0.0769	0.0824	0.11	0.171	0.088	0.109
Iron, total	mg/L	0.975	0.869	0.66	1.2		1.11	0.713	1.01	0.787	0.628	1.33	1.45	0.906	0.329	0.533	0.315	0.482	0.443	0.942	0.837	1.07
Lead, total	mg/L	0.00024	<0.00020	<0.00020	0.00028		0.00033	<0.00020	0.00027	<0.00020	<0.00020	0.00038	0.00032	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	37.7	39.1	40.9	38.6		40.7	42.3	46.3	47.1	43	49	46.3	46	33.3	41.8	39.5	35.9	42.4	54.4	45.9	42.2
Manganese, total	mg/L	1.41	1.48	1.48	1.38		1.21	1.36	1.43	1.5	1.48	1.71	2.01	1.23	0.871	1.2	0.589	0.515	1.16	2.02	1.67	1.41
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0129	0.0136	0.0158	0.013		0.0131	0.0126	0.0123	0.0165	0.0169	0.0155	0.0132	0.0151	0.0117	0.0137	0.0145	0.0147	0.0145	0.0153	0.014	0.0139
Nickel, total	mg/L	0.0015	0.0012	0.0015	0.0013		0.0013	0.0016	0.0013	0.0014	0.0014	0.0018	0.0017	0.0014	0.0012	0.0014	<0.0010	<0.0010	<0.0010	0.0011	0.0012	<0.0010
Phosphorus, total	mg/L	0.055	0.054	0.053	0.054		0.061	0.045	0.058	0.059	0.034	0.057	0.074	0.05	0.031	0.043	0.039	0.044	0.033	0.041	0.034	0.049
Potassium, total	mg/L	6.23	6.09	6.31	5.79		6.7	5.97	7.3	6.35	6.61	6.36	6.57	7.05	4.65	5.89	5.98	5.27	6.1	6.84	6.83	6.6
Selenium, total	mg/L	0.0083	0.00804	0.00845	0.00682		0.00978	0.00717	0.00833	0.00857	0.00935	0.00855	0.00908	0.0129	0.0109	0.0129	0.0184	0.0146	0.0135	0.0133	0.0117	0.0102
Silver, total	mg/L	0.000028	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	0.00002	<0.000020	0.000301	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	31.1	32.4	32.2	34.2		32.9	34.1	36.1	37.8	33.9	34.9	34.4	37	25	29.8	33.1	32	36.5	42.3	38.5	33.7
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.636	0.511	0.431	0.695		0.648	0.851	0.375	0.457	0.789	0.354	2.7	0.392	0.179	0.359	1.35	0.981	0.582	0.308	0.36	0.435
Aluminum, dissolved	mg/L	0.0084	0.0128	0.0144	0.0198		0.0072	0.0123	0.0379	0.015	0.0056	0.0125	0.0088	0.0086	0.0155	0.0109	0.0127	0.0071	0.0191	0.0082	0.0107	0.0089
Arsenic, dissolved	mg/L	0.0004	0.00033	0.00049	0.00033		0.00055	0.00048	0.00051	0.00056	0.00047	0.00047	0.00049	0.0005	0.00062	0.00056	0.00053	0.00035	0.00049	0.0005	0.00052	0.00038
Cadmium, dissolved	mg/L	0.000325	0.000341	0.000365	0.000497		0.000103	0.000252	0.000253	0.000206	0.000178	0.000297	0.00018	0.000189	0.000158	0.000223	0.000247	0.000309	0.00027	0.000177	0.000155	0.000209
Calcium, dissolved	mg/L	126	135	153	154		140	135	149	154	148	142	144	165	127	139	152	145	161	173	156	157
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.149	0.148	0.156	0.213		0.0819	0.142	0.126	0.101	0.0932	0.151	0.0922	0.108	0.105	0.133	0.111	0.122	0.112	0.0927	0.0624	0.0943
Iron, dissolved	mg/L	0.118	0.147	0.21	0.251		0.141	0.172	0.171	0.218	0.189	0.215	0.158	0.123	0.159	0.165	0.109	0.101	0.123	0.209	0.3	0.338
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	38.2	38	38.8	46.3		41.7	41.8	47.9	47.4	42.8	40.8	45.3	44.1	37.1	41.9	40.6	41.9	44.3	44.1	45.3	43.7
Manganese, dissolved	mg/L	1.35	1.39	1.46	1.92		1.09	1.38	1.39	1.33	1.28	1.36	1.13	0.887	0.893	1.3	1.01	0.957	1.31	1.34	1.6	1.52
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0128	0.0118	0.0168	0.0191		0.0115	0.012	0.0124	0.0138	0.0141	0.0131	0.013	0.0136	0.0119	0.0132	0.0117	0.0146	0.0144	0.0141	0.0132	0.0139
Nickel, dissolved	mg/L	0.0012	0.0011	<0.0010	0.0015		0.0013	0.0014	0.0013	0.0012	0.0012	0.0015	0.0013	0.0013	0.0013	0.0015	0.0011	<0.0010	0.001	0.001	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.025	0.029	0.015	0.025		0.037	0.031	0.023	0.041	0.038	0.024	0.04	0.043	0.048	0.026	0.021	0.02	0.018	0.029	0.027	0.021
Potassium, dissolved	mg/L	5.98	6.1	6.38	7.05		6.35	5.63	6.37	6.48	6.98	5.82	6.09	6.84	5.3	5.81	5.46	6.23	6.36	6.29	5.98	6.14
Selenium, dissolved	mg/L	0.00835	0.0084	0.0077	0.0085		0.00863	0.0071	0.00608	0.00761	0.00833	0.00884	0.00912	0.0115	0.0147	0.0153	0.0163	0.0139	0.0127	0.0114	0.0109	0.0109
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	0.000036	<0.000020	0.000055	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	32.2	31.7	30.1	35.6		34.3	31.8	37.2	35.1	33	32.8	35.3	37	29.7	32.2	34.3	34.5	37.5	36.2	35.9	35
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	0.505	0.504	0.341	0.739		0.27	0.552	0.265	0.507	0.29	0.383	0.417	0.438	0.123	0.377	0.338	0.392	0.361	0.377	0.336	0.381

Station Name		W8A	W8A	W8A	W8A	W8A	W8A	W8A	W8A
Sample Date		**23/10/2015**	**29/10/2015**	**03/11/2015**	**10/11/2015**	**22/11/2015**	**28/11/2015**	**04/12/2015**	**10/12/2015**
pH (field)	pH units	7.37	7.18	7.21	7.54	7.04	7.22	7.16	7.7
pH (lab)	pH units	7.71	7.74	7.85	7.86	8		8.23	7.72
Hardness (from dissolved)	mg/L	586	597	714	704	689		769	763
Hardness (from total)	mg/L	520	722	782	790	727		686	689
Total Dissolved Solids	mg/L	912	864	894	924	956		1000	986
Total Suspended Solids	mg/L	14	7.4	11.7	8.3	9.9		12	5
Alkalinity, total	mg/L	377	363	371	379	398		449	509
Sulphate, dissolved	mg/L	222	273	283	290	271		255	245
Chloride	mg/L	11	12	13	14	17		15	15
Fluoride	mg/L	0.62	0.61	0.62	0.66	0.63		0.56	0.59
Nitrite (N)	mg/L	0.0735	0.0706	0.0827	0.106	0.173		0.118	0.0952
Nitrate (N)	mg/L	10.6	11	10.6	11.7	10		8.92	8.22
Ammonia	mg/L	0.089	0.13	0.16	0.14	0.3		0.27	0.23
Aluminum, total	mg/L	0.134	0.049	0.0248	0.138	0.0587		0.0709	0.0157
Arsenic, total	mg/L	0.00056	0.00055	0.00052	0.00058	0.00061		0.00064	0.00057
Cadmium, total	mg/L	0.000152	0.000351	0.000442	0.000445	0.000293		0.000243	0.000274
Calcium, total	mg/L	146	201	220	227	196		185	186
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, total	mg/L	0.132	0.152	0.171	0.212	0.14		0.105	0.112
Iron, total	mg/L	1.6	1.93	1.7	3.62	1.56		1.66	1.11
Lead, total	mg/L	0.00039	<0.00020	<0.00020	0.00046	0.00025		<0.00020	<0.00020
Magnesium, total	mg/L	37.8	53.6	56.3	54.2	57.4		54.3	54.6
Manganese, total	mg/L	1.25	2.54	2.85	2.79	3.09		3.21	3.22
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molybdenum, total	mg/L	0.0127	0.0159	0.0195	0.0174	0.0173		0.0144	0.0151
Nickel, total	mg/L	0.0012	0.0013	<0.0010	0.005	0.0017		0.0017	0.0012
Phosphorus, total	mg/L	0.056	0.066	0.054	0.071	0.053		0.052	0.048
Potassium, total	mg/L	5.52	7.71	8.76	7.65	7.39		7.27	7.44
Selenium, total	mg/L	0.00994	0.0118	0.0125	0.0147	0.00938		0.00844	0.00728
Silver, total	mg/L	0.000026	0.000051	0.000026	0.000039	<0.000020		<0.000020	<0.000020
Sodium, total	mg/L	31.9	39.6	43.4	42.1	44.8		42.1	42.6
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, total	mg/L	1.47	0.449	0.323	0.615	1.27		0.606	0.657
Aluminum, dissolved	mg/L	0.0117	0.0132	0.0092	0.0092	0.0091		0.036	0.0106
Arsenic, dissolved	mg/L	0.00045	0.00041	0.00052	0.00037	0.00044		0.00058	0.00047
Cadmium, dissolved	mg/L	0.00017	0.000294	0.000189	0.000402	0.000273		0.000237	0.000246
Calcium, dissolved	mg/L	163	166	205	189	189		207	210
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, dissolved	mg/L	0.082	0.0808	0.0713	0.127	0.0791		0.0749	0.0791
Iron, dissolved	mg/L	0.345	0.319	0.306	0.294	0.254		0.263	0.325
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, dissolved	mg/L	43.8	44.5	48.8	56.7	53		61.2	57.9
Manganese, dissolved	mg/L	1.53	2.23	2.13	2.65	2.79		2.97	3.26
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0137	0.0156	0.0155	0.0167	0.0167		0.015	0.0154
Nickel, dissolved	mg/L	0.0013	<0.0010	0.0013	0.0011	0.0012		0.0014	0.0012
Phosphorus, dissolved	mg/L	0.028	0.025	0.029	0.024	0.028		0.019	0.011
Potassium, dissolved	mg/L	6.24	6.44	8.89	7.79	6.91		7.76	6.9
Selenium, dissolved	mg/L	0.0102	0.00957	0.00998	0.0116	0.00866		0.00871	0.007
Silver, dissolved	mg/L	<0.000020	<0.000020	0.000044	0.00003	0.000022		<0.000020	<0.000020
Sodium, dissolved	mg/L	36.8	37.4	41.5	43.8	42.6		46.7	42.4
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, dissolved	mg/L	0.812	0.309	0.492	0.174	0.885		0.456	0.512

Station Name		W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12
Sample Date		**19/05/2007**	**20/06/2007**	**27/06/2007**	**#########**	**12/08/2007**	**23/10/2007**	**30/10/2007**	**27/11/2007**	**18/12/2007**	**18/12/2007**	**15/01/2008**	**16/01/2008**	**13/02/2008**	**22/04/2008**	**#########**	**13/05/2008**	**20/05/2008**	**27/05/2008**	**18/06/2008**	**27/06/2008**	**22/07/2008**	**18/09/2008**	**18/11/2008**
pH (field)	pH units					308			7.44	8.17			8.25	7.6				7.9		7.85		8.1		8.5
pH (lab)	pH units	7.67	7.52			7.8	7.96	8.03	8.02	8.08	8.08	8.21	8.21	7.82	8.18			7.88		7.93		8.03	7.92	8.12
Hardness (from dissolved)	mg/L	622															82	116	126					
Hardness (from total)	mg/L	622	621		489	442	366	330	302	335	335	312		600		112	82	116	126			242	152	
Total Dissolved Solids	mg/L	1100	1050			718	636	556	530	572	572	602	602	1090	294			286		300		458	352	626
Total Suspended Solids	mg/L	66	34				<2	<2	<2	<2	<2	6	6	2	19			14		19		15	44	27
Alkalinity, total	mg/L	201	238				132	126	142		140	116		214	111			70		83		80	91	184
Sulphate, dissolved	mg/L	18	262				244	221	196		239	290		282	79.5			52.2		74.2		141	84.7	221
Chloride	mg/L	1.3	1.9			1.6	1.62	0.96	1.63	0.95	0.95	0.84	0.84	1.87	1.71			1.18		1.24		1.39	1.63	2.01
Fluoride	mg/L																							
Nitrite (N)	mg/L	6.38	8.78			3.87	0.97	0.48	0.34	0.14	0.14	0.18	0.18	3	0.5			0.73		0.4	0.35	0.19	0.06	
Nitrate (N)	mg/L	100	66			41	35.1	20.4	19.3	9.8	9.8	9.95	9.95	68	5.77			5.75		7.28	7.88	10.6	6.68	
Ammonia	mg/L	10.8	8.17				9.91	8.66	5.47	3.64		3.43	3.43	16.3	2.16			2.02		1.73		1.68	1.11	0.71
Aluminum, total	mg/L	0.301	1.02	4.92	0.546	13.8	0.108	0.016	0.049	0.098	0.098	0.463	0.463	0.106	0.29	3.5	4.42	3.61	1.46	1.24	0.92	0.798	1.7	0.611
Arsenic, total	mg/L	0.0006	0.0032	0.0196	0.0012	0.0051	0.001	0.0008	0.0014	0.0008	0.0008	0.0005	0.0005	0.0009	<0.0002	0.0025	0.0035	0.0021	0.0019	0.0015	0.0009	0.0008	0.0016	0.001
Cadmium, total	mg/L	0.00002	0.00065	0.00055	0.00057	0.00109	0.00008	0.00006	0.00005	0.00011	0.00011	0.00003	0.00003	0.00019	0.00009	0.00026	0.00026	0.00026	0.00019	0.00024	0.00026	0.00024	0.00016	0.00047
Calcium, total	mg/L	187	187	146	142	131	99.9	90.2	84.3	91.2	91.2	80.4	80.4	166	50.2	31.4	33.5	37.3	35.8	46.2	47	69.7	48	102
Chromium, total	mg/L	<0.001	<0.0005	0.0012	<0.0005	0.0037	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	0.0007	0.0007	<0.0005	<0.0005	0.0045	0.0056	0.0054	0.002	0.0021	0.0022	0.0006	0.0032	0.0013
Copper, total	mg/L	0.205	0.469	1.884	0.172	3.59	0.027	0.015	0.016	0.053	0.053	0.051	0.051	0.288	0.129	0.569	0.675	0.519	0.458	0.465	0.539	0.318	0.393	0.48
Iron, total	mg/L	0.6	1.6	9.1	0.9	23.3	0.1	<0.1	<0.1	0.1	0.1	0.6	0.6	0.5	0.61	4.99	6.61	4.51	1.88	1.71	1.42	0.91	3.38	0.99
Lead, total	mg/L	0.0003	0.001	0.0032	0.0003	0.0056	<0.0001	<0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0042	0.004	0.004	0.0018	0.0015	0.0013	0.0006	0.0018	0.0003
Magnesium, total	mg/L	44	37.3	30.8	32.4	33.8	28.2	25.5	22.1	26.1	26.1	27	27	45.1	11.9	8.26	9.28	9.79	8.7	11.2	11	16.5	13.1	25.3
Manganese, total	mg/L	0.486	0.822	0.865	0.309	1.15	0.137	0.133	0.067	0.079	0.079	0.051	0.051	0.13	0.0364	0.187	0.231	0.172	0.125	0.123	0.121	0.129	0.165	0.295
Mercury, total	mg/L	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	0.0005	0.0005	0.0004	0.0003	0.0002	0.00002	<0.0001	0.0001	<0.0001
Molybdenum, total	mg/L	0.02	0.015	0.029	0.022	0.028	0.042	0.044	0.023	0.038	0.038	0.042	0.042	0.039	0.024	0.0232	0.0202	0.0234	0.0208	0.0245	0.024	0.036	0.0213	0.042
Nickel, total	mg/L	<0.001	0.0013	0.0017	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.003	0.003	0.0014	0.005	0.042	0.051	0.035	0.003	0.002	0.002	<0.0005	0.002	0.0017
Phosphorus, total	mg/L																							
Potassium, total	mg/L	6.7	9	17.5	9.2	16	4.9	4.4	4.2	3.4	3.4	3.3	3.3	8.3	2.98	3.47	3.41	3.78	3.09	3.55	3.31	3.9	4.39	6
Selenium, total	mg/L	0.0046	0.0065	0.0102	0.0066	0.0065	0.013	0.0093	0.0096	0.0032	0.0032	0.004	0.004	0.0185	0.0016	0.0044	0.0034	0.003	0.0042	0.004	0.0038	0.007	0.0078	0.0067
Silver, total	mg/L	0.0003	0.0003	0.0006	0.0001	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00006	<0.0001	0.0004	0.0003	0.0004	0.0001	0.00015	0.00006	0.00008	0.00016	0.00016
Sodium, total	mg/L	19	34.5	39.6	22.4	25.8	26.9	21.3	27.8	19.6	19.6	50.3	50.3	41	9.8	8.6	10.1	11.3	10.1	14.4	14.2	20.2	16.1	28.6
Thallium, total	mg/L	<0.0001	<0.00005	0.00012	<0.00005	0.00025	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	0.00003	0.00003	0.00005	<0.00001	<0.00001	<0.00001	<0.00005	0.00002	<0.00005
Zinc, total	mg/L	0.01	0.027	0.073	0.016	0.17	0.007	0.004	0.013	0.012	0.012	0.011	0.011	0.015	0.009	0.023	0.038	0.018	0.01	0.016	0.013	0.01	0.016	0.04
Aluminum, dissolved	mg/L	<0.005				0.013											0.05	0.04	0.0016	0.04	0.03		0.051	
Arsenic, dissolved	mg/L	0.0005				0.001											0.0016	0.003	0.0021	0.0015	0.0014		0.0011	
Cadmium, dissolved	mg/L	0.00005				0.00049											0.00008	0.00009	0.00012	0.00017	0.00019		0.00009	
Calcium, dissolved	mg/L	178				129											23.4	33.5	36.6	46.8	50.6		42.4	
Chromium, dissolved	mg/L	0.0011				<0.0005											<0.0006	0.0011	0.0013	0.001	0.0025		0.0007	
Copper, dissolved	mg/L	0.099				0.141											0.15	0.217	0.318	0.318	0.396		0.217	
Iron, dissolved	mg/L	<0.01				0.02											0.12	0.15	0.14	0.09	0.09		0.1	
Lead, dissolved	mg/L	<0.0001				0.0002											0.0004	0.0005	0.0004	0.0004	0.0002		0.0003	
Magnesium, dissolved	mg/L	43.4				29											5.8	7.8	8.52	0.0798	11.8		11.3	
Manganese, dissolved	mg/L	0.36				0.538											0.0505	0.0672	0.0763	0.0798	0.093		0.107	
Mercury, dissolved	mg/L	0.0001				<0.0001											0.0002	0.0001	0.0001	<0.0001	<0.00001		<0.0001	
Molydenum, dissolved	mg/L	0.016				0.024											0.0174	0.0226	0.0217	0.0262	0.026		0.0211	
Nickel, dissolved	mg/L	0.0008				<0.0005											0.001	0.001	<0.001	<0.001	<0.001		0.001	
Phosphorus, dissolved	mg/L																							
Potassium, dissolved	mg/L	10.4				10.1											1.46	2.75	3	4.42	3.36		3.56	
Selenium, dissolved	mg/L	0.0048				0.0071											<0.0006	0.0036	0.0055	0.006	0.009		0.009	
Silver, dissolved	mg/L	0.0002				<0.0001											<0.0010	<0.0010	<0.0010	0.00002	<0.00001		<0.00001	
Sodium, dissolved	mg/L	20.1				32.9											7.01	9.99	11	13.8	15.1		14.5	
Thallium, dissolved	mg/L	<0.00005				<0.00005											<0.00001	<0.00001	<0.00001	0.00001	<0.00001		<0.00001	
Zinc, dissolved	mg/L	0.015				0.016											0.002	0.003	0.005	0.006	0.004		0.005	

Station Name		W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12
Sample Date		#########	21/04/2009	#########	#########	#########	#########	13/07/2009	19/07/2009	21/09/2009	05/11/2009	06/11/2009	02/12/2009	#########	#########	#########	#########	19/04/2010	26/04/2010	#########	11/05/2010	18/05/2010	26/05/2010	#########	06/12/2010
pH (field)	pH units	6.88	8.1				7.85				6.97		7.96		7.05	7.87	6.99	7.69	7.26	8.05		7.92	8.02	7.87	7.87
pH (lab)	pH units	8.02	7.8	7.28	10.6	7.27			7.9	7.58		7.79	7.68	7.77		7.9	8.06	8.05	7.6	8	7.9	8.1	8.1	8.1	7.9
Hardness (from dissolved)	mg/L	535		68	156	86		120	124	177		398	1180						135	188	198	175	186	203	674
Hardness (from total)	mg/L							129	120					671		749	170	178	130	183	192	191	192	1140	692
Total Dissolved Solids	mg/L	776	458	140	252	136			190	304		722	1860	1130		1220	260	324	240	320	280	310	300	330	
Total Suspended Solids	mg/L	16	40	251	25	157			<4	<2		24	68	<5		38	13	45	21	66	41	54	18	19	
Alkalinity, total	mg/L	158	131	39	136	45			66	80		193	342	200		217	102	114	65	88	88	93	95	99	150
Sulphate, dissolved	mg/L	298	98.2	14.8		20.8			43	63.3		121	452	335		394	46.4	48.7	46	74	69	76	73	76	320
Chloride	mg/L	0.96	4.84	1.05	1.6	1.1			16	32.4		1.57	4.49	2.42		3.48	1.54	1.88	2.5	3.6	2.4	2.9	2.9	2.9	4.8
Fluoride	mg/L								0.3										0.34	0.53	0.44	0.68	0.69	0.71	
Nitrite (N)	mg/L				0.132				0.057										0.292	0.351	0.355	0.353	0.318	0.242	2.36
Nitrate (N)	mg/L				2.9				6.4	8.04		48.1	141	66.4		71.4		<0.01	6.5	11.5	11.6	12.3	13.3	13.9	119
Ammonia	mg/L								1.09										1	2.2	2.2	1.8	1.6	2.1	24
Aluminum, total	mg/L	0.354	1.94	5.08	1.5	4.54		0.196	0.214	0.266		0.288	3.58	0.02		2.47	1.11	1.86	0.934	2.31	1.36	2.05	0.73	0.837	0.886
Arsenic, total	mg/L	0.0004	0.0008	0.0025	0.0015	0.0025		0.0009	0.0009	0.0006		0.0008	0.0017	0.0006		0.0023	0.0007	0.0007	0.0009	0.0017	0.0014	<0.001	0.0014	0.0012	0.0007
Cadmium, total	mg/L	0.00029	0.00039	0.00016	0.00029	0.00135		0.00006	0.00008	0.00003		0.00018	0.00126	0.00034		0.00056	0.00032	0.00007	0.00005	0.00013	0.00013	0.0001	<0.0001	<0.0001	0.00039
Calcium, total	mg/L		80	22.2	66	27.2		36.5	34.1	52.1		127	364	212		261	53.2	54.4	38.2	54.2	57.8	52.6	57	69	198
Chromium, total	mg/L	0.0009	0.0011	0.0076	0.0035	0.0065		<0.001	<0.001	0.0009		<0.0004	0.0022	<0.0004		0.0024	0.0008	0.0008	<0.001	0.003	0.002	0.003	<0.002	<0.002	<0.001
Copper, total	mg/L	0.171	0.511	0.372	0.256	0.348		0.0467	0.0335	0.01		0.186	6.21	0.123		3.21	1.07	0.158	0.183	0.225	0.168	0.447	0.173	0.189	1.18
Iron, total	mg/L		2.6	8.17	1.87	6.7		0.298	0.245	0.054		0.269	8.79	0.052		6.02	2.91	2.51	1.37	3.17	2.1	3.22	1.22	1.18	2.39
Lead, total	mg/L	0.0003	0.0012	0.004	0.001	0.0034		0.0008	0.0005	0.0007		0.0002	0.003	<0.0001		0.0037	0.0027	0.001	0.0008	0.0017	0.0011	0.0011	0.0008	0.0006	0.0005
Magnesium, total	mg/L		20.1	7.19	1.3	8		9.25	8.36	13.2		29.9	88	44.1		56.9	12.8	13.8	8.35	11.7	11.6	14.5	12	14	48.1
Manganese, total	mg/L	0.413	0.196	0.271	0.062	0.266		0.118	0.118	0.324		0.419	0.532	0.0961		0.355	0.132	0.105	0.143	0.184	0.158	0.196	0.133	0.138	0.172
Mercury, total	mg/L	<0.00001	0.00002	0.00003	<0.0001	0.00002		<0.00002	<0.00002	<0.00001		<0.00001	0.00003	<0.00001		0.00002	0.00001	0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	0.00002
Molybdenum, total	mg/L	0.0425	0.0263	0.0036	0.006	0.00568		0.016	0.016	0.017		0.0391	0.0514	0.0488		0.0598	0.0394	0.0269	0.009	0.015	0.017	0.018	0.019	0.023	0.034
Nickel, total	mg/L	0.001	0.001	0.007	0.0006	0.008		0.001	0.001	0.001		0.003	0.005	0.003		0.002	<0.001	0.001	0.002	0.004	0.002	<0.003	0.002	0.002	<0.001
Phosphorus, total	mg/L																								
Potassium, total	mg/L		5	3.8	5	3.3		3.2	2.97	3.6		5.1	14.2	5.7		7.1	2.8	3.1	2.62	3.19	3.68	4	3	4	7.52
Selenium, total	mg/L	0.0029	0.005	0.0009	0.002	0.001		0.0022	0.002	0.0018		0.0062	0.0142	0.0178		0.0167	0.0076	0.0041	0.0019	0.0031	0.0034	0.0039	0.004	0.004	0.0092
Silver, total	mg/L	<0.00001	0.00003	0.00006	0.00006	0.00009		<0.00002	0.00002	<0.00001		<0.00001	0.00251	<0.00001		0.00059	0.00029	0.00011	0.00006	0.00006	<0.00002	0.00016	<0.0001	<0.0001	0.00052
Sodium, total	mg/L		23.4	4.88	4.5	6.81		11.2	11	19.5		47.2	53	48.6		51	10.2	13.2	8.71	13.1	16.3	20.3	17	21	99.1
Thallium, total	mg/L	<0.00001	0.00002	0.00004	<0.00005	0.00005		<0.00005	<0.00005	0.00014		<0.00001	0.00003	<0.00001		0.00002	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.014	0.023	0.047	0.01	0.036		0.007	0.017	0.011		0.004	0.075	0.004		0.03	0.022	0.025	0.012	0.015	0.011	0.016	<0.01	<0.01	0.013
Aluminum, dissolved	mg/L	<0.005		0.032	<0.005	0.034		0.075	0.07	0.021								<0.005	0.057	0.025	0.023	0.019	0.019	0.023	0.079
Arsenic, dissolved	mg/L	0.0004		0.0007	0.001	0.001		0.0009	0.0008	0.0003								0.0004	0.0007	0.0008	0.0008	0.0005	<0.001	0.0009	0.0007
Cadmium, dissolved	mg/L	0.00025		0.00005	<0.00001	0.00004		0.00003	0.00003	0.00001								0.00003	0.00005	0.0001	0.00028	0.00006	<0.0001	<0.0001	0.00015
Calcium, dissolved	mg/L	152		19.5	62.6	24.9		34.2	35.6	50.1								50.8	40.4	57.3	60.6	49	53	61	190
Chromium, dissolved	mg/L	0.0004		<0.0004	<0.0005	<0.0004		<0.001	<0.001	<0.0004								<0.0004	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.001
Copper, dissolved	mg/L	0.126		0.077	0.117	0.081		0.0276	0.0191	0.001								0.018	0.109	0.113	0.107	0.108	0.122	0.131	0.476
Iron, dissolved	mg/L	<0.01		0.12	0.02	0.15		0.101	0.07	<0.01								0.03	0.173	0.103	0.094	0.081	0.064	0.069	0.386
Lead, dissolved	mg/L	0.0001		0.0002	<0.0001	0.0002		0.0003	0.0002	<0.0001								0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	37.9		4.61	<0.2	5.82		8.3	8.59	12.7								12.5	8.3	10.9	11.3	12.7	13	12	48.6
Manganese, dissolved	mg/L	0.382		0.0841	<0.005	0.0951		0.098	0.11	0.336								0.036	0.119	0.108	0.094	0.085	0.088	0.088	0.132
Mercury, dissolved	mg/L	<0.00001		<0.00001	<0.0001	<0.00001		0.00002	<0.00002	<0.00001								<0.00001	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.0002	<0.00002
Molydenum, dissolved	mg/L	0.0407		0.00492	0.006	0.0074		0.016	0.017	0.017								0.0264	0.009	0.016	0.017	0.018	0.021	0.021	0.029
Nickel, dissolved	mg/L	0.001		<0.001	<0.0005	0.001		<0.001	<0.001	0.002								<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001
Phosphorus, dissolved	mg/L																								
Potassium, dissolved	mg/L	5.2		2.9	4.6	2.6		3.06	3.1	3.5								2.7	2.68	2.97	3.41	3.41	4	3	7.21
Selenium, dissolved	mg/L	0.0029		0.0009	0.0018	0.0014		0.0023	0.0023	0.0023								0.0039	0.0021	0.0033	0.0038	0.0038	0.005	0.0044	0.0098
Silver, dissolved	mg/L	<0.00001		<0.00001	<0.00001	<0.00001		<0.00002	<0.00002	<0.00001								<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	0.0001
Sodium, dissolved	mg/L	30.3		4.5	4.3	5.8		10.3	11.4	18.1								12.4	9.21	13.7	16.2	19.5	21	19	92.4
Thallium, dissolved	mg/L	<0.00001		<0.00001	<0.00005	<0.00001		<0.00005	<0.00005	<0.00001								<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.007		0.004	0.001	0.004		<0.005	<0.005	0.004								0.003	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.005

Station Name		W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12
Sample Date		**16/03/2011**	**#########**	**25/05/2011**	**#########**	**30/06/2011**	**#########**	**01/10/2011**	**30/10/2011**	**03/11/2011**	**23/11/2011**	**13/02/2012**	**28/03/2012**	**07/04/2012**	**22/04/2012**	**03/05/2012**	**03/06/2012**	**03/07/2012**	**18/07/2012**	**12/08/2012**	**12/09/2012**	**14/10/2012**	**11/11/2012**	**16/12/2012**
pH (field)	pH units							7.56	7.73	7.12				7.44	7.35	7.08	8.26	8.38	8.52	7.7	7.96	8.29	7.95	8.09
pH (lab)	pH units	7.91	7.59	8.05	8.15	8.11	7.99	7.92	7.93	8.11	7.85	8.14	8.13	8.06	7.91	8.14	8.24	8.62	8.48	8.39	8.11	7.97	8.07	8.14
Hardness (from dissolved)	mg/L	659	113	120	195	205	216	244	241	249	262	256	250	243	223	188	243	286	275	258	243		273	275
Hardness (from total)	mg/L	682	123	144	205	198	212	232	211	239	258	226	251	201	211	175	231	267	268	283	256	283	268	279
Total Dissolved Solids	mg/L	930	210	190	340	320	340	330	360	330	370	368	380	404	346	298	380	424	442	446	386	422	428	440
Total Suspended Solids	mg/L	1	15	27	35	15	11	<4	5	6	5	<4.0	1.7	19.6	13	22.2	3.6	2.2	1.8	<1.0	6.3	2.2	17.9	32.1
Alkalinity, total	mg/L	230	82	97	120	130	130	130	130	140	141	142	137	134	121	109	134	164	162	167	151	152	157	165
Sulphate, dissolved	mg/L	390	34	22	76	75	74	82					92	90.6	74.7	61.1	74.9	93.3	87.9	87.3	81.3	86.5	114	126
Chloride	mg/L	5.3	4.3	2.8	4.6			4.3	4.1	4.6	4.9	4.5	4	3.9	4.7	4.8	13	19	16	15	9.7	8.6	7.5	7.8
Fluoride	mg/L	1.2	0.23	0.14	0.48								0.64	0.63	0.54	0.45	0.48	0.52	0.51	0.56	0.25	0.53	0.57	0.67
Nitrite (N)	mg/L	0.133	0.126	0.046	0.025	0.147	0.6	0.074	0.007	0.01	0.036	0.019	0.023	0.107	0.108	0.046	0.0623	0.0863	0.0804	0.0748	0.075	0.07	0.12	0.255
Nitrate (N)	mg/L	27	5.1	1.85	5.9	11.6	13.3	18	18.8	19.5	17.9	18.6	19.4	19.7	17.1	12.8	15.5	33.1	8.88	15	15	15.4	19	17.9
Ammonia	mg/L	4.4	0.089	0.202	0.997	0.65	0.74	0.01	<0.005	<0.005	0.16	<0.0050	0.0154	0.217	0.22	0.099	0.073	0.18	0.11	0.026	0.053	0.089	0.092	0.1
Aluminum, total	mg/L	0.018	0.604	2.02	1.68	0.173	0.365	0.068	0.093	0.14	0.132	0.039	0.024	0.813	0.505	0.427	0.166	0.147	0.175	0.0762	0.189	0.0892	0.452	0.551
Arsenic, total	mg/L	0.0009	0.0005	0.0018	0.0017	0.0015	0.0015	0.001	0.0009	0.0009	0.0009	0.0009	0.0009	0.0008	0.00093	0.00072	0.00062	0.00048	0.00063	0.0007	0.00046	0.0007	0.0007	0.00052
Cadmium, total	mg/L	0.00026	0.00004	0.00006	0.00009	0.00004	0.00004	0.00008	0.00004	0.00007	0.00005	0.00004	0.00008	0.00004	0.000043	0.000042	0.000033	0.000024	0.000024	0.000028	0.000032	0.000078	0.00005	0.000044
Calcium, total	mg/L	190	33.4	40	54.6	53.1	51.3	61.5	52.9	65.3	67	59.7	65.9	49.6	54.8	46.9	61.3	70.4	70.6	74.9	67.2	72	71.9	73.4
Chromium, total	mg/L	<0.001	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0016	<0.0010	<0.0010
Copper, total	mg/L	0.159	0.0825	0.212	0.182	0.0596	0.0662	0.0703	0.0801	0.077	0.0879	0.075	0.08	0.0803	0.103	0.105	0.0849	0.0638	0.0777	0.0696	0.105	0.0923	0.0638	0.0855
Iron, total	mg/L	0.024	1.14	3.44	2.24	0.292	0.437	0.113	0.136	0.272	0.207	0.088	0.051	1.24	0.661	0.568	0.177	0.0559	0.186	0.041	0.337	0.127	0.42	0.742
Lead, total	mg/L	0.0002	0.0003	0.0008	0.0011	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	0.00031	0.00026	0.00034	<0.00020	<0.00020	<0.00020	<0.00020	0.00031	<0.00020	0.00024
Magnesium, total	mg/L	50.6	9.59	10.8	16.7	16	20.5	19.1	19.1	18.3	22.1	18.7	20.9	18.7	18.1	14.1	19	22.1	22.4	23.4	21.3	25.1	21.5	23.3
Manganese, total	mg/L	0.225	0.301	0.254	0.213	0.068	0.112	0.13	0.145	0.15	0.143	0.128	0.134	0.109	0.126	0.112	0.138	0.0461	0.0264	0.0298	0.0818	0.11	0.166	0.342
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.044	0.005	0.003	0.015	0.016	0.021	0.018	0.019	0.02	0.022	0.019	0.022	0.024	0.0166	0.0136	0.0163	0.0183	0.0176	0.017	0.0169	0.0205	0.0204	0.027
Nickel, total	mg/L	<0.001	0.002	0.003	0.003	0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.0011	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.002	0.0017	0.0038
Phosphorus, total	mg/L																							
Potassium, total	mg/L	6.97	3.68	3.1	4.47	3.54	4.41	3.74	4.2	4.12	4.63	3.84	4.3	4.38	3.88	3.27	4.34	5.31	5.21	5.57	4.75	5.07	5.87	10.8
Selenium, total	mg/L	0.0099	0.0015	0.0011	0.0051	0.0046	0.005	0.0052	0.0048	0.0058	0.0062	0.0057	0.0065	0.0042	0.00459	0.00393	0.00535	0.00564	0.00691	0.00663	0.00588	0.00646	0.0052	0.00631
Silver, total	mg/L	<0.00002	0.00002	0.00009	0.00008	<0.00002	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00003	<0.000020	0.000022	<0.000020	<0.000020	<0.000020	<0.000020	0.000038	<0.000020	<0.000020	0.000041
Sodium, total	mg/L	51	9.61	6.34	18.6	16.5	20.7	18.4	20	19.3	22.4	19.4	21.6	14.8	17.3	13.7	19.6	23.4	22.3	22.6	20.3	24.1	20.6	24.9
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.007	0.009	0.047	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050	0.0057	0.0061	<0.0050	<0.0050	<0.0050	0.0055	0.0124	0.0056	0.0057
Aluminum, dissolved	mg/L	0.003	0.089	0.032	0.02	0.007	0.013	0.014	0.012	0.01	0.0048	0.0042	0.004	0.0038	0.0178	0.0384	0.0764	0.124	0.0846	0.0753	0.0301		0.0109	0.0084
Arsenic, dissolved	mg/L	0.0007	0.0003	0.0008	0.0012	0.0017	0.0015	0.0009	0.001	0.001	0.001	0.00102	0.00091	0.00086	0.0008	0.00063	0.00069	0.00061	0.00063	0.00062	0.0006		0.00051	0.00046
Cadmium, dissolved	mg/L	0.00014	0.00004	0.00003	0.00005	0.00004	0.00003	0.00006	0.00006	0.00005	0.000052	0.000079	0.000089	0.000042	0.000034	0.000016	0.000046	0.000024	0.000022	0.000028	0.000031		0.000049	0.000035
Calcium, dissolved	mg/L	185	31.2	34.3	53.6	55.8	56.5	64.7	63.9	66.3	68.9	65.9	67	62.6	58	50.7	65.1	76.5	73.1	67.3	64.2		72.3	70.3
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, dissolved	mg/L	0.148	0.0431	0.0724	0.0742	0.0414	0.0501	0.0692	0.0719	0.0715	0.0791	0.0742	0.0755	0.0674	0.0398	0.0237	0.0772	0.0586	0.0655	0.0664	0.0696		0.0341	0.00983
Iron, dissolved	mg/L	<0.005	0.204	0.225	0.07	0.032	0.024	0.039	0.016	0.021	0.0246	0.012	0.0124	0.0113	0.0604	0.0456	0.0537	0.0121	0.0117	0.0133	0.028		0.0074	0.0108
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, dissolved	mg/L	48	8.56	8.41	14.8	16	18.1	20.1	19.8	20.3	21.9	22.1	20.1	20.3	19	14.9	19.5	23.1	22.4	21.8	20.1		22.4	24.1
Manganese, dissolved	mg/L	0.213	0.277	0.161	0.131	0.058	0.098	0.135	0.139	0.141	0.143	0.134	0.13	0.118	0.112	0.104	0.131	0.0095	0.0196	0.0263	0.07		0.168	0.296
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.037	0.004	0.003	0.014	0.013	0.02	0.018	0.02	0.021	0.0218	0.0214	0.0211	0.0223	0.0167	0.0137	0.0171	0.0195	0.0188	0.0179	0.0176		0.0215	0.0286
Nickel, dissolved	mg/L	<0.001	0.001	0.002	0.001	0.001	0.002	0.001	0.001	<0.001	0.0016	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	0.003
Phosphorus, dissolved	mg/L																							
Potassium, dissolved	mg/L	6.62	3.32	2.36	4.05	3.57	4.21	4.04	4.15	4.33	4.33	4.55	4.13	4.19	3.9	3.84	4.65	6.07	5.34	5.23	4.73		6.16	10.7
Selenium, dissolved	mg/L	0.0095	0.0014	0.0009	0.0047	0.0055	0.0058	0.0061	0.006	0.0062	0.00684	0.00701	0.00685	0.00586	0.00554	0.00438	0.00593	0.00704	0.00639	0.00665	0.00629		0.00667	0.00675
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, dissolved	mg/L	48.2	8.62	5.42	17	17.2	17.8	20	20.4	21.1	22.3	23.2	21.1	20.2	17.7	15.1	20.2	24.2	23.1	22	20.2		22	26.4
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.005	0.008	0.031	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0219	0.0079	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050

Station Name		W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12
Sample Date		**04/01/2013**	**13/02/2013**	**04/03/2013**	**18/04/2013**	**04/05/2013**	**07/07/2013**	**02/08/2013**	**04/09/2013**	**04/10/2013**	**18/10/2013**	**09/11/2013**	**10/12/2013**	**05/01/2014**	**04/02/2014**	**24/03/2014**	**19/04/2014**	**19/04/2014**	**06/05/2014**	**14/06/2014**	**03/07/2014**	**23/07/2014**
pH (field)	pH units	7.91		8.01	7.96	8.34	7.87	7.67	7.97	7	7.73	8	7.98	8.09	8.16	8.4	8		8.11	8.2	8.32	8.66
pH (lab)	pH units	8.03	8.11	8.22	8.14	8.09	8.26	8.1	8.17	8.21	8.16	8.2	8.23	8.19	8.17	8.25		8.32	8.24	8.18	8.24	
Hardness (from dissolved)	mg/L	755	475	303	202	237	223	221	227	240	251	257	271	273	275	259		276	265	271	267	
Hardness (from total)	mg/L	714	427	290	236	257	223	240	260	277	279	277	265	269	272	265		272	266	277	300	
Total Dissolved Solids	mg/L	1290	846	560	418	460	432	456	468	478	510	498	560	514	554	548		544	562	560	614	
Total Suspended Solids	mg/L	5.6	7.3	5.2	15.4	10.4	10.4	20.8	11.2	8.7	14.7	8.2	6	2.7	11.6	9.3		8	3.2	1.1	6.1	
Alkalinity, total	mg/L	373	276	210	163	173	167	160	166	166	165	165	168	183	172	178		187	193	195	188	
Sulphate, dissolved	mg/L	565	228	133	131	134	124	129	135	148	151	157	169	174	179	185		187	185	190	215	
Chloride	mg/L	6.3	15	8.3	8.7	10	11	11	11	10	11	11	12	13	14	14		14	15	17	17	
Fluoride	mg/L	3.2	1.3	0.98	0.93	1	0.97	1.1	1.2	1.3	1.3	1.3	1.3	1.4	1.5	1.4		1.4	1.4	1.4	1.5	
Nitrite (N)	mg/L	0.941	0.43	0.0397	0.148	0.173	0.211	0.213	0.242	0.278	0.249	0.221	0.262	0.242	0.284	0.0429		0.0351	0.131	0.191	0.216	
Nitrate (N)	mg/L	23	32.2	17.5	13.2	13.4	10.6	12.4	13.6	15.2	14.9	15.8	17.2	16.8	16.7	14.4		12	10.4	10.1	11.6	
Ammonia	mg/L	4.3	1.3	0.42	0.57	0.64	0.45	0.38	0.48	0.7	0.78	1.2	1.5	1.6	1.5	1.2		1.2	1.3	1.5	1.3	
Aluminum, total	mg/L	0.125	0.167	0.0867	0.526	0.364	0.37	0.444	0.432	0.572	0.389	0.141	0.37	0.086	0.148	0.113		0.228	0.174	0.078	0.133	
Arsenic, total	mg/L	0.00194	0.0007	0.00051	0.00045	0.00036	0.00056	0.00052	0.00046	0.00064	0.0004	0.00032	0.00042	0.0004	0.00042	0.00051		0.00049	0.00051	0.00046	0.00049	
Cadmium, total	mg/L	0.000026	0.000021	0.000011	0.000026	0.000027	0.000022	0.000012	0.000017	0.000015	0.000071	0.000027	0.000017	0.000015	0.000026	0.000015		0.000026	0.000023	0.000026	<0.000010	
Calcium, total	mg/L	174	102	69.3	56.1	60.8	50.6	56	61.2	65.1	64.5	64.7	67.2	65.6	68.9	67.1		69.6	68.4	70.7	77.9	
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	
Copper, total	mg/L	0.0356	0.0461	0.0457	0.06	0.0174	0.038	0.0278	0.0226	0.0543	0.11	0.0363	0.0491	0.00641	0.00749	0.00393		0.0343	0.0172	0.00948	0.0169	
Iron, total	mg/L	0.242	0.226	0.159	0.743	0.351	0.49	0.502	0.421	0.982	0.646	0.342	0.702	0.0847	0.193	0.291		0.376	0.388	0.13	0.215	
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	0.00029	0.00023	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	
Magnesium, total	mg/L	67.9	41.6	28.4	23.2	25.7	23.4	24.4	25.9	27.7	28.5	27.9	23.5	25.5	24.3	23.5		23.9	23.2	24.4	25.5	
Manganese, total	mg/L	0.141	0.178	0.126	0.104	0.12	0.104	0.079	0.0748	0.0785	0.0681	0.0593	0.0765	0.0784	0.116	0.17		0.154	0.145	0.133	0.119	
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000027	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000050	<0.000010	<0.000010	
Molybdenum, total	mg/L	0.0462	0.042	0.0315	0.0291	0.0355	0.0391	0.042	0.047	0.05	0.0528	0.051	0.0486	0.0509	0.05	0.0509		0.0526	0.0499	0.0551	0.0564	
Nickel, total	mg/L	0.0016	0.0031	0.0016	0.0015	0.0035	0.0015	0.0015	0.0019	0.0019	0.0021	0.0025	0.0033	0.0034	0.0032	0.0013		0.0012	0.0017	0.0034	0.0034	
Phosphorus, total	mg/L	0.024	0.024	0.032	0.033	0.016	0.016	0.016	0.021	0.076	0.022	0.012	0.041	0.017	<0.01	0.033		0.039	0.031	<0.01	0.016	
Potassium, total	mg/L	11.8	22.3	20.5	18.9	22.7	20.7	20.3	22	23.2	23.7	22.5	23.6	26.7	28.5	31		32.2	30.7	32.9	36	
Selenium, total	mg/L	0.00386	0.00163	0.0007	0.00064	0.00096	0.00363	0.00431	0.00554	0.00593	0.0059	0.00597	0.00516	0.00521	0.00464	0.00453		0.00444	0.00447	0.00484	0.00523	
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000029	<0.000020	0.000038	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	
Sodium, total	mg/L	95.3	52.3	39.9	36.6	43.6	41.1	45.4	47.8	50.3	50.8	51.6	43.9	50.7	48.7	52.4		55.1	54.8	59.6	62.1	
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0052	<0.0050	<0.0050	0.0102	<0.0050		0.0065	<0.0050	<0.0050	<0.0050	
Aluminum, dissolved	mg/L	0.0066	0.0095	0.0122	0.0069	0.0159	0.0266	0.0269	0.0288	0.0246	0.0249	0.0118	0.0159	0.0122	0.0162	0.0154		0.0184	0.0185	0.0184	0.0332	
Arsenic, dissolved	mg/L	0.00213	0.00082	0.00053	0.0004	0.00036	0.00051	0.00048	0.00043	0.00046	0.0004	0.00027	0.00039	0.0004	0.00034	0.00043		0.00041	0.00038	0.00045	0.00049	
Cadmium, dissolved	mg/L	0.000025	0.000016	0.000019	0.000013	0.000017	0.000023	0.00002	0.000023	<0.000010	0.000012	0.000026	0.000016	0.00001	0.000012	<0.000010		0.000013	0.000021	0.000015	0.000023	
Calcium, dissolved	mg/L	184	113	72.5	48.1	57.1	51.9	50.9	53	57.2	59.7	62.5	66	68.1	70	65.2		69.9	67.2	68.7	68.7	
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	
Copper, dissolved	mg/L	0.0263	0.0354	0.0082	0.00974	0.00244	0.00615	0.00666	0.00647	0.00289	0.0112	0.0197	0.00656	0.00226	0.0066	0.00046		0.00121	0.00302	0.00805	0.00432	
Iron, dissolved	mg/L	0.0298	0.0069	0.0061	<0.0050	0.0128	0.0117	0.0093	<0.0050	<0.0050	0.0228	<0.0050	<0.0050	<0.0050	0.0052	0.0435		0.0359	0.0706	0.0228	0.0069	
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	
Magnesium, dissolved	mg/L	71.5	46.6	29.7	19.9	23	22.7	22.9	23	23.5	24.8	24.5	25.8	25.1	24.3	23.3		24.7	23.5	24.1	23.3	
Manganese, dissolved	mg/L	0.146	0.194	0.124	0.076	0.104	0.0906	0.0604	0.0604	0.0495	0.0473	0.0458	0.0635	0.077	0.115	0.161		0.142	0.141	0.134	0.1	
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000050	<0.000010	<0.000010	
Molydenum, dissolved	mg/L	0.0484	0.0476	0.0343	0.0255	0.032	0.0367	0.043	0.0435	0.0484	0.0475	0.0491	0.0525	0.0496	0.0508	0.0561		0.0537	0.0511	0.0527	0.0576	
Nickel, dissolved	mg/L	0.0019	0.0028	0.0015	0.0012	0.0032	0.0014	0.0013	0.0016	0.0017	0.0018	0.002	0.003	0.0033	0.0034	0.001		0.001	0.0014	0.0036	0.0026	
Phosphorus, dissolved	mg/L	0.017	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	
Potassium, dissolved	mg/L	12.1	24.8	20.4	16.1	20	20.8	20.3	20.6	20.2	21.2	21.5	24.3	24.3	29	29.9		33	30.6	34	34	
Selenium, dissolved	mg/L	0.00387	0.00185	0.00077	0.00062	0.00103	0.00437	0.00467	0.00537	0.00548	0.00586	0.00553	0.00562	0.00521	0.00465	0.00494		0.00487	0.00472	0.00512	0.00495	
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	
Sodium, dissolved	mg/L	103	58.5	43	32.7	40.3	38.6	40.9	43	44.4	46.1	44.7	49.1	50.3	47.6	52.5		57.7	56.4	58.8	62.5	
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0074	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	

Station Name		W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12
Sample Date		**07/08/2014**	**09/08/2014**	**09/08/2014**	**15/08/2014**	**19/08/2014**	**26/08/2014**	**07/09/2014**	**07/09/2014**	**12/09/2014**	**12/09/2014**	**15/09/2014**	**15/09/2014**	**25/09/2014**	**03/10/2014**	**08/10/2014**	**08/10/2014**	**09/10/2014**	**13/10/2014**	**02/11/2014**	**23/11/2014**	**11/12/2014**
pH (field)	pH units		8.08	8.08	8.03	8.12	8.11	8.03	8.03	8.06	8.06	6.01	6.01	8	8.4	8.18		8.16	7.9	7.99	7.89	7.84
pH (lab)	pH units		8.31						8.16		8.26	8.27						8.18		8.17	8.16	8.09
Hardness (from dissolved)	mg/L		286						330		300	299						305		306	308	311
Hardness (from total)	mg/L	277	287						311		286	331						291		301	344	327
Total Dissolved Solids	mg/L		876						618		792	767						652		642	686	684
Total Suspended Solids	mg/L		20.8						10.1		3.7	5.6						19.9		7.5	24.7	6.6
Alkalinity, total	mg/L		191						184		185	186						175		181	182	184
Sulphate, dissolved	mg/L		237						174		179	186						235		211	198	255
Chloride	mg/L		18						20		19	19						20		20	22	22
Fluoride	mg/L		1.5						1.5		1.5	1.6						1.5		1.6	0.17	1.5
Nitrite (N)	mg/L		0.217						0.202		0.197	0.197						0.194		0.174	0.198	0.457
Nitrate (N)	mg/L		12.3						13.2		13.6	13.7						14.1		15.6	16.1	14.9
Ammonia	mg/L		1.6						1.6		1.4	1.7						1		1.2	0.96	1.4
Aluminum, total	mg/L	0.163	0.172						0.248		0.089	0.149						0.29		0.124	4.13	0.11
Arsenic, total	mg/L	0.00037	0.00044						0.00059		0.00068	0.00056						0.00054		0.00055	0.00164	0.00053
Cadmium, total	mg/L	0.000024	0.000016						0.000016		0.000017	0.000019						0.000021		0.000033	0.00046	0.000054
Calcium, total	mg/L	70.4	72.1						79.2		74.7	86.6						72.6		79.5	90.8	84.4
Chromium, total	mg/L	<0.0010	<0.0010						<0.0010		<0.0010	<0.0010						<0.0010		<0.0010	0.0060	<0.0010
Copper, total	mg/L	0.00156	0.0122						0.0146		0.0136	0.00875						0.0665		0.0266	4.53	0.0205
Iron, total	mg/L	<0.01	0.233						0.336		0.102	0.166						0.434		0.161	13.7	0.273
Lead, total	mg/L	<0.00020	<0.00020						<0.00020		<0.00020	<0.00020						<0.00020		<0.00020	0.00435	<0.00020
Magnesium, total	mg/L	24.6	26.1						27.4		24.2	27.8						26.8		24.8	28.4	28.3
Manganese, total	mg/L	0.0869	0.11						0.0994		0.0949	0.108						0.16		0.153	0.418	0.227
Mercury, total	mg/L	<0.000010	<0.000010						<0.000010		<0.000010	<0.000010						<0.000010		<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0597	0.0597						0.0639		0.06	0.0643						0.0659		0.0701	0.0758	0.0745
Nickel, total	mg/L	0.0025	0.0027						0.0024		0.0022	0.0022						0.0023		0.0017	0.0053	0.0037
Phosphorus, total	mg/L	0.339	0.015						0.013		0.013	0.017						<0.01		0.01	0.374	0.016
Potassium, total	mg/L	31.9	33.3						37.2		34.6	38.3						36.2		37.2	38.3	37.9
Selenium, total	mg/L	0.00533	0.00558						0.00603		0.00644	0.00585						0.00674		0.00698	0.0102	0.00795
Silver, total	mg/L	<0.000020	<0.000020						<0.000020		<0.000020	<0.000020						<0.000020		<0.000020	0.0017	0.000037
Sodium, total	mg/L	62.6	63.2						66.2		63.8	69.9						69.6		68.6	74.7	79.8
Thallium, total	mg/L	<0.000050	<0.000050						<0.000050		<0.000050	<0.000050						<0.000050		<0.000050	0.000062	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050						0.0117		<0.0050	<0.0050						<0.0050		<0.0050	0.0379	0.0084
Aluminum, dissolved	mg/L		0.0221						0.0299		0.0274	0.0284						0.0215		0.0201	0.0198	0.0126
Arsenic, dissolved	mg/L		0.00037						0.00059		0.00052	0.00062						0.00054		0.00057	0.00054	0.00048
Cadmium, dissolved	mg/L		<0.000010						0.000011		0.00002	0.000018						0.000022		0.000025	0.000027	0.000019
Calcium, dissolved	mg/L		73.1						86.6		79.4	77.1						79.9		83.1	80.7	81.6
Chromium, dissolved	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L		0.00335						0.00324		0.0062	0.00699						0.00809		0.0123	0.00686	0.00302
Iron, dissolved	mg/L		0.0112						0.0064		0.0172	0.005						0.0157		0.0098	0.013	0.107
Lead, dissolved	mg/L		<0.00020						<0.00020		<0.00020	<0.00020						<0.00020		<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L		25.1						27.7		24.8	25.8						25.5		23.9	25.8	26
Manganese, dissolved	mg/L		0.0937						0.0992		0.0967	0.104						0.145		0.151	0.157	0.212
Mercury, dissolved	mg/L		<0.000010						<0.000010		<0.000010	<0.000010						<0.000010		<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.0502						0.0635		0.0638	0.0645						0.0725		0.0655	0.0729	0.0732
Nickel, dissolved	mg/L		0.0029						0.0026		0.0023	0.0023						0.0021		0.0017	0.002	0.0029
Phosphorus, dissolved	mg/L		0.011						<0.01		<0.01	0.012						<0.01		<0.01	<0.01	<0.01
Potassium, dissolved	mg/L		30.3						37.7		35.9	35.9						36.5		35	36.7	35.9
Selenium, dissolved	mg/L		0.0063						0.00763		0.0069	0.00617						0.00641		0.00704	0.00725	0.00749
Silver, dissolved	mg/L		<0.000020						<0.000020		<0.000020	<0.000020						<0.000020		<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L		58.4						72.1		65.2	68.1						67.2		66.5	75.2	76.1
Thallium, dissolved	mg/L		<0.000050						<0.000050		<0.000050	<0.000050						<0.000050		<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L		<0.0050						<0.0050		<0.0050	<0.0050						<0.0050		<0.0050	<0.0050	<0.0050

Station Name		W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12	W12
Sample Date		**05/01/2015**	**17/01/2015**	**18/01/2015**	**20/02/2015**	**08/03/2015**	**02/04/2015**	**11/05/2015**	**11/06/2015**	**03/07/2015**	**20/08/2015**	**16/09/2015**	**16/10/2015**	**07/11/2015**	**11/12/2015**
pH (field)	pH units	7.76		8.26	7.89	8.09	8.19	7.92	8.14	8.19	8.28	8.22	7.9	8.26	8.2
pH (lab)	pH units	7.7	8.01		8.16	8.27	8.2	8.23	8.23	8.2	8.17	8.31	8.3	8.23	8.15
Hardness (from dissolved)	mg/L	310	298		295	298	293	287	327	305	291	320	324	336	355
Hardness (from total)	mg/L	300	303		301	295	296	336	307	294	294	335	337	326	332
Total Dissolved Solids	mg/L	686	698		702	722	732	638	676	788	850	812	782	878	866
Total Suspended Solids	mg/L		15.2		69.4	14.8	6.9	15.5	5.6	38.3	4.6	3.4	2	46.9	5
Alkalinity, total	mg/L	163	186		209	215	213	195	196	193	176	169	174	172	171
Sulphate, dissolved	mg/L	265	243		281	264	277	223	236	286	312	313	329	309	333
Chloride	mg/L	30	24		30	29	29	26	25	28	28	27	27	27	30
Fluoride	mg/L	1.4	1.3		1.5	1.4	1.3	1.3	1.3	1.4	1.5	1.3	1.4	1.4	1.3
Nitrite (N)	mg/L	1.87	1.49		0.0569	0.749	1.85	1.66	1.79	2.83	1.98	1.1	0.693	0.529	0.552
Nitrate (N)	mg/L	16.4	13.6		7.73	8.31	9.11	8.2	11.8	13.6	19.6	21.2	23.8	24	26
Ammonia	mg/L	1.4	1.4		1.7	2.2	2.8	2.7	2.9	3.9	4.3	3.5	3.2	3	3.1
Aluminum, total	mg/L	0.143	0.381		2.22	0.168	0.0862	1.29	0.109	0.242	0.697	0.059	0.0484	0.0431	0.0553
Arsenic, total	mg/L	0.00051	0.00047		0.001	0.00051	0.00046	0.00079	0.00046	0.0003	0.00066	0.00039	0.00036	0.00029	0.00038
Cadmium, total	mg/L	0.000073	0.00008		0.000295	0.000053	0.00006	0.000144	0.000047	0.000035	0.000138	0.000053	0.000052	0.000048	0.000061
Calcium, total	mg/L	76	78.2		74.8	74	73.1	84.4	77.1	72.8	74	82.8	84.6	83.4	87.8
Chromium, total	mg/L	<0.0010	<0.0010		0.0031	<0.0010	<0.0010	0.0036	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0257	0.0999		2.55	0.0919	0.0659	1.34	0.0665	0.0638	0.104	0.0322	0.0411	0.0249	0.0425
Iron, total	mg/L	0.462	0.694		5.75	0.277	0.177	3.82	0.259	0.47	1.25	0.083	0.071	0.048	0.122
Lead, total	mg/L	<0.00020	0.00021		0.00178	<0.00020	<0.00020	0.00123	<0.00020	<0.00020	0.00039	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	26.8	26.3		27.8	26.8	27.6	30.5	27.7	27.3	26.6	31.2	30.6	28.7	27.3
Manganese, total	mg/L	0.329	0.459		0.669	0.725	0.648	0.743	0.365	0.276	0.188	0.132	0.119	0.129	0.145
Mercury, total	mg/L	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0752	0.0801		0.0926	0.0896	0.0924	0.0779	0.0742	0.0859	0.101	0.0846	0.0803	0.0848	0.0885
Nickel, total	mg/L	0.0027	0.0025		0.0048	0.0022	0.0019	0.0049	0.0018	0.0018	0.0021	0.0011	<0.0010	<0.0010	0.001
Phosphorus, total	mg/L	0.025	0.044		0.113	0.042	0.043	0.361	0.022	0.022	0.067	<0.01	<0.01	0.017	0.014
Potassium, total	mg/L	39	36		39.4	41.3	39.7	38.2	33.3	41.1	44.5	39.3	41.9	39.6	41.3
Selenium, total	mg/L	0.00864	0.00927		0.0111	0.01	0.0106	0.0119	0.00964	0.0147	0.0183	0.0161	0.0162	0.0171	0.0175
Silver, total	mg/L	0.000021	0.000039		0.000727	<0.000020	<0.000020	0.000154	<0.000020	<0.000020	0.000051	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	79.1	81		92.9	94.7	102	97.8	82.9	106	121	115	121	111	118
Thallium, total	mg/L	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0062	0.0107		0.0183	<0.0050	0.0095	0.0176	0.0835	<0.0050	0.014	<0.0050	<0.0050	0.0054	<0.0050
Aluminum, dissolved	mg/L	0.0152	0.0107		0.0149	0.0141	0.0132	0.0095	0.0084	0.0277	0.0235	0.0203	0.0129	0.027	0.0191
Arsenic, dissolved	mg/L	0.00046	0.00049		0.00044	0.00044	0.00044	0.00045	0.00043	0.00037	0.00055	0.00047	0.00035	0.00047	0.00041
Cadmium, dissolved	mg/L	<0.000010	0.00002		0.000023	<0.000010	0.000018	0.000044	0.000055	0.000045	0.000042	0.00004	0.000052	0.000054	0.000025
Calcium, dissolved	mg/L	83	74.4		75.5	73	73.5	72.2	80.7	74.8	69.7	81.1	82.1	83.3	91.9
Chromium, dissolved	mg/L	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00098	0.00247		0.0102	0.0117	0.0163	0.03	0.0373	0.0049	0.0117	0.0211	0.029	0.0253	0.0194
Iron, dissolved	mg/L	0.231	0.0484		0.0115	0.0063	0.0054	0.0095	0.0096	<0.0050	<0.0050	<0.0050	<0.0050	0.0085	0.0124
Lead, dissolved	mg/L	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	25	27.2		25.7	28.1	26.7	25.8	30.4	28.6	28.4	28.4	28.9	31.1	30.4
Manganese, dissolved	mg/L	0.321	0.438		0.576	0.687	0.63	0.548	0.329	0.264	0.124	0.12	0.117	0.133	0.143
Mercury, dissolved	mg/L	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0782	0.0758		0.0834	0.088	0.0941	0.0796	0.0747	0.0945	0.0972	0.0873	0.0825	0.0829	0.0882
Nickel, dissolved	mg/L	0.0022	0.0021		0.002	0.0019	0.0015	0.0015	0.0015	0.0018	0.0011	<0.0010	<0.0010	<0.0010	0.0038
Phosphorus, dissolved	mg/L	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	0.012	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	39.1	37.3		38.5	40.7	39.4	32.9	32.3	39.9	42.7	39.6	37.9	39.8	39.9
Selenium, dissolved	mg/L	0.00819	0.00877		0.00893	0.00952	0.0105	0.00975	0.00969	0.0151	0.0207	0.0165	0.0157	0.0163	0.0174
Silver, dissolved	mg/L	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	83.3	84		84.3	103	99	87.5	90.4	116	129	112	115	130	120
Thallium, dissolved	mg/L	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	0.0062		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0062	<0.0050

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**19/05/2007**	**20/06/2007**	**18/07/2007**	**14/08/2007**	**17/09/2007**	**17/10/2007**	**20/11/2007**	**22/04/2008**	**07/05/2008**	**20/05/2008**	**18/06/2008**	**22/07/2008**	**26/08/2008**	**18/09/2008**	**27/10/2008**	**18/11/2008**	**30/04/2009**	**18/05/2009**	**04/06/2009**	**16/06/2009**	**07/07/2009**
pH (field)	pH units																7.6		6.16	6.9	7.63	7.71
pH (lab)	pH units	7.43	7.26	7.41	7.67	7.66	7.3	7.64	7.57		7.43	7.22	7.4	7.14	7.42	7.31	7.47	6.39	7.12	7.43		7.84
Hardness (from dissolved)	mg/L	89																22		96		299
Hardness (from total)	mg/L		83	143	152	98	139	250		42		106	62									
Total Dissolved Solids	mg/L	150	140	234	268	182	266	494	190		160	176	146	162	198	186	322	94	138	166		364
Total Suspended Solids	mg/L	<2	2	<2	<2	20	<2	<5	14		<2	<2	<2	<2	4	134	2	8	3	5		6
Alkalinity, total	mg/L	72	76	130	99	68	64	118	54		37	49	29	34	50	75	236	8	33	59		274
Sulphate, dissolved	mg/L	8.1	6.7	18.6	52	35.2			44.5		19.1	59.7	17.5	8.8	21.1	36.1	1.27	1.77	20.2	34.5		10
Chloride	mg/L	0.5	0.5	1.1	2.5	1.96	3.01	9.94	1.87		0.76	1.3	0.27	0.24	0.49	0.97	2.1	0.35	0.46	4.1		0.82
Fluoride	mg/L																					
Nitrite (N)	mg/L	<0.05	<0.05	<0.05	0.09	<0.02	<0.02	<0.02	0.15		0.02	0.01	0.02	<0.01	<0.01							
Nitrate (N)	mg/L	<0.1	0.1	0.2	3.2	3.75	8.1	4.69	1.24		0.19	0.14	0.02	<0.01	0.4							
Ammonia	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					
Aluminum, total	mg/L	0.1	0.093	0.052	0.047	0.036	0.033	0.127	0.7	0.23	0.17	0.04	0.135	0.308	0.203	3.09	0.398	0.504	0.153	0.101		0.099
Arsenic, total	mg/L	0.0005	0.0006	0.0005	0.0004	0.0004	0.0003	0.0006	0.001	0.0005	0.0007	0.0008	0.0004	0.0006	0.0002	0.0011	0.0004	0.0003	0.0004	0.0004		0.0018
Cadmium, total	mg/L	0.00003	<0.00001	0.00002	<0.00001	<0.00001	0.00001	0.00003	<0.00007	<0.00007	<0.00007	<0.00008	<0.00001	<0.00001	0.00002	0.00008	0.00003	0.00004	0.00001	<0.00001		0.00008
Calcium, total	mg/L	24.5	22.8	38.5	41.1	26	37	59.5	23.3	11.4	15.4	27.4	16.4	14.2	21.2	38.5	59.3	5.72	19.3	27.2		83.7
Chromium, total	mg/L	<0.001	0.0006	0.0007	<0.0005	0.0005	<0.0005	0.0009	0.0007	<0.0005	0.0014	0.0014	0.0006	0.0024	0.0014	0.0022	0.0008	0.0015	0.0021	0.0004		0.001
Copper, total	mg/L	0.027	0.008	0.049	0.013	0.003	0.002	0.017	0.066	0.018	0.009	0.003	0.009	0.02	0.011	0.275	0.073	0.049	0.015	0.011		0.028
Iron, total	mg/L	0.8	0.7	0.8	0.1	0.2	0.4	0.4	1.01	0.55	0.51	0.35	0.32	0.62	0.87	6.1	0.54	0.73	0.28	0.4		4.02
Lead, total	mg/L	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0006	0.0006	<0.0001	<0.0001	0.0001	<0.0001	0.0002	0.0013	<0.0001	0.0002	0.0001	<0.0001		0.0001
Magnesium, total	mg/L	7.5	6.4	11.3	11.9	8.1	11.4	24.6	7.16	3.42	5.02	9.11	5.1	4.16	6.2	13.9	18.9	1.95	5.66	8.59		22.2
Manganese, total	mg/L	0.078	0.15	0.254	0.047	0.009	0.025	0.299	0.379	0.37	0.101	0.0661	0.01	0.0097	0.0422	0.248	0.087	0.109	0.0129	0.0492		4.57
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00001	0.00001	<0.00001	<0.01	<0.0001	0.00001	<0.00001	<0.00001	<0.0001	0.00002	<0.00001	<0.00001		<0.00001
Molybdenum, total	mg/L	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00225	0.00027	0.00034	0.00046	<0.001	0.0004	0.00051	0.00051	<0.001	0.00016	0.00075	0.00049		0.0029
Nickel, total	mg/L	0.002	0.0022	0.0009	0.0011	<0.0005	0.0007	<0.0005	0.009	0.005	0.005	<0.001	0.0015	0.003	<0.001	0.002	0.0013	0.001	0.002	0.002		0.004
Phosphorus, total	mg/L	0.07	<0.05		<0.05	<0.05			0.11	0.06	0.05	<0.05		0.05	0.04	0.245		0.07	<0.05	<0.05		0.045
Potassium, total	mg/L	0.9	<0.4	2.2	2.2	1.5	1.6	5.1	3.63	1.89	2.04	1.26	<0.4	0.65	0.83	2	1	1.9	1.7	1.2		2.2
Selenium, total	mg/L	<0.0004	<0.0002	0.0004	0.0011	0.0003	0.0012	0.0011	0.0013	<0.0006	<0.0006	<0.0006	<0.0002	<0.0006	<0.0006	<0.0006	<0.0002	<0.0006	<0.0006	<0.0006		<0.0006
Silver, total	mg/L	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	0.00006	0.00009	0.00007	<0.00001	<0.00001	<0.00001		0.00012
Sodium, total	mg/L	3.1	4.3	6	8.6	6.3	7.5	17	5.1	2.5	4.1	6.9	4.6	3.3	3.6	5.44	8.8	1.11	3.16	4.61		7.06
Thallium, total	mg/L	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001
Zinc, total	mg/L	0.01	0.005	0.003	0.003	0.007	0.006	0.016	0.017	0.01	0.002	0.005	0.006	0.005	0.006	0.044	0.013	0.014	0.005	0.006		0.01
Aluminum, dissolved	mg/L	0.072												0.226				0.2		0.049		0.025
Arsenic, dissolved	mg/L	0.0005												0.0004				<0.0002		0.0004		0.0017
Cadmium, dissolved	mg/L	<0.00001												<0.00001				0.00003		<0.00001		0.00002
Calcium, dissolved	mg/L	23.4												14				5.59		25.6		83.1
Chromium, dissolved	mg/L	0.0008												0.0017				0.0009		0.0004		0.0008
Copper, dissolved	mg/L	0.009												0.016				0.018		0.009		0.017
Iron, dissolved	mg/L	0.39												0.57				0.24		0.28		2.68
Lead, dissolved	mg/L	<0.0001												0.0001				0.0002		<0.0001		<0.0001
Magnesium, dissolved	mg/L	7.4												4.17				1.86		7.96		22.2
Manganese, dissolved	mg/L	0.07												0.0076				0.0898		0.0427		<2
Mercury, dissolved	mg/L	<0.0001												<0.00001				0.00002		<0.00001		<0.00001
Molydenum, dissolved	mg/L	<0.001												0.00044				0.0001		0.00043		0.00273
Nickel, dissolved	mg/L	0.0009												0.003				<0.001		0.001		0.004
Phosphorus, dissolved	mg/L													0.03				0.04		<0.01		0.03
Potassium, dissolved	mg/L	0.9												0.65				1.7		1.2		2.1
Selenium, dissolved	mg/L	<0.0002												<0.0006				<0.0006		<0.0006		<0.0006
Silver, dissolved	mg/L	<0.0001												<0.00001				<0.00001		<0.00001		<0.00001
Sodium, dissolved	mg/L	3.2												3.29				1.1		4.2		6.9
Thallium, dissolved	mg/L	<0.00005												<0.00001				<0.00001		<0.00001		<0.00001
Zinc, dissolved	mg/L	0.004												0.003				0.007		0.002		0.003

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**13/07/2009**	**11/08/2009**	**25/08/2009**	**02/09/2009**	**03/09/2009**	**18/09/2009**	**12/10/2009**	**19/04/2010**	**20/04/2010**	**21/04/2010**	**22/04/2010**	**23/04/2010**	**24/04/2010**	**25/04/2010**	**25/04/2010**	**26/04/2010**	**27/04/2010**	**28/04/2010**	**29/04/2010**	**30/04/2010**	**01/05/2010**
pH (field)	pH units		8.18	7.47	7.88		7.02	7.51	7.73	7.18		7.06	6.95	6.97		7.12	7.05	7.38	7.71	7.95	8.01	7.4
pH (lab)	pH units	7.9	7.84	7.85		7.83	7.63	7.9	7.55	7.61	7.18	6.88	7.08	7.31	7.7	7.25	7.6	7.6	7.5	7.3	7.4	7.7
Hardness (from dissolved)	mg/L	362	319	388		330	186								132		79.6	128	55.1	57.5	58.9	61.2
Hardness (from total)	mg/L								166	164	99	72	130	90	143	79	78	129	58.3	60.9	67.5	277
Total Dissolved Solids	mg/L	452	424	548		510	298	318	292	306	218	186	264	192	230	180	150	130	72	64	100	120
Total Suspended Solids	mg/L	18	6	23		9	<3	8	38	48	31	77	370	24	12	48	7	190	5	9	4	27
Alkalinity, total	mg/L	345	290	306		261	130	178	121	112	57	42	99	54	95	49	51	78	39	40	46	47
Sulphate, dissolved	mg/L	6.7	13	13		21	49.5		37.6	34.7	21	12	25	12	37	10	<0.5	25	9	<5	5	<5
Chloride	mg/L	0.97	1.09	1.37		1.06	3.26	2.53	5	5.4	1.53	1.03	2.93	1.4	2.8	1.18	2.3	1.7	2.2	2.2	2.1	1.9
Fluoride	mg/L														0.17		0.1	0.23	0.08	0.07	0.07	0.08
Nitrite (N)	mg/L														0.24		0.221	0.05	0.115	0.11	0.13	0.163
Nitrate (N)	mg/L			26.3		18	1.2	4.67	3	6.36	6.65	3.12			4.3		2.81	1.8	1.58	1.51	2.2	2.02
Ammonia	mg/L														0.093		0.056	0.016	0.036	0.06	0.082	0.081
Aluminum, total	mg/L	0.346	0.046	1.25		0.137	0.054	0.166	1.13	1.74	2.8	1.24	9.42	0.638	0.566	1.03	0.451	5.2	0.276	1.04	0.432	0.309
Arsenic, total	mg/L	0.0025	0.0019	0.0024		0.002	0.0009	0.001	0.0009	0.001	0.0009	0.0006	0.0019	0.0005	0.0005	0.0007	0.0005	0.0022	0.0004	0.0006	0.0007	0.0005
Cadmium, total	mg/L	<0.00001	0.00003	0.00024		0.00002	0.00014	0.00003	0.00005	0.00009	0.00008	0.00013	0.00016	0.00009	0.00007	0.00006	0.00003	0.00025	0.00006	0.00009	0.00001	0.0001
Calcium, total	mg/L	100	88.5	114		95.7	54.7	64.5	44.5	45.1	30.1	28.5	42.9	25.9	38.4	23.3	21.1	37	15.5	16.5	18.3	73.5
Chromium, total	mg/L	0.0018	0.0015	0.0026		0.0014	0.0012	0.0006	0.0012	0.0016	0.0015	0.0008	0.0046	0.0008	<0.001	0.0009	<0.001	0.006	<0.001	0.001	0.001	<0.001
Copper, total	mg/L	0.026	0.024	0.09		0.024	0.034	0.038	0.089	0.158	0.145	0.093	0.31	0.062	0.0673	0.08	0.0502	0.469	0.0382	0.064	0.0383	0.0231
Iron, total	mg/L	6.91	3.67	6.93		3.67	0.634	1.31	2.38	2.62	2.29	1.03	10.7	0.981	1.02	1.21	0.823	6.71	0.649	1.85	1.11	0.467
Lead, total	mg/L	0.0002	0.0004	0.0011		0.0004	0.0004	<0.0001	0.0006	0.0008	0.001	0.0004	0.0045	0.0003	0.0003	0.0006	0.0003	0.0033	0.0002	0.001	0.0002	<0.0002
Magnesium, total	mg/L	27.7	24.3	30		24.4	16.7	17.2	14.8	14.6	9.12	8.62	15.4	7.89	11.5	7.13	6.14	8.83	4.74	4.81	5.3	22.8
Manganese, total	mg/L	7.73	3.8			4.67	0.147	1.82	0.985	0.941	0.55	0.495	1.2	0.493	0.562	0.488	0.377	0.594	0.415	0.572	0.629	2.23
Mercury, total	mg/L	0.00001		0.00002		<0.00001	<0.00001	<0.00001	0.00002	0.00001	0.00002	0.00002	0.00002	0.00001	<0.00002	0.00001	<0.00002	<0.00002	0.00004	0.00003	0.00004	<0.00002
Molybdenum, total	mg/L	0.00293	0.0027	0.003		0.0036	0.0012	0.0024	0.0032	0.0038	0.0028	0.0023	0.0017	0.0017	0.005	0.0016	0.001	0.005	0.001	<0.001	0.001	0.007
Nickel, total	mg/L	0.005	0.004	0.005		0.003	0.002	0.004	0.002	0.002	0.002	0.002	0.005	0.002	0.001	0.002	0.002	0.009	0.001	0.002	0.003	0.003
Phosphorus, total	mg/L	0.084	0.056	0.099		0.051	0.04	<0.05	0.19	0.15	0.14	0.12	2.5	0.12	0.073	0.16						0.024
Potassium, total	mg/L	2.6	2	2.8		2.9	2.6	3.1	4.6	4.6	3.1	3.2	4.8	2.7	3.64	2.6	2.02	2.8	1.78	1.82	1.88	4.14
Selenium, total	mg/L	0.0009	<0.0006	0.0016		0.0011	<0.0006	<0.0006	<0.0006	0.0011	0.0015	0.001	0.0006	<0.0006	0.0016	0.0007	0.0005	0.0016	0.0002	0.0002	0.0002	0.0008
Silver, total	mg/L	0.00051	0.00001	<0.00001		<0.00001	<0.00001	<0.00001	0.00003	0.00004	<0.00001	<0.00001	0.00009	0.0001	0.00003	<0.00001	<0.00002	0.00005	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	7.8	8.88	10.4		9.31	7.88	6.8	7.29	7.5	4.64	4.26	5.96	3.69	6.27	3.44	2.74	4.37	2.12	1.97	2.37	20.6
Thallium, total	mg/L	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.005	0.007	0.014		0.009	0.007	0.006	0.026	0.03	0.015	0.012	0.048	0.013	0.007	0.014	0.011	0.05	0.009	0.014	0.009	<0.005
Aluminum, dissolved	mg/L	0.055		0.109					0.04	0.208	0.174	0.367	0.12	0.159	0.065	0.21	0.17	2.65	0.169	0.171	0.136	0.154
Arsenic, dissolved	mg/L	0.002		0.0015					0.0005	0.0006	0.0005	0.0005	0.0006	0.0004	0.0003	0.0004	0.0004	0.0016	0.0004	0.0004	0.0005	0.0005
Cadmium, dissolved	mg/L	<0.00001		0.00038					0.00004	0.00023	0.00004	0.00008	0.00003	0.00004	0.00005	0.00004	0.00005	0.00234	0.00004	0.00005	0.00004	0.00003
Calcium, dissolved	mg/L	100		109					43.1	43.3	26.9	19.4	34.5	24	36.3	21	21.8	38.7	14.6	15.7	15.9	16.4
Chromium, dissolved	mg/L	0.0008		0.0018					0.0005	0.0005	0.0004	0.0007	0.0005	<0.0004	<0.001	0.0004	<0.001	0.003	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.015		0.014					0.046	0.063	0.071	0.054	0.059	0.038	0.034	0.039	0.04	0.415	0.027	0.0289	0.027	0.0265
Iron, dissolved	mg/L	2.91		1.32					0.7	0.74	0.26	0.39	0.33	0.43	0.366	0.44	0.437	2.91	0.449	0.522	0.564	0.568
Lead, dissolved	mg/L	0.0001		0.001					0.0003	0.0004	<0.0001	<0.0001	0.0002	<0.0001	<0.0002	<0.0001	<0.0002	0.0027	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	27		28.3					14.2	13.6	7.8	5.6	10.7	7.2	10.1	6.4	6.08	7.57	4.51	4.48	4.67	4.91
Manganese, dissolved	mg/L	7.34		5.54					0.9	0.855	0.404	0.375	0.582	0.434	0.501	0.376	0.363	0.569	0.369	0.466	0.359	0.316
Mercury, dissolved	mg/L	<0.00001		<0.00001					<0.00001	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00002	0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.00303		0.0036					0.003	0.0037	0.0029	0.0014	0.0026	0.0015	0.004	0.0014	0.001	0.003	<0.001	<0.001	0.001	<0.001
Nickel, dissolved	mg/L	0.004		0.005					0.001	0.002	0.002	0.003	0.005	0.001	<0.001	0.001	0.001	0.008	0.001	0.001	0.001	0.002
Phosphorus, dissolved	mg/L	0.02		0.01					0.04	0.05	0.01	0.03	0.05	0.04	0.021	0.03						0.027
Potassium, dissolved	mg/L	2.1		2.6					4.3	4.3	2.6	2.1	3.2	2.4	3.26	2.2	2.08	2.37	1.69	1.73	1.67	1.65
Selenium, dissolved	mg/L	<0.0006		0.0009					<0.0006	0.001	0.0015	<0.0006	<0.0006	<0.0006	0.0015	<0.0006	0.0006	0.0015	0.0002	0.0002	0.0002	0.0002
Silver, dissolved	mg/L	0.00018		<0.00001					<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	7.5		10.5					7	7.2	4.2	3.2	5	3.4	5.39	3.1	2.9	4.28	2.11	2.12	2.16	2.34
Thallium, dissolved	mg/L	<0.00001		<0.00001					<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.004		0.014					0.006	0.009	0.003	0.004	<0.001	0.004	<0.005	0.004	0.006	0.041	<0.005	0.006	<0.005	<0.005

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**02/05/2010**	**03/05/2010**	**04/05/2010**	**05/05/2010**	**06/05/2010**	**07/05/2010**	**08/05/2010**	**09/05/2010**	**10/05/2010**	**13/05/2010**	**17/05/2010**	**20/05/2010**	**24/05/2010**	**27/05/2010**	**31/05/2010**	**03/06/2010**	**14/06/2010**	**17/06/2010**	**21/06/2010**	**25/06/2010**	**04/07/2010**
pH (field)	pH units	7.18	7.28	7.88	7.6	7.55	7.98	7.65	7.8			7.85		7.13	6.86	7.31	7.56		7.01	7.19	7.7	6.76
pH (lab)	pH units	7.7	7.8	7.6	7.8	7.8	7.6	7.9	8	8.1	8	8	8.2	7.7	7.7	7.9	8.4	8.4	8.1	8.2	8.15	7.74
Hardness (from dissolved)	mg/L	74.7	72.5	83.4	94.3	89.8	90.7	104	125	141	150	161	178	161	188	246	258	241	231	207	206	119
Hardness (from total)	mg/L	77.2	76.8	78.5	88.8	91.4	93.4	107	139	143	143	160	176	154	193	276	255	242	236	221	221	132
Total Dissolved Solids	mg/L	94	96	100	170	150	170	170	210	240	190	260	250	230	240	360	350	350	310	300	250	220
Total Suspended Solids	mg/L	<4	16	62	67	24	4	11	4	27	16	8	23	15	10	52	10	20	6	11	7	15
Alkalinity, total	mg/L	55	58	66	72	71	71	84	110	120	120	130	140	140	160	240	230	210	220	200	190	93
Sulphate, dissolved	mg/L	8	6	<0.5	<0.5	2.1	2.4	14	13	18	24	23	28	23	28	36	34	43	33	29	29	22
Chloride	mg/L	2.1	4.6	2.3	2.1	2.4	2.2	2	2.4	2.3	2.3	2.4	2.4	2.6	3.2	3.6	3.5	5.2	4	3.4	3	1.9
Fluoride	mg/L	0.08	0.09	0.1	0.1	0.09	0.09	0.1	0.11	0.13	0.12	0.11	0.13	0.14	0.13	0.16	0.14	0.15	0.14	0.14	0.14	0.11
Nitrite (N)	mg/L	0.215	0.24	0.26	0.276	0.265	0.289	0.304	0.275	0.328	0.367	0.402	0.353	0.207	0.138	0.059	0.066	0.04	0.028	0.025	0.025	0.233
Nitrate (N)	mg/L	2.45	3.3	2.9	2.66	2.65	1.07	2.53	2.14	2.51	2.25	2.06	1.72	1.1	0.77	0.7	0.74	0.41	0.31	0.25	0.15	5.1
Ammonia	mg/L	0.055	0.079	0.089	0.07	0.45	0.04	0.15	0.03	0.14	0.19	0.19	0.15	0.18	0.18	<0.05	0.08	0.14	<0.01	<0.5	0.08	0.11
Aluminum, total	mg/L	0.411	0.313	0.184	0.422	0.569	0.255	0.306	0.79	0.946	0.513	0.286	1.01	0.433	0.388	1.37	0.234	1.02	0.361	0.244	0.592	0.751
Arsenic, total	mg/L	0.0008	0.0006	0.0006	0.0006	0.0007	0.0006	0.0007	0.001	0.0011	0.0009	0.0009	0.001	0.0011	0.001	0.0023	0.0015	0.0015	0.001	0.0011	0.0009	0.0013
Cadmium, total	mg/L	0.00003	<0.00001	<0.00001	0.0001	0.00002	0.00003	0.00004	0.00038	0.00013	0.00005	0.00005	0.00006	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	20.9	20.6	20.9	23.5	24.4	24.7	28.6	37.2	39.5	39.8	44.9	46.2	42	51	77	72	65	63	59	61	35
Chromium, total	mg/L	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.0406	0.0393	0.0307	0.0431	0.051	0.0334	0.038	0.0608	0.0912	0.0576	0.0535	0.0636	0.04	0.047	0.085	0.049	0.064	0.032	0.027	0.04	0.049
Iron, total	mg/L	1.23	1.04	0.843	1.22	1.3	0.976	1.04	1.42	2.41	1.68	1.54	2.42	2.34	2.65	6.06	3.16	2.71	1.45	1.21	1.71	1.74
Lead, total	mg/L	0.0003	0.0004	0.0003	0.0018	0.0004	0.0012	<0.0002	0.0006	0.0007	0.0004	0.0002	0.0005	0.0004	0.0003	0.0008	0.0003	0.0006	0.0003	<0.0002	0.0003	0.0004
Magnesium, total	mg/L	6.08	6.15	6.38	7.3	7.41	7.72	8.75	11.2	10.8	10.7	11.6	14.6	12	16	20	18	19	19	18	17	11
Manganese, total	mg/L	0.609	0.591	0.545	0.61	0.544	0.605	0.548	0.323	0.832	0.842	1.01	0.993	0.927	1.03	2.24	1.46	0.987	0.776	0.582	0.477	0.423
Mercury, total	mg/L	<0.00002	0.00009	0.00006	<0.00002	0.00003	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.002
Nickel, total	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	<0.003	0.002	<0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.006
Phosphorus, total	mg/L				0.096	0.086	0.07	0.068	0.095	0.095	0.071	0.052	0.083									
Potassium, total	mg/L	2.01	1.98	1.94	2.22	2.22	2.3	2.49	2.75	2.7	2.59	2.61	2.97	3	3	4	3	3	3	3	3	2
Selenium, total	mg/L	0.0003	0.0003	0.0003	0.0001	0.0002	0.0002	0.0003	0.0002	0.0004	0.0003	0.0004	<0.001	<0.0008	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0013
Silver, total	mg/L	<0.00002	0.00003	0.00004	<0.00002	0.00002	0.00004	<0.00002	0.00004	0.00004	<0.00002	<0.00002	0.00004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	2.75	2.89	2.88	3.1	3.75	3.71	4.08	5.64	4.8	4.47	4.91	6.62	5	8	7	7	8	8	8	8	6
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.011	0.008	0.005	0.005	0.007	0.005	<0.005	0.009	0.009	0.005	<0.005	0.009	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.125	0.102	0.091	0.074	0.076	0.083	0.088	0.034	0.042	0.038	0.039	0.03	0.029	0.031	0.014	0.016	0.013	0.017	0.017	0.022	0.081
Arsenic, dissolved	mg/L	0.0006	0.0005	0.0005	0.0006	0.0006	0.0006	0.0006	0.0006	0.0007	0.0007	0.0007	<0.001	0.001	0.001	0.0012	0.001	0.0008	0.0008	0.0007	0.0009	0.0007
Cadmium, dissolved	mg/L	0.00003	0.00003	<0.00001	0.00003	0.00002	0.00003	0.00003	0.00012	0.00005	0.00004	0.00004	0.00003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	20	19.5	22.3	25.4	24.4	24.1	27.8	33.5	38.9	41.7	45.2	48.3	45	50	67	74	65	62	57	56	32
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.0257	0.0245	0.0244	0.0248	0.0259	0.023	0.0279	0.022	0.0498	0.0405	0.0355	0.0351	0.025	0.03	0.03	0.031	0.022	0.021	0.018	0.017	0.026
Iron, dissolved	mg/L	0.684	0.634	0.588	0.563	0.487	0.536	0.555	0.307	0.971	0.792	0.807	0.835	1.22	1.41	1.08	0.887	0.356	0.395	0.264	0.344	0.762
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	5.99	5.8	6.73	7.47	7.01	7.44	8.48	10	10.7	11.2	11.6	13.8	12	15	19	18	19	18	16	16	10
Manganese, dissolved	mg/L	0.506	0.501	0.524	0.449	0.418	0.352	0.455	0.14	0.742	0.791	0.968	0.974	0.841	0.935	1.72	1.41	0.671	0.672	0.414	0.405	0.332
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.001	0.001	0.001	0.002	0.002	0.001	0.002	0.001	0.003	0.003	0.002	0.003	0.002	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.002
Nickel, dissolved	mg/L	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	<0.003	0.002	<0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, dissolved	mg/L				0.032	0.028	0.028	0.027	0.028	0.028	0.026	0.023	0.026									
Potassium, dissolved	mg/L	1.94	1.86	2.04	2.34	2.08	2.21	2.39	2.39	2.56	2.66	2.78	2.91	3	3	3	3	3	3	3	3	1
Selenium, dissolved	mg/L	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004	0.0003	0.0003	<0.001	<0.0008	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0012
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	2.79	2.79	3.2	3.53	3.32	3.61	4	5.15	4.91	5.09	5.25	6.66	5	8	7	7	9	8	7	8	5
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**11/07/2010**	**18/07/2010**	**25/07/2010**	**02/08/2010**	**08/08/2010**	**15/08/2010**	**22/08/2010**	**29/08/2010**	**06/09/2010**	**10/09/2010**	**19/09/2010**	**29/03/2011**	**12/04/2011**	**16/04/2011**	**25/04/2011**	**02/05/2011**	**05/05/2011**	**08/05/2011**	**15/05/2011**	**22/05/2011**	**29/05/2011**
pH (field)	pH units	7.95	7.79	7.54	7.79	7.54	7.8	8.29	7.85	8.02	7.87	7.97										
pH (lab)	pH units	8.12	7.86	7.64	8.06	8.05	8.09	8.19	7.83	8	7.96	7.83	7.9	8.11	8.01	7.7	7.39	7.32	7.32	7.8	8.34	7.91
Hardness (from dissolved)	mg/L	191	160	166	250	279	251	209	220	276	256	283	94.6	250	232	132	92	74	68.8	105	293	188
Hardness (from total)	mg/L	206	166	180	237	267	243	187	243	275	263	263	107	275	244	143	102	83.5	73.9	111	269	169
Total Dissolved Solids	mg/L	310	260	290	350	410	350	350	430	430	440	400	120	350	340	230	200	150	140	180	370	260
Total Suspended Solids	mg/L	23	19	5	9	4	2	7	2	5	11	4	64	68	40	12	17	18	16	47	15	14
Alkalinity, total	mg/L	150	130	120	160	180	170	120	140	160	160	160	58	170	160	95	55	47	41	72	230	130
Sulphate, dissolved	mg/L	31	28	30	37	49	48	44	64	58	54	62	27	70	71	37	12	12	1	24	83	39
Chloride	mg/L	2.4	2	2.1	2.9	3.3	2.5	2.9	3	2.8	3.3	2.7	7.2	13	6.2	2.8	3	2.5	1.8	2	7.6	2.5
Fluoride	mg/L	0.11	0.12	0.11	0.13	0.12	0.13	0.14	0.11	0.16		0.19	0.15	0.17	0.17	0.17	0.12	0.09	0.08	0.12	0.43	0.13
Nitrite (N)	mg/L	0.176	0.101	0.163	<0.005	0.107	0.266	0.124	0.104	0.24	0.071	0.038	0.089	0.232	0.383	0.24	0.2	0.121	0.082	0.12	0.076	0.033
Nitrate (N)	mg/L	8.5	8.4	9.2	16.5	18.9	14.7	15	20.8	21.1	18.4	20.8	5.2	11.3	4.8	4.3	5.2	4	3.3	4.9	6.4	6.4
Ammonia	mg/L	0.24		0.43	0.1	0.15	0.007	<0.05	0.049	0.19	0.073	<0.005	0.12	0.1	0.056	0.093		0.088	0.055	0.096	0.081	0.075
Aluminum, total	mg/L	0.909	0.382	0.285	0.155	0.077	0.052	0.234	0.104	0.223	0.302	0.03	2.66	1.36	1.84	0.566	0.395	0.833	0.324	0.85	0.617	0.126
Arsenic, total	mg/L	0.0011	0.0007	0.0009	0.0006	0.0006	0.0005	0.0006	0.0004	<0.0004	0.0006	<0.0004	0.0011	0.0008	0.001	0.0005	0.0005	0.0005	0.0004	0.0007	0.0007	0.0004
Cadmium, total	mg/L	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00015	0.0001	0.00006	0.00007	0.00021	0.00006	0.00004	0.00004	0.00008	0.00001
Calcium, total	mg/L	56	45	47	66	73	68	52	67	76	72	74	27.4	75.2	63.1	38.4	28.5	23.6	20.7	31.6	67.1	46.3
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.061	0.038	0.03	0.024	0.02	0.03	0.029	0.019	0.028	0.026	0.018	0.416	0.211	0.159	0.0673	0.0534	0.102	0.0437	0.0867	0.0787	0.0168
Iron, total	mg/L	2.91	1.29	0.637	1.13	1.02	0.401	0.904	0.335	0.552	1.15	0.25	4.3	1.86	2.76	1.02	0.624	1.45	0.676	1.66	1.12	0.639
Lead, total	mg/L	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0015	0.0007	0.0009	0.0003	0.0003	0.0004	<0.0002	0.0004	0.0003	<0.0002
Magnesium, total	mg/L	16	13	15	17	20	18	14	18	21	20	19	9.45	21.2	20.9	11.5	7.43	5.94	5.41	7.79	24.7	13
Manganese, total	mg/L	0.663	0.299	0.192	0.332	0.302	0.242	0.187	0.1	0.176	0.287	0.053	0.249	0.576	0.692	0.562	0.523	0.444	0.441	0.669	0.375	0.189
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.005	0.008	0.008	0.005	0.003	0.002	0.001	0.002	0.008	0.002
Nickel, total	mg/L	0.003	0.002	0.007	0.004	0.002	0.001	0.002	<0.001	0.002	0.001	0.002	0.003	0.002	0.002	0.001	0.002	0.002	0.001	0.002	0.002	0.002
Phosphorus, total	mg/L												0.096	0.065	0.072	0.073		0.094	0.064	0.09	0.042	0.029
Potassium, total	mg/L	3	2	2	3	3	3	2	3	3	3	3	2.56	4.03	5.23	3.64	2.75	2.08	1.9	2.38	5.37	2.71
Selenium, total	mg/L	0.0017	0.0016	0.0019	0.0024	0.0026	0.0019	0.0025	0.0036	0.0031	0.0031	0.0034	0.0018	0.002	0.0016	0.0016	0.0014	0.0013	0.0008	0.0014	0.0021	0.0015
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00021	0.00008	0.00007	0.00003	0.00002	0.00005	<0.00002	0.00004	0.00004	<0.00002
Sodium, total	mg/L	8	6	7	8	9	9	7	8	9	9	9	7.16	12.6	11	6.27	4.43	3.12	2.72	4	21	6.68
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	0.01	0.01	0.007	0.009	0.01	0.006	0.007	<0.005	<0.005
Aluminum, dissolved	mg/L	0.023	0.037	0.047	0.025	0.019	0.02	0.045	0.014	0.018	0.022	0.024	0.018	0.004	0.014	0.065	0.179	0.142	0.145	0.087	0.006	0.028
Arsenic, dissolved	mg/L	0.0009	0.0006	0.0005	0.0006	0.0007	0.0005	0.0005	0.0006	0.0005	0.0005	<0.0004	0.0003	0.0004	0.0004	0.0003	0.0004	0.0003	0.0003	0.0005	0.0005	0.0005
Cadmium, dissolved	mg/L	<0.0001	0.0004	<0.0001	<0.0001	0.0001	<0.0001	0.0005	<0.0001	<0.0001	<0.0001	0.0001	0.00007	0.00005	0.00004	0.00005	0.00005	0.00004	0.00003	0.00001	0.00006	0.00001
Calcium, dissolved	mg/L	52	44	45	69	76	70	56	61	78	70	78	25.1	67.8	61.6	36.3	26.1	21	19.2	30.1	73.6	52.2
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.021	0.022	0.017	0.017	0.013	0.023	0.018	0.037	0.017	0.014	0.009	0.0214	0.0462	0.0475	0.034	0.0329	0.0255	0.0249	0.0195	0.05	0.0166
Iron, dissolved	mg/L	1.02	0.577	0.272	0.782	0.657	0.258	0.537	0.03	0.225	0.72	0.196	0.03	0.007	0.122	0.366	0.322	0.253	0.331	0.479	0.045	0.368
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0005
Magnesium, dissolved	mg/L	15	12	13	19	22	18	16	17	20	20	21	7.72	19.5	19.1	10.1	6.52	5.24	5.09	7.37	26.4	14
Manganese, dissolved	mg/L	0.551	0.268	0.156	0.323	0.327	0.254	0.187	0.001	0.164	0.286	0.056	0.114	0.462	0.626	0.501	0.467	0.381	0.429	0.631	0.382	0.192
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.019	0.002	0.003	0.002	0.004	0.007	0.007	0.004	0.003	0.002	0.001	0.002	0.009	0.002
Nickel, dissolved	mg/L	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	0.001	0.001
Phosphorus, dissolved	mg/L												0.017	0.01	0.022	0.021		0.03	0.029	0.023	0.013	0.019
Potassium, dissolved	mg/L	2	2	2	3	3	3	2	8	3	3	3	1.82	3.6	4.75	3.26	2.47	1.89	1.84	2.19	5.87	3
Selenium, dissolved	mg/L	0.0017	0.0016	0.0019	0.0025	0.0029	0.002	0.0029	0.0052	0.0032	0.0037	0.0036	0.0016	0.002	0.0016	0.0015	0.0014	0.0011	0.0008	0.0014	0.002	0.0015
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	7	6	6	10	10	9	8	24	9	10	10	6.5	11.8	10.3	5.39	3.88	2.76	2.71	3.94	22.2	7.2
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	0.006	0.013	<0.005	<0.005	<0.005	0.005

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**06/06/2011**	**14/06/2011**	**18/06/2011**	**27/06/2011**	**03/07/2011**	**16/07/2011**	**23/07/2011**	**31/07/2011**	**07/08/2011**	**18/08/2011**	**27/08/2011**	**30/08/2011**	**05/09/2011**	**10/09/2011**	**17/09/2011**	**24/09/2011**	**14/10/2011**	**13/11/2011**	**23/11/2011**	**10/04/2012**	**22/04/2012**
pH (field)	pH units													7.76	7.6	7.38	7.94	7.28	8		7.74	7.93
pH (lab)	pH units	7.81	8	7.81	7.99	7.98	7.66	7.76	8.12	7.77	8.12	7.89	8.07	8.22	8.06	8.02	8.03	7.97	7.99	7.61	8.13	7.78
Hardness (from dissolved)	mg/L	150	169	204	215	142	119	177	330	131	228	215	258	272	290	283	280	326	1230	545	313	96.2
Hardness (from total)	mg/L	138	154	215	192	131	118	179	323	134	213	218	225	255	255	292	258	339	1280	514	299	92.9
Total Dissolved Solids	mg/L	200	230	270	310	150	200	280	490	190	360	310	350	440	380	350	400	480	1840	678	456	162
Total Suspended Solids	mg/L	4	<1	3	5	<1	1	4	5	1	1	1	2	4	<1	15	<4	2	59.4	6.3	11.6	6.9
Alkalinity, total	mg/L	110	130	160	160	110	87	120	170	87	140	130	160	160	170	180	170	220	603	342	230	68.6
Sulphate, dissolved	mg/L	38			39	28	21	32	64	27		43				55	57				91.7	11.3
Chloride	mg/L						2							4	4.1	3.7	4.2	5.1	28	22	8.2	1.6
Fluoride	mg/L	0.12					0.11														0.15	0.078
Nitrite (N)	mg/L	0.01	0.008	0.018	0.023	0.007	0.005	0.01	0.157	0.006	0.012	0.008	0.006	0.01	0.006	<0.005	0.007	0.011	0.314	0.338	0.182	0.0535
Nitrate (N)	mg/L	4	4.3	6.7	6.1	3.2	2.69	7.2	20.6	5	13.6	12.1	12.8	16.9	15.7	17.1	13.4	16.9	56.1	29.6	5.49	2.28
Ammonia	mg/L	0.026			0.072	0.013	<0.005	0.018	0.118	0.037	0.013	0.013	0.032	0.038	0.054	0.025	0.701	0.018	0.253	0.158	0.0689	0.028
Aluminum, total	mg/L	0.093	0.037	0.085	0.082	0.107	0.095	0.082	0.121	0.202	0.093	0.056	0.062	0.029	0.032	0.107	0.073	0.027	0.64	0.006	0.416	0.28
Arsenic, total	mg/L	0.0004	0.0005	0.0006	0.0005	0.0004	0.0004	0.0005	0.0005	0.0006	0.0004	0.0005	0.0004	0.0004	0.0003	0.0004	0.0003	0.0002	0.0016	0.0004	0.0006	0.00038
Cadmium, total	mg/L	0.00002	<0.00001	0.00001	0.00001	0.00002	0.00001	<0.00001	0.00009	0.00002	0.00001	<0.00001	0.00001	0.00001	0.00001	0.00001	<0.00001	<0.00001	0.00023	0.00003	0.00005	0.000029
Calcium, total	mg/L	37.3	40.2	59.9	53.9	35.7	32.1	48.6	96	34.3	56.3	59.9	62.5	70.7	69.7	81.8	70.8	94.5	311	145	71.5	25.8
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.0010
Copper, total	mg/L	0.0175	0.0123	0.016	0.0228	0.0187	0.0145	0.014	0.072	0.0181	0.012	0.0087	0.0068	0.0087	0.0067	0.0125	0.0107	0.0072	0.158	0.0346	0.0773	0.0328
Iron, total	mg/L	0.405	0.534	0.706	0.862	0.424	0.402	0.48	0.546	0.63	0.376	0.355	0.541	0.257	0.247	0.575	0.194	0.242	1.19	0.255	1.06	0.705
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.00020
Magnesium, total	mg/L	10.8	13	15.9	13.9	10.2	9.08	14.1	20.1	11.7	17.7	16.6	16.7	19	19.7	21.3	19.7	25	121	36.9	29.3	6.93
Manganese, total	mg/L	0.082	0.101	0.15	0.237	0.058	0.034	0.062	0.776	0.078	0.065	0.054	0.085	0.041	0.051	0.095	0.02	0.063	0.743	0.961	0.366	0.26
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000010	<0.000010
Molybdenum, total	mg/L	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.006	0.003	0.002	0.0011
Nickel, total	mg/L	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.005	<0.001	0.001	<0.0010
Phosphorus, total	mg/L	0.021	0.021	0.019	0.022	0.021	0.019	0.025	0.025	0.034	0.022		0.017	0.013	0.013	0.018	0.016	<0.01	0.082	<0.01	0.095	0.062
Potassium, total	mg/L	2.04	2.09	2.31	2.14	1.39	1.22	1.6	3.67	1.42	2.1	1.99	2.23	2.42	2.41	2.59	2.69	2.88	18	5.8	6.67	2.21
Selenium, total	mg/L	0.0009	0.0008	0.0012	0.0008	0.0005	0.0004	0.001	0.0042	0.001	0.002	0.0018	0.0023	0.003	0.0024	0.0025	0.0023	0.003	0.0113	0.0044	0.0013	0.00058
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00011	<0.00002	0.00005	<0.000020
Sodium, total	mg/L	6.25	7.03	8.25	7.23	5.39	5.15	7.33	11.8	6.7	9.42	8.18	8.11	9.44	9.71	10.3	10	11.8	61.4	17.2	15.5	3.46
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050
Zinc, total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	0.0051
Aluminum, dissolved	mg/L	0.026	0.021	0.017	0.025	0.049	0.075	0.043	0.02	0.099	0.045	0.04	0.051	0.024	0.022	0.02	0.031	0.012	0.0189	0.0069	0.02	0.0888
Arsenic, dissolved	mg/L	0.0005	0.0004	0.0004	0.0006	0.0004	0.0004	0.0004	0.0005	0.0005	0.0004	0.0003	0.0004	0.0003	0.0004	0.0004	0.0003	0.0002	0.00158	0.00054	0.00051	0.0003
Cadmium, dissolved	mg/L	0.00001	<0.00001	0.00001	0.00002	0.00001	0.00001	0.00001	0.00006	0.00002	0.00003	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00004	0.00001	0.000078	0.000048	0.000041	0.000035
Calcium, dissolved	mg/L	40.4	46	55.3	60.2	38	32.6	48.9	96.2	34.6	65.1	59.8	72	77.1	80.6	79.4	79.3	90.5	286	158	75.7	26.7
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0129	0.0073	0.0115	0.0186	0.0143	0.0137	0.0154	0.0597	0.0134	0.0107	0.0075	0.0082	0.008	0.0057	0.0063	0.0102	0.0059	0.0427	0.0357	0.0259	0.0159
Iron, dissolved	mg/L	0.272	0.488	0.322	0.605	0.301	0.382	0.323	0.253	0.447	0.285	0.237	0.571	0.19	0.217	0.307	0.106	0.208	0.0591	0.214	0.244	0.388
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	12	13.2	15.9	15.6	11.4	9.18	13.4	21.9	10.9	15.8	15.9	19.1	19.4	21.6	20.6	20	24.2	126	36.9	30.2	7.18
Manganese, dissolved	mg/L	0.081	0.087	0.137	0.268	0.059	0.036	0.058	0.819	0.072	0.065	0.05	0.09	0.047	0.053	0.095	0.019	0.062	0.715	1.07	0.371	0.258
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.004	0.002	0.002	0.001	0.002	0.002	<0.001	0.002	0.002	0.002	0.0051	0.0035	0.0021	0.0011
Nickel, dissolved	mg/L	0.002	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.002	<0.001	<0.001	<0.001	0.001	<0.001	0.0038	0.0011	0.0012	<0.0010
Phosphorus, dissolved	mg/L	0.013	0.01	0.011	0.016	0.014	0.017	0.013	0.017	0.018	0.013		0.016	0.01	<0.01	<0.01	0.013	<0.01	0.039	<0.01	0.029	0.026
Potassium, dissolved	mg/L	2.23	2.09	2.37	2.4	1.55	1.18	1.56	4.07	1.25	1.93	2	2.41	2.59	2.69	2.6	2.94	2.91	19.7	5.77	6.76	2.14
Selenium, dissolved	mg/L	0.001	0.001	0.0012	0.0011	0.0007	0.0005	0.0012	0.0039	0.0011	0.0025	0.0021	0.0027	0.0029	0.003	0.0026	0.0024	0.0024	0.0124	0.00465	0.00135	0.00064
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	6.83	7.02	8.36	8.12	6.2	5.15	6.84	13.2	5.98	8.1	8.04	9.58	9.92	10.7	10.5	10.1	11.6	64.3	17.2	16	3.49
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0094	<0.0050	<0.0050	<0.0050

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**29/04/2012**	**01/05/2012**	**02/05/2012**	**03/05/2012**	**04/05/2012**	**05/05/2012**	**06/05/2012**	**07/05/2012**	**08/05/2012**	**09/05/2012**	**11/05/2012**	**13/05/2012**	**16/05/2012**	**24/05/2012**	**03/06/2012**	**08/06/2012**	**15/06/2012**	**24/06/2012**	**28/06/2012**	**03/07/2012**	**09/07/2012**
pH (field)	pH units	7.31	7.23	7.47	7.09	7.27	6.88	7.32	7.31	7.22	7.97	7.71	7.45	9.95	7.18	7.29	7.31	7.51	7.73	7.52	7.81	7.37
pH (lab)	pH units	7.78	7.87	7.91	7.81	7.86	6.55	7.85	7.63	7.86	7.83	8.05	8.1	8.02	8	7.89	8.17	7.98	7.92	7.99	8.23	8.27
Hardness (from dissolved)	mg/L	101	102	90.9	104	107	141	121	127	127	109	130	147	157	175	217	201	167	189	221	203	224
Hardness (from total)	mg/L	92.4	97.8	89.8	100	100	133	120	115	115	110	118	149	153	180	208	155	171	188	194	200	224
Total Dissolved Solids	mg/L	172	184	148	168	164	236	188	192	176	188	186	214	242	244	294	278	280	304	288	280	326
Total Suspended Solids	mg/L	3	4.3	3.1	5.3	11.1	11.8	10.7	6.6	9.3	18.1	18	3.2	2.9	3.3	4.3	5.4	19.8	11.9	4.6	19.8	2.8
Alkalinity, total	mg/L	65.4	74	66.6	73	79.4	90	93.7	88.7	93.1	83.2	96.7	112	121	134	159	151	117	146	169	151	172
Sulphate, dissolved	mg/L	14.1	17.2	9.21	23.1	17.6	31.3	19.9	28.5	24.6	19.1	27.1	29.4	36.1	36	56.1	52.9	36.1	44.5	48.8	48.6	52.9
Chloride	mg/L	1.8	1.9	1.8	2.2	1.8	2.7	2.1	2.1	1.9	1.9	2.4	2.4	2.2	2.8	4.1	3.2	2.7	2.6	2.6	3	2.8
Fluoride	mg/L	0.089	0.094	0.093	0.099	0.092	0.1	0.11	0.098	0.1	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.14	0.13	0.14	0.14
Nitrite (N)	mg/L	0.0588	0.0682	0.0462	0.0777	0.0551	0.111	0.051	0.115	0.0681	0.0444	0.0487	0.0452	0.0372	0.0443	0.0375	0.0261	0.0164	0.0127	0.012	0.0147	0.012
Nitrate (N)	mg/L	2.89	2.33	1.9	2.43	2.18	2.6	2.57	2.05	2.21	2.22	2.93	3.74	3.98	3.99	4.85	3.58	5.63	2.63	3.08	4.1	5.46
Ammonia	mg/L	0.059	0.061	0.019	0.058	0.05	0.2	0.032	0.11	0.18	0.038	0.1	0.16	0.049	0.21	0.22	0.5	0.16	0.05	0.076	0.063	0.042
Aluminum, total	mg/L	0.172	0.208	0.174	0.24	0.332	0.418	0.337	0.239	0.33	0.495	0.687	0.117	0.102	0.121	0.0723	0.116	0.802	0.222	0.119	0.789	0.117
Arsenic, total	mg/L	0.00053	0.00051	0.00042	0.00054	0.00072	0.00093	0.00074	0.00069	0.00072	0.00071	0.00084	0.00068	0.00062	0.00055	0.00053	0.00042	0.00081	0.00088	0.00057	0.00094	0.00064
Cadmium, total	mg/L	0.000013	0.000027	0.000022	0.000026	0.00006	0.000128	0.000027	0.000027	0.000027	0.000024	0.000032	0.00002	0.000014	0.000033	<0.000010	<0.000010	0.000064	0.000015	0.000022	0.000037	0.000024
Calcium, total	mg/L	24.6	26.3	24.9	27.3	27.7	35.4	33.9	30.7	32.2	29.6	32.2	41	41.1	48.2	55.2	41.2	47.4	51	52.5	53.8	60.8
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	0.0014	<0.0010
Copper, total	mg/L	0.0241	0.0238	0.0229	0.0294	0.0311	0.0299	0.016	0.0152	0.0194	0.0199	0.0386	0.0124	0.015	0.0147	0.0105	0.00939	0.0283	0.00743	0.00644	0.0147	0.0108
Iron, total	mg/L	0.836	1.1	0.646	1.06	1.05	2.82	1.31	1.39	1.24	1.48	1.69	0.964	0.781	1.03	1.45	0.841	1.73	0.912	0.562	1.56	0.731
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	<0.00020	<0.00020	<0.00020	0.00021	0.00027	<0.00020	<0.00020	<0.00020	0.00029	<0.00020	0.00035	<0.00020	<0.00020	0.00035	<0.00020
Magnesium, total	mg/L	7.5	7.82	6.69	7.8	7.52	10.8	8.73	9.29	8.45	8.68	9.16	11.2	12.3	14.5	17	12.8	12.7	14.7	15.3	15.9	17.5
Manganese, total	mg/L	0.288	0.357	0.26	0.324	0.353	0.71	0.362	0.447	0.407	0.391	0.467	0.534	0.418	0.407	0.361	0.163	0.162	0.117	0.102	0.14	0.131
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010	<0.0010	0.0011	0.001	0.0011	0.0012	0.0014	0.0012	0.0014	0.0014	0.0016	0.0018	0.002	0.0021	0.0021	0.0018	0.002	0.0024	0.0023	0.0027	0.0024
Nickel, total	mg/L	<0.0010	0.0011	0.001	0.0021	0.0012	0.0014	0.0013	0.0012	0.001	0.0014	0.0019	0.0014	0.0011	0.0011	<0.0010	<0.0010	0.0023	0.0014	0.0013	0.0021	0.0013
Phosphorus, total	mg/L	0.035	0.046	0.042	0.045	0.076	0.103	0.052	0.047	0.042	0.052	0.056	0.041	0.037	0.043	0.035	0.018	0.04	0.027	0.024	0.04	0.018
Potassium, total	mg/L	2.1	1.99	1.78	2.07	3.05	2.7	2.09	2.17	1.96	1.92	1.99	2.2	2.37	2.72	2.69	1.96	2.29	2.22	1.87	1.9	1.98
Selenium, total	mg/L	0.00048	0.00048	0.00045	0.00042	0.0005	0.0006	0.00058	0.00044	0.00053	0.00057	0.00043	0.00066	0.00086	0.00067	0.0009	0.00064	0.00107	0.00061	0.00052	0.00069	0.00118
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000022	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	3.59	3.81	3.22	4.17	3.6	5.47	4.14	4.89	4.23	4.17	4.34	5.46	6.1	7.53	9.42	7.32	7.31	8.25	8.3	9.05	9.27
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0062	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0095	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.112	0.0881	0.0897	0.0964	0.072	0.0789	0.0581	0.0544	0.0456	0.0644	0.0955	0.0391	0.0401	0.0292	0.0162	0.02	0.0402	0.0348	0.0306	0.035	0.0286
Arsenic, dissolved	mg/L	0.00042	0.00048	0.00039	0.00052	0.00051	0.00081	0.00058	0.00064	0.00063	0.00066	0.00064	0.00062	0.00055	0.00053	0.00059	0.00052	0.00063	0.00068	0.00052	0.0006	0.00055
Cadmium, dissolved	mg/L	0.000028	0.000026	0.000024	0.000028	0.00002	0.000026	0.000015	0.000018	0.000023	0.000014	0.000027	0.000014	0.000016	0.000025	0.000014	0.000014	0.000018	0.000014	0.000013	0.000016	0.000013
Calcium, dissolved	mg/L	27.2	27.8	25.4	28.1	30.5	38.3	34.1	34.6	35.8	30.3	36.5	41.2	43.9	47.4	57.8	53.2	46.6	50.5	59.7	55.5	62.1
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0214	0.0195	0.0181	0.0203	0.014	0.0145	0.0121	0.0124	0.0113	0.0116	0.025	0.0101	0.0109	0.0119	0.00656	0.00858	0.0124	0.00598	0.00604	0.00789	0.00792
Iron, dissolved	mg/L	0.662	0.888	0.495	0.723	0.63	1.95	0.829	1.07	0.872	0.814	0.813	0.678	0.547	0.674	0.924	0.556	0.565	0.601	0.346	0.486	0.42
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00031	<0.00020	<0.00020
Magnesium, dissolved	mg/L	7.96	7.85	6.67	8.25	7.48	11	8.69	9.88	9.14	8.14	9.3	10.8	11.6	13.8	17.6	16.6	12.4	15.2	17.5	15.5	16.7
Manganese, dissolved	mg/L	0.31	0.393	0.273	0.358	0.363	0.719	0.36	0.486	0.461	0.423	0.502	0.543	0.43	0.441	0.33	0.218	0.145	0.135	0.113	0.134	0.124
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	0.0011	0.0017	0.0011	0.0012	0.0013	0.0015	0.0013	0.0015	0.0015	0.0016	0.0019	0.002	0.0021	0.0022	0.0022	0.0021	0.0026	0.0024	0.0026	0.0029
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	0.0032	0.0011	0.0011	0.0011	0.0013	0.0013	0.0012	0.0011
Phosphorus, dissolved	mg/L	0.028	0.029	0.024	0.026	0.033	0.04	0.026	0.03	0.026	0.027	0.038	0.025	0.023	0.024	0.022	0.019	0.017	0.018	0.013	0.012	0.014
Potassium, dissolved	mg/L	2.25	2.02	1.8	2.17	1.97	2.61	1.98	2.37	2.2	1.96	2.07	2.19	2.27	3.03	2.88	2.79	2.22	2.28	2.2	2.05	2.15
Selenium, dissolved	mg/L	0.0004	0.00048	0.00056	0.00053	0.00057	0.00053	0.00065	0.00062	0.0006	0.00063	0.00062	0.00086	0.00099	0.00075	0.00103	0.00079	0.00112	0.00045	0.00063	0.00077	0.00112
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	3.81	3.8	3.13	4.05	3.45	5.56	4	5.07	4.48	4.01	4.47	5.29	5.89	7.32	9.76	9.52	7.33	8.73	9.58	8.81	9.31
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0074	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**18/07/2012**	**24/07/2012**	**05/08/2012**	**07/08/2012**	**16/08/2012**	**24/08/2012**	**30/08/2012**	**03/09/2012**	**10/09/2012**	**17/09/2012**	**24/09/2012**	**06/10/2012**	**12/10/2012**	**19/10/2012**	**25/10/2012**	**05/11/2012**	**09/11/2012**	**18/11/2012**	**26/11/2012**	**04/12/2012**	**12/12/2012**
pH (field)	pH units	7.54	7.65	8.42	7.61	7.56	7.17	7.84	7.78		7.56	8.03	8.43	7.47	8.2	7.9		7.66	8.13	7.66	7.67	7.05
pH (lab)	pH units	8.17	8.12	8.06	8.24	8.3	8.04	8.19	8.28	8.03	8.04	8.23	7.75	7.79	7.91	7.94	8.35	8.24	7.74	8	8.2	8
Hardness (from dissolved)	mg/L	233	255	260	282	296	304	283	308	175	215	272			263	327	580	400	455	510	491	537
Hardness (from total)	mg/L	236	243	273	283	298	323	276	315	170	162	288	303	282	291	347	600	397	482	447	524	542
Total Dissolved Solids	mg/L	346	368	400	390	456	436	404	438	266	350	424	420	364	370	492	814	534	656	640	670	676
Total Suspended Solids	mg/L	8.6	11.6	26.3	6	5	7.3	31.3	3.1	4.2	17	4	4.3	15.6	2.6	<1.0	6.1	2.5	13.2	3.5	1.7	2
Alkalinity, total	mg/L	180	192	180	207	218	230	205	215	124	147	188	203	171	183	218	342	248	272	263	309	331
Sulphate, dissolved	mg/L	58.7	57.9	20.3	65.7	72.2	76.1	63.9	73.6	41.1	49.3	75	72.7	62.2	73.8	88.1	145	104	135	114	125	129
Chloride	mg/L	2.7	2.9	22	3.6	3.8	4.3	4.2	4.6	2.8	2.5	3.9	3.2	3	3.1	4.1	8.7	6	8.3	6.9	8.1	8.5
Fluoride	mg/L	0.14	0.15	0.19	0.17	0.17	0.17	0.18	0.17	0.14	0.14	0.16	0.13	0.14	0.13	0.14	0.25	0.18	0.18	0.16	0.18	0.19
Nitrite (N)	mg/L	0.0127	0.0116	<0.050	0.0164	0.0184	0.0197	0.0116	0.0129	0.0078	0.0071	0.01	0.0138	0.0062	0.0075	0.0161	0.07	0.0368	0.0722	0.118	0.171	0.269
Nitrate (N)	mg/L	3.44	3.2	10	6.13	8.74	6.82	9.17	10.8	4.46	7.47	13.8	9.49	7.74	8.78	13.4	42.5	18.9	17.8	24.4	28.6	26.9
Ammonia	mg/L	0.091	0.18	0.067	0.05	0.029	0.12	0.069	0.09	0.1	0.07	0.048	0.23	0.066	0.072	0.014	0.0058	0.016	0.0072	0.03	0.18	0.12
Aluminum, total	mg/L	0.272	0.268	0.969	0.165	0.195	0.139	0.336	0.0655	0.11	0.209	0.0678	0.0413	0.228	0.266	0.0312	0.0906	0.0337	0.127	0.0866	0.0279	0.0304
Arsenic, total	mg/L	0.00056	0.00066	0.00081	0.00061	0.0005	0.00089	0.00047	0.00051	0.00043	0.00047	0.00046	0.00058	0.00058	0.00059	0.00052	0.00072	0.000449	0.00046	0.00041	0.00041	0.00045
Cadmium, total	mg/L	0.000013	0.000018	0.000032	0.000016	0.00002	0.000014	0.000018	0.00001	<0.000010	<0.000010	0.00008	<0.000010	0.000026	<0.000010	<0.000010	0.000053	0.000024	0.000063	0.000126	0.000033	0.00008
Calcium, total	mg/L	64.7	65.9	77.7	76.9	82.9	89.7	76.7	88.3	45.6	40.5	81.1	81.1	73.9	79.6	96.5	174	114	134	127	149	151
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0123	0.00027	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0111	0.00677	0.107	0.0255	0.0295	0.0234	0.0704	0.0281	0.0137	0.0172	0.0214	0.00673	0.0315	0.0353	0.0186	0.0462	0.0261	0.0397	0.035	0.0309	0.0343
Iron, total	mg/L	0.704	0.83	1.93	1.06	0.925	2.3	1.43	0.916	0.375	0.335	0.784	1.93	1.2	0.596	0.233	0.371	0.204	0.348	0.296	0.18	0.284
Lead, total	mg/L	<0.00020	<0.00020	0.00044	<0.00020	<0.00020	<0.00020	0.00035	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00044	0.00026	<0.00020	<0.00020	0.000063	<0.00020	0.0002	<0.00020	<0.00020
Magnesium, total	mg/L	18.2	19.1	19.2	22.2	22	24.1	20.5	22.9	13.7	14.7	20.8	24.3	23.7	22.4	25.8	40.3	27.2	35.6	31.6	36.8	39.8
Manganese, total	mg/L	0.0877	0.113	0.317	0.23	0.194	0.354	0.32	0.197	0.0478	0.066	0.182	0.334	0.188	0.0726	0.064	0.348	0.151	0.184	0.245	0.383	0.685
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0024	0.0027	0.003	0.0024	0.0026	0.0024	0.0022	0.0026	0.0016	0.0017	0.0023	0.002	0.002	0.0022	0.0022	0.0047	0.0026	0.0033	0.0027	0.0029	0.0033
Nickel, total	mg/L	0.0015	0.0017	0.0018	0.0013	0.0011	0.0013	0.0012	0.0011	<0.0010	0.0012	0.0012	0.002	0.0019	0.0015	0.0014	0.0057	0.00101	0.0013	0.0023	0.0024	0.0017
Phosphorus, total	mg/L	0.028	0.033	0.055	0.038	0.034	0.068	0.043	0.023	0.022	0.031	0.027	0.044	0.051	0.042	0.013	0.043		0.034	0.024	0.024	0.023
Potassium, total	mg/L	2	2.9	3.42	2.62	2.77	2.88	2.71	3.01	1.84	1.84	2.75	2.5	2.85	2.76	3.44	7.39	4.27	5.54	4.82	5.48	5.81
Selenium, total	mg/L	0.00086	0.00083	0.00218	0.00125	0.00156	0.00144	0.00141	0.00209	0.00086	0.00088	0.00266	0.00236	0.00206	0.00189	0.00263	0.00659	0.00429	0.00554	0.00428	0.00538	0.00482
Silver, total	mg/L	<0.000020	<0.000020	0.000035	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.00002	<0.0000050	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	9.84	10.2	11	11.9	11.5	12.3	11.2	12.1	7.68	7.96	11.3	12.4	12.4	11.5	13.2	20.2	13.7	17.5	15.7	18.1	19.6
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000002	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	0.0086	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0169	<0.0050	0.0086	0.00371	0.0074	0.0242	0.0083	0.0111
Aluminum, dissolved	mg/L	0.0272	0.0382	0.0132	0.0205	0.0145	0.029	0.0195	0.0129	0.039	0.046	0.025			0.0181	0.0192	0.0153	0.0115	0.0092	0.0092	0.0107	0.015
Arsenic, dissolved	mg/L	0.00048	0.0006	0.00052	0.00054	0.00049	0.00163	0.00055	0.00042	0.00037	0.00043	0.00051			0.00034	0.00037	0.00057	0.000405	0.00046	0.00054	0.0004	0.00052
Cadmium, dissolved	mg/L	0.00001	0.000016	0.000023	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00001			<0.000010	0.000012	0.000034	0.000022	0.000031	0.000052	0.000039	0.00006
Calcium, dissolved	mg/L	64.2	69.6	75.8	79.4	82.5	81.3	78.3	85.2	47.3	59.1	76.1			71.9	88.7	168	113	126	144	138	150
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010	<0.0010	<0.0010	0.00022	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.00602	0.00574	0.0488	0.0184	0.0178	0.00713	0.0198	0.0213	0.0117	0.0105	0.00821			0.00865	0.0122	0.0396	0.0245	0.0246	0.0258	0.0289	0.028
Iron, dissolved	mg/L	0.274	0.412	0.231	0.374	0.309	6.48	0.508	0.374	0.21	0.283	0.818			0.156	0.125	0.151	0.0994	0.0685	0.107	0.0889	0.154
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00034			<0.00020	<0.00020	<0.00020	0.000031	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	17.6	19.7	17.2	20.2	21.9	24.6	21.1	23.2	13.7	16.5	19.8			20.2	25.5	39.2	28.6	34.2	36.6	35.4	39.3
Manganese, dissolved	mg/L	0.0877	0.114	0.267	0.22	0.173	0.996	0.317	0.193	0.0467	0.0616	0.217			0.0478	0.0615	0.359	0.15	0.154	0.253	0.349	0.644
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0024	0.0027	0.0028	0.0027	0.0027	0.0022	0.0027	0.0025	0.0018	0.0019	0.0022			0.0019	0.0022	0.0038	0.00267	0.0044	0.003	0.0029	0.0031
Nickel, dissolved	mg/L	0.0012	0.0014	<0.0010	0.0013	<0.0010	0.0015	0.0011	<0.0010	<0.0010	0.0011	0.0013			<0.0010	0.0011	0.0017	0.000956	<0.0010	0.0012	0.0023	0.0018
Phosphorus, dissolved	mg/L	0.012	0.017	0.016	0.016	0.014	0.121	0.018	0.013	0.012	0.017	0.024			<0.01	<0.01	0.013		0.016	0.012	0.023	<0.01
Potassium, dissolved	mg/L	1.95	2.26	3.14	2.57	2.73	2.87	2.88	3.08	1.97	2.01	2.67			2.43	3.19	7.46	4.23	5.32	5.23	5.22	5.69
Selenium, dissolved	mg/L	0.00077	0.00077	0.00195	0.00132	0.00166	0.00109	0.0017	0.00193	0.00106	0.00141	0.0022			0.00208	0.00287	0.00715	0.00419	0.0055	0.00513	0.00472	0.00521
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020	<0.000020	0.000023	<0.0000050	<0.000020	<0.000020	0.000029	<0.000020
Sodium, dissolved	mg/L	9.68	10.6	10.2	11	11.3	13	11.4	12.2	7.78	8.95	10.7			10.4	12.8	19.9	14.8	17.3	18	17.2	19.2
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050	<0.000050	<0.000050	<0.0000020	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0062			<0.0050	<0.0050	0.0066	0.00295	0.0068	<0.0050	0.0083	0.0052

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**02/05/2013**	**05/05/2013**	**06/05/2013**	**07/05/2013**	**08/05/2013**	**09/05/2013**	**10/05/2013**	**13/05/2013**	**14/05/2013**	**14/05/2013**	**15/05/2013**	**16/05/2013**	**17/05/2013**	**17/05/2013**	**18/05/2013**	**19/05/2013**	**20/05/2013**	**21/05/2013**	**22/05/2013**	**24/05/2013**	**25/05/2013**
pH (field)	pH units	8.68	7.67	7.64	7.79	7.57	7.71	7.66	7.9	6.92	7.11	7.11	8.37	7.8	8.1	7.6		8.1	8.2	7.9	8.42	9.63
pH (lab)	pH units	8.14					7.44								7.71		7.97					
Hardness (from dissolved)	mg/L	261					39.5								115							
Hardness (from total)	mg/L	307					39.7								160		133					
Total Dissolved Solids	mg/L	400					96								196		198					
Total Suspended Solids	mg/L	136					22.7								182		40.7					
Alkalinity, total	mg/L	126					29.6								75.8		84.6					
Sulphate, dissolved	mg/L	117					<0.50								32.6							
Chloride	mg/L	3.5					3.8								1.9							
Fluoride	mg/L	0.16					0.087								0.17							
Nitrite (N)	mg/L	0.111					0.0538								0.119		0.102					
Nitrate (N)	mg/L	10.3					1.01								4.02		4.21					
Ammonia	mg/L	0.085					0.12								0.22		0.17					
Aluminum, total	mg/L	2.59					1.35								14.7		1.79					
Arsenic, total	mg/L	0.00068					0.00052								0.00614		0.00163					
Cadmium, total	mg/L	0.0001					0.000015								0.000153		0.000021					
Calcium, total	mg/L	81.2					11.4								40.9		35.8					
Chromium, total	mg/L	0.0013					0.0012								0.0226		0.0029					
Copper, total	mg/L	0.493					0.0629								0.173		0.0347					
Iron, total	mg/L	4.73					1.65								24.5		3.85					
Lead, total	mg/L	0.00114					0.00046								0.00610		0.00076					
Magnesium, total	mg/L	25.4					2.74								14.1		10.5					
Manganese, total	mg/L	0.234					0.0523								0.671		0.469					
Mercury, total	mg/L	<0.000010					<0.000010								0.000034		<0.000010					
Molybdenum, total	mg/L	0.0043					0.001								0.0029		0.0022					
Nickel, total	mg/L	0.0014					0.0013								0.0187		0.0036					
Phosphorus, total	mg/L	0.176					0.074								0.416		0.082					
Potassium, total	mg/L	5.71					2.36								3.65		2.42					
Selenium, total	mg/L	0.00308					0.00013								0.00142		0.00136					
Silver, total	mg/L	0.000139					<0.000020								0.000053		0.000040					
Sodium, total	mg/L	11.2					2.27								4.81		5.09					
Thallium, total	mg/L	<0.000050					<0.000050								0.000120		<0.000050					
Zinc, total	mg/L	0.0309					0.0073								0.063		0.008					
Aluminum, dissolved	mg/L	0.0052					0.118								0.0478							
Arsenic, dissolved	mg/L	0.00036					0.00031								0.00086							
Cadmium, dissolved	mg/L	<0.000010					<0.000010								<0.000010							
Calcium, dissolved	mg/L	67					11.3								31.7							
Chromium, dissolved	mg/L	<0.0010					<0.0010								<0.0010							
Copper, dissolved	mg/L	0.037					0.0345								0.0114							
Iron, dissolved	mg/L	0.0085					0.134								1							
Lead, dissolved	mg/L	<0.00020					<0.00020								<0.00020							
Magnesium, dissolved	mg/L	22.7					2.72								8.8							
Manganese, dissolved	mg/L	0.0709					0.0212								0.372							
Mercury, dissolved	mg/L	<0.000010					<0.000010								<0.000010							
Molydenum, dissolved	mg/L	0.0039					<0.0010								0.0022							
Nickel, dissolved	mg/L	<0.0010					<0.0010								0.0012							
Phosphorus, dissolved	mg/L	0.014					0.032								0.027							
Potassium, dissolved	mg/L	4.81					2.28								2.08							
Selenium, dissolved	mg/L	0.00299					0.00015								0.00118							
Silver, dissolved	mg/L	<0.000020					<0.000020								<0.000020							
Sodium, dissolved	mg/L	10.4					2.47								4.78							
Thallium, dissolved	mg/L	<0.000050					<0.000050								<0.000050							
Zinc, dissolved	mg/L	<0.0050					<0.0050								<0.0050							

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**26/05/2013**	**27/05/2013**	**28/05/2013**	**29/05/2013**	**30/05/2013**	**31/05/2013**	**08/06/2013**	**14/06/2013**	**18/06/2013**	**24/06/2013**	**02/07/2013**	**11/07/2013**	**19/07/2013**	**23/07/2013**	**31/07/2013**	**08/08/2013**	**15/08/2013**	**19/08/2013**	**26/08/2013**	**02/09/2013**	**17/09/2013**
pH (field)	pH units	8	7.9	7.96	8.25	7.95	7.6	7.28	7.61	8.3	8.4	7.78	8.4	7.97	8.3	7.82	7.42	8.3	8.18	7.66	7.72	7.71
pH (lab)	pH units			8.09				7.96	8.1	8.25	8.25	8.42	8.16	8.28	8.21	8.05	8.04	8.26	8.14	8.21	7.93	8.08
Hardness (from dissolved)	mg/L			171				178	208	217	236	257	244	255	224	144	250	273	285	254	241	329
Hardness (from total)	mg/L			161				190	211	253	280	268	254	270	255	163	292	281	298	285	284	376
Total Dissolved Solids	mg/L			256				288	316	352	396	358	372	354	320	320	386	448	368	416	388	412
Total Suspended Solids	mg/L			17.1				14	10.2	53	9.4	4.8	3.6	1.7	5.9	10.8	100	9.8	5.7	10.2	13.7	14.5
Alkalinity, total	mg/L			125				130	157	164	177	189	173	197	173	105	190	190	193	172	167	206
Sulphate, dissolved	mg/L			41.3				38.8	52.5	58.7	61.5	66.4	67.9	68.3	70.3	31.1	61	79.7	89	70.8	70	104
Chloride	mg/L			2.8				3.6	2.7	2.9	3.1	3.5	3.6	3.3	5.8	2.1	3.7	2.9	2.9	3.2	3.2	4.4
Fluoride	mg/L			0.14				0.14	0.16	0.11	0.15	0.15	0.14	0.14	0.17	0.16	0.17	0.17	0.16	0.15	0.16	0.23
Nitrite (N)	mg/L			0.219				0.0609	0.0364	0.0377	0.0406	0.0507	0.0373	0.0468	<0.050	0.0158	<0.050	0.0282	0.0341	0.0206	0.0218	0.0325
Nitrate (N)	mg/L			5.11				5.76	6.14	5.89	6.57	6.07	4.28	3.8	3.97	1.78	5.2	7.19	8.42	6.54	7.37	16.9
Ammonia	mg/L			0.19				0.17	0.13	0.052	0.028	0.062	0.031	0.13	0.074	0.093	0.23	1.2	0.044	0.13	0.098	0.039
Aluminum, total	mg/L			0.377				0.612	0.469	1.07	0.266	0.127	0.187	0.201	0.726	0.817	2.65	0.154	0.388	0.569	0.656	0.786
Arsenic, total	mg/L			0.00058				0.00099	0.00081	0.00106	0.00079	0.00076	0.00079	0.00089	0.00105	0.00127	0.00183	0.00086	0.00079	0.00086	0.00087	0.0007
Cadmium, total	mg/L			0.000015				0.000013	0.00001	0.000015	<0.000010	<0.000010	0.00001	0.000014	0.000017	0.000022	0.000047	0.00001	0.000011	0.00002	<0.000010	<0.000010
Calcium, total	mg/L			42.9				51.2	56.5	68.8	75.5	72.1	68.2	73.7	67.2	45	78.4	76	79.4	77	76.5	104
Chromium, total	mg/L			<0.0010				<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0026	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L			0.0324				0.0303	0.0282	0.0709	0.0228	0.0124	0.0155	0.0235	0.0543	0.045	0.102	0.0153	0.0272	0.0276	0.0347	0.0508
Iron, total	mg/L			1.11				1.67	1.22	2.18	0.708	0.447	0.495	0.733	1.02	1.95	6.23	0.892	1.01	1.79	1.39	1.1
Lead, total	mg/L			<0.00020				0.00032	0.00027	0.00052	<0.00020	<0.00020	<0.00020	<0.00020	0.00031	0.00044	0.00101	<0.00020	<0.00020	0.00022	0.00024	0.00024
Magnesium, total	mg/L			13.1				15.1	16.9	19.7	22.1	21.3	20.3	20.9	21.2	12.3	23.4	22.2	24.2	22.5	22.6	28.4
Manganese, total	mg/L			0.563				0.342	0.315	0.191	0.115	0.117	0.0994	0.181	0.148	0.125	0.7	0.275	0.226	0.388	0.281	0.176
Mercury, total	mg/L			<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L			0.0022				0.0033	0.0029	0.0034	0.0033	0.0035	0.0032	0.0035	0.0053	0.0022	0.0033	0.0028	0.0034	0.0029	0.0038	0.0046
Nickel, total	mg/L			0.0011				0.0017	0.0021	0.0021	0.0014	0.0014	0.0015	0.0017	0.0016	0.0024	0.0035	0.0017	0.0016	0.0017	0.0018	0.0011
Phosphorus, total	mg/L			0.046				0.066	0.05	0.067	0.03	0.027	0.031	0.037	0.033	0.067	0.118	0.025	0.044	0.046	0.04	0.024
Potassium, total	mg/L			2.95				2.7	2.64	3.24	3.17	2.98	2.52	2.94	2.86	1.72	2.82	2.55	2.65	2.57	2.91	4.89
Selenium, total	mg/L			0.00111				0.00129	0.00144	0.00136	0.0016	0.00123	0.00111	0.00109	0.00102	0.00067	0.00213	0.00243	0.00275	0.0019	0.00224	0.00442
Silver, total	mg/L			<0.000020				<0.000020	0.000043	<0.000020	<0.000020	<0.000020	<0.000020	0.000052	<0.000020	<0.000020	0.000028	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L			6.44				8.49	9.22	10.8	12.2	11.7	11.7	12.3	13.8	7.49	11.7	12.3	13.3	12.2	13.1	16.5
Thallium, total	mg/L			<0.000050				<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L			<0.0050				<0.0050	0.0076	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0134	<0.0050	<0.0050	0.0066	<0.0050	<0.0050
Aluminum, dissolved	mg/L			0.0158				0.0339	0.0221	0.0208	0.0185	0.0239	0.0168	0.0179	0.0158	0.0523	0.0359	0.0287	0.0937	0.028	0.0283	0.0218
Arsenic, dissolved	mg/L			0.00051				0.00076	0.00052	0.00058	0.0006	0.00071	0.00071	0.0007	0.00069	0.00087	0.00088	0.00058	0.0007	0.00057	0.0005	0.00042
Cadmium, dissolved	mg/L			<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000014	<0.000010	0.000012	<0.000010	0.000013	<0.000010	<0.000010	<0.000010	0.00001	0.000013
Calcium, dissolved	mg/L			47.6				48.7	56.9	59	63.8	70.6	65.7	69.3	60.8	39.6	68.8	74.1	77.7	69.8	64.9	91.8
Chromium, dissolved	mg/L			<0.0010				<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L			0.0147				0.014	0.0102	0.0106	0.0101	0.00963	0.0107	0.0124	0.0266	0.0168	0.0124	0.00934	0.0139	0.00758	0.014	0.025
Iron, dissolved	mg/L			0.464				0.601	0.239	0.121	0.0545	0.0919	0.0885	0.219	0.108	0.536	1.4	0.272	0.512	0.542	0.26	0.0926
Lead, dissolved	mg/L			<0.00020				<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L			12.7				13.8	15.9	16.9	18.6	19.7	19.4	19.9	17.6	11	18.9	21.4	22.2	19.4	19.1	24.1
Manganese, dissolved	mg/L			0.658				0.309	0.297	0.122	0.0367	0.0556	0.0716	0.154	0.115	0.088	0.616	0.246	0.198	0.32	0.221	0.144
Mercury, dissolved	mg/L			<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L			0.0024				0.0028	0.003	0.0029	0.0032	0.0032	0.0034	0.0031	0.0045	0.0023	0.0032	0.003	0.0032	0.0028	0.0031	0.0041
Nickel, dissolved	mg/L			0.0019				0.0012	0.0013	0.0011	0.001	0.0011	0.0011	0.0012	0.0011	0.0016	0.0015	0.0014	0.0015	0.0012	0.0012	<0.0010
Phosphorus, dissolved	mg/L			0.02				0.02	0.013	0.016	0.012	0.011	0.011	0.012	0.018	0.021	0.03	0.014	0.02	0.016	0.011	<0.01
Potassium, dissolved	mg/L			3.35				2.57	2.58	2.64	2.82	2.85	2.47	2.65	2.44	1.67	2.18	2.4	2.57	2.25	2.48	4.17
Selenium, dissolved	mg/L			0.0012				0.00126	0.00144	0.00138	0.00154	0.00136	0.0008	0.00101	0.00112	0.00057	0.00186	0.00259	0.00284	0.00165	0.002	0.0041
Silver, dissolved	mg/L			<0.000020				<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L			6.48				7.95	8.83	9.37	10.3	11.9	11.3	11.1	11.2	6.79	10.3	12	12.3	10.3	11.3	14
Thallium, dissolved	mg/L			<0.000050				<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L			0.014				<0.0050	<0.0050	<0.0050	<0.0050	0.006	<0.0050	<0.0050	<0.0050	<0.0050	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**28/09/2013**	**04/10/2013**	**08/10/2013**	**17/10/2013**	**22/10/2013**	**07/11/2013**	**15/11/2013**	**19/11/2013**	**29/11/2013**	**06/12/2013**	**10/12/2013**	**22/12/2013**	**24/12/2013**	**25/04/2014**	**26/04/2014**	**27/04/2014**	**28/04/2014**	**29/04/2014**	**30/04/2014**	**01/05/2014**	**02/05/2014**
pH (field)	pH units	7.46	7.52	7.67	7.8	7.45	7.64	7.48	7.77	6.84	7.2	7.52	7.11	7.25		8.18	8.31	8.2	8.25	8.28	8.43	8.3
pH (lab)	pH units	8.13	8.14	8.15	8.34	8.03	8.21	8.31	8.31	7.91	7.84	8.15	7.99	8.04	7.86			7.87				
Hardness (from dissolved)	mg/L	221	260	297	327	430	481	507	503	547	533	550	518	535	114			114				
Hardness (from total)	mg/L	219	283	293	342	427	499	535	532	579	521	532	506	547	119			126				
Total Dissolved Solids	mg/L	358	380	378	486	532	638	632	674	578	712	728	667	682	226			190				
Total Suspended Solids	mg/L	14.3	8.6	5.1	3.9	9.6	2.3	4.6	<4.0	2.1	3.1	2.2	2.3	7	128			35.3				
Alkalinity, total	mg/L	139	171	193	210	261	278	278	292		299	292	287	291	67.7			72.3				
Sulphate, dissolved	mg/L	60	71.5	78	98.9	118	137	136	155	149	155	163	153	156	27.3			25.5				
Chloride	mg/L	2.9	3.2	3.1	3.2	4	5.7	5.9	6.4	6.7	7.1	7.4	7.7	8.3	2.5			2.2				
Fluoride	mg/L	0.14	0.16	0.14	0.16	0.18	0.22	0.22	0.21	0.17	0.17	0.19	0.22	0.22	0.12			0.13				
Nitrite (N)	mg/L	0.0135	<0.050	<0.050	0.0141	<0.050	0.0193	0.0254	0.0343	0.0368	0.0488	0.0503	0.0266	0.0323	0.0706			0.121				
Nitrate (N)	mg/L	7.58	10.2	11.3	12.6	17.7	26.7	29.4	29.1	34	36	32.9	30.4	31.4	3.61			4.13				
Ammonia	mg/L	0.061	0.08	0.09	0.063	0.17	0.032	0.024	0.038	0.096	0.075	0.15	0.1	0.13	0.07			0.04				
Aluminum, total	mg/L	0.914	0.161	0.1	0.223	0.358	0.0477	0.121	0.0659	0.0436	0.0551	0.0554	0.0161	0.0359	1.9			1.77				
Arsenic, total	mg/L	0.00071	0.00057	0.00048	0.00051	0.00062	0.00043	0.00037	0.00038	0.00028	0.00038	0.00038	0.00035	0.00042	0.00089			0.00074				
Cadmium, total	mg/L	0.000032	<0.000010	<0.000010	0.00001	0.000021	0.000033	0.000037	0.000034	0.000035	0.000028	0.00003	0.00002	0.000029	0.000053			0.000051				
Calcium, total	mg/L	59.6	76.1	77.1	90.8	118	146	156	153	168	150	153	147	158	31.9			34.3				
Chromium, total	mg/L	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0016			0.0012				
Copper, total	mg/L	0.0615	0.012	0.0142	0.0259	0.034	0.0463	0.0637	0.0582	0.0483	0.0433	0.0334	0.0164	0.0284	0.197			0.203				
Iron, total	mg/L	2.02	0.695	0.723	0.726	1.65	0.258	0.383	0.261	0.47	0.337	0.422	0.61	0.766	3.49			3.25				
Lead, total	mg/L	0.00053	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00025	<0.00020	0.00111			0.00101				
Magnesium, total	mg/L	17.1	22.6	24.4	28	32.2	33	35.4	36.5	38.9	35.4	36.7	33.8	37	9.65			9.84				
Manganese, total	mg/L	0.165	0.122	0.211	0.171	0.388	0.189	0.207	0.198	0.415	0.27	0.408	0.477	0.636	0.269			0.203				
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010				
Molybdenum, total	mg/L	0.002	0.0025	0.0026	0.0024	0.0027	0.0037	0.004	0.0037	0.0029	0.0031	0.0034	0.0038	0.004	0.0017			0.0017				
Nickel, total	mg/L	0.002	0.0012	0.0013	0.0012	0.0015	0.0011	<0.0010	<0.0010	0.0014	0.0013	<0.0010	<0.0010	0.0011	0.0023			0.0019				
Phosphorus, total	mg/L	0.071	0.033	0.042	0.035	0.049	0.023	0.024	0.017		0.023	0.039	0.022	0.028	0.192			0.192				
Potassium, total	mg/L	2.1	2.49	2.78	2.96	3.82	5.31	5.32	5.41	5.58	5.46	5.55	5.55	5.93	3.08			2.88				
Selenium, total	mg/L	0.00208	0.00255	0.00289	0.00334	0.00439	0.00625	0.00689	0.00631	0.00731	0.00642	0.00678	0.00598	0.0069	0.00146			0.00147				
Silver, total	mg/L	0.000038	<0.000020	<0.000020	0.000047	<0.000020	0.000033	<0.000020	<0.000020	0.000029	<0.000020	0.000023	<0.000020	<0.000020	0.000026			0.000040				
Sodium, total	mg/L	9.76	12.2	13.7	15.3	17	16.2	17.8	17.9	18.5	16.3	16.6	15.6	17	4.49			4.44				
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050				
Zinc, total	mg/L	0.0069	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0188			0.018				
Aluminum, dissolved	mg/L	0.0468	0.0269	0.158	0.0174	0.0114	0.0066	0.0058	0.0057	0.0081	0.0043	0.005	0.0048	0.0042	0.161			0.152				
Arsenic, dissolved	mg/L	0.00043	0.00048	0.00056	0.00039	0.00045	0.00029	0.0005	0.00035	0.00037	0.0003	0.00034	0.00031	0.00032	0.00046			0.00037				
Cadmium, dissolved	mg/L	<0.000010	<0.000010	0.00001	<0.000010	0.000012	0.000028	0.000033	0.000042	0.000026	0.000028	0.000029	0.00002	0.000023	0.00003			0.000022				
Calcium, dissolved	mg/L	60.9	69.8	79.9	90	120	139	145	143	156	155	156	149	154	31.1			31.9				
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010			<0.0010				
Copper, dissolved	mg/L	0.00814	0.0075	0.0231	0.00635	0.0145	0.0419	0.0529	0.047	0.0286	0.0311	0.0241	0.0144	0.0175	0.0423			0.0313				
Iron, dissolved	mg/L	0.421	0.356	1.09	0.225	0.386	0.102	0.0866	0.0751	0.135	0.0847	0.105	0.129	0.118	0.853			0.335				
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020				
Magnesium, dissolved	mg/L	16.8	20.7	23.7	24.9	31.4	32.7	35.2	35.3	37.9	35.2	39.1	35.4	36.6	8.83			8.32				
Manganese, dissolved	mg/L	0.114	0.11	0.228	0.126	0.362	0.182	0.194	0.192	0.417	0.275	0.403	0.568	0.684	0.19			0.11				
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010				
Molydenum, dissolved	mg/L	0.0019	0.0022	0.0021	0.0024	0.0028	0.0034	0.0038	0.0041	0.0028	0.0031	0.0033	0.004	0.0041	0.0021			0.0018				
Nickel, dissolved	mg/L	0.0011	0.0011	0.0013	0.0011	0.0012	<0.0010	<0.0010	0.001	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.0011			0.0011				
Phosphorus, dissolved	mg/L	0.015	0.014	0.039	0.012	0.014	0.013	0.019	0.017		<0.01	<0.01	0.01	<0.01	0.036			0.032				
Potassium, dissolved	mg/L	1.83	2.41	2.8	2.77	3.82	4.73	5.33	5	5.45	5.44	5.53	5.7	5.79	2.71			2.57				
Selenium, dissolved	mg/L	0.00192	0.00256	0.00286	0.00339	0.00446	0.00609	0.0068	0.00652	0.00638	0.00665	0.00668	0.00651	0.00683	0.0017			0.00127				
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020			<0.000020				
Sodium, dissolved	mg/L	9.28	12.3	13.1	13.9	16.8	15.9	17.4	17.1	17.9	17.4	18.3	17	17.1	4.62			4.09				
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050			<0.000050				
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0092	<0.0050	<0.0050	0.0069	0.0094	<0.0050	<0.0050	<0.0050	<0.0050			<0.0050				

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**03/05/2014**	**04/05/2014**	**05/05/2014**	**06/05/2014**	**07/05/2014**	**08/05/2014**	**09/05/2014**	**10/05/2014**	**11/05/2014**	**12/05/2014**	**13/05/2014**	**14/05/2014**	**15/05/2014**	**15/05/2014**	**16/05/2014**	**17/05/2014**	**18/05/2014**	**19/05/2014**	**20/05/2014**	**21/05/2014**	**22/05/2014**
pH (field)	pH units	8.05	7.85	8.01	8.09	8.22	8.16	8.2	8.19	8.46	8.24	8.08	8.22	8.31	8.14	6.4	7.21	7.48	7.42	7.31	7.57	7.32
pH (lab)	pH units				7.95							7.99			7.77							
Hardness (from dissolved)	mg/L				145										141							
Hardness (from total)	mg/L				155							93.3			135							
Total Dissolved Solids	mg/L				226										190							
Total Suspended Solids	mg/L				17.9							14.8			8.8							
Alkalinity, total	mg/L				97										80.5							
Sulphate, dissolved	mg/L				37.2										29.5							
Chloride	mg/L				2.4										1.3							
Fluoride	mg/L				0.14										0.13							
Nitrite (N)	mg/L				0.172							0.249			0.125							
Nitrate (N)	mg/L				4.45							3.8			3.57							
Ammonia	mg/L				0.12							0.101			0.13							
Aluminum, total	mg/L				0.735							0.511			0.823							
Arsenic, total	mg/L				0.00072							0.0003			0.00044							
Cadmium, total	mg/L				0.000031							0.000018			0.000022							
Calcium, total	mg/L				42.8							26.6			38							
Chromium, total	mg/L				<0.0010							<0.0010			<0.0010							
Copper, total	mg/L				0.0587							0.0561			0.0501							
Iron, total	mg/L				1.4							0.638			1.21							
Lead, total	mg/L				0.00265							0.00025			0.00028							
Magnesium, total	mg/L				11.8							6.51			9.74							
Manganese, total	mg/L				0.36							0.245			0.301							
Mercury, total	mg/L				<0.000010							<0.000010			<0.000010							
Molybdenum, total	mg/L				0.002							0.0011			0.0018							
Nickel, total	mg/L				0.0016							<0.0010			<0.0010							
Phosphorus, total	mg/L				0.103							0.026			0.047							
Potassium, total	mg/L				2.58							1.92			2							
Selenium, total	mg/L				0.00139							0.00092			0.0008							
Silver, total	mg/L				0.000025							<0.000020			0.000025							
Sodium, total	mg/L				5.96							3.06			5.04							
Thallium, total	mg/L				<0.000050							<0.000050			<0.000050							
Zinc, total	mg/L				0.0162							0.0058			0.0059							
Aluminum, dissolved	mg/L				0.0618										0.0182							
Arsenic, dissolved	mg/L				0.00047										0.00035							
Cadmium, dissolved	mg/L				0.000016										0.000012							
Calcium, dissolved	mg/L				40.3										39.8							
Chromium, dissolved	mg/L				<0.0010										<0.0010							
Copper, dissolved	mg/L				0.0206										0.0149							
Iron, dissolved	mg/L				0.407										0.169							
Lead, dissolved	mg/L				0.00057										<0.00020							
Magnesium, dissolved	mg/L				10.7										10.1							
Manganese, dissolved	mg/L				0.311										0.304							
Mercury, dissolved	mg/L				<0.000010										<0.000010							
Molydenum, dissolved	mg/L				0.0019										0.0018							
Nickel, dissolved	mg/L				<0.0010										<0.0010							
Phosphorus, dissolved	mg/L				0.03										0.014							
Potassium, dissolved	mg/L				2.48										1.99							
Selenium, dissolved	mg/L				0.00133										0.001							
Silver, dissolved	mg/L				<0.000020										<0.000020							
Sodium, dissolved	mg/L				5.68										5.21							
Thallium, dissolved	mg/L				<0.000050										<0.000050							
Zinc, dissolved	mg/L				<0.0050										<0.0050							

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**23/05/2014**	**24/05/2014**	**25/05/2014**	**26/05/2014**	**27/05/2014**	**28/05/2014**	**29/05/2014**	**30/05/2014**	**31/05/2014**	**05/06/2014**	**14/06/2014**	**19/06/2014**	**26/06/2014**	**30/06/2014**	**13/07/2014**	**16/07/2014**	**21/07/2014**	**29/07/2014**	**07/08/2014**	**14/08/2014**	**18/08/2014**
pH (field)	pH units	7.43	7.4	7.39	7.39	7.31	8.23	8.15	8.17	8.18	8.05	7.83	7.99	8.08	8.38	8.31	8.08	7.83	7.46	8.15	8.1	8.11
pH (lab)	pH units		8.14				8.26				8.34	8.25	8.25	8.28	8.31	8.48	8.27	8.28	8.19	8.2	8.27	8.37
Hardness (from dissolved)	mg/L		154				224				271	298	303	293	324	311	326	285	277	283	294	311
Hardness (from total)	mg/L		156				228				269	328	314	310	338	333	324	283	309	280	351	342
Total Dissolved Solids	mg/L		268				324				1640	410	438	402	456	414	408	420	422	452	414	442
Total Suspended Solids	mg/L		12.7				8.2				5.1	9.6	6.2	5	4.1	2.5	2.6	6.6	72	1.1	1.6	2
Alkalinity, total	mg/L		109				162				189	214	199	205	212	217	227	198	208	199	230	242
Sulphate, dissolved	mg/L		35.6				52.5				64.7	73.7	82.6	88.4	102	103	100	90.1	82	80.2	88.6	91.7
Chloride	mg/L		2.1				2.7				3	3.7	3.5	3.3	3.8	4.3	3.6	3.7	4.4	3	3.4	3.6
Fluoride	mg/L		0.16				0.17				0.17	0.17	0.16	0.16	0.16	0.17	0.17	0.2	0.23	0.18	0.18	0.17
Nitrite (N)	mg/L		0.049				0.0645				0.0307	0.0342	0.0279	0.026	0.0285	0.0409	0.0475	0.0313	0.0623	0.0274	0.0274	0.0264
Nitrate (N)	mg/L		5.17				8.45				10.8	13	10.8	9.75	10.1	8.05	7.56	6.09	5.64	4.4	4.89	5.06
Ammonia	mg/L		0.093				0.14				0.081	0.073	0.059	0.032	0.045	0.046	0.05	0.068	0.092	0.017	0.04	0.051
Aluminum, total	mg/L		0.477				0.244				0.135	0.242	0.132	0.106	0.0763	0.0674	0.0894	0.242	2.81	0.0483	0.108	0.164
Arsenic, total	mg/L		0.00064				0.00054				0.00053	0.00066	0.00051	0.00056	0.00053	0.00056	0.00045	0.00059	0.00128	0.00053	0.00056	0.00054
Cadmium, total	mg/L		0.000016				0.000012				<0.000010	0.000018	<0.000010	0.000028	<0.000010	<0.000010	<0.000010	0.000011	0.000035	<0.000010	<0.000010	<0.000010
Calcium, total	mg/L		43.4				61				72	87	83.3	84.5	89.8	88.1	84.4	74.8	85.1	76.1	95.6	91.1
Chromium, total	mg/L		<0.0010				<0.0010				<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L		0.0282				0.0234				0.0157	0.0196	0.0179	0.0145	0.0127	0.0144	0.0172	0.0233	0.176	0.0142	0.0225	0.029
Iron, total	mg/L		1.18				1				0.833	1.04	0.888	0.771	0.787	0.398	0.379	0.71	4.75	0.162	0.322	0.59
Lead, total	mg/L		0.00027				0.00024				<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00100	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L		11.6				18.4				21.6	27	25.7	24.1	27.8	27.5	27.6	23.2	23.4	21.8	27.3	27.8
Manganese, total	mg/L		0.302				0.355				0.27	0.236	0.184	0.145	0.144	0.0922	0.0648	0.17	0.306	0.0463	0.109	0.145
Mercury, total	mg/L		<0.000010				<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L		0.0024				0.003				0.0034	0.004	0.0031	0.0028	0.0031	0.0031	0.003	0.0036	0.0046	0.0034	0.0038	0.0037
Nickel, total	mg/L		0.002				0.0015				0.0013	0.0022	0.0018	0.001	0.0015	0.0012	0.001	0.0016	0.0016	0.0011	0.0012	0.0013
Phosphorus, total	mg/L		0.04				0.039				0.03	0.029	0.024	0.014	0.045	0.017	0.021	0.024	0.058	0.012	0.017	0.02
Potassium, total	mg/L		2.13				2.83				2.99	3.71	3.19	2.96	3.45	3.27	3.13	2.86	4.22	2.68	3.41	3.51
Selenium, total	mg/L		0.00129				0.00167				0.00225	0.00246	0.00193	0.0018	0.00155	0.00139	0.0014	0.0013	0.00141	0.00099	0.0011	0.00106
Silver, total	mg/L		<0.000020				<0.000020				<0.000020	0.000035	0.000021	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000030	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L		6.39				9.74				12.1	15	12.7	13.5	15.8	16.4	15	14.9	14.6	13.6	15.6	15.3
Thallium, total	mg/L		<0.000050				<0.000050				<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L		0.0065				0.0052				0.0052	0.0075	0.0054	0.0065	0.0065	<0.0050	<0.0050	<0.0050	0.0175	<0.0050	<0.0050	0.013
Aluminum, dissolved	mg/L		0.0642				0.0362				0.0246	0.0169	0.0141	0.0124	0.0111	0.015	0.0123	0.0189	0.0181	0.0256	0.0146	0.0146
Arsenic, dissolved	mg/L		0.00052				0.00047				0.00046	0.00045	0.00042	0.0004	0.00044	0.00046	0.0005	0.00038	0.00047	0.00045	0.0005	0.00063
Cadmium, dissolved	mg/L		<0.000010				0.000011				0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L		42.3				61.9				74.7	80.3	80.7	78.9	87	81.9	86.4	78.5	73.9	78	79	82.4
Chromium, dissolved	mg/L		<0.0010				<0.0010				<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L		0.0172				0.0119				0.0104	0.00901	0.00929	0.00812	0.00847	0.0101	0.0128	0.0121	0.0308	0.0135	0.0152	0.0162
Iron, dissolved	mg/L		0.457				0.493				0.343	0.163	0.11	0.092	0.0778	0.112	0.109	0.138	0.115	0.0938	0.124	0.212
Lead, dissolved	mg/L		<0.00020				<0.00020				<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L		11.9				17.7				20.5	23.6	24.6	23.3	25.9	25.9	26.7	21.6	22.5	21.3	23.5	25.6
Manganese, dissolved	mg/L		0.28				0.336				0.252	0.212	0.151	0.108	0.0786	0.0642	0.0527	0.155	0.151	0.0413	0.0885	0.123
Mercury, dissolved	mg/L		<0.000010				<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L		0.0023				0.0031				0.0034	0.0032	0.0034	0.0028	0.003	0.003	0.0032	0.0036	0.0042	0.0034	0.0035	0.0034
Nickel, dissolved	mg/L		0.0012				0.0012				0.0011	0.001	0.001	<0.0010	0.0011	0.001	0.0012	0.001	<0.0010	0.0011	0.0012	<0.0010
Phosphorus, dissolved	mg/L		0.021				0.019				0.015	<0.01	<0.01	0.01	<0.01	0.01	<0.01	<0.01	0.011	<0.01	0.011	0.011
Potassium, dissolved	mg/L		2.03				2.84				2.99	3.2	3.22	3.1	3.16	3.21	3	2.83	3.62	2.69	2.64	3.01
Selenium, dissolved	mg/L		0.00128				0.00177				0.002	0.00227	0.00184	0.0017	0.00151	0.00138	0.00148	0.00125	0.00114	0.00098	0.00092	0.00092
Silver, dissolved	mg/L		<0.000020				<0.000020				<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L		6.37				9.74				11.5	12.9	13.3	13.4	14.8	14.8	16.2	13.7	14.3	12.2	13.5	15.2
Thallium, dissolved	mg/L		<0.000050				<0.000050				<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L		<0.0050				<0.0050				<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**26/08/2014**	**01/09/2014**	**12/09/2014**	**15/09/2014**	**24/09/2014**	**30/09/2014**	**20/12/2014**	**22/12/2014**	**29/12/2014**	**07/01/2015**	**13/01/2015**	**20/01/2015**	**27/01/2015**	**03/02/2015**	**10/02/2015**	**20/02/2015**	**26/02/2015**	**03/03/2015**	**12/03/2015**	**14/03/2015**	**25/03/2015**
pH (field)	pH units	7.72	7.98	7.48	7.74	7.66	7.73	7.43	7.32	7.03	7.54	8.06	7.06	7.27	7.26	7.2	7.77	7.56	7.4	7.25		8.2
pH (lab)	pH units	8.1	8.32	8.08	8.19	8.29	8.11	7.96	7.71	7.81	7.57	8.14	8.09	8.12	8.14	7.73	7.95	7.63	7.35		7.93	8.05
Hardness (from dissolved)	mg/L	345	339	349	327	293	251	735	579	592	635	786	657	644	686	700	1170	1450	3120		1140	467
Hardness (from total)	mg/L	359	323	339	372	326	264	756	566	652	781	799	796	654	673	724	1240	1760	3940		1150	513
Total Dissolved Solids	mg/L	518	524	526	530	408	402	904	746	802	816	1080	862	842	910	954	1670	2480	3960		1600	790
Total Suspended Solids	mg/L	90.7	8.2	13	10.4	4.3	3.4	5.7	2	3	1.1	25	2	1.7	6.1	3.6	1.9	1.7	18.1		10.8	105
Alkalinity, total	mg/L	245	252	266	248	216	180	408	337	357	373	316	373	341	384	400	565	737	1170		567	189
Sulphate, dissolved	mg/L	99.7	97.2	83.5	87.7	87.2	72.6	197	164	189	187	277	193	191	193	194	413	617	1220		372	221
Chloride	mg/L	4	4.1	3.9	3.9	3.8	4.1	11	8.9	10	11	13	11	9.8	11	12	13	20	44		18	21
Fluoride	mg/L	0.18	0.18	0.16	0.18	0.16	0.16	0.26	0.2	0.23	0.25	0.3	0.24	0.28	0.25	0.26	0.83	0.94	1.4		0.49	0.9
Nitrite (N)	mg/L	0.0294	0.0306	0.0177	0.0219	0.0111	0.008	0.0468	0.08	0.0842	0.092	0.0553	0.0816	0.0535	0.069	0.079	0.132	0.218	0.51		0.138	0.245
Nitrate (N)	mg/L	5.87	6.71	6.12	6.89	6.4	5.87	42.4	30.4	29.2	25.3	50.7	35.2	37.2	35.6	36.8	76	122	265		73.7	38.9
Ammonia	mg/L	0.14	0.11	0.3	0.16	0.05	0.051	0.025	0.07	0.098	0.15	0.02	0.16	0.056	0.19	0.23	0.028	0.055	0.11		0.41	0.19
Aluminum, total	mg/L	1.68	0.288	0.379	0.284	0.202	0.177	0.0236	0.0108	0.0483	0.0163	0.359	0.0146	0.0102	0.0544	0.0123	0.0262	0.0165	0.0376		0.0513	7.14
Arsenic, total	mg/L	0.00092	0.00047	0.00116	0.00068	0.00058	0.00046	0.00037	0.00039	0.00035	0.00047	0.00058	0.00043	0.00039	0.00051	0.00056	0.00073	0.00117	0.00281		0.00075	0.0025
Cadmium, total	mg/L	0.000025	<0.000010	0.000018	<0.000010	<0.000010	<0.000010	0.000055	0.000032	0.000039	0.000043	0.000038	0.000021	0.000035	0.000054	0.000045	<0.000010	<0.000010	0.000023		0.000052	0.000111
Calcium, total	mg/L	95.7	85.7	92.5	102	88	69.6	224	160	190	226	223	241	194	195	207	304	430	903		311	111
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020		<0.0010	0.0051
Copper, total	mg/L	0.0997	0.0367	0.0348	0.0242	0.023	0.0147	0.0819	0.031	0.0409	0.0422	0.133	0.03	0.0308	0.0421	0.0345	0.0445	0.0587	0.132		0.0696	0.342
Iron, total	mg/L	3.34	0.806	3.15	1.69	1.21	0.756	0.126	0.096	0.135	0.118	0.681	0.169	0.098	0.957	0.486	0.067	0.039	0.052		0.313	6.03
Lead, total	mg/L	0.00052	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00040		<0.00020	0.00246
Magnesium, total	mg/L	29.1	26.5	26.2	28.7	25.8	21.8	47.5	40.3	42.9	52.7	58.8	47.3	40.9	45	50.3	115	166	409		89.8	57.4
Manganese, total	mg/L	0.325	0.223	0.656	0.357	0.189	0.146	0.297	0.575	0.616	0.978	0.0497	0.7	0.209	0.99	1.12	0.0267	0.0286	0.0519		1.58	0.195
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molybdenum, total	mg/L	0.0036	0.0033	0.003	0.0027	0.0028	0.0024	0.0051	0.0035	0.0041	0.0044	0.0051	0.0038	0.0039	0.0045	0.004	0.0269	0.0374	0.0891		0.0137	0.0491
Nickel, total	mg/L	0.0019	0.0013	0.0016	0.0012	0.0018	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	0.0012	0.0044	0.0019	0.0012	0.0024		0.0016	0.0047
Phosphorus, total	mg/L	0.091	0.019	0.063	0.038	0.016	0.035	<0.01	<0.01	0.027	0.021	0.067	0.018	0.013	0.029	0.021	0.048	0.043	0.089		0.041	0.199
Potassium, total	mg/L	4.1	3.11	3.21	3.22	3	2.41	8.12	6.28	6.67	8.34	10.8	6.71	6.94	7.18	7.66	17	25.2	60.9		14.1	15.7
Selenium, total	mg/L	0.00106	0.00109	0.0011	0.00114	0.00115	0.00105	0.00884	0.0054	0.00584	0.0063	0.0102	0.00724	0.00675	0.00692	0.00592	0.0185	0.0256	0.0681		0.0131	0.00973
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000044	0.000023	<0.000020	<0.000020	<0.000020	<0.000020	0.000035	<0.000040		0.000095	0.000096
Sodium, total	mg/L	16	16.3	15.2	15.4	14.5	12	20.7	18.1	19.3	24	29.9	20.3	18.6	19.5	20.9	58	85.6	217		45.7	52
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.00010		<0.000050	0.000050
Zinc, total	mg/L	0.0111	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0396	0.0064	0.0083	0.0061	0.0122	<0.0050	0.007	<0.01		0.0076	0.0291
Aluminum, dissolved	mg/L	0.0113	0.0147	0.079	0.0128	0.0111	0.0143	0.0051	0.0035	0.0038	0.0045	0.007	0.0102	0.0035	0.0053	0.005	0.0073	0.0112	0.0078		0.0046	0.0072
Arsenic, dissolved	mg/L	0.00062	0.00047	0.00063	0.0006	0.00039	0.00037	0.00039	0.00028	0.00036	0.00044	0.00049	0.0004	0.00035	0.00045	0.00054	0.0008	0.00138	0.0022		0.0007	0.00119
Cadmium, dissolved	mg/L	<0.000010	<0.000010	0.000017	<0.000010	<0.000010	<0.000010	0.000057	0.000012	0.000032	0.000032	0.00002	0.000038	0.000032	0.00006	0.000041	<0.000010	<0.000010	0.000021		0.000041	0.00003
Calcium, dissolved	mg/L	93.6	91.4	95.8	88.8	79.1	68.1	214	167	166	177	221	192	190	200	197	299	348	733		309	99
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, dissolved	mg/L	0.0214	0.017	0.0356	0.011	0.00868	0.00668	0.0746	0.0295	0.0324	0.031	0.031	0.0238	0.0273	0.0332	0.0281	0.0338	0.044	0.101		0.0468	0.0541
Iron, dissolved	mg/L	0.332	0.14	0.774	0.328	0.331	0.235	0.0152	0.0196	0.0175	0.024	0.0178	0.0344	0.0295	0.0817	0.0422	0.0152	0.0144	0.0126		0.0278	<0.0050
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, dissolved	mg/L	27	26.9	26.7	25.5	23.1	19.6	48.7	39.4	42.9	46.7	56.7	43	41.1	45.4	50.7	102	140	314		90.5	53.4
Manganese, dissolved	mg/L	0.278	0.219	0.689	0.33	0.174	0.133	0.293	0.519	0.577	0.743	0.0286	0.637	0.206	1	1.07	0.0216	0.024	0.0378		1.58	0.0732
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0036	0.0038	0.0029	0.0027	0.0027	0.0025	0.0052	0.0034	0.0037	0.0035	0.0055	0.0036	0.0043	0.0039	0.0041	0.0226	0.0364	0.0725		0.0134	0.0525
Nickel, dissolved	mg/L	0.0012	0.001	0.0014	0.0012	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	0.001	<0.0010	0.001	<0.0010	0.0028	0.0015	0.0019	0.0027	0.0011		0.0014	<0.0010
Phosphorus, dissolved	mg/L	0.019	0.013	0.058	0.011	<0.01	0.013	0.014	<0.01	<0.01	0.02	0.027	<0.01	<0.01	<0.01	<0.01	0.025	0.028	0.052		0.018	0.096
Potassium, dissolved	mg/L	3.19	3.42	3.23	2.87	2.68	2.27	8.55	6.34	6.57	6.85	10.6	7.26	6.8	6.78	7.3	14.9	20.3	49.2		14.1	13.5
Selenium, dissolved	mg/L	0.00097	0.0011	0.00101	0.00134	0.00113	0.00106	0.00875	0.00529	0.00558	0.00467	0.0103	0.00561	0.00691	0.00612	0.00579	0.016	0.023	0.0504		0.013	0.00946
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000027		<0.000020	<0.000020
Sodium, dissolved	mg/L	15.1	15	15.2	14.8	12.6	11.5	21.1	17.7	19	21.3	26.3	20	19.1	20.7	22.1	51.2	73.7	169		44.5	50.3
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0068	<0.0050	0.0065	0.009	<0.0050	<0.0050	<0.0050		0.0122	<0.0050

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**30/03/2015**	**31/03/2015**	**01/04/2015**	**02/04/2015**	**03/04/2015**	**04/04/2015**	**05/04/2015**	**06/04/2015**	**19/04/2015**	**20/04/2015**	**22/04/2015**	**23/04/2015**	**24/04/2015**	**25/04/2015**	**26/04/2015**	**27/04/2015**	**28/04/2015**	**29/04/2015**	**30/04/2015**	**01/05/2015**	**02/05/2015**
pH (field)	pH units	8.21	8.21	8.58	8.26	8.13	8.11	8.12	8.18	7.66	7.64	7.85	8.01	8.09	7.39	7.86	8.06	7.99	8.11	8	7.87	6.73
pH (lab)	pH units	8.33							8.12	8.1	8.16						8.11					
Hardness (from dissolved)	mg/L	599							384	350	250						178					
Hardness (from total)	mg/L	555							431	375	206	288					198					
Total Dissolved Solids	mg/L	860							580	478	326						262					
Total Suspended Solids	mg/L	26.7							18.8	36.2	4.9						13.9					
Alkalinity, total	mg/L	201							153	199	147						123					
Sulphate, dissolved	mg/L	253							174	108	66.7						48.8					
Chloride	mg/L	12							12	4.4	2.8						3.1					
Fluoride	mg/L	0.34							0.27	0.24	0.15						0.15					
Nitrite (N)	mg/L	0.199							0.262	0.41	0.354						0.297					
Nitrate (N)	mg/L	45							26.9	15.3	8.31						5.8					
Ammonia	mg/L	0.12							0.081	0.095	0.077						0.075					
Aluminum, total	mg/L	1.44							0.533	1.23	0.162	0.32					0.547					
Arsenic, total	mg/L	0.0008							0.00064	0.00054	0.00039	0.00047					0.00039					
Cadmium, total	mg/L	0.000038							0.000034	0.000033	0.000023	0.000024					0.00002					
Calcium, total	mg/L	127							98.6	95.4	54.4	76.9					54.2					
Chromium, total	mg/L	<0.0010							0.0024	<0.0010	<0.0010	<0.0010					<0.0010					
Copper, total	mg/L	0.129							0.0984	0.12	0.0268	0.0576					0.0531					
Iron, total	mg/L	1.87							0.837	2.44	0.601	1.08					1.08					
Lead, total	mg/L	0.00089							0.00047	0.00056	<0.00020	<0.00020					0.00025					
Magnesium, total	mg/L	57.9							44.9	33.3	16.9	23.3					15.3					
Manganese, total	mg/L	0.0923							0.0877	0.414	0.209	0.41					0.225					
Mercury, total	mg/L	<0.000010							<0.000010	<0.000010	<0.000010	<0.000010					<0.000010					
Molybdenum, total	mg/L	0.0207							0.0155	0.0062	0.0025	0.0034					0.0021					
Nickel, total	mg/L	0.0013							0.0019	<0.0010	<0.0010	<0.0010					<0.0010					
Phosphorus, total	mg/L	0.073							0.042	0.062	0.045	0.053					0.052					
Potassium, total	mg/L	9.21							7.46	5.83	3.2	4.69					3.38					
Selenium, total	mg/L	0.0102							0.00784	0.00434	0.00191	0.00231					0.00156					
Silver, total	mg/L	0.000039							<0.000020	<0.000020	<0.000020	<0.000020					<0.000020					
Sodium, total	mg/L	33.2							26.2	15.8	8.52	10.8					7.28					
Thallium, total	mg/L	<0.000050							<0.000050	<0.000050	<0.000050	<0.000050					<0.000050					
Zinc, total	mg/L	0.0115							0.0064	0.0106	0.0367	<0.0050					0.0056					
Aluminum, dissolved	mg/L	0.0107							0.0032	0.0069	0.0131						0.0148					
Arsenic, dissolved	mg/L	0.00046							0.0004	0.00029	0.00035						0.00028					
Cadmium, dissolved	mg/L	0.000023							0.000015	0.000015	0.000014						0.000012					
Calcium, dissolved	mg/L	136							92.6	93.6	66.1						48.5					
Chromium, dissolved	mg/L	<0.0010							<0.0010	<0.0010	<0.0010						<0.0010					
Copper, dissolved	mg/L	0.0348							0.0368	0.0253	0.0228						0.0204					
Iron, dissolved	mg/L	0.007							<0.0050	0.135	0.409						0.141					
Lead, dissolved	mg/L	<0.00020							<0.00020	<0.00020	<0.00020						<0.00020					
Magnesium, dissolved	mg/L	63.1							37.1	28.3	20.6						13.8					
Manganese, dissolved	mg/L	0.0467							0.063	0.313	0.244						0.183					
Mercury, dissolved	mg/L	<0.000010							<0.000010	<0.000010	<0.000010						<0.000010					
Molydenum, dissolved	mg/L	0.0223							0.0142	0.006	0.0029						0.0019					
Nickel, dissolved	mg/L	<0.0010							<0.0010	<0.0010	<0.0010						<0.0010					
Phosphorus, dissolved	mg/L	0.034							0.016	0.013	0.018						0.019					
Potassium, dissolved	mg/L	9.43							6.61	5.31	3.91						3.05					
Selenium, dissolved	mg/L	0.0113							0.00666	0.0041	0.00234						0.00136					
Silver, dissolved	mg/L	<0.000020							<0.000020	<0.000020	<0.000020						<0.000020					
Sodium, dissolved	mg/L	34.5							23.1	14	9.54						6.66					
Thallium, dissolved	mg/L	<0.000050							<0.000050	<0.000050	<0.000050						<0.000050					
Zinc, dissolved	mg/L	<0.0050							<0.0050	<0.0050	<0.0050						<0.0050					

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**03/05/2015**	**04/05/2015**	**05/05/2015**	**06/05/2015**	**07/05/2015**	**09/05/2015**	**10/05/2015**	**11/05/2015**	**12/05/2015**	**13/05/2015**	**14/05/2015**	**15/05/2015**	**16/05/2015**	**17/05/2015**	**18/05/2015**	**19/05/2015**	**20/05/2015**	**21/05/2015**	**22/05/2015**	**23/05/2015**	**24/05/2015**
pH (field)	pH units	7.33	7.46	7.81	7.44	7.1	7.15	7.61	7.52	7.33	7.62	7.56	7.79	7.51	7.63	7.56	7.66	7.76	7.76	7.89	7.8	7.77
pH (lab)	pH units				7.95							8.08						8.04				
Hardness (from dissolved)	mg/L				162							158						180				
Hardness (from total)	mg/L				169							149						180				
Total Dissolved Solids	mg/L				252							232						276				
Total Suspended Solids	mg/L				88							4.1						8.3				
Alkalinity, total	mg/L				104							117						134				
Sulphate, dissolved	mg/L				32.5							36.8						38.8				
Chloride	mg/L				2.5							2.5						2.2				
Fluoride	mg/L				0.14							0.16						0.15				
Nitrite (N)	mg/L				0.113							0.165						0.106				
Nitrate (N)	mg/L				3.63							3.22						3.28				
Ammonia	mg/L				0.27							0.15						0.092				
Aluminum, total	mg/L				1.73							0.224						0.288				
Arsenic, total	mg/L				0.0008							0.00054						0.00056				
Cadmium, total	mg/L				0.000031							0.000057						0.000016				
Calcium, total	mg/L				46.9							40.8						49				
Chromium, total	mg/L				<0.0010							<0.0010						<0.0010				
Copper, total	mg/L				0.121							0.0367						0.0358				
Iron, total	mg/L				3.11							0.55						0.684				
Lead, total	mg/L				0.00067							<0.00020						<0.00020				
Magnesium, total	mg/L				12.6							11.3						14				
Manganese, total	mg/L				0.218							0.331						0.333				
Mercury, total	mg/L				<0.000010							<0.000010						<0.000010				
Molybdenum, total	mg/L				0.0019							0.002						0.0027				
Nickel, total	mg/L				0.0014							0.0011						0.0011				
Phosphorus, total	mg/L				0.133							0.062						0.051				
Potassium, total	mg/L				2.96							2.74						2.9				
Selenium, total	mg/L				0.00105							0.00094						0.00095				
Silver, total	mg/L				0.000036							<0.000020						0.000022				
Sodium, total	mg/L				5.4							6.09						7.36				
Thallium, total	mg/L				<0.000050							<0.000050						<0.000050				
Zinc, total	mg/L				0.0125							<0.0050						<0.0050				
Aluminum, dissolved	mg/L				0.0833							0.0776						0.0172				
Arsenic, dissolved	mg/L				0.00045							0.00042						0.00046				
Cadmium, dissolved	mg/L				0.000013							0.00001						0.000011				
Calcium, dissolved	mg/L				46.1							43.5						49.6				
Chromium, dissolved	mg/L				<0.0010							0.0053						<0.0010				
Copper, dissolved	mg/L				0.0304							0.0258						0.0198				
Iron, dissolved	mg/L				0.45							0.303						0.192				
Lead, dissolved	mg/L				<0.00020							<0.00020						<0.00020				
Magnesium, dissolved	mg/L				11.4							11.9						13.7				
Manganese, dissolved	mg/L				0.139							0.317						0.301				
Mercury, dissolved	mg/L				<0.000010							<0.000010						<0.000010				
Molydenum, dissolved	mg/L				0.0016							0.0022						0.0025				
Nickel, dissolved	mg/L				0.001							0.0027						<0.0010				
Phosphorus, dissolved	mg/L				0.028							0.038						0.017				
Potassium, dissolved	mg/L				2.48							2.85						2.89				
Selenium, dissolved	mg/L				0.00103							0.00086						0.0009				
Silver, dissolved	mg/L				<0.000020							<0.000020						<0.000020				
Sodium, dissolved	mg/L				5.49							6.17						6.98				
Thallium, dissolved	mg/L				<0.000050							<0.000050						<0.000050				
Zinc, dissolved	mg/L				<0.0050							<0.0050						<0.0050				

Station Name		W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15	W15
Sample Date		**25/05/2015**	**26/05/2015**	**27/05/2015**	**28/05/2015**	**29/05/2015**	**30/05/2015**	**31/05/2015**	**04/06/2015**	**08/06/2015**	**16/06/2015**	**25/06/2015**	**29/06/2015**	**06/07/2015**	**06/07/2015**	**16/07/2015**	**20/07/2015**	**30/07/2015**	**04/08/2015**	**02/09/2015**	**05/10/2015**	**09/12/2015**
pH (field)	pH units	7.64	7.9	7.92	7.77	7.94	8.01	8.07	7.86	8.25	8.28	8.15	7.98	7.9		8.14	8.02	8.14	8.1	7.91	7.48	9.76
pH (lab)	pH units				8.24				8.06	8.32	8.24	8.26	8.32		8.3	8.22	8.23	8.31	8.17	8.12	8.13	8.03
Hardness (from dissolved)	mg/L				264				244	240	268	329	340		285	275	315	332	276	219	375	619
Hardness (from total)	mg/L				305				278	258	258	315	300		280	307	296	372	272	235	391	575
Total Dissolved Solids	mg/L				404				292	314	360	392	446		380	365	402	526	916	360	512	774
Total Suspended Solids	mg/L				10.4				5.8	17.7	3.6	1.9	2.2		2.5	1.8	2.3	2.5	19.9	1.1	7.5	76.7
Alkalinity, total	mg/L				203				175	167	184	219	224		202	221	231	250	161	136	208	306
Sulphate, dissolved	mg/L				74.8				68.6	71.6	75.3	94.5	88.3		77.1	76.6	80	92.2	344	75	126	180
Chloride	mg/L				3.3				2.3	2.5	2.8	3.1	3.6		3.4	3.3	3.1	3.4	31	2.2	4	12
Fluoride	mg/L				0.18				0.16	0.17	0.17	0.18	0.16		0.17	0.17	0.18	0.19	1.6	0.16	0.15	0.23
Nitrite (N)	mg/L				0.036				0.0169	0.0173	0.0175	0.0298	0.0217		0.0156	0.0214	0.0247	0.0279	3.78	0.0078	0.0118	0.0271
Nitrate (N)	mg/L				6.13				2.73	4.25	4.6	3.53	4.32		3.57	3	2.86	2.55	21	7.06	15.7	35
Ammonia	mg/L				0.19				0.034	0.015	0.026	0.05	0.07		0.089	0.068	0.083	0.11	5.3	0.038	0.038	0.042
Aluminum, total	mg/L				0.144				0.125	0.0929	0.0566	0.0398	0.0396		0.0428	0.0498	0.0704	0.0408	2.07	0.143	0.128	1.14
Arsenic, total	mg/L				0.00056				0.00056	0.00054	0.00052	0.00055	0.00049		0.00049	0.00055	0.00057	0.00067	0.0008	0.00046	0.0004	0.0005
Cadmium, total	mg/L				0.000011				<0.000010	<0.000010	0.000011	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	0.000133	0.000013	0.000012	0.000056
Calcium, total	mg/L				83.1				77.7	69.9	69.7	84.4	77.8		77.1	83.5	79.2	99	68.4	63.8	106	165
Chromium, total	mg/L				<0.0010				<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0017	<0.0010	<0.0010	<0.0010
Copper, total	mg/L				0.0229				0.0207	0.0227	0.0218	0.0204	0.0197		0.0165	0.0216	0.0241	0.0283	1.18	0.0133	0.0205	0.126
Iron, total	mg/L				0.794				0.71	0.467	0.263	0.3	0.383		0.44	0.545	0.56	0.509	9.44	0.476	0.326	2.36
Lead, total	mg/L				<0.00020				<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	0.01220	<0.00020	<0.00020	0.00053
Magnesium, total	mg/L				23.7				20.3	20.3	20.4	25.4	25.7		21.3	23.8	23.8	30.2	24.6	18.5	30.6	39.5
Manganese, total	mg/L				0.255				0.119	0.0578	0.027	0.0301	0.0884		0.105	0.11	0.0952	0.0945	0.327	0.0667	0.0492	0.195
Mercury, total	mg/L				<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	0.000033	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L				0.0032				0.0029	0.0028	0.0027	0.0027	0.0028		0.0026	0.0029	0.0028	0.0034	0.127	0.0021	0.0023	0.0038
Nickel, total	mg/L				0.0014				0.0012	0.0013	0.0011	0.0014	0.0013		0.001	0.0012	<0.0010	0.0014	0.0035	<0.0010	<0.0010	0.001
Phosphorus, total	mg/L				0.033				0.034	0.026	0.029	<0.01	0.021		0.023	0.017	0.03	0.022	0.117	0.027	0.022	0.104
Potassium, total	mg/L				3.87				2.72	2.76	2.48	3.36	2.77		2.7	2.48	2.97	2.67	50.2	1.92	3	6.04
Selenium, total	mg/L				0.00146				0.00088	0.00074	0.00078	0.00074	0.00069		0.00063	0.00044	0.00053	0.00037	0.0209	0.00259	0.00468	0.008
Silver, total	mg/L				<0.000020				<0.000020	<0.000020	0.000021	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	0.000305	<0.000020	<0.000020	0.000036
Sodium, total	mg/L				12.8				11.7	12.1	12.3	13.4	14.5		12	12.9	13.2	16.6	145	10.2	14.6	17.7
Thallium, total	mg/L				<0.000050				<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L				0.0101				<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	0.0241	<0.0050	<0.0050	0.0172
Aluminum, dissolved	mg/L				0.0596				0.0354	0.0146	0.0134	0.0202	0.0239		0.018	0.0209	0.0157	0.0153	0.0335	0.0398	0.0178	0.0076
Arsenic, dissolved	mg/L				0.00047				0.00045	0.00045	0.0005	0.00054	0.00051		0.00046	0.00045	0.00056	0.0006	0.00036	0.00039	0.00038	0.00033
Cadmium, dissolved	mg/L				<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	0.000035	<0.000010	0.000022	0.000038
Calcium, dissolved	mg/L				71.6				67.4	65	70.8	88.7	90.3		74.6	72.4	83.1	90.1	68.2	60.8	104	180
Chromium, dissolved	mg/L				<0.0010				<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L				0.0141				0.0137	0.0158	0.0168	0.0196	0.0172		0.0168	0.0187	0.0192	0.0214	0.0038	0.0126	0.00891	0.0362
Iron, dissolved	mg/L				0.203				0.236	0.11	0.074	0.19	0.238		0.236	0.319	0.313	0.242	0.0173	0.449	0.0931	0.0226
Lead, dissolved	mg/L				<0.00020				0.00024	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	<0.00020
Magnesium, dissolved	mg/L				20.6				18.4	18.9	22.2	26	27.9		24.1	22.8	26.2	26	25.7	16.4	27.9	41.1
Manganese, dissolved	mg/L				0.213				0.0963	0.0152	0.008	0.0264	0.0876		0.105	0.105	0.0923	0.079	0.222	0.0662	0.0483	0.122
Mercury, dissolved	mg/L				<0.000010				<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L				0.0032				0.0029	0.0026	0.003	0.0028	0.003		0.0028	0.0026	0.003	0.0027	0.113	0.0016	0.0022	0.0039
Nickel, dissolved	mg/L				0.0012				0.0011	0.0011	0.001	0.0011	0.0011		0.0011	0.001	0.0011	0.0011	0.0012	0.0011	<0.0010	<0.0010
Phosphorus, dissolved	mg/L				0.015				0.019	0.015	0.013	0.014	0.02		0.01	0.012	<0.01	0.016	<0.01	0.022	<0.01	<0.01
Potassium, dissolved	mg/L				3.25				2.85	2.51	2.84	3.37	3.22		2.54	2.27	2.6	2.43	51.8	1.79	3.19	5.31
Selenium, dissolved	mg/L				0.00124				0.00086	0.00079	0.00079	0.00078	0.00065		0.00055	0.00043	0.00037	0.00045	0.0206	0.00252	0.00424	0.00856
Silver, dissolved	mg/L				<0.000020				<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L				11.3				10.6	11.5	12.4	13.7	14.6		13	12.4	14.2	13.8	153	9.35	13.8	18
Thallium, dissolved	mg/L				<0.000050				<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L				0.0149				0.0079	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0072

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**22/11/2006**	**19/12/2006**	**04/01/2007**	**10/01/2007**	**16/01/2007**	**30/01/2007**	**07/02/2007**	**15/02/2007**	**22/02/2007**	**02/03/2007**	**23/03/2007**	**17/04/2007**	**11/05/2007**	**19/05/2007**	**30/05/2007**	**13/06/2007**	**20/06/2007**	**27/06/2007**	**04/07/2007**	**05/07/2007**	**11/07/2007**
pH (field)	pH units																					
pH (lab)	pH units	7.83	7.5	7.4	8.52	7.41	8.12	7.34	7.33	8.25	7.97	7.82	8.27	7.61	7.46	7.72	8.59	8.76			7.81	7.77
Hardness (from dissolved)	mg/L													115	122		132					146
Hardness (from total)	mg/L	392	419	415	415	412	399		375	947	394	404	223			125		137		135	139	
Total Dissolved Solids	mg/L	502	536	484	500	492	484	484	470	1440	473	432	318	250	220	244	226	266			258	244
Total Suspended Solids	mg/L	2	<2	<2	<2	41	<2	<2	<2	<2	181	126	31	28	15	8	5	<2			<2	2
Alkalinity, total	mg/L	335	383	385	366	387	371	361	364	582	369	340	185	73	74	79	93	98			115	121
Sulphate, dissolved	mg/L	83	64	56	54	52	48	47	51	286		52	67	21.4	21.6	25.1	25.9	26.9			30	26
Chloride	mg/L						0.81	0.84		0.9	1.4	1.7	2.4	0.9	0.9	1.1	1.1	1.1			1.2	1
Fluoride	mg/L																					
Nitrite (N)	mg/L	<0.03	<0.1	<0.03	<0.03	<0.03	0.31	<0.03	<0.05	3.75	0.022	<0.05	0.18	0.62	0.62	0.64	0.3	0.23			0.24	0.21
Nitrate (N)	mg/L	0.14	0.1	0.09	0.08	<0.05	<0.05	<0.05	<0.1	35	0.17	0.2	1.1	5.7	5.6	5.4	4.8	4.3			3	3.2
Ammonia	mg/L	0.004	0.066	0.15	0.09	0.033	0.058	0.11	0.101	2		0.082		0.48	0.51	0.37	0.07	0.1				0.13
Aluminum, total	mg/L	0.1	0.031	0.056	0.026	0.92	0.012	0.053	0.072	0.094	4.72	6.06	1.55	1.96	1.21	0.552	0.09	0.127	0.038	0.071	0.062	0.365
Arsenic, total	mg/L	0.0005	0.0011	0.0008	0.0008	0.0011	0.0009	0.0008	0.0008	0.0022	0.002	0.002	0.0008	0.001	0.001	0.0007	0.0003	0.0006	0.0007	0.0005	0.0005	0.0008
Cadmium, total	mg/L	<0.00002	0.00009	<0.00001	0.00009	0.00004	<0.00001	0.00002	<0.00001	<0.00002	0.00004	0.00003	0.00003	0.00004	0.00006	0.00005	0.00003	0.00003	0.00001	0.00003	0.00003	0.00002
Calcium, total	mg/L	97.8	112	114	114	113	111	115	107	221		110	46	32.3	33.1	32.6	32.7	35.8	34.6	33.8	34.8	38.3
Chromium, total	mg/L	<0.001	0.0013	<0.0005	<0.0005	0.0012	0.0006	<0.0005	<0.0005	<0.001	0.0047	0.0066	0.0012	0.0026	0.001	0.0011	0.0006	0.0006	<0.0005	<0.0005	<0.0005	0.0007
Copper, total	mg/L	0.007	0.006	0.009	0.006	0.006	0.003	0.004	0.007	0.1	0.017	0.01	0.042	0.082	0.07	0.054	0.047	0.052	0.041	0.035	0.038	0.059
Iron, total	mg/L	0.2	<0.1	<0.1	<0.1	1.2	<0.1	0.1	0.2	0.6		8.2	1.9	2.6	2	0.8	0.2	0.2	0.1	0.2	0.1	0.6
Lead, total	mg/L	0.0006	0.0002	0.0003	0.0006	0.0005	0.0003	0.0002	0.0002	0.0002	0.0016	0.002	0.0005	0.0009	0.0006	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	0.0002
Magnesium, total	mg/L	35.8	34	31.8	31.9	31.4	29.5	29	25.9	95.8		31.4	26.4	11	11	10.6	11.3	11.6	12.2	12.4	12.6	13.5
Manganese, total	mg/L	0.271	0.62	1.04	1.08	1.35	1.78	1.96	1.97	0.333		2.41	0.162	0.19	0.17	0.125	0.085	0.077	0.046	0.028	0.03	0.055
Mercury, total	mg/L	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum, total	mg/L	0.004	0.005	0.004	0.005	0.004	0.004	0.004	0.004	0.02	0.004	0.003	0.006	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.003
Nickel, total	mg/L	0.0039	0.003	0.0023	0.0018	0.0018	0.0018	0.0076	0.0018	0.0046	0.0063	0.0083	0.0019	0.0027	0.0033	0.0019	0.001	0.0021	0.0019	0.002	0.002	0.0018
Phosphorus, total	mg/L			0.16	<0.05		0.04	0.04		0.28				0.1	0.11	0.06	<0.05	0.06			<0.05	<0.05
Potassium, total	mg/L	3.8	4.4	4.8	4.4	4.4	4.2	4.2	4.2	21		5.2	3.7	2.3	2.2	2.3	2.4	2.4	2.4	2.4	2.5	2.8
Selenium, total	mg/L	<0.0004	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	<0.0002	0.0004	0.0004	<0.0004	<0.0004	<0.0002	0.0003	0.0002	<0.0002	0.0002	0.0002	0.0007
Silver, total	mg/L	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.001	<0.0001	<0.0002	<0.0001	<0.0002	0.0002	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001
Sodium, total	mg/L	21.1	17.8	15.8	15.9	14.2	13.1	12.8	12.5	64.6		13	17.3	5.7	5.6	6.6	7.1	7.1	7.6	7.8	8.2	9
Thallium, total	mg/L	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.01	0.004	0.025	0.009	0.008	0.005	0.004	0.003	0.01	0.033	0.029	0.009	0.02	0.02	0.015	0.006	0.007	0.007	0.005	0.011	0.012
Aluminum, dissolved	mg/L						<0.005							0.072	0.068		0.037					0.022
Arsenic, dissolved	mg/L						0.0012							0.0007	0.0006		0.0005					0.0007
Cadmium, dissolved	mg/L						0.00002							0.00002	0.00004		0.00003					0.00002
Calcium, dissolved	mg/L						116							29.2	31.3		33.8					37.1
Chromium, dissolved	mg/L						0.0032							0.0013	0.001		0.0006					<0.0005
Copper, dissolved	mg/L						0.002							0.045	0.05		0.043					0.034
Iron, dissolved	mg/L						0.02							0.27	0.22		0.14					0.09
Lead, dissolved	mg/L						<0.0001							<0.0001	0.0001		<0.0001					<0.0001
Magnesium, dissolved	mg/L						28.7							10.1	10.7		11.6					13
Manganese, dissolved	mg/L						1.79							0.114	0.131		0.079					0.036
Mercury, dissolved	mg/L						<0.0001							<0.0001	<0.0001		<0.0001					<0.0001
Molydenum, dissolved	mg/L						0.004							0.003	0.003		0.003					0.004
Nickel, dissolved	mg/L						<0.0005							0.0015	0.0012		0.0009					0.0011
Phosphorus, dissolved	mg/L										<0.05											
Potassium, dissolved	mg/L						4.6							2.1	2		2.4					2.5
Selenium, dissolved	mg/L						<0.0002							<0.0002	<0.0002		<0.0002					0.0004
Silver, dissolved	mg/L						<0.0001							<0.0001	<0.0001		<0.0001					<0.0001
Sodium, dissolved	mg/L						14.6							5.9	5.7		7.4					8.7
Thallium, dissolved	mg/L						<0.00005							<0.00005	<0.00005		<0.00005					<0.00005
Zinc, dissolved	mg/L						0.001							0.008	0.012		0.004					0.008

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**18/07/2007**	**25/07/2007**	**01/08/2007**	**09/08/2007**	**14/08/2007**	**29/08/2007**	**06/09/2007**	**11/09/2007**	**18/09/2007**	**25/09/2007**	**03/10/2007**	**11/10/2007**	**17/10/2007**	**22/10/2007**	**30/10/2007**	**08/11/2007**	**13/11/2007**	**20/11/2007**	**27/11/2007**	**11/12/2007**	**18/12/2007**
pH (field)	pH units																					
pH (lab)	pH units	7.66	7.73		7.76	7.99	7.97	8	7.87	7.9	7.86	7.94	8	7.91	7.96	7.89	7.56	8.16	7.83	7.9	7.74	
Hardness (from dissolved)	mg/L																		219			
Hardness (from total)	mg/L	155	156	164	171	178	188	195	189	180	182	191	189	194	195	202	204	208		214	218	
Total Dissolved Solids	mg/L	270	276		282	328	334	322	316	304	320	320	306	298	322	322	352	364	374	368	380	
Total Suspended Solids	mg/L	<2	2		<2	<2	<2	<2	<2	19	<2	14	<2	<2	8	<2	4	4	3	2	2	
Alkalinity, total	mg/L	128	137		152	161	178	188	174	179	163	162	162	160	162	168	177	182	184	182	189	
Sulphate, dissolved	mg/L	27	30		34	35	39	41	39.9	39.7	40.2	41.5	40		40.4	38.8	40.7	43		40.7	44.5	
Chloride	mg/L	1.2	1.3		1.6	1.8	2.2	2.2	2.32	2.38	2.42	2.56	2.51	2.61	2.5	2.72	3.37	3.42	2.96	3.74	3.88	
Fluoride	mg/L																					
Nitrite (N)	mg/L	0.21	0.19		0.32	0.32	0.47	0.46	0.53	0.47	0.48	0.41	0.36	0.34	0.3	8.62	0.35	0.27	0.17	0.25	0.27	
Nitrate (N)	mg/L	3.2	2.9		3.7	4.2	7.4	7.4	8.51	7.47	8.33	8.96	6.8	6.8	8.73	0.26	9.11	9.11	8	7.7	9.85	
Ammonia	mg/L	0.15	0.17		0.31	0.41	0.68	0.69	0.74	0.6	0.77	0.55		0.65	0.63	0.57	0.61	0.64	0.52	0.54	0.63	0.44
Aluminum, total	mg/L	0.035	0.031	0.135	0.066	0.065	0.101	0.103	0.137	0.151	0.123	0.125	0.126	0.142	0.093	0.073	0.114	0.404	0.128	0.067	0.053	
Arsenic, total	mg/L	0.0008	0.0005	0.0008	0.0007	0.0007	0.0007	0.0007	0.0008	0.0007	0.0006	0.0007	0.0007	0.0006	0.0007	0.0006	0.0005	0.0008	0.0007	0.0006	0.0007	
Cadmium, total	mg/L	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00003	0.00002	0.00003	0.00005	0.00002	0.00002	0.00002	0.00004	0.00004	0.00005	0.00004	0.00003	0.00004	
Calcium, total	mg/L	38.8	39.1	41.8	43.1	46.1	48.8	51.7	50.4	47	47.4	50.4	49.9	51.2	51.6	53.4	54	55.8	55.8	56.8	57.5	
Chromium, total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0007	0.0006	<0.0005	0.0016	0.0007	0.0006	<0.0005	0.0005	0.0008	0.0009	0.0009	0.0013	0.0006	
Copper, total	mg/L	0.031	0.029	0.028	0.031	0.031	0.033	0.032	0.031	0.03	0.034	0.036	0.032	0.029	0.03	0.026	0.035	0.044	0.032	0.028	0.031	
Iron, total	mg/L	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.6	0.2	0.5	0.1	
Lead, total	mg/L	<0.0001	<0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0002	<0.0001	<0.0001	<0.0001	0.0004	0.0004	0.0006	0.0001	<0.0001	
Magnesium, total	mg/L	14.2	14.2	14.5	15.3	15.4	16.2	16	15.4	15.2	15.4	15.9	15.6	16	16	16.6	16.7	16.8	17.3	17.6	18.1	
Manganese, total	mg/L	0.049	0.043	0.085	0.091	0.091	0.123	0.137	0.15	0.144	0.148	0.14	0.127	0.115	0.107	0.098	0.106	0.115	0.108	0.11	0.109	
Mercury, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Molybdenum, total	mg/L	0.004	0.004	0.005	0.007	0.008	0.011	0.012	0.012	0.012	0.012	0.012	0.011	0.012	0.011	0.011	0.012	0.012	0.012	0.012	0.014	
Nickel, total	mg/L	0.0011	0.0007	0.0018	0.0017	0.0014	0.0015	0.0018	0.0024	0.0009	0.0016	0.002	0.0015	0.0015	<0.0005	0.0008	0.0018	0.0008	<0.0005	0.0014	0.0018	
Phosphorus, total	mg/L		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.18	<0.05		0.07		0.02	<0.05		<0.05	0.09	
Potassium, total	mg/L	3	3.3	3.4	4.3	4.5	6.7	6.6	7.6	7.6	7	6.8	6.5	6.6	6.4	6.6	8.8	7.8	8	8	9.9	
Selenium, total	mg/L	0.0006	0.0006	0.0011	0.0009	0.001	0.0012	0.0014	0.0015	0.0018	0.0017	0.0013	0.0018	0.0021	0.0014	0.0014	0.0017	0.0013	0.0017	0.0012	0.0021	
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Sodium, total	mg/L	10	10.2	11.4	13.1	13.7	17.2	16.4	17.5	17.4	16.4	16.7	16.7	16.4	16.6	16.9	19.3	18.4	18.3	18.7	20.8	
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
Zinc, total	mg/L	0.005	0.005	0.006	0.006	0.01	0.013	0.011	0.009	0.014	0.014	0.01	0.013	0.012	0.012	0.014	0.019	0.021	0.016	0.014	0.019	
Aluminum, dissolved	mg/L																		0.017			
Arsenic, dissolved	mg/L																		0.0004			
Cadmium, dissolved	mg/L																		0.00004			
Calcium, dissolved	mg/L																		58.3			
Chromium, dissolved	mg/L																		0.0009			
Copper, dissolved	mg/L																		0.025			
Iron, dissolved	mg/L																		0.06			
Lead, dissolved	mg/L																		<0.0001			
Magnesium, dissolved	mg/L																		17.9			
Manganese, dissolved	mg/L																		0.104			
Mercury, dissolved	mg/L																		<0.0001			
Molydenum, dissolved	mg/L																		0.011			
Nickel, dissolved	mg/L																		<0.0005			
Phosphorus, dissolved	mg/L											0.08										
Potassium, dissolved	mg/L																		8			
Selenium, dissolved	mg/L																		0.0018			
Silver, dissolved	mg/L																		<0.0001			
Sodium, dissolved	mg/L																		18.5			
Thallium, dissolved	mg/L																		<0.00005			
Zinc, dissolved	mg/L																		0.01			

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**18/12/2007**	**26/12/2007**	**09/01/2008**	**16/01/2008**	**22/01/2008**	**13/02/2008**	**14/03/2008**	**20/03/2008**	**26/03/2008**	**26/03/2008**	**17/04/2008**	**22/04/2008**	**03/05/2008**	**04/05/2008**	**05/05/2008**	**07/05/2008**	**08/05/2008**	**09/05/2008**	**11/05/2008**	**11/05/2008**	**13/05/2008**
pH (field)	pH units																					
pH (lab)	pH units	7.94	7.64	7.66	7.58	7.65	7.67	7.77		7.63					7.19	7.18		7.07	7.02	7.08	7.08	7.28
Hardness (from dissolved)	mg/L	234												30				63	74	74		50
Hardness (from total)	mg/L		221	241	236	247	248		230	230	237	217					59	51				
Total Dissolved Solids	mg/L	412	378	390	394	412	398	400		380					102	176		126	224	230	230	188
Total Suspended Solids	mg/L	<2	<5	<2	<5	<2	3	<2		<5					8	18		12	12	16	16	12
Alkalinity, total	mg/L	192	203	203	208	208	215	218		208					27	46		44	60	60	60	59
Sulphate, dissolved	mg/L	49.7	43.7	48	47.1	51.8	53.1	56		65.4					7	13.8		13.8	20.6	21.8	21.8	22.4
Chloride	mg/L	3.77	3.63	4.41	4.31	4.83	4.98	5.3		5.77					0.71	1.28		1.27	1.98	1.87	1.87	1.78
Fluoride	mg/L																					
Nitrite (N)	mg/L	0.35	0.34	0.4	0.52	0.52	0.61	0.39	0.15	0.46					0.05	0.08		0.07	0.09	0.08	0.08	0.08
Nitrate (N)	mg/L	8.6	9.75	9.14	9.27	8.69	8.53	7.28	7.02	8.17					0.51	0.71		0.71	0.94	0.95	0.95	0.96
Ammonia	mg/L		0.64	0.61	0.6	0.67	0.73	0.75	0.83	0.93	1.09	0.243	0.79		0.12	0.12		0.11				<0.05
Aluminum, total	mg/L	0.047	0.043	0.046	0.034	0.029	0.072	0.09	0.23	0.03	0.05	0.625	0.2		0.39	0.48	0.55	0.43	0.95	0.84	0.84	0.59
Arsenic, total	mg/L	0.001	0.0007	0.0007	0.0004	0.0008	0.0006	0.0006	0.0009	0.0007	0.0006	0.0007	0.005		0.0002	0.0004	<0.0002	<0.0002	0.0011	0.001	0.001	0.0022
Cadmium, total	mg/L	0.00009	0.00003	0.00007	0.00002	0.00004	0.00003	0.00003	<0.00007	<0.00007	<0.00007	0.00009	<0.0004		<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007
Calcium, total	mg/L	57.4	59.2	64.2	63.3	66.4	66.8	63.8	62.3	62	63.3	57.6	28.9		6.65	14.3	16.5	14.2	20.2	20.5	20.5	20.2
Chromium, total	mg/L	0.0008	0.0006	0.0013	<0.0005	<0.0005	0.0012	0.0014	0.006	0.0025	0.0014	0.001	<0.002		<0.0005	0.0007	0.0005	<0.0005	0.001	0.0009	0.0009	0.0008
Copper, total	mg/L	0.032	0.04	0.053	0.029	0.028	0.077	0.053	0.021	0.019	0.022	0.047	0.052		0.043	0.082	0.088	0.068	0.138	0.127	0.127	0.121
Iron, total	mg/L	0.1	0.1	0.2	<0.1	<0.1	0.2	0.2	0.36	0.12	0.15	0.7	0.38		0.64	1.08	1.16	0.92	2.38	2.53	2.53	2.58
Lead, total	mg/L	0.0002	0.0001	0.0024	<0.0001	0.0002	0.0004	0.0003	0.0002	0.0001	<0.0001	0.0005	<0.0005		0.0004	0.0002	0.0003	0.0002	0.0004	0.0003	0.0003	0.0003
Magnesium, total	mg/L	18.8	17.8	19.5	18.9	19.7	19.8	18.9	18.1	18.1	19.2	17.8	8.36		1.75	3.87	4.44	3.73	5.86	5.81	5.81	5.77
Manganese, total	mg/L	0.12	0.114	0.152	0.153	0.213	0.256	0.284	0.299	0.314	0.33	0.489	0.117		0.0526	0.113	0.134	0.111	0.21	0.212	0.212	0.212
Mercury, total	mg/L	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001		<0.00001	0.0001	<0.0001	<0.0001	0.00002		<0.00001	0.00001	0.00001	<0.00001	0.00001	0.00001	0.00001	0.00001
Molybdenum, total	mg/L	0.014	0.013	0.016	0.015	0.017	0.019	0.019	0.0216	0.0228	0.0268	0.031	0.0121		0.00171	0.00378	0.00424	0.00373	0.00557	0.00537	0.00537	0.00507
Nickel, total	mg/L	0.002	0.0017	0.0026	0.0019	0.0021	0.0025	0.0025	0.005	0.003	0.003	0.0029	<0.005		0.006	0.01	0.01	0.008	0.019	0.02	0.02	0.019
Phosphorus, total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05		0.06	0.1	0.07	0.07	0.11	0.09	0.09	0.08
Potassium, total	mg/L	8.6	8.1	9	9	9.8	10.9	11.5	13.6	13.6	15	26	7.73		1.6	3.74	4.52	3.89	6.09	5.91	5.91	5.6
Selenium, total	mg/L	0.0018	0.0014	0.0026	0.0022	0.0029	0.0029	0.0032	0.0056	0.0063	0.0058	0.0039	0.004		<0.0006	<0.0006	<0.0006	<0.0006	0.002	0.0014	0.0014	<0.0006
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00003	0.00002	<0.001	<0.0001	<0.0001	0.00004	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	21	19.5	21.2	21.3	22.7	24	25.7	27.2	28.5	31	37.8	12.6		2.2	6	7.2	6.2	10.2	10.4	10.4	10
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00001	<0.00001
Zinc, total	mg/L	0.022	0.016	0.033	0.016	0.02	0.035	0.02	0.015	0.024	0.023	0.027	0.02		0.01	0.016	0.017	0.014	0.026	0.022	0.022	0.027
Aluminum, dissolved	mg/L	0.017												0.06	0.05			0.09	0.08	0.09	0.09	0.05
Arsenic, dissolved	mg/L	0.0009												<0.0002	<0.0002			<0.0002	0.0007	0.0008	0.0008	0.0013
Cadmium, dissolved	mg/L	0.00002												<0.00008	<0.00008			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
Calcium, dissolved	mg/L	61.6												8.11	8.86			18.2	20.6	20.4		13.8
Chromium, dissolved	mg/L	0.0007												<0.0006	<0.0006			0.001	0.0013	0.0012	0.0012	<0.0006
Copper, dissolved	mg/L	0.029												0.032	0.028			0.055	0.076	0.077	0.077	0.049
Iron, dissolved	mg/L	0.06												0.09	0.08			0.46	0.79	1.05	1.05	0.69
Lead, dissolved	mg/L	0.0001												<0.0001	<0.0001			0.0001	<0.0001	0.0002	0.0002	0.0001
Magnesium, dissolved	mg/L	19.5												2.25	2.15			4.39	5.6	5.7		3.91
Manganese, dissolved	mg/L	0.113												0.055	0.0486			0.119	0.184	0.185	0.185	0.113
Mercury, dissolved	mg/L	<0.0001												0.00002	<0.00001			<0.00001	0.00001	0.00001		<0.00001
Molydenum, dissolved	mg/L	0.014												0.00182	0.00215			0.0046	0.00537	0.00514	0.00514	0.00414
Nickel, dissolved	mg/L	0.0006												0.001	0.001			0.005	0.007	0.009	0.009	0.006
Phosphorus, dissolved	mg/L													<0.01	0.01			0.04	0.04	0.04		0.01
Potassium, dissolved	mg/L	8.5												2.76	1.96			4.53	5.93	5.81		3.39
Selenium, dissolved	mg/L	0.0021												<0.0006	<0.0006			<0.0006	0.0008	0.0011	0.0011	<0.0006
Silver, dissolved	mg/L	<0.0001												<0.0010	<0.0010			<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sodium, dissolved	mg/L	21.1												3.18	3.04			7.44	9.37	9.46		6.8
Thallium, dissolved	mg/L	<0.00005												<0.00001	<0.00001			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Zinc, dissolved	mg/L	0.021												0.006	0.006			0.022	0.017	0.017	0.017	0.011

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**15/05/2008**	**18/05/2008**	**20/05/2008**	**27/05/2008**	**29/05/2008**	**05/06/2008**	**11/06/2008**	**17/06/2008**	**25/06/2008**	**26/06/2008**	**03/07/2008**	**08/07/2008**	**09/07/2008**	**22/07/2008**	**23/08/2008**	**25/08/2008**	**18/09/2008**	**08/10/2008**	**17/10/2008**	**18/11/2008**	**10/12/2008**
pH (field)	pH units																				8.47	7.79
pH (lab)	pH units	7.22	7.24	7.41	7.38	7.64	7.7	7.59	7.6	7.69		7.71	7.77		7.7	7.8	7.76	7.47	7.9	7.81	7.84	7.87
Hardness (from dissolved)	mg/L	65	75	75	88	90						120			125							
Hardness (from total)	mg/L						103															
Total Dissolved Solids	mg/L	170	210	236	222	230	254	222	246	342		272	302		284	264	272	300	308	362	436	446
Total Suspended Solids	mg/L	10	8	16	7	8	4	<2	3	<2		<2	<2		4	<2	4	33	12	10	57	15
Alkalinity, total	mg/L	56	67	68	71	72	76	78	80	87		94	96		83	134	131	184	138	140	172	168
Sulphate, dissolved	mg/L	21.6	26.5	27	27.5	32	39.3	44.3	43.8	46.1		50.3	48.2		50.4	47.5	44.9	31.7	73.8	74.8	80.9	105
Chloride	mg/L	1.61	2.07	2.11	2.27	2.43	2.46	2.63	2.55	2.78		2.86	2.88		2.85	2.72	2.66	3.72	2.64	2.58	6.6	5.28
Fluoride	mg/L																					
Nitrite (N)	mg/L	0.08	0.1	0.09	0.09	0.13	0.16	0.28	0.25	0.32	0.28	0.31	0.27	0.163	0.11	<0.01	<0.01	<0.01	0.18	0.2		
Nitrate (N)	mg/L	0.86	1.02	1.03	1.28	1.88	2.05	1.99	1.82	1.32	1.23	0.82	0.66	0.6	0.22	0.03	0.03	0.01	5.22	5.05		
Ammonia	mg/L	0.032	0.056	<0.05	0.11	0.22	0.3	0.34	0.38	0.38		0.34	0.29		0.33		0.53	0.46	0.94	0.72	0.49	0.7
Aluminum, total	mg/L	0.31	0.35	0.39	0.04	0.04	<0.01	<0.01	0.08	0.09	0.07	0.084	0.06	0.128	0.107	0.083	0.24	1.15	0.645	0.497	3.71	0.27
Arsenic, total	mg/L	<0.0002	0.0012	0.0002	0.0003	<0.0002	0.002	0.0003	0.0009	<0.0002	0.0009	0.0007	0.0007	0.0004	0.0005	0.0005	0.0008	0.0012	0.0009	0.0009	0.0007	0.0008
Cadmium, total	mg/L	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00008	<0.00008	<0.00008	0.00012	0.00007	<0.00008	0.00007	0.00002	0.00004	0.00003	0.0001	0.00011	0.00019	0.00019	0.00012
Calcium, total	mg/L	18.1	19.9	21.9	21.1	23.2	28.4	33.5	28.7	31.6	30.6	29.7	32.7	32.6	32.8	38.8	38.7	49.3	57.3	53.3	54.6	65.8
Chromium, total	mg/L	0.0015	0.0016	0.0015	0.0014	0.0015	0.001	0.0015	0.001	0.0027	0.0024	0.001	0.001	0.0012	<0.0005	0.0017	0.0019	0.0028	0.0014	0.001	0.0019	0.0008
Copper, total	mg/L	0.083	0.082	0.08	0.083	0.081	0.085	0.094	0.072	0.075	0.066	0.06	0.057	0.058	0.051	0.127	0.036	0.207	0.207	0.178	0.468	0.125
Iron, total	mg/L	1.65	1.94	1.94	1.72	1.84	1.83	1.83	1.49	1.56	1.4	1.39	1.5	1.4	1.36	1.1	1.25	3.02	1.81	1.24	2.92	0.86
Lead, total	mg/L	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0012	0.0002	0.0002	0.0003	<0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0008	0.0006	0.0006	0.001	0.0002
Magnesium, total	mg/L	4.53	5.57	6.36	6.04	6.54	7.84	9.37	8.28	8.96	9.04	9.1	9.47	9.5	10	12.3	12.1	14.3	15.5	14.4	17	19.5
Manganese, total	mg/L	0.148	0.198	0.209	0.203	0.206	0.211	0.237	0.195	0.237	0.23	0.253	0.282	0.283	0.326	0.439	0.447	0.72	0.502	0.461	0.529	0.481
Mercury, total	mg/L	<0.00001	0.00001	0.00001	0.00001	<0.00001	<0.01	<0.01	<0.01	0.00002	<0.00001	<0.0001	0.00001	<0.0001	<0.0001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.00001
Molybdenum, total	mg/L	0.00481	0.00579	0.00604	0.00621	0.0073	0.00889	0.00944	0.00884	0.00836	0.00814	0.01	0.0085	0.01	0.009	0.00754	0.00684	0.0055	0.0193	0.0207	0.033	0.0297
Nickel, total	mg/L	0.014	0.017	0.015	0.003	0.002	0.002	0.025	<0.001	0.003	0.003	0.0027	0.003	0.0052	0.002	0.004	0.005	0.003	0.003	0.002	0.0022	0.002
Phosphorus, total	mg/L	0.04	0.06	0.07	0.04	0.04	<0.05	<0.05	<0.05	0.04	0.05		0.02			0.06	0.05	0.09	0.079	0.03		0.026
Potassium, total	mg/L	4.39	5.52	6.35	5.91	6.53	7.86	8.97	7.84	9.21	8.99	9.3	9.83	9	9.4	9.28	9.05	9.83	7.3	6.4	15.6	11.5
Selenium, total	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0009	0.0015	0.0019	0.0009	0.0028	0.002	0.001	0.0024	0.0014	0.0015	0.0013	<0.0006	0.006	0.0067	0.0052	0.0059
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00005	<0.00001	<0.00001	0.00001	0.00007	0.00004	<0.00001	0.00013	<0.00001	0.00011	<0.00001	0.00011	0.00005	<0.00001	0.00033	0.00002
Sodium, total	mg/L	8.2	10.6	11.2	10.9	12.1	14.3	16.1	14.4	15.9	15.5	15.8	14.8	15.4	16.6	17.6	16.4	18.8		17.3	36.1	31.7
Thallium, total	mg/L	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	0.00002
Zinc, total	mg/L	0.02	0.019	0.021	0.019	0.022	0.028	0.028	0.024	0.029	0.034	0.024	0.024	0.024	0.022	0.025	0.012	0.016	0.022	0.021	0.029	0.016
Aluminum, dissolved	mg/L	0.08	0.06	0.06	<0.02	<0.02	<0.01	<0.01	0.05	0.05	0.05	0.056	0.05	0.064	0.037	0.026	0.041	0.091	0.013			0.016
Arsenic, dissolved	mg/L	<0.0002	<0.0002	0.0015	0.0009	0.0003	<0.0002	<0.0002	0.0014	<0.0002	0.0008	0.0006	0.0006	0.0006	0.0005	0.0007	0.0005	0.0003	0.0007			0.0006
Cadmium, dissolved	mg/L	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00007	<0.00008	0.00005	<0.00001	0.00002	<0.00001	0.00002	0.00009			0.00008
Calcium, dissolved	mg/L	18.5	20.7	20.5	24.4	24.8				29.8	30.7	31.6	33.8	30.6	33.3	36.5	37.7	46.2	47.8			65.7
Chromium, dissolved	mg/L	0.0015	0.0017	0.0014	0.0014	0.0014	0.001	0.0013	0.0013	0.0026	0.0027	0.0017	0.0011	0.0172	<0.0005	0.001	0.0009	0.0018	0.0009			0.0007
Copper, dissolved	mg/L	0.06	0.06	0.058	0.07	0.073	0.077	0.073	0.065	0.066	0.065	0.054	0.058	0.054	0.043	0.025	0.024	0.02	0.104			0.073
Iron, dissolved	mg/L	0.87	1.02	0.94	1.05	1.09	1.13	1.12	1.16	1.28	1.29	1.22	1.35	1.36	1.12	0.89	1.04	0.57	0.194			0.167
Lead, dissolved	mg/L	<0.0001	0.0001	0.0002	<0.0001	<0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0007	0.0001	0.0002	0.0001	0.0002	0.0001			<0.0001
Magnesium, dissolved	mg/L	4.59	5.77	5.72	6.64	6.86				8.76	9	9.3	9.94	9.6	10.2	11.4	12.1	13.1	13.3			19.4
Manganese, dissolved	mg/L	0.136	0.191	0.196	0.205	0.193	0.186	0.211	0.173	0.224	0.231	0.276	0.29	0.29	0.321	0.4	0.426	0.763	0.367			0.455
Mercury, dissolved	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.02	<0.01	<0.01	<0.00001	0.00001	<0.0001	0.00001	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	<0.00001			<0.00001
Molydenum, dissolved	mg/L	0.0049	0.00643	0.00622	0.00619	0.00726	0.00882	0.0085	0.0089	0.00849	0.0085	0.009	0.00813	0.009	0.008	0.0068	0.00645	0.00332	0.0186			0.0271
Nickel, dissolved	mg/L	0.008	0.009	0.009	0.003	0.002	0.002	0.003	0.001	0.003	0.003	0.0026	0.003	0.0088	0.0018	0.004	0.004	0.002	0.005			0.001
Phosphorus, dissolved	mg/L	0.02	0.02	0.01	0.02	0.02				0.02	0.02		<0.01			0.02	0.02	0.02	<0.01			<0.01
Potassium, dissolved	mg/L	4.49	5.98	5.94	6.89	7.07				8.73	9.01	9.7	10.2	9.3	9.2	8.77	8.96	9.14	5.7			12.8
Selenium, dissolved	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	0.0015	0.001	0.002	0.0037	<0.0006	0.0035	0.002	0.0019	0.0016	0.0016	0.0024	<0.0006	0.0039	0.0064			0.0056
Silver, dissolved	mg/L	<0.001	<0.0010	<0.001	<0.001	<0.001	<0.00001	<0.00001	<0.00001	0.00002	0.00002	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.0003			<0.00001
Sodium, dissolved	mg/L	8.38	10.8	10.7	12.2	12.7				15.5	15.2	16.2	15.4	16	16.4	15.5	16.6	17.2	15.7			32.2
Thallium, dissolved	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00005	<0.00005	<0.00001	<0.00001	<0.00001	0.00002			<0.00001
Zinc, dissolved	mg/L	0.01	0.016	0.014	0.017	0.016	0.019	0.021	0.018	0.02	0.02	0.026	0.02	0.024	0.014	0.008	0.008	0.005	0.008			0.012

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**17/12/2008**	**17/01/2009**	**18/01/2009**	**31/03/2009**	**21/04/2009**	**05/05/2009**	**20/06/2009**	**22/06/2009**	**27/10/2009**	**05/11/2009**	**02/12/2009**	**04/01/2010**	**01/02/2010**	**02/03/2010**	**05/04/2010**	**28/04/2010**	**04/05/2010**	**11/05/2010**	**18/05/2010**	**26/05/2010**	**02/06/2010**
pH (field)	pH units		6.64	7.7	7.8	8.1		7.71		7.1		7.88	7.98	7.17	6.8	6.73	7.93	7.77		7.58	7.58	7.24
pH (lab)	pH units	7.59	7.7			7.52	6.74		7.93	7.56	7.52	7.8	7.68	7.85	7.68	7.7	7.4	8.1	8	8.2	8.1	8.2
Hardness (from dissolved)	mg/L	199	203		232		24		163	110	208	228	239				24.6	165	155	180	209	187
Hardness (from total)	mg/L												239	243	247	265	32.9	165	163	179	179	1080
Total Dissolved Solids	mg/L	192	364			140	36		274	184	356	364	392	388	414	418	76	290	220	290	260	290
Total Suspended Solids	mg/L	8	4			<5	10		4	<2	14	<2	<5	<5	<5	4	7	8	24	8	5	7
Alkalinity, total	mg/L	148	143			62	11		131	78	107	123	141	94	160	156	21	110	100	120	130	130
Sulphate, dissolved	mg/L	78	76			23.4	2.1		45.3	28	69.9	79	80.6	73.9	82.6	88	4.4	54	45	54	53	59
Chloride	mg/L	2.78	3.27			1.22	0.4		2.92	9.79	7.35	23.9	23	20.5	18.5	18.2	0.7	10	8.3	9.6	9.4	9.6
Fluoride	mg/L																0.12	0.33	0.21	<0.01	0.39	0.49
Nitrite (N)	mg/L		<0.005														0.052	0.279	0.241	0.264	0.232	0.219
Nitrate (N)	mg/L		4.81							3.58	9.29	10.1	11.4	11	10.9		0.86	5.4	5.1	5.7	5.8	7.9
Ammonia	mg/L	0.76															0.11	0.02	0.15	0.05	0.11	0.34
Aluminum, total	mg/L	0.301	0.158		0.046	0.225	0.218		0.125	0.073	0.11	0.092	0.096	0.036	0.136	0.154	0.455	0.528	0.863	0.723	0.151	0.287
Arsenic, total	mg/L	0.0009	0.0008		0.0007	0.0003	<0.0002		0.0004	0.0003	0.0006	0.0006	0.0006	0.0005	0.0005	0.0006	0.0002	0.0004	0.0006	<0.001	0.0005	0.0006
Cadmium, total	mg/L	0.00012	0.00011		0.00014	0.0001	0.0026		0.00006	0.00002	0.00004	0.00002	0.00004	0.00008	0.00006	0.00002	0.00007	0.00002	0.00041	0.00004	<0.0001	<0.0001
Calcium, total	mg/L	57.2	54.8		72.9	24.4	6.2		45.1	35.2	64.5	63.7	69.2	69.3	68.2	72.5	9.82	44.1	44.5	46.2	48	61
Chromium, total	mg/L	0.0012	0.0006		0.0006	<0.0004	0.0005		0.0005	<0.0004	<0.0004	<0.0004	0.0005	<0.0004	<0.0004	0.0005	<0.001	<0.001	<0.001	0.001	<0.002	<0.002
Copper, total	mg/L	0.149	0.16		0.114	0.069	0.035		0.082	0.005	0.013	0.019	0.02	0.011	0.047	0.018	0.0227	0.0572	0.0653	0.0504	0.038	0.051
Iron, total	mg/L	0.87	0.63		0.3	0.32	0.27		0.3	0.022	0.061	0.127	0.139	0.064	0.242	0.331	0.689	0.899	1.52	1.31	0.429	0.555
Lead, total	mg/L	0.0006	0.0002		0.0003	0.0002	0.0006		<0.0001	<0.0001	0.0001	0.0002	0.0002	0.0004	0.0002	0.0002	0.0003	0.0004	0.0005	0.0002	<0.0002	0.0003
Magnesium, total	mg/L	15.1	14.9		21.1	5.8	1.28		13.2	8.24	17.6	17.9	19.7	20.5	20.7	23	2.03	13.2	12.5	15.5	14	15
Manganese, total	mg/L	0.488	0.455		0.536	0.145	0.0383		0.2	0.178	0.39	0.386	0.431	0.346	0.345	0.262	0.069	0.267	0.254	0.212	0.204	0.18
Mercury, total	mg/L	0.00004	<0.0001		<0.00001	<0.00001	<0.00001		0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002
Molybdenum, total	mg/L	0.022	0.02		0.02	0.00652	0.00051		0.0109	0.0067	0.0172	0.0184	0.0183	0.0159	0.0156	0.0127	0.002	0.007	0.007	0.008	0.008	0.014
Nickel, total	mg/L	0.0021	0.0027		0.002	<0.001	<0.001		0.002	0.001	0.003	0.002	0.003	0.002	<0.001	0.002	<0.001	0.002	0.002	<0.003	0.001	0.001
Phosphorus, total	mg/L		<0.05		0.018	<0.05	<0.05		<0.01	<0.05	<0.05	0.06	<0.05	0.05	<0.05	0.06		0.042	0.042	0.075		
Potassium, total	mg/L	6.9	6.5		8.6	3.1	0.8		5.7	2.7	4.8	5.4	5.8	5.5	5.6	6	1.16	4.36	4.33	4.65	5	6
Selenium, total	mg/L	0.0048	0.0053		0.0042	0.001	<0.0006		0.0019	0.0006	0.0025	0.0026	0.003	0.0024	0.0022	0.0019	0.0003	0.0014	0.0011	0.0016	0.0014	0.0019
Silver, total	mg/L	0.00005	0.00016		<0.00001	<0.00001	<0.00001		0.00033	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00003	<0.00002	<0.00002	0.00002	<0.0001	<0.0001
Sodium, total	mg/L	18.9	18.1		26.6	7.71	2.14		15.4	9.5	20.9	22.9	23.3	23.7	23.2	25.5	2.92	15.7	13.7	17.7	15	21
Thallium, total	mg/L	<0.00005	<0.00005		<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.019	0.017		0.024	0.008	0.017		0.004	0.104	0.015	0.013	0.012	0.006	0.024	0.007	0.008	0.009	0.009	0.008	<0.01	<0.01
Aluminum, dissolved	mg/L	0.026	0.029		0.012		0.098		0.043				0.03				0.016	0.032	0.033	0.024	0.025	0.028
Arsenic, dissolved	mg/L	0.0006	0.0008		0.0007		<0.0002		0.0003				0.0006				<0.0001	0.0004	0.0005	0.0003	<0.001	0.0005
Cadmium, dissolved	mg/L	0.00009	0.00012		0.00006		0.00557		0.00006				0.00018				0.00005	0.00003	0.00006	0.00002	<0.0001	<0.0001
Calcium, dissolved	mg/L	54.3	55.1		62		7.21		44.1				65.3				7.74	45.7	42.2	47.9	55	53
Chromium, dissolved	mg/L	<0.0005	0.0005		0.0005		0.0006		<0.0004				<0.0004				<0.001	<0.001	<0.001	<0.001	<0.002	<0.002
Copper, dissolved	mg/L	0.123	0.121		0.072		0.027		0.073				0.009				0.0073	0.0282	0.0407	0.0306	0.033	0.03
Iron, dissolved	mg/L	0.3	0.31		0.12		0.14		0.2				0.04				0.012	0.123	0.126	0.126	0.138	0.094
Lead, dissolved	mg/L	0.0001	0.0001		0.0002		0.0008		0.0001				0.0004				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	15.4	15.8		18.9		1.54		13				18.4				1.29	12.3	12	14.8	18	14
Manganese, dissolved	mg/L	0.457	0.468		0.512		0.043		0.17				0.36				0.032	0.072	0.168	0.151	0.106	0.021
Mercury, dissolved	mg/L	<0.00001	<0.0001		<0.00001		<0.00001		0.00002				<0.00001				<0.00002	0.00003	0.00003	<0.00002	<0.00002	<0.0002
Molydenum, dissolved	mg/L	0.021	0.021		0.019		0.00074		0.0104				0.0172				0.001	0.008	0.007	0.008	0.01	0.013
Nickel, dissolved	mg/L	0.0011	0.002		0.002		<0.001		0.002				0.007				<0.001	0.001	0.001	<0.001	<0.003	0.001
Phosphorus, dissolved	mg/L				<0.01		0.03		0.02				0.03					0.013	0.011	0.013		
Potassium, dissolved	mg/L	6.9	6.9		8.3		0.9		5.7				5.8				0.87	4.17	4.01	4.41	5	6
Selenium, dissolved	mg/L	0.0058	0.0058		0.0041		<0.0006		0.0024				0.0028				0.0002	0.0014	0.0012	0.0015	0.002	0.0022
Silver, dissolved	mg/L	<0.00001	<0.00001		<0.00001		<0.00001		<0.00001				<0.00001				<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001
Sodium, dissolved	mg/L	19.6	19.7		24.9		3.1		15.2				22.6				2.13	14	13.1	17.9	21	18
Thallium, dissolved	mg/L	<0.00005	<0.00005		<0.00001		<0.00001		<0.00001				<0.00001				<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.017	0.015		0.013		0.023		0.003				0.02				<0.005	<0.005	<0.005	<0.005	<0.01	<0.01

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**14/06/2010**	**15/06/2010**	**16/06/2010**	**17/06/2010**	**23/06/2010**	**24/06/2010**	**29/06/2010**	**04/07/2010**	**11/07/2010**	**14/07/2010**	**19/07/2010**	**25/07/2010**	**02/08/2010**	**05/08/2010**	**10/08/2010**	**15/08/2010**	**22/08/2010**	**29/08/2010**	**06/09/2010**	**10/09/2010**	**13/09/2010**
pH (field)	pH units	7.29	7.2	7.47	7.07	7.97	7.94	7.94	7.91	8.06	8.13	8.07	7.77	7.89	7.97	7.88	8.37	8.24	7.86	7.76	7.79	7.94
pH (lab)	pH units	8.2	8.34	8.1	8.1	8.17	8.2	7.87	8.03	8.17		8.12	7.99	8.15	8.12	8.21	8.18	8.31	7.94	8.01	8.13	8.25
Hardness (from dissolved)	mg/L	180	181	183	183	176	178	183	188	181		190	191	201	234	212	213	200	201	213	209	216
Hardness (from total)	mg/L	185	194	180	186	187	193	187	188	183		193	205	184	194	229	208	205	203	211	212	189
Total Dissolved Solids	mg/L	320	310	300	300	320	340	340	340	300		320	360	340	310	340	310	340	370	380	390	380
Total Suspended Solids	mg/L	1	2	4	<1	2	1	1	2	<1		3	10	4	3	2	3	19	3	<1	2	<1
Alkalinity, total	mg/L	120	130	130	130	130	130	130	130	130		130	130	140	130	140	130	140	140	140	140	140
Sulphate, dissolved	mg/L	70	66	68	66	65	64	71	75	68		68	69	67	67	72	74	76	78	73	74	77
Chloride	mg/L	9.1	8.5	8.3	8.8	8	8.2	7.1	7.8	8		7.6	7.1	7.1	6.3	6.7	5.9	6.5	7.1	7.1	7.3	7.4
Fluoride	mg/L	0.56	0.56	0.55	0.57	0.54	0.54	0.57	0.55	0.55		0.56	0.59	0.59	0.57	0.54	0.55	0.59	0.51	0.65		0.61
Nitrite (N)	mg/L	0.182	0.187	0.181	0.178	0.187	0.183	0.175	0.176	0.187		0.188	0.214	0.006	0.178	0.172	0.175	0.152	0.136	0.147	0.136	0.135
Nitrate (N)	mg/L	9.6	9.7	9.2	9.3	9.3	9.2	9.8	9.6	9.7		9.6	9.8	10.6	10.6	11.3	11.5	10.5	10.7	12.4	12	12.4
Ammonia	mg/L	0.94	0.6	0.61	0.38	0.27	0.39	0.52	0.45	0.32		0.25	0.18	0.16	0.18	0.23	0.058	0.065	<0.005	0.21	0.091	0.071
Aluminum, total	mg/L	0.11	0.071	0.072	0.048	0.049	0.035	0.068	0.082	0.097		0.085	0.589	0.138	0.093	0.093	0.056	0.192	0.078	0.075	0.065	0.05
Arsenic, total	mg/L	0.0006	0.0007	0.0005	0.0006	0.0005	0.0005	0.0005	0.0006	0.0004		<0.0004	0.0009	0.0005	0.0006	0.0006	0.0007	0.0007	0.0005	0.0005	0.0005	<0.0004
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, total	mg/L	50	53	49	50	48	52	51	51	50		55	55	51	53	62	57	57	56	58	58	52
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, total	mg/L	0.082	0.078	0.068	0.066	0.066	0.068	0.083	0.082	0.073		0.06	0.053	0.042	0.045	0.052	0.045	0.052	0.046	0.042	0.037	0.029
Iron, total	mg/L	0.217	0.175	0.16	0.121	0.132	0.1	0.168	0.188	0.164		0.161	0.763	0.408	0.191	0.257	0.13	0.342	0.159	0.214	0.113	0.089
Lead, total	mg/L	<0.0002	0.0002	0.0007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0008	<0.0002	<0.0002
Magnesium, total	mg/L	15	15	14	15	16	15	14	15	14		13	16	14	15	18	16	15	16	16	16	14
Manganese, total	mg/L	0.065	0.059	0.053	0.051	0.045	0.049	0.071	0.078	0.066		0.035	0.057	0.023	0.021	0.051	0.053	0.048	0.023	0.021	0.026	0.026
Mercury, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003
Molybdenum, total	mg/L	0.015	0.016	0.014	0.015	0.014	0.016	0.016	0.016	0.016		0.015	0.017	0.015	0.015	0.018	0.016	0.017	0.015	0.016	0.017	0.014
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001		0.001	0.006	0.003	0.004	0.002	0.001	0.002	0.002	0.001	0.001	0.001
Phosphorus, total	mg/L																					
Potassium, total	mg/L	5	5	5	5	5	5	5	5	5		5	6	5	5	6	5	5	6	7	7	6
Selenium, total	mg/L	0.0026	0.0028	0.0025	0.0025	0.0024	0.0026	0.0027	0.0026	0.0027		0.0027	0.0032	0.0028	0.003	0.0039	0.0038	0.0038	0.0038	0.0043	0.0042	0.0037
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	19	20	18	19	21	19	19	19	22		20	21	20	20	22	22	19	20	21	21	18
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.022	0.023	0.021	0.028	0.022	0.024	0.019	0.023	0.034		0.03	<0.01	<0.01	<0.01	0.011	0.01	<0.01	0.011	0.016	0.014	0.017
Arsenic, dissolved	mg/L	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005		0.0006	0.0005	0.0006	0.0004	0.0006	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	48	49	51	50	48	50	50	51	50		52	53	55	63	58	59	55	55	60	57	59
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.055	0.055	0.06	0.058	0.058	0.052	0.07	0.074	0.054		0.053	0.027	0.016	0.007	0.033	0.039	0.037	0.036	0.015	0.019	0.02
Iron, dissolved	mg/L	0.071	0.074	0.075	0.078	0.055	0.075	0.08	0.098	0.062		0.065	0.036	0.022	<0.02	0.049	0.047	0.028	0.025	0.033	0.026	0.046
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	14	14	14	14	14	13	14	15	14		15	15	15	18	16	16	15	15	15	16	16
Manganese, dissolved	mg/L	0.029	0.034	0.035	0.026	0.033	0.041	0.056	0.074	0.056		0.002	0.01	0.004	0.039	0.036	0.046	0.019	<0.001	0.012	0.023	0.029
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	0.014	0.014	0.015	0.015	0.015	0.015	0.016	0.017	0.015		0.016	0.016	0.016	0.007	0.016	0.016	0.016	0.016	0.017	0.018	0.017
Nickel, dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001		0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003
Phosphorus, dissolved	mg/L																					
Potassium, dissolved	mg/L	5	5	5	5	5	5	5	5	5		5	6	5	4	5	5	5	5	6	7	7
Selenium, dissolved	mg/L	0.0025	0.0024	0.0027	0.0026	0.0025	0.0025	0.0025	0.0027	0.0029		0.0028	0.0031	0.0033	0.0019	0.0038	0.0039	0.0039	0.0039	0.0045	0.0048	0.0045
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	21	21	19	19	18	17	19	20	19		20	20	22	20	22	20	20	20	21	23	23
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**19/09/2010**	**03/10/2010**	**09/10/2010**	**07/11/2010**	**06/12/2010**	**08/01/2011**	**04/02/2011**	**02/04/2011**	**09/04/2011**	**16/04/2011**	**25/04/2011**	**02/05/2011**	**07/05/2011**	**14/05/2011**	**21/05/2011**	**29/05/2011**	**04/06/2011**	**13/06/2011**	**27/06/2011**	**03/07/2011**	**09/07/2011**
pH (field)	pH units	7.98		8.01	7.84	7.74	7.23	7.62														
pH (lab)	pH units	8.05	8.04	8.26	8.07	8.15	7.77	8.07	8.01	7.8	8.09	7.63	7.32	7.47	7.79	8	8.15	7.97	8.01	8.19	8.18	8.02
Hardness (from dissolved)	mg/L	229	235	222	280	290	279	293	245	121	291	46.8	50.4	83.9	129	143	150	152	163	170	184	184
Hardness (from total)	mg/L	213	243	249	295	281	283	302	258	135	290	52.3	53.5	98.3	130	134	139	140	148	156	167	184
Total Dissolved Solids	mg/L	360	390	380	430	420	450	470	430	190	490	64	100	160	270	220	230	260	250	270	260	280
Total Suspended Solids	mg/L	<1	<1	1	5	6	3	2	8	37	7	3	7	14	6	1	7	4	1	6	26	5
Alkalinity, total	mg/L	150	150	150	170	170	170	190	160	81	190	41	43	65	89	98	110	110	120	130	130	130
Sulphate, dissolved	mg/L	73	70	82	99	100	110	120	100	48	110	12	<5	28	46	47	51	47		49	58	46
Chloride	mg/L	7	6.7	5.8	5.6	7	7.9	8.3	19	4.8	12	1.2	4.2	3.6	5.2	5.2	5.5					
Fluoride	mg/L	0.59	0.56	0.53	0.66	0.7	0.72	0.71	0.72	0.33	0.81	0.21	0.18	0.22	0.31	0.33	0.34	0.35				
Nitrite (N)	mg/L	0.126	0.08	0.098	0.096	0.095	0.1	0.11	0.291	0.094	0.22	0.037	0.012	0.03	0.048	0.048	0.037	0.034	0.022	0.025	0.022	0.023
Nitrate (N)	mg/L	13	13.6	13.6	16.1	15.5	16.4	14.2	16.2	7.6	16.6	1.79	0.63	2.6	5.3	5.4	5.3	4.9	4.9	4.7	4.4	4.2
Ammonia	mg/L	0.11	0.086	<0.005	0.33	0.37	0.23	0.39	0.42	0.22	0.523	0.083		0.087	0.13	0.12	0.033	0.051		0.065	0.056	0.049
Aluminum, total	mg/L	0.035	0.04	0.05	0.176	0.162	0.06	0.045	0.358	0.657	0.339	0.088	0.408	0.526	0.333	0.029	0.23	0.087	0.12	0.084	0.101	0.111
Arsenic, total	mg/L	<0.0004	0.0004	0.0004	0.0007	0.0005	0.0003	0.0005	0.0005	0.0005	0.0005	0.0001	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004
Cadmium, total	mg/L	<0.0001	0.00004	0.00005	0.00006	0.00013	0.0001	0.00006	0.00007	0.00012	0.00005	0.00003	0.00004	0.00004	0.00005	0.00004	0.00002	0.00003	0.00045	0.00005	0.00004	0.00002
Calcium, total	mg/L	59	67	67.7	80.1	78.1	78.2	82.5	68.5	35.8	76.5	15.1	15.1	26.1	34.7	35.6	36.9	36.7	37.8	41	44.1	48.3
Chromium, total	mg/L	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.03	0.0306	0.0444	0.0724	0.131	0.0668	0.0547	0.0652	0.268	0.0408	0.0311	0.062	0.12	0.0429	0.0305	0.0385	0.0322	0.044	0.0309	0.0324	0.0314
Iron, total	mg/L	0.083	0.147	0.139	0.288	0.415	0.175	0.128	0.562	7.76	0.501	0.442	0.619	0.994	0.572	0.159	0.465	0.223	0.239	0.245	0.259	0.303
Lead, total	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0003	<0.0002	0.0006	0.0025	<0.0002	<0.0002
Magnesium, total	mg/L	16	18.4	19.4	23.1	21	21.2	23.4	21.2	11	24	3.52	3.86	8.04	10.6	11.1	11.4	11.7	13.1	13	13.7	15.4
Manganese, total	mg/L	0.048	0.081	0.1	0.129	0.127	0.136	0.185	0.256	0.157	0.255	0.045	0.075	0.193	0.175	0.157	0.164	0.154	0.138	0.142	0.144	0.125
Mercury, total	mg/L	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum, total	mg/L	0.015	0.015	0.018	0.019	0.018	0.02	0.02	0.024	0.01	0.021	0.002	0.002	0.003	0.006	0.006	0.006	0.006	0.007	0.007	0.006	0.007
Nickel, total	mg/L	0.001	0.001	0.001	0.001	0.001	0.003	0.001	<0.001	0.002	0.001	<0.001	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Phosphorus, total	mg/L								0.023	0.061	0.015	0.014		0.063	0.037	0.017	0.025	0.021	0.042	0.027	0.019	0.022
Potassium, total	mg/L	6	6.91	6.77	6.87	6.4	6.96	7.94	10.1	3.99	9.29	1.34	2.05	2.5	3.61	3.45	3.5	3.37	3.74	3.43	3.48	3.73
Selenium, total	mg/L	0.004	0.0046	0.0044	0.0053	0.0052	0.0053	0.0051	0.0052	0.0024	0.0047	0.0006	0.0003	0.0009	0.0013	0.0014	0.0014	0.0012	0.0012	0.0011	0.0012	0.0011
Silver, total	mg/L	<0.0001	<0.00002	<0.00002	<0.00002	0.00005	0.00002	<0.00002	0.00003	0.00016	<0.00002	<0.00002	0.00002	0.00005	0.00012	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L	19	23.8	23.8	27.2	24.6	26.2	32.3	41.4	15	38.4	4.23	3.05	8.93	12.8	13.4	13.4	14.1	14.9	15.3	15.1	17.3
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.01	<0.005	<0.005	<0.005	0.005	0.005	0.008	0.006	0.027	<0.005	0.005	0.009	0.006	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	0.006	<0.005
Aluminum, dissolved	mg/L	0.015	0.011	0.011	0.01	0.062	0.019	0.017	0.006	0.006	0.006	0.005	0.04	0.037	0.042	0.139	0.029	0.031	0.073	0.029	0.234	0.029
Arsenic, dissolved	mg/L	0.0006	0.0005	0.0005	0.0006	0.0006	0.0006	0.0005	0.0004	0.0001	0.0004	<0.0001	0.0002	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004
Cadmium, dissolved	mg/L	<0.0001	0.00003	0.00004	0.00003	0.00011	0.00006	0.00007	0.00006	0.00002	0.00011	<0.00001	0.00003	0.00003	0.00005	0.00004	0.00002	0.00003	0.00021	0.00004	0.00003	0.00002
Calcium, dissolved	mg/L	63	66	61.5	77.1	80.4	76.3	77.8	63.4	33	77.2	13.8	14.6	22.4	34.5	39	40.7	40.1	42.4	44.6	48	48.9
Chromium, dissolved	mg/L	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.024	0.0244	0.0296	0.0307	0.0389	0.033	0.0305	0.0242	0.0126	0.0261	0.0074	0.0307	0.0283	0.0313	0.0338	0.0319	0.0319	0.038	0.0322	0.0385	0.0294
Iron, dissolved	mg/L	0.042	0.057	0.055	0.048	0.202	0.077	0.061	0.026	0.057	0.029	0.048	0.125	0.15	0.151	0.297	0.137	0.145	0.224	0.14	0.454	0.115
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	18	16.9	16.6	21.4	21.6	21.4	24	21	9.34	23.9	3.02	3.39	6.83	10.5	11.2	11.7	12.5	13.8	14.1	15.5	15.1
Manganese, dissolved	mg/L	0.051	0.079	0.086	0.116	0.125	0.123	0.169	0.233	0.103	0.234	0.036	0.053	0.167	0.162	0.171	0.161	0.158	0.131	0.154	0.165	0.101
Mercury, dissolved	mg/L	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.016	0.015	0.015	0.02	0.018	0.019	0.017	0.023	0.008	0.018	0.002	0.001	0.003	0.005	0.005	0.005	0.006	0.007	0.006	0.006	0.005
Nickel, dissolved	mg/L	0.001	0.001	0.001	0.001	0.001	0.002	0.001	<0.001	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.002	0.001
Phosphorus, dissolved	mg/L								<0.01	<0.01	0.01	<0.01		0.016	0.015	0.024	0.021	0.017	0.018	0.014	0.051	0.013
Potassium, dissolved	mg/L	7	6.27	6.39	6.59	6.69	7.01	8.02	9.94	3.43	9.31	1.12	1.79	2.15	3.52	3.71	3.69	3.61	4.03	3.71	3.96	3.84
Selenium, dissolved	mg/L	0.0043	0.0043	0.0041	0.0053	0.0051	0.0054	0.0048	0.0059	0.0021	0.0048	0.0006	0.0003	0.0008	0.0014	0.0015	0.0014	0.0014	0.0014	0.0013	0.0013	0.0013
Silver, dissolved	mg/L	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	22	21.9	19.3	28	25.6	26.7	32.8	41.9	12.6	37	3.71	2.82	8.32	13.3	13.6	14.6	15.1	16.1	16.4	17.8	16.9
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	0.005	<0.005	<0.005

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**16/07/2011**	**23/07/2011**	**07/08/2011**	**11/08/2011**	**28/08/2011**	**30/08/2011**	**05/09/2011**	**10/09/2011**	**24/09/2011**	**30/09/2011**	**06/10/2011**	**18/10/2011**	**13/11/2011**	**21/11/2011**	**13/02/2012**	**24/03/2012**	**31/03/2012**	**01/04/2012**	**02/04/2012**	**03/04/2012**	**04/04/2012**
pH (field)	pH units							7.98	7.87	7.71	7.77	7.72	7.69	7.77						7.7		
pH (lab)	pH units	8.05	7.98	7.96	8.05	8.13	8.08	8.24	8.13	8.01	8.08	8.21	8.15	8.36	8.01	8.19	8.22	8.32	8.3	8.22	8.24	8.16
Hardness (from dissolved)	mg/L	174	172	178	175	178	172	183	185	188	185	189	190	355	222	219	236	209	214	182	218	209
Hardness (from total)	mg/L	176	178	168	168	166	145	165	154	178	169	188	195	374	203	200	231	184	205	180	223	205
Total Dissolved Solids	mg/L	270	270	240	190	240	270	300	260	270	240	260	280	546	284	298	322	284	278	280	296	288
Total Suspended Solids	mg/L	3	2	6	3	3	3	2	3	<4	<4	2	7	3.7	5.1	<4.0	1.3	26.8	14.6	19.1	14	20.7
Alkalinity, total	mg/L	130	140	130	120	130	130	130	130	140	150	150	150	302	165	188	191	178	179	161	178	168
Sulphate, dissolved	mg/L	49	47	37		36				41	46	41	48				56.3	50.1	40.2	43.2	44.4	45.6
Chloride	mg/L	5.3						4.3	5.3	4.6	4.7	4.4	5	10	5.5	5.4	5.7	4.8	4.9	4.1	4.7	4.9
Fluoride	mg/L	0.34															0.39	0.37	0.37	0.35	0.37	0.36
Nitrite (N)	mg/L	0.023	0.02	0.027	0.033	0.034	0.027	0.028	0.024	0.019	0.018	<0.05	0.015	0.032	0.012	0.012	0.01	0.01	0.012	0.013	0.01	0.014
Nitrate (N)	mg/L	4.5	4.2	4.3	4.6	4.5	3.6	4.2	4.7	4.3	4.6	5.3	5.3	8.77	4.98	4.52	4.81	4.29	4.95	3.76	4.41	4.26
Ammonia	mg/L	0.036	0.029	0.038	0.026	0.012	0.057	0.042	0.043	0.023	0.035	0.029	0.009	0.0755	0.0359	0.0067	<0.0050	0.0076	0.0118	<0.0050	0.0123	0.0101
Aluminum, total	mg/L	0.125	0.162	0.352	0.154	0.065	0.072	0.036	0.067	0.034	0.037	0.052	0.041	0.127	0.118	0.048	0.012	0.634	0.327	1.21	0.877	1.22
Arsenic, total	mg/L	0.0004	0.0004	0.0006	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0008	0.0004	0.0004	0.0005	0.0005	0.0004	0.0006	0.0006	0.0006
Cadmium, total	mg/L	0.00005	0.00002	0.00001	0.00003	0.00001	0.00002	0.00003	0.00002	0.00001	0.00002	0.00003	0.00001	0.00004	0.00004	0.00008	0.00002	0.00003	0.00002	0.00004	0.00004	0.00003
Calcium, total	mg/L	46.8	46.8	43.5	46.1	44.4	39.6	44.1	39.6	48.3	44.1	51.4	52.4	100	54.5	53	60.5	48.3	53.6	49	60	54.8
Chromium, total	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, total	mg/L	0.0315	0.0304	0.0483	0.04	0.0333	0.0272	0.0316	0.0329	0.0314	0.0296	0.0325	0.032	0.0761	0.0321	0.0207	0.0237	0.0434	0.0349	0.0789	0.0766	0.0936
Iron, total	mg/L	0.258	0.253	0.481	0.353	0.129	0.123	0.105	0.123	0.104	0.091	0.135	0.103	0.386	0.237	0.124	0.033	1.07	0.59	1.85	1.4	1.78
Lead, total	mg/L	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0003	<0.0002	0.0004	0.0004	0.0005
Magnesium, total	mg/L	14.4	14.7	14.4	12.9	13.5	11.2	13.3	13.5	13.9	14.3	14.4	15.7	29.8	16.4	16.4	19.3	15.3	17.3	14.1	17.9	16.6
Manganese, total	mg/L	0.077	0.045	0.073	0.048	0.013	0.014	0.015	0.017	0.026	0.032	0.038	0.032	0.059	0.036	0.038	0.032	0.072	0.053	0.097	0.091	0.099
Mercury, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.007	0.006	0.006	0.004	0.005	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.01	0.006	0.006	0.006	0.005	0.005	0.005	0.006	0.006
Nickel, total	mg/L	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, total	mg/L	0.022	0.025	0.034	0.022		0.029	0.018	0.036	0.017	0.014	0.012	0.066	0.128	0.023	0.011	<0.01	0.03	0.022	0.115	0.048	0.045
Potassium, total	mg/L	3.7	3.41	3.25	2.7	2.52	2.31	2.64	2.66	2.73	2.89	2.98	3.19	6.52	3.63	3.27	3.76	3.07	3.36	3.16	3.85	3.59
Selenium, total	mg/L	0.0012	0.001	0.0012	0.0011	0.0012	0.0011	0.0012	0.0011	0.0015	0.0013	0.0014	0.0014	0.0028	0.0015	0.0012	0.0016	0.0011	0.0014	0.0011	0.0012	0.0012
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00007	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00004	0.00003	0.00004
Sodium, total	mg/L	15.5	15.8	13.9	11.7	11.7	9.64	12	12.2	13.1	13	12.9	14.8	29.6	15.1	15.3	18.3	13.8	15.9	12.6	16.6	14.9
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.018	0.01	<0.005	<0.005	0.006	<0.005	0.008	0.008	0.009
Aluminum, dissolved	mg/L	0.019	0.016	0.02	0.017	0.015	0.018	0.027	0.016	0.02	0.023	0.026	0.013	0.0162	0.0191	0.006	0.0063	0.0056	0.0075	0.0058	0.0051	0.0173
Arsenic, dissolved	mg/L	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.00079	0.00041	0.00042	0.00049	0.00041	0.00038	0.00036	0.00043	0.00039
Cadmium, dissolved	mg/L	0.00006	0.00002	0.00003	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00003	0.00002	0.000045	0.000031	0.000018	0.000025	0.000025	0.000028	0.000021	0.000015	0.000023
Calcium, dissolved	mg/L	45.5	45.9	47.5	47.9	48.6	46.5	51	49.7	51.8	48.5	50.6	50.6	93.2	61	58	62.7	55.1	57.3	48.4	57.8	55.8
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0271	0.0259	0.0398	0.032	0.0297	0.0307	0.0303	0.0308	0.0297	0.0318	0.0315	0.0287	0.0568	0.03	0.0181	0.0245	0.0244	0.0259	0.0294	0.0269	0.0289
Iron, dissolved	mg/L	0.064	0.049	0.082	0.091	0.065	0.063	0.105	0.058	0.066	0.079	0.089	0.065	0.0934	0.072	0.0289	0.0352	0.029	0.033	0.0286	0.0247	0.0551
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	14.7	13.9	14.4	13.5	13.7	13.7	13.5	14.7	14.1	15.4	15.1	15.4	29.6	16.9	17.9	19.4	17.4	17.3	14.9	17.9	17
Manganese, dissolved	mg/L	0.019	0.025	0.02	0.006	0.006	0.007	0.008	0.008	0.019	0.024	0.028	0.026	0.0555	0.0289	0.0333	0.0322	0.0331	0.0343	0.0393	0.0347	0.0405
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, dissolved	mg/L	0.006	0.006	0.005	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.0086	0.0061	0.0062	0.0059	0.0059	0.0058	0.0052	0.0059	0.0056
Nickel, dissolved	mg/L	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.0026	0.0013	<0.0010	0.0018	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.025	<0.01	<0.01	<0.01		0.01	<0.01	<0.01	0.01	<0.01	0.011	<0.01	0.024	<0.01	<0.01	<0.01	<0.01	0.012	0.013	<0.01	0.013
Potassium, dissolved	mg/L	3.8	3.31	2.91	2.76	2.74	2.69	2.79	3.02	3.13	3.05	3.07	3	6.58	3.42	3.6	3.84	3.48	3.48	3.16	3.61	3.43
Selenium, dissolved	mg/L	0.0011	0.0013	0.0013	0.0013	0.0013	0.0013	0.0014	0.0014	0.0016	0.0016	0.0016	0.0016	0.00341	0.00174	0.00157	0.00167	0.00136	0.00151	0.00133	0.00154	0.00138
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	16.6	15.1	13.7	12.4	12.2	12.5	12.6	13.7	13.3	14.4	13.9	14.5	29.4	16.2	16.8	18.3	16.5	16.5	13.6	17.2	15.9
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	0.007	<0.005	0.0185	0.0107	<0.0050	0.0054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**05/04/2012**	**06/04/2012**	**08/04/2012**	**10/04/2012**	**11/04/2012**	**12/04/2012**	**13/04/2012**	**14/04/2012**	**15/04/2012**	**16/04/2012**	**17/04/2012**	**18/04/2012**	**19/04/2012**	**20/04/2012**	**21/04/2012**	**22/04/2012**	**23/04/2012**	**24/04/2012**	**25/04/2012**	**26/04/2012**	**27/04/2012**
pH (field)	pH units				7.7	8.27	7.66	7.7	7.73	7.68	7.67	7.83	7.74	8.4	8.37	7.62	7.47	7.99	8.06		7.58	7.78
pH (lab)	pH units	8.05	8.08	8.13	7.87	7.79	7.68	7.67	7.68	7.86	7.79	7.73	7.8	7.82	7.56	7.56	7.57	7.55	7.48	7.68	7.52	7.55
Hardness (from dissolved)	mg/L	184	200	224	83.2	43.5	47.9	219	55.7	52.5	44.9	45.4	43.9	39.4	35.7	35.9	33.9	29.5	30.4	29.2	28.5	26.5
Hardness (from total)	mg/L	161	169	208	85	52.6	44.8	32.1	56.5	50.8	47.7	42.2	39.7	40.8	35.2	34.7	32.8	35.3	29.9	30.9	29.6	25.7
Total Dissolved Solids	mg/L	292	320	300	114	76	72	58	54	62	54	56	56	48	40	46	46	48	40	46	52	32
Total Suspended Solids	mg/L	31.3	42.1	9.3	36.2	39.8	23	11	5.9	2.5	3.6	3.2	3.4	4.9	3.7	17.8	8.1	4.1	2.3	8.3	2.6	1.7
Alkalinity, total	mg/L	149	173	179	73.6	48.5	39.5	32.3	44	47.4	39.6	38.8	38.5	36.8	32.2	31.1	28.2	28.7	26.7	26.4	26	24
Sulphate, dissolved	mg/L	36.1	47.4	47.4	14.2	10.7	8.19	4.43	8.05	8.14	6.94	6.92	5.56	6.61	3.46	3.71	2.38	2.83	2.44	2.45	2.88	2.41
Chloride	mg/L	3.9	4.5	4.7	2.2	2	1.5	0.6	1.2	0.83	1.1	0.71	0.68	0.84	0.68	0.81	0.65	0.61	0.76	<0.50	<0.50	<0.50
Fluoride	mg/L	0.32	0.35	0.37	0.2	0.21	0.18	0.12	0.16	0.16	0.14	0.13	0.12	0.12	0.11	0.11	0.099	0.11	0.099	0.1	0.096	0.083
Nitrite (N)	mg/L	0.014	0.013	0.01	0.031	0.037	0.041	0.0132	0.015	0.0094	0.0095	0.0083	0.0076	0.008	0.007	0.0078	<0.0050	0.0058	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (N)	mg/L	3.31	4.08	4.31	1.39	0.769	0.592	0.476	0.838	0.974	0.786	0.72	0.612	0.535	0.449	0.439	0.386	0.338	0.345	0.315	0.305	0.293
Ammonia	mg/L	0.0099	0.009	0.0191	<0.0050	<0.0050	<0.0050	0.089	0.012	0.019	0.012	0.04	0.0268	0.0212	0.013	0.032	0.015	0.013	0.0098	0.017	0.023	0.02
Aluminum, total	mg/L	1.03	1.22	0.21	1.99	2.68	1.98	0.628	0.668	0.339	0.42	0.244	0.246	0.298	0.261	0.489	0.224	0.27	0.236	0.336	0.184	0.128
Arsenic, total	mg/L	0.0006	0.0006	0.0005	0.0006	0.0007	0.0006	0.00023	0.00037	0.00026	0.00022	0.00022	0.00022	0.00023	0.0002	0.00024	0.0002	<0.00025	0.00018	0.00022	0.00011	0.00022
Cadmium, total	mg/L	0.00003	0.00004	0.00002	0.00004	0.00005	0.00005	0.000017	0.000018	0.000011	0.00001	0.000014	0.000037	0.000015	0.000013	0.000019	0.000015	<0.000025	0.000013	0.000015	0.000022	<0.000010
Calcium, total	mg/L	43	45.5	55.5	23	14.4	12.4	9.27	15.9	14.8	14.2	12.3	11.5	11.8	10.4	10.1	9.72	10.9	8.91	9.28	8.93	7.78
Chromium, total	mg/L	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0025	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0774	0.0828	0.0319	0.112	0.143	0.119	0.0416	0.045	0.0309	0.0284	0.0245	0.0236	0.0291	0.0254	0.0355	0.0439	0.0255	0.0255	0.0275	0.0293	0.0231
Iron, total	mg/L	1.53	1.81	0.33	2.68	3.47	2.5	0.724	0.838	0.429	0.508	0.314	0.331	0.435	0.292	0.757	0.382	0.55	0.279	0.423	0.251	0.252
Lead, total	mg/L	0.0004	0.0005	<0.0002	0.0008	0.001	0.0009	0.00029	0.00027	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00022	<0.00020	<0.00050	<0.00020	0.00021	0.0005	<0.00020
Magnesium, total	mg/L	12.9	13.4	16.8	6.71	4.04	3.36	2.18	4.08	3.35	2.97	2.81	2.65	2.75	2.27	2.29	2.08	1.97	1.86	1.87	1.79	1.51
Manganese, total	mg/L	0.096	0.113	0.04	0.12	0.109	0.084	0.0376	0.0447	0.0301	0.0293	0.0425	0.0417	0.042	0.0332	0.0442	0.0375	0.0314	0.0321	0.0356	0.0298	0.0256
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.004	0.005	0.006	0.002	0.002	0.002	<0.0010	0.0017	0.0013	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0025	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, total	mg/L	0.001	0.001	<0.001	0.001	0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0025	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L	0.043	0.048	0.019	0.054	0.064	0.05	0.022	0.025	0.02	0.029	0.019	0.017	0.02	0.018	0.054	0.037	<0.025	0.019	0.017	0.019	0.017
Potassium, total	mg/L	2.99	3.15	3.3	2.01	1.79	1.53	0.918	1.38	1.03	0.911	0.9	0.932	0.98	0.873	0.88	0.898	1.03	0.806	0.816	0.773	0.634
Selenium, total	mg/L	0.0009	0.001	0.0013	0.0006	0.0005	0.0004	0.00025	0.00044	0.00031	0.00026	0.0003	0.0003	0.00025	0.0002	0.00022	0.00021	0.00033	0.00022	0.0003	0.00025	0.00018
Silver, total	mg/L	0.00003	0.00003	<0.00002	0.00005	0.00007	0.00007	0.000023	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000050	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	11.6	11.4	15.4	5.39	3.62	3.07	1.85	3.79	3.04	2.59	2.52	2.24	2.28	1.85	1.72	1.6	1.78	1.47	1.5	1.47	1.28
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.00013	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.006	0.008	<0.005	0.01	0.014	0.011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0064	<0.0050	<0.013	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.021	0.0094	0.007	0.0068	0.0094	0.006	0.0064	0.0072	0.008	0.0085	0.0083	0.0068	0.0106	0.0104	0.0091	0.0088	0.0106	0.0106	0.0099	0.0116	0.0084
Arsenic, dissolved	mg/L	0.00035	0.00035	0.0004	0.00015	0.00011	0.0002	0.00035	0.00012	0.00012	0.00012	0.00014	<0.00010	0.00011	<0.00010	<0.00010	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Cadmium, dissolved	mg/L	0.000028	0.000022	0.000013	0.00002	<0.000010	0.000014	0.000012	0.000014	<0.000010	0.000011	0.000011	<0.000010	0.000012	0.000015	0.000011	0.000013	0.000014	0.000014	<0.000010	0.00001	0.000012
Calcium, dissolved	mg/L	49.2	53.4	59.6	23.4	12.9	14	57.9	15.9	15.2	13	13.1	13	11.8	10.7	10.8	10.2	8.96	9.29	8.86	8.71	8.21
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0317	0.0265	0.0223	0.0212	0.0121	0.0157	0.00658	0.0155	0.0148	0.0128	0.0164	0.0145	0.0154	0.0175	0.0167	0.0176	0.0145	0.0151	0.0154	0.0156	0.0131
Iron, dissolved	mg/L	0.0597	0.0365	0.0327	0.0208	0.0181	0.016	0.0131	0.0134	0.0156	0.02	0.0269	0.0246	0.0345	0.0299	0.0222	0.0292	0.0254	0.0242	0.0231	0.0267	0.0186
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	14.7	16.2	18.2	6	2.75	3.13	18.1	3.88	3.54	3	3.08	2.78	2.44	2.17	2.14	2.03	1.72	1.74	1.73	1.63	1.46
Manganese, dissolved	mg/L	0.0497	0.0446	0.0328	0.0522	0.0144	0.0231	0.0759	0.0249	0.02	0.0181	0.0338	0.0358	0.0316	0.0279	0.0221	0.0284	0.0217	0.0236	0.0244	0.0252	0.0202
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0048	0.0052	0.0059	0.0023	0.0023	0.0018	0.0064	0.0016	0.0013	0.0011	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, dissolved	mg/L	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.023	0.011	0.01	0.012	0.013	0.012	0.02	0.012	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	3.19	3.33	3.56	1.76	1.27	1.27	3.56	1.17	0.969	0.849	0.897	0.882	0.83	0.871	0.778	0.822	0.798	0.794	0.745	0.736	0.633
Selenium, dissolved	mg/L	0.00122	0.00137	0.00158	0.00057	0.00053	0.00057	0.00085	0.00047	0.00042	0.00032	0.00035	0.0003	0.00024	0.00023	0.00023	0.00019	0.00023	0.00022	0.0002	0.00016	0.00017
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	13.3	14.7	16.9	5.33	2.87	3.32	16.7	3.6	3.3	2.7	2.82	2.39	2.1	1.83	1.84	1.7	1.63	1.44	1.47	1.42	1.25
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0097	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**28/04/2012**	**29/04/2012**	**30/04/2012**	**01/05/2012**	**02/05/2012**	**03/05/2012**	**04/05/2012**	**05/05/2012**	**06/05/2012**	**07/05/2012**	**08/05/2012**	**09/05/2012**	**13/05/2012**	**14/05/2012**	**24/05/2012**	**03/06/2012**	**08/06/2012**	**15/06/2012**	**24/06/2012**	**28/06/2012**	**05/07/2012**
pH (field)	pH units		9.03	8.27	7.67	7.36	7.72	7.16	7.33	7.41	7.35	6.81	7.32	7.66	8.02	8.42	8.31	8.01	7.71	8.26	8.28	7.88
pH (lab)	pH units	7.61	7.53	7.54	7.5	7.59	7.65	7.72	7.78	7.84	7.63	7.78		8.15	8.14	8.09	8.21	8.05	7.98	7.96	8.19	8.29
Hardness (from dissolved)	mg/L	24.8	20.6	19.6	18.2	15.4	17.1	69.7	70	103	96.3	98.7		138	142	109	97.7	90.4	97.4	110	121	125
Hardness (from total)	mg/L	20.6	22.1	25.7	24	24.6	41.6	66.3	69.6	102	85.2	84.8		131	130	117	97.7	94.6	97.2	105	110	122
Total Dissolved Solids	mg/L	38	24	26	52	26	70	76	114	156	140	148		196	212	130	140	138	168	188	172	192
Total Suspended Solids	mg/L	5.3	4.4	7.7	5.7	<1.0	4.1	4.3	3.8	5.7	10.7	6.2		7	6.6	8.2	12.7	2.6	3.5	15.8	2.7	1.8
Alkalinity, total	mg/L	24.9	20.1	16.5	20.6	21.9	32.6	51.9	59	86.3	77.1	77.4		116	116	99.1	92.8	85.1	82.3	93.1	99.4	109
Sulphate, dissolved	mg/L	<0.50	<0.50	<0.50	1.08	2.05	0.82	3.11	3.1	19.3	13.9	14.7		28.2	27.8	21.1	20	19.6	22	25	25	26.4
Chloride	mg/L	0.55	<0.50	<0.50	<0.50	<0.50	1.5	1.8	2.3	2.8	2.6	2.7		3.4	3.6	3	3.5	2.5	2.3	2.5	2.6	2.3
Fluoride	mg/L	0.11	0.09	0.39	0.084	0.086	0.11	0.13	0.14	0.2	0.17	0.17		0.23	0.23	0.18	0.16	0.15	0.14	0.16	0.16	0.17
Nitrite (N)	mg/L	0.0053	<0.0050	<0.0050	<0.0050	0.0053	<0.0050	0.0056	0.0053	<0.0050	0.0058	0.0088		0.0073	0.0102	0.0122	0.0084	0.0083	0.0478	0.0451	0.0357	0.0289
Nitrate (N)	mg/L	0.191	0.115	0.113	0.161	0.208	0.298	0.615	0.713	1.26	1.02	1.04		1.82	1.83	1.71	1.66	1.49	2.68	3.19	3.12	3.12
Ammonia	mg/L	0.025	0.021	0.015	0.02	0.0084	0.02	0.023	0.017	0.019	0.017	0.088		0.063	0.08	0.025	0.068	0.026	0.15	0.043	0.053	0.0074
Aluminum, total	mg/L	0.323	0.17	0.157	0.332	0.0965	0.119	0.439	0.218	0.249	0.248	0.361		0.279	0.25	0.324	0.367	0.0794	0.159	0.265	0.0241	0.041
Arsenic, total	mg/L	0.00023	0.00024	0.0002	0.00016	0.00013	0.00026	0.00059	0.00038	0.00045	0.00039	0.00043		0.00049	0.00048	0.00024	0.00031	0.00029	0.00032	0.00063	0.00028	0.00037
Cadmium, total	mg/L	0.000064	0.000033	0.000026	0.000018	0.000036	0.000232	0.000131	0.000031	0.000052	0.000043	0.000037		0.000032	0.000035	0.000063	0.000018	<0.000010	0.00002	0.000032	0.000027	0.000011
Calcium, total	mg/L	6.54	7.04	8.04	7.08	7.24	11.7	17.4	18.6	27.5	22.6	22.7		34.1	33.8	30.8	25.6	25.2	25.5	28.4	29.6	31.9
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0308	0.0212	0.0253	0.031	0.0207	0.0272	0.0689	0.0376	0.0415	0.039	0.0416		0.0385	0.0365	0.0348	0.0398	0.0199	0.035	0.0386	0.0199	0.0206
Iron, total	mg/L	0.572	0.274	0.23	0.568	0.238	0.192	0.744	0.359	0.476	0.448	0.619		0.564	0.527	0.705	0.761	0.246	0.413	0.618	0.137	0.175
Lead, total	mg/L	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00026	<0.00020	<0.00020	<0.00020	0.0002		<0.00020	<0.00020	<0.00040	0.00038	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	1.03	1.1	1.37	1.54	1.59	3.04	5.55	5.65	8.15	7.01	6.83		11.2	11.1	9.75	8.2	7.67	8.16	8.22	8.82	10.2
Manganese, total	mg/L	0.0351	0.0204	0.0209	0.0404	0.0286	0.0422	0.127	0.0973	0.124	0.13	0.145		0.173	0.171	0.147	0.13	0.0782	0.0763	0.0704	0.0302	0.0242
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0014	0.0026	0.0019	0.0018		0.0027	0.003	0.0023	0.0022	0.0022	0.0022	0.0025	0.0026	0.0028
Nickel, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0018	0.0017	0.0011	0.0011	0.0012	0.0012		0.0016	0.0016	0.0022	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L	0.023	0.023	0.018	0.027	0.014	0.024	0.088	0.036	0.037	0.035	0.04		0.038	0.039	0.032	0.033	0.016	0.024	0.023	0.016	0.018
Potassium, total	mg/L	0.564	0.563	0.703	0.852	0.603	1.02	3.41	1.58	2.03	1.69	1.65		2.25	2.23	2.12	1.9	1.7	1.83	1.87	1.79	1.91
Selenium, total	mg/L	0.00011	0.00018	0.00013	0.00017	0.00011	0.00027	0.0003	0.00035	0.00057	0.00044	0.00039		0.00057	0.00064	0.00093	0.00047	0.00046	0.00035	0.00055	0.00061	0.00073
Silver, total	mg/L	0.000022	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000040	0.000025	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	0.746	0.844	1.02	1.46	1.28	2.15	4.49	4.52	6.69	5.73	5.55		9.58	10	11.3	10.2	9.84	8.86	8.12	8.53	9.47
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.00010	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.023	0.0141	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	0.011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0253	0.021	0.0196	0.0184	0.0093	0.0173	0.16	0.0451	0.0304	0.0326	0.0315		0.021	0.0207	0.0749	0.0168	0.0116	0.0104	0.0092	0.004	0.0066
Arsenic, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00054	0.00031	0.00036	0.00033	0.00032		0.00038	0.00039	0.00032	0.00031	0.00025	0.00029	0.00035	0.00035	0.00033
Cadmium, dissolved	mg/L	<0.000010	0.00001	0.000013	<0.000010	0.00001	0.000012	0.000109	0.000043	0.000034	0.000035	0.000032		0.000031	0.000033	0.000029	0.000012	0.000015	0.000015	0.000016	0.000011	0.00004
Calcium, dissolved	mg/L	7.94	6.79	6.49	5.69	4.87	5.4	18.9	19.2	27.9	26	26.7		36.4	37.2	29.4	25.8	23.9	25.8	29.3	32.6	34.4
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0138	0.0116	0.0117	0.0111	0.00795	0.0109	0.0509	0.0311	0.0373	0.0326	0.0299		0.0293	0.0301	0.0253	0.0213	0.0186	0.0212	0.0232	0.0193	0.0179
Iron, dissolved	mg/L	0.0398	0.0276	0.0249	0.032	0.0501	0.0312	0.333	0.146	0.16	0.172	0.171		0.162	0.166	0.212	0.118	0.0922	0.0918	0.0934	0.0692	0.0732
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	1.21	0.879	0.816	0.973	0.796	0.873	5.48	5.37	8.1	7.59	7.77		11.4	11.9	8.75	8.06	7.46	7.99	8.9	9.65	9.53
Manganese, dissolved	mg/L	0.0103	0.0083	0.0088	0.0126	0.0136	0.0143	0.112	0.093	0.113	0.126	0.129		0.162	0.169	0.128	0.0989	0.072	0.0683	0.0413	0.0032	0.0137
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	0.0013	0.0027	0.0019	0.0018		0.0028	0.003	0.0026	0.0023	0.0022	0.0024	0.0027	0.0027	0.0029
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	<0.0010	<0.0010	0.001	0.001		0.001	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	0.048	0.021	0.017	0.018	0.018		0.015	0.016	0.043	<0.01	<0.01	<0.01	<0.01	<0.01	0.015
Potassium, dissolved	mg/L	0.679	0.503	0.483	0.547	0.397	0.476	4.14	1.58	1.97	1.91	1.95		2.3	2.43	1.91	1.93	1.73	1.88	1.95	2.02	2.1
Selenium, dissolved	mg/L	0.00013	<0.00010	<0.00010	<0.00010	0.00011	<0.00010	0.00035	0.0004	0.00058	0.00055	0.00055		0.00082	0.0008	0.00064	0.00056	0.00056	0.00053	0.00061	0.00063	0.00077
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	0.954	0.756	0.708	0.879	0.74	0.823	4.38	4.28	6.69	6.2	6.38		10.1	11.1	9.97	10.3	9.28	8.98	9.03	9.5	8.82
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0114	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**15/07/2012**	**17/07/2012**	**24/07/2012**	**02/08/2012**	**07/08/2012**	**16/08/2012**	**27/08/2012**	**03/09/2012**	**05/09/2012**	**05/09/2012**	**10/09/2012**	**17/09/2012**	**24/09/2012**	**06/10/2012**	**12/10/2012**	**19/10/2012**	**22/10/2012**	**25/10/2012**	**04/11/2012**	**05/11/2012**	**09/11/2012**
pH (field)	pH units	8.13	8.22	8.49	8.14	8.13	8.1	8.41	7.98	6.71		7.92	7.79	7.67	7.8	7.77	7.9	8.4	8.2		7.01	7.93
pH (lab)	pH units	8.09	8.15	8.24	8.24	8.21	8.3	8.38	8.24		8.26	8.19	8.01	8.22	8.02	8	8.07	8.02	8.09	8.29		8.23
Hardness (from dissolved)	mg/L	136	142	144	157	155	163	164	168		167	175	177	179			118	183	201	206		190
Hardness (from total)	mg/L	131	136	140	148	166	170	166	161		194	168	158	185	190	180	179	189	198	200		189
Total Dissolved Solids	mg/L	210	196	206	218	250	248	222	246		248	244	276	252	258	272	248	244	284	262		272
Total Suspended Solids	mg/L	1.8	2.9	4.3	1.8	6.9	9.4	2.3	2.3		1.8	5.5	4.7	8.1	2.1	2	5.7	2	2.2	1.5		4.7
Alkalinity, total	mg/L	111	116	120	129	133	135	145	143		146	146	144	146	147	150	148	152	159	160		156
Sulphate, dissolved	mg/L	29.5	28.4	28.4	31	19.8	30.2	35.9	33.8		34.1	32.8	33.9	34.8	36.7	37.3	42.4	38.8	40.4	40.8		39.8
Chloride	mg/L	2.8	2.6	3	2.6	21	2.8	3.4	2.7		3.2	3.4	3.3	3.1	3.2	3.3	3.5	3	3.6	3.6		3.4
Fluoride	mg/L	0.18	0.18	0.2	0.22	0.21	0.22	0.22	0.23		0.24	0.23	0.23	0.23	0.24	0.24	0.22	0.22	0.24	0.26		0.26
Nitrite (N)	mg/L	0.0226	0.022	0.0163	0.0159	<0.050	0.0134	0.0112	0.0132		0.0164	0.0191	0.0203	0.0179	0.0153	0.0128	0.0107	0.0165	0.0114	0.0116		0.0101
Nitrate (N)	mg/L	2.92	2.14	2.84	2.96	3	3.42	3.15	3.16		3.38	3.31	3.86	3.73	3.82	3.48	3.45	3.29	4.15	4.07		3.93
Ammonia	mg/L	0.012	0.025	0.077	0.0055	0.025	0.024	<0.0050	0.032		0.012	0.068	0.11	0.14	0.21	0.045	0.048	0.032	0.045	0.023		0.028
Aluminum, total	mg/L	0.0262	0.0401	0.226	0.0195	0.188	0.225	0.0309	0.0183		0.027	0.101	0.0999	0.0874	0.0467	0.0447	0.0471	0.0741	0.0398	0.0497		0.0434
Arsenic, total	mg/L	0.00033	0.00035	0.00043	0.00037	0.00042	0.00038	0.00032	0.00025		0.00039	0.00038	0.00032	0.00039	0.0004	0.0004	0.00044	0.0004	0.00045	0.00054		0.000361
Cadmium, total	mg/L	<0.000010	0.000019	0.000025	<0.000010	0.000012	0.000015	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	0.000015	0.000011	<0.000010	<0.000010	0.000015	0.000013	0.000143		0.000008
Calcium, total	mg/L	35.2	36	36.9	39.7	44	45.5	44.9	43.2		51.7	45.2	41.9	49.7	50	47.5	48.1	49.9	52.3	53.7		51.1
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		0.00013
Copper, total	mg/L	0.0194	0.0214	0.0556	0.0175	0.0341	0.109	0.0196	0.018		0.022	0.0263	0.0272	0.0267	0.0224	0.0223	0.0249	0.0298	0.0253	0.0307		0.0215
Iron, total	mg/L	0.129	0.165	0.482	0.0835	0.36	0.519	0.103	0.0698		0.0963	0.196	0.178	0.202	0.102	0.103	0.0999	0.173	0.122	0.116		0.103
Lead, total	mg/L	<0.00020	<0.00020	0.00025	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00109		0.000046
Magnesium, total	mg/L	10.4	11.3	11.5	11.9	13.6	13.7	13	12.9		15.7	13.5	12.9	14.7	15.9	14.9	14.4	15.6	16.4	16		15
Manganese, total	mg/L	0.0104	0.0116	0.0263	0.008	0.0231	0.0274	0.0075	0.0124		0.0178	0.0466	0.0484	0.0444	0.0383	0.0312	0.0235	0.0227	0.0139	0.0088		0.0056
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Molybdenum, total	mg/L	0.003	0.0031	0.0032	0.0033	0.0034	0.0036	0.0034	0.0034		0.004	0.0036	0.0033	0.0039	0.0043	0.0041	0.0037	0.0039	0.0042	0.0043		0.00393
Nickel, total	mg/L	0.001	<0.0010	0.0011	<0.0010	0.0011	<0.0010	<0.0010	0.001		0.0012	<0.0010	0.0011	0.0081	<0.0010	0.0011	0.0013	<0.0010	0.0014	0.002		0.000799
Phosphorus, total	mg/L	0.014	0.018	0.034	0.012	0.029	0.048	0.012	0.016		0.013	0.015	0.018	0.02	0.016	<0.01	0.016	0.121	0.018	0.069		
Potassium, total	mg/L	1.99	2.11	2.2	2.1	2.4	2.47	2.31	2.27		2.68	2.29	2.25	2.53	2.7	2.52	2.57	3.07	2.96	4.42		2.81
Selenium, total	mg/L	0.00055	0.0006	0.00062	0.0008	0.00091	0.00087	0.00065	0.00062		0.00084	0.00093	0.00074	0.00087	0.00105	0.00107	0.00088	0.0009	0.00104	0.00088		0.000949
Silver, total	mg/L	<0.000020	<0.000020	0.000025	<0.000020	<0.000020	0.000052	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.0000050
Sodium, total	mg/L	9.52	9.97	9.93	10.1	11.2	11.2	10.6	10.9		12.8	11	10.3	11.9	12.4	11.7	11.3	12.3	13.1	12.8		11.6
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		0.000002
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.009	0.0069	0.0056	0.0164		0.0026
Aluminum, dissolved	mg/L	0.0041	0.0067	0.0076	<0.0030	0.0058	<0.0030	0.0036	<0.0030		<0.0030	0.13	0.0053	0.0062			<0.0030	<0.0030	<0.0030	0.0124		0.00432
Arsenic, dissolved	mg/L	0.00038	0.00037	0.00036	0.00036	0.00038	0.00036	0.00034	0.00037		0.00038	0.00037	0.00041	0.00038			0.00018	0.00036	0.00038	0.00043		0.000382
Cadmium, dissolved	mg/L	<0.000010	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	0.000011	<0.000010	<0.000010			0.000022	<0.000010	<0.000010	0.000059		0.000007
Calcium, dissolved	mg/L	36.5	38.1	38.8	43.2	42.4	44.8	44.8	44.8		44.5	46.8	47.8	49.1			33.3	50.1	53.6	54.2		50.5
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010			<0.0010	<0.0010	<0.0010	<0.0010		0.00013
Copper, dissolved	mg/L	0.0189	0.0188	0.0198	0.0161	0.0168	0.0164	0.0176	0.0165		0.0173	0.0277	0.019	0.0178			0.023	0.0181	0.0186	0.023		0.0183
Iron, dissolved	mg/L	0.0713	0.0617	0.0687	0.0465	0.0465	0.0388	0.0344	0.0257		0.0264	0.174	0.0312	0.0368			0.0107	0.0207	0.0207	0.0394		0.0213
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020			<0.00020	<0.00020	<0.00020	0.00037		0.00002
Magnesium, dissolved	mg/L	10.9	11.4	11.5	12	11.9	12.4	12.7	13.8		13.4	14.2	14	13.7			8.46	14.1	16.3	17.2		15.5
Manganese, dissolved	mg/L	0.0027	0.002	0.0027	0.0022	0.0052	0.0038	0.0013	<0.0010		<0.0010	0.0567	0.0033	0.0015			0.0024	0.0013	0.0014	0.0018		0.00118
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		
Molydenum, dissolved	mg/L	0.0032	0.003	0.0034	0.0033	0.0033	0.0034	0.0036	0.0037		0.0037	0.0036	0.0038	0.0035			0.0019	0.0037	0.0041	0.0045		0.00431
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010			<0.0010	<0.0010	<0.0010	0.0014		0.000841
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	0.018	<0.01	<0.01			<0.01	<0.01	<0.01	0.046		
Potassium, dissolved	mg/L	2.06	2.13	2.26	2.24	2.29	2.19	2.41	2.5		2.36	2.56	2.42	2.54			1.93	2.61	2.78	3.54		2.86
Selenium, dissolved	mg/L	0.00076	0.00072	0.00076	0.0008	0.00079	0.00084	0.00075	0.00083		0.0008	0.00088	0.00096	0.00095			0.00048	0.00089	0.0012	0.00106		0.000955
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020			<0.000020	<0.000020	<0.000020	<0.000020		<0.0000050
Sodium, dissolved	mg/L	9.98	10.2	10.2	10.1	10.1	10.2	10.4	11.3		11	11.5	11.3	11			6.68	11.2	12.8	14.1		12.3
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050			<0.000050	<0.000050	<0.000050	<0.000050		<0.0000020
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050			0.0828	<0.0050	<0.0050	0.0092		0.00276

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**18/11/2012**	**24/11/2012**	**25/11/2012**	**07/03/2013**	**09/03/2013**	**09/03/2013**	**24/03/2013**	**28/03/2013**	**29/03/2013**	**30/03/2013**	**31/03/2013**	**01/04/2013**	**02/04/2013**	**03/04/2013**	**04/04/2013**	**05/04/2013**	**06/04/2013**	**07/04/2013**	**08/04/2013**	**09/04/2013**	**10/04/2013**
pH (field)	pH units	8		7.71	7.5	7.42	7.42	7.3	10.05	7.99	7.67	7.51	7.66		7.44	7.32	7.45	7.7	7.53	7.78	7.5	7.58
pH (lab)	pH units	7.95	8.09		7.97		7.99	8.04	8.09	8.12	8.12	8.16	7.9	8.11	8.07	8.13	8.04	8.09	7.98	8.24	8.02	8.17
Hardness (from dissolved)	mg/L	244	195		205		208	213	208	219	217	205	170	186	214	216	213	217	207	216	208	173
Hardness (from total)	mg/L	179	203		210		218	210	227	217	224	199	172	188	207	205	221	232	221	210	208	184
Total Dissolved Solids	mg/L	254	260		300		300	288	286	296	294	286	214	242	284	284	278	288	256	292	298	236
Total Suspended Solids	mg/L	1.5	<1.0		<1.0		1.5	8.5	5.2	<1.0	3.6	4.8	2.8	2	2.3	1.4	<1.0	1.4	2.7	6.4	5.7	7.1
Alkalinity, total	mg/L	157	159		177		182	185	187	189	189	170	137	159	184	186	185	188	176	182	182	152
Sulphate, dissolved	mg/L	41.2	39.2		41.1		40.7	45.1	44.4	47.7	47.3	47.9	45.6	43.4	46.1	50.1	44.9	45.8	43.9	46.9	43	38.9
Chloride	mg/L	3.8	3.7		3.5		3.6	4.6	4.1	4.2	4.5	4.8	4.4	4.3	4.4	4.1	4.1	4.1	4.1	4.5	4.1	3.9
Fluoride	mg/L	0.24	0.24		0.29		0.3	0.31	0.3	0.32	0.32	0.29	0.22	0.26	0.3	0.31	0.35	0.33	0.32	0.3	0.3	0.23
Nitrite (N)	mg/L	0.0114	0.0095		0.0079		0.008	0.0433	0.0079	0.053	<0.050	<0.050	0.0162	0.0145	0.008	0.007	0.0114	<0.050	<0.050	0.0134	0.0127	0.0244
Nitrate (N)	mg/L	1.85	3.86		3.24		3.36	3.31	3.39	3.84	3.69	3.65	4.69	5.58	3.33	3.27	3.39	3.46	3.31	3.17	3.03	2.8
Ammonia	mg/L	0.024	0.038		0.058		0.1	0.13	0.042	0.047	0.33	0.06	0.08	0.048	0.11	0.059	0.029	0.029	0.04	0.06	0.11	0.049
Aluminum, total	mg/L	0.0272	0.0127		0.01		0.0466	0.167	0.119	0.0116	0.0387	0.132	0.113	0.0897	0.0584	0.0438	0.0447	0.0492	0.0838	0.159	0.164	0.304
Arsenic, total	mg/L	0.00029	0.00035		0.00037		0.00041	0.00033	0.00032	0.00054	0.00044	0.00052	0.00055	0.00039	0.00034	0.00028	0.0003	0.00037	0.00039	0.00033	0.00039	0.00043
Cadmium, total	mg/L	0.000023	0.000059		<0.000010		<0.000010	0.00002	0.00002	<0.000010	0.000024	0.000012	0.000019	0.000029	0.00001	0.000017	<0.000010	<0.000010	<0.000010	0.000014	0.000016	0.000049
Calcium, total	mg/L	47.5	54.4		55.8		57.3	53.8	59.5	56.8	58.4	50.5	40.7	46	53.7	53.2	57.5	60.6	57.2	54.4	52.7	46.8
Chromium, total	mg/L	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.023	0.0201		0.0174		0.0313	0.0566	0.0541	0.0174	0.0275	0.0513	0.0396	0.0379	0.0219	0.0212	0.0205	0.0225	0.0254	0.0266	0.0499	0.0617
Iron, total	mg/L	0.0923	0.0407		0.0496		0.14	0.393	0.258	0.0517	0.162	0.305	0.196	0.183	0.134	0.122	0.108	0.133	0.177	0.271	0.377	0.475
Lead, total	mg/L	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	14.6	16.3		17.2		18.1	18.5	19	18.2	19.1	17.7	17.1	17.8	17.7	17.5	18.8	19.5	19.1	18	18.5	16.3
Manganese, total	mg/L	0.0046	0.0039		0.0173		0.0158	0.0265	0.0238	0.0164	0.0198	0.0209	0.0208	0.0188	0.0191	0.0139	0.0174	0.017	0.0199	0.0254	0.0328	0.0501
Mercury, total	mg/L	<0.000010	<0.000010		<0.000010		<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0039	0.0041		0.0045		0.0047	0.0045	0.0047	0.0043	0.0044	0.0043	0.0044	0.0043	0.0042	0.0043	0.0045	0.0048	0.0048	0.0048	0.004	0.0045
Nickel, total	mg/L	<0.0010	<0.0010		<0.0010		<0.0010	0.0012	<0.0010	0.001	0.0012	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	0.0011	0.0011	<0.0010	<0.0010
Phosphorus, total	mg/L	0.02	0.017		<0.01		0.014	0.022	0.021	<0.01	0.013	0.041	0.03	0.025	0.013	0.012	0.014	0.012	0.021	0.018	0.02	0.017
Potassium, total	mg/L	2.56	3.05		3.01		3.16	3.35	3.2	2.95	3.23	3.09	3.02	3.21	3.03	2.95	3.02	3.21	3.07	3.22	3.02	3.41
Selenium, total	mg/L	0.0011	0.00099		0.001		0.00089	0.00085	0.00095	0.00106	0.00097	0.00087	0.00077	0.001	0.00078	0.00094	0.00081	0.0008	0.00084	0.00089	0.00089	0.00099
Silver, total	mg/L	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000036	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	11.5	12.9		13.5		14.4	14.8	14.6	14.1	14.9	14.1	13.6	14.6	13.7	13.8	14.5	15.2	14.9	14	14.2	12.6
Thallium, total	mg/L	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0082	0.0064		<0.0050		<0.0050	0.016	<0.0050	<0.0050	0.007	<0.0050	<0.0050	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0073
Aluminum, dissolved	mg/L	0.0034	0.0388		<0.0030		0.0079	0.0057	<0.0030	0.0087	<0.0030	0.0067	0.009	<0.0030	0.0359	0.0041	0.0033	0.0133	<0.0030	0.0095	<0.0030	0.0054
Arsenic, dissolved	mg/L	0.00042	0.00038		0.00036		0.00037	0.00038	0.00036	0.00044	0.0004	0.00053	0.00046	0.00039	0.00039	0.00032	0.00033	0.00044	0.00043	0.00037	0.00036	0.00034
Cadmium, dissolved	mg/L	0.00003	0.00007		<0.000010		0.000014	0.000021	0.000012	<0.000010	0.000026	0.000021	0.000019	0.000022	0.00001	<0.000010	<0.000010	<0.000010	0.000013	0.000012	<0.000010	0.000031
Calcium, dissolved	mg/L	64.8	51.9		53.9		55.2	55.5	54.9	57.5	57.7	52.1	40.8	45.2	56.6	57.1	55.5	57.2	54.6	57	54.7	46.2
Chromium, dissolved	mg/L	<0.0010	<0.0010		<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.019	0.0264		0.0148		0.0164	0.0183	0.0151	0.0148	0.0158	0.0251	0.0283	0.0272	0.0185	0.0148	0.0152	0.0154	0.0155	0.0165	0.0159	0.0288
Iron, dissolved	mg/L	0.0289	0.105		0.02		0.0366	0.028	0.0229	0.0204	0.0207	0.017	0.0134	0.0162	0.103	0.0245	0.0228	0.02	0.0193	0.0404	0.0324	0.0206
Lead, dissolved	mg/L	<0.00020	<0.00020		<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	18.6	16		17.1		17.1	18.2	17.1	18.2	17.7	18.1	16.5	17.7	17.7	17.7	18.1	18.2	17.1	17.8	17.4	14.1
Manganese, dissolved	mg/L	0.0242	0.0109		0.0018		0.0014	0.0039	0.0017	0.0025	0.0036	0.009	0.0133	0.0121	0.0052	0.0028	0.0025	0.0033	0.0039	0.0031	0.006	0.0343
Mercury, dissolved	mg/L	<0.000010	<0.000010		<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0043	0.0041		0.0043		0.0045	0.0043	0.0044	0.0044	0.0042	0.0047	0.0045	0.0044	0.0042	0.0043	0.0041	0.0044	0.0043	0.0044	0.0041	0.0039
Nickel, dissolved	mg/L	<0.0010	0.0018		<0.0010		<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.012	0.033		<0.01		0.02	<0.01	<0.01	<0.01	<0.01	0.036	0.023	0.019	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	3.28	3		2.95		3.03	3.33	3.03	3.22	3.29	3.43	3.17	3.35	3.2	3.13	3.28	3.1	2.96	3.1	3.15	3.21
Selenium, dissolved	mg/L	0.00168	0.00108		0.00097		0.00107	0.00095	0.00105	0.001	0.0009	0.00104	0.00093	0.00101	0.00087	0.001	0.00101	0.00102	0.00099	0.00097	0.00105	0.00091
Silver, dissolved	mg/L	<0.000020	<0.000020		<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	13.4	12.7		13.6		13.8	14.8	13.5	14.6	14.3	14.9	13.5	14.6	14.1	14.2	14.4	14.4	13.6	14.2	13.9	11
Thallium, dissolved	mg/L	<0.000050	<0.000050		<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	0.0059	0.0657		<0.0050		0.0074	0.0123	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**12/04/2013**	**13/04/2013**	**14/04/2013**	**15/04/2013**	**16/04/2013**	**17/04/2013**	**18/04/2013**	**19/04/2013**	**20/04/2013**	**25/04/2013**	**17/05/2013**	**18/05/2013**	**18/05/2013**	**19/05/2013**	**20/05/2013**	**21/05/2013**	**22/05/2013**	**23/05/2013**	**25/05/2013**	**26/05/2013**	**27/05/2013**
pH (field)	pH units	7.4	7.6	7.4	7.7	7.5		7.53	8.31	7.87	7.95	7.48	7.89	8	7.85	7.49	8.6	8.2	8.07	7.62	7.8	8.1
pH (lab)	pH units	7.99	8.1	8.09	8.16		7.92	7.95	7.98	8.05	8.01		7.46						7.62			
Hardness (from dissolved)	mg/L	217	209	204	210		188	189	222	229	188		44.4						53.4			
Hardness (from total)	mg/L	224	213	206	220		214	213	230	223	200		47.3						54			
Total Dissolved Solids	mg/L	296	286	278	302		294	282	308	294	254		112						112			
Total Suspended Solids	mg/L	2.1	2.1	5.1	2.5		1.7	1.2	2.4	5.3	6.7		19.6						18.3			
Alkalinity, total	mg/L	186	185	175	182		183	181	184	185	164		35.5						43.6			
Sulphate, dissolved	mg/L	46.8	43.5	44.6	44.6		47.4	43.6	43.3	42.7	38.5		<0.50						<0.50			
Chloride	mg/L	4.6	4.6	4.5	4.5		4.9	5	4	4.5	5.9		4.3						4.6			
Fluoride	mg/L	0.3	0.3	0.28	0.31		0.3	0.3	0.32	0.31	0.28		0.1						0.11			
Nitrite (N)	mg/L	0.0099	0.0076	0.0206	0.0054		0.0103	0.0086	0.0104	0.0131	0.0192		0.021						0.0338			
Nitrate (N)	mg/L	3.2	3.13	3.16	3.17		3.89	3.37	3.5	3.24	2.82		0.778						0.812			
Ammonia	mg/L	0.023	0.014	0.13	0.059		0.067	0.031	0.011	0.022	0.025		0.032						0.047			
Aluminum, total	mg/L	0.0691	0.0609	0.172	0.0859		0.0421	0.04	0.0582	0.115	0.443		1.14						1.18			
Arsenic, total	mg/L	0.00035	0.00034	0.00036	0.00038		0.00032	0.00031	0.00033	0.00038	0.00043		0.00071						0.00058			
Cadmium, total	mg/L	<0.000010	<0.000010	0.000024	0.000012		0.000011	<0.000010	0.000015	0.000033	<0.000010		0.000026						0.00002			
Calcium, total	mg/L	59.6	56	54.2	57.7		56.1	55.9	59.6	57.3	52.7		12.8						14.5			
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		0.0013						0.0013			
Copper, total	mg/L	0.0254	0.0204	0.0514	0.025		0.02	0.0199	0.0222	0.0336	0.0523		0.0656						0.0674			
Iron, total	mg/L	0.183	0.163	0.375	0.219		0.154	0.166	0.201	0.314	0.743		1.78						1.52			
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		0.00048						0.00038			
Magnesium, total	mg/L	18.3	17.8	17.2	18.4		17.9	17.9	19.6	19.5	16.5		3.7						4.31			
Manganese, total	mg/L	0.0362	0.0277	0.0472	0.0279		0.0253	0.026	0.0285	0.0455	0.0513		0.0953						0.0797			
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010						<0.000010			
Molybdenum, total	mg/L	0.0042	0.0043	0.0045	0.0048		0.0043	0.0042	0.0046	0.0046	0.0039		0.0011						0.0017			
Nickel, total	mg/L	<0.0010	<0.0010	0.0011	<0.0010		<0.0010	<0.0010	<0.0010	0.0012	0.0012		0.0022						0.0021			
Phosphorus, total	mg/L	0.012	0.015	0.015	0.013		0.016	0.013	0.013	0.023	0.021		0.07						0.058			
Potassium, total	mg/L	3.21	2.92	3.48	2.98		2.89	2.83	3.08	3.34	2.94		1.76						2.07			
Selenium, total	mg/L	0.00091	0.00066	0.00086	0.00081		0.00074	0.00065	0.0008	0.00074	0.00095		0.00026						0.00029			
Silver, total	mg/L	<0.000020	<0.000020	0.000032	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020						0.00002			
Sodium, total	mg/L	14.4	13.5	13.3	14.4		13.9	13.9	15.4	15.5	14		3.51						5.57			
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050						<0.000050			
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		0.0056	<0.0050	<0.0050	0.0061	<0.0050		0.0065						0.0051			
Aluminum, dissolved	mg/L	<0.0030	<0.0030	0.0041	0.0066		<0.0030	0.0054	<0.0030	<0.0030	0.006		0.0571						0.064			
Arsenic, dissolved	mg/L	0.00035	0.00033	0.00034	0.00035		0.00035	0.00032	0.00032	0.00035	0.00027		0.00029						0.00027			
Cadmium, dissolved	mg/L	<0.000010	<0.000010	0.000026	<0.000010		<0.000010	0.00001	<0.000010	0.000015	0.000013		0.000016						0.000013			
Calcium, dissolved	mg/L	56.9	53.7	52.6	55.1		49.3	49.3	59.3	62.5	48.8		12.3						14.7			
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010						<0.0010			
Copper, dissolved	mg/L	0.0185	0.0159	0.0275	0.0167		0.0146	0.0149	0.0157	0.0198	0.0189		0.0328						0.0343			
Iron, dissolved	mg/L	0.0371	0.0383	0.0311	0.0421		0.0543	0.0624	0.0698	0.0479	0.0499		0.172						0.16			
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020						<0.00020			
Magnesium, dissolved	mg/L	18.1	18.2	17.5	17.6		15.8	16.1	17.9	17.8	16		3.35						4.07			
Manganese, dissolved	mg/L	0.0237	0.0152	0.0331	0.012		0.0158	0.0168	0.0165	0.0248	0.0249		0.0416						0.0281			
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010						<0.000010			
Molydenum, dissolved	mg/L	0.0043	0.0042	0.0046	0.0042		0.0039	0.0039	0.0043	0.0043	0.0038		0.0011						0.0015			
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010						0.001			
Phosphorus, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	0.012	<0.01		0.017						0.026			
Potassium, dissolved	mg/L	3.33	3.07	3.52	3.01		2.63	2.67	3.18	3.45	2.86		1.52						1.91			
Selenium, dissolved	mg/L	0.00097	0.00077	0.00096	0.0009		0.00072	0.00079	0.00094	0.00094	0.00078		0.00022						0.0002			
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020						<0.000020			
Sodium, dissolved	mg/L	14.4	14.5	14	14.2		12.6	12.9	14.2	14.2	14		3.36						5.22			
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050						<0.000050			
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050						<0.0050			

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**28/05/2013**	**06/06/2013**	**15/06/2013**	**20/06/2013**	**25/06/2013**	**01/07/2013**	**12/07/2013**	**21/07/2013**	**23/07/2013**	**31/07/2013**	**08/08/2013**	**15/08/2013**	**19/08/2013**	**26/08/2013**	**02/09/2013**	**12/09/2013**	**17/09/2013**	**28/09/2013**	**03/10/2013**	**09/10/2013**	**16/10/2013**
pH (field)	pH units	7.45	7.3	8.9	8.8	8.95	8.96	9	8.99	9.2	9.16	9.03	9.3	8.79	8.45	8.43	8.06	7.77	7.68	7.67	7.61	7.82
pH (lab)	pH units	7.8	8.09	8.14	8.09	8.02	8.44	8.17	8.33	8.28	8.17	8.43	8.31	8.34	8.37	8.12	8.19	8.12	8.16	8.09	7.97	8.33
Hardness (from dissolved)	mg/L	66.6	101	114	125	122	134	136	150	149	145	141	160	158	161	161	172	163	160	168	172	163
Hardness (from total)	mg/L	65.9	106	124	126	142	151	165	154	163	159	163	171	168	180	177	184	183	169	184	180	181
Total Dissolved Solids	mg/L	142	190	200	248	200	184	224	246	204	188	242	276	212	258	236	226	192	258	242	218	266
Total Suspended Solids	mg/L	10	9.2	6.2	6	10.5	24	2	5.1	5.1	13.8	4.8	3.5	2.5	2.6	5	2.3	2.8	2.7	2.9	10	3.7
Alkalinity, total	mg/L	53.5	79.9	93.3	98.9	109	116	120	125	128	120	124	133	133	134	134	138	145	146	142	144	151
Sulphate, dissolved	mg/L	16.5	27.7	29.2	27.6	29	29.4	32	32.9	30.4	25.2	27.7	26	29	25.6	29	29.7	33.4	33.7	29.2	28.5	30.8
Chloride	mg/L	5.5	6.5	7.2	6.8	7.4	8	8.7	8.7	8.8	9	9.2	9.3	9.9	10	10	11	11	11	10	9.8	9.8
Fluoride	mg/L	0.18	0.25	0.26	0.25	0.26	0.26	0.26	0.26	0.27	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.28	0.25	0.25	0.23	0.26
Nitrite (N)	mg/L	0.0442	0.0697	0.0404	0.0278	0.0203	0.0164	0.0104	0.0087	<0.050	0.0117	<0.050	0.0077	0.0082	0.0073	0.0073	0.0095	<0.0050	<0.0050	0.0058	<0.0050	0.0056
Nitrate (N)	mg/L	1.88	2.77	2.36	1.76	1.77	1.56	1.35	1.11	1.15	1.04	1.13	1.01	1.05	1.04	0.936	0.904	0.817	<0.020	0.701	0.67	0.712
Ammonia	mg/L	0.059	0.036	0.024	0.061	0.03	0.024	0.032	0.024	0.022	0.051	0.019	0.084	0.033	0.021	0.075	0.093	0.029	0.022	0.021	0.023	0.034
Aluminum, total	mg/L	0.571	0.337	0.135	0.138	0.304	1.54	0.139	0.133	0.179	0.349	0.047	0.0724	0.0434	0.0526	0.0399	0.0345	0.0561	0.0376	0.0676	0.257	0.0405
Arsenic, total	mg/L	0.00045	0.00044	0.00058	0.00044	0.00057	0.00081	0.00053	0.00055	0.00064	0.00062	0.00066	0.00056	0.00062	0.00052	0.00056	0.00057	0.00065	0.00048	0.00054	0.00059	0.00052
Cadmium, total	mg/L	<0.000010	<0.000010	0.000021	0.000019	0.000014	0.00003	<0.000010	<0.000010	0.000013	0.000012	0.000014	0.000013	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000027	0.000011	0.00001
Calcium, total	mg/L	16.8	27	32.4	33.5	37.1	39.9	43.8	39.2	42.3	40.8	42.7	45	44.1	47.3	47	48.2	48.2	44.1	47.3	47	47.7
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0481	0.0337	0.0316	0.0273	0.0368	0.138	0.0312	0.0303	0.0328	0.0369	0.0265	0.0292	0.0248	0.0245	0.025	0.0241	0.0232	0.0199	0.0251	0.0245	0.02
Iron, total	mg/L	0.786	0.47	0.313	0.372	0.633	2.78	0.25	0.315	0.289	0.621	0.166	0.18	0.153	0.179	0.148	0.153	0.175	0.14	0.194	0.539	0.134
Lead, total	mg/L	0.00023	<0.00020	<0.00020	<0.00020	<0.00020	0.00081	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	5.8	9.4	10.5	10.2	11.9	12.6	13.6	13.6	14	13.8	13.6	14.1	14	14.9	14.6	15.4	15.3	14.4	16	15.1	15
Manganese, total	mg/L	0.0535	0.0989	0.104	0.101	0.103	0.158	0.0491	0.0532	0.0503	0.0525	0.0294	0.0313	0.0388	0.0564	0.0436	0.0625	0.0953	0.16	0.193	0.213	0.25
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.004	0.0068	0.0063	0.0059	0.0059	0.0068	0.0056	0.0057	0.0058	0.0049	0.0047	0.0051	0.0053	0.0049	0.005	0.0052	0.0049	0.0046	0.0043	0.0044	0.0048
Nickel, total	mg/L	0.0012	0.0013	0.0017	0.0013	0.0013	0.0022	0.0013	0.0012	0.0013	0.0017	0.0013	0.0017	0.0012	0.0012	0.0014	0.0013	0.0013	0.0013	0.0032	0.0013	0.0014
Phosphorus, total	mg/L	0.039	0.032	0.033	0.029	0.029	0.106	0.021	0.021	0.032	0.04	0.029	0.026	0.025	0.024	0.024	0.019	0.021	0.013	0.032	0.047	0.025
Potassium, total	mg/L	3.33	4.82	3.95	4	4.31	4.39	4.16	3.61	3.63	3.4	2.93	3.06	2.99	3.15	2.94	3.19	3.12	2.71	3.35	2.92	3.01
Selenium, total	mg/L	0.00032	0.00064	0.00049	0.00048	0.00052	0.00057	0.00047	0.00059	0.00065	0.00052	0.00052	0.00043	0.00059	0.00069	0.00058	0.00054	0.0006	0.00046	0.00039	0.00048	0.00061
Silver, total	mg/L	<0.000020	<0.000020	0.000021	<0.000020	<0.000020	0.000067	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L	7.8	12	11.7	11.5	12.7	11.6	12.9	12.1	13.6	11.7	11.8	12.2	11.6	12.8	12.3	12.9	13	11.4	13.4	12.2	12.7
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0144	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0391	0.0203	0.0055	0.006	0.0098	0.0112	0.0079	0.0108	0.0089	0.0132	0.0093	0.0115	0.0051	0.0039	0.0037	0.0043	0.0053	0.0049	0.0051	0.005	0.0078
Arsenic, dissolved	mg/L	0.00027	0.00041	0.00039	0.00042	0.00044	0.00044	0.00047	0.00047	0.00048	0.00047	0.00052	0.00054	0.00056	0.00052	0.00053	0.00055	0.00047	0.00045	0.00046	0.00045	0.00044
Cadmium, dissolved	mg/L	0.000015	0.000014	0.000011	0.000012	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	18.1	26.3	29.9	34.2	31.4	35.4	36	39.7	39.5	39.2	36.7	43.9	42	42.7	42.3	45.9	43.8	42.5	44.9	46.3	42.7
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0367	0.0258	0.0243	0.0225	0.0225	0.0222	0.02	0.0217	0.0247	0.0235	0.0213	0.0211	0.0205	0.019	0.0209	0.0191	0.0176	0.0164	0.0156	0.0155	0.0152
Iron, dissolved	mg/L	0.12	0.11	0.0836	0.102	0.0825	0.0833	0.0643	0.0801	0.0813	0.0787	0.0662	0.0678	0.0643	0.0657	0.0617	0.0563	0.0618	0.0478	0.044	0.0497	0.0602
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	5.22	8.59	9.48	9.58	10.6	11	11.1	12.3	12.3	11.5	12.1	12.3	13	13.2	13.5	13.9	13.2	13.1	13.6	13.7	13.6
Manganese, dissolved	mg/L	0.0379	0.0804	0.0798	0.0745	0.065	0.0504	0.0264	0.0389	0.032	0.0119	0.009	0.014	0.0243	0.035	0.0256	0.0062	0.0112	0.0856	0.0949	0.131	0.205
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0035	0.0067	0.0056	0.0054	0.0058	0.0059	0.0054	0.0056	0.0056	0.0048	0.0047	0.0049	0.0046	0.005	0.0047	0.0047	0.0045	0.0044	0.0047	0.0036	0.0043
Nickel, dissolved	mg/L	<0.0010	0.0012	0.0011	0.001	0.0011	<0.0010	0.001	0.001	0.001	0.0011	0.0013	0.0011	0.0011	0.0011	0.0013	0.0012	0.0011	0.0012	0.0012	0.0011	0.0012
Phosphorus, dissolved	mg/L	0.015	0.013	0.013	0.011	0.012	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
Potassium, dissolved	mg/L	3.12	4.53	3.94	4.05	3.96	3.74	3.37	3.47	3.42	3.02	2.91	2.92	3.01	2.93	2.9	3.06	2.76	2.67	2.75	2.82	2.75
Selenium, dissolved	mg/L	0.00033	0.00052	0.00057	0.00057	0.00052	0.00052	0.00053	0.00047	0.00051	0.00045	0.00045	0.00048	0.00069	0.00055	0.00057	0.00053	0.00052	0.00051	0.00051	0.00044	0.00046
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	7.39	11.1	10.7	10.2	11	11.4	10.4	11.5	11.4	10.7	10.3	10.8	11.5	11	11.9	12.2	10.9	11	11.9	11.4	11.2
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**22/10/2013**	**28/10/2013**	**07/11/2013**	**14/11/2013**	**18/11/2013**	**01/12/2013**	**05/12/2013**	**09/12/2013**	**16/12/2013**	**23/12/2013**	**02/01/2014**	**07/01/2014**	**18/01/2014**	**21/01/2014**	**27/01/2014**	**03/02/2014**	**13/02/2014**	**18/02/2014**	**27/02/2014**	**06/03/2014**	**10/03/2014**
pH (field)	pH units	8.02	7.93	8.12	7.84	8.27	7.91	7.8	8.1	6.73	7.71	7.6	7.68	7.56	7.67	7.58	7.69	7.54	7.67	7.67	7.84	7.8
pH (lab)	pH units	8.23	8.26	8.24	8.35	8.24	8.18	7.99	8.18	8.16	8.17	7.89	8.13	7.86	8.22	7.83	8.2	8	8.02	8.05	7.83	8.09
Hardness (from dissolved)	mg/L	182	178	173	175	199	181	182	179	189	213	168	190	174	185	188	191	180	185	200	196	194
Hardness (from total)	mg/L	181	211	187	210	206	189	176	195	183	202	171	201	177	177	187	216	195	203	195	201	204
Total Dissolved Solids	mg/L	260	256	234	228	242	252	242	228	258	291	222	262	240	248	236	298	228	268	234	264	259
Total Suspended Solids	mg/L	5.3	6.5	7.5	7.6	9.8	9.6	9.2	5.4	10.7	4.4	3.4	3.7	2.1	2.3	2.8	4.4	3	3.6	3	1.7	1.7
Alkalinity, total	mg/L	153	150	154	157	156	158	161	160	163	181	147	163	156	162	161	171	167	176	170	176	177
Sulphate, dissolved	mg/L	29.1	28.6	29.4	33.9	34	30	37.8	43	34.8	33.6	25.3	35	30.7	32.5	30.9	35.5	33.3	31.7	32.8	37.8	36.2
Chloride	mg/L	9.7	10	9.6	11	10	11	10	10	11	12	7.6	11	9.4	10	10	11	10	11	11	11	11
Fluoride	mg/L	0.26	0.26	0.26	0.27	0.27	0.27	0.23	0.25	0.27	0.32	0.25	0.28	0.25	0.29	0.29	0.34	0.29	0.3	0.29	0.3	0.28
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	0.0055	<0.0050	0.005	<0.0050	<0.0050	<0.0050	<0.0050	0.0089	<0.0050	0.0054	0.0051	<0.0050	0.0052	0.0062	<0.0050	<0.0050	0.0068	0.0054
Nitrate (N)	mg/L	0.655	0.658	0.682	0.729	0.75	0.711	0.754	0.751	0.747	0.88	0.85	0.746	0.773	0.736	0.739	0.724	0.718	0.693	0.711	0.693	0.684
Ammonia	mg/L	0.03	0.012	0.021	0.024	0.022	0.036	0.07	0.042	0.034	0.05	0.066	0.045	0.046	0.063	0.053	0.061	0.065	0.06	0.044	0.078	0.078
Aluminum, total	mg/L	0.0424	0.0453	0.0269	0.0319	0.0617	0.0197	0.0186	0.0152	0.0735	0.0155	0.0243	0.0261	0.02	0.0274	0.0564	0.0252	0.0654	0.0668	0.0675	0.0173	0.0206
Arsenic, total	mg/L	0.0005	0.00063	0.00045	0.00056	0.00051	0.00048	0.00047	0.00046	0.00045	0.00058	0.00055	0.00047	0.00041	0.00047	0.00043	0.00045	0.00042	0.00051	0.00039	0.0004	0.00043
Cadmium, total	mg/L	0.000011	<0.000010	<0.000010	0.000013	<0.000010	0.00001	0.000015	0.000013	0.000016	0.000013	<0.000010	0.000021	0.000011	<0.000010	0.000012	0.000013	<0.000010	0.000013	0.000011	<0.000010	<0.000010
Calcium, total	mg/L	48.1	55.5	50.6	55.7	54.9	50.4	46.5	51.4	49.4	53.1	45.3	52.8	46	46.1	49.1	57.7	50.9	52.1	51.3	52.5	52.7
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0181	0.0247	0.019	0.0269	0.0454	0.0284	0.024	0.0194	0.0256	0.0247	0.0225	0.0242	0.0178	0.0272	0.028	0.0246	0.0422	0.0509	0.0509	0.0207	0.0201
Iron, total	mg/L	0.146	0.197	0.112	0.167	0.222	0.128	0.12	0.103	0.225	0.109	0.212	0.146	0.147	0.162	0.172	0.108	0.212	0.191	0.205	0.115	0.11
Lead, total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L	14.8	17.6	14.6	17.1	16.6	15.3	14.6	16.3	14.4	16.8	14	16.7	15.2	15.1	15.5	17.5	16.5	17.6	16.2	17.1	17.6
Manganese, total	mg/L	0.217	0.221	0.194	0.223	0.213	0.21	0.197	0.19	0.165	0.179	0.322	0.13	0.196	0.162	0.163	0.124	0.143	0.136	0.119	0.0972	0.0748
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000050	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0045	0.0047	0.0044	0.0049	0.0046	0.0047	0.0043	0.005	0.0042	0.0048	0.0036	0.0047	0.0041	0.0041	0.0038	0.0049	0.0043	0.0045	0.004	0.0044	0.0045
Nickel, total	mg/L	0.0014	0.0015	0.0013	0.0013	0.0011	0.0012	0.0014	0.0015	0.0013	0.0015	<0.0010	0.0011	0.0011	0.0011	0.001	0.0012	0.001	0.0011	0.0012	0.0013	0.0013
Phosphorus, total	mg/L	0.021	0.055	0.048	0.038	0.038	0.046	0.054	0.031	0.027	0.028	0.041	0.033		0.033	0.034	0.042	0.024	0.026	0.023	0.021	0.014
Potassium, total	mg/L	2.96	3.38	3.21	3.2	2.95	3.14	2.98	2.95	3.15	3.36	2.95	3.26	2.53	2.61	2.76	3.39	2.88	2.99	2.78	3	3.39
Selenium, total	mg/L	0.00049	0.00065	0.00044	0.0007	0.0005	0.00062	0.00056	0.00065	0.00055	0.00045	0.00046	0.00053	0.00042	0.00039	0.00043	0.00045	0.00064	0.00044	0.00044	0.00041	0.00052
Silver, total	mg/L	<0.000020	<0.000020	0.000054	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000046	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000045	0.000036	0.000033	<0.000020	<0.000020
Sodium, total	mg/L	12.7	14.4	11.4	14	13.8	13.5	11.6	12.8	12.3	13.9	10.2	13.5	12	12.2	12.6	14.2	13.7	13.8	12.9	13.6	14.3
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050	0.0104	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0052	<0.0050	<0.0050	0.0084	<0.0050	<0.0050	<0.0050	0.0085	0.0054	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.0068	0.0058	0.0053	0.0055	0.0047	0.0038	0.0061	0.0039	0.0039	0.0043	0.0051	0.0046	0.0034	0.0036	0.0064	0.0037	0.0034	0.0033	0.0035	0.0032	0.0155
Arsenic, dissolved	mg/L	0.00043	0.00052	0.00042	0.00048	0.00046	0.00048	0.00045	0.00046	0.00044	0.00051	0.00042	0.00044	0.00042	0.00043	0.00041	0.00043	0.00042	0.00043	0.0004	0.0004	0.00045
Cadmium, dissolved	mg/L	<0.000010	<0.000010	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000013
Calcium, dissolved	mg/L	49	47.4	46.8	46.9	52.8	48.7	49.9	48.4	51.5	56.7	46.7	49.5	47	48.6	48.9	50.5	46.8	48.9	53.4	50.9	51.2
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0163	0.0165	0.0158	0.0166	0.0151	0.018	0.0152	0.0147	0.0179	0.0246	0.0128	0.0152	0.0135	0.0143	0.0151	0.0145	0.0145	0.0136	0.0135	0.0133	0.0152
Iron, dissolved	mg/L	0.0639	0.0631	0.0582	0.0612	0.0563	0.0537	0.057	0.0543	0.0554	0.0477	0.129	0.056	0.073	0.0688	0.071	0.0474	0.0455	0.0382	0.0359	0.0393	0.0459
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0003	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	14.5	14.5	13.6	14.1	16.3	14.4	14.1	14.1	14.7	17.4	12.4	16.1	13.7	15.5	16	15.8	15.4	15.3	16.3	16.7	16
Manganese, dissolved	mg/L	0.197	0.191	0.166	0.196	0.193	0.175	0.172	0.151	0.134	0.157	0.32	0.0938	0.162	0.132	0.135	0.0938	0.104	0.0846	0.0527	0.0234	0.0071
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, dissolved	mg/L	0.0044	0.0042	0.0041	0.0045	0.0044	0.0042	0.0044	0.0043	0.0046	0.0053	0.0037	0.0046	0.004	0.0042	0.0041	0.0043	0.0046	0.0046	0.0043	0.0043	0.0046
Nickel, dissolved	mg/L	0.0012	0.0011	0.0012	0.0012	0.002	0.0011	0.0011	0.0012	0.0011	0.0013	<0.0010	0.0011	<0.0010	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0012
Phosphorus, dissolved	mg/L	<0.01	0.018	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.014	0.013	0.015	0.014	0.013	0.013	<0.01	<0.01	<0.01	0.012	0.03
Potassium, dissolved	mg/L	3.08	2.92	2.86	2.82	3.21	2.94	2.99	2.97	2.95	3.62	2.65	3.19	2.66	3.04	3	3.13	2.84	2.88	2.91	3.24	3.08
Selenium, dissolved	mg/L	0.00051	0.0004	0.00049	0.00053	0.00055	0.0004	0.00056	0.0005	0.00053	0.00064	0.00047	0.00049	0.00047	0.00052	0.00047	0.00051	0.00066	0.00054	0.00048	0.00045	0.00055
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000022	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	12.3	12	11.1	11.5	13.6	12.7	12.1	11.8	12.3	14.5	9.37	13.3	10.9	12.8	13	12.9	13	12.7	12.7	13.5	12.7
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.007	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0079

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**21/03/2014**	**27/03/2014**	**28/03/2014**	**29/03/2014**	**30/03/2014**	**31/03/2014**	**01/04/2014**	**02/04/2014**	**02/04/2014**	**03/04/2014**	**08/04/2014**	**16/04/2014**	**21/04/2014**	**21/04/2014**	**02/05/2014**	**06/05/2014**	**17/05/2014**	**23/05/2014**	**27/05/2014**	**28/05/2014**	**29/05/2014**
pH (field)	pH units	7.63	7.52	7.45	7.5	7.48	7.42	7.23	7.44	7.35	7.44	7.51	7.51	7.9		9.15	8.1	7.24	7.37	7.56	8.35	8.34
pH (lab)	pH units	8.22	8.13							8.16		8.03	7.93		7.57	7.55	7.69	7.93	8.09		8.13	
Hardness (from dissolved)	mg/L	190	195							203		177	117		25.3	13.3	44.8	97.9	120		132	
Hardness (from total)	mg/L	191	199							210		167	117		26	16	47	106	123		135	
Total Dissolved Solids	mg/L	263	274							288		257	170		50	20	96	170	208		238	
Total Suspended Solids	mg/L	23.8	1.4							7		5.7	24.1		<1.0	1.7	3.6	9.2	12.9		14.8	
Alkalinity, total	mg/L	161	174							179		155	109		25	13.5	36.1	73.9	92.2		97.2	
Sulphate, dissolved	mg/L	24.5	35.3							36		33.3	23		3.07	0.93	11.2	30.8	41.6		44.4	
Chloride	mg/L	21	11							11		10	6.4		1.5	<0.50	2.1	3.2	4.6		4.8	
Fluoride	mg/L	0.31	0.3							0.3		0.29	0.22		0.11	0.06	0.12	0.22	0.26		0.29	
Nitrite (N)	mg/L	0.0214	0.0053							0.0072		0.0067	0.0081		<0.0050	<0.0050	0.0159	0.0375	0.0347		0.0298	
Nitrate (N)	mg/L	0.631	0.605							0.635		1.1	1.23		0.121	0.12	1.05	2.15	2.54		2.71	
Ammonia	mg/L	0.059	0.1							0.082		0.095	0.19		0.034	0.02	0.23	0.1	0.14		0.099	
Aluminum, total	mg/L	0.55	0.0199							0.12		0.111	0.376		0.0679	0.0704	0.238	0.419	0.987		0.765	
Arsenic, total	mg/L	0.00062	0.00042							0.00053		0.00032	0.00035		<0.00010	<0.00010	0.00033	0.00051	0.00076		0.00086	
Cadmium, total	mg/L	0.000409	0.000011							<0.000010		0.000024	0.000054		0.000042	0.000028	0.000026	0.000029	0.00003		0.000032	
Calcium, total	mg/L	50.8	52							54.8		43.5	30.5		7.95	5	13.1	29	32.5		35.9	
Chromium, total	mg/L	<0.0010	<0.0010							<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	
Copper, total	mg/L	0.131	0.0332							0.0433		0.0427	0.199		0.0203	0.0201	0.0327	0.0461	0.0501		0.0673	
Iron, total	mg/L	0.907	0.085							0.274		0.287	1.05		0.111	0.132	0.367	0.866	1.03		1.56	
Lead, total	mg/L	0.00025	<0.00020							<0.00020		<0.00020	0.00023		<0.00020	<0.00020	<0.00020	0.00031	0.00035		0.00043	
Magnesium, total	mg/L	15.4	16.9							17.6		14.1	9.96		1.49	0.846	3.47	8.11	10.1		11	
Manganese, total	mg/L	0.0942	0.0332							0.0307		0.0408	0.148		0.0246	0.0179	0.0577	0.185	0.279		0.359	
Mercury, total	mg/L	<0.000010	<0.000010							<0.000010		<0.000010	<0.000010		<0.000010	<0.000010	<0.000050	<0.000010	<0.000010		<0.000010	
Molybdenum, total	mg/L	0.0041	0.0042							0.0044		0.0048	0.0043		<0.0010	<0.0010	0.0019	0.0041	0.0059		0.0059	
Nickel, total	mg/L	0.0012	0.0013							0.0014		0.0013	<0.0010		<0.0010	<0.0010	<0.0010	0.0013	0.0022		0.0019	
Phosphorus, total	mg/L	0.039	0.018							0.017		0.021	0.047		0.01	0.014	0.031	0.047	0.051		0.059	
Potassium, total	mg/L	3.68	3.04							3.04		3.56	3.18		0.468	0.474	1.98	3.47	4.34		4.56	
Selenium, total	mg/L	0.00067	0.00053							0.00064		0.00067	0.00061		<0.00010	<0.00010	0.00041	0.00077	0.0009		0.00099	
Silver, total	mg/L	0.000055	<0.000020							<0.000020		<0.000020	0.000073		<0.000020	<0.000020	<0.000020	<0.000020	0.000027		0.000027	
Sodium, total	mg/L	13	12.9							13.9		12.3	13.5		1.63	0.94	4.45	9.06	11.9		11.5	
Thallium, total	mg/L	<0.000050	<0.000050							<0.000050		<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	
Zinc, total	mg/L	0.0125	0.0054							0.0059		0.0096	0.01		<0.0050	<0.0050	<0.0050	0.0061	0.0069		0.0085	
Aluminum, dissolved	mg/L	0.0065	0.0038							0.0066		0.0044	0.0054		0.0047	0.013	0.0418	0.0261	0.0214		0.02	
Arsenic, dissolved	mg/L	0.00042	0.0004							0.00042		0.00032	0.00025		<0.00010	<0.00010	0.0002	0.0004	0.00051		0.00055	
Cadmium, dissolved	mg/L	0.000033	<0.000010							0.000015		0.000014	0.000029		0.000031	0.000015	0.000024	0.000024	0.000017		0.000018	
Calcium, dissolved	mg/L	51	51							53.7		48.1	31.2		7.75	4.21	12.3	26.2	32.2		34.8	
Chromium, dissolved	mg/L	<0.0010	<0.0010							<0.0010		<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	
Copper, dissolved	mg/L	0.0225	0.0135							0.0153		0.0116	0.0132		0.0112	0.01	0.0255	0.0274	0.0262		0.0303	
Iron, dissolved	mg/L	0.0189	0.0552							0.0382		0.0319	0.0606		0.0103	0.011	0.119	0.163	0.189		0.208	
Lead, dissolved	mg/L	<0.00020	<0.00020							<0.00020		<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	
Magnesium, dissolved	mg/L	15.3	16.5							16.7		13.8	9.47		1.45	0.665	3.41	7.88	9.57		10.9	
Manganese, dissolved	mg/L	0.0438	0.0088							0.0063		0.0189	0.123		0.0212	0.012	0.0538	0.15	0.226		0.258	
Mercury, dissolved	mg/L	<0.000010	0.000014							<0.000010		<0.000010	<0.000010		<0.000010	<0.000010	<0.000050	<0.000010	<0.000010		<0.000010	
Molybdenum, dissolved	mg/L	0.0045	0.0044							0.0042		0.0046	0.0044		<0.0010	<0.0010	0.0019	0.004	0.0054		0.0062	
Nickel, dissolved	mg/L	<0.0010	0.0011							0.0012		0.001	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.001		0.0012	
Phosphorus, dissolved	mg/L	0.011	<0.01							<0.01		<0.01	<0.01		<0.01	<0.01	0.019	0.017	0.015		0.016	
Potassium, dissolved	mg/L	3.5	3.42							3.15		3.47	3.32		0.447	0.348	1.78	3.65	4.37		4.42	
Selenium, dissolved	mg/L	0.00059	0.00046							0.00054		0.00053	0.00056		0.00018	<0.00010	0.0004	0.00081	0.00074		0.00087	
Silver, dissolved	mg/L	<0.000020	<0.000020							<0.000020		<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	
Sodium, dissolved	mg/L	12.3	13.3							13.5		13	13.3		1.64	0.75	4.28	9.38	11.1		12.1	
Thallium, dissolved	mg/L	<0.000050	<0.000050							<0.000050		<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	
Zinc, dissolved	mg/L	<0.0050	<0.0050							<0.0050		<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**30/05/2014**	**31/05/2014**	**05/06/2014**	**10/06/2014**	**17/06/2014**	**24/06/2014**	**30/06/2014**	**09/07/2014**	**15/07/2014**	**21/07/2014**	**31/07/2014**	**06/08/2014**	**14/08/2014**	**18/08/2014**	**26/08/2014**	**04/09/2014**	**04/09/2014**	**12/09/2014**	**15/09/2014**	**25/09/2014**	**01/10/2014**
pH (field)	pH units	8.42	8.42	8.44	8.94	8.86	8.91	9.09	9.21	9.06	9.43	8.76	8.43	8.22	8.22	8.36	8.13		8.1	8.15	7.97	7.85
pH (lab)	pH units			8.21	8.19	8.36	8.37	8.48	8.36	8.76	8.49	8.44	8.01	8.29	8.27	8.23	8.24	8.26	8.24	8.25	8.23	8.11
Hardness (from dissolved)	mg/L			159	167	185	187	189	184	195	201	206	205	212	210	209	214	224	216	208	206	200
Hardness (from total)	mg/L			162	168	195	182	191	194	197	203	202	221	238	213	227	215	234	218	227	225	212
Total Dissolved Solids	mg/L			248	262	328	288	296	270	296	304	302	380	302	378	360	312	318	384	306	314	396
Total Suspended Solids	mg/L			23.8	17.6	11.1	6.9	5.9	6.2	6.3	6.2	2	1.3	17.1	7	11.3	2.5	2	3.8	4.2	2.3	3.2
Alkalinity, total	mg/L			114	124	131	132	123	122	127	129	133	129	141	143	139	146	147	141	141	146	143
Sulphate, dissolved	mg/L			52	56	67.5	77	83.4	90.4	94.4	93.7	96.8	104	99.7	98.2	102	96.7	99.8	93.1	89.9	99.6	93.2
Chloride	mg/L			4.8	5	5.3	5.7	6.3	6.5	6.8	6.8	6.6	7	6.6	6.4	6.7	6.2	6.5	6.3	6.2	6.3	6.7
Fluoride	mg/L			0.32	0.34	0.38	0.44	0.44	0.49	0.5	0.51	0.49	0.51	0.5	0.47	0.49	0.47	0.47	0.44	0.46	0.45	0.45
Nitrite (N)	mg/L			0.0265	0.0208	0.0228	0.0377	0.0414	0.0505	0.0572	0.0548	0.0454	0.0433	0.0426	0.0413	0.0441	0.0394	0.0403	0.0369	0.0386	0.0331	0.0286
Nitrate (N)	mg/L			2.71	2.43	2.78	3.56	3.25	3.72	3.85	4	3.86	3.52	3.67	3.38	3.57	3.12	3.23	3.8	3.24	3.22	3.12
Ammonia	mg/L			0.013	0.027	0.045	0.057	0.15	0.059	0.052	0.046	0.053	0.092	0.13	0.1	0.046	0.35	0.082	0.069	0.11	0.077	0.095
Aluminum, total	mg/L			0.647	0.533	1.35	0.137	0.0799	0.172	0.199	0.121	0.0487	0.0443	0.365	0.177	0.248	0.0476	0.0368	0.0515	0.0889	0.0318	0.0722
Arsenic, total	mg/L			0.00083	0.00078	0.00098	0.0006	0.00072	0.00056	0.00058	0.00054	0.00055	0.00063	0.00079	0.00063	0.00066	0.00047	0.00058	0.00068	0.00046	0.00044	0.00041
Cadmium, total	mg/L			0.000016	0.000021	0.000019	0.000021	0.000013	0.000031	0.000014	0.000013	0.000015	0.000014	0.000012	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000012	<0.000010	0.000011
Calcium, total	mg/L			42.6	43	51.6	46	50.8	50.4	51.2	53	53	58.9	62.5	56.9	60.3	56.4	62.7	58	59.1	59.6	54.5
Chromium, total	mg/L			<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L			0.0617	0.0428	0.0629	0.0281	0.021	0.0241	0.0183	0.0187	0.0176	0.0176	0.0348	0.0198	0.0189	0.0162	0.0146	0.0145	0.0159	0.0127	0.0221
Iron, total	mg/L			1.38	1.19	2.57	0.388	0.216	0.328	0.383	0.241	0.146	0.09	0.662	0.338	0.4	0.106	0.098	0.113	0.147	0.067	0.191
Lead, total	mg/L			0.00034	0.00024	0.00052	<0.00020	0.00021	<0.00020	0.00037	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, total	mg/L			13.5	14.7	16.1	16.4	15.5	16.5	16.8	17	16.9	17.9	19.8	17.1	18.7	18.1	18.9	17.8	19.2	18.4	18.4
Manganese, total	mg/L			0.285	0.219	0.235	0.13	0.107	0.0921	0.0797	0.0572	0.0241	0.0178	0.0415	0.0375	0.0516	0.0653	0.059	0.046	0.0372	0.0928	0.249
Mercury, total	mg/L			<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L			0.0058	0.0059	0.0074	0.0105	0.0112	0.0124	0.0138	0.0132	0.0117	0.0121	0.0124	0.0108	0.0112	0.0094	0.0115	0.0093	0.0091	0.0094	0.0095
Nickel, total	mg/L			0.0022	0.0017	0.0019	0.0019	0.0016	0.0015	0.0011	0.0011	<0.0010	<0.0010	0.0012	0.001	0.0011	0.0013	<0.0010	<0.0010	<0.0010	0.0011	<0.0010
Phosphorus, total	mg/L			0.064	0.075	0.143	0.029	0.017	0.047	0.054	0.029	0.022	0.038	0.074	0.025	0.04	0.022	0.029	0.02	0.043	0.038	0.044
Potassium, total	mg/L			4.2	4.3	5	6.63	7.2	8.75	8.81	8.2	7.94	8.55	9	7.62	7.93	6.58	7.57	6.88	7.41	6.78	6.67
Selenium, total	mg/L			0.00091	0.00095	0.0009	0.00133	0.00127	0.00136	0.0013	0.00137	0.00114	0.00105	0.00145	0.00134	0.00129	0.00088	0.00105	0.00116	0.00112	0.0012	0.0011
Silver, total	mg/L			<0.000020	<0.000020	0.000025	0.000021	<0.000020	<0.000020	<0.000020	0.00002	<0.000020	<0.000020	0.000026	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, total	mg/L			12.5	12.5	13.7	17.5	18.5	20.7	20.5	21	18.8	20.2	21.6	18.6	20	20.1	19.3	18.8	19.9	20.1	18.5
Thallium, total	mg/L			<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L			0.0079	<0.0050	0.016	0.01	0.0073	0.0193	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Aluminum, dissolved	mg/L			0.0075	0.0058	0.0056	0.0102	0.0117	0.0114	0.0142	0.0146	0.0167	0.0138	0.0085	0.0084	<0.0030	0.0095	<0.0030	0.0036	0.0061	0.0031	0.0086
Arsenic, dissolved	mg/L			0.00064	0.00066	0.00057	0.00054	0.0005	0.00049	0.00049	0.0005	0.0006	0.00058	0.00051	0.0006	0.00053	0.00056	0.00049	0.00049	0.00044	0.00044	0.00041
Cadmium, dissolved	mg/L			0.000016	0.000012	<0.000010	0.000014	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L			43.5	45	49.2	50	49.6	48.2	51.4	53.3	50.9	54.7	56.7	52.9	54.5	56.8	59.9	58.4	53.2	55.2	52.4
Chromium, dissolved	mg/L			<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L			0.0278	0.0262	0.0217	0.0186	0.0166	0.0133	0.0139	0.014	0.0139	0.0144	0.0136	0.0154	0.0132	0.013	0.0122	0.0127	0.0113	0.0106	0.0113
Iron, dissolved	mg/L			0.172	0.131	0.0745	0.078	0.0671	0.067	0.066	0.0432	0.0434	0.0373	0.0346	0.0351	0.0213	0.0214	0.0161	0.0187	0.0116	0.011	0.0442
Lead, dissolved	mg/L			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L			12.3	13.3	15.1	15.1	15.8	15.3	16.2	16.5	17	16.6	17.2	19	17.8	17.7	18	17.1	18.2	16.6	16.9
Manganese, dissolved	mg/L			0.147	0.12	0.0802	0.0931	0.0771	0.0631	0.053	0.031	0.0107	0.0087	0.0138	0.0231	0.0222	0.0154	0.0133	0.0143	0.0088	0.0422	0.167
Mercury, dissolved	mg/L			<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L			0.0059	0.0059	0.0073	0.0102	0.011	0.0118	0.0132	0.0129	0.0125	0.0122	0.0118	0.0111	0.0114	0.0097	0.01	0.0094	0.0102	0.0092	0.0092
Nickel, dissolved	mg/L			0.0012	0.0012	0.0012	0.0011	0.0011	<0.0010	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.001	<0.0010	<0.0010	0.0011
Phosphorus, dissolved	mg/L			0.013	0.013	0.01	0.013	0.012	0.024	0.023	0.02	0.018	0.015	0.018	0.018	0.018	0.018	0.015	0.015	0.023	0.02	0.029
Potassium, dissolved	mg/L			3.94	4.24	4.93	6.7	7.21	8.28	8.5	8.75	8.1	7.45	7.7	7.51	7.45	6.79	6.8	6.94	7.11	6.9	6.72
Selenium, dissolved	mg/L			0.00085	0.00084	0.00095	0.00111	0.00112	0.00136	0.00112	0.00152	0.00139	0.0011	0.00144	0.0013	0.00116	0.00102	0.00106	0.00109	0.00091	0.00092	0.00092
Silver, dissolved	mg/L			<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000025	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L			11.2	12.3	13.3	16.6	18.1	19.4	20.5	20.3	20.1	19.5	19.5	22.4	18.8	18.2	19.7	17.9	20.1	17	17.7
Thallium, dissolved	mg/L			<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**08/10/2014**	**13/10/2014**	**20/10/2014**	**28/10/2014**	**05/11/2014**	**10/11/2014**	**18/12/2014**	**22/12/2014**	**02/01/2015**	**06/01/2015**	**13/01/2015**	**21/01/2015**	**29/01/2015**	**04/02/2015**	**09/02/2015**	**18/02/2015**	**26/02/2015**	**03/03/2015**	**09/03/2015**	**17/03/2015**	**25/03/2015**
pH (field)	pH units	7.98	8.05	8.01	8.09	7.89	7.88	7.72	7.74	7.91	7.89	7.76	8.08	8.71	7.5	8.05	7.77	8.08	8.39	8.09	7.63	7.55
pH (lab)	pH units	8.16	8.11	8.22	8.08	8.17	8.09	7.82	7.82	7.69	7.8	8.03	8.06	8.05	7.91	8.08	7.89	7.96	7.89	7.92	7.93	8.01
Hardness (from dissolved)	mg/L	197	200	217	201	172	179	108	112	40.2	99.5	138	149	81.4	83	93.9	74.9	51.8	53.5	65	90.2	99
Hardness (from total)	mg/L	210	208	205	203	192	177	110	106	38.4	103	145	164	87	79.4	97.8	74.5	53.6	57.4	69.9	96.3	102
Total Dissolved Solids	mg/L	326	313	316	272	272	266	174	174	96	184	228	236	170	192	202	188	136	156	170	210	194
Total Suspended Solids	mg/L	7.8	2.1	2.5	2.4	24.9	5.9	4.6	2.1	2.7		3.6	1.1	5.6	1.4	2.8	3.7	3.2	12	4.2	2.5	8.7
Alkalinity, total	mg/L	139	134	142	140	123	122	71.1	71.3	44.9	76.2	94.8	108	85.1	112	93.3	93.9	77	75.7	88.9	96.6	97.9
Sulphate, dissolved	mg/L	88.3	85.9	111	87.3	82.7	76.2	54.2	52.4	25.1	53.5	65	72.8	42.3	48.4	52.5	45	38	43.5	40.5	50.7	50.5
Chloride	mg/L	6.4	6.6	6.7	7.1	7.8	7.1	6.5	5.7	4.3	6.6	6.9	7.1	7.1	7.6	8.1	9.6	9.1	10	8.9	8.9	9.4
Fluoride	mg/L	0.4	0.39	0.42	0.44	0.4	0.42	0.27	0.26	0.13	0.27	0.33	0.34	0.19	0.22	0.22	0.2	0.13	0.15	0.16	0.22	0.23
Nitrite (N)	mg/L	0.0288	0.0303	0.0281	0.0309	0.0319	0.0365	0.0672	0.0857	0.295	0.254	0.133	0.12	0.0683	0.059	0.0629	0.0734	0.0846	0.123	0.122	0.11	0.118
Nitrate (N)	mg/L	3.08	3.15	3.27	3.51	3.52	3.79	3.48	3.87	2.6	3.99	3.55	3.92	2.79	2.54	2.63	2.29	1.71	1.67	1.82	2.41	2.61
Ammonia	mg/L	0.093	0.097	0.07	0.073	0.046	0.092	0.21	0.16	0.17	0.21	0.16	0.14	0.15	0.17	0.16	0.25	0.28	0.29	0.24	0.22	0.24
Aluminum, total	mg/L	0.522	0.0237	0.0544	0.0087	0.282	0.0681	0.168	0.0344	0.0405	0.0519	0.0553	0.0205	0.0836	0.0333	0.0506	0.0403	0.0865	0.195	0.1	0.0385	0.134
Arsenic, total	mg/L	0.00058	0.00047	0.00038	0.00043	0.00046	0.00037	0.00029	0.00027	0.00016	0.00025	0.00034	0.00029	0.00021	0.00019	0.00027	0.00022	0.0002	0.00023	0.00022	0.00014	0.00027
Cadmium, total	mg/L	0.000018	<0.000010	0.000026	<0.000010	<0.000010	<0.000010	0.000011	<0.000010	<0.000010	0.000012	0.000017	<0.000010	0.000017	0.00004	0.000014	0.000012	<0.000010	0.000017	0.00002	<0.000010	0.00001
Calcium, total	mg/L	54.8	56.3	53.6	52.9	50.2	45.7	28.9	27	9.64	26.7	37.9	43.1	22.2	21.1	24.9	18.8	13.4	14.4	17.5	25.1	26.8
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, total	mg/L	0.0747	0.0115	0.0135	0.0101	0.018	0.0136	0.0288	0.00607	0.0101	0.00783	0.0126	0.0114	0.0277	0.0135	0.0197	0.0165	0.0324	0.106	0.0361	0.0191	0.0477
Iron, total	mg/L	1.09	0.051	0.102	0.021	0.485	0.141	0.27	0.045	0.063	0.095	0.116	0.073	0.2	0.088	0.112	0.079	0.196	0.394	0.242	0.082	0.34
Lead, total	mg/L	0.00024	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00025	<0.00020	<0.00020
Magnesium, total	mg/L	17.7	16.4	17.2	17.2	16.1	15.2	9.15	9.35	3.47	8.9	12.2	13.7	7.64	6.51	8.66	6.68	4.9	5.2	6.35	8.16	8.59
Manganese, total	mg/L	0.185	0.109	0.0644	0.0395	0.0498	0.0185	0.0215	0.0163	0.0212	0.0268	0.0288	0.0449	0.0577	0.0394	0.0414	0.0501	0.0592	0.0792	0.0616	0.0579	0.0666
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	0.0091	0.0089	0.0092	0.0095	0.0091	0.0104	0.0083	0.0097	0.0055	0.0096	0.0093	0.0098	0.0076	0.0061	0.0088	0.0087	0.0083	0.0082	0.009	0.0094	0.009
Nickel, total	mg/L	<0.0010	0.001	<0.0010	<0.0010	0.0013	0.001	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	0.0049	0.001	<0.0010	<0.0010	0.0014	<0.0010	<0.0010	<0.0010
Phosphorus, total	mg/L	0.107	0.042	0.041	0.043	0.073	0.069	0.093	0.054	0.048	0.053	0.054	0.046	0.05	0.042	0.042	0.05	0.056	0.07	0.05	0.034	0.058
Potassium, total	mg/L	6.23	7.06	7.07	7.22	8.06	7.62	6.49	7.13	4.46	7.11	7.03	7.23	6.02	5.85	6.39	6.34	6.18	6.49	5.95	6.56	6.7
Selenium, total	mg/L	0.00089	0.00115	0.00095	0.00111	0.00144	0.00106	0.00078	0.00134	0.00141	0.00108	0.00097	0.00107	0.0009	0.00083	0.00101	0.00122	0.00113	0.00164	0.00099	0.00151	0.00101
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000036	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.00002	<0.000020	0.000028
Sodium, total	mg/L	16.9	17.9	19.6	20.1	19.2	19.1	16.5	15.6	19.5	20.6	19.8	20.2	31.9	39.9	31.9	35.6	31.4	33.9	35.4	32.1	34.3
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, total	mg/L	0.0066	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0111	0.01	0.0053	0.0145	<0.0050	0.017	0.0118	0.0167	0.011	0.0174	0.0076	0.0057	0.053	0.008	<0.0050
Aluminum, dissolved	mg/L	0.0031	0.005	0.0044	0.0035	0.0056	0.0068	0.0052	0.0055	0.0066	0.0059	0.0056	0.0043	0.0048	0.0199	0.0051	0.0057	0.0105	0.0246	0.006	0.0069	0.0072
Arsenic, dissolved	mg/L	0.0004	0.00038	0.00044	0.0004	0.00032	0.00032	0.00023	0.00025	0.00011	0.00024	0.00027	0.00031	0.00018	0.00016	0.00021	0.00016	0.00013	0.00014	0.00019	0.00018	0.00021
Cadmium, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	0.000034	0.00001	<0.000010	<0.000010	0.000013	<0.000010	<0.000010	<0.000010
Calcium, dissolved	mg/L	52.5	54.1	58.6	53.2	44.7	48.7	27	29.5	10.3	26.3	35.8	39.5	20.6	21.5	24.4	19.2	12.5	13.1	16.6	23.3	25.9
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Copper, dissolved	mg/L	0.0121	0.00978	0.00878	0.0112	0.00704	0.00762	0.00587	0.00507	0.00158	0.00369	0.00532	0.00513	0.00355	0.0044	0.00431	0.00357	0.00382	0.00709	0.00254	0.00326	0.00459
Iron, dissolved	mg/L	0.0123	0.0107	0.0105	0.0066	0.0072	0.0085	0.011	0.0078	0.0091	0.0438	0.0214	0.0158	0.0155	0.0182	0.0083	0.0113	0.0124	0.0476	0.0106	0.011	0.0113
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Magnesium, dissolved	mg/L	16	15.9	17.2	16.6	14.7	13.9	9.79	9.42	3.52	8.22	11.7	12.2	7.28	7.11	7.99	6.57	5.02	5.04	5.7	7.8	8.33
Manganese, dissolved	mg/L	0.0747	0.0301	0.0037	0.002	0.0048	0.006	0.0144	0.0138	0.0185	0.0239	0.0226	0.0201	0.0294	0.0358	0.0352	0.0479	0.0539	0.0596	0.053	0.0511	0.0546
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.009	0.0088	0.0094	0.0097	0.0093	0.0099	0.0091	0.0097	0.0058	0.0099	0.0107	0.0094	0.0076	0.006	0.0085	0.0089	0.0099	0.008	0.0086	0.009	0.0095
Nickel, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.018	0.021	0.027	0.026	0.035	0.058	0.077	0.044	0.048	0.05	0.048	0.038	0.034	0.036	0.036	0.041	0.058	0.059	0.039	0.036	0.046
Potassium, dissolved	mg/L	6.15	7.02	7.52	6.81	7.2	7.44	6.89	7.55	4.53	6.81	6.75	7.25	5.63	5.7	6.02	6.43	6.34	6.16	5.82	6.22	6.56
Selenium, dissolved	mg/L	0.00088	0.00103	0.00113	0.00097	0.00097	0.00102	0.00101	0.00138	0.00065	0.00107	0.00109	0.0011	0.00091	0.00089	0.00101	0.00102	0.00112	0.00106	0.00095	0.00147	0.00117
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium, dissolved	mg/L	16.6	17.5	18.9	18.5	18	18.2	16.4	16	20.7	19.8	19.2	18.7	29.3	39	28.7	36.3	34.5	31.4	32.7	31.6	32.9
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0057	<0.0050	<0.0050	0.0087	0.0062	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**30/03/2015**	**31/03/2015**	**01/04/2015**	**02/04/2015**	**03/04/2015**	**06/04/2015**	**07/04/2015**	**21/04/2015**	**29/04/2015**	**06/05/2015**	**12/05/2015**	**18/05/2015**	**28/05/2015**	**04/06/2015**	**09/06/2015**	**15/06/2015**	**22/06/2015**	**29/06/2015**	**06/07/2015**	**06/07/2015**	**13/07/2015**
pH (field)	pH units	7.73	7.8	7.75	7.68	7.87	7.63	7.6	7.41	7.48	7.22	7.87	8.12	8.91	8.72	8.64	8.78	8.44	8.14	8.07		8.9
pH (lab)	pH units	8.04					7.98		7.78	7.67	7.9	7.99	8.1	8.15	8.1	7.81	8.19	8.25	8.18		8.1	8.17
Hardness (from dissolved)	mg/L	67.1					128		80	64.1	127	121	119	92.4	96.1	99.6	107	114	123		105	104
Hardness (from total)	mg/L	66.2					123		77.8	97.5	118	132	116	114	99.6	81.8	127	111	111		106	112
Total Dissolved Solids	mg/L	168					202		130	110	198	196	198	168	114	158	172	176	172		165	158
Total Suspended Solids	mg/L	15					13.9		2.6	4	4.5	6.1	17.9	9.6	5	<1.0	5.5	5.6	25.1		8.8	7.9
Alkalinity, total	mg/L	73.4					110		67.6	56.3	94.2	97.6	99.3	94.5	90.3	89.7	102	108	108		97.7	99.7
Sulphate, dissolved	mg/L	38.1					58.6		29.3	18	39	31.4	32.4	24.6	21.5	22.6	25.9	26.5	26.1		25.2	26.5
Chloride	mg/L	8.6					7.7		5.8	3.8	5.7	5.7	5.9	5	4.6	4.7	4.9	5.5	5.4		5	5.3
Fluoride	mg/L	0.18					0.27		0.16	0.15	0.23	0.2	0.22	0.17	0.16	0.16	0.17	0.2	0.18		0.17	0.18
Nitrite (N)	mg/L	0.123					0.0576		0.0758	0.0191	0.036	0.0514	0.0509	0.0565	0.0342	0.0384	0.0317	0.0288	0.0493		0.0683	0.0508
Nitrate (N)	mg/L	2.22					2.44		2.1	1.22	1.66	1.63	1.52	1.34	1.22	1.24	1.18	1.03	0.946		1.2	1.08
Ammonia	mg/L	0.22					0.14		0.084	0.065	0.054	0.044	0.034	0.035	0.041	0.034	0.04	0.061	0.077		0.09	0.037
Aluminum, total	mg/L	0.268					0.267		0.12	0.153	0.144	0.216	0.338	0.213	0.156	0.157	0.279	0.259	0.286		0.162	0.0537
Arsenic, total	mg/L	0.00032					0.00029		0.00027	0.00034	0.00042	0.00046	0.00056	0.00061	0.00056	0.00038	0.00061	0.00056	0.00055		0.00053	0.00043
Cadmium, total	mg/L	0.000021					0.000017		0.000018	0.000019	0.00002	0.000024	0.00002	0.000013	0.000014	<0.000010	0.000017	<0.000010	0.000013		0.000012	0.000015
Calcium, total	mg/L	17.2					31.8		21	25.4	31.1	34.7	31	30.3	27.4	21.3	33.1	30.1	28.7		28.1	29.4
Chromium, total	mg/L	<0.0010					<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, total	mg/L	0.0551					0.103		0.0227	0.0379	0.0274	0.035	0.0531	0.0301	0.0315	0.0178	0.0282	0.0257	0.0294		0.0169	0.0159
Iron, total	mg/L	0.488					0.601		0.238	0.314	0.392	0.473	0.807	0.628	0.46	0.373	0.609	0.653	0.781		0.539	0.313
Lead, total	mg/L	<0.00020					<0.00020		<0.00020	<0.00020	<0.00020	0.00023	0.0004	0.00026	0.00022	<0.00020	<0.00020	0.00035	<0.00020		<0.00020	<0.00020
Magnesium, total	mg/L	5.66					10.6		6.17	8.27	9.85	10.9	9.37	9.42	7.59	6.96	10.8	8.76	9.61		8.72	9.27
Manganese, total	mg/L	0.0677					0.0607		0.06	0.119	0.12	0.177	0.208	0.235	0.179	0.136	0.213	0.184	0.23		0.274	0.251
Mercury, total	mg/L	<0.000010					<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molybdenum, total	mg/L	0.0091					0.0073		0.0036	0.0028	0.0035	0.0039	0.0034	0.0032	0.0035	0.0026	0.004	0.0038	0.0035		0.0039	0.004
Nickel, total	mg/L	<0.0010					<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Phosphorus, total	mg/L	0.068					0.052		0.018	0.039	0.066	0.036	0.049	0.033	0.024	0.022	0.044	0.041	0.03		0.019	0.026
Potassium, total	mg/L	5.8					5.41		3.1	2.92	3.27	3.82	3.05	3.06	2.79	2.33	3.34	2.92	2.93		2.76	2.95
Selenium, total	mg/L	0.0011					0.00119		0.00055	0.00046	0.00049	0.00081	0.00059	0.00063	0.00068	0.00036	0.00048	0.00047	0.00044		0.00047	0.00042
Silver, total	mg/L	0.000036					<0.000020		0.000034	<0.000020	<0.000020	<0.000020	0.000051	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, total	mg/L	27.9					24.4		12.7	8.96	11.7	14.3	12.6	14.6	14.1	11.5	16.8	13.5	15.7		14.7	15.1
Thallium, total	mg/L	<0.000050					<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, total	mg/L	0.034					0.0052		0.0112	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0638	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050
Aluminum, dissolved	mg/L	0.008					0.0058		0.0102	0.0134	0.0142	0.0339	0.0103	0.0414	0.0227	0.0209	0.0216	0.0279	0.0335		0.0154	0.0063
Arsenic, dissolved	mg/L	0.00022					0.00025		0.00019	0.00017	0.0003	0.00035	0.00042	0.00047	0.00043	0.00043	0.00048	0.00054	0.00049		0.00044	0.00039
Cadmium, dissolved	mg/L	0.00001					<0.000010		<0.000010	0.000012	0.000012	0.000014	0.000012	<0.000010	<0.000010	<0.000010	0.000012	<0.000010	<0.000010		0.000012	<0.000010
Calcium, dissolved	mg/L	17.2					33.5		21.7	17.5	34.3	31.8	32	23.9	25.1	26.2	28.3	30.5	32.8		27.2	27.2
Chromium, dissolved	mg/L	<0.0010					<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Copper, dissolved	mg/L	0.00824					0.0102		0.016	0.0174	0.0192	0.0246	0.0211	0.0166	0.0136	0.0138	0.0151	0.0141	0.0154		0.0135	0.0132
Iron, dissolved	mg/L	0.0113					0.0079		0.048	0.0478	0.132	0.153	0.191	0.17	0.131	0.123	0.15	0.214	0.264		0.216	0.119
Lead, dissolved	mg/L	<0.00020					<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020
Magnesium, dissolved	mg/L	5.88					10.8		6.26	4.93	10.1	10.1	9.57	7.93	8.1	8.32	8.83	9.21	9.88		9.09	8.8
Manganese, dissolved	mg/L	0.0513					0.0404		0.0547	0.0577	0.0923	0.0906	0.11	0.131	0.0916	0.123	0.144	0.149	0.191		0.245	0.14
Mercury, dissolved	mg/L	<0.000010					<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010
Molydenum, dissolved	mg/L	0.0091					0.0073		0.0037	0.0019	0.0038	0.0037	0.0034	0.0032	0.0034	0.0034	0.0035	0.004	0.0038		0.0039	0.0035
Nickel, dissolved	mg/L	<0.0010					<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010
Phosphorus, dissolved	mg/L	0.047					0.033		0.014	0.012	0.013	0.02	0.015	<0.01	<0.01	<0.01	0.013	<0.01	0.018		0.012	0.014
Potassium, dissolved	mg/L	5.59					5.57		3.2	2.21	3.48	3.38	2.93	2.6	2.8	2.65	2.83	3.05	3.21		2.98	2.87
Selenium, dissolved	mg/L	0.00123					0.00133		0.00054	0.00036	0.00058	0.00053	0.00052	0.00049	0.00041	0.00045	0.00039	0.00039	0.00037		0.0004	0.00049
Silver, dissolved	mg/L	<0.000020					<0.000020		<0.000020	<0.000020	<0.000020	0.000028	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020
Sodium, dissolved	mg/L	27.9					24.3		13.1	6.46	12.1	13.4	12.8	13.2	13	13.8	13.5	13.3	15.7		14.9	13.9
Thallium, dissolved	mg/L	<0.000050					<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050					<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050

Station Name		W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16	W16
Sample Date		**20/07/2015**	**29/07/2015**	**05/08/2015**	**14/08/2015**	**20/08/2015**	**24/08/2015**	**01/09/2015**	**08/09/2015**	**11/09/2015**	**15/09/2015**	**25/09/2015**	**28/09/2015**	**28/09/2015**	**08/10/2015**	**16/10/2015**	**23/10/2015**	**29/10/2015**	**02/11/2015**	**10/11/2015**	**06/12/2015**
pH (field)	pH units	8.84	9.08	9	8.99	8.89	8.86	8.21	8.37	8.28	8.37	8.25	7.95	7.88	8.26	8.23	8.44	8.25	8.13	8.39	8.07
pH (lab)	pH units	8.37	8.54		8.56					8.3			8.15		8.15					8.17	8.2
Hardness (from dissolved)	mg/L	119	113		128					146			166		159					172	174
Hardness (from total)	mg/L	120	106		131					160			177		173					157	151
Total Dissolved Solids	mg/L	164	178		170					198			228		218					220	225
Total Suspended Solids	mg/L	6.1	10		8					5.3			5.7		10.8					10.9	3.5
Alkalinity, total	mg/L	107	108		125					132			142		144					150	149
Sulphate, dissolved	mg/L	25.9	27		29.6					32.4			35.3		35.7					36.5	41
Chloride	mg/L	4.8	5.5		6.4					7			7.2		7.9					7.8	8.7
Fluoride	mg/L	0.19	0.21		0.21					0.23			0.24		0.23					0.26	0.25
Nitrite (N)	mg/L	0.0371	0.0299		0.0255					0.014			0.0138		0.0135					0.011	0.0095
Nitrate (N)	mg/L	1.03	0.807		0.345					0.958			0.962		0.896					0.955	0.913
Ammonia	mg/L	0.03	0.063		0.055					0.061			0.024		0.062					0.053	0.081
Aluminum, total	mg/L	0.0395	0.0967		0.0774					0.0835			0.112		0.0301					0.19	0.0752
Arsenic, total	mg/L	0.00044	0.00047		0.00059					0.00054			0.0005		0.00057					0.00044	0.00032
Cadmium, total	mg/L	<0.000010	0.000011		<0.000010					<0.000010			<0.000010		0.000011					<0.000010	0.000036
Calcium, total	mg/L	29.8	28.1		34.1					41.3			44.9		45.9					40.2	37.6
Chromium, total	mg/L	<0.0010	<0.0010		<0.0010					<0.0010			<0.0010		<0.0010					<0.0010	<0.0010
Copper, total	mg/L	0.0149	0.0158		0.0191					0.0202			0.0217		0.0174					0.0231	0.0268
Iron, total	mg/L	0.176	0.281		0.238					0.273			0.294		0.202					0.44	0.314
Lead, total	mg/L	<0.00020	<0.00020		<0.00020					<0.00020			0.00029		<0.00020					<0.00020	<0.00020
Magnesium, total	mg/L	11.1	8.65		11.1					13.7			15.8		14.2					13.6	13.8
Manganese, total	mg/L	0.0772	0.0771		0.315					0.206			0.292		0.795					0.23	0.0631
Mercury, total	mg/L	<0.000010	<0.000010		<0.000010					<0.000010			<0.000010		<0.000010					<0.000010	<0.000010
Molybdenum, total	mg/L	0.0043	0.0043		0.005					0.0045			0.0042		0.0042					0.0036	0.0039
Nickel, total	mg/L	<0.0010	<0.0010		<0.0010					<0.0010			<0.0010		<0.0010					<0.0010	0.0022
Phosphorus, total	mg/L	0.034	0.035		0.051					0.04			0.052		0.033					0.049	0.024
Potassium, total	mg/L	3.57	2.62		3.04					2.94			3.22		2.87					2.74	2.81
Selenium, total	mg/L	0.00051	0.00045		0.00054					0.00068			0.00054		0.00058					0.00042	0.00044
Silver, total	mg/L	<0.000020	<0.000020		<0.000020					<0.000020			<0.000020		<0.000020					<0.000020	<0.000020
Sodium, total	mg/L	15.3	14.5		14.9					15.4			16.5		15.2					13.7	13.7
Thallium, total	mg/L	<0.000050	<0.000050		<0.000050					<0.000050			<0.000050		<0.000050					<0.000050	<0.000050
Zinc, total	mg/L	<0.0050	<0.0050		<0.0050					<0.0050			<0.0050		<0.0050					0.0075	0.006
Aluminum, dissolved	mg/L	0.0102	0.0153		0.0127					0.0085			0.0089		0.0108					0.0082	0.0531
Arsenic, dissolved	mg/L	0.00036	0.00049		0.00051					0.00054			0.00045		0.00039					0.00044	0.00039
Cadmium, dissolved	mg/L	<0.000010	0.000018		<0.000010					<0.000010			<0.000010		<0.000010					<0.000010	0.000095
Calcium, dissolved	mg/L	31.1	29.6		33.8					37.6			44.4		41.6					45.3	43.8
Chromium, dissolved	mg/L	<0.0010	<0.0010		<0.0010					<0.0010			<0.0010		<0.0010					<0.0010	<0.0010
Copper, dissolved	mg/L	0.0116	0.0127		0.0134					0.0144			0.013		0.0126					0.0128	0.0125
Iron, dissolved	mg/L	0.0786	0.0961		0.1					0.0555			0.0617		0.0553					0.0683	0.0747
Lead, dissolved	mg/L	<0.00020	<0.00020		<0.00020					<0.00020			<0.00020		<0.00020					<0.00020	<0.00020
Magnesium, dissolved	mg/L	10.1	9.46		10.6					12.7			13.5		13.5					14.3	15.8
Manganese, dissolved	mg/L	0.0071	0.0201		0.139					0.0049			0.0269		0.0625					0.0303	0.0085
Mercury, dissolved	mg/L	<0.000010	<0.000010		<0.000010					<0.000010			<0.000010		<0.000010					<0.000010	<0.000010
Molybdenum, dissolved	mg/L	0.0043	0.0042		0.0045					0.0044			0.0039		0.0038					0.0038	0.0044
Nickel, dissolved	mg/L	<0.0010	<0.0010		<0.0010					<0.0010			<0.0010		<0.0010					<0.0010	0.0011
Phosphorus, dissolved	mg/L	<0.01	0.014		0.017					0.016			0.022		0.02					0.021	0.025
Potassium, dissolved	mg/L	3.14	2.79		2.91					2.61			2.9		2.61					3.06	3.33
Selenium, dissolved	mg/L	0.00044	0.00039		0.00047					0.0005			0.00054		0.00036					0.00034	0.00039
Silver, dissolved	mg/L	<0.000020	<0.000020		<0.000020					<0.000020			<0.000020		<0.000020					0.00004	<0.000020
Sodium, dissolved	mg/L	15.7	15.4		15.7					13.9			14.6		14.6					14.2	16
Thallium, dissolved	mg/L	<0.000050	<0.000050		<0.000050					<0.000050			<0.000050		<0.000050					<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050		<0.0050					<0.0050			<0.0050		<0.0050					<0.0050	<0.0050

Station Name		W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A
Sample Date		**22/04/2009**	**27/04/2009**	**10/05/2009**	**25/05/2009**	**16/06/2009**	**08/07/2009**	**27/07/2009**	**11/08/2009**	**01/09/2009**	**19/04/2010**	**20/04/2010**	**21/04/2010**	**23/04/2010**	**24/04/2010**	**25/04/2010**	**26/04/2010**	**27/04/2010**	**28/04/2010**	**29/04/2010**	**30/04/2010**	**01/05/2010**
pH (field)	pH units				7	7.62	7.32		7.88	7.98	7.32	7	6.44	7.02	7	7.5	7.03	7.66	7.14	7.44	6.8	6.5
pH (lab)	pH units			7.3	7.59		7.82	8.01	7.75	7.67	7.1	7.02	6.89	6.96	7.31	7.38	7.3	7.2	7.4	7.3	7.3	7.4
Hardness (from dissolved)	mg/L	51		36	72		117	139	120	110							31.2	34.1	36.5	40	35.8	41.1
Hardness (from total)	mg/L										32	36	30	36	44	45	33.6	33.3	36.5	42.9	39.8	40.9
Total Dissolved Solids	mg/L			82	128		164	192	192	170	116	<5	106	128	106	120	60	58	62	70	60	62
Total Suspended Solids	mg/L			<2	3		<5	<2	<2	<3	8	16	<7	6	22	8	15	6	<4	<4	<4	<4
Alkalinity, total	mg/L			31	60		109	129	124	106	26	23	16	23	32	32	25	23	27	31	27	29
Sulphate, dissolved	mg/L				12.4		9	5.7	7.1	12	8.4	8.7	5.3	5.2	4.6	5	11	24	7	<0.5	<5	<5
Chloride	mg/L			1.2	0.28		0.1	1.9	2.04	0.37	1.92	1.38	1.05	0.81	1.12	1.18	2	1.6	1.7	1.5	1.7	1.7
Fluoride	mg/L																0.11	0.11	0.1	0.08	0.1	0.09
Nitrite (N)	mg/L			<0.005													0.011	0.013	<0.03	0.02	<0.05	<0.005
Nitrate (N)	mg/L			<0.01						<0.01		0.07	0.06				0.08	0.11	<0.1	0.3	<0.2	0.03
Ammonia	mg/L																0.031	<0.005	0.031	0.18	0.028	0.05
Aluminum, total	mg/L		5.74	0.11	0.032		0.028	0.022	0.024	0.027	0.51	0.434	0.199	0.383	1.04	0.405	1.04	0.118	0.27	0.181	0.189	0.218
Arsenic, total	mg/L		0.001	0.0002	0.0002		0.0003	0.001	0.0006	0.0007	0.0006	0.0005	0.0004	0.0005	0.0005	0.0005	0.0007	0.0002	0.0004	0.0004	0.0004	0.0004
Cadmium, total	mg/L		0.00006	0.00001	<0.00001		<0.00001	<0.00001	0.00001	<0.00001	0.00005	0.00021	0.00003	0.00003	0.00055	0.00115	0.00007	0.00004	0.00035	0.00004	<0.00001	0.00003
Calcium, total	mg/L		18.7	10.2	20.3		33.3	37.5	34.6	30.9	9.05	8.82	8.11	9.63	14.7	14.6	8.24	9.24	9.92	11.9	10.6	10.8
Chromium, total	mg/L		0.003	0.0018	0.0013		0.0006	0.0011	0.0011	0.0011	0.0006	0.0006	0.0004	0.0009	0.001	0.0007	0.002	<0.001	<0.001	<0.001	0.001	0.001
Copper, total	mg/L		0.39	0.021	0.008		0.007	0.006	0.006	0.005	0.061	0.05	0.022	0.068	0.147	0.092	0.119	0.0126	0.0506	0.0338	0.0598	0.0634
Iron, total	mg/L		6.84	0.21	0.08		0.22	0.269	0.232	0.203	0.704	0.6	0.13	0.454	1.22	0.457	1.19	0.317	0.361	0.418	0.284	0.325
Lead, total	mg/L		0.002	<0.0001	0.0001		<0.0001	0.0003	0.0004	0.0004	0.0003	0.0002	0.0002	0.0002	0.0004	0.0004	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0004
Magnesium, total	mg/L		4.2	2.6	6.22		10.8	12	11	9.83	3.15	2.82	2.7	3.51	3.87	3.66	3.17	2.49	2.85	3.24	3.23	3.41
Manganese, total	mg/L		0.191	0.013	0.0047		0.0281	0.0429	0.0489	0.0374	0.044	0.0258	0.0069	0.0324	0.0797	0.0646	0.077	0.082	0.014	0.037	0.02	0.023
Mercury, total	mg/L		0.00002	<0.0001	<0.00001		<0.00001	<0.00001		<0.00001	0.00002	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	<0.00002	<0.00002	0.00002	<0.00002
Molybdenum, total	mg/L		0.0012	<0.001	0.00086		0.00096	0.0011	0.001	0.0009	0.0007	0.0005	0.0004	0.0009	0.0008	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel, total	mg/L		<0.005	0.0013	0.001		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.004	0.001	0.002	0.002	0.002	0.002
Phosphorus, total	mg/L		0.22	0.05	<0.05		<0.010	<0.01	<0.01	0.015	0.21	0.14	0.13	0.13	0.11	0.1						0.05
Potassium, total	mg/L		4	1	1		0.6	0.4	0.5	0.8	5.3	3.7	2.9	2.5	2.4	2.2	1.98	1.33	1.51	1.5	1.54	1.19
Selenium, total	mg/L		<0.003	<0.0002	<0.0006		<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002	<0.0001	0.0001	0.0001	0.0002	0.0002
Silver, total	mg/L		<0.00005	0.00002	<0.00001		0.0027	0.00002	<0.00001	<0.00001	0.00003	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, total	mg/L		4	1.8	3.75		5.47	5.02	4.94	4.44	3.41	2.53	1.93	2.67	2.55	2.63	2.04	1.62	2.01	2.25	2.27	2.35
Thallium, total	mg/L		<0.00005	<0.00005	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L		0.03	0.004	0.005		0.007	0.015	0.006	0.006	0.01	0.016	0.008	0.01	0.009	0.005	0.013	0.008	0.006	0.007	<0.005	<0.005
Aluminum, dissolved	mg/L	0.073		0.054	0.031		0.063	0.012	0.018	0.022	0.045	0.061	0.074	0.209	0.062	0.059	0.271	0.182	0.138	0.065	0.129	0.146
Arsenic, dissolved	mg/L	0.0004		0.0002	0.0002		0.0003	0.0004	0.0003	0.0003	0.0004	0.0003	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Cadmium, dissolved	mg/L	0.00061		<0.00001	<0.00001		0.00002	<0.00001	<0.00001	<0.00001	0.00009	0.00006	<0.00001	<0.00001	<0.00001	0.00002	0.00002	0.00002	0.00007	<0.00001	0.00001	0.00002
Calcium, dissolved	mg/L	16.3		10.1	19.2		33.4	36.6	30.9	29.8	8.3	9.2	7.9	9	12.5	12.8	7.92	9.05	9.92	11	9.48	10.8
Chromium, dissolved	mg/L	0.0014		<0.0005	0.0007		0.0007	0.0011	0.001	0.0013	<0.0004	0.0004	<0.0004	0.0006	<0.0004	<0.0004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper, dissolved	mg/L	0.098		0.02	0.007		0.013	0.005	0.005	0.004	0.022	0.023	0.067	0.062	0.07	0.064	0.094	0.061	0.0429	0.0214	0.0545	0.0602
Iron, dissolved	mg/L	0.13		0.13	0.08		0.34	0.22	0.17	0.16	0.11	0.1	0.12	0.25	0.1	0.11	0.306	0.245	0.186	0.222	0.205	0.215
Lead, dissolved	mg/L	0.0003		<0.0001	<0.0001		0.0002	0.0003	0.0005	0.0006	0.0002	0.0009	0.0002	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	2.52		2.7	5.8		10.5	11.7	9.6	9.2	2.7	3.3	2.6	3.2	3.1	3.2	2.79	2.8	2.86	3.07	2.95	3.44
Manganese, dissolved	mg/L	0.0397		<0.005	0.0053		0.0369	0.0447	0.044	0.0345	0.0225	0.0109	0.0072	0.0086	0.0196	0.0324	<0.001	<0.001	0.002	<0.001	0.001	0.002
Mercury, dissolved	mg/L	<0.00001		<0.0001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	0.00001	0.00002	0.00001	0.00001	0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Molydenum, dissolved	mg/L	0.00117		<0.001	0.00077		0.001	0.001	0.0009	0.0009	0.0006	0.0008	0.0003	0.0008	0.0007	0.0009	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel, dissolved	mg/L	<0.001		0.0014	0.001		0.002	0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.002	0.002	0.001	0.001	0.002	0.002
Phosphorus, dissolved	mg/L	0.04			<0.01		0.02	<0.01	<0.01	0.04	0.12	0.06	0.05	0.05	0.03	0.03						0.029
Potassium, dissolved	mg/L	3		1	0.9		0.4	0.5	0.5	0.9	4.8	3.8	2.7	2.4	2	1.9	1.86	1.61	1.52	1.36	1.13	1.21
Selenium, dissolved	mg/L	<0.0006		<0.0002	<0.0006		<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002
Silver, dissolved	mg/L	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Sodium, dissolved	mg/L	3.8		1.7	3.7		4.7	4.9	4.3	4.3	3.2	3.4	1.9	2.5	2.2	2.4	1.97	2.16	2.15	2.18	2.19	2.51
Thallium, dissolved	mg/L	<0.00001		<0.00005	<0.00001		<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	0.006		0.002	0.002		0.004	0.001	0.003	0.002	0.007	0.008	0.007	0.002	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Station Name		W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A
Sample Date		02/05/2010	03/05/2010	04/05/2010	05/05/2010	06/05/2010	07/05/2010	08/05/2010	09/05/2010	10/05/2010	13/05/2010	17/05/2010	20/05/2010	24/05/2010	27/05/2010	31/05/2010	03/06/2010	14/06/2010	17/06/2010	21/06/2010	25/06/2010	12/07/2010
pH (field)	pH units	6.77	7.54	7.41	7.55	7.7	7.55	8.1	7.76	7.9		7.94	7.18	7.06	7.59	7.26		6.64	6.21	6.56	7.64	8.15
pH (lab)	pH units	7.3	7.4	7.5	7.5	7.5	7.6	7.8	7.7	7.7	7.7		8	7.9	7.9	7.8	7.8	8	7.9	7.9	7.96	8.12
Hardness (from dissolved)	mg/L	43.9	44.8	40.6	44.7	47.3	47.8	54.4	50.6	50.9	54.2	60.8	66.4	63	76.5	65.4	75.2	87	87.7	76	78.4	414
Hardness (from total)	mg/L	42.3	41.6	46.6	48.3	47	47.1	55.9	53.8	50.4	56.8	61.5	67.3	60.1	70.3	71	403	87.9	91.4	81.1	86.3	415
Total Dissolved Solids	mg/L	80	82	68	62	64	58	78	66	62	88	84	110	110	100	110	110	150	130	120	110	690
Total Suspended Solids	mg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	18	<1	<1	<1	<1	<1	<1	<1	<1	1	21
Alkalinity, total	mg/L	30	32	36	39	38	39	48	45	43	44	52	56	56	60	66	70	78	88	73	73	270
Sulphate, dissolved	mg/L	<0.5	<0.5	5	<0.5	10	<0.5	<0.5	19	<0.5	<0.5	<0.5	5.4	10	14	11	11	15	8.6	6.8	7.3	170
Chloride	mg/L	1.8	1.6	1.3	1.4	1.2	1.4	1	0.9	1	0.9	0.8	0.6	<0.5	<0.5	0.9	<0.5	1.2	0.5	<0.5	<0.5	14
Fluoride	mg/L	0.09	0.08	0.09	0.08	0.09	0.08	0.09	0.09	0.09	0.08	0.08	0.1	0.11	0.1	0.12	0.09	0.09	0.08	0.1	0.11	0.24
Nitrite (N)	mg/L	<0.05	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.05	0.009	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	3.09
Nitrate (N)	mg/L	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.2	0.08	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02	15.1
Ammonia	mg/L	0.039	0.017	0.01	0.04	<0.01	0.04	0.1	<0.01	0.01	0.04	0.06	0.05	0.05	0.03		<0.01	0.066	0.03	<0.5	0.011	1.3
Aluminum, total	mg/L	0.172	0.083	0.112	0.161	0.093	0.169	0.129	0.082	0.098	0.062	1.13	0.054	0.054	0.063	0.036	0.064	0.043	0.047	0.055	0.062	0.875
Arsenic, total	mg/L	0.0004	0.0005	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0005	<0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	<0.0004	0.0004	0.0028
Cadmium, total	mg/L	<0.00001	0.00001	0.00017	0.00006	0.00002	0.00004	0.0001	0.00025	0.00007	<0.00001	0.00003	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001
Calcium, total	mg/L	10.9	11.3	12.7	13.3	12.8	12.9	16	14.6	13.5	15.5	16.3	17.2	16	18	19	22	23	23	21	23	101
Chromium, total	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002
Copper, total	mg/L	0.0608	0.0287	0.0254	0.034	0.0281	0.0171	0.0695	0.0203	0.0166	0.013	0.13	0.0117	0.012	0.017	0.009	0.012	0.009	0.008	0.008	0.008	0.148
Iron, total	mg/L	0.258	0.201	0.23	0.301	0.197	0.26	0.218	0.169	0.183	0.137	1.85	0.107	0.127	0.228	0.122	0.256	0.237	0.365	0.313	0.579	1.39
Lead, total	mg/L	0.0003	<0.0002	0.0011	0.0009	<0.0002	<0.0002	0.0003	0.0003	0.0003	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004
Magnesium, total	mg/L	3.64	3.22	3.59	3.67	3.64	3.64	3.9	4.23	4.06	4.38	5.06	5.91	5	6	6	6	8	8	7	7	40
Manganese, total	mg/L	0.016	0.006	0.012	0.021	0.011	0.007	0.005	0.011	0.009	0.004	0.063	0.004	0.008	0.029	0.009	0.02	0.019	0.034	0.026	0.042	1.3
Mercury, total	mg/L	0.00005	<0.00002	<0.00002	<0.00002	0.00007	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.012
Nickel, total	mg/L	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.003	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.007
Phosphorus, total	mg/L			0.037	0.035	0.023	0.032	0.032	0.025	0.02	0.018	0.063	0.019									
Potassium, total	mg/L	1.06	0.88	0.93	0.87	0.78	0.74	1.25	0.76	0.67	0.7	0.87	0.58	<1	<1	<1	<1	<1	<1	<1	<1	5
Selenium, total	mg/L	0.0002	0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0106
Silver, total	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, total	mg/L	2.59	2.18	2.13	2.13	2.35	2.2	2.44	2.73	2.53	2.81	2.86	3.79	3	3	3	4	4	4	4	4	30
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, total	mg/L	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.005	<0.005	<0.005	0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum, dissolved	mg/L	0.118	0.079	0.053	0.052	0.066	0.053	0.04	0.05	0.05	0.051	0.039	0.033	0.032	0.031	0.024	0.026	0.024	0.023	0.026	0.027	<0.01
Arsenic, dissolved	mg/L	0.0005	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.001	<0.0004	<0.001	<0.0004	<0.0004	<0.0004	0.0005	<0.0004	<0.0004	0.0024
Cadmium, dissolved	mg/L	0.00002	<0.00001	0.00007	0.00002	0.00003	0.00002	0.00007	0.00012	0.00007	0.00008	0.00002	0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium, dissolved	mg/L	11.4	12	11.1	12.3	13.2	12.8	15.4	13.6	13.5	14.5	16.3	17.4	17	20	18	20	22	23	20	21	103
Chromium, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper, dissolved	mg/L	0.0605	0.0277	0.0188	0.023	0.0241	0.0123	0.0631	0.0171	0.0142	0.0125	0.0179	0.0101	0.009	0.016	0.008	0.009	0.007	0.007	0.006	0.007	0.11
Iron, dissolved	mg/L	0.216	0.162	0.131	0.126	0.151	0.108	0.094	0.11	0.111	0.099	0.093	0.07	0.065	0.118	0.077	0.098	0.125	0.247	0.122	0.123	0.163
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Magnesium, dissolved	mg/L	3.78	3.62	3.14	3.38	3.5	3.83	3.87	4.07	4.18	4.38	4.85	5.6	5	7	5	6	8	7	6	7	38
Manganese, dissolved	mg/L	0.003	<0.001	<0.001	<0.001	0.012	<0.001	<0.001	<0.001	0.001	<0.001	0.003	0.001	0.001	0.018	0.005	0.004	0.007	0.023	0.004	0.005	1.24
Mercury, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molydenum, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.012
Nickel, dissolved	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.003	0.001	<0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.005
Phosphorus, dissolved	mg/L			0.02	0.018	0.019	0.016	0.014	0.013	0.015	0.011	0.01	<0.01									
Potassium, dissolved	mg/L	1.12	0.96	0.76	0.78	0.77	0.73	1.14	0.72	0.67	0.77	0.86	0.61	<1	<1	<1	<1	<1	<1	<1	<1	5
Selenium, dissolved	mg/L	0.0002	0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.001	<0.0008	<0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0111
Silver, dissolved	mg/L	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium, dissolved	mg/L	2.76	2.47	1.98	2.14	2.19	2.47	2.56	2.63	2.68	2.88	3.18	3.89	3	4	3	4	4	4	4	4	27
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Zinc, dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Station Name		W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A
Sample Date		**29/07/2010**	**12/08/2010**	**19/08/2010**	**26/08/2010**	**08/09/2010**	**15/09/2010**	**22/09/2010**	**06/10/2010**	**11/10/2010**	**29/10/2010**	**04/04/2011**	**03/05/2011**	**02/06/2011**	**06/07/2011**	**13/08/2011**	**13/09/2011**	**08/10/2011**	**13/11/2011**	**10/04/2012**	**01/05/2012**	**02/05/2012**
pH (field)	pH units	7.57	8.2	8.3	7.79	7.95	7.89	7.63	7.56		7.35						7.55	7.15	7.06	8.16	7.51	7.17
pH (lab)	pH units	7.81	7.88	7.99	7.95		7.98	7.89	7.85	7.72	7.86	7.67	7.18	7.82	7.54	7.66	8.1	7.91	8.03	7.99	7.57	7.59
Hardness (from dissolved)	mg/L	73.9	90.6	72.4	81.8	88.3	92.6	95.2	88.1	103	127	200	33	74.3	84.2	91.4	119	150	144		40.2	41.2
Hardness (from total)	mg/L	76	102	81.3	87.2	88.9	92.4	94	92.7	101	125	222	35.8	82.5	83.9	91.6	113	137	166	335	39.8	42.6
Total Dissolved Solids	mg/L	100	120	130	130	160	150	140	160	170	160	490	60	130	140	180	170	180	196	132	72	74
Total Suspended Solids	mg/L	3	<1	16	<1	<1	<1	<1	<1	<1	6	12	6	1	1	2	2	10	5.3	1460	1.8	1.7
Alkalinity, total	mg/L	72	79	65	75	85	83	89	87	100	110	72	28	68	76	85	110	140	165	84.8	31.8	32.6
Sulphate, dissolved	mg/L	<0.5	3.5	<0.5	5.1	6.5	12	8.5	12	12	20	140	<0.5	12	<0.5		5.8			5.52	<0.50	<0.50
Chloride	mg/L	0.9	1.3	1.6	1.1	1	0.8	0.8	<0.5	0.9	1.3	61	2.2	<0.5			1.5	1	2.6	2.1	1	1.4
Fluoride	mg/L	0.11	0.1	0.12	0.11	0.11	0.12	0.11	0.1	0.11	0.12	0.22	0.07	0.1						0.2	0.071	0.072
Nitrite (N)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.181	0.009		<0.005	<0.005	<0.005	<0.005	<0.005	0.078	<0.0050	<0.0050
Nitrate (N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	0.15	16.9	8.4		0.04	<0.02	<0.02	<0.02	<0.020	0.281	<0.020	<0.020
Ammonia	mg/L	0.08	0.23	0.14	0.13	0.29	0.22	0.33	0.06	0.064	0.054	0.17	0.007	0.017	0.009	0.011	0.022	0.008	0.0129	0.0064	0.0098	0.0071
Aluminum, total	mg/L	0.048	0.076	0.673	0.052	0.068	0.041	0.033	0.032	0.028	0.107	0.304	0.309	0.082	0.178	0.081	0.04	0.043	0.174	70.6	0.119	0.821
Arsenic, total	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0002	0.0002	0.0004	0.0005	0.0004	0.0002	0.0004	0.0004	0.0002	0.0003	0.0007	0.0157	0.00028	0.00046
Cadmium, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00001	<0.00001	0.00008	0.00006	0.00002	0.00004	0.00002	<0.00001	0.0028	<0.00001	0.00005	0.00126	0.000014	0.000042
Calcium, total	mg/L	21	28	22	23	24	25	25	24.8	27.5	32.6	68.1	10.1	21.9	22.5	26	30.6	37.1	45.6	67.3	11.5	12.2
Chromium, total	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.03	<0.0010	<0.0010
Copper, total	mg/L	0.009	0.043	0.092	0.01	0.007	0.008	0.006	0.0064	0.0066	0.0191	0.113	0.0478	0.0205	0.0185	0.0149	0.0077	0.0082	0.0266	6.69	0.0153	0.164
Iron, total	mg/L	0.168	0.185	1.23	0.186	0.157	0.147	0.149	0.138	0.235	0.799	0.397	0.593	0.199	0.323	0.271	0.156	0.263	2.17	130	0.327	1.46
Lead, total	mg/L	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0276	<0.00020	0.00039
Magnesium, total	mg/L	6	8	6	7	7	8	8	7.48	7.83	10.6	12.6	2.59	6.78	6.76	6.49	8.84	10.9	12.7	40.6	2.7	2.96
Manganese, total	mg/L	0.009	0.011	0.05	0.011	0.011	0.01	0.011	0.009	0.039	0.215	0.216	0.049	0.024	0.025	0.017	0.019	0.045	0.33	3.98	0.0521	0.1
Mercury, total	mg/L	<0.0002	<0.0002	<0.00002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00008	<0.00002	<0.00002	<0.000020	<0.000010	<0.000010	<0.000010
Molybdenum, total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.011	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.008	<0.0010	<0.0010
Nickel, total	mg/L	0.004	0.002	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.002	<0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.021	0.0011	0.0015
Phosphorus, total	mg/L											0.042	0.062	0.015	0.016	0.014	0.01	0.011	0.044	1.36	0.033	0.075
Potassium, total	mg/L	<1	<1	<1	<1	<1	<1	<1	0.37	0.34	0.43	8.99	1.9	0.79	0.38	0.4	0.62	0.49	0.527	16	1.46	1.44
Selenium, total	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0005	0.0002	0.0004	0.0054	<0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	0.0024	<0.00010	<0.00010
Silver, total	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	0.00211	<0.000020	0.000022
Sodium, total	mg/L	3	5	5	4	4	5	4	4.28	4.66	5.91	58.7	1.69	4.66	4.94	3.86	4.19	5.05	5.98	5.3	1.59	1.45
Thallium, total	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00054	<0.000050	<0.000050
Zinc, total	mg/L	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.039	<0.005	<0.005	0.512	<0.0050	0.0072
Aluminum, dissolved	mg/L	0.041	0.041	0.044	0.038	0.034	0.029	0.032	0.026	0.027	0.048	0.012	0.072	0.037	0.037	0.034	0.021	0.02	0.0216		0.0613	0.22
Arsenic, dissolved	mg/L	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0003	0.0003	0.0004	0.0004	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.00061		0.0003	0.00031
Cadmium, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00003	0.00001	0.00006	0.00006	0.00004	0.00002	0.00001	<0.00001	0.00004	0.00001	0.00004		0.000017	0.00003
Calcium, dissolved	mg/L	20	25	20	22	23	25	25	23.3	28.2	33	60.5	9.58	20.6	23.2	25.6	32.3	41.4	38.7		11.7	11.9
Chromium, dissolved	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010		<0.0010	<0.0010
Copper, dissolved	mg/L	0.009	0.037	0.026	0.008	0.008	0.008	0.007	0.0063	0.0069	0.0129	0.0785	0.0254	0.0123	0.0103	0.0086	0.006	0.0059	0.00309		0.0185	0.0653
Iron, dissolved	mg/L	0.123	0.117	0.129	0.144	0.15	0.133	0.133	0.105	0.212	0.5	0.022	0.14	0.107	0.119	0.146	0.115	0.232	1.38		0.225	0.431
Lead, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00020		<0.00020	<0.00020
Magnesium, dissolved	mg/L	6	7	5	6	7	7	8	7.26	7.9	10.8	11.9	2.21	5.56	6.38	6.65	9.28	11.2	11.6		2.65	2.77
Manganese, dissolved	mg/L	0.003	0.008	0.022	0.009	0.011	0.009	0.011	0.007	0.041	0.231	0.19	0.032	0.011	0.016	0.011	0.011	0.044	0.318		0.0486	0.0486
Mercury, dissolved	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020		<0.000010	<0.000010
Molydenum, dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010		<0.0010	<0.0010
Nickel, dissolved	mg/L	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.0014		<0.0010	0.0012
Phosphorus, dissolved	mg/L											0.021	0.036	<0.01	<0.01	<0.01	<0.01	<0.01	0.027		0.026	0.048
Potassium, dissolved	mg/L	<1	<1	<1	<1	<1	<1	<1	0.4	0.37	0.42	8.2	1.78	0.73	0.36	0.38	0.64	0.49	0.522		1.46	1.43
Selenium, dissolved	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.0002	0.0002	0.0004	0.0057	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	<0.00010		<0.00010	<0.00010
Silver, dissolved	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.000020		<0.000020	<0.000020
Sodium, dissolved	mg/L	4	4	4	4	5	5	4	4.18	4.43	6.44	56.9	1.52	3.85	4.09	4.03	4.58	5.04	5.39		1.44	1.47
Thallium, dissolved	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.000050		<0.000050	<0.000050
Zinc, dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0050		<0.0050	<0.0050

Station Name		W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A	W35A
Sample Date		**03/05/2012**	**04/05/2012**	**05/05/2012**	**06/05/2012**	**07/05/2012**	**08/05/2012**	**09/05/2012**	**10/05/2012**	**18/05/2012**	**05/06/2012**	**27/06/2012**	**22/07/2012**	**11/08/2012**	**11/09/2012**	**11/09/2012**
pH (field)	pH units	7.14	7	7.13	7.29	7.63	7.3	7.79	8.72	7.25	7.21	8.2	8.33	8.14	8.28	8.28
pH (lab)	pH units	7.6	7.59	5.72	7.58	7.5	7.46		7.56	7.74	7.76	8.22	8.06	8.28		8
Hardness (from dissolved)	mg/L	41	42.4	46.4	43.6	46.8	49		46.7	56.3	89.3	113	125	137		136
Hardness (from total)	mg/L	40.9	50.4	45.9	44.3	41.9	43.5		43.8	55.1	89.1	114	135	151		150
Total Dissolved Solids	mg/L	68	76	86	60	80	80		88	106	128	176	166	196		238
Total Suspended Solids	mg/L	1.2	2.7	<1.0	20.5	2.1	<1.0		<1.0	3.7	<1.0	1.1	<1.0	<1.0		60.1
Alkalinity, total	mg/L	32.9	34	10.5	37.7	38.9	40.3		40.2	50.5	85.4	109	125	149		107
Sulphate, dissolved	mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	2.03	<0.50	<0.50	<0.50		27.5
Chloride	mg/L	1.2	0.91	0.86	0.81	1.4	0.68		1.2	1.1	1.3	1.4	0.81	0.99		1.8
Fluoride	mg/L	0.073	0.072	0.071	0.08	0.075	0.072		0.087	0.091	0.11	0.12	0.12	0.13		0.66
Nitrite (N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		0.195
Nitrate (N)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		7.58
Ammonia	mg/L	0.0095	0.01	0.0086	0.011	0.0067	<0.0050		0.011	0.024	0.033	0.036	0.027	0.0069		0.89
Aluminum, total	mg/L	0.1	0.391	0.0575	0.0832	0.195	0.0362		0.0735	0.226	0.052	0.0499	0.0294	0.0472		0.757
Arsenic, total	mg/L	0.00029	0.00082	0.00033	0.00034	0.00028	0.00024		0.00028	0.00051	0.00032	0.00045	0.00043	0.00054		0.00066
Cadmium, total	mg/L	0.000061	0.000193	0.000055	0.000031	0.00002	0.000015		<0.000010	0.000014	0.000016	0.00001	0.000017	<0.000010		0.000028
Calcium, total	mg/L	11.7	14.1	13	12.9	11.9	12.5		12.2	15.1	25	33.1	38.1	42.2		37.3
Chromium, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Copper, total	mg/L	0.0203	0.102	0.0137	0.0166	0.0361	0.00708		0.0174	0.0349	0.0377	0.0555	0.0485	0.0441		0.272
Iron, total	mg/L	0.253	0.695	0.193	0.242	0.439	0.161		0.245	0.567	0.171	0.17	0.13	0.206		1.38
Lead, total	mg/L	<0.00020	0.00034	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		0.00066
Magnesium, total	mg/L	2.83	3.69	3.27	2.92	2.93	2.97		3.25	4.22	6.51	7.72	9.62	11.1		13.8
Manganese, total	mg/L	0.0129	0.0761	0.0098	0.0136	0.0245	0.0125		0.0087	0.0229	0.0208	0.0193	0.0148	0.0245		0.138
Mercury, total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	0.00001	<0.000010	<0.000010	<0.000010		<0.000010
Molybdenum, total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	0.0011	0.0013	0.0015	0.0016	0.0018		0.0035
Nickel, total	mg/L	0.0016	0.0024	0.0013	0.0013	0.0014	0.0011		0.0013	0.0015	0.0011	0.0013	0.0016	0.0014		0.0017
Phosphorus, total	mg/L	0.03	0.1	0.029	0.036	0.04	0.024		0.025	0.024	0.015	0.015	0.011	0.014		0.058
Potassium, total	mg/L	1.23	7.41	1.15	1.11	1.65	0.887		0.923	0.872	1.15	1.42	1.37	1.36		1.94
Selenium, total	mg/L	<0.00010	<0.00010	0.00017	<0.00010	<0.00010	<0.00010		0.0001	<0.00010	0.00012	0.00019	0.00014	0.00011		0.00307
Silver, total	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		0.00004
Sodium, total	mg/L	1.56	2.55	1.82	1.7	1.7	1.74		1.88	2.55	3.72	4.38	5.21	5.58		8.06
Thallium, total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Zinc, total	mg/L	0.0075	0.0181	0.0357	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		0.0083
Aluminum, dissolved	mg/L	0.0544	0.0421	0.044	0.0448	0.0532	0.0436		0.0425	0.0617	0.0264	0.0173	0.0142	0.0182		0.0228
Arsenic, dissolved	mg/L	0.0003	0.00029	0.00026	0.00032	0.00029	0.00023		0.00029	0.00049	0.00038	0.00044	0.00043	0.00053		0.0005
Cadmium, dissolved	mg/L	0.000022	0.000019	0.000018	0.000012	0.000038	0.000018		0.00001	0.000022	0.000016	0.000022	0.000015	<0.000010		<0.000010
Calcium, dissolved	mg/L	11.8	12.3	13.3	12.6	13.5	14.2		13.1	15.8	24.9	32.4	35.5	38.1		34.5
Chromium, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010
Copper, dissolved	mg/L	0.0149	0.0132	0.0129	0.0134	0.0142	0.00952		0.0153	0.0301	0.0355	0.0536	0.0437	0.0405		0.0351
Iron, dissolved	mg/L	0.272	0.18	0.173	0.17	0.188	0.177		0.188	0.286	0.101	0.0748	0.0969	0.0916		0.132
Lead, dissolved	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020
Magnesium, dissolved	mg/L	2.79	2.86	3.2	2.93	3.2	3.27		3.4	4.07	6.57	7.71	8.77	10.1		12
Manganese, dissolved	mg/L	0.0092	0.0223	0.0072	0.0096	0.0081	0.0091		0.0056	0.0123	0.0178	0.0176	0.0118	0.0209		0.0395
Mercury, dissolved	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010		<0.000010
Molydenum, dissolved	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	0.0013	0.0016	0.0016	0.0017		0.0041
Nickel, dissolved	mg/L	0.0012	0.0012	0.0012	0.0014	0.0016	0.0014		0.0013	0.0015	0.0016	0.0014	0.0013	0.0014		0.0014
Phosphorus, dissolved	mg/L	0.024	0.022	0.022	0.027	0.027	0.023		0.018	0.019	0.012	<0.01	<0.01	<0.01		0.011
Potassium, dissolved	mg/L	1.34	1.24	1.23	1.12	1.19	1.11		1	0.839	1.24	1.45	1.29	1.27		1.65
Selenium, dissolved	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		0.00013	<0.00010	0.00011	0.00017	0.00012	0.00012		0.00293
Silver, dissolved	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020		<0.000020
Sodium, dissolved	mg/L	1.54	1.6	1.76	1.69	1.89	2.11		1.94	2.47	3.9	4.39	4.73	5.09		7.39
Thallium, dissolved	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050		<0.000050
Zinc, dissolved	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.019	<0.0050		<0.0050	<0.0050	0.0053	<0.0050	<0.0050	<0.0050		<0.0050