SÄ DENA HES MINE

WATER QUALITY CHARACTERIZATION

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Prepared for:

TECK RESOURCES LIMITED.

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ACKNOWLEDGMENTS

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1 INTRODUCTION

The Sä Dena Hes property is located close to Yukon's southern boundary with British Columbia, approximately 70 kilometres by road from the town of Watson Lake. The Sä Dena Hes zinc-lead mine, which comprises the Jewelbox and Burnick underground mines as well as two open pits (Main Zone and Jewelbox pit), was constructed in 1991 and operated for a 16-month period between August, 1991 and December, 1992, at which time the property was put on a care and maintenance basis. A decision has subsequently been made by the owners to begin Permanent Closure activities commencing in 2013.

This report presents a characterization of existing water quality conditions at the site. It also presents a screening of the monitoring data against Canadian Water Quality Guidelines to identify contaminants of potential concern for the Sä Dena Hes mine receiving environment. This screening will provide the basis for an aquatic effects assessment of ongoing mine discharge during the post closure period for the mine.

2 AREA OVERVIEW

An overview of the site drainages in relation to the mine workings was provided in Azimuth's Human Health Risk Assessment (HHRA 2014b):

The Sä Dena Hes Mine Site is located within the Boreal Cordillera Ecozone and the Liard Basin Ecoregion (Government of Yukon, 2003). The Site property straddles a drainage divide between the False Canyon Creek and Tom Creek catchments, both of which ultimately drain into the Liard River. False Canyon Creek is the main catchment for the Site, which drains an area of 492 km^2. False Canyon Creek flows into the Frances River which ultimately flows into the Liard River, 55 km downstream from the confluence with False Canyon Creek. Tom Creek receives water from the southern portion of the Site property away from any potential contamination sources and ultimately drains into the Liard River (SRK, 1990). There is no surface water connection between False Canyon Creek and the Stuart River drainage to the east.

The mine Site itself straddles two different catchment areas, one that originates and flows north of the Tailings Facility as North Creek and the other that originates west of the mine and flows south as Camp Creek. In both cases, there are relatively low volumes and sources of surface water discharge from the mine site. Camp Creek is the principal aquatic receiving environment for the Site.

Camp Creek originates from two small springs located northwest of the mill site and downgradient of the 1380 Gully (SRK, 2012). These springs connect with one another about 200 m downstream to form a well-defined channelized stream that flows south east, adjacent to the Tailings Ponds and Reclaim Pond (diverted from its original course during the period of mine construction) before leaving the Site to flow south. Camp Creek also receives groundwater from local background, as well as runoff and drainage from the Reclaim Pond. A portion of the Reclaim Pond is also actively pumped down each year between April and October, in accordance with the Water License. Discharge is routinely monitored for water chemistry. Downstream of the Reclaim Pond Camp Creek flows south to eventually become False Canyon Creek approximately 4 km downstream.

There are no surface water inputs to Camp Creek within the bounds of the Site. As stated in the 2012 Reconnaissance Report (Azimuth 2013), there is no surface water flow, nor connection via the 1380 Gully north of the Main Zone pit area, and Camp Creek. There are two small tributary streams that join Camp Creek just downstream of the Site. Downgradient of the Jewelbox area is the origin of Portal Creek. This is an ephemeral stream the flows principally during freshet and flows towards Camp Creek, entering several hundred meters downstream of the mine site. Approximately 1.5 km downstream of the Reclaim Pond, Access Creek enters Camp Creek. This stream drains the western flank of the mountain that contains the mineral deposit and the Data Report suggests that this stream can be considered a reference stream as there is no mine activity upgradient (Azimuth 2014a).

Discharge from the Burnick Zone adit, northwest of the mill site, flows over and through the waste rock pile to disappear underground. Nearly 2 km away from the adit, along a presumed groundwater flowpath, runs a small tributary of False Canyon Creek known as the West Fork of Tributary E. The West Fork of Tributary E joins the East Fork well north of the mine site, eventually merging with False Canyon Creek approximately 20 km downstream from the mine site.

3 WATER QUALITY MONITORING PROGRAM

Water quality monitoring at the site has been ongoing since 1991, initially as part of a baseline sampling program and subsequently as required under the Water License during operations and temporary closure. Water quality standards and monitoring requirements are presented in Part E – EFFLUENT QUALITY STANDARDS and Part F – MONITORING AND SURVEILLANCE of Water Use Licence (WUL) QZ99-045. The WUL describes the water quality monitoring sites and programs, including required water quality parameters and sampling frequency (Appendices A and C of licence QZ99-045). In response to the Detailed Decommissioning and Reclamation Report submitted in July 2013, a more extensive water quality monitoring program was implemented to provide data to support the human health and ecological risk assessment, water quality loading assessment and post reclamation monitoring.

Figure 1 shows the locations of all water monitoring stations considered in the present report and their descriptions are presented in the following sections.

3.1 REFERENCE STATIONS

Reference stations are upstream locations, or background areas unaffected by human activities. The following reference stations were used in this assessment:

CC-1: This is one of the two spring-fed origins of Camp Creek. Groundwater daylights from beneath a 50 m swath of forest just above one of the mine access roads that is gathered in a small ditch and directed through a culvert beneath the road to a defined channel.

MH-26: Tributary D, upstream of confluence with False Canyon Creek

MH-29: Access Creek drains directly to Camp Creek about 300 m south of Portal Creek via a defined channel, down gradient of an area about 250 m east of Jewelbox pit, where there is no mine-related disturbance.

MH-30: This area was sampled twice in 2013, once during freshet and once in fall to measure water quality in a large tributary stream to False Canyon Creek that is unaffected by mining activities and is considered a near-field reference, although it does not drain mineralized soils.

3.2 CAMP CREEK TO FALSE CANYON CREEK

The following stations are of interest from a monitoring perspective as they are located downstream of the Jewelbox zone, mill site, reclaim pond and/or tailings facility.

PH-01: This area is about 40 m below the same road crossing as CC-1. This vertically upwelling spring emerges at very well defined location entering directly into a stream channel and merges with flow from CC-1 about 100 m downstream; 400 m upstream of MH-4.

MH-04: This area is situated 0.5 km downstream of PH-1 and CC-1 and is 1.0 km upstream of the location where water from the Reclaim Pond drains or is pumped into Camp Creek. This area represents completely mixed conditions combining CC-1 and PH-1 water, upgradient of groundwater that may have been affected by

presence and activity at the Mill Site and the Tailings Facility. Although this station is upstream of all mine site components, it is technically not a reference station because it is downgradient of the 1380 adit, although metals from this source have not reached this receiving environment station (SRK, 2000).

CC-3: Camp Creek, downstream of MH-04, upstream of tailings area.

MH-05: A small gully which drains the East face of Jewelbox Hill, immediately below the 1450 exploration portal, to False Canyon Creek; discharge from a sedimentation pool, located immediately above the mine access road servicing the portal, Jewelbox Waste Dump and mill site drainage located immediately above the access road.

MH-28: Otherwise known as Portal Creek, this is a small watershed that discharges to Camp Creek. Upgradient, there is a small surface discharge near the mine access road (MH-05) that only contains water during snowmelt. Otherwise, this stream discharges to Camp Creek 250 m downstream of the Reclaim Pond via an ill-defined channel that alternately daylights and goes beneath ground as it flows nearly 1 km down gradient from the mine access road towards the creek. It is primarily active during freshet.

MH-27: This is a mainstem station on Camp Creek that was sampled only in 2013 and is situated just upstream of where Access Creek discharges to Camp Creek about 1 km downstream of the Reclaim Pond.

MH-11: This area is situated on Camp Creek mainstem 2 km downstream of the Reclaim Pond and is part of the quarterly monitoring areas for the site. Camp Creek in the vicinity of this area represents water quality leaving the mine site to become False Canyon Creek upstream of a large, unnamed tributary stream upon which a reference area (MH-30) was established in 2013.

MH-13: This area is located approximately 10km downstream of the mine site and Reclaim Pond and 2 km downstream of MH-30 on the mainstem of False Canyon Creek. This part of the watershed contains sculpin (*Cottus sp.*), but no other fish species.

3.3 TRIBUTARY E

Stations located on Tributary E are monitored as they are down gradient of mine workings as well: the West fork is located downstream of the Burnick zone and the East fork is situated downstream of the North Tailings Management Facility.

TRIBEWF01: West fork of Tributary E, upstream

TRIBEWF02: West fork of Tributary E, downstream

MH-14: False Canyon Creek, 20km downstream of Reclaim Pond, upstream of Tributary E confluence

MH-15: Tributary E West Fork, upstream of Tributary E East Fork confluence, approximately 6 km downstream of the North Hill development

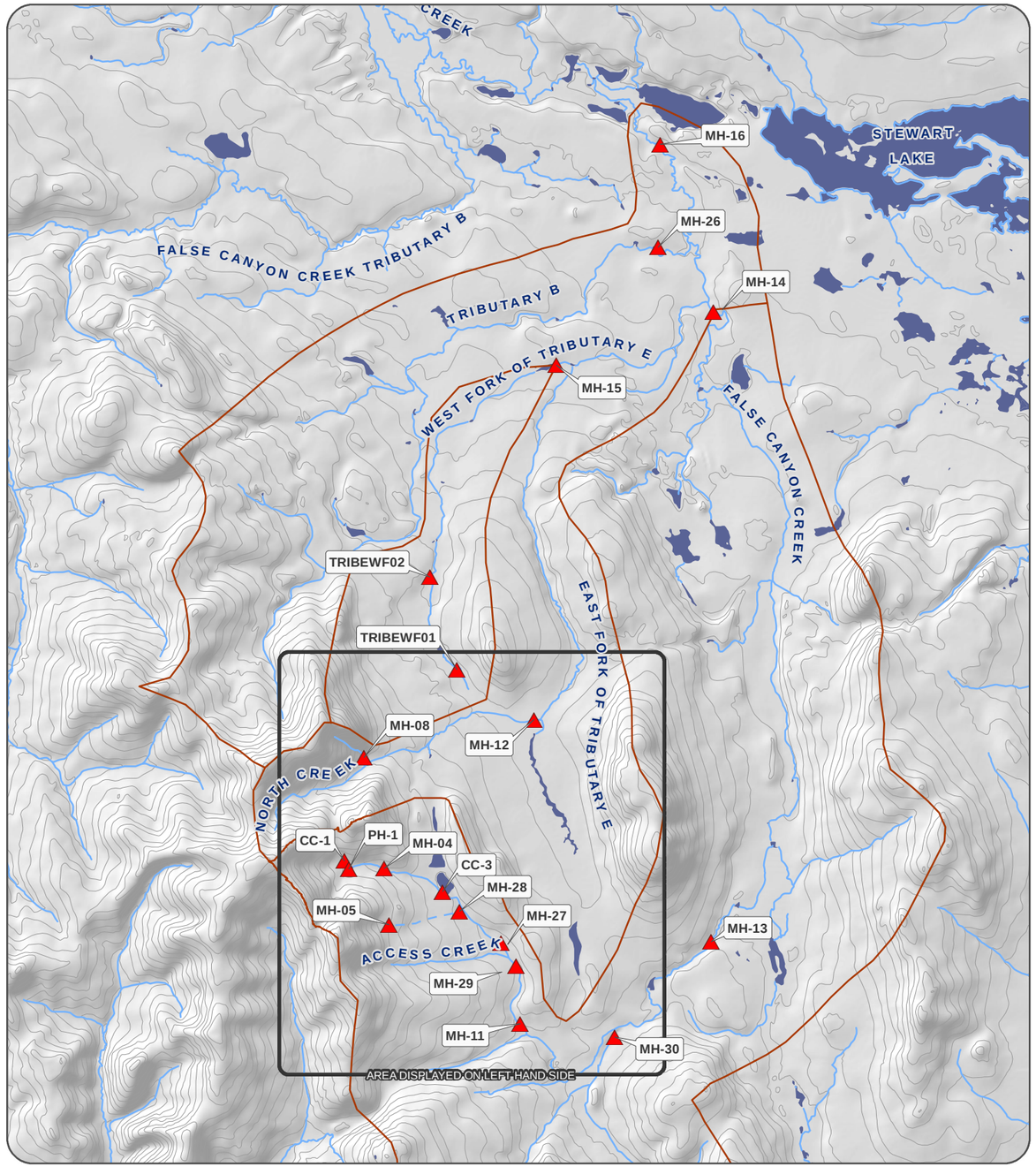
MH-08: Burnick Creek – Burnick Creek is a small intermittent drainage south of the Burnick Zone area. Station MH-08 was established on Burnick Creek, upstream of the confluence with North Creek near the access road,

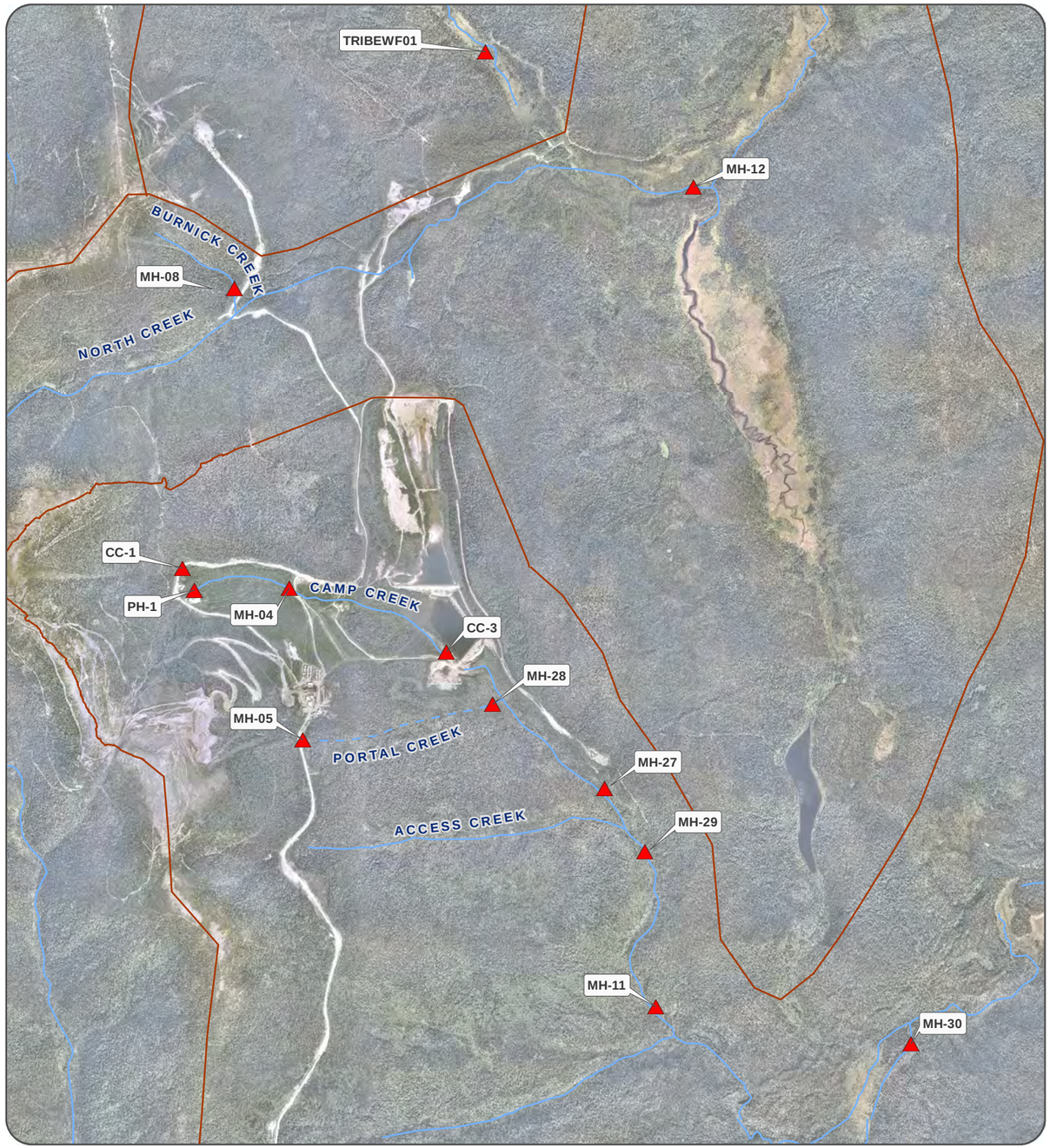
to monitor drainage from a proposed pit, portals, sedimentation pond outflow, and access road runoff. No open pit mining was conducted in the Burnick Zone area.

MH-12: Tributary E East Fork – of False Canyon Creek, approximately 2 km downstream of the north tailings dam, above confluence with a small tributary flowing north from a small lake through a swamp which is located approximately 2 km east of the tailings pond.

3.4 DOWNSTREAM ENVIRONMENT

Station MH-16 is located on the main channel of False Canyon Creek, downstream of the confluence with Tributary D, approximately 22 km downstream of the reclaim pond and therefore captures the combined water quality features of Camp Creek, Portal Creek, Burnick Creek and Tributary E East and West Forks.





Datum: NAD 83; Map Projection: UTM Zone 9N

- Water Quality Monitoring Stations
- Catchements Boundary
- Perrenial Stream
- Ephemeral Stream

Teck

ACCESS

SÄ DENA HES MINE - WATER QUALITY CHARACTERIZATION

FIGURE 1

WATER QUALITY MONITORING STATIONS

OCTOBER 2014

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4 DATA PREPARATION

Data have been collected at and around the Sä Dena Hes site since the 1990s. Prior to evaluating the data in detail it is important to determine if any data points should be omitted due to artificially elevated MDLs or because they are apparent outliers. Data preparation details were presented in section 3 of Azimuth's report *Sä Dena Hes Mine – Evaluation of Water Quality Data to Support Permitting* (2014), which is included in Appendix A.

4.1 DATA SCREENING

Contaminants of Potential Concern (COPCs) were identified by screening each sample against CCME water quality guidelines for protection of aquatic life (Table 1). A total of 12 parameters had at least one case where the CCME guidelines were exceeded, although zinc, cadmium and lead are the only metals that have concentrations which are elevated enough to consistently exceed federal water quality guidelines. Details on the screening methods and results were presented in section 2 of Azimuth's report *Sä Dena Hes Mine – Evaluation of Water Quality Data to Support Permitting* (2014) (see Appendix A).

Table 1 CCME Water Quality Guidelines for the Protection of Aquatic Life

CCME WQGs for Protection of Aquatic Life (mg/L unless otherwise noted)

Analyte	Long-Term	Short-Term
Aluminum (total)	0.005 if pH <6.5, otherwise 0.100	none
Ammonia (as NH_3)	pH and temperature dependent	none
Arsenic	0.005	none
Boron	1.5	29
Cadmium	0.00004 if hardness < 17; $(10^{0.83\ [\log10\ (\text{hardness})]\ -2.46})/1000$ from hardness 17 to 280; 0.00037 at hardness > 280	0.00011 at hardness < 5.3; $(10^{1.016[\log10\ (\text{hardness})]\ -1.71})/1000$ from hardness 5.3 to 360; 0.0077 at hardness > 360
Chloride	120	640
Chromium	0.001 (CrVI); 0.0089 (CrIII); The Cr(VI) number is used and applied to measurements of total chromium. According the CCME factsheet for chromium, Cr(VI) is the principal species found in surface waters while Cr(III) is more prevalent in mildly reducing environments such as sediments and wetlands.	none
Copper	0.002 at hardness < 82; $(e^{0.8545[\ln(\text{hardness})]-1.465}*0.2)/1000$ at hardness 82 to 180; 0.004 at hardness > 180	none
Cyanide (dissolved)	0.005 (as free CN)	
Fluoride	0.12	none
Iron (total)	0.3	none
Lead	0.001 at hardness 60 or less; $(e^{1.273[\ln(\text{hardness})]-4.705})/1000$ at hardness > 60 and less than 180; 0.007 at hardness > 180	none
Mercury	0.000026	none
Molybdenum	0.073	none
Nickel	0.025 at hardness 60 or less; $(e^{0.76[\ln(\text{hardness})]+1.06})/1000$ at hardness > 60 to 180; 0.150 at hardness > 180	none
Nitrite (as NO_2)	0.197	none
Nitrite (as N)	0.06	none
Nitrate (as NO_3)	13	550
Nitrate (as N)	3	124
pH	6.5 to 9.0	none
Selenium	0.001	none
Silver	0.0001	none
Thallium	0.0008	none
Uranium	0.015	0.033
Zinc	0.03	none
Dissolved Oxygen	Minimum 9.5 mg/L for early life stages, 6.5 mg/L for other life stages	
Turbidity	**Clear Flow**: Maximum increase of 8 NTUs from background levels for a short-term exposure (e.g., 24-h period). Maximum average increase of 2 NTUs from background levels for a longer term exposure (e.g., 30-d period). **High Flow or Turbid Waters**: Maximum increase of 8 NTUs from background levels at any one time when background levels are between 8 and 80 NTUs. Should not increase more than 10% of background levels when background is >80 NTUs; See http://www.env.gov.bc.ca/wat/wq/BCguidelines/turbidity/turbiditytech.pdf for details and definitions	
Total Suspended Solids	**Clear Flow**: Maximum increase of 25 mg/L from background levels for any short-term exposure (e.g., 24-h period). Maximum average increase of 5 mg/L from background levels for longer-term exposures (e.g., inputs lasting b/w 24h & 30d); **High Flow**: Maximum increase of 25 mg/L from background levels at any time when background levels are between 25 and 250 mg/L. Should not increase more than 10% of background levels when background is >250 mg/L; See http://www.env.gov.bc.ca/wat/wq/BCguidelines/turbidity/turbiditytech.pdf for details and definitions	

5 ANALYSIS

Summary statistics for parameters and stations of interest are presented in Tables 2 to 5, while complete data tables are presented in Appendix B. The following interpretations are made based on the data presented in Tables 2 to 6 and Figure 4 of Azimuth's report *Sä Dena Hes Mine – Evaluation of Water Quality Data to Support Permitting* (2014) (Appendix A).

- Aluminum – The guideline for aluminum has been exceeded in 35 out of 413 samples. The highest exceedence rate was observed at station MH-05 (38% of samples) but is uncertain because of the small number of samples (n=8). Stations that are considered receiving environment such as MH-13 and MH-16 both have an exceedence rate of about 3%. In the Tributary E drainage, only two stations have data for aluminum, and the exceedence rate are 9.5% and 11.3% at MH-14 and MH-08 respectively.

- Ammonia – Ammonia at exposure stations appears similar to background, although background data are limited. Ammonia has only marginally exceeded the guideline in 2 of 411 samples, one of which was collected at station MH-11 and the other at MH-14.

- Arsenic – Arsenic should be dropped as a parameter of concern; all guideline exceedances were omitted in the data preparation process (see Appendix A). No exceedences of the WQG were observed in the past 10 years.

- Cadmium – Irrespective of many potential outliers in the data set, cadmium clearly exceeds the WQG in many samples. Only one exceedence was observed at a reference station (MH-30) out of a total of 16 samples across all four reference stations. The exceedence rate in receiving environments is about 9% at MH-13 and 4% at MH-16 but is as high as 80% at MH-05 (again there is uncertainty due to small sample size) and 55% at MH-04. Very few exceedences were observed in the Tributary E drainage (11 of 219 samples).

- Chromium – The chromium data set is limited and most samples (38 out of 57) exceed the WQG. At MH-11 almost all data (14 out of 16) exceed the WQG. In the receiving environments, 3 of 5 samples exceed the guideline at MH-13 and 4 out of 5 at MH-16. Similar exceedence rates are observed in the Tributary E drainage, while no exceedences were observed at reference stations (out of only two samples).

- Copper – Copper occasionally exceeds the WQG. The background data appear relatively consistent with the exposure data in both the Camp Creek to False Canyon Creek and Tributary E drainages, and exceedences rates in the receiving environment are about 7% at MH-13 and 5% at MH-16.

- Iron – Although the majority of samples are below the WQG for iron, exceedences are more frequent than for copper. The background data are limited but appear reasonably consistent with the exposure data, with exceedences rates of about 24% at MH-13 and 8% at MH-16. Even though the exceedence rate is comparable

in the Tributary E drainage, the mean iron concentration is slightly higher than in the Camp Creek to False Canyon Creek drainage.

- Lead – Lead exceeds the WQG in many samples. The background data appear consistent with much of the exposure data, however key stations like MH-27 and MH-11 appear to have higher average concentrations than background. MH-13 has an exceedence rate of 7% and MH-16, 6%. The exceedence rate is slightly lower in the Tributary E drainage.

- Nitrate – There has been only one marginal exceedance of the WQG (at MH-05) for nitrate out of a total of 24 samples in the data set.

- Selenium – Selenium occasionally exceeds WQG both in the Camp Creek and Tributary E drainages, and appears high relative to background. While no exceedences of the selenium guideline were observed at the four background stations, 12% of MH-13 samples exceed the WQG. However, all samples are below the WQG upstream of MH-13 at MH-11, suggesting a downstream contributor beyond the mine's influence. All samples were below WQGs at MH-16.

- Silver – Most data for silver (201 of 214 data points) are below MDLs. Two samples (both at MH-11) have exceeded the WQG – in July and December 2010. These samples had TSS of 15 and 12 mg/L respectively, which seem high and may have resulted from bottom disturbance during sampling.

- Zinc – Zinc exceeds the WQG in a large proportion of samples. The limited background data indicate that site water is elevated relative to background, mostly in the Camp Creek drainage but also in the upper reaches of the Tributary E drainage. Exceedence rates in the receiving environment is only about 2% at both MH-13 and MH-16, while it is 19% at MH-11.

There are additional parameters not considered above but which have CCME guidelines. These include pH (field), TSS and turbidity, and they are graphed in Appendix A.

Table 2 Water Quality Summary Statistics for Reference Stations

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH_3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
	CC-1												
Count	0	16			2	2		2	2	2	2	2	2
Mean	NA	122			3.45E-04	8.30E-05		2.60E-04	7.05E-03	3.90E-04	2.55E-04	2.00E-05	5.00E-03
Minimum	NA	114			3.30E-04	7.90E-05		2.50E-04	5.00E-03	3.70E-04	2.00E-04	2.00E-05	5.00E-03
Maximum	NA	130			3.60E-04	8.70E-05		2.70E-04	9.10E-03	4.10E-04	3.10E-04	2.00E-05	5.00E-03
Standard Deviation	NA	8			2.12E-05	5.66E-06		1.41E-05	2.90E-03	2.83E-05	7.78E-05	0	0
Count <MDL	NA	NA			0	0		0	0	0	0	2	2
Count > Standard	NA	NA			0	0		0	0	0	0	0	0
% > standard	NA	NA			0	0		0	0	0	0	0	0
	MH-26												
Count	38	81	4	4	10	10		10	10	10	10	3	10
Mean	8.32	158	2.70E-02	3.72E-02	4.36E-04	8.97E-05		1.79E-03	2.81E-01	1.57E-03	6.64E-04	2.00E-05	8.70E-03
Minimum	8.16	134	1.30E-02	5.00E-03	2.00E-04	1.00E-05		4.70E-04	1.98E-01	2.00E-04	3.00E-04	2.00E-05	5.00E-03
Maximum	8.52	204	4.70E-02	7.26E-02	5.00E-04	1.56E-04		7.60E-03	3.64E-01	8.50E-03	8.00E-04	2.00E-05	1.00E-02
Standard Deviation	0.14	19	1.51E-02	2.79E-02	9.26E-05	4.28E-05		2.12E-03	6.02E-02	2.57E-03	2.20E-04	0	2.16E-03
Count <MDL	0	NA	0	0	0	0		0	0	0	0	3	0
Count > Standard	0	NA	0	0	0	0		1	4	1	0	0	0
% > standard	0	NA	0	0	0	0		10	40	10	0	0	0
	MH-29												
Count	0	17			2	2	1	2	2	2	2	2	2
Mean	NA	166			7.72E-04	1.28E-04	1.70E-04	9.00E-04	6.66E-02	1.65E-03	5.00E-04	1.25E-05	1.18E-02

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH_3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
Minimum	NA	144			6.20E-04	7.50E-05	1.70E-04	4.70E-04	2.01E-02	2.00E-04	4.20E-04	5.00E-06	5.00E-03
Maximum	NA	190			9.24E-04	1.81E-04	1.70E-04	1.33E-03	1.13E-01	3.09E-03	5.79E-04	2.00E-05	1.86E-02
Standard Deviation	NA	24			2.15E-04	7.50E-05	0	6.08E-04	6.57E-02	2.04E-03	1.12E-04	1.06E-05	9.62E-03
Count <MDL	NA	NA			0	0	0	0	0	0	0	0	0
Count > Standard	NA	NA			0	0	0	0	0	0	0	0	0
% > standard	NA	NA			0	0	0	0	0	0	0	0	0
	MH-30												
Count	0	17			2	2	1	2	2	2	2	2	2
Mean	NA	111			2.77E-04	1.49E-04	1.40E-04	1.38E-03	3.55E-01	2.65E-03	3.44E-04	1.30E-05	8.86E-03
Minimum	NA	92			2.23E-04	5.80E-05	1.40E-04	8.45E-04	3.08E-01	3.32E-04	2.47E-04	6.00E-06	2.51E-03
Maximum	NA	133			3.30E-04	2.40E-04	1.40E-04	1.92E-03	4.02E-01	4.96E-03	4.40E-04	2.00E-05	1.52E-02
Standard Deviation	NA	21			7.57E-05	1.29E-04	0	7.60E-04	6.65E-02	3.27E-03	1.36E-04	9.90E-06	8.97E-03
Count <MDL	NA	NA			0	0	0	0	0	0	0	0	0
Count > Standard	NA	NA			0	1	0	0	2	1	0	0	0
% > standard	NA	NA			0	50	0	0	100	50	0	0	0
	ALL STATIONS												
Mean	8.32	139	2.70E-02	3.72E-02	4.57E-04	1.12E-04	1.55E-04	1.08E-03	1.77E-01	1.56E-03	4.41E-04	1.64E-05	8.59E-03

Table 3 Water Quality Summary Statistics for Camp Creek to False Canyon Creek Stations

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	NO_3-N (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
	PH-01													
Count	0	24			3	3		3	3	3		3	3	3
Mean	NA	151			5.90E-04	6.73E-04		3.77E-04	2.06E-02	2.39E-03		1.22E-03	2.00E-05	1.32E-02
Minimum	NA	142			5.40E-04	6.21E-04		2.60E-04	5.00E-03	1.05E-03		1.02E-03	2.00E-05	1.13E-02
Maximum	NA	165			6.50E-04	7.05E-04		5.90E-04	5.19E-02	4.76E-03		1.56E-03	2.00E-05	1.59E-02
Standard Deviation	NA	10			5.57E-05	4.54E-05		1.85E-04	2.71E-02	2.06E-03		2.94E-04	0	2.40E-03
Count <MDL	NA	NA			0	0		0	0	0		0	3	0
Count > Standard	NA	NA			0	3		0	0	0		3	0	0
% > standard	NA	NA			0	100		0	0	0		100	0	0
	MH-04													
Count	301	479	40	40	33	65	4	39	66	65	3	33	27	66
Mean	8.22	162.18	4.04E-02	1.33E-02	4.00E-04	5.48E-03	2.25E-03	1.29E-03	5.35E-02	8.15E-02	2.37E-01	7.40E-04	2.00E-05	9.77E-03
Minimum	7.25	42.80	5.00E-03	5.00E-03	1.00E-04	4.00E-05	1.00E-03	2.00E-04	5.00E-03	1.26E-04	2.00E-02	3.00E-04	2.00E-05	5.00E-03
Maximum	8.50	210.00	1.86E-01	1.80E-01	6.10E-04	3.40E-01	3.00E-03	1.10E-02	4.11E-01	5.16E+00	4.30E-01	1.10E-03	2.00E-05	5.70E-02
Standard Deviation	0.22	26.07	3.61E-02	2.93E-02	1.09E-04	4.21E-02	9.57E-04	1.88E-03	7.38E-02	6.40E-01	2.06E-01	1.58E-04	0	8.63E-03
Count <MDL	NA	NA	0	0	0	0	0	0	0	0	0	0	27	0
Count > Standard	NA	NA	2	0	0	36	3	1	1	5	0	1	0	3
% > standard	NA	NA	5.0	0.0	0.0	55.4	75.0	2.6	1.5	7.7	0.0	3.0	0.0	4.5
	CC-3													
Count	0	8			1	1		1	1	1		1	1	1
Mean	NA	153			4.40E-04	1.75E-04		9.60E-04	8.02E-02	1.59E-03		5.80E-04	2.00E-05	5.10E-03

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	NO_3-N (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
Minimum	NA	153			4.40E-04	1.75E-04		9.60E-04	8.02E-02	1.59E-03		5.80E-04	2.00E-05	5.10E-03
Maximum	NA	153			4.40E-04	1.75E-04		9.60E-04	8.02E-02	1.59E-03		5.80E-04	2.00E-05	5.10E-03
Standard Deviation	NA	0			0	0		0	0	0		0	0	0
Count <MDL	NA	NA			0	0		0	0	0		0	1	0
Count > Standard	NA	NA			0	0		0	0	0		0	0	0
% > standard	NA	NA			0	0		0	0	0		0	0	0
	MH-05													
Count	53	66	8	8	2	10	3	4	10	10	1	2	2	6
Mean	8.11	161	6.44E-01	9.88E-03	1.31E-03	5.28E-03	4.33E-03	4.81E-03	1.02E+00	4.26E-01	3.62E+00	2.53E-03	2.00E-05	2.94E-02
Minimum	7.22	103	5.00E-03	5.00E-03	1.30E-03	2.24E-04	2.00E-03	3.40E-04	5.00E-03	0	3.62E+00	2.50E-03	2.00E-05	5.10E-03
Maximum	8.41	200	2.43E+00	2.90E-02	1.31E-03	1.78E-02	6.00E-03	9.00E-03	4.91E+00	2.01E+00	3.62E+00	2.55E-03	2.00E-05	5.60E-02
Standard Deviation	0.33	36	1.00E+00	8.17E-03	7.07E-06	6.77E-03	2.08E-03	4.84E-03	1.89E+00	7.84E-01	NA	3.54E-05	0	1.86E-02
Count <MDL	NA	NA	0	0	0	0	0	0	0	0	0	0	2	0
Count > Standard	NA	NA	3	0	0	8	3	2	3	5	1	2	0	3
% > standard	NA	NA	37.5	0.0	0.0	80.0	100.0	50.0	30.0	50.0	100.0	100.0	0.0	50.0
	MH-28													
Count	0	33			4	4	1	4	4	4		4	4	4
Mean	NA	192			7.20E-04	1.34E-04	1.30E-04	6.89E-04	1.16E-01	2.11E-03		8.13E-04	1.63E-05	1.16E-02
Minimum	NA	170			5.80E-04	5.50E-05	1.30E-04	3.87E-04	5.00E-03	2.00E-04		5.50E-04	5.00E-06	5.40E-03
Maximum	NA	211			1.06E-03	3.09E-04	1.30E-04	1.41E-03	4.16E-01	7.32E-03		1.19E-03	2.00E-05	2.41E-02
Standard Deviation	NA	19			2.30E-04	1.19E-04	NA	4.83E-04	2.00E-01	3.48E-03		3.13E-04	7.50E-06	8.54E-03
Count <MDL	NA	NA			0	0	0	0	0	0		0	4	0
Count > Standard	NA	NA			0	1	0	0	1	1		1	0	0

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	NO_3-N (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
% > standard	NA	NA			0	25	0	0	25	25		25	0	0
	MH-27													
Count	0	81			10	10	1	10	10	10		10	10	10
Mean	NA	172			5.99E-04	1.61E-04	1.00E-04	8.54E-04	1.11E-01	8.64E-03		8.19E-04	1.85E-05	1.79E-02
Minimum	NA	151			4.40E-04	1.12E-04	1.00E-04	5.20E-04	6.11E-02	1.90E-03		5.40E-04	5.00E-06	1.06E-02
Maximum	NA	191			7.80E-04	2.36E-04	1.00E-04	2.15E-03	1.66E-01	5.87E-02		1.06E-03	2.00E-05	3.34E-02
Standard Deviation	NA	12			1.00E-04	4.00E-05	NA	4.92E-04	3.56E-02	1.76E-02		1.59E-04	4.74E-06	6.96E-03
Count <MDL	NA	NA			0	0	1	0	0	0		0	0	0
Count > Standard	NA	NA			0	0	0	0	0	1		1	0	1
% > standard	NA	NA			0	0	0	0	0	10		10	0	10
	MH-11													
Count	952	1225	127	126	71	164	16	89	171	164	6	70	54	171
Mean	8.22	197	1.07E-01	1.23E-02	5.61E-04	1.14E-03	3.09E-03	1.73E-03	1.88E-01	2.53E-02	1.55E-01	7.10E-04	2.62E-05	3.11E-02
Minimum	7.10	100	1.00E-03	5.00E-03	1.00E-04	5.00E-05	1.00E-03	2.00E-04	5.00E-03	2.70E-04	2.00E-02	1.00E-04	2.00E-05	5.00E-03
Maximum	8.62	255	4.96E+00	3.20E-01	2.10E-03	1.50E-01	8.00E-03	1.10E-02	7.85E+00	2.98E+00	2.90E-01	1.00E-03	2.00E-04	3.44E-01
Standard Deviation	0.28	28	4.71E-01	2.99E-02	2.93E-04	1.17E-02	1.88E-03	1.73E-03	6.59E-01	2.33E-01	9.48E-02	1.74E-04	2.86E-05	5.00E-02
Count <MDL	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Count > Standard	NA	NA	11	1	0	37	14	6	14	36	0	0	2	33
% > standard	NA	NA	8.7	0.8	0.0	22.6	87.5	6.7	8.2	22.0	0.0	0.0	3.7	19.3
	MH-13													
Count	288	415	40	40	25	57	5	30	58	58	2	25	17	58
Mean	8.12	198	3.64E-02	2.95E-02	4.03E-04	3.77E-03	2.02E-03	1.73E-03	2.78E-01	4.70E-02	2.00E-02	7.64E-04	1.91E-05	8.36E-03
Minimum	7.04	15	5.00E-03	5.00E-03	1.00E-04	1.10E-05	1.00E-04	3.00E-04	8.00E-03	3.00E-05	2.00E-02	5.00E-04	5.00E-06	1.90E-03

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	NO_3-N (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
Maximum	8.79	290	1.70E-01	4.54E-01	1.05E-03	1.70E-01	4.00E-03	5.30E-03	1.23E+00	1.63E+00	2.00E-02	1.68E-03	2.00E-05	4.80E-02
Standard Deviation	0.35	40	3.07E-02	7.46E-02	2.28E-04	2.30E-02	1.55E-03	1.28E-03	2.17E-01	2.48E-01	0	2.95E-04	3.64E-06	6.26E-03
Count <MDL	NA	NA	0	0	0	0	0	0	0	0	2	0	17	0
Count > Standard	NA	NA	1	0	0	5	3	2	14	4	0	3	0	1
% > standard	NA	NA	2.5	0.0	0.0	8.8	60.0	6.7	24.1	6.9	0.0	12.0	0.0	1.7
	ALL STATIONS													
Mean	8.17	173	2.07E-01	1.62E-02	6.27E-04	2.10E-03	1.99E-03	1.55E-03	2.34E-01	7.43E-02	1.01E+00	1.02E-03	2.00E-05	1.58E-02

Table 4 Water Quality Summary Statistics for Tributary E Drainage Stations

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH_3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
	TRIBEWF01												
Count	0	8			1	1		1	1	1	1	1	1
Mean	NA	156			2.14E-03	1.92E-04		1.44E-03	8.46E-01	3.38E-03	9.30E-04	2.00E-05	3.22E-02
Minimum	NA	156			2.14E-03	1.92E-04		1.44E-03	8.46E-01	3.38E-03	9.30E-04	2.00E-05	3.22E-02
Maximum	NA	156			2.14E-03	1.92E-04		1.44E-03	8.46E-01	3.38E-03	9.30E-04	2.00E-05	3.22E-02
Standard Deviation	NA	0			0	0		0	0	0	0	0	0
Count <MDL	NA	NA			0	0		0	0	0	0	1	0
Count > Standard	NA	NA			0	0		0	1	0	0	0	1
% > standard	NA	NA			0	0		0	100	0	0	0	100
	TRIBEWF02												
Count	0	16			2	2		2	2	2	2	2	2

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH_3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
Mean	NA	145			1.07E-03	1.10E-05		2.00E-04	2.60E-01	2.00E-04	7.15E-04	2.00E-05	5.00E-03
Minimum	NA	144			1.06E-03	1.00E-05		2.00E-04	2.58E-01	2.00E-04	6.90E-04	2.00E-05	5.00E-03
Maximum	NA	146			1.07E-03	1.20E-05		2.00E-04	2.62E-01	2.00E-04	7.40E-04	2.00E-05	5.00E-03
Standard Deviation	NA	1			7.07E-06	1.41E-06		0	2.83E-03	0	3.54E-05	0	0
Count <MDL	NA	NA			0	0		2	0	2	0	2	2
Count > Standard	NA	NA			0	0		0	0	0	0	0	0
% > standard	NA	NA			0	0		0	0	0	0	0	0
	MH-14												
Count	309	433	42	42	25	60	8	31	60	60	25	17	60
Mean	8.01	208.34	7.60E-02	1.90E-02	3.84E-04	3.58E-03	2.89E-03	1.81E-03	3.03E-01	2.46E-02	8.24E-04	2.15E-05	7.21E-03
Minimum	7.00	132.00	1.60E-02	5.00E-03	1.00E-04	1.40E-05	1.00E-04	3.00E-04	9.00E-03	7.00E-05	4.00E-04	5.00E-06	2.61E-03
Maximum	8.39	240.00	1.38E+00	3.13E-01	1.40E-03	1.60E-01	6.00E-03	8.30E-03	2.76E+00	8.80E-01	1.10E-03	6.00E-05	2.10E-02
Standard Deviation	0.32	21.14	2.10E-01	4.76E-02	2.30E-04	2.15E-02	2.28E-03	1.83E-03	3.61E-01	1.31E-01	1.73E-04	1.06E-05	3.79E-03
Count <MDL	NA	NA	0	0	0	0	0	0	0	0	0	0	0
Count > Standard	0	NA	4	1	0	2	5	2	19	3	3	0	0
% > standard	0	NA	9.5	2.4	0.0	3.3	62.5	6.5	31.7	5.0	12.0	0.0	0.0
	MH-15												
Count	0	17			2	2	1	2	2	2	2	2	2
Mean	NA	195			4.35E-04	1.40E-05	1.00E-04	2.56E-04	1.92E-01	2.10E-04	4.98E-04	1.30E-05	3.18E-03
Minimum	NA	188			4.30E-04	1.00E-05	1.00E-04	2.00E-04	1.73E-01	2.00E-04	4.90E-04	6.00E-06	1.35E-03
Maximum	NA	203			4.40E-04	1.80E-05	1.00E-04	3.11E-04	2.11E-01	2.20E-04	5.05E-04	2.00E-05	5.00E-03
Standard Deviation	NA	8			7.07E-06	5.66E-06	NA	7.85E-05	2.69E-02	1.41E-05	1.06E-05	9.90E-06	2.58E-03
Count <MDL	NA	NA			0	0	1	0	0	0	0	0	0

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH_3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
Count > Standard	NA	NA			0	0	0	0	0	0	0	0	0
% > standard	NA	NA			0	0	0	0	0	0	0	0	0
	MH-08												
Count	875	1150	115	114	75	152	10	84	159	152	74	54	159
Mean	8.27	149	9.40E-02	1.25E-02	1.24E-03	6.32E-04	4.04E-03	1.79E-03	1.41E-01	2.59E-03	7.56E-04	1.99E-05	1.54E-02
Minimum	7.59	104	1.00E-03	5.00E-03	1.00E-04	1.00E-05	4.10E-04	2.00E-04	5.00E-03	2.00E-05	1.00E-04	5.00E-06	5.00E-03
Maximum	8.53	208	1.99E+00	2.17E-01	4.22E-03	8.00E-02	1.40E-02	2.10E-02	3.71E+00	1.80E-01	1.98E-03	3.00E-05	1.30E-01
Standard Deviation	0.15	15	2.73E-01	2.50E-02	5.12E-04	6.48E-03	4.41E-03	3.13E-03	4.12E-01	1.52E-02	3.90E-04	2.47E-06	1.93E-02
Count <MDL	NA	NA	0	0	0	0	0	0	0	0	0	0	0
Count > Standard	0	NA	13	0	0	9	6	8	14	8	8	0	13
% > standard	0	NA	11.3	0.0	0.0	5.9	60.0	9.5	8.8	5.3	10.8	0.0	8.2
	MH-12												
Count	0	17			2	2	1	2	2	2	2	2	2
Mean	NA	155			1.23E-03	5.95E-05	3.60E-04	6.89E-04	1.71E-01	9.90E-04	6.27E-04	1.40E-05	4.48E-03
Minimum	NA	136			8.90E-04	4.30E-05	3.60E-04	5.40E-04	2.67E-02	2.70E-04	6.14E-04	8.00E-06	3.95E-03
Maximum	NA	177			1.56E-03	7.60E-05	3.60E-04	8.37E-04	3.15E-01	1.71E-03	6.40E-04	2.00E-05	5.00E-03
Standard Deviation	NA	21			4.74E-04	2.33E-05	NA	2.10E-04	2.04E-01	1.02E-03	1.84E-05	8.49E-06	7.42E-04
Count <MDL	NA	NA			0	0	0	0	0	0	0	0	0
Count > Standard	NA	NA			0	0	0	0	1	0	0	0	0
% > standard	NA	NA			0	0	0	0	50	0	0	0	0
	ALL STATIONS												
Mean	8.14	168	8.50E-02	1.58E-02	1.08E-03	7.48E-04	1.85E-03	1.03E-03	3.19E-01	5.33E-03	7.25E-04	1.81E-05	1.12E-02

Table 5 Water Quality Summary Statistics for Downstream Environment Stations

	pH (field) pH units	Hardness (dissolved) mg/L	Al (total) mg/L	NH_3-N (total) mg/L	As (total) mg/L	Cd (total) mg/L	Cr (total) mg/L	Cu (total) mg/L	Fe (total) mg/L	Pb (total) mg/L	Se (total) mg/L	Ag (total) mg/L	Zn (total) mg/L
	MH-16												
Count	256	355	37	37	17	52	5	22	52	52	17	9	52
Mean	8.20	207	4.19E-02	1.24E-02	4.10E-04	6.03E-03	3.02E-03	1.40E-03	2.26E-01	5.07E-03	6.74E-04	1.83E-05	7.50E-03
Minimum	7.38	110	1.00E-02	5.00E-03	2.00E-04	1.00E-05	1.00E-04	2.00E-04	8.80E-02	2.00E-05	3.10E-04	5.00E-06	5.00E-03
Maximum	8.56	246	4.69E-01	5.20E-02	1.00E-03	2.90E-01	5.00E-03	5.00E-03	1.20E+00	1.20E-01	9.00E-04	2.00E-05	4.10E-02
Standard Deviation	0.26	22	7.48E-02	1.47E-02	1.68E-04	4.02E-02	2.09E-03	1.25E-03	2.08E-01	2.13E-02	1.62E-04	5.00E-06	5.60E-03
Count <MDL	NA	NA	0	0	0	0	0	0	0	0	0	9	0
Count > Standard	0	NA	1	0	0	2	4	1	4	3	0	0	1
% > standard	0	NA	2.7	0.0	0.0	3.8	80.0	4.5	7.7	5.8	0.0	0.0	1.9

6 DISCUSSION AND CONCLUSION

Analysis of water quality data indicates that cadmium, lead and zinc are the main parameters of concern, as they frequently exceed the CCME guidelines for the protection of aquatic life. MH-13 is the station located the nearest from the mine site where fish presence has historically been reported (seasonally) and the exceedence rate of the CCME WQG for the protection of aquatic life (PAL) at this site is 9%, 7% and 2% for cadmium, lead and zinc respectively. Although the exceedence rates are not substantial, the fact that concentrations are on average higher at MH-13 than at reference stations for those parameters is suggestive of the influence of mine-related or natural sources of metals between MH-04 and MH-11 and MH-13. Parameters for which exceedences of the CCME guidelines were observed at reference stations include copper, iron, lead and cadmium, indicating that they may be naturally elevated in this region.

It is interesting to note that ammonia is on average higher at reference sites than at impacted sites, and that copper and selenium have average concentrations that are higher at reference sites than in the Tributary E drainage.

7 REFERENCES

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APPENDIX A

EXCERPTS FROM *SÄ DENA HES MINE – EVALUATION OF WATER QUALITY DATA TO SUPPORT PERMITTING* *AZIMUTH (2014)*

Sä Dena Hes Mine

Evaluation of Water Quality Data to Support Permitting

Working Draft

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USE & LIMITATIONS OF THIS REPORT

This report has been prepared by Azimuth Consulting Group Partnership (Azimuth) for the use of Teck Metals Ltd (Teck). This report is intended to provide information to Teck to assist with making decisions with respect to the Sä Dena Hes Mine. Azimuth is not party to the various considerations underlying the business decisions, and does not make recommendations regarding such business decisions. In providing this report, Azimuth accepts no liability or responsibility in respect of the site described in this report or for any business decisions relating to the site, including decisions in respect of the purchase, sale or investment in the site.

Any use, reliance on, or decision made by Yukon Energy Mines and Resources, Liard First Nation or any other third party based on this report is the sole responsibility of such third party. Azimuth accepts no liability or responsibility for any damages that may be suffered or incurred by any party as a result of the use of, reliance on, or any decision made based on this report.

The findings, conclusions and recommendations in this report reflect our best professional judgment and have been developed in a manner consistent with the level of skill normally exercised by environmental professionals currently practicing under similar conditions in the area. The findings contained in this report are based, in part, upon information provided by others and are valid only as of the date of this report. Azimuth has assumed the data or other information provided by others is factual and accurate. If any of the information is inaccurate, site conditions change, new information is discovered, and/or unexpected site conditions are encountered in future work, then modifications by Azimuth to the findings, conclusions, and recommendations of this report may be necessary.

In addition, the conclusions and recommendations of this report are based upon applicable legislation existing at the time the report was drafted. Changes to legislation, such as an alteration in acceptable limits of contamination, may alter conclusions and recommendations.

This report pertains to a specific site and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development or remediation other than those to which it refers. Any variation from the site, remediation or proposed development may necessitate a supplementary investigation and assessment.

The results and conclusions reported herein are based on interpretation of data collected during a preliminary sampling effort. All information and data used to make decisions are subject to interpretation. Azimuth has used its best professional judgment to make decisions, predictions, and offer opinions about trends observed in this data set. Copying of this report is not permitted without the written permission of Teck and Azimuth.

2. CONTAMINANTS OF POTENTIAL CONCERN

2.1. Screening Methods

Data have been collected at and around the Sa Dena Hess site since the 1990s. Contaminants of Potential Concern (COPCs) were identified by screening each sample against CCME water quality guidelines for protection of aquatic life (**Table 1**), with the following caveats:

- Data for 1999 to 2014 were used, but data prior to 1999 were excluded due to our lack of confidence in the lab results and (often) elevated method detection limits (MDLs) relative to more recent data.
- Data from sites designated as representing effluent or seeps or groundwater were not screened; rather, screening focused only on sites representing surface water (i.e., the receiving environment).
- Data points with values below detection limits were ignored for screening purposes (but not for subsequent analyses). This is reasonable because screening is based on the maximum values for measured data points rather than on a statistic (e.g., a percentile).
- In cases where CCME guidelines depend on pH, field pH was used.
- In cases where CCME guidelines depend on temperature, a temperature of 10 degrees was assumed.
- In cases where CCME guidelines depend on hardness, dissolved hardness was used. For samples where dissolved hardness was not reported, it was estimated from total hardness using the average relationship between dissolved and total hardness across the data set (1 mg total hardness = 0.951 mg dissolved hardness).
- The CCME guideline for Chromium VI was applied to the data for total chromium.
- Three forms of cyanide have been collected at the site: WAD, SAD, and total cyanide. Our understanding is that none of these are directly comparable to the CCME “free cyanide” guideline. Consequently, cyanide has not been screened at this time.

Compliance points that are likely to be appropriate for the site include MH-27 for the Camp Creek to False Canyon Creek watershed, MH-15 for the west fork of Tributary E, and MH-12 for the east fork of Tributary E. However, data for these particular stations are somewhat limited; therefore, all surface water stations in each of the three watersheds are used for initial screening.

2.2. Screening Results

A total of 12 parameters had at least one case where the CCME guidelines were exceeded. For cadmium there were exceedances of both short-term and long-term CCME guidelines, so we focus only on exceedances of the long-term guideline (which is more conservative). Because many of the parameters

have guidelines that are hardness or pH dependent, it is easiest to screen data using the ratio of concentration in a sample to the sample-specific guideline value. This ratio is termed the Exceedance Ratio, and a value > 1.0 indicates that the sample exceeded the guideline. Initial evaluation of the data for screening (**Figure 1**) shows that most of the parameters have multiple exceedances. Silver and ammonia exceed guidelines only twice, but in both cases the exceedances do not appear to be outliers (i.e., the exceedances are not inconsistent with the rest of the data). For nitrate there is only a single exceedance, and while it is several factors higher than the other values there is no obvious rationale for discounting this data point at this stage.

Parameters for which WQGs depend on natural background values (pH, TSS, turbidity) are considered later in this memo.

3. DATA PREPARATION

Prior to evaluating the data in detail it is important to determine if any data points should be omitted due to artificially elevated MDLs or because they are apparent outliers. Beginning with evaluation of MDLs, it is clear that in many cases MDLs have been elevated beyond water quality guidelines (**Figure 2**; red symbols at values above 1). Thus, those data points were deleted. To evaluate apparent outliers, the data were logged (**Figure 3**) and additional coding was used to depict data collected prior to 2004. Potential outliers based on visual analysis were evaluated as follows:

- As at several stations: all of the high values for As were from samples more than 10 years old, and are inconsistent with more recent data. It is reasonable to omit these data, in which case arsenic is no longer a parameter of concern.
- Cu at MH-16: The concentration of copper of 0.18 mg/L was measured in February 2000. Given that this value was measured at the furthest downstream station (where we would expect considerable dilution) and is so much higher than all other data points, it is assumed to be anomalous and is omitted.
- NO3.N at MH-05: There is nothing anomalous about the sample. Given that there is clear variation among sites, and there are no other samples at MH-05, there is no rationale to omit the data point. Thus, the data point is retained.
- Se at MH-05, MH-08: All of these high values for Se were from samples more than 10 years old, and are inconsistent with more recent data. It is reasonable to omit these data.
- Zn: multiple data points at MH-05: All four of the data points with high values were collected from 1999 to 2001, whereas all of the data points with low values were collected from 2002 to 2013. All data points were collected in June with one exception (a 1999 data point collected in May). It seems reasonable to omit the older data as they do not appear to reflect current conditions.

The revised data set with outliers removed is shown in **Figure 4**.

TABLES

Table 1. CCME water quality guidelines for the protection of aquatic life

	CCME WQGs for Protection of Aquatic Life (mg/L unless otherwise noted)	
Analyte	**Long-Term**	**Short-Term**
Aluminum (total)	0.005 if pH <6.5, otherwise 0.100	none
Ammonia (as NH_3)	pH and temperature dependent	none
Arsenic	0.005	none
Boron	1.5	29
Cadmium	0.00004 if hardness < 17; $(10^{0.83\ [\log10\ (\text{hardness})]\ -2.46})/1000$ from hardness 17 to 280; 0.00037 at hardness > 280	0.00011 at hardness < 5.3; $(10^{1.016[\log10\ (\text{hardness})]\ -1.71})/1000$ from hardness 5.3 to 360; 0.0077 at hardness > 360
Chloride	120	640
Chromium	0.001 (CrVI); 0.0089 (CrIII); The Cr(VI) number is used and applied to measurements of total chromium. According the CCME factsheet for chromium, Cr(VI) is the principal species found in surface waters while Cr(III) is more prevalent in mildly reducing environments such as sediments and wetlands.	none
Copper	0.002 at hardness < 82; $(e^{0.8545[\ln(\text{hardness})]-1.465}*0.2)/1000$ at hardness 82 to 180; 0.004 at hardness > 180	none
Cyanide (dissolved)	0.005 (as free CN)	
Fluoride	0.12	none
Iron (total)	0.3	none
Lead	0.001 at hardness 60 or less; $(e^{1.273[\ln(\text{hardness})]-4.705})/1000$ at hardness > 60 and less than 180; 0.007 at hardness > 180	none
Mercury	0.000026	none
Molybdenum	0.073	none
Nickel	0.025 at hardness 60 or less; $(e^{0.76[\ln(\text{hardness})]+1.06})/1000$ at hardness > 60 to 180; 0.150 at hardness > 180	none
Nitrite (as NO_2)	0.197	none
Nitrite (as N)	0.06	none
Nitrate (as NO_3)	13	550
Nitrate (as N)	3	124
pH	6.5 to 9.0	none
Selenium	0.001	none
Silver	0.0001	none
Thallium	0.0008	none
Uranium	0.015	0.033
Zinc	0.03	none
Dissolved Oxygen	Minimum 9.5 mg/L for early life stages, 6.5 mg/L for other life stages	
Turbidity	**Clear Flow**: Maximum increase of 8 NTUs from background levels for a short-term exposure (e.g., 24-h period). Maximum average increase of 2 NTUs from background levels for a longer term exposure (e.g., 30-d period). **High Flow or Turbid Waters**: Maximum increase of 8 NTUs from background levels at any one time when background levels are between 8 and 80 NTUs. Should not increase more than 10% of background levels when background is >80 NTUs; See http://www.env.gov.bc.ca/wat/wq/BCguidelines/turbidity/turbiditytech.pdf for details and definitions	
Total Suspended Solids	**Clear Flow**: Maximum increase of 25 mg/L from background levels for any short-term exposure (e.g., 24-h period). Maximum average increase of 5 mg/L from background levels for longer-term exposures (e.g., inputs lasting b/w 24h & 30d); **High Flow**: Maximum increase of 25 mg/L from background levels at any time when background levels are between 25 and 250 mg/L. Should not increase more than 10% of background levels when background is >250 mg/L; See http://www.env.gov.bc.ca/wat/wq/BCguidelines/turbidity/turbiditytech.pdf for details and definitions	

FIGURES

Figure 1. Parameters exceeding CCME water quality guidelines at surface water sites, 1999-2014.

Notes: Data below detection limits excluded. y axis is exceedance ratio, dotted line at ratio = 1). See text for additional details.

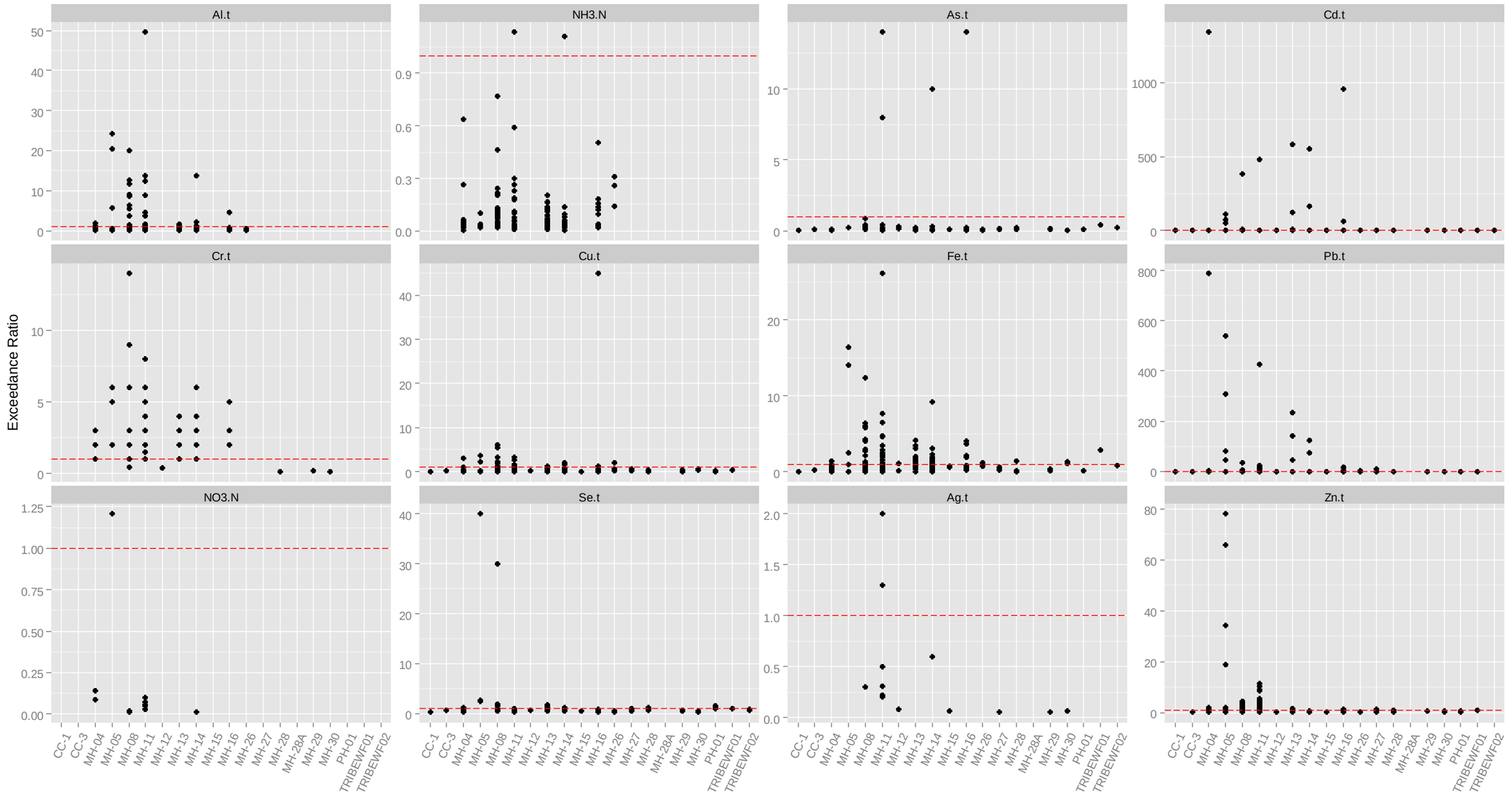


Figure 2. Exceedance ratios by parameter and site

Notes: Data < MDL included, and indicated with red symbols. Y axis is exceedance ratio, dotted line at ratio = 1). Based on data collected 1999-2014. Station groups roughly separated – reference stations on left, Camp Creek to False Canyon Creek watershed in middle, the two Tributary E watersheds as the third and fourth groups, station MH-16 is downstream of all contributing watershed. . See text for additional details.

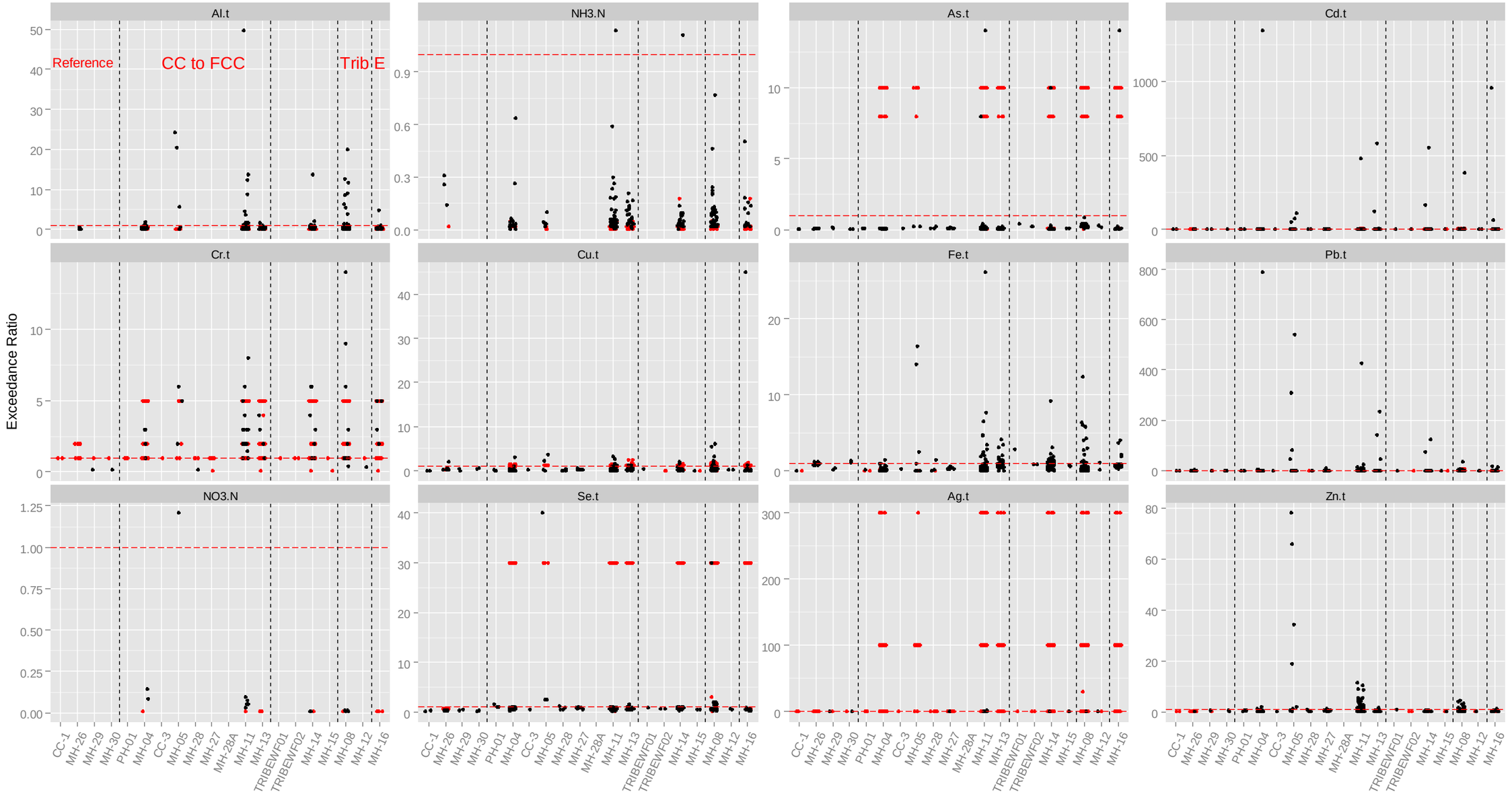


Figure 3. Log_{10} (Exceedance Ratios) by parameter and site

Notes: Data < MDL included except if above guidelines; MDL data indicated with red symbols. For the rest of the data, orange indicates collection prior to 2004, while black indicates collection from 2004 to 2014. Y axis is log10 (exceedance ratio), thus points above the dotted line (0) exceed water quality guidelines. Based on data collected 1999-2014. Station groups roughly separated – reference stations on left, Camp Creek to False Canyon Creek watershed in middle, the two Tributary E watersheds as the third and fourth groups, station MH-16 is downstream of all contributing watershed. . See text for additional details.

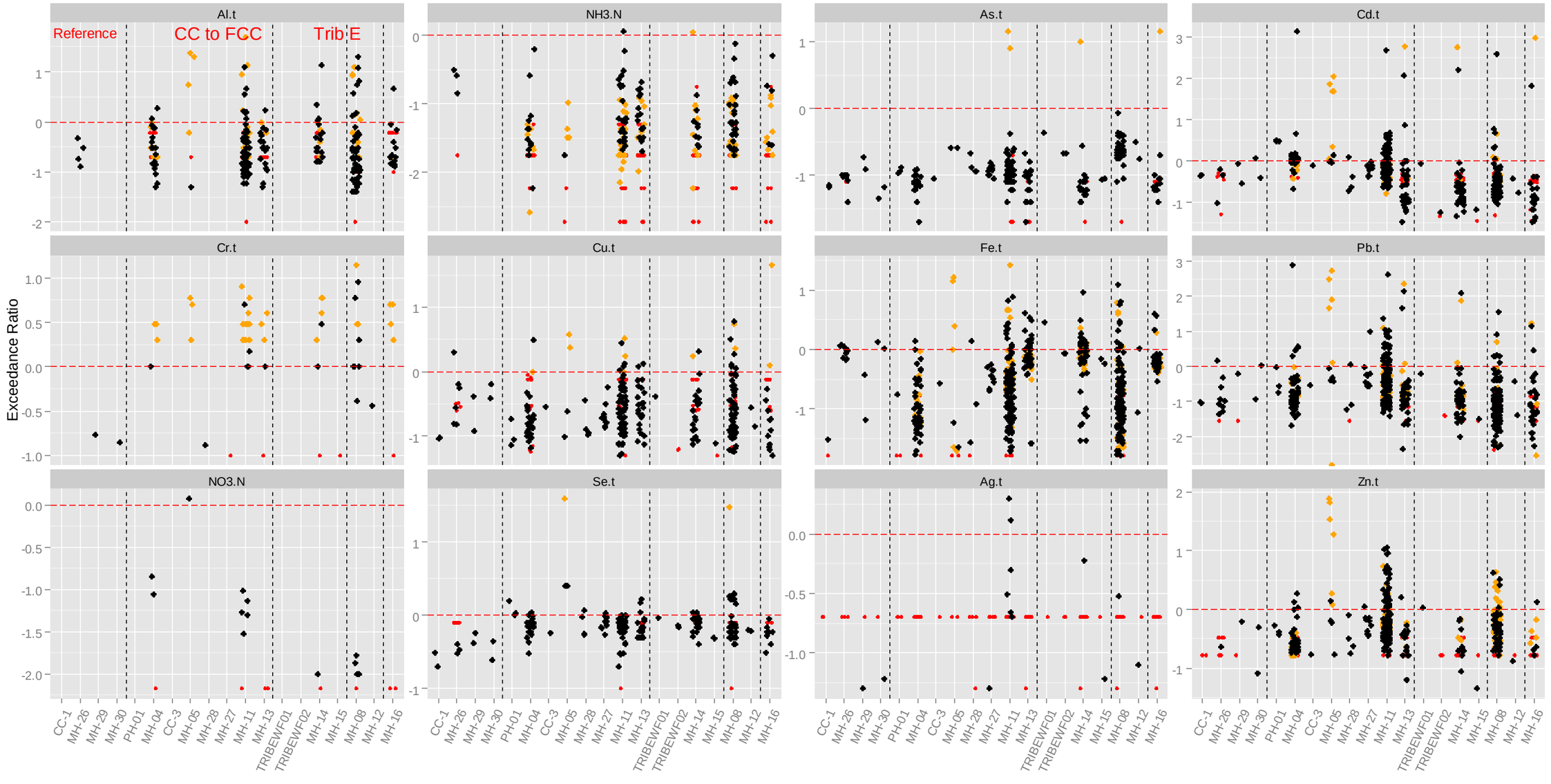


Figure 4. Log_{10} (Exceedance Ratios) by parameter and site, with outliers removed.

Notes: Data < MDL included except if above guidelines; MDL data indicated with red symbols. For the rest of the data, orange indicates collection prior to 2004, while black indicates collection from 2004 to 2014. Y axis is log10 (exceedance ratio), thus points above the dotted line (0) exceed water quality guidelines. Based on data collected 1999-2014. Station groups roughly separated – reference stations on left, Camp Creek to False Canyon Creek watershed in middle, the two Tributary E watersheds as the third and fourth groups, station MH-16 is downstream of all contributing watershed. . See text for additional details.

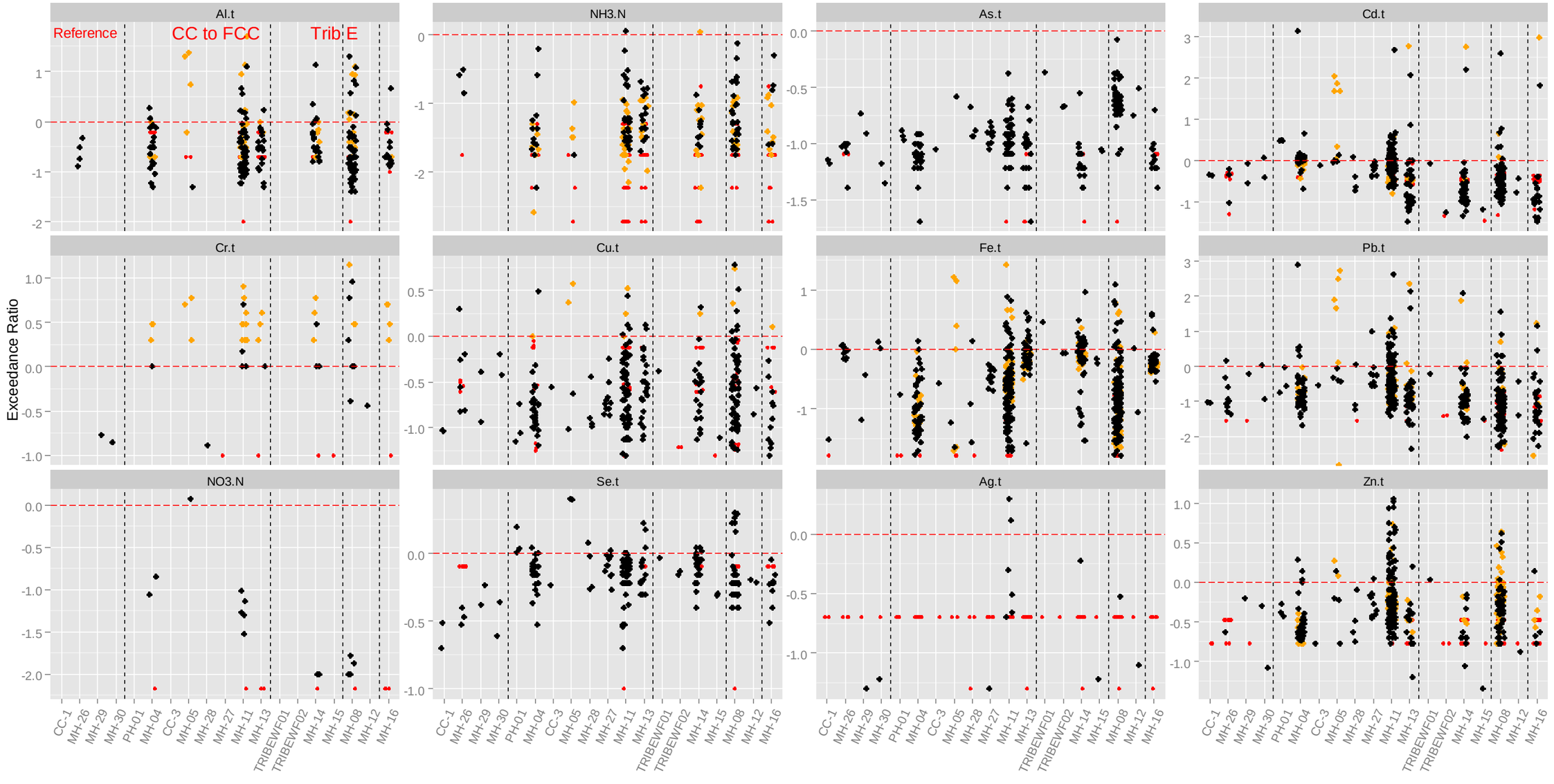
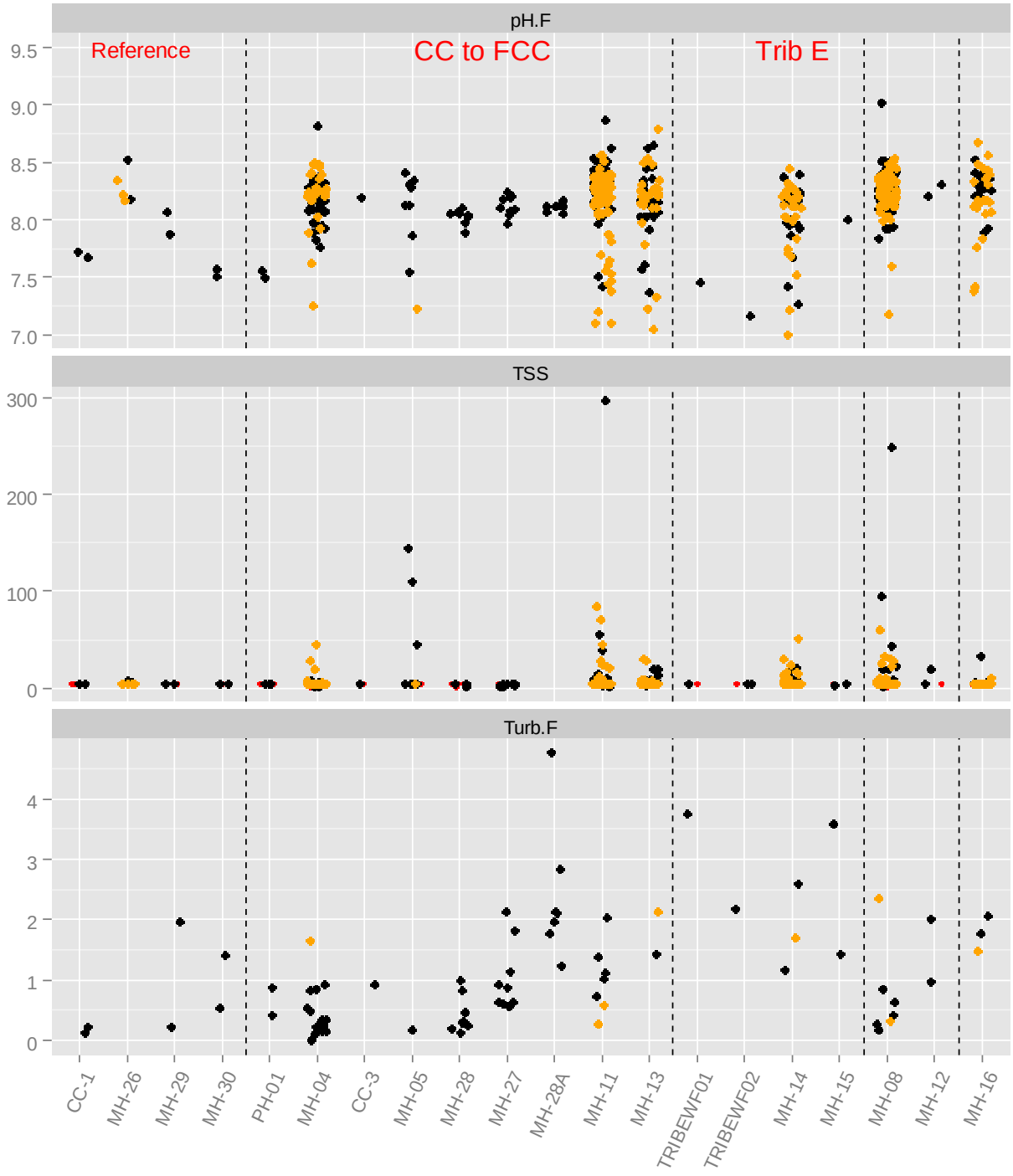


Figure 5. Additional parameters with irregular CCME water quality guidelines (field pH, TSS, turbidity)

Notes: Data < MDL indicated with red symbols. For the rest of the data, orange indicates collection in winter (November to May inclusive) while black indicates collection from June to October. See text for additional details including units.



APPENDIX B

WATER QUALITY TABULAR DATA

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
1	CC-1	20/06/2013	114	NA	NA	NA	0.00033	7.90E-05	NA	0.00025	0.005	0.00037	NA	2.00E-04	2.00E-05	0.005
2	CC-1	27/09/2013	130	NA	NA	NA	0.00036	8.70E-05	NA	0.00027	0.0091	0.00041	NA	0.00031	2.00E-05	0.005
3	MH-26	28/09/2010	149	8.52	0.03	0.031	2.00E-04	2.10E-05	NA	5.00E-04	0.288	0.000456	NA	3.00E-04	2.00E-05	0.005
4	MH-26	31/12/2010	175	8.34	0.047	0.005	5.00E-04	0.000156	NA	0.0076	0.329	0.000755	NA	4.00E-04	2.00E-05	0.007
5	MH-26	30/03/2011	163	NA	NA	NA	5.00E-04	1.00E-04	NA	0.002	0.213	0.0085	NA	8.00E-04	NA	0.01
6	MH-26	07/10/2011	134	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.205	2.00E-04	NA	8.00E-04	NA	0.01
7	MH-26	23/12/2011	159	8.22	0.013	0.0402	4.00E-04	1.00E-04	NA	0.001	0.198	6.00E-04	NA	8.00E-04	NA	0.01
8	MH-26	21/03/2012	163	8.16	0.018	0.0726	5.00E-04	1.00E-04	NA	0.001	0.258	0.0015	NA	8.00E-04	NA	0.01
9	MH-26	13/07/2012	140	NA	NA	NA	0.00042	1.00E-04	NA	0.001	0.364	0.00035	NA	8.00E-04	NA	0.01
10	MH-26	19/09/2012	134	NA	NA	NA	5.00E-04	1.00E-05	NA	0.00047	0.323	0.00024	NA	0.00034	2.00E-05	0.005
11	MH-26	18/01/2013	162	NA	NA	NA	0.00047	0.00011	NA	0.0023	0.29	0.00286	NA	8.00E-04	NA	0.01
12	MH-26	15/03/2013	204	NA	NA	NA	0.00047	1.00E-04	NA	0.001	0.342	2.00E-04	NA	8.00E-04	NA	0.01
13	MH-29	24/06/2013	144	NA	NA	NA	0.000924	0.000181	0.00017	0.00133	0.113	0.00309	NA	0.000579	5.00E-06	0.0186
14	MH-29	27/09/2013	190	NA	NA	NA	0.00062	7.50E-05	NA	0.00047	0.0201	2.00E-04	NA	0.00042	2.00E-05	0.005
15	MH-30	22/06/2013	92.2	NA	NA	NA	0.000223	5.80E-05	0.00014	0.000845	0.308	0.000332	NA	0.000247	6.00E-06	0.00251
16	MH-30	29/09/2013	133	NA	NA	NA	0.00033	0.00024	NA	0.00192	0.402	0.00496	NA	0.00044	2.00E-05	0.0152
17	PH-01	20/06/2013	142	NA	NA	NA	0.00054	0.000621	NA	0.00028	0.005	0.00135	NA	0.00109	2.00E-05	0.0113
18	PH-01	20/06/2013	145	NA	NA	NA	0.00065	0.000693	NA	0.00059	0.0519	0.00476	NA	0.00102	2.00E-05	0.0159
19	PH-01	26/09/2013	165	NA	NA	NA	0.00058	0.000705	NA	0.00026	0.005	0.00105	NA	0.00156	2.00E-05	0.0124
20	MH-04	04/01/1999	182	7.92	0.06	0.005	NA	1.00E-04	NA	0.003	0.05	0.001	NA	NA	NA	0.01
21	MH-04	02/04/1999	183	8.03	0.1	0.005	NA	3.00E-04	0.003	0.004	0.28	0.001	NA	NA	NA	0.01
22	MH-04	10/07/1999	151	8.1	0.06	0.01	NA	2.00E-04	0.002	0.003	0.05	0.001	NA	NA	NA	0.01
23	MH-04	05/10/1999	185	8.28	0.06	0.005	NA	3.00E-04	NA	0.003	0.05	0.001	NA	NA	NA	0.01
24	MH-04	02/02/2000	173	7.25	0.06	0.007	NA	2.00E-04	0.003	0.003	0.05	0.001	NA	NA	NA	0.01
25	MH-04	04/04/2000	191	7.62	0.06	0.02	NA	1.00E-04	NA	0.003	0.05	0.001	NA	NA	NA	0.01
26	MH-04	01/07/2000	154	8.3	0.02	0.006	NA	2.00E-04	NA	NA	0.017	0.001	NA	NA	NA	0.007
27	MH-04	01/11/2000	172	8.24	0.02	0.005	NA	2.00E-04	NA	NA	0.052	0.001	NA	NA	NA	0.005
28	MH-04	01/02/2001	172	8.28	0.08	0.012	NA	3.00E-04	NA	NA	0.11	0.0058	NA	NA	NA	0.012
29	MH-04	01/04/2001	174	8.4	0.02	0.005	NA	0.00015	NA	NA	0.021	0.00052	NA	NA	NA	0.007
30	MH-04	01/07/2001	159	8.37	0.02	0.005	NA	2.00E-04	NA	NA	0.024	0.002	NA	NA	NA	0.007
31	MH-04	04/11/2001	172	8.23	0.02	0.005	NA	2.00E-04	NA	NA	0.017	0.001	NA	NA	NA	0.005
32	MH-04	05/01/2002	172	8.39	0.02	0.005	NA	2.00E-04	NA	NA	0.032	0.0021	NA	NA	NA	0.005
33	MH-04	03/04/2002	171	8.16	0.02	0.005	NA	1.00E-04	NA	NA	0.022	8.00E-04	NA	NA	NA	0.005

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
34	MH-04	01/07/2002	162	8.33	0.03	0.005	NA	2.00E-04	NA	NA	0.044	0.0014	NA	NA	NA	0.008
35	MH-04	01/10/2002	182	8.33	0.02	0.005	NA	0.00023	NA	NA	0.018	8.00E-04	NA	NA	NA	0.008
36	MH-04	02/01/2003	173	8.2	0.02	0.005	NA	2.00E-04	NA	NA	0.04	0.003	NA	NA	NA	0.005
37	MH-04	01/04/2003	180	8.25	0.03	0.014	NA	2.00E-04	NA	NA	0.052	0.001	NA	NA	NA	0.005
38	MH-04	04/07/2003	160	NA	NA	NA	NA	3.00E-04	NA	NA	0.018	0.0011	NA	NA	NA	0.008
39	MH-04	14/10/2003	174	8.31	0.02	0.005	NA	3.00E-04	NA	NA	0.016	9.00E-04	NA	NA	NA	0.007
40	MH-04	09/02/2004	176	NA	NA	NA	NA	0.34	NA	NA	0.141	5.16	NA	NA	NA	0.012
41	MH-04	09/05/2004	164	NA	NA	NA	NA	2.00E-04	NA	NA	0.014	8.00E-04	0.02	NA	NA	0.005
42	MH-04	06/08/2004	162	NA	NA	NA	NA	3.00E-04	NA	NA	0.012	7.00E-04	0.26	NA	NA	0.006
43	MH-04	04/10/2004	181	NA	NA	NA	NA	3.00E-04	NA	NA	0.177	6.00E-04	0.43	NA	NA	0.008
44	MH-04	24/02/2005	NA	NA	NA	NA	NA	NA	NA	NA	0.411	NA	NA	NA	NA	0.03
45	MH-04	06/07/2005	150	7.93	0.03	0.005	NA	0.00026	NA	NA	0.019	0.00073	NA	NA	NA	0.006
46	MH-04	13/09/2005	180	NA	NA	NA	NA	0.00026	NA	NA	0.026	0.00063	NA	NA	NA	0.005
47	MH-04	08/01/2006	170	8.5	0.02	0.005	NA	0.00037	NA	NA	0.017	0.00061	NA	NA	NA	0.007
48	MH-04	09/04/2006	210	8.48	0.04	0.019	NA	6.00E-05	NA	NA	0.036	0.00055	NA	NA	NA	0.005
49	MH-04	12/06/2006	160	8.11	0.03	0.006	NA	0.00023	NA	NA	0.03	0.0011	NA	NA	NA	0.007
50	MH-04	11/09/2006	200	8.39	0.02	0.005	NA	0.00017	NA	NA	0.019	0.00058	NA	NA	NA	0.009
51	MH-04	19/06/2007	152	8.19	0.03	0.005	NA	0.00025	NA	NA	0.017	0.00108	NA	NA	NA	0.01
52	MH-04	17/09/2007	178	8.17	0.02	0.005	NA	0.00023	NA	NA	0.011	0.00071	NA	NA	NA	0.008
53	MH-04	07/12/2007	174	8.41	0.015	0.005	4.00E-04	0.00027	NA	5.00E-04	0.021	0.000591	NA	7.00E-04	2.00E-05	0.008
54	MH-04	24/03/2008	179	8.2	0.075	0.005	4.00E-04	0.000255	NA	7.00E-04	0.097	0.00125	NA	9.00E-04	2.00E-05	0.008
55	MH-04	21/06/2008	42.8	NA	NA	NA	4.00E-04	4.00E-05	0.001	5.00E-04	0.049	0.00033	NA	5.00E-04	2.00E-05	0.007
56	MH-04	21/10/2008	165	8.32	0.009	0.005	6.00E-04	0.000281	NA	5.00E-04	0.005	0.000472	NA	8.00E-04	2.00E-05	0.01
57	MH-04	18/01/2009	162	8.27	0.016	0.007	3.00E-04	0.00026	NA	2.00E-04	0.02	0.000547	NA	8.00E-04	2.00E-05	0.008
58	MH-04	31/03/2009	168	NA	NA	NA	3.00E-04	0.000227	NA	7.00E-04	0.006	0.000215	NA	8.00E-04	2.00E-05	0.007
59	MH-04	15/07/2009	196	NA	NA	NA	5.00E-04	0.000259	NA	0.0019	0.09	0.00367	NA	0.0011	2.00E-05	0.041
60	MH-04	21/09/2009	168	8.26	0.075	0.005	3.00E-04	0.000226	NA	0.0015	0.034	0.000126	NA	6.00E-04	2.00E-05	0.014
61	MH-04	25/12/2009	174	8.24	0.014	0.012	4.00E-04	0.000249	NA	7.00E-04	0.02	0.00107	NA	8.00E-04	2.00E-05	0.009
62	MH-04	21/03/2010	172	8.46	0.006	0.005	4.00E-04	0.000226	NA	0.0011	0.018	0.00122	NA	0.001	2.00E-05	0.009
63	MH-04	28/05/2010	174	8.23	0.085	0.016	4.00E-04	0.00035	NA	6.00E-04	0.136	0.00297	NA	7.00E-04	2.00E-05	0.009
64	MH-04	26/09/2010	170	8.31	0.005	0.18	2.00E-04	0.00029	NA	4.00E-04	0.029	0.000707	NA	7.00E-04	2.00E-05	0.008
65	MH-04	20/12/2010	72	8.36	0.023	0.005	1.00E-04	0.000133	NA	4.00E-04	0.034	0.000493	NA	3.00E-04	2.00E-05	0.005
66	MH-04	13/03/2011	162	NA	NA	NA	4.00E-04	3.00E-04	NA	0.011	0.056	0.0028	NA	8.00E-04	NA	0.01

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
67	MH-04	22/06/2011	163	8.08	0.186	0.012	6.00E-04	0.0011	NA	0.001	0.297	0.0212	NA	8.00E-04	NA	0.032
68	MH-04	08/10/2011	177	8.29	0.116	0.074	5.00E-04	3.00E-04	NA	0.001	0.206	0.0129	NA	8.00E-04	NA	0.022
69	MH-04	23/12/2011	152	8.24	0.012	0.0076	4.00E-04	2.00E-04	NA	0.001	0.022	6.00E-04	NA	8.00E-04	NA	0.01
70	MH-04	21/03/2012	162	8.2	0.05	0.0086	6.00E-04	3.00E-04	NA	0.001	0.098	0.0025	NA	8.00E-04	NA	0.01
71	MH-04	16/07/2012	155	NA	NA	NA	4.00E-04	0.00025	NA	0.001	0.074	0.00226	NA	8.00E-04	NA	0.01
72	MH-04	19/09/2012	162	NA	NA	NA	0.00038	0.000293	NA	0.00023	0.0134	7.00E-04	NA	0.00084	2.00E-05	0.0061
73	MH-04	30/12/2012	181	NA	NA	NA	0.00061	0.000377	NA	0.00059	0.0771	0.0239	NA	0.00069	2.00E-05	0.057
74	MH-04	19/06/2013	128	NA	NA	NA	0.00034	0.000239	NA	2.00E-04	0.0185	0.00066	NA	0.00054	2.00E-05	0.005
75	MH-04	22/06/2013	135	NA	NA	NA	0.00034	0.000249	NA	0.00029	0.019	5.00E-04	NA	0.00043	2.00E-05	0.005
76	MH-04	04/07/2013	141	NA	NA	NA	0.00036	0.000254	NA	0.00041	0.0189	0.0138	NA	0.00059	2.00E-05	0.0108
77	MH-04	10/07/2013	130	NA	NA	NA	0.00038	0.000209	NA	3.00E-04	0.0153	0.00032	NA	6.00E-04	2.00E-05	0.005
78	MH-04	16/07/2013	140	NA	NA	NA	0.00041	0.00024	NA	0.00057	0.0223	0.00156	NA	0.00069	2.00E-05	0.0061
79	MH-04	31/07/2013	149	NA	NA	NA	0.00038	0.000277	NA	2.00E-04	0.0131	0.00043	NA	0.00072	2.00E-05	0.005
80	MH-04	13/08/2013	154	NA	NA	NA	0.00049	0.00029	NA	0.00028	0.0329	0.00103	NA	0.00074	2.00E-05	0.0063
81	MH-04	28/08/2013	157	NA	NA	NA	0.00035	0.000261	NA	0.00072	0.012	0.00033	NA	0.00071	2.00E-05	0.0056
82	MH-04	26/09/2013	165	NA	NA	NA	0.00042	0.000283	NA	0.00041	0.0117	0.00041	NA	0.00082	2.00E-05	0.0058
83	MH-04	30/09/2013	164	NA	NA	NA	0.00047	0.000318	NA	0.00036	0.0097	0.00057	NA	0.00099	2.00E-05	0.0061
84	MH-04	16/10/2013	155	NA	NA	NA	0.00034	0.000265	NA	0.00056	0.0051	0.00024	NA	0.00077	2.00E-05	0.0055
85	MH-04	11/12/2013	164	NA	NA	NA	0.00034	0.000234	NA	0.00043	0.0084	0.00028	NA	8.00E-04	2.00E-05	0.0067
86	CC-3	20/06/2013	153	NA	NA	NA	0.00044	0.000175	NA	0.00096	0.0802	0.00159	NA	0.00058	2.00E-05	0.0051
87	MH-05	02/05/1999	109	7.22	0.06	0.005	NA	0.0083	NA	NA	0.3	0.159	NA	NA	NA	NA
88	MH-05	02/06/1999	106	8.13	0.56	0.012	NA	0.0125	0.002	NA	0.74	0.274	NA	NA	NA	NA
89	MH-05	04/06/2000	103	8.3	2.43	0.029	NA	0.0178	0.005	0.009	4.91	1.79	NA	NA	NA	NA
90	MH-05	03/06/2001	176	7.86	2.04	0.005	NA	0.0122	0.006	0.009	4.22	2.01	NA	NA	NA	NA
91	MH-05	02/06/2002	189	8.34	0.02	0.009	NA	3.00E-04	NA	NA	0.007	0	NA	NA	NA	0.036
92	MH-05	01/06/2003	193	8.41	0.02	0.009	NA	6.00E-04	NA	NA	0.006	0.0089	NA	NA	NA	0.056
93	MH-05	07/06/2004	191	NA	NA	NA	NA	0.00038	NA	NA	0.018	0.0063	3.62	NA	NA	0.042
94	MH-05	14/06/2006	200	8.13	0.02	0.005	NA	0.00026	NA	NA	0.005	0.00259	NA	NA	NA	0.019
95	MH-05	15/06/2009	174	8.28	0.005	0.005	0.0013	0.000255	NA	9.00E-04	0.007	0.0025	NA	0.0025	2.00E-05	0.018
96	MH-05	19/06/2013	161	NA	NA	NA	0.00131	0.000224	NA	0.00034	0.005	0.00276	NA	0.00255	2.00E-05	0.0051
97	MH-28	24/06/2013	170	NA	NA	NA	0.000659	0.000101	0.00013	0.000387	0.036	0.00049	NA	0.00119	5.00E-06	0.00966
98	MH-28	17/07/2013	178	NA	NA	NA	0.00106	0.000309	NA	0.00141	0.416	0.00732	NA	0.00095	2.00E-05	0.0241
99	MH-28	26/09/2013	211	NA	NA	NA	0.00058	6.90E-05	NA	0.00051	0.0082	0.00042	NA	0.00055	2.00E-05	0.0071

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
100	MH-28	30/09/2013	211	NA	NA	NA	0.00058	5.50E-05	NA	0.00045	0.005	2.00E-04	NA	0.00056	2.00E-05	0.0054
101	MH-27	24/06/2013	151	NA	NA	NA	0.000504	0.000181	1.00E-04	0.000633	0.0611	0.003	NA	0.000917	5.00E-06	0.0193
102	MH-27	04/07/2013	167	NA	NA	NA	0.00044	0.000236	NA	0.00067	0.0834	0.0587	NA	0.00082	2.00E-05	0.0334
103	MH-27	04/07/2013	170	NA	NA	NA	5.00E-04	0.000171	NA	0.00052	0.0655	0.00373	NA	0.00097	2.00E-05	0.0212
104	MH-27	10/07/2013	161	NA	NA	NA	0.00058	0.000178	NA	0.00077	0.0972	0.0054	NA	0.00106	2.00E-05	0.0217
105	MH-27	17/07/2013	170	NA	NA	NA	0.00063	0.000191	NA	0.00118	0.107	0.00367	NA	0.00074	2.00E-05	0.0203
106	MH-27	31/07/2013	173	NA	NA	NA	0.00063	0.000162	NA	0.00062	0.105	0.00204	NA	0.00095	2.00E-05	0.0161
107	MH-27	14/08/2013	172	NA	NA	NA	0.00078	0.000149	NA	0.00215	0.134	0.00216	NA	0.00082	2.00E-05	0.013
108	MH-27	28/08/2013	181	NA	NA	NA	0.00063	0.000113	NA	8.00E-04	0.166	0.0019	NA	0.00054	2.00E-05	0.0113
109	MH-27	28/09/2013	191	NA	NA	NA	7.00E-04	0.000112	NA	0.00055	0.153	0.00386	NA	0.00069	2.00E-05	0.0117
110	MH-27	18/10/2013	189	NA	NA	NA	6.00E-04	0.000114	NA	0.00065	0.134	0.00196	NA	0.00068	2.00E-05	0.0106
111	MH-11	04/01/1999	250	7.87	0.06	0.005	NA	1.00E-04	NA	0.003	0.19	0.006	NA	NA	NA	0.02
112	MH-11	01/02/1999	244	7.64	0.06	0.005	NA	1.00E-04	NA	0.003	0.14	0.002	NA	NA	NA	0.02
113	MH-11	02/03/1999	243	7.44	0.06	0.005	NA	1.00E-04	NA	0.003	0.11	0.001	NA	NA	NA	0.01
114	MH-11	02/04/1999	255	7.81	0.06	0.005	NA	1.00E-04	0.003	0.003	0.12	0.002	NA	NA	NA	0.01
115	MH-11	02/05/1999	219	7.47	0.09	0.005	NA	2.00E-04	0.002	0.003	1.03	0.008	NA	NA	NA	0.03
116	MH-11	02/06/1999	119	8.05	1.37	0.011	NA	3.00E-04	0.003	NA	1.4	0.034	NA	NA	NA	0.08
117	MH-11	02/07/1999	198	8.15	0.06	0.005	NA	2.00E-04	0.002	0.003	0.1	0.008	NA	NA	NA	0.02
118	MH-11	05/08/1999	209	7.5	0.06	0.006	NA	1.00E-04	NA	0.004	0.08	0.002	NA	NA	NA	0.03
119	MH-11	02/09/1999	219	7.96	0.06	0.005	NA	1.00E-04	NA	0.003	0.08	0.001	NA	NA	NA	0.02
120	MH-11	05/10/1999	235	8.3	0.06	0.005	NA	1.00E-04	0.003	0.003	0.07	0.001	NA	NA	NA	0.02
121	MH-11	03/11/1999	241	7.38	0.06	0.005	NA	1.00E-04	0.002	0.003	0.1	0.001	NA	NA	NA	0.03
122	MH-11	09/12/1999	236	7.55	0.06	0.021	NA	1.00E-04	NA	0.003	0.1	0.001	NA	NA	NA	0.02
123	MH-11	04/01/2000	239	7.53	0.06	0.005	NA	1.00E-04	0.003	0.003	0.13	0.002	NA	NA	NA	0.03
124	MH-11	02/02/2000	228	7.2	0.06	0.005	NA	1.00E-04	0.003	0.003	0.06	0.001	NA	NA	NA	0.01
125	MH-11	02/03/2000	242	7.1	0.06	0.03	NA	1.00E-04	0.004	0.003	0.09	0.001	NA	NA	NA	0.02
126	MH-11	04/04/2000	254	7.69	0.06	0.012	NA	1.00E-04	NA	0.003	0.08	0.001	NA	NA	NA	0.02
127	MH-11	03/05/2000	213	7.86	0.06	0.005	NA	1.00E-04	0.002	0.003	0.15	0.002	NA	NA	NA	0.02
128	MH-11	04/06/2000	162	8.43	0.89	0.032	NA	2.00E-04	NA	NA	1.39	0.009	NA	NA	NA	0.056
129	MH-11	01/07/2000	185	8.37	0.03	0.028	NA	1.00E-04	NA	NA	0.064	0.002	NA	NA	NA	0.014
130	MH-11	01/08/2000	211	8.32	0.08	0.005	NA	1.00E-04	NA	0.007	0.127	0.003	NA	NA	NA	0.018
131	MH-11	01/09/2000	206	8.32	0.05	0.005	NA	1.00E-04	NA	NA	0.084	0.001	NA	NA	NA	0.015
132	MH-11	03/10/2000	199	8.34	0.06	0.006	NA	2.00E-04	NA	NA	0.118	0.003	NA	NA	NA	0.017

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
133	MH-11	13/11/2000	215	8.26	0.02	0.005	NA	1.00E-04	NA	NA	0.068	0.001	NA	NA	NA	0.013
134	MH-11	01/12/2000	221	8.28	0.02	0.005	NA	1.00E-04	NA	NA	0.097	0.001	NA	NA	NA	0.015
135	MH-11	06/01/2001	227	8.3	0.03	0.005	NA	1.00E-04	NA	NA	0.092	5.00E-04	NA	NA	NA	0.019
136	MH-11	01/02/2001	219	8.32	0.02	0.012	NA	1.00E-04	NA	NA	0.091	0.001	NA	NA	NA	0.017
137	MH-11	02/03/2001	233	8.24	0.02	0.007	NA	1.00E-04	NA	NA	0.086	9.00E-04	NA	NA	NA	0.021
138	MH-11	01/04/2001	225	8.37	0.02	0.005	NA	1.00E-04	0.006	NA	0.071	6.00E-04	NA	NA	NA	0.016
139	MH-11	02/05/2001	225	8.34	0.02	0.005	NA	1.00E-04	NA	NA	0.094	0.0015	NA	NA	NA	0.016
140	MH-11	03/06/2001	149	7.42	4.96	0.005	NA	8.00E-04	0.008	0.011	7.85	0.0686	NA	NA	NA	0.162
141	MH-11	01/07/2001	175	8.38	0.04	0.005	NA	1.00E-04	NA	NA	0.069	0.0036	NA	NA	NA	0.01
142	MH-11	01/08/2001	193	8.44	0.03	0.007	NA	1.00E-04	NA	NA	0.005	0.0016	NA	NA	NA	0.012
143	MH-11	01/09/2001	207	8.45	0.02	0.005	NA	1.00E-04	NA	NA	0.041	0.001	NA	NA	NA	0.012
144	MH-11	03/10/2001	203	8.48	0.02	0.009	NA	1.00E-04	NA	NA	0.046	7.00E-04	NA	NA	NA	0.009
145	MH-11	04/11/2001	211	8.39	0.02	0.005	NA	1.00E-04	NA	NA	0.069	0.0015	NA	NA	NA	0.013
146	MH-11	01/12/2001	220	8.37	0.02	0.005	NA	1.00E-04	NA	NA	0.081	0.0011	NA	NA	NA	0.014
147	MH-11	05/01/2002	218	8.31	0.02	0.005	NA	1.00E-04	NA	NA	0.085	0.0011	NA	NA	NA	0.015
148	MH-11	02/02/2002	217	8.27	0.02	0.005	NA	2.00E-04	NA	NA	0.14	0.0018	NA	NA	NA	0.019
149	MH-11	03/03/2002	231	8.37	0.02	0.005	NA	5.00E-05	NA	NA	0.082	0.00063	NA	NA	NA	0.015
150	MH-11	03/04/2002	228	8.06	0.03	0.005	NA	1.00E-04	NA	NA	0.063	7.00E-04	NA	NA	NA	0.014
151	MH-11	05/05/2002	227	8.31	0.02	0.005	NA	1.00E-04	NA	NA	0.096	0.0014	NA	NA	NA	0.018
152	MH-11	02/06/2002	169	8.44	0.17	0.005	NA	2.00E-04	NA	NA	0.287	0.0062	NA	NA	NA	0.019
153	MH-11	01/07/2002	195	8.35	0.03	0.005	NA	1.00E-04	NA	NA	0.047	0.0016	NA	NA	NA	0.014
154	MH-11	29/07/2002	195	8.28	0.02	0.007	NA	1.00E-04	NA	NA	0.066	0.0026	NA	NA	NA	0.023
155	MH-11	01/09/2002	194	8.39	0.02	0.005	NA	1.00E-04	NA	NA	0.061	0.0021	NA	NA	NA	0.01
156	MH-11	01/10/2002	213	8.39	0.02	0.005	NA	9.00E-05	NA	NA	0.068	0.0013	NA	NA	NA	0.016
157	MH-11	03/11/2002	211	8.41	0.02	0.005	NA	1.00E-04	NA	NA	0.084	0.0018	NA	NA	NA	0.014
158	MH-11	02/12/2002	218	8.4	0.02	0.005	NA	1.00E-04	NA	NA	0.095	0.0027	NA	NA	NA	0.017
159	MH-11	02/01/2003	220	8.37	0.02	0.005	NA	1.00E-04	NA	NA	0.107	0.0021	NA	NA	NA	0.013
160	MH-11	01/02/2003	231	8.25	0.02	0.007	NA	1.00E-04	NA	NA	0.098	0.0021	NA	NA	NA	0.015
161	MH-11	01/03/2003	238	8.28	0.03	0.021	NA	1.00E-04	NA	NA	0.129	0.0027	NA	NA	NA	0.017
162	MH-11	01/04/2003	239	8.23	0.02	0.012	NA	1.00E-04	NA	NA	0.124	0.0017	NA	NA	NA	0.015
163	MH-11	02/05/2003	187	8.21	0.06	0.022	NA	1.00E-04	NA	NA	0.196	0.0052	NA	NA	NA	0.018
164	MH-11	01/06/2003	178	8.03	0.05	0.011	NA	1.00E-04	NA	NA	0.094	0.0036	NA	NA	NA	0.01
165	MH-11	04/07/2003	183	NA	NA	NA	NA	2.00E-04	NA	NA	0.164	0.0049	NA	NA	NA	0.013

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
166	MH-11	08/08/2003	209	8.31	0.02	0.005	NA	NA	NA	NA	0.069	NA	NA	NA	NA	0.01
167	MH-11	04/09/2003	191	8.17	0.02	0.005	NA	3.00E-04	NA	NA	0.015	0.0042	NA	NA	NA	0.025
168	MH-11	03/11/2003	222	8.34	0.02	0.012	NA	NA	NA	NA	0.058	NA	NA	NA	NA	0.017
169	MH-11	07/12/2003	218	8.3	0.02	NA	NA	1.00E-04	NA	NA	0.077	0.00123	NA	NA	NA	0.015
170	MH-11	06/01/2004	223	NA	NA	NA	NA	NA	NA	NA	0.087	NA	NA	NA	NA	0.019
171	MH-11	07/02/2004	227	NA	NA	NA	NA	0.15	NA	NA	0.123	2.98	NA	NA	NA	0.021
172	MH-11	02/03/2004	232	NA	NA	NA	NA	9.00E-05	NA	NA	0.079	9.00E-04	NA	NA	NA	0.015
173	MH-11	11/04/2004	224	NA	NA	NA	NA	NA	NA	NA	0.064	NA	NA	NA	NA	0.018
174	MH-11	09/05/2004	202	NA	NA	NA	NA	1.00E-04	NA	NA	0.087	0.0013	0.02	NA	NA	0.013
175	MH-11	07/06/2004	164	NA	NA	NA	NA	0.00023	NA	NA	0.05	0.00233	0.22	NA	NA	0.01
176	MH-11	06/07/2004	179	8.36	0.02	0.005	NA	2.00E-04	NA	NA	0.02	8.00E-04	0.15	NA	NA	0.008
177	MH-11	10/08/2004	208	8.4	0.02	0.005	NA	1.00E-04	NA	NA	0.123	0.0016	0.09	NA	NA	0.011
178	MH-11	05/09/2004	184	NA	NA	NA	NA	3.00E-04	NA	NA	0.028	0.00329	0.16	NA	NA	0.028
179	MH-11	04/10/2004	186	NA	NA	NA	NA	2.00E-04	NA	NA	0.015	5.00E-04	0.29	NA	NA	0.007
180	MH-11	29/01/2005	233	NA	NA	NA	NA	NA	NA	NA	0.091	NA	NA	NA	NA	0.015
181	MH-11	24/02/2005	NA	NA	NA	NA	NA	NA	NA	NA	0.076	NA	NA	NA	NA	0.016
182	MH-11	17/03/2005	NA	NA	NA	NA	NA	NA	NA	NA	0.087	NA	NA	NA	NA	0.014
183	MH-11	18/04/2005	230	NA	NA	NA	NA	8.00E-05	NA	NA	0.079	0.00054	NA	NA	NA	0.016
184	MH-11	27/05/2005	180	NA	NA	NA	NA	0.00023	NA	NA	0.467	0.00698	NA	NA	NA	0.022
185	MH-11	21/06/2005	160	8.27	0.05	0.009	NA	0.00015	NA	NA	0.075	0.0122	NA	NA	NA	0.024
186	MH-11	12/07/2005	190	8.37	0.04	0.005	NA	0.00014	NA	NA	0.048	0.0158	NA	NA	NA	0.038
187	MH-11	10/08/2005	190	8.53	0.02	0.006	NA	2.00E-04	NA	NA	0.028	0.00158	NA	NA	NA	0.012
188	MH-11	13/09/2005	230	8.23	0.02	0.005	NA	0.00011	NA	NA	0.082	9.00E-04	NA	NA	NA	0.009
189	MH-11	11/10/2005	190	8.52	0.02	0.005	NA	0.00015	NA	NA	0.007	0.00027	NA	NA	NA	0.01
190	MH-11	17/11/2005	230	8.3	0.05	0.005	NA	0.00019	NA	NA	0.214	0.00485	NA	NA	NA	0.024
191	MH-11	10/12/2005	240	8.32	0.02	0.005	NA	0.00011	NA	NA	0.102	0.00129	NA	NA	NA	0.013
192	MH-11	10/01/2006	230	8.38	0.02	0.005	NA	0.00033	NA	NA	0.067	0.00076	NA	NA	NA	0.011
193	MH-11	05/02/2006	230	8.28	0.02	0.005	NA	7.00E-05	NA	NA	0.064	0.00041	NA	NA	NA	0.008
194	MH-11	10/03/2006	230	8.28	0.03	0.005	NA	0.00011	NA	NA	0.132	0.00249	NA	NA	NA	0.018
195	MH-11	23/05/2006	170	8.24	0.09	0.005	NA	2.00E-04	NA	NA	0.147	0.00239	NA	NA	NA	0.009
196	MH-11	14/06/2006	170	8.3	0.06	0.011	NA	0.00019	NA	NA	0.082	0.00146	NA	NA	NA	0.008
197	MH-11	05/07/2006	180	8.51	0.02	0.005	NA	0.00017	NA	NA	0.006	0.00056	NA	NA	NA	0.008
198	MH-11	14/08/2006	190	8.49	0.02	0.005	NA	0.00016	NA	NA	0.006	0.00049	NA	NA	NA	0.009

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
199	MH-11	15/09/2006	190	8.32	0.02	0.011	NA	0.00016	NA	NA	0.007	0.00045	NA	NA	NA	0.005
200	MH-11	15/10/2006	200	8.18	0.019	0.005	0.001	0.00016	NA	8.00E-04	0.024	0.00066	NA	NA	NA	0.014
201	MH-11	01/11/2006	180	8.13	0.03	0.008	NA	0.00028	NA	NA	0.021	0.00631	NA	NA	NA	0.033
202	MH-11	17/12/2006	220	8.14	0.02	0.005	NA	0.00011	NA	NA	0.045	0.00112	NA	NA	NA	0.017
203	MH-11	17/01/2007	232	NA	NA	NA	NA	8.00E-05	NA	NA	0.054	0.00075	NA	NA	NA	0.018
204	MH-11	19/02/2007	233	8.05	0.07	0.005	NA	0.00107	NA	NA	0.093	0.0488	NA	NA	NA	0.259
205	MH-11	26/03/2007	240	8.04	0.15	0.005	NA	0.00134	NA	NA	0.22	0.0783	NA	NA	NA	0.315
206	MH-11	27/04/2007	240	8.14	0.02	0.005	NA	0.00061	NA	NA	0.009	0.00372	NA	NA	NA	0.165
207	MH-11	21/05/2007	166	NA	NA	NA	NA	0.00051	0.005	NA	1.95	0.0207	NA	NA	NA	0.043
208	MH-11	19/06/2007	161	8.34	0.06	0.005	NA	0.00013	NA	NA	0.113	0.00342	NA	NA	NA	0.011
209	MH-11	19/07/2007	173	8.52	0.06	0.059	NA	0.00021	NA	NA	0.064	0.00262	NA	NA	NA	0.013
210	MH-11	12/08/2007	182	8.42	0.04	0.005	NA	1.00E-04	NA	NA	0.115	0.00288	NA	NA	NA	0.012
211	MH-11	15/09/2007	186	8.31	0.02	0.005	NA	0.00022	NA	NA	0.007	0.00255	NA	NA	NA	0.019
212	MH-11	21/10/2007	195	8.25	0.009	0.005	4.00E-04	0.000226	NA	2.00E-04	0.018	0.00204	NA	7.00E-04	2.00E-05	0.02
213	MH-11	14/11/2007	195	NA	NA	NA	4.00E-04	0.000246	NA	2.00E-04	0.012	0.0028	NA	6.00E-04	2.00E-05	0.029
214	MH-11	03/12/2007	217	8.34	0.015	0.005	5.00E-04	0.000303	NA	0.0015	0.04	0.00556	NA	8.00E-04	2.00E-05	0.042
215	MH-11	04/01/2008	206	8.34	0.001	0.005	1.00E-04	0.00057	NA	2.00E-04	0.005	0.00921	NA	1.00E-04	2.00E-05	0.005
216	MH-11	11/02/2008	199	8.13	0.023	0.005	4.00E-04	0.000522	NA	8.00E-04	0.038	0.0093	NA	8.00E-04	2.00E-05	0.065
217	MH-11	03/03/2008	213	NA	NA	NA	5.00E-04	0.000464	NA	0.0027	0.03	0.00703	NA	8.00E-04	2.00E-05	0.051
218	MH-11	02/04/2008	216	8.19	0.01	0.005	5.00E-04	0.000549	NA	4.00E-04	0.018	0.00774	NA	8.00E-04	2.00E-05	0.065
219	MH-11	24/06/2008	184	NA	NA	NA	7.00E-04	0.000389	NA	9.00E-04	0.354	0.0291	NA	5.00E-04	2.00E-05	0.035
220	MH-11	19/07/2008	169	NA	NA	NA	4.00E-04	0.000181	NA	4.00E-04	0.013	0.000481	NA	6.00E-04	2.00E-05	0.006
221	MH-11	15/08/2008	174	NA	NA	NA	5.00E-04	0.000227	NA	6.00E-04	0.124	0.00163	NA	6.00E-04	2.00E-05	0.01
222	MH-11	03/09/2008	214	8.38	0.009	0.005	4.00E-04	0.000175	NA	3.00E-04	0.02	0.000338	NA	7.00E-04	2.00E-05	0.006
223	MH-11	23/10/2008	189	8.36	0.009	0.005	6.00E-04	0.000156	NA	3.00E-04	0.005	0.000403	NA	7.00E-04	2.00E-05	0.01
224	MH-11	14/11/2008	192	8.23	0.025	0.006	5.00E-04	0.000184	NA	0.0014	0.091	0.00189	NA	7.00E-04	2.00E-05	0.01
225	MH-11	01/12/2008	216	8.56	0.026	0.005	5.00E-04	0.000221	NA	0.0035	0.057	0.00453	NA	7.00E-04	2.00E-05	0.011
226	MH-11	18/01/2009	248	8.31	0.365	0.005	8.00E-04	0.00144	NA	0.0016	0.732	0.0733	NA	2.00E-04	5.00E-05	0.268
227	MH-11	13/02/2009	186	8.56	0.006	0.005	4.00E-04	0.000153	NA	3.00E-04	0.009	0.000631	NA	7.00E-04	2.00E-05	0.01
228	MH-11	18/03/2009	194	8.41	0.006	0.005	5.00E-04	0.000143	NA	3.00E-04	0.007	0.000628	NA	9.00E-04	2.00E-05	0.016
229	MH-11	13/04/2009	164	8.29	0.011	0.016	0.001	0.000158	NA	4.00E-04	0.012	0.000592	NA	4.00E-04	2.00E-05	0.005
230	MH-11	18/05/2009	206	8.36	0.013	0.005	4.00E-04	0.000168	NA	5.00E-04	0.023	0.000608	NA	7.00E-04	2.00E-05	0.011
231	MH-11	15/06/2009	158	8.28	0.041	0.005	4.00E-04	0.000165	NA	8.00E-04	0.067	0.00474	NA	6.00E-04	2.00E-05	0.013

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
232	MH-11	20/07/2009	179	8.4	0.011	0.005	4.00E-04	0.00021	NA	3.00E-04	0.015	0.000597	NA	7.00E-04	2.00E-05	0.009
233	MH-11	19/08/2009	183	NA	NA	NA	4.00E-04	0.000179	NA	3.00E-04	0.021	0.000594	NA	7.00E-04	2.00E-05	0.006
234	MH-11	24/09/2009	184	NA	NA	NA	5.00E-04	0.000229	NA	5.00E-04	0.015	0.0015	NA	8.00E-04	2.00E-05	0.018
235	MH-11	23/10/2009	190	8.12	0.012	0.005	4.00E-04	0.000169	NA	4.00E-04	0.03	0.000441	NA	6.00E-04	2.00E-05	0.008
236	MH-11	15/11/2009	184	8.3	0.013	0.005	4.00E-04	0.000157	NA	2.00E-04	0.033	0.000809	NA	7.00E-04	2.00E-05	0.009
237	MH-11	09/12/2009	244	8.34	0.011	0.008	2.00E-04	0.000465	NA	5.00E-04	0.019	0.00198	NA	3.00E-04	2.00E-05	0.122
238	MH-11	13/01/2010	247	8.38	0.065	0.009	3.00E-04	0.000493	NA	8.00E-04	0.142	0.013	NA	3.00E-04	2.00E-05	0.126
239	MH-11	16/02/2010	195	8.45	0.011	0.32	4.00E-04	0.000461	NA	0.0012	0.021	0.01	NA	8.00E-04	2.00E-05	0.061
240	MH-11	07/03/2010	196	8.51	0.009	0.005	5.00E-04	0.000488	NA	0.0022	0.005	0.0093	NA	8.00E-04	2.00E-05	0.066
241	MH-11	11/04/2010	208	8.31	0.014	0.005	4.00E-04	0.000683	NA	0.0024	0.033	0.0107	NA	9.00E-04	2.00E-05	0.101
242	MH-11	04/05/2010	177	8.23	0.014	0.012	4.00E-04	0.000174	NA	0.0013	0.022	0.00129	NA	7.00E-04	2.00E-05	0.015
243	MH-11	14/06/2010	177	8.21	0.023	0.05	6.00E-04	0.000168	NA	5.00E-04	0.04	0.00122	NA	7.00E-04	2.00E-05	0.012
244	MH-11	20/07/2010	180	8.52	0.156	0.03	8.00E-04	0.000285	0.001	0.001	0.295	0.0155	NA	6.00E-04	2.00E-04	0.036
245	MH-11	16/08/2010	177	NA	NA	NA	6.00E-04	0.000152	NA	0.0013	0.063	0.00545	NA	6.00E-04	2.00E-05	0.016
246	MH-11	21/09/2010	171	NA	NA	NA	1.00E-04	0.000101	NA	9.00E-04	0.035	0.00227	NA	6.00E-04	2.00E-05	0.024
247	MH-11	23/10/2010	184	8.3	0.008	0.074	3.00E-04	0.000152	NA	0.0011	0.013	0.000658	NA	8.00E-04	2.00E-05	0.009
248	MH-11	14/11/2010	191	8.21	0.047	0.053	3.00E-04	0.000273	NA	0.0025	0.031	0.0133	NA	7.00E-04	2.00E-05	0.033
249	MH-11	11/12/2010	200	8.24	0.462	0.005	0.0011	0.00107	NA	0.0032	0.617	0.162	NA	0.001	0.00013	0.344
250	MH-11	23/05/2011	149	8.24	1.23	0.005	0.0021	6.00E-04	NA	0.004	2.29	0.0166	NA	0.001	NA	0.042
251	MH-11	15/06/2011	136	NA	NA	NA	4.00E-04	2.00E-04	NA	0.002	0.057	0.0016	NA	8.00E-04	NA	0.01
252	MH-11	18/07/2011	154	8.14	0.014	0.017	5.00E-04	0.00019	0.001	0.0017	0.562	0.0022	NA	8.00E-04	2.00E-05	0.02
253	MH-11	22/08/2011	174	8.62	0.01	0.023	5.00E-04	0.00016	NA	6.00E-04	0.021	0.0021	NA	9.00E-04	2.00E-05	0.016
254	MH-11	19/09/2011	193	8.42	0.008	0.008	4.00E-04	0.00016	NA	5.00E-04	0.021	0.0015	NA	7.00E-04	2.00E-05	0.013
255	MH-11	08/10/2011	172	8.17	0.013	0.005	4.00E-04	0.00012	NA	5.00E-04	0.047	0.0056	NA	7.00E-04	2.00E-05	0.012
256	MH-11	15/11/2011	182	8.36	0.01	0.017	5.00E-04	1.00E-04	NA	0.001	0.02	5.00E-04	NA	8.00E-04	NA	0.01
257	MH-11	05/12/2011	161	8.16	0.015	0.0106	4.00E-04	3.00E-04	NA	0.002	0.033	0.0062	NA	8.00E-04	NA	0.025
258	MH-11	09/01/2012	173	8.26	0.01	0.031	4.00E-04	2.00E-04	NA	0.001	0.021	0.0037	NA	8.00E-04	NA	0.021
259	MH-11	09/02/2012	177	8.07	0.163	0.005	6.00E-04	5.00E-04	NA	0.002	0.259	0.0286	NA	8.00E-04	NA	0.07
260	MH-11	21/03/2012	188	8.21	0.01	0.0069	6.00E-04	4.00E-04	NA	0.001	0.02	0.0052	NA	8.00E-04	NA	0.043
261	MH-11	16/04/2012	190	8.14	0.038	0.015	0.00058	0.00053	NA	0.0042	0.099	0.0124	NA	8.00E-04	NA	0.055
262	MH-11	19/06/2012	164	8.24	0.117	0.015	6.00E-04	0.00025	NA	0.001	0.239	0.00796	NA	8.00E-04	NA	0.019
263	MH-11	20/07/2012	150	8.16	0.017	0.0519	0.00055	0.00018	NA	0.001	0.047	0.00222	NA	8.00E-04	NA	0.019
264	MH-11	27/08/2012	169	NA	NA	NA	0.00049	0.00013	NA	0.001	0.025	0.00189	NA	8.00E-04	NA	0.013

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
265	MH-11	20/09/2012	177	NA	NA	NA	0.00048	0.000133	NA	0.00053	0.022	0.00181	NA	0.00085	2.00E-05	0.0157
266	MH-11	29/10/2012	188	NA	NA	NA	0.00074	0.00022	NA	0.0017	0.165	0.0313	NA	8.00E-04	NA	0.045
267	MH-11	11/11/2012	178	NA	NA	NA	5.00E-04	0.00014	NA	0.001	0.031	0.00329	NA	8.00E-04	NA	0.02
268	MH-11	30/12/2012	154	NA	NA	NA	3.00E-04	0.000192	NA	0.00038	0.0094	0.00042	NA	0.00076	2.00E-05	0.005
269	MH-11	20/01/2013	188	NA	NA	NA	0.00084	0.000641	NA	0.00108	0.339	0.0616	NA	0.00072	3.10E-05	0.148
270	MH-11	20/02/2013	155	NA	NA	NA	0.00112	1.00E-04	NA	0.0014	0.069	0.00086	NA	8.00E-04	NA	0.01
271	MH-11	08/03/2013	188	NA	NA	NA	0.00059	0.00059	NA	0.001	0.036	0.0146	NA	0.00086	NA	0.083
272	MH-11	14/04/2013	184	NA	NA	NA	0.00073	0.00071	NA	0.0023	0.268	0.0515	NA	0.00085	NA	0.139
273	MH-11	20/05/2013	99.6	NA	NA	NA	0.00121	0.000757	0.0015	0.00646	0.838	0.0123	NA	0.00029	2.20E-05	0.0432
274	MH-11	24/06/2013	161	NA	NA	NA	0.000595	0.000114	NA	0.000725	0.109	0.001865	NA	0.00082	2.00E-05	0.0096
275	MH-11	17/07/2013	175	NA	NA	NA	6.00E-04	0.000143	NA	0.00051	0.0896	0.00134	NA	0.00079	2.00E-05	0.0142
276	MH-11	14/08/2013	178	NA	NA	NA	0.00125	0.00038	NA	0.00511	0.675	0.0131	NA	0.00097	2.00E-05	0.0558
277	MH-11	27/09/2013	205	NA	NA	NA	0.00069	9.30E-05	NA	0.00062	0.135	0.0027	NA	0.00067	2.00E-05	0.0092
278	MH-11	17/10/2013	197	NA	NA	NA	0.00063	6.90E-05	NA	4.00E-04	0.0843	0.00061	NA	0.00042	2.00E-05	0.0066
279	MH-11	20/11/2013	231	NA	NA	NA	0.00044	8.70E-05	NA	0.00031	0.0723	0.00076	NA	0.00073	2.00E-05	0.0107
280	MH-11	10/12/2013	219	NA	NA	NA	0.00047	7.00E-05	NA	0.00021	0.0621	0.00053	NA	0.00075	2.00E-05	0.0087
281	MH-13	11/01/1999	248	8.17	0.06	0.011	NA	1.00E-04	NA	0.003	0.19	0.001	NA	NA	NA	0.01
282	MH-13	12/08/1999	197	7.6	0.06	0.005	NA	1.00E-04	0.004	0.003	0.19	0.001	NA	NA	NA	0.01
283	MH-13	18/10/1999	220	7.91	0.06	0.005	NA	1.00E-04	NA	0.003	0.21	0.001	NA	NA	NA	0.01
284	MH-13	03/02/2000	226	7.22	0.06	0.005	NA	1.00E-04	0.003	0.003	0.26	0.002	NA	NA	NA	0.01
285	MH-13	07/04/2000	290	7.78	0.06	0.009	NA	1.00E-04	0.002	0.003	0.14	0.005	NA	NA	NA	0.01
286	MH-13	21/07/2000	192	8.35	0.1	0.026	NA	1.00E-04	NA	NA	0.422	0.001	NA	NA	NA	0.018
287	MH-13	02/11/2000	196	8.25	0.02	0.005	NA	1.00E-04	NA	NA	0.159	0.001	NA	NA	NA	0.005
288	MH-13	31/01/2001	219	8.53	0.02	0.012	NA	1.00E-04	NA	NA	0.245	0.0013	NA	NA	NA	0.005
289	MH-13	02/04/2001	218	8.48	0.02	0.005	NA	1.00E-04	NA	NA	0.237	9.00E-04	NA	NA	NA	0.005
290	MH-13	21/07/2001	184	8.36	0.02	0.031	NA	1.00E-04	NA	NA	0.158	8.00E-04	NA	NA	NA	0.005
291	MH-13	02/11/2001	203	8.1	0.02	0.009	NA	1.00E-04	NA	NA	0.226	0.0018	NA	NA	NA	0.005
292	MH-13	01/02/2002	230	8.24	0.02	0.014	NA	NA	NA	NA	0.157	0.001	NA	NA	NA	0.005
293	MH-13	16/04/2002	223	8.28	0.02	0.005	NA	1.00E-04	NA	NA	0.283	9.00E-04	NA	NA	NA	0.005
294	MH-13	25/07/2002	189	8.46	0.02	0.005	NA	1.00E-04	NA	NA	0.182	5.00E-04	NA	NA	NA	0.005
295	MH-13	15/11/2002	209	8.31	0.02	0.009	NA	0.17	NA	NA	0.216	1.63	NA	NA	NA	0.005
296	MH-13	12/01/2003	233	8.26	0.02	0.031	NA	1.00E-04	NA	NA	0.241	0.0011	NA	NA	NA	0.01
297	MH-13	25/04/2003	69.5	8.79	0.02	0.005	NA	1.00E-04	NA	NA	0.095	0.0024	NA	NA	NA	0.007

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
298	MH-13	15/07/2003	177	8.62	0.03	0.005	NA	1.00E-04	NA	NA	0.146	7.00E-04	NA	NA	NA	0.005
299	MH-13	14/10/2003	205	8.65	0.02	0.005	NA	1.00E-04	NA	NA	0.156	5.00E-04	NA	NA	NA	0.005
300	MH-13	08/02/2004	244	NA	NA	NA	NA	0.04	NA	NA	0.249	0.99	NA	NA	NA	0.016
301	MH-13	09/05/2004	14.6	NA	NA	NA	NA	3.00E-04	NA	NA	0.149	0.0449	0.02	NA	NA	0.048
302	MH-13	04/10/2004	203	NA	NA	NA	NA	1.00E-04	NA	NA	0.184	5.00E-04	0.02	NA	NA	0.005
303	MH-13	06/07/2005	190	8.16	0.04	0.02	NA	3.00E-05	NA	NA	0.22	0.00054	NA	NA	NA	0.005
304	MH-13	04/09/2005	210	7.36	0.02	0.005	NA	8.00E-05	NA	NA	0.182	0.0024	NA	NA	NA	0.005
305	MH-13	21/12/2005	210	8.2	0.02	0.005	NA	0.00013	NA	NA	0.182	0.00202	NA	NA	NA	0.006
306	MH-13	27/03/2006	140	NA	NA	NA	NA	5.00E-05	NA	NA	0.169	0.00126	NA	NA	NA	0.011
307	MH-13	08/06/2006	150	8.05	0.17	0.058	NA	8.00E-05	NA	NA	0.386	0.00096	NA	NA	NA	0.005
308	MH-13	30/08/2006	220	8.02	0.07	0.046	NA	0.00018	NA	NA	0.519	0.00124	NA	NA	NA	0.005
309	MH-13	15/12/2006	220	7.33	0.02	0.178	NA	3.00E-05	NA	NA	0.207	0.00058	NA	NA	NA	0.01
310	MH-13	09/04/2007	124	7.04	0.03	0.454	NA	0.00019	NA	NA	1.23	0.00118	NA	NA	NA	0.005
311	MH-13	22/07/2007	177	8.06	0.06	0.009	NA	1.00E-04	NA	NA	0.157	0.00048	NA	NA	NA	0.005
312	MH-13	13/09/2007	197	8.02	0.03	0.012	NA	3.00E-05	NA	NA	0.295	0.00015	NA	NA	NA	0.013
313	MH-13	27/11/2007	218	8.1	0.005	0.037	1.00E-04	2.60E-05	NA	9.00E-04	0.008	0.000521	NA	0.0011	2.00E-05	0.005
314	MH-13	07/03/2008	237	7.97	0.006	0.017	1.00E-04	1.10E-05	NA	6.00E-04	0.008	0.000446	NA	0.0015	2.00E-05	0.005
315	MH-13	17/06/2008	188	NA	NA	NA	5.00E-04	0.000156	0.001	0.0016	0.47	0.00177	NA	8.00E-04	2.00E-05	0.011
316	MH-13	10/10/2008	203	8.3	0.028	0.005	4.00E-04	1.90E-05	NA	3.00E-04	0.207	0.000207	NA	5.00E-04	2.00E-05	0.005
317	MH-13	28/12/2008	201	8.23	0.018	0.024	1.00E-04	3.60E-05	NA	8.00E-04	0.111	0.000581	NA	6.00E-04	2.00E-05	0.005
318	MH-13	30/03/2009	228	NA	NA	NA	3.00E-04	3.70E-05	NA	0.0013	0.252	0.000574	NA	7.00E-04	2.00E-05	0.006
319	MH-13	24/06/2009	174	NA	NA	NA	6.00E-04	0.00021	NA	0.0046	0.61	0.00153	NA	5.00E-04	2.00E-05	0.012
320	MH-13	21/09/2009	185	NA	NA	NA	3.00E-04	1.90E-05	NA	0.0019	0.195	3.00E-05	NA	5.00E-04	2.00E-05	0.012
321	MH-13	26/12/2009	209	8.22	0.027	0.016	2.00E-04	7.70E-05	NA	4.00E-04	0.191	0.00018	NA	5.00E-04	2.00E-05	0.005
322	MH-13	19/03/2010	214	8.27	0.015	0.005	2.00E-04	4.10E-05	NA	0.0011	0.144	0.00207	NA	7.00E-04	2.00E-05	0.005
323	MH-13	28/05/2010	142	NA	NA	NA	8.00E-04	9.90E-05	NA	0.0023	1.02	0.00137	NA	5.00E-04	2.00E-05	0.011
324	MH-13	28/09/2010	180	8.25	0.011	0.039	2.00E-04	3.00E-05	NA	5.00E-04	0.216	0.000778	NA	5.00E-04	2.00E-05	0.005
325	MH-13	31/12/2010	222	8.24	0.054	0.009	3.00E-04	0.000143	NA	0.0053	0.43	0.000752	NA	5.00E-04	2.00E-05	0.007
326	MH-13	30/03/2011	209	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.201	5.00E-04	NA	8.00E-04	NA	0.01
327	MH-13	22/06/2011	137	8.16	0.077	0.008	5.00E-04	1.00E-04	NA	0.001	0.296	7.00E-04	NA	8.00E-04	NA	0.01
328	MH-13	07/10/2011	164	NA	NA	NA	4.00E-04	1.00E-04	NA	0.002	0.353	0.0021	NA	8.00E-04	NA	0.01
329	MH-13	23/12/2011	194	8.35	0.041	0.0127	4.00E-04	1.00E-04	NA	0.001	0.327	5.00E-04	NA	8.00E-04	NA	0.01
330	MH-13	21/03/2012	281	8.14	0.012	0.005	5.00E-04	1.00E-04	NA	0.003	0.116	0.0027	NA	9.00E-04	NA	0.01

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
331	MH-13	13/07/2012	183	NA	NA	NA	0.00057	1.00E-04	NA	0.0012	0.359	0.00113	NA	8.00E-04	NA	0.01
332	MH-13	19/09/2012	199	NA	NA	NA	1.00E-04	1.70E-05	NA	0.00033	0.163	0.00077	NA	0.00168	2.00E-05	0.005
333	MH-13	18/01/2013	195	NA	NA	NA	0.00105	0.00028	NA	0.0024	0.916	0.00164	NA	8.00E-04	NA	0.012
334	MH-13	15/03/2013	224	NA	NA	NA	0.00056	1.00E-04	NA	0.0013	0.421	0.00098	NA	0.00085	NA	0.01
335	MH-13	21/06/2013	152	NA	NA	NA	0.000498	3.40E-05	1.00E-04	0.000687	0.192	0.00079	NA	0.000619	5.00E-06	0.0019
336	MH-13	29/09/2013	194	NA	NA	NA	0.00054	2.80E-05	NA	0.00044	0.242	2.00E-04	NA	0.00064	2.00E-05	0.005
337	MH-13	18/12/2013	210	NA	NA	NA	0.00046	4.00E-05	NA	0.00084	0.319	0.00035	NA	7.00E-04	2.00E-05	0.005
338	TRIBEWF01	07/06/2013	156	NA	NA	NA	0.00214	0.000192	NA	0.00144	0.846	0.00338	NA	0.00093	2.00E-05	0.0322
339	TRIBEWF02	07/06/2013	144	NA	NA	NA	0.00107	1.00E-05	NA	2.00E-04	0.258	2.00E-04	NA	0.00074	2.00E-05	0.005
340	TRIBEWF02	07/06/2013	146	NA	NA	NA	0.00106	1.20E-05	NA	2.00E-04	0.262	2.00E-04	NA	0.00069	2.00E-05	0.005
341	MH-14	11/01/1999	228	7.83	0.06	0.018	NA	1.00E-04	NA	0.003	0.27	0.001	NA	NA	NA	0.01
342	MH-14	13/04/1999	225	7	0.06	0.005	NA	1.00E-04	0.002	0.003	0.26	0.001	NA	NA	NA	0.01
343	MH-14	12/08/1999	207	7.26	0.1	0.005	NA	1.00E-04	0.006	0.007	0.69	0.001	NA	NA	NA	0.02
344	MH-14	18/10/1999	217	7.95	0.06	0.005	NA	1.00E-04	NA	0.003	0.25	0.001	NA	NA	NA	0.01
345	MH-14	03/02/2000	226	7.21	0.06	0.005	NA	1.00E-04	0.004	0.003	0.32	0.009	NA	NA	NA	0.01
346	MH-14	07/04/2000	238	7.68	0.06	0.005	NA	1.00E-04	NA	0.003	0.27	0.001	NA	NA	NA	0.01
347	MH-14	21/07/2000	205	8.14	0.07	0.313	NA	1.00E-04	0.006	NA	0.329	0.001	NA	NA	NA	0.009
348	MH-14	02/11/2000	216	8.01	0.02	0.005	NA	1.00E-04	NA	NA	0.141	0.002	NA	NA	NA	0.005
349	MH-14	31/01/2001	209	7.99	0.02	0.015	NA	1.00E-04	NA	NA	0.273	9.00E-04	NA	NA	NA	0.005
350	MH-14	02/04/2001	208	8.03	0.02	0.005	NA	1.00E-04	NA	NA	0.265	4.00E-04	NA	NA	NA	0.005
351	MH-14	21/07/2001	199	8.16	0.02	0.027	NA	1.00E-04	NA	NA	0.167	5.00E-04	NA	NA	NA	0.005
352	MH-14	02/11/2001	211	8.11	0.02	0.027	NA	1.00E-04	NA	NA	0.26	9.00E-04	NA	NA	NA	0.005
353	MH-14	01/02/2002	220	8.2	0.02	0.017	NA	1.00E-04	NA	NA	0.226	5.00E-04	NA	NA	NA	0.005
354	MH-14	16/04/2002	210	8.13	0.02	0.023	NA	1.00E-04	NA	NA	0.185	5.00E-04	NA	NA	NA	0.005
355	MH-14	25/07/2002	200	7.92	0.02	0.005	NA	1.00E-04	NA	NA	0.116	0.0011	NA	NA	NA	0.005
356	MH-14	15/11/2002	208	8.11	0.02	0.01	NA	0.16	NA	NA	0.169	0.53	NA	NA	NA	0.005
357	MH-14	12/01/2003	216	8.18	0.02	0.016	NA	1.00E-04	NA	NA	0.222	5.00E-04	NA	NA	NA	0.01
358	MH-14	25/04/2003	192	8.24	0.04	0.005	NA	1.00E-04	NA	NA	0.393	5.00E-04	NA	NA	NA	0.005
359	MH-14	15/07/2003	201	7.97	0.02	0.005	NA	1.00E-04	NA	NA	0.213	0.001	NA	NA	NA	0.005
360	MH-14	14/10/2003	229	8.39	0.06	0.005	NA	1.00E-04	NA	NA	0.235	0.0016	NA	NA	NA	0.005
361	MH-14	08/02/2004	219	NA	NA	NA	NA	0.05	NA	NA	0.212	0.88	NA	NA	NA	0.005
362	MH-14	09/05/2004	132	NA	NA	NA	NA	1.00E-04	NA	NA	0.55	5.00E-04	0.02	NA	NA	0.005
363	MH-14	10/08/2004	214	NA	NA	NA	NA	1.00E-04	NA	NA	0.378	0.0044	0.03	NA	NA	0.005

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
364	MH-14	04/10/2004	222	NA	NA	NA	NA	1.00E-04	NA	NA	0.201	5.00E-04	0.03	NA	NA	0.005
365	MH-14	06/07/2005	210	7.67	0.03	0.005	NA	3.00E-05	NA	NA	0.114	0.00022	NA	NA	NA	0.005
366	MH-14	04/09/2005	220	7.42	0.02	0.005	NA	6.00E-05	NA	NA	0.059	0.00631	NA	NA	NA	0.019
367	MH-14	21/12/2005	210	8.02	0.02	0.005	NA	5.00E-05	NA	NA	0.017	0.00022	NA	NA	NA	0.005
368	MH-14	27/03/2006	240	NA	NA	NA	NA	9.00E-05	NA	NA	0.43	0.00082	NA	NA	NA	0.005
369	MH-14	08/06/2006	170	7.98	0.02	0.029	NA	4.00E-05	NA	NA	0.031	6.00E-04	NA	NA	NA	0.005
370	MH-14	30/08/2006	240	7.86	0.02	0.005	NA	8.00E-05	NA	NA	0.025	7.00E-05	NA	NA	NA	0.005
371	MH-14	15/12/2006	220	7.52	0.09	0.005	NA	4.00E-05	NA	NA	0.194	0.00024	NA	NA	NA	0.005
372	MH-14	09/04/2007	213	7.71	0.06	0.02	NA	9.00E-05	NA	NA	0.382	0.00103	NA	NA	NA	0.005
373	MH-14	22/07/2007	183	8.24	0.22	0.005	NA	0.00011	NA	NA	0.398	0.00061	NA	NA	NA	0.006
374	MH-14	13/09/2007	217	8.16	0.02	0.005	NA	3.00E-05	NA	NA	0.009	3.00E-04	NA	NA	NA	0.005
375	MH-14	27/11/2007	234	8.11	1.38	0.013	0.0014	0.000295	0.003	0.0037	2.76	0.00236	NA	0.0011	6.00E-05	0.021
376	MH-14	07/03/2008	230	8.21	0.105	0.005	4.00E-04	3.30E-05	NA	0.001	0.381	0.000513	NA	0.001	2.00E-05	0.006
377	MH-14	17/06/2008	159	NA	NA	NA	4.00E-04	0.000135	0.001	0.0015	0.356	0.00119	NA	6.00E-04	2.00E-05	0.014
378	MH-14	10/10/2008	207	8.21	0.016	0.005	3.00E-04	2.60E-05	NA	3.00E-04	0.023	0.000499	NA	4.00E-04	2.00E-05	0.005
379	MH-14	28/12/2008	219	8.19	0.045	0.038	2.00E-04	2.60E-05	NA	5.00E-04	0.178	0.000176	NA	9.00E-04	2.00E-05	0.005
380	MH-14	30/03/2009	224	NA	NA	NA	4.00E-04	3.90E-05	NA	0.0013	0.349	0.000509	NA	9.00E-04	2.00E-05	0.006
381	MH-14	24/06/2009	187	NA	NA	NA	3.00E-04	6.10E-05	NA	0.0014	0.177	0.00244	NA	7.00E-04	2.00E-05	0.005
382	MH-14	16/09/2009	194	8.22	0.049	0.009	4.00E-04	3.00E-05	0.001	0.0013	0.279	0.000218	NA	7.00E-04	2.00E-05	0.005
383	MH-14	26/12/2009	224	8.2	0.056	0.014	3.00E-04	6.20E-05	NA	0.0012	0.282	0.000488	NA	9.00E-04	2.00E-05	0.007
384	MH-14	19/03/2010	222	8.22	0.017	0.005	3.00E-04	9.00E-05	NA	8.00E-04	0.232	0.0013	NA	0.0011	2.00E-05	0.005
385	MH-14	28/05/2010	214	NA	NA	NA	1.00E-04	3.20E-05	NA	6.00E-04	0.016	0.00018	NA	7.00E-04	2.00E-05	0.005
386	MH-14	28/09/2010	180	8.37	0.016	0.023	2.00E-04	4.60E-05	NA	5.00E-04	0.308	0.00125	NA	6.00E-04	2.00E-05	0.006
387	MH-14	31/12/2010	232	8.32	0.025	0.05	3.00E-04	0.000159	NA	0.0083	0.287	0.00115	NA	9.00E-04	2.00E-05	0.006
388	MH-14	30/03/2011	230	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.233	9.00E-04	NA	9.00E-04	NA	0.01
389	MH-14	22/06/2011	151	8.12	0.031	0.007	5.00E-04	1.00E-04	NA	0.001	0.352	6.00E-04	NA	8.00E-04	NA	0.01
390	MH-14	07/10/2011	178	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.246	3.00E-04	NA	8.00E-04	NA	0.01
391	MH-14	23/12/2011	200	8.28	0.026	0.0157	4.00E-04	1.00E-04	NA	0.002	0.287	0.0062	NA	9.00E-04	NA	0.01
392	MH-14	21/03/2012	205	8.1	0.114	0.005	4.00E-04	1.00E-04	NA	0.001	0.433	8.00E-04	NA	8.00E-04	NA	0.01
393	MH-14	13/07/2012	189	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.267	7.00E-04	NA	0.00085	NA	0.01
394	MH-14	19/09/2012	227	NA	NA	NA	0.00026	4.10E-05	NA	0.00039	0.908	0.00097	NA	0.00077	2.00E-05	0.005
395	MH-14	18/01/2013	192	NA	NA	NA	4.00E-04	0.00014	NA	0.0015	0.488	0.00073	NA	0.00103	NA	0.01
396	MH-14	15/03/2013	215	NA	NA	NA	4.00E-04	1.00E-04	NA	0.0014	0.475	0.00096	NA	0.00084	NA	0.01

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
397	MH-14	21/06/2013	182	NA	NA	NA	0.000329	4.70E-05	1.00E-04	0.000715	0.123	0.00107	NA	0.000929	5.00E-06	0.00261
398	MH-14	29/09/2013	204	NA	NA	NA	0.00046	1.70E-05	NA	0.00034	0.28	0.00058	NA	0.00052	2.00E-05	0.005
399	MH-14	18/12/2013	218	NA	NA	NA	0.00026	1.40E-05	NA	0.00035	0.217	2.00E-04	NA	0.00097	2.00E-05	0.005
400	MH-15	21/06/2013	188	NA	NA	NA	0.00044	1.80E-05	1.00E-04	0.000311	0.173	0.00022	NA	0.000505	6.00E-06	0.00135
401	MH-15	29/09/2013	203	NA	NA	NA	0.00043	1.00E-05	NA	2.00E-04	0.211	2.00E-04	NA	0.00049	2.00E-05	0.005
402	MH-08	02/06/1999	112	7.94	1.26	0.005	NA	8.00E-04	0.003	0.006	1.81	0.018	NA	NA	NA	0.13
403	MH-08	02/07/1999	159	8.02	0.06	0.005	NA	1.00E-04	NA	0.003	0.05	0.001	NA	NA	NA	0.04
404	MH-08	05/08/1999	151	8.17	0.06	0.005	NA	1.00E-04	NA	0.003	0.05	0.001	NA	NA	NA	0.04
405	MH-08	02/09/1999	147	8.18	0.06	0.005	NA	1.00E-04	NA	0.003	0.05	0.001	NA	NA	NA	0.01
406	MH-08	05/10/1999	150	8.16	0.06	0.005	NA	1.00E-04	NA	0.003	0.05	0.001	NA	NA	NA	0.02
407	MH-08	03/11/1999	149	7.59	0.06	0.005	NA	1.00E-04	0.003	0.003	0.05	0.001	NA	NA	NA	0.03
408	MH-08	04/06/2000	104	8.35	0.9	0.029	NA	2.00E-04	NA	NA	1.29	0.003	NA	NA	NA	0.063
409	MH-08	01/07/2000	147	8.32	0.02	0.034	NA	1.00E-04	NA	NA	0.005	0.001	NA	NA	NA	0.019
410	MH-08	01/08/2000	162	8.37	0.03	0.005	NA	1.00E-04	NA	NA	0.025	0.001	NA	NA	NA	0.018
411	MH-08	01/09/2000	149	8.28	0.02	0.005	NA	1.00E-04	NA	NA	0.013	0.001	NA	NA	NA	0.013
412	MH-08	03/10/2000	152	8.1	0.06	0.005	NA	1.00E-04	NA	NA	0.083	0.001	NA	NA	NA	0.027
413	MH-08	13/11/2000	155	8.32	0.02	0.005	NA	1.00E-04	NA	NA	0.029	0.001	NA	NA	NA	0.022
414	MH-08	01/12/2000	152	8.33	0.02	0.005	NA	1.00E-04	NA	NA	0.013	0.001	NA	NA	NA	0.017
415	MH-08	03/06/2001	120	8.26	0.86	0.005	NA	2.00E-04	0.014	0.015	1.2	0.0028	NA	NA	NA	0.046
416	MH-08	01/07/2001	151	8.24	0.03	0.005	NA	1.00E-04	NA	NA	0.01	5.00E-04	NA	NA	NA	0.033
417	MH-08	01/08/2001	145	8.39	0.02	0.005	NA	1.00E-04	NA	NA	0.005	5.00E-04	NA	NA	NA	0.028
418	MH-08	01/09/2001	141	8.45	0.02	0.007	NA	1.00E-04	NA	NA	0.005	5.00E-04	NA	NA	NA	0.009
419	MH-08	03/10/2001	141	8.42	0.03	0.01	NA	1.00E-04	NA	NA	0.01	5.00E-04	NA	NA	NA	0.009
420	MH-08	04/11/2001	144	8.37	0.02	0.005	NA	1.00E-04	NA	NA	0.01	5.00E-04	NA	NA	NA	0.015
421	MH-08	01/12/2001	141	8.32	0.02	0.005	NA	1.00E-04	NA	NA	0.009	5.00E-04	NA	NA	NA	0.005
422	MH-08	05/01/2002	145	8.33	0.03	0.005	NA	1.00E-04	NA	NA	0.012	5.00E-04	NA	NA	NA	0.031
423	MH-08	02/02/2002	136	8.51	0.02	0.005	NA	1.00E-04	NA	NA	0.005	5.00E-04	NA	NA	NA	0.021
424	MH-08	03/03/2002	146	8.36	0.02	0.006	NA	3.00E-05	NA	NA	0.007	3.00E-05	NA	NA	NA	0.02
425	MH-08	03/04/2002	148	8.11	0.02	0.005	NA	1.00E-04	NA	NA	0.01	5.00E-04	NA	NA	NA	0.018
426	MH-08	05/05/2002	143	8.31	0.02	0.005	NA	1.00E-04	NA	NA	0.02	5.00E-04	NA	NA	NA	0.018
427	MH-08	02/06/2002	153	8.32	0.06	0.005	NA	1.00E-04	NA	NA	0.062	0.0013	NA	NA	NA	0.026
428	MH-08	01/07/2002	149	8.28	0.03	0.005	NA	1.00E-04	NA	NA	0.007	5.00E-04	NA	NA	NA	0.026
429	MH-08	29/07/2002	152	8.21	0.02	0.032	NA	1.00E-04	NA	NA	0.014	5.00E-04	NA	NA	NA	0.02

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
430	MH-08	01/09/2002	143	8.42	0.02	0.005	NA	1.00E-04	NA	NA	0.007	5.00E-04	NA	NA	NA	0.017
431	MH-08	01/10/2002	152	8.26	0.02	0.005	NA	7.00E-05	NA	NA	0.009	5.00E-04	NA	NA	NA	0.018
432	MH-08	03/11/2002	147	8.34	0.04	0.005	NA	1.00E-04	NA	NA	0.056	5.00E-04	NA	NA	NA	0.02
433	MH-08	02/12/2002	145	8.44	0.02	0.005	NA	1.00E-04	NA	NA	0.018	5.00E-04	NA	NA	NA	0.008
434	MH-08	02/01/2003	143	8.39	0.15	0.005	NA	1.00E-04	NA	NA	0.331	6.00E-04	NA	NA	NA	0.019
435	MH-08	01/02/2003	140	8.37	0.11	0.008	NA	1.00E-04	NA	NA	0.15	7.00E-04	NA	NA	NA	0.086
436	MH-08	01/03/2003	145	8.45	0.02	0.026	NA	1.00E-04	NA	NA	0.012	5.00E-04	NA	NA	NA	0.029
437	MH-08	01/04/2003	144	8.4	0.02	0.005	NA	1.00E-04	NA	NA	0.012	5.00E-04	NA	NA	NA	0.015
438	MH-08	02/05/2003	132	8.35	0.04	0.021	NA	1.00E-04	NA	NA	0.06	5.00E-04	NA	NA	NA	0.021
439	MH-08	01/06/2003	138	8.13	0.02	0.011	NA	1.00E-04	NA	NA	0.011	5.00E-04	NA	NA	NA	0.007
440	MH-08	04/07/2003	156	NA	NA	NA	NA	1.00E-04	NA	NA	0.02	5.00E-04	NA	NA	NA	0.025
441	MH-08	08/08/2003	157	8.36	0.02	0.005	NA	NA	NA	NA	0.008	NA	NA	NA	NA	0.012
442	MH-08	04/09/2003	159	8.37	0.02	0.005	NA	1.00E-04	NA	NA	0.156	5.00E-04	NA	NA	NA	0.011
443	MH-08	03/11/2003	144	8.34	0.02	0.007	NA	NA	NA	NA	0.03	NA	NA	NA	NA	0.023
444	MH-08	07/12/2003	142	8.35	0.14	NA	NA	6.00E-05	NA	NA	0.2	0.00021	NA	NA	NA	0.072
445	MH-08	06/01/2004	142	NA	NA	NA	NA	NA	NA	NA	0.005	NA	NA	NA	NA	0.017
446	MH-08	07/02/2004	140	NA	NA	NA	NA	0.08	NA	NA	0.009	0.18	NA	NA	NA	0.016
447	MH-08	02/03/2004	140	NA	NA	NA	NA	8.00E-05	NA	NA	0.006	0.00036	NA	NA	NA	0.015
448	MH-08	11/04/2004	137	NA	NA	NA	NA	NA	NA	NA	0.009	NA	NA	NA	NA	0.026
449	MH-08	09/05/2004	134	NA	NA	NA	NA	1.00E-04	NA	NA	0.019	5.00E-04	0.02	NA	NA	0.015
450	MH-08	07/06/2004	158	NA	NA	NA	NA	8.00E-05	NA	NA	0.006	4.00E-05	0.05	NA	NA	0.02
451	MH-08	06/07/2004	156	8.4	0.02	0.005	NA	1.00E-04	NA	NA	0.009	5.00E-04	0.03	NA	NA	0.013
452	MH-08	06/08/2004	144	8.42	0.02	0.005	NA	1.00E-04	NA	NA	0.024	5.00E-04	0.04	NA	NA	0.013
453	MH-08	05/09/2004	140	NA	NA	NA	NA	0.00018	NA	NA	0.195	0.00239	0.03	NA	NA	0.018
454	MH-08	04/10/2004	156	NA	NA	NA	NA	1.00E-04	NA	NA	0.337	5.00E-04	0.03	NA	NA	0.015
455	MH-08	29/01/2005	155	NA	NA	NA	NA	NA	NA	NA	0.018	NA	NA	NA	NA	0.005
456	MH-08	24/02/2005	NA	NA	NA	NA	NA	NA	NA	NA	0.304	NA	NA	NA	NA	0.008
457	MH-08	17/03/2005	NA	NA	NA	NA	NA	NA	NA	NA	0.064	NA	NA	NA	NA	0.005
458	MH-08	18/04/2005	160	NA	NA	NA	NA	7.00E-05	NA	NA	0.137	0.00084	NA	NA	NA	0.005
459	MH-08	27/05/2005	170	NA	NA	NA	NA	0.00012	NA	NA	0.023	9.00E-05	NA	NA	NA	0.021
460	MH-08	21/06/2005	150	8.07	0.02	0.006	NA	9.00E-05	NA	NA	0.008	3.00E-05	NA	NA	NA	0.025
461	MH-08	12/07/2005	160	8.25	0.02	0.005	NA	8.00E-05	NA	NA	0.009	0.00016	NA	NA	NA	0.018
462	MH-08	10/08/2005	170	8.26	1.99	0.005	NA	0.00149	0.009	0.012	3.71	0.0123	NA	NA	NA	0.124

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
463	MH-08	13/09/2005	150	8.07	0.02	0.005	NA	8.00E-05	NA	NA	0.01	3.00E-05	NA	NA	NA	0.01
464	MH-08	11/10/2005	140	8.19	0.02	0.005	NA	7.00E-05	NA	NA	0.005	2.00E-05	NA	NA	NA	0.01
465	MH-08	17/11/2005	160	8.19	0.03	0.005	NA	5.00E-05	NA	NA	0.029	3.00E-04	NA	NA	NA	0.005
466	MH-08	10/12/2005	170	8.27	0.02	0.005	NA	6.00E-05	NA	NA	0.015	0.00039	NA	NA	NA	0.005
467	MH-08	10/01/2006	160	8.19	0.02	0.005	NA	0.00014	NA	NA	0.02	0.00065	NA	NA	NA	0.008
468	MH-08	05/02/2006	160	8.23	0.02	0.012	NA	0.00016	NA	NA	0.03	0.0112	NA	NA	NA	0.008
469	MH-08	10/03/2006	160	8.12	0.02	0.005	NA	4.00E-05	NA	NA	0.009	0.00015	NA	NA	NA	0.005
470	MH-08	19/05/2006	120	NA	NA	NA	NA	5.00E-05	NA	NA	0.138	0.00077	NA	NA	NA	0.007
471	MH-08	13/06/2006	160	8.39	0.02	0.005	NA	0.00011	NA	NA	0.016	6.00E-05	NA	NA	NA	0.017
472	MH-08	05/07/2006	170	8.35	1.18	0.005	NA	0.00117	NA	0.007	1.9	0.00813	NA	NA	NA	0.097
473	MH-08	14/08/2006	150	8.27	0.02	0.005	NA	4.00E-05	NA	NA	0.01	9.00E-05	NA	NA	NA	0.005
474	MH-08	15/09/2006	150	8.36	0.13	0.015	NA	0.00016	NA	NA	0.215	0.00075	NA	NA	NA	0.014
475	MH-08	15/10/2006	160	8.1	0.006	0.005	0.001	3.00E-05	NA	4.00E-04	0.013	4.00E-05	NA	NA	NA	0.005
476	MH-08	01/11/2006	140	8.02	0.02	0.005	NA	4.00E-05	NA	NA	0.021	9.00E-05	NA	NA	NA	0.005
477	MH-08	16/12/2006	160	8.12	0.02	0.005	NA	9.00E-05	NA	NA	0.028	0.00065	NA	NA	NA	0.005
478	MH-08	18/01/2007	160	8	0.05	0.005	NA	4.00E-05	NA	NA	0.044	0.00066	NA	NA	NA	0.005
479	MH-08	19/02/2007	159	8.02	0.02	0.005	NA	3.00E-05	NA	NA	0.016	0.00024	NA	NA	NA	0.005
480	MH-08	26/03/2007	160	8.02	0.05	0.005	NA	6.00E-05	0.006	NA	0.266	0.00048	NA	NA	NA	0.005
481	MH-08	27/04/2007	172	8.01	0.02	0.005	NA	5.00E-05	NA	NA	0.015	0.00013	NA	NA	NA	0.005
482	MH-08	21/05/2007	114	7.99	0.64	0.005	NA	0.00012	NA	NA	0.888	0.00235	NA	NA	NA	0.024
483	MH-08	19/06/2007	129	8.38	0.02	0.005	NA	5.00E-05	NA	NA	0.046	0.00053	NA	NA	NA	0.005
484	MH-08	19/07/2007	134	8.22	0.15	0.005	NA	5.00E-05	NA	NA	0.169	0.00047	NA	NA	NA	0.006
485	MH-08	12/08/2007	139	8.36	0.02	0.005	NA	4.00E-05	NA	NA	0.059	0.00101	NA	NA	NA	0.006
486	MH-08	15/09/2007	146	8.17	0.02	0.005	NA	4.00E-05	NA	NA	0.033	0.00017	NA	NA	NA	0.005
487	MH-08	21/10/2007	156	8.19	0.007	0.01	0.0012	4.50E-05	NA	4.00E-04	0.03	0.00016	NA	6.00E-04	2.00E-05	0.005
488	MH-08	14/11/2007	150	NA	NA	NA	0.0011	3.60E-05	NA	2.00E-04	0.033	0.0036	NA	5.00E-04	2.00E-05	0.005
489	MH-08	03/12/2007	168	8.46	0.028	0.006	0.0012	5.20E-05	NA	0.0034	0.083	0.00121	NA	7.00E-04	2.00E-05	0.008
490	MH-08	04/01/2008	159	8.31	0.001	0.005	1.00E-04	4.40E-05	NA	2.00E-04	0.005	0.000296	NA	1.00E-04	2.00E-05	0.005
491	MH-08	11/02/2008	167	8.16	0.018	0.005	0.001	4.10E-05	NA	6.00E-04	0.052	0.000399	NA	7.00E-04	2.00E-05	0.008
492	MH-08	03/03/2008	174	NA	NA	NA	0.001	3.90E-05	NA	0.0016	0.032	0.000241	NA	7.00E-04	2.00E-05	0.007
493	MH-08	02/04/2008	183	8.17	0.011	0.005	0.0011	3.50E-05	NA	9.00E-04	0.051	0.000367	NA	7.00E-04	2.00E-05	0.005
494	MH-08	24/06/2008	141	NA	NA	NA	0.0012	3.90E-05	0.002	0.0018	0.077	0.000483	NA	5.00E-04	2.00E-05	0.013
495	MH-08	19/07/2008	135	NA	NA	NA	0.0012	3.10E-05	NA	3.00E-04	0.017	6.50E-05	NA	5.00E-04	2.00E-05	0.005

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
496	MH-08	15/08/2008	133	NA	NA	NA	0.0011	4.10E-05	NA	3.00E-04	0.027	8.30E-05	NA	5.00E-04	2.00E-05	0.005
497	MH-08	03/09/2008	173	8.17	0.026	0.005	0.0011	3.60E-05	NA	4.00E-04	0.052	0.000145	NA	5.00E-04	2.00E-05	0.005
498	MH-08	23/10/2008	141	8.25	0.01	0.005	0.0013	3.80E-05	NA	6.00E-04	0.039	0.000302	NA	5.00E-04	2.00E-05	0.005
499	MH-08	14/11/2008	149	8.37	0.007	0.005	0.0011	4.60E-05	NA	0.0012	0.033	0.000339	NA	5.00E-04	3.00E-05	0.005
500	MH-08	01/12/2008	163	8.43	0.031	0.005	0.0011	6.70E-05	NA	0.0046	0.074	0.00229	NA	5.00E-04	2.00E-05	0.005
501	MH-08	18/01/2009	154	8.25	0.378	0.005	0.0019	0.000149	0.001	0.0015	0.63	0.00256	NA	7.00E-04	2.00E-05	0.013
502	MH-08	13/02/2009	153	8.51	0.014	0.005	0.001	6.10E-05	NA	9.00E-04	0.072	0.000552	NA	6.00E-04	2.00E-05	0.005
503	MH-08	18/03/2009	165	8.36	0.026	0.005	0.0013	6.30E-05	NA	0.001	0.098	0.000596	NA	8.00E-04	2.00E-05	0.007
504	MH-08	13/04/2009	208	8.19	0.007	0.037	4.00E-04	2.60E-05	NA	0.0014	0.012	3.50E-05	NA	6.00E-04	2.00E-05	0.016
505	MH-08	18/05/2009	153	8.35	0.057	0.005	0.0011	3.70E-05	NA	9.00E-04	0.017	0.000192	NA	7.00E-04	2.00E-05	0.012
506	MH-08	15/06/2009	130	8.32	0.051	0.005	0.0012	3.30E-05	NA	4.00E-04	0.072	0.000278	NA	4.00E-04	2.00E-05	0.005
507	MH-08	20/07/2009	138	8.26	0.014	0.005	0.0011	3.50E-05	NA	4.00E-04	0.015	2.50E-05	NA	4.00E-04	2.00E-05	0.005
508	MH-08	19/08/2009	141	NA	NA	NA	0.0012	3.50E-05	NA	3.00E-04	0.04	9.70E-05	NA	5.00E-04	2.00E-05	0.005
509	MH-08	24/09/2009	147	NA	NA	NA	0.0014	2.40E-05	NA	3.00E-04	0.023	8.40E-05	NA	5.00E-04	2.00E-05	0.005
510	MH-08	23/10/2009	135	8.51	0.007	0.005	0.0012	7.20E-05	NA	8.00E-04	0.033	0.00187	NA	4.00E-04	2.00E-05	0.005
511	MH-08	15/11/2009	148	8.27	0.004	0.005	0.0012	4.00E-05	NA	2.00E-04	0.029	9.00E-05	NA	5.00E-04	2.00E-05	0.005
512	MH-08	09/12/2009	156	8.21	0.013	0.005	0.0011	2.70E-05	NA	2.00E-04	0.039	0.000205	NA	6.00E-04	2.00E-05	0.005
513	MH-08	13/01/2010	167	8.2	0.008	0.008	0.001	3.30E-05	NA	7.00E-04	0.026	0.000697	NA	6.00E-04	2.00E-05	0.005
514	MH-08	16/02/2010	158	8.34	0.006	0.217	0.001	2.60E-05	NA	4.00E-04	0.037	0.000375	NA	6.00E-04	2.00E-05	0.005
515	MH-08	07/03/2010	162	8.48	0.01	0.01	0.0011	3.30E-05	NA	8.00E-04	0.038	0.000243	NA	6.00E-04	2.00E-05	0.005
516	MH-08	11/04/2010	163	8.53	0.005	0.005	9.00E-04	3.70E-05	NA	5.00E-04	0.054	0.00124	NA	7.00E-04	2.00E-05	0.008
517	MH-08	04/05/2010	154	8.33	0.004	0.027	0.001	2.30E-05	NA	4.00E-04	0.026	9.50E-05	NA	7.00E-04	2.00E-05	0.005
518	MH-08	14/06/2010	121	8.05	0.012	0.13	0.0011	2.40E-05	0.001	5.00E-04	0.019	0.000138	NA	4.00E-04	2.00E-05	0.005
519	MH-08	20/07/2010	138	8.51	0.012	0.022	0.0012	3.30E-05	0.001	2.00E-04	0.025	9.90E-05	NA	5.00E-04	2.00E-05	0.005
520	MH-08	15/08/2010	144	NA	NA	NA	0.0013	4.40E-05	NA	4.00E-04	0.165	0.000379	NA	5.00E-04	2.00E-05	0.005
521	MH-08	21/09/2010	156	8.3	0.01	0.059	7.00E-04	3.00E-05	NA	5.00E-04	0.023	0.000157	NA	6.00E-04	2.00E-05	0.005
522	MH-08	23/10/2010	154	8.21	0.006	0.069	9.00E-04	3.90E-05	NA	7.00E-04	0.032	0.000331	NA	6.00E-04	2.00E-05	0.005
523	MH-08	14/11/2010	156	8.24	0.019	0.057	0.001	9.30E-05	NA	0.0041	0.039	0.000406	NA	5.00E-04	2.00E-05	0.005
524	MH-08	11/12/2010	158	8.07	0.019	0.006	0.0011	0.000113	NA	0.0032	0.062	0.00126	NA	7.00E-04	2.00E-05	0.008
525	MH-08	21/01/2011	160	8.32	0.01	0.005	9.00E-04	1.00E-04	NA	0.001	0.029	5.00E-04	NA	8.00E-04	NA	0.01
526	MH-08	12/02/2011	158	8.26	0.042	0.022	0.0012	5.00E-04	NA	0.021	0.124	0.0466	NA	8.00E-04	NA	0.032
527	MH-08	13/03/2011	171	NA	NA	NA	0.001	1.00E-04	NA	0.002	0.104	4.00E-04	NA	8.00E-04	NA	0.01
528	MH-08	05/04/2011	164	NA	NA	NA	9.00E-04	1.00E-04	NA	0.001	0.045	4.00E-04	NA	8.00E-04	NA	0.01

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
529	MH-08	23/05/2011	127	8.22	0.027	0.008	0.001	1.00E-04	NA	0.001	0.063	2.00E-04	NA	8.00E-04	NA	0.01
530	MH-08	15/06/2011	107	NA	NA	NA	0.0012	1.00E-04	NA	0.001	0.088	5.00E-04	NA	8.00E-04	NA	0.01
531	MH-08	18/07/2011	124	8.27	0.011	0.028	0.001	6.00E-05	NA	0.0021	0.063	7.00E-04	NA	5.00E-04	2.00E-05	0.009
532	MH-08	22/08/2011	136	8.51	0.006	0.005	0.001	1.00E-05	NA	3.00E-04	0.015	2.00E-04	NA	6.00E-04	2.00E-05	0.005
533	MH-08	19/09/2011	147	8.4	0.004	0.005	0.0012	4.00E-05	NA	2.00E-04	0.011	2.00E-04	NA	5.00E-04	2.00E-05	0.005
534	MH-08	08/10/2011	138	8.27	0.011	0.005	0.0011	4.00E-05	NA	2.00E-04	0.032	5.00E-04	NA	5.00E-04	2.00E-05	0.005
535	MH-08	15/11/2011	140	8.14	0.01	0.0117	0.001	1.00E-04	NA	0.001	0.037	5.00E-04	NA	8.00E-04	NA	0.01
536	MH-08	05/12/2011	139	8.28	0.013	0.0152	0.0011	1.00E-04	NA	0.001	0.071	3.00E-04	NA	8.00E-04	NA	0.01
537	MH-08	09/01/2012	145	8.01	0.08	0.028	0.0014	1.00E-04	NA	0.002	0.286	0.0033	NA	8.00E-04	NA	0.01
538	MH-08	09/02/2012	141	8.22	0.018	0.005	0.0011	1.00E-04	NA	0.001	0.079	7.00E-04	NA	8.00E-04	NA	0.01
539	MH-08	21/03/2012	160	8.24	0.015	0.0062	0.0013	1.00E-04	NA	0.004	0.094	6.00E-04	NA	8.00E-04	NA	0.01
540	MH-08	16/04/2012	151	8.26	0.01	0.02	0.00099	1.00E-04	NA	0.001	0.068	0.00021	NA	8.00E-04	NA	0.01
541	MH-08	19/06/2012	125	8.32	0.552	0.0152	0.00188	0.00011	NA	0.0015	0.815	0.00347	NA	8.00E-04	NA	0.01
542	MH-08	20/07/2012	132	8.28	0.06	0.0067	0.00135	1.00E-04	NA	0.001	0.082	0.00053	NA	8.00E-04	NA	0.01
543	MH-08	27/08/2012	142	NA	NA	NA	0.00103	1.00E-04	NA	0.001	0.021	2.00E-04	NA	8.00E-04	NA	0.01
544	MH-08	20/09/2012	156	NA	NA	NA	0.00118	3.50E-05	NA	0.00024	0.032	2.00E-04	NA	5.00E-04	2.00E-05	0.005
545	MH-08	29/10/2012	148	NA	NA	NA	0.00154	0.00014	NA	0.002	0.401	0.00214	NA	8.00E-04	NA	0.012
546	MH-08	10/11/2012	152	NA	NA	NA	0.00109	1.00E-04	NA	0.001	0.191	0.00054	NA	8.00E-04	NA	0.01
547	MH-08	30/12/2012	157	NA	NA	NA	0.00112	5.70E-05	NA	0.00125	0.128	0.00111	NA	0.00049	2.00E-05	0.0059
548	MH-08	20/01/2013	150	NA	NA	NA	0.00113	3.60E-05	NA	0.00072	0.129	0.00053	NA	0.00075	2.00E-05	0.005
549	MH-08	20/02/2013	192	NA	NA	NA	0.00044	0.00056	NA	0.0012	0.02	0.0147	NA	0.00097	NA	0.079
550	MH-08	08/03/2013	157	NA	NA	NA	0.0016	1.00E-04	NA	0.0017	0.364	0.00226	NA	8.00E-04	NA	0.01
551	MH-08	14/04/2013	163	NA	NA	NA	0.00422	0.00026	NA	0.0031	1.74	0.012	NA	8.00E-04	NA	0.023
552	MH-08	20/05/2013	146	NA	NA	NA	0.00099	0.000123	NA	0.00088	0.0571	0.00063	NA	0.00059	2.00E-05	0.005
553	MH-08	22/06/2013	124	NA	NA	NA	0.00132	8.00E-05	0.00041	0.00028	0.0052	0.000107	NA	0.00145	5.00E-06	0.0117
554	MH-08	17/07/2013	130	NA	NA	NA	0.00196	8.30E-05	NA	0.00033	0.0203	2.00E-04	NA	0.00169	2.00E-05	0.005
555	MH-08	13/08/2013	134	NA	NA	NA	0.0021	8.50E-05	NA	2.00E-04	0.005	2.00E-04	NA	0.00166	2.00E-05	0.005
556	MH-08	24/09/2013	133	NA	NA	NA	0.00211	7.70E-05	NA	2.00E-04	0.005	2.00E-04	NA	0.00166	2.00E-05	0.005
557	MH-08	24/09/2013	145	NA	NA	NA	0.00197	6.70E-05	NA	2.00E-04	0.005	2.00E-04	NA	0.00183	2.00E-05	0.005
558	MH-08	17/10/2013	129	NA	NA	NA	0.00217	7.40E-05	NA	0.00042	0.005	2.00E-04	NA	0.00196	2.00E-05	0.005
559	MH-08	19/11/2013	150	NA	NA	NA	0.00201	6.00E-05	NA	2.00E-04	0.005	2.00E-04	NA	0.00198	2.00E-05	0.005
560	MH-08	10/12/2013	136	NA	NA	NA	0.00208	6.70E-05	NA	2.00E-04	0.005	2.00E-04	NA	0.00195	2.00E-05	0.005
561	MH-12	22/06/2013	136	NA	NA	NA	0.00156	7.60E-05	0.00036	0.000837	0.315	0.00171	NA	0.000614	8.00E-06	0.00395

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
562	MH-12	24/09/2013	177	NA	NA	NA	0.00089	4.30E-05	NA	0.00054	0.0267	0.00027	NA	0.00064	2.00E-05	0.005
563	MH-16	11/01/1999	227	8.05	0.06	0.011	NA	1.00E-04	NA	0.005	0.17	0.001	NA	NA	NA	0.01
564	MH-16	13/04/1999	231	7.38	0.06	0.005	NA	1.00E-04	0.002	0.003	0.14	0.001	NA	NA	NA	0.02
565	MH-16	12/08/1999	215	7.89	0.06	0.024	NA	1.00E-04	0.005	0.003	0.57	0.001	NA	NA	NA	0.01
566	MH-16	18/10/1999	219	7.93	0.06	0.005	NA	1.00E-04	NA	0.003	0.16	0.001	NA	NA	NA	0.01
567	MH-16	03/02/2000	221	7.42	0.06	0.005	NA	1.00E-04	0.003	NA	0.18	0.001	NA	NA	NA	0.01
568	MH-16	07/04/2000	226	7.83	0.06	0.005	NA	1.00E-04	NA	0.003	0.15	0.001	NA	NA	NA	0.01
569	MH-16	21/07/2000	206	8.41	0.02	0.027	NA	1.00E-04	0.005	NA	0.194	0.001	NA	NA	NA	0.008
570	MH-16	02/11/2000	224	8.13	0.02	0.005	NA	1.00E-04	NA	NA	0.19	0.001	NA	NA	NA	0.005
571	MH-16	31/01/2001	208	8.31	0.02	0.005	NA	1.00E-04	NA	NA	0.163	5.00E-04	NA	NA	NA	0.005
572	MH-16	02/04/2001	216	8.48	0.02	0.005	NA	2.00E-05	NA	NA	0.155	2.00E-05	NA	NA	NA	0.005
573	MH-16	21/07/2001	201	8.39	0.02	0.038	NA	1.00E-04	NA	NA	0.134	5.00E-04	NA	NA	NA	0.005
574	MH-16	02/11/2001	214	8.56	0.02	0.012	NA	1.00E-04	NA	NA	0.135	5.00E-04	NA	NA	NA	0.005
575	MH-16	01/02/2002	226	8.45	0.02	0.006	NA	1.00E-04	NA	NA	0.141	5.00E-04	NA	NA	NA	0.005
576	MH-16	16/04/2002	219	8.39	0.02	0.005	NA	1.00E-04	NA	NA	0.147	5.00E-04	NA	NA	NA	0.005
577	MH-16	25/07/2002	204	8.38	0.02	0.005	NA	1.00E-04	NA	NA	0.172	5.00E-04	NA	NA	NA	0.005
578	MH-16	15/11/2002	219	8.31	0.02	0.005	NA	0.29	NA	NA	0.122	0.12	NA	NA	NA	0.005
579	MH-16	12/01/2003	214	8.17	0.02	0.009	NA	1.00E-04	NA	NA	0.15	5.00E-04	NA	NA	NA	0.013
580	MH-16	25/04/2003	208	8.33	0.02	0.005	NA	1.00E-04	NA	NA	0.214	5.00E-04	NA	NA	NA	0.005
581	MH-16	15/07/2003	199	8.36	0.02	0.005	NA	1.00E-04	NA	NA	0.153	5.00E-04	NA	NA	NA	0.005
582	MH-16	14/10/2003	215	8.42	0.02	0.005	NA	1.00E-04	NA	NA	0.13	6.00E-04	NA	NA	NA	0.005
583	MH-16	08/02/2004	224	NA	NA	NA	NA	0.02	NA	NA	0.13	0.1	NA	NA	NA	0.005
584	MH-16	09/05/2004	156	NA	NA	NA	NA	1.00E-04	NA	NA	0.648	9.00E-04	0.02	NA	NA	0.005
585	MH-16	10/08/2004	212	NA	NA	NA	NA	1.00E-04	NA	NA	0.156	0.0014	0.02	NA	NA	0.005
586	MH-16	04/10/2004	246	NA	NA	NA	NA	1.00E-04	NA	NA	1.1	5.00E-04	0.02	NA	NA	0.005
587	MH-16	06/07/2005	200	8.25	0.04	0.005	NA	4.00E-05	NA	NA	0.237	0.00124	NA	NA	NA	0.005
588	MH-16	04/09/2005	220	8.26	0.02	0.005	NA	2.00E-05	NA	NA	0.175	0.00437	NA	NA	NA	0.005
589	MH-16	21/12/2005	220	8.43	0.03	0.005	NA	2.00E-05	NA	NA	0.157	0.00049	NA	NA	NA	0.005
590	MH-16	27/03/2006	110	NA	NA	NA	NA	5.00E-05	NA	NA	0.127	0.0102	NA	NA	NA	0.041
591	MH-16	08/06/2006	170	8.18	0.07	0.005	NA	3.00E-05	NA	NA	0.198	0.00031	NA	NA	NA	0.005
592	MH-16	30/08/2006	230	8.31	0.02	0.044	NA	7.00E-05	NA	NA	0.175	0.00015	NA	NA	NA	0.005
593	MH-16	15/12/2006	220	8.06	0.02	0.005	NA	3.00E-05	NA	NA	0.144	6.00E-05	NA	NA	NA	0.005
594	MH-16	09/04/2007	163	8.06	0.02	0.005	NA	1.00E-05	NA	NA	0.179	0.00021	NA	NA	NA	0.005

	Site	Date	Hard.d	pH.ID.F	Al.t	NH3.N	As.t	Cd.t	Cr.t	Cu.t	Fe.t	Pb.t	NO3.N	Se.t	Ag.t	Zn.t
595	MH-16	22/07/2007	182	8.36	0.09	0.005	NA	3.00E-05	NA	NA	0.228	2.00E-04	NA	NA	NA	0.005
596	MH-16	13/09/2007	216	8.3	0.02	0.005	NA	3.00E-05	NA	NA	0.174	0.00037	NA	NA	NA	0.005
597	MH-16	27/11/2007	220	8.16	0.022	0.005	3.00E-04	1.00E-05	NA	4.00E-04	0.187	8.70E-05	NA	6.00E-04	2.00E-05	0.005
598	MH-16	07/03/2008	227	8.14	0.013	0.005	3.00E-04	4.20E-05	NA	5.00E-04	0.088	8.60E-05	NA	7.00E-04	2.00E-05	0.005
599	MH-16	17/06/2008	183	NA	NA	NA	5.00E-04	5.50E-05	NA	7.00E-04	0.254	0.000538	NA	6.00E-04	2.00E-05	0.007
600	MH-16	28/09/2010	197	8.52	0.017	0.05	2.00E-04	2.80E-05	NA	3.00E-04	0.191	0.000838	NA	4.00E-04	2.00E-05	0.005
601	MH-16	31/12/2010	232	8.36	0.015	0.05	3.00E-04	1.10E-05	NA	2.00E-04	0.163	3.60E-05	NA	6.00E-04	2.00E-05	0.005
602	MH-16	30/03/2011	234	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.138	3.00E-04	NA	8.00E-04	NA	0.01
603	MH-16	22/06/2011	168	8.21	0.469	0.007	0.001	1.00E-04	NA	0.002	1.2	0.0023	NA	8.00E-04	NA	0.01
604	MH-16	07/10/2011	162	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.129	5.00E-04	NA	8.00E-04	NA	0.01
605	MH-16	23/12/2011	196	8.15	0.014	0.052	4.00E-04	1.00E-04	NA	0.001	0.194	3.00E-04	NA	8.00E-04	NA	0.01
606	MH-16	21/03/2012	216	8.12	0.01	0.0073	4.00E-04	1.00E-04	NA	0.001	0.181	2.00E-04	NA	8.00E-04	NA	0.01
607	MH-16	13/07/2012	190	NA	NA	NA	0.00044	1.00E-04	NA	0.001	0.221	0.00037	NA	8.00E-04	NA	0.01
608	MH-16	19/09/2012	205	NA	NA	NA	0.00036	1.00E-05	NA	0.00027	0.194	2.00E-04	NA	0.00062	2.00E-05	0.005
609	MH-16	18/01/2013	199	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.22	2.00E-04	NA	8.00E-04	NA	0.01
610	MH-16	15/03/2013	224	NA	NA	NA	4.00E-04	1.00E-04	NA	0.001	0.198	0.00031	NA	9.00E-04	NA	0.01
611	MH-16	21/06/2013	175	NA	NA	NA	0.000385	0.000103	1.00E-04	0.00139	0.147	0.00304	NA	0.000591	5.00E-06	0.00623
612	MH-16	29/09/2013	202	NA	NA	NA	0.00045	1.20E-05	NA	0.00024	0.245	2.00E-04	NA	0.00053	2.00E-05	0.005
613	MH-16	18/12/2013	222	NA	NA	NA	0.00033	2.70E-05	NA	0.00074	0.252	0.00021	NA	0.00031	2.00E-05	0.005