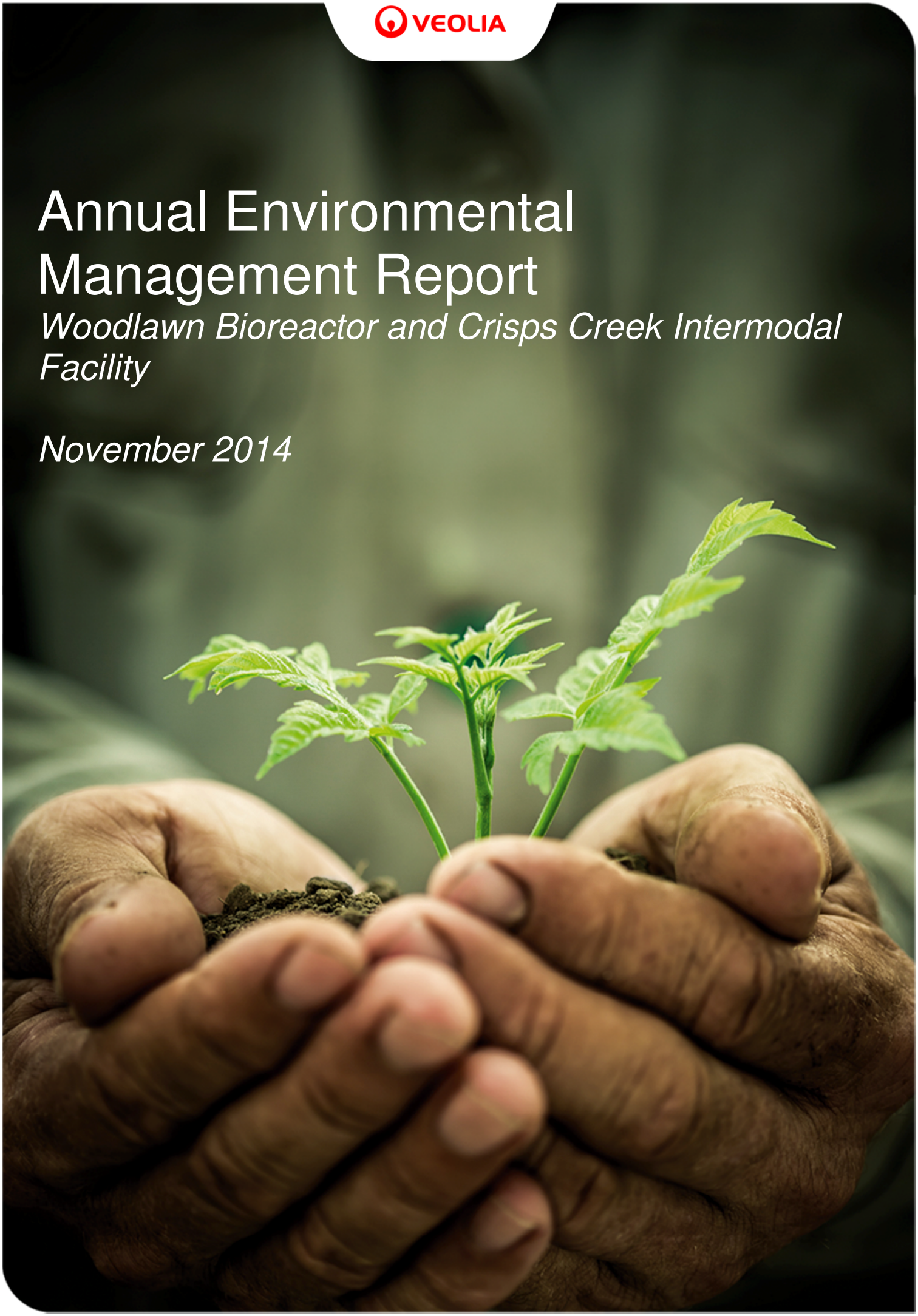
Annual Environmental Management Report

Woodlawn Bioreactor and Crisps Creek Intermodal Facility

November 2014



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1 Introduction

1.1 Site Overview

The Woodlawn Eco Project Site (the Eco Project Site), owned and operated by Veolia Environment Australia (Veolia), is located approximately 250 kilometres (km) south west of Sydney in the NSW Southern Highlands. A site location plan is provided in **Appendix 1**. The Eco Project Site, which covers an area of 6000 hectares, comprises of the Pylara and Woodlawn properties. An integral part of the Woodlawn property is the Woodlawn Bioreactor (the Bioreactor), where waste landfilling and landfill gas extraction occurs in the void of a remnant open cut mine, approximately 33 million cubic metres (m^3) in capacity.

The Bioreactor has been operating since September 2004, with the collection of landfill gas from landfilled waste to extract methane for energy generation commencing in 2008. This occurs at the adjacent Woodlawn Bio Energy Power Station (the Power Station).

Waste to the Bioreactor from Sydney is transported in shipping containers via rail and unloaded onto road trucks at the Crisps Creek Intermodal Facility (IMF), also owned and operated by Veolia and located approximately 8 km away in the township of Tarago. Local waste from neighbouring councils and businesses are transported via road.

In accordance with relevant legislative requirements and industry, the environmental performance of the Bioreactor and the IMF is managed to quite stringent conditions, the reporting of which forms the basis of this Annual Environmental Monitoring Report (AEMR). The AEMR has been prepared in accordance with Environmental Protection Licences (EPL) 11436 and 11455, issued and regulated by the NSW Environment Protection Authority (EPA) for the Bioreactor and the IMF respectively.

The AEMR is submitted to the EPA in conjunction with the Annual Returns which comprise statements of compliance and summaries of monitoring and compliance for both sites, as required under Condition R1 of the EPLs for the reporting period of 6 September 2013 to 5 September 2014.

1. Introduction

1.2 Legislative Requirements

The main legislative instruments governing the activities undertaken at and the environmental performance of the Bioreactor and the IMF pertaining to this AEMR are the Environmental Planning and Assessment Act 1979 (EP&A Act) regulated by the Department of Planning and Environment (DPE) and the Protection of the Environment Operations Act 1997 (POEO Act) regulated by the EPA, as well as their associated regulations.

Conditions of the Development Consent and EPLs stipulate the environmental and operational parameters that need to be addressed by Veolia in the management strategies adopted for both the sites to maintain compliance and are detailed, where relevant, in this AEMR which is split into two sections for each site.

Part 1 EPL 11436

Woodlawn Bioreactor

2 Bioreactor Operations

2.1 Bioreactor Licence Conditions

In accordance with EPL 11436, the Bioreactor is permitted to accept material classified as General Solid Waste (Putrescible) as described in the Waste Classification Guidelines (EPA, 2009) for the activity 'Waste disposal by application to land'. While energy generation is not a requirement of the EPL, Veolia adopts this practice as a sustainable environmental solution for the site.

In addition to the waste management activities, the site EPL mandates the administrative, operative and reporting conditions for the Bioreactor, as described in **Table 2.1** below. A licenced boundary plan is provided in **Appendix 2**.

Table 2.1: Bioreactor Licence Conditions

Condition	Compliance with Condition
1. Administrative conditions	Noted
2. Discharges to air and water and application to land	Noted
3. Limit conditions	**L1. Pollution of Waters** The Bioreactor is deemed a zero discharge site, as all surface and storm water that comes into contact with waste or leachate is captured, stored and treated onsite. Non contaminated water is managed through diversion drains and bunds. No water was discharged during this reporting period.
	L3. Waste All waste received at the Bioreactor during this reporting period was in accordance with the waste types permitted in the EPL. Waste generated onsite was deposited in the Bioreactor.
	L4. Noise Limits No noise complaints were received during this reporting period indicating that noise at the Bioreactor was likely maintained within the 35 dB(A) LAeq (15 minute) criteria at the nearest residential receiver. Noise monitoring will be undertaken by Veolia on the receipt of any such complaints.
	L5. Hours of Operation All operational activities at the Bioreactor, including haulage of waste from the IMF were undertaken between 6:00 am and 10:00 pm, Monday to Saturday during this reporting period as permitted under the DA.
	L6. Potentially Offensive Odour 23 odour complaints were received at the premises during this reporting period. Engaging independent odour audits and liaison with the local community is undertaken very actively by Veolia to identify sources of odour and recommended actions as part of the odour management strategy for the Bioreactor site. Extraction and treatment of leachate from the void is

Condition	Compliance with Condition
	ongoing and further detailed in Section 3. Veolia will continue to implement recommended actions from the odour audit and on site trials to investigate ways to minimise odours over the next reporting period.
4. Operating conditions	**O1. Activities Carried out in Competent Manner** All licenced activities undertaken at the Bioreactor in this reporting period were carried out in a competent manner and under a high standard of environmental management for which Veolia is certified under ISO 14001.
	O2. Maintenance of Plant and Equipment The maintenance and operation of all plant and equipment on the premises associated with the licenced activities was undertaken in a proper and efficient condition as required by qualified technicians. All Veolia operators hold the appropriate qualifications and licenses to operate plant and equipment used as part of Bioreactor operations.
	O3. Dust All operations and activities were carried out at the Bioreactor in a manner to minimise dust at the boundary of the premises. These included all access roads from the IMF to the Bioreactor and the haul road used for ancillary operations being sealed, the use of water trucks for dust suppression as required and monthly sampling to monitor for the presence and quantity of depositional dust. Onsite mining of cover material and exploration activities in this reporting period was undertaken in accordance with the Woodlawn Mining Operations Plan to minimise dust generation which can be verified by the results of compliance dust monitoring, which is discussed further in Section 3.
	O4. Emergency Response The Emergency Response Plan (ERP) for the Bioreactor is maintained on the premises and electronically on Veolia's National Integrated Management System, an online platform for storing Veolia policies procedures and plans. The ERP contains procedures for minimising the risk of and managing incidents such as fires, spills, explosions etc. at the Bioreactor, as well as a Pollution Incidence Response Management Plan in accordance with the EPL.
	O5. Processes and Management The processes and managed of water quality is documented and implemented on site in accordance with the EPL and the Landfill Environmental Management Plan (LEMP) for the Bioreactor. The LEMP provides guidance on the management of surface and stormwater systems such as drainage and pumping networks to divert clean water from any water that has come in contact with waste or leachate. Clean surface and stormwater collected from within the void is pumped to Evaporation Dam 3 South (ED3S) and used for Bioreactor operations such as dust suppression. Water contaminated by waste or leachate and leachate is collected and

2. Bioreactor Operations

Condition	Compliance with Condition
	treated in the Leachate Treatment System before being transferred to Evaporation Dam 3 North (ED3N) for evaporation with the use of mechanical evaporators. These are controlled by wind direction sensors to prevent the drifting of sprayed liquids from the premises. Wash water from the cleaning of containers or equipment in contact with waste is directed to the leachate collection and treatment systems and/or used for dust suppression within the Bioreactor void. In order to ensure that design, construction, extension and maintenance of all engineered features of the Bioreactor is done in compliance with the Development Consent and the EPL for the site, as well as the maintenance of records such as waste types, quantities, disposal, separation, reuse, reprocessing and recycling and annual returns, access is granted by Veolia to the supervisor licence holder for EPL 11437, which is Goulburn Mulwaree Council (the Council). Veolia grants the Council's representative access to the site and all requested documentation and records. All instructions provided by the Council's representative were complied with by Veolia in this reporting period.
	O6. Waste Management All licenced activities associated with this condition were carried out in accordance during this reporting period. A closure plan shall be submitted prior to the closure date of the Bioreactor. Monitoring undertaken within the Bioreactor void and around the licenced boundary during this reporting period validated that groundwater flows form an inward gradient towards the void ensuring no outward movement of leachate occurs. The leachate recirculation, collection and treatment system was continued to be maintained and operated to optimise the Bioreactor conditions for treatment of leachate, other waste waters and contaminated storm waters. Excess leachate was extracted and treated in the Leachate Treatment System and transferred for storage in ED3N lagoons 1, 2 and 3 (ED3N-1, ED3N-2, ED3N-3). Clay lined barriers were continued to be installed in the southern portion of the void wall as detailed in the previous reporting period. Leachate from the waste accepted at the Clyde Transfer Terminal, which has been approved by the EPA was the only liquid imported into the void during this reporting period. All cover material used onsite was sourced from the borrow pit area identified within the Woodlawn Mining Operation Plan (2004) in accordance with EPL requirements.

2. Bioreactor Operations

Condition	Compliance with Condition
	Trial of using batch processing fines as an alternative daily cover material as identified in the Alternative Daily Cover Trial Report Woodlawn Bioreactor (Veolia, 2013) submitted to the EPA in November 2013 continued in this reporting period, along with onsite mining of top soil from Evaporation Dam 1and the dolerite stockpile. All waste accepted within the Bioreactor in this reporting period was screened prior to final disposal in accordance with the requirements of the NSW procedure for screening and recording to ensure only conforming waste is received.. Veolia will undertake final capping of the Bioreactor when required and in accordance with the EPL. Veolia operate the Bioreactor to maximise the production of landfill gas for generation of renewable energy at the Power Station, with 2 auxiliary flares as back up treatment of landfill gas emissions captured. The generators and flares satisfy the design, installation and operational requirements within the EPL. A 6th landfill gas generator was installed and commissioned in Month XX to increase the capacity of the Power Station to 6 Megawatts (MW). The landfill gas extraction and utilisation infrastructure in the Bioreactor has been designed to meet the conditions of the landfill including settlement. In this reporting period, Veolia continued to construct temporary access roads to minimise waste delivery vehicles coming in contact with and tracking waste to external surfaces. Dedicated site vehicles that only operated within the void and other operational areas were utilised with a wheel wash facility operating for vehicles exiting the facility. In addition to tracking of waste, a monthly site inspection checklist appended to the Site Management Plan is used to ensure the practical measures in place at the site to prevent litter leaving the premises.
	O7. Other Operating Conditions No drill holes were required to be sealed during this reporting period.
5. Monitoring and recording conditions	Noted, all compliance monitoring was carried out in this reporting period in according to EPL requirements, the results of which are detailed, along with any non conformances in Section 3.
6. Reporting conditions	Noted and addressed in this AEMR and the annual return documents, where relevant. Notifications to the EPA were undertaken in a timely fashion.
7. General conditions	Noted.
8. Pollution studies and reduction programs	**U1. Trial of Alternative Daily Cover** Details of the alternative daily cover material trialed on site were provided in the Alternative Daily Cover Trial Report Woodlawn Bioreactor (Veolia, 2013)

Condition	Compliance with Condition
	submitted to the EPA in November 2013. Veolia is still awaiting a response from the Department.
	U2. ED3N-1 Leachate Management Monthly monitoring of the leachate aeration dam was undertaken during this reporting period to ensure efficient performance. The evaporation dams (ED3N-1, ED3N-2 and ED3N-3) were also monitored monthly to confirm consistency of the treated leachate quality. The results of this monitoring indicated that the evaporation dams were being maintained in an alkaline state. In May 2014, odour emissions testing was undertaken and compared against the findings from 2012 and 2013 annual testing. The results of which indicated that the odour emission profile for the evaporation dams (ED3N-1, ED3N-3) were below the historical reporting periods. ED3N-2 was empty at the time of sampling. Most of the leachate treatment system upgrades were completed during the last reporting period however Veolia intend to further expand the treatment capacity and reliability of the system which is intended to be carried out in the next reporting period.
9. Special Conditions	Noted.

2.2 Complaints

Veolia operates a 24 hour telephone complaints line that enables the receipt of complaints from members of the public, as required under the EPL. Other complaints that were received off site during this reporting period were logged by Goulburn-Mulwaree Council and the EPA. Veolia recorded a total of 23 complaints, relating to only to odour during this reporting period. Upon receipt of an odour complaint, Veolia recorded all details into the site complaints register as required under the EPL and Site Management followed up with the complainant to determine the nature (and scale) of the odour.

In order to proactively engage in effective odour management, Veolia participates in regular community liaisons to encourage and gather feedback from the local residents regarding the odour performance at the Bioreactor. These liaisons are facilitated either through the Community Liaison Committee (CLC) to voice their concerns with the Bioreactor Site and also at the Tarago Progress Association Inc. (TADPAI) meetings. Veolia continues to implement activities to eliminate and minimise odour sources at the site based on annual odour audit recommendations.

3 Bioreactor Environmental Monitoring

3.1 Bioreactor Monitoring Points

Veolia is required to monitor environmental performance of the Bioreactor under EPL 11436. **Table 3.1** details the EPL ID, sampling location, frequency and the type of monitoring undertaken at each licensed point. A monitoring location plan is included in **Appendix 3**.

Table 3.1: Bioreactor Licensed Monitoring Points

EPA ID	Sampling Location	Frequency	Type of Monitoring
1	GMBH1	Quarterly	Subsurface Gas
2	GMBH2		
4	GMBH4		
5	Gas Extraction Booster	Annual	Landfill Gas Input
6	Landfill Surface	Quarterly	Surface Gas
7	Landfill Gas Flare	Annual / Continuous	Air Discharge
8	Landfill Gas Engine Exhaust Point – Gen 1	Annual	Air Discharge
9	Meteorological Station	Continuous	Meteorological
10	DG28 – Pylara	Monthly	Particulates – Deposited Matter
11	DG22		
12	DG24		
13	Site 115 – Allianoyonyige Creek	Quarterly	Surface Water
14	Spring 2 – Crisps Creek		
15	Site 105 – Crisps Creek		
16	WM200 – RWD		
17	WM201 – ERC		
18	WM202 – ED3S		
19	WM203 – ED3N		
21	Pond 2 (Decommissioned)		
22	Pond 3		
23	Leachate Pond	Annual	Leachate
24	Leachate Recirculation System		
25	MB1	Quarterly / Annual	Groundwater
26	MB2		
27	MB3		
28	MB4		
29	MB5		
30	MB6		

3. Bioreactor Environmental Monitoring

EPA ID	Sampling Location	Frequency	Type of Monitoring
31	MB7		
32	MB8		
33	MB10		
34	MB11		
35	MB12		
36	MB13		
37	MB14		
38	MB15	Quarterly / Annual	Groundwater
39	MB16		
40	MB17		
41	ED3B		
42	WM1		
43	WM3 (Decommissioned)		
44	WM4		
45	WM5		
46	WM6		
47	WM7 (Decommissioned)		
48	P38A & P38B	Quarterly	Standing Water Level
49	P44A & P44B		
50	P45A & P45B		
51	P58A & P58B		
52	P59A & P59B		
53	P100A & P100B		
54	ED3	Monthly	Storage Volume
55	MW8S	Quarterly / Annual	Groundwater
56	MW8D		
57	MW9S		
58	MW10S (Dry well)		

All monitoring data collected at the monitoring points identified in **Table 3.1** during this reporting period has been tabulated and provided in **Section 3.2** or in **Appendix 4**. Graphs of data collected have been developed to assist in the assessment of trends and depict any variability within the monitoring results are presented in **Section 3.2** or in **Appendix 5**.

3. Bioreactor Environmental Monitoring

3.2 Bioreactor Monitoring Results

3.2.1 Bioreactor Landfill Gas Monitoring Results

Table 3.2.1: Bioreactor Landfill Gas Monitoring Results

<table>
<tr><th>Parameter</th><th>Results/Discussion</th></tr>
<tr><td>Subsurface Gas</td><td>Monitoring of 3 subsurface gas monitoring bores (GMB)were undertaken quarterly as per EPL requirements and are summarised in Table 3.2.1.1 below:

Table 3.2.1.1: Subsurface Gas Monitoring Result
<table>
<tr><th rowspan="2">Gas Monitoring Bore ID</th><th colspan="4">Purged Methane Reading (%)</th></tr>
<tr><th>3/12/2013</th><th>13/03/2014</th><th>12/06/2014</th><th>29/08/2014</th></tr>
<tr><td>GMBH1*</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>GMBH2*</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>GMBH4*</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
</table>

No methane was detected in any of the bores during this reporting period, consistent with results from the past three years.

The results show that the gas collection network is effectively capturing and controlling landfill gas within the landfill void. Engineered impermeable barriers and the natural subsurface of the void wall also minimise the potential movement of landfill gas from the Bioreactor, allowing for maximum extraction through the gas collection system.</td></tr>
<tr><td>Landfill Gas Extraction Booster</td><td>The data reported for the landfill gas extraction booster at the Power Station is consistent to the historical average since 2008 as summarised in Table 3.2.1.2 below:

Table 3.2.1.2: Landfill Gas Extraction Booster Monitoring Results Summary
<table>
<tr><th>Parameter</th><th>Historical Average</th><th>2013/2014 Result</th></tr>
<tr><td>Temperature (°C)</td><td>36.7</td><td>47.8</td></tr>
<tr><td>Volumetric Flow (m3/hr)</td><td>2699</td><td>2520</td></tr>
<tr><td>Methane (%)</td><td>52.7</td><td>48</td></tr>
</table>

The detailed data for each of the parameters required under the EPL for the gas extraction booster is provided in Table 1 (refer Appendix 4).</td></tr>
</table>

3. Bioreactor Environmental Monitoring

Parameter	Results/Discussion
Surface Gas	Surface gas monitoring was completed on a quarterly basis as per EPL requirements, which are summarised in **Table 3.2.1.3** below. The detailed tabulated data is available in **Table 2** (refer Appendix 4). *Table 3.2.1.3: Surface Gas Monitoring Results Summary* **Parameter** / **Minimum** / **Maximum** / **Average** **Methane (%)** / 0.000 / 0.098 / 0.010 Methane was detected in varying amounts over the waste surface with an overall average of 0.01 % during this reporting period which was slightly lower than 0.02% from the previous reporting period. The emission threshold concentration for methane detected in surface gas emission testing is 500 parts per million (0.05%), as recommended in Benchmark Technique 17 (Environmental Guidelines for Solid Waste Landfills, January 1996). Surface gas monitoring enables site operational personnel to investigate and apply corrective actions where any high concentrations of methane has been detected to maintain the effectiveness of the landfill cap and prevent migration of landfill gas through preferential pathways to the surface. This can include application of cover material in areas of the void demonstrating settlement cracking, commissioning and rebalancing of gas extraction wells and installing additional gas collection infrastructure.
Landfill Gas Flare	The landfill gas flares are manufactured to a residence time of 0.3 seconds with a destruction efficiency of 98% for methane and non methanogenic organic compounds to meet the requirements of the EPL. Monitoring was continuously performed during this reporting period, an average of which is summarised in **Table 3.2.1.4** below. *Table 3.2.1.4: Landfill Gas Flare Monitoring Results* **Parameter** / **Units** / **Result** **Temperature** / ℃ / 1100.8 **Residence Time** / Seconds / < 0.3
Landfill Gas Engine Exhaust Point(s)	Monitoring of the landfill gas engines exhaust points was completed annually for each active generator. Veolia was operating 4 generators at the Power Station during this reporting period. The monitoring point stated in the EPL is Generator 1, however due to its unavailability at the time of monitoring, measurements from the other generators were taken as representative. The results are consistent with the previous monitoring period and presented in **Tables 3.1** to **3.5** (refer **Appendix 4**). Concentration limits for each of the following pollutants are stipulated in the EPL, all of which were below the threshold for each exhaust point test within this reporting period and consistent with previously reported levels, as

Parameter	Results/Discussion
	demonstrated in **Figures 3.2.1.1 – 3.2.1.3**. • Nitrogen Oxides; • Hydrogen Sulphide; • Sulphuric Acid Mist; and • Sulphur Trioxide. An upward trend in nitrogen oxides was noted from the previous monitoring period however was still within the concentration threshold.

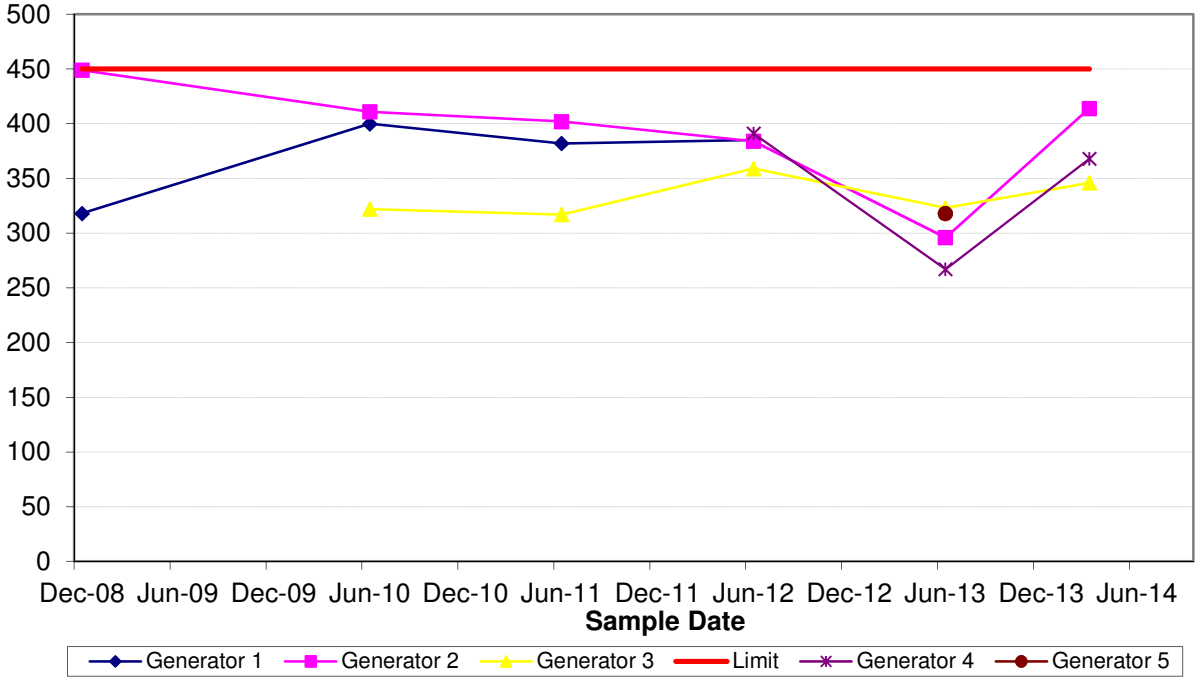

Figure 3.2.1.1 – Landfill Gas Engine Exhaust Point – Nitrogen Oxide Flow (mg/m^3)

3. Bioreactor Environmental Monitoring

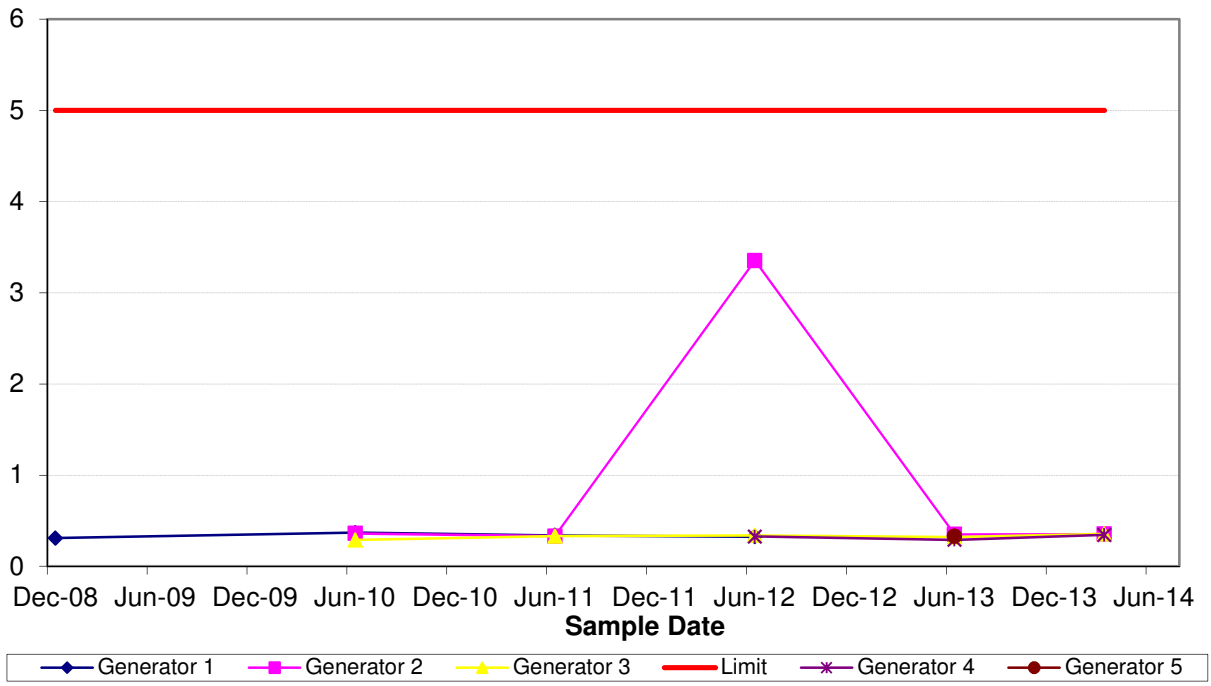

Figure 3.2.1.2 – Landfill Gas Engine Exhaust Point – Hydrogen Sulphide (mg/m^3)

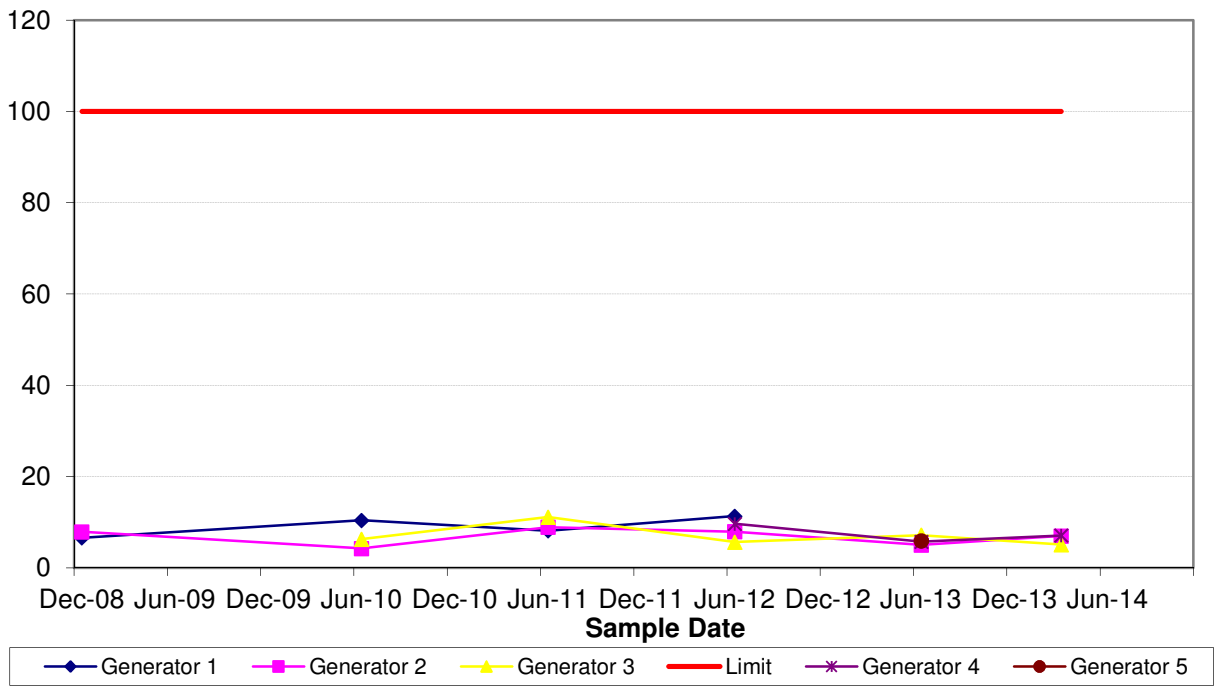

Figure 3.2.1.3 – Landfill Gas Engine Exhaust Point – Sulphuric Acid Mist and Sulphur Trioxide (mg/m^3)

3. Bioreactor Environmental Monitoring

3.2.2 Bioreactor Air Quality Monitoring Results

Table 3.2.2: Bioreactor Air Quality Monitoring Results

Parameter	Results/Discussion
Meteorological Station	Veolia operates an onsite meteorological station to continuously monitor climatic data listed in the EPL. Meteorological data recorded includes (but is not limited to): • Wind speed at 10m; • Wind direction at 10m; • Temperature at 2m; • Temperature at 10m; • Rainfall; • Solar radiation; and • Sigma theta at 10m Meteorological data is logged in 15 minute and 24 hour intervals and can be made available for the 2013/2014 reporting period upon request. Servicing and calibration of the meteorological station is carried out quarterly by Hydrometric Consulting Services.
Particulates/Dust Monitoring	Monitoring of 3 depositional dust gauges (DG) was completed on a monthly basis as required under the EPL, the results of which are generally consistent with previously reporting periods as depicted in **Figure 3.2.2.1**. The results of total solids found within the depositional dust samples are summarised for each of the monitoring locations in **Table 3.2.2.1** below, with the detailed results tabulated in **Tables 4.1** - **4.3** (refer **Appendix 4**). *Table 3.2.2.1: Dust Monitoring Results* **Dust Gauge** / **Summary Total Solids (g/m2/month)** **Minimum** / **Maximum** / **Average** **DG22** 1 3.9 2.0 **DG24** 0.3 8.8 4.1 **DG28** 0.7 31 5.9 Dust levels at DG22 and DG24, located east and west of the landfill void along the haul roads respectively, did not reflect significant increase during this reporting period which is a measure of the dust control measures that the site has in place. The maximum dust level recorded in this reporting period was 31 g/m2/month at DG28 in June 2014, which is sited at the Veolia owned property of Pylara. Given that for the corresponding date, no exceedances were recorded at the dust gauges located within the proximity of the landfill void, it can be inferred that this dust emission was not as a result of the Bioreactor activities and can be treated as an outlier. This can be attributed

Parameter	Results/Discussion
	to extensive tree removal within proximity of the dust gauge location. A non conformance for August 2014 has been reported in the Annual Return due to the failure to collect a monthly sample.

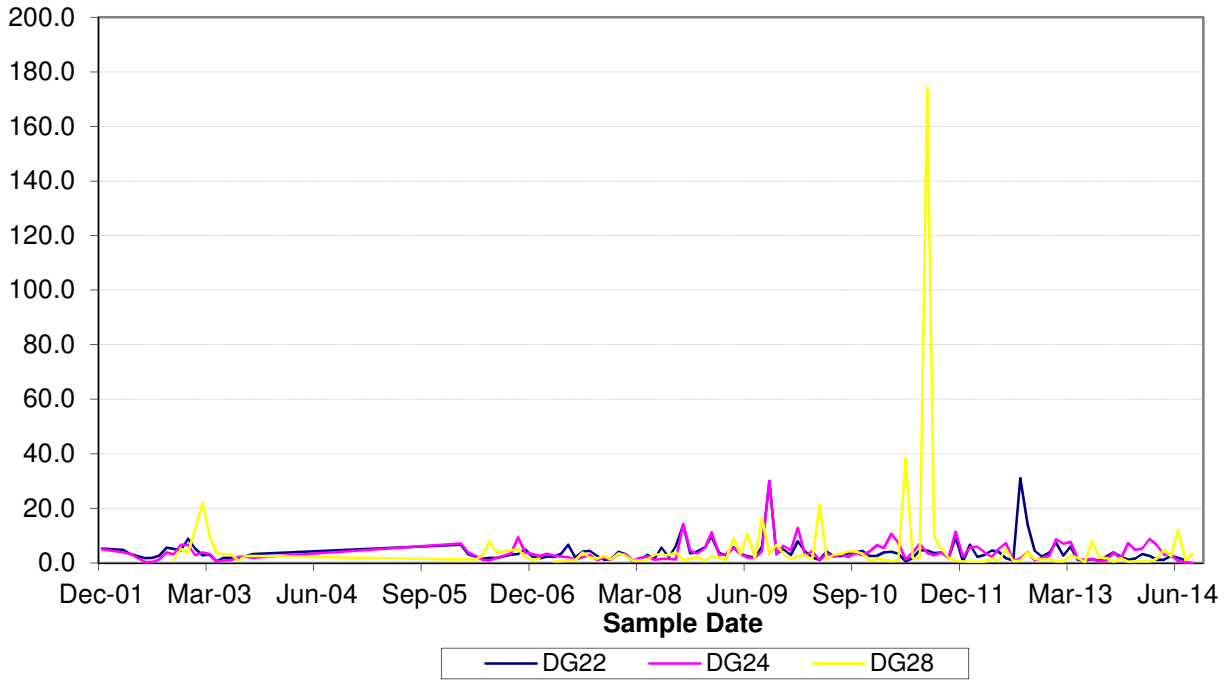

Figure 3.2.2.1 – Bioreactor Depositional Dust Levels (g/m^2/month)

3.2.3 Bioreactor Surface Water Monitoring Results

The findings from water quality monitoring of surface water locations required under the EPL is summarised in **Table 3.2.3** below with detailed data provided in **Tables 5.1 - 5.8** (refer **Appendix 4**). Key quality indicators selected to identify likely impacts from the Bioreactor include:

- pH,
- Electrical conductivity (EC),
- Ammonia (NH_3),
- Total organic carbon (TOC),
- Iron (Fe),

- Sulphate (SO_4), and
- Zinc (Zn).

These are depicted in the trend graphs (**Figures 3.2.3.1** – **3.2.3.8**) provided in **Appendix 5**.

Table 3.2.3: Bioreactor Surface Water Monitoring Results

Parameter	Results/Discussion
Site 115 – Allianyonyige Creek	Site 115 is situated downstream of the evaporation dams. Only 1 out of 4 quarterly monitoring events required under the EPL were undertaken in this reporting period and have been documented in the Annual Return. Based on the results provided in **Table 5.1** (refer **Appendix 4**), the pollutant concentration trends from previous monitoring periods are generally consistent. • pH at 7.7 remains within the overall range of 6.1 – 8.6 for this location indicating slightly alkaline water. • EC ranges overall between 174 – 4360 µS/cm, indicating fresh to brackish water. This reporting period recorded the highest EC reading and is likely influenced by SO_4 as both show similar increasing trends. Variability can also be affected by dilution during wet weather periods and evapo-concentration as is likely based on Woodlawn's local climatic conditions and seen historically (Earth2Water, 2010). Veolia will continue to monitor this in the next reporting period for any likely impacts. • Heavy metal concentrations are of low magnitude for this reporting period – less than 1 mg/L for Fe and less than 0.1mg/L for Zn, indicating no contaminated runoff is impacting surface water at this monitoring location. • NH_3 at 0.1mg/L and TOC at 10 mg/L concentrations recorded in this monitoring period remain consistent with historical monitoring results ;
Spring 2	Spring 2 is located upstream of the Bioreactor and is adjacent to Crisps Creek, therefore provides background water quality information to site operations. This location naturally overflows to Crisps Creek in wet weather events. 3 out of 4 quarterly monitoring events as required by the EPL were undertaken in this reporting period and have been documented in the Annual Return. Water quality trend in Spring 2, based on the results provided in **Table 5.2** (refer **Appendix 4**), is consistent with water quality from historical monitoring results. • pH is almost neutral (average 6) which is within the overall range of; 3.5 – 8.5 for this location; • EC (average 712 µS/cm) for this reporting period is indicative of fresh water.

Parameter	Results/Discussion
	• SO_4 (average 339 mg/L) shows an identical trend to conductivity, again indicating a direct affect on EC. • Fe (average 0.3 mg/l) and Zn (average 26 mg/L) concentrations continue to show slow decline from overall averages, with some variability due to likely dilution, following wet weather periods and concentration during drier periods. • NH_3 (average 2.1 mg/L) and TOC (average 18 mg/L) concentrations recorded in this monitoring period were consistent with historical monitoring results.
Site 105 – Crisps Creek	Site 105 is located downstream of the Bioreactor and tailings dams. 2 out of 4 quarterly monitoring events required under the EPL were undertaken in this monitoring period and have been documented in the Annual Return. Water quality trends in Site 105, based on the results provided in **Table 5.3** (refer **Appendix 4**) are consistent with previous monitoring results. • pH (average 7) is within the overall range of 5.4 – 8.6 for this location, indicating a relatively neutral water; • EC (average 2260 µS/cm) is consistent with historical results, reflecting brackish water. • SO_4 concentration (574 mg/L) recorded for this reporting period was the highest for this location and shows an increasing trend. Veolia will continue to monitoring this location in the next monitoring period to ensure runoff from contaminated areas are not impacting water quality at this location. • Zn and Fe remain consistent and less than 10 mg/L as per previous reporting periods; • TOC (average 19 mg/L) and NH_3 (average 0.1 mg/L) were consistent with historical trends.
WM200 Raw Water Dam	The Raw Water Dam is located to the west of the dolerite stockpile and collects uncontaminated water. Quarterly monitoring events were undertaken in accordance with EPL conditions. Based on the results provided in **Table 5.4** (refer **Appendix 4**), the results for WM200 remain generally consistent with the previous reporting periods. • pH (average 6 - 7) indicates slightly acidic water; • EC (average 1500 µS/cm) is showing a slight increasing trend since the last monitoring period (average 1320 µS/cm) and is indicative of fresh/brackish water; • SO_4 level (average 452 mg/L) was generally consistent with previous trends; • Zn and Fe levels appear to have stabilised at averages of 24 mg/L and 0.2 mg/L respectively, which are lower than the previous reporting period of 52mg/L and 0.78mg/L. Based on historical evidence, it appears the variability in the heavy metals may be quite cyclical;

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Parameter	Results/Discussion
	• TOC was an average of 7.2 mg/L in this reporting period compared to 10.6 mg/L from the last reporting period, a slight decrease in trend although relatively consistent with historical results; • NH_3 at 0.1 mg/L is at quite low levels at this location.
WM201 – Entrance Road Culvert	The Entrance Road Culvert collects surface water runoff from the Woodlawn Bioreactor administration office and workshop areas. 1 monitoring event was undertaken during this reporting period, the results of which are provided in **Table 5.5** (refer **Appendix 4**). • pH is continuing to show a minor rise (average 6.8) from previous reporting periods, yes remains within the overall range of 4.5 – 8.2 for this location; • EC at 1300 µS/cm is encroaching on brackish water, while not the maximum reading for the site, is nearly double the average of 544 µS/cm; • Other key indicators (SO_4, Iron, Lead, Zinc and NH_3) were not sampled in this reporting period and cannot be commented on; Veolia will continue to monitoring this location in the next reporting period for any likely contaminant run off impacts.
WM202 – Evaporation Dam South	Evaporation Dam 3 South is a storage point to manage stormwater from the void by evaporation. Quarterly monitoring events were undertaken in accordance with EPL conditions. Water quality results indicated a similar trend to previously reported data as seen **in Table 5.6** (refer **Appendix 4**). • pH levels indicate an acidic, yet stable trending result with the average pH of 2.9 consistent from previous reporting period; • Fe (average 71mg/L) is consistent with previous reporting period; • Zn at an average of 810 mg/L shows in increase from the average reporting in the previous period (465 mg/L) however is well within the maximum measured at this location of 1964 mg/L; • SO_4 shows an increase of an average of 8456 mg/L from an average of 4875mg/L reported in the previous period, however is generally within the overall average for this location (13000 mg/L) • EC (average 8765 µS/cm) has an identical increased trend to Sulphate but still remains within the overall average. Both SO_4 and EC concentrations reflect the signature for Acid Mine Drainage (AMD) contaminated waters from remnant mining operations stored in Evaporation Dam 3 South. • NH_3 concentrations (average 81.2 mg/L) continue to stabilise from the previous monitoring period.

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Parameter	Results/Discussion
WM203 – Evaporation Dam 3 North	Evaporation Dam 3 North (ED3N) is a storage point to manage AMD/leachate by evaporation. Quarterly monitoring events were undertaken in accordance with the EPL. Based on the water quality results provided in **Table 5.7** (refer **Appendix 4**), for WM203, the following can be confirmed: • pH average 4.5 for stored acidic water is consistent with historical results; • EC average 19832.5 µS/cm is generally consistent with previous reporting period (average 17200µS/cm); • SO_4 averages (12023 mg/L) appear to be generally consistent with previous reporting periods and identical in trend to EC. • Fe levels appear to have decreased slightly from the previous reporting periods to 2.3 mg/L from a minimum of 5.9 mg/L but Zn levels show a slight increase from 410 – 550 mg/L to an average of 720 mg/L. These concentrations are fairly representative of the AMD contaminated waters stored in ED3N. • NH_3 shows a slight increase in trend from 470 – 660 mg/L to and average of 700 mg/L; • TOC has decreased slightly from 220 – 260 mg/L to 196 mg/L in this reporting period.
Pond 3	Pond 3 is situated on a bench within the landfill void at a relative level (RL) of 740 m above sea level. Pond 3 acts as a transfer point to capture stormwater from the walls of the landfill void to Evaporation Dam 3. Quarterly monitoring events were undertaken in accordance with the EPL, the results of which are tabulated in **Table 5.8** (refer **Appendix 4**). These water quality results consistent results with previous reporting periods. • pH average of 2.9 confirms acidic nature of water that comes in contact with the void walls and is consistent with previous period range of 2.7 – 4.1. • EC (3750 µS/cm) remains similar with previous results, showing variability (3200 – 7000 µS/cm), likely due to weather influences; • SO_4 trends (average 3240 mg/L) mirror variability of EC (2500 – 5600mg/L); • Fe at 67 mg/L is consistent with the previous reporting period and continuing to show a slight decline; • Zn average 347.5 mg/L also showing a declining trend; • NH_3 (average 9.7 mg/L) and TOC (average 8.5 mg/L) both mirror a similar trend which appears quite variable over historical monitoring results. This may be attributed to natural cycles in the atmosphere. These results and trends are deemed representative of the stormwater quality captured from the walls of the void.

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3.2.4 Bioreactor Leachate Monitoring Results

Leachate quality monitoring is undertaken annually at 2 monitoring locations in the Bioreactor as required by the EP. The findings from this reporting period are summarised in **Table 3.2.4** below with the detailed data provided in **Tables 6.1** and **6.2** (refer **Appendix 4**). The key quality indicators selected to characterize the leachate and identify any migration into groundwater or surface water monitoring locations include:

- pH,
- Electrical Conductivity (EC),
- Sulphate (SO_4),
- Lead (Pb),
- Zinc (Zn),
- Ammonia (NH_3), and
- Total Organic Carbon (TOC).

These are depicted in the subsequent trend graphs **Figures 3.2.4.1** and **3.2.4.2**.

Table 3.2.4: Bioreactor Leachate Monitoring Results

Parameter	Results/Discussion
Leachate Dam	The leachate dam is located at the northwest rim of the landfill void where leachate collected and extracted from the void is treated by aeration to oxidise organic compounds. An annual monitoring round was completed during this reporting period as per the requirements of the EPL. Based on the results provided in **Table 6.1** (refer **Appendix 4**), the characteristics of the leachate are: • pH (7.09) was closer to neutral compared to the slightly alkaline reading reporting in the previous period; • EC (24,400 µS/cm) is consistent with previous readings; • SO_4, one of the dominant anions, (910 mg/L) has continued to decrease from the previous reporting periods; • Both Pb and Zn show a slight increase in trend from the previous reporting period, similar to NH_3 with concentrations 0.06 mg/L, 3.56 mg/L and 690 mg/L respectively. These are consistent with the overall average for this location, other than Zn which is significantly lower than historical averages; It should be noted that the analysis of metals was changed from detection of total to dissolved metals in the previous reporting period; • TOC (1500 mg/L) continues to show a declining trend from the previous reporting period which reflects the changing water quality of the dam.
Leachate Recirculation System	The leachate recirculation system is located within the landfill void, comprised of a network of drainage sumps, pipes, pumps and wells that are used to collect and extract leachate from the waste mass.

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Parameter	Results/Discussion
	An annual round was completed during this reporting period in accordance with the EPL, the results of which are detailed in the **Table 6.2** (refer **Appendix 4**). Based on these results, the leachate collected directly from the recirculation system displays similar characteristics to the leachate pond, with some exceptions as summarised below: • pH (8.1) is generally consistent with previous reporting period and slightly more alkaline than the dam; • EC (33,000 µS/cm) shows a slight increase from previous reporting period, however is still generally consistent with the overall annual average for this location; • SO_4 (313) shows a slight increase from previous reporting period, correlating with the rise in EC, however is still less than the overall annual average for this location; • Both Pb and Zinc show increasing trends from previous reporting period, 0.04 mg/L and 1.6 Mg/L respectively, but are significantly lower than historical averages. It should be noted that the analysis for heavy metals was changed from detection of total to dissolved metals in the previous reporting period. • TOC (5510 mg/L) shows a slight increase from the previous reporting period but is generally consistent with historical monitoring results;

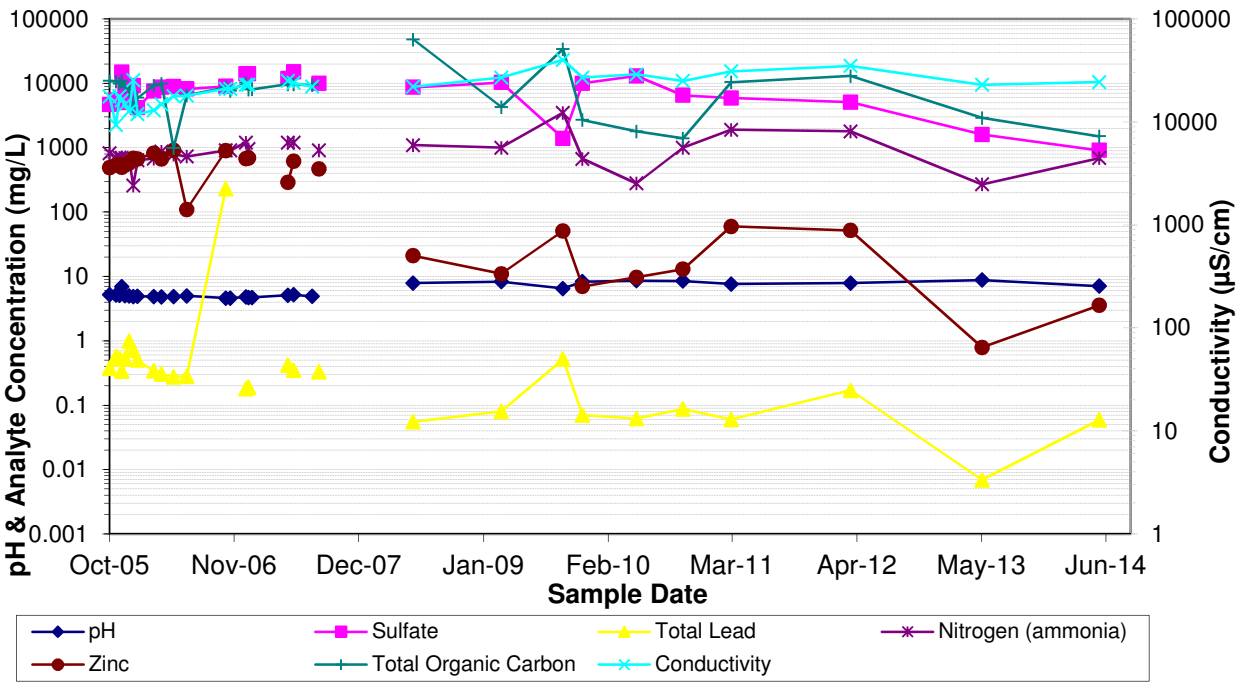

Figure 3.2.4.1 – Leachate Trends – Leachate Dam

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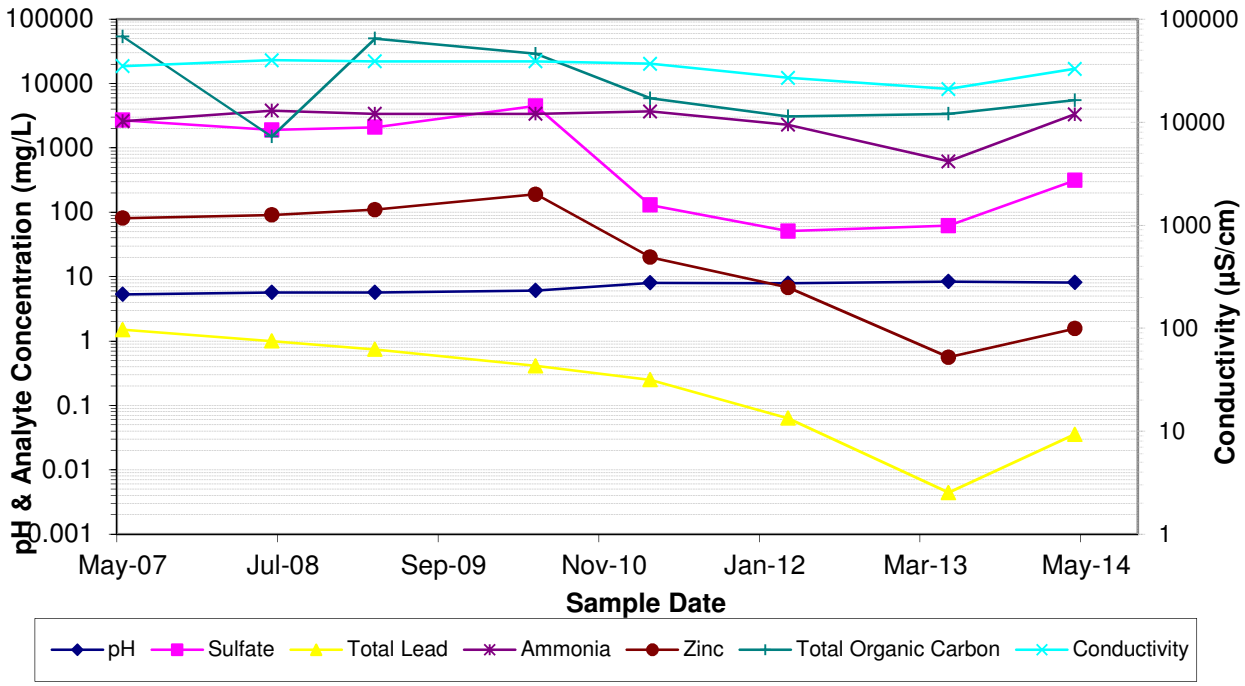

Figure 3.2.4.2 – Leachate Trends – Leachate Recirculation System

3.2.5 Bioreactor Groundwater Monitoring Results

Groundwater quality monitoring at 24 locations was undertaken in this reporting period as required by the EPL, comprising 1 annual and 3 quarterly rounds of monitoring, the results of which are summarised in **Table 3.2.5** below. Detailed data is provided in Tables **7.1** – **7.24** (refer **Appendix 4**).

The groundwater monitoring well network allows for an assessment of potential impacts from the waste operations at the Bioreactor, evaporation dams and tailing dams. The key quality indicators selected to detect any pollutants in groundwater samples are the same as those deemed characteristic for leachate and are as follows:

- pH
- Electrical Conductivity (EC),
- Sulphate (SO_4),
- Lead (Pb),
- Zinc (Zn),
- Ammonia (NH_3), and
- Total Organic Carbon (TOC).

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These are depicted in the trend graphs **Figures 3.2.5.1** to **3.2.5.24** (refer **Appendix 5**). In addition to water quality monitoring, standing water levels (SWL) of the wells are also measured in metres relative to sea level (m RL) and are depicted in the subsequent graphs Figures **3.2.5A**, **3.2.5B** and **3.2.5C**.

Table3.2.5: Bioreactor Groundwater Monitoring Results

Parameter	Results/Discussion
MB1	MB1 is located down gradient of the landfill void. Based on the results provided in **Table 7.1** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 771.86 m RL) was consistent with long term average since 2004; • pH (average 7.3) neutral – to slightly alkaline consistent with previous reporting period; • EC (average 1382.5 µS/cm) is slightly higher than but generally consistent with previous readings representing fresh water; • SO_4 (average 270.25 mg/L) mirrors EC with a slightly increasing trend but generally consistent with previous periods; • Pb (average 0.0006 mg/L) shows a decreasing trend while Zn (average 0.06 mg/L) is seen to be rising from previous reporting period. • NH_3 (average 0.13) is slightly higher than previous monitoring periods of non detection rates; • TOC (6 mg/L) continues to show an increasing trend however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. All trends at this location indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities. No significant variations or anomalies were recorded for any analyte tested during this monitoring period.
MB2	MB2 is located upstream of Evaporation Dam 2. Based on the results provided in **Table 7.2** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 778.9 m RL) was consistent with long term average since 2004; • pH (average 6.9) neutral, consistent with previous reporting period; • EC (average 6630 µS/cm) and SO_4 (average 3846 mg/L) showed a slight declining trend but are consistent with previous readings; • Pb (average 0.00014 mg/L) shows a stable trend from previous reporting period. • Zn (average 0.08 mg/L) is slightly lower than previous monitoring but generally consistent; • NH_3 (<0.1 mg/L) same as previous monitoring periods of non detection rates; • TOC (3 mg/L) continues to show similar trends to EC and TOC, slight increase compared to previous reporting periods.

Parameter	Results/Discussion
	All trends indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities. No significant variations or anomalies were recorded for any analyte tested during this monitoring period.
MB3	MB3 is located upstream of the Bioreactor and mine site. Based on the results provided in **Table 7.3** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 791.07 m RL) was consistent with long term average since 2004; • pH (average 7.0) neutral consistent with previous reporting period; • EC (average 1985.3 µS/cm) is consistent with previous readings representing fresh water; • SO_4 (average 33.4 mg/L) is stable and consistent with previous periods; • Pb (average 0.00014 mg/L) remains stable while Zn (average 0.02 mg/L) shows a slight decline from previous reporting period. • NH_3 (< 0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (1 mg/L) result is consistent with historical results however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. All trends indicate fairly stable concentration and provide an indication of background groundwater concentrations.
MB4	MB4 is located downstream of the Bioreactor. Based on the results provided in **Table 7.4** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 774.6 m RL) was consistent with long term average since 2004; • pH (average 5.3) slightly acidic, consistent with previous reporting period; • EC (average 1620.25 µS/cm) represents fresh water salinity and is consistent with previous period identically reflected in SO_4 (average 210.25 mg/L); • Pb (average 0.005 mg/L) remains stable while Zn (average 0.5 mg/L) is seen to fluctuate which appears consistent with historical cyclic trends; • NH_3 (< 0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (1 mg/L) result is consistent with historical results however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. All trends indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities.

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Parameter	Results/Discussion
MB5	MB5 is located upstream of the Western Tailings Dam at the Waste Rock Dump area. Based on the results provided in **Table 7.5** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 827.9 m RL) was consistent with long term average since 2004; • pH (average 4.16) acidic, consistent with previous reporting period, reflecting the characteristic of tailings and waste rock; • EC (average 8070 µS/cm) is consistent historically with brackish water quality; • SO_4 (average 5955 mg/L) mirrors EC; • Pb (average 0.002 mg/L) shows a decreasing trend while Zn (average 266.75 mg/L) is seen to be rising from previous reporting period. • NH_3 (average 0.23) is slightly higher than previous monitoring periods of non detection rates; • TOC (4 mg/L) appears consistent with historical results however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. All trends indicate fairly stable concentration and there is no indication of contamination Bioreactor activities. There is indication of impacts from mining activities at this monitoring location although this has been ongoing prior to Veolia obtaining the site. No significant variations or anomalies were recorded for any analyte tested during this monitoring period.
MB6	MB6 is located downstream of the Evaporation Dam 3 and upstream of the Bioreactor. Based on the results provided in **Table 7.6** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 789.7 m RL) was consistent with historical results; • pH (average 5.7) slightly acidic consistent with previous reporting period; • EC (average 1472.5 µS/cm) represents fresh water and mirrored by SO_4 (average 826.75 mg/L) is consistent with previous periods; • Pb (average 0.0008 mg/L) shows a decreasing trend while Zn (average 8.36 mg/L) is seen to be rising from previous reporting period. • NH_3 (average 0.15) is slightly higher than previous monitoring periods of non detection rates; • TOC (4 mg/L) appears consistent with historical results however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. No indication of contamination from mining or Bioreactor activities is evident at this monitoring location.
MB7	MB7 is located upstream of Evaporation Dam 3. Based on the results provided in **Table 7.7** (refer **Appendix 4**), the groundwater quality at this location can be described as:

Parameter	Results/Discussion
	• SWL (average 785.8 m RL) was consistent with long term average since 2004; • pH (average 6.9) near neutral consistent with previous reporting period; • EC (average 8515 µS/cm) and SO_4 (average 169.5 mg/L) show a stable but slightly declining trend, overall consistent with previous periods; • Pb (average 0.01 mg/L) and Zn (average 1.18 mg/L) show a fluctuating trend consistent with historical cycles; • NH_3 (< 0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (5 mg/L) appears consistent with historical results however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. The previous anomaly noted with TOC being which was higher than the historical average level (7.9 mg/L) is now generally consistent. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. All trends indicate fairly stable concentration and there is no indication of contamination from mining or Bioreactor activities.
MB8	MB8 is located downstream of the Bioreactor at the Pylara residence. Based on the results provided in **Table 7.8** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 748.4 m RL) was consistent with previous periods; • pH (average 7.3) neutral – to slightly consistent with previous reporting period; • EC (average 3510 µS/cm) and SO_4 (average 106.8 mg/L) show a stable trend, overall consistent with previous periods; • Pb (average 0.0002 mg/L) and Zn (average 0.01 mg/L) show a fluctuating trend consistent with historical cycles; • NH_3 (< 0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (5 mg/L) appears stable however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. The previous anomaly noted with TOC being which was higher than the historical average level (7.9 mg/L) is now generally consistent. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. All trends indicate fairly stable concentrations and no indication of contamination from mining or Bioreactor activities is evident.
MB10	MB10 is located adjacent to Evaporation Dam 1. Based on the results provided in **Table 7.9** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 781.7 m RL) was consistent with long term average since 2004; • pH (average 7.0) neutral with previous reporting period; • EC (average 7447.5 µS/cm) is of brackish quality consistent with

Parameter	Results/Discussion
	previous readings representing fresh water; • SO_4 (average 3607.5 mg/L) mirrors EC with a slightly decreasing trend but generally consistent with previous periods; • Pb (average 0.0002 mg/L) is stable while Zn (average 0.02 mg/L) shows a slight decreasing trend but is generally consistent with previous reporting periods. • NH_3 (< 0.1 mg/L) is consistent with previous monitoring periods of non detection rates; • TOC (2 mg/L) has decreased from previous reporting period however with intermittent sampling, not enough data points exist for a line of best fit. The concentration is indicative of natural conditions. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. All trends indicate fairly stable concentrations and there is no indication of contamination from mining or Bioreactor activities.
MB11	MB11 is located between Evaporation Dam 2 (ED2) and the Seepage Collection Trench (SCT), which is a dedicated capture area for seepage waters. Based on the results provided in **Table 7.10** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 782.3 m RL) was consistent with long term average since 2004; • pH (average 3.8) acidic and consistent with previous reporting period; • EC (average 35,350 µS/cm) consistent with previous readings for saline water; • SO_4 (average 47,050 mg/L) mirrors EC with a slightly increasing trend but generally consistent with previous periods; • Pb (average 0.02 mg/L) shows a decreasing trend while Zn (average 5295 mg/L) is stable consistent with previous reporting period. • NH_3 (average 0.2 mg/L) is slightly higher than previous monitoring periods of close to non detection rates; • TOC (13 mg/L) is slightly lower than previous reporting period but still indicative of natural conditions. Any fluctuations in trends is influenced by seepage water from ED2, which has been ongoing since Veolia assumed responsibility for the site however there is no indication of increasing trends. Veolia are managing the water volume in ED2 by promoting evaporation and limiting inputs from rainfall to minimise the volume of seepage at this location. In addition to monitoring this well, non EPA compliance wells MB19 and MB20 located down gradient of the SCT are also monitored to ensure that any contamination migrating from ED2 is managed in the SCT. Results of these wells have been tabulated and provided in **Tables 11.1** and **11.2** (refer **Appendix 6**). The evaporation dams have been previously identified by Veolia for rehabilitation which will be undertaken in accordance with the Mining Operations Plan (MOP) for the site.

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Parameter	Results/Discussion
MB12	MB12 is also located at ED2 SCT, adjacent to MB11. Based on the results provided in **Table 7.11** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 770.5 m RL) consistent with previous results; • pH (average 4) acidic and consistent with previous reporting period; • EC (average 39,775 µS/cm) consistent with previous readings for saline water; • SO_4 (average 58,975 mg/L) mirrors EC with a slightly increasing trend but generally consistent with previous periods; • Pb (average 1.04 mg/L) and Zn (average 6842.5 mg/L) show a decreasing trend although generally stable and consistent with previous reporting period. • NH_3 (average 0.6 mg/L) is slightly higher than previous monitoring periods of close to non detection rates; • TOC (16 mg/L) is slightly lower than previous reporting period but still indicative of natural conditions. All trends indicate fairly stable concentrations.
MB13	MB13 is located downstream of Evaporation Dam 1 (ED1) and surface water monitoring point Site 115. Based on the results provided in **Table 7.12** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 746.2 m RL) was consistent with long term average since 2004; • pH (average 7.2) neutral to slightly alkaline consistent with previous reporting period; • EC (average 3460 µS/cm) consistent with previous readings for brackish water; • SO_4 (average 68. 5 mg/L) mirrors EC with a slightly increasing trend but generally consistent with previous periods; • Pb (average 0.0002 mg/L) remains stable while Zn (average 0.4 mg/L) is seen to be rising from previous reporting period. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (6 mg/L) appears consistent with previous reporting period and indicative of organic matter being present in the groundwater at this location, which may be influenced by local microbial communities rather than Bioreactor operations. All trends indicate fairly stable concentrations and no contamination from mining or Bioreactor activities.
MB14	MB14 is located upstream of Evaporation Dam 2. Based on the results provided in **Table 7.13** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 784 m RL) consistent with long term average since 2004; • pH (average 7.23) neutral – to slightly alkaline consistent with previous reporting period; • EC (average 2527.5 µS/cm) consistent with previous reporting period for brackish water;

Parameter	Results/Discussion
	• SO_4 (average 1142.5 mg/L) mirrors EC with a stable trend consistent with previous periods; • Pb (average 0.0002 mg/L) remains stable while Zn (average 0.1 mg/L) displays a fluctuating trend consistent with previous reporting periods. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (3 mg/L) consistent with historical results is indicative of natural conditions. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
MB15	MB15 is located downstream of the Waste Rock Dam (WRD). Based on the results provided in **Table 7.14** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 764.4 mRL) was consistent with long term average since 2004; • pH (average 6.8s) slightly more acidic than previous reporting period however generally consistent with historical results; • EC (average 7615 µS/cm) representative of brackish water and SO_4 (average 4877.5 mg/L) follow a similar and stable trend consistent with previous periods; • Pb (average 0.0002 mg/L) and Zn (average 0.5 mg/L) display a fluctuating trend consistent with historical cycles; • NH_3 (average 0.13) is slightly higher than previous monitoring periods of non detection rates; • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (4 mg/L) consistent with historical results is indicative of natural conditions, which may include some influence from microbial communities; All trends indicate fairly stable concentrations, with the exception of fluctuating metal trends. The waste rock area has been previously identified by Veolia for rehabilitation which will be undertaken in accordance with the MOP. There is no indication of contamination from Bioreactor activities at this monitoring location.
MB16	MB16 is located downstream of the WRD. Based on the results provided in **Table 7.15** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 769.02 m RL) was consistent with long term average since 2004; • pH (average 3.08) acidic consistent with previous reporting period; • EC (average 35,025 µS/cm) representative of brackish water and SO_4 (average 60,700 mg/L) follow similar trends consistent with previous periods; • Pb (average 0.5 mg/L) remains while Zn (average 19,215.25 mg/L) is seen to be rising from previous reporting period. • NH_3 (average 8.3 mg/L) is stable and consistent with previous monitoring periods;

Parameter	Results/Discussion
	• TOC (35 mg/L) is consistent with previous monitoring period indicating the likely presence of organic matter present in groundwater at this location (which may also be attributed to microbial communities). There appears to be no indication of contamination from Bioreactor activities.
MB17	MB17 is located downstream of the WRD. Based on the results provided in **Table 7.16** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 767.7 mRL) was consistent with long term average since 2004; • pH (average 6.3) is slightly acidic consistent with previous reporting period; • EC (average 11,467.5 µS/cm) indicating brackish water and SO_4 (average 9305 mg/L) follow similar trends consistent with previous periods; • Pb (average 0.0009 mg/L) shows a decreasing trend while Zn (average 5.9 mg/L) is seen to be rising from previous reporting period. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (140mg/L) is the maximum reading recorded at this location which could have been a result of sampling cross contamination. Veolia will continue to monitoring this parameter in the future to ensure water quality at this location is preserved. Contamination from Bioreactor activities at this location is not evident.
ED3B	ED3B is located downstream of Evaporation Dam 3. Based on the results provided in **Table 7.17** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 785.19 mRL) was consistent with long term average since 2004; • pH (average 7) is neutral consistent with previous reporting period; • EC (average 7702.5 µS/cm) indicating brackish water and SO_4 (average 1057.5 mg/L) follow similar trends consistent with previous periods; • Pb (average 0.0003 mg/L) remains stable while Zn (average 0.2 mg/L) is seen to be rising from previous reporting period. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (5 mg/L) is slightly lower but overall consistent with previous reporting periods. No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
WM1	WM1 is located northeast of the landfill void. Based on the results provided in **Table 7.18** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 736.7 m RL) was consistent with long term average since 2004;

Parameter	Results/Discussion
	• pH (average 7.2) neutral – to slightly alkaline consistent with previous reporting period; • EC (average 1911.75 µS/cm) represents slightly brackish water, consistent with previous readings; • SO_4 (average 772.25 mg/L) is similar in trend to EC; • Pb (average 0.01 mg/L) shows a decreasing trend while Zn (average 4.15 mg/L) remains stable from previous reporting period. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (5 mg/L) is consistent with previous monitoring period reflecting natural conditions; All trends indicate fairly stable concentrations at this location with no evidence of contamination from mining or Bioreactor activities.
WM3	Decommissioned
WM4	WM4 is located northeast of the void. Based on the results provided in **Table 7.19** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 639.11 mRL) is slightly higher than previous period but generally consistent with long term averages; • pH (average 6.7) neutral is slightly lower than previous period but generally consistent; • EC (average 2059.25 µS/cm) is slightly higher than but generally consistent with previous readings representing fresh water; • SO_4 (average 983.75 mg/L) is similar to EC trend; • Pb (average 0.0005 mg/L) and Zn (average 0.5 mg/L) both seen to be fluctuating, which appears consistent with historical cyclic trends; • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (6 mg/L) is consistent with previous monitoring period reflecting natural conditions; No significant variations or anomalies were recorded for any analyte tested during this monitoring period from the data available.
WM5	WM5 is located to the west of the void near Evaporation Dam 3 South. Based on the results provided in **Table 7.20** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 784.18 mRL) is consistent with long term averages; • pH (average 7.8) neutral is slightly lower than previous period but generally consistent; • EC (average 6677.5 µS/cm) is representative of saline water, the trend showing a slight dip since previous reporting period; • SO_4 (average 888 mg/L) is similar to EC trend with the slight dip but generally consistent with previous results; • Pb (average 0.002 mg/L) and Zn (average 0.3 mg/L) both seen to be fluctuating with an increasing and decreasing trend respectively, which appears consistent with historical cyclic trends; • NH_3 (0.15 mg/L) is slightly higher than previous non detection rates but generally consistent with historical trends;; • TOC (9 mg/L) is consistent with previous monitoring period reflecting natural conditions;

Parameter	Results/Discussion
	No significant variations or anomalies were recorded for any analyte tested in this location during this monitoring period from the data available.
WM6	WM6 is located to the west of the void adjacent to Evaporation Dam 3 North. Based on the results provided in **Table 7.21** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 785.9 m RL) was consistent with previous reporting period; • pH (average 6.3) is slightly acidic, but stable and consistent with previous reporting period; • EC (average 13,237.5 µS/cm) represents brackish to slightly saline water, consistent with previous reporting period; • SO_4 (average 369.75 mg/L) mirrors EC's stable trend; • Pb (average 0.008 mg/L) and Zn (average 1.6 mg/L) both show an increasing trend but are generally consistent with historical fluctuations. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (4 mg/L) is consistent with previous monitoring period reflecting natural conditions; All trends are relatively consistent and there is no indication of contamination from mining or Bioreactor activities.
WM7	Decommissioned
MW8S	MW8S is located northern side of ED3N. Based on the results provided in **Table 7.22** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 784.9 m RL) was consistent with long term average since 2004; • pH (average 6.9) near neutral consistent with previous reporting period; • EC (average 12333.3 µS/cm) remains stable with previous reporting period; • SO_4 (average 2007. 5 mg/L) shows a slight decreasing trend but is generally consistent with previous periods; • Pb (average 0.004 mg/L) shows an increasing trend while Zn (average 8.9 mg/L) is seen to be declining from previous reporting period. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (7 mg/L) is consistent with previous monitoring period reflecting natural conditions; The fluctuations noted could be attributed to recharging of this well only following significant wet weather events, indicting that this well intercepts the shallow unconfined aquifer. There is no indication of contamination from mining or Bioreactor activities.
MW8D	MW8D is located adjacent to MW8S. Based on the results provided in **Table 7.23** (refer **Appendix 4**), the groundwater quality at this location can be

Parameter	Results/Discussion
	described as: • SWL (average 785.1) was consistent with long term average since 2004; • pH (average 6.3) slightly acidic to neutral consistent with previous reporting period; • EC (average 7775.5 µS/cm) represents brackish water, consistent with previous readings representing fresh water; • SO_4 (average 4017.5 mg/L) mirrors EC consistent with previous periods; • Pb (average 0.0003 mg/L) and Zn (average 18.6 mg/L) both show slightly declining trends from previous reporting period, but consistent overall. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (0.02 mg/L) is present at really low levels, reflecting natural conditions consistent with historical results; All trends indicate fairly stable concentrations with no evidence of contamination from mining or Bioreactor activities.
MW9S	MW9S is located on the northwest side of ED3N. Based on the results provided in **Table 7.24** (refer **Appendix 4**), the groundwater quality at this location can be described as: • SWL (average 786.5) was consistent with previous reporting period; • pH (average 6.7) close to neutral consistent with previous reporting period; • EC (average 10,825 µS/cm) remains stable, consistent with previous reporting period for brackish water; • SO_4 (average 6462.5 mg/L) had slight variations but generally consistent with previous periods; • Pb (average 0.0004 mg/L) and Zn (average 0.3 mg/L) were both seen to have slightly declining trends but generally consistent historical results. • NH_3 (< 0.1 mg/L) is at non detection rates; • TOC (5 mg/L) reflecting natural conditions is consistent with historical results; No significant variations or anomalies were recorded for any analyte tested at this location during this monitoring period.
MW10S	MW10S is located on the northeast side of ED3. No sampling of MW10S could be undertaken during the reporting period as this well was continually dry This has been a consistent observation since the well was commissioned in 2007. No data is available to produce tables or graphs for this monitoring point.

3. Bioreactor Environmental Monitoring

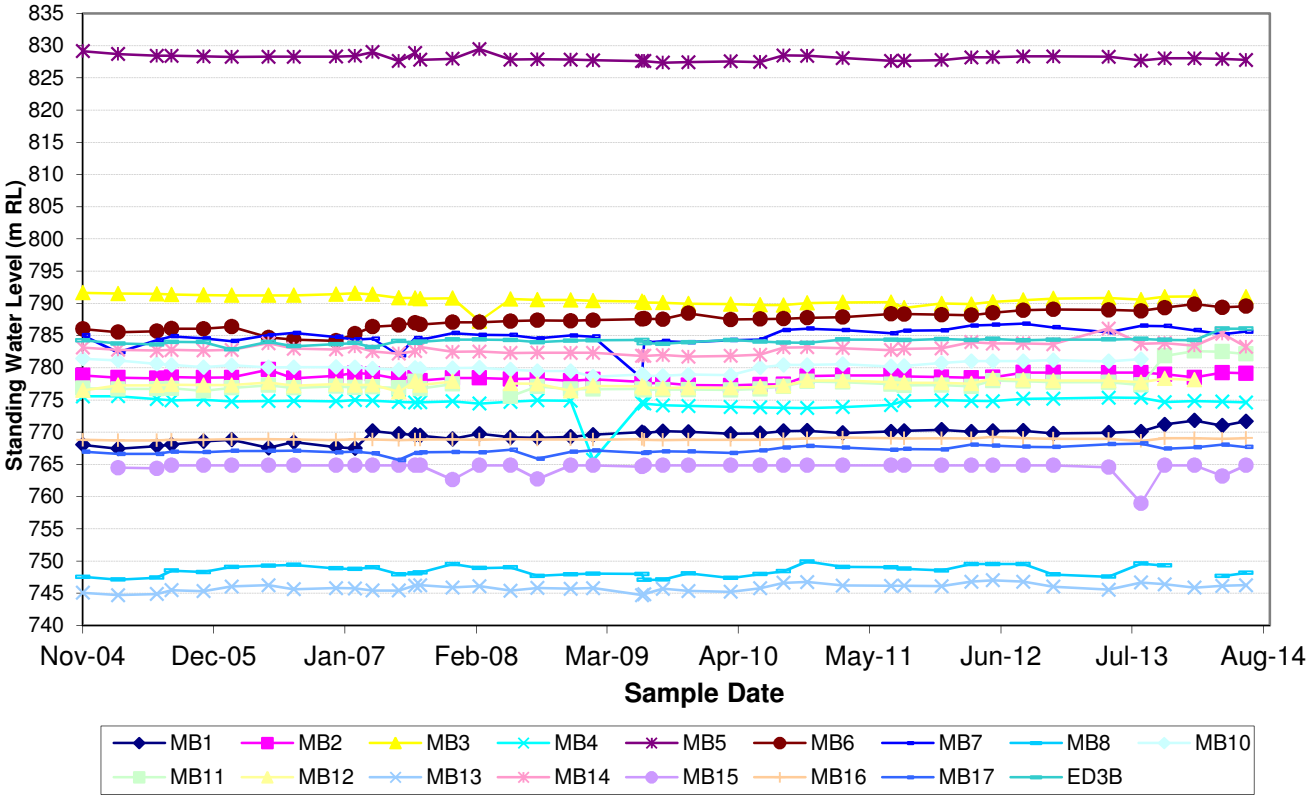

Figure 3.2.5A – Groundwater Levels – MB1 to MB17 and ED3B

3. Bioreactor Environmental Monitoring

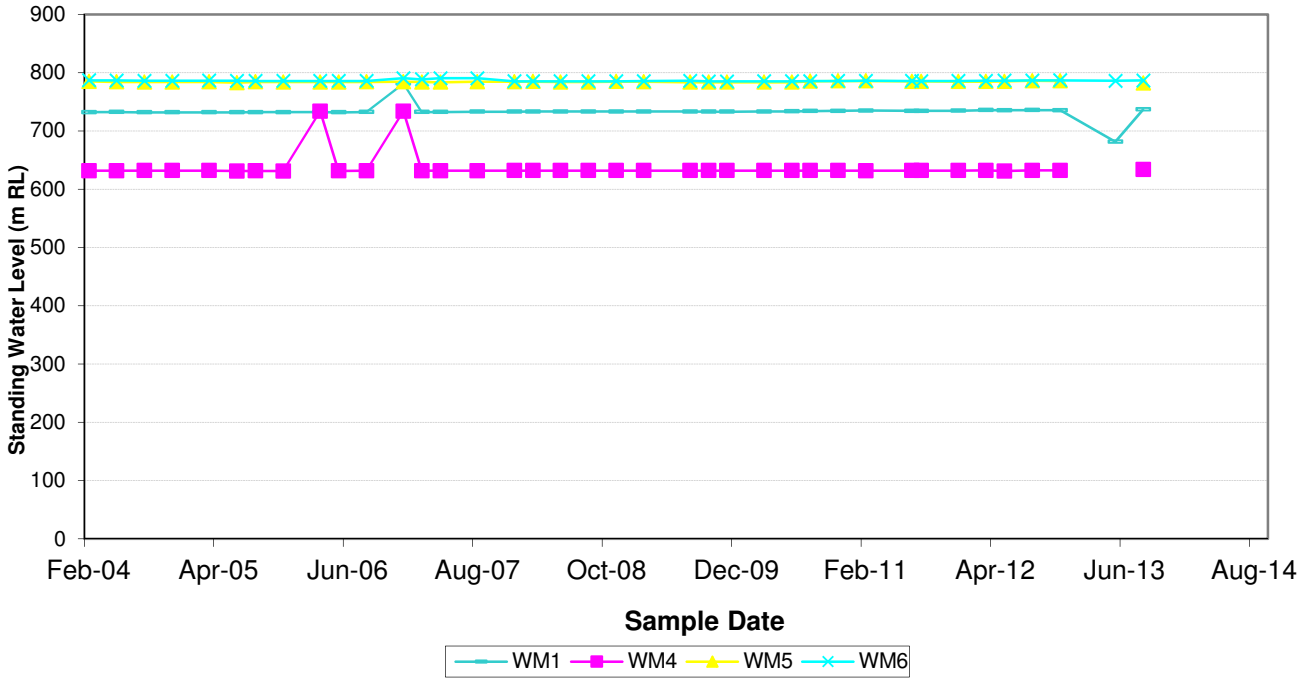

Figure 3.2.5B – Groundwater Levels – WM1 to WM6

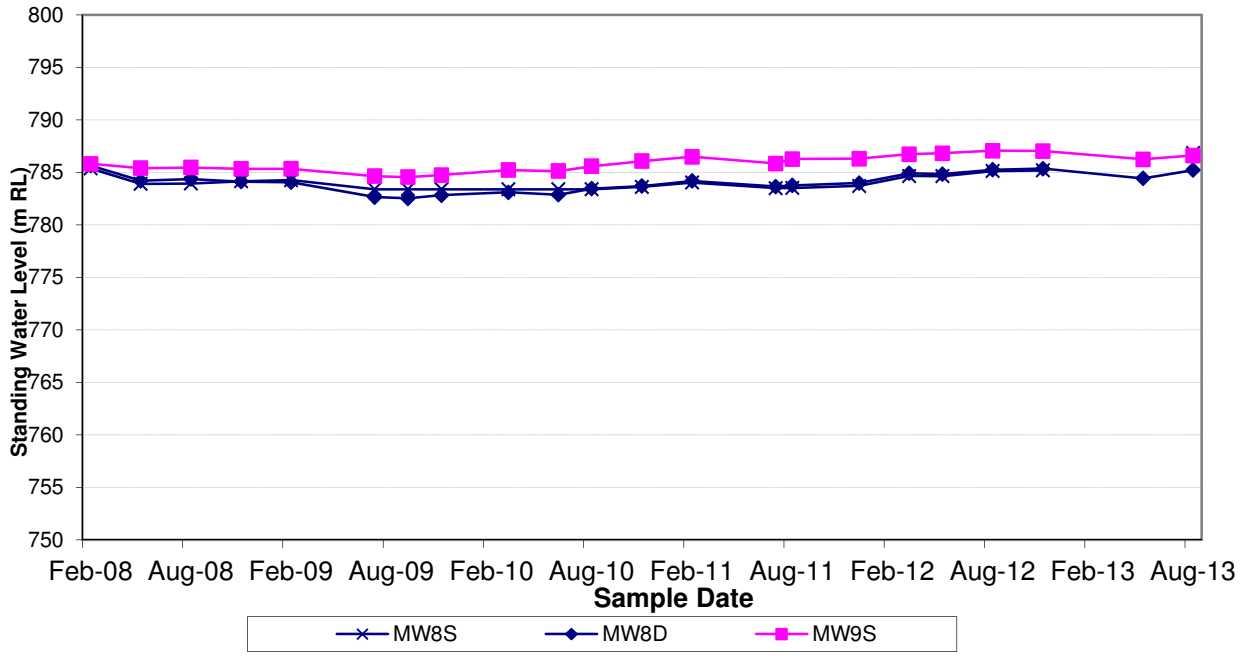

Figure 3.2.5C – Groundwater Levels – MW8S to MW10S

3. Bioreactor Environmental Monitoring

3.2.6 Bioreactor Piezometers Level Monitoring Results

Measurements for groundwater standing water levels (SWL) in the vicinity of the Bioreactor were undertaken at 5 out of 6 piezometers around the landfill void in accordance with the EPL and have been documented in the Annual Return. Each location consists of a shallow (reference A) and deep (reference B) piezometer.

The findings of the monitoring are summarised in Table 3.2.6 below and detailed quarterly levels are provided in Tables 8.1 – 8.5 (refer **Appendix 4**)

Table 3.2.6: Bioreactor Piezometers Level Monitoring Results

Parameter	Results/Discussion
P38A & P38B	Access to the monitoring location P38 has been restricted by Site Management due to safety concerns regarding the stability of this area of the void. The EPA has been notified of the geotechnical safety concerns surrounding of this area therefore, monitoring of the site has been ceased since 2010.
P44A & P44B	P44 is located east of the void. Standing water levels are presented in **Table 8.1** (refer **Appendix 4**). SWL in P44A (shallow aquifer)) indicated a variable standing water level from 715.8 metres Relative Level (m RL) to 717.20m RL during this reporting period, similar to previous trends, indicative of rainfall and infiltration influence. SWL in P44B (deep) has decreased approximately 1 m from the previous reporting period, although it is generally higher than historically observed.
P45A & P45B	P45 is located east of the mine void, and to the south of P44. Standing water levels are presented in **Table 8.2** (refer **Appendix 4**). SWL in P45A (shallow) showed a range of 715.66m RL to 717.06 m RL, stable and consistent with historical monitoring results. SWL in P45B (deep) has remained stable compared to previous reporting period, fluctuating between 718.46 m RL and 719.86 m RL.
P58A & P58B	P58 is located west of the void. Standing water levels are presented in **Table 8.3** (refer **Appendix 4**). SWL in P58A (shallow) was at the base level of this piezometer at 764.21RL, consistent with previous reporting period, indicating no recharge is occurring at this level. SWL in P58B (deep) is similar to previous reporting period fluctuating between 746.55 m RL and 754.15 mRL.
P59A & P59B	P59 is located west of the void and to the south of P58. Standing water

Parameter	Results/Discussion
	levels are presented in **Table 8.4** (refer **Appendix 4**). SWL in P59A (shallow) ranged from 786.65m RL to 787.45 m RL in this reporting period, consistent with previous reporting period. SWL in P59B (deep) ranged between 785.05 and 786.25, which is almost identical to the level within the shallow piezometer as per previous reporting periods.
P100A & P100B	P100 is located northeast of the void. Standing water levels are presented in **Table 8.5** (refer **Appendix 4**). SWL in P100A (shallow), while showing minor fluctuations throughout the reporting period, remains identical to the previous period of 745.58 m RL to 746.63 m RL. P100B (deep) continues to be dry as per previous monitoring periods, with the base level at approximately 698.29 m RL.

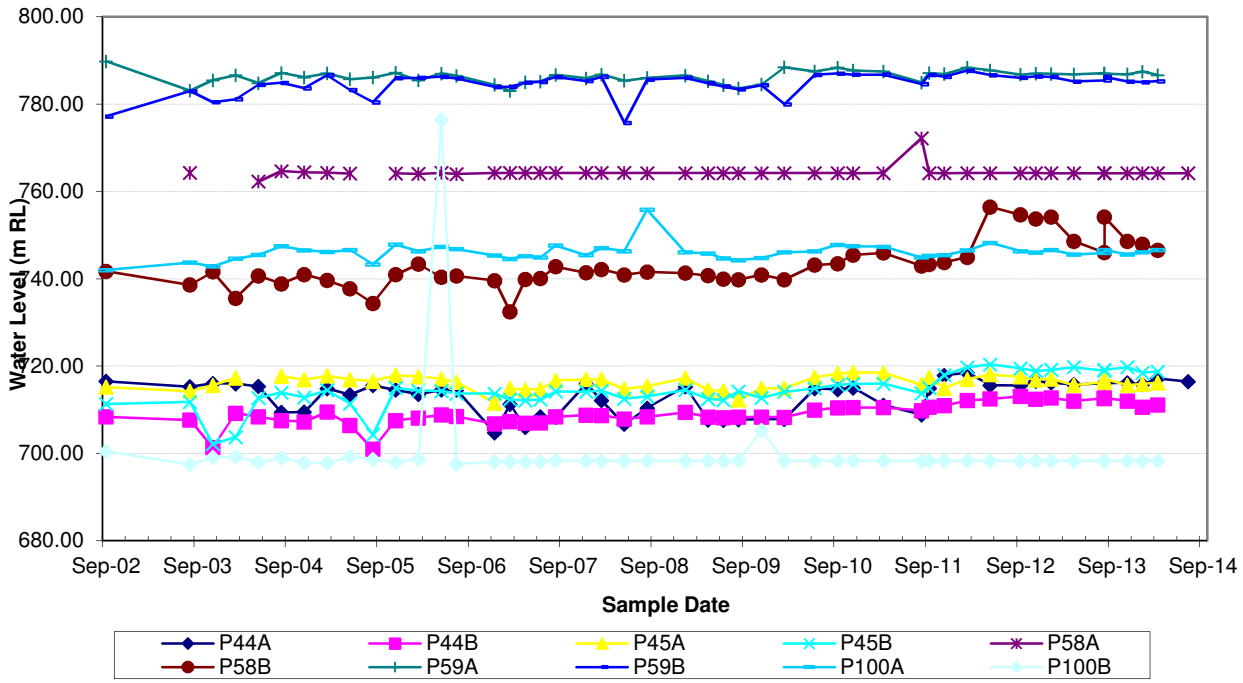

Figure 3.2.6.1 – Piezometer Standing Water Levels – P44 to P100

3. Bioreactor Environmental Monitoring

3.2.7 Bioreactor Evaporation Dam Volume Monitoring Results

The Evaporation Dam 3 (ED3) system comprises extracted (and treated) leachate from the landfill void and captured stormwater. The water volume has to be maintained in Evaporation Dam 3 to below 323 Megalitres as specified in the EPL.

Water levels are taken monthly as detailed in **Table 3.2.7**, which shows that the dam levels have been kept at an average of 170.93 Megalitres in this reporting period. The subsequent graph, **Figure 3.2.7.1** shows the overall trend over time.

Table 3.2.7: ED3 Water Volume Monitoring Results

Date	ED3S	ED3N Lagoon 1	ED3N Lagoon 2	ED3N Lagoon 3	ED3N Lagoon 4	ED3 System Total Volume
Sep-13	115	3.48	10.64	17.39	62.86	209.37
Oct-13	111	4.53	5.66	17.93	60.40	199.01
Nov-13	115	11.18	3.47	17.93	61.80	209.38
Dec-13	90	14.36	0.00	17.73	56.93	179.02
Jan-14	79	12.57	0.00	16.93	47.62	156.11
Feb-14	No survey data					
Mar-14	83	13.16	0.00	18.68	43.50	158.34
Apr-14	83	20.65	0.00	17.79	45.07	166.51
May-14	83	22.51	0.00	17.93	44.75	168.19
Jun-14	83	24.86	2.83	18.40	45.07	174.16
Jul-14	79	24.68	12.48	18.34	46.66	181.15
Aug-14	No survey data					
Minimum	79	3.48	0.00	16.93	43.50	**156.11**
Mean	89.88	15.20	3.51	17.90	51.47	**170.93**
Maximum	115	24.86	12.48	18.68	62.86	**209.38**

3. Bioreactor Environmental Monitoring

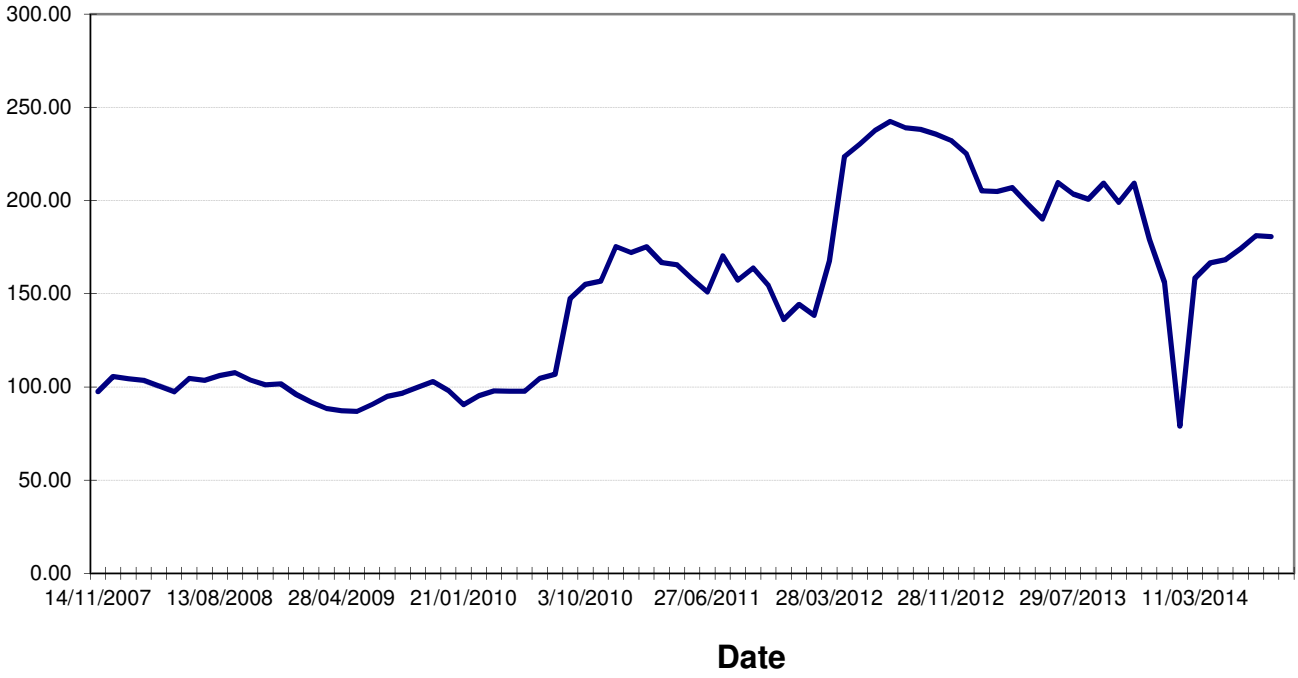

Figure 3.2.7.1 – Evaporation Dam 3 Water Volume (Megalitres)

Part 2 EPL 11455

Crisps Creek Intermodal Facility

4 Intermodal Facility Operations

Veolia operates the Crisps Creek Intermodal Facility (IMF) which is comprised of a hardstand located adjacent to the regional rail network (approximately 1 km south of Tarago train station and 8 km from the Bioreactor) to enable transfer of containerized waste received by rail from Sydney onto road trucks and subsequent to the Bioreactor for disposal.

4.1 IMF Licence Conditions

The IMF is operated under EPL 11455 which details the operating conditions and environmental monitoring requirements as noted in **Table 4.1**.

Table 4.1: IMF Licence Conditions

Condition	Compliance with Condition
1. Administrative conditions	Noted
2. Discharges to air and water and application to land	Noted
3. Limit conditions	**L1. Pollution of Waters** All clean surface and storm water collected at the IMF was diverted to the onsite retention system for storage, as part of the first flush stormwater management system, in this reporting period. Following rainfall events, surface water monitoring was undertaken to assess the water quality prior to discharge into the Mulwaree River.
	L5. Waste All waste received at the IMF during this reporting period was in accordance with the waste types permitted in the EPL, received via rail from the Clyde Transfer Terminal in Sydney. All waste was maintained in sealed containers and transported to the Bioreactor on the same day.
	L6. Noise Limits No noise complaints were received during this reporting period indicating that noise from operational activities at the IMF was likely maintained within the 35 dB(A) LAeq (15 minute) criteria at the nearest residential receiver. Similarly it can be inferred that noise from freight trains did not exceed 45 dB(A) LAeq (15 minute and 50 dB(A) LAeq (15 minute before and after 7:00 am respectively. Noise monitoring will be undertaken by Veolia on the receipt of any such complaints.
	L7. Hours of Operation All operational activities at the IMF including haulage of waste to the Bioreactor were undertaken between 6:00 am and 10:00 pm, Monday to Saturday during this reporting period as permitted under the DA.
	L8. Potentially Offensive Odour No odour complaints were received for the IMF during this reporting period.

4. IMF Operations

Condition	Compliance with Condition
4. Operating conditions	**O1. Activities Carried out in Competent Manner** All licenced activities undertaken at the IMF in this reporting period were carried out in a competent manner and under a high standard of environmental management for which Veolia is certified under ISO 14001.
	O2. Maintenance of Plant and Equipment The maintenance and operation of all plant and equipment on the premises associated with the licenced activities was undertaken in a proper and efficient condition as required by qualified technicians. All Veolia operators hold the appropriate qualifications and licenses to operate plant and equipment used as part of the IMF operations.
	O3. Dust Control All operations and activities were carried out at the IMF in a manner to minimise dust at the boundary of the premises. These included operating on a hardstand site with fully paved access roads to the site. All haulage of waste to the Bioreactor occurred within enclosed containers. Monitoring for the presence and quantity of depositional dust is undertaken monthly to verify the performance.
	O4. Stormwater and Wastewater Management – Operating Phase The first flush stormwater management system was operated effectively in this reporting period in accordance with the EPL requirements to capture all the clean storm and surface water from the paved and sealed areas of the IMF. No sewage was removed from the IMF in this reporting period. Uncontaminated stormwater is permitted under the EPL to be utilised in vegetated areas of the IMF, as requirement.
	O5.Tracking of Mud and Waste As all waste container unloading and movements occurred within enclosed containers on a hardstand site, tracking of mud and waste from the IMF did not occur during this reporting period. No opening of containers was required to be undertaken at the IMF during this reporting period.
	O6. Waste Transportation All containers utilised in the transportation of waste in this reporting period were maintained in accordance with the EPL requirements to minimise potential odour emissions. All containers had rubber seals to prevent the leakage of leachate during transport and handling activities.
	O7. Fire Extinguishment There were no fires at the IMF during this reporting period.
	O8. Fire Fighting Capability All Veolia operators are trained in handling emergency situations, which include fire fighting in accordance with site specific Emergency Response Plans. Fire extinguishers and a 20,000 litre water tank were maintained onsite during this reporting period to enable effective fire fighting capabilities. In addition, Crisps Creek and Mulwaree River are located adjacent to the IMF as approved and readily available water source for fire fighting. The Tarago Fire Brigade is also located approximately 1 km from the site which enables fast mobilisation at the site.
5. Monitoring and recording	Noted, all compliance monitoring was carried out in this reporting period in

Condition	Compliance with Condition
conditions	according to EPL requirements, the results of which are detailed, along with any non conformances in Section 5.
6. Reporting conditions	Noted and addressed in this AEMR and the annual return documents, where relevant. Notifications to the EPA were undertaken in a timely fashion.
General conditions	Noted.
Pollution studies and reduction programs	N/A
Special Conditions	N/A

5 IMF Environmental Monitoring

5.1 IMF Monitoring Points

Veolia is required to monitor environmental performance of the IMF under the site EPL. **Table 5.1** details the EPA ID, Veolia monitoring point identification, frequency and the type of monitoring undertaken at each licensed point. A monitoring location plan is included in **Appendix 3**.

Table 5.1: IMF Licensed Monitoring Points

EPA ID	Veolia ID	Frequency	Type of Monitoring
1	Site 110 - Upstream	6 x Annually	Surface Water
2	Site 150 - Downstream		
3	IMF First Flush		
4	DG18 IMF	Monthly	Dust / Particulates

Veolia also undertakes additional surface water quality monitoring at Site 130 (located upstream of Crisps Creek Intermodal in Mulwaree River) to provide additional background quality information.

5.2 IMF Monitoring Results

5.2.1 IMF Surface Water Monitoring Results

Surface water quality monitoring at 3 monitoring locations was undertaken as required by the EPL, the findings of which are summarised in **Table 5.2.1**. Detailed quality results are provided in **Tables 9.1** to **9.4** (refer **Appendix 4**). The key quality indicators selected to identify any contamination in the receiving surface waters from site operations include:

- pH,
- Electrical Conductivity (EC),
- Sulphate (SO_4),
- Iron (Fe),
- Zinc (Zn),
- Ammonia (NH_3), and
- Total Organic Carbon (TOC).

These are depicted in trend graphs **Figures 5.2.1.1** to **5.2.1.4** (refer **Appendix 5**).

5. IMF Environmental Monitoring

Table 5.2.1: IMF Surface Water Monitoring Results

Parameter	Results/Discussion
Site 110 - Upstream	Site 110 is located upstream of the IMF and approximately 8 km downstream of the Bioreactor. Results provided in **Table 9.1** (refer **Appendix 4**) indicate the following trends: • pH is close to neutral (average 7.2), slightly lower than the previous reporting period; • EC (average 1296 µS/cm) is slightly higher but generally consistent with the previous period and representative of fresh water salinity; • SO_4 (average 246 mg/L) is also slightly higher but generally consistent with previous reporting period; • Fe and Zn continue to indicate a fluctuating trend, of 0.7 mg/L each, consistent with historical cyclic results; • NH_3 (< 0.1mg/L) continued to be not detected during this reporting period. • TOC (average 16.5 mg/L), consistent with previous reporting period, is present at levels which reflect natural organic matter in streams. While the indicator trends for this location indicate some variability over time, this is not uncommon when sampling intermittent streams.
Site 130 - Downstream	Site 130 is located upstream of the IMF in the Mulwaree River. Results provided in **Table 9.2** (refer **Appendix 4**) indicate the following trends: • pH is close to neutral (average 7.4), slightly lower than the previous reporting period; • EC (average 376 µS/cm) shows a downward trend but is generally consistent with the previous period and representative of fresh water salinity; • SO_4 (average 20 mg/L) is also slightly lower but generally consistent with previous reporting period; • Fe and Zn, average 1.23 mg/L and 0.02 mg/L respectively indicate an increasing tend, consistent with fluctuating cycles in previous reporting periods; • NH_3 (< 0.1mg/L) continued to be not detected during this reporting period. • TOC (average 18 mg/L), consistent with previous reporting periods;
Site 150 – Mulwaree River	Site 150 is located 2 km downstream of the IMF on the Mulwaree River, which is also downstream of a railway bridge and Braidwood Road. Results provided in **Table 9.3** (refer **Appendix 4**) indicate the following trends: • pH (average 7.5) is slightly alkaline, consistent with the previous

Parameter	Results/Discussion
	reporting period; • EC (average 721.5 µS/cm) shows a slight upward trend but is generally consistent with the previous period for fresh water salinity; • SO_4 (average 77 mg/L) is also slightly higher, reflecting EC trend, but generally consistent with previous reporting period; • Fe and Zn, average 0.9 mg/L and 0.12 mg/L respectively indicate an increasing tend, consistent with fluctuating cycles in previous reporting periods; • NH_3 (< 0.1mg/L) continued to be not detected during this reporting period. • TOC (average 16 mg/L), is slightly higher but generally consistent with previous reporting periods; These results are consistent with the trends for Site 110.
First Flush Stormwater Outlet	The IMF First Flush is located at the surface water outlet point of the site, prior to runoff into Crisps Creek. Results provided in **Table 9.4** (refer **Appendix 4**) indicate the following trends: • pH (average 7.3) is close to neutral, consistent with the previous reporting period; • EC (average 479.5 µS/cm) shows a slight downward trend but is generally consistent with the previous period for fresh water salinity; • SO_4 (average 67.4 mg/L) is also slightly lower, reflecting EC trend, but generally consistent with previous reporting period; • Fe and Zn, average 1.04 mg/L and 0.21 mg/L respectively indicate an increasing tend, consistent with fluctuating cycles in previous reporting periods; • NH_3 (< 0.1mg/L) continued to be not detected during this reporting period. • TOC (average 16 mg/L), is consistent with previous reporting periods;

5.2.2 IMF Air Quality Monitoring Results

Dust monitoring is undertaken monthly at 1 location at the IMF in accordance with the EPL. A summary of this reporting period is provided in **Table 5.2.2.1** and detailed in **Table 10** (refer **Appendix 4**).

The results at DG18 indicate an average level of total solid matter is 3.1 g/m^2/month, which is generally consistent with overall historical trends as seen in the subsequent graph, **Figure 5.2.2.1**. The handling of waste and associated operational activities at the IMF are undertaken in a manner to ensure minimal emissions of dust. This includes no opening of containerised waste on unloading and operating on hardstand site.

Table 5.2.2: Dust Monitoring Results

Dust Gauge	Summary Total Solids (g/m2/month)		
	Minimum	Maximum	Average
DG18	1.0	10.5	3.1

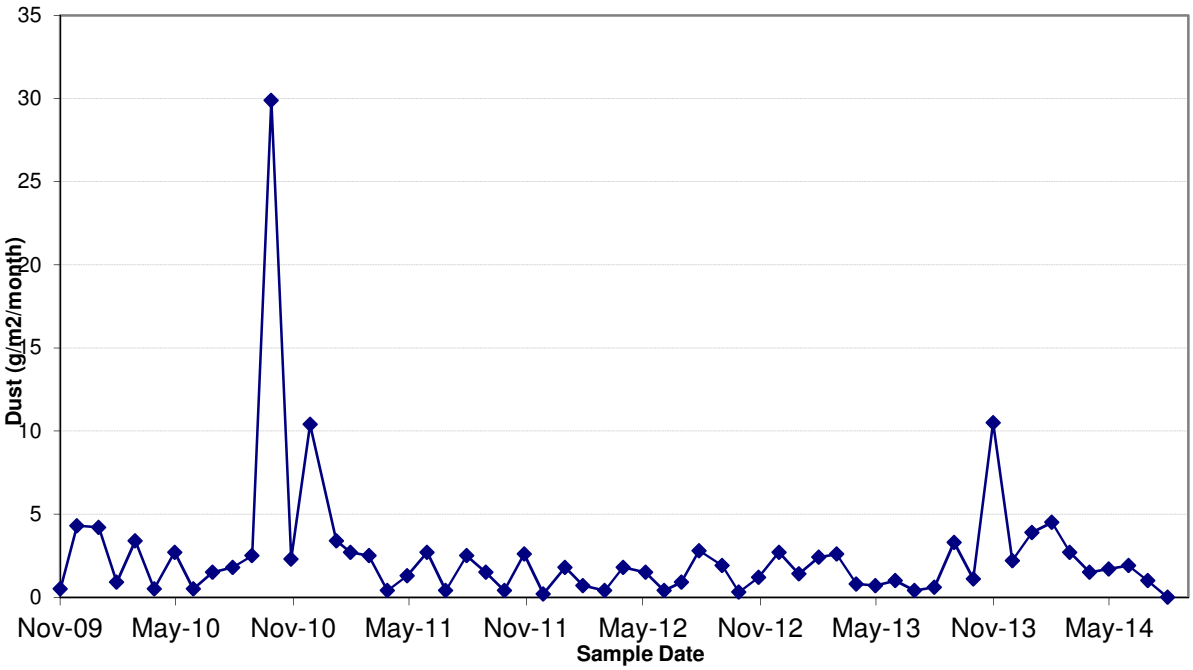

Figure 5.2.2.1 – IMF Depositional Dust Levels – DG18

6. Bioreactor and IMF Environmental Performance

- Based on the results of monitoring undertaken at both the Bioreactor and IMF sites in accordance with the respective EPLs, the overall environmental performance of the Woodlawn Eco Project in this reporting period can be demonstrated to be well managed.

- The non conformances result from missed sampling periods at certain locations and reasons for have been documented in the Annual Return which has been submitted to the EPA.

- In this reporting period, Veolia have also implemented the recommendations for environmental and operational improvements identified in the 2012/2013 AEMR.

- Additional improvements proposed for the 2014/2015 reporting period at the Bioreactor and the IMF are as follows in **Table 6.1**:

Table 6.1: 2014/2015 Reporting Period Recommendations

Item No.		Recommendation
1.		Implementing actions recommended from the most recent annual odour audit undertaken at the Bioreactor (report yet to be finalised);
2.		Upgrades to the Leachate Treatment System at the Bioreactor, which currently comprises an Aeration Dam, Polymer Dosing System and a Settlement Tank. to improve capacity to treat additional leachate from the void; This may include design and installation of additional settlement tanks.
3.		A consistent leachate treatment and operational monitoring is to be maintained to ensure leachate quality is kept at a level that does no produce offensive odour. The treated leachate is to be maintained at alkaline conditions in the lagoons for Evaporation Dam 3 North (ED3N-1, ED3N-2, and ED3N-3) to prevent reproduction of odour in stagnant condition.
4.		Following up to non conformances identified in the reporting period and documented both in the Annual Return and this AEMR. Corrective actions will include ensuring that missing analytes, monitoring periods and/or locations are further minimised with the adoption of the following practices:
	a.	Effectively communicating and promoting the monitoring requirements template developed in the previous monitoring period to monitoring personnel and updating the monitoring calendar for the new reporting period;
	b.	Effectively communicating sample analysis requirements and liaising with the laboratory to ensure any missed testing is corrected immediately, including retaining samples to provide adequate time for review of analysis results;; Continuing to refine automate sampling proformas.
	c.	Liaising with the EPA to review the existing conditions on EPLs that are not practically complied with and streamlining monitoring requirements to reduce non conformances.

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References

- **Earth2Water (2010)** EPL - Annual Assessment of Woodlawn Bioreactor and Intermodal Facility Monitoring Data, 30 November 2010;

- **EPA (1996)** Environmental Guidelines: Solid Waste Landfills, January 1996;

- **Veolia (2013)** Annual Environmental Monitoring Report – Woodlawn Bioreactor and Crisps Creek Intermodal Facility, November 2013;

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Appendices

Note: All documents appended to this Report are provided electronically via CD labeled: ***'Appendices 1 – 6 Annual Environmental Management Report Woodlawn_Veolia Nov 2014'***

Appendices

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Appendices

Appendix 1 Site Location Plan

Appendices

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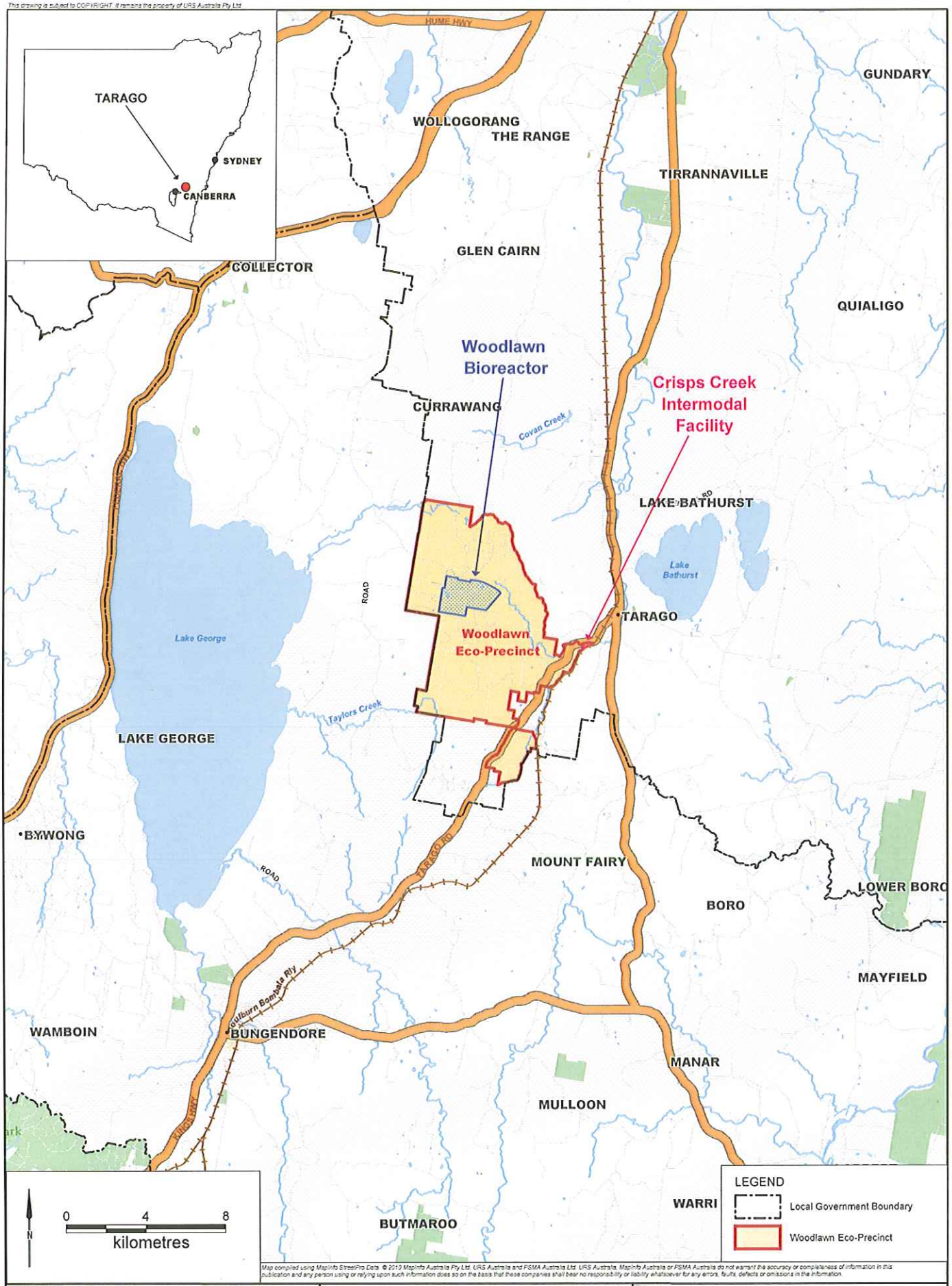

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Client	Project	Title
VEOLIA ENVIRONMENTAL SERVICES PTY LTD	WOODLAWN EXPANSION PROJECT	WOODLAWN ECO-PRECINCT LOCATION
URS	Drawn: SB / Approved: LO / Date: 06/08/2010	Figure: 1.1
	Job No: 43177703 / File No: 43177703.018.wor	

Appendices

Appendix 2 EPL Boundary

Appendices

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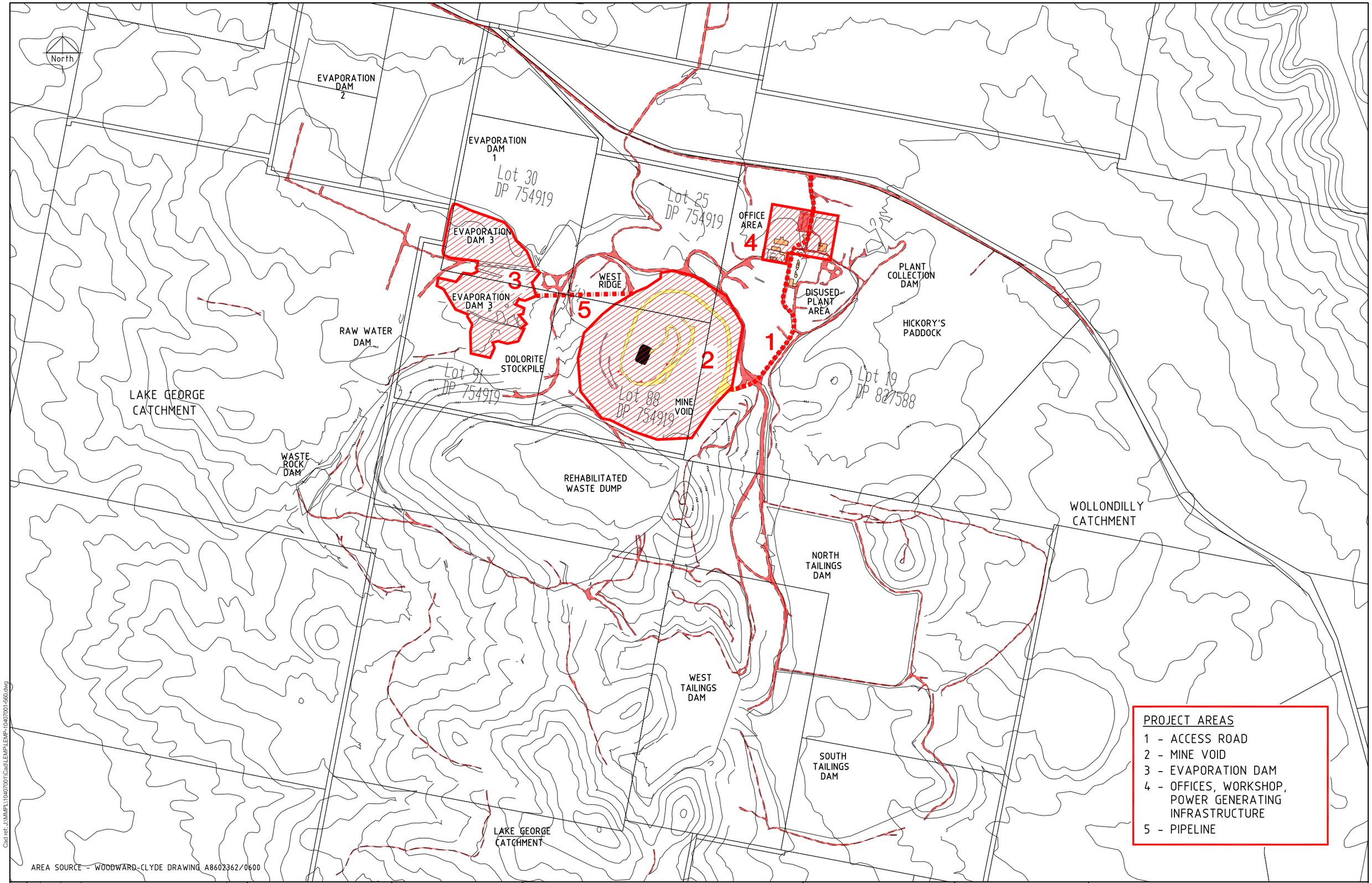

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Last modified: 23 Jun 04 - 15:00

REVISIONS				
A	SGG	23.6.04		
No.	BY	DATE	DESCRIPTION	APPD

Before commencing work, all controlling dimensions on the drawings must be verified on the site, particularly those relative to property allignments, other structures, and services.

Figured dimensions take preference over scaled. If in doubt, ask.

SCALES

0 100 200 300 400m

1 : 1500 at A3

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	PREPARED	CHECKED	PASSED
DESIGN			DATE
DRAFTING	PM		

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An AECOM company

WOODLAWN BIOREACTOR

WOODLAWN MINE SITE

LICENCED PREMISES

10407001-560 | A

Appendices

Appendix 3 Monitoring Locations Plan

Appendices

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Rev.	Description	By	Date
A	Site monitoring locations	B.R.	12/10/07

Kells
Land Development Solutions
GOULBURN
58 Montague Street
PO Box 2042
GOULBURN NSW 2580
Ph: (02) 4821 2088
Fax: (02) 4821 7288
BRAIDWOOD
5 Village Terrace
Jerrabatgulla Street
BRAIDWOOD NSW 2622
Ph: (02) 4842 2288
Fax: (02) 4842 2494
Email: office@kellsurveyors.com.au

SCALE 1:12,500 (AT A1)

0 250 500 750 1000 1250
Metres

SURVEY	B.R
DESIGN	VEOLIA
DRAWN	B.R.
CHECKED	VEOLIA
APPROVED	VEOLIA

VEOLIA ENVIRONMENTAL SERVICES

WOODLAWN BIOREACTOR SITE MONITORING LOCATIONS

DATUM: AHD

ORIGIN OF LEVELS:

DRAWING No. 16800 - 220/1

REV. A

Appendices

Appendix 4 Tabulated Monitoring Results

Appendices

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Table 1 - Landfill Gas Extraction Booster Results

EPL 11436	Date	Carbon Dioxide	Dry Gas Density	Moisture Content	Molecular weight of stack gases	Oxygen	Temperature	Volatile Organic Compounds	Volumetric Flow rate	Volumetric Flow rate	Methane
		%	*%*	*%*	*mg/m3*	*%*	*Deg C*	*mg/m3*	*m3/hour*	*m3/sec*	*%*
	1/06/2011	37.04			N/A	1.09	22.2		771.83	0.21	
	14/10/2011	34.8	11617	8.5	30.17	1.6	44.7	0.09	5380	1.49	48.6
	6/05/2013	36.1			N/A	0.53	32.2		2124	0.59	61.4
	29/05/2014	44.7	105	7.8	N/A	1.68	47.8		2520	0.7	48
OVERALL	Minimum	34.8	105	7.8	30.17	0.53	22.2	0.09	771.83	0.21	48
	Maximum	44.7	11617	8.5	30.17	1.68	47.8	0.09	5380	1.49	61.4
	Average	38.16	5861.00	8.15	30.17	1.23	36.7	0.09	2698.96	0.75	52.67
	StdDev	4.46	N/A	N/A	N/A	0.53	11.80	N/A	1937.73	0.54	7.57
	Count	4	2	2	1	4	4	1	4	4	3

Table 2 - Surface Gas Monitoring Results

Quarter 1 - Surface Gas Results

6/12/2013

Transect	Time	No of measurements	Min Methane(%)	Max Methane (%)	Average Methane (%)
1	9:00:00 AM	16	0.0021	0.0354	0.0099
2		22	0.0006	0.0376	0.0072
3		22	0.0035	0.0250	0.0097
4		15	0.0054	0.0167	0.0093
5		20	0.0021	0.0310	0.0113
6		21	0.0021	0.0241	0.0086
7		9	0.0039	0.0154	0.0082
8		9	0.0042	0.0367	0.0177
9		9	0.0055	0.0312	0.0117
10		11	0.0023	0.0355	0.0110
11		12	0.0022	0.0191	0.008
12		5	0.00325	0.02543	0.010516
13	12:00:00 PM				
Total Measurements		**171**	**0.001**	**0.038**	**0.010**

Quarter 2 - Surface Gas Results

5/03/2014

Transect	Time	No of measurements	Min Methane (%)	Max Methane (%)	Average Methane (%)
1	9:00:00 AM	9	0.0054	0.0983	0.0270
2		16	0.0058	0.0533	0.0343
3		20	0.0058	0.0470	0.0204
4		19	0.0010	0.0455	0.0271
5		21	0.0052	0.0401	0.0162
6		23	0.0016	0.0395	0.0147
7		18	0.0023	0.0405	0.0248
8		17	0.0013	0.0549	0.0167
9		16	0.0016	0.0346	0.0089
10		15	0.0014	0.0161	0.0058
11		16	0.0013	0.0269	0.0105
12		12	0.0031	0.0398	0.0131
13	12:00:00 PM	3	0.0006	0.0039	0.0022
Total Measurements		**205**	**0.001**	**0.098**	**0.017**

Quarter 3 Surface Gas Results

6/06/2014

Transect	Time	No of measurements	Min Methane (%)	Max Methane (%)	Average Methane (%)
1	12:50:00 PM	8	0.0020	0.0224	0.0095
2		12	0.0037	0.0220	0.0107
3		15	0.0003	0.0314	0.0076
4		13	0.0007	0.0303	0.0068
5		22	0.0027	0.0312	0.0071
6		18	0.0029	0.0228	0.0066
7		18	0.0031	0.0117	0.0058
8		15	0.0019	0.0103	0.0054
9		15	0.0012	0.0157	0.0054
10		15	0.0017	0.0218	0.0082
11		14	0.0021	0.0301	0.0095
12		11	0.0024	0.0303	0.0098
13	3:30:00 PM	8	0.0032	0.0101	0.0068
Total Measurements		**184**	**0.000**	**0.031**	**0.008**

Quarter 4 - Surface Gas Results

29/08/2014

Transect	Time	No of measurements	Min Methane (%)	Max Methane (%)	Average Methane (%)
1	11:30:00 PM	5	0.0018	0.0400	0.0119
2		12	0.0003	0.0457	0.0092
3		15	0.0020	0.0437	0.0048
4		12	0.0008	0.0059	0.0026
5		15	0.0010	0.0305	0.0094
6		10	0.0011	0.0334	0.0074
7		12	0.0002	0.0078	0.0032
8		11	0.0003	0.0400	0.0059
9		14	0.0011	0.0365	0.0077
10		15	0.0009	0.0265	0.0071
11		14	0.0034	0.0352	0.0093
12		11	0.0008	0.0548	0.0081
13	2:30:00 PM	9	0.0019	0.0079	0.0042
Total Measurements		**155**	**0.000**	**0.055**	**0.007**

2013/2014 Surface Gas Results Summary			
	Minimum	**Maximum**	**Average**
Methane (%)	0.000	0.098	0.010

Table 3.1 - Landfill Gas Engine Results - Generator 1

EPL 11436

	Date	Carbon Dioxide	Carbon Monoxide	Dry Gas Density	Moisture Content	Molcular Weight Of Stack Gases	Nitrogen Oxides	Oxygen	Sulfuric Acid Mist & Sulfur Trioxides S03	Sulphur Dioxide	Temperature	Velocity	Volatile Organic Compounds	Volumetric Flowrate	Hydrogen Sulphide
							EPL Limit		EPL Limit						EPL Limit
							450		100						5
		%	mg/m3	kg/m3	%	gr/gr mole	mg/m3	%	mg/m3	mg/m3	Deg C	m/sec	mg/m3	m3/sec	mg/m3
	3/04/2009	11.6	962	1.35	5.6	30.2	318	8.2	6.58	21	455	50.5	3.62	1.71	0.31
	10/02/2010	13.3	1073	1.36	5.3	30.472	400	8.2	10.4	3	475	46.4	1.74	1.59	0.37
	30/06/2011	10.4	1011	1.34	3.3	30.032	382	9.2	8.13	56	418	42.9	4.14	1.6	0.34
	20/06/2012	11.6	997	1.35	8.3	30.172	385	8.2	11.3	214	447	45	0.09	1.49	0.326
	11/06/2013	Generator 1 was not available													
	25/03/2014	Generator 1 was not available													
OVERALL Minimum		10.4	962	1.34	3.3	30.032	318	8.2	6.58	3	418	42.9	0.09	1.49	0.31
Maximum		13.3	1073	1.36	8.3	30.472	400	9.2	11.3	214	475	50.5	4.14	1.71	0.37
Average		11.73	1010.75	1.35	5.63	30.22	371.25	8.45	9.10	73.50	448.75	46.20	2.40	1.60	0.34
StdDev		1.19	46.33	0.01	2.05	0.18	36.36	0.50	2.15	96.22	23.64	3.21	1.85	0.09	0.03
Count		4	4	4	4	4	4	4	4	4	4	4	4	4	4

Note: A TAN coloured cell indicates that the indicated value is LESS THAN (<) indicated

Table 3.2 - Landfill Gas Engine Results - Generator 2

EPL 11436

	Date	Carbon Dioxide	Carbon Monoxide	Dry Gas Density	Moisture Content	Molcular Weight Of Stack Gases	Nitrogen Oxides	Oxygen	Sulfuric Acid Mist & Sulfur Trioxides S03	Sulphur Dioxide	Temperature	Velocity	Volatile Organic Compounds	Volumetric Flowrate	Hydrogen Sulphide
							EPL Limit		EPL Limit						EPL Limit
							450		100						5
		%	mg/m3	kg/m3	%	gr/gr mole	mg/m3	%	mg/m3	mg/m3	Deg C	m/sec	mg/m3	m3/sec	mg/m3
	8/12/2008	9.3	674	1.31	6.2	29.4	449	10	7.88	10	437	44.7	4.17	1.55	
	23/06/2010	13.4	799	1.36	5.4	30.48	411	8.4	4.23	3	368	41.7	0.086	1.61	0.36
	30/06/2011	11.4	750	1.35	4.8	30.152	402	8.2	8.89	109	415	43.6	4.1	1.59	0.33
	20/06/2012	9.8	1011	1.34	8.1	29.944	384	9	7.9	255	432	44.7	0.18	1.52	3.354
	11/06/2013	10.1	981	1.34	5	29.976	296	9	5	136	464	45	3.71	1.51	0.35
	25/03/2014	9.7	766	1.33	5.9	29.9	414	8.6	6.95	410	471	46.2	4.178	1.53	0.354
OVERALL Minimum		9.30	674.00	1.31	4.80	29.40	296.00	8.20	4.23	3.00	368.00	41.70	0.09	1.51	0.33
Maximum		13.40	1011.00	1.36	8.10	30.48	449.00	10.00	8.89	410.00	471.00	46.20	4.18	1.61	3.35
Average		10.62	830.17	1.34	5.90	29.98	392.67	8.87	6.81	153.83	431.17	44.32	2.74	1.55	0.35
StdDev		1.54	135.17	0.02	1.20	0.35	51.91	0.64	1.82	155.96	37.28	1.53	2.02	0.04	1.34
Count		6	6	6	6	6	6	6	6	6	6	6	6	6	5

Table 3.3 - Landfill Gas Engine Results - Generator 3

EPL 11436

	Date	Carbon Dioxide	Carbon Monoxide	Dry Gas Density	Moisture Content	Molcular Weight Of Stack Gases	Nitrogen Oxides	Oxygen	Sulfuric Acid Mist & Sulfur Trioxides S03	Sulphur Dioxide	Temperature	Velocity	Volatile Organic Compounds	Volumetric Flowrate	Hydrogen Sulphide
							EPL Limit		EPL Limit						EPL Limit
							450		100						5
		%	mg/m3	kg/m3	%	gr/gr mole	mg/m3	%	mg/m3	mg/m3	Deg C	m/sec	mg/m3	m3/sec	mg/m3
	8/04/2010	7.5	304	1.35	6	30.138	322	14.7	6.25	3	345	46.2	0.09	1.89	0.288
	30/06/2011	10.5	869	1.34	3.8	30.04	317	9	11.1	120	438	48.7	25	1.75	0.33
	20/06/2012	10.6	926	1.34	3.8	30.032	359	8.3	5.65	266	421	45.8	3.87	1.65	0.34
	11/06/2013	9.6	622	1.34	7.1	29.992	323	10.8	7.15	83	476	51.3	3.12	1.66	0.32
	25/03/2014	11.6	819	1.35	7.3	30.19	346	8.3	5.07	395	474	52.5	4.122	1.69	0.355
OVERALL Minimum		7.50	304.00	1.34	3.80	29.99	317.00	8.30	5.07	3.00	345.00	45.80	0.09	1.65	0.29
Maximum		11.60	926.00	1.35	7.30	30.19	359.00	14.70	11.10	395.00	476.00	52.50	25.00	1.89	0.36
Average		9.96	708.00	1.34	5.60	30.08	333.40	10.22	7.04	173.40	430.80	48.90	7.24	1.73	0.33
StdDev		1.55	253.17	0.01	1.72	0.08	18.17	2.70	2.39	156.32	53.43	2.99	10.06	0.10	0.03
Count		5	5	5	5	5	5	5	5	5	5	5	5	5	5

Table 3.4 - Landfill Gas Engine Results - Generator 4

EPL 11436	Date	Carbon Dioxide	Carbon Monoxide	Dry Gas Density	Moisture Content	Molcular Weight Of Stack Gases	Nitrogen Oxides	Oxygen	Sulfuric Acid Mist & Sulfur Trioxides S03	Sulphur Dioxide	Temperature	Velocity	Volatile Organic Compounds	Volumetric Flowrate	Hydrogen Sulphide
							EPL Limit		EPL Limit						EPL Limit
							450		100						5
		%	mg/m3	kg/m3	%	gr/gr mole	mg/m3	%	mg/m3	mg/m3	Deg C	m/sec	mg/m3	m3/sec	mg/m3
	20/06/2012	10.3	686	1.34	5.7	29.964	391	8.3	9.64	278	425	45.3	3.77	1.6	0.327
	11/06/2013	9.4	784	1.33	4.6	29.884	267	9.5	5.72	121	436	52.9	3.87	1.87	0.29
	25/03/2014	9.7	878	1.34	5.8	29.9	368	8.8	7.08	411	458	51.7	0.099	1.73	0.345
OVERALL Minimum		9.40	686.00	1.33	4.60	29.88	267.00	8.30	5.72	121.00	425.00	45.30	0.10	1.60	0.29
Maximum		10.30	878.00	1.34	5.80	29.96	391.00	9.50	9.64	411.00	458.00	52.90	3.87	1.87	0.35
Average		9.80	782.67	1.34	5.37	29.92	342.00	8.87	7.48	270.00	439.67	49.97	2.58	1.73	0.32
StdDev		0.46	96.01	0.01	0.67	0.04	65.96	0.60	1.99	145.17	16.80	4.09	2.15	0.14	0.03
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3

Table 3..5 - Landfill Gas Engine Results - Generator 5

EPL 11436	Date	Carbon Dioxide	Carbon Monoxide	Dry Gas Density	Moisture Content	Molcular Weight Of Stack Gases	Nitrogen Oxides	Oxygen	Sulfuric Acid Mist & Sulfur Trioxides S03	Sulphur Dioxide	Temperature	Velocity	Volatile Organic Compounds	Volumetric Flowrate	Hydrogen Sulphide
							EPL Limit		EPL Limit						EPL Limit
							450		100						5
		%	mg/m3	kg/m3	%	gr/gr mole	mg/m3	%	mg/m3	mg/m3	Deg C	m/sec	mg/m3	m3/sec	mg/m3
	25/03/2014	Generator 5 was not available													
OVERALL Minimum		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
StdDev		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4.1 - Dust Deposition Results - DG22 East Void

Site Name	ALS Batch Code	Date	Ash Residue	Combustibles	Calculated Rainfall	Soluble Matter	Insoluble Solids	Total Solids
			g/m2/mth	g/m2/mth	mm	g/m2/mth	g/m2/mth	g/m2/mth
DG22	958671	Sep-13	2.7	0.4	63	0.8	3.1	3.9
DG22	962974	Oct-13	1.6	0.3	7	0.4	1.9	2.3
DG22	A1300189-0	Nov-13	0.5	0.2	80	0.4	0.7	1.1
DG22	A1400048-0	Dec-13	1.2	0.4	8	0.2	1.6	1.6
DG22	A1400438-0	Jan-14	0.7	0.9	7	1.6	1.6	3.2
DG22	974993	Feb-14	0.47	0.33	61	1.7	0.8	2.5
DG22	977261	Mar-14	0.36	0.2	69	0.5	0.6	1.1
DG22	979955	Apr-14	1	0.2		0.2	1.2	1.2
DG22	982434	May-14	1.9	0.3	21	0.4	2.2	2.6
DG22	984578	Jun-14	0.71	0.19	33	1	0.9	1.9
DG22	986912	Jul-14	0.7	0.25	12		1	1
DG22		Aug-14	-	-	-	-	-	-
		Min	0.36	0.19	7	0.2	0.6	1
		Avg	1.08	0.33	36.10	0.72	1.42	2.04
		Max	2.7	0.9	80	1.7	3.1	3.9
		stDev	0.72	0.20	29.16	0.55	0.76	0.96

Table 4.2 - Dust Deposition Results - DG24 West Void

Site Name	ALS Batch Code	Date	Ash Residue	Combustibles	Calculated Rainfall	Soluble Matter	Insoluble Solids	Total Solids
			g/m2/mth	g/m2/mth	mm	g/m2/mth	g/m2/mth	g/m2/mth
DG24	958672	Sep-13	1.5	0.8	79	1.5	2.3	3.8
DG24	962975	Oct-13	0.81	0.69	6	0.2	1.5	1.5
DG24	A1300189-0	Nov-13	1.8	3.2	93	2.2	5	7.2
DG24	A1400048-0	Dec-13	1.4	1.9	16	1.5	3.3	4.8
DG24	A1400438-0	Jan-14	1.2	1	23	3.2	2.1	5.3
DG24	974994	Feb-14	2.2	1.2	75	5.4	3.4	8.8
DG24	977262	Mar-14	2.3	1.1	92	3.3	3.4	6.7
DG24	979957	Apr-14	0.88	0.42		1.7	1.3	3
DG24	982435	May-14	1	1.2	35	0.8	2.2	3
DG24	984579	Jun-14	0.16	0.19	40	0.3	0.4	0.7
DG24	986913	Jul-14	0.11	0.13	14	0.1	0.2	0.3
DG24		Aug-14	-	-	-	-	-	-
		Min	0.11	0.13	6	0.1	0.2	0.3
		Avg	1.21	1.08	47.30	1.84	2.28	4.10
		Max	2.3	3.2	93	5.4	5	8.8
		stDev	0.73	0.87	34.07	1.62	1.43	2.75

Table 4.3 - Dust Deposition Results - DG28 Pylara

Site Name	ALS Batch Code	Date	Ash Residue	Combustibles	Calculated Rainfall	Soluble Matter	Insoluble Solids	Total Solids
			g/m2/mth	g/m2/mth	mm	g/m2/mth	g/m2/mth	g/m2/mth
DG28	958673	Sep-13	0.66	1.7	81	2.4	2.4	4.8
DG28	962976	Oct-13	0.82	0.78	14	0.8	1.6	2.4
DG28	A1300189-0	Nov-13	1.7	5.4	68	4.9	7	12
DG28	A1400048-0	Dec-13	0.4	0.6	17	0.2	1	1
DG28	A1400438-0	Jan-14	0.7	0.6	13	1.8	1.3	3.2
DG28	974995	Feb-14	0.35	0.55	61	1.9	0.9	2.8
DG28	977263	Mar-14	0.66	0.44	73	1.8	1.1	2.9
DG28	979958	Apr-14	0.64	0.33		0.2	1	1.2
DG28	982436	May-14	0.39	0.32	25	0.2	0.7	0.7
DG28	984580	Jun-14	18.5	7.1	34	5.4	25.6	31
DG28	986914	Jul-14	1.6	0.9	14	0.5	2.5	3
DG28		Aug-14	-	-	-	-	-	-
		Min	0.35	0.32	13	0.2	0.7	0.7
		Avg	2.40	1.70	40.00	1.83	4.10	5.91
		Max	18.5	7.1	81	5.4	25.6	31
		stDev	5.36	2.31	27.62	1.82	7.35	8.88

	Summary Total Solids (g/m2/month)		
Dust Guage	Minimum	Maximum	Average
DG22	1	3.9	2.0
DG24	0.3	8.8	4.1
DG28	0.7	31	5.9

'<' removed from <LOR values

Table 5.1 - Surface Water Results - Site 115

EPL 11436	Statistics	Field Information									Analytical Information								
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		14/10/2013	Site 115	11:15pm	DS						Not Flowing								
		14/01/2014	Site 115	8:45am	TB						Not Flowing								
		11/04/2014	Site 115	9:45am	TB						Not Flowing								
		12/06/2014	Site 115	11:55am	PM	6.27	4280	12.2	9.66	33.2	Low flow water	CA1401785-001	0.1	2	4360	7.73	3820	10	2.4
2013/14	Minimum					6.27	4280.00	12.20	9.66	33.20			0.10	2.00	4360.00	7.73	3820.00	10.00	2.40
	Maximum					6.27	4280.00	12.20	9.66	33.20			0.10	2.00	4360.00	7.73	3820.00	10.00	2.40
	Average					6.27	4280.00	12.20	9.66	33.20			0.10	2.00	4360.00	7.73	3820.00	10.00	2.40
	StdDev					#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 5.2 - Surface Water Results - Spring 2

EPL 11436	Statistics	Field Information									Analytical Information								
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		7/11/2013	Spring 2	10:15pm	DS	7.01	556	18.7	9.55	1.4		962968	0.1	9	570	7.2	480	28	4.5
		15/01/2014	Spring 2	10:35am	TB						Not Flowing								
		10/04/2014	Spring 2	11:45am	TB	5.13	774	15.8	15.39	125.8		CA1401110-001	1.4	5	764	5.93	526	14	14
		13/06/2014	Spring 2	1:00pm	PM	5.74	799	9.5	8.74	61.6	Water clear	CA1401809-001	4.7	2	801	5.33	597	12	19.9
2013/14	Minimum					5.13	556.00	9.50	8.74	1.40			0.10	2.00	570.00	5.33	480.00	12.00	4.50
	Maximum					7.01	799.00	18.70	15.39	125.80			4.70	9.00	801.00	7.20	597.00	28.00	19.90
	Average					5.96	709.67	14.67	11.23	62.93			2.07	5.33	711.67	6.15	534.33	18.00	12.80
	StdDev					0.96	133.67	4.70	3.63	62.21			2.37	3.51	124.07	0.95	58.94	8.72	7.77
	Count					3.00	3.00	3.00	3.00	3.00			3.00	3.00	3.00	3.00	3.00	3.00	3.00

Table 5.3 - Surface Water Results - Site 105

EPL 11436	Statistics	Field Information									Analytical Information								
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		7/11/2013	Site 105	10:45am		7.17	2440	17	5.12	10	-	962969	0.1	14	2500	7.5	1700	24	0.9
		15/01/2014	Site 105	9:35am	TB						Not Flowing								
		11/04/2014	Site 105	1:10pm	TB						Not Flowing								
		13/06/2014	Site 105	1:40pm	PM	6.08	2052	9.7	11.81	43.3	Water level low	CA1401809-002	0.1	4	2020	6.55	1690	14	2.3
2013/14	Minimum					6.08	2052.00	9.70	5.12	10.00			0.10	4.00	2020.00	6.55	1690.00	14.00	0.90
	Maximum					7.17	2440.00	17.00	11.81	43.30			0.10	14.00	2500.00	7.50	1700.00	24.00	2.30
	Average					6.63	2246.00	13.35	8.47	26.65			0.10	9.00	2260.00	7.03	1695.00	19.00	1.60
	StdDev					#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					2.00	2.00	2.00	2.00	2.00			2.00	2.00	2.00	2.00	2.00	2.00	2.00

Table 5.4 - Surface Water Results - Raw Water Dam (WM200)

SML20 EPL 11436	Statistics	Field Information											Analytical Information						
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		21/10/2013	WM200	DS	0.045139	6.14	1179	18.3	8.59	47.8		960727	0.1	2	1179	6.14	900	7	3.2
		13/01/2014	WM200	DS	11:15am	4.66	1467	23.4	8.51	436		CA1400102-007	0.1	2	1430	6.78	1060	16	4.1
		9/04/2014	WM200	TB	10:30am	5.82	1610	17.9	9.72	86.7		CA1401093-001	0.1	2	1500	7.58	1130	22	4.3
		12/06/2014	WM200	PM	12:30pm	6.01	1595	11.6	11.03	47.7	Water Cloudy	CA1401785-002	0.1	2	1560	7.44	1080	22	4.8
2013/14	Minimum					4.66	1179.00	11.60	8.51	47.70			0.10	2.00	1179.00	6.14	900.00	7.00	3.20
	Maximum					6.14	1610.00	23.40	11.03	436.00			0.10	2.00	1560.00	7.58	1130.00	22.00	4.80
	Average					5.66	1462.75	17.80	9.46	154.55			0.10	2.00	1417.25	6.99	1042.50	16.75	4.10
	StdDev					0.68	199.75	4.83	1.18	188.53			0.00	0.00	167.48	0.66	99.46	7.09	0.67
	Count					4.00	4.00	4.00	4.00	4.00			4.00	4.00	4.00	4.00	4.00	4.00	4.00

Table 5.5 - Surface Water Results - Entrance Road Culvert (WM201)

EPL 11436	Statistics	Field Information									Analytical Information								
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		7/11/2013	WM201	11:00am	DS	6.65	1337	21	6.88	19.4		962970	0.1	3	1300	6.8	1000	13	8.1
		15/01/2014	WM201	10:45am	TB						Not Flowing								
		9/04/2014	WM201	12:20pm	TB						Not Flowing								
		17/06/2014	WM201	1:25pm	PM						Not Flowing								
		25/06/2013	WM201	2:45pm	DS	7.06	242	8.9	7.43	281									
2013/14	Minimum					6.65	242.00	8.90	6.88	19.40			0.10	3.00	1300.00	6.80	1000.00	13.00	8.10
	Maximum					7.06	1337.00	21.00	7.43	281.00			0.10	3.00	1300.00	6.80	1000.00	13.00	8.10
	Average					6.86	789.50	14.95	7.16	150.20			0.10	3.00	1300.00	6.80	1000.00	13.00	8.10
	StdDev					0.29	774.28	8.56	0.39	184.98			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					2.00	2.00	2.00	2.00	2.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 5.6 - Surface Water Results - Evaporation Dam 3 South (WM202)

EPL 11436	Statistics	Field Information									Analytical Information								
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		21/10/2013	WM202	0.58333333	DS	2.87	7440	19.4	8.54	231.5		960728	65	4	7440	2.87	9800	9	10
		13/01/2014	WM202	10:55am	DS	4.66	1467	23.4	8.51	473		CA14001102-008	82.9	2	8970	2.93	12100	10	15.4
		9/04/2014	WM202	11:10am	TB	6.79	9660	17	9.41	31.2		CA1401093-003	91.8	2	9290	2.78	13200	6	15.9
		12/06/2014	WM202	12:55pm	PM	2.69	9760	10.5	11.5	228.5	Water murky	CA1401785-003	85	2	9360	2.84	13000	7	14
2013/14	Minimum					2.69	1467.00	10.50	8.51	31.20			65.00	2.00	7440.00	2.78	9800.00	6.00	10.00
	Maximum					6.79	9760.00	23.40	11.50	473.00			91.80	4.00	9360.00	2.93	13200.00	10.00	15.90
	Average					4.25	7081.75	17.58	9.49	241.05			81.18	2.50	8765.00	2.86	12025.00	8.00	13.83
	StdDev					1.91	3893.33	5.41	1.40	180.82			11.43	1.00	899.50	0.06	1558.58	1.83	2.67
	Count					4.00	4.00	4.00	4.00	4.00			4.00	4.00	4.00	4.00	4.00	4.00	4.00

Table 5.7 - Surface Water Results - Evaporation Dam 3 North (WM203)

EPL 11436	Statistics	Field Information										Analytical Information							
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		21/10/2013	WM203	14:30	DS	4.42	16640	19.7	7.23	145.3		960729	580	22	16630	4.42	17000	190	600
		13/01/2014	WM203	11:22am	DS	4.75	19740	23.3	7.44	351		CA1400102-009	672	20	20300	4.79	19800	192	931
		9/04/2014	WM203	10:50am	TB	6.74	22400	18	7.88	34.1		CA1401093-002	754	22	20800	4.33	22300	206	820
		17/06/2014	WM203	2:00pm	PM	4.66	21700	9.3	10.58	120.6	Water clear	CA1401826-001	793	11	21600	4.5	21900	196	756
2013/14	Minimum					4.42	16640.00	9.30	7.23	34.10			580.00	11.00	16630.00	4.33	17000.00	190.00	600.00
	Maximum					6.74	22400.00	23.30	10.58	351.00			793.00	22.00	21600.00	4.79	22300.00	206.00	931.00
	Average					5.14	20120.00	17.58	8.28	162.75			699.75	18.75	19832.50	4.51	20250.00	196.00	776.75
	StdDev					1.07	2578.73	5.94	1.56	134.25			94.43	5.25	2201.11	0.20	2428.31	7.12	138.24
	Count					4.00	4.00	4.00	4.00	4.00			4.00	4.00	4.00	4.00	4.00	4.00	4.00

Table 5.8 - Surface Water Results - Pond 3

EPL 11436	Statistics	Field Information									Analytical Information								
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissovled Oxygen	Redox	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Total Dissolved Solids	Total Organic Carbon	Total Potassium
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L
		14/10/2013	Pond 3	14:30pm	DS						Not Flowing								
		21/01/2014	Pond 3	11:25am	DS						Not Flowing								
		9/04/2013	Pond 3	12:15pm	TB	6.78	4270	17.9	9	31.9	Water level low	CA1401093-004	9.1	2	4180	2.79	5350	11	2.8
		13/06/2014	Pond 3	8:30am	PM	3.05	3560	8.7	10.44	207.3	Water murky	CA1401809-003	10.2	2	3320	3.04	3940	6	3
2013/14	Minimum					3.05	3560.00	8.70	9.00	31.90			9.10	2.00	3320.00	2.79	3940.00	6.00	2.80
	Maximum					6.78	4270.00	17.90	10.44	207.30			10.20	2.00	4180.00	3.04	5350.00	11.00	3.00
	Average					4.92	3915.00	13.30	9.72	119.60			9.65	2.00	3750.00	2.92	4645.00	8.50	2.90
	StdDev					2.64	502.05	6.51	1.02	124.03			0.78	0.00	608.11	0.18	997.02	3.54	0.14
	Count					2.00	2.00	2.00	2.00	2.00			2.00	2.00	2.00	2.00	2.00	2.00	2.00

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Table 6.1 - Leachate Results - Leachate Dam

Statistics	Field Information									Analytical Information																																								
EPL 11436	Date	Site Code	Time	Sampler	pH	Cond.	Temp	ORP	DO	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Chromium (Hex)	Conductivity	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	pH	Sulphate	Total Suspended Solids	Total Dissolved Solids	Total Organic Carbon	Total Phosphorous	Total Aluminium	Total Arsenic	Total Barium	Total Cadmium	Total Calcium	Total Chromium	Total Cobalt	Total Copper	Total Lead	Total Magnesium	Total Manganese	Total Mercury	Total Phenols	Total Potassium	Total Sodium	Total Zinc
			AM/PM	Initials	pH	µS/cm	°C	mV	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
17/03/2011	LD	10.28	TH	7.94	30700	17.5	-25.6	0.23	829336	6390	0.1	6390	1900	3500	0.024	31000	2	1.6	0.01	0.0001	2	0.001	1100	37000	29000	3900	40	48	40	100	7.6	5900	2000	26000	10400	5	12	0.18	0.045	0.16	730	0.35	0.36	0.38	0.06	1100	0.82	0.0003	2.4	2100	3100	60
30/03/2012	LD	10.37	TH	7.8	34300	16.8	0	0.19	882567	9710	0.1	9710	1800	5400	0.1	35000	0.26	6.9	0.23	2.5	2.5	10	190	348000	21200	50	1	5	2	2	7.9	5100	3400	31000	13000	7.5	17	0.188	0.067	0.055	660	0.41	0.15	0.32	0.17	1400	0.91	0.0012	1.57	2900	4400	52
22/05/2013	LD	2:30pm	CC	8.8	23000	N/A	N/A	N/A	940239	5170	2230	7400	270	4700	0.1	23000	9	5	1												8.8	1600	2400	18000	2900	26	0.1	0.011	0.016	0.0004	36	0.62	0.1	0.19	0.0069	800	0.25	0.0011	<0.05	2000	3000	0.79
29/05/2013	LD	9:05:00 AM	CC	N/A	N/A	N/A	N/A	N/A	941057											2	2	0.5	20	1360	4420	630	1	2	2	2																						
29/05/2014	LD	12:00pm	CC	7.5	27100	16		3	CA1401648-001	653	0.1	653	690	3550	0.1	24400	7.8	70	1660	2	2	1	100	3390	6370	810	5	5	5	5	7.09	910	848	13400	1500	29.3	2.3	0.268	0.149	0.0107	266	0.55	0.102	0.267	0.0591	0.332	0.96	0.001	0.51	1610	2910	3.56

Table 6.2 - Leachate Results - Leachate Recirculation System

Statistics	Field Information																																																			
EPL 11436	Date	Site Code	Time	Sampler	pH	Cond.	Temp	ORP	DO	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chemical Oxygen Demand	Chloride	Chromium (Hex)	Conductivity	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	pH	Sulphate	Total Suspended Solids	Total Dissolved Solids	Nitrate + Nitrite (oxidised nitrogen)	Total Organic Carbon	Total Phosphorous	Total Aluminium	Total Arsenic	Total Barium	Total Cadmium	Total Calcium	Total Chromium	Total Cobalt	Total Copper	Total Iron	Total Lead	Total Magnesium	Total Manganese	Total Mercury	Total Phenols	Total Sodium	Total Zinc
			AM/PM	Initials	pH	µS/cm	°C	mV	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
17/03/2011	LR	9.54	TH	7.69	39800	28.4	-36.2	0.25	829337	16900	0.1	16900	3700	11100	3400	0.05	37000	1.5	0.89	0.07	0.0001	0.001	2	550	13000	42000	4100	40	49	40	80	8	130	720	16000		5900	23	35	0.29	0.41	0.016	370	2.9	0.4	0.46	140	0.25	930	3.7	0.0092	0.88	11400	20
30/03/2012	LR	10.51	TH	7.77	28500	28.8	0	0.22	882680	12600	0.1	12600	2300	5500	2500	0.1	27000	1.1	0.01	0.17	2	2	5	780	27100	37300	610	2	73	22	77	7.9	51	160	12000	0.1	3100	2.34	3.5	0.217	0.16	0.016	110	0.41	0.061	0.25	31	0.063	360	1	0.001	2.34	2300	6.8
3/05/2013	LR	11:30am	CC	N/A	21000	N/A	N/A	N/A	937588	6550	500	7570	620	N/A	3800	0.1	21000	0.1	5	1	5	5	1	20	8130	8980	1100	1	2	2	2	8.4	62	140	15000	5	3400	4.3	1.4	0.17	0.092	0.0028	41	0.1	0.043	0.033	N/A	0.0044	490	0.075	0.0005	2.71	2300	0.56
16/04/2014	LR	8:30am	CC	8.3	18500	23.2		0.07	CA1401181-001	15400	0.1	15400	3330	N/A	18100	0.1	33000	2.3	0.5	0.31	2	2	3.2	1380	8790	13300	1170	3	65	22	81	8.1	313	259	21400	0.5	5510	23.6	1.33	0.267	0.224	0.00246	87.1	0.604	0.0826	0.099	N/A	0.0354	172	0.461	0.0024	1.44	2720	1.56

Table 7.1 - Groundwater Results - MB 1

	Statistics	Field Information											Analytical Information												
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		23/10/2013	MB1	13:35	DS	7.07	1333	16.8	6.33	-4.6	26.49	771.02	960999	333	0.1	333	0.1	120	1400	140	69	4.8		7.5	270
		21/01/2014	MB1	8:55am	DS	6.84	1377	16.1	5.57	1.9	25.81	771.70	CA1400217-001	323	0.1	323	0.1	124	1390	131	69.4	5.5	42.2	7.48	270
		15/04/2014	MB1	11:30am	TB	6.67	1415	15.2	5.38	37.9	25.5	772.01	CA1401168-001	336	0.1	336	0.1	126	1400	134	73.4	5.9	45.6	7.16	275
		25/06/2014	MB1	10:00am	PM	6.59	1390	13.3	4.09	18.5	24.8	772.71	CA1401907-003	340	0.1	340	0.2	122	1340	131	73.2	4.8	46.9	7.17	266
2013/14	Minimum					6.59	1333	13.3	4.09	-4.6	24.8	771.02		323	0.1	323	0.1	120	1340	131	69	4.8	42.2	7.16	266
	Maximum					7.07	1415	16.8	6.33	37.9	26.49	772.71		340	0.1	340	0.2	126	1400	140	73.4	5.9	46.9	7.5	275
	Average					6.7925	1378.75	15.35	5.3425	13.425	25.65	771.86		333	0.1	333	0.125	123	1382.5	134	71.25	5.25	44.9	7.3275	270.25
	StdDev					0.212347985	34.335356	1.5154757	0.93042553	18.99567933	0.701474637	0.701474637		7.25718	0	7.25718035	0.05	2.581988897	28.72281	4.242640687	2.3741665	0.5446712	2.42693222	0.187861	3.685557
	Count					4	4	4	4	4	4	4		4	4	4	4	4	4	4	4	4	3	4	4

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	23/10/2013	1100																												
	21/01/2014	1030			0.001	0.00128		0.006	0.001			0.132																		
	15/04/2014	913	0.007	0.05	0.001	0.00078	0.0003	0.004	0.0007	0.017	0.0001	0.167	0.3	0.32	0.01	0.002	0.002	1	20	50	1010	480	1	2	2	2	0.05	6	0.0892	0.007
	25/06/2014	1060			0.002	0.00011		0.001	0.0002			0.242																		
Minimum		913	0.007	0.05	0.001	0.00011	0.0003	0.001	0.0002	0.017	0.0001	0.132	0.3	0.32	0.01	0.002	0.002	1	20	50	1010	480	1	2	2	2	0.05	6	0.0892	0.007
Maximum		1100	0.007	0.05	0.002	0.00128	0.0003	0.006	0.001	0.017	0.0001	0.242	0.3	0.32	0.01	0.002	0.002	1	20	50	1010	480	1	2	2	2	0.05	6	0.0892	0.007
Average		1025.75	0.007	0.05	0.001333333	0.000723	0.0003	0.0036667	0.0006333	0.017	0.0001	0.180333	0.3	0.32	0.01	0.002	0.002	1	20	50	1010	480	1	2	2	2	0.05	6	0.0892	0.007
StdDev		80.450295	#DIV/0!	#DIV/0!	0.00057735	0.000587	#DIV/0!	0.0025166	0.0004041	#DIV/0!	#DIV/0!	0.056199	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		4	1	1	3	3	1	3	3	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.2 - Groundwater Results - MB 2

	Statistics	Field Information											Analytical Information												
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		14/10/2013	MB2	13:42	DS	6.69	6540	15.1	1.06	18.9	2.71	779.15	959585	191	0.1	191	0.1	570	6540	520	730	1.6	250	7.3	4100
		8/11/2013	MB2	11:05am	DS								963213	211	0.1	211	0.1	590			840	1.9	260		3800
		15/01/2014	MB3	10:25am	DS	6.52	6520	17.8	Probe Failed		3.08	778.78	CA1400135-005	192	0.1	192	0.1	630	6650	500	854	1.7	242	6.91	3950
		10/04/2014	MB2	12:05am	TB	6.47	6680	15.1	0.65	49.6	3	778.86	CA1401099-006	199	0.1	199	0.1	646	6670	484	789	1.8	266	6.59	4160
		24/06/2014	MB2	2:55pm	PM	6.65	6710	13.1	2.65	15	3.14	778.72	CA1401898-001	194	0.1	194	0.1	620	6660	510	808	1.8	269	6.78	3220
2013/14	Minimum					6.47	6520	13.1	0.65	15	2.71	778.72		191	0.1	191	0.1	570	6540	484	730	1.6	242	6.59	3220
	Maximum					6.69	6710	17.8	2.65	49.6	3.14	779.15		211	0.1	211	0.1	646	6670	520	854	1.9	269	7.3	4160
	Average					6.5825	6612.5	15.275	1.453333333	27.83333333	2.9825	778.8775		197.4	0.1	197.4	0.1	611.2	6630	503.5	804.2	1.76	257.4	6.895	3846
	StdDev					0.104363148	96.393292	1.9293781	1.056424788	18.95107737	0.190503718	0.190503718		8.20366	0	8.20365772	0	30.7766145	60.55301	15.35143859	48.766792	0.1140175	11.26055061	0.300278	376.8023
	Count					4	4	4	3	3	4	4		5	5	5	5	5	4	4	5	5	5	4	5

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	14/10/2013	7500			0.002	0.0043		0.0039	0.00005			0.084																		
	8/11/2013	7000			0.002	0.0043		0.0042	0.00005			0.032																		
	15/01/2014	7200			0.003	0.00533		0.004	0.0002			0.014																		
	10/04/2014	4340	0.01	0.11	0.003	0.0077	0.0023	0.01	0.0002	0.062	0.0001	0.214	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0226	0.001
	24/06/2014	7060			0.002	0.0269		0.005	0.0002			0.051																		
Minimum		4340	0.01	0.11	0.002	0.0043	0.0023	0.0039	0.00005	0.062	0.0001	0.014	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0226	0.001
Maximum		7500	0.01	0.11	0.003	0.0269	0.0023	0.01	0.0002	0.062	0.0001	0.214	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0226	0.001
Average		6620	0.01	0.11	0.0024	0.009706	0.0023	0.00542	0.00014	0.062	0.0001	0.079	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0226	0.001
StdDev		1289.1082	#DIV/0!	#DIV/0!	0.000547723	0.009712	#DIV/0!	0.0025965	8.216E-05	#DIV/0!	#DIV/0!	0.079793	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		5	1	1	5	5	1	5	5	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.3 - Groundwater Results - MB 3

	Statistics	Field Information											Analytical Information												
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		14/10/2013	MB3	14:10	DS	6.73	2011	15.4	3.02	16.5	2.13	791.07	959583	245	0.1	245	0.1	530	2011	130	100	1.5	70	7.3	34
		8/11/2013	MB3	10:40am	DS								963214	254	0.1	254	0.1	510			110	1.7	71		34
		15/01/2014	MB3	9:50am	DS	6.78	1945	17.4	Probe Failed		2.19	791.01	CA1400135-006	242	0.1	242	0.1	516	1980	128	105	1.6	64.7	6.91	33.3
		11/04/2014	MB3	11:05am	TB	6.52	1987	15.7	2.68	42.7	2.05	791.15	CA1401140-002	241	0.1	241	0.1	523	1970	130	105	1.6	71.4	6.8	34.6
		24/06/2014	MB3	2:15pm	PM	6.71	1971	12.9	4.07	11.5	2.15	791.05	CA1401898-002	230	0.1	230	0.1	498	1980	131	108	1.6	74.6	6.92	31.3
2013/14	Minimum					6.52	1945	12.9	2.68	11.5	2.05	791.01		230	0.1	230	0.1	498	1970	128	100	1.5	64.7	6.8	31.3
	Maximum					6.78	2011	17.4	4.07	42.7	2.19	791.15		254	0.1	254	0.1	530	2011	131	110	1.7	74.6	7.3	34.6
	Average					6.685	1978.5	15.35	3.256666667	23.56666667	2.13	791.07		242.4	0.1	242.4	0.1	515.4	1985.25	129.75	105.6	1.6	70.34	6.9825	33.44
	StdDev					0.113871272	27.730849	1.8556221	0.724591839	16.75748589	0.058878406	0.058878406		8.61974	0	8.61974478	0	12.28006515	17.80215	1.258305739	3.7815341	0.0707107	3.592770519	0.218537	1.281796
	Count					4	4	4	3	3	4	4		5	5	5	5	5	4	4	5	5	5	4	5

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	14/10/2013	1700			0.002	0.00016		0.0007	0.00005			0.012																		
	8/11/2013	1500			0.002	0.00016		0.0019	0.00007			0.031																		
	15/01/2014	1620			0.002	0.00018		0.002	0.0002			0.02																		
	11/04/2014	1280	0.01	0.04	0.002	0.00034	0.0004	0.003	0.0002	0.001	0.0001	0.014	523	0.61	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.0363	0.001
	24/06/2014	1390			0.001	0.00028		0.003	0.0002			0.013																		
Minimum		1280	0.01	0.04	0.001	0.00016	0.0004	0.0007	0.00005	0.001	0.0001	0.012	523	0.61	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.0363	0.001
Maximum		1700	0.01	0.04	0.002	0.00034	0.0004	0.003	0.0002	0.001	0.0001	0.031	523	0.61	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.0363	0.001
Average		1498	0.01	0.04	0.0018	0.000224	0.0004	0.00212	0.000144	0.001	0.0001	0.018	523	0.61	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.0363	0.001
StdDev		169.46976	#DIV/0!	#DIV/0!	0.000447214	8.17E-05	#DIV/0!	0.0009524	7.701E-05	#DIV/0!	#DIV/0!	0.007906	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		5	1	1	5	5	1	5	5	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.4 - Groundwater Results - MB 4

	Statistics	Field Information											Analytical Information												
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		21/10/2013	MB4	15:10pm	DS	5.18	1591	18	2.83	101.1	11.75	774.75	960733	13.8	0.1	14	0.1	410	1591	7.2	82	1.6	160	5.5	210
		15/01/2014	MB4	12:24pm	DS	5.53	1651	19.3	2.52		11.89	774.61	CA1400135-001	13.9	0.1	14	0.1	431	1710	6.81	87.8	1.7	150	5.34	212
		10/04/2014	MB4	12:30am	TB	5.66	1757	15.4	2.22	95.6	11.94	774.56	CA1401099-007	14.9	0.1	15	0.1	420	1660	7.02	85.4	1.7	165	5.21	218
		25/06/2014	MB4	1:40pm	PM	5.54	1566	13.3	3.96	76.3	12.15	774.35	CA1401907-001	13.4	0.1	13	0.1	378	1520	6.56	79.7	1.5	154	5.2	201
2013/14	Minimum					5.18	1566	13.3	2.22	76.3	11.75	774.35		13.4	0.1	13	0.1	378	1520	6.56	79.7	1.5	150	5.2	201
	Maximum					5.66	1757	19.3	3.96	101.1	12.15	774.75		14.9	0.1	15	0.1	431	1710	7.2	87.8	1.7	165	5.5	218
	Average					5.4775	1641.25	16.5	2.8825	91	11.9325	774.5675		14	0.1	14	0.1	409.75	1620.25	6.8975	83.725	1.625	157.25	5.3125	210.25
	StdDev					0.206942021	85.011274	2.6795522	0.760279554	13.02420823	0.165806112	0.165806112		0.6377	0	0.81649658	0	22.83819899	82.7461	0.275726314	3.5864328	0.0957427	6.60176744	0.140327	7.041543
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	21/10/2013	1100						0.052	0.0072			0.69																		
	15/01/2014	1100			0.004	0.00254		0.05	0.0041			0.0694																		
	10/04/2014	1080	0.001	0.14	0.002	0.00398	0.0229	0.039	0.003	0.036	0.0001	0.764	0.2	0.35	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.027	0.001
	25/06/2014	1010			0.002	0.00147		0.05	0.0048			0.643																		
Minimum		1010	0.001	0.14	0.002	0.00147	0.0229	0.039	0.003	0.036	0.0001	0.0694	0.2	0.35	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.027	0.001
Maximum		1100	0.001	0.14	0.004	0.00398	0.0229	0.052	0.0072	0.036	0.0001	0.764	0.2	0.35	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.027	0.001
Average		1072.5	0.001	0.14	0.002666667	0.002663	0.0229	0.04775	0.004775	0.036	0.0001	0.5416	0.2	0.35	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	1	0.027	0.001
StdDev		42.720019	#DIV/0!	#DIV/0!	0.001154701	0.00126	#DIV/0!	0.005909	0.0017783	#DIV/0!	#DIV/0!	0.318716	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		4	1	1	3	3	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.5 - Groundwater Results - MB 5

	Statistics	Field Information											Analytical Information												
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		15/10/2013	MB5	13:55pm	DS	4.29	8220	15.3	1.08	152.4	5.94	828.04	959798	0.1	0.1	1	0.2	510	8220	140	900	6.6	430	4.1	6100
		16/01/2014	MB5	10:10am	DS	4.33	7750	18.1	0.68		6.06	827.92	CA1400166-001	0.1	0.1	1	0.2	566	7990	241	1160	7	554	4.33	5890
		14/04/2014	MB5	8:50am	TB	4.92	7840	15.4	0.85	137	6.2	827.78	CA1401146-001	0.1	0.1	1	0.2	565	7930	139	742	5.9	373	3.95	5790
		17/06/2014	MB5	12:30pm	PM	4.3	8460	14.6	1.1	142.7	6.26	827.72	CA1401827-001	0.1	0.1	1	0.3	553	8140	161	973	6.9	451	4.26	6040
2013/14	Minimum					4.29	7750	14.6	0.68	137	5.94	827.72		0.1	0.1	1	0.2	510	7930	139	742	5.9	373	3.95	5790
	Maximum					4.92	8460	18.1	1.1	152.4	6.26	828.04		0.1	0.1	1	0.3	566	8220	241	1160	7	554	4.33	6100
	Average					4.46	8067.5	15.85	0.9275	144.0333333	6.115	827.865		0.1	0.1	1	0.225	548.5	8070	170.25	943.75	6.6	452	4.16	5955
	StdDev					0.30713732	331.59966	1.5416441	0.200229036	7.786098724	0.143643076	0.143643076		0	0	0	0.05	26.3375524	133.4166	48.24503429	173.43274	0.4966555	75.56454195	0.169902	141.0674
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	15/10/2013	9900						0.0068	0.00067			280																		
	16/01/2014	9540			0.02	0.176		0.008	0.0011			298																		
	14/04/2014	5160	0.01	22.9	0.022	0.168	1.2	0.013	0.0036	25.7	0.0001	215	5.9	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0042	0.002
	17/06/2014	9750			0.026	0.233		0.006	0.0008			274																		
Minimum		5160	0.01	22.9	0.02	0.168	1.2	0.006	0.00067	25.7	0.0001	215	5.9	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0042	0.002
Maximum		9900	0.01	22.9	0.026	0.233	1.2	0.013	0.0036	25.7	0.0001	298	5.9	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0042	0.002
Average		8587.5	0.01	22.9	0.022666667	0.192333	1.2	0.00845	0.0015425	25.7	0.0001	266.75	5.9	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0042	0.002
StdDev		2289.7653	#DIV/0!	#DIV/0!	0.00305505	0.035445	#DIV/0!	0.0031427	0.0013834	#DIV/0!	#DIV/0!	35.97569	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		4	1	1	3	3	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.6 - Groundwater Results - MB 6

	Statistics	Field Information											Analytical Information												
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		7/11/2013	MB6	14:30pm	DS	5.27	4720	17.9	2.18	96.3	6.35	789.86	960608	34.2	0.1	34	0.1	1300	4700	32	320	13	430	6	780
		16/01/2014	MB6	11:40am	DS	5.18	5180	18.3	2.13		6.83	789.38	CA1400166-002	31.9	0.1	32	0.1	1480	5270	33	345	13.6	471	5.78	828
		14/04/2014	MB6	11:35am	TB	5.27	5330	15.8	2.35	117.6	6.65	789.56	CA1401146-007	33.4	0.1	33	0.2	1530	5370	33.6	349	13.6	472	5.48	846
		24/06/2014	MB6	11:15am	PM	5.61	5240	11.4	3.5	71.6	6.15	790.06	CA1401898-003	32.8	0.1	33	0.2	1580	5260	33	356	13.2	480	5.65	853
2013/14	Minimum					5.18	4720	11.4	2.13	71.6	6.15	789.38		31.9	0.1	32	0.1	1300	4700	32	320	13	430	5.48	780
	Maximum					5.61	5330	18.3	3.5	117.6	6.83	790.06		34.2	0.1	34	0.2	1580	5370	33.6	356	13.6	480	6	853
	Average					5.3325	5117.5	15.85	2.54	95.16666667	6.495	789.715		33.075	0.1	33	0.15	1472.5	5150	32.9	342.5	13.35	463.25	5.7275	826.75
	StdDev					0.189802529	272.07536	3.1628047	0.646889996	23.0209325	0.303479818	0.303479818		0.97082	0	0.81649658	0.057735	122.0314167	304.0833	0.663324958	15.673757	0.3	22.52961015	0.219298	32.89757
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	7/11/2013	3400			0.004	0.021		0.018	0.0012			9.6																		
	16/01/2014	3480			0.005	0.0249		0.022	0.0006			9.54																		
	14/04/2014	3490	0.01	0.26	0.005	0.0271	0.0067	0.008	0.0012	0.902	0.0001	4.79	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0269	0.001
	24/06/2014	3620			0.004	0.0217		0.003	0.0003			9.51																		
Minimum		3400	0.01	0.26	0.004	0.021	0.0067	0.003	0.0003	0.902	0.0001	4.79	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0269	0.001
Maximum		3620	0.01	0.26	0.005	0.0271	0.0067	0.022	0.0012	0.902	0.0001	9.6	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0269	0.001
Average		3497.5	0.01	0.26	0.0045	0.023675	0.0067	0.01275	0.000825	0.902	0.0001	8.36	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0269	0.001
StdDev		91.058589	#DIV/0!	#DIV/0!	0.00057735	0.002845	#DIV/0!	0.0087702	0.00045	#DIV/0!	#DIV/0!	2.380294	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		4	1	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.7 - Groundwater Results - MB 7

	Statistics	Field Information											Analytical Information												
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		23/10/2013	MB7	0.50347222	DS	6.68	8500	17.2	2.33	17	2.60	786.47	961000	655	0.1	655	0.1	2800	8500	320	580	10	560	7	160
		14/01/2014	MB7	10:48am	DS	6.43	8560	17.6	0.73		3.25	785.82	CA1400127-002	657	0.1	657	0.1	2800	8680	305	620	11.4	564	6.83	165
		10/04/2014	MB7	11:05am	TB	6.95	8570	15.1	0.76	22.4	3.86	785.21	CA1401099-005	655	0.1	866	0.1	2840	8860	310	598	12	577	6.76	203
		23/06/2014	MB7	11:45am	PM	6.68	7960	14.8	2.37	13.2	3.46	785.61	CA1401881-001	625	0.1	625	0.1	2570	8020	279	546	10.2	551	6.84	150
2013/14	Minimum					6.43	7960.00	14.80	0.73	13.20	2.60	785.21		625.00	0.10	625.00	0.10	2570.00	8020.00	279.00	546.00	10.00	551.00	6.76	150.00
	Maximum					6.95	8570.00	17.60	2.37	22.40	3.86	786.47		657.00	0.10	866.00	0.10	2840.00	8860.00	320.00	620.00	12.00	577.00	7.00	203.00
	Average					6.69	8397.50	16.18	1.55	17.53	3.29	785.78		648.00	0.10	700.75	0.10	2752.50	8515.00	303.50	586.00	10.90	563.00	6.86	169.50
	StdDev					0.190918831	431.33514	0.212132	1.138441918	6.505382387	0.282842712	0.282842712		21.2132	0	170.412734	0	190.9188309	593.9697	21.92031022	36.769553	1.2727922	18.38477631	0.056569	37.47666
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	23/10/2013	6700			0.011	0.0013		0.0049	0.00022			0.096																		
	14/01/2014	5690			0.013	0.00905			0.034			0.974																		
	10/04/2014	5620	0.01	0.23	0.014	0.0291	0.0247	0.131	0.0011	1.46	0.0001	3.16	0.4	0.13	0.02	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.19	0.001
	23/06/2014	4630			0.01	0.0019		1.08	0.0002			0.477																		
Minimum		4630.00	0.01	0.23	0.01	0.00	0.02	0.00	0.00	1.46	0.00	0.10	0.40	0.13	0.02	0.00	0.00	1.00	20.00	50.00	100.00	50.00	1.00	2.00	2.00	2.00	0.05	5.00	0.19	0.00
Maximum		6700.00	0.01	0.23	0.01	0.03	0.02	1.08	0.03	1.46	0.00	3.16	0.40	0.13	0.02	0.00	0.00	1.00	20.00	50.00	100.00	50.00	1.00	2.00	2.00	2.00	0.05	5.00	0.19	0.00
Average		5660.00	0.01	0.23	0.01	0.01	0.02	0.41	0.01	1.46	0.00	1.18	0.40	0.13	0.02	0.00	0.00	1.00	20.00	50.00	100.00	50.00	1.00	2.00	2.00	2.00	0.05	5.00	0.19	0.00
StdDev		700.03571	#DIV/0!	#DIV/0!	0.002828427	0.019233	#DIV/0!	0.6710443	0.0006364	#DIV/0!	#DIV/0!	1.897167	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		4	1	1	4	4	1	3	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.8 - Groundwater Results - MB 8

	Statistics	Field Information											Analytical Information												
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
		14/10/2013	MB8	0.54861111	DS	6.97	3600	15.7	1.15	3.4	3.26	749.31	959584	569	0.1	569	0.1	900	3600	100	140	2	410	7.7	110
		8/11/2013	MB8	11:05am									963212	594	0.1	594	0.1	840			130	2.1	430		110
		15/01/2014	MB8	9:28am	DS	7.04	3380	19	1.52		4.91	747.66	CA1400135-007	572	0.1	572	0.1	838	3490	89.7	138	2.1	418	7.29	107
		11/04/2014	MB8	10:45am	TB	6.79	3490	15.7	1.31	31.4	4.4	748.17	CA1401140-001	557	0.1	557	0.1	855	3490	93	136	2.1	429	7.22	107
		25/06/2014	MB8	1:05pm	PM	6.84	3610	14.2	2.25	3.6	4.11	748.46	CA1401907-002	575	0.1	575	0.1	843	3460	98.7	146	2.1	428	7.1	100
2013/14	Minimum					6.79	3380	14.2	1.15	3.4	3.26	747.66		557	0.1	557	0.1	838	3460	89.7	130	2	410	7.1	100
	Maximum					7.04	3610	19	2.25	31.4	4.91	749.31		594	0.1	594	0.1	900	3600	100	146	2.1	430	7.7	110
	Average					6.91	3520	16.15	1.5575	12.8	4.17	748.4		573.4	0.1	573.4	0.1	855.2	3510	95.35	138	2.08	423	7.3275	106.8
	StdDev					0.115181017	108.01234	2.0273135	0.485892649	16.10838291	0.690941387	0.690941387		13.3903	0	13.390295	0	25.89787636	61.64414	4.840454524	5.8309519	0.0447214	8.717797887	0.260432	4.086563
	Count					4	4	4	4	3	4	4		5	5	5	5	5	4	4	5	5	5	4	5

Statistics	Date	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	14/10/2013	2300			0.003	0.00023		0.0023	0.00005			0.005																		
	8/11/2013	2200			0.003	0.00023		0.0014	0.00014			0.008																		
	15/01/2014	2130			0.004	0.00019		0.003	0.0002			0.014																		
	11/04/2014	2270	0.001	0.03	0.003	0.0005	0.0004	0.005	0.0002	0.005	0.0001	0.026	0.9	5.09	0.03	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0835	0.001
	25/06/2014	2200			0.003	0.00005		0.001	0.0002																					
Minimum		2130	0.001	0.03	0.003	0.00005	0.0004	0.001	0.00005	0.005	0.0001	0.005	0.9	5.09	0.03	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0835	0.001
Maximum		2300	0.001	0.03	0.004	0.0005	0.0004	0.005	0.0002	0.005	0.0001	0.026	0.9	5.09	0.03	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0835	0.001
Average		2220	0.001	0.03	0.0032	0.00024	0.0004	0.00254	0.000158	0.005	0.0001	0.01325	0.9	5.09	0.03	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0835	0.001
StdDev		66.70832	#DIV/0!	#DIV/0!	0.000447214	0.000163	#DIV/0!	0.0015805	6.573E-05	#DIV/0!	#DIV/0!	0.009287	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count		5	1	1	5	5	1	5	5	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.9 - Groundwater Results - MB 10

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		23/10/2013	MB10	14:10pm	DS	6.63	7550	15.5	1.51		2.51	781.29	961001	227	0.1	227	0.1	1000	7500	520	740	1.2	480	7.1	3800	7500			0.003	0.00005		0.0063	0.00014			0.005																		
		14/01/2014	MB10	11:47am	DS	6.55	7560	17.5	0.74		2.81	780.99	CA1400127-003	232	0.1	232	0.1	1020	7490	484	770	1.2	465	6.87	3690	7370			0.003	0.00114		0.011	0.0002			0.026																		
		11/04/2014	MB10	11:45am	TB	6.75	7320	15.6	1.53	33.5	1.6	782.2	CA1401140-003	229	0.1	229	0.1	1030	7380	473	710	1.2	483	6.97	3910	4800	0.0100	0.07	0.003	0.0004	0.0018	0.008	0.0002	0.069	0.0001	0.039	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	2	0.0072	0.001
		24/06/2014	MB10	1:50pm	PM	6.72	7470	14.3	3.3	10.9	1.65	782.15	CA1401898-004	24	0.1	24	0.1	976	7420	502	742	1.2	490	7.03	3030	7290			0.002	0.00005		0.004	0.0002			0.006																		
2013/14	Minimum					6.55	7320	14.3	0.74	10.9	1.6	780.99		24	0.1	24	0.1	976	7380	473	710	1.2	465	6.87	3030	4800	0.01	0.07	0.002	0.00005	0.0018	0.004	0.00014	0.069	0.0001	0.005	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	2	0.0072	0.001
	Maximum					6.75	7560	17.5	3.3	33.5	2.81	782.2		232	0.1	232	0.1	1030	7500	520	770	1.2	490	7.1	3910	7500	0.01	0.07	0.003	0.00114	0.0018	0.011	0.0002	0.069	0.0001	0.039	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	2	0.0072	0.001
	Average					6.6625	7475	15.725	1.77	22.2	2.1425	781.6575		178	0.1	178	0.1	1006.5	7447.5	494.75	740.5	1.2	479.5	6.9925	3607.5	6740	0.01	0.07	0.00275	0.00041	0.0018	0.007325	0.000185	0.069	0.0001	0.019	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	2	0.0072	0.001
	StdDev					0.090691786	110.90537	1.3225606	1.084281636	15.98061325	0.610320954	0.610320954		102.687	0	102.687227	0	23.85372088	57.37305	20.64582282	24.515301	0	10.53565375	0.097425	395.3374	1296.2253	#DIV/0!	#DIV/0!	0.0005	0.000514	#DIV/0!	0.0029477	0.00003	#DIV/0!	#DIV/0!	0.016472	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	2	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.10 - Groundwater Results - MB 11

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		18/10/2013	MB11	12:50	DS	4.12	29100	15.2	6.11	161.5	1.3	782.5	960609	0.1	0.1	1	0.1	0.1	29100	330	5100	4	1300	3.9	30000	50000			0.031	23		110	0.0096			3400																		
		14/01/2014	MB11	10:12am	DS	4.16	35100	19.1	3.29		1.66	782.14	CA1400127-004	0.1	0.1	1	0.3	1820	36600	498	7910	7.2	2010	3.84	49200	79200			0.145	35.5		135	0.0318			6190																		
		10/04/2014	MB11	10:20	TB	4.1	38400	17.3	2.2	184.7	1.64	782.16	CA1401099-003	0.1	0.1	1	0.2	2140	37400	300	6760	8.3	1760	3.63	53600	24300	0.03	462	0.056	34.4	12	126	0.029	640	0.0001	5590	173	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.17	13	0.0269	0.03
		17/06/2014	MB11	10:45am	PM	3.92	39200	14.2	2.33	163.3	1.57	782.23	CA1401827-002	0.1	0.1	1	0.3	1970	38300	274	6900	7.6	2200	3.78	55400	81600			0.105	38.7		127	0.0252			6000																		
2013/14	Minimum					3.92	29100	14.2	2.2	161.5	1.3	782.14		0.1	0.1	1	0.1	0.1	29100	274	5100	4	1300	3.63	30000	24300	0.03	462	0.031	23	12	110	0.0096	640	0.0001	3400	173	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.17	13	0.0269	0.03
	Maximum					4.16	39200	19.1	6.11	184.7	1.66	782.5		0.1	0.1	1	0.3	2140	38300	498	7910	8.3	2200	3.9	55400	81600	0.03	462	0.145	38.7	12	135	0.0318	640	0.0001	6190	173	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.17	13	0.0269	0.03
	Average					4.075	35450	16.45	3.4825	169.8333333	1.5425	782.2575		0.1	0.1	1	0.225	1482.525	35350	350.5	6667.5	6.775	1817.5	3.7875	47050	58775	0.03	462	0.08425	32.9	12	124.5	0.0239	640	0.0001	5295	173	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.17	13	0.0269	0.03
	StdDev					0.106301458	4590.207	2.1886069	1.817862756	12.9063292	0.166207701	0.166207701		0	0	0	0.0957427	996.8915868	4224.137	100.9603883	1163.8263	1.9050372	389.2193041	0.115866	11661.19	27102.814	#DIV/0!	#DIV/0!	0.050842076	6.847384	#DIV/0!	10.472185	0.0099096	#DIV/0!	#DIV/0!	1287.905	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.11 - Groundwater Results - MB 12

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		18/10/2013	MB12	13:00pm	DS	3.65	39400	14.9	2.98	189.9	32.8	747.15	960610	0.1	0.1	1	0.5	1900	39400	330	8000	12	2500	3.2	59000	95000			0.056	45		280	1.1			6700																		
		14/01/2014	MB12	10:20am	DS	3.92	38600	17.6	0.96		2.19	777.76	CA1400127-005	0.1	0.1	1	0.6	1930	40200	558	9060	13.6	2640	3.56	57100	94200			0.199	41.5		291	1.03			7130																		
		10/04/2014	MB12	10:30am	TB	4.54	39100	15.2	1	158.7	1.6	778.35	CA1401099-004	0.1	0.1	1	0.5	2300	39800	304	7860	14.4	2010	3.47	60600	25900	0.1	702	0.081	38.6	16.1	177	1.16	750	0.0002	7350	171	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.5	16	20.8	0.038
		17/06/2014	MB12	11:00am	PM	3.71	41100	14.2	2.21	174.8	1.42	778.53	CA1401827-003	0.1	0.1	1	0.6	2020	39700	273	7500	12.4	2400	3.62	59200	90600			0.129	41.2		174	0.862			6190																		
2013/14	Minimum					3.65	38600	14.2	0.96	158.7	1.42	747.15		0.1	0.1	1	0.5	1900	39400	273	7500	12	2010	3.2	57100	25900	0.1	702	0.056	38.6	16.1	174	0.862	750	0.0002	6190	171	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.5	16	20.8	0.038
	Maximum					4.54	41100	17.6	2.98	189.9	32.8	778.53		0.1	0.1	1	0.6	2300	40200	558	9060	14.4	2640	3.62	60600	95000	0.1	702	0.199	45	16.1	291	1.16	750	0.0002	7350	171	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.5	16	20.8	0.038
	Average					3.955	39550	15.475	1.7875	174.4666667	9.5025	770.4475		0.1	0.1	1	0.55	2037.5	39775	366.25	8105	13.1	2387.5	3.4625	58975	76425	0.1	702	0.11625	41.575	16.1	230.5	1.038	750	0.0002	6842.5	171	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.5	16	20.8	0.038
	StdDev					0.406816912	1084.7427	1.4773287	0.984119742	15.60267071	15.53514805	15.53514805		0	0	0	0.057735	182.2772613	330.4038	129.939409	670.59675	1.1015141	270.2313823	0.18554	1438.46	33737.652	#DIV/0!	#DIV/0!	0.062935814	2.628529	#DIV/0!	63.678882	0.1287996	#DIV/0!	#DIV/0!	511.9489	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.12 - Groundwater Results - MB 13

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		15/10/2013	MB13	11:50	DS	6.99	3430	16.2	1.01	2.4	2.27	746.39	959801	603	0.1	603	0.1	840	3430	140	170	3	280	7.3	72	2300						0.0017	0.00005			0.016																		
		14/01/2014	MB13	8:55am	DS	6.83	3440	17.6	3.55		2.78	745.88	CA1400127-006	604	0.1	604	0.1	863	3610	137	210	1.7	138	7.16	54.8	2410			0.003	0.0093		0.054	0.0006			0.562																		
		10/04/2014	MB13	8:35am	TB	7.08	3490	15.5	0.61	15	2.5	746.16	CA1401099-001	614	0.1	615	0.1	862	3440	138	185	3.1	294	7.04	67.2	2240	0.01	0.04	0.004	0.00032	0.0004	0.002	0.0002	0.006	0.0001	0.021	0.6	0.71	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	6	0.0294	0.001
		17/06/2014	MB13	9:00am	PM	6.72	3460	13.6	3.5	8.8	2.42	746.24	CA1401827-004	608	0.1	608	0.1	786	3360	132	183	3.2	309	7.13	80	3220			0.004	0.0069		0.042	0.0002			1.03																		
2013/14	Minimum					6.72	3430	13.6	0.61	2.4	2.27	745.88		603	0.1	603	0.1	786	3360	132	170	1.7	138	7.04	54.8	2240	0.01	0.04	0.003	0.00032	0.0004	0.0017	0.00005	0.006	0.0001	0.016	0.6	0.71	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	6	0.0294	0.001
	Maximum					7.08	3490	17.6	3.55	15	2.78	746.39		614	0.1	615	0.1	863	3610	140	210	3.2	309	7.3	80	3220	0.01	0.04	0.004	0.0093	0.0004	0.054	0.0006	0.006	0.0001	1.03	0.6	0.71	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	6	0.0294	0.001
	Average					6.905	3455	15.725	2.1675	8.733333333	2.4925	746.1675		607.25	0.1	607.5	0.1	837.75	3460	136.75	187	2.75	255.25	7.1575	68.5	2542.5	0.01	0.04	0.003666667	0.005507	0.0004	0.024925	0.0002625	0.006	0.0001	0.40725	0.6	0.71	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	6	0.0294	0.001
	StdDev					0.160934769	26.457513	1.6640813	1.576121294	6.300264545	0.214067746	0.214067746		4.99166	0	5.44671155	0	36.09593698	106.1446	3.403429643	16.713268	0.7047458	79.05852263	0.107819	10.54957	457.11961	#DIV/0!	#DIV/0!	0.00057735	0.004649	#DIV/0!	0.0270916	0.0002358	#DIV/0!	#DIV/0!	0.487863	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	3	3	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.13 - Groundwater Results - MB 14

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		15/10/2013	MB14	13:00	DS	7.24	2420	15.1	2.69	-11.9	8.54	783.83	959799	295	0.1	295	0.1	79	2420	160	180	1.5	140	7.3	1100	2200						0.0017	0.00005			0.012																		
		14/01/2014	MB14	9:45am	DS	7.16	2430	16.6	2.19		8.92	783.45	CA1400127-007	297	0.1	297	0.1	91.5	2630	171	210	1.7	138	7.24	1150	2270			0.001	0.00369		0.021	0.0002			0.243																		
		10/04/2014	MB14	9:15am	TB	7.1	2450	14.7	3.1	13.8	7.1	785.27	CA1401099-002	304	0.1	304	0.1	89.1	2440	157	197	1.7	148	7.16	1070	1590	0.0100	0.05	0.001	0.00012	0.0005	0.002	0.0002	0.002	0.0001	0.015	1.2	8.65	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0052	0.001
		17/06/2014	MB14	10:20am	PM	7.03	2730	15.2	3.44	-8.6	9.12	783.25	CA1401827-005	303	0.1	303	0.1	101	2620	172	220	1.7	166	7.22	1250	2260			0.001	0.00066		0.004	0.0002			0.114																		
2013/14	Minimum					7.03	2420	14.7	2.19	-11.9	7.1	783.25		295	0.1	295	0.1	79	2420	157	180	1.5	138	7.16	1070	1590	0.01	0.05	0.001	0.00012	0.0005	0.0017	0.00005	0.002	0.0001	0.012	1.2	8.65	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0052	0.001
	Maximum					7.24	2730	16.6	3.44	13.8	9.12	785.27		304	0.1	304	0.1	101	2630	172	220	1.7	166	7.3	1250	2270	0.01	0.05	0.001	0.00369	0.0005	0.021	0.0002	0.002	0.0001	0.243	1.2	8.65	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0052	0.001
	Average					7.1325	2507.5	15.4	2.855	-2.233333333	8.42	783.95		299.75	0.1	299.75	0.1	90.15	2527.5	165	201.75	1.65	148	7.23	1142.5	2080	0.01	0.05	0.001	0.00149	0.0005	0.007175	0.0001625	0.002	0.0001	0.096	1.2	8.65	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	3	0.0052	0.001
	StdDev					0.089209491	148.85675	0.8286535	0.539042361	13.98296583	0.912286505	0.912286505		4.42531	0	4.42530602	0	9.036407841	112.9528	7.615773106	17.289207	0.1	12.75408431	0.057735	78.89867	328.12599	#DIV/0!	#DIV/0!	0	0.001924	#DIV/0!	0.009273	0.000075	#DIV/0!	#DIV/0!	0.108858	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	3	3	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.14 - Groundwater Results - MB 15

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		23/10/2013	MB15	12:40pm	DS	6.51	7490	15.5	1.09	26.6	0	764.86	961002	497	0.1	497	0.1	470	7600	470	1100	17	300	6.9	5200	8800						0.0065	0.00005			0.17																		
		16/01/2014	MB15	10:40am	DS	6.26	7380	19.6	0.85		0	764.86	CA1400166-033	491	0.1	491	0.1	474	7670	443	1090	18.4	323	6.94	5260	8710			0.004	0.00144		0.003	0.0002			0.164																		
		14/04/2014	MB15	10:05am	TB	6.23	7590	16.1	1.01	63.4	1.66	763.2	CA1401146-004	482	0.1	482	0.1	478	7650	443	1060	17.7	306	6.57	5270	4970	0.01	0.25	0.004	0.0111	0.0129	0.047	0.0004	3.43	0.0001	1.27	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0201	0.001
		24/06/2014	MB15	1:00pm	PM	6.47	7660	13.5	3.16	24.6	0	764.86	CA1401898-005	492	0.1	492	0.1	464	7540	464	1080	17.1	302	6.84	3780	8510			0.003	0.00129		0.016	0.0002			0.211																		
2013/14	Minimum					6.23	7380	13.5	0.85	24.6	0	763.2		482	0.1	482	0.1	464	7540	443	1060	17	300	6.57	3780	4970	0.01	0.25	0.003	0.00129	0.0129	0.003	0.00005	3.43	0.0001	0.164	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0201	0.001
	Maximum					6.51	7660	19.6	3.16	63.4	1.66	764.86		497	0.1	497	0.1	478	7670	470	1100	18.4	323	6.94	5270	8800	0.01	0.25	0.004	0.0111	0.0129	0.047	0.0004	3.43	0.0001	1.27	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0201	0.001
	Average					6.3675	7530	16.175	1.5275	38.2	0.415	764.445		490.5	0.1	490.5	0.1	471.5	7615	455	1082.5	17.55	307.75	6.8125	4877.5	7747.5	0.01	0.25	0.003666667	0.00461	0.0129	0.018125	0.0002125	3.43	0.0001	0.45375	0.3	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0201	0.001
	StdDev					0.142916059	121.92894	2.539521	1.092897525	21.84673889	0.83	0.83		6.245	0	6.244998	0	5.972157622	58.02298	14.07124728	17.078251	0.6454972	10.46820583	0.166808	732.3194	1855.6288	#DIV/0!	#DIV/0!	0.00057735	0.005621	#DIV/0!	0.0200182	0.0001436	#DIV/0!	#DIV/0!	0.544567	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	3	3	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.15 - Groundwater Results - MB 16

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		18/10/2013	MB16	14:10pm	DS	3.33	33000	15.3	1.23	206.1	2.34	769.05	960611	0.1	0.1	1	8.1	220	33000	320	7300	5.3	290	2.9	57000	91000			0.055	32		220	0.45			64000																		
		16/01/2014	MB16	11:10am	DS	3.26	32000	19.6	1.61		2.44	768.95	CA1400166-004	0.1	0.1	1	8.1	266	33800	527	7960	6.9	284	3.23	59400	89600			0.089	23.4		232	0.474			7280																		
		14/04/2014	MB16	9:45am	TB	3.73	33600	17.5	1.01	206.3	2.3	769.09	CA1401146-003	0.1	0.1	1	8.5	261	34200	317	4640	7.5	1780	3	61100	22200	0.01	1790	0.133	25	22.9	162	0.58	212	0.0002	307	214	0.69	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.59	35	0.0124	0.008
		17/06/2014	MB16	1:45pm	PM	3.24	35000	16.5	1.54	202.8	2.39	769.00	CA1401827-006	0.1	0.1	1	8.4	251	35100	381	6070	4.1	189	3.19	65300	96600			0.109	26.9		179	0.486			5270																		
2013/14	Minimum					3.24	32000	15.3	1.01	202.8	2.3	768.95		0.1	0.1	1	8.1	220	33000	317	4640	4.1	189	2.9	57000	22200	0.01	1790	0.055	23.4	22.9	162	0.45	212	0.0002	307	214	0.69	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.59	35	0.0124	0.008
	Maximum					3.73	35000	19.6	1.61	206.3	2.44	769.09		0.1	0.1	1	8.5	266	35100	527	7960	7.5	1780	3.23	65300	96600	0.01	1790	0.133	32	22.9	232	0.58	212	0.0002	64000	214	0.69	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.59	35	0.0124	0.008
	Average					3.39	33400	17.225	1.3475	205.0666667	2.3675	769.0225		0.1	0.1	1	8.275	249.5	34025	386.25	6492.5	5.95	635.75	3.08	60700	74850	0.01	1790	0.0965	26.825	22.9	198.25	0.4975	212	0.0002	19214.25	214	0.69	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.59	35	0.0124	0.008
	StdDev					0.229927525	1254.3258	1.820943	0.279090786	1.965536398	0.060759087	0.060759087		0	0	0	0.2061553	20.63169083	873.2125	98.35776533	1462.4038	1.5438048	764.234857	0.156418	3497.618	35230.053	#DIV/0!	#DIV/0!	0.033	3.734858	#DIV/0!	33.149912	0.057	#DIV/0!	#DIV/0!	30000.64	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.16 - Groundwater Results - MB 17

	Statistics	Field Information											Analytical Information																																									
SML20		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
EPL 11436				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		18/10/2013	MB17	13:50pm	DS	6.27	11570	16.9	4.6	42.9	3.62	767.45	960607	483	0.1	483	0.1	500	11570	460	2200	24	550	6.9	9400	15000			0.003	0.0053		0.022	0.00005			5.6																		
		16/01/2014	MB17	10:57am	DS	6.2	10960	19.8	1.38		3.44	767.63	CA1400166-005	500	0.1	500	0.1	556	11300	376	1820	25.6	577	5.7	9010	14200			0.008	0.0153		0.057	0.0018			5.7																		
		14/04/2014	MB17	9:25am	TB	6.3	11240	16.8	0.98	59.3	3	768.07	CA1401146-002	476	0.1	476	0.1	571	11400	390	1860	25.6	580	6.26	9100	7380	0.01	0.08	0.005	0.00622	0.0329	0.013	0.001	15.4	0.0001	4.79	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	140	0.018	0.001
		17/06/2014	MB17	1:15pm	PM	6.01	11590	15.3	3.06	48.1	3.37	767.70	CA1401827-007	500	0.1	500	0.1	552	11600	393	1960	26.2	591	6.49	9710	14900			0.006	0.0173		0.046	0.0006			7.54																		
2013/14	Minimum					6.01	10960	15.3	0.98	42.9	3	767.45		476	0.1	476	0.1	500	11300	376	1820	24	550	5.7	9010	7380	0.01	0.08	0.003	0.0053	0.0329	0.013	0.00005	15.4	0.0001	4.79	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	140	0.018	0.001
	Maximum					6.3	11590	19.8	4.6	59.3	3.62	768.07		500	0.1	500	0.1	571	11600	460	2200	26.2	591	6.9	9710	15000	0.01	0.08	0.008	0.0173	0.0329	0.057	0.0018	15.4	0.0001	7.54	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	140	0.018	0.001
	Average					6.195	11340	17.2	2.505	50.1	3.3575	767.7125		489.75	0.1	489.75	0.1	544.75	11467.5	404.75	1960	25.35	574.5	6.3375	9305	12870	0.01	0.08	0.0055	0.01103	0.0329	0.0345	0.0008625	15.4	0.0001	5.9075	0.6	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	140	0.018	0.001
	StdDev					0.130256158	299.88887	1.8814888	1.662157233	8.380930736	0.260560294	0.260560294		12.1758	0	12.1757957	0	30.93406968	142.2146	37.57104381	170.48949	0.9433981	17.40689519	0.500691	317.3326	3677.2635	#DIV/0!	#DIV/0!	0.002081666	0.006151	#DIV/0!	0.0204695	0.0007364	#DIV/0!	#DIV/0!	1.162107	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					4	4	4	4	3	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.17 - Groundwater Results - ED3B

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		21/10/2013	ED3B	14:40pm	DS	6.66	7560	16.6	3.77	18.1	2.46	784.34	960732	535	0.1	535	0.1	2000	7560	89	400	0.9	970	7.1	1000	5500	
		20/01/2014	ED3B	11:40am	DS	6.8	7750	18.1	6.39	4.4	2.52	784.28	CA1400190-001	538	0.1	538		2030	7780	89.2	366	1	988	6.91	1040	5110	
		15/04/2014	ED3B	9:20am	TB	6.49	7680	17.2	2.98	48.2	0.74	786.06	CA1401168-001	517	0.1	517	0.1	2100	7720	88.7	379	0.9	999	7	1120	5020	0.002
		23/06/2014	ED3B	10:20am	PM	6.68	7700	12.4	9.44	13	0.72	786.08	CA1401881-002	532	0.1	532	0.1	1930	7750	88.8	401	0.8	1060	6.98	1070	5130	
2013/14	Minimum					6.49	7560	12.4	2.98	4.4	0.72	784.28		517	0.1	517	0.1	1930	7560	88.7	366	0.8	970	6.91	1000	5020	0.002
	Maximum					6.8	7750	18.1	9.44	48.2	2.52	786.08		538	0.1	538	0.1	2100	7780	89.2	401	1	1060	7.1	1120	5500	0.002
	Average					6.6575	7672.5	16.075	5.645	20.925	1.61	785.19		530.5	0.1	530.5	0.1	2015	7702.5	88.925	386.5	0.9	1004.25	6.9975	1057.5	5190	0.002
	StdDev					0.127638813	80.57088	2.526361	2.919754556	19.0419493	1.016464461	1.016464461		9.32738	0	9.32737905	1.7E-17	70.47458171	98.10708	0.221735578	17.019597	0.0816497	39.04164443	0.078475	50.57997	212.13203	#DIV/0!
	Count					4	4	4	4	4	4	4		4	4	4	3	4	4	4	4	4	4	4	4	4	1

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
21/10/2013					0.01	0.0005			0.35																		
20/01/2014		0.012	0.00236		0.011	0.0002			0.037																		
15/04/2014	0.4	0.01	0.00243	0.0044	0.007	0.0002	0.417	0.0004	0.134	0.5	0.17	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0444	0.002
23/06/2014		0.007	0.00214		0.107	0.0002			0.274																		
Minimum	0.4	0.007	0.00214	0.0044	0.007	0.0002	0.417	0.0004	0.037	0.5	0.17	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0444	0.002
Maximum	0.4	0.012	0.00243	0.0044	0.107	0.0005	0.417	0.0004	0.35	0.5	0.17	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0444	0.002
Average	0.4	0.009666667	0.00231	0.0044	0.03375	0.000275	0.417	0.0004	0.19875	0.5	0.17	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0444	0.002
StdDev	#DIV/0!	0.002516611	0.000151	#DIV/0!	0.0488629	0.00015	#DIV/0!	#DIV/0!	0.140113	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1	3	3	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.18 - Groundwater Results - WM1

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Temperature	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	mV	mg/L	°C	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		8/11/2013	WM1	12:30pm	DS	6.85	2177	7.7	5.36	20.4	44.5	736.77	963215	233	0.1	233	0.1	210	2177		110	5	74	6.86	790	2000	
		21/01/2014	WM1	10:00am	DS	6.69	1861	10.4	7.2	18	44.64	736.63	CA1400217-002	190	0.1	190	0.1	171	1390	199	92.7	4.7	61.4	7.47	689	1520	
		16/04/2014	WM1	9:45am	TB	6.7	2084	36.2	7.43	14.3	44.5	736.77	CA1401180-001	186	0.1	186	0.1	176	1990	229	97.6	5.6	73.3	7.29	780	1300	0.01
		25/06/2014	WM1	12:20pm	PM	6.4	2150	28.6	2.12	12.9	44.6	736.67	CA1401907-004	205	0.1	205	0.1	181	2090	235	114	4.9	71.6	7.13	830	1780	
2013/14	Minimum					6.4	1861	7.7	2.12	12.9	44.5	736.63		186	0.1	186	0.1	171	1390	199	92.7	4.7	61.4	6.86	689	1300	0.01
	Maximum					6.85	2177	36.2	7.43	20.4	44.64	736.77		233	0.1	233	0.1	210	2177	235	114	5.6	74	7.47	830	2000	0.01
	Average					6.66	2068	20.725	5.5275	16.4	44.56	736.71		203.5	0.1	203.5	0.1	184.5	1911.75	221	103.575	5.05	70.075	7.1875	772.25	1650	0.01
	StdDev					0.188148877	143.42245	13.87741	2.453288609	3.42636834	0.071180522	0.071180522		21.2995	0	21.2994523	0	17.48332539	356.1258	19.28730152	10.065245	0.3872983	5.870476982	0.258763	59.556	304.84969	#DIV/0!
	Count					4	4	4	4	4	4	4		4	4	4	4	4	4	3	4	4	4	4	4	4	1

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
8/11/2013		0.002	0.022		0.025	0.013			4.2																		
21/01/2014		0.002	0.0223		0.025	0.0099			3.68																		
16/04/2014	0.06	0.001	0.0374	0.003	0.028	0.0126	0.234	0.0001	4.54	0.5	0.64	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0197	0.065
25/06/2014		0.001	0.0252		0.004	0.0051			4.18																		
Minimum	0.06	0.001	0.022	0.003	0.004	0.0051	0.234	0.0001	3.68	0.5	0.64	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0197	0.065
Maximum	0.06	0.002	0.0374	0.003	0.028	0.013	0.234	0.0001	4.54	0.5	0.64	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0197	0.065
Average	0.06	0.0015	0.026725	0.003	0.0205	0.01015	0.234	0.0001	4.15	0.5	0.64	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0197	0.065
StdDev	#DIV/0!	0.00057735	0.007261	#DIV/0!	0.0110905	0.0036373	#DIV/0!	#DIV/0!	0.354213	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.19 - Groundwater Results - WM4

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Temperature	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	mV	mg/L	°C	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		8/11/2013	WM4	1:45pm	DS	7.41	1967	23.8	2.7	22	98.9	635.02	963216	50.9	0.1	1967	0.1	45	1967		29	1.9	220	7.41	940	1500	
		21/01/2014	WM4	11:10am	DS	6.02	2077	48.3	3.68	19.9	93.54	640.38	CA1400217-003	168	0.1	168	0.1	46.7	2120	206	33	2.4	219	6.32	995	1670	
		16/04/2014	WM4	10:35am	TB	6.3	2200	59.8	1.86	19.9	95	638.92	CA1401180-002	260	0.1	260	0.1	46.7	2170	241	35.5	2.9	228	6.5	1000	1410	0.01
		25/06/2014	WM4	11:40am	PM	6.22	2092	38.5	1.5	12.8	91.8	642.12	CA1401907-005	115	0.1	115	0.1	44.4	1980	203	32.6	2.3	222	6.38	1000	1610	
2013/14	Minimum					6.02	1967.00	23.80	1.50	12.80	91.80	635.02		50.90	0.10	115.00	0.10	44.40	1967.00	203.00	29.00	1.90	219.00	6.32	940.00	1410.00	0.01
	Maximum					7.41	2200.00	59.80	3.68	22.00	98.90	642.12		260.00	0.10	1967.00	0.10	46.70	2170.00	241.00	35.50	2.90	228.00	7.41	1000.00	1670.00	0.01
	Average					7.41	1967.00	23.80	2.70	22.00	98.90	635.02		50.90	0.10	1967.00	0.10	45.00	1967.00	#DIV/0!	29.00	1.90	220.00	7.41	940.00	1500.00	#DIV/0!
	StdDev					0.63	95.32	15.26	0.97	4.02	3.02	3.02		88.43	0.00	895.01	0.00	1.18	101.24	21.13	2.68	0.41	4.03	0.51	29.26	115.58	#DIV/0!
	Count					4.00	4.00	4.00	4.00	4.00	4.00	4.00		4.00	4.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	1.00

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
8/11/2013		0.001	0.00089		0.0035	0.00005			0.14																		
21/01/2014		0.006	0.00005		0.005	0.0008			0.103																		
16/04/2014	0.06	0.018	0.00005	0.0368	0.002	0.0005	4.95	0.0001	0.94	0.4	0.05	0.01	0.002	0.002	1	30	50	100	50	1	3	9	3	0.05	6	0.0313	0.229
25/06/2014		0.012	0.0001		0.001	0.0008			0.663																		
Minimum	0.06	0.00	0.00	0.04	0.00	0.00	4.95	0.00	0.10	0.40	0.05	0.01	0.00	0.00	1.00	30.00	50.00	100.00	50.00	1.00	3.00	9.00	3.00	0.05	6.00	0.03	0.23
Maximum	0.06	0.02	0.00	0.04	0.01	0.00	4.95	0.00	0.94	0.40	0.05	0.01	0.00	0.00	1.00	30.00	50.00	100.00	50.00	1.00	3.00	9.00	3.00	0.05	6.00	0.03	0.23
Average	#DIV/0!	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!	#DIV/0!	0.14	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
StdDev	#DIV/0!	0.01	0.00	#DIV/0!	0.00	0.00	#DIV/0!	#DIV/0!	0.41	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1.00	4.00	4.00	1.00	4.00	4.00	1.00	1.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 7.20 - Groundwater Results - WM5

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Temperature	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	mV	mg/L	°C	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		21/10/2013	WM5	11:25am	DS	6.96	5780	-4.5	1.22	16.5	1.71	785.02	CA1400190-008	720	0.1	720		1590	5680	69.4	208	2.2	728	7.36	121	3400	
		20/01/2014	WM5	10:35am	TB	6.93	6270	23.5	1.17	16.6	1.42	785.31	CA1401146-005	764	0.1	764	0.1	4490	6270	79.4	243	2.5	844	7.21	141	4080	0.01
		14/04/2014	WM5	11:00am	PM	6.82	7040	5.3	4.06	14	2.5	784.23	CA1401881-003	849	0.1	849	0.2	2410	8300	131	405	3.1	1110	7.38	242	4920	
		23/06/2014	WM5	12:10pm	DS	7.31	6460		4.27	14.3	4.57	782.16	951506	756	0.1	756		1800	6460	90		2.7	870	7.6	150	3700	
2013/14	Minimum					6.82	5780	-4.5	1.17	14	1.42	782.16		720	0.1	720	0.1	1590	5680	69.4	208	2.2	728	7.21	121	3400	0.01
	Maximum					7.31	7040	23.5	4.27	16.6	4.57	785.31		849	0.1	849	0.2	4490	8300	131	405	3.1	1110	7.6	242	4920	0.01
	Average					7.005	6387.5	8.1	2.68	15.35	2.55	784.18		772.25	0.1	772.25	0.15	2572.5	6677.5	92.45	285.33333	2.625	888	7.3875	163.5	4025	0.01
	StdDev					0.212053452	520.85667	14.208448	1.716993496	1.391641716	1.421900137	1.421900137		54.6283	0	54.6282894	0.0707107	1324.798727	1131.5	27.04138803	105.10154	0.3774917	160.357933	0.160702	53.7184	658.35654	#DIV/0!
	Count					4	4	3	4	4	4	4		4	4	4	2	4	4	4	3	4	4	4	4	4	1

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
21/10/2013		0.01	0.00007		0.002	0.0002			0.006																		
20/01/2014	0.1	0.01	0.00251	0.0034	0.012	0.0002	1.17	0.0001	0.499	0.8	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	9	0.233	0.001
14/04/2014		0.014	0.00197		2.11	0.0002			0.74																		
23/06/2014					0.017	0.0074			0.033																		
Minimum	0.1	0.01	0.00007	0.0034	0.002	0.0002	1.17	0.0001	0.006	0.8	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	9	0.233	0.001
Maximum	0.1	0.014	0.00251	0.0034	2.11	0.0074	1.17	0.0001	0.74	0.8	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	9	0.233	0.001
Average	0.1	0.011333333	0.001517	0.0034	0.53525	0.002	1.17	0.0001	0.3195	0.8	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	9	0.233	0.001
StdDev	#DIV/0!	0.002309401	0.001282	#DIV/0!	1.0498519	0.0036	#DIV/0!	#DIV/0!	0.36028	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1	3	3	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.21 - Groundwater Results - WM6

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Temperature	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	mV	mg/L	°C	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		18/10/2013	WM6	13:20pm	DS	5.51	13350	84.5	7.67	16.6	4.8	785.54	960608	42.6	0.1	43	0.1	5000	13350	110	460	2.6	1800	6.1	390	8700	
		14/01/2014	WM6	11:06am	DS	5.92	13020		6	19	4.21	786.13	CA1400127-001	43.8	0.1	44	0.1	4740	13000	86.8	383	2	1760	6.88	348	8460	
		14/04/2014	WM6	12:25pm	TB	5.64	13010	96.6	7.63	16.1	4.48	785.86	CA1401146-006	47.5	0.1	48	0.1	4720	13000	101	416	3.2	1760	6	391	8480	0.015
		24/06/2014	WM6	11:45am	PM	5.71	13360	66.2	6.72	11.9	4.45	785.89	CA1401898-006	47.2	0.1	47	0.1	4890	13600	113	486	2.9	2060	6.05	350	8640	
2013/14	Minimum					5.51	13010	66.2	6	11.9	4.21	785.54		42.6	0.1	43	0.1	4720	13000	86.8	383	2	1760	6	348	8460	0.015
	Maximum					5.92	13360	96.6	7.67	19	4.8	786.13		47.5	0.1	48	0.1	5000	13600	113	486	3.2	2060	6.88	391	8700	0.015
	Average					5.695	13185	82.433333	7.005	15.9	4.485	785.855		45.275	0.1	45.5	0.1	4837.5	13237.5	102.7	436.25	2.675	1845	6.2575	369.75	8570	0.015
	StdDev					0.171367052	196.38398	15.30501	0.800853711	2.951835587	0.242280829	0.242280829		2.44864	0	2.38047614	0	132.2560648	292.6175	11.76265276	45.77026	0.5123475	144.5683229	0.417003	23.97742	118.3216	#DIV/0!
	Count					4	4	3	4	4	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
18/10/2013		0.019	0.032		0.16	0.014			4.7																		
14/01/2014		0.015	0.00621		0.023	0.0064			0.508																		
14/04/2014	0.06	0.019	0.00403	0.0414	0.023	0.0043	0.223	0.0007	0.53	0.3	20.5	0.01	0.002	0.002	1	20	50	160	70	1	2	2	2	0.05	4	0.0042	0.002
24/06/2014		0.019	0.00544		0.1	0.009			0.692																		
Minimum	0.06	0.015	0.00403	0.0414	0.023	0.0043	0.223	0.0007	0.508	0.3	20.5	0.01	0.002	0.002	1	20	50	160	70	1	2	2	2	0.05	4	0.0042	0.002
Maximum	0.06	0.019	0.032	0.0414	0.16	0.014	0.223	0.0007	4.7	0.3	20.5	0.01	0.002	0.002	1	20	50	160	70	1	2	2	2	0.05	4	0.0042	0.002
Average	0.06	0.018	0.01192	0.0414	0.0765	0.008425	0.223	0.0007	1.6075	0.3	20.5	0.01	0.002	0.002	1	20	50	160	70	1	2	2	2	0.05	4	0.0042	0.002
StdDev	#DIV/0!	0.002	0.013417	#DIV/0!	0.0664555	0.0041844	#DIV/0!	#DIV/0!	2.063299	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.22 - Groundwater Results - MW8S

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Temperature	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	mV	mg/L	°C	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		18/10/2013	MW8S	14:35pm	DS	6.15	12600	49.1	5.7	17.1	5.5	785.15	960612	439	0.1	439	0.1	3600	12600	280	1000	4.6	1100	6.9	2500	9700	
		15/01/2014	MW8S	8:35am	DS	6.59	12030		6.12	19.8	5.88	784.77	CA1400135-002	477	0.1	477	0.1	3550	12300	276	1090	5.2	1120	6.76	2320	10000	
		11/04/2014	MW8S	12:05pm	TB						5.94	784.71															
		23/06/2014	MW8S	2:15pm	PM	6.81	12150	6.2	9.12	10.9	5.69	784.96	CA1401881-004	499	0.1	499	0.1	3550	12100	259	929	5	1180	6.74	1620	8560	
		26/08/2014	MW8S	13:00pm	CC									433	0.1	433	0.1	3330		252	878	4.7	1030	6.88	1590	8480	0.01
2013/14	Minimum					6.15	12030	6.2	5.7	10.9	5.5	784.705		433	0.1	433	0.1	3330	12100	252	878	4.6	1030	6.74	1590	8480	0.01
	Maximum					6.81	12600	49.1	9.12	19.8	5.94	785.145		499	0.1	499	0.1	3600	12600	280	1090	5.2	1180	6.9	2500	10000	0.01
	Average					6.516666667	12260	27.65	6.98	15.93333333	5.7525	784.8925		462	0.1	462	0.1	3507.5	12333.33	266.75	974.25	4.875	1107.5	6.82	2007.5	9185	0.01
	StdDev					0.336055551	300.49958	30.334881	1.865154149	4.563259069	0.199227675	0.199227675		31.4325	0	31.4324673	0	120.6579187	251.6611	13.40087062	91.96512	0.2753785	61.84658438	0.08165	470.6998	778.26731	#DIV/0!
	Count					3	3	2	3	3	4	4		4	4	4	4	4	3	4	4	4	4	4	4	4	1

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
18/10/2013		0.02	0.29		0.24	0.0011			18																		
15/01/2014		0.016	0.196		0.026	0.003			5.07																		
11/04/2014																											
23/06/2014		0.016	0.218		1.1	0.0002			5.16																		
26/08/2014	1.44	0.016	0.282	0.0031	0.531	0.0122	0.186	0.0003	7.44	0.6	0.81	0.01	0.002	0.002	0.001	20	50	100	50	1	2	2	2	0.05	12	0.0472	0.006
Minimum	1.44	0.016	0.196	0.0031	0.026	0.0002	0.186	0.0003	5.07	0.6	0.81	0.01	0.002	0.002	0.001	20	50	100	50	1	2	2	2	0.05	12	0.0472	0.006
Maximum	1.44	0.02	0.29	0.0031	1.1	0.0122	0.186	0.0003	18	0.6	0.81	0.01	0.002	0.002	0.001	20	50	100	50	1	2	2	2	0.05	12	0.0472	0.006
Average	1.44	0.017	0.2465	0.0031	0.47425	0.004125	0.186	0.0003	8.9175	0.6	0.81	0.01	0.002	0.002	0.001	20	50	100	50	1	2	2	2	0.05	12	0.0472	0.006
StdDev	#DIV/0!	0.002	0.046601	#DIV/0!	0.465684	0.0055084	#DIV/0!	#DIV/0!	6.153505	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.23 - Groundwater Results - MW8D

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Temperature	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	mV	mg/L	°C	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		18/10/2013	MW8D	14:45pm	DS	6.05	0.03	54.7	6.05	17.5	5.31	785.24	960613	121	0.1	121	0.1	2100	0.03	350	980	6.1	760	6.4	4200	9400	
		15/01/2013	MW8D	8:25am	DS	6.11	10260		6.12	19.7	5.88	784.67	CA1400135-003	128	0.1	128	0.1	2180	10300	323	1140	5.8	771	6.19	3890	9840	
		11/04/2014	MW8D	12:20pm	TB	6.36	10380	55.8	3.43	17	5.53	785.02	CA1401140-006	139	0.1	139	0.1	2170	10400	329	1050	6.2	798	6.24	4230	6780	0.01
		23/06/2014	MW8D	1:50pm	PM	6.36	10520	31	5.75	13.4	5.14	785.41	CA1401881-005	123	0.1	123	0.1	1800	10400	385	1180	7	760	6.15	3750	10100	
2013/14	Minimum					6.05	0.03	31	3.43	13.4	5.14	784.668		121	0.1	121	0.1	1800		323	980	5.8	760	6.15	3750	6780	0.01
	Maximum					6.36	10520	55.8	6.12	19.7	5.88	785.408		139	0.1	139	0.1	2180	10400	385	1180	7	798	6.4	4230	10100	0.01
	Average					6.22	7790.0075	47.166667	5.3375	16.9	5.465	785.083		127.75	0.1	127.75	0.1	2062.5	7775.008	346.75	1087.5	6.275	772.25	6.245	4017.5	9030	0.01
	StdDev					0.163503313	5194.4051	14.011543	1.281753356	2.611512971	0.31942657	0.31942657		8.05709	0	8.05708798	0	178.5823806	5183.533	28.00446393	89.953692	0.5123475	17.93274472	0.109697	235.4251	1527.5689	#DIV/0!
	Count					4	4	3	4	4	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	1

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
18/10/2013		0.014	0.31		0.032	0.00013			21																		
15/01/2013		0.011	0.295		0.03	0.0004			18.5																		
11/04/2014	0.07	0.011	0.313	0.0226	0.029	0.0008	2.2	0.0003	18.6	0.4	0.38	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0182	0.044
23/06/2014		0.009	0.279		0.155	0.0002			16.2																		
Minimum	0.07	0.009	0.279	0.0226	0.029	0.00013	2.2	0.0003	16.2	0.4	0.38	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0182	0.044
Maximum	0.07	0.014	0.313	0.0226	0.155	0.0008	2.2	0.0003	21	0.4	0.38	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0182	0.044
Average	0.07	0.01125	0.29925	0.0226	0.0615	0.0003825	2.2	0.0003	18.575	0.4	0.38	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	4	0.0182	0.044
StdDev	#DIV/0!	0.002061553	0.015628	#DIV/0!	0.0623458	0.0003009	#DIV/0!	#DIV/0!	1.96023	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1	4	4	1	4	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 7.24 - Groundwater Results - MW9S

	Statistics	Field Information											Analytical Information														
EPL 11436		Date	Site Code	Time	Sampler	pH	Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Temperature	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
				AM/PM	Initials	pH	µS/cm	mV	mg/L	°C	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
		23/10/2013	MW9S	14:40pm	DS	6.38	10850	33.8	3.4	15	2.85	786.69	961003	229	0.1	229	0.1	1700	10800	370	930	2.7		6.8	4900	10000	
		15/01/2014	MW9S	9:00am	DS	6.66	10630		4.14	18.5	3.09	786.45	CA1400135-004	220	0.1	220	0.1	1820	10700	333	1000	2.9	1140	6.76	4640	9990	
		14/04/2014	MW9S	12:00am	TB	6.07	10840	72.5	2.51	16.2	3.15	786.39	CA1401146-008	226	0.1	226	0.1	4720	10900	348	927	3	1150	6.65	12500	7060	0.01
		23/06/2014	MW9S	12:40pm	PM	6.82	10960	5.5	6.45	12.8	3.05	786.49	CA1401881-006	233	0.1	233	0.1	1770	10900	369	1000	2.8	1150	6.59	3810	10300	
2013/14	Minimum					6.07	10630	5.5	2.51	12.8	2.85	786.394		220	0.1	220	0.1	1700	10700	333	927	2.7	1140	6.59	3810	7060	0.01
	Maximum					6.82	10960	72.5	6.45	18.5	3.15	786.694		233	0.1	233	0.1	4720	10900	370	1000	3	1150	6.8	12500	10300	0.01
	Average					6.4825	10820	37.266667	4.125	15.625	3.035	786.509		227	0.1	227	0.1	2502.5	10825	355	964.25	2.85	1146.666667	6.7	6462.5	9337.5	0.01
	StdDev					0.329684192	137.84049	33.634258	1.68717713	2.378199599	0.13	0.13		5.47723	0	5.47722558	0	1479.152347	95.74271	17.8325545	41.298709	0.1290994	5.773502692	0.096954	4051.752	1525.1311	#DIV/0!
	Count					4	4	3	4	4	4	4		4	4	4	4	4	4	4	4	4	3	4	4	4	1

	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
23/10/2013																											
15/01/2014		0.01	0.00243		0.019	0.001			0.219																		
14/04/2014	0.1	0.01	0.00307	0.0136	0.02	0.0005	0.06	0.0007	0.525	0.9	0.55	0.01	0.002	0.002	1	20	50	160	50	1	2	2	2	0.05	5	0.0124	0.008
23/06/2014		0.009	0.0014		0.362	0.0002			0.139																		
Minimum	0.1	0.009	0.0014	0.0136	0.019	0.0002	0.06	0.0007	0.139	0.9	0.55	0.01	0.002	0.002	1	20	50	160	50	1	2	2	2	0.05	5	0.0124	0.008
Maximum	0.1	0.01	0.00307	0.0136	0.362	0.001	0.06	0.0007	0.525	0.9	0.55	0.01	0.002	0.002	1	20	50	160	50	1	2	2	2	0.05	5	0.0124	0.008
Average	0.1	0.009666667	0.0023	0.0136	0.1336667	0.0005667	0.06	0.0007	0.294333	0.9	0.55	0.01	0.002	0.002	1	20	50	160	50	1	2	2	2	0.05	5	0.0124	0.008
StdDev	#DIV/0!	0.00057735	0.000843	#DIV/0!	0.1977431	0.0004041	#DIV/0!	#DIV/0!	0.203729	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Count	1	3	3	1	3	3	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 8.1 - Piezometer Water Level Results - P44A & P44B

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P44A	14.85	716.20	HG
		23/01/2014	P44A	15.25	715.80	HG
		27/03/2014	P44A	13.85	717.20	HG
		17/07/2014	P44A	14.6	716.45	HG
2013/14	Minimum			13.85	715.80	
	Maximum			15.25	717.20	
	Average			14.64	716.41	
	StdDev			0.589315	0.589315	
	Count			4	4	

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P44B	18.35	712.70	HG
		23/01/2014	P44B	19.05	712.00	HG
		27/03/2014	P44B	20.45	710.60	HG
		17/07/2014	P44B	19.95	711.10	HG
2013/14	Minimum			18.35	710.60	
	Maximum			20.45	712.70	
	Average			19.45	711.60	
	StdDev			0.934523	0.934523	
	Count			4	4	

Table 8.2 - Piezometer Water Level Results - P45A & P45B

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P45A	14.10	717.06	HG
		23/01/2014	P45A	15.50	715.66	HG
		27/03/2014	P45A	15.25	715.91	HG
		17/07/2014	P45A	14.95	716.21	HG
2013/14	Minimum			14.10	715.66	
	Maximum			15.50	717.06	
	Average			14.95	716.21	
	StdDev			0.609645	0.609645	
	Count			4	4	

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P45B	11.95	719.16	HG
		23/01/2014	P45B	11.35	719.76	HG
		27/03/2014	P45B	12.65	718.46	HG
		17/07/2014	P45B	12.35	718.76	HG
2013/14	Minimum			11.35	718.46	
	Maximum			12.65	719.76	
	Average			12.08	719.04	
	StdDev			0.561991	0.561991	
	Count			4	4	

Table 8.3 - Piezometer Water Level Results - P58A & P58B

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler	Comments
		10/11/2013	P58A	42.05	764.20	HG	
		23/01/2014	P58A	42.05	764.20	HG	
		27/03/2014	P58A	42.05	764.20	HG	
		17/07/2014	P58A	42.05	764.20	HG	
2013/14	Minimum			42.05	764.2		
	Maximum			42.05	764.2		
	Average			42.05	764.2		
	StdDev			0	0		
	Count			4	4		

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P58B	52.10	754.15	HG
		23/01/2014	P58B	57.65	748.60	HG
		27/03/2014	P58B	58.30	747.95	HG
		17/07/2014	P58B	59.70	746.55	HG
2013/14	Minimum			52.10	746.55	
	Maximum			59.70	754.15	
	Average			56.94	749.31	
	StdDev			3.34	3.34	
	Count			4	4	

Table 8.4 - Piezometer Water Level Results - P59A & P59B

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P59A	17.75	786.95	HG
		23/01/2014	P59A	17.85	786.85	HG
		27/03/2014	P59A	17.25	787.45	HG
		17/07/2014	P59A	18.05	786.65	HG
2013/14	Minimum			17.25	786.65	
	Maximum			18.05	787.45	
	Average			17.725	786.975	
	StdDev			0.340343	0.340343	
	Count			4	4	

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P59B	18.45	786.25	HG
		23/01/2014	P59B	19.5	785.20	HG
		27/03/2014	P59B	19.65	785.05	HG
		17/07/2014	P59B	19.45	785.25	HG
2013/14	Minimum			18.45	785.05	
	Maximum			19.65	786.25	
	Average			19.2625	785.4375	
	StdDev			0.548293	0.548293	
	Count			4	4	

Table 8.5 - Piezometer Water Level Results - P100A & P100B

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P100A	29.8	746.63	HG
		23/01/2014	P100A	30.85	745.58	HG
		27/03/2014	P100A	30.35	746.08	HG
		17/07/2014	P100A	29.85	746.58	HG
2013/14	Minimum			29.8	745.58	
	Maximum			30.85	746.63	
	Average			30.2125	746.2175	
	StdDev			0.492231	0.492231	
	Count			4	4	

EPL 11436	Statistics	Date	Site Code	Depth to Water m	RL water level	Sampler
		10/11/2013	P100B	78.14	698.29	HG
		23/01/2014	P100B	78.14	698.29	HG
		27/03/2014	P100B	78.14	698.29	HG
		17/07/2014	P100B	78.14	698.29	HG
2013/14	Minimum			78.14	698.29	
	Maximum			78.14	698.29	
	Average			78.14	698.29	
	StdDev			0.00	0.00	
	Count			4	4	

Table 9.1 - IMF Surface Water Results - Site 110

EPL 11455	Statistics	Field Information										Analytical Information														
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Sulphate	Total Suspended Solids	Total Dissolved Solids	Total Kjeldahl Nitrogen	Total Organic Carbon	Oil & Grease	Phosphorous	Total Copper	Total Iron	Total Lead	Total Zinc
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		15/10/2013	Site 110	10:15am	DS						Not Flowing																
		13/01/2014	Site 110	8:20am	TB						Not Flowing																
		11/04/2014	Site 110	10:25am	TB	6.47	932	16	6.26	49.7	Water clear and only just flowing	CA1401141-001	0.1	2	931	6.86	256	5	672	0.66	19	1	0.04	0.008	0.91	0.0012	1.03
		12/06/2014	Site 110	7:45am	PM						Not Flowing																
		19/08/2014	Site 110	1:35pm	TB							CA1402466-001	0.1	2	1660	7.57	236	6	1010	0.86	14	1	0.05	0.011	0.43	0.0016	0.369
2012/13	Minimum					6.47	932	16	6.26	49.7			0.1	2	931	6.86	236	5	672	0.66	14	1	0.04	0.008	0.43	0.0012	0.369
	Maximum					6.47	932	16	6.26	49.7			0.1	2	1660	7.57	256	6	1010	0.86	19	1	0.05	0.011	0.91	0.0016	1.03
	Average					6.47	932	16	6.26	49.7			0.1	2	1295.5	7.215	246	5.5	841	0.76	16.5	1	0.045	0.0095	0.67	0.0014	0.6995
	StdDev					#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			0	0	515.4808435	0.502046	14.14214	0.707106781	239.002	0.141421	3.53553391	0	0.007071068	0.00212132	0.339411	0.000283	0.467398
	Count					1	1	1	1	1			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Table 9.2 - IMF Surface Water Results - Site 130

EPL 11455	Statistics	Field Information										Analytical Information														
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Sulphate	Total Suspended Solids	Total Dissolved Solids	Total Kjeldahl Nitrogen	Total Organic Carbon	Oil & Grease	Phosphorous	Total Copper	Total Iron	Total Lead	Total Zinc
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		15/10/2013	Site 130	10:20am	DS						Not Flowing																
		13/01/2014	Site 130	8:30am	TB						Not Flowing																
		11/04/2014	Site 130	9:45am	TB	6.13	408	17.4	6.85	68.7	Water clear and just flowing. Sampled upstream of bridge	CA1401141-002	0.1	2	408	7.38	24.8	2	233	0.95	16	1	0.01	0.002	0.96	0.0002	0.012
		12/06/2014	Site 130	7:50am	PM						Not Flowing																
		19/08/2014	Site 130	13:05pm	TB							CA1402466-003	0.1	4	344	7.5	15.2	23	243	1.4	20	1	0.09	0.006	1.5	0.0014	0.018
2012/13	Minimum					6.13	408	17.4	6.85	68.7			0.1	2	344	7.38	15.2	2	233	0.95	16	1	0.01	0.002	0.96	0.0002	0.012
	Maximum					6.13	408	17.4	6.85	68.7			0.1	4	408	7.5	24.8	23	243	1.4	20	1	0.09	0.006	1.5	0.0014	0.018
	Average					6.13	408	17.4	6.85	68.7			0.1	3	376	7.44	20	12.5	238	1.175	18	1	0.05	0.004	1.23	0.0008	0.015
	StdDev					#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			0	1.414213562	45.254834	0.084853	6.788225	14.8492424	7.07107	0.318198	2.82842712	0	0.056568542	0.002828427	0.381838	0.000849	0.004243
	Count					1	1	1	1	1			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Table 9.3 - IMF Surface Water Results - Site 150

EPL 11455	Statistics	Field Information										Analytical Information														
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Sulphate	Total Suspended Solids	Total Dissolved Solids	Total Kjeldahl Nitrogen	Total Organic Carbon	Oil & Grease	Phosphorous	Total Copper	Total Iron	Total Lead	Total Zinc
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		15/10/2013	Site 150	9:30am	DS						Not Flowing																
		13/01/2014	Site 150	8:00am	TB						Not Flowing																
		11/04/2014	Site 150	9:10am	TB	5.64	498	17.1	5.51	97	Water clear and just flowing. Sampled downstream of bridge	CA1401141-002	0.1	2	505	7.41	51	4	296	0.87	14	1	0.01	0.006	0.86	0.0006	0.037
		12/06/2014	Site 150	7:30am	PM						Not Flowing																
		19/08/2014	Site 150	12:45pm	TB							CA1402466-002	0.1	2	938	7.48	103	8	567	1.14	18	1	0.07	0.013	0.94	0.0017	0.21
2012/13	Minimum					0	0	0	0	0			0.1	2	938	7.48	103	8	567	1.14	18	1	0.07	0.013	0.94	0.0017	0.21
	Maximum					0	0	0	0	0			0.1	2	938	7.48	103	8	567	1.14	18	1	0.07	0.013	0.94	0.0017	0.21
	Average					#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			0.1	2	938	7.48	103	8	567	1.14	18	1	0.07	0.013	0.94	0.0017	0.21
	StdDev					#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Count					0	0	0	0	0			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 9.4 - IMF Surface Water Results - First Flush System

EPL 11455	Statistics	Field Information										Analytical Information														
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Flow	Laboratory Sample Code	Nitrogen (ammonia)	Biochemical Oxygen Demand	Conductivity	pH	Sulphate	Total Suspended Solids	Total Dissolved Solids	Total Kjeldahl Nitrogen	Total Organic Carbon	Oil & Grease	Phosphorous	Total Copper	Total Iron	Total Lead	Total Zinc
				AM/PM	Initials	pH	µS/cm	°C	mg/L	mV			mg/L	mg/L	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		15/10/2013	First Flush	10:30am	DS						Not Flowing																
		13/01/2014	First Flush	8:35am	TB						Not Flowing																
		11/04/2014	First Flush	10:05am	TB	6.21	641	16.1	6.77	64	Water clear, good flow and sampled downstream from bridge	CA1401141-004	0.1	2	618	7.12	120	2	357	0.72	12	1	0.01	0.005	0.73	0.0012	0.405
		12/06/2014	First Flush	7:55am	PM						Not Flowing																
		19/08/2014	First Flush	13:20pm	TB						-	CA1402466-004	0.1	4	341	7.47	14.8	15	258	1.39	20	-	0.08	0.003	1.34	0.001	0.01
2012/13	Minimum					6.21	641	16.1	6.77	64			0.1	2	341	7.12	14.8	2	258	0.72	12	1	0.01	0.003	0.73	0.001	0.01
	Maximum					6.21	641	16.1	6.77	64			0.1	4	618	7.47	120	15	357	1.39	20	1	0.08	0.005	1.34	0.0012	0.405
	Average					6.21	641	16.1	6.77	64			0.1	3	479.5	7.295	67.4	8.5	307.5	1.055	16	1	0.045	0.004	1.035	0.0011	0.2075
	StdDev					#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			0	1.414213562	195.8685784	0.247487	74.38763	9.192388155	70.0036	0.473762	5.65685425	#DIV/0!	0.049497475	0.001414214	0.431335	0.000141	0.279307
	Count					1	1	1	1	1			2	2	2	2	2	2	2	2	2	1	2	2	2	2	2

Table 10 - Dust Deposition Results - DG18

Site Name	Date	ALS Batch Code	Ash Residue	Combustibles	Calculated Rainfall	Soluble Matter	Insoluble Solids	Total Solids
			g/m2/mth	g/m2/mth	mm	g/m2/mth	g/m2/mth	g/m2/mth
DG18	958674	**Sep-13**	0.49	0.71	75	2.1	1.2	3.3
DG18	962977	**Oct-13**	0.23	0.39	6	0.5	0.6	1.1
DG18	CA1300189-00	**Nov-13**	2.1	3.4	72	5	5.5	10.5
DG18	CA1400048-00	**Dec-13**	0.7	1.1	18	0.4	1.8	2.2
DG18	CA1400438-00	**Jan-14**	0.4	0.3	12	3.2	0.7	3.9
DG18	974996	**Feb-14**	0.28	0.37	76	3.8	0.7	4.5
DG18	977264	**Mar-14**	0.47	0.38	77	1.8	0.9	2.7
DG18	979959	**Apr-14**	0.6	0.22		0.7	0.8	1.5
DG18	982437	**May-14**	0.64	0.23	31	0.8	0.9	1.7
DG18	984581	**Jun-14**	0.42	0.28	31	1.2	0.7	1.9
DG18	986915	**Jul-14**	0.56	0.41	15	0	1	1
DG18	Sample lost	**Aug-14**	-	-	-	-	-	-

2013/2014	Min	0.23	0.22	6	0	0.6	1
	Max	2.1	3.4	77	5	5.5	10.5
	Avg	0.63	0.71	41.30	1.77	1.35	3.12
	stDev	0.51	0.93	30.01	1.60	1.42	2.70

Appendices

Appendix 5 Monitoring Trend Graphs

Appendices

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Figure 5.1 - Surface Water Trends - Site 115

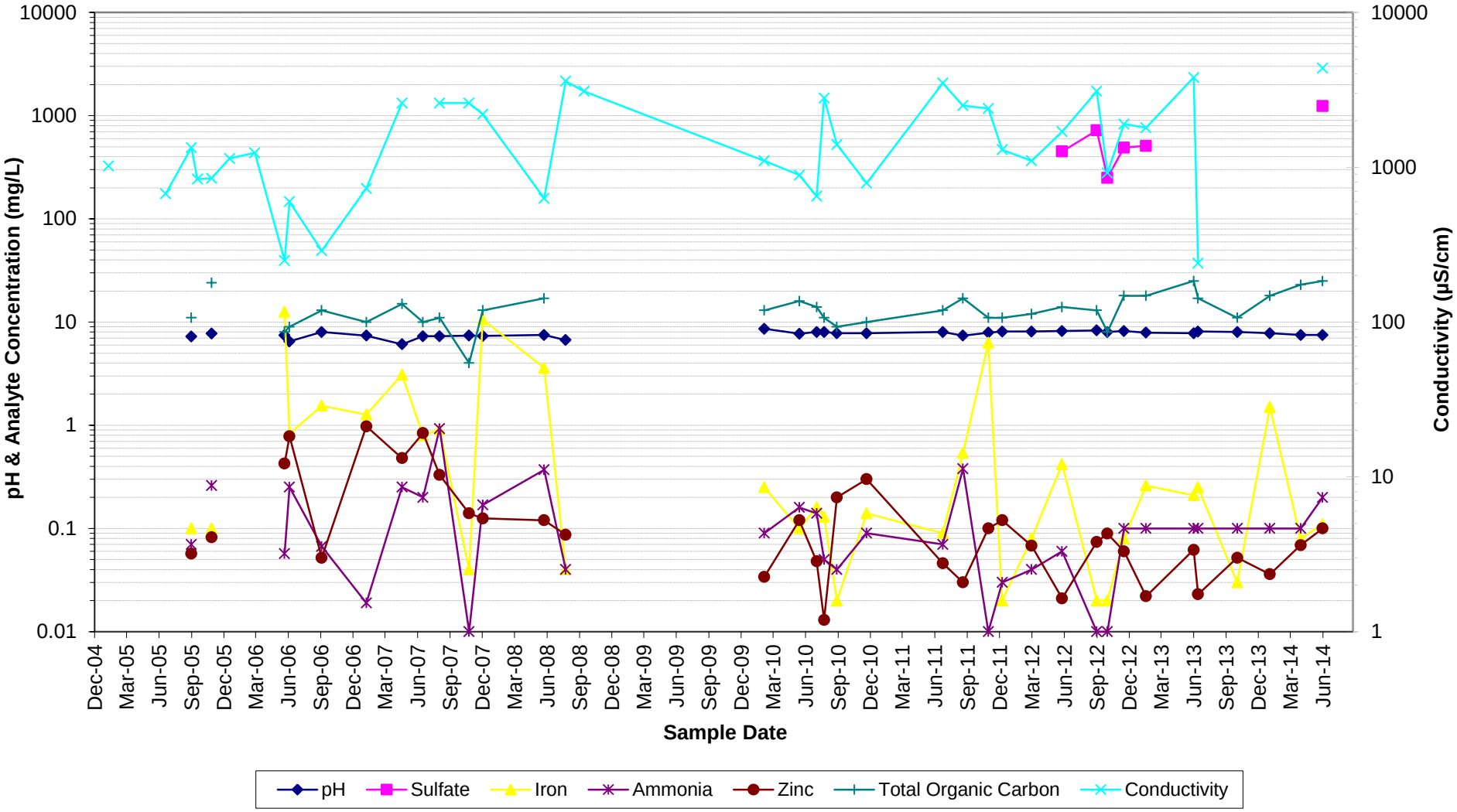


Figure 5.2 - Surface Water Trends - Spring 2

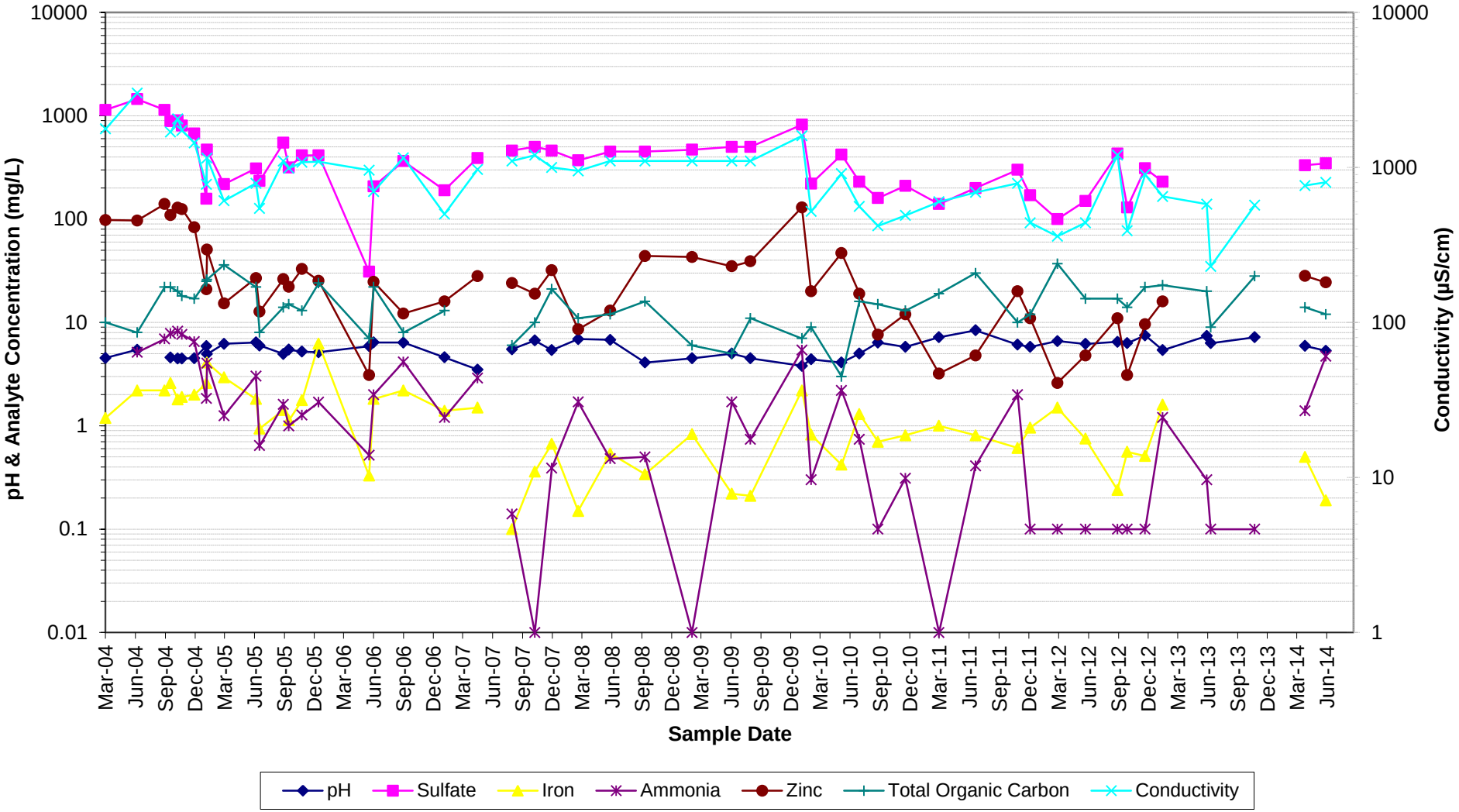


Figure 5.3 - Surface Water Trends - Site 105

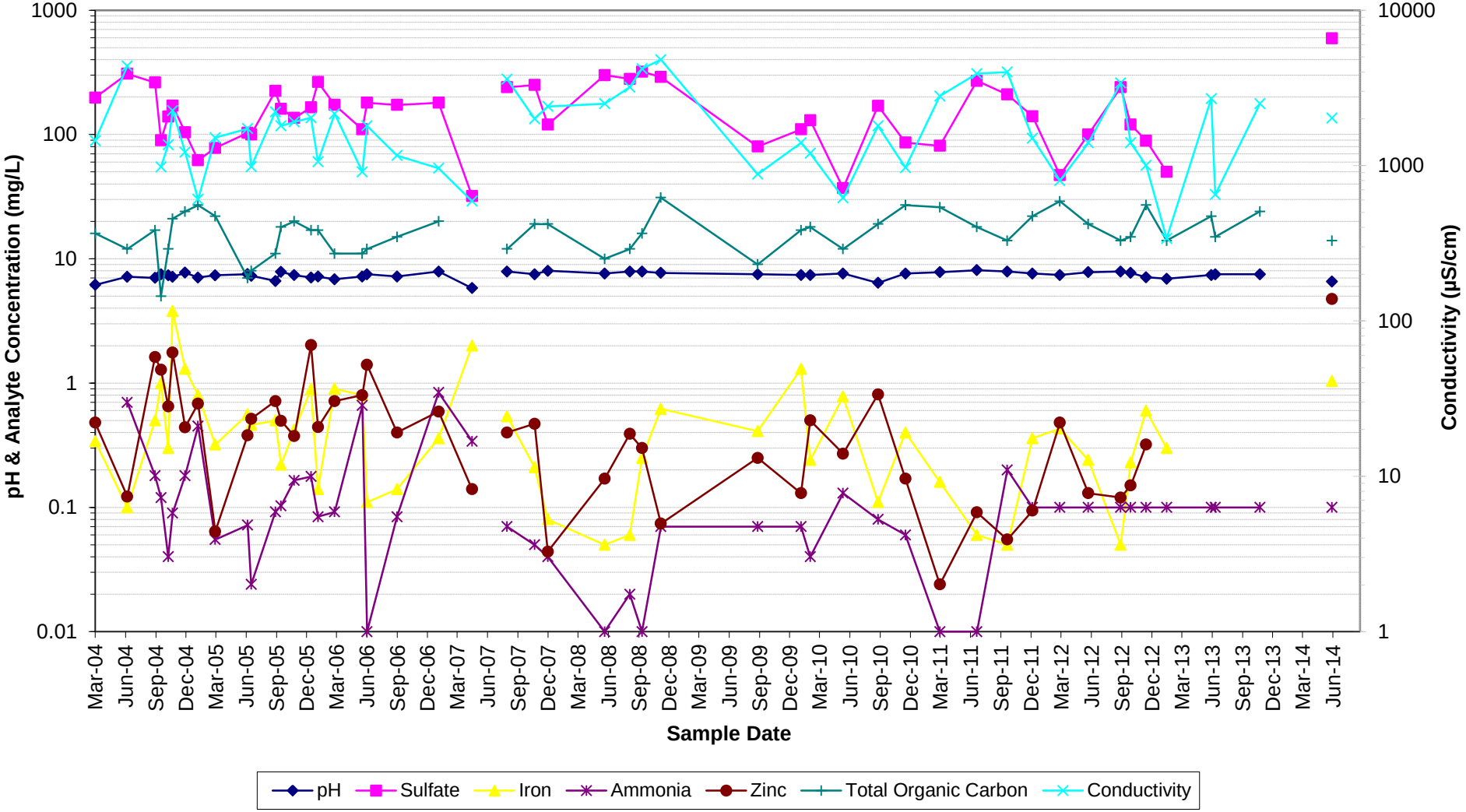


Figure 5.4 - Surface Water Trends - WM200

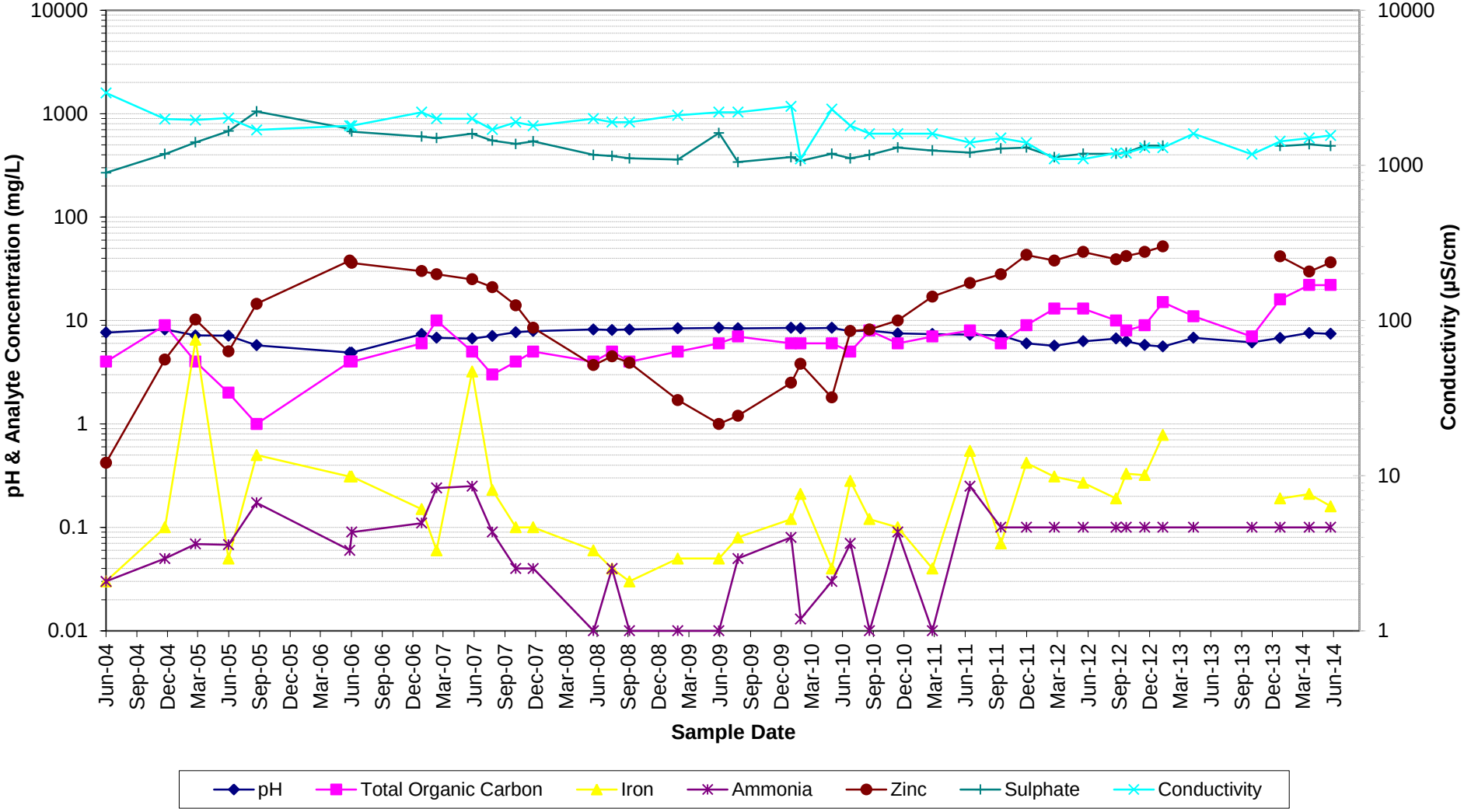


Figure 5.5 - Surface Water Trends - WM201

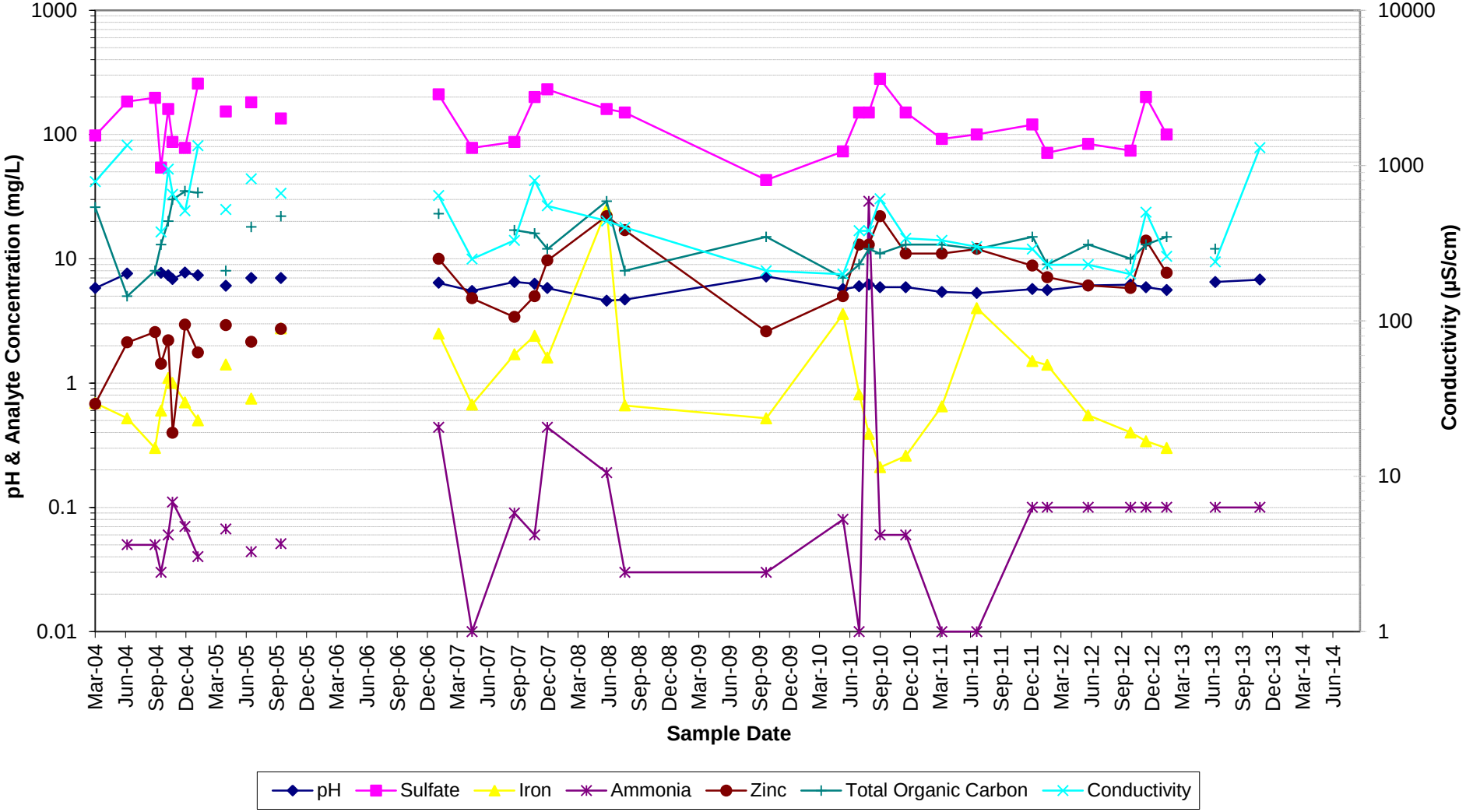


Figure 5.6 - Surface Water Trends - WM202

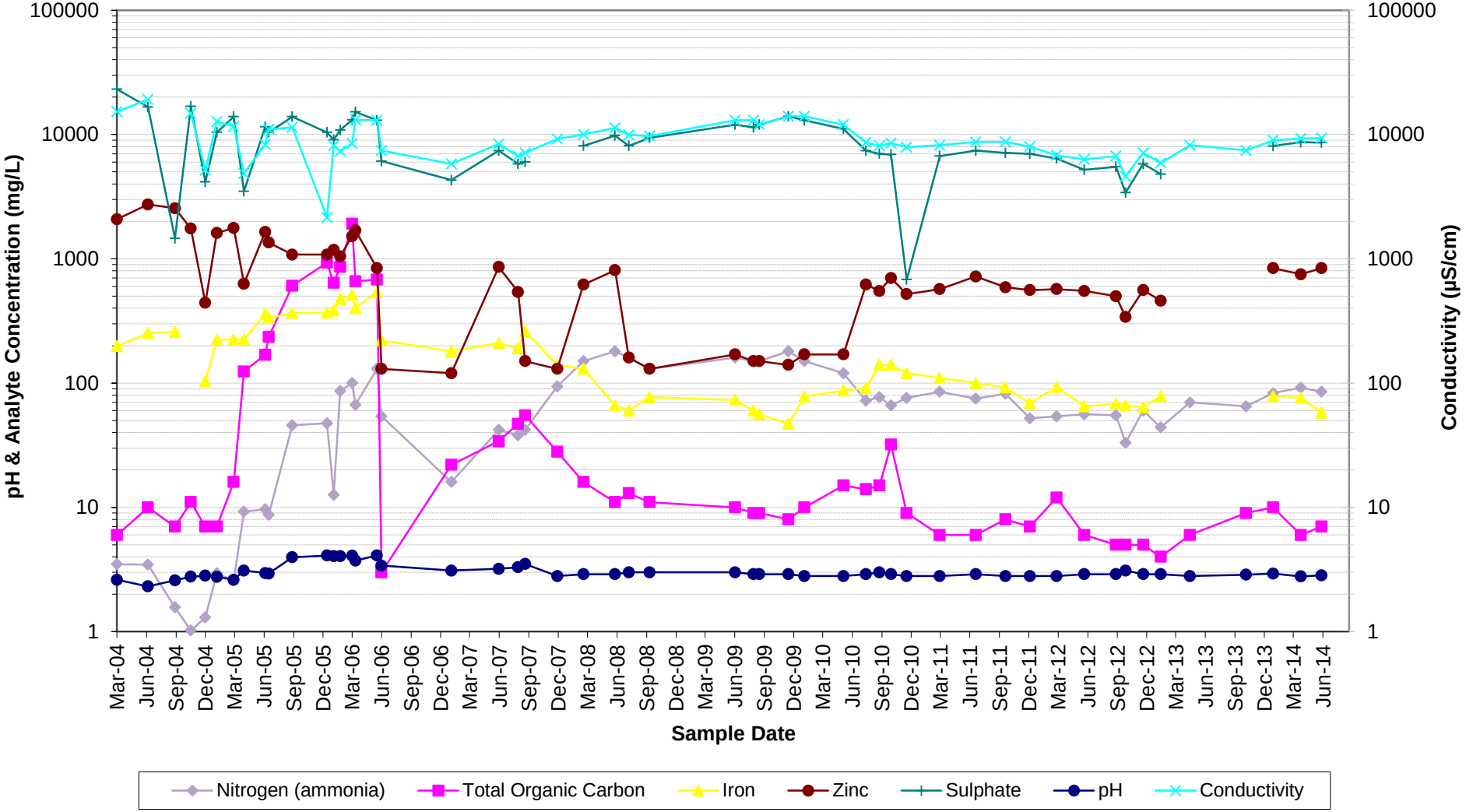


Figure 5.7 - Surface Water Trends - WM203

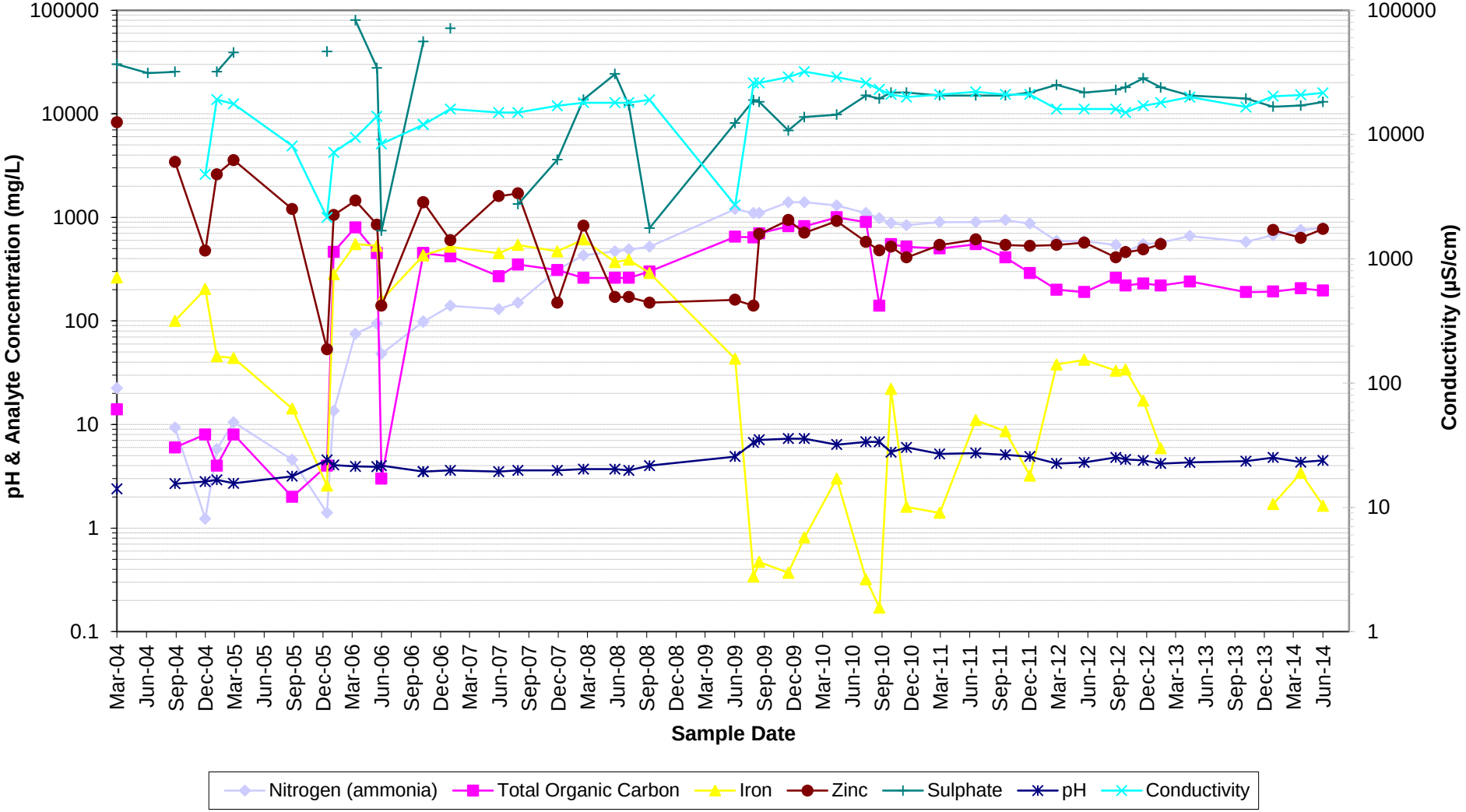


Figure 5.8 - Surface Water Trends - Pond 3

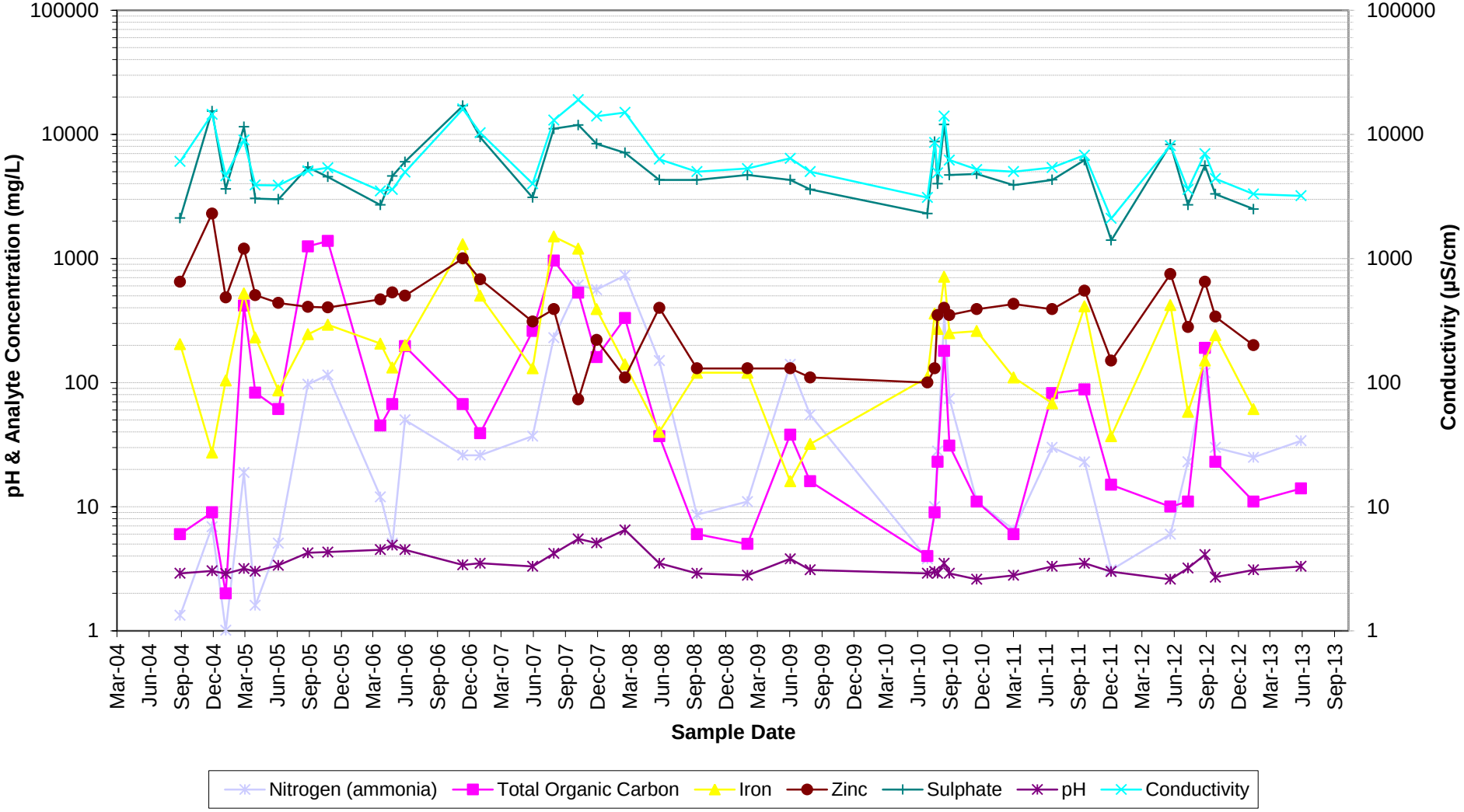


Figure 3.2.5A - Groundwater Levels - MB1 to MB17 and ED3B

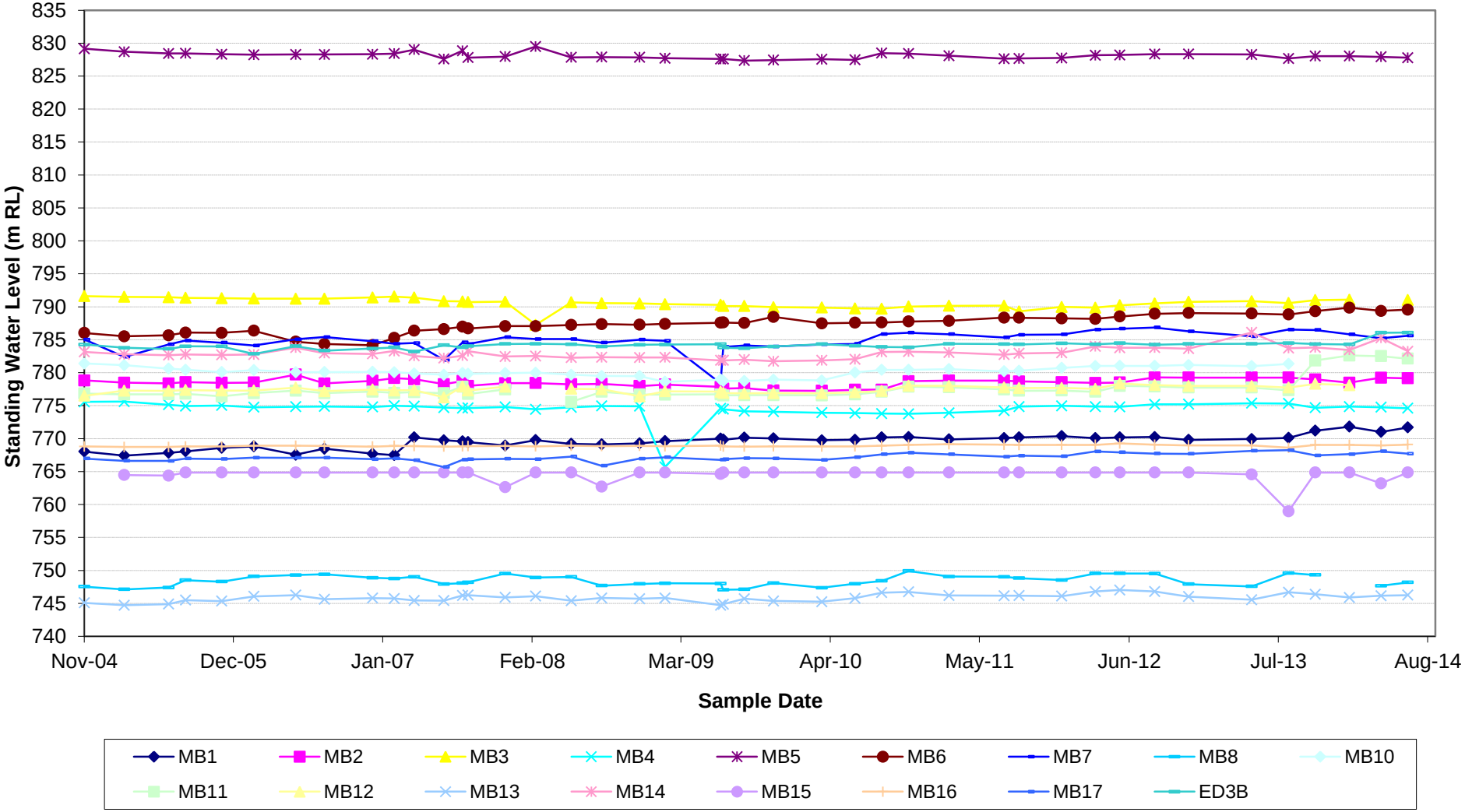


Figure 3.2.5.1 - Groundwater Trends - MB1

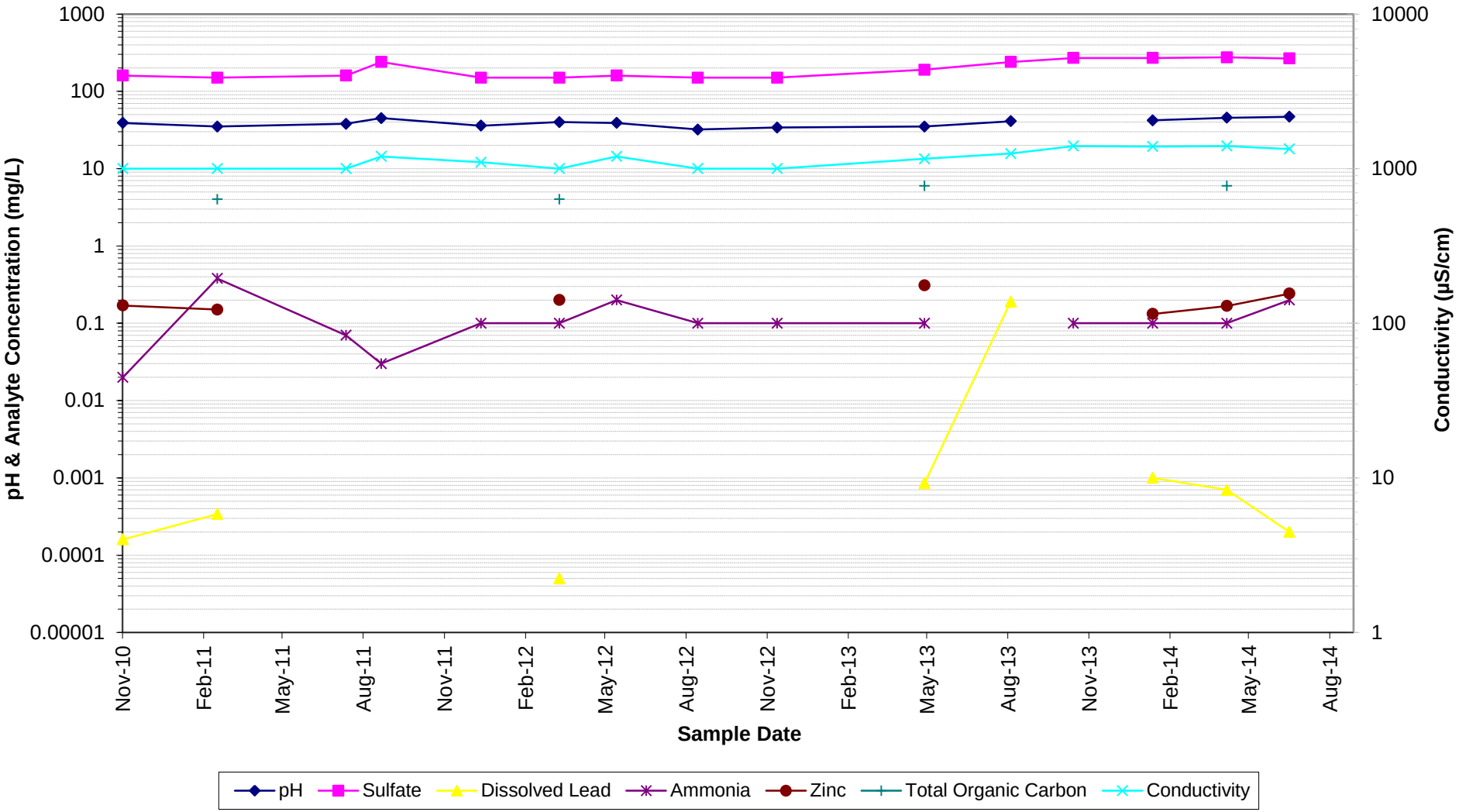


Figure 3.2.5.2 - Groundwater Trends - MB2

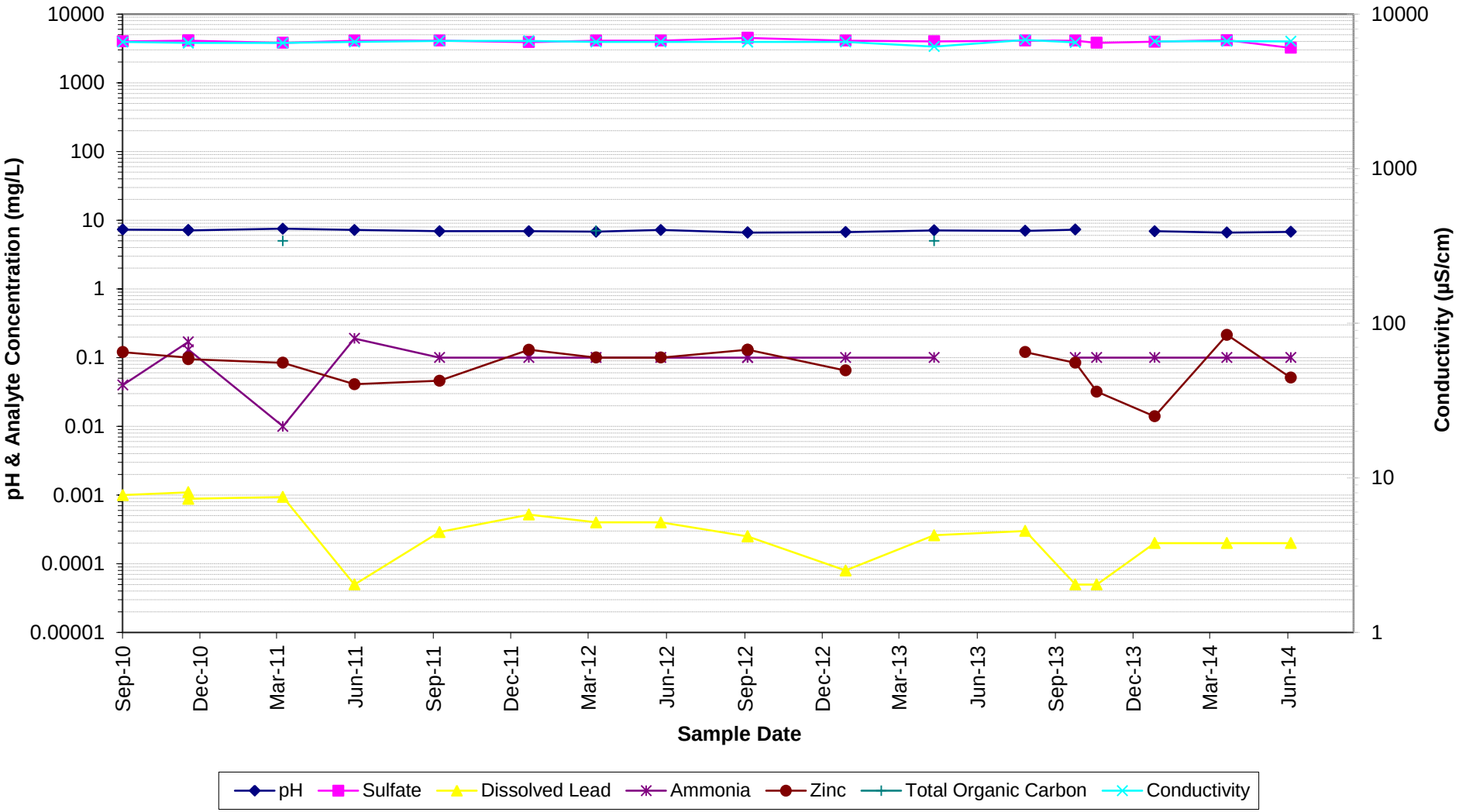


Figure 3.2.5.3 - Groundwater Trends - MB3

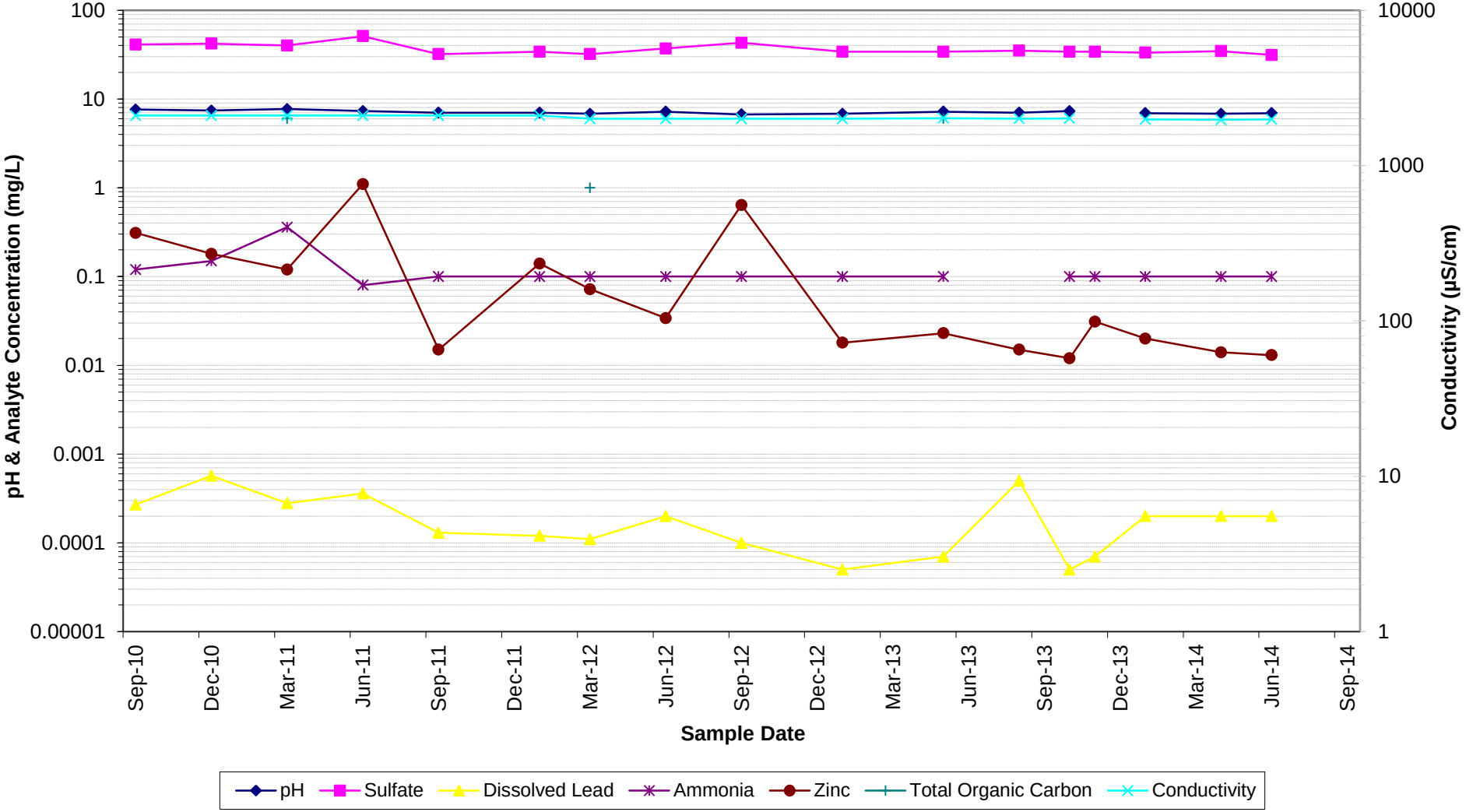


Figure 3.2.5.4 - Groundwater Trends - MB4

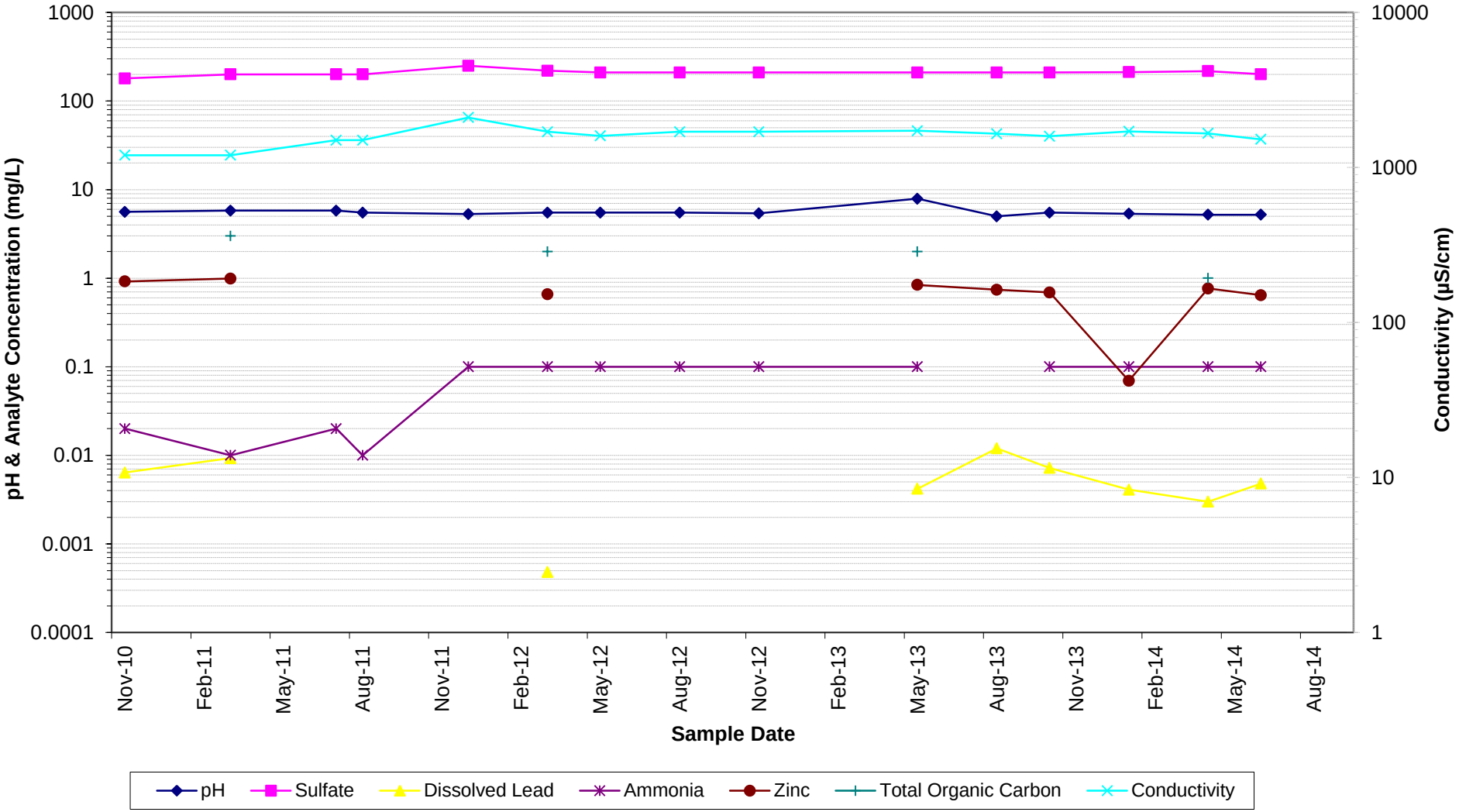


Figure 3.2.5.5 - Groundwater Trends - MB5

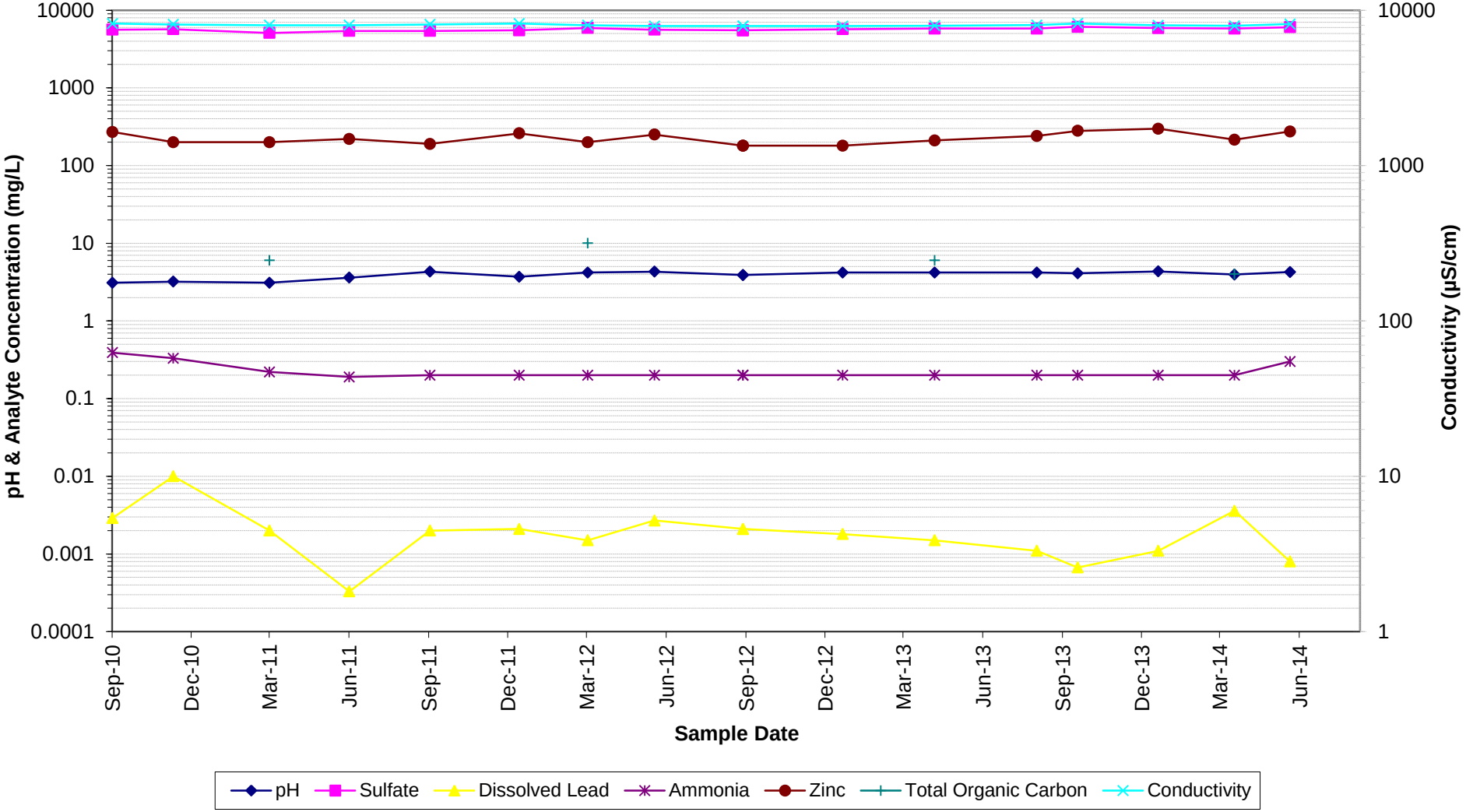


Figure 3.2.5.6 - Groundwater Trends - MB6

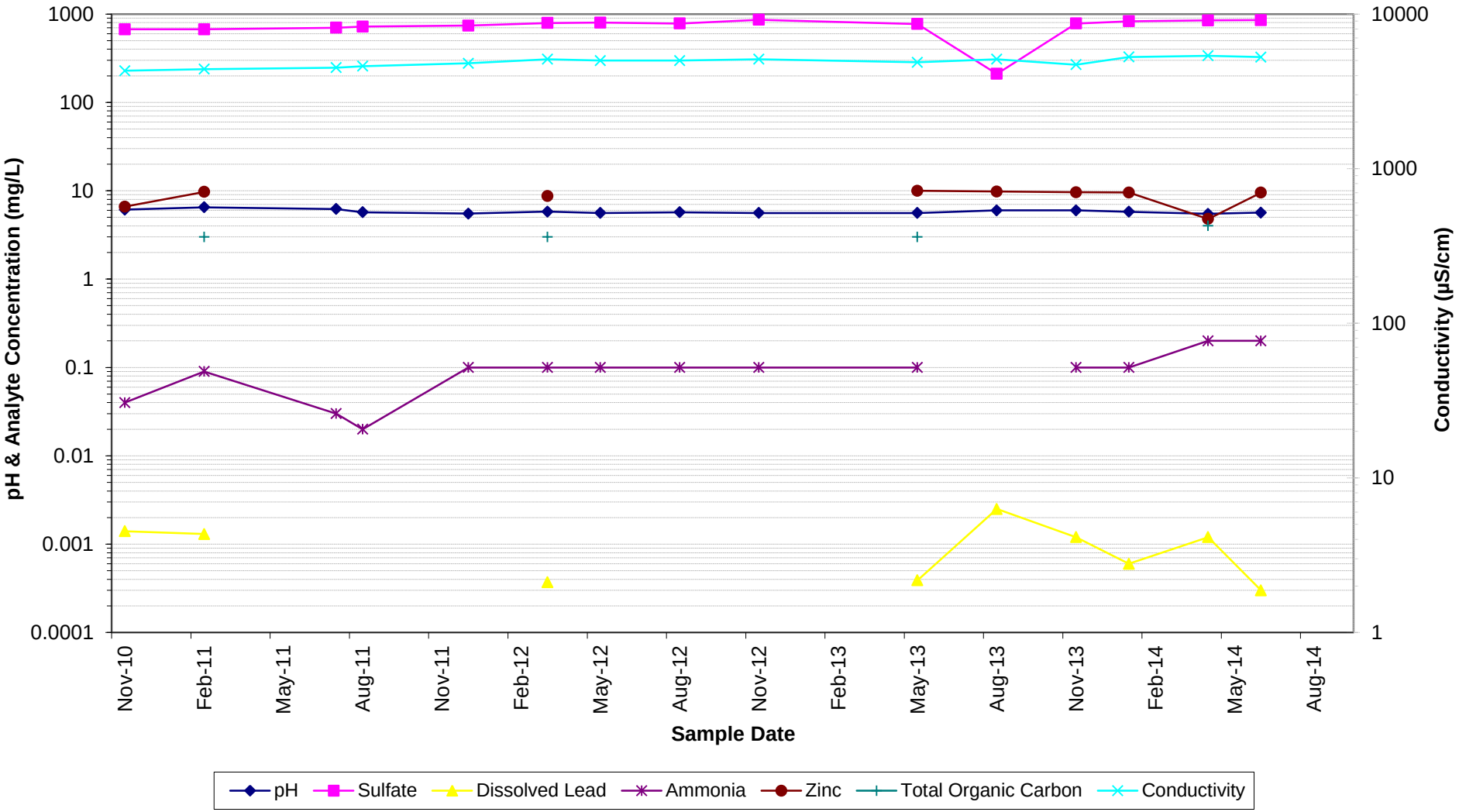


Figure 3.2.5.7 - Groundwater Trends - MB7

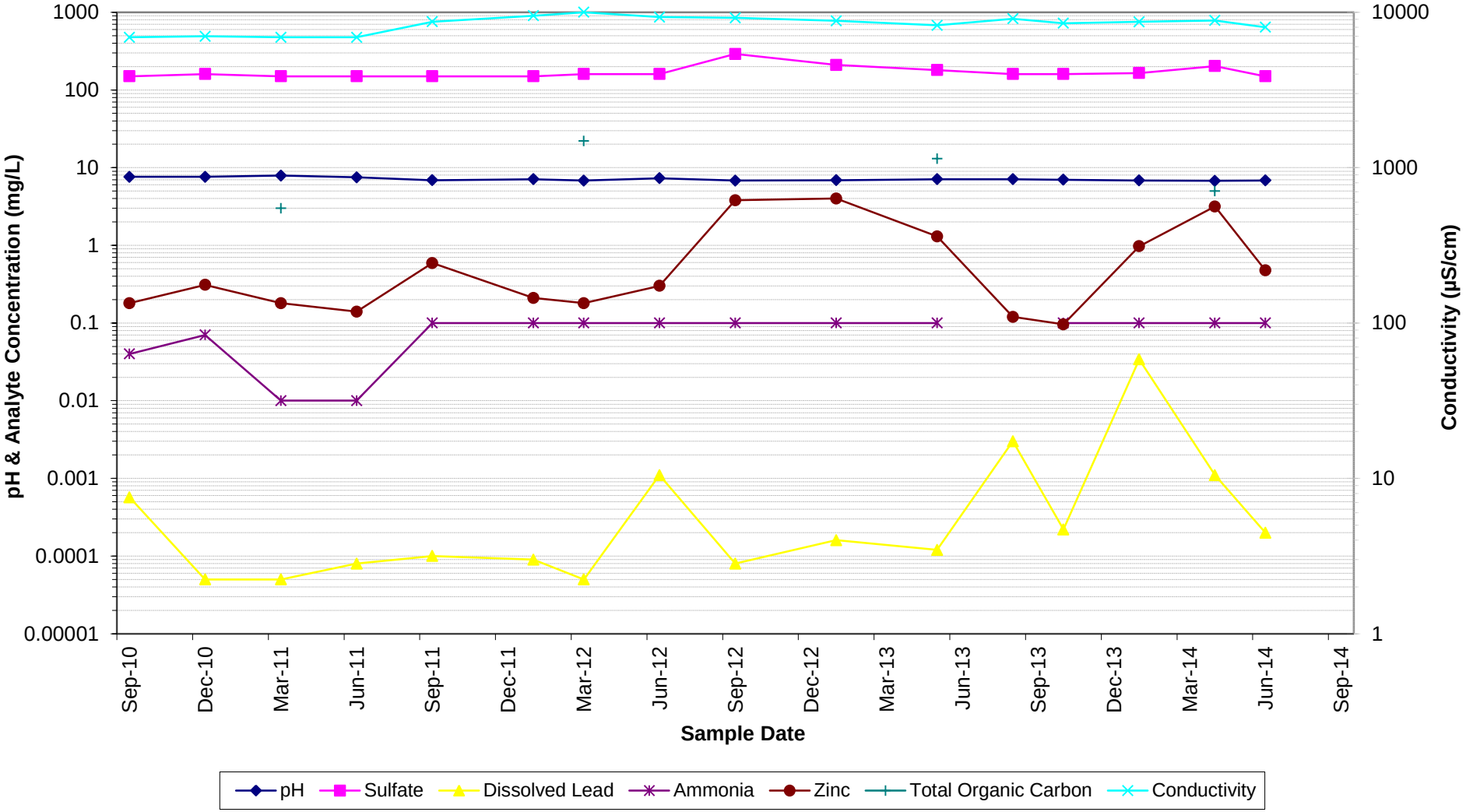
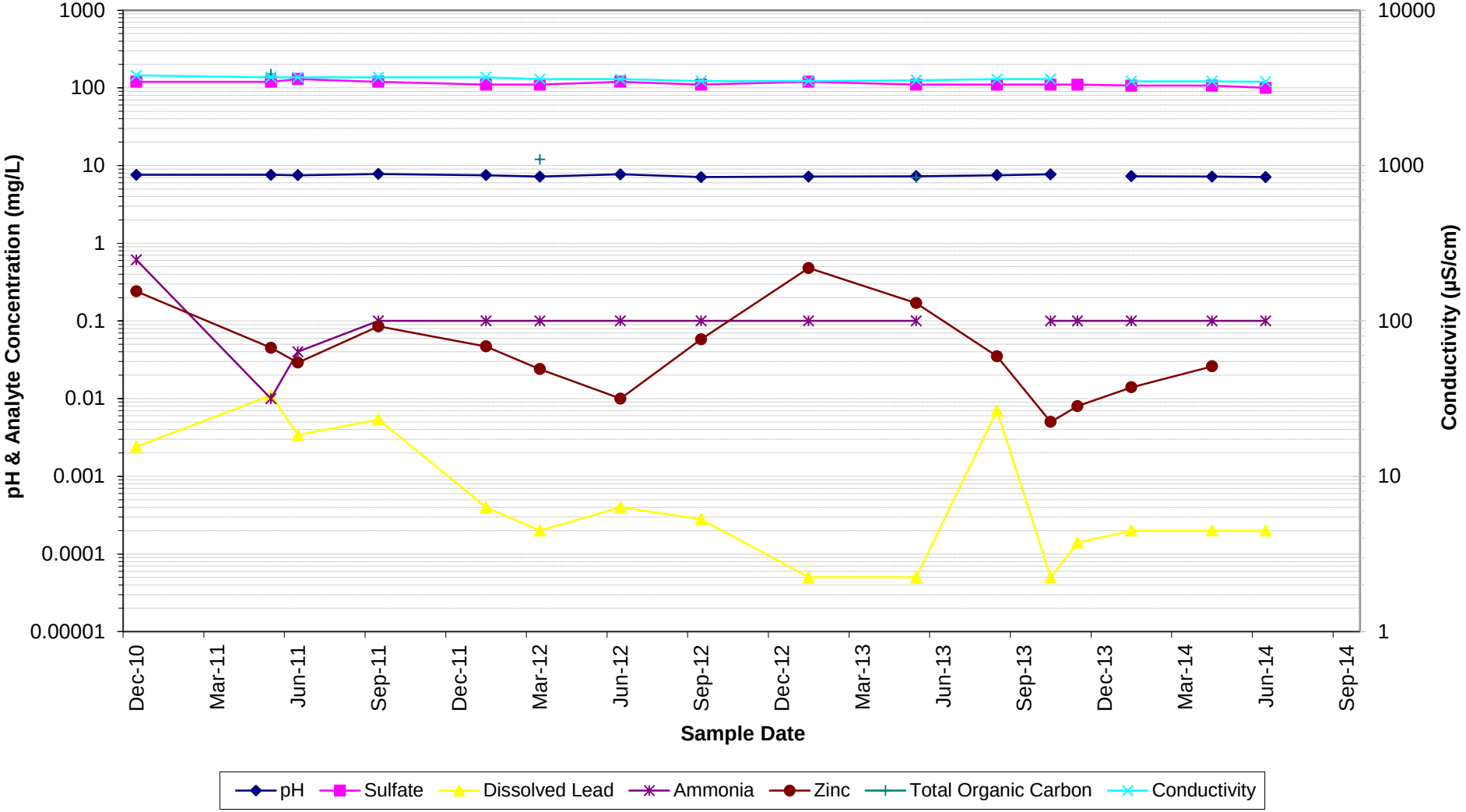


Figure 3.2.5.8 - Groundwater Trends - MB8



EPL 11436	Statistics	Field Information					
		Date	Site Code	Time	Sampler	pH	Conductivity
				AM/PM	Initials	pH	µS/cm
		6/12/1996	MB1				
		17/06/1997	MB1				
		7/08/1997	MB1				
		11/11/1997	MB1				
		26/03/1998	MB1				
		9/06/1998	MB1				
		9/06/1998	MB1				
		7/09/1998	MB1				
		1/12/1998	MB1				
		1/03/1999	MB1				
		4/06/1999	MB1				
		10/09/1999	MB1				
		3/12/1999	MB1				
		6/03/2000	MB1				
		2/06/2000	MB1				
		4/09/2000	MB1				
		5/12/2000	MB1				
		2/03/2001	MB1				
		8/06/2001	MB1				
		8/06/2001	MB1				
		21/08/2001	MB1				
		21/08/2001	MB1				
		10/09/2001	MB1				
		10/01/2002	MB1				
		6/03/2002	MB1				
		7/05/2002	MB1				
		9/05/2002	MB1				
		17/06/2002	MB1				
		21/08/2002	MB1				
		19/09/2002	MB1				
		23/06/2003	MB1				
		12/08/2003	MB1				
		3/11/2003	MB1				
		18/02/2004	MB1				
		12/05/2004	MB1				
		18/08/2004	MB1				
		17/11/2004	MB1		AMW,GB	6.21	1806
		3/03/2005	MB1	14:45	GB	6.22	1558
		28/06/2005	MB1	8:50	AMW,AW		
		12/08/2005	MB1	12:50	AW,CS	6.92	1203
		16/11/2005	MB1	7.0 am	jmc	7.02	1052
		9/02/2006	MB1	3.0 pm	jmc	7.28	961
		31/05/2006	MB1	7.30 am	jmc	6.89	984
		15/08/2006	MB1	4	jmc	7.06	1068
		21/12/2006	MB1	10	HG	6.76	970
		16/02/2007	MB1	12	HG	7.21	280
		10/04/2007	MB1	11am	HG	6.9	329
		28/06/2007	MB1	12pm	HG	7.01	383
		31/08/2007	MB1	1:30pm	TM	7.61	1053
		16/08/2007	MB1		Coffey	7.25	882

7/12/2007	MB1	10.00am	TM	6.95	991
26/02/2008	MB1	8.26am	TM	7.37	959
30/05/2008	MB1	9.10am	TM	7.79	852
19/08/2008	MB1	12.30pm	TM		
27/11/2008	MB1	14.04	TM	7.65	998
3/02/2009	MB1	8.45	TM	6.82	1000
30/06/2009	MB1	8.43	TM	8.19	1178
7/07/2009	MB1	9.3	TM	7.45	1159
1/09/2009	MB1	9.16	TM	7.67	970
17/11/2009	MB1	9.2	TM	7.61	1150
25/03/2010	MB1	10.06	TM	6.99	1064
21/06/2010	MB1	10	TM	7.66	1474
31/08/2010	MB1	9.52	TH	7.3	1077
10/11/2010	MB1	9.58	TH	7.46	1645
25/02/2011	MB1	8.4	TH	7.04	1039
21/07/2011	MB1	11	TH	6.53	1146
30/08/2011	MB1	10.23	TH	6.83	1195
21/12/2011	MB1	9.07	TH	6.77	1059
19/03/2012	MB1	10.43	TH	6.7	1055
23/05/2012	MB1	9.32	TH	6.21	1045
23/08/2012	MB1	9.33	TH	7.07	1012
21/11/2012	MB1	11.03	TH	6.47	1033
7/05/2013	MB1	14:15	DS	6.98	1157
13/08/2013	MB1	13:40	DS	6.97	1252
23/10/2013	MB1	13:35	DS	7.07	1333
21/01/2014	MB1	8:55am	DS	6.84	1377
15/04/2014	MB1	11:30am	TB	6.67	1415
25/06/2014	MB1	10:00am	PM	6.59	1390

Negative values converted to positive
'<' removed from <LOR values

2013/14	Minimum	6.59	1333
	Maximum	7.07	1415
	Average	6.7925	1378.75
	StdDev	0.212348	34.3353559
	Count	4	4
2012/13	Minimum	6.47	1033
	Maximum	6.98	1252
	Average	6.806667	1147.33333
	StdDev	0.291605	109.819549
	Count	3	3
2011/12	Minimum	6.21	1012
	Maximum	7.07	1059
	Average	6.6875	1042.75
	StdDev	0.356499	21.3287756
	Count	4	4
2010/11	Minimum	6.53	1039
	Maximum	7.04	1195
	Average	6.7925	1109.75
	StdDev	0.209821	73.4001589
	Count	4	4

11/02/2010 Changed from DISSOLVED metals to TOTAL or

2009/10	Minimum	6.99	1064
	Maximum	7.66	1645
	Average	7.3525	1315
	StdDev	0.283005	290.875689
	Count	4	4
OVERALL	Minimum	6.21	280
	Maximum	8.19	1806
	Average	7.04975	1088.85
	StdDev	0.446901	301.848455
	Count	40	40
1996 - 2004 (mining)	Minimum	6	1558
	Maximum	6	1806
	Average	6	1682
	StdDev	0.007071	175.362482
	Count	2	2
2005 + (post minin	Minimum	6.21	280
	Maximum	8.19	1645
	Average	7.129118	1019.85294
	StdDev	0.418557	264.999501
	Count	34	34
2007/08	Minimum	7.37	852
	Maximum	7.79	998
	Average	7.603333	936.333333
	StdDev	0.213854	75.5932096
	Count	3	3
2008/09	Minimum	6.82	970
	Maximum	8.19	1178
	Average	7.548	1091.4
	StdDev	0.492565	98.2283055
	Count	5	5

					Analytical Information			
Temperature	**Dissolved Oxygen**	**Oxidation-Reduction Potential**	**Depth to Water**	**RL Water Level**	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)
°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L
						218		
						410		
			30.38	767.13		395		
			26.60	770.91				
			26.74	770.77				
			25.95	771.56				
			26.78	770.73				
			27.90	769.61				
			28.20	769.31				
			28.10	769.41				
			28.48	769.03				
			29.04	768.47		460		
			28.77	768.74				
			29.05	768.46		338		
			29.13	768.38				
			29.60	767.91				
			29.13	768.38				
			29.73	767.78				
			29.61	767.90				
			29.61	767.90				
			30.10	767.41				
			29.31	768.20				
			29.31	768.20				
			30.60	766.91				
			29.90	767.61				
						227		
			29.95	767.56				
			28.22	769.29				
			29.20	768.31	ES41593			
			28.54	768.97				
			29.86	767.65	ES45547			
			29.48	768.03	ES47496	235	1	235
			30.08	767.43	ES49667			
17.6			29.67	767.84	ES52077	275	1	275
20.9			29.44	768.07	ugh sample			
			28.92	768.59	ugh sample			
14.18			28.69	768.82	ES0506803	260	1	260
18.6			29.95	767.56	ugh sample			
17.63			29.04	768.47	ES0601616	258	1	258
12.7			29.81	767.70	ES0607022	247	1	247
13.6			30.01	767.50	ugh sample			
16.96			27.33	770.18	543721	230	2	200
16.21			27.76	769.75	552675	230	2	230
13.92			28.04	769.47	561710	230	2	230
12.92			27.93	769.58				
15.25			28.56	768.95	587801	250	2	250
			27.75	769.76	ES0711417	232	1	232

17.9			28.31	769.20	603408	240	2	<0.1
16.4			28.38	769.13	618264	240	2	240
12			28.23	769.28	635816	230	2	80
			27.9	769.61	648103	240	2	23
19.2	2.88		27.51	770.00	664645	240	2	46
18.6	3.36		27.67	769.84	675488	230	2	230
14.2	2.76		27.36	770.15				
11.5	2.14		27.47	770.04	701822	240	2	240
13.9	3.04		27.77	769.74	711416	230	2	230
16.9	3.5		27.69	769.82	723609	213	0.1	213
17.9	1.38		27.33	770.18	747493	276	0.1	276
14.1	2.1		27.28	770.23	762361	291	0.1	291
13.5	2.2		27.63	769.88	800622	240	0.1	240
17.3	2.48		27.42	770.09	809744	232	0.1	232
16.5	5.92		27.32	770.19	826206	246	0.1	246
13.2	2.46		27.14	770.37	847174	239	0.1	239
14.2	3.41		27.44	770.07	852260	282	0.1	282
15.8	2.83		27.33	770.18	868018	256	0.1	256
16.3	3.95		27.28	770.23	880610	247	0.1	247
13.8	4.08		27.71	769.80	890057	277	0.1	277
14.1	2.28		27.58	769.93	902532	241	0.1	241
16.3	2.97		27.4	770.11	915127	251	0.1	251
16.5	3.31		26.31	771.20	937886	270	0.1	270
15.7	5.14		25.71	771.80	951360	329	0.1	329
16.8	6.33	-4.6	26.49	771.02	960999	333	0.1	333
16.1	5.57	1.9	25.81	771.70	\1400217-0	323	0.1	323
15.2	5.38	37.9	25.5	772.01	\1401168-0	336	0.1	336
13.3	4.09	18.5	24.8	772.71	\1401907-0	340	0.1	340

13.3	4.09		24.8	771.02	960999	323	0.1	323
16.8	6.33		26.49	772.71	960999	340	0.1	340
15.35	5.3425		25.65	771.86	960999	333	0.1	333
1.515475724	0.9304264		0.7014754	0.7014754	#DIV/0!1	7.2574	0 4	7.2571803524

15.7	2.97		25.71	770.11	915127	251	0.1	251
16.5	5.14		27.4	771.8	951360	329	0.1	329
16.1666667	3.806667		26.47333	771.0367	934791	283.3	0.1	283.3333333
0.41633323	1.1671483		0.8567573	0.8567573	18313.713	40.673	1.6997E-173	40.673496693

13.8	2.28	0	27.28	769.8		241	0.1	241
16.3	4.08	0	27.71	770.23		277	0.1	277
15	3.285	#DIV/0!	27.475	770.035		255.3	0.1	255.25
1.235583534	0.8739374	#DIV/0!0	0.2043694	0.2043694		15.764	0 4	15.755951264

13.2	2.46	0	27.14	770.07		239	0.1	239
16.5	5.92	0	27.44	770.37		282	0.1	282
14.925	3.655	#DIV/0!	27.3075	770.2025		255.8	0.1	255.75
1.49972224	1.5597974	#DIV/0!0	0.1241974	0.1241974		18.844	0 4	18.839232114

n recommendation of Dino Parisotto Earth2 Water (Environmental & Groundwater Consulting)

13.5	1.38	0	27.28	769.88	232	0.1	232
17.9	2.48	0	27.63	770.23	291	0.1	291
15.7	2.04	#DIV/0!	27.415	770.095	259.8	0.1	259.75
2.221110834	0.4684734	#DIV/0!0	0.1545964	0.1545964	28.294	04	28.288690324
11.5	1.38	-4.6	24.8	766.91	213	0.1	23
20.9	6.33	37.9	30.6	772.71	460	2	340
15.5812821	3.481667	13.425	28.22247	769.2875	269.9	0.86216216	242.4444444
2.1399252139	1.33179724	18.9956794	1.29159172	1.29159172	55.1443	0.8609914737	68.9013557636
18	0	0	26	767	218	1	235
21	0	0	31	772	460	1	275
19	#DIV/0!	#DIV/0!	29	769	320	1	255
2.333452382	#DIV/0!0	#DIV/0!0	1.14864132	1.14864132	94.088	02	28.284271252
11.5	1.38	0	25.71	767.5	213	0.1	23
19.2	5.92	0	30.01	771.8	329	2	329
15.3869697	3.1095	#DIV/0!	27.85994	769.6501	248.9	0.9516129	229.5333333
2.0409763133	1.06565320	#DIV/0!0	0.89185336	0.89185336	23.2231	0.8958686531	66.1981004730
12	2.88	0	27.51	769.13	230	2	23
19.2	2.88	0	28.38	770	240	2	240
15.8666667	2.88	#DIV/0!	28.005	769.505	237.5	2	97.25
3.629508693	#DIV/0!1	#DIV/0!0	0.3861354	0.3861354	54	04	98.004676764
11.5	2.14	0	27.36	769.74	213	0.1	213
18.6	3.5	0	27.77	770.15	240	2	240
15.02	2.96	#DIV/0!	27.592	769.918	228.3	1.525	228.25
2.768934815	0.5409255	#DIV/0!0	0.1703535	0.1703535	11.214	0.954	11.206396984

Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
	140	1280	115	68	5.2	58	7.2	255
	140	1350	145	70	6.3	50	6.6	195
	145	1560	150	105	5.4	50	6.6	370
	140	1580	200	95	5.6	60	6.7	370
	180	2360	240	220	11	120	6.5	1130
		1430	180	94	6.4	56	6.6	393
	137.4	1850	152	111	7.79	74.1	6.7	493
	160	1797	158	113	7.6	61.9	6.8	418
	131	1420	154	90.5	5.11	69.1	6.81	346
	136	1810	178	108	4.33	66.9	6.89	478
	135	1700	133	80.8	3.48	53.1	6.69	286
	155	1480	116	72	3.73	69	6.9	200
	134	1320	128	65	3.26	50.2	6.91	195
		1240	128	62	4.58	53.2	6.83	192
	126	1320	139	69.7	4.68	60	6.99	219
	107	1240	164	84.8	6.09	53	6.96	252
	107	1130	126	78.8	6.63	48.4	6.87	228
	110	1120	78.1	58.5	3.21	44.9	6.93	168
	110	1120	78.1	58.5	3.21	44.9	6.93	168
	100		109	61	5.05	43	7.05	181
	202	1250	84	1	6	70	7.36	198
	101	1190	92	58.9		31.2	6.86	177
	95	1010	97.3	50.3		27.1	6.83	154
	99.7	2490	80.5	35		19.1	7.23	152
	98.1	1080		29.2		25.2	6.82	197
	115	1170	226	19.2		30.1	7.32	153
	202	1250	84	77	6	70	7.36	198
		1140					6.71	
		1530					5.07	
		2056					6.34	
0.21	111	1559	164	103	8	61	5.08	526
1.75	114	1510	161	91	5	50	7.35	466
0.01	99.8	1140	146	68	6	41	7.59	498
1.2	110	1261	160	90	5	42	7.4	468
0.01	109	1020	91	53	5	35	7.13	136
0.05	92	1000	79	48	3.2	30	7.6	410
0.06	91	1000	91	56	4	37	8	180
0.08	93	1000	93	56	4	37	7.3	170
0.14	94	1100	99	56	3.9	38	7.4	190
	95.1	882	91	55	5	32	6.76	161

0.8	92	1000	91	52	3.6	31	7.8	170
0.05	110	1000	90	51	3.9	35	7.6	140
0.01	99	1000	95	54	4.1	35	7.5	160
0.04	120	1100	98	57	4.5	43	7.4	200
0.09	110	1000	84	48	3.6	36	7.4	170
0.08	95	1100	88	49	3.6	36	7.4	150
0.08	100	1100	97	56	4.5	41	7.5	170
0.05	100	1000	87	50	3.9	37	7.3	150
0.01	96	1000	85	49	4.4	34	7.5	160
0.03	100	1200	120	69	3.9	42	7.7	280
0.15	100	1300	130	72	4.2	47	7.6	290
0.05	97	1000	99	56	4.6	38	7.3	180
0.02	93	1000	99	59	5	39	7.3	160
0.38	89	1000	90	52	5.2	35	7.5	150
0.07	93	1000	96	54	4.7	38	7.6	160
0.03	96	1200	120	69	4.6	45	7.2	240
0.1	90	1100	100	56	4.2	36	7.1	150
0.1	93	1000	93	52	4.2	40	7.4	150
0.2	98	1200	110	64	4.5	39	7.3	160
0.1	96	1000	93	49	4	32	7.6	150
0.1	100	1000	100	54	3.9	34	7.2	150
0.1	100	1157	110	58	4.4	35	7.4	190
	410	1252	130		5.2	41	7.6	240
0.1	120	1400	140	69	4.8		7.5	270
0.1	124	1390	131	69.4	5.5	42.2	7.48	270
0.1	126	1400	134	73.4	5.9	45.6	7.16	275
0.2	122	1340	131	73.2	4.8	46.9	7.17	266

0.1	120	1340	131	69	4.8	42.2	7.16	266
0.2	126	1400	140	73.4	5.9	46.9	7.5	275
0.125	123	1382.5	134	71.25	5.25	44.9	7.3275	270.25
0.05	2.581989	28.72281	4.242641	2.37416652	0.54467115	2.426932	0.187861	3.68556
4	4	4	4	4	4	3	4	4
0.1	100	1000	100	54	3.9	34	7.2	150
0.1	410	1252	130	58	5.2	41	7.6	240
0.1	203.3333	1136.333	113.3333	56	4.5	36.66667	7.4	193.333
0	178.9786	127.2648	15.27525	2.82842712	0.65574385	3.785939	0.2	45.0925
2	3	3	3	2	3	3	3	3
0.1	90	1000	93	49	4	32	7.1	150
0.2	98	1200	110	64	4.5	40	7.6	160
0.125	94.25	1075	99	55.25	4.225	36.75	7.35	152.5
0.05	3.5	95.74271	8.041559	6.5	0.20615528	3.593976	0.208167	5
4	4	4	4	4	4	4	4	4
0.03	89	1000	90	52	4.2	35	7.1	150
0.38	96	1200	120	69	5.2	45	7.6	240
0.145	92	1075	101.5	57.75	4.675	38.5	7.35	175
0.15926916	3.162278	95.74271	13	7.67571929	0.41129876	4.50925	0.238048	43.589
4	4	4	4	4	4	4	4	4

0.02	93	1000	99	56	3.9	38	7.3	160
0.15	100	1300	130	72	5	47	7.7	290
0.0625	97.5	1125	112	64	4.425	41.5	7.475	227.5
0.059651774	3.3166254	1504	15.556354	7.702813344	0.478713554	4.0414524	0.2061554	67.01994
0.01	89	882	78.1	1	3.2	19.1	5.07	136
1.75	410	2490	240	220	11	120	8	1130
0.19	119.0984	1272.485	119.8571	67.0984127	4.9059322	45.47778	7.111642	252.688
0.3564366135	45.3431662	321.153166	36.1530163	28.4979597	1.3657032	15.5550363	0.50502867	154.13864
0	95	1010	78	1	3	19	5	152
2	202	2490	240	220	11	120	7	1130
1	131	1463	138	77	6	54	7	302
1.088944442	29.516527	361.997731	43.2872428	38.7830364	1.8170336924	19.2162729	0.51231932	197.41229
0.01	89	882	79	48	3.2	30	6.76	136
1.2	410	1300	160	90	6	47	8	498
0.14448276	108.4161	1068.129	101.7742	57.0666667	4.3483871	37.45161	7.431613	204.29
0.2536249529	56.4087131	101.046131	18.6023531	8.99016065 30	0.5971437431	4.031862 31	0.230768 31	93.304931
0.01	99	1000	84	48	3.6	35	7.4	140
0.09	120	1100	98	57	4.5	43	7.6	200
0.0475	109.75	1025	91.75	52.5	4.025	37.25	7.475	167.5
0.033040384	8.5780734	504	6.1305254	3.872983354	0.377491724	3.862214	0.0957434	254
0.01	95	1000	85	49	3.6	34	7.3	150
0.08	100	1100	97	56	4.5	41	7.5	170
0.055	97.75	1050	89.25	51	4.1	37	7.425	157.5
0.033166254	2.6299564	57.735034	5.3150734	3.36650165 4	0.42426407 4	2.943924	0.0957434	9.574274

Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
860						0.01	0.03	0.22
1020						0.01	0.03	1.1
1220						0.01	0.03	1.5
		0.05		0.01		0.01	0.03	1.3
		0.04		0.01		0.01	0.03	1.2
		0.09		0.01		0.02	0.07	0.83
		0.07		0.03		0.07	0.07	1.4
		0.16		0.03		0.01	0.03	1.6
		0.07		0.03		0.02	0.04	1.02
		0.03		0.03		0.03	0.03	1.42
		0.06		0.03		0.01	0.04	0.9
		0.01		0.03		0.01	0.03	0.62
		0.01		0.03		0.08	0.03	0.64
		0.34		0.03		0.01	0.03	0.52
		0.01		0.03		0.04	0.03	0.94
		0.01		0.03		0.05	0.03	0.66
		0.01		0.03		0.01	0.03	0.49
		0.01		0.03		0.03	0.03	0.34
		0.01		0.03		0.03	0.03	0.34
		0.18		0.03		0.01	0.03	0.5
						0.002		0.7
		0.01		0.03		0.01	0.03	0.85
		0.01		0.03		0.01	0.03	0.9
		0.02		0.03		0.05	0.03	0.61
		0.01		0.03		0.31	0.03	0.39
		0.01		0.04		0.31	0.03	0.53
						0.002		
						0.017		2.34
1290			0.002	0.0083		0.028	0.006	4.44
1190			0.001	0.0004		0.003	0.001	1.2
816		0.22	0.22	0.0026		0.023	0.031	0.36
862		2.3	0.001	0.00039		0.005	0.001	1.2
644		4.07	0.01	0.0069		0.11	0.375	0.817
670		0.94	0.001	0.0022		0.018	0.075	0.16
			0.004	0.0031		0.051	0.21	0.31
700	0.005	0.66			0.0031			
700								
			0.001	0.0014		0.003	0.001	

700						0.014	0.037	
650	0.005	0.57	0.001	0.0014	0.0012	0.017	0.037	0.099
740						0.015	0.036	
730						0.016	0.026	
744						0.027	0.051	
727	0.005	0.86	0.002	0.0013	0.0025	0.013	0.057	0.14
700						0.015	0.066	
640						0.007	0.0086	
780						0.049	0.019	
880	0.005	0.02	0.001	0.00009	0.0025	0.0028	0.0006	1.1
940						0.0038	0.00035	
690						0.0017	0.00055	
800						0.002	0.00016	
650	0.005	0.02	0.001	0.0007	0.0018	0.0025	0.00034	0.32
710								
850								
680								
660	0.01	0.02	0.001	0.0016	0.0003	0.0032	0.00005	0.029
820								
660								
720								
810	<0.01	0.005	0.001	0.0026	0.0014	0.0034	0.00085	0.3
880						0.069	0.19	
1100								
1030			0.001	0.00128		0.006	0.001	
913	0.007	0.05	0.001	0.00078	0.0003	0.004	0.0007	0.017
1060			0.002	0.00011		0.001	0.0002	

913	0.007	0.05	0.001	0.00011	0.0003	0.001	0.0002	0.017
1100	0.007	0.05	0.002	0.00128	0.0003	0.006	0.001	0.017
1025.75	0.007	0.05	0.001333	0.00072	0.0003	0.0036667	0.0006333	0.017
80.4503	#DIV/0!	#DIV/0!	0.000577	0.00059	#DIV/0!	0.0025166	0.0004041	#DIV/0!
4	1	1	3	3	1	3	3	1
720	0	0.005	0.001	0.0026	0.0014	0.0034	0.00085	0.3
880	0	0.005	0.001	0.0026	0.0014	0.069	0.19	0.3
803.333	#DIV/0!	0.005	0.001	0.0026	0.0014	0.0362	0.095425	0.3
80.2081	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0463862	0.1337492	#DIV/0!
3	0	1	1	1	1	2	2	1
660	0.01	0.02	0.001	0.0016	0.0003	0.0032	0.00005	0.029
820	0.01	0.02	0.001	0.0016	0.0003	0.0032	0.00005	0.029
705	0.01	0.02	0.001	0.0016	0.0003	0.0032	0.00005	0.029
77.2442	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1
650	0.005	0.02	0.001	0.0007	0.0018	0.0025	0.00034	0.32
850	0.005	0.02	0.001	0.0007	0.0018	0.0025	0.00034	0.32
722.5	0.005	0.02	0.001	0.0007	0.0018	0.0025	0.00034	0.32
88.459	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1

690	0.005	0.02	0.001	0.00009	0.0025	0.0017	0.00016	1.1
940	0.005	0.02	0.001	0.00009	0.0025	0.0038	0.0006	1.1
827.5	0.005	0.02	0.001	0.00009	0.0025	0.002575	0.000415	1.1
108.128	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0009394	0.0002014	#DIV/0!
4	1	1	1	1	1	4	4	1
640	0.005	0.005	0.001	0.00009	0.0003	0.001	0.00005	0.017
1290	0.01	4.07	0.22	0.04	0.0031	0.31	0.375	4.44
822	0.006	0.32220588	0.014765	0.01654	0.001638	0.0304357	0.0392906	0.837854
173.546	0.001914854	0.7970126	0.052935	0.01413	0.001034	0.0586381	0.0609043	0.762981
38	7	34	17	39	8	56	53	41
860	0	0	0	0	0	0	0	0
1290	0	0	0	0	0	0	0	4
1116	#DIV/0!	0	0	0	#DIV/0!	0	0	1
174.155	#DIV/0!	0.0798646	0.000707	0.00982	#DIV/0!	0.0757068	0.0134953	0.807712
5	0	22	2	24	0	30	27	29
640	0.005	0.005	0.001	0.00009	0.0003	0.0017	0.00005	0.029
940	0.01	4.07	0.22	0.0069	0.0031	0.11	0.375	1.2
743.207	0.005833333	0.88045455	0.020333	0.00202	0.001829	0.0204957	0.0531957	0.439545
83.5299	0.002041241	1.25542912	0.062933	0.00179	0.000952	0.0263573	0.0898688	0.408195
29	6	11	12	12	7	23	23	11
650	0.005	0.57	0.001	0.0014	0.0012	0.015	0.026	0.099
744	0.005	0.57	0.001	0.0014	0.0012	0.027	0.051	0.099
716	0.005	0.57	0.001	0.0014	0.0012	0.01875	0.0375	0.099
44.3922	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0055603	0.0102794	#DIV/0!
4	1	1	1	1	1	4	4	1
640	0.005	0.86	0.002	0.0013	0.0025	0.007	0.0086	0.14
780	0.005	0.86	0.002	0.0013	0.0025	0.049	0.066	0.14
711.75	0.005	0.86	0.002	0.0013	0.0025	0.021	0.03765	0.14
58.243	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0189737	0.0281062	#DIV/0!
4	1	1	1	1	1	4	4	1

Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	0.05					
	0.15					
	0.65					
	0.43					
	0.64					
	0.57					
	0.28					
	0.39					
	0.16					
	0.19					
	0.34					
	0.15					
	0.09					
	0.32					
	0.22					
	0.99					
	0.13					
	0.23					
	0.23					
	0.24					
	0.11					
	0.09					
	0.14					
	0.01					
	0.09					
	0.1					
	0.11	0.2				
	0.48					
	1.04	0.3				
	0.185	0.2				
	0.265	0.5	0.115	0.011		
	0.2	0.3			0.05	0.05
	0.92	0.4	0.436	0.01		
	0.33	0.51			0.01	0.1
	0.5	0.62				
			0.22	0.01		
0.0001	0.128					

	0.18					
0.0001	0.28	0.5	0.37	0.01		
	0.23				0.01	0.1
	0.28					
	0.5					
0.0001	0.22	0.5	0.21	0.01		
	0.2				0.00001	0.0001
	0.16					
	1.9					
0.0001	0.036	0.4	0.17	0.01	0.00001	0.0001
	0.48					
	0.18					
	0.17					
0.0001	0.15	0.5	0.04	0.01	0.00001	0.0001
0.0001	0.2	0.5	1.7	0.01	0.002	0.002
<0.0001	0.31	0.5	0.97	<0.01	<0.002	<0.002

	0.132					
0.0001	0.167	0.3	0.32	0.01	0.002	0.002
	0.242					

0.0001	0.132	0.3	0.32	0.01	0.002	0.002
0.0001	0.242	0.3	0.32	0.01	0.002	0.002
0.0001	0.1803333	0.3	0.32	0.01	0.002	0.002
#DIV/0!	0.0561991	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	3	1	1	1	1	1
0	0.31	0.5	0.97	0	0	0
0	0.31	0.5	0.97	0	0	0
#DIV/0!	0.31	0.5	0.97	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	1	1	1	0	0	0
0.0001	0.2	0.5	1.7	0.01	0.002	0.002
0.0001	0.2	0.5	1.7	0.01	0.002	0.002
0.0001	0.2	0.5	1.7	0.01	0.002	0.002
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
0.0001	0.15	0.5	0.04	0.01	0.00001	0.0001
0.0001	0.15	0.5	0.04	0.01	0.00001	0.0001
0.0001	0.15	0.5	0.04	0.01	0.00001	0.0001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

0.0001	0.036	0.4	0.17	0.01	0.00001	0.0001
0.0001	0.48	0.4	0.17	0.01	0.00001	0.0001
0.0001	0.2165	0.4	0.17	0.01	0.00001	0.0001
#DIV/0!	0.1875344	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1		1	1	1	1	1

0.0001	0.01	0.2	0.04	0.01	0.00001	0.0001
0.0001	1.9	0.62	1.7	0.011	0.05	0.1
0.0001	0.3120909	0.415333333	0.4551	0.010111111	0.00925375	0.031788
1.464E-207	0.312672755	0.12732784815	0.50830446910	0.0003333339	0.016999778	0.0453948

0	0	0	0	0	0	0
0	1	0	0	0	0	0
#DIV/0!	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	0.259213530	0.0577350273	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0			0	0	0	0

0.0001	0.036	0.3	0.04	0.01	0.00001	0.0001
0.0001	1.9	0.62	1.7	0.011	0.05	0.1
0.0001	0.3554091	0.475454545	0.470111111	0.010125	0.01029	0.036043
0	0.391618222	0.08238490611	0.5367821829	0.0003535538	0.0180868817	0.0472777
6						

0.0001	0.23	0.5	0.37	0.01	0.01	0.1
0.0001	0.5	0.5	0.37	0.01	0.01	0.1
0.0001	0.3225	0.5	0.37	0.01	0.01	0.1
#DIV/0!	0.12065794	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1		1	1	1	1	1

0.0001	0.16	0.5	0.21	0.01	0.00001	0.0001
0.0001	1.9	0.5	0.21	0.01	0.00001	0.0001
0.0001	0.62	0.5	0.21	0.01	0.00001	0.0001
#DIV/0!	0.85369784	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1		1	1	1	1	1

Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1	25	25	190	100	1	1	1	2

1	25	25	690	100	1	1	1	2
1	25	25	100	100	1	1	1	2
1	25	25	100	100				
1	25	25	100	100	1	1	1	2
0.5	20	50	100	50	1	5	2	2

<0.5	<20	<50	<100	<50	<1	<2	<2	<2
1	20	50	1010	480	1	2	2	2

1	20	50	1010	480	1	2	2	2
1	20	50	1010	480	1	2	2	2
1	20	50	1010	480	1	2	2	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
0.5	20	50	100	50	1	5	2	2
0.5	20	50	100	50	1	5	2	2
0.5	20	50	100	50	1	5	2	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
1	25	25	100	100	1	1	1	2
1	25	25	100	100	1	1	1	2
1	25	25	100	100	1	1	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

1	25	25	100	100	0	0	0	0
1	25	25	100	100	0	0	0	0
1	25	25	100	100	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	0	0	0	0
0.5	20	25	100	50	1	1	1	2
1	25	50	1010	480	1	5	2	2
0.92857143	23.57143	32.14286	327.1429	147.1429	1	1.833333	1.333333	2
0.18898224	2.43975	12.19875	370.3923	147.9543	0	1.602082	0.516398	0
7	7	7	7	7	6	6	6	6
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
0.5	20	25	100	50	1	1	1	2
1	25	50	690	100	1	5	2	2
0.91666667	24.16667	29.16667	213.3333	91.66667	1	1.8	1.2	2
0.20412415	2.041241	10.20621	236.2767	20.41241	0	1.788854	0.447214	0
6	6	6	6	6	5	5	5	5
1	25	25	690	100	1	1	1	2
1	25	25	690	100	1	1	1	2
1	25	25	690	100	1	1	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
1	25	25	100	100	1	1	1	2
1	25	25	100	100	1	1	1	2
1	25	25	100	100	1	1	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
mg/L	mg/L	mg/L	mg/L
		1	
			0.001
0.05	7		0.001
0.05	6		0.001
0.5	1		0.003
0.05	6.5		0.001
0.05	2		0.014
0.005	2		0.003
1	2		0.007
	2		0.003
	2	0.1	
			0.001

	1		
2	1	0.073	0.003
	1		
	2		
	1		
2	2	0.14	0.003
	1		
0.001	2	0.15	0.002
0.001	4	0.091	0.002
0.001	4	0.11	0.001
<0.05	6	0.081	<0.002

0.05	6	0.0892	0.007

0.05	6	0.0892	0.007
0.05	6	0.0892	0.007
0.05	6	0.0892	0.007
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1
0	6	0.081	0
0	6	0.081	0
#DIV/0!	6	0.081	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	1	1	0
0.001	4	0.11	0.001
0.001	4	0.11	0.001
0.001	4	0.11	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1
0.001	4	0.091	0.002
0.001	4	0.091	0.002
0.001	4	0.091	0.002
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1

0.001	2	0.15	0.002
0.001	2	0.15	0.002
0.001	2	0.15	0.002
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1

0.001	1	0.073	0.001
2	7	0.15	0.014
0.442923	2.840909091	0.104275	0.003313
0.747896	2.100942893	0.027624	0.003439
13	22	8	16

0	1	0	0
0	7	0	0
0	5	#DIV/0!	0
0	3.214550254	#DIV/0!	0
2	3	0	3

0.001	1	0.073	0.001
2	6.5	0.15	0.014
0.5608	2.361111111	0.106429	0.003583
0.823951	1.678633509	0.029102	0.003655
10	18	7	12

2	1	0.073	0.003
2	2	0.073	0.003
2	1.25	0.073	0.003
#DIV/0!	0.5	#DIV/0!	#DIV/0!
1	4	1	1

2	1	0.14	0.003
2	2	0.14	0.003
2	1.5	0.14	0.003
#DIV/0!	0.707106781	#DIV/0!	#DIV/0!
1	2	1	1

Comments
Ref: Woodward Clyde July 1997
ALS
ALS
not enough water to pump
Not enough water to fill bottles or test field parameters

Sample collected using bailer

	Statistics	Field Information					
SML20		Date	Site Code	**Time**	**Sampler**	**pH**	**Conductivity**
EPL 11436				AM/PM	Initials	pH	µS/cm
		6/12/1996	MB2			6.50	6170.00
		17/06/1997	MB2			6.50	6480.00
		7/08/1997	MB2			6.50	6410.00
		11/11/1997	MB2			6.50	6480.00
		26/03/1998	MB2			6.40	5750.00
		9/06/1998	MB2			6.50	5410.00
		7/09/1998	MB2			6.50	6630.00
		1/12/1998	MB2			6.50	6270.00
		1/03/1999	MB2			6.57	6150.00
		4/06/1999	MB2			6.68	6550.00
		10/09/1999	MB2			6.69	7190.00
		3/12/1999	MB2			6.67	7090.00
		6/03/2000	MB2			6.70	6430.00
		2/06/2000	MB2			6.55	6590.00
		4/09/2000	MB2			6.78	6870.00
		5/12/2000	MB2			6.74	6680.00
		2/03/2001	MB2			6.58	6910.00
		8/06/2001	MB2			6.59	6120.00
		8/06/2001	MB2			6.59	6120.00
		10/09/2001	MB2			6.56	6280.00
		10/01/2002	MB2			6.56	6740.00
		6/03/2002	MB2			6.60	6700.00
		17/06/2002	MB2			6.62	6460.00
		19/09/2002	MB2			6.60	6250.00
		4/12/2002	MB2			6.62	6250.00
		18/03/2003	MB2				
		23/06/2003	MB2			6.91	5340.00
		3/09/2003	MB2			6.90	5700.00
		26/11/2003	MB2			7.23	5060.00
		18/03/2004	MB2			6.43	6260.00
		22/06/2004	MB2			6.68	6900.00
		6/09/2004	MB2			6.95	5170.00
		8/12/2004	MB2		AMW,GB	5.76	5480.00
		21/03/2005	MB2		AMW	7.2	5410
		6/07/2005	MB2		AW,CS	6.85	6320
		8/09/2005	MB2		AW,AMW	6.87	6640
		14/11/2005	MB2		JMc	6.72	5940
		13/03/2006	MB2		JMc	5.94	6110
		8/06/2006	MB2		JMc	6.51	6030
		4/09/2006	MB2		JMc	6.5	5664
		13/12/2006	MB2		HG	6.7	6430
		20/04/2007	MB2		HG	7.42	6790
		28/06/2007	MB2		HG	7.04	6530
		22/08/2007	MB2		TM	6.72	6660
		16/08/2007	MB2		Coffey	6.77	5350
		30/10/2007	MB2		TM	6.05	5600
		11/12/2007	MB2		TM	6.42	6580
		15/04/2008	MB2		TM	6.91	5050
		30/09/2008	MB2	10.44	TM	7.48	6660

6/01/2009	MB2	15.09	TM	7.58	6420
21/05/2009	MB2	13.13	TM	7.25	6710
23/06/2009	MB2	9.34	TM	6.51	6810
19/10/2009	MB2	10.4	TM	6.98	6650
8/12/2009	MB2	10	TM	7.91	6430
29/04/2010	MB2	8.25	TM	7.12	6470
15/06/2010	MB2	10.08	TM	7.55	6870
21/09/2010	MB2	10.16	TH	6.32	6380
7/12/2010	MB2	10.58	TH	7.39	6390
7/12/2010	MB2	10.58	TH	7.39	6390
28/03/2011	MB2	10.4	TH	6.75	6480
20/06/2011	MB2	13.35	SB	-	6610
28/09/2011	MB2	10.56	TH	6.67	6600
11/01/2012	MB2	11.04	TH	6.75	6570
30/03/2012	MB2	10.55	TH	6.54	6590
14/06/2012	MB2	7.58	TH	6.81	6740
24/09/2012	MB2	9.56	TH	6.55	6510
24/09/2012	MB2	9.56	TH	6.55	6510
17/01/2013	MB2	11.22	TH	6.87	6600
1/05/2013	MB2	9:40	DS	6.27	6160
16/08/2013	MB2	13:00	DS	6.57	6810
14/10/2013	MB2	13:42	DS	6.69	6540
8/11/2013	MB2	11:05am	DS		
15/01/2014	MB3	10:25am	DS	6.52	6520
10/04/2014	MB2	12:05am	TB	6.47	6680
24/06/2014	MB2	2:55pm	PM	6.65	6710

Negative values converted to positive

'<' removed from <LOR values

2013/14	Minimum	6.47	6520
	Maximum	6.69	6710
	Average	6.5825	6612.5
	StdDev	0.10436	96.3932916
	Count	4	4
2012/13	Minimum	6.27	6160
	Maximum	6.87	6810
	Average	6.565	6520
	StdDev	0.24515	270.924344
	Count	4	4
2011/12	Minimum	6.54	6570
	Maximum	6.81	6740
	Average	6.6925	6625
	StdDev	0.11673	77.6745347
	Count	4	4
2010/11	Minimum	6.32	6380
	Maximum	7.39	6480
	Average	6.9625	6410
	StdDev	0.52392	46.9041576

	Count		4	4
		11/02/2010	Changed from DISSOLVED metals to TOT	
2009/10	Minimum		6.98	6430
	Maximum		7.91	6870
	Average		7.39	6605
	StdDev		0.42308	200.914576
	Count		4	4
OVERALL	Minimum		5.76	5050.00
	Maximum		7.91	7190.00
	Average		6.73	6339.78
	StdDev		0.36913	482.519034
	Count		72	73
1996 - 2004 (mining)	Minimum		6	5060
	Maximum		7	7190
	Average		7	6278
	StdDev		0.23027	547.885874
	Count		32	32
2005 + (post mini	Minimum		5.94	5050
	Maximum		7.91	6870
	Average		6.89097	6339.8125
	StdDev		0.4587	462.478417
	Count		31	32
2007/08	Minimum		6.05	5050
	Maximum		6.91	6580
	Average		6.46	5743.33333
	StdDev		0.43139	775.005376
	Count		3	3
2008/09	Minimum		6.51	6420
	Maximum		7.58	6810
	Average		7.205	6650
	StdDev		0.48349	165.529454
	Count		4	4

					Analytical Information			
Temperature	**Dissolved Oxygen**	**Oxidation-Reduction**	**Depth to Water**	**RL Water Level**	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)
°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L
			0.00			280		
			0.00			280		
			1.65	780.21		280		
			1.57	780.29				
			2.07	779.79				
			2.07	779.79				
			1.38	780.48				
			1.61	780.25				
			1.81	780.05				
			1.92	779.94				
			1.82	780.04				
			1.84	780.02				
			2.07	779.79				
			2.09	779.77		270		
			2.05	779.81				
			1.89	779.97				
			2.09	779.77				
			2.34	779.52				
			0.00	781.86				
			2.23	779.63				
			2.45	779.41				
			2.45	779.41				
			2.14	779.72				
			2.42	779.44				
			2.62	779.24		547		
			2.75	779.11				
			2.80	779.06				
			2.68	779.18				
			2.75	779.11				
16.80			3.04	778.82				
13.00			3.38	778.48				
14.40			3.49	778.37				
16.30		155	3.31	778.55				
			3.4	778.46				
14.71	3.26	155	3.36	778.50				
15.09	3.28	169	2.155	779.71				
16.24	3.83	96	3.5	778.36				
14.5	2.98	104	3.1	778.76				
12.6	3.73	144	2.68	779.18				
13.8	3.47	68	2.84	779.02				
19.76	2.51	119	3.6	778.26				
16.74	5	108	3.87	777.99	563904			
12.93	3.63	103	3.14	778.72				
14.06	1.61	130	3.45	778.41				
15.1			3.44	778.42	ES0711417	205	1	205
Qanta not working			3.62	778.24				
14.3	4.32		3.57	778.29				
15.8	3.35		3.88	777.98				
14.6	2.2		3.66	778.20				

27.3	3.57		4.03	777.83				
14.7	2.89		4.28	777.58	694637			
12.7	4.75		4.21	777.65	699744	210	2	210
15.3	3.5		4.56	777.30	718599	202	0.1	202
16.6	2.52		4.6	777.26	727369	202	0.1	202
14.1	3.76		4.46	777.40	753061	280	0.1	280
13.2	2.81		4.44	777.42	761399	203	0.1	203
14.2	7.05		3.16	778.70	803082	209	0.1	209
15.9	5.64		3.05	778.81	813898	198	0.1	198
15.9	5.64		3.05	778.81	813905	199	0.1	199
15.6	4.24		3.19	778.67	830986	199	0.1	199
13.3	2.25		3.31	778.55	842906	211	0.1	211
14.8	2.41		3.41	778.45	855929	203	0.1	203
15	2.62		3.35	778.51	870349	203	0.1	203
15.4	4.08		2.59	779.27	882303	204	0.1	204
13.9	3.4		2.6	779.26	893137	199	0.1	199
15.3	3.56		2.61	779.25	906738	200	0.1	200
15.3	3.56		2.61	779.25	906738	200	0.1	200
16.4	2.71		2.88	778.98	922841	199	0.1	199
15.2	0.18		3.37	778.49	936991	197	0.1	197
15.4	0.48		2.62	779.24	951936	207	0.1	207
15.1	1.06	18.9	2.71	779.15	959585	191	0.1	191
					963213	211	0.1	211
17.8	Probe Failed		3.08	778.78	A1400135-0(	192	0.1	192
15.1	0.65	49.6	3	778.86	A1401099-0(	199	0.1	199
13.1	2.65	15	3.14	778.72	A1401898-0(	194	0.1	194

13.1	0.65	15	2.71	778.72	191	0.1	191
17.8	2.65	49.6	3.14	779.15	211	0.1	211
15.275	1.45333333	27.833	2.9825	778.8775	197.4	0.1	197.4
1.929378144	1.056424793	18.9513	0.19054	0.1905044	8.2036585	0.05	8.2036585

15.2	0.18		2.61	778.49	202	0.1	202
16.4	3.56		3.37	779.25	280	0.1	280
15.575	1.7325		2.87	778.99	223.5	0.1	223.5
0.556027584	1.660750334		0.356	0.3559964	37.79334	0.04	37.79334

13.9	2.41	0	2.59	778.45	199	0.1	199
15.4	4.08	0	3.41	779.27	204	0.1	204
14.775	3.1275	#DIV/0!	2.9875	778.8725	202.25	0.1	202.25
0.634428884	0.764607744	#DIV/0!	0.4539	0.4539	2.2173564	0.04	2.2173564

14.2	4.24	0	3.05	778.67	198	0.1	198
15.9	7.05	0	3.19	778.81	209	0.1	209
15.4	5.6425	#DIV/0!	3.1125	778.7475	201.25	0.1	201.25
0.81240384	1.14718133	#DIV/0!	0.0732	0.073201	5.188127	0	5.188127

4	4	0	4	4	4	4	4

'AL on recommendation of Dino Parisotto Earth2 Water (Environmental & Groundwater Consulting)

13.2	2.52	0	4.44	777.26	202	0.1	202
16.6	3.76	0	4.6	777.42	280	0.1	280
14.8	3.1475	#DIV/0!	4.515	777.345	221.75	0.1	221.75
1.47648231	0.57938905	#DIV/0!	0.07724	0.077244	38.83619	0	38.83619
4	4	0	4	4	4	4	4
12.60	0.18	15.00	0.00	777.26	191.00	0.10	191.00
27.30	7.05	169.00	4.60	781.86	547.00	2.00	280.00
15.29	3.22	102.46	2.79	778.99	225.80	0.21	204.68
2.34565426	1.41465443	49.142	0.95889	0.848673	67.38638	0.413642	16.58242
43	37	14	74	72	30	25	25
13	0	155	0	778	270	0	0
17	0	155	3	782	547	0	0
15	#DIV/0!	155	2	780	331	#DIV/0!	#DIV/0!
1.75380539	#DIV/0!	#DIV/0!	0.84888	0.678492	120.6018	#DIV/0!	#DIV/0!
4	0	1	33	31	5	0	0
12.6	1.61	68	2.155	777.26	205	1	205
27.3	7.05	169	4.6	779.705	210	2	210
15.271	3.59655172	119.6	3.48606	778.3739	207.5	1.5	207.5
2.68662248	1.18166129	30.314	0.60711	0.607112	3.535534	0.707107	3.535534
30	29	10	32	32	2	2	2
14.3	3.35		3.57	777.98	0	0	0
15.8	4.32		3.88	778.29	0	0	0
15.05	3.835		3.69	778.17	#DIV/0!	#DIV/0!	#DIV/0!
1.06066017	0.68589358		0.16643	0.166433	#DIV/0!	#DIV/0!	#DIV/0!
2	2		3	3	0	0	0
12.7	2.2	0	3.66	777.58	210	2	210
27.3	4.75	0	4.28	778.2	210	2	210
17.325	3.3525	#DIV/0!	4.045	777.815	210	2	210
6.71335733	1.08665772	#DIV/0!	0.27743	0.277429	#DIV/0!	#DIV/0!	#DIV/0!
4	4	0	4	4	1	1	1

Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
	380		585	835	1.9	250		4450
	370		580	850	0.32	255		4420
	380		550	890	2.3	270		4360
	395		620	880	2.3	260		4550
	394		600	810	2.7	260		4300
			586	718	2.1	257		3984
	388.9		472	798	2.51	265		4060
	421		454	880	2.96	218		4261
	430		577	805	1.45	294		4236
	329		613	769	1.34	278		3999
	390		595	785	1.29	275		4160
	392		579	728	1.71	288		4170
	407		625	759	1.03	264		4080
			627	754	2.36	318		4110
	394		617	877	1.27	299		4490
	385		732	867	2.81	326		4530
	393		622	979	4.18	334		5062
	402		378	747	0.85	240		3690
	402		378	747	0.85	240		3690
	392		501	769		274		3980
	414		620	743		250		4110
	398		488	705		206		3500
	415		3570	335		254		4260
0.03	1970		101	420		967		661
							7.1	4200
	414	5350	530	764	2	288	6.47	4520

		6700					6.7	4100
0.08	520	6600	570	850	1.5	290	7.7	4100
0.04	530	6500	490	760	2	260	7.1	4300
0.05	520	6600	590	780	1.6	260	7	4100
0.07	530	6600	510	820	2.2	250	7.1	4200
0.02	540	6700	630	950	2	260	7.1	4100
0.04	520	6600	530	820	2.4	260	7.3	4000
0.17	540	6500	460	710	2.3	250	7.2	4100
0.13	510	6500	470	720	2.3	250	7.1	4100
0.01	480	6500	490	760	2.4	260	7.5	3800
0.19	520	6600	490	740	1.5	240	7.2	4100
0.1	520	6700	580	850	2.2	240	6.9	4100
0.1	500	6700	540	820	1.9	280	6.9	3900
0.1	510	6600	550	830	2	290	6.8	4100
0.1	540	6600	530	820	1.9	280	7.2	4100
0.1	540	6600	480	730	1.1	250	6.6	4500
0.1	540	6600	480	730	1.1	250	6.6	4500
0.1	570	6600	490	790	1.4	240	6.7	4100
0.1	590	6160	510	720	1.1	230	7.1	4000
	600	6810	520		1.6	260	7	4100
0.1	570	6540	520	730	1.6	250	7.3	4100
0.1	590			840	1.9	260		3800
0.1	630	6650	500	854	1.7	242	6.91	3950
0.1	646	6670	484	789	1.8	266	6.59	4160
0.1	620	6660	510	808	1.8	269	6.78	3220

0.1	570	6540	484	730	1.6	242	6.59	3220
0.1	646	6670	520	854	1.9	269	7.3	4160
0.1	611.2	6630	503.5	804.2	1.76	257.4	6.895	3846
0	30.77661	60.55301	15.35144	48.76679	0.1140175	11.26055	0.300278	376.8023
5	5	4	4	5	5	5	4	5

0.02	520	6600	510	780	1.6	250	7	4000
0.07	540	6700	630	950	2.4	260	7.3	4200
0.045	527.5	6625	565	842.5	2.05	257.5	7.125	4100
0.020817	9.574271	50	55.07571	74.10578	0.341565	5	0.125831	81.64966
4	4	4	4	4	4	4	4	4

0.1	500	6600	530	820	1.9	240	6.8	3900
0.1	540	6700	580	850	2.2	290	7.2	4100
0.1	517.5	6650	550	830	2	272.5	6.95	4050
0	17.07825	57.73503	21.60247	14.14214	0.1414214	22.17356	0.173205	100
4	4	4	4	4	4	4	4	4

0.01	480	6500	460	710	2.3	250	7.1	3800
0.17	540	6600	530	820	2.4	260	7.5	4100
0.0875	512.5	6525	487.5	752.5	2.35	255	7.275	4000
0.075	25	50	30.95696	49.9166	0.057735	5.773503	0.170783	141.4214

4	4	4	4	4	4	4	4	4
0.02	520	6500	490	760	1.6	250	7	4100
0.07	540	6700	630	950	2.2	260	7.1	4300
0.045	530	6600	555	827.5	1.95	257.5	7.075	4175
0.020817	8.164966	81.64966	66.08076	85.39126	0.2516611	5	0.05	95.74271
4	4	4	4	4	4	4	4	4
0.01	329.00	5350.00	101.00	335.00	0.32	206.00	6.47	661.00
0.19	1970.00	6810.00	3570.00	979.00	4.18	967.00	7.70	5062.00
0.09	507.06	6545.60	594.25	779.90	1.85	277.90	7.00	4067.90
0.042356	233.6792	275.4403	448.3805	105.4956	0.669535	103.4781	0.294306	565.3936
24	47	25	48	48	44	49	26	51
0	329	0	101	335	0	206	0	661
0	1970	0	3570	979	4	967	0	5062
0	466	#DIV/0!	670	769	2	298	#DIV/0!	4046
#DIV/0!	336.6277	#DIV/0!	630.2914	138.3355	0.9283322	145.8471	#DIV/0!	790.4353
1	22	0	24	24	19	24	0	24
0.08	414	5350	530	764	1.5	288	6.47	4100
0.08	520	6700	570	850	2	290	7.7	4520
0.08	467	6216.667	550	807	1.75	289	6.9925	4230
#DIV/0!	74.95332	752.2189	28.28427	60.81118	0.3535534	1.414214	0.538725	198.9975
1	2	3	2	2	2	2	4	4
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
0.08	520	6600	570	850	1.5	290	6.7	4100
0.08	520	6700	570	850	1.5	290	7.7	4100
0.08	520	6650	570	850	1.5	290	7.2	4100
#DIV/0!	#DIV/0!	70.71068	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.707107	0
1	1	2	1	1	1	1	2	2

Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
6783						0.01	0.12	0.02
6760						0.02	0.03	0.01
6730						0.03	0.03	0.03
		0.06		0.02		0.01	0.03	0.03
		0.01		0.01		0.01	0.03	0.02
		0.03		0.03		0.01	0.04	0.01
		0.01		0.02		0.02	0.04	0.02
		0.28		0.03		0.01	0.04	0.01
		0.06		0.03		0.03	0.04	0.02
		0.03		0.02		0.03	0.03	0.01
		0.01		0.03		0.01	0.03	0.02
		0.01		0.03		0.01	0.03	0.02
		0.01		0.03		0.07	0.03	0.03
		0.47		0.03		0.01	0.03	0.02
		0.01		0.03		0.03	0.03	0.02
		0.2		0.04		0.13	0.13	0.02
		0.01		0.03		0.01	0.03	0.01
		0.01		0.03		0.01	0.03	0.01
		0.01		0.03		0.01	0.03	0.01
		0.01		0.03		0.01	0.03	0.01
		0.01		0.03		0.01	0.03	0.01
		0.07		0.03		0.01	0.03	0.07
		0.01		0.06		0.32	0.03	0.03
			0.01			0.021	0.01	0.63
						0.009	0.009	
			0.001	0.0048		0.006	0.001	

						0.006	0.0019	
7028	0.005	0.1	0.001	0.021	0.0011	0.007	0.0068	0.044
6900				0.006		0.006	0.002	
5000						0.002	0.0011	
6900	0.005	0.02	0.001	0.036	0.0015	0.011	0.00069	0.035
7200						0.0047	0.00053	
7200						0.0056	0.001	
6900						0.0066	0.0011	
6900						0.0056	0.00088	
6900	0.005	0.00002	0.001	0.03	0.0013	0.007	0.00094	0.035
7100						0.0033	0.00005	
7100						0.0048	0.00029	
7300						0.044	0.00052	
6900	0.01	0.03	0.003	0.028	0.0012	0.0049	0.0004	0.053
7300						0.007	0.0004	
6900						0.0066	0.00025	
6900						0.0066	0.00025	
7400						0.0051	0.00008	
7100	0.1	0.005	0.003	0.029	0.001	0.0041	0.00026	0.033
7100						0.008	0.0003	
7500			0.002	0.0043		0.0039	0.00005	
7000			0.002	0.0043		0.0042	0.00005	
7200			0.003	0.00533		0.004	0.0002	
4340	0.01	0.11	0.003	0.0077	0.0023	0.01	0.0002	0.062
7060			0.002	0.0269		0.005	0.0002	

4340	0.01	0.11	0.002	0.0043	0.0023	0.0039	0.00005	0.062
7500	0.01	0.11	0.003	0.0269	0.0023	0.01	0.0002	0.062
6620	0.01	0.11	0.0024	0.009706	0.0023	0.00542	0.00014	0.062
1289.1085	#DIV/0!1	#DIV/0!1	0.0005485	0.0097125	#DIV/0!1	0.0025975	8.216E-055	#DIV/0!1

5000	0.005	0.02	0.001	0.036	0.0015	0.002	0.00053	0.035
7200	0.005	0.02	0.001	0.036	0.0015	0.011	0.0011	0.035
6575	0.005	0.02	0.001	0.036	0.0015	0.005825	0.00083	0.035
1059.4814	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	0.0037744	0.00026554	#DIV/0!1

6900	0.01	0.03	0.003	0.028	0.0012	0.0048	0.00029	0.053
7300	0.01	0.03	0.003	0.028	0.0012	0.044	0.00052	0.053
7150	0.01	0.03	0.003	0.028	0.0012	0.015175	0.0004025	0.053
191.48544	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	0.0192434	9.394E-054	#DIV/0!1

6900	0.005	0.00002	0.001	0.03	0.0013	0.0056	0.00088	0.035
7200	0.005	0.00002	0.001	0.03	0.0013	0.007	0.0011	0.035
6975	0.005	0.00002	0.001	0.03	0.0013	0.0062	0.00098	0.035
150	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.000712	9.381E-05	#DIV/0!

4	1	1	1	1	1	4	4	1
5000	0.005	0.02	0.001	0.006	0.0015	0.002	0.00053	0.035
7200	0.005	0.02	0.001	0.036	0.0015	0.011	0.002	0.035
6500	0.005	0.02	0.001	0.021	0.0015	0.005925	0.00108	0.035
1009.95	#DIV/0!	#DIV/0!	#DIV/0!	0.021213	#DIV/0!	0.003771	0.0006586	#DIV/0!
4	1	1	1	2	1	4	4	1
4340.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
7500.00	0.10	0.47	0.01	0.06	0.00	0.32	0.13	0.63
6866.70	0.02	0.06	0.00	0.02	0.00	0.02	0.02	0.05
668.1732	0.038046	0.106056	0.002462	0.012183	0.000473	0.047376	0.0265163	0.111587
27	6	26	12	32	6	51	51	30
6730	0	0	0	0	0	0	0	0
6783	0	0	0	0	0	0	0	1
6758	#DIV/0!	0	0	0	#DIV/0!	0	0	0
26.57693	#DIV/0!	0.118606	#DIV/0!	0.009445	#DIV/0!	0.066257	0.0272369	0.125177
3	0	20	1	20	0	24	24	24
7028	0.005	0.1	0.001	0.0048	0.0011	0.006	0.001	0.044
7028	0.005	0.1	0.001	0.021	0.0011	0.009	0.009	0.044
7028	0.005	0.1	0.001	0.0129	0.0011	0.007	0.004675	0.044
#DIV/0!	#DIV/0!	#DIV/0!	0	0.011455	#DIV/0!	0.001414	0.0038483	#DIV/0!
1	1	1	2	2	1	4	4	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
7028	0.005	0.1	0.001	0.021	0.0011	0.006	0.0019	0.044
7028	0.005	0.1	0.001	0.021	0.0011	0.007	0.0068	0.044
7028	0.005	0.1	0.001	0.021	0.0011	0.0065	0.00435	0.044
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.000707	0.0034648	#DIV/0!
1	1	1	1	1	1	2	2	1

Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L
	0.81							
	0.63							
	1							
	0.49							
	0.39							
	0.68							
	0.52							
	0.74							
	0.61							
	0.59							
	0.61							
	0.5							
	0.5							
	0.65							
	0.71							
	0.51							
	0.41							
	0.42							
	0.42							
	0.21							
	0.31							
	0.12							
	0.25							
	0.19	0.5						
	0.1							
	0.045							

	0.046							
0.0001	0.055	0.3	0.01	0.01	0.00001	0.0001	0.05	25
	0.048							
	0.1							
0.0001	0.16	0.5	0.24	0.01	0.00001	0.0001	0.0005	25
	0.051							
	0.12							
	0.1							
	0.095							
0.0001	0.084	0.4	0.27	0.01	0.00001	0.0001	1	25
	0.041							
	0.046							
	0.13							
0.0001	0.1	0.3	0.08	0.01	0.002	0.002	0.5	20
	0.1							
	0.13							
	0.13							
	0.065							
0.0001		0.2	0.05	0.01	0.002	0.002	0.5	20
	0.12							
	0.084							
	0.032							
	0.014							
0.0001	0.214	0.3	0.05	0.01	0.002	0.002	1	20
	0.051							

0.0001	0.014	0.3	0.05	0.01	0.002	0.002	1	20
0.0001	0.214	0.3	0.05	0.01	0.002	0.002	1	20
0.0001	0.079	0.3	0.05	0.01	0.002	0.002	1	20
#DIV/0!	0.0797935	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1		1	1	1	1	1	1	1

0.0001	0.051	0.5	0.24	0.01	0.00001	0.0001	0.0005	25
0.0001	0.16	0.5	0.24	0.01	0.00001	0.0001	0.0005	25
0.0001	0.10775	0.5	0.24	0.01	0.00001	0.0001	0.0005	25
#DIV/0!	0.0453164	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1		1	1	1	1	1	1	1

0.0001	0.046	0.3	0.08	0.01	0.002	0.002	0.5	20
0.0001	0.13	0.3	0.08	0.01	0.002	0.002	0.5	20
0.0001	0.094	0.3	0.08	0.01	0.002	0.002	0.5	20
#DIV/0!	0.0349864	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1		1	1	1	1	1	1	1

0.0001	0.084	0.4	0.27	0.01	0.00001	0.0001	1	25
0.0001	0.12	0.4	0.27	0.01	0.00001	0.0001	1	25
0.0001	0.09975	0.4	0.27	0.01	0.00001	0.0001	1	25
#DIV/0!	0.015064	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

1	4	1	1	1	1	1	1	1
0.0001	0.048	0.5	0.24	0.01	0.00001	0.0001	0.0005	25
0.0001	0.16	0.5	0.24	0.01	0.00001	0.0001	0.0005	25
0.0001	0.08975	0.5	0.24	0.01	0.00001	0.0001	0.0005	25
#DIV/0!	0.052551	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	4	1	1	1	1	1	1	1
0.00	0.01	0.20	0.01	0.01	0.00	0.00	0.00	20.00
0.00	1.00	0.50	0.27	0.01	0.00	0.00	1.00	25.00
0.00	0.29	0.36	0.12	0.01	0.00	0.00	0.51	22.50
0	0.259656	0.113389	0.109848	0	0.00109	0.001041	0.436251	2.738613
6	50	7	6	6	6	6	6	6
0	0	1	0	0	0	0	0	0
0	1	1	0	0	0	0	0	0
#DIV/0!	1	1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	0.209104	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	24	1	0	0	0	0	0	0
0.0001	0.045	0.3	0.01	0.01	0.00001	0.0001	0.05	25
0.0001	0.1	0.3	0.01	0.01	0.00001	0.0001	0.05	25
0.0001	0.0615	0.3	0.01	0.01	0.00001	0.0001	0.05	25
#DIV/0!	0.026058	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	4	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
0.0001	0.046	0.3	0.01	0.01	0.00001	0.0001	0.05	25
0.0001	0.055	0.3	0.01	0.01	0.00001	0.0001	0.05	25
0.0001	0.0505	0.3	0.01	0.01	0.00001	0.0001	0.05	25
#DIV/0!	0.006364	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	2	1	1	1	1	1	1	1

TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L

25	100	100	1	1	1	2	0.001	1
								1
25	100	100	1	1	1	2	0.001	2
25	100	100	1	1	1	2	0.001	5
50	100	50	1	5	2	2	0.001	7

50	100	50	1	2	2	2	0.05	5
50	100	50	1	2	2	2	0.05	3

50	100	50	1	2	2	2	0.05	3
50	100	50	1	2	2	2	0.05	3
50	100	50	1	2	2	2	0.05	3
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

25	100	100	1	1	1	2	0.001	2
25	100	100	1	1	1	2	0.001	2
25	100	100	1	1	1	2	0.001	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

50	100	50	1	5	2	2	0.001	7
50	100	50	1	5	2	2	0.001	7
50	100	50	1	5	2	2	0.001	7
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

25	100	100	1	1	1	2	0.001	5
25	100	100	1	1	1	2	0.001	5
25	100	100	1	1	1	2	0.001	5
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

1	1	1	1	1	1	1	1	1
25	100	100	1	1	1	2	0.001	1
25	100	100	1	1	1	2	0.001	2
25	100	100	1	1	1	2	0.001	1.5
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.707107
1	1	1	1	1	1	1	1	2
25.00	100.00	50.00	1.00	1.00	1.00	2.00	0.00	1.00
50.00	100.00	100.00	1.00	5.00	2.00	2.00	0.05	10.00
37.50	100.00	75.00	1.00	2.00	1.50	2.00	0.02	4.25
13.69306	0	27.38613	0	1.549193	0.547723	0	0.025303	3.150964
6	6	6	6	6	6	6	6	8
0	0	0	0	0	0	0	0	10
0	0	0	0	0	0	0	0	10
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	10
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	1
25	100	100	1	1	1	2	0.001	1
25	100	100	1	1	1	2	0.001	1
25	100	100	1	1	1	2	0.001	1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
25	100	100	1	1	1	2	0.001	1
25	100	100	1	1	1	2	0.001	1
25	100	100	1	1	1	2	0.001	1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

Total Barium	Total Chromium	Comments
mg/L	mg/L	

Ref: Woodward Clyde July 1997

Pumped for 2 minutes
bore pumped for 2 mins

0.001

Sample collected using electric purger.
Used waterra valve to collect sample.

0.025	0.001	
0.025	0.002	
0.02	0.002	
0.026	0.002	27/09/11 - Purged bore for 10 min. SWL 3.44m, SWL after purge 3.74m. 10/01/12 - 10min purge, SWL 3.36m, SWLA 3.72m. 22/03/12 - SWL 2.37m, 5min purge, SWLA 3.59m. 7/06/12 SWL 2.73m, 5min purge, SWLA 2.76m 17/09/12 - SWL 2.45m, 5 min purge, SWLA 2.76m
		17/09/12 - SWL 2.45m, 5 min purge, SWLA 2.76m
		10/01/13 - SWL 2.85m. 5min purge, SWLA 4.34m.
0.022	0.006	
0.0226	0.001	

0.0226	0.001
0.0226	0.001
0.0226	0.001
#DIV/0!	#DIV/0!
1	1

0.025	0.002
0.025	0.002
0.025	0.002
#DIV/0!	#DIV/0!
1	1

0.026	0.002
0.026	0.002
0.026	0.002
#DIV/0!	#DIV/0!
1	1

0.02	0.002
0.02	0.002
0.02	0.002
#DIV/0!	#DIV/0!

1	1

0.025	0.002
0.025	0.002
0.025	0.002
#DIV/0!	#DIV/0!
1	1

0.02	0.00
0.03	0.01
0.02	0.00
0.0022826	0.001777

0	0
0	0
#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!
0	0

0.025	0.001
0.025	0.001
0.025	0.001
#DIV/0!	0
1	2

0	0
0	0
#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!
0	0

0.025	0.001
0.025	0.001
0.025	0.001
#DIV/0!	#DIV/0!
1	1

Statistics Field Information

SML20 EPL 11436	Date	Site Code	Time	Sampler	pH	Conductivity	Temperature
			AM/PM	Initials	pH	µS/cm	°C
	6/12/1996	MB3			6.40	2300.00	
	17/06/1997	MB3			6.50	2340.00	
	7/08/1997	MB3			6.50	2320.00	
	11/11/1997	MB3			6.50	2330.00	
	26/03/1998	MB3			6.50	2260.00	
	9/06/1998	MB3			6.50	1980.00	
	7/09/1998	MB3			6.40	2490.00	
	1/12/1998	MB3			6.60	2260.00	
	1/03/1999	MB3			6.53	2200.00	
	4/06/1999	MB3			6.65	2280.00	
	10/09/1999	MB3			6.56	1520.00	
	3/12/1999	MB3			6.68	2520.00	
	6/03/2000	MB3			6.66	2320.00	
	2/06/2000	MB3			6.61	2250.00	
	4/09/2000	MB3			6.63	2450.00	
	5/12/2000	MB3			6.79	2390.00	
	2/03/2001	MB3			6.56	2390.00	
	8/06/2001	MB3			6.61	2120.00	
	8/06/2001	MB3			6.61	2120.00	
	10/09/2001	MB3			6.63	2210.00	
	10/01/2002	MB3			6.71	2420.00	
	6/03/2002	MB3			6.69	2400.00	
	17/06/2002	MB3			6.71	2310.00	
	19/09/2002	MB3			6.66	2190.00	
	4/12/2002	MB3			6.93	2290.00	
	18/03/2003	MB3					
	23/06/2003	MB3			6.70	2040.00	14.80
	3/09/2003	MB3			7.15	2180.00	
	26/11/2003	MB3			6.90	1898.00	
	18/03/2004	MB3			5.90	2500.00	16.90
	22/06/2004	MB3			6.68	2503.00	13.40
	6/09/2004	MB3			6.83	2132.00	14.30
	8/12/2004	MB3		AMW,GB	5.39	2200.00	17.40
	21/03/2005	MB3		AMW	7.01	2382	
	6/07/2005	MB3		AW,CS	6.63	2140	14.54
	8/09/2005	MB3		AW,AM	6.98	2290	14.72
	14/11/2005	MB3		JMc	6.64	2220	15.7
	13/03/2006	MB3		JMc	7.02	2150	14.9
	8/06/2006	MB3		JMc	6.58	2441	15.8
	4/09/2006	MB3		JMc	6.88	2200	16.7
	13/12/2006	MB3		HG	6.51	2200	19.8
	20/04/2007	MB3		HG	7.41	2390	17.27
	28/06/2007	MB3		HG	7.21	2360	16.82
	22/08/2007	MB3		TM	6.96	2190	14.07
	30/10/2007	MB3		TM	5.95	2000	Qanta
	11/12/2007	MB3		TM	6.4	2155	15.00
	15/04/2008	MB3		TM	7.16	1679	15.80
	26/06/2008	MB3		TM	7.64	1703	12.60
	30/09/2008	MB3	10.16	TM	7.61	2240	15.01

6/01/2009	MB3	15.21	TM	7.78	2075	21.20
21/05/2009	MB3	12.45	TM	7.61	2164	15.40
23/06/2009	MB3	9.14	TM	6.25	2290	13.00
19/10/2009	MB3	10.2	TM	7.57	2131	15.90
8/12/2009	MB3	10.2	TM	7.74	2290	19.50
29/04/2010	MB3	9.2	TM	7.57	2220	14.70
15/06/2010	MB3	10.23	TM	7.65	2129	13.50
21/09/2010	MB3	10.02	TH	6.36	2114	14.40
7/12/2010	MB3	10.37	TH	6.81	2230	17.30
28/03/2011	MB3	10.16	TH	6.84	2240	17.10
20/06/2011	MB3	12.45	SB	0.00	2133	13.00
28/09/2011	MB3	10.38	TH	6.56	2200	15.20
11/01/2012	MB3	11.2	TH	6.83	2132	15.80
28/03/2012	MB3	10.4	TH	6.59	2134	15.50
14/06/2012	MB3	8.12	TH	6.86	2090	14.2
24/09/2012	MB3	9.41	TH	6.1	2260	15.3
17/01/2013	MB3	11.34	TH	6.91	3041	16.8
1/05/2013	MB3	10:30	DS	6.29	2017	15.7
16/08/2013	MB3	13:40	DS	6.76	2005	15.5
14/10/2013	MB3	14:10	DS	6.73	2011	15.4
8/11/2013	MB3	10:40am	DS			
15/01/2014	MB3	9:50am	DS	6.78	1945	17.4
11/04/2014	MB3	11:05am	TB	6.52	1987	15.7
24/06/2014	MB3	2:15pm	PM	6.71	1971	12.9

Negative values converted to positive
'<' removed from <LOR values

2013/14	Minimum	6.52	1945	12.9
	Maximum	6.78	2011	17.4
	Average	6.685	1978.5	15.35
	StdDev	0.1139	27.73085	1.855622
	Count	4	4	4
2012/13	Minimum	6.1	2005	15.3
	Maximum	6.91	3041	16.8
	Average	6.515	2330.75	15.825
	StdDev	0.3825	487.8568	0.670199
	Count	4	4	4
2011/12	Minimum	6.56	2090	14.2
	Maximum	6.86	2200	15.8
	Average	6.71	2139	15.175
	StdDev	0.1568	45.44594	0.694622
	Count	4	4	4
2010/11	Minimum	0	2114	13
	Maximum	6.84	2240.00	17.30
	Average	5.00	2179.25	15.45
	StdDev	3.3422	64.96858	2.101587
	Count	4	4	4

11/02/2010 Changed from DISSOLVED metals to TOTAL on r

2009/10	Minimum	7.57	2129	13.5
	Maximum	7.74	2290	19.5

	Average	7.6325	2192.5	15.9
	StdDev	0.081	77.62517	2.592296
	Count	4	4	4
OVERALL	Minimum	0.00	1520.00	12.60
	Maximum	7.78	3041.00	21.20
	Average	6.66	2206.51	15.62
	StdDev	0.9124	211.628	1.821696
	Count	71	71	42
1996 - 2004 (mining)	Minimum	5	1520	13
	Maximum	7	2520	17
	Average	7	2254	15
	StdDev	0.2973	201.3613	1.71843
	Count	32	32	5
2005 + (post mini	Minimum	0	1679	12.6
	Maximum	7.78	3041	21.2
	Average	6.7285	2167.923	15.65216
	StdDev	1.2049	214.5553	1.854975
	Count	39	39	37
2007/08	Minimum	5.95	1679	12.6
	Maximum	7.64	2155	15.8
	Average	6.7875	1884.25	14.46667
	StdDev	0.7565	232.1514	1.665333
	Count	4	4	3
2008/09	Minimum	6.25	2075	13
	Maximum	7.78	2290	21.2
	Average	7.3125	2192.25	16.1525
	StdDev	0.7129	93.77411	3.525482
	Count	4	4	4

Analytical Information

Dissolved Oxygen	Oxidation-Reduction	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride
mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L
					327				585
					330				585
		0.54	792.66		330				585
		0.39	792.81						585
		0.64	792.56						582
		0.68	792.52						
		0.33	792.87						589.3
		0.15	793.05						578
		0.27	792.93						582
		0.41	792.79						556
		0.53	792.67						563
		0.57	792.63						570
		0.67	792.53						568
		0.76	792.44		315				
		0.85	792.35						560
		0.86	792.34						565
		0.89	792.31						561
		0.95	792.25						566
			793.20						566
		1.03	792.17						560
		1.13	792.07						566
		1.13	792.07						574
		1.13	792.07						574
		1.13	792.07						
		1.25	791.95						
		1.34	791.86						
1.87	153	1.35	791.85						
		1.40	791.80						
		1.46	791.74						
		1.57	791.63						
		1.69	791.51						
		1.74	791.46						
	160	1.84	791.36						
		1.9	791.30						
2.88	128	1.965	791.24						
1.62	34	1.97	791.23						
5.89	49	1.97	791.23						
2.57	52	1.79	791.41						
4.68	28	1.65	791.55						
3.13	50	1.8	791.40						
5.55	118	2.35	790.85						
4.91	157	2.48	790.72	563905					
4.18	123	2.39	790.81						
1.56	122	2.42	790.78						
a not working		5.95	787.25						
1.95		2.53	790.67						
2.35		2.66	790.54						
4		2.69	790.51	639929					
3.37		2.8	790.40						

3.07		2.90	790.30						
3.62		3.09	790.11	694638					
3.19		3.10	790.10	699743	260	2	260	0.01	550
3.37		3.26	789.94	718601	248	0.1	248	0.02	550
3.86		3.32	789.88	727370	250	0.1	250	0.01	530
3.49		3.45	789.75	753062	252	0.1	253	0.01	540
3.10		3.48	789.72	761400	249	0.1	249	0.02	550
7.76		3.16	790.04	803083	252	0.1	252	0.12	520
3.77		3.06	790.14	813899	244	0.1	244	0.15	550
2.62		3.03	790.17	830987	250	0.1	250	0.36	510
2.53		3.90	789.30	842907	259	0.1	259	0.08	520
4.22		3.22	789.98	855930	250	0.1	250	0.1	510
4.53		3.33	789.87	870350	255	0.1	255	0.1	500
4.73		2.98	790.22	882304	255	0.1	255	0.1	500
4.39		2.7	790.50	893138	249	0.1	249	0.1	510
4.97		2.45	790.75	906739	248	0.1	248	0.1	500
3.82		2.35	790.85	922842	248	0.1	248	0.1	500
2.03		2.64	790.56	936990	251	0.1	251	0.1	510
4.11		2.18	791.02	951937	250	0.1	250		520
3.02	16.5	2.13	791.07	959583	245	0.1	245	0.1	530
				963214	254	0.1	254	0.1	510
Probe Failed		2.19	791.01	A1400135-0	242	0.1	242	0.1	516
2.68	42.7	2.05	791.15	A1401140-0	241	0.1	241	0.1	523
4.07	11.5	2.15	791.05	A1401898-0	230	0.1	230	0.1	498

2.68	11.5	2.05	791.01		230	0.1	230	0.1	498
4.07	42.7	2.19	791.15		254	0.1	254	0.1	530
3.25666667	23.567	2.13	791.07		242.4	0.1	242.4	0.1	515.4
0.72459184	16.757	0.05888	0.058878		8.6197	0	8.61974	0	12.2801
3	3	4	4		5	5	5	5	5

2.03		2.18	790.56		248	0.1	248	0.1	500
4.97		2.64	791.02		251	0.1	251	0.1	520
3.7325		2.405	790.795		249.25	0.1	249.25	0.1	507.5
1.23559365		0.19227	0.192267		1.5	0	1.5	1.7E-17	9.57427
4		4	4		4	4	4	3	4

4.22	0	2.7	789.87	855930	249	0.1	249	0.1	500
4.73	0	3.33	790.5	893138	255	0.1	255	0.1	510
4.4675	#DIV/0!	3.0575	790.1425	875430.5	252.25	0.1	252.25	0.1	505
0.21608255	#DIV/0!	0.27957	0.279568	15988.35	3.2016	0	3.20156	0	5.7735
4	0	4	4	4	4	4	4	4	4

2.53	0	3.03	789.3		244	0.1	244	0.08	510
7.76	0.00	3.90	790.17		259.00	0.10	259.00	0.36	550.00
4.17	#DIV/0!	3.29	789.91		251.25	0.10	251.25	0.18	525.00
2.45901064	#DIV/0!	0.4121	0.412098		6.1847	0	6.18466	0.125	17.3205
4	0	4	4		4	4	4	4	4

ecommendation of Dino Parisotto Earth2 Water (Environmental & Groundwater Consulting)

3.1	0	3.26	789.72		248	0.1	248	0.01	530
3.86	0	3.48	789.94		252	0.1	253	0.02	550

3.455	#DIV/0!	3.3775	789.8225	249.75	0.1	250	0.015	542.5
0.31543621	#DIV/0!	0.10468	0.104682	1.7078	0	2.16025	0.00577	9.57427
4	0	4	4	4	4	4	4	4
1.56	11.50	0.15	787.25	230.00	0.10	230.00	0.01	498.00
7.76	160.00	5.95	793.20	330.00	2.00	260.00	0.36	589.30
3.61	82.98	1.94	791.28	260.92	0.19	249.23	0.09	545.75
1.28141386	55.076	1.08853	1.105305	28.794	0.40508	6.4286	0.07325	30.1126
37	15	69	70	26	22	22	21	43
2	153	0	791	315	0	0	0	556
2	160	2	793	330	0	0	0	589
2	157	1	792	326	#DIV/0!	#DIV/0!	#DIV/0!	572
#DIV/0!	4.9497	0.46364	0.487113	7.1414	#DIV/0!	#DIV/0!	#DIV/0!	10.3417
1	2	30	31	4	0	0	0	21
1.56	11.5	1.65	787.25	230	0.1	230	0.01	498
7.76	157	5.95	791.55	260	2	260	0.36	550
3.65527778	71.669	2.70346	790.4965	249.18	0.18636	249.227	0.09429	520.318
1.26504316	49.974	0.77052	0.770517	6.4041	0.40508	6.4286	0.07325	18.0037
36	13	39	39	22	22	22	21	22
1.95		2.53	787.25	0	0	0	0	0
4		5.95	790.67	0	0	0	0	0
2.76666667		3.4575	789.7425	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1.08666155		1.66312	1.663117	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
3		4	4	0	0	0	0	0
3.07	0	2.8	790.1	260	2	260	0.01	550
3.62	0	3.1	790.4	260	2	260	0.01	550
3.3125	#DIV/0!	2.9725	790.2275	260	2	260	0.01	550
0.23921747	#DIV/0!	0.14728	0.147281	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	0	4	4	1	1	1	1	1

Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
	155	150	1.7	94		42
	160	140	2.6	85		48
	150	145	2	85		44
	480	140	1.9	95		50
	150	130	2.3	80		38
	166	122	2.1	84		35
	138	135	2.56	99		43.1
	152	151	2.98	87		44
	168	130	1.69	110		37.4
	157	128	1.14	100		36
	153	129	1.32	90.4		35.7
	157	120	1.62	109		33.6
	166	124	1.37	88.8		34.2
	175	119	2.4	120		33.4
	170	132	1.94	113		34.9
	161	137	1.77	96.8		35.7
	199	143	2.03	121		38.2
	94.8	121	1.72	84.5		29.2
	94.8	121	1.72	84.5		29.2
	128	113		68		33
	156	130		82.9		39.7
	127	95.2		56.5		33.1
	414	52.3		85		39.1
2300					7	39
2200					6.7	34

2200					6.8	37
2200	140	110	1.6	77	7.5	33
2100	150	120	1.8	73	7.1	36
2100	140	110	1.4	72	7	33
2100	150	120	2.1	82	7.6	43
2100	150	120	1.8	82	7.1	38
2100	150	120	2.1	80	7.6	41
2100	140	110	2.2	78	7.4	42
2100	150	120	2.4	78	7.7	40
2100	130	110	1.6	71	7.3	51
2100	160	120	1.9	77	7	32
2100	140	110	1.6	75	7	34
2000	150	120	1.9	80	6.8	32
2000	140	110	1.7	72	7.2	37
2000	140	110	1.2	72	6.7	43
2000	140	100	1.5	70	6.8	34
2017	140	100	1.3	75	7.2	34
2005	130	N/A	1.6	75	7	35
2011	130	100	1.5	70	7.3	34
		110	1.7	71		34
1980	128	105	1.6	64.7	6.91	33.3
1970	130	105	1.6	71.4	6.8	34.6
1980	131	108	1.6	74.6	6.92	31.3

1970	128	100	1.5	64.7	6.8	31.3
2011	131	110	1.7	74.6	7.3	34.6
1985.25	129.75	105.6	1.6	70.34	6.9825	33.44
17.802153434	1.258314	3.7815345	0.0707106785	3.5927705195	0.2185368014	1.2817956165

2000	130	100	1.2	70	6.7	34
2017	140	110	1.6	75	7.2	43
2005.5	137.5	103.3333	1.4	73	6.925	36.5
8.0208062774	5.4	5.7735033	0.1825741864	2.4494897434	0.2217355784	4.3588989444

2000	140	110	1.6	72	6.8	32
2100	160	120	1.9	80	7.2	37
2050	147.5	115	1.775	76	7	33.75
57.735026924	9.574274	5.7735034	0.154	3.3665016464	0.1632993164	2.3629078134

2100	130	110	1.6	71	7.3	40
2100.00	150.00	120.00	2.40	80.00	7.70	51.00
2100.00	142.50	115.00	2.08	76.75	7.50	43.50
0	9.574274	5.7735034	0.3403429644	3.9475730944	0.1825741864	5.0662280514

2100	140	110	1.4	72	7	33
2100	150	120	2.1	82	7.6	43

2100	147.5	117.5	1.775	77.25	7.2	37.5
0	5	5	0.287228132	5.5	0.27080128	4.203173404
4	4	4	4	4	4	4
1970.00	94.80	52.30	1.14	56.50	6.70	29.20
2300.00	480.00	151.00	2.98	121.00	7.70	51.00
2077.63	159.79	119.22	1.82	83.56	7.10	37.12
85.343201	66.4084	17.22308	0.397099238	14.40139654	0.295507118	5.005981794
24	44	44	41	45	24	48
0	95	52	1	57	0	29
0	480	151	3	121	0	50
#DIV/0!	177	126	2	92	#DIV/0!	38
#DIV/0!	88.8571	20.49657	0.470177272	15.45065075	#DIV/0!	5.444364675
0	23	23	19	23	0	23
1970	128	100	1.2	64.7	6.7	31.3
2300	160	120	2.4	82	7.7	51
2077.625	140.905	111.3333	1.713636364	74.57727273	7.10125	36.608
85.343201	8.96607	7.12975	0.293250185	4.376771132	0.295507118	4.61924597
24	21	21	22	22	24	25
2200	0	0	0	0	6.7	34
2200	0	0	0	0	6.7	34
2200	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	6.7	34
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	0	0	0	0	1	1
2200	140	110	1.6	77	6.8	33
2200	140	110	1.6	77	7.5	37
2200	140	110	1.6	77	7.15	35
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.494974747	2.828427125
2	1	1	1	1	2	2

Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1355						0.01
1350						0.01
1340						0.01
		0.01		0.01		0.01
		0.01		0.01		0.01
		0.01		0.01		0.02
		0.11		0.03		0.02
		0.29		0.03		0.01
		0.02		0.03		0.01
		0.03		0.03		0.02
		0.07		0.03		0.01
		0.01		0.03		0.01
		0.01		0.03		0.07
		0.45		0.03		0.02
		0.01		0.03		0.01
		0.01		0.03		0.06
		0.01		0.03		0.01
		0.01		0.03		0.01
		0.01		0.03		0.01
		0.01		0.03		0.01
		0.01		0.03		0.01
		0.1		0.03		0.04
		0.03		0.04		0.32

0.013

0.001

						0.004
1452	0.005	0.02	0.001	0.00009	0.0002	0.001
1200						0.002
1400						0.001
1300	0.005	0.02	0.001	0.00043	0.0003	0.0026
1500						0.0009
1700						0.0018
1400						0.0031
1500	0.005	0.02	0.001	0.0004	0.0005	0.0013
1500						0.0072
1300						0.0009
1500						0.0044
1500	0.01	0.02	0.002	0.00033	0.0003	0.0024
1500						0.002
1200						0.018
1600						0.0017
1100	0.01	0.005	0.002	0.00012	0.0002	0.0012
1100						0.002
1700			0.002	0.00016		0.0007
1500			0.002	0.00016		0.0019
1620			0.002	0.00018		0.002
1280	0.01	0.04	0.002	0.00034	0.0004	0.003
1390			0.001	0.00028		0.003

1280	0.01	0.04	0.001	0.00016	0.0004	0.0007
1700	0.01	0.04	0.002	0.00034	0.0004	0.003
1498	0.01	0.04	0.0018	0.000224	0.0004	0.00212
169.4697613	#DIV/0!	#DIV/0!	0.000447214	8.17313E-05	#DIV/0!	0.000952365
5	1	1	5	5	1	5

1100	0.01	0.005	0.002	0.00012	0.0002	0.0012
1600	0.01	0.005	0.002	0.00012	0.0002	0.018
1250	0.01	0.005	0.002	0.00012	0.0002	0.005725
238.0476143	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.008189984
4	1	1	1	1	1	4

1300	0.01	0.02	0.002	0.00033	0.0003	0.0009
1500	0.01	0.02	0.002	0.00033	0.0003	0.0044
1450	0.01	0.02	0.002	0.00033	0.0003	0.002425
100	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.001461449
4	1	1	1	1	1	4

1400	0.005	0.02	0.001	0.0004	0.0005	0.0013
1700.00	0.01	0.02	0.00	0.00	0.00	0.01
1525.00	0.01	0.02	0.00	0.00	0.00	0.00
125.8305739	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00267644
4	1	1	1	1	1	4

1200	0.005	0.02	0.001	0.00043	0.0003	0.0009
1500	0.005	0.02	0.001	0.00043	0.0003	0.0026

1350	0.005	0.02	0.001	0.00043	0.0003	0.001625
129.09944494	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	0.0008180264
1100.00	0.01	0.01	0.00	0.00	0.00	0.00
1700.00	0.01	0.45	0.00	0.04	0.00	0.32
1411.48	0.01	0.05	0.00	0.02	0.00	0.02
163.354706125	0.0027386136	0.10012933926	0.00051639810	0.01453404330	0.0001169056	0.04677944748
1340	0	0	0	0	0	0
1355	0	0	0	0	0	0
1348	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
7.6376261583	#DIV/0!0	0.1129927820	#DIV/0!0	0.00786397520	#DIV/0!0	0.06503875423
1100	0.005	0.005	0.001	0.00009	0.0002	0.0007
1700	0.01	0.04	0.002	0.00043	0.0005	0.018
1420.090909	0.0075	0.020833333	0.0016	0.000249	0.000316667	0.003284
172.754135522	0.0027386136	0.011143016	0.00051639810	0.0001219710	0.0001169056	0.00400361125
0	0	0	0	0	0	0.001
0	0	0	0	0	0	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.001
#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!1
1452	0.005	0.02	0.001	0.00009	0.0002	0.001
1452	0.005	0.02	0.001	0.00009	0.0002	0.004
1452	0.005	0.02	0.001	0.00009	0.0002	0.0025
#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	0.002121322

Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
0.03	0.01		0.15				
0.03	0.01		0.07				
0.03	0.01		0.41				
0.03	0.01		0.6				
0.03	0.01		0.01				
0.05	0.01		0.38				
0.03	0.01		0.26				
0.03	0.01		0.25				
0.04	0.01		0.12				
0.03	0.03		0.15				
0.03	0.01		0.19				
0.03	0.01		0.11				
0.03	0.01		0.09				
0.03	0.01		0.28				
0.03	0.01		0.18				
0.03	0.01		0.07				
0.03	0.01		0.08				
0.03	0.01		0.08				
0.03	0.01		0.08				
0.03	0.01		0.09				
0.03	0.01		0.04				
0.03	0.02		0.03				
0.03	0.02		0.1				
0.02			0.11				
0.0002			0.011				

0.0045			0.021				
0.0002	0.001	0.0001	0.015	0.1	0.64	0.01	0.00001
0.0002			0.028				
0.0002			0.021				
0.00025	0.002	0.0001	0.16	0.2	0.72	0.01	0.00001
0.00005			0.014				
0.00027			0.31				
0.00057			0.18				
0.00028	0.008	0.0001	0.12	0.2	0.74	0.09	0.00001
0.00036			1.1				
0.00013			0.015				
0.00012			0.14				
0.00011	0.003	0.0001	0.072	0.1	0.61	0.01	0.002
0.0002			0.034				
0.0001			0.64				
0.00005			0.018				
0.00007	0.0005	0.0001	0.023	0.1	0.48	0.01	0.002
0.0005			0.015				
0.00005			0.012				
0.00007			0.031				
0.0002			0.02				
0.0002	0.001	0.0001	0.014	523	0.61	0.01	0.002
0.0002			0.013				

0.00005	0.001	0.0001	0.012	523	0.61	0.01	0.002
0.0002	0.001	0.0001	0.031	523	0.61	0.01	0.002
0.000144	0.001	0.0001	0.018	523	0.61	0.01	0.002
7.70065E-05	#DIV/0!	#DIV/0!	0.007905695	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
5	1	1	5	1	1	1	1

0.00005	0.0005	0.0001	0.015	0.1	0.48	0.01	0.002
0.0005	0.0005	0.0001	0.64	0.1	0.48	0.01	0.002
0.00018	0.0005	0.0001	0.174	0.1	0.48	0.01	0.002
0.000214321	#DIV/0!	#DIV/0!	0.310684194	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	4	1	1	1	1

0.00011	0.003	0.0001	0.015	0.1	0.61	0.01	0.002
0.0002	0.003	0.0001	0.14	0.1	0.61	0.01	0.002
0.00014	0.003	0.0001	0.06525	0.1	0.61	0.01	0.002
4.08248E-05	#DIV/0!	#DIV/0!	0.055180764	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	4	1	1	1	1

0.00027	0.008	0.0001	0.12	0.2	0.74	0.09	0.00001
0.00	0.01	0.00	1.10	0.20	0.74	0.09	0.00
0.00	0.01	0.00	0.43	0.20	0.74	0.09	0.00
0.000139284	#DIV/0!	#DIV/0!	0.455292954	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	4	1	1	1	1

0.00005	0.002	0.0001	0.014	0.2	0.72	0.01	0.00001
0.00025	0.002	0.0001	0.16	0.2	0.72	0.01	0.00001

0.000175	0.002	0.0001	0.05575	0.2	0.72	0.01	0.00001
8.66025E-05	#DIV/0!	#DIV/0!	0.069734624	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1		1	1	1	1
0.00	0.00	0.00	0.01	0.10	0.48	0.01	0.00
0.05	0.03	0.00	1.10	523.00	0.74	0.09	0.00
0.02	0.01	0.00	0.14	87.28	0.63	0.02	0.00
0.01579896448	0.0058829	0	0.2011663248	213.45670686	0.0933095216	0.032666	0.001096
0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0
0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.00457696623	0.0049123	#DIV/0!	0.1421183623	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
		0		0	0	0	0
0.00005	0.0005	0.0001	0.011	0.1	0.48	0.01	0.00001
0.02	0.008	0.0001	1.1	523	0.74	0.09	0.002
0.0011632	0.00258	0.0001	0.12548	87.28333333	0.633333333	0.02333	0.001005
0.00401939625	0.00286	0	0.2447694725	213.45670686	0.0933095216	0.032666	0.001096
0.0002	0	0	0.011	0	0	0	0
0.0002	0	0	0.011	0	0	0	0
0.0002	#DIV/0!	#DIV/0!	0.011	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	0	0	1	0	0	0	0
0.0002	0.001	0.0001	0.015	0.1	0.64	0.01	0.00001
0.0045	0.001	0.0001	0.021	0.1	0.64	0.01	0.00001
0.00235	0.001	0.0001	0.018	0.1	0.64	0.01	0.00001
0.0030405592	#DIV/0!	#DIV/0!	0.004242642	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	1	1		1	1	1	1

Organo-phosphate pesticide	Polycyclic Aromatic Hydrocar	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene
mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		25	25	100	100	1	1	1
		25	25	100	100	1	1	1
		25	25	100	100	1	1	1

0.0001	0.5

0.0001	0.0005

0.0001	1

0.002	0.5	20	50	100	50	1	5	2

0.002	0.5	20	50	100	50	1	5	2
0.002	1	20	50	100	50	1	2	2

0.002	1	20	50	100	50	1	2	2
0.002	1	20	50	100	50	1	2	2
0.002	1	20	50	100	50	1	2	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

0.002	0.5	20	50	100	50	1	5	2
0.002	0.5	20	50	100	50	1	5	2
0.002	0.5	20	50	100	50	1	5	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

0.002	0.5	20	50	100	50	1	5	2
0.002	0.5	20	50	100	50	1	5	2
0.002	0.5	20	50	100	50	1	5	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

0.0001	1	0	0	0	0	0	0	0
0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	0	0	0	0	0	0	0

0.0001	0.0005	0	0	0	0	0	0	0
0.0001	0.0005	0	0	0	0	0	0	0

0.0001	0.0005	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	0	0	0	0	0	0	0
0.00	0.00	20.00	25.00	100.00	50.00	1.00	1.00	1.00
0.00	1.00	25.00	50.00	100.00	100.00	1.00	5.00	2.00
0.00	0.58	22.50	37.50	100.00	75.00	1.00	2.50	1.50
0.001046	0.376236	2.738616	13.69316	0	27.386127886	0	1.97484186	0.547726
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
0.0001	0.0005	20	25	100	50	1	1	1
0.002	1	25	50	100	100	1	5	2
0.00105	0.58342	22.5	37.5	100	75	1	2.5	1.5
0.001046	0.376236	2.738616	13.69316	0	27.386127886	0	1.97484186	0.547726
0	0	25	25	100	100	1	1	1
0	0	25	25	100	100	1	1	1
#DIV/0!	#DIV/0!	25	25	100	100	1	1	1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	1	1	1	1	1	1	1
0.0001	0.5	0	0	0	0	0	0	0
0.0001	0.5	0	0	0	0	0	0	0
0.0001	0.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	0	0	0	0	0	0	0

Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium	Comments
µg/L	mg/L	mg/L	mg/L	mg/L	

Ref: Woodward Clyde July 1997

Pumped for 2 minutes
bore pumped for 2 mins

2

2

2

Sample collected using electric purger.
Used waterra valve to collect sample.

	0.001	1	0.36	0.001
		1		
	0.001	2	0.039	0.001
	0.001	6	0.036	0.002
2	0.001	1	0.037	0.001

27/09/11 - Purged bore for 10 min. SWL 3.23m, SWL
10/01/12 - 10min purge, SWL 3.35m, SWLA 3.63m. (
22/03/12 - SWL 2.95m, 5min purge, SWLA 3.28m.
7/06/12 - SWL 2.73m, 5min puge, SWLA 3.05m
17/09
10/01

2	0.05	6	0.032	0.005
2	0.05	1	0.0363	0.001

2	0.05	1	0.0363	0.001
2	0.05	1	0.0363	0.001
2	0.05	1	0.0363	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1

2	0.05	6	0.032	0.005
2	0.05	6	0.032	0.005
2	0.05	6	0.032	0.005
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1

2	0.001	1	0.037	0.001
2	0.001	1	0.037	0.001
2	0.001	1	0.037	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1

0	0.001	6	0.036	0.002
0.00	0.00	6.00	0.04	0.00
#DIV/0!	0.00	6.00	0.04	0.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	1	1	1	1

0	0.001	1	0.039	0.001
0	0.001	2	0.039	0.001

#DIV/0!	0.001	1.5	0.039	0.001
#DIV/0!	#DIV/0!	0.70711	#DIV/0!	#DIV/0!
0	1	2	1	1

2.00	0.00	1.00	0.03	0.00
2.00	0.05	6.00	0.36	0.01
2.00	0.02	2.57	0.09	0.00
0	0.0253	2.37045	0.13227	0.0016
6	6	7	6	6

0	0	0	0	0
0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0

2	0.001	1	0.032	0.001
2	0.05	6	0.36	0.005
2	0.01733	2.57143	0.09005	0.00183
0	0.0253	2.37045	0.13227	0.0016
6	6	7	6	6

2	0	0	0	0
2	0	0	0	0
2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	0	0	0	0

0	0.001	1	0.36	0.001
0	0.001	1	0.36	0.001
#DIV/0!	0.001	1	0.36	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	1	1	1	1

after purge 3.30m.
QA/QC test.

)/12 - SWL 2.45m, 5 min purge, SWLA 2.76m
./13 - SWL 2.37m, 5 min purge, SWLA 2.72m

Statistics Field Information

EPL 11436	Date	Site Code	Time	Sampler	pH	Conductivity	Temperature
			AM/PM	Initials	pH	µS/cm	°C
	6/12/1996	MB4					
	17/06/1997	MB4					
	7/08/1997	MB4					
	11/11/1997	MB4					
	26/03/1998	MB4					
	9/06/1998	MB4					
	7/09/1998	MB4					
	1/12/1998	MB4					
	1/03/1999	MB4					
	4/06/1999	MB4					
	10/09/1999	MB4					
	3/12/1999	MB4					
	6/03/2000	MB4					
	2/06/2000	MB4					
	4/09/2000	MB4					
	5/12/2000	MB4					
	2/03/2001	MB4					
	8/06/2001	MB4					
	8/06/2001	MB4					
	21/08/2001	MB4					
	21/08/2001	MB4					
	21/08/2001	MB4					
	21/08/2001	MB4					
	10/09/2001	MB4					
	10/09/2001	MB4					
	10/01/2002	MB4					
	6/03/2002	MB4					
	7/05/2002	MB4					
	9/05/2002	MB4					
	9/05/2002	MB4					
	17/06/2002	MB4					
	21/08/2002	MB4					
	19/09/2002	MB4					
	4/12/2002	MB4					
	9/12/2002	MB4					
	18/02/2003	MB4					
	18/03/2003	MB4					
	23/06/2003	MB4					
	12/08/2003	MB4					
	3/11/2003	MB4					
	18/02/2004	MB4					
	12/05/2004	MB4					
	18/08/2004	MB4					
	17/11/2004	MB4		AMW,GB	5.32	1606.00	18.20
	3/03/2005	MB4	15:00	GB	5.12	1558.00	17.70
	28/06/2005	MB4	8:30	AMW,AW	5.18	1339.00	14.35
	15/08/2005	MB4	11:30	AW,CS	5.40	1370.00	14.48
	16/11/2005	MB4	3:00 PM	jmc	5.21	1539.00	16.94
	9/02/2006	MB4	8.45 am	jmc	4.90	1364.00	14.30
	31/05/2006	MB4	7.25 am	jmc	5.6	1430	15.7

15/08/2006	MB4	10.5	jmc	6.1	1581	16.3
21/12/2006	MB4	10	HG	5.7	1254	11.8
16/02/2007	MB4	11	HG	6.06	404	17.19
10/04/2007	MB4	12.3	HG	6.98	458	14.13
28/06/2007	MB4	9.3	HG	6.81	561	12.81
31/08/2007	MB4	1:30pm	TM	6.23	600	14.98
7/12/2007	MB4	10.00am	TM	5.3	1343	17.7
26/02/2008	MB4	8.47	TM	6.13	1187	16.2
30/05/2008	MB4	9.40am	TM	6.96	968	13.5
19/08/2008	MB4	9.30am	TM			
28/11/2008	MB4	9.11	TM	6.85	1260	17
3/02/2009	MB4	9.10	TM	6.45	1217	18.9
30/06/2009	MB4	9.40	TM	7.83	1360	14.01
7/07/2009	MB4	12.13	TM	7.35	1304	13.5
2/09/2009	MB4	11.42	TM	6.28	1287	15.2
17/11/2009	MB4	9.40	TM	7.32	1195	17.8
25/03/2010	MB4	12.58	TM	7.68	1239	17
21/06/2010	MB4	12.43	TM	7.26	1285	15.4
31/08/2010	MB4	10.10	TH	6.63	1216	14.7
10/11/2010	MB4	9.39	TH	7.12	2145	16.7
7/03/2011	MB4	9.50	TH	5.48	1258	15.3
21/07/2011	MB4	13.20	TH	6.43	1429	13.4
31/08/2011	MB4	9.32	TH	5.78	1758	14.1
20/12/2011	MB4	12.20	TH	5.4	1821	16.3
21/03/2012	MB4	10.39	TH	6.02	1732	17.4
23/05/2012	MB4	8.28	TH	6	1679	13.7
23/08/2012	MB4	8.14	TH	6.08	1773	15.2
21/11/2012	MB4	12.51	TH	6.28	1874	18.8
7/05/2013	MB4	1:40pm	DS	5.98	1726	18.2
13/08/2013	MB4	11:50pm	DS	5.1	1650	15.4
21/10/2013	MB4	15:10pm	DS	5.18	1591	18
15/01/2014	MB4	12:24pm	DS	5.53	1651	19.3
10/04/2014	MB4	12:30am	TB	5.66	1757	15.4
25/06/2014	MB4	1:40pm	PM	5.54	1566	13.3

Negative values converted to positive

'<' removed from <LOR values

2013/14	Minimum	5.18	1566	13.3
	Maximum	5.66	1757	19.3
	Average	5.4775	1641.25	16.5
	StdDev	0.2069	85.0112738	2.68
	Count	4	4	4
2012/13	Minimum	5.1	1650	15.4
	Maximum	6.28	1874	18.8
	Average	5.7867	1750	17.47
	StdDev	0.6133	113.912247	1.815
	Count	3	3	3

2011/12	Minimum	5.4	1679	13.7
	Maximum	6.08	1821	17.4
	Average	5.875	1751.25	15.65
	StdDev	0.3185	60.3565793	1.58
	Count	4	4	4
2010/11	Minimum	5.48	1258	13.4
	Maximum	7.12	2145	16.7
	Average	6.2025	1647.5	14.88
	StdDev	0.7289	391.224147	1.448
	Count	4	4	4
		11/02/2010 Changed from DISSOLVED metals to TOTAL on reco		
2009/10	Minimum	6.63	1195	14.7
	Maximum	7.68	1285	17.8
	Average	7.2225	1233.75	16.23
	StdDev	0.4364	38.6037563	1.424
	Count	4	4	4
OVERALL	Minimum	4.90	404.00	11.80
	Maximum	7.83	2145.00	19.30
	Average	6.11	1383.38	15.76
	StdDev	0.7841	380.396938	1.886
	Count	40	40	40
1996 - 2004 (mining)	Minimum	5	1606	18
	Maximum	5	1606	18
	Average	5	1606	18
	StdDev	#DIV/0!	#DIV/0!	#####
	Count	1	1	1
2005 + (post mini	Minimum	4.90	404.00	11.80
	Maximum	7.83	2145.00	19.30
	Average	6.13	1377.67	15.69
	StdDev	0.7838	383.630122	1.868
	Count	39	39	39
2007/08	Minimum	5.3	968	13.5
	Maximum	6.96	1343	17.7
	Average	6.13	1166	15.8
	StdDev	0.83	188.379935	2.128
	Count	3	3	3
2008/09	Minimum	6.28	1217	13.5
	Maximum	7.83	1360	18.9
	Average	6.952	1285.6	15.72
	StdDev	0.641	53.0028301	2.229
	Count	5	5	5

Analytical Information

Dissolved Oxygen	Oxidation-Reduction	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride
mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L
					41				240
					27				260
		10.14	776.36		25				265
		10.12	776.38						265
		10.29	776.21						315
		10.52	775.98						
		10.43	776.07						315.3
		10.05	776.45						296
		10.01	776.49						299
		10.08	776.42						300
		10.21	776.29						314
		10.02	776.48						321
		9.91	776.59						339
		9.99	776.51		19.2				
		10.15	776.35						347
		9.91	776.59						354
		9.74	776.76						366
		9.89	776.61						406
									406
		10.19	776.31						
		10.19	776.31						
		10.19	776.31						412
		10.19	776.31						427
		10.31	776.19						364
		10.26	776.24						381
		10.26	776.24						392
									376
					16			0.03	420
		10.37	776.13		16	1			420
		10.28	776.22						384
					14				427
		10.61	775.89						
		10.75	775.75						
					17			0.02	445
		10.93	775.57		13			0.76	377
		11.00	775.50						
		11.04	775.46						
		11.06	775.44	ES41593	14				355
		11.07	775.43						
		10.93	775.57	ES45547	14	1		0.01	425
		10.90	775.60	ES47496	12	1	12	0.05	330
		11.37	775.13	ES49667	20	1	20	0.02	355
		11.57	774.93	ES52077	10	1	10	0.01	302
		11.47	775.03	ES0501701	12	1	12	0.012	312
		11.74	774.76	ES0505359	13	1	13	0.014	295
		11.67	774.84	ES0506831	15	1	15	0.018	314
		11.63	774.87	ES0509840	19.4	1	19.4	0.01	291
		11.71	774.79	ES0601616	11	1	11	0.01	285
		11.52	774.98	ES0607022	13	1	13	0.01	349

		11.6	774.90	512977	12	1	12	0.02	340
		11.8	774.70	543722	19	2	300	0.8	290
		11.86	774.64	552676	10	2	10	0.07	290
		11.878	774.62	561711	12	2	12	0.57	290
		11.71	774.79						
		12.06	774.44	587802	32	2	32	0.03	330
		11.77	774.73	603409	9	2	18	0.01	320
		11.555	774.95	618265	10	2	10	0.03	230
		11.6	774.90	635817	14	2	48	0.01	300
		20.8	765.70	648104	14	2	55	0.01	370
3.49		11.94	774.56	664901	12	2	46	0.04	270
4.65		12.05	774.45	675489	10	2	10	0.02	230
3.56		12.34	774.16						
4.67		12.42	774.08	701823	11	2	11	0.07	290
4.84		12.58	773.92	711599	88	2	88	0.11	280
3.47		12.64	773.86	723610	13.1	0.1	11	0.01	270
3.48		12.71	773.79	747494	14.2	0.1	14	0.04	250
3.32		12.74	773.76	762362	14.7	0.1	14	0.01	260
3.1		12.6	773.90	800623	14.2	0.1	14	0.03	250
4.5		12.27	774.23	809745	15.1	0.1	15	0.02	240
4.96		11.64	774.86	827746	13.5	0.1	13	0.01	280
5.13		11.53	774.97	847175	13.2	0.1	13	0.02	330
4.23		11.64	774.86	852478	14	0.1	14	0.01	330
3.68		11.68	774.82	867632	17.7	0.1	17	0.1	450
4.62		11.3	775.20	881086	15.4	0.1	15	0.1	400
3.7		11.28	775.22	890058	17.9	0.1	18	0.1	410
3.47		11.14	775.36	902533	16.6	0.1	16	0.1	420
3.58		11.17	775.33	915128	17.4	0.1	17	0.1	440
2.88		11.82	774.68	937887	133	0.1	133	0.1	410
2.36		11.65	774.85	951359	13.6	0.1	13		410
2.83	101.1	11.75	774.75	960733	13.8	0.1	14	0.1	410
2.52		11.89	774.61	A1400135-00	13.9	0.1	14	0.1	431
2.22	95.6	11.94	774.56	A1401099-00	14.9	0.1	15	0.1	420
3.96	76.3	12.15	774.35	A1401907-00	13.4	0.1	13	0.1	378

2.22	76.3	11.75	774.35	13.4	0.1	13	0.1	378
3.96	101.1	12.15	774.75	14.9	0.1	15	0.1	431
2.8825	91	11.9325	774.5675	14	0.1	14	0.1	409.75
0.76028	13.02	0.165806	0.165806	0.638	0	0.816497	0	22.8382
4	3	4	4	4	4	4	4	4

2.36		11.17	774.68	13.6	0.1	13	0.1	410
3.58		11.82	775.33	133	0.1	133	0.1	440
2.94		11.54667	774.9533	54.67	0.1	54.33333	0.1	420
0.612209		0.337095	0.337095	67.87	1.7E-17	68.15668	0	17.32051
3		3	3	3	3	3	2	3

3.47	0	11.14	774.82	867632	15.4	0.1	15	0.1	400
4.62	0	11.68	775.36	902533	17.9	0.1	18	0.1	450
3.8675	#####	11.35	775.15	885327.25	16.9	0.1	16.5	0.1	420
0.512339	#####	0.231229	0.231229	14714.255	1.152	0	1.290994	0	21.60247
4	0	4	4	4	4	4	4	4	4

4.23	0	11.53	774.23	13.2	0.1	13	0.01	240
5.13	0	12.27	774.97	15.1	0.1	15	0.02	330
4.705	#####	11.77	774.73	13.95	0.1	13.75	0.015	295
0.413642	#####	0.337343	0.337343	0.835	0	0.957427	0.005774	43.58899
4	0	4	4	4	4	4	4	4

mmendation of Dino Parisotto Earth2 Water (Environmental & Groundwater Consulting)

3.1	0	12.6	773.76	13.1	0.1	11	0.01	250
3.48	0	12.74	773.9	14.7	0.1	14	0.04	270
3.3425	#####	12.6725	773.8275	14.05	0.1	13.25	0.0225	257.5
0.177459	#####	0.063966	0.063966	0.676	0	1.5	0.015	9.574271
4	0	4	4	4	4	4	4	4

2.22	76.30	9.74	765.70	9.00	0.10	10.00	0.01	230.00
5.13	101.10	20.80	776.76	#####	2.00	300.00	0.80	450.00
3.72	91.00	11.29	774.47	19.12	0.88	28.55	0.09	339.80
0.837902	13.02	1.388244	1.388244	19.77	0.798587	49.28963	0.175856	61.83976
24	3	76	76	52	43	41	44	72

0		10	775	10	1	10	0	240
0		12	777	41	1	20	1	445
#DIV/0!		10	776	18	1	14	0	353
#DIV/0!		0.457037	0.457037	8.056	0	5.291503	0.278773	55.59573
0		36	36	14	5	3	7	34

2.22	76.30	11.14	765.70	9.00	0.10	10.00	0.01	230.00
5.13	101.10	20.80	775.36	#####	2.00	300.00	0.80	450.00
3.72	91.00	12.08	774.42	19.37	0.87	29.69	0.08	328.03
0.837902	13.02	1.473064	1.473064	22.71	0.849571	51.05318	0.153699	65.42356
24	3	40	40	38	38	38	37	38

0		11.555	765.7	9	2	10	0.01	230
0		20.8	774.945	14	2	55	0.03	370
#DIV/0!		13.93125	772.5688	11.75	2	32.75	0.015	305
#DIV/0!		4.580103	4.580103	2.63	0	22.08129	0.01	58.02298
0		4	4	4	4	4	4	4

3.49	0	11.94	773.92	10	2	10	0.02	230
4.84	0	12.58	774.56	88	2	88	0.11	290
4.242	#####	12.266	774.234	30.25	2	38.75	0.06	267.5
0.659143	#####	0.264915	0.264915	38.51	0	36.85444	0.039158	26.29956
5	0	5	5	4	4	4	4	4

Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)
µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L
1790	56	128	2.5	127	5.6	515	1110	
1260	9	85	1.9	110	5.3	210	705	
1270	8	90	1.6	125	5.3	220	740	
1280	84	90	1.9	130	5.3	210		
1300	6.7	90	2.4	125	5.3	200		
1400	7.9	80	2.5	137	5	195		
1220	8	84.2	2.76	156	5.3	220		
1280	7.95	98.7	2.8	119	5.3	234		
1260	7.44	84.3	1.78	172	5.28	200		
1380	6.98	84.3	1.7	148	5.36	198		
1430	6.73	82.2	1.17	141	5.37	189		
1560	1.42	83.9	1.38	154	5.43	189		
1420	7.31	86.8	1.26	142	5.37	192		
1542	9.24	86.2	2.03	235	5.32	190		
1560	7.5	94.3	1.56	180	5.42	205		
1688	7.2	107	1.8	168	6.77	196		
1600	7.33	104	2.49	184	5.36	202		
1760	4.36	94.3	0.92	156	5.46	180		
1760	4.36	94.3	0.92	156	5.46	180		
	7.2	102	3.15	185	5.47	224		
	7.63	105	1.43	202	5.38	237		
1640	8	167	3	169	5.69	204		
1640	8	362	3	166	5.55	210		
1630	6.28	84.7		132	5.31	211		
1740	8.12	107		178	5.22	252		
1690	6.46	72		113	5.2	198		
1670		60.2		125	5.22	210		
1550	8	95	3	174	6.07	207		
1550	8	95	3	174	6.07	207		
1640	20.5	36.6		151	6.69	220		
1640	8	101	3	166	5.55	210		
1580					5.34			
1560					5.55			
1780	8	102	2	180	5.74	199		
1670	7	88	2	158	5.82	197		
1510	7	77	2	152	5.2	178	826	
1600					5.35			
1573	7	85	2	201	5.05	208	882	
1224	7	81	2	147	3.68	198	842	
1547	8	87	2	150	4.71	208	900	
1360	9	76	2	132	5.68	195	868	
1490	7	75	1	142	6.04	193	818	
1380	8	72	2	124	5.43	190	732	
1210	8	75	2	145	5.98	309	780	
1552	5	72	2	134	5.63	190	904	
1435	9	72	2	130	5.68	195	917	
1410	8	84	2	168	5.45	224	902	

1630	8	80	2	150	6.08	200	849	
1300	6.7	65	2.2	110	6		760	
1300	7.1	66	1.7	120	6.1	150		
1300	9.5	67	1.8	120	5.7	200	800	0.005
1400				130	6	200	840	
1400	6.5	69	1.3	130	5.6	200	830	
1200	6.1	61	1.4	110	5.7	170	700	0.005
1300	7.2	65	1.9	100	5.8	200	760	
1500	6.9	76	1.7	160	5.6	210	860	
1300	6.1	56	1.4	100	5.8	190	747	
1300	6	58	1.8	100	5.8	210	776	0.005
1300	7.5	68	2.3	120	5.7	200	770	
1300	7.3	68	1.8	120	5.5	190	650	
1300	6.5	57	1.5	110	5.7	190	830	
1200	6.3	54	1.3	130	5.8	180	680	0.005
1200	7.5	60	1.8	140	5.7	190	730	
1200	7.2	58	1.6	140	5.5	180	690	
1200	7.8	63	1.9	150	5.6	180	820	
1200	7	59	2	140	5.8	200	1600	0.005
1500	7.7	77	2	140	5.8	200	740	
1500	8.2	83	1.9	150	5.5	200	890	
2100	12	110	2.6	200	5.3	250	1200	
1700	7.7	84	1.9	160	5.5	220	1000	0.01
1600	8.8	89	1.9	170	5.5	210	1000	
1700	8.1	93	1.8	170	5.5	210	1100	
1700	7.7	89	1.8	170	5.4	210	1100	
1726	7.5	87	1.6	160	7.9	210	1100	0.01
1650	7.2		1.7	170	5	210	1000	
1591	7.2	82	1.6	160	5.5	210	1100	
1710	6.81	87.8	1.7	150	5.34	212	1100	
1660	7.02	85.4	1.7	165	5.21	218	1080	0.001
1520	6.56	79.7	1.5	154	5.2	201	1010	

1520	6.56	79.7	1.5	150	5.2	201	1010	0.001
1710	7.2	87.8	1.7	165	5.5	218	1100	0.001
1620.25	6.8975	83.725	1.625	157.25	5.3125	210.25	1072.5	0.001
82.7461	0.275726	3.58643277	0.095743	6.601767	0.140327	7.041543	42.72002	#DIV/0!
4	4	4	4	4	4	4	4	1

1650	7.2	87	1.6	160	5	210	1000	0.01
1726	7.7	89	1.8	170	7.9	210	1100	0.01
1692	7.466667	88	1.7	166.6667	6.1	210	1066.667	0.01
38.62642	0.251661	1.41421356	0.1	5.773503	1.571623	0	57.73503	#DIV/0!
3	3	2	3	3	3	3	3	1

1600	7.7	84	1.8	160	5.3	210	1000	0.01
2100	12	110	2.6	200	5.5	250	1200	0.01
1775	9.15	94	2.05	175	5.45	222.5	1075	0.01
221.7356	1.953629	11.2842073	0.369685	17.32051	0.1	18.92969	95.74271	#DIV/0!
4	4	4	4	4	4	4	4	1

1200	7	59	1.9	140	5.5	180	740	0.005
1500	8.2	83	2	150	5.8	200	1600	0.005
1350	7.675	70.5	1.95	145	5.675	195	1012.5	0.005
173.2051	0.499166	11.3578167	0.057735	5.773503	0.15	10	396.432	#DIV/0!
4	4	4	4	4	4	4	4	1

1200	6.3	54	1.3	110	5.5	180	680	0.005
1300	7.5	60	1.8	140	5.8	190	830	0.005
1225	6.875	57.25	1.55	130	5.675	185	732.5	0.005
50	0.567891	2.5	0.208167	14.14214	0.125831	5.773503	68.49574	#DIV/0!
4	4	4	4	4	4	4	4	1

1200.00	1.42	36.60	0.92	100.00	3.68	150.00	650.00	0.00
2100.00	84.00	362.00	3.15	235.00	7.90	515.00	1600.00	0.01
1487.25	9.21	86.19	1.93	148.18	5.56	208.00	889.73	0.01
192.838477	10.6502674	37.4167348	0.5083670	26.3224776	0.4766379	41.2638275	178.109645	0.0029648

1220	1	37	1	110	4	178	705	0
1790	84	362	3	235	7	515	1110	0
1527	11	98	2	156	5	213	859	#DIV/0!
171.505539	14.9029537	48.0210838	0.6375733	26.9916538	0.4728841	52.6008938	122.20998	#DIV/0!

1200.00	5.00	54.00	1.00	100.00	5.00	150.00	650.00	0.00
2100.00	12.00	110.00	2.60	200.00	7.90	309.00	1600.00	0.01
1446.42	7.42	73.53	1.79	140.58	5.69	202.76	896.35	0.01
206.868538	1.17315737	12.6905674 36	0.29922337	23.6032938	0.44682138	24.5055637	188.720137	0.0029648

1200	6.1	61	1.3	100	5.6	170	700	0.005
1500	7.2	76	1.9	160	5.8	210	860	0.005
1350	6.675	67.75	1.575	125	5.675	195	787.5	0.005
129.09944	0.4787144	6.39661369 4	0.2753794	26.457514	0.0957434	17.320514	71.821544	#DIV/0!

1300	6	56	1.4	100	5.5	190	650	0.005
1300	7.5	68	2.3	120	5.8	210	776	0.005
1300	6.725	62.5	1.825	110	5.7	197.5	735.75	0.005
0	0.78475	6.40312424	0.368556	11.54701	0.141421	9.574271	58.51709	#DIV/0!
4	4	4	4	4	4	4	4	1

Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				0.01	0.04	0.08		0.71
				0.01	0.03	0.07		0.6
				0.03	0.03	0.13		2.3
0.12		0.01		0.02	0.03	0.12		1.2
0.02		0.01		0.01	0.03	0.06		0.6
0.11		0.01		0.03	0.06	0.03		0.74
0.36		0.03		0.08	0.04	0.04		0.74
0.43		0.03		0.01	0.04	0.02		1.11
0.32		0.03		0.03	0.04	0.04		0.78
0.03		0.03		0.02	0.03	0.03		0.77
0.32		0.03		0.02	0.03	0.03		0.81
0.01		0.03		0.03	0.03	0.03		0.71
0.01		0.03		0.08	0.03	0.04		0.65
0.36		0.03		0.03	0.03	0.03		0.77
0.01		0.03		0.04	0.03	0.04		0.82
0.21		0.03		0.07	0.03	0.02		0.66
0.01		0.03		0.01	0.03	0.02		0.67
0.01		0.03		0.01	0.03	0.02		0.84
0.01		0.03		0.01	0.03	0.02		0.84
0.26		0.03		0.04	0.03	0.02		1
0.2		0.03		0.06	0.03	0.02		1.01
				0.034	0.01	0.01		0.75
				0.048	0.01	0.01		0.72
0.01		0.03		0.01	0.03	0.01		0.69
0.01		0.03		0.01	0.03	0.01		0.75
0.18		0.03		0.01	0.03	0.06		0.67
0.01		0.03		0.03	0.03	0.02		0.74
				0.046	0.02			0.76
		0.01		0.046	0.05	0.04		0.76
0.07		0.04		0.36	0.04	0.04		0.46
				0.048	0.01			0.72
				0.046	0.01			0.86
				0.03	0.01			0.67
				0.05		0.03		0.88
14				0.041		0.03		0.8
	0.001	0.0018		0.049	0.004	0.038		0.79
	0.001	0.0017		0.04	0.003	0.034		0.723
	0.001	0.0032		0.057	0.006	0.036		1.25
	0.001	0.0015		0.045	0.006	0.025		0.774
0.13	0.001	0.0016		0.046	0.003	0.029		0.851
0.14	0.001	0.0016		0.204	0.002	0.027		0.826
0.24	0.004	0.0014		0.081	0.001	0.04		0.74
0.28	0.001	0.003		0.06	0.006	0.036		0.97
1.24	0.003	0.0014		0.064	0.05	0.053		0.822

0.1	0.001	0.0017	0.026	0.04	0.003	0.034		0.723
0.64	0.003	0.00097		0.041	0.038	0.047		1.1
	0.006	0.002		0.11	0.11	0.054		0.96
0.95			0.026				0.0005	
				0.073	0.075			0.62
0.61	0.001	0.0013	0.023	0.058	0.026	0.038	0.0003	0.79
				0.056	0.021			0.82
				0.056	0.0092			0.87
				0.086	0.081			1.1
0.19	0.001	0.0017	0.023	0.051	0.022	0.031	0.0001	0.87
				0.068	0.036			1
				0.051	0.012			0.87
				0.041	0.0045			0.75
0.11	0.001	0.0011	0.02	0.041	0.0029	0.035	0.0001	0.57
				0.037	0.00051			0.83
				0.038	0.006			0.69
				0.051	0.0064			0.92
0.14	0.002	0.0022	0.024	0.058	0.0093	0.041	0.0001	0.99
0.02	0.001	0.0015	0.023	0.031	0.00048	0.022	0.0003	0.66

0.12	0.002	0.0015	0.021	0.048	0.0042	0.021	0.0001	0.84
				0.13	0.012			0.74
				0.052	0.0072			0.69
	0.004	0.00254		0.05	0.0041			0.0694
0.14	0.002	0.00398	0.0229	0.039	0.003	0.036	0.0001	0.764
	0.002	0.00147		0.05	0.0048			0.643

0.14	0.002	0.00147	0.0229	0.039	0.003	0.036	0.0001	0.0694
0.14	0.004	0.00398	0.0229	0.052	0.0072	0.036	0.0001	0.764
0.14	0.002667	0.002663	0.0229	0.04775	0.004775	0.036	0.0001	0.5416
#DIV/0!	0.001155	0.00126	#DIV/0!	0.005909	0.001778	#DIV/0!	#DIV/0!	0.318716
1	3	3	1	4	4	1	1	4

0.12	0.002	0.0015	0.021	0.048	0.0042	0.021	0.0001	0.74
0.12	0.002	0.0015	0.021	0.13	0.012	0.021	0.0001	0.84
0.12	0.002	0.0015	0.021	0.089	0.0081	0.021	0.0001	0.79
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.057983	0.005515	#DIV/0!	#DIV/0!	0.070711
1	1	1	1	2	2	1	1	2

0.02	0.001	0.0015	0.023	0.031	0.00048	0.022	0.0003	0.66
0.02	0.001	0.0015	0.023	0.031	0.00048	0.022	0.0003	0.66
0.02	0.001	0.0015	0.023	0.031	0.00048	0.022	0.0003	0.66
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0.14	0.002	0.0022	0.024	0.051	0.0064	0.041	0.0001	0.92
0.14	0.002	0.0022	0.024	0.058	0.0093	0.041	0.0001	0.99
0.14	0.002	0.0022	0.024	0.0545	0.00785	0.041	0.0001	0.955
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.004952	0.0020512	#DIV/0!	#DIV/0!	0.0494972
1	1	1	1			1	1	
0.11	0.001	0.0011	0.02	0.037	0.00051	0.035	0.0001	0.57
0.11	0.001	0.0011	0.02	0.041	0.006	0.035	0.0001	0.83
0.11	0.001	0.0011	0.02	0.03925	0.003478	0.035	0.0001	0.71
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0020624	0.0023494	#DIV/0!	#DIV/0!	0.1095454
1	1	1	1			1	1	
0.01	0.00	0.00	0.02	0.01	0.00	0.01	0.00	0.07
14.00	0.01	0.04	0.03	0.36	0.11	0.13	0.00	2.30
0.57	0.00	0.02	0.02	0.05	0.01	0.04	0.00	0.81
2.22317839	0.00137521	0.01400545	0.0019889	0.0487368	0.02609366	0.02333550	0.0001518	0.25054168
0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	2
1	0	0	#DIV/0!	0	0	0	#DIV/0!	1
2.83388924	0 3	0.01099627	#DIV/0! 0	0.05655738	0.01272936	0.02761134	#DIV/0! 0	0.29134938
0.02	0.00	0.00	0.02	0.03	0.00	0.02	0.00	0.07
1.24	0.01	0.00	0.03	0.20	0.11	0.05	0.00	1.10
0.34	0.00	0.00	0.02	0.06	0.02	0.04	0.00	0.80
0.35919915	0.00143418	0.00073418	0.0019889	0.03438530	0.02704130	0.00992616	0.0001518	0.19036830
0.61	0.001	0.0013	0.023	0.056	0.0092	0.038	0.0003	0.62
0.61	0.001	0.0013	0.023	0.073	0.075	0.038	0.0003	0.87
0.61	0.001	0.0013	0.023	0.06075	0.0328	0.038	0.0003	0.775
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0082214	0.0290024	#DIV/0!	#DIV/0!	0.1084744
1	1	1	1			1	1	
0.19	0.001	0.0017	0.023	0.051	0.012	0.031	0.0001	0.87
0.19	0.001	0.0017	0.023	0.086	0.081	0.031	0.0001	1.1
0.19	0.001	0.0017	0.023	0.064	0.03775	0.031	0.0001	0.96
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0167134	0.0304674	#DIV/0!	#DIV/0!	0.1116544
1	1	1	1			1	1	

Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28
mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L
0.2				TRUE				
0.2				TRUE	TRUE			
0.2								
0.2								
0.2				TRUE				
0.2								
0.3	0.115	0.011						
0.1								
0.2								
0.2	0.436	0.01						
0.2								
0.2								
0.2								
0.15			0.05	0.05				
0.2								
0.1								

0.2								
0.33			0.01	0.1				
0.43								
	0.24	0.01			1	25	25	100
0.2	0.28	0.01			1	25	25	440
			0.01	0.1				
0.3	0.39	0.01			1	25	25	100
			0.00001	0.0001				
0.2	0.32	0.01	0.00001	0.0001				
					1	25	25	100
0.2	0.43	0.01	0.00001	0.0001	1	25	25	100
0.2	0.33	0.01	0.002	0.002	0.5	20	50	100

0.3	0.29	0.01	0.002	0.002	0.5	20	50	100
0.2	0.35	0.01	0.002	0.002	1	20	50	100

0.2	0.35	0.01	0.002	0.002	1	20	50	100
0.2	0.35	0.01	0.002	0.002	1	20	50	100
0.2	0.35	0.01	0.002	0.002	1	20	50	100
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

0.3	0.29	0.01	0.002	0.002	0.5	20	50	100
0.3	0.29	0.01	0.002	0.002	0.5	20	50	100
0.3	0.29	0.01	0.002	0.002	0.5	20	50	100
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

0.2	0.33	0.01	0.002	0.002	0.5	20	50	100
0.2	0.33	0.01	0.002	0.002	0.5	20	50	100
0.2	0.33	0.01	0.002	0.002	0.5	20	50	100
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0.2	0.43	0.01	0.00001	0.0001	1	25	25	100
0.2	0.43	0.01	0.00001	0.0001	1	25	25	100
0.2	0.43	0.01	0.00001	0.0001	1	25	25	100
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0.2	0.32	0.01	0.00001	0.0001	1	25	25	100
0.2	0.32	0.01	0.00001	0.0001	1	25	25	100
0.2	0.32	0.01	0.00001	0.0001	1	25	25	100
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0.10	0.12	0.01	0.00	0.00	0.50	20.00	25.00	100.00
0.43	0.44	0.01	0.05	0.10	1.00	25.00	50.00	440.00
0.22	0.32	0.01	0.01	0.03	0.88	23.13	34.38	142.50
0.06806926	0.09565310	0.00031610	0.0160859	0.0436089	0.2314558	2.5877468	12.938738	120.20828
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.0471410	0.2269812	0.0007072	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.10	0.24	0.01	0.00	0.00	0.50	20.00	25.00	100.00
0.43	0.43	0.01	0.05	0.10	1.00	25.00	50.00	440.00
0.23	0.33	0.01	0.01	0.03	0.88	23.13	34.38	142.50
0.07822816	0.0612818	08	0.0160859	0.0436089	0.2314558	2.5877468	12.938738	120.20828
0.2	0.28	0.01	0.01	0.1	1	25	25	440
0.2	0.28	0.01	0.01	0.1	1	25	25	440
0.2	0.28	0.01	0.01	0.1	1	25	25	440
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0.3	0.39	0.01	0.00001	0.0001	1	25	25	100
0.3	0.39	0.01	0.00001	0.0001	1	25	25	100
0.3	0.39	0.01	0.00001	0.0001	1	25	25	100
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium
µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L
							3
							3
							7
							8
							3
						0.14	2
						0.05	1
						0.05	2
						0.05	1
						0.05	1
						0.05	1
						0.05	1
						0.5	4
						0.05	2
						0.05	1
						0.05	1

					0.05	1	
					0.001	2	
					0.002	2	
100	1	1	1	2		10	
						2	
						1	
100	1	1	1	2	1	1	0.68
						1	
						1	
						1	
100	1	1	1	1	2	1	0.029
						1	
					0.001	1	0.026
100							
100	1	1	1	2	1	3	0.027
50	1	5	2	2	0.002	2	0.032

50	1	2	2	2	0.05	2	0.05
50	1	2	2	2	0.05	1	0.027

50	1	2	2	2	0.05	1	0.027
50	1	2	2	2	0.05	1	0.027
50	1	2	2	2	0.05	1	0.027
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

50	1	2	2	2	0.05	2	0.05
50	1	2	2	2	0.05	2	0.05
50	1	2	2	2	0.05	2	0.05
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

50	1	5	2	2	0.002	2	0.032
50	1	5	2	2	0.002	2	0.032
50	1	5	2	2	0.002	2	0.032
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1
100	1	1	1	2	1	3	0.027
100	1	1	1	2	1	3	0.027
100	1	1	1	2	1	3	0.027
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1
100	0	0	0	0	0.001	1	0.026
100	0	0	0	0	0.001	1	0.026
100	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.001	1	0.026
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	0	0	0	0	1	1	1
50.00	1.00	1.00	1.00	1.00	0.00	1.00	0.03
100.00	1.00	5.00	2.00	2.00	2.00	10.00	0.68
81.25	1.00	1.86	1.43	1.86	0.25	2.24	0.12
25.877458	0	1.46385	0.534522	0.377964	0.499455165	2.151021604	0.245126
8	7	7	7	7	21	33	7
0	0	0	0	0	0	1	0
0	0	0	0	0	0	8	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	3	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.040249224	2.469817807	#DIV/0!
0	0	0	0	0	5	10	0
50.00	1.00	1.00	1.00	1.00	0.00	1.00	0.03
100.00	1.00	5.00	2.00	2.00	2.00	10.00	0.68
81.25	1.00	1.86	1.43	1.86	0.31	1.87	0.12
25.877458	0	1.46385	0.534522	0.377964	0.563661113	1.937766939	0.245126
8	7	7	7	7	16	23	7
100	1	1	1	2	1	1	0.68
100	1	1	1	2	1	1	0.68
100	1	1	1	2	1	1	0.68
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!
1	1	1	1	1	1	4	1
100	1	1	1	1	2	1	0.029
100	1	1	1	1	2	1	0.029
100	1	1	1	1	2	1	0.029
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!
1	1	1	1	1	1	3	1

Total Chromium	Comments
mg/L	
	Ref: Woodward Clyde July 1997
	ALS
	ALS
	ALS
0.001	
0.001	
0.001	
0.001	
0.001	
0.001	
0.001	
0.001	
0.001	
0.001	
0.002	

0.001	
0.002	
0.005	
0.003	
0.002	
	Sample collected using bailer.
0.001	
0.001	
0.001	
	16/12/11 SWL 11.71m, 10min purge.
0.001	15/03/12 - SWL 11.51m, 5min purge, SWLA 12.8m.
	18/05/12 - SWL 11.30m, 5min purge, SWLA 12.50m.
	17/08/12 - SWL 11.08m, 5min purge, SWLA 12.25m.
	14/11/12 - SWL 11.21m, 5min purge, SWLA 11.80m.
0.005	
0.001	

0.001
0.001
0.001
#DIV/0!
1

0.005
0.005
0.005
#DIV/0!
1

0.001
0.001
0.001
#DIV/0!
1

0.001
0.001
0.001
#DIV/0!
1

0.001
0.001
0.001
#DIV/0!
1

0.00
0.01
0.00
0.001221
22

0
0
0
0
5

0.00
0.01
0.00
0.001348
17

0.002
0.002
0.002
#DIV/0!
1

0.001
0.001
0.001
#DIV/0!
1

Statistics Field Information

SML20 EPL 11436	Date	Site Code	Time	Sampler	pH	Conductivity	Temperature
			AM/PM	Initials	pH	µS/cm	°C
	6/12/1996	MB5			4.10	8560.00	
	17/06/1997	MB5			4.20	8170.00	
	7/08/1997	MB5			4.20	8070.00	
	11/11/1997	MB5			4.20	7900.00	
	26/03/1998	MB5			4.10	6680.00	
	9/06/1998	MB5			4.10	7860.00	
	7/09/1998	MB5			4.30	7000.00	
	1/12/1998	MB5			4.20	7430.00	
	1/03/1999	MB5			4.21	7540.00	
	4/06/1999	MB5			4.24	7770.00	
	10/09/1999	MB5			4.24	8420.00	
	3/12/1999	MB5			4.21	8790.00	
	6/03/2000	MB5			4.23	7700.00	
	2/06/2000	MB5			4.22	8360.00	
	4/09/2000	MB5			4.27	8580.00	
	5/12/2000	MB5			4.24	8960.00	
	2/03/2001	MB5			4.18	8310.00	
	8/06/2001	MB5			4.23	8740.00	
	8/06/2001	MB5			4.23	8740.00	
	10/09/2001	MB5			4.17	8240.00	
	10/01/2002	MB5			4.11	8700.00	
	6/03/2002	MB5			4.17	8350.00	
	17/06/2002	MB5			4.20	8120.00	
	19/09/2002	MB5			4.25	7970.00	
	4/12/2002	MB5			4.28	7990.00	
	18/03/2003	MB5					
	23/06/2003	MB5			3.70	6780.00	15.40
	3/09/2003	MB5			4.70	5240.00	
	26/11/2003	MB5			4.58	5490.00	
	18/03/2004	MB5			4.43	6380.00	17.50
	22/06/2004	MB5			3.89	7750.00	14.50
	6/09/2004	MB5			4.92	6030.00	15.20
	8/12/2004	MB5		AMW,GB	2.74	7670	21.6
	21/03/2005	MB5		AMW	4.74	7610	
	6/07/2005	MB5		AW,CS	4.43	8030	14.57
	15/09/2005	MB5		AW	3.4	8360	14.63
	14/11/2005	MB5		JMc	3.64	8550	15.58
	13/03/2006	MB5		JMc	2.9	6877	18.4
	8/06/2006	MB5		JMc	3.4	6351	17.4
	4/09/2006	MB5		JMc	3.21	7541	16.8
	30/11/2006	MB5		DL	2.72	8940	17.01
	19/04/2007	MB5		HG	3.26	8890	19.54
	28/06/2007	MB5		HG	3.4	7960	15.12
	16/08/2007	MB5		Coffey	3.52	6910	
	30/10/2007	MB5		TH	4.5	12300	Qanta n
	14/12/2007	MB5		TH	4.33	8170	17
	15/04/2008	MB5		TH	4.45	6150	16.5
	18/11/2008	MB5	12.13	TH	5.2	8060	18.4
	9/01/2009	MB5	11.41	TH	3.8	8330	19

28/05/2009	MB5	9.08	TH	5.98	8380	14.3
25/06/2009	MB5	10.01	TH	4.97	8470	13.1
19/10/2009	MB5	9.3	TH	6.45	8160	15
14/01/2010	MB5	10.55	TH	5.32	8120	15.7
29/04/2010	MB5	12.55	TH	5.8	8030	15.5
15/06/2010	MB5	12.16	TH	6.27	7980	14.4
28/09/2010	MB5	11.14	TH	4.5	8070	14
7/12/2010	MB5	12.06	TH	5.52	7970	15.8
28/03/2011	MB5	13.16	TH	3.27	7810	18.2
28/06/2011	MB5	12.3	TH	4.01	7950	15.4
29/09/2011	MB5	11.41	TH	4.11	16150	14.4
10/01/2012	MB5	11.15	TH	4.57	8090	15.7
29/03/2012	MB5	11.03	TH	4.75	8100	16.9
14/06/2012	MB5	11.32	TH	5.09	8040	15.2
24/09/2012	MB5	11.26	TH	4.85	7830	15.3
24/09/2012	MB5	11.26	TH	4.85	7830	15.3
17/01/2013	MB5	10.31	TH	5.13	7970	15.8
3/05/2013	MB5	12:35	DS	5.07	7940	15.4
29/08/2013	MB5	2:50pm	DS	4.43	8020	15.6
15/10/2013	MB5	13:55pm	DS	4.29	8220	15.3
16/01/2014	MB5	10:10am	DS	4.33	7750	18.1
14/04/2014	MB5	8:50am	TB	4.92	7840	15.4
17/06/2014	MB5	12:30pm	PM	4.3	8460	14.6

Negative values converted to positive

'<' removed from <LOR values

2013/14	Minimum	4.29	7750.00	14.60
	Maximum	4.92	8460.00	18.10
	Average	4.46	8067.50	15.85
	StdDev	0.31	331.60	1.54
	Count	4	4	4
2012/13	Minimum	4.43	7830.00	15.30
	Maximum	5.13	8020.00	15.80
	Average	4.87	7940.00	15.53
	StdDev	0.32	80.42	0.22
	Count	4	4	4
2011/12	Minimum	4.11	8040.00	14.40
	Maximum	5.09	16150.00	16.90
	Average	4.63	10095.00	15.55
	StdDev	0.41	4036.75	1.05
	Count	4	4	4
2010/11	Minimum	3.27	7810	14
	Maximum	5.52	8070	18.2
	Average	4.325	7950	15.85
	StdDev	0.9436	107.082523	1.74642
	Count	4	4	4

11/02/2010 Changed from DISSOLVED metals to TOTAL on re

2009/10	Minimum	5.32	7980	14.4
	Maximum	6.45	8160	15.7
	Average	5.96	8072.5	15.15
	StdDev	0.5071	82.209083	0.58023
	Count	4	4	4
OVERALL	Minimum	2.72	5240.00	13.10
	Maximum	6.45	16150.00	21.60
	Average	4.33	8035.20	16.06
	StdDev	0.7203	1346.20076	1.70877
	Count	71	71	41
1996 - 2004 (mining)	Minimum	3	5240	15
	Maximum	5	8960	22
	Average	4	7759	17
	StdDev	0.3366	951.888986	2.88669
	Count	32	32	5
2005 + (post mini	Minimum	2.72	6150	13.1
	Maximum	6.45	16150	19.54
	Average	4.3987	8328.35484	16.0304
	StdDev	1.0035	1763.28469	1.63071
	Count	31	31	28
2007/08	Minimum	4.33	6150	16.5
	Maximum	4.5	12300	17
	Average	4.4267	8873.33333	16.75
	StdDev	0.0874	3134.74614	0.35355
	Count	3	3	2
2008/09	Minimum	3.8	8060	13.1
	Maximum	5.98	8470	19
	Average	4.9875	8310	16.2
	StdDev	0.902	176.446404	2.93825
	Count	4	4	4

					Analytical Information			
Dissolved Oxygen	**Oxidation-Reduction**	**Depth to Water**	**RL Water Level**	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)
mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L
		2.74	831.24					
		2.53	831.45					
		2.84	831.14					
		3.02	830.96					
		2.74	831.24					
		2.67	831.31					
		2.81	831.17					
		3.08	830.90					
		3.18	830.80					
		3.12	830.86					
		3.17	830.81					
		3.31	830.67					
		3.46	830.52					
		3.12	830.86					
		3.23	830.75					
		3.51	830.47					
			833.98					
		3.79	830.19					
		3.86	830.12					
		3.86	830.12					
		3.82	830.16					
		4.38	829.60					
		4.49	829.49					
		4.80	829.18					
2.11	332	4.80	829.18					
		4.84	829.14					
		4.89	829.09					
		4.83	829.15					
		5.29	828.69					
		5.55	828.43					
	124	5.54	828.44					
		5.66	828.32					
0.88	144	5.735	828.25					
1.36	226	5.7	828.28					
2.14	196	5.7	828.28					
0.96	158	5.67	828.31					
1.54	204	5.57	828.41					
1.47	224	4.97	829.01					
5.14	235	6.38	827.60					
5.85	338	6.17	827.81	563898				
4.91	304	5.14	828.84					
		6.03	827.95	ES0711417	1	1	1	
not working		4.50	829.48					
1.28		6.14	827.84					
1.5		6.1	827.88					
0.93		6.14	827.84					
4.06		6.26	827.72					

2.25		6.38	827.60	696256	2	2	2	0.21
2.6		6.38	827.60					
2.17		6.62	827.36	718603	0.1	0.1	1	0.23
2.65		6.55	827.43	733100	0.1	0.1	1	0.23
1.92		6.42	827.56	753063	0.1	0.1	1	0.47
1.56		6.51	827.47	761401	0.1	0.1	1	0.2
2.37		5.5	828.48	803864	0.1	0.1	1	0.39
3.95		5.56	828.42	813900	0.1	0.1	1	0.33
2.87		5.89	828.09	830991	0.1	0.1	1	0.22
2.45		6.35	827.63	843861	0.1	0.1	1	0.19
3.26		6.31	827.67	856085	0.1	0.1	1	0.2
2.6		6.23	827.75	870351	0.1	0.1	1	0.2
3.53		5.81	828.17	882484	0.1	0.1	1	0.2
2.23		5.78	828.20	893139	0.1	0.1	1	0.2
2		5.65	828.33	906740	0.1	0.1	1	0.2
2		5.65	828.33	906740	0.1	0.1	1	0.2
1.9		5.71	828.27	922843	0.1	0.1	1	0.2
1.75		6.3	827.68	937572	0.1	0.1	1	0.2
5.31	220	5.95	828.03	953589	0.1	0.1	1	0.2
1.08	152.4	5.94	828.04	959798	0.1	0.1	1	0.2
0.68		6.06	827.92	CA1400166-00	0.1	0.1	1	0.2
0.85	137	6.2	827.78	CA1401146-00	0.1	0.1	1	0.2
1.1	142.7	6.26	827.72	CA1401827-00	0.1	0.1	1	0.3

0.68	137.00	5.94	827.72	0.10	0.10	1.00	0.20
1.10	152.40	6.26	828.04	0.10	0.10	1.00	0.30
0.93	144.03	6.12	827.87	0.10	0.10	1.00	0.23
0.20	7.79	0.14	0.14	0.00	0.00	0.00	0.05
4	3	4	4	4	4	4	4

1.75	220.00	5.65	827.68	0.10	0.10	1.00	0.20
5.31	220.00	6.30	828.33	0.10	0.10	1.00	0.20
2.74	220.00	5.90	828.08	0.10	0.10	1.00	0.20
1.72	#DIV/0!	0.30	0.29	0.00	0.00	0.00	0.00
4	1	4	4	4	4	4	4

2.23	0.00	5.78	827.67	856085.00	0.10	0.10	1.00	0.20
3.53	0.00	6.31	828.20	893139.00	0.10	0.10	1.00	0.20
2.91	#DIV/0!	6.03	827.95	875514.75	0.10	0.10	1.00	0.20
0.60	#DIV/0!	0.28	0.28	15951.64	0.00	0.00	0.00	0.00
4	0	4	4	4	4	4	4	4

2.37	0	5.5	827.63	0.1	0.1	1	0.19
3.95	0	6.35	828.48	0.1	0.1	1	0.39
2.91	#DIV/0!	5.825	828.155	0.1	0.1	1	0.2825
0.727186	#DIV/0!	0.38974	0.38974	0	0	0	0.09358597
4	0	4	4	4	4	4	4

commendation of Dino Parisotto Earth2 Water (Environmental & Groundwater Consulting)

1.56	0	6.42	827.36	0.1	0.1	1	0.2
2.65	0	6.62	827.56	0.1	0.1	1	0.47
2.075	#DIV/0!	6.525	827.455	0.1	0.1	1	0.2825
0.4578574	#DIV/0!0	0.083474	0.083474	04	04	04	0.125797464
0.68	124.00	2.53	827.36	0.10	0.10	1.00	0.19
5.85	338.00	6.62	833.98	2.00	2.00	2.00	0.47
2.36	209.14	5.00	829.05	0.22	0.22	1.04	0.24
1.33254737	70.27215	1.2865869	1.4102370	0.430623	0.4305984423	0.2085144123	0.0728174522
2	124	3	828	0	0	0	0
2	332	6	834	0	0	0	0
2	228	4	830	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!1	147.082	0.9299530	1.1383531	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0
0.88	144	4.5	827.36	0.1	0.1	1	0.19
5.85	338	6.62	829.48	2	2	2	0.47
2.515357	225.44	5.92919	828.051	0.2867	0.28666667	1.06666667	0.24785714
1.29732328	62.6929	0.4896331	0.4896331	0.527615	0.5276181915	0.2581988915	0.0860392214
1.28		4.5	827.84	0	0	0	0
1.5		6.14	829.48	0	0	0	0
1.39		5.58	828.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.1555632		0.935523	0.935523	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0
0.93	0	6.14	827.6	2	2	2	0.21
4.06	0	6.38	827.84	2	2	2	0.21
2.46	#DIV/0!	6.29	827.69	2	2	2	0.21
1.2864164	#DIV/0!0	0.114894	0.114894	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1

Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids
mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L
600.00		176.00	1090.00	3.30	460.00		6080.00	9130.00
590.00		170.00	1000.00	8.20	490.00		5800.00	8740.00
590.00		170.00	1000.00	8.40	580.00		5550.00	8550.00
590.00		180.00	1100.00	6.80	510.00		6000.00	
596.00		160.00	1000.00	8.00	520.00		5890.00	
0.00		174.00	1062.00	7.50	592.00		5922.00	
583.90		209.00	1110.00	26.10	571.00		6340.00	
583.00		157.00	1168.00	10.10	417.00		6526.00	
542.00		196.00	1080.00	6.44	563.00		5880.00	
564.00		189.00	1270.00	6.59	519.00		7660.00	
565.00		186.00	970.00	5.54	525.00		5400.00	
569.00		183.00	907.00	5.79	578.00		5450.00	
596.00		196.00	940.00	5.29	496.00		5200.00	
0.00		198.00	935.00	7.06	596.00		5050.00	
569.00		206.00	1060.00	6.49	540.00		5890.00	
562.00		226.00	1130.00	5.91	519.00		5820.00	
567.00		190.00	1070.00	6.79	528.00		6600.00	
563.00		116.00	1000.00	4.82	468.00		4970.00	
563.00		116.00	1000.00	4.82	468.00		4970.00	
565.00		199.00	1140.00		502.00		6300.00	
617.00		223.00	1070.00		538.00		6140.00	
582.00		209.00	998.00		394.00		5420.00	
555.00		540.00	338.00		353.00		5630.00	
	8800					2.7	5900	
545	6910	188	886	7	552	4.01	5220	

560	8300	180	840	5	440	4	6000	8282
580	8000	180	900	4.4	460	3.2	5900	9400
550	7900	140	830	6.1	420	4.1	5900	10000
560	8200	150	930	6	470	3.4	5800	9100
570	8200	150	1000	7.3	520	4.3	5700	9500
550	8200	210	1000	6.6	540	3.1	5600	9400
570	8100	180	860	5.5	430	3.2	5700	9100
520	8000	150	910	7.2	460	3.1	5100	9300
540	8000	160	980	6.6	460	3.6	5400	9100
500	8100	170	830	7.6	430	4.3	5400	9300
510	8200	150	980	5.9	410	3.7	5500	9500
530	8000	170	860	7.7	430	4.2	5900	9300
540	7900	220	1000	7.2	480	4.3	5600	9200
540	7900	190	850	4.5	380	3.9	5500	9100
540	7900	190	850	4.5	380	3.9	5500	9100
540	7900	150	910	4.3	350	4.2	5700	9400
540	7940	140	90	5.9	360	4.2	5800	9500
550	8020	170	930	6.5	430	4.2	5800	9400
510	8220	140	900	6.6	430	4.1	6100	9900
566	7990	241	1160	7	554	4.33	5890	9540
565	7930	139	742	5.9	373	3.95	5790	5160
553	8140	161	973	6.9	451	4.26	6040	9750

510.00	7930.00	139.00	742.00	5.90	373.00	3.95	5790.00	5160.00
566.00	8220.00	241.00	1160.00	7.00	554.00	4.33	6100.00	9900.00
548.50	8070.00	170.25	943.75	6.60	452.00	4.16	5955.00	8587.50
26.34	133.42	48.25	173.43	0.50	75.56	0.17	141.07	2289.77
4	4	4	4	4	4	4	4	4

540.00	7900.00	140.00	90.00	4.30	350.00	3.90	5500.00	9100.00
550.00	8020.00	190.00	930.00	6.50	430.00	4.20	5800.00	9500.00
542.50	7940.00	162.50	695.00	5.30	380.00	4.13	5700.00	9350.00
5.00	56.57	22.17	404.76	1.07	35.59	0.15	141.42	173.21
4	4	4	4	4	4	4	4	4

500.00	7900.00	150.00	830.00	5.90	410.00	3.70	5400.00	9200.00
540.00	8200.00	220.00	1000.00	7.70	480.00	4.30	5900.00	9500.00
520.00	8050.00	177.50	917.50	7.10	437.50	4.13	5600.00	9325.00
18.26	129.10	29.86	85.00	0.83	29.86	0.29	216.02	125.83
4	4	4	4	4	4	4	4	4

520	8000	150	860	5.5	430	3.1	5100	9100
570	8200	210	1000	7.2	540	3.6	5700	9400
545	8075	175	937.5	6.475	472.5	3.25	5450	9225
20.81666	95.7427	26.458	64.4851404	0.708872	47.16991	0.238048	264.5751	150
4	4	4	4	4	4	4	4	4

550	7900	140	830	4.4	420	3.2	5700	9100
580	8200	180	1000	7.3	520	4.3	5900	10000
565	8075	155	915	5.95	467.5	3.75	5825	9500
12.90994454	150	17.3214	70.47458174	1.1902384	41.129884	0.5322914	95.742714	374.16574

0.00	6910.00	116.00	90.00	3.30	350.00	2.70	4970.00	5160.00
617.00	8800.00	540.00	1270.00	26.10	596.00	4.33	7660.00	10000.00
535.67	8031.25	184.52	948.89	6.81	476.89	3.84	5770.81	9110.08
118.04730346	309.39424	60.42546	192.94918546	3.31048342	68.2375746	0.47836524	465.807147	905.061825

0	0	116	338	3	353	0	4970	8550
617	0	540	1270	26	596	0	7660	9130
527	#DIV/0!	199	1019	8	510	#DIV/0!	5847	8807
167.04953123	#DIV/0!0	79.40623	170.39378923	4.74050619	62.5629223	#DIV/0!0	610.785423	295.69133

500	6910	140	830	4.4	380	2.7	5100	8282
580	8800	220	1000	7.7	552	4.3	6000	10000
544.333333	8044.38	172.53	910.4	6.306667	458.8	3.694375	5632.5	9255.857
22.5884505	373.86216	23.34215	66.2644054	1.08263315	48.2126215	0.5186916	265.518416	368.890614

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0

560	8300	180	840	5	440	4	6000	8282
560	8300	180	840	5	440	4	6000	8282
560	8300	180	840	5	440	4	6000	8282
#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1

Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	49.000		0.880		0.160	0.010	41.000	
	50.000		0.640		0.340	0.030	39.000	
	60.000		0.590		0.350	0.030	38.000	
	55.000		0.610		0.350	0.030	38.000	
	40.000		0.450		0.020	0.030	35.000	
	47.000		0.420		0.020	0.030	36.000	
	46.800		0.440		0.030	0.030	38.000	
	47.700		0.520		0.020	0.030	41.200	
	47.000		0.460		0.040	0.040	39.900	
	47.100		0.460		0.040	0.030	38.500	
	48.000		0.460		0.030	0.030	40.200	
	43.100		0.390		0.040	0.030	36.800	
	41.900		3.420		0.100	0.030	38.700	
	44.500		0.420		0.050	0.030	35.100	
	48.600		0.440		0.060	0.030	40.100	
	58.100		0.440		0.080	0.030	35.700	
	45.900		0.420		0.010	0.030	44.200	
	41.20		0.36		0.010	0.030	32.50	
	41.200		0.360		0.010	0.030	32.500	
	49.40		0.31		0.010	0.030	43.10	
	44.70		0.38		0.010	0.030	46.20	
	32.20		0.300		0.010	0.300	39.80	
	36.00		0.62		2.420	0.300	21.40	
					0.48	0.067		
		0.010	0.262		0.134	0.014		

0.005	34	0.003	0.14	1.2	0.028	0.0037	41	0.0001
					0.053	0.011		
					0.02	0.059		
0.13	27	0.001	0.19	1	0.1	0.01	28	0.0001
					0.0047	0.0016		
					0.1	0.0029		
					0.041	0.01		
0.005	25	0.001	0.18	1.3	0.015	0.002	25	0.0001
					0.011	0.00033		
					0.016	0.002		
					0.045	0.0021		
0.01	27	0.016	0.16	0.9	0.0096	0.0015	28	0.0001
					0.012	0.0027		
					0.015	0.0021		
					0.015	0.0021		
					0.012	0.0018		
0.01	20	0.027	0.15	1	0.019	0.0015	30	0.0001
					0.019	0.0011		
					0.0068	0.00067		
		0.02	0.176		0.008	0.0011		
0.01	22.9	0.022	0.168	1.2	0.013	0.0036	25.7	0.0001
		0.026	0.233		0.006	0.0008		

0.01	22.90	0.02	0.17	1.20	0.01	0.00067	25.70	0.00
0.01	22.90	0.03	0.23	1.20	0.01	0.00360	25.70	0.00
0.01	22.90	0.02	0.19	1.20	0.01	0.00154	25.70	0.00
#DIV/0!	#DIV/0!	0.00	0.04	#DIV/0!	0.00	0.00	#DIV/0!	#DIV/0!
1	1	3	3	1	4	4	1	1

0.01	20.00	0.03	0.15	1.00	0.01	0.00	30.00	0.00
0.01	20.00	0.03	0.15	1.00	0.02	0.00	30.00	0.00
0.01	20.00	0.03	0.15	1.00	0.02	0.00	30.00	0.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	0.00	#DIV/0!	#DIV/0!
1	1	1	1	1	4	4	1	1

0.01	27.00	0.02	0.16	0.90	0.01	0.00	28.00	0.00
0.01	27.00	0.02	0.16	0.90	0.05	0.00	28.00	0.00
0.01	27.00	0.02	0.16	0.90	0.02	0.00	28.00	0.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.02	0.00	#DIV/0!	#DIV/0!
1	1	1	1	1	4	4	1	1

0.005	25	0.001	0.18	1.3	0.011	0.00033	25	0.0001
0.005	25	0.001	0.18	1.3	0.1	0.01	25	0.0001
0.005	25	0.001	0.18	1.3	0.04175	0.0038075	25	0.0001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.041048	0.0042634	#DIV/0!	#DIV/0!
1	1	1	1	1	4	4	1	1

0.13	27	0.001	0.19	1	0.0047	0.0016	28	0.0001
0.13	27	0.001	0.19	1	0.1	0.059	28	0.0001
0.13	27	0.001	0.19	1	0.044425	0.0204	28	0.0001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.042177	0.0260763	#DIV/0!	#DIV/0!
1	1	1	1	1	4	4	1	1
0.01	20.00	0.00	0.14	0.90	0.00	0.00	21.40	0.00
0.13	60.00	0.03	3.42	1.30	2.42	0.30	46.20	0.00
0.03	42.08	0.01	0.48	1.10	0.11	0.03	36.16	0.00
0.049866	10.26434	0.010559	0.562378	0.154919	0.359142	0.0597429	6.059026	0
6	29	9	32	6	47	47	29	6
0	32	0	0	0	0	0	21	0
0	60	0	3	0	2	0	46	0
#DIV/0!	46	#DIV/0!	1	#DIV/0!	0	0	38	#DIV/0!
#DIV/0!	6.31513	#DIV/0!	0.628002	#DIV/0!	0.500131	0.0780696	4.920053	#DIV/0!
0	23	0	23	0	23	23	23	0
0.005	25	0.001	0.14	0.9	0.0047	0.00033	25	0.0001
0.13	34	0.016	0.262	1.3	0.48	0.067	41	0.0001
0.0375	28.25	0.0062	0.1864	1.1	0.067769	0.0119956	30.5	0.0001
0.061712	3.947573	0.006611	0.04642	0.182574	0.116521	0.0203892	7.141428	0
4	4	5	5	4	16	16	4	4
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
0.005	34	0.003	0.14	1.2	0.028	0.0037	41	0.0001
0.005	34	0.003	0.14	1.2	0.028	0.0037	41	0.0001
0.005	34	0.003	0.14	1.2	0.028	0.0037	41	0.0001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
290.000								
275.000								
250.000								
310.000								
250.000								
275.000								
269.000								
278.000								
286.000								
582.000								
257.000								
215.000								
255.000								
242.000								
279.000								
281.000								
274.000								
259.00								
259.000								
374.00								
286.00								
338.00								
121.00								

150

200

240	7.6	0.01	0.01			1	25	36
				0.00001	0.0001			
90								
220								
230	6.5	0.01	0.01	0.00001	0.0001	0.0005	25	79
230								
270								
200								
200	5.7	0.02	0.01	0.00001	0.0001	1	25	25
220								
190								
260								
200	5.8	0.05	0.01	0.002	0.002	0.5	20	50
250								
180								
180								
180								
210	5.8	0.05	0.01	0.002	0.002	0.5	20	50
240								
280								
298								
215	5.9	0.05	0.01	0.002	0.002	1	20	50
274								

215.00	5.90	0.05	0.01	0.00	0.00	1.00	20.00	50.00
298.00	5.90	0.05	0.01	0.00	0.00	1.00	20.00	50.00
266.75	5.90	0.05	0.01	0.00	0.00	1.00	20.00	50.00
35.98	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1
180.00	5.80	0.05	0.01	0.00	0.00	0.50	20.00	50.00
240.00	5.80	0.05	0.01	0.00	0.00	0.50	20.00	50.00
202.50	5.80	0.05	0.01	0.00	0.00	0.50	20.00	50.00
28.72	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1
190.00	5.80	0.05	0.01	0.00	0.00	0.50	20.00	50.00
260.00	5.80	0.05	0.01	0.00	0.00	0.50	20.00	50.00
225.00	5.80	0.05	0.01	0.00	0.00	0.50	20.00	50.00
35.12	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1
200	5.7	0.02	0.01	0.00001	0.0001	1	25	25
270	5.7	0.02	0.01	0.00001	0.0001	1	25	25
222.5	5.7	0.02	0.01	0.00001	0.0001	1	25	25
33.0404	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1

90	6.5	0.01	0.01	0.00001	0.0001	0.0005	25	79
230	6.5	0.01	0.01	0.00001	0.0001	0.0005	25	79
192.5	6.5	0.01	0.01	0.00001	0.0001	0.0005	25	79
68.4957	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1
90.00	5.70	0.01	0.01	0.00	0.00	0.00	20.00	25.00
582.00	7.60	0.05	0.01	0.00	0.00	1.00	25.00	79.00
249.19	6.22	0.03	0.01	0.00	0.00	0.67	22.50	48.33
71.9071	0.73598007	0.02041	0	0.00109	0.001041	0.408085	2.738613	18.14019
47	6	6	6	6	6	6	6	6
121	0	0	0	0	0	0	0	0
582	0	0	0	0	0	0	0	0
283	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
79.5702	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
23	0	0	0	0	0	0	0	0
90	5.7	0.01	0.01	0.00001	0.0001	0.0005	20	25
270	7.6	0.05	0.01	0.002	0.002	1	25	79
208.125	6.4	0.0225	0.01	0.000508	0.000575	0.625125	23.75	47.5
44.1541	0.87559504	0.01893	0	0.000995	0.00095	0.478496	2.5	23.35951
16	4	4	4	4	4	4	4	4
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0
240	7.6	0.01	0.01	0.00001	0.0001	1	25	36
240	7.6	0.01	0.01	0.00001	0.0001	1	25	36
240	7.6	0.01	0.01	0.00001	0.0001	1	25	36
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L

0.010

100	100	1	1	1	2	0.002	3	0.0047	0.006
							2		
2100	2000	1	1	1	2	0.001	3	0.0051	0.007
100	100	1	1	1	2	0.001	6	0.0028	0.002
100	50	1	5	2	2	0.001	10	0.0041	0.007

								17/09/12 - SW	
								10/01/13 - SW	
100	50	1	2	2	2	0.05	6	0.021	0.008
100	50	1	2	2	2	0.05	4	0.0042	0.002

100.00	50.00	1.00	2.00	2.00	2.00	0.05	4.00	0.00	0.00
100.00	50.00	1.00	2.00	2.00	2.00	0.05	4.00	0.00	0.00
100.00	50.00	1.00	2.00	2.00	2.00	0.05	4.00	0.00	0.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1	1

100.00	50.00	1.00	2.00	2.00	2.00	0.05	6.00	0.02	0.01
100.00	50.00	1.00	2.00	2.00	2.00	0.05	6.00	0.02	0.01
100.00	50.00	1.00	2.00	2.00	2.00	0.05	6.00	0.02	0.01
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1	1

100.00	50.00	1.00	5.00	2.00	2.00	0.00	10.00	0.00	0.01
100.00	50.00	1.00	5.00	2.00	2.00	0.00	10.00	0.00	0.01
100.00	50.00	1.00	5.00	2.00	2.00	0.00	10.00	0.00	0.01
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1	1

100	100	1	1	1	2	0.001	6	0.0028	0.002
100	100	1	1	1	2	0.001	6	0.0028	0.002
100	100	1	1	1	2	0.001	6	0.0028	0.002
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1	1

2100	2000	1	1	1	2	0.001	2	0.0051	0.007
2100	2000	1	1	1	2	0.001	3	0.0051	0.007
2100	2000	1	1	1	2	0.001	2.5	0.0051	0.007
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.7071	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	2	1	1
100.00	50.00	1.00	1.00	1.00	2.00	0.00	2.00	0.00	0.00
2100.00	2000.00	1.00	5.00	2.00	2.00	0.05	10.00	0.02	0.01
433.33	391.67	1.00	2.00	1.50	2.00	0.02	4.86	0.01	0.01
816.5	788.3	0	1.54919	0.5477	0	0.0252	2.7343	0.0069	0.003
6	6	6	6	6	6	6	7	6	7
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0	0
100	50	1	1	1	2	0.001	2	0.0028	0.002
2100	2000	1	5	2	2	0.002	10	0.0051	0.01
600	562.5	1	2	1.25	2	0.0013	4.8	0.0042	0.0064
1000	958.62	0	2	0.5	0	0.0005	3.2711	0.001	0.002881
4	4	4	4	4	4	4	5	4	5
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0	0
100	100	1	1	1	2	0.002	3	0.0047	0.006
100	100	1	1	1	2	0.002	3	0.0047	0.006
100	100	1	1	1	2	0.002	3	0.0047	0.006
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1	1

Comments

Ref: Woodward Clyde July 1997
Fe, Cd and Al included in TDS
MB5 Fe,Cd,Al Included in T.D.S

Pumped for 2 minutes
bore pumped for 2 mins

Sample collected using waterra valve

27/09/11 - Purged bore for 10 min. SWL 6.31m, SWL after purge 9.19m.
10/01/12 - 10min purge, SWL 6.21m, SWLA 9.20m.
22/03/12 - SWL 5.73m, 5min purge, SWLA 6.76m.
7/06/12 - Road cut unable to purge.
17/09/12 - SWL - 4.67m, 5min purge, SWLA 7.05m
/L - 4.67m, 5min purge, SWLA 7.05m
L - 5.66m, 5min purge, SWLA 8.77m.

EPL 11436	Statistics	Field Information						
		Date	Site Code	Time	Sampler	pH	Conductivity	Temperature
				AM/PM	Initials	pH	µS/cm	°C
		6/12/1996	MB6					
		17/06/1997	MB6					
		7/08/1997	MB6					
		11/11/1997	MB6					
		26/03/1998	MB6					
		9/06/1998	MB6					
		7/09/1998	MB6					
		1/12/1998	MB6					
		1/03/1999	MB6					
		4/06/1999	MB6					
		10/09/1999	MB6					
		3/12/1999	MB6					
		6/03/2000	MB6					
		2/06/2000	MB6					
		4/09/2000	MB6					
		5/12/2000	MB6					
		2/03/2001	MB6					
		8/06/2001	MB6					
		8/06/2001	MB6					
		21/08/2001	MB6					
		21/08/2001	MB6					
		10/09/2001	MB6					
		10/09/2001	MB6					
		10/01/2002	MB6					
		6/03/2002	MB6					
		7/05/2002	MB6					
		9/05/2002	MB6					
		17/06/2002	MB6					
		21/08/2002	MB6					
		19/09/2002	MB6					
		4/12/2002	MB6					
		9/12/2002	MB6					
		18/02/2003	MB6					
		18/03/2003	MB6					
		23/06/2003	MB6					
		12/08/2003	MB6					
		3/11/2003	MB6					
		18/02/2004	MB6					
		12/05/2004	MB6					
		18/08/2004	MB6					
		17/11/2004	MB6		AMW,GB	5.16	2644.00	16.90
		3/03/2005	MB6		GB	5.55	2910.00	18.30
		28/06/2005	MB6		AMW,AW	5.5	3210.00	14.69
		12/08/2005	MB6		AW,CS	5.68	3410.00	14.56
		16/11/2005	MB6		jmc	5.82	3359.00	17.61
		9/02/2006	MB6		jmc	5.4	3155	15.43
		31/05/2006	MB6		jmc	5.31	2847	13.51
		15/08/2006	MB6		jmc	6	3460	14.6
		9/01/2007	MB6		HG	6.13	593	17.24
		16/02/2007	MB6		HG	6.84	7270	17.59

10/04/2007	MB6		HG	6.67	4900	13.36
28/06/2007	MB6		HG	6.77	6430	12.91
31/08/2007	MB6	1:30pm	TM	5.75	3410	16.52
7/12/2007	MB6	0.30am	TM	5.65	3620	17.5
15/02/2008	MB6	9.00am	TM	6	3990	16.1
27/05/2008	MB6	9.36am	TM	6.55	3360	15.3
19/08/2008	MB6	9.50am	TM			
27/11/2008	MB6	9.30	TM	7.07	4340	16.5
3/02/2009	MB6	11.53	TM	4.77	3510	21.3
30/06/2009	MB6	9.23	TM	7.53	4590	14.3
7/07/2009	MB6	9.56	TM	6.86	4560	13.4
1/09/2009	MB6	9.44	TM	6.88	4500	14.3
17/11/2009	MB6	10.10	TM	6.88	4390	17.2
25/03/2010	MB6	10.24	TM	6.7	4260	16.1
21/06/2010	MB6	10.20	TM	7.2	4290	14.6
31/08/2010	MB6	9.22	TH	6.55	4470	13.5
10/11/2010	MB6	10.14	TH	7.08	6940	16.5
25/02/2011	MB6	9.15	TH	5.9	4430	15.9
21/07/2011	MB6	11.18	TH	6.08	4600	13.7
30/08/2011	MB6	10.38	TH	5.98	4580	14.5
21/12/2011	MB6	9.25	TH	5.89	4790	15.9
19/03/2012	MB6	11.10	TH	5.87	4950	15.6
23/05/2012	MB6	9.50	TH	5.73	5020	14.5
23/08/2012	MB6	9.51	TH	6.02	4970	14.8
21/11/2012	MB6	10.38	TH	5.21	5020	16.2
3/05/2013	MB6	1:15pm	DS	5.92	4870	16
13/08/2013	MB6	4:45pm	DS	5.42	5100	15
7/11/2013	MB6	14:30pm	DS	5.27	4720	17.9
16/01/2014	MB6	11:40am	DS	5.18	5180	18.3
14/04/2014	MB6	11:35am	TB	5.27	5330	15.8
24/06/2014	MB6	11:15am	PM	5.61	5240	11.4

Negative values converted to positive
'<' removed from <LOR values

2012/13	Minimum	5.18	4720	11.4
	Maximum	5.61	5330	18.3
	Average	5.333	5117.5	15.85
	StdDev	0.19	272.0753572	3.162804663
	Count	4	4	4
2012/13	Minimum	5.21	4870	15
	Maximum	5.92	5100	16.2
	Average	5.517	4996.666667	15.73333333
	StdDev	0.365	116.7618659	0.642910051
	Count	3	3	3
2011/12	Minimum	5.73	4790	14.5
	Maximum	6.02	5020	15.9
	Average	5.878	4932.5	15.2

	StdDev		0.119	99.45685832	0.658280589
	Count		4	4	4
2010/11	Minimum		5.9	4430	13.7
	Maximum		7.08	6940	16.5
	Average		6.26	5137.5	15.15
	StdDev		0.552	1204.059107	1.279322737
	Count		4	4	4
		11/02/2010	Changed from DISSOLVED metals to TOTAL on recommendat		
2009/10	Minimum		6.55	4260	13.5
	Maximum		7.2	4470	17.2
	Average		6.833	4352.5	15.35
	StdDev		0.28	96.04686356	1.629928424
	Count		4	4	4
OVERALL	Minimum		4.77	593	11.4
	Maximum		7.53	7270	21.3
	Average		6.041	4330.45	15.633
	StdDev		0.679	1191.252432	1.843373719
	Count		40	40	40
1996 - 2004 (mining)	Minimum		5	2644	17
	Maximum		5	2644	17
	Average		5	2644	17
	StdDev		#####	#DIV/0!	#DIV/0!
	Count		1	1	1
2005 + (post mini	Minimum		4.77	593	12.91
	Maximum		7.53	7270	21.3
	Average		6.229	4170.8	15.61733333
	StdDev		0.665	1270.246851	1.837141583
	Count		30	30	30
2007/08	Minimum		5.65	3360	15.3
	Maximum		6.55	3990	17.5
	Average		6.067	3656.666667	16.3
	StdDev		0.454	316.5964835	1.113552873
	Count		3	3	3
2008/09	Minimum		4.77	3510	13.4
	Maximum		7.53	4590	21.3
	Average		6.622	4300	15.96
	StdDev		1.07	452.0508821	3.196560652
	Count		5	5	5

Analytical Information

Dissolved Oxygen	Oxidation-Reduction	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)
mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L
					36.00			
					35.00			
		11.98	784.23		47.00			
		11.84	784.37					
		12.54	783.67					
		12.48	783.73					
		10.35	785.86					
		10.42	785.79					
		11.51	784.70					
		11.83	784.38					
		12.24	783.97					
		11.70	784.51					
		11.89	784.32					
		12.11	784.10		33.80			
		12.60	783.61					
		12.06	784.15					
		12.04	784.17					
		12.68	783.53					
		13.05	783.16					
		13.05	783.16					
		13.24	782.97					
		12.81	783.40					
		12.81	783.40					
		11.58	784.63		35.00	1		
		12.21	784.00					
					33.00			
		10.97	785.24					
		10.96	785.25					
					33.00			
		11.10	785.11		32.00			0.02
		11.10	785.11					
		10.52	785.69					
		10.64	785.57	ES41593	46.00			
		10.55	785.66					
				ES45547	46.00	1		0.07
		10.19	786.02	ES47496	36.00	1	36.00	0.23
		10.69	785.52	ES49667	39.00	1	39.00	0.08
		10.54	785.67	ES52077	33.00	1	33.00	0.04
		10.13	786.08	ES0501701	36.00	1	36.00	0.13
		10.17	786.04	ES0505359	39.00	1	39.00	0.02
		9.85	786.37	ES0506803	42.00	1	42.00	0.01
		11.50	784.71	ES0509840	41.00	1	41.00	0.23
		11.86	784.35	ES0601616	35.00	1	35.00	0.08
		12.03	784.18	ES0607022	40.00	1	40.00	0.07
		10.94	785.27	512977	43.00	1	43.00	0.08
		9.85	786.36	545546	50	2	100	0.65
		9.59	786.62	552678	37	2	37	0.59

		9.5	786.71	561712	60	2	60	0.34
		9.23	786.98					
		9.15	787.06	587803	36	2	36	0.01
		9.14	787.07	603410	35	2	92	0.12
		8.98	787.23	616381	38	2	38	0.12
		8.84	787.37	635164	44	2	99	0.01
		8.93	787.28	648105	34	2	82	0.01
2.46		8.81	787.40	664641	36	2	150	0.03
3.79		8.64	787.57	675490	14	2	14	0.04
3.85		8.6	787.61					
4.19		8.68	787.53	701824	43	2	43	0.11
3.96		7.75	788.46	711417	33	2	33	0.01
2.78		8.73	787.48	723606	33.8	0.1	34	0.01
1.81		8.64	787.57	747495	41.3	0.1	41	0.32
3.06		8.6	787.61	762363	40.1	0.1	40	0.25
2.28		8.44	787.77	800624	36.2	0.1	36	0.13
7.11		8.35	787.86	809746	37.9	0.1	38	0.04
5.77		7.85	788.36	826207	34.2	0.1	34	0.09
4.09		7.88	788.33	847176	32.3	0.1	32	0.03
4.01		7.98	788.23	852261	33.8	0.1	34	0.02
4.53		8.05	788.16	868019	33.7	0.1	34	0.10
3.89		7.68	788.53	880611	33.4	0.1	33	0.10
3.94		7.27	788.94	890059	33.9	0.1	34	0.1
4		7.16	789.05	902534	32.3	0.1	32	0.1
3.68		7.23	788.98	915129	33.6	0.1	34	0.1
2.87		7.39	788.82	937575	31	0.1	31	0.1
2.48		6.88	789.33	951361	32.2	0.1	32	
2.18	96.3	6.35	789.86	960608	34.2	0.1	34	0.1
2.13		6.83	789.38	A1400166-00	31.9	0.1	32	0.1
2.35	117.6	6.65	789.56	A1401146-00	33.4	0.1	33	0.2
3.5	71.6	6.15	790.06	A1401898-00	32.8	0.1	33	0.2

2.13	71.6	6.15	789.38	31.9	0.1	32	0.1
3.5	117.6	6.83	790.06	34.2	0.1	34	0.2
2.54	95.17	6.495	789.715	33.1	0.1	33	0.15
0.64689	23.02	0.30348	0.30348	0.97	0	0.81649658	0.05773503
4	3	4	4	4	4	4	4

2.48		6.88	788.82	31	0.1	31	0.1
3.68		7.39	789.33	33.6	0.1	34	0.1
3.01		7.166667	789.04	32.3	0.1	32.3333333	0.1
0.612127		0.260832	0.260832	1.3	1.6997E-17	1.52752523	0
3		3	3	3	3	3	2

3.89	0	7.16	788.16	32.3	0.1	32	0.1
4.53	0	8.05	789.05	33.9	0.1	34	0.1
4.09	#####	7.54	788.67	33.3	0.1	33.25	0.1

0.29676	#####	0.407022	0.407022	0.71	0	0.95742711	0
4	0	4	4	4	4	4	4
4.01	0	7.85	787.86	32.3	0.1	32	0.02
7.11	0	8.35	788.36	37.9	0.1	38	0.09
5.245	#####	8.015	788.195	34.6	0.1	34.5	0.045
1.484711	#####	0.230145	0.230145	2.38	0	2.51661148	0.03109126
4	0	4	4	4	4	4	4

ion of Dino Parisotto Earth2 Water (Environmental & Groundwater Consulting)

1.81	0	8.44	787.48	33.8	0.1	34	0.01
3.06	0	8.73	787.77	41.3	0.1	41	0.32
2.4825	#####	8.6025	787.6075	37.9	0.1	37.75	0.1775
0.552351	#####	0.121209	0.121209	3.47	0	3.30403793	0.13647344
4	0	4	4	4	4	4	4
1.81	71.6	6.15	782.97	14	0.1	14	0.01
7.11	117.6	13.24	790.06	60	2	150	0.65
3.529583	95.17	10.035	786.175	36.7	0.88139535	44.3658537	0.12359524
1.213559	23.02	1.948383	1.948383	6.43	0.79858679	24.9547151	0.13924204
24	3	73	73	51	43	41	42
0		10	783	32	1	33	0.02
0		13	786	47	1	39	0.23
#DIV/0!		12	785	37	1	36	0.088
#DIV/0!		0.909609	0.909609	5.46	0	3	0.08288546
0		33	33	13	5	3	5
1.81	0	7.68	784.18	14	0.1	14	0.01
7.11	0	12.03	788.53	60	2	150	0.65
3.838667	#####	9.173065	787.0369	37.7	1.10344828	48.8275862	0.12934483
1.344783	#####	1.163376	1.163376	7.39	0.84069816	28.5895447	0.16313147
15	0	31	31	29	29	29	29
0		8.84	787.07	34	2	38	0.01
0		9.14	787.37	44	2	99	0.12
#DIV/0!		8.9725	787.2375	37.8	2	77.75	0.065
#DIV/0!		0.125797	0.125797	4.5	0	27.4028587	0.06350853
0		4	4	4	4	4	4
2.46	0	7.75	787.4	14	2	14	0.01
4.19	0	8.81	788.46	43	2	150	0.11
3.65	#####	8.496	787.714	31.5	2	60	0.0475
0.682532	#####	0.424417	0.424417	12.4	0	61.1936816	0.04349329
5	0	5	5	4	4	4	4

Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate
mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L
250.00	1310.00	22.00	99.00	11.00	102.00	5.50	235.00
270.00	1360.00	9.00	110.00	8.90	95.00	5.40	260.00
275.00	1750.00	33.00	160.00	8.00	110.00	5.60	490.00
270.00	1540.00	23.00	130.00	8.10	120.00	5.60	370.00
280.00	1210.00	8.40	105.00	8.70	75.00	5.60	215.00
	1220.00	12.00	100.00	9.00	105.00	5.40	216.00
343.80	1390.00	13.80	119.00	15.60	132.00	5.70	261.00
329.00	1609.00	12.70	135.00	11.80	105.00	5.70	286.00
332.00	1500.00	12.70	119.00	8.49	144.00	5.62	248.00
406.00	1670.00	10.40	122.00	7.86	126.00	5.53	244.00
350.00	1780.00	10.20	123.00	7.36	125.00	5.54	248.00
372.00	1880.00	11.70	123.00	8.18	132.00	5.54	253.00
382.00	1750.00	11.30	126.00	7.17	128.00	5.50	256.00
	1810.00	11.30	127.00	10.00	151.00	5.48	261.00
408.00	1910.00	13.00	145.00	9.02	172.00	5.57	287.00
427.00	2070.00	14.30	170.00	11.80	182.00	5.53	351.00
450.00	1940.00	13.70	162.00	9.55	173.00	5.48	304.00
464.00	2030.00	8.07	152.00	6.74	150.00	5.52	272.00
464.00	2030.00	8.07	152.00	6.74	150.00	5.52	272.00
482.00		13.10	173.00	19.30	184.00	5.60	347.00
517.00	2130.00	14.00	100.00	17.00	156.00	5.83	318.00
465.00	2040.00	11.90	156.00		134.00	5.49	316.00
494.00	2100.00	15.70	181.00		164.00	5.50	391.00
533.00	2440.00	18.30	160.00		153.00	5.45	441.00
590.00	2500.00		121.00		167.00	5.49	389.00
581.00	2230.00	19.00	174.00	14.00	194.00	5.91	374.00
546.00	2340.00	40.80	68.70		175.00	5.53	403.00
517.00	2130.00	14.00	167.00	17.00	156.00	5.83	318.00
	2370.00					5.59	
	2600.00					5.57	
606.00	2480.00	16.00	189.00	10.00	201.00	5.89	366.00
676.00	2880.00	17.00	208.00	11.00	207.00	6.08	403.00
728.00	2980.00	18.00	210.00	11.00	238.00	5.50	407.00
	2950.00					5.74	
808.00	2790.00	18.00	222.00	12.00	315.00	5.29	459.00
672.00	2260.00	18.00	196.00	16.00	216.00	4.74	404.00
703.00	2730.00	19.00	219.00	13.00	214.00	5.64	444.00
604.00	2280.00	17.00	176.00	11.00	181.00	5.95	351.00
581.00	2570.00	17.00	188.00	11.00	198.00	5.60	394.00
798.00	1800.00	21.00	240.00	12.00	227.00	5.65	481.00
908.00	2660.00	23.00	242.00	14.00	221.00	6.24	967.00
652.00	2106.00	20.00	190.00	17.00	223.00	5.20	410.00
701.00	2564.00	19.00	235.00	13.00	218.00	5.34	367.00
638.00	2654.00	18.00	221.00	12.00	310.00	5.20	562.00
701.00	2564.00	19.00	220.00	13.00	218.00	6.04	367.00
510	2300	16.00	150	9.9	170	6.5	300
510	2300	18.00	150	10	160	6.8	360

2800	10800	140.00	300	7.9	1500	6.7	430
900	3600	22	250	12	310	5.9	570
910	3600	25	250	9.6	300	5.9	590
1100	4100	27	290	13	350	6.6	610
1100	4300	28	320	14	400	6	750
1100	4300	28	330	14	420	5.9	710
1100	4400	27	320	12	400	5.8	700
660	4400	26	290	12	350	5.5	340
1100	4600	29	330	15	380	6.2	720
1100	4500	28	300	14	350	5.8	720
1100	4500	29	300	15	340	6	710
1100	4200	30	300	14	410	6.4	690
1100	4300	32	330	17	390	6.2	680
1100	4300	31	310	15	390	5.9	700
1000	4300	38	330	21	410	6.1	670
1000	4400	30	320	15	380	6.5	670
1100	4500	30	300	15	380	6.2	700
1200	4600	32	340	16	390	5.7	720
1200	4800	33	330	15	450	5.5	740
1300	5100	33	330	15	410	5.8	790
1300	5000	33	320	15	450	5.6	800
1300	5000	33	330	13	460	5.7	780
1400	5100	32	340	12	480	5.6	860
1400	4870	31	330	13	430	5.6	770
410	5100	33		13	470	6	210
1300	4700	32	320	13	430	6	780
1480	5270	33	345	13.6	471	5.78	828
1530	5370	33.6	349	13.6	472	5.48	846
1580	5260	33	356	13.2	480	5.65	853

1300	4700	32	320	13	430	5.48	780
1580	5370	33.6	356	13.6	480	6	853
1472.5	5150	32.9	342.5	13.35	463.25	5.7275	826.75
122.0314	304.0833	0.663325	15.67375726	0.3	22.52961	0.219298	32.8975683
4	4	4	4	4	4	4	4
410	4870	31	330	12	430	5.6	210
1400	5100	33	340	13	480	6	860
1070	5023.333	32	335	12.66667	460	5.733333	613.3333333
571.5768	132.7906	1	7.071067812	0.57735	26.45751	0.23094	352.1836642
3	3	3	2	3	3	3	3
1200	4800	33	320	13	410	5.5	740
1300	5100	33	330	15	460	5.8	800
1275	4975	33	327.5	14.5	442.5	5.65	777.5

50	125.8306	0	5	1	22.17356	0.129099	26.2995564
4	4	4	4	4	4	4	4
1000	4300	30	300	15	380	5.7	670
1200	4600	38	340	21	410	6.5	720
1075	4450	32.5	322.5	16.75	390	6.125	690
95.74271	129.0994	3.785939	17.07825128	2.872281	14.14214	0.330404	24.49489743
4	4	4	4	4	4	4	4
1100	4200	29	300	14	340	5.9	680
1100	4500	32	330	17	410	6.4	710
1100	4325	30.5	310	15.25	382.5	6.125	695
0	125.8306	1.290994	14.14213562	1.258306	29.86079	0.221736	12.90994449
4	4	4	4	4	4	4	4
250	1210	8.07	68.7	6.74	75	4.74	210
2800	10800	140	356	21	1500	6.8	967
793.8563	3157.027	23.48667	220.7736111	12.32515	278.4932	5.743816	487.739726
438.0792	1564.461	16.37793	85.44462006	3.106372	191.6338	0.358125	210.4545364
71	75	72	72	68	73	76	73
250	1210	8	69	7	75	5	215
808	2980	41	222	19	315	6	490
473	2054	16	149	11	158.0571	6	327
147.4349	490.8654	6.679954	37.919575	3.368492	46.78168	0.216189	75.96140108
33	37	34	35	30	35	38	35
510	1800	16	150	7.9	160	5.2	300
2800	10800	140	340	21	1500	6.8	967
1002.379	3969.586	29.96552	276.0689655	13.56552	367.4138	5.971379	600.6206897
413.5869	1634.634	21.91947	56.8097898	2.631577	233.9152	0.425254	167.1715145
29	29	29	29	29	29	29	29
910	3600	25	250	9.6	300	5.9	590
1100	4300	28	330	14	420	6.6	750
1052.5	4075	27	297.5	12.65	367.5	6.1	665
95	330.4038	1.414214	35.93976442	2.087263	53.77422	0.33665	77.24420151
4	4	4	4	4	4	4	4
660	4400	26	290	12	350	5.5	340
1100	4600	29	330	15	400	6.2	720
990	4475	27.5	310	13.25	370	5.825	620
220	95.74271	1.290994	18.25741858	1.5	24.4949	0.287228	186.9046103
4	4	4	4	4	4	4	4

Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
759.00						0.010	0.010	0.510
795.00						0.010	0.030	0.380
1130.00						0.010	0.030	0.300
				0.010		0.010	0.030	0.440
				0.010		0.010	0.030	0.180
				0.010		0.010	0.030	0.200
				0.030		0.010	0.030	0.250
				0.030		0.010	0.050	0.230
				0.030		0.010	0.040	0.260
				0.030		0.010	0.030	0.250
				0.030		0.010	0.030	0.230
				0.030		0.020	0.030	0.250
				0.030		0.070	0.030	0.260
				0.030		0.010	0.030	0.240
				0.030		0.020	0.030	0.250
				0.030		0.050	0.030	0.330
				0.030		0.010	0.030	0.330
		0.010		0.030		0.010	0.030	0.21
				0.030		0.010	0.030	0.210
		0.36		0.030		0.010	0.030	0.30
				0.0100		5.230		0.21
		0.010		0.030		0.010	0.030	0.26
		0.010		0.030		0.010	0.030	0.29
		0.70		0.030		0.100	0.140	0.32
		0.010		0.030		0.010	0.030	0.23
				0.010		0.016	0.020	0.29
		0.14		0.0400		0.300	0.030	0.23
				0.0100		0.009		
				0.0100		0.023	0.010	0.35
				0.0100		0.009		0.35
1790.00				0.0100		0.109	0.010	0.29
1900.00		46		0.0000		0.008		0.03
1760.00				0.0038		0.004	0.001	4.98
1770.00			0.001	0.0078		0.009	0.002	0.32
1660.00			0.001	0.0238		0.076	0.011	0.41
1600.00			0.001	0.0068		0.003	0.002	0.42
3020.00		0.12	0.001	0.0099		0.004	0.001	0.37
2080.00		0.22		0.0095		0.009	0.004	0.40
1581.00				0.0080		0.004	0.004	0.51
1782.00		0.24	0.001	0.0078		0.009	0.002	0.32
1636.00		46		0.0000		0.008	0.000	0.03
1782.00		0.24	0.001	0.0078		0.009	0.002	0.32
1400			0.001	0.0025		0.015	0.001	0.44
			0.003	0.0057		0.015	0.022	0.45

6700	0.005	4.9			0.019			
2300								
2500						0.050	0.025	
2700	0.005	1.1	4	0.0140	0.003	0.043	0.053	0.54
2900						0.008	0.004	
2900						0.009	0.0047	
2969						0.013	0.0036	
3144	0.0050	0.86	0.003	0.0170	0.005	0.040	0.0071	0.62
3100						0.006	0.0027	
2700						0.002	0.0006	
3300						0.009	0.009	
2600	0.0050	0.16	0.001	0.0001	0.0021	0.002	0.00018	0.69
3000						0.004	0.00009	
2900						0.003	0.00079	
3300						0.012	0.0014	
2600	0.0050	0.12	0.001	0.0034	0.0025	0.008	0.0013	0.62
3100								
3300								
3200								
3500	0.0100	0.07	0.003	0.0180	0.002	0.0051	0.00037	0.75
3400								
3400								
3600								
3500	0.01	0.13	0.006	0.019	0.0035	0.012	0.00039	0.94
3600						0.012	0.0025	
3400			0.004	0.021		0.018	0.0012	
3480			0.005	0.0249		0.022	0.0006	
3490	0.01	0.26	0.005	0.0271	0.0067	0.008	0.0012	0.902
3620			0.004	0.0217		0.003	0.0003	

3400	0.01	0.26	0.004	0.021	0.0067	0.003	0.0003	0.902
3620	0.01	0.26	0.005	0.0271	0.0067	0.022	0.0012	0.902
3497.5	0.01	0.26	0.0045	0.023675	0.0067	0.01275	0.000825	0.902
91.05859	#DIV/0!	#DIV/0!	0.000577	0.002845	#DIV/0!	0.00877021	0.00045	#DIV/0!
4	1	1	4	4	1	4	4	1
3500	0.01	0.13	0.006	0.019	0.0035	0.012	0.00039	0.94
3600	0.01	0.13	0.006	0.019	0.0035	0.012	0.0025	0.94
3566.667	0.01	0.13	0.006	0.019	0.0035	0.012	0.001445	0.94
57.73503	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0.001492	#DIV/0!
3	1	1	1	1	1	2	2	1
3200	0.01	0.07	0.003	0.018	0.002	0.0051	0.00037	0.75
3500	0.01	0.07	0.003	0.018	0.002	0.0051	0.00037	0.75
3375	0.01	0.07	0.003	0.018	0.002	0.0051	0.00037	0.75

125.8306	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	1	1	1	1	1	1	1	1
2600	0.005	0.12	0.001	0.0034	0.0025	0.0079	0.0013	0.62
3300	0.005	0.12	0.001	0.0034	0.0025	0.012	0.0014	0.62
3075	0.005	0.12	0.001	0.0034	0.0025	0.00995	0.00135	0.62
330.4038	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.002899142	7.07E-05	#DIV/0!
4	1	1	1	1	1		2	1
2600	0.005	0.16	0.001	0.0001	0.0021	0.0022	0.00009	0.69
3300	0.005	0.16	0.001	0.0001	0.0021	0.009	0.009	0.69
2950	0.005	0.16	0.001	0.0001	0.0021	0.0047	0.002515	0.69
288.6751	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.002992214	0.0043354	#DIV/0!
4	1	1	1	1	1			1
759	0.005	0.01	0.001	0	0.002	0.002	0	0.03
6700	0.01	46	4	0.04	0.019	5.23	0.14	4.98
2681.067	0.006875	4.840952	0.224556	0.018227	0.005475	0.10167385	0.017731	0.44954
1026.89345	0.00258778	13.7236621	0.94222818	0.01122951	0.0056958	0.6473315565	0.02176161	0.67930650
759	0	0	0	0	0	0	0	0
1900	0	46	0	0	0	5	0	5
1446	#DIV/0!	6	0	0	#DIV/0!	0	0	0
473.50438	#DIV/0!	16.202688	0	0.0110632	#DIV/0!	0.8806446935	0.02301131	0.8107134
1400	0.005	0.07	0.001	0	0.002	0.002	0	0.03
6700	0.01	46	4	0.018	0.019	0.05	0.053	0.75
2771.214	0.0058333	4.911818	0.365091	0.007893	0.0056	0.01211667	0.00631	0.461786
987.02728	0.00204126	13.6996211	1.20556311	0.00559814	0.0066566	0.0130635824	0.01179524	0.18359214
2500	0.005	1.1	4	0.014	0.003	0.008	0.0036	0.54
2900	0.005	1.1	4	0.014	0.003	0.05	0.053	0.54
2750	0.005	1.1	4	0.014	0.003	0.0275	0.021575	0.54
191.4854	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.022128414	0.0231454	#DIV/0!
4	1	1	1	1	1			1
2700	0.005	0.86	0.003	0.017	0.005	0.002	0.0006	0.62
3144	0.005	0.86	0.003	0.017	0.005	0.04	0.0071	0.62
2978.25	0.005	0.86	0.003	0.017	0.005	0.01525	0.0035	0.62
199.8372	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.017114814	0.0027094	#DIV/0!
4	1	1	1	1	1			1

Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L
	3.400							
	5.100							
	5.500							
	6.100							
	4.200							
	4.100							
	3.790							
	4.750							
	4.560							
	4.270							
	4.490							
	4.080							
	4.420							
	4.240							
	5.010							
	5.930							
	5.150							
	5.04							
	5.040							
	6.85							
	5.23							
	5.25							
	5.80							
	5.72							
	5.07							
	5.11	0.50			TRUE	TRUE		
	2.82							
	5.23	0.60						
	5.71	0.60						
	6.04	0.50			TRUE			
	6.63	0.60						
	6.22	0.80						
	0.10	0.60						
	5.81							
	11.10	0.50						
	6.16	0.60						
	6.84	0.60						
	6.70	0.60						
	0.20	0.60			0.05	0.05		
	5.09	0.60						
	4.99	0.80						
	5.09	0.60						
	5.7	0.65			0.01	0.10		
	6.6	0.74						

0.0001			0.04	140.00			<1.0	25
	6.1							
0.0001	9.2	0.5	0.01	0.18			<1.0	25
	8.6				0.01	0.10		
	9.2							
	8							
0.0002	8.8	0.6	0.01	0.01			1	290
	5.4				0.00001	0.0001		
	4.7							
	7.9							
0.0001	1.4	0.6	0.05	0.01	0.00001	0.0001		
	2.4							
	7.5						1	25
	6.6							
0.0001	9.7	0.6	0.50	0.01	0.00001	0.0001	1	25
0.0003	8.7	0.7	0.06	0.01	0.002	0.002	0.5	20

0.0003	10	0.5	0.07	0.01	0.002	0.002	0.5	20
	9.8							
	9.6							
	9.54							
0.0001	4.79	0.6	0.05	0.01	0.002	0.002	1	20
	9.51							

0.0001	4.79	0.6	0.05	0.01	0.002	0.002	1	20
0.0001	9.6	0.6	0.05	0.01	0.002	0.002	1	20
0.0001	8.36	0.6	0.05	0.01	0.002	0.002	1	20
#DIV/0!	2.380294	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	4	1	1	1	1	1	1	1
0.0003	9.8	0.5	0.07	0.01	0.002	0.002	0.5	20
0.0003	10	0.5	0.07	0.01	0.002	0.002	0.5	20
0.0003	9.9	0.5	0.07	0.01	0.002	0.002	0.5	20
#DIV/0!	0.141421	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	2	1	1	1	1	1	1	1
0.0003	8.7	0.7	0.06	0.01	0.002	0.002	0.5	20
0.0003	8.7	0.7	0.06	0.01	0.002	0.002	0.5	20
0.0003	8.7	0.7	0.06	0.01	0.002	0.002	0.5	20

#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1
0.0001	6.6	0.6	0.5	0.01	0.00001	0.0001	1	25
0.0001	9.7	0.6	0.5	0.01	0.00001	0.0001	1	25
0.0001	8.15	0.6	0.5	0.01	0.00001	0.0001	1	25
#DIV/0!	2.192031	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	2	1	1	1	1	1	1	1
0.0001	1.4	0.6	0.05	0.01	0.00001	0.0001	1	25
0.0001	7.9	0.6	0.05	0.01	0.00001	0.0001	1	25
0.0001	4.8	0.6	0.05	0.01	0.00001	0.0001	1	25
#DIV/0!	3.377376	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	4	1	1	1	1	1	1	1
0.0001	0.096	0.5	0.01	0.01	0.00001	0.0001	0.5	20
0.0003	11.1	0.8	0.5	140	0.05	0.1	1	290
0.000163	5.887169	0.607917	0.09875	17.53	0.008448	0.028478	0.83333333	56.25
9.16E-05	2.258432	0.083561	0.163571	49.48539	0.016085	0.043608	0.25819889	94.48167
8	65	24	8	8	9	9	6	8
0	0	1	0	0	0	0	0	0
0	11	1	0	0	0	0	0	0
#DIV/0!	5	1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	1.60492	0.099103	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	35	8	0	0	0	0	0	0
0.0001	0.2	0.5	0.01	0.01	0.00001	0.0001	0.5	20
0.0003	9.7	0.8	0.5	140	0.05	0.1	1	290
0.00015	6.315417	0.627857	0.111667	23.37	0.01029	0.036043	0.875	68.33333
8.37E-05	2.45002	0.074025	0.191355	57.13684	0.018087	0.047277	0.25	108.6125
6	24	14	6	6	7	7	4	6
0.0001	6.1	0.5	0.01	0.18	0.01	0.1	0	25
0.0001	9.2	0.5	0.01	0.18	0.01	0.1	0	25
0.0001	8.275	0.5	0.01	0.18	0.01	0.1	#DIV/0!	25
#DIV/0!	1.477329	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	4	1	1	1	1	1	0	1
0.0002	4.7	0.6	0.01	0.01	0.00001	0.0001	1	290
0.0002	8.8	0.6	0.01	0.01	0.00001	0.0001	1	290
0.0002	6.725	0.6	0.01	0.01	0.00001	0.0001	1	290
#DIV/0!	1.982213	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	4	1	1	1	1	1	1	1

TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

25	100	100	1	1	1	2
72	170	100	1	1	1	2
3100	1900	100	1	1	1	2
25	100	100				
25	100	100	1	1	1	2
50	100	50	1	5	2	2

50	100	50	1	2	2	2
50	100	50	1	2	2	2

50	100	50	1	2	2	2
50	100	50	1	2	2	2
50	100	50	1	2	2	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

50	100	50	1	2	2	2
50	100	50	1	2	2	2
50	100	50	1	2	2	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

50	100	50	1	5	2	2
50	100	50	1	5	2	2
50	100	50	1	5	2	2

#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
25	100	100	1	1	1	2
25	100	100	1	1	1	2
25	100	100	1	1	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
25	100	100	0	0	0	0
25	100	100	0	0	0	0
25	100	100	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	0	0	0	0
25	100	50	1	1	1	2
3100	1900	100	1	5	2	2
424.625	333.75	81.25	1	1.85714286	1.428571429	2
1081.144	633.33443	25.877458	0	1.46385011	0.534522484	0
8	8	8	7	7	7	7
0	0	0	0	0	0	0
0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0
25	100	50	1	1	1	2
3100	1900	100	1	5	2	2
549.5	411.666667	91.666667	1	1.8	1.2	2
1249.629	729.668875	20.412415	0	1.78885438	0.447213595	0
6	6	6	5	5	5	5
72	170	100	1	1	1	2
72	170	100	1	1	1	2
72	170	100	1	1	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
3100	1900	100	1	1	1	2
3100	1900	100	1	1	1	2
3100	1900	100	1	1	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

Total Phenols	Total Organic Carbon	Total Barium	Total Chromium	Comments
mg/L	mg/L	mg/L	mg/L	
				Ref: Woodward Clyde July 1997
				ALS
		4		ALS
		6		
		7		
0.12		5	0.001	
0.05		1	0.001	
0.05		3	0.001	
0.05		1	0.001	
0.05		1	0.010	
0.05		1	0.001	
0.05		1	0.001	
0.50		1		
0.05		1	0.001	
0.05		1	0.001	
0.05		1	0.001	
0.05		1	0.001	
0.001		2	0.001	
0.001		2	0.002	

	20		0.008	
	2	0.033		
	1			
0.001	2	0.043	0.004	
	1			
	1			
	1			Sample collected using electric purger.
0.002	47	0.045	0.002	
	3			
0.001	3	0.028	0.002	
0.001	3	0.029	0.002	
				16/12/11 SWL 7.92, 10min purge.
0.001	3	0.032	0.001	15/03/12 SWL 7.54, purged for 5min
				18/05/12 - SWL 7.15m, 5min purge, SWLA 12.1
				17/08/12 - SWL 7.02m, 5min purge, SWLA 11.6

0.05	3	0.065	0.009
0.05	4	0.0269	0.001

0.05	4	0.0269	0.001
0.05	4	0.0269	0.001
0.05	4	0.0269	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1

0.05	3	0.065	0.009
0.05	3	0.065	0.009
0.05	3	0.065	0.009
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1

0.001	3	0.032	0.001
0.001	3	0.032	0.001
0.001	3	0.032	0.001

#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1

0.001	3	0.029	0.002
0.001	3	0.029	0.002
0.001	3	0.029	0.002
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1

0.001	3	0.028	0.002
0.001	3	0.028	0.002
0.001	3	0.028	0.002
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1

0.001	1	0.0269	0.001
0.5	47	0.065	0.01
0.05847619	4.290322581	0.0377375	0.00247619
0.105499109	8.687897898	0.012915432	0.00283935
21	31	8	21

0	1	0	0
0	7	0	0
0	4	#DIV/0!	0
0.031304952	2.390457219	#DIV/0!	0.00402492
5	8	0	5

0.001	1	0.028	0.001
0.5	47	0.045	0.008
0.057714286	4.666666667	0.035	0.002
0.129607946	10.5229907	0.007238784	0.00192154
14	21	6	14

0.001	1	0.043	0.004
0.001	2	0.043	0.004
0.001	1.25	0.043	0.004
#DIV/0!	0.5	#DIV/0!	#DIV/0!
1	4	1	1

0.002	1	0.045	0.002
0.002	47	0.045	0.002
0.002	17	0.045	0.002
#DIV/0!	26	#DIV/0!	#DIV/0!
1	3	1	1

.2m.
ɜ3m.

	Statistics	Field Information					
SML20		Date	Site Code	**Time**	**Sampler**	**pH**	**Conductivity**
EPL 11436				AM/PM	Initials	pH	µS/cm
		6/12/1996	MB7				
		17/06/1997	MB7				
		7/08/1997	MB7				
		11/11/1997	MB7				
		26/03/1998	MB7				
		9/06/1998	MB7				
		7/09/1998	MB7				
		1/12/1998	MB7				
		1/03/1999	MB7				
		4/06/1999	MB7				
		10/09/1999	MB7				
		3/12/1999	MB7				
		6/03/2000	MB7				
		2/06/2000	MB7				
		4/09/2000	MB7				
		5/12/2000	MB7				
		2/03/2001	MB7				
		8/06/2001	MB7				
		8/06/2001	MB7				
		10/09/2001	MB7				
		10/01/2002	MB7				
		6/03/2002	MB7				
		17/06/2002	MB7				
		19/09/2002	MB7				
		4/12/2002	MB7				
		18/03/2003	MB7				
		23/06/2003	MB7				
		3/09/2003	MB7				
		26/11/2003	MB7				
		18/03/2004	MB7				
		22/06/2004	MB7				
		6/09/2004	MB7				
		8/12/2004	MB7				
		21/03/2005	MB7		AMW	6.68	8020
		1/07/2005	MB7		AW,CS	6.9	7470
		8/09/2005	MB7		AW,AMW	6.88	8020
		14/11/2005	MB7		JMc	6.89	7850
		13/03/2006	MB7		JMc	7	7224
		8/06/2006	MB7		JMc	6.55	8014
		4/09/2006	MB7		JMc	6.43	8187
		30/11/2006	MB7		DL	6.72	7590
		19/04/2007	MB7		HG	6.41	1590
		28/06/2007	MB7		HG	6.77	7960
		16/08/2007	MB7		Coffey	6.81	6680
		30/10/2007	MB7		TM	6.24	7200
		11/12/2007	MB7		TM	6.88	8710
		9/05/2008	MB7		TM	6.66	6670
		18/11/2008	MB7	1:33	TM	6.88	9520
		6/01/2009	MB7	9.51	TM	7.44	9460
		28/05/2009	MB7	10.2	TM	7.18	9610
		25/06/2009	MB7	8.54	TM	7.55	8420

19/10/2009	MB7	12.5	TM	7.27	8110
12/01/2010	MB7	9.3	TM	7.46	7370
29/04/2010	MB7	11.59	TM	7.32	6820
18/06/2010	MB7	9.38	TM	7.50	7090
21/09/2010	MB7	11.44	TH	6.89	6760
7/12/2010	MB7	13.34	TH	7.06	7080
28/03/2011	MB7	13.41	TH	7.17	6810
28/06/2011	MB7	11.12	TH	7.47	6910
29/09/2011	MB7	10.41	TH	6.75	18070
10/01/2012	MB7	9.09	TH	6.54	9510
28/03/2012	MB7	13.37	TH	6.74	9960
14/06/2012	MB7	10.29	TH	6.62	9290
24/09/2012	MB7	12.42	TH	6.43	9210
17/01/2013	MB7	9.25	TH	6.54	8960
3/05/2013	MB7	0:25am	DS	6.99	8240
14/08/2013	MB7	14:05	DS	6.70	9090
23/10/2013	MB7	0.503	DS	6.68	8500
14/01/2014	MB7	10:48am	DS	6.43	8560
10/04/2014	MB7	11:05am	TB	6.95	8570
23/06/2014	MB7	11:45am	PM	6.68	7960

Negative values converted to positive

'<' removed from <LOR values

2012/13	Minimum	6.43	7960.00
	Maximum	6.95	8570.00
	Average	6.69	8397.50
	StdDev	0.21	293.30
	Count	4	4
2012/13	Minimum	6.43	8240.00
	Maximum	6.99	9210.00
	Average	6.67	8875.00
	StdDev	0.24	435.47
	Count	4	4
2011/12	Minimum	6.54	9290.00
	Maximum	6.75	18070.00
	Average	6.66	11707.50
	StdDev	0.10	4250.82
	Count	4	4
2010/11	Minimum	6.89	6760.00
	Maximum	7.47	7080.00
	Average	7.15	6890.00
	StdDev	0.243909136	141.1854572
	Count	4	4

11/02/2010 Changed from DISSOLVED metals to TOTAL on recommer

2009/10	Minimum	7.27	6820
	Maximum	7.5	8110
	Average	7.3875	7347.5

	StdDev	0.109962115	555.7202534
	Count	4	4
OVERALL	Minimum	6.24	1590
	Maximum	7.55	18070
	Average	6.87	8185.921053
	StdDev	0.342384326	2169.080069
	Count	38	38
1996 - 2004 (mining)	Minimum	0	0
	Maximum	0	0
	Average	#DIV/0!	#DIV/0!
	StdDev	#DIV/0!	#DIV/0!
	Count	0	0
2005 + (post mini	Minimum	6.24	1590
	Maximum	7.55	18070
	Average	6.906129032	8102.741935
	StdDev	0.359283337	2394.51114
	Count	31	31
2007/08	Minimum	6.24	6670
	Maximum	6.88	8710
	Average	6.593333333	7526.666667
	StdDev	0.325166624	1058.505235
	Count	3	3
2008/09	Minimum	6.88	8420
	Maximum	7.55	9610
	Average	7.2625	9252.5
	StdDev	0.298482272	558.4129296
	Count	4	4

Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate
°C	mg/L	mV	m	m RL		mg/L
						730
						785
			2.51	786.56		830
			2.14	786.93		
			3.08	785.99		
			3.39	785.68		
			1.82	787.25		
			2.07	787.00		
			2.76	786.31		
			2.94	786.13		
			2.55	786.52		
			2.39	786.68		
			2.80	786.27		
			2.93	786.14		797
			2.65	786.42		
			2.18	786.89		
			2.64	786.43		
			3.14	785.93		
				789.07		
			2.94	786.13		
			3.08	785.99		
			3.08	785.99		
			3.00	786.07		
			3.22	785.85		
			3.48	785.59		
			3.88	785.19		
15.50	2.17	177	3.90	785.17		
			3.67	785.40		
			3.56	785.51		
19.30			4.04	785.03		
12.50			6.67	782.40		
14.20			4.78	784.29		
19.10			4.20	784.87		
			4.51	784.56		
15.15	2.14	119	4.947	784.12		
15.45	2.17	242	4.01	785.06		
15.94	2	33	3.675	785.40		
14.2	1.88	109	4.3	784.77		
15.4	2.1	57	4.69	784.38		
15	2.3	89	4.57	784.50		
15.7	3.03	142	7.14	781.93		
19.82	6.09	181	4.73	784.34	563898	
15.61	3.41	139	4.49	784.58		
			3.695	785.38	ES0711417	625
Qanta not working			3.97	785.10		
14.6	3.3		3.98	785.09		
16.5	2.34		4.52	784.55		
17.8	0.96		4.06	785.01		
21.6	3.61		4.24	784.83		
14.5	2.62		10.70	778.37	696257	680
13.2	1.85		5.17	783.90		

17	2.52		4.94	784.13	718605	613
19.3	5.2		5.10	783.97	732589	609
14.8	2		4.78	784.29	753064	580
13.9	2.42		4.70	784.37	762156	583
14.9	7.24		3.22	785.85	803084	582
17.7	6.39		3.01	786.06	813901	568
17.8	6.01		3.23	785.84	830992	569
17.7	7.5		3.73	785.34	843862	577
14.1	2.5		3.33	785.74	856086	637
14.7	2.77		3.28	785.79	870352	695
16	2		2.53	786.54	882305	714
15	3.65		2.41	786.66	893140	679
14	3.29		2.22	786.85	906741	665
15.6	2.74		2.79	786.28	922844	649
15.4	2.8		3.56	785.51	937577	636
15.4	2.17		2.54	786.53	951508	655
17.2	2.33	17	2.60	786.47	961000	655
17.6	0.73		3.25	785.82	CA1400127-002	657
15.1	0.76	22.4	3.86	785.21	CA1401099-00	655
14.8	2.37	13.2	3.46	785.61	CA1401881-001	625

14.80	0.73	13.20	2.60	785.21	625.00
17.60	2.37	22.40	3.86	786.47	657.00
16.18	1.55	17.53	3.29	785.78	648.00
1.43	0.93	4.62	0.53	0.53	15.36
4	4	3	4	4	4

14.00	2.17		2.22	785.51	636.00
15.60	3.29		3.56	786.85	665.00
15.10	2.75		2.78	786.29	651.25
0.74	0.46		0.57	0.57	12.12
4	4		4	4	4

14.10	2.00	0.00	2.41	785.74	637.00
16.00	3.65	0.00	3.33	786.66	714.00
14.95	2.73	#DIV/0!	2.89	786.18	681.25
0.79	0.69	#DIV/0!	0.49	0.49	32.79
4	4	0	4	4	4

14.90	6.01	0.00	3.01	785.34	568.00
17.80	7.50	0.00	3.73	786.06	582.00
17.03	6.79	#DIV/0!	3.30	785.77	574.00
1.41745076	0.7011657	#DIV/0!	0.30565503	0.30565503	6.68331255
4	4	0	4	4	4

ndation of Dino Parisotto Earth2 Water (Environmental & Groundwater Consulting)

13.9	2	0	4.7	783.97	580
19.3	5.2	0	5.1	784.37	613
16.25	3.035	#DIV/0!	4.88	784.19	596.25

2.414539294	1.460810284	#DIV/0!0	0.177388464	0.177388464	17.15371684
12.5	0.73	13.2	1.82	778.37	568
21.6	7.5	242	10.7	789.07	830
15.97675	3.03777778	103.1231	3.69745588	785.42613	655.769231
1.9544917240	1.6959836836	72.547813	1.338199568	1.4009196969	70.220400326
13	2	177	2	782	730
19	2	177	7	789	830
16	2	177	3	786	786
3.006991855	#DIV/0!1	#DIV/0!1	0.9435192730	1.089668131	41.60528814
13.2	0.96	33	2.22	778.37	568
21.6	7.5	242	10.7	786.85	714
15.9775	3.33178571	123.4444	4.3186129	784.751387	622.214286
1.9778301328	1.7757628628	63.210199	1.5340047731	1.5340047731	50.781854114
14.6	2.34		3.97	784.55	0
16.5	3.3		4.52	785.1	0
15.55	2.82		4.15666667	784.913333	#DIV/0!
1.34350288	0.67882251		0.31469562	0.31469562	#DIV/0!
2	2		3	3	0
13.2	0.96	0	4.06	778.37	680
21.6	3.61	0	10.7	785.01	680
16.775	2.26	#DIV/0!	6.0425	783.0275	680
3.754441814	1.126972354	#DIV/0!0	3.142868914	3.142868914	#DIV/0!1

Analytical Information

Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium
mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L
			2910	10240	260	605.00	18
			2680	8860	335	550.00	17
			3080	9640	320	750.00	15
			2900	9230	360	710.00	15
			2784	7580	310	600.00	13
				8440	340	566.00	15
			3350	7950	276	631.00	20.6
			3032	9710	303	723.00	18.2
			2440	8080	319	587.00	14.4
			2120	8620	302	551.00	12
			2822	9770	306	611.00	13.2
			3280	11600	184	750.00	16.3
				9930	370	686.00	12.5
				9320	333	614.00	14
			2810	9350	368	706.00	13.8
			3010	10350	478	796.00	16.2
			2720	9360	411	775.00	15.9
			2910	9400	191	653.00	9.94
			2910	9400	191	653.00	9.94
			2800	8800	332	688.00	
			3060	9140	455	800.00	
			2860	9520	347	498.00	
			3050	9230	753	234.00	
				9330			
				10400			
				7970			
				7850			
				6760			
				9260			
				9300			
				6340			
				6460			
				7700			
	625		2650	6680	318.00	564	12
2	680	0.06	3000	9500	340.00	600	10

0.1	613	0.08	2400	8000	290	520	13
0.1	609	0.04	2300	7400	280	470	8.7
0.1	580	0.02	2100	7000	250	440	12
0.1	583	0.01	2100	7000	270	460	12
0.1	582	0.04	2000	6900	280	460	13
0.1	568	0.07	2100	7000	240	400	13
0.1	569	0.01	1900	6900	260	440	14
0.1	577	0.01	2100	6900	240	400	10
0.1	637	0.1	2600	8700	270	460	16
0.1	695	0.1	3000	9500	370	700	13
0.1	714	0.1	3200	10000	410	760	16
0.1	679	0.1	3000	9300	390	690	11
0.1	665	0.1	3000	9200	340	590	7.5
0.1	649	0.1	2900	8800	320	600	9
0.1	636	0.1	2500	8240	320	54	12
0.1	655		2900	9090	330		11
0.1	655	0.1	2800	8500	320	580	10
0.1	657	0.1	2800	8680	305	620	11.4
0.1	866	0.1	2840	8860	310	598	12
0.1	625	0.1	2570	8020	279	546	10.2

0.10	625.00	0.10	2570.00	8020.00	279.00	546.00	10.00
0.10	866.00	0.10	2840.00	8860.00	320.00	620.00	12.00
0.10	700.75	0.10	2752.50	8515.00	303.50	586.00	10.90
0.00	111.13	0.00	123.12	361.25	17.48	31.28	0.96
4	4	4	4	4	4	4	4

0.10	636.00	0.10	2500.00	8240.00	320.00	54.00	7.50
0.10	665.00	0.10	3000.00	9200.00	340.00	600.00	12.00
0.10	651.25	0.10	2825.00	8832.50	327.50	414.67	9.88
0.00	12.12	0.00	221.74	429.52	9.57	312.39	2.02
4	4	3	4	4	4	3	4

0.10	637.00	0.10	2600.00	8700.00	270.00	460.00	11.00
0.10	714.00	0.10	3200.00	10000.00	410.00	760.00	16.00
0.10	681.25	0.10	2950.00	9375.00	360.00	652.50	14.00
0.00	32.79	0.00	251.66	537.74	62.18	132.00	2.45
4	4	4	4	4	4	4	4

0.10	568.00	0.01	1900.00	6900.00	240.00	400.00	10.00
0.10	582.00	0.07	2100.00	7000.00	280.00	460.00	14.00
0.10	574.00	0.03	2025.00	6925.00	255.00	425.00	12.50
0	6.6833126	0.028723	95.74271	50	19.14854	30	1.73205081
4	4	4	4	4	4	4	4

0.1	580	0.01	2100	7000	250	440	8.7
0.1	613	0.08	2400	8000	290	520	13
0.1	596.25	0.0375	2225	7350	272.5	472.5	11.425

0	17.153717	0.030957	150	472.5816	17.07825	34.0342964	1.87683244
4	4	4	4	4	4	4	4
0.1	568	0.01	1900	6340	184	54	7.5
2	866	0.1	3350	11600	753	800	20.6
0.1904762	641.77273	0.072	2721.143	8637.455	323.9111	583.840909	13.0921951
0.414614	65.699845	0.036361	369.8612	1166.753	89.61732	145.785434	2.84933634
21	22	20	42	55	45	44	41
0	0	0	2120	6340	184	234	10
0	0	0	3350	11600	753	800	21
#DIV/0!	#DIV/0!	#DIV/0!	2876	8975	341	641	15
#DIV/0!	#DIV/0!	#DIV/0!	270.0999	1152.543	115.8112	121.912867	2.72550569
0	0	0	20	32	23	23	19
0.1	568	0.01	1900	6680	240	400	7.5
2	714	0.1	3200	10000	410	760	16
0.2461538	625.06667	0.06	2496.667	7980	303.2	530.266667	12.08
0.5269652	50.166105	0.037622	448.9936	1181.412	55.07813	115.094661	2.3911145
13	15	14	15	16	15	15	15
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0
2	680	0.06	3000	9500	340	600	10
2	680	0.06	3000	9500	340	600	10
2	680	0.06	3000	9500	340	600	10
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt
mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
775	7.50	168	5467					
700	6.50	200	5270					
750	6.60	200	5950					
760	6.60	190			0.05		0.01	
660	6.50	170			0.01		0.01	
790	6.60	175			0.01		0.01	
893	6.70	203			0.16		0.03	
759	6.80	206			0.02		0.03	
730	6.59	162			0.31		0.04	
624	6.80	151			0.07		0.03	
651	6.91	166			0.05		0.03	
776	6.77	175			0.01		0.03	
701	6.65	160			0.01		0.03	
677	6.77	151			0.01		0.03	
712	6.95	170			0.01		0.03	
754	6.75	175			0.04		0.03	
789	6.61	177			0.15		0.03	
573	6.66	136			0.01		0.03	
573	6.66	136					0.03	
553	6.82	233			0.01		0.03	
649	6.68	294			0.01		0.03	
400	6.65	192			4.93		0.03	
452	6.65	164			0.01		0.4	
	6.77							
	6.60							
	6.89							
	6.09							
	6.69							
	6.24							
	6.67							
	7.31							
	6.35							
	7.5	210						
600	6.71	172				0.001	0.0002	
560	6.8	190	6997	0.0050	2	0.001	0.0150	0.0220

520	7.3	160	4300					
490	7.4	150	5500					
510	8	150	3900	0.005	0.03	0.001	0.0018	0.0075
480	7.3	150	3800					
480	7.6	150	5100					
470	7.6	160	5400					
490	7.9	150	5500	0.005	0.02	0.001	0.0005	0.0009
480	7.5	150	4900					
460	6.9	150	5000					
600	7.1	150	6000					
700	6.8	160	7500	0.01	0.03	0.016	0.00075	0.0003
640	7.3	160	6800					
510	6.8	290	6200					
560	6.9	210	7100					
530	7.1	180	6200	0.01	0.037	0.017	0.0099	0.0096
580	7.1	160	5100					
560	7	160	6700			0.011	0.0013	
564	6.83	165	5690			0.013	0.00905	
577	6.76	203	5620	0.01	0.23	0.014	0.0291	0.0247
551	6.84	150	4630			0.01	0.0019	

551.00	6.76	150.00	4630.00	0.01	0.23	0.01	0.00	0.02
577.00	7.00	203.00	6700.00	0.01	0.23	0.01	0.03	0.02
563.00	6.86	169.50	5660.00	0.01	0.23	0.01	0.01	0.02
10.80	0.10	23.19	845.58	#DIV/0!	#DIV/0!	0.00	0.01	#DIV/0!
4	4	4	4	1	1	4	4	1

510.00	6.80	160.00	5100.00	0.01	0.04	0.02	0.01	0.01
580.00	7.10	290.00	7100.00	0.01	0.04	0.02	0.01	0.01
545.00	6.98	210.00	6150.00	0.01	0.04	0.02	0.01	0.01
31.09	0.15	57.15	818.54	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	4	4	4	1	1	1	1	1

460.00	6.80	150.00	5000.00	0.01	0.03	0.02	0.00	0.00
700.00	7.30	160.00	7500.00	0.01	0.03	0.02	0.00	0.00
600.00	7.03	155.00	6325.00	0.01	0.03	0.02	0.00	0.00
101.98	0.22	5.77	1075.10	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	4	4	4	1	1	1	1	1

470.00	7.50	150.00	4900.00	0.01	0.02	0.00	0.00	0.00
490.00	7.90	160.00	5500.00	0.01	0.02	0.00	0.00	0.00
480.00	7.65	152.50	5225.00	0.01	0.02	0.00	0.00	0.00
8.164966	0.173205	5	275.3785	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	4	4	4	1	1	1	1	1

480	7.3	150	3800	0.005	0.03	0.001	0.0018	0.0075
520	8	160	5500	0.005	0.03	0.001	0.0018	0.0075
500	7.5	152.5	4375	0.005	0.03	0.001	0.0018	0.0075

18.257424	0.336654	5	780.4914	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1
400	6.09	136	3800	0.005	0.01	0.001	0.0002	0.0003
893	8	294	7500	0.01	4.93	0.017	0.4	0.0247
613.6222	6.897636	175.7391	5609.333	0.0075	0.32908	0.0085	0.032983	0.010833
115.872845	0.39055555	33.2314746	972.84924	0.0027396	1.03704625	0.0067710	0.07047230	0.0103856
400	6	136	5270	0	0	0	0	0
893	8	294	5950	0	5	0	0	0
683	7	181	5562	#DIV/0!	0	#DIV/0!	0	#DIV/0!
114.726823	0.25807932	33.846923	349.88053	#DIV/0!0	1.12156419	#DIV/0!0	0.08369120	#DIV/0!0
460	6.71	150	3800	0.005	0.02	0.001	0.0002	0.0003
700	8	290	7500	0.01	2	0.016	0.015	0.022
532.6667	7.281875	168.875	5492.643	0.00625	0.52	0.004	0.00365	0.007675
71.5608315	0.40106916	36.516	1121.13414	0.00254	0.9866784	0.0067085	0.0063735	0.0100924
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0	#DIV/0!0
560	6.8	190	6997	0.005	2	0.001	0.015	0.022
560	6.8	190	6997	0.005	2	0.001	0.015	0.022
560	6.8	190	6997	0.005	2	0.001	0.015	0.022
#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1

Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
0.01	0.01	0.2		0.36			
0.01	0.03	0.43		0.33			
0.01	0.03	0.74		0.87			
0.01	0.03	0.57		0.65			
0.01	0.03	0.4		0.24			
0.01	0.03	0.5		0.68			
0.01	0.03	0.67		0.77			
0.01	0.05	0.45		0.56			
0.02	0.04	0.35		0.5			
0.02	0.03	0.3		0.44			
0.02	0.03	0.65		0.6			
0.02	0.03	0.14		0.52			
0.08	0.03	0.34		0.52			
0.01	0.03	0.34		0.65			
0.03	0.03	0.26		0.67			
0.12	0.04	0.22		1.05			
0.01	0.03	0.26		0.74			
0.01	0.03	0.22		0.5			
0.01	0.03	0.22		0.5			
0.01	0.03	1.17		6.26			
0.01	0.03	1.14		9			
5.46	1.18	3.32		0.5			
2.17	0.03	0.27		0.71			
0.063	0.082			2.7			
0.003	0.001			0.348			
0.043	0.032	4.5	0.0001	2.3	0.4	0.01	0.01

0.01	0.0035			0.29			
0.008	0.0012		0.0012	0.32			
0.0063	0.00037	1.6	0.0001	0.38	0.4	0.1	0.01
0.0043	0.00065			0.3			
0.0041	0.00057			0.18			
0.0025	0.00005			0.31			
0.0026	0.00005	0.013	0.0001	0.18	0.4	0.1	0.01
0.0023	0.00008			0.14			
0.015	0.0001			0.59			
0.0046	0.00009			0.21			
0.0046	0.00005	1.5	0.0001	0.18	0.3	0.17	0.01
0.011	0.0011			0.3			
0.068	0.00008			3.8			
0.13	0.00016			4			
0.028	0.00012	1.1	0.0001	1.3	0.3	0.06	0.01
0.014	0.003			0.12			
0.0049	0.00022			0.096			
	0.034			0.974			
0.131	0.0011	1.46	0.0001	3.16	0.4	0.13	0.02
1.08	0.0002			0.477			

0.00	0.00	1.46	0.00	0.10	0.40	0.13	0.02
1.08	0.03	1.46	0.00	3.16	0.40	0.13	0.02
0.41	0.01	1.46	0.00	1.18	0.40	0.13	0.02
0.59	0.02	#DIV/0!	#DIV/0!	1.37	#DIV/0!	#DIV/0!	#DIV/0!
3	4	1	1	4	1	1	1

0.01	0.00	1.10	0.00	0.12	0.30	0.06	0.01
0.13	0.00	1.10	0.00	4.00	0.30	0.06	0.01
0.06	0.00	1.10	0.00	2.31	0.30	0.06	0.01
0.05	0.00	#DIV/0!	#DIV/0!	1.91	#DIV/0!	#DIV/0!	#DIV/0!
4	4	1	1	4	1	1	1

0.00	0.00	1.50	0.00	0.18	0.30	0.17	0.01
0.02	0.00	1.50	0.00	0.59	0.30	0.17	0.01
0.01	0.00	1.50	0.00	0.32	0.30	0.17	0.01
0.01	0.00	#DIV/0!	#DIV/0!	0.19	#DIV/0!	#DIV/0!	#DIV/0!
4	4	1	1	4	1	1	1

0.00	0.00	0.01	0.00	0.14	0.40	0.10	0.01
0.00	0.00	0.01	0.00	0.31	0.40	0.10	0.01
0.00	0.00	0.01	0.00	0.20	0.40	0.10	0.01
0.000826	0.000255	#DIV/0!	#DIV/0!	0.07410578	#DIV/0!	#DIV/0!	#DIV/0!
4	4	1	1	4	1	1	1

0.0043	0.00037	1.6	0.0001	0.29	0.4	0.1	0.01
0.01	0.0035	1.6	0.0012	0.38	0.4	0.1	0.01
0.00715	0.00143	1.6	0.00065	0.3225	0.4	0.1	0.01

0.0024284	0.0014224	#DIV/0!1	0.0007782	0.040311294	#DIV/0!1	#DIV/0!1	#DIV/0!1
0.0023 5.46 0.216004 0.87461945	0.00005 1.18 0.04395 0.17220646	0.013 4.5 0.804586 0.97682429	0.0001 0.0012 0.000257 0.0004167	0.096 9 1.09293478 1.7018762846	0.3 0.4 0.36666667 0.051639786	0.01 0.17 0.095 0.055407586	0.01 0.02 0.01166667 0.004082486
0 5 0 1.20050523	0 1 0 0.23969523	0 3 1 0.65916623		0 9 1 2.0778483523	0 0 #DIV/0! #DIV/0!0	0 0 #DIV/0! #DIV/0!0	0 0 #DIV/0! #DIV/0!0
0.0023 0.068 0.015769 0.02178416	0.00005 0.082 0.007681 0.02132416	0.013 4.5 1.90325 1.8771194	0.0001 0.0012 0.00032 0.0004925	0.14 3.8 0.783 1.1089839216	0.3 0.4 0.375 0.054	0.01 0.17 0.095 0.065574394	0.01 0.01 0.01 04
0 0 #DIV/0! #DIV/0!0	0 0 #DIV/0! #DIV/0!0	0 0 #DIV/0! #DIV/0!0		0 0 #DIV/0! #DIV/0!0	0 0 #DIV/0! #DIV/0!0	0 0 #DIV/0! #DIV/0!0	0 0 #DIV/0! #DIV/0!0
0.043 0.043 0.043 #DIV/0!1	0.032 0.032 0.032 #DIV/0!1	4.5 4.5 4.5 #DIV/0!1	0.0001 0.0001 0.0001 #DIV/0!1	2.3 2.3 2.3 #DIV/0!1	0.4 0.4 0.4 #DIV/0!1	0.01 0.01 0.01 #DIV/0!1	0.01 0.01 0.01 #DIV/0!1

Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene
mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
			25	63	100	100	1
0.00001	0.0001	1					

0.00001	0.0001	1	25	25	250	410	1

0.00001	0.0001	1	25	25	100	100	1

0.002	0.002	0.5	20	50	100	50	1

0.002	0.002	0.5	20	50	100	50	1
0.002	0.002	1	20	50	100	50	1

0.00	0.00	1.00	20.00	50.00	100.00	50.00	1.00
0.00	0.00	1.00	20.00	50.00	100.00	50.00	1.00
0.00	0.00	1.00	20.00	50.00	100.00	50.00	1.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

0.00	0.00	0.50	20.00	50.00	100.00	50.00	1.00
0.00	0.00	0.50	20.00	50.00	100.00	50.00	1.00
0.00	0.00	0.50	20.00	50.00	100.00	50.00	1.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

0.00	0.00	0.50	20.00	50.00	100.00	50.00	1.00
0.00	0.00	0.50	20.00	50.00	100.00	50.00	1.00
0.00	0.00	0.50	20.00	50.00	100.00	50.00	1.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

0.00	0.00	1.00	25.00	25.00	100.00	100.00	1.00
0.00	0.00	1.00	25.00	25.00	100.00	100.00	1.00
0.00	0.00	1.00	25.00	25.00	100.00	100.00	1.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

0.00001	0.0001	1	25	25	250	410	1
0.00001	0.0001	1	25	25	250	410	1
0.00001	0.0001	1	25	25	250	410	1

#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1
0.00001	0.0001	0.5	20	25	100	50	1
0.002	0.002	1	25	63	250	410	1
0.001005	0.00105	0.833333	22.5	43.8333333	125	126.666667	1
0.00109	0.001041	0.258199	2.738613	15.4326494	61.2372436	140.949163	0
6	6	6	6	6	6	6	6
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0
0.00001	0.0001	0.5	20	25	100	50	1
0.002	0.002	1	25	63	250	410	1
0.000508	0.000575	0.875	23.75	40.75	137.5	165	1
0.000995	0.00095	0.25	2.5	18.9450961	75	165.025251	0
4	4	4	4	4	4	4	4
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0
0.00001	0.0001	1	25	63	100	100	1
0.00001	0.0001	1	25	63	100	100	1
0.00001	0.0001	1	25	63	100	100	1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
						0.005
1	1	2	0.002	6	0.29	0.0070

				3		
1	1	2	0.001	3	0.17	0.001
1	1	2	0.001	3	0.14	0.004
5	2	2	0.001	22	0.25	0.003
						17/09/12 - S
						10/01/13 - SWL
2	2	2	0.05	13	0.23	0.037
2	2	2	0.05	5	0.19	0.001

2.00	2.00	2.00	0.05	5.00	0.19	0.00
2.00	2.00	2.00	0.05	5.00	0.19	0.00
2.00	2.00	2.00	0.05	5.00	0.19	0.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
2.00	2.00	2.00	0.05	13.00	0.23	0.04
2.00	2.00	2.00	0.05	13.00	0.23	0.04
2.00	2.00	2.00	0.05	13.00	0.23	0.04
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
5.00	2.00	2.00	0.00	22.00	0.25	0.00
5.00	2.00	2.00	0.00	22.00	0.25	0.00
5.00	2.00	2.00	0.00	22.00	0.25	0.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
1.00	1.00	2.00	0.00	3.00	0.14	0.00
1.00	1.00	2.00	0.00	3.00	0.14	0.00
1.00	1.00	2.00	0.00	3.00	0.14	0.00
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1
1	1	2	0.001	3	0.17	0.001
1	1	2	0.001	3	0.17	0.001
1	1	2	0.001	3	0.17	0.001

#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
1	1	1	1	2	1	1
1	1	2	0.001	3	0.14	0.001
5	2	2	0.05	22	0.29	0.037
2	1.5	2	0.0175	7.857143	0.211667	0.008286
1.549193346	0.547722566	0	0.0251776	7.1746917	0.0552876	0.0128427
0	0	0	0	0	0	0
0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0
1	1	2	0.001	3	0.14	0.001
5	2	2	0.002	22	0.29	0.007
2	1.25	2	0.00125	7.4	0.2125	0.004
2	0.5	0	0.0005	8.2643815	0.0694624	0.0022365
0	0	0	0	0	0	0
0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0
1	1	2	0.002	6	0.29	0.007
1	1	2	0.002	6	0.29	0.007
1	1	2	0.002	6	0.29	0.007
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

Comments

Ref: Woodward Clyde July 1997

Pumped for 2 minutes
bore pumped for 2 mins

Dry @ 116 sec

Used waterra valve to collect sample.

27/09/11 - Purged bore for 3 min until 15m hose empty. SWL 3.41m.
9/01/12 - 4min purge, SWL 3.27m.
22/03/12 - SWL 2.41m, 5min purge, SWLA 14.66m.
7/06/12 - SWL 2.62m, 5min purge, SWLA 14.30m
WL 2.27m, 5min purge, SWLA 7m
2.67m, 5min purge, SWLA 4.56m.

	Statistics	Field Information						
SML20		Date	Site Code	**Time**	**Sampler**	**pH**	**Conductivity**	**Temperature**
EPL 11436				AM/PM	Initials	pH	µS/cm	°C
		6/12/1996	MB8					
		6/12/1996	MB9					
		17/06/1997	MB8					
		7/08/1997	MB8					
		11/11/1997	MB8					
		26/03/1998	MB8					
		9/06/1998	MB8					
		7/09/1998	MB8					
		1/12/1998	MB8					
		1/03/1999	MB8					
		4/06/1999	MB8					
		10/09/1999	MB8					
		3/12/1999	MB8					
		6/03/2000	MB8					
		2/06/2000	MB8					
		4/09/2000	MB8					
		5/12/2000	MB8					
		2/03/2001	MB8					
		8/06/2001	MB8					
		8/06/2001	MB8					
		10/09/2001	MB8					
		10/01/2002	MB8					
		10/01/2002	MB9					
		6/03/2002	MB8					
		17/06/2002	MB8					
		19/09/2002	MB8					
		4/12/2002	MB8					
		18/03/2003	MB8					
		23/06/2003	MB8					13.2
		3/09/2003	MB8					
		26/11/2003	MB8					
		18/03/2004	MB8					17
		22/06/2004	MB8					12.8
		6/09/2004	MB8					14.8
		8/12/2004	MB8					
		21/03/2005	MB8		AMW	7	4680	
		8/07/2005	MB8		AW,CS	7.13	4300	14.54
		8/09/2005	MB8		AW,AMW	7.11	4530	15.06
		14/11/2005	MB8		JMc	7.1	4060	15.6
		13/03/2006	MB8		JMc	6.97	4239	14.4
		8/06/2006	MB8		JMc	7.16	4162	14
		4/09/2006	MB8		JMc	7.2	4201	15.3
		13/12/2006	MB8		HG	6.8	4250	20.7
		20/04/2007	MB8		HG	7.29	4370	16.74
		28/06/2007	MB8		HG	7.14	4350	14.91
		22/08/2007	MB8		TM	6.82	4150	14.4
		30/10/2007	MB8		TM	5.86	3600	Qanta r
		11/12/2007	MB8		TM	6.94	4000	14.3
		15/04/2008	MB8		TM	7.05	2990	15.3

26/06/2008	MB8		TM	7.49	3080	11.2
19/11/2008	MB8	13.46	TM	7.51	2990	
9/01/2009	MB8	9.45	TM	7.79	3950	15.4
29/05/2009	MB8	10.2	TM	6.43	3990	12.4
23/06/2009	MB8	10.47	TM	6.67	3930	12.6
19/10/2009	MB8	11.48	TM	7.27	3860	16.4
8/12/2009	MB8	11.37	TM	7.57	3860	17.2
29/04/2010	MB8	10.5	TM	7.24	3920	14.9
15/06/2010	MB8	11.29	TM	7.61	3820	15.1
8/12/2010	MB8	12.16	TH	5.42	3720	17
3/05/2011	MB8	11.23	TH	7.15	14510	15.6
20/06/2011	MB8	14	SB	0	3780	13.9
30/09/2011	MB8	11.11	TH	6.96	3770	14.2
11/01/2012	MB8	11.4	TH	7.07	3660	14.8
28/03/2012	MB8	11.12	TH	6.93	3690	15.5
14/06/2012	MB8	8.28	TH	6.87	3630	13.5
24/09/2012	MB8	10.53	TH	7.09	3490	15.3
17/01/2013	MB8	11.07	TH	6.7	3540	16.9
3/05/2013	MB8	9:15am	DS	6.76	3540	15.1
16/08/2013	MB8	14:00	DS	6.99	3600	15.4
14/10/2013	MB8	0.549	DS	6.97	3600	15.7
8/11/2013	MB8	11:05am				
15/01/2014	MB8	9:28am	DS	7.04	3380	19
11/04/2014	MB8	10:45am	TB	6.79	3490	15.7
25/06/2014	MB8	1:05pm	PM	6.84	3610	14.2

Negative values converted to positive

'<' removed from <LOR values

2013/14	Minimum	6.79	3380	14.2
	Maximum	7.04	3610	19
	Average	6.91	3520	16.15
	StdDev	0.115181	108.012345	2.027313
	Count	4	4	4
2012/13	Minimum	6.7	3540	15.1
	Maximum	6.99	3600	16.9
	Average	6.816667	3560	15.8
	StdDev	0.15308	34.6410162	0.964365
	Count	3	3	3
2011/12	Minimum	6.87	3630	13.5
	Maximum	7.07	3770	15.5
	Average	6.9575	3687.5	14.5
	StdDev	0.083815	60.2079729	0.852447
	Count	4	4	4
2010/11	Minimum	0	3720	13.9
	Maximum	7.15	14510	17
	Average	4.19	7336.66667	15.5
	StdDev	3.730322	6212.36133	1.552417
	Count	3	3	3

11/02/2010 Changed from DISSOLVED metals to TOTAL on recommendation c

2009/10	Minimum	7.24	3820	14.9
	Maximum	7.61	3920	17.2
	Average	7.4225	3865	15.9
	StdDev	0.194487	41.2310563	1.092398
	Count	4	4	4
OVERALL	Minimum	0	2990	11.2
	Maximum	7.79	14510	20.7
	Average	6.808684	4112.94737	15.12949
	StdDev	1.21207	1776.2753	1.733091
	Count	38	38	39
1996 - 2004 (mining)	Minimum	0	0	13
	Maximum	0	0	17
	Average	#DIV/0!	#DIV/0!	14
	StdDev	#DIV/0!	#DIV/0!	1.907005
	Count	0	0	4
2005 + (post mini	Minimum	0	4	2.027313
	Maximum	7.79	14510	20.7
	Average	6.610692	3861.17418	14.77738
	StdDev	1.530102	1818.34241	3.132217
	Count	46	46	43
2007/08	Minimum	5.86	2990	11.2
	Maximum	7.49	4000	15.3
	Average	6.835	3417.5	13.6
	StdDev	0.692074	472.325806	2.137756
	Count	4	4	3
2008/09	Minimum	6.43	2990	12.4
	Maximum	7.79	3990	15.4
	Average	7.1	3715	13.46667
	StdDev	0.652687	483.976583	1.677299
	Count	4	4	3

Dissolved Oxygen	Oxidation-Reduction	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)
mg/L	mV	m	m RL		mg/L	mg/L	mg/L
					760		
					210		
					775		
		3.46	749.11		790		
		3.22	749.35				
		5.34	747.23				
		4.77	747.8				
		2	750.57				
		3.01	749.56				
		4.54	748.03				
		4	748.57				
		3.15	749.42				
		3.23	749.34				
		4.37	748.2				
		3.85	748.72		786		
		3.14	749.43				
		2.96	749.61				
		3.7	748.87				
		4.52	748.05				
			752.57				
		2.97	749.6				
		4.34	748.23				
			752.57		179		
		4.34	748.23				
		3.44	749.13				
		3.46	749.11				
		4.64	747.93				
		4.25	748.32				
1.8	174	3.92	748.65				
		3.62	748.95				
		3.51	749.06				
		5.03	747.54				
		5.45	747.12				
		5.16	747.41				
		4.05	748.52				
		4.28	748.29				
1.65	65	3.48	749.09				
3.04	32	3.28	749.29				
15.25	30	3.16	749.41				
1.93	28	3.7	748.87				
3.4	33	3.81	748.76				
2.2	40	3.54	749.03				
3.84	111	4.63	747.94				
5.19	160	4.37	748.2	563906			
3.16	120	4.51	748.06				
1.53	117	3.05	749.52				
not working		3.66	748.91				
2.2		3.57	749				
3.11		4.89	747.68				

4.17		4.62	747.95	639930			
2.66		4.53	748.04				
4.29		4.57	748				
4.44		5.5	747.07	696354	670	2	670
3.75		5.45	747.12	699747			
3.23		4.48	748.09	718607	646	0.1	646
3.27		5.21	747.36	727371	648	0.1	648
2.62		4.6	747.97	753065	652	0.1	652
2.75		4.16	748.41	761402	647	0.1	647
2.85		2.65	749.92	814209	637	0.1	637
4.1		3.5	749.07	836014	633	0.1	633
3.64		3.54	749.03	842908	650	0.1	650
4.55		3.76	748.81	856313	605	0.1	605
2.35		4.03	748.54	870353	629	0.1	629
3.3		3.04	749.53	882306	629	0.1	629
2.92		3.03	749.54	893141	616	0.1	616
3.9		3.05	749.52	906742	600	0.1	600
4.29		4.65	747.92	922845	592	0.1	592
1.42		5	747.57	937582	583	0.1	583
0.92		2.97	749.6	951938	588	0.1	588
1.15	3.4	3.26	749.31	959584	569	0.1	569
				963212	594	0.1	594
1.52		4.91	747.66	A1400135-0	572	0.1	572
1.31	31.4	4.4	748.17	A1401140-0	557	0.1	557
2.25	3.6	4.11	748.46	A1401907-0	575	0.1	575

1.15	3.4	3.26	747.66		557	0.1	557
2.25	31.4	4.91	749.31		594	0.1	594
1.5575	12.8	4.17	748.4		573.4	0.1	573.4
0.4858934	16.10843	0.6909414	0.6909414		13.390294995	05	13.3902955
0.92	0	2.97	747.57	922845	583	0.1	583
4.29	0	5	749.6	951938	592	0.1	592
2.21	#DIV/0!	4.206667	748.3633	937455	587.6666667	0.1	587.666667
1.8185983	#DIV/0!0	1.0851883	1.0851883	14546.923	4.5092497533	1.7E-173	4.509249753
2.35	0	3.03	748.54		605	0.1	605
4.55	0	4.03	749.54		629	0.1	629
3.28	#DIV/0!	3.465	749.105		619.75	0.1	619.75
0.9323454	#DIV/0!0	0.5086264	0.5086264		11.586630234	04	11.58663024
2.85	0	2.65	749.03		633	0.1	633
4.1	0	3.54	749.92		650	0.1	650
3.53	#DIV/0!	3.23	749.34		640	0.1	640
0.6322183	#DIV/0!0	0.5026933	0.5026933		8.8881944173	1.7E-173	8.888194423

2.62	0	4.16	747.36	646	0.1	646
3.27	0	5.21	748.41	652	0.1	652
2.9675	#DIV/0!	4.6125	747.9575	648.25	0.1	648.25
0.330895	#DIV/0!	0.439498	0.439498	2.62995564	0	2.62995564
4	0	4	4	4	4	4
0.92	3.4	2	747.07	179	0.1	557
15.25	174	5.5	752.57	790	2	670
3.241892	67.7429	3.976324	748.7073	607.1111111	0.190476	613.904762
2.300098	57.2922	0.779508	1.017458	135.9868018	0.414614	33.0498181
37	14	68	70	27	21	21
2	174	2	747	179	0	0
2	174	5	753	790	0	0
2	174	4	749	583	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	0.815157	1.244389	301.527887	#DIV/0!	#DIV/0!
1	1	30	32	6	0	0
0.485893	#DIV/0!	0.690941	0.690941	5	0	5
15.25	#DIV/0!	5.5	749.92	670	5	670
3.068486	#DIV/0!	3.959948	716.0936	565.4295504	0.331034	565.42955
2.215043	#DIV/0!	0.890011	153.8553	157.2624346	0.965144	157.262435
44	20	46	46	29	29	29
2.2		3.57	747.68	0	0	0
4.17		4.89	749	0	0	0
3.16		4.185	748.385	#DIV/0!	#DIV/0!	#DIV/0!
0.985951		0.668356	0.668356	#DIV/0!	#DIV/0!	#DIV/0!
3		4	4	0	0	0
2.66	0	4.53	747.07	670	2	670
4.44	0	5.5	748.04	670	2	670
3.785	#DIV/0!	5.0125	747.5575	670	2	670
0.806412	#DIV/0!	0.534688	0.534688	#DIV/0!	#DIV/0!	#DIV/0!
4	0	4	4	1	1	1

Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH
mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH
	1300	5090	180	255	1	515	6.7
	990	3390	245	190	2.7	130	6.3
	1270	4980	165	240	2	530	6.7
	1280	4890	140	280	3.1	540	6.8
	1260	5010	160	260	3.1	580	6.8
	1229	4620	140	240	3	520	6.7
		4150	165	229	3.5	568	6.7
	1139	5180	152	234	4.67	662	6.7
	1430	4630	137	237	4.46	584	6.9
	1140	4480	148	218	2.31	567	6.82
	1090	4710	146	221	2.26	526	6.96
	1085	4860	146	213	1.82	509	6.87
	1140	5050	149	207	2.58	499	7
	1270	4660	150	204	1.79	479	6.88
		4640	142	198	2.77	611	6.83
	1130	4780	169	221	3.31	638	6.93
	1060	4700	166	245	2.98	624	7
	1094	4730	168	236	3.22	656	6.88
	1030	4100	70.7	196	1.43	460	6.86
	1030	4100	70.7	196	1.43	460	6.86
	1060	4550	120	193		416	6.89
	1040	4500	212	277		709	6.86
	1070	3660	326	260		147	6.18
	1090	4490					6.89
	1070	4330	364	75.3		477	6.93
		4310					6.95
		4440					6.97
		3770					6.67
		4320					6.41
		3810					6.57
		4440					6.67
		4840					6.52
		4230					6.67
		4190					6.18
		4200					7.2

		3900					7.1
0.03	850	3900	110	150	1.8	440	7.8
0.01	900	3900	120	160	2.5	440	7.5
0.05	870	3900	110	160	2	430	7.4
0.02	880	3800	110	160	2.5	460	8
0.01	880	3900	120	170	2.6	490	7.6
0.61	810	3800	110	150	3.5	460	7.6
0.01	800	3700	110	150	2.2	460	7.6
0.04	830	3700	96	140	1.9	430	7.5
0.1	800	3700	100	150	2.9	450	7.8
0.1	800	3700	110	150	2.2	480	7.5
0.1	780	3600	110	150	2.5	470	7.2
0.1	800	3600	110	150	2.3	480	7.7
0.1	780	3500	100	140	1.5	460	7.1
0.1	810	3500	97	140	1.7	450	7.2
0.1	820	3540	110	150	2.4	430	7.3
	870	3600	95		2	440	7.5
0.1	900	3600	100	140	2	410	7.7
0.1	840			130	2.1	430	
0.1	838	3490	89.7	138	2.1	418	7.29
0.1	855	3490	93	136	2.1	429	7.22
0.1	843	3460	98.7	146	2.1	428	7.1

0.1	838	3460	89.7	130	2	410	7.1
0.1	900	3600	100	146	2.1	430	7.7
0.1	855.2	3510	95.35	138	2.08	423	7.3275
0	25.8978765	61.644144	4.840454524	5.830951895	0.0447215	8.7177985	0.2604324
0.1	810	3500	95	140	1.7	430	7.2
0.1	870	3600	110	150	2.4	450	7.5
0.1	833.33333	3546.66667	100.666667	145	2.033333	440	7.333333
0	32.1455033	50.33222963	8.144527823	7.071067812	0.3511883	103	0.1527533
0.1	780	3600	100	150	2.2	450	7.2
0.1	800	3700	110	150	2.9	480	7.8
0.1	795	3650	107.5	150	2.475	470	7.55
0	104	57.73502694	54	04	0.309574	14.142144	0.2645754
0.01	800	3700	96	140	1.9	430	7.5
0.61	830	3800	110	150	3.5	460	7.6
0.22	813.33333	3733.33333	105.333333	146.666667	2.533333	450	7.566667
0.33808283	15.2752523	57.73502693	8.082903773	5.773502693	0.850493	17.320513	0.0577353

0.01	870	3800	110	160	2	430	7.4
0.05	900	3900	120	170	2.6	490	8
0.0225	882.5	3875	115	162.5	2.4	455	7.625
0.018929694	12.583057	50	5.77350269	5	0.270801	26.45751	0.2629964
0.01	780	3390	70.7	75.3	1	130	6.18
0.61	1430	5180	364	280	4.67	709	8
0.099	996.65909	4180.53571	139.336364	188.302273	2.447073	484.2667	7.026071
0.126028420	176.51338	521.47838756	57.6570417	48.0917896	0.759273	106.3548	0.41569556
0	990	3390	71	75	1	130	6
0	1430	5180	364	280	5	709	7
#DIV/0!	1143	4489	168	222	3	517	7
#DIV/0!	111.74346	424.78064	65.3514129	40.7103161	0.954393	137.2536	0.218093
0	5	4	4	5	0.044721	5	0.260432
5	900	4200	120	170	5	490	8
0.27071429	782.53211	3425.41036	96.3913258	136.422534	2.215795	413.1627	7.077709
0.93305126	215.3345	939.087532	27.2618613	38.0978186	0.771598	114.3741	1.45177
0	0	3900	0	0	0	0	7.1
0	0	3900	0	0	0	0	7.1
#DIV/0!	#DIV/0!	3900	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	7.1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.03	850	3900	110	150	1.8	440	7.8
0.03	850	3900	110	150	1.8	440	7.8
0.03	850	3900	110	150	1.8	440	7.8
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
109	3120						0.01	0.01
45	1813						0.01	0.01
115	3100						0.01	0.03
130	3160						0.01	0.03
130			0.03		0.01		0.01	0.03
110			0.01		0.01		0.01	0.03
124			0.02		0.01		0.01	0.04
130			0.1		0.03		0.01	0.03
132			0.03		0.03		0.01	0.03
112			0.02		0.03		0.01	0.04
109			0.03		0.03		0.02	0.03
112			0.15		0.03		0.01	0.06
116			0.31		0.03		0.02	0.03
107			0.01		0.03		0.07	0.03
107			0.01		0.03		0.01	0.03
120			0.01		0.03		0.02	0.03
135			0.04		0.03		0.06	0.03
123			0.01		0.03		0.01	0.03
98.8			0.01		0.03		0.01	0.03
98.8					0.03		0.01	0.03
120			0.01		0.03		0.01	0.03
166			0.01		0.03		0.01	0.03
58.4			0.01		0.03		0.01	0.03
131			0.03		0.04		0.31	0.03
130							0.009	0.013

130							0.002	0.0031
130	2147	0.005	0.18	0.001	0.00005	0.0005	0.004	0.0067
130	2200						0.002	0.002
130	2200						0.001	0.0003
130	2300	0.005	0.02	0.001	0.00011	0.0002	0.002	0.00077
140	2400						0.0017	0.0011
120	2100						0.0098	0.0024
120	2200	0.005	0.02	0.001	0.00015	0.0003	0.0057	0.011
130	2200						0.0029	0.0034
120	2300						0.0056	0.0054
110	2300						0.0025	0.0004
110	2000	0.01	0.02	0.004	0.00014	0.0002	0.0018	0.0002
120	2200						0.002	0.0004
110	2000						0.0023	0.00028
120	2100						0.0054	0.00005
110	2200	0.01	0.015	0.005	0.00062	0.0005	0.0046	0.00005
110	2000						0.005	0.007
110	2300			0.003	0.00023		0.0023	0.00005
110	2200			0.003	0.00023		0.0014	0.00014
107	2130			0.004	0.00019		0.003	0.0002
107	2270	0.001	0.03	0.003	0.0005	0.0004	0.005	0.0002
100	2200			0.003	0.00005		0.001	0.0002

100	2130	0.001	0.03	0.003	0.00005	0.0004	0.001	0.00005
110	2300	0.001	0.03	0.004	0.0005	0.0004	0.005	0.0002
106.8	2220	0.001	0.03	0.0032	0.00024	0.0004	0.00254	0.000158
4.0865635	66.708325	#DIV/0!1	#DIV/0!1	0.0004475	0.0001635	#DIV/0!1	0.0015815	6.5727E-05 5
110	2000	0.01	0.015	0.005	0.00062	0.0005	0.0046	0.00005
120	2200	0.01	0.015	0.005	0.00062	0.0005	0.0054	0.007
113.3333	2100	0.01	0.015	0.005	0.00062	0.0005	0.005	0.00236667
5.7735033	1003	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	0.00043	0.004012583
110	2000	0.01	0.02	0.004	0.00014	0.0002	0.0018	0.0002
120	2300	0.01	0.02	0.004	0.00014	0.0002	0.0056	0.0054
115	2200	0.01	0.02	0.004	0.00014	0.0002	0.002975	0.0016
5.7735034	141.42144	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	0.0017754	0.002535094
120	2100	0.005	0.02	0.001	0.00015	0.0003	0.0029	0.0024
130	2200	0.005	0.02	0.001	0.00015	0.0003	0.0098	0.011
123.3333	2166.667	0.005	0.02	0.001	0.00015	0.0003	0.006133	0.0056
5.7735033	57.735033	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	#DIV/0!1	0.003473	0.004703193

130	2200	0.005	0.02	0.001	0.00011	0.0002	0.001	0.0003
140	2400	0.005	0.02	0.001	0.00011	0.0002	0.002	0.002
132.5	2275	0.005	0.02	0.001	0.00011	0.0002	0.001675	0.0010425
5	95.74271	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.000472	0.00071779
4	4	1	1	1	1	1	4	4
45	1813	0.001	0.01	0.001	0.00005	0.0002	0.001	0.00005
166	3160	0.01	0.31	0.005	0.04	0.0005	0.31	0.06
116.4468	2285.6	0.006	0.0454	0.0028	0.018409	0.00035	0.016213	0.01677319
18.67517	340.1712	0.003464	0.070325	0.001398	0.014544	0.000138	0.045603	0.01568957
47	25	6	25	10	30	6	47	47
45	1813	0	0	0	0	0	0	0
166	3160	0	0	0	0	0	0	0
114	2798	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0
24.01998	657.3068	#DIV/0!	0.073588	#DIV/0!	0.007864	#DIV/0!	0.061972	0.00907896
24	4	0	19	0	20	0	24	24
4.086563	5	#DIV/0!	#DIV/0!	0.000447	0.00005	#DIV/0!	0.001	0.00005
140	2400	#DIV/0!	#DIV/0!	5	5	#DIV/0!	5	5
109.7813	2033.404	#DIV/0!	#DIV/0!	0.280758	0.27806	#DIV/0!	0.164746	0.1634913
29.87782	562.5831	#DIV/0!	#DIV/0!	1.177768	1.178441	#DIV/0!	0.897388	0.89762445
31	29	13	13	18	18	13	31	31
130	0	0	0	0	0	0	0.002	0.0031
130	0	0	0	0	0	0	0.002	0.0031
130	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.002	0.0031
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	0	0	0	0	0	0	1	1
130	2147	0.005	0.18	0.001	0.00005	0.0005	0.004	0.0067
130	2147	0.005	0.18	0.001	0.00005	0.0005	0.004	0.0067
130	2147	0.005	0.18	0.001	0.00005	0.0005	0.004	0.0067
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1	1

Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
0.01		0.11					
0.3		0.11					
0.01		0.01					
0.11		1					
0.03		0.17					
0.01		0.01					
0.01		0.29					
0.01		0.13					
0.01		0.07					
0.01		0.21					
0.03		0.21					
0.01		0.26					
0.03		0.21					
0.02		0.14					
0.01		0.2					
0.01		0.26					
0.01		0.12					
0.01		0.11					
0.01		0.14					
0.01		0.14					
0.01		0.14					
0.01		0.12					
0.07		0.28					
0.02		0.1					
		0.085					

		0.005					
0.088	0.0001	0.034	0.9	2.9	0.23		
						0.00001	0.0001
		0.009					
		0.006					
0.001	0.0001	0.03	1	4.7	0.01	0.00001	0.0001
		0.017					
		0.24					
0.001	0.0001	0.045	0.9	4.6	0.04	0.00001	0.0001
		0.029					
		0.085					
		0.047					
0.002	0.0001	0.024	1	5.1	0.01	0.002	0.002
		0.01					
		0.058					
		0.48					
0.0076	0.0001	0.17	0.8	5	0.01	0.002	0.002
		0.035					
		0.005					
		0.008					
		0.014					
0.005	0.0001	0.026	0.9	5.09	0.03	0.002	0.002

0.005	0.0001	0.005	0.9	5.09	0.03	0.002	0.002
0.005	0.0001	0.026	0.9	5.09	0.03	0.002	0.002
0.005	0.0001	0.01325	0.9	5.09	0.03	0.002	0.002
#DIV/0!	#DIV/0!	0.009287	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	4	1	1	1	1	1
0.0076	0.0001	0.035	0.8	5	0.01	0.002	0.002
0.0076	0.0001	0.48	0.8	5	0.01	0.002	0.002
0.0076	0.0001	0.228333	0.8	5	0.01	0.002	0.002
#DIV/0!	#DIV/0!	0.228163	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	3	1	1	1	1	1
0.002	0.0001	0.01	1	5.1	0.01	0.002	0.002
0.002	0.0001	0.085	1	5.1	0.01	0.002	0.002
0.002	0.0001	0.0415	1	5.1	0.01	0.002	0.002
#DIV/0!	#DIV/0!	0.032767	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	4	1	1	1	1	1
0.001	0.0001	0.029	0.9	4.6	0.04	0.00001	0.0001
0.001	0.0001	0.24	0.9	4.6	0.04	0.00001	0.0001
0.001	0.0001	0.104667	0.9	4.6	0.04	0.00001	0.0001
#DIV/0!	#DIV/0!	0.117475	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	3	1	1	1	1	1

0.001	0.0001	0.006	1	4.7	0.01	0.00001	0.0001
0.001	0.0001	0.03	1	4.7	0.01	0.00001	0.0001
0.001	0.0001	0.0155	1	4.7	0.01	0.00001	0.0001
#DIV/0!	#DIV/0!	0.010724	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	4	1	1	1	1	1
0.001	0.0001	0.005	0.8	2.9	0.01	0.00001	0.0001
0.3	0.0001	1	1	5.1	0.23	0.002	0.002
0.02915333	0.0001	0.130478	0.916667	4.565	0.055	0.001005	0.00105
0.05706477	0	0.165758	0.075277	0.84175412	0.08666	0.00109	0.001041
30	6	46	6	6	6	6	6
0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0
0	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.06164267	#DIV/0!	0.188309	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
24	0	24	0	0	0	0	0
#DIV/0!	#DIV/0!	0.005	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	0.208629	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	0.726923	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
13	13	30	13	13	13	13	13
0	0	0.005	0	0	0	0	0
0	0	0.005	0	0	0	0	0
#DIV/0!	#DIV/0!	0.005	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	1	0	0	0	0	0
0.088	0.0001	0.034	0.9	2.9	0.23	0.00001	0.0001
0.088	0.0001	0.034	0.9	2.9	0.23	0.00001	0.0001
0.088	0.0001	0.034	0.9	2.9	0.23	0.00001	0.0001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1	1

Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

1	25	36	100	100	1	1

1	25	25	100	100	1	1

1	25	25	100	100	1	1

0.5	20	50	100	50	1	5

0.5	20	50	100	50	1	2
1	20	50	100	50	1	2

1	20	50	100	50	1	2
1	20	50	100	50	1	2
1	20	50	100	50	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

0.5	20	50	100	50	1	2
0.5	20	50	100	50	1	2
0.5	20	50	100	50	1	2
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

0.5	20	50	100	50	1	5
0.5	20	50	100	50	1	5
0.5	20	50	100	50	1	5
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
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1	25	25	100	100	1	1
1	25	25	100	100	1	1
1	25	25	100	100	1	1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
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1	25	25	100	100	1	1
1	25	25	100	100	1	1
1	25	25	100	100	1	1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
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0.5	20	25	100	50	1	1
1	25	50	100	100	1	5
0.833333	22.5	39.3333333	100	75	1	2
0.258199	2.73861279	12.3558353	0	27.3861279	0	1.549193338
6	6	6	6	6	6	6
0	0	0	0	0	0	0
0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
13	13	13	13	13	13	13
0	0	0	0	0	0	0
0	0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0
1	25	36	100	100	1	1
1	25	36	100	100	1	1
1	25	36	100	100	1	1
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1	1

Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium	Comments
µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	
						Ref: Woodward Clyde July 1997
						Ref: Woodward Clyde July 1997
						repeats done 30 days late
						Pumped for 2 minutes
						bore pumped for 2 mins

Sample collected with waterra valve.
Sample collected with waterra valve.

1	2	0.002	2	0.11	0.001
			1		
1	2	0.001	2	0.11	0.001
1	2	0.001	150	0.094	0.001
2	2	0.001	12	0.1	0.001

28/09/11 - Purged bore for 10 min. SWL
10/01/12 - 10min purge, SWL 3.77m, S\
22/03/12 - SWL 2.59m, 5min purge, SW
7/06/12 - SWL 3.06m, 5min purge, SWL
17/09/12 - SWL 3.43m, 5min purge, SW
10/01/13 - SWL 4.53m, 5min purge, SW

2	2	0.05	7	0.14	0.019
2	2	0.05	5	0.0835	0.001

2	2	0.05	5	0.0835	0.001
2	2	0.05	5	0.0835	0.001
2	2	0.05	5	0.0835	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1
2	2	0.05	7	0.14	0.019
2	2	0.05	7	0.14	0.019
2	2	0.05	7	0.14	0.019
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1
2	2	0.001	12	0.1	0.001
2	2	0.001	12	0.1	0.001
2	2	0.001	12	0.1	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1
1	2	0.001	150	0.094	0.001
1	2	0.001	150	0.094	0.001
1	2	0.001	150	0.094	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1

1	2	0.001	1	0.11	0.001
1	2	0.001	2	0.11	0.001
1	2	0.001	1.5	0.11	0.001
#DIV/0!	#DIV/0!	#DIV/0!	0.707107	#DIV/0!	#DIV/0!
1	1	1	2	1	1
1	2	0.001	1	0.0835	0.001
2	2	0.05	150	0.14	0.019
1.5	2	0.0175	25.57143	0.10625	0.004
0.547723	0	0.025177	54.99957	0.019359	0.007348
6	6	6	7	6	6
0	0	0	0	0	0
0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
13	13	13	14	13	13
0	0	0	0	0	0
0	0	0	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0
1	2	0.002	2	0.11	0.001
1	2	0.002	2	0.11	0.001
1	2	0.002	2	0.11	0.001
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1	1	1	1	1	1

. 3.75m SWL after 5.90m.
NLA 4.62m.
'LA 4.02m.
.A 6.43m
'LA 5.90
/LA 6.40m.

Figure 3.2.5.9 - Groundwater Trends - MB10

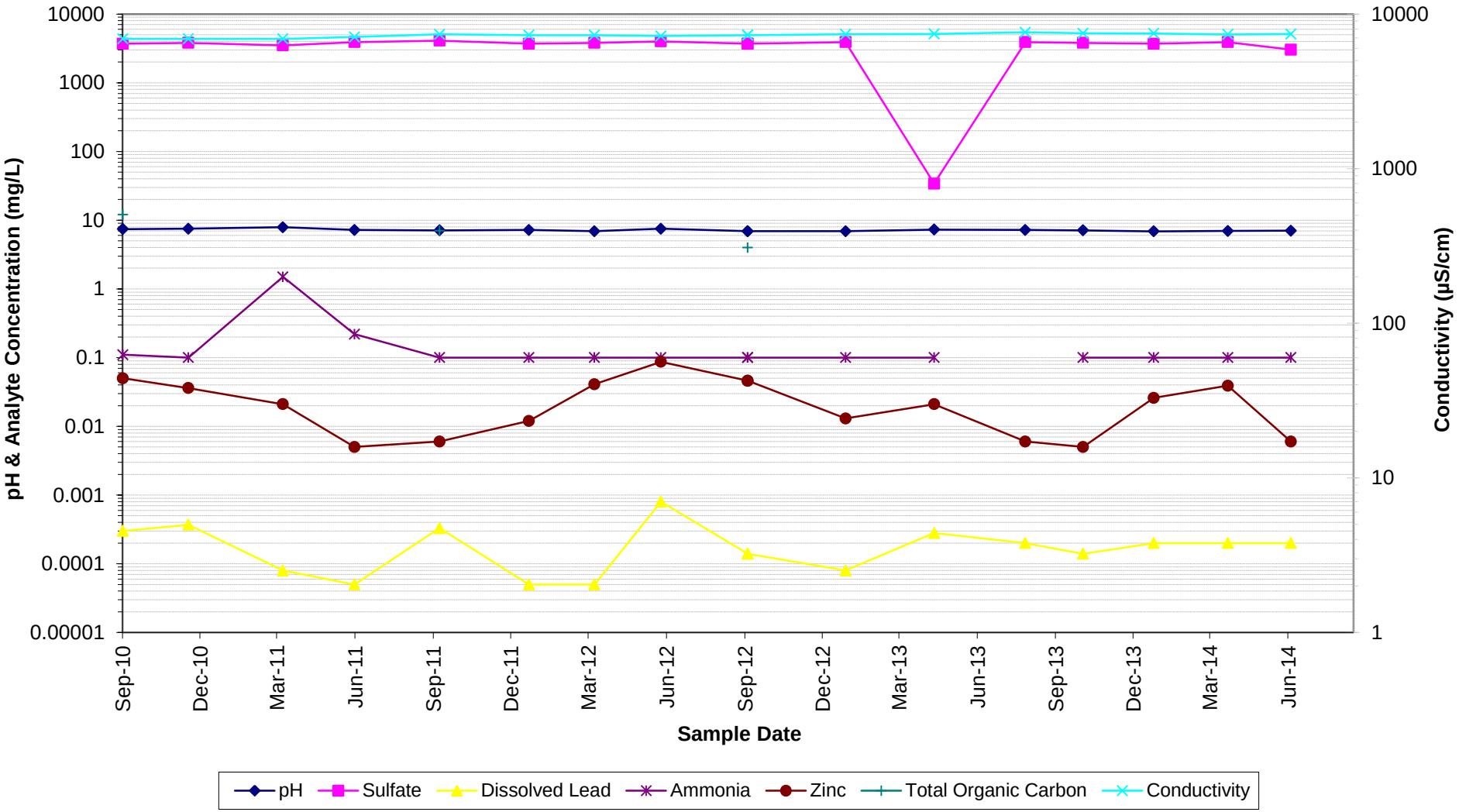


Figure 3.2.5.10 - Groundwater Trends - MB11

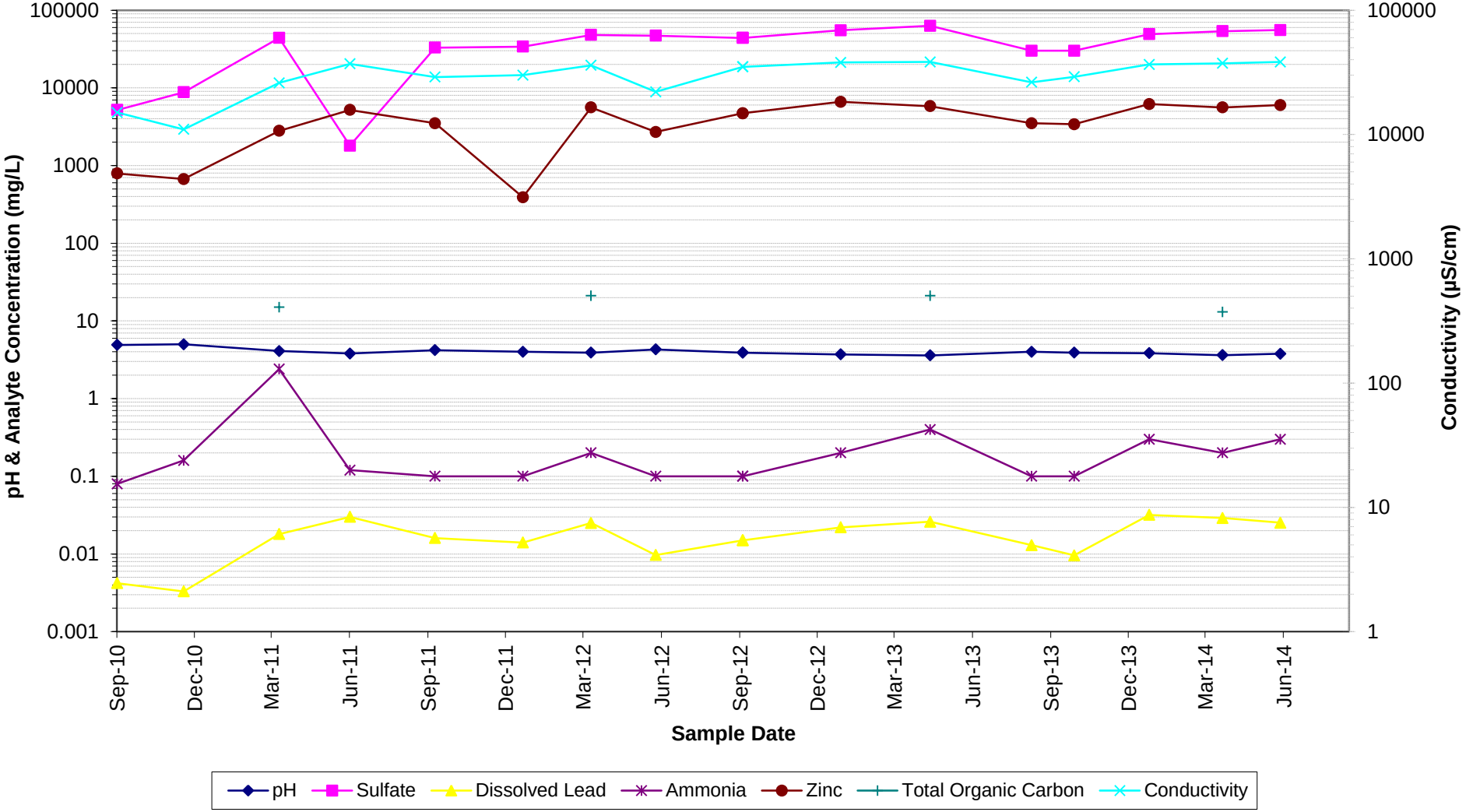


Figure 3.2.5.11 - Groundwater Trends - MB12

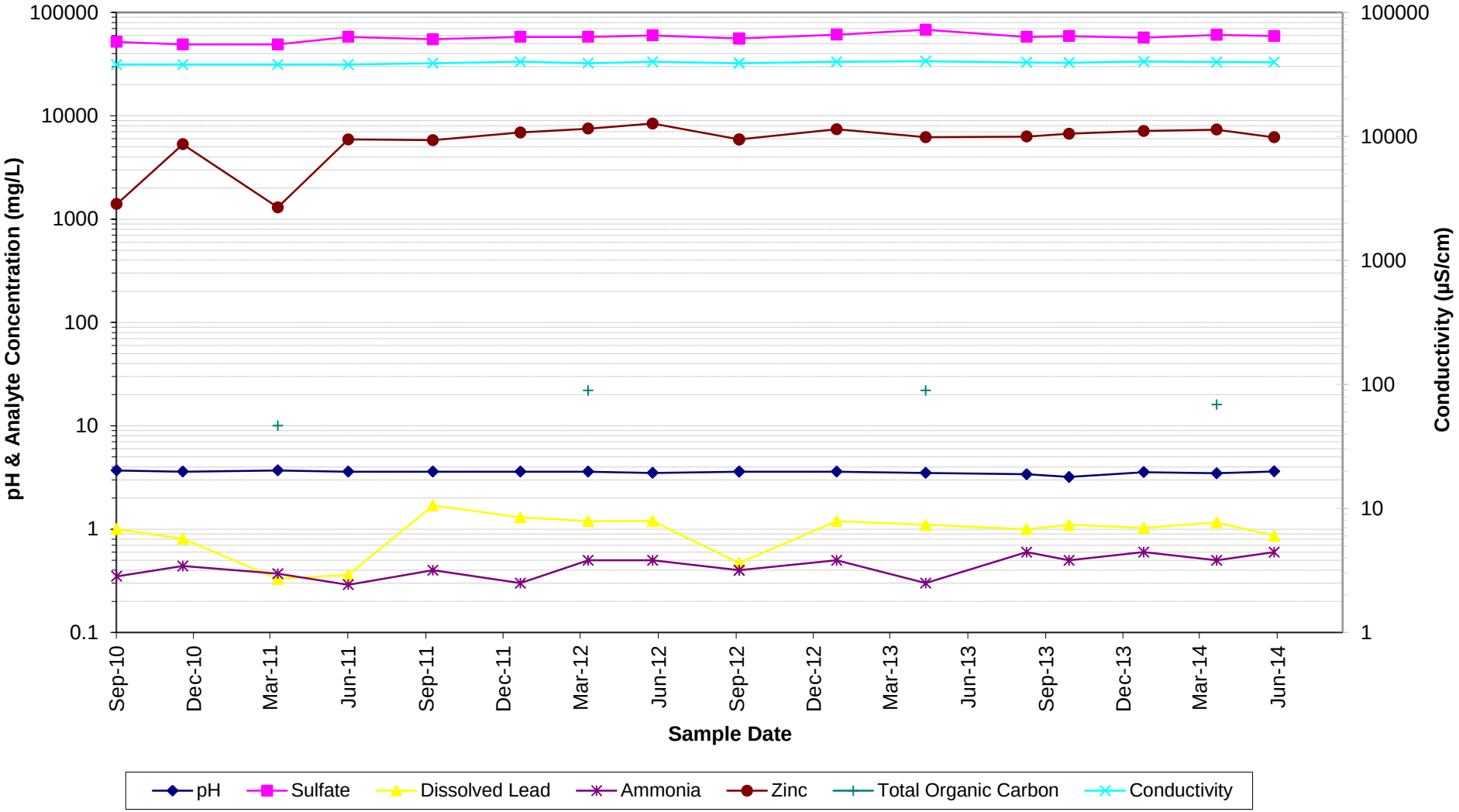


Figure 3.2.5.12 - Groundwater Trends - MB13

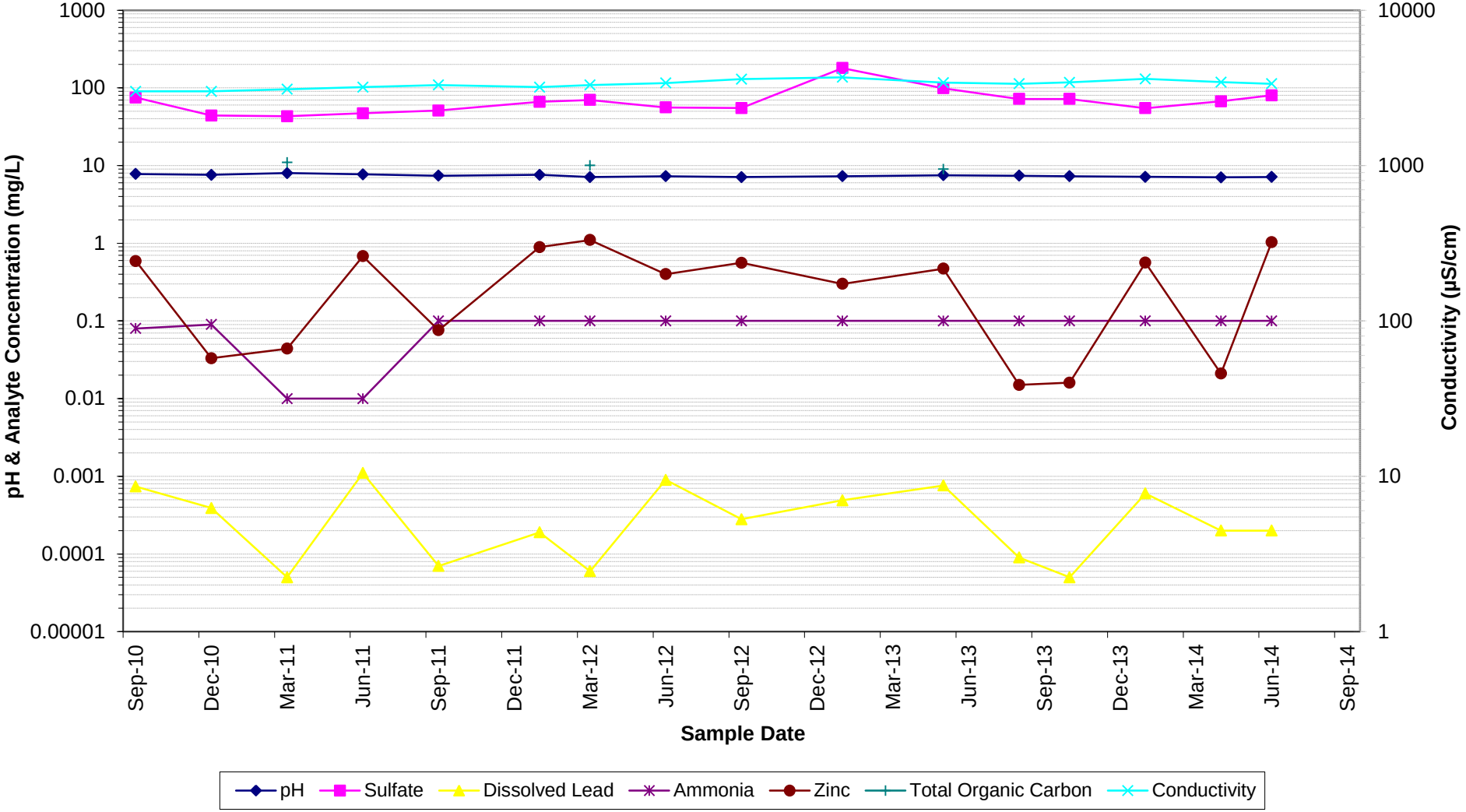


Figure 3.2.5.13 - Groundwater Trends - MB14

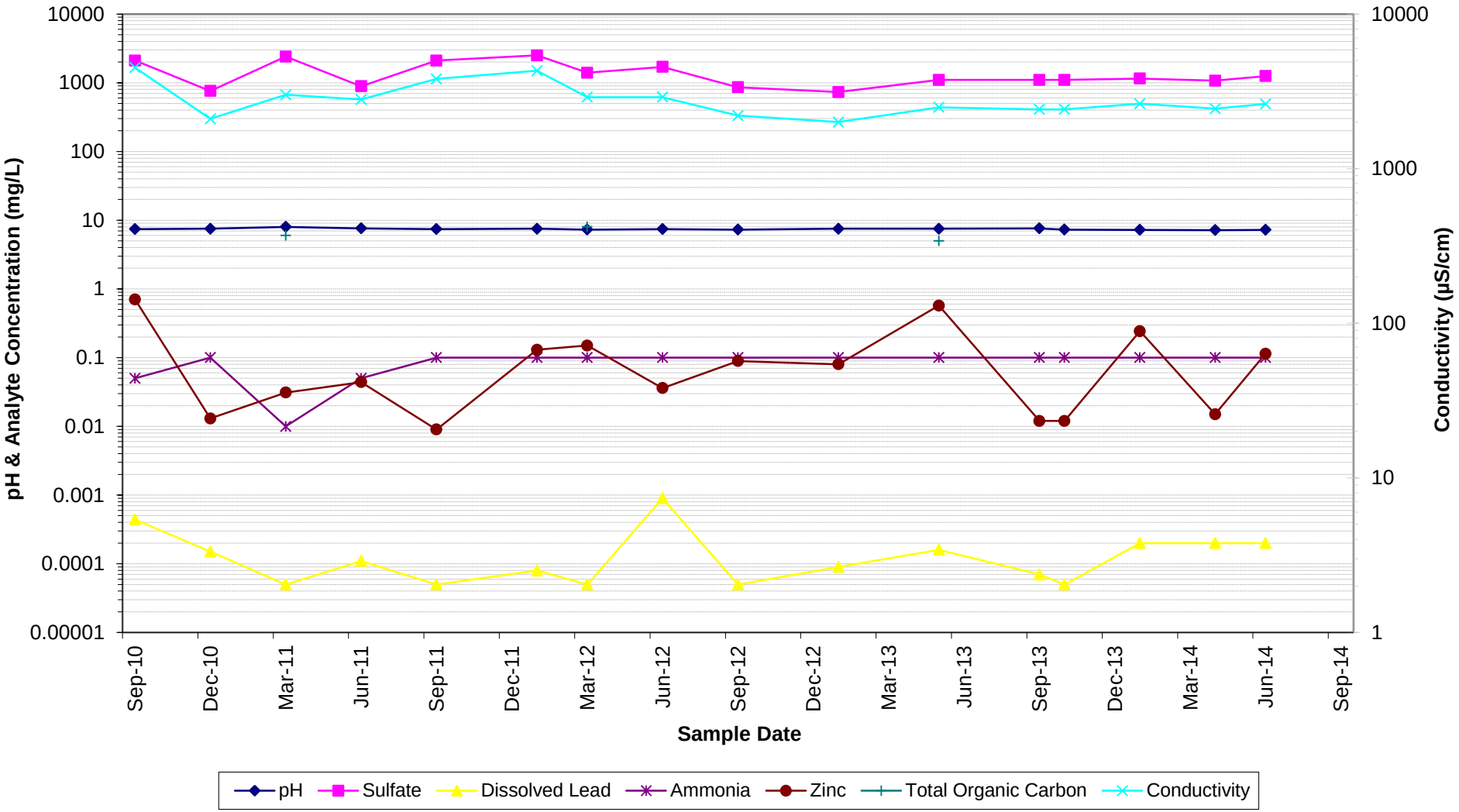


Figure 3.2.5.14 - Groundwater Trends - MB15

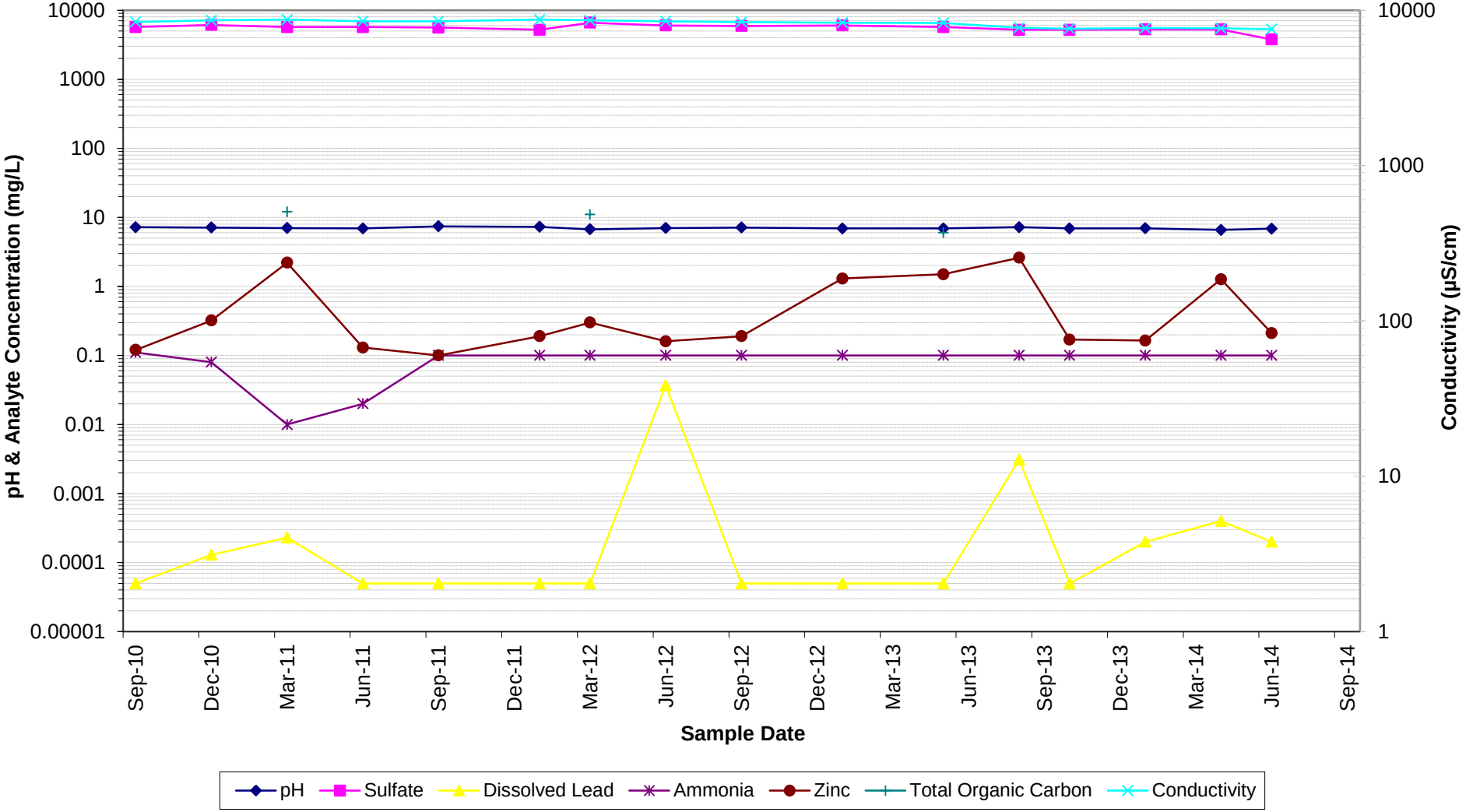


Figure 3.2.5.15 - Groundwater Trends - MB16

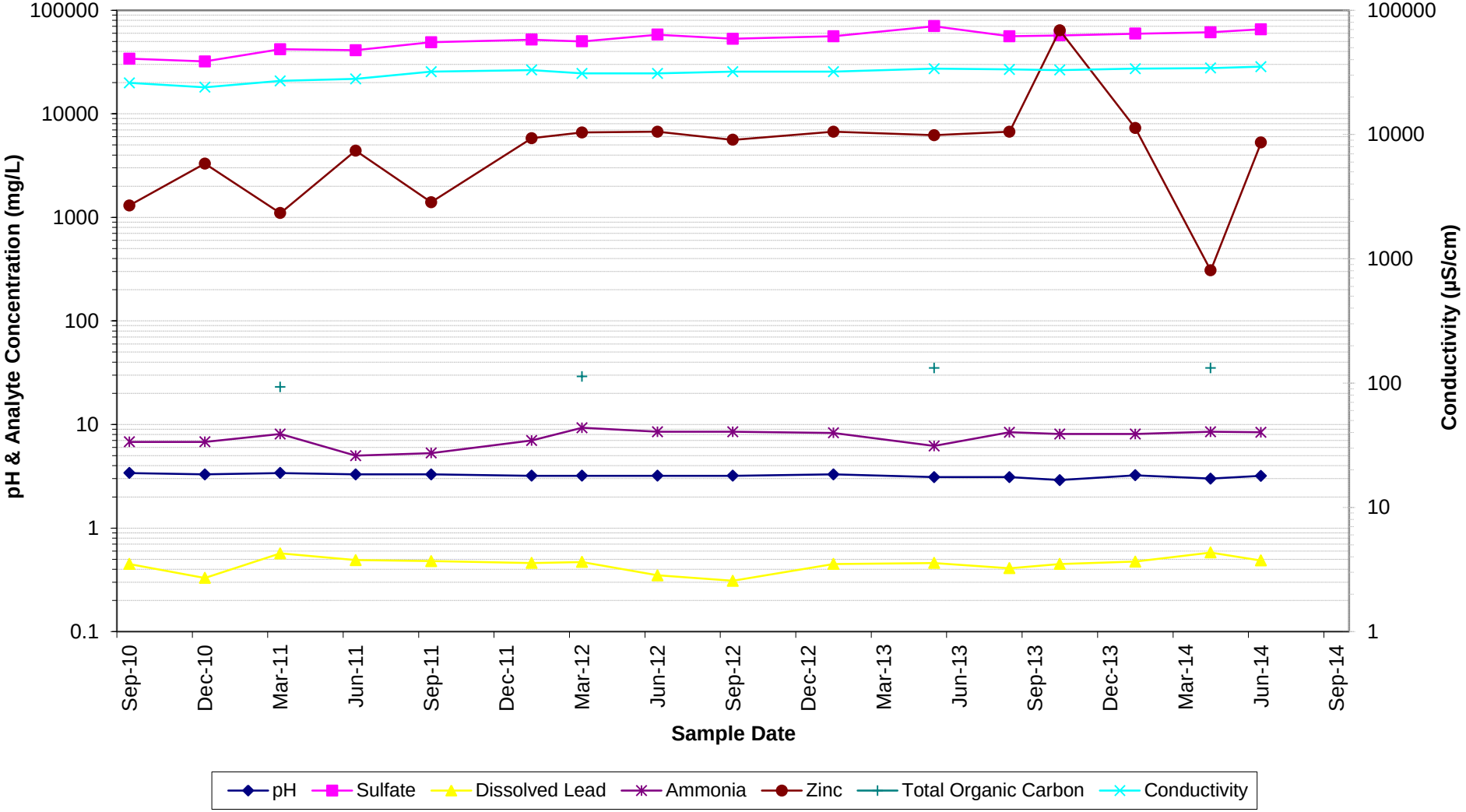


Figure 3.2.5.16 - Groundwater Trends - MB17

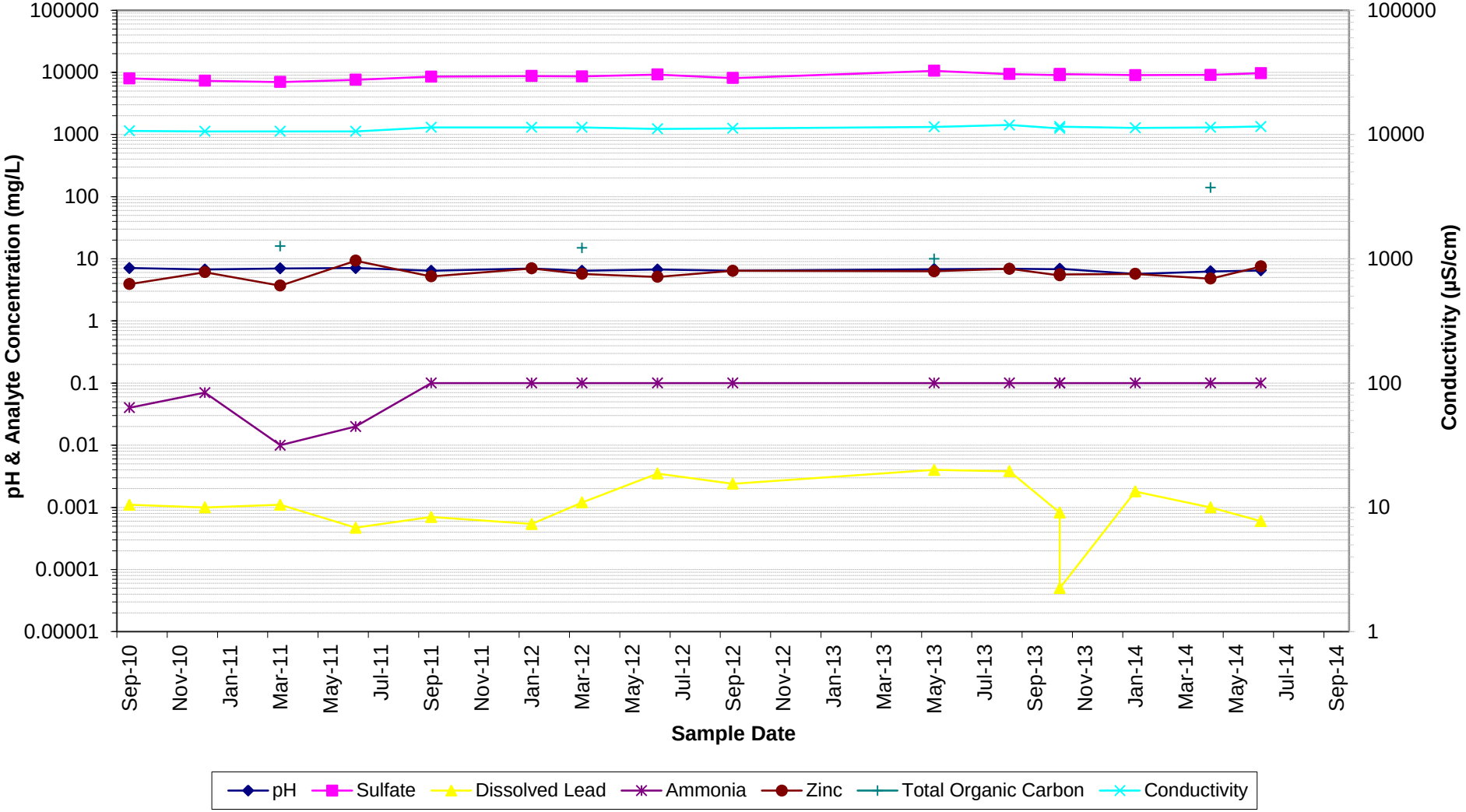


Figure 3.2.5.17 - Groundwater Trends - ED3B

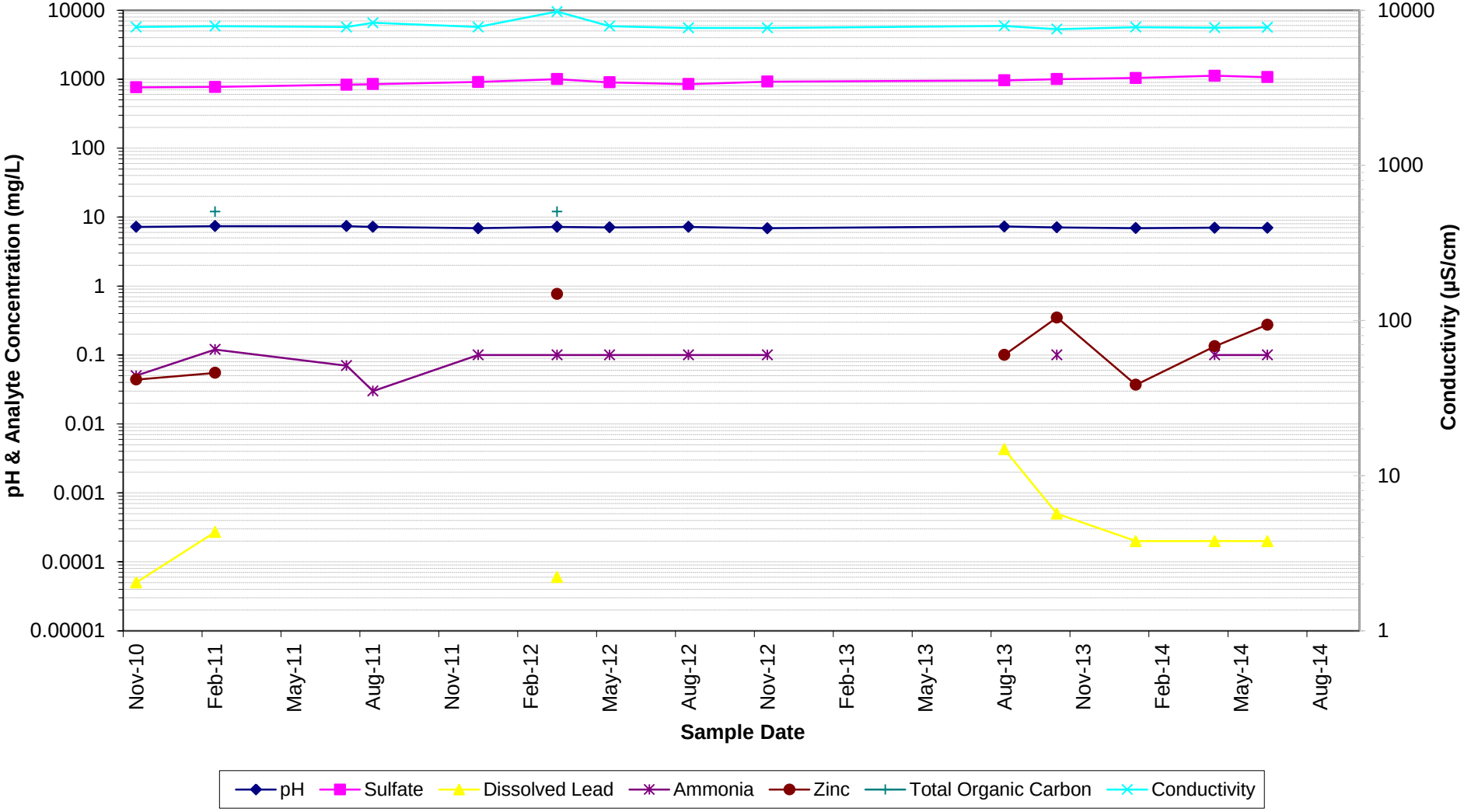


Figure 3.2.5B - Groundwater Levels - WM1 to WM6

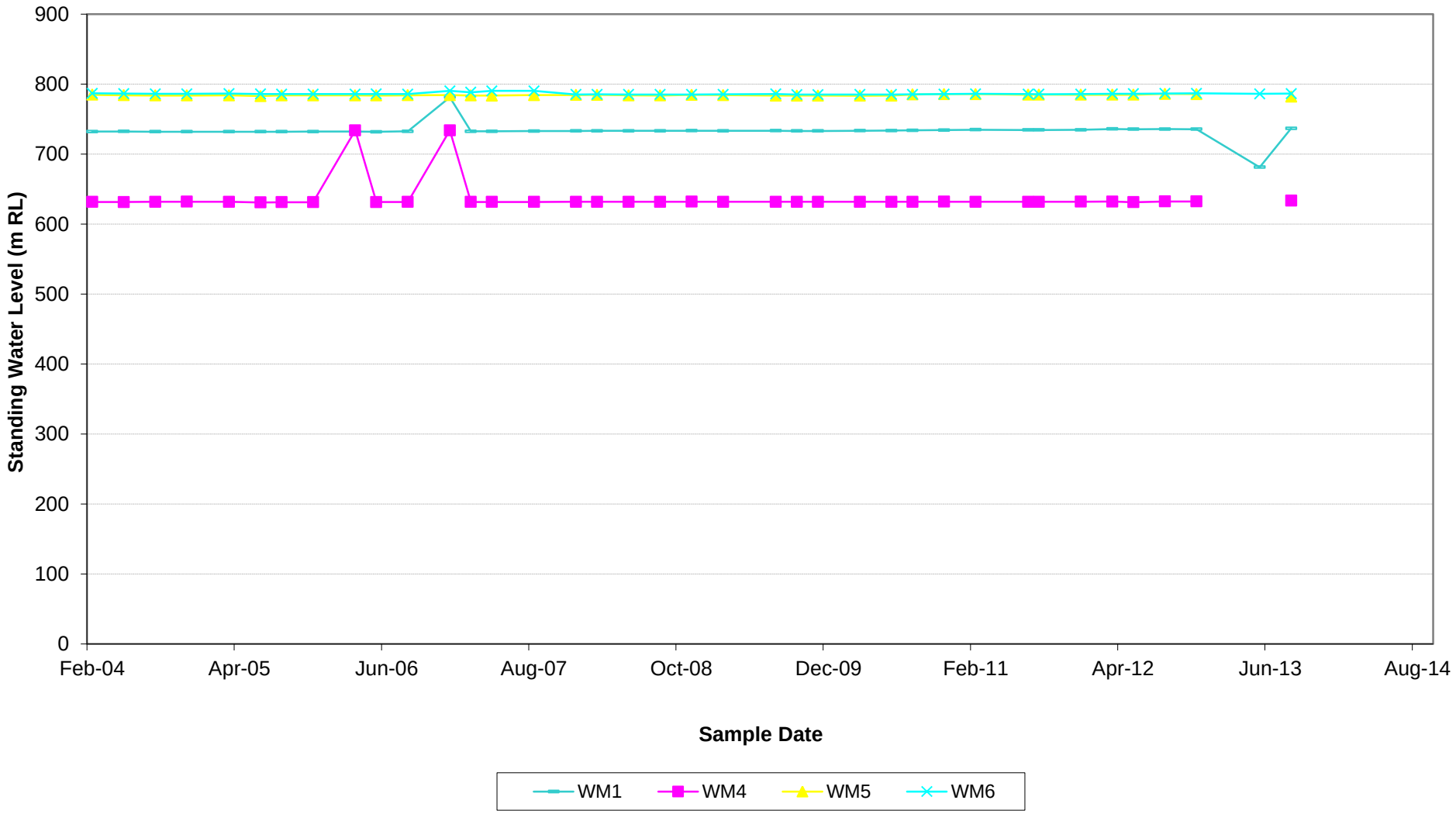


Figure 3.2.5C - Groundwater Levels - MW8S to MW10S

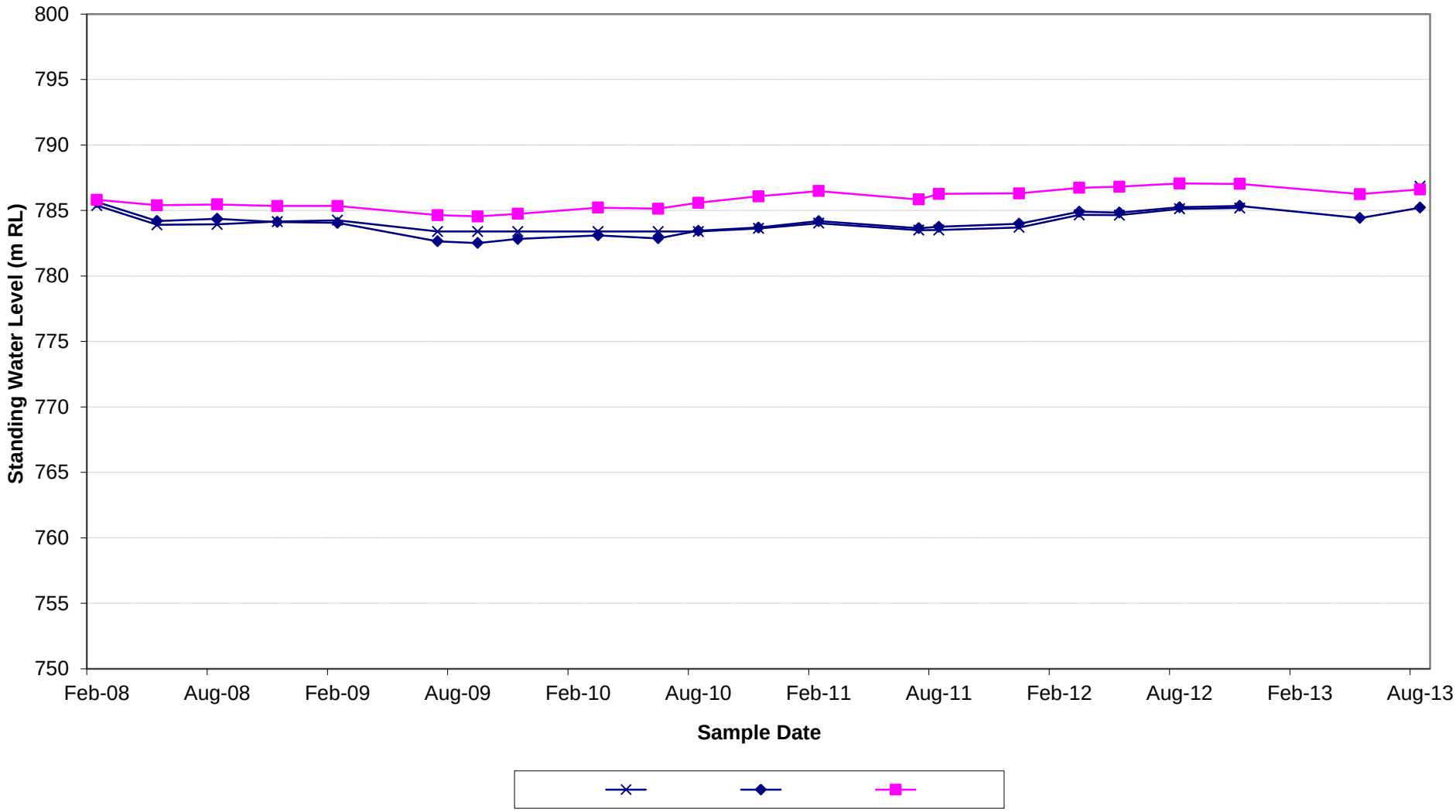


Figure 3.2.5.18 - Groundwater Trends - WM1

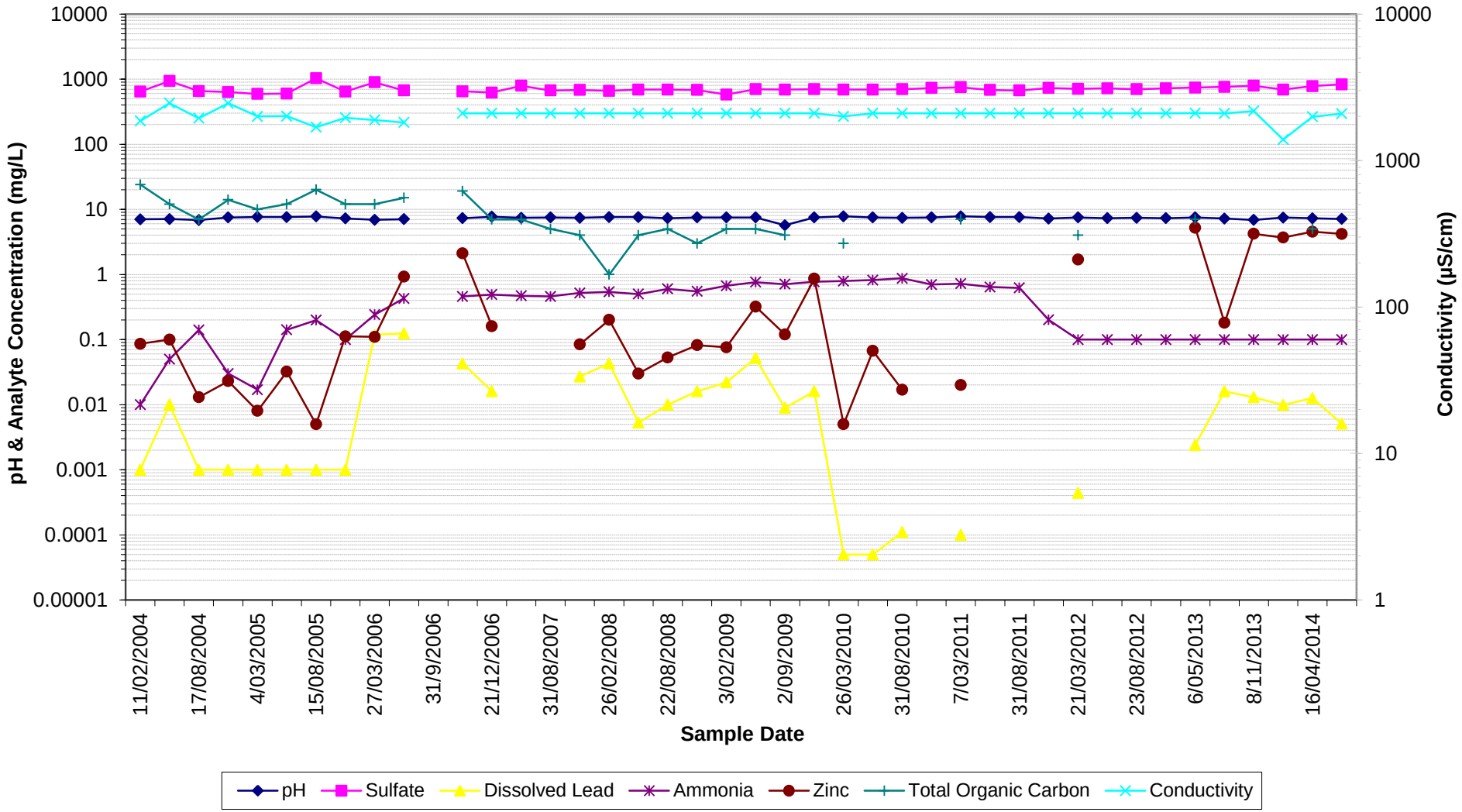


Figure 3.2.5.19 - Groundwater Trends - WM4

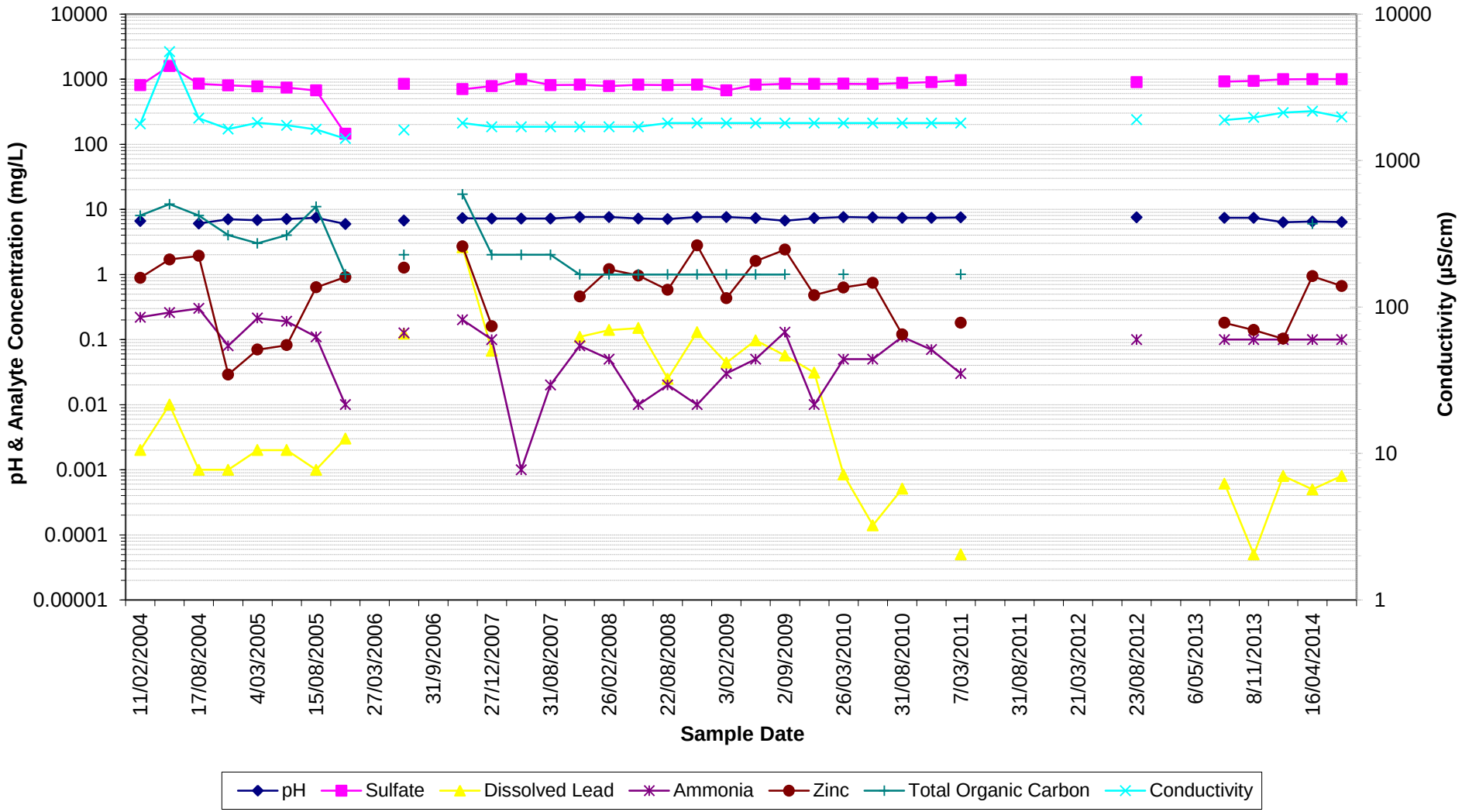


Figure 3.2.5.20 - Groundwater Trends - WM5

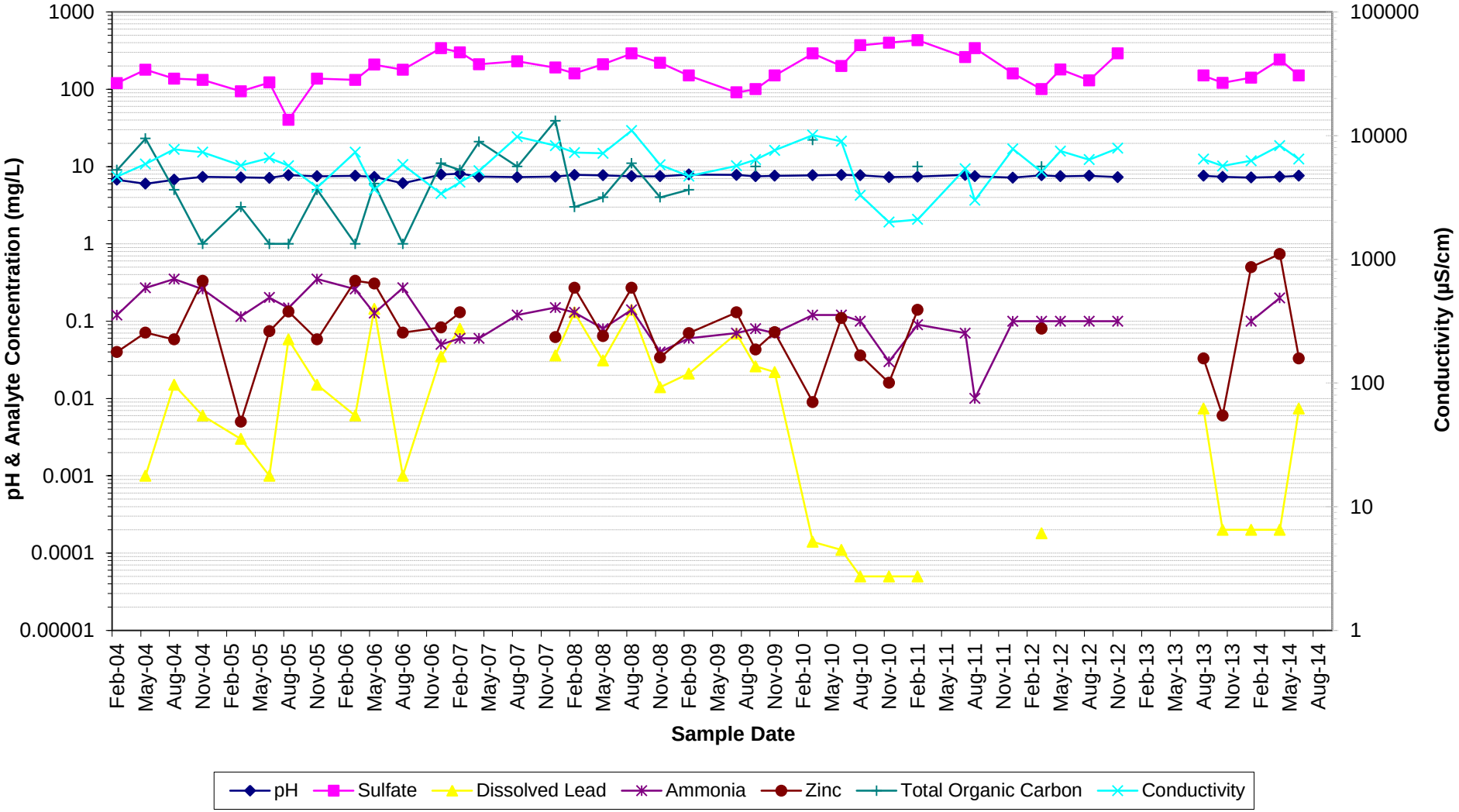


Figure 3.2.5.21 - Groundwater Trends - WM6

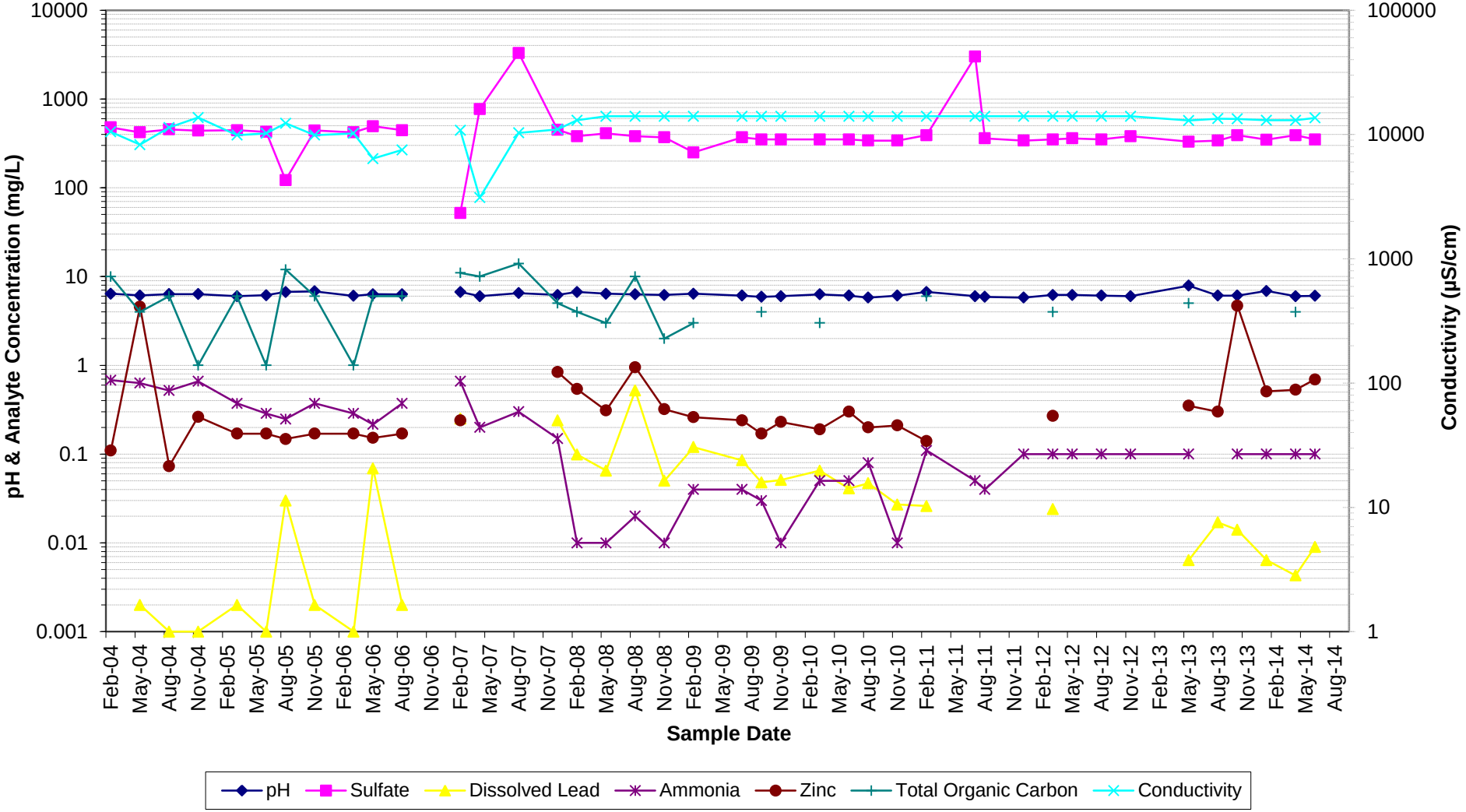


Figure 3.2.5.22 - Groundwater Trends - MW8S

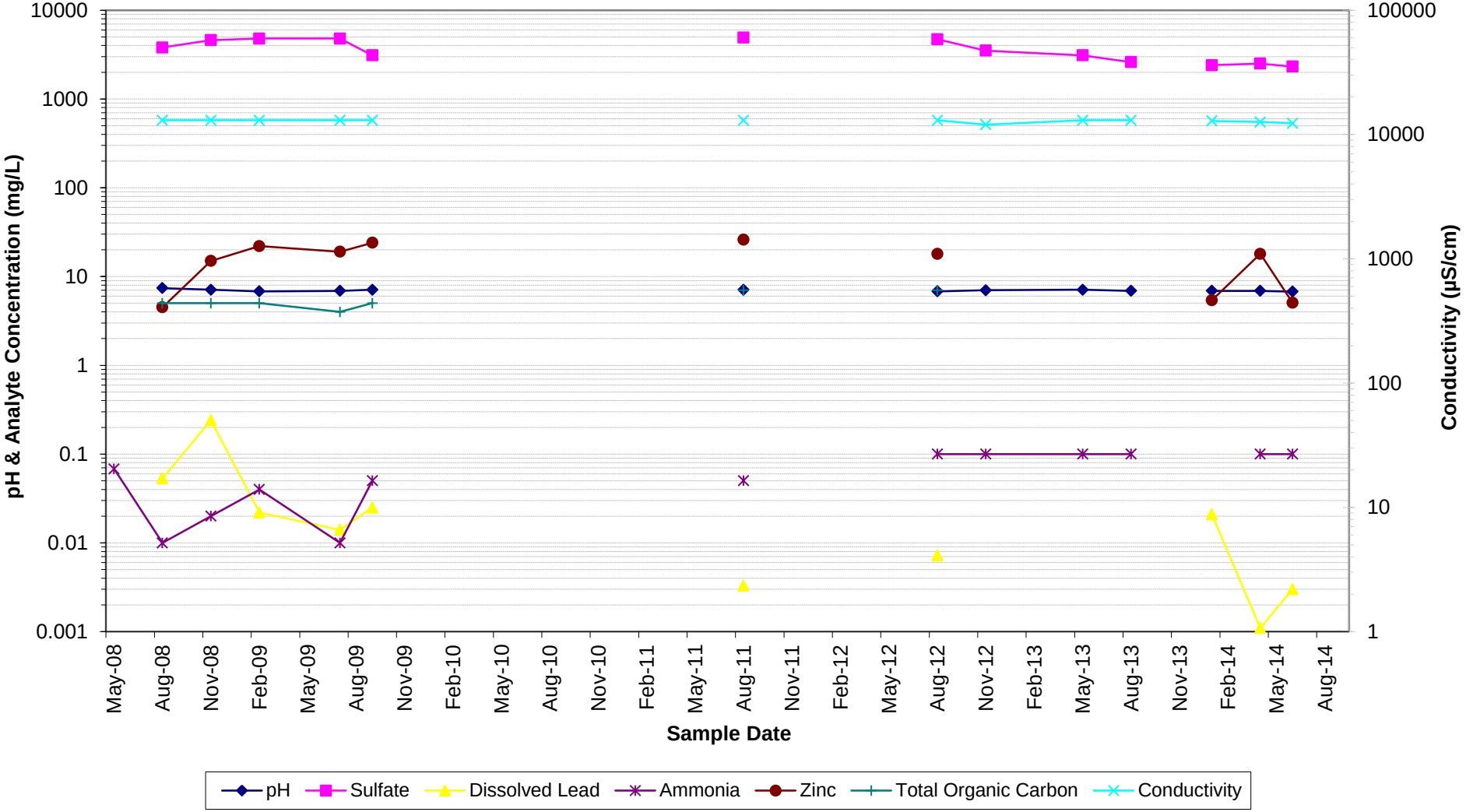


Figure 3.2.5.23 - Groundwater Trends - MW8D

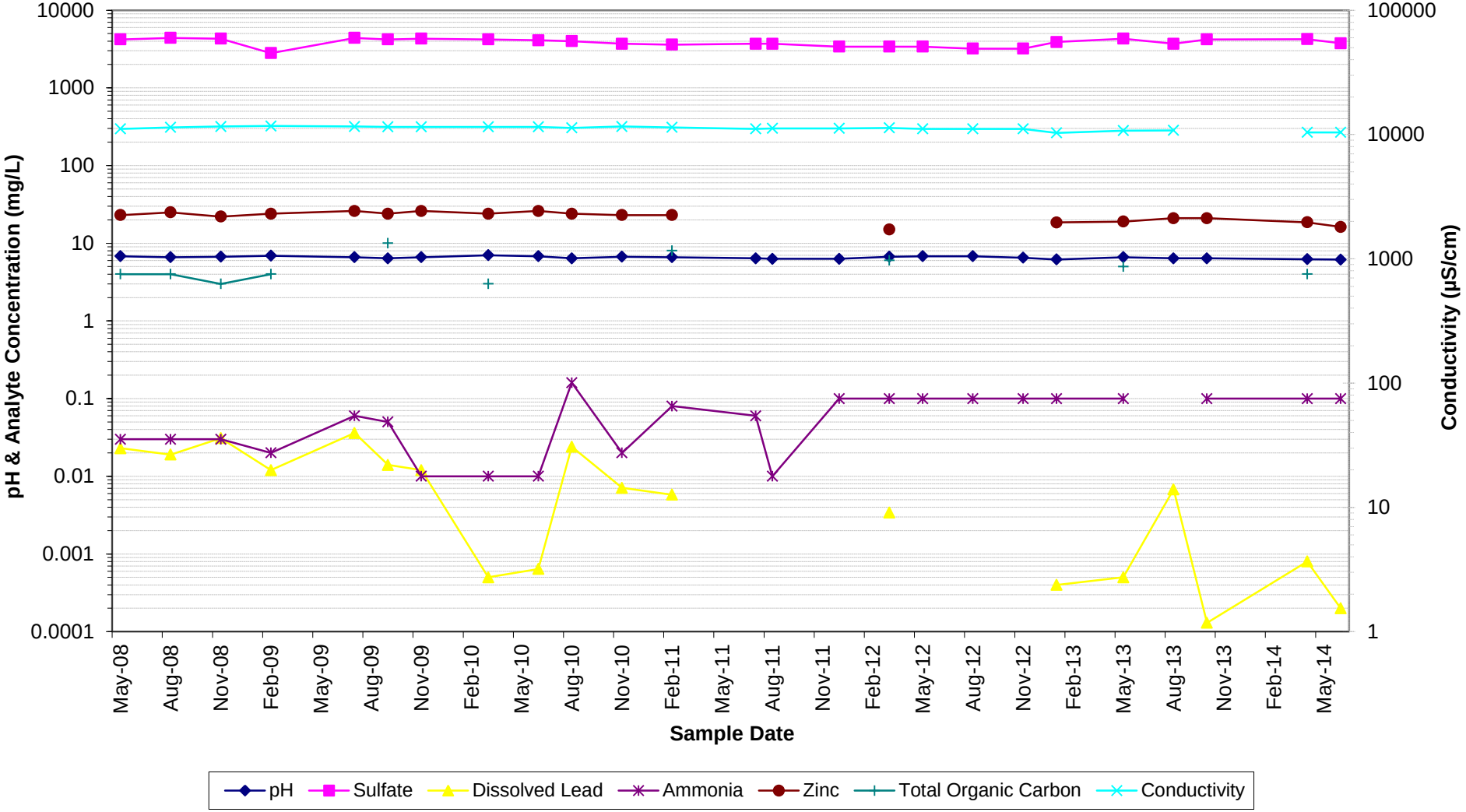


Figure 3.2.5.24 - Groundwater Trends - MW9S

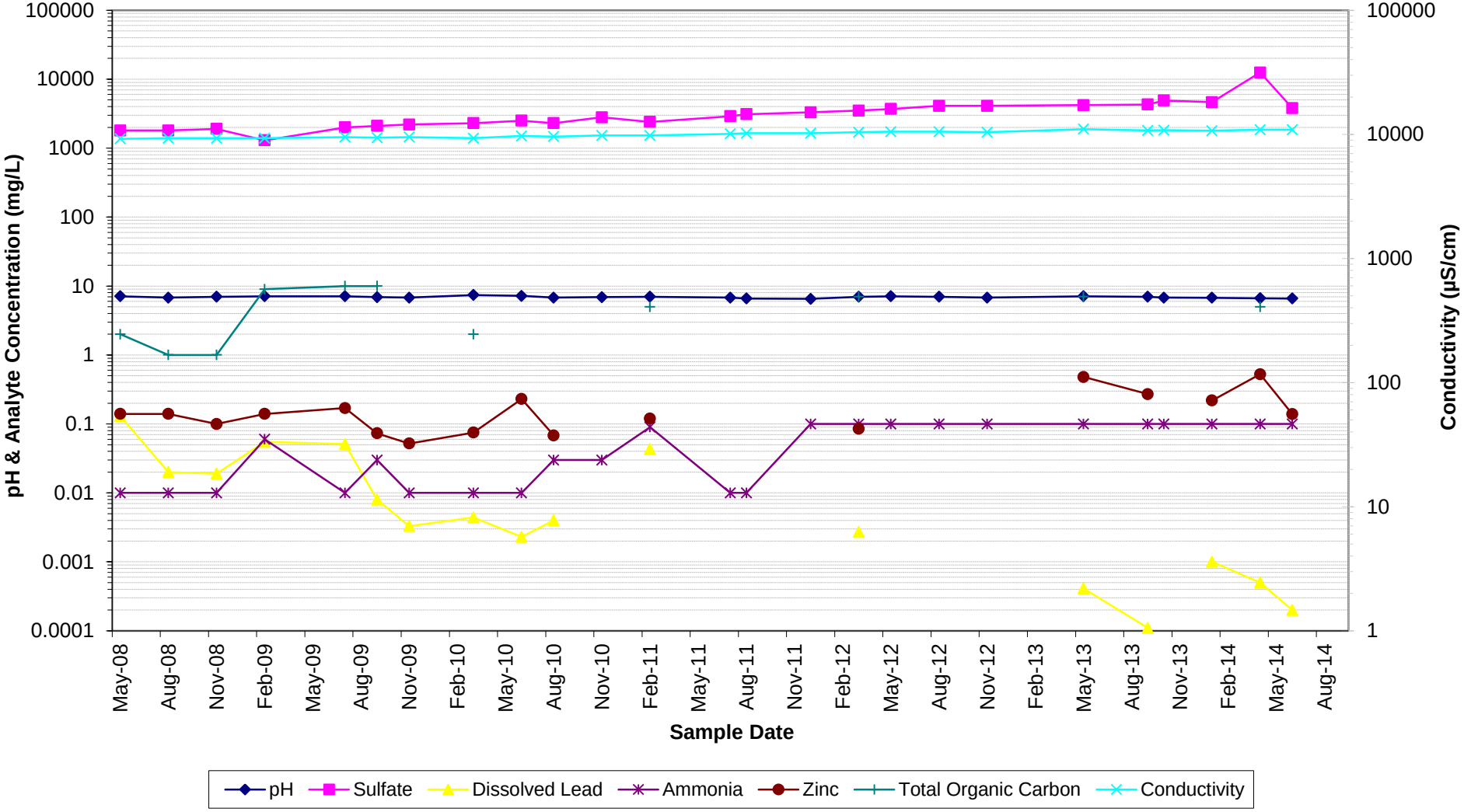


Figure 5.2.1.1 - IMF Surface Water Trends - Site 110

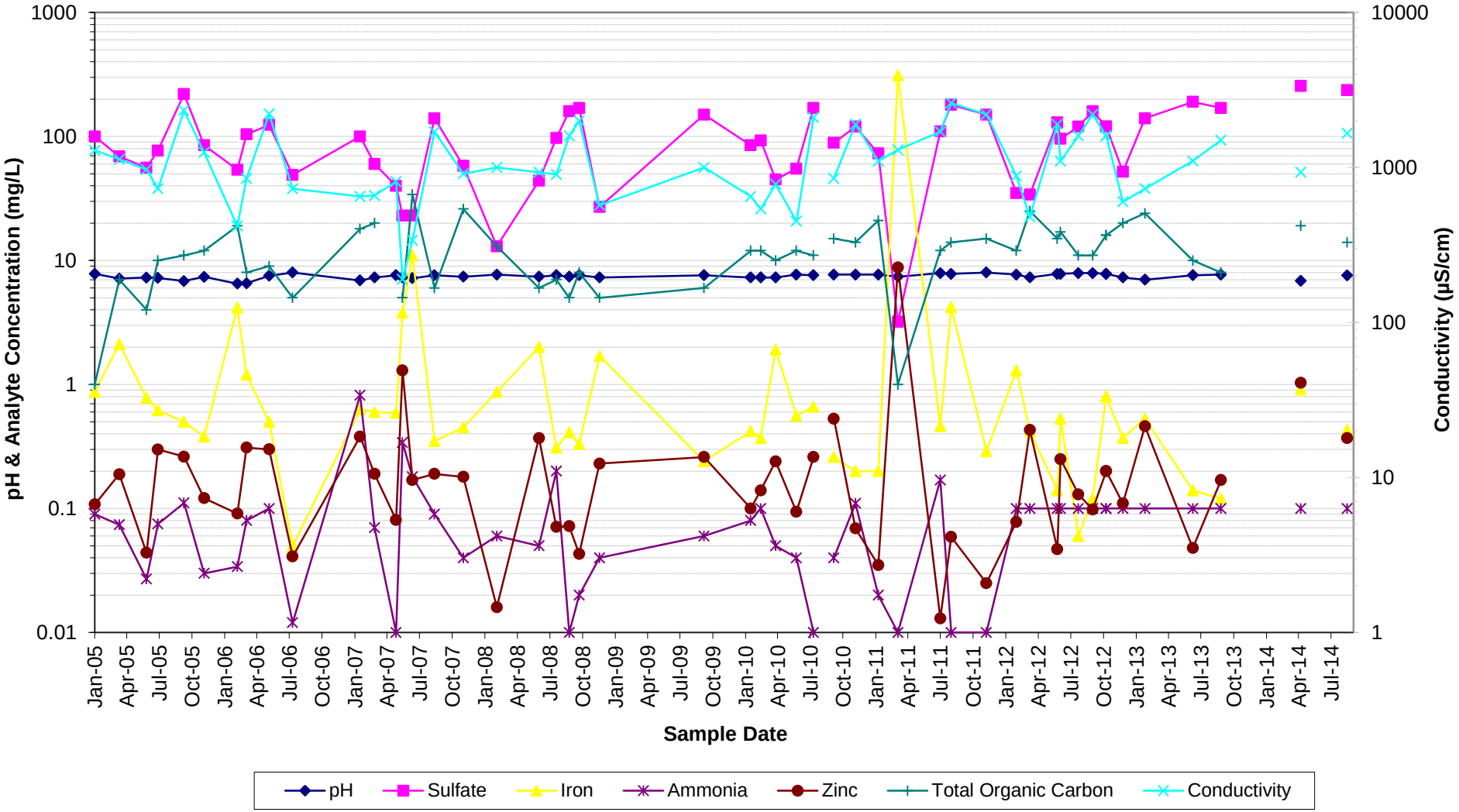


Figure 5.2.1.2 - IMF Surface Water Trends - Site 130

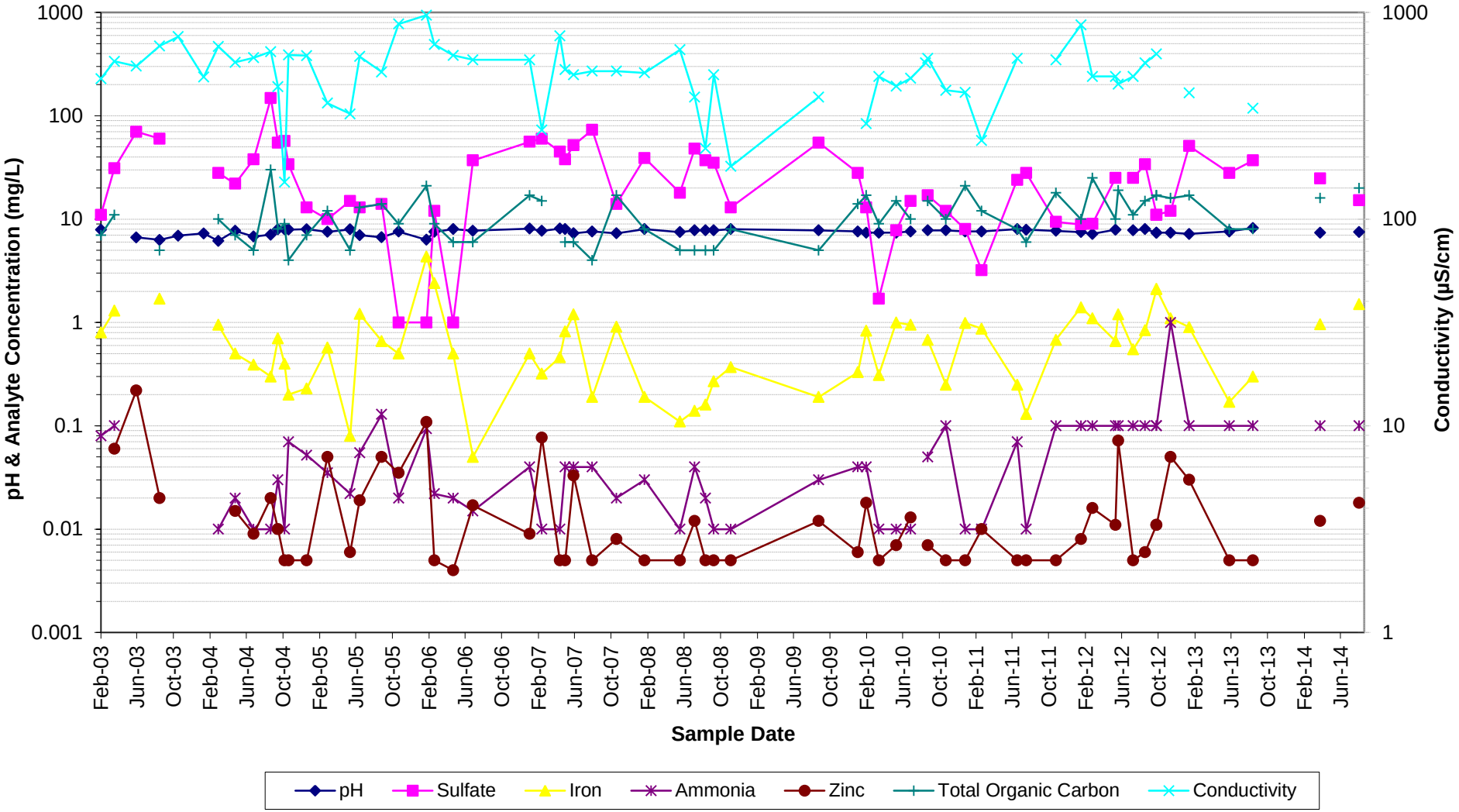


Figure 5.2.1.3 - IMF Surface Water Trends - Site 150

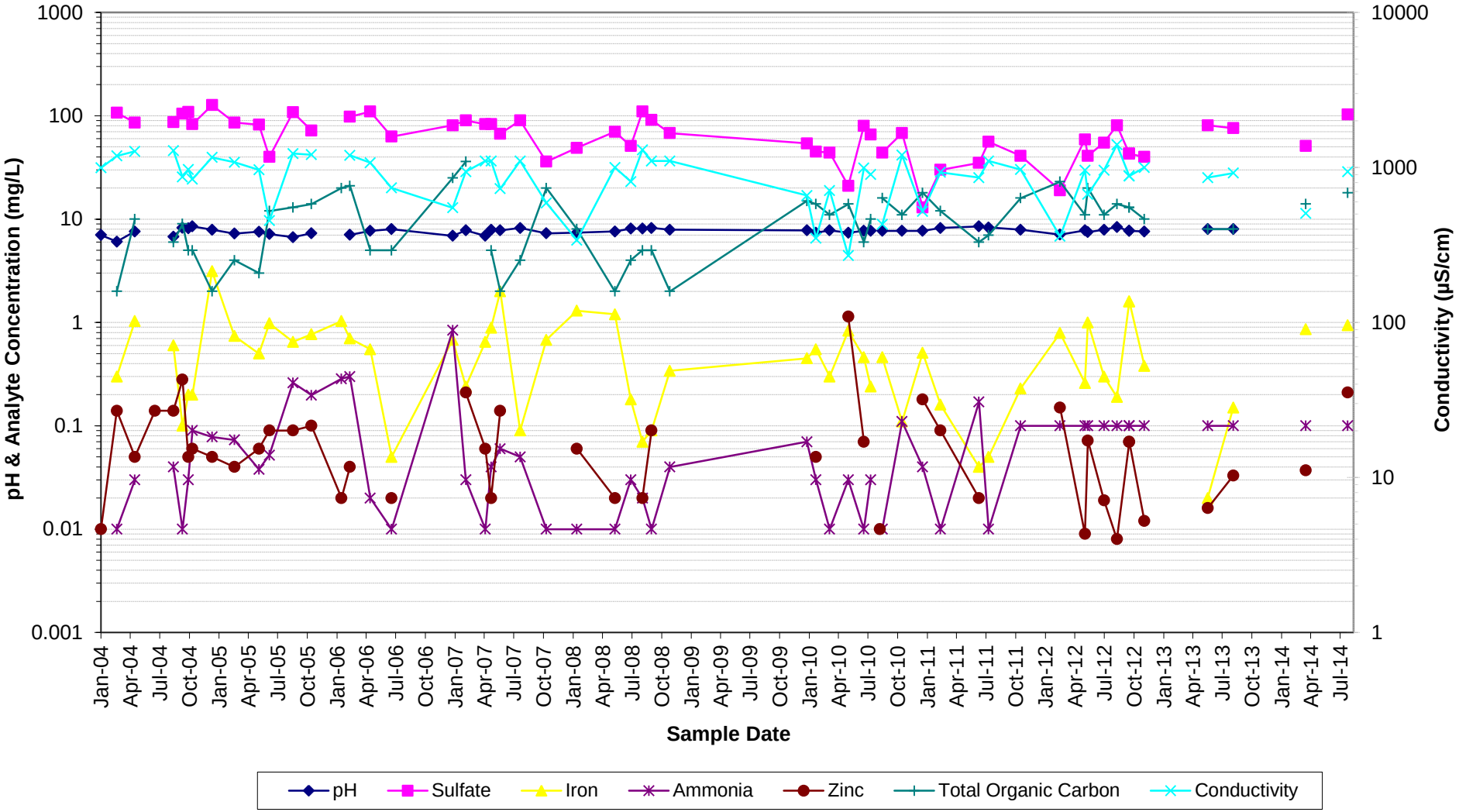
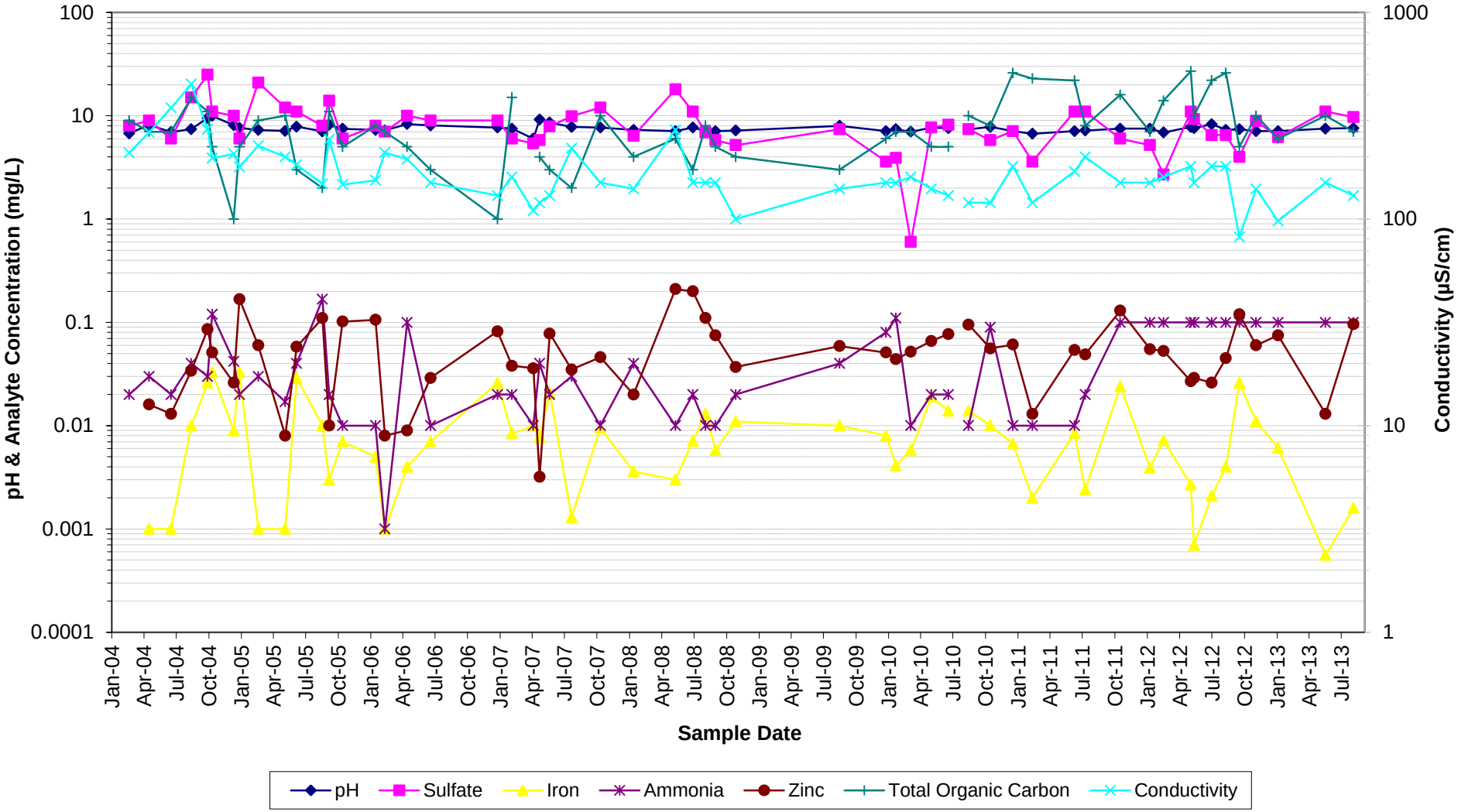


Figure 5.2.1.4 - IMF Surface Water Trends - First Flush



Appendices

Appendix 6 MB19 and MB20 Monitoring Results

Appendices

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Appendix 6 - MB19 & MB20

Table 11.1 - Groundwater Results - Monitoring Bore 19

Statistics	Field Information											Analytical Information																																									
	Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
			AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	15/10/2013	MB19	12:35	DS	6.54	6340	15.1	4.48	27.2	0.44	777.08	959800	462	0.1	462	0.1	730	6340	650	500	1.4	270	6.6	3000	6400						0.0039	0.0016			0.042																		
	14/01/2014	MB19	9:20am	DS	6.62	5810	16.4	0.74		1.31	776.21	CA1400131-008	474	0.1	474	0.1	721	5940	561	504	1.7	261	6.66	2710	5950			0.003	0.00142		0.01	0.0003			0.125																		
	10/04/2014	MB19	9:40am	TB	6.42	6040	15.8	0.89	52.1	1.4	776.12	CA1401109-001	496	0.1	496	0.1	786	6010	570	491	1.9	288	6.6	2730	3910	0.004	0.08	0.002	0.00094	0.0114	0.007	0.0015	1.38	0.0001	0.092	0.2	0.05	0.01	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	6	0.0162	0.004
	17/06/2014	MB19	10:00am	PM	6.42	6790	14.7	2.81	25.5	1.46	776.06	CA1401825-001	597	0.1	597	0.1	1000	6530	674	532	1.6	297	6.58	2300	6090			0.003			0.002	0.002			0.04																		

Table 11.2 - Groundwater Results - Monitoring Bore 20

Statistics	Field Information											Analytical Information																																									
	Date	Site Code	Time	Sampler	pH	Conductivity	Temperature	Dissolved Oxygen	Oxidation-Reduction Potential	Depth to Water	RL Water Level	Laboratory Sample Code	Bicarbonate	Carbonate	Alkalinity (as CaCO3)	Nitrogen (ammonia)	Chloride	Conductivity	Dissolved Calcium	Dissolved Magnesium	Dissolved Potassium	Dissolved Sodium	pH	Sulphate	Total Dissolved Solids	Chromium (Hex)	Dissolved Aluminium	Dissolved Arsenic	Dissolved Cadmium	Dissolved Cobalt	Dissolved Copper	Dissolved Lead	Dissolved Manganese	Dissolved Mercury	Dissolved Zinc	Fluoride	Nitrate	Nitrite	Organo-chlorine pesticides	Organo-phosphate pesticides	Polycyclic Aromatic Hydrocarbons	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	Benzene	Toluene	Ethyl Benzene	Xylene	Total Phenols	Total Organic Carbon	Total Barium	Total Chromium
			AM/PM	Initials	pH	µS/cm	°C	mg/L	mV	m	m RL		mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
	15/10/2013	MB20	12:25pm	DS	6.57	5110	15	1.23	25.3	1.05	776.97	959802	335	0.1	335	0.1	440	5110	560	400	1.1	210	6.8	2600	5300						0.0044	0.0029			0.034																		
	14/01/2014	MB20	9:25am	DS	6.59	4480	16.3	1.32		1.77	776.25	CA1400131-007	276	0.1	276	0.1	341	4480	519	339	0.9	152	6.79	2410	4570			0.002	0.00151		0.01	0.0026			0.113																		
	10/04/2014	MB20	9:50am	TB	6.7	4050	14.9	0.81	36.4	1.88	776.14	CA1401109-002	307	0.1	307	0.1	434	4750	523	372	1	178	6.65	2540	3090	0.01	0.08	0.002	0.00127	0.0029	0.007	0.0043	0.106	0.0001	0.08	0.66	0.01	0.2	0.002	0.002	1	20	50	100	50	1	2	2	2	0.05	5	0.0098	0.001
	17/06/2014	MB20	9:30am	PM	6.47	5760	14.3	3.87	5.76	1.19	776.83	CA1401825-002	406	0.1	406	0.1	612	5540	632	452	1.1	229	6.65	2730	5400			0.002			0.005	0.0037			0.062																		