1 Monitoring Data

1.1 Monitoring Equipment

Noise	One noise monitoring location currently being used- AN2. The sound meter records in the 1/3 octave band.
Weather Station	The data used for this reporting period was taken from the Terminal Site meteorological station.
TSS	There are TSS meters on the each of discharges on the Siltbuster.
Sondes	The results are displayed graphically.
Discharge pipe flow	The results are displayed graphically.

1.2 Rainfall Data

Date	Rainfall mm
15/09/2011	1.0
16/09/2011	8.2
17/09/2011	9.0
18/09/2011	1.2
19/09/2011	12.6
20/09/2011	0.4
21/09/2011	3.8
Total	36.2

1.3 Summary

Environment	Comments
Weather	There was a total of 36.2mm of rainfall during the reporting period, with a temperature range of 9.1ºC to 17.4ºC.
Noise	Noise levels were within permitted ranges.
Surface Water	Where there are gaps in the data on the surface water graphs, this is due to there being no discharge from the water treatment unit during that time. The surface water discharge from the siltbuster had elevated pH values during the reporting period.

2 Environmental Exceedances / Incidents /

Date and Time	September 15th
Location	Silt Buster Discharge
Nature of Incident	Continued elevated pH of surface water from the silt buster treatment unitsover the target limits.
Actions Taken	• Automatic dosing system has been adjusted down 1/0.5 of a pH unit • New dosing pumps have been ordered. • Continue to monitor pH of the surface water from the plant.
Category	Environmental Exceedance
Status	Open

Day Time Noise Monitoring Record Sheet

Determinant Results

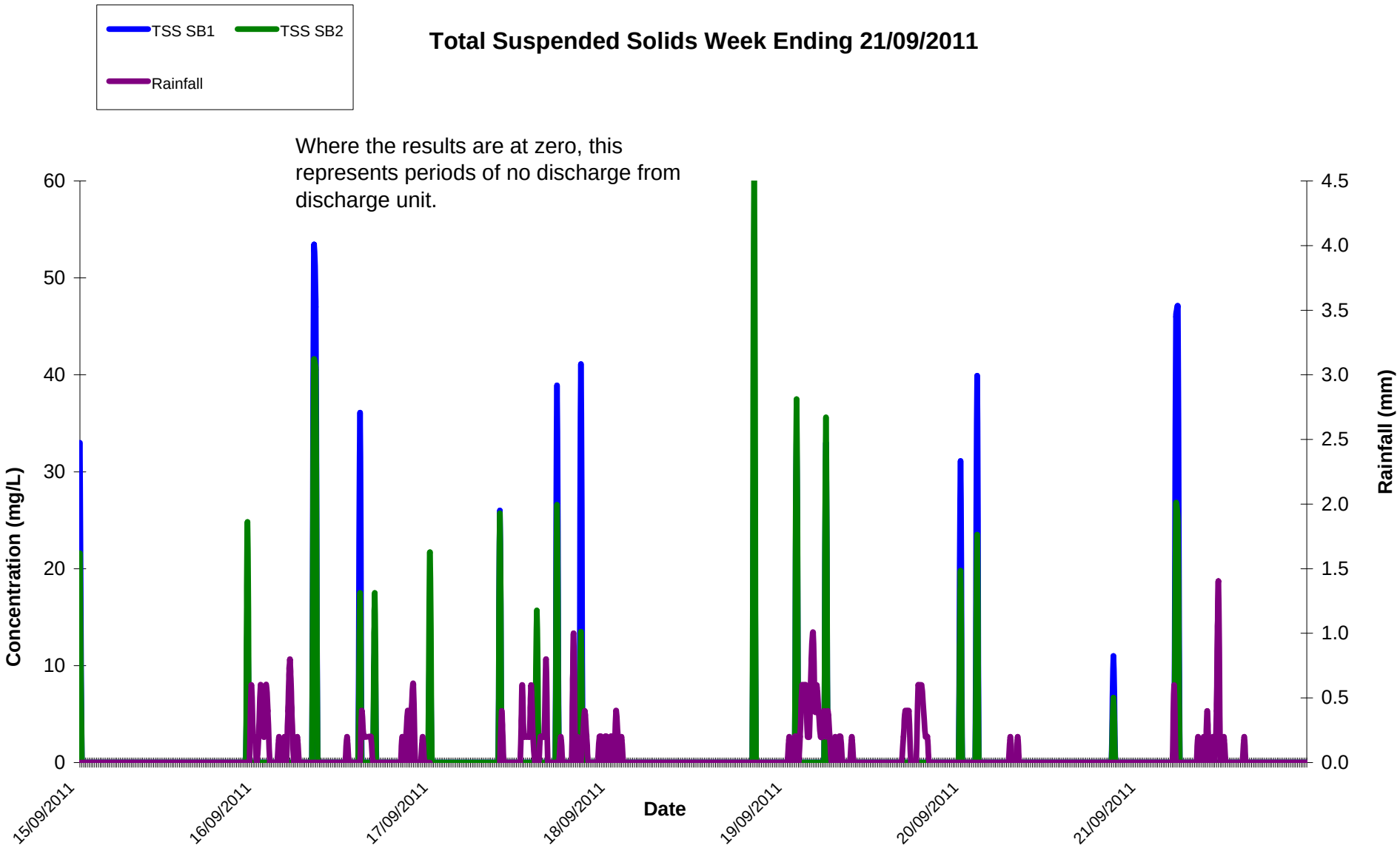
Location	Air Temp. (Min)	Air Temp. (Max)	Start Date and Time	**Duration**	**Wind**		**Results dB**			*Comments
					Speed (m/s)*	Direction (Degrees)	L_{Aeq}	L_{Amax}	L_{Amin}	
Action Limit							**60.0**			
Target Limit							**65.0**			
AN2	10.0	17.4	15/09/2011 08:00	01:00	4.6	143.8	65.4	87.0	32.6	
AN2	11.0	15.0	16/09/2011 12:00	01:00	4.0	184.0	60.6	87.9	35.4	
AN2	9.9	12.8	17/09/2011	01:00	5.2	294.8				No data due to equipment fault
AN2	10.4	15.0	19/09/2011	01:00	3.8	233.8				No data due to equipment fault
AN2	9.1	14.0	20/09/2011 18:00	01:00	4.7	237.9	63.7	87.7	38.8	
AN2	9.3	14.2	21/09/2011 17:00	01:00	7.0	250.0	64.1	85.5	43.0	

* Wind speeds in excess of 5 m/s negatively impact noise readings (as per EPA Guidance Note on Noise Measurement).

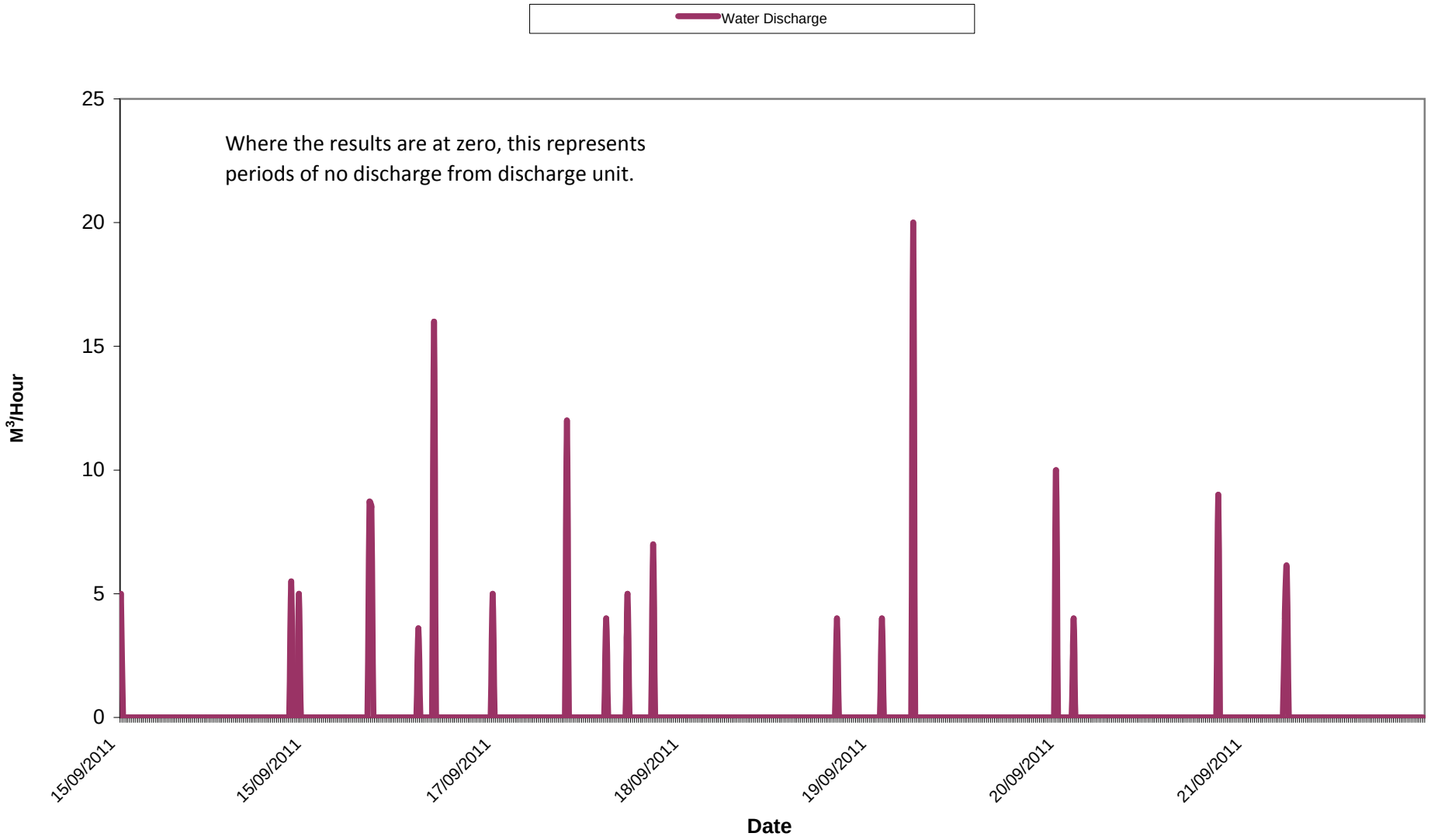
**Allowance of +/- 1.5dB accuracy of sound level meter (ref: IEC 61672 (2002-2005)

The results show the maximum Laeq(1hr) for each day of monitoring

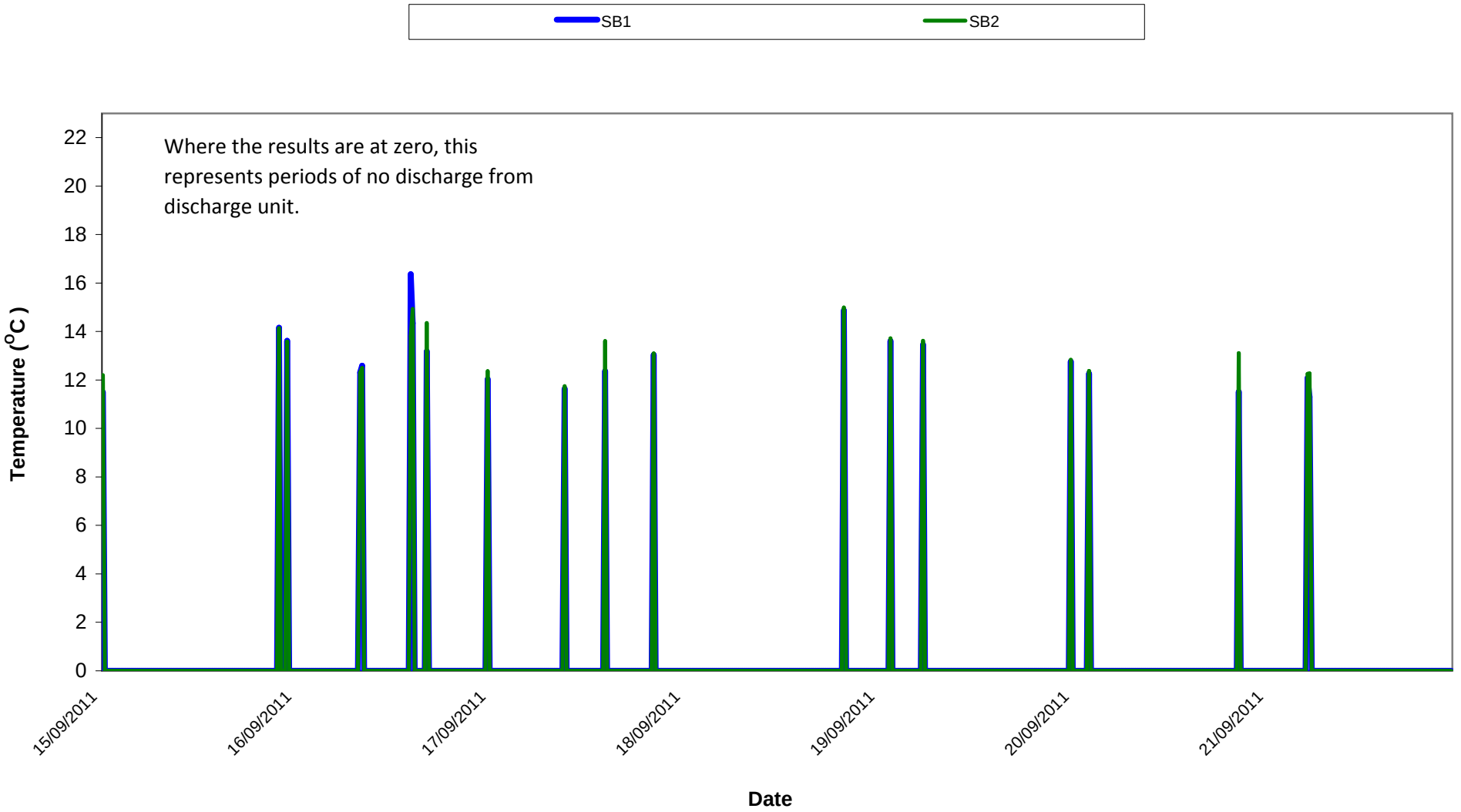
Total Suspended Solids Week Ending 21/09/2011



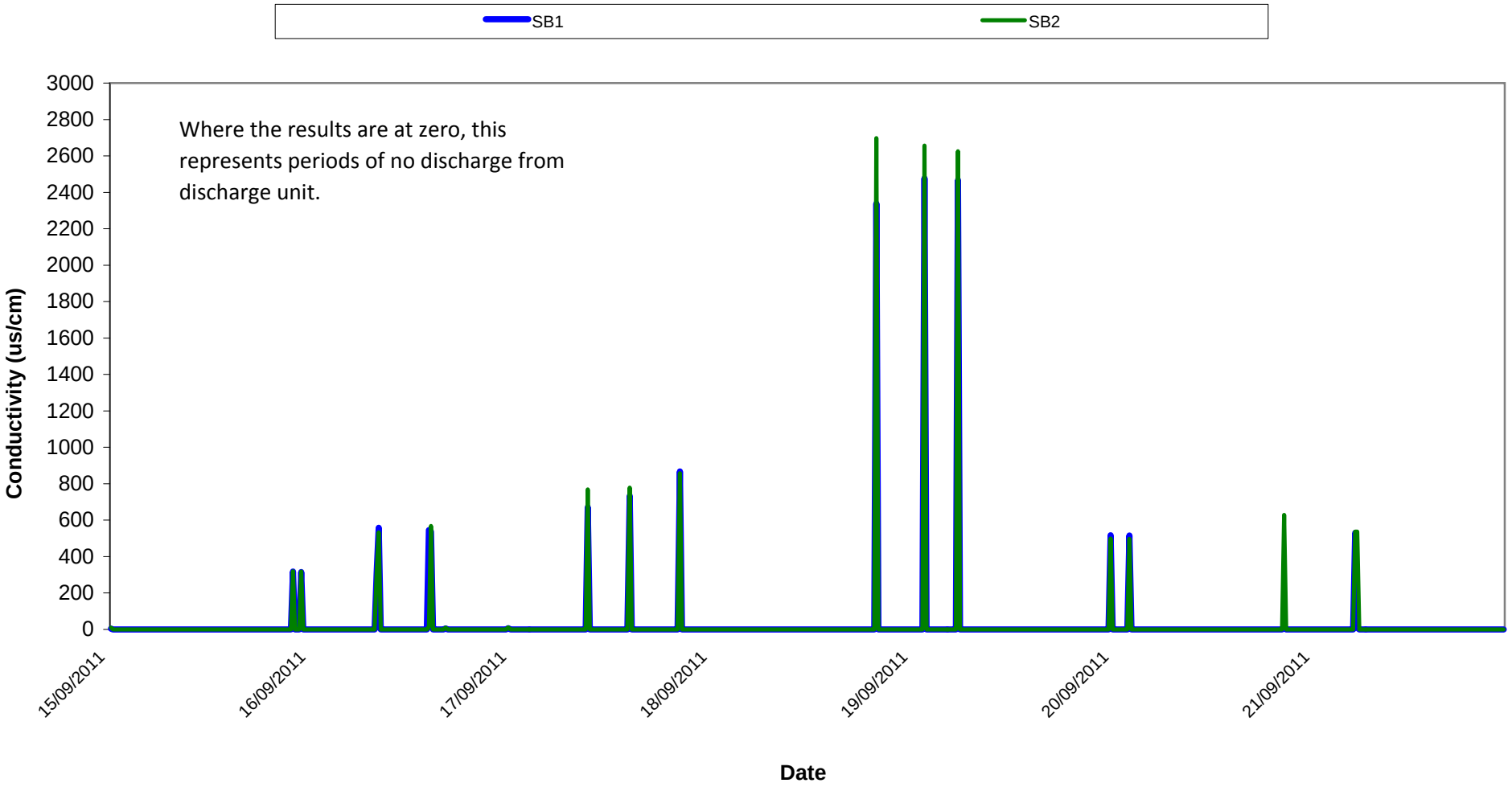
Surface Water Discharge
Weir Flow for Week Ending 21/09/2011



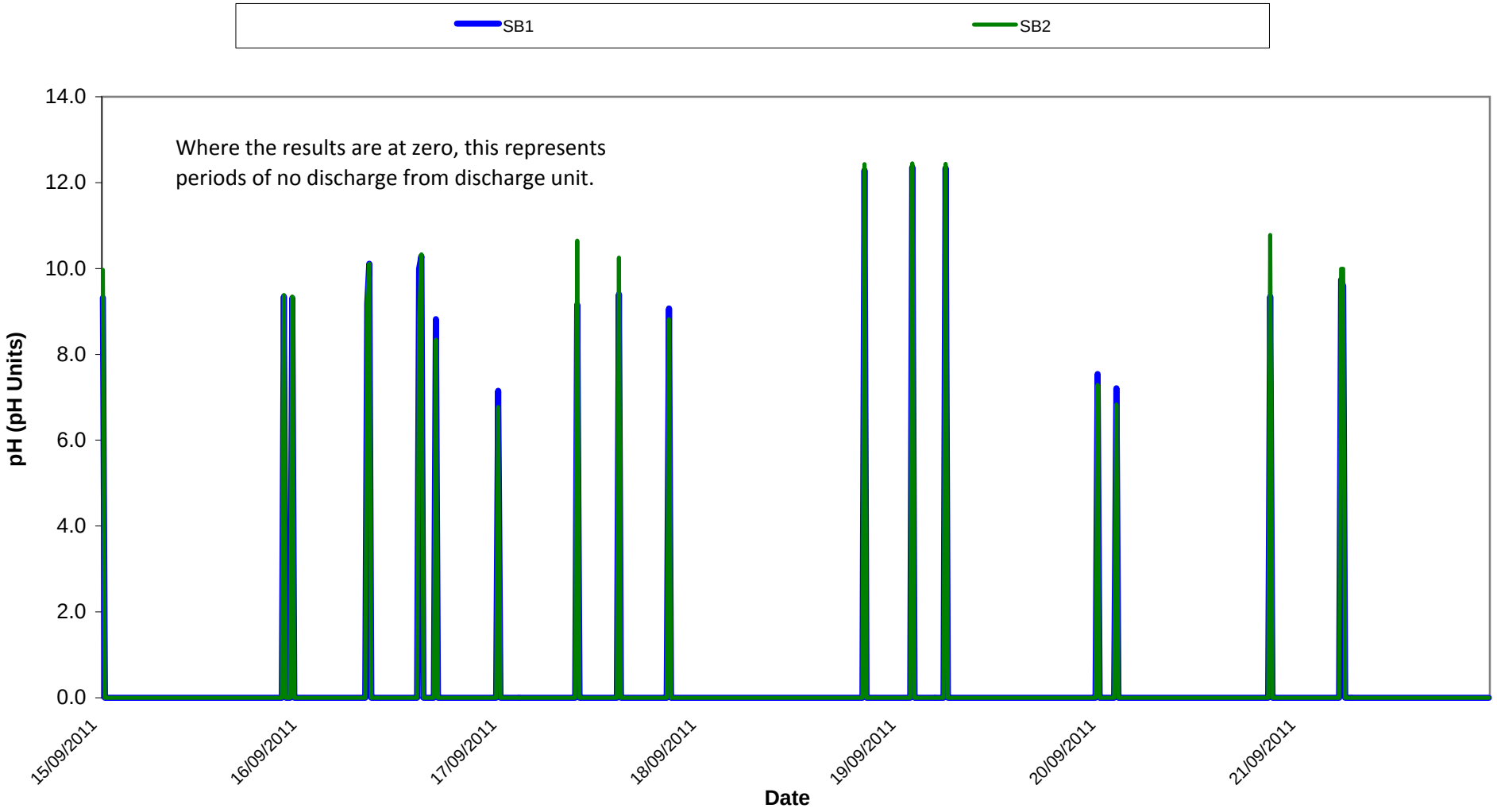
Temperature - Surface Waters Discharge
Week ending 21/09/2011



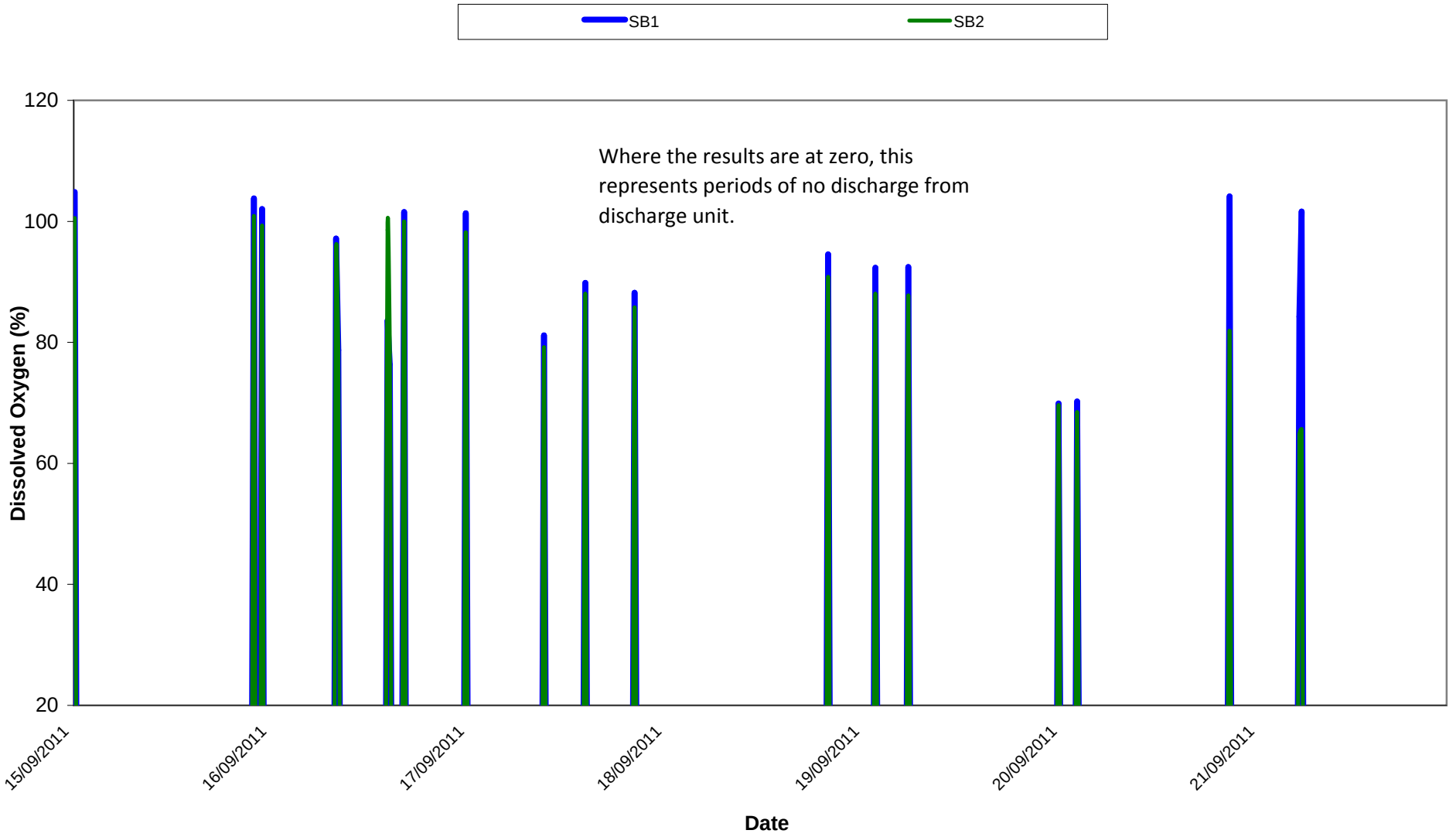
Conductivity - Surface Waters Discharge Week ending 21/09/2011



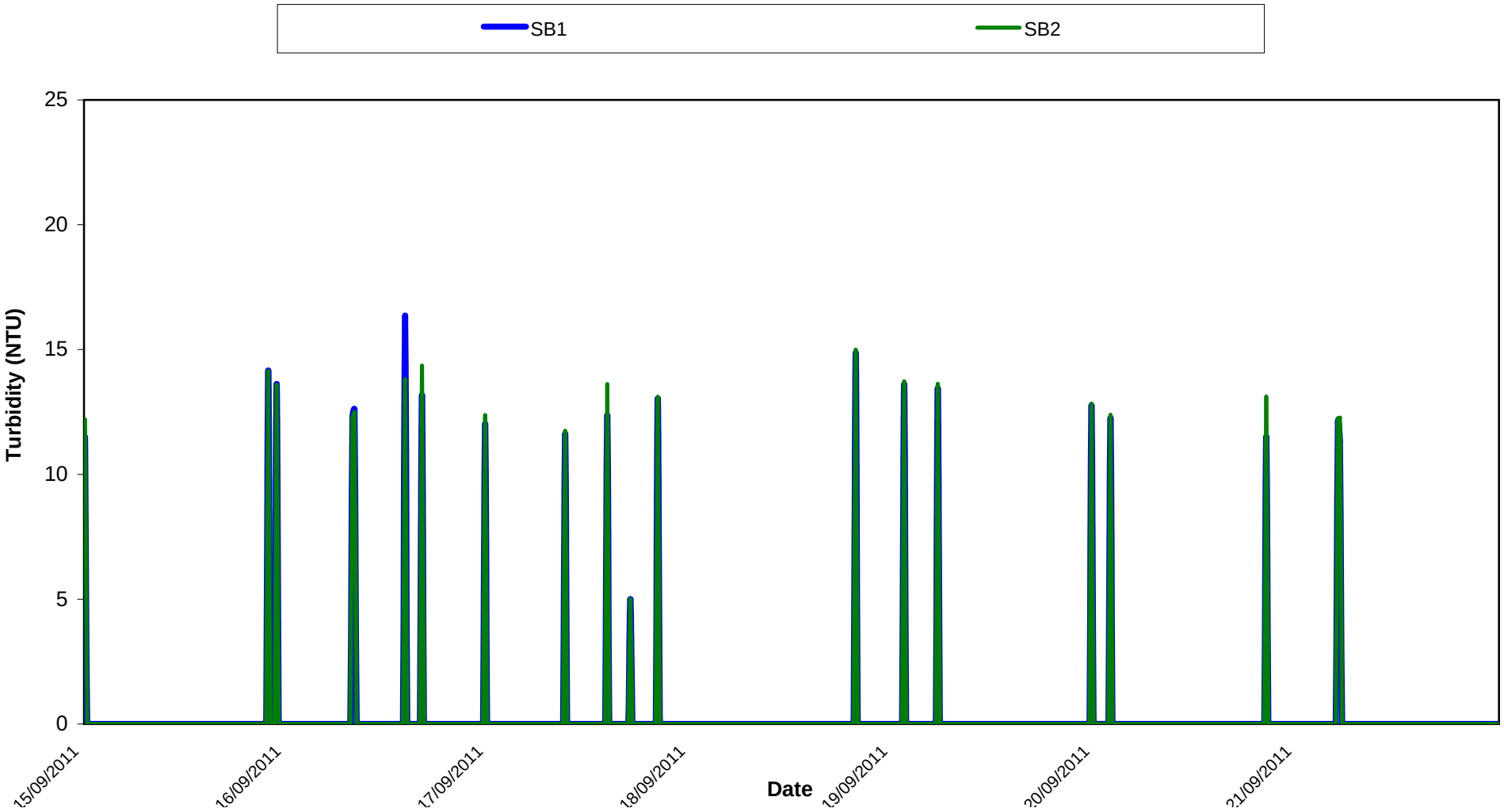
pH - Surface Waters Discharge
Week Ending 21/09/2011



Dissolved Oxygen - Surface Waters Discharge
Week Ending 21/09/2011



Turbidity - Surface Water Discharge
Week ending 21/09/2011



Appendix 1

Appendix 1: Surface Water Monitoring Record Sheet- Onsite Monitoring

Location	Date	Temp	DO	Cond.	Turbidity	pH	TDS
		C	% Sat	µS/cm	NTU	pH Units	
DL2	15/9/2011	14.2	97.0	213.0	2.6	5.8	123.0
DL2	16/9/2011	14.5	91.7	199.9	2.9	6.5	114.0
DL2	19/9/2011	16.7	90.2	187.6	9.3	8.2	117.0
DL2	20/9/2011	13.4	87.5	199.2	5.3	5.9	128.0
DL2	21/9/2011	12.9	73.3	200.0	8.5	6.1	129.0

Grey shaded areas denote parameters that cannot or were not analysed on-site.
= Indicative Only
< LOD = Below Limit of Detection > LOD = Above Limit of Detection