

1 Monitoring Data

1.1 Monitoring Equipment

Noise	Two noise monitoring locations are currently being used – AN1 and Noise Sensitive Receptor (NSR). 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
13/10/11	0.4
14/10/11	5.2
15/10/11	5.8
16/10/11	6.4
17/10/11	22.6
18/10/11	6.8
19/10/11	3.6
Total	50.8

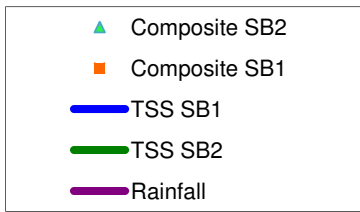
1.3 Summary

Environment	Comments
Weather	There was a total of 50.8mm of rainfall during the reporting period, with a temperature range of 3.7°C to 16.5°C. Temperature values were taken from Met Eireann Belmullet weather station on 13 th and 14 th October as data from the Terminal weather station was lost due to technical error.
Noise	There were no noise level exceedences during the reporting period.
Surface Water	There was no discharge of surface water through the siltbuster between the 14 th and 16 th of October. A technical error occurred in the SB1 sonde which resulted in a loss of data. This error has since been rectified.

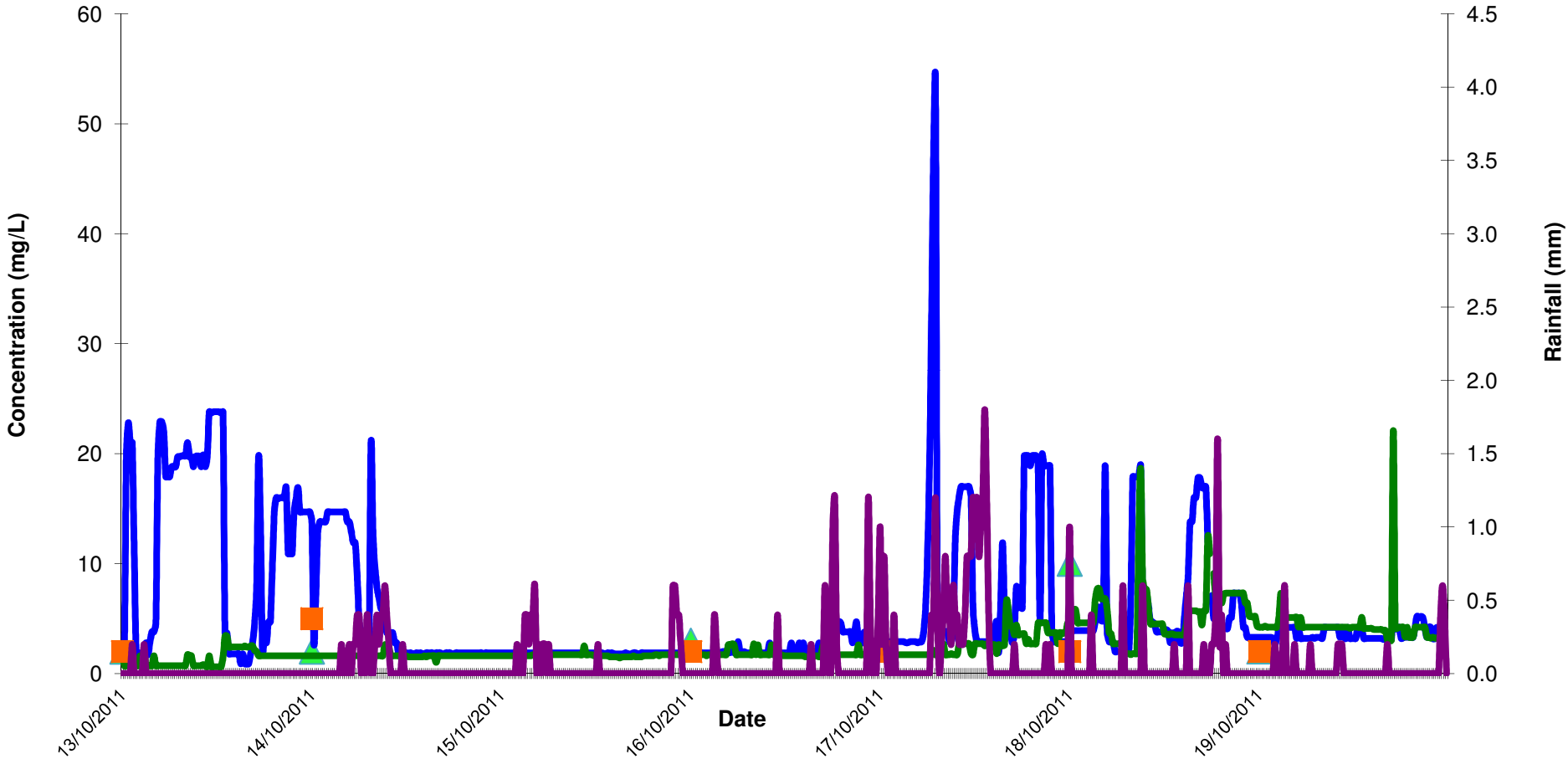
2 Environmental Exceedances / Incidents /

There were no environmental exceedences identified during the reporting period.

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				
AN1	12.0	16.3	13/10/2011 15:00	1:00	2.1	172.9	54.5	76.1	36.1		
AN1	13.5	16.5	14/10/2011	1:00	3.0	178.1				Loss of data due to equipment maintenance	
AN1	3.7	10.9	17/10/2011 15:00	1:00	4.8	272.3	64.2	85.3	50.6		
AN1	5.0	10.9	18/10/2011 15:00	1:00	6.3	306.7	61.1	86.1	47.8		
AN1	5.1	10.5	19/10/2011 16:00	1:00	4.6	325.8	59.6	78.5	45.8		
NSR	12.0	16.3	13/10/2011 11:00	1:00	2.1	172.9	54.5	76.1	36.1		
NSR	13.5	16.5	14/10/2011	1:00	3.0	178.1				Installation of permanent noise monitoring equipment	
NSR	3.7	10.9	17/10/2011 17:00	1:00	4.8	272.3	58.4	82.4	33.6		
NSR	5.0	10.9	18/10/2011 13:00	1:00	6.3	306.7	61.7	82.1	37.1		
NSR	5.1	10.5	19/10/2011 08:00	1:00	4.6	325.8	57.1	76.6	33.6		
* 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											
NSR: Nearest Sensitive Receptor											

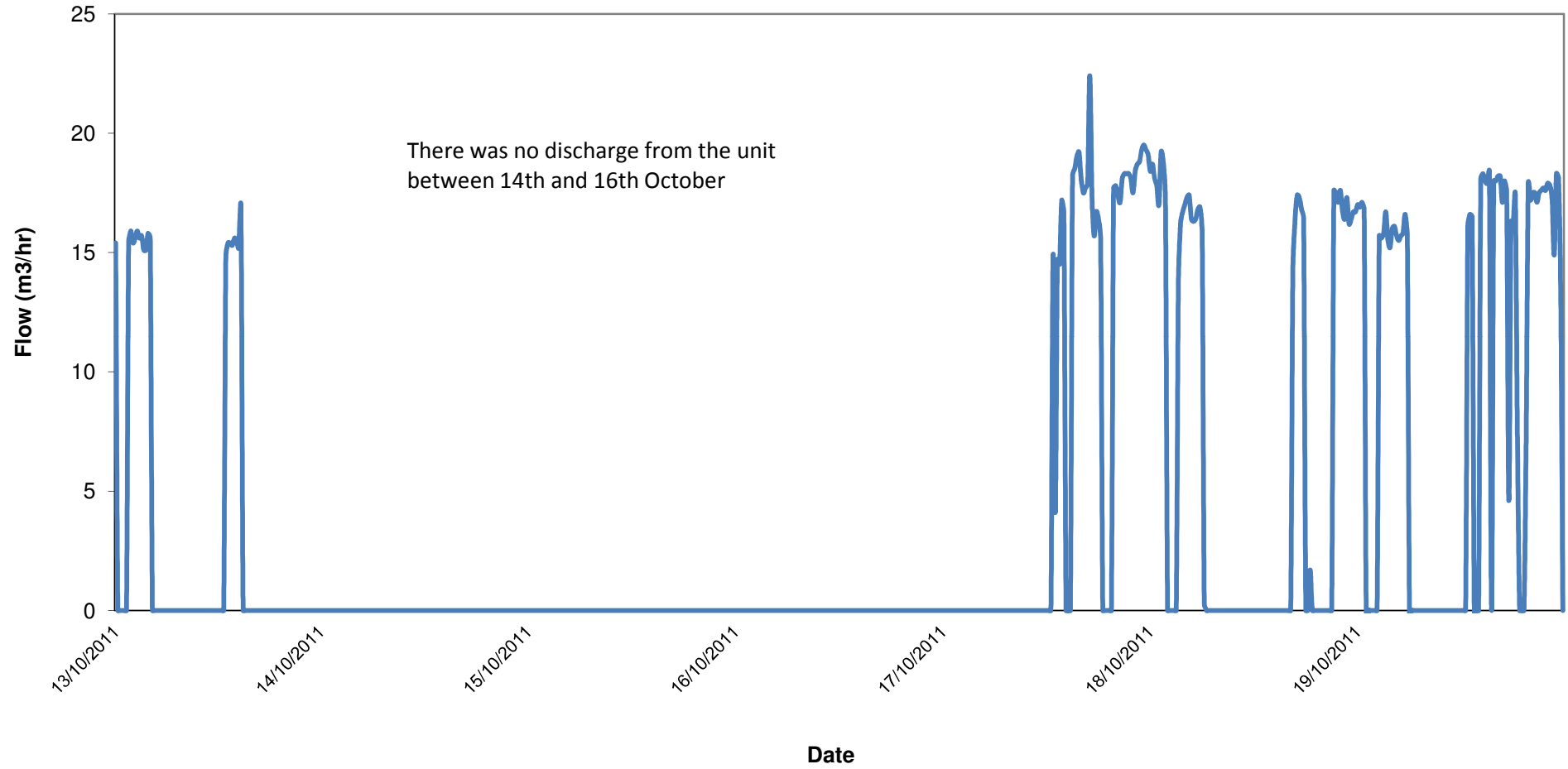


Total Suspended Solids Week Ending 19/10/2011

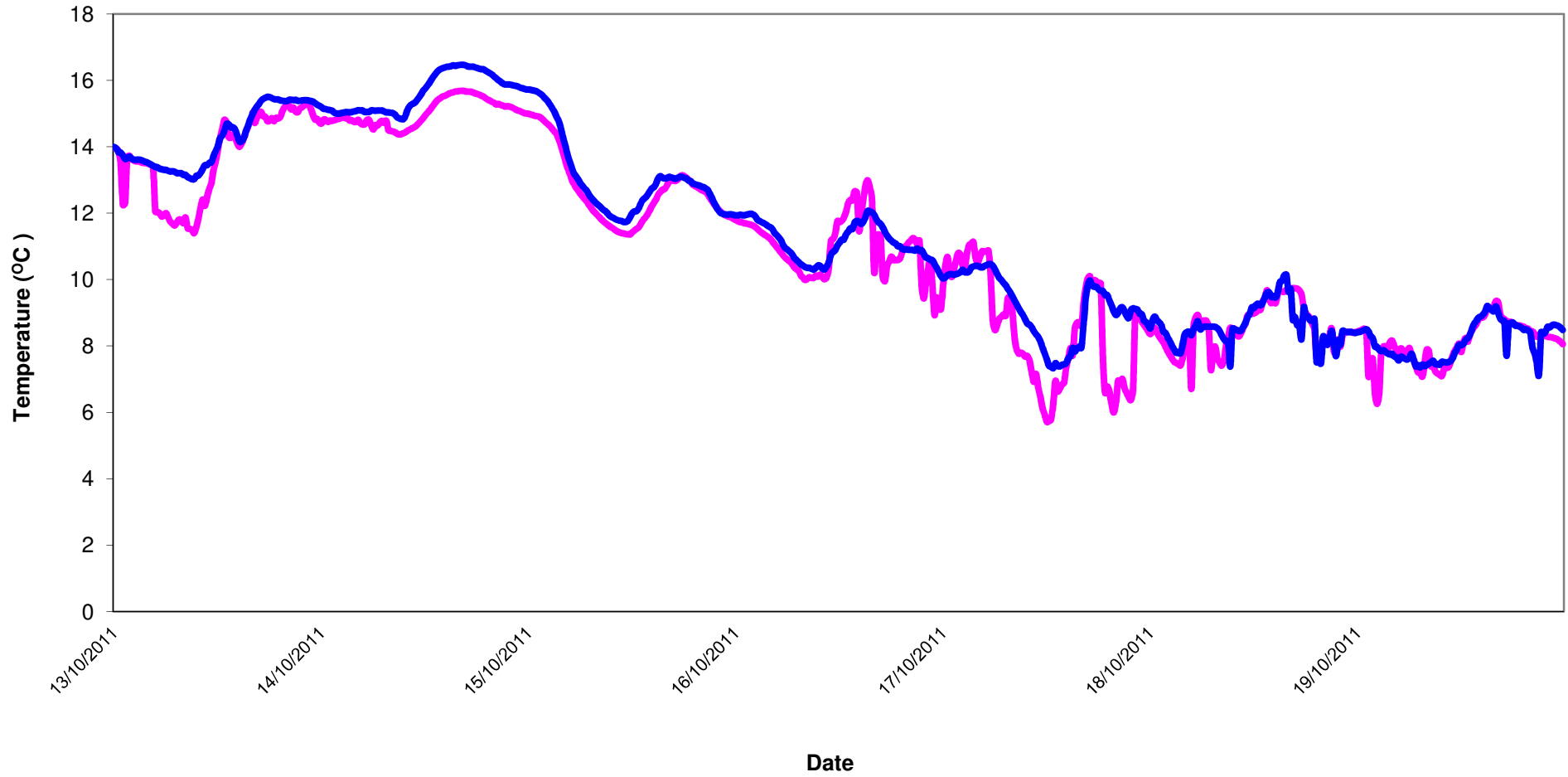


Flow - Surface Waters Discharge Week ending 19/10/2011

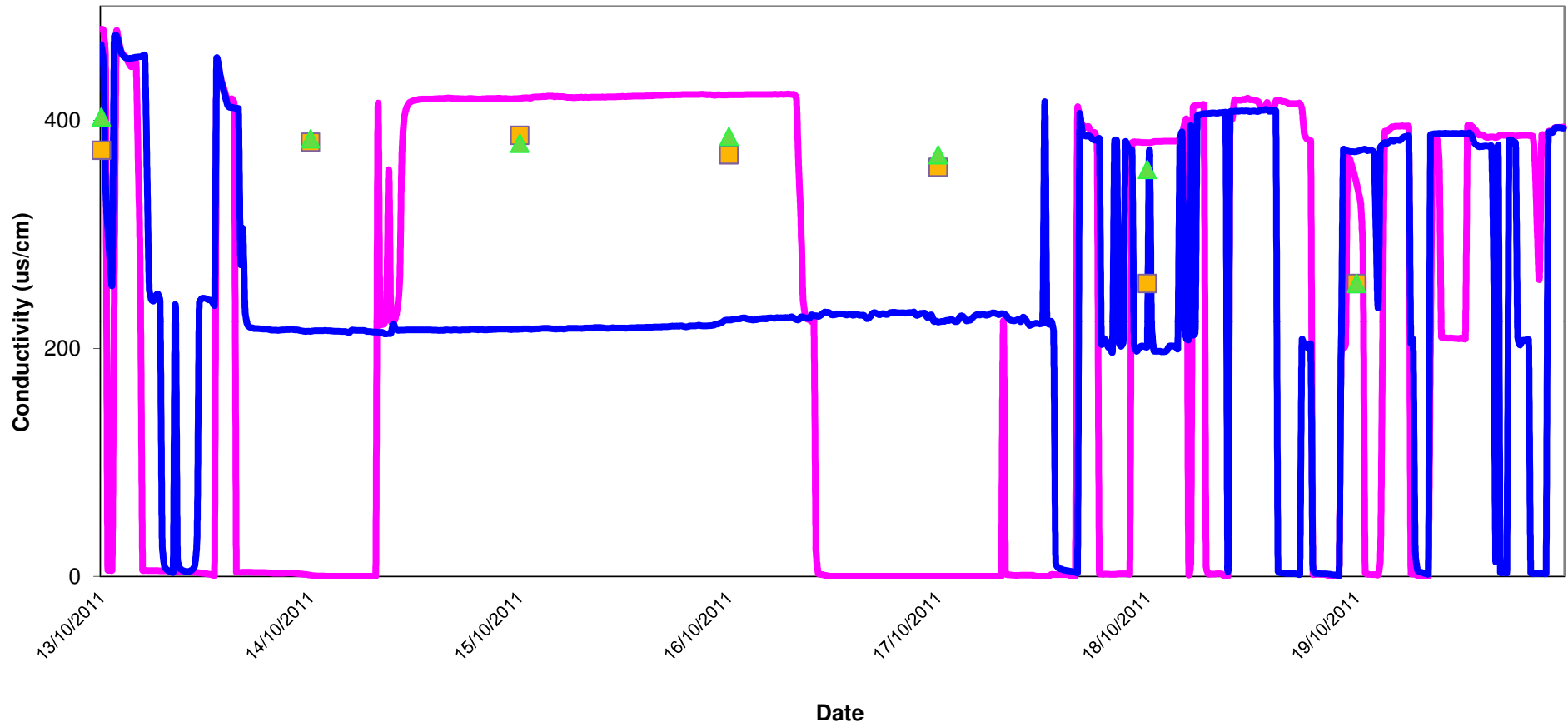
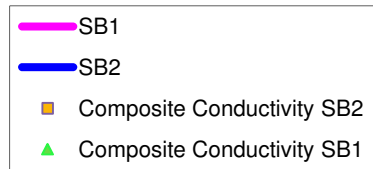
— Discharge



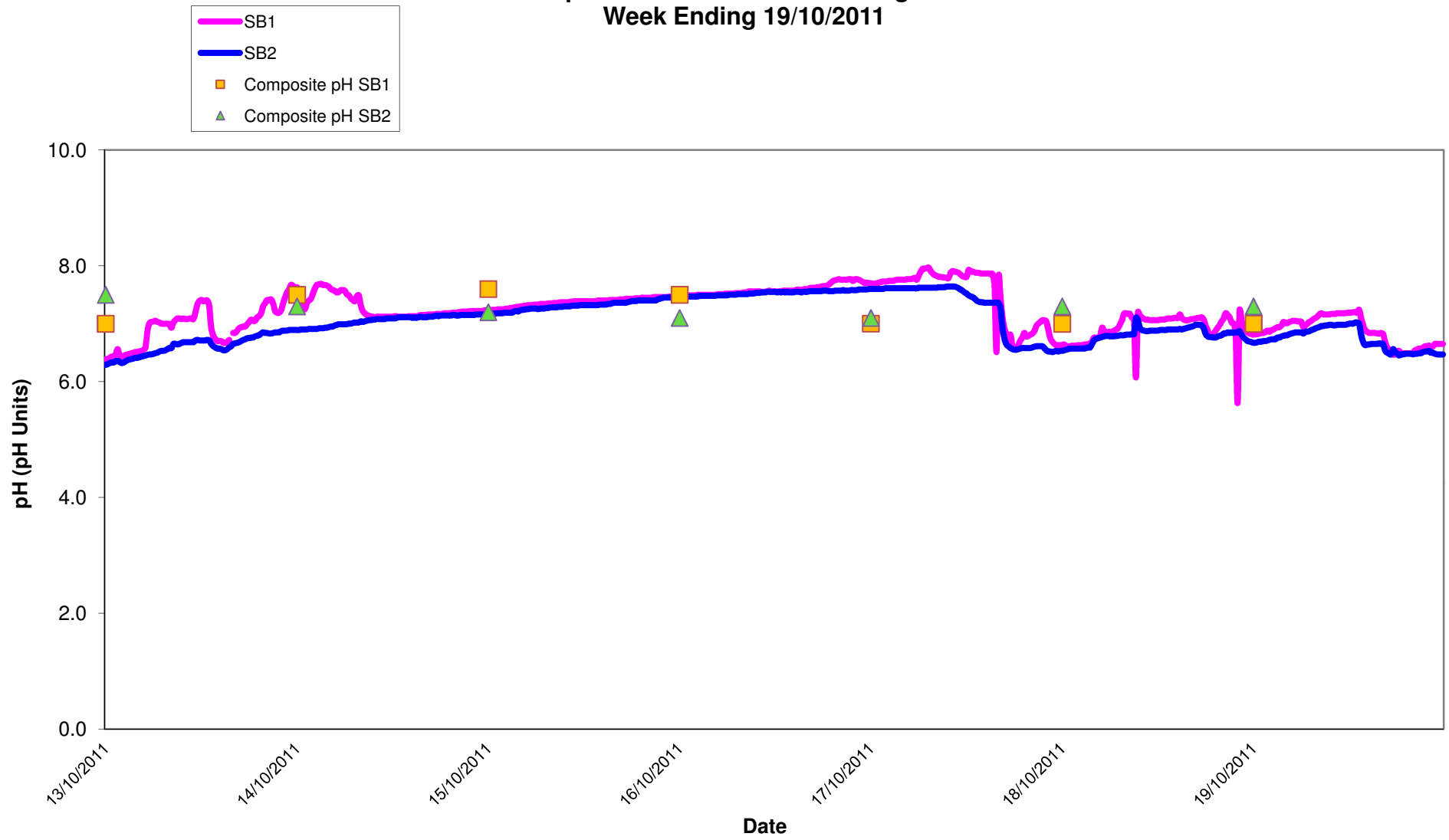
Temperature - Surface Waters Discharge
Week ending 19/10/2011



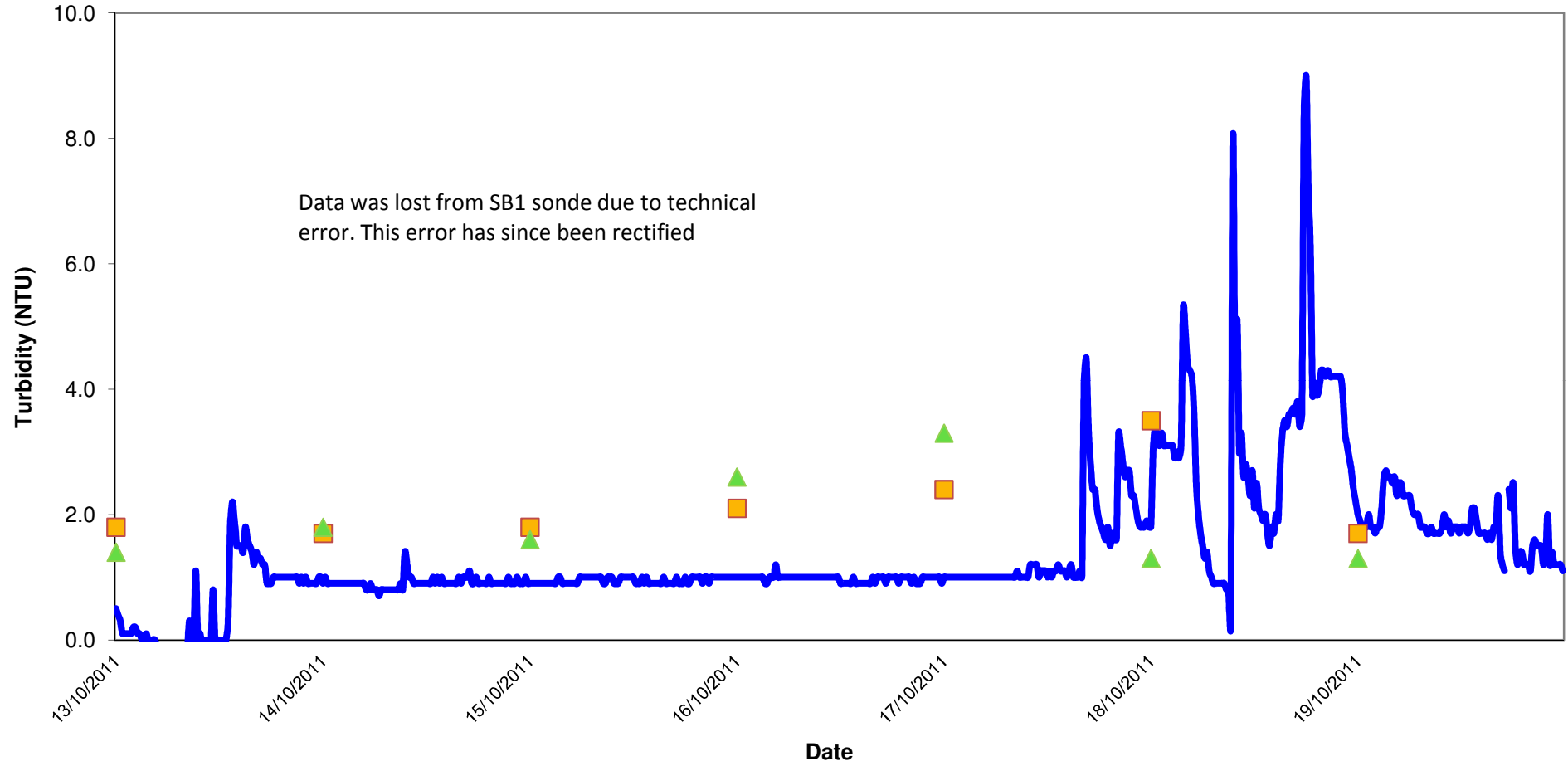
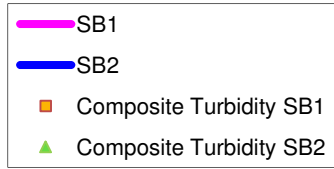
Conductivity - Surface Waters Discharge Week ending 19/10/2011



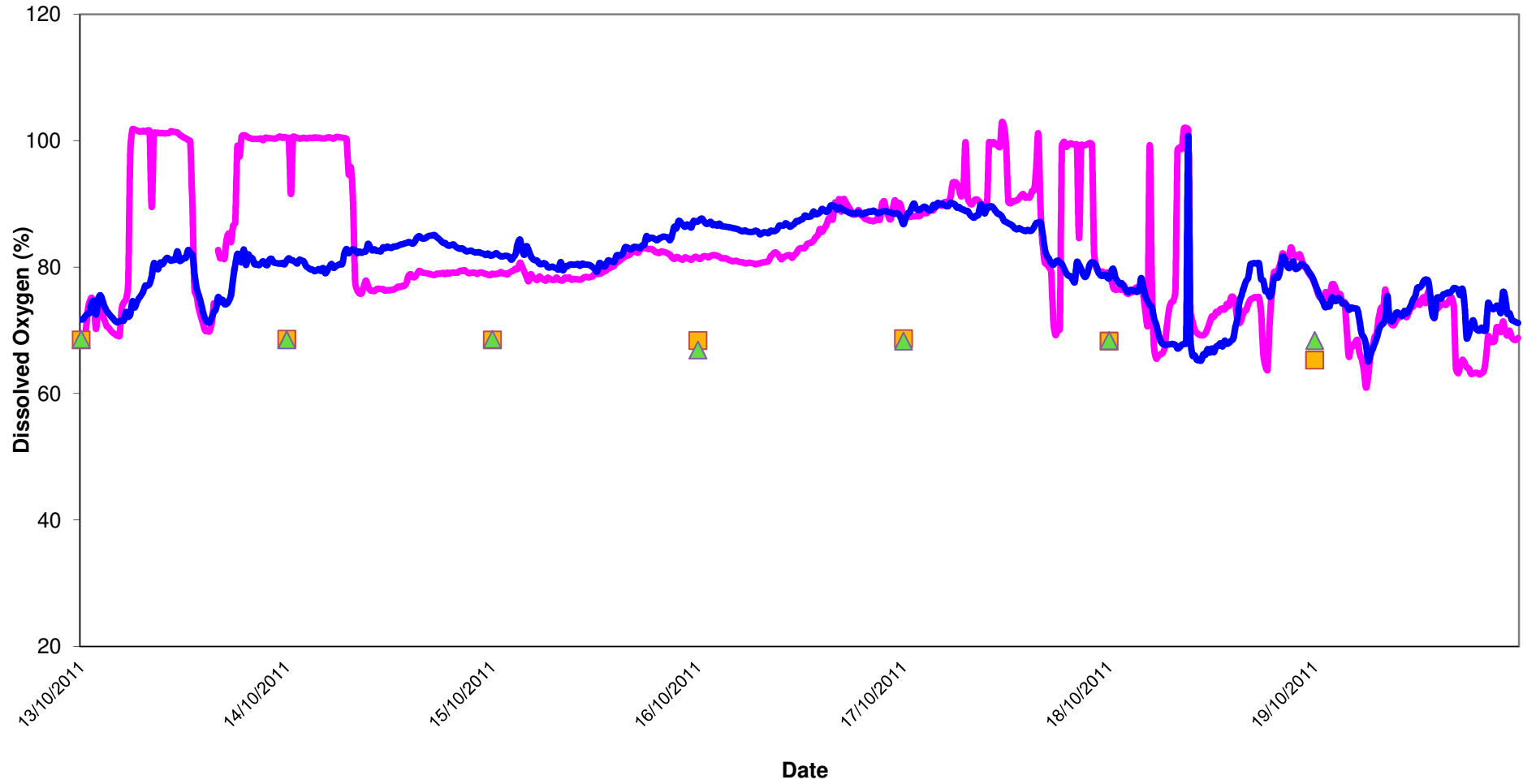
pH - Surface Waters Discharge Week Ending 19/10/2011



Turbidity - Surface Waters Discharge Week Ending 19/10/2011



Dissolved Oxygen - Surface Waters Discharge Week Ending 19/10/2011



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	ppm
DL2	13/10/2011	14.0	46.9	208	4.0	6.3	132
DL2	14/10/2011	13.7	36.4	217	5.8	6.4	147
DL2	17/10/2011	11.5	67.9	146	12.1	7.1	85
DL2	18/10/2011	11.1	68.3	148	9.8	6.4	87
DL2	19/10/2011	8.2	67.0	180	10.2	6.6	103
	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			