

## 1 Monitoring Data

### 1.1 Monitoring Equipment

Noise	Two noise monitoring locations are currently being used – AN2 and NSR1. The sound meter records in the 1/3 octave band.
Weather Station	The data used for this reporting period was taken from the Aughoose 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
08/12/11	12.6
09/12/11	4.6
10/12/11	5.0
11/12/11	5.2
12/12/11	18.4
13/12/11	12.6
14/12/11	8.8
Total	67.2

### 1.3 Summary

Environment	Comments
Weather	There was a total of 67.2mm of rainfall during the reporting period, with a temperature range of 1.2°C to 11.6°C.
Noise	There were no identified noise exceedances during the reporting period. Elevated noise levels during the recording period were due to high winds speeds.
Surface Water	There were no identified surface water exceedances during the reporting period from the siltbuster. Fluctuations in conductivity readings on 8 <sup>th</sup> December were due to a technical fault with dosing system. This has since been rectified.

## 2 Environmental Exceedances / Incidents /

There were no environmental exceedances identified during the reporting period.

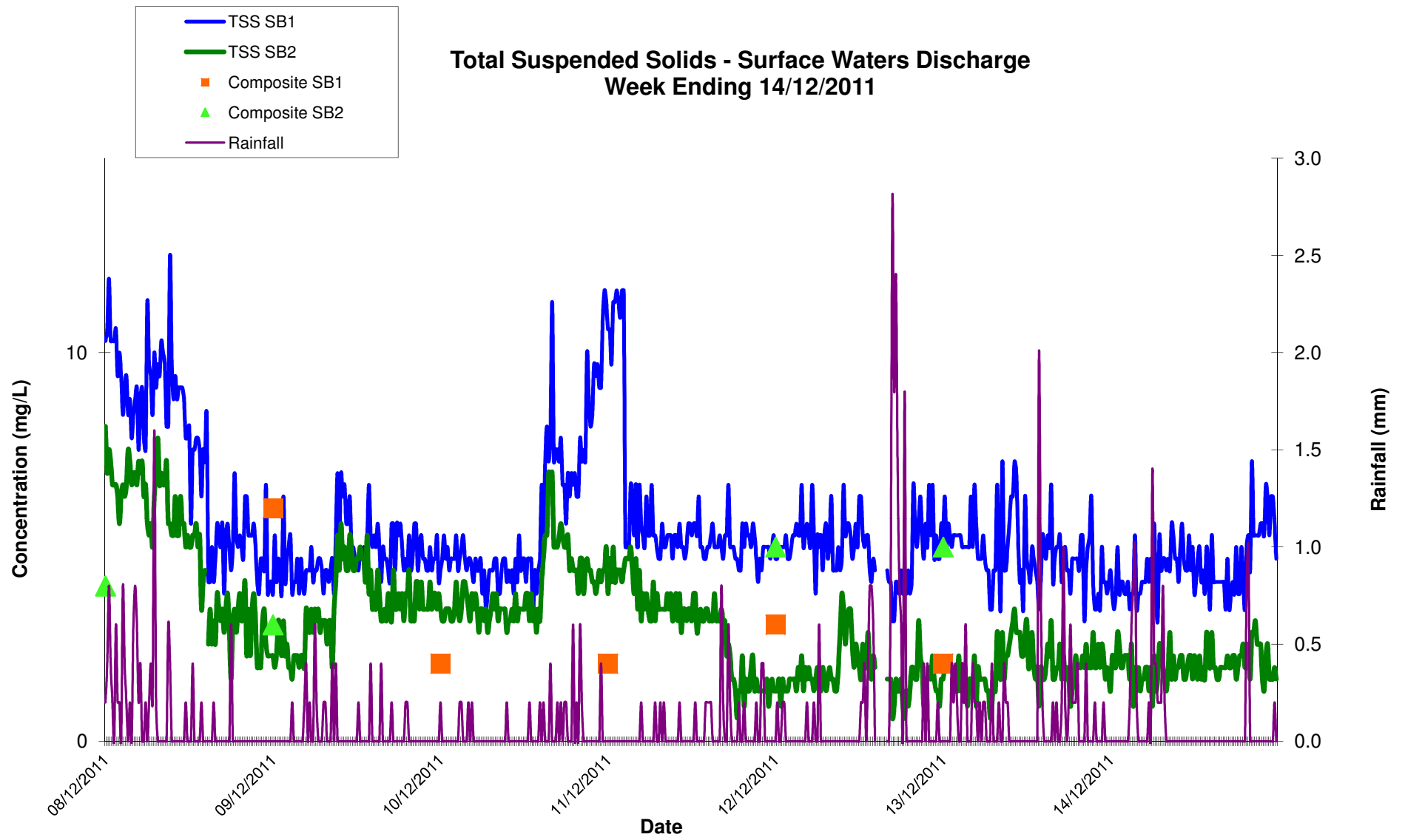
Day Time Noise Monitoring / Hourly L <sub>aeq</sub> above 60dB Record Sheet										
Determinant Results										
Location	Air Temp. (Min)	Air Temp. (Max)	Start Date and Time	Duration	Wind		Results dB			*Comments
					Speed (m/s)*	Direction (Degrees)	L <sub>Aeq</sub>	L <sub>Amax</sub>	L <sub>Amin</sub>	
<b>Action Limit</b>							<b>60.0</b>			
<b>Target Limit</b>							<b>65.0</b>			
AN2	4.3	11.6	08/12/2011 08:00:00	1:00	8.2	244.3	79.4	93	50.6	Elevated noise levels due to high wind speeds
			08/12/2011 09:00:00	1:00			69.7	86.5	49.8	
			08/12/2011 10:00:00	1:00			68.5	83.2	47.7	
			08/12/2011 11:00:00	1:00			70.9	87.6	49.8	
			08/12/2011 12:00:00	1:00			67.4	82.6	50.4	
			08/12/2011 13:00:00	1:00			70.3	84	48.4	
			08/12/2011 14:00:00	1:00			72	87.4	47.7	
			08/12/2011 15:00:00	1:00			71.4	88	52.1	
			08/12/2011 16:00:00	1:00			72.5	84.7	50.7	
NSR1			8/12/2011	1:00					Loss of data due to power failure.	
AN2	1.8	6.0	09/12/2011 08:00:00	1:00	4.2	267.6	65.2	80.5	51	
			09/12/2011 09:00:00	1:00			64.4	82.4	51	
			09/12/2011 10:00:00	1:00			63.2	80.2	46.4	
			09/12/2011 11:00:00	1:00			66.1	81.7	50.5	
			09/12/2011 12:00:00	1:00			61.7	78.2	49.9	
			09/12/2011 13:00:00	1:00			63	75.5	45.5	
			09/12/2011 14:00:00	1:00			60.5	78.2	45.3	
			09/12/2011 15:00:00	1:00			64.1	80.8	50.9	
			09/12/2011 16:00:00	1:00			60.3	79.6	43.8	
NSR1			09/12/2011 15:00:00	1:00			52.2	71	30.2	
AN2	3.4	8.2	12/12/2011 10:00:00	1:00	3.8	203.9	60.2	74.2	39.2	
			12/12/2011 13:00:00	1:00			65.6	83.8	44.3	
			12/12/2011 14:00:00	1:00			61.2	75.8	41.5	
			12/12/2011 15:00:00	1:00			60	75.9	43.5	
			12/12/2011 16:00:00	1:00			60	76.4	40.9	
NSR1			12/12/2011 13:00:00	1:00			60.5	74.6	46.1	
AN2	2.3	6.5	13/12/2011 08:00:00	1:00	7.9	234.5	78.4	92.7	52.1	Site closed due to high wind speeds
			13/12/2011 09:00:00	1:00			79.2	94.3	50.5	
			13/12/2011 10:00:00	1:00			79.5	92.5	52.3	
			13/12/2011 11:00:00	1:00			80.8	96	50.5	
			13/12/2011 12:00:00	1:00			80.8	93.9	50	
			13/12/2011 13:00:00	1:00			81	93.6	53.3	
			13/12/2011 14:00:00	1:00			77.7	90	50	
			13/12/2011 15:00:00	1:00			80	96.1	48.8	
			13/12/2011 16:00:00	1:00			79.2	92.1	49.9	
			13/12/2011 08:00:00	1:00			67.2	86.6	43.1	
			13/12/2011 09:00:00	1:00			69.3	85.1	49.1	
			13/12/2011 10:00:00	1:00			68.7	85.3	46	
			13/12/2011 11:00:00	1:00			70.2	91.9	48.4	
			13/12/2011 12:00:00	1:00			71.8	87.4	50	
			13/12/2011 13:00:00	1:00			70.4	86	49.8	
			13/12/2011 14:00:00	1:00			68.4	86.4	45.4	
13/12/2011 15:00:00	1:00	70.1	87.2	45.6						
13/12/2011 16:00:00	1:00	68.2	87.6	47.9						
AN2	1.2	7.1	14/12/2011 08:00:00	1:00	3.0	205.5	60.9	75.4	44.6	
			14/12/2011 09:00:00	1:00			61.1	78.6	41.5	
			14/12/2011 15:00:00	1:00			61.5	77.5	40.4	
NSR1			14/12/2011 16:00:00	1:00			51.7	75.1	34.6	

\* 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))

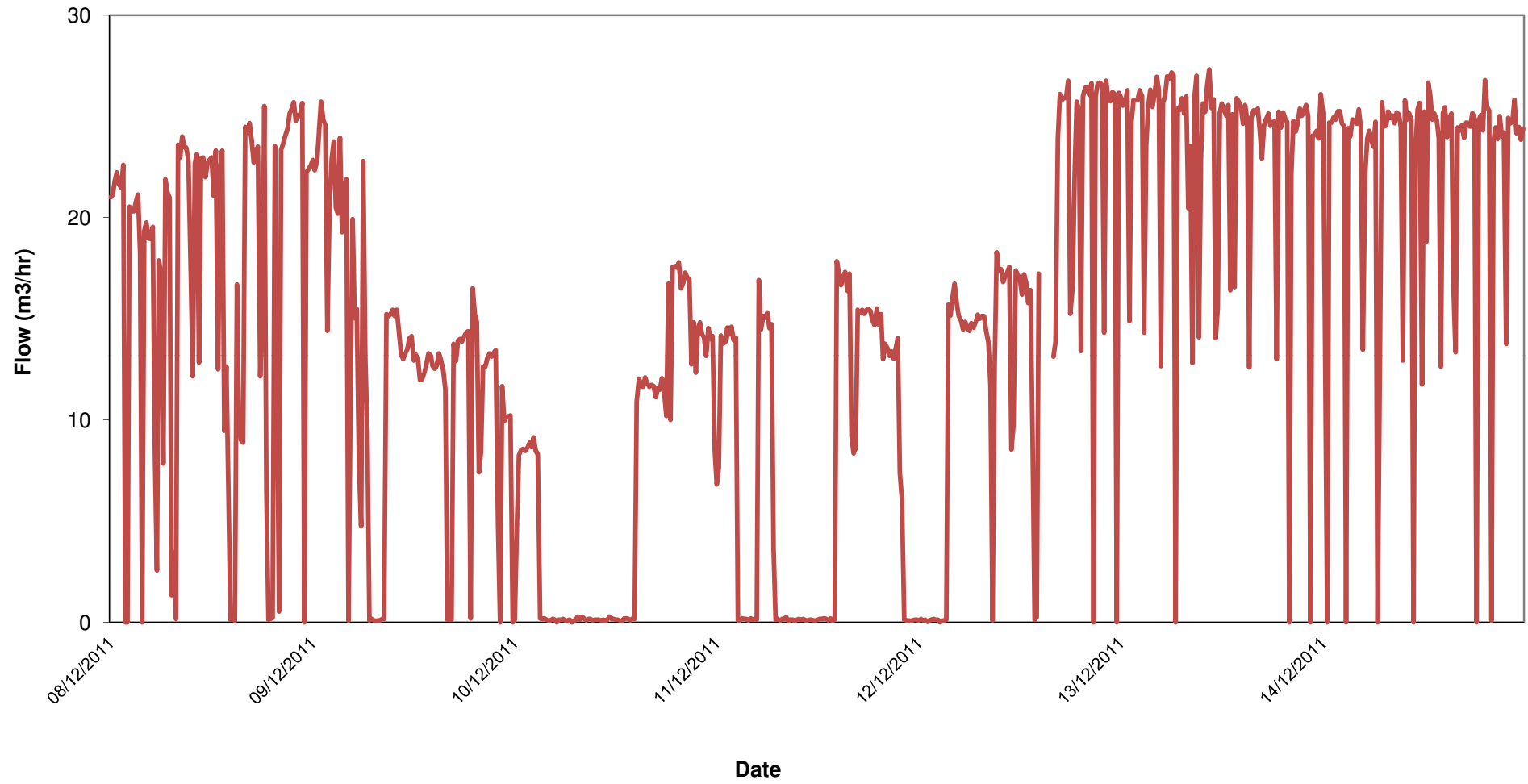
The results show Laeq(1hr) for values over 60dB for each day of monitoring

### Total Suspended Solids - Surface Waters Discharge Week Ending 14/12/2011

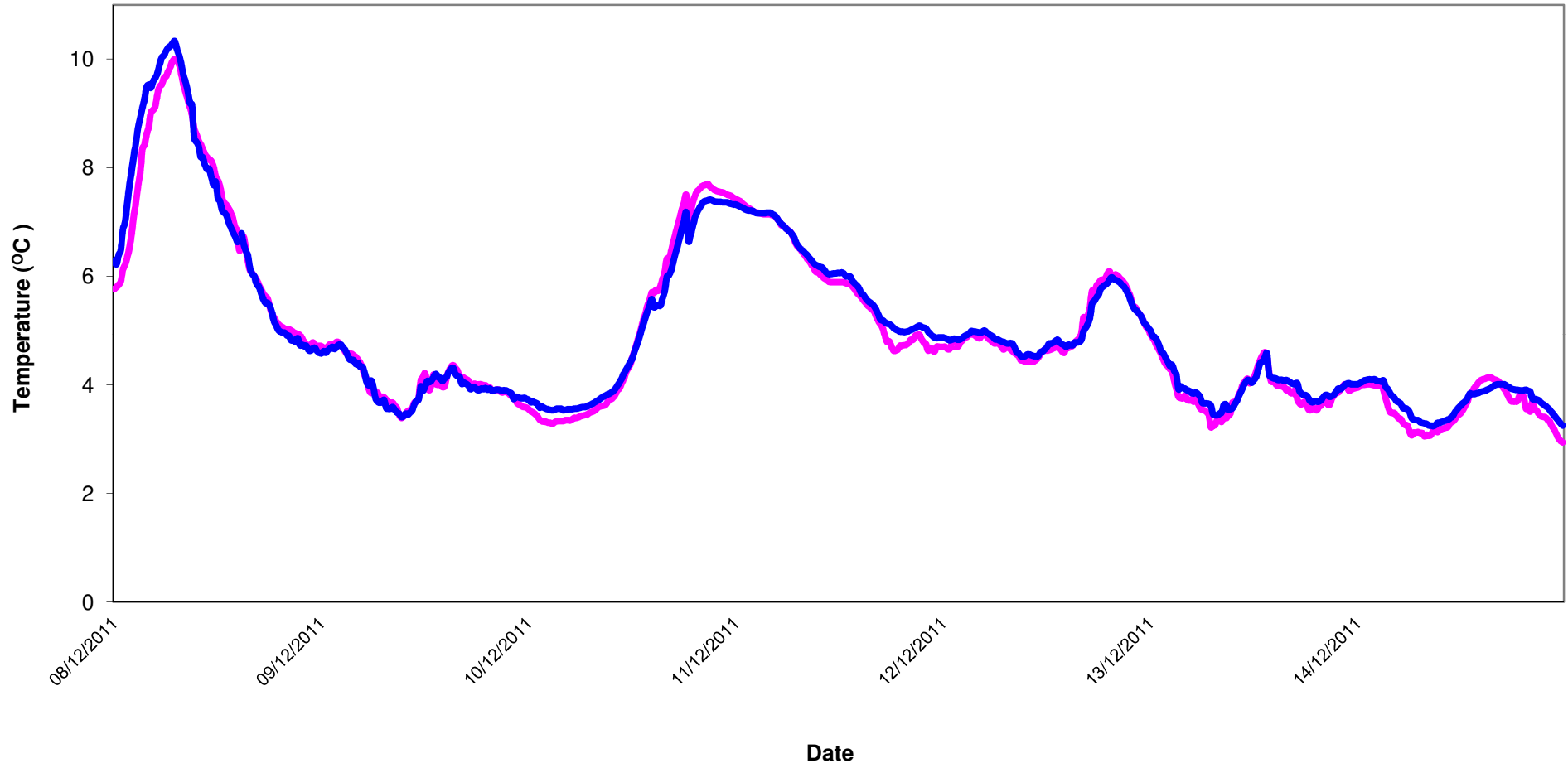


# Flow - Surface Waters Discharge Week ending 14/12/2011

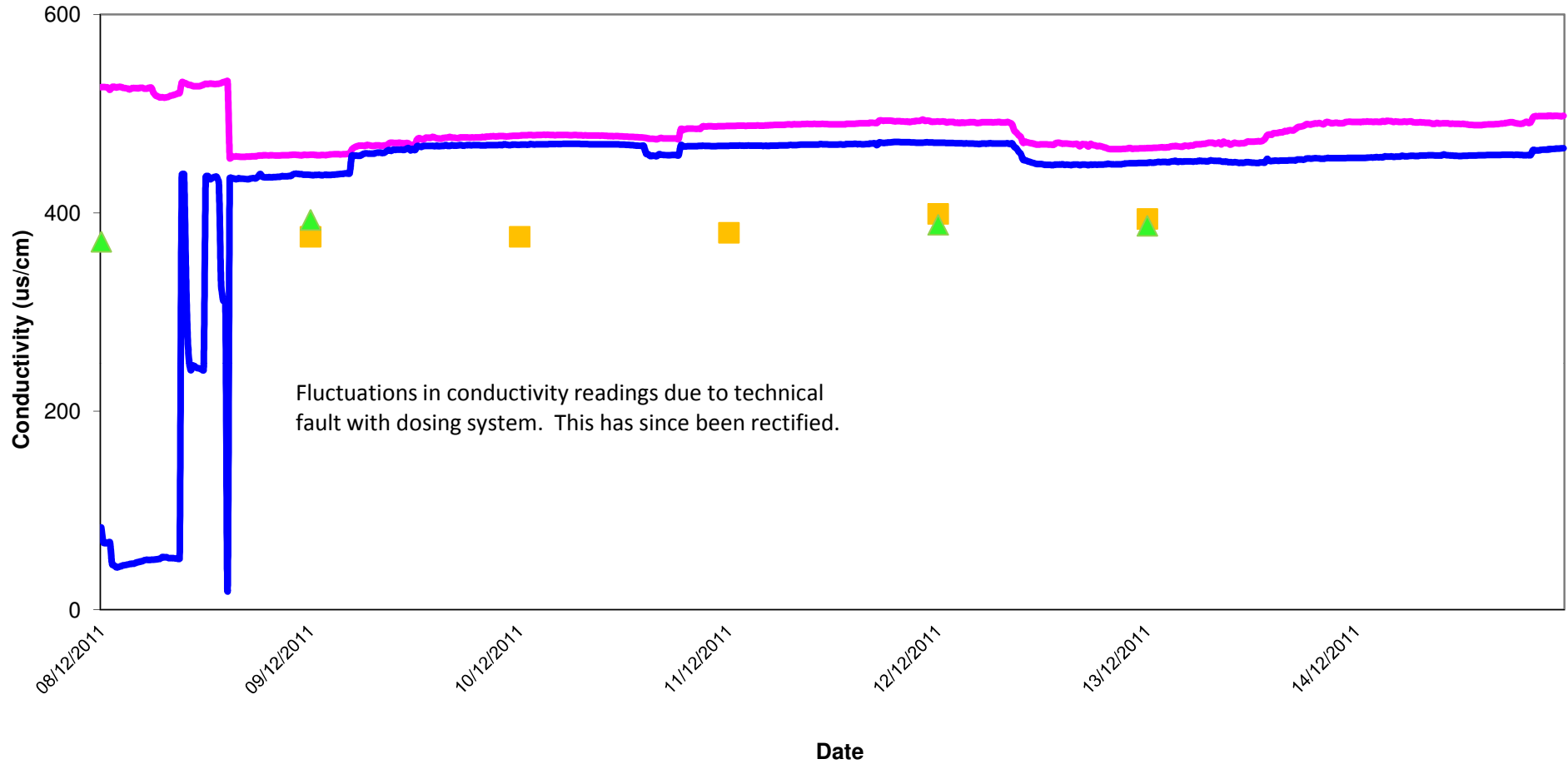
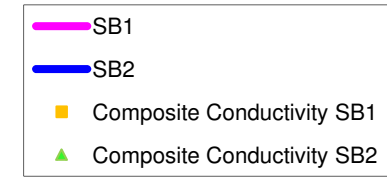
Flow



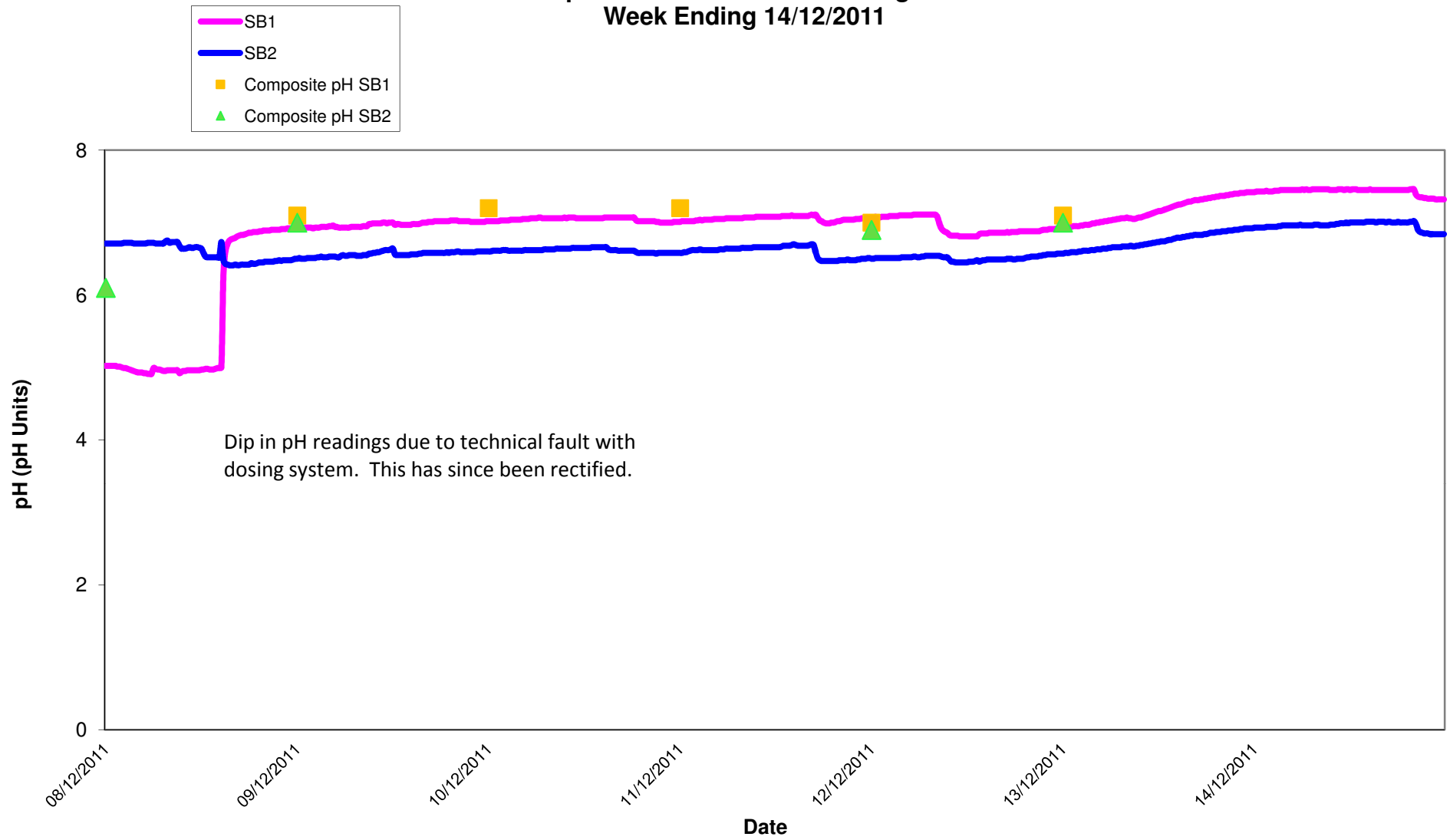
### Temperature - Surface Waters Discharge Week ending 14/12/2011



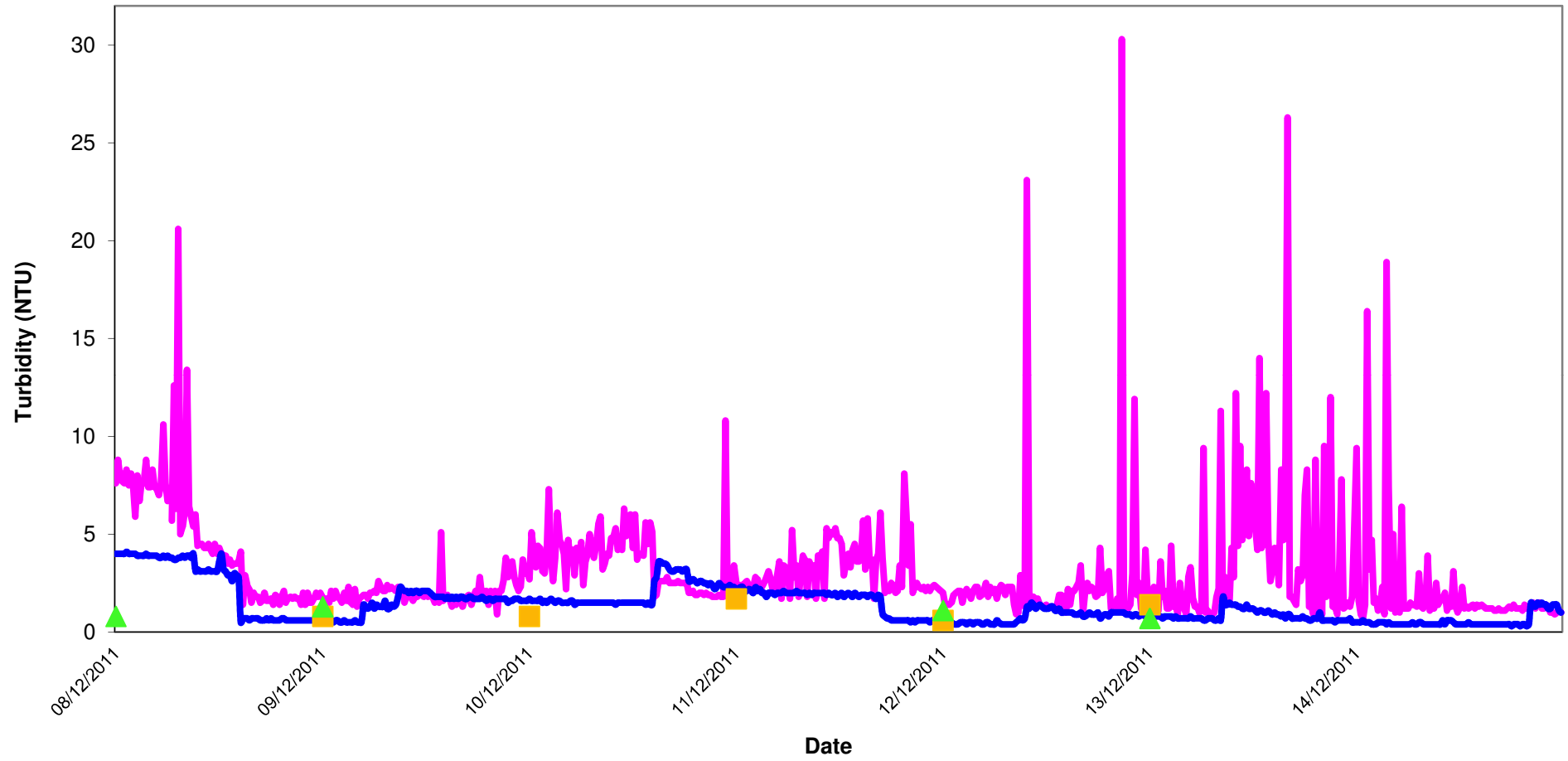
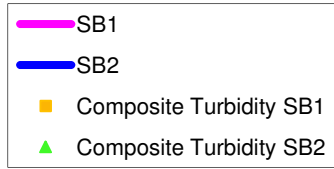
### Conductivity - Surface Waters Discharge Week ending 14/12/2011



### pH - Surface Waters Discharge Week Ending 14/12/2011

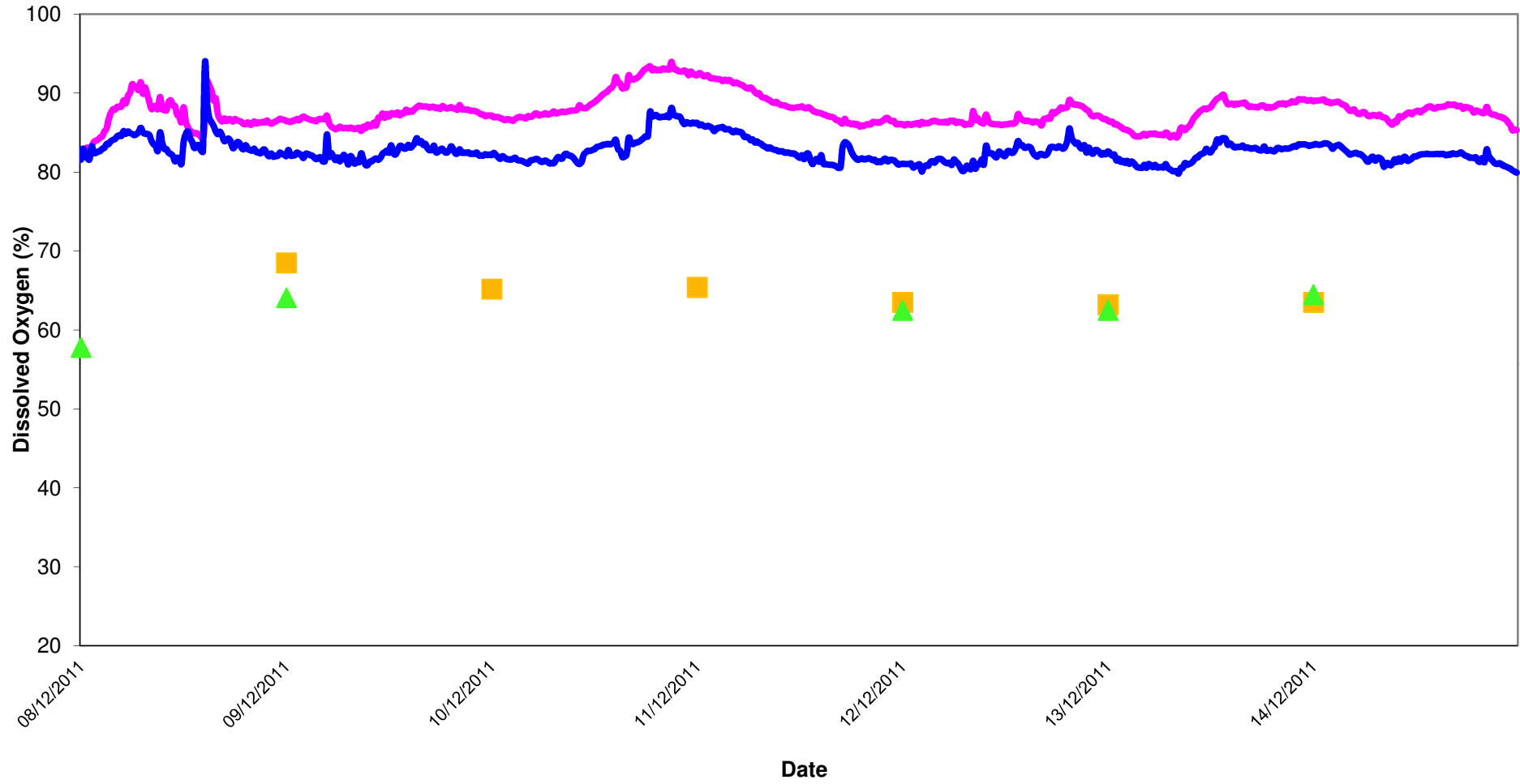
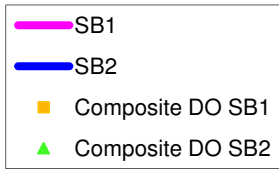


### Turbidity - Surface Waters Discharge Week Ending 14/12/2011





### Dissolved Oxygen - Surface Waters Discharge Week Ending 14/12/2011



# **Appendix 1**

Appendix 1: Surface Water Monitoring Record Sheet- Onsite Monitoring						
Location	Date	Temp	DO	Cond.	Turbidity	pH
		C	% Sat	µS/cm	NTU	pH Units
DL2	08/12/2011	8.5	89.8	328	11.4	6.3
DL2	09/12/2011	4.0	91.0	430	10.0	6.1
DL2	12/12/2011	6.7	88.5	410	12.0	6.0
DL2	13/12/2011	Site closed - no samples taken				
DL2	14/12/2011	5.2	90.8	443	4.0	6.1
	Grey shaded areas denote parameters that cannot or were not analysed on-site (results given are from CLS Labs).					
	= Indicative Only					
< LOD	= Below Limit of Detection		> LOD	= Above Limit of Detection		