

## 1 Monitoring Data

### 1.1 Monitoring Equipment

Noise	Six noise monitoring locations are currently being used – NSR1 & NSR2 (compliance monitoring points) and AN1, AN2, AN3, GN1 and RN1 (information purposes). The noise meters records in the 1/3 octave band.
Weather Station	The data used for this reporting period was taken from the Aughooose Site meteorological station. A meteorological station will be installed in Glengad upon erection of the site perimeter fence.
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
16/02/2012	3.8
17/02/2012	3.8
18/02/2012	9.0
19/02/2012	0.6
20/02/2012	13.0
21/02/2012	7.0
22/02/2012	11.2
Total	48.4

### 1.3 Summary

Environment	Comments
Weather	There was a total of 48.4mm of rainfall during the reporting period, with a temperature range of 3.7°C to 12.6°C.
Noise	There were occasions of elevated noise at NSR2 during the reporting period due to the close proximity of the construction works to the noise meter. During those periods, the noise results at GN1 are provided for information.
Surface Water	There were no identified surface water exceedences during the reporting period.

## 2 Environmental Exceedances / Incidents /

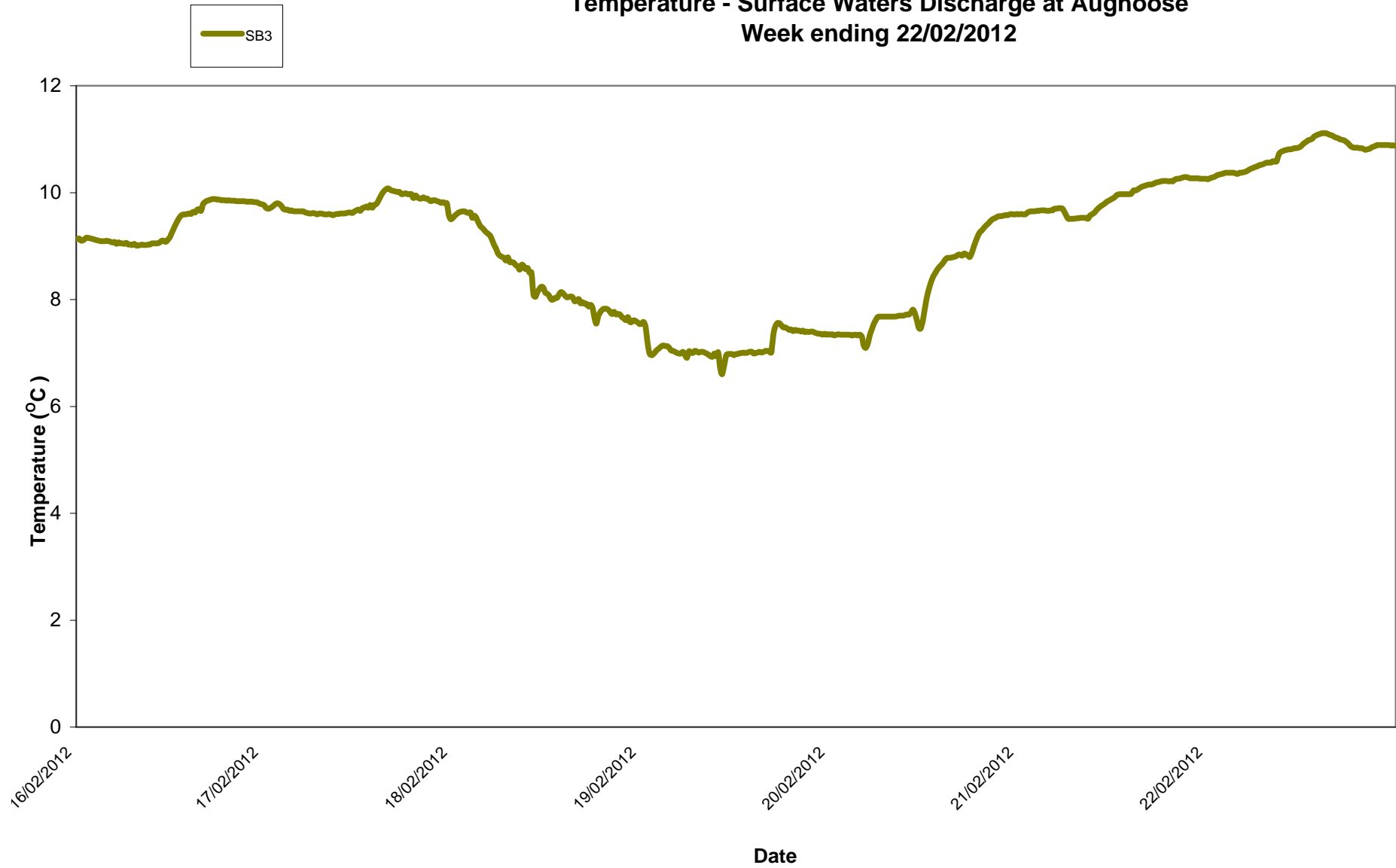
There were no identified environmental exceedances during this reporting period, however on the 20<sup>th</sup> of February at 11.00 am, hydrocarbon staining was observed on the outer sections of the bog mats, outside the northern fence line. A sample of the product on the mat and small pockets of water on the vegetation adjacent to the fence line was taken and the stains were mopped up using absorbent matting and then treated with 'Bioversal'. The entire perimeter of the fence line was walked to check for further staining and none was detected. The Regulatory Authorities were informed.

Day Time Noise Monitoring / Max Hourly or above 60dB L <sub>Aeq</sub> Record Sheet - Support monitoring data											
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>		
AN1	8.6	10.5	16/02/2012 16:00	1:00:00	3.5	256.0	64.7	87.6	54.8		
AN2			16/02/2012 11:00	1:00:00	4.9	233.0	76.0	82.0	49.8	Elevated noise levels due to traffic movements.	
			16/02/2012 13:00	1:00:00	5.8	230.8	76.0	92.3	46.1		
			16/02/2012 14:00	1:00:00	5.0	240.3	72.1	81.4	44.7	Elevated noise levels due to high wind speeds.	
			16/02/2012 15:00	1:00:00	4.3	243.0	61.3	85.2	45.5		
AN3			16/02/2012 13:00	1:00:00	5.8	230.8	49.3	65.3	34.9		
GN1			16/02/2012 11:00	1:00:00	4.9	233.0	58.7	76.7	45.3		
RN1			16/02/2012 10:00	1:00:00	4.9	239.0	57.4	81.5	36.4		
AN1				17/02/2012 13:00	1:00:00	4.1	240.0	60.8	79.8	43.7	
				17/02/2012 14:00	1:00:00	4.3	198.0	60.6	78.1	43.5	
		17/02/2012 15:00	1:00:00	6.0	213.3	63.4	83.0	43.6			
		17/02/2012 16:00	1:00:00	3.6	211.5	66.3	83.5	43.8	Elevated noise levels due to construction works in close proximity to noise meter.		
		17/02/2012 17:00	1:00:00	5.1	231.3	62.6	79.6	43.2			
AN2		17/02/2012 13:00	1:00:00	4.1	240.0	61.1	73.8	42.3			
		17/02/2012 14:00	1:00:00	4.3	198.0	61.1	74.5	42.5			
		17/02/2012 15:00	1:00:00	6.0	213.3	62.8	83.1	43.3			
		17/02/2012 16:00	1:00:00	3.6	211.5	65.2	80.0	44.0	Elevated noise levels due to traffic movements.		
GN1		17/02/2012 17:00	1:00:00	5.1	231.3	63.7	77.7	43.7			
		17/02/2012 16:00	1:00:00	3.6	211.5	55.4	74.6	33.2			
		17/02/2012 11:00	1:00:00	4.1	220.8	61.1	79.6	46.3			
		17/02/2012 12:00	1:00:00	3.9	214.8	63.6	80.9	48.8			
		17/02/2012 13:00	1:00:00	4.1	240.0	63.9	80.5	48.3			
		17/02/2012 14:00	1:00:00	4.3	198.0	62.7	79.7	46.4			
		17/02/2012 15:00	1:00:00	6.0	213.3	63.6	80.3	45.8			
		17/02/2012 16:00	1:00:00	3.6	211.5	67.5	84.7	47.0	Elevated noise levels due to localised noise source.		
		17/02/2012 17:00	1:00:00	5.1	231.3	64.9	80.1	49.7			
	RN1	17/02/2012 16:00	1:00:00	3.6	211.5	57.3	81.3	47.4			
AN1		18/02/2012 08:00	1:00:00	6.4	276.5	75.7	88.9	45.6			
		18/02/2012 09:00	1:00:00	5.0	270.8	73.6	85.1	47.1			
		18/02/2012 10:00	1:00:00	7.2	292.3	78.2	88.9	47.2	Elevated noise levels due to high wind speeds.		
		18/02/2012 11:00	1:00:00	7.5	284.0	80.7	95.6	45.2			
		18/02/2012 12:00	1:00:00	5.5	303.8	73.3	86.7	47.1			
		18/02/2012 13:00	1:00:00	5.4	312.3	71.8	84.2	47.3			
		18/02/2012 14:00	1:00:00	3.9	325.8	67.6	81.1	45.4	Elevated noise levels due to construction works in close proximity to noise meter.		
		18/02/2012 15:00	1:00:00	4.0	319.5	65.6	85.8	43.9			
		18/02/2012 16:00	1:00:00	4.6	303.3	63.7	85.2	42.3			
AN2		18/02/2012 08:00	1:00:00	6.4	276.5	66.2	81.6	42.0			
		18/02/2012 09:00	1:00:00	5.0	270.8	66.9	86.8	41.9			
		18/02/2012 10:00	1:00:00	7.2	292.3	67.1	79.2	41.4	Elevated noise levels due to high wind speeds.		
		18/02/2012 11:00	1:00:00	7.5	284.0	71.7	88.4	42.5			
AN3		18/02/2012 12:00	1:00:00	5.5	303.8	65.7	78.8	43.7			
		18/02/2012 13:00	1:00:00	5.4	312.3	66.8	81.4	43.3			
		18/02/2012 14:00	1:00:00	3.9	325.8	63.2	75.4	43.0			
		18/02/2012 16:00	1:00:00	4.6	303.3	62.3	78.6	40.4			
		18/02/2012 08:00	1:00:00	6.4	276.5	63.2	81.4	38.0			
		18/02/2012 09:00	1:00:00	5.0	270.8	60.2	77.1	41.4			
		18/02/2012 10:00	1:00:00	7.2	292.3	63.9	77.4	42.3			
		18/02/2012 11:00	1:00:00	7.5	284.0	67.7	87.4	35.8	Elevated noise levels due to high wind speeds.		
		18/02/2012 12:00	1:00:00	5.5	303.8	60.0	78.9	40.7			
		18/02/2012 08:00	1:00:00	6.4	276.5	64.1	80.8	48.3			
GN1		18/02/2012 09:00	1:00:00	5.0	270.8	62.5	81.3	50.3			
		18/02/2012 10:00	1:00:00	7.2	292.3	63.1	82.5	48.7			
	RN1	18/02/2012 11:00	1:00:00	7.5	284.0	67.8	85.2	49.9	Elevated noise levels due to high wind speeds.		
AN1		18/02/2012 16:00	1:00:00	4.6	303.3	63.3	81.8	31.1			
		20/02/2012 08:00	1:00:00	6.2	203.8	69.1	84.4	48.5			
		20/02/2012 09:00	1:00:00	8.1	207.3	76.1	93.6	54.6	Elevated noise levels due to high wind speeds.		
		20/02/2012 10:00	1:00:00	7.9	199.0	75.1	93.7	53.4			
		20/02/2012 11:00	1:00:00	6.1	196.0	75.0	91.2	57.6			
		20/02/2012 12:00	1:00:00	4.9	199.8	73.0	89.2	55.8	Elevated noise levels due to construction works in close proximity to noise meter.		
		20/02/2012 13:00	1:00:00	6.4	198.3	75.7	95.2	52.7			
		20/02/2012 14:00	1:00:00	5.9	203.3	73.0	90.8	55.2	Elevated noise levels due to high wind speeds.		
		20/02/2012 15:00	1:00:00	5.8	200.3	72.1	92.2	56.7			
		20/02/2012 16:00	1:00:00	5.5	200.3	68.1	83.7	58.1			
AN2		20/02/2012 17:00	1:00:00	4.4	191.8	67.7	83.4	49.9	Elevated noise levels due to construction works in close proximity to noise meter.		
		20/02/2012 08:00	1:00:00	6.2	203.8	62.0	78.6	43.8			
		20/02/2012 09:00	1:00:00	8.1	207.3	67.9	85.8	43.5	Elevated noise levels due to high wind speeds.		
		20/02/2012 10:00	1:00:00	7.9	199.0	63.2	76.9	43.1			
		20/02/2012 11:00	1:00:00	6.1	196.0	66.1	81.2	44.0	Elevated noise levels due to high wind speeds.		
		20/02/2012 12:00	1:00:00	4.9	199.8	64.3	80.2	42.6			
GN1		20/02/2012 13:00	1:00:00	6.4	198.3	61.2	74.6	40.3			
		20/02/2012 14:00	1:00:00	5.9	203.3	61.7	82.4	40.6			
		20/02/2012 15:00	1:00:00	5.8	200.3	62.9	83.9	41.1			
		20/02/2012 16:00	1:00:00	5.8	200.3	53.3	73.9	34.7			
		20/02/2012 08:00	1:00:00	6.2	203.8	66.1	79.7	46.8			
		20/02/2012 09:00	1:00:00	8.1	207.3	66.0	82.2	48.4	Elevated noise levels due high wind speeds.		
		20/02/2012 10:00	1:00:00	7.9	199.0	64.5	79.6	48.8			
		20/02/2012 11:00	1:00:00	6.1	196.0	63.0	80.6	49.0			
		20/02/2012 12:00	1:00:00	4.9	199.8	62.7	78.1	46.1			
		20/02/2012 13:00	1:00:00	6.4	198.3	62.7	77.1	47.2			
AN1		20/02/2012 14:00	1:00:00	5.9	203.3	64.8	81.2	48.8			
		20/02/2012 15:00	1:00:00	5.8	200.3	63.1	78.4	41.4			
		20/02/2012 16:00	1:00:00	5.5	200.3	62.9	87.6	45.1			
		20/02/2012 17:00	1:00:00	4.4	191.8	61.6	78.9	44.3			
		20/02/2012 09:00	1:00:00	8.1	207.3	60.7	85.2	50.5			
		21/02/2012 08:00	1:00:00	5.7	187.5	74.2	91.9	59.8			
		21/02/2012 09:00	1:00:00	7.3	189.8	72.1	84.5	55.1			
		21/02/2012 10:00	1:00:00	6.7	182.3	74.4	89.4	56.5			
		21/02/2012 11:00	1:00:00	6.9	195.0	74.5	90.4	58.5	Elevated noise levels due high wind speeds.		
		21/02/2012 12:00	1:00:00	5.7	177.3	77.6	90.2	61.9			
AN2		21/02/2012 13:00	1:00:00	8.4	189.3	76.1	88.1	49.5			
		21/02/2012 14:00	1:00:00	5.9	180.5	69.7	89.4	50.4			
		21/02/2012 15:00	1:00:00	6.6	195.5	72.4	88.2	56.5			
		21/02/2012 16:00	1:00:00	5.7	199.5	71.7	89.1	57.3			
		21/02/2012 17:00	1:00:00	6.4	196.5	73.0	95.6	48.8			
		21/02/2012 08:00	1:00:00	5.7	187.5	82.5	84.7	41.4			
		21/02/2012 11:00	1:00:00	6.9	195.0	63.4	77.7	45.0			
		21/02/2012 12:00	1:00:00	5.7	177.3	61.7	79.2	42.8			
		21/02/2012 13:00	1:00:00	8.4	189.3	62.6	79.5	43.3			
		21/02/2012 14:00	1:00:00	5.9	180.5	62.1	75.3	44.1			
AN3		21/02/2012 15:00	1:00:00	6.6	195.5	64.4	81.1	44.4			
		21/02/2012 16:00	1:00:00	5.7	199.5	64.1	79.4	43.8			
		21/02/2012 17:00	1:00:00	6.4	196.5	62.6	78.2	43.4			
		21/02/2012 14:00	1:00:00	5.9	180.5	50.6	76.7	34.3			
GN1		21/02/2012 13:00	1:00:00	8.4	189.3	62.3	86.8	39.1			
		21/02/2012 14:00	1:00:00	5.9	180.5	62.4	83.9	39.9			
		21/02/2012 15:00	1:00:00	6.6	195.5	65.2	86.0	41.9			
		21/02/2012 16:00	1:00:00	5.7	199.5	66.4	85.9	43.4	Elevated noise levels due to high wind speeds.		
RN1		21/02/2012 17:00	1:00:00	6.4	196.5	68.4	89.9	47.5			
		21/02/2012 14:00	1:00:00	5.9	180.5	54.7	76.2	48.0			
AN1		22/02/2012 08:00	1:00:00	9.3	203.3	77.1	91.6	60.3			
		22/02/2012 09:00	1:00:00	6.8	206.3	75.9	91.3	55.7	Elevated noise levels due to high wind speeds.		
		22/02/2012 10:00	1:00:00	6.2	223.8	75.7	92.2	52.8			
		22/02/2012 11:00	1:00:00	4.8	231.0	71.0	87.6	56.1	Elevated noise levels due to construction works in close proximity to noise meter.		
		22/02/2012 12:00	1:00:00	5.0	201.0	74.0	91.2	56.6	Elevated noise levels due to high wind speeds.		
		22/02/2012 13:00	1:00:00	3.8	215.8	69.8	84.6	49.2	Elevated noise levels due to construction works in close proximity to noise meter.		
		22/02/2012 14:00	1:00:00	6.7	234.8	73.2	93.3	51.6	Elevated noise levels due to high wind speeds.		
AN2		22/02/2012 15:00	1:00:00	4.8	271.0	69.9	86.5	57.4	Elevated noise levels due to construction works in close proximity to noise meter.		
		22/02/2012 16:00	1:00:00	6.9	244.8	70.6	85.5	56.2			
		22/02/2012 17:00	1:00:00	5.6	233.8	69.4	87.1	50.2	Elevated noise levels due to high wind speeds.		
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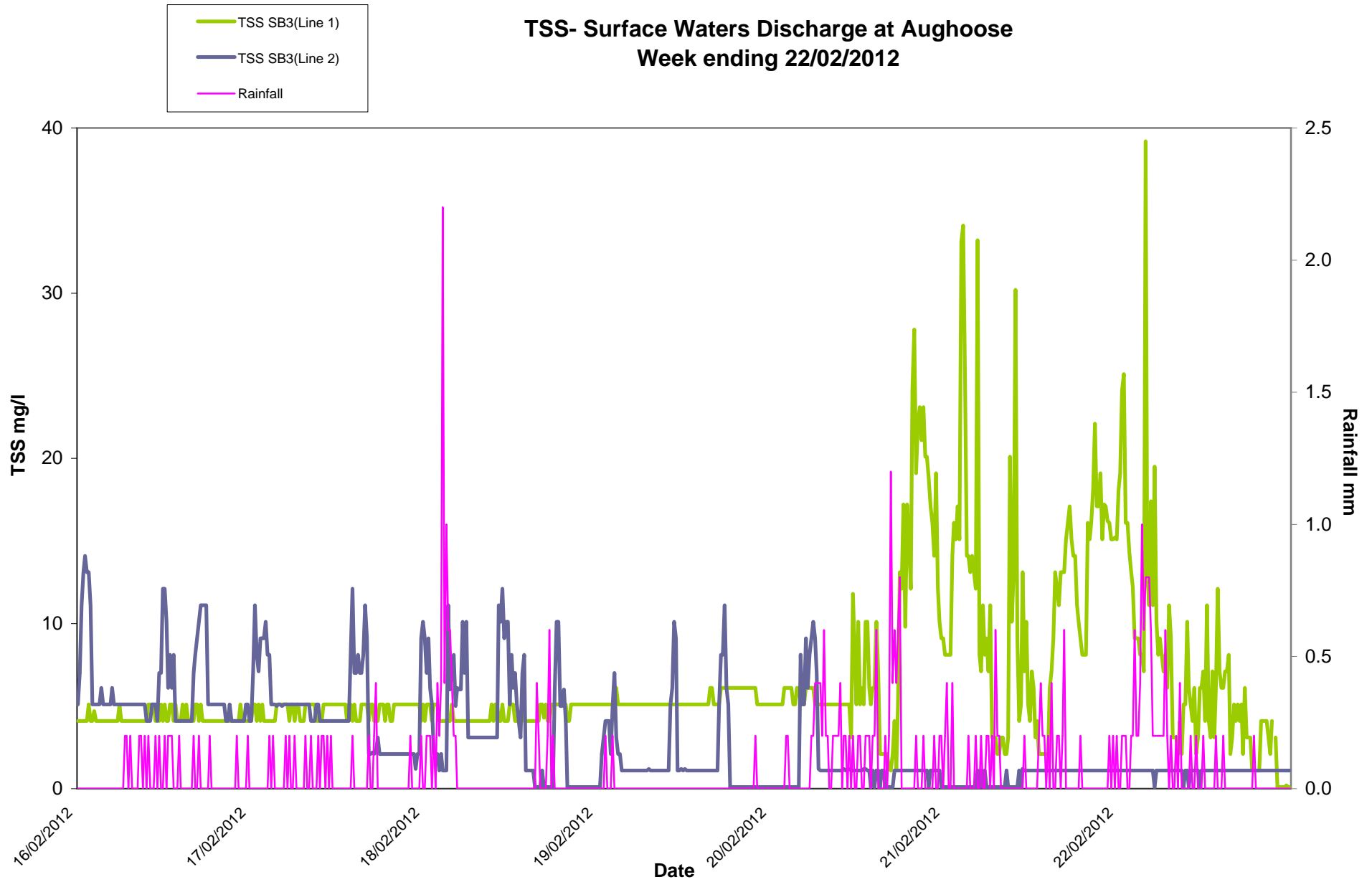
## Determinant Results

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>	
NSR1	8.6	10.5	16/02/2012 11:00	01:00:00	4.9	233.0	50.8	68.1	31.8	
NSR2			16/02/2012 13:00	1:00:00	5.8	230.8	60.5	74.6	50.8	
			16/02/2012 14:00	1:00:00	5.0	240.3	61.2	76.8	51.2	
NSR1	7.9	10.8	17/02/2012 16:00	1:00:00	3.6	211.5	60.6	79.1	38.6	
NSR2			17/02/2012 11:00	1:00:00	4.9	233.0	63.6	84.1	48.6	
			17/02/2012 12:00	1:00:00	3.9	214.8	60.0	71.6	49.4	
			17/02/2012 14:00	1:00:00	5.0	240.3	60.8	73.5	49.4	
			17/02/2012 15:00	1:00:00	6.0	213.3	60.1	73.9	50.0	
			17/02/2012 16:00	1:00:00	3.6	211.5	63.2	84.8	50.1	
			17/02/2012 17:00	1:00:00	5.1	231.3	64.6	79.6	50.7	
NSR1	4.0	9.5	18/02/2012 11:00	1:00:00	7.5	284.0	59.7	82.4	35.1	
NSR2			18/02/2012 8:00	1:00:00	6.4	276.5	67.1	78.7	51.9	
			18/02/2012 9:00	1:00:00	5.0	270.8	69.9	82.3	51.5	
			18/02/2012 10:00	1:00:00	7.2	292.3	66.8	80.8	51.9	Elevated noise levels due to high wind speeds.
			18/02/2012 11:00	1:00:00	7.5	284.0	69.6	83.5	53.5	
			18/02/2012 12:00	1:00:00	5.5	303.8	73.9	87.7	52.6	
			18/02/2012 13:00	1:00:00	5.4	312.3	67.4	85.2	52.6	
										Elevated noise levels due to construction works in close proximity to noise meter. The Laeq at GN1 was 52.8.
			18/02/2012 14:00	1:00:00	3.9	325.8	68.0	82.3	52.8	
			18/02/2012 15:00	1:00:00	4.0	319.5	64.9	79.1	52.6	
			18/02/2012 16:00	1:00:00	4.6	303.3	61.7	78.4	51.1	
									Elevated noise levels due to construction works in close proximity to noise meter. The Laeq at GN1 was 51.0.	
18/02/2012 17:00	1:00:00	3.6	331.0	65.7	80.8	51.0				
NSR1	7.0	10.4	20/02/2012 8:00	1:00:00	6.2	203.8	60.1	76.0	43.5	
NSR2			20/02/2012 9:00	1:00:00	8.1	207.3	60.9	77.5	42.2	
			20/02/2012 8:00	1:00:00	6.2	203.8	68.7	81.1	50.4	
			20/02/2012 9:00	1:00:00	8.1	207.3	69.3	85.0	51.9	Elevated noise levels due to high wind speeds.
			20/02/2012 10:00	1:00:00	7.9	199.0	69.6	87.6	51.4	
			20/02/2012 11:00	1:00:00	6.1	196.0	67.7	79.7	50.7	
										Elevated noise levels due to construction works in close proximity to noise meter. The Laeq at GN1 was 62.7.
			20/02/2012 12:00	1:00:00	4.9	199.8	67.3	79.4	51.2	
			20/02/2012 13:00	1:00:00	6.4	198.3	66.4	77.8	49.8	
			20/02/2012 14:00	1:00:00	5.9	203.3	66.6	78.8	50.6	Elevated noise levels due to high wind speeds.
			20/02/2012 15:00	1:00:00	5.8	200.3	65.5	77.9	48.6	
			20/02/2012 16:00	1:00:00	5.5	200.3	64.3	86.8	47.3	
			20/02/2012 17:00	1:00:00	4.4	191.8	63.5	76.5	47.7	
NSR1	10.2	11.1	21/02/2012 11:00	1:00:00	6.9	195.0	60.0	75.7	42.0	
NSR2			21/02/2012 14:00	1:00:00	5.9	180.5	60.5	79.4	42.4	
			21/02/2012 15:00	1:00:00	6.6	195.5	60.9	76.2	42.5	
			21/02/2012 17:00	1:00:00	6.4	196.5	60.1	78.5	41.1	
			21/02/2012 9:00	1:00:00	7.3	189.8	62.0	89.1	44.7	
			21/02/2012 13:00	1:00:00	8.4	189.3	60.6	82.4	42.4	
			21/02/2012 14:00	1:00:00	5.9	180.5	63.2	79.5	45.1	
			21/02/2012 15:00	1:00:00	6.6	195.5	64.3	87.3	44.9	
			21/02/2012 16:00	1:00:00	5.7	199.5	65.9	82.3	45.9	Elevated noise levels due to high wind speeds.
21/02/2012 17:00	1:00:00	6.4	196.5	65.6	81.4	46.2				
NSR1	10.3	12.6	22/02/2012 8:00	1:00:00	9.3	203.3	65.8	81.9	47.3	Elevated noise levels due to high wind speeds.
NSR1			22/02/2012 9:00	1:00:00	6.8	206.3	64.6	78.2	45.4	
			22/02/2012 10:00	1:00:00	6.2	223.8	62.5	77.5	43.7	
			22/02/2012 11:00	1:00:00	4.8	231.0	61.9	77.9	43.7	
			22/02/2012 12:00	1:00:00	5.0	201.0	60.6	73.1	42.2	
			22/02/2012 13:00	1:00:00	3.8	215.8	60.1	75.0	39.5	
NSR2			22/02/2012 8:00	1:00:00	9.3	203.3	74.1	90.0	52.3	
			22/02/2012 9:00	1:00:00	6.8	206.3	72.4	85.4	52.2	Elevated noise levels due to high wind speeds.
			22/02/2012 10:00	1:00:00	6.2	223.8	71.1	85.2	53.0	
										Elevated noise levels due to construction works in close proximity to noise meter. The Laeq at GN1 wa 67.2.
			22/02/2012 11:00	1:00:00	4.8	231.0	69.1	81.9	52.3	
			22/02/2012 12:00	1:00:00	5.0	201.0	66.3	78.4	50.2	Elevated noise levels due to high wind speeds.
			22/02/2012 13:00	1:00:00	3.8	215.8	64.2	76.7	49.8	
			22/02/2012 14:00	1:00:00	6.7	234.8	62.4	77.5	49.3	
* 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))										
09:00										
NSR1										
NSR2										

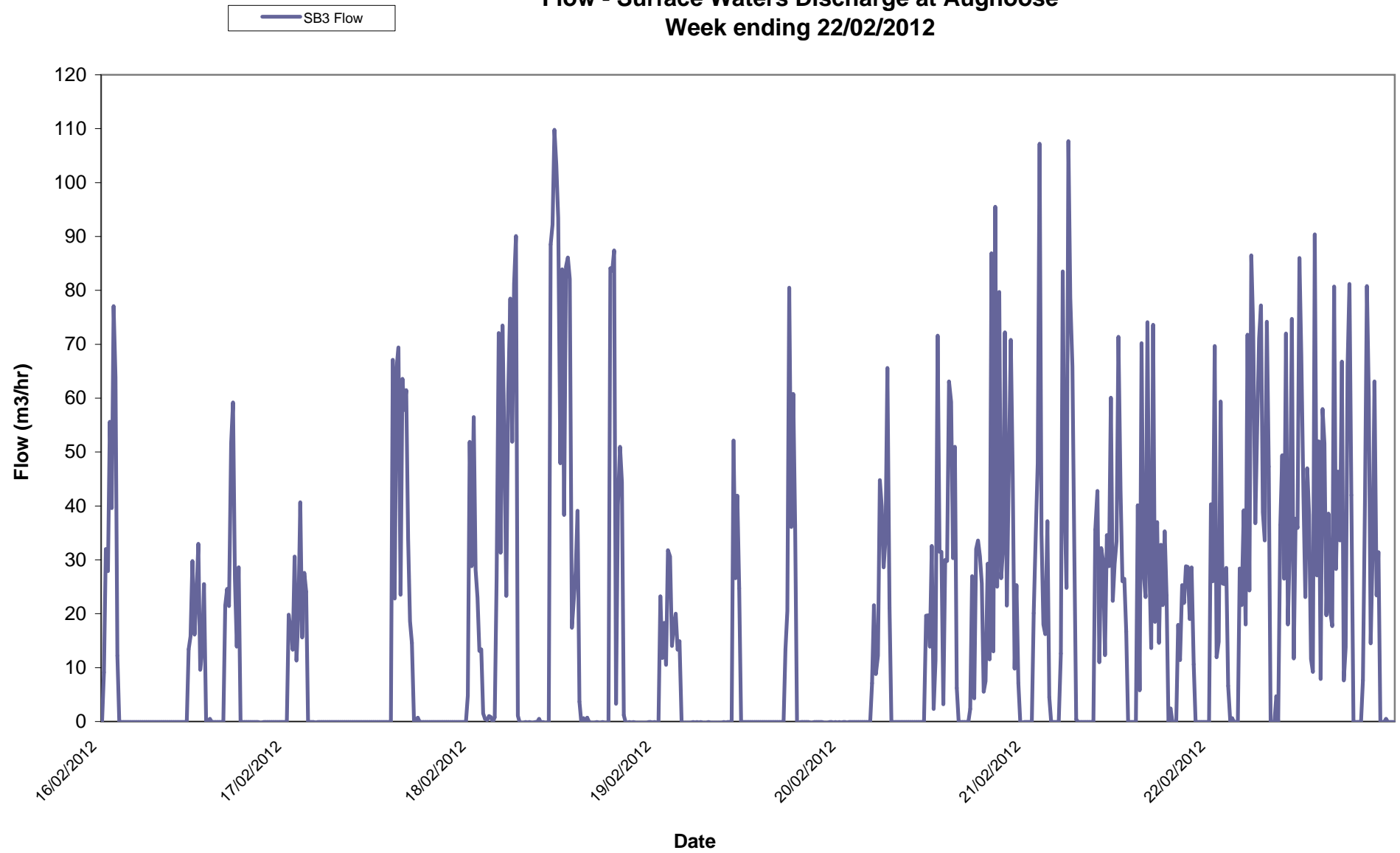
Temperature - Surface Waters Discharge at Aughooose  
Week ending 22/02/2012



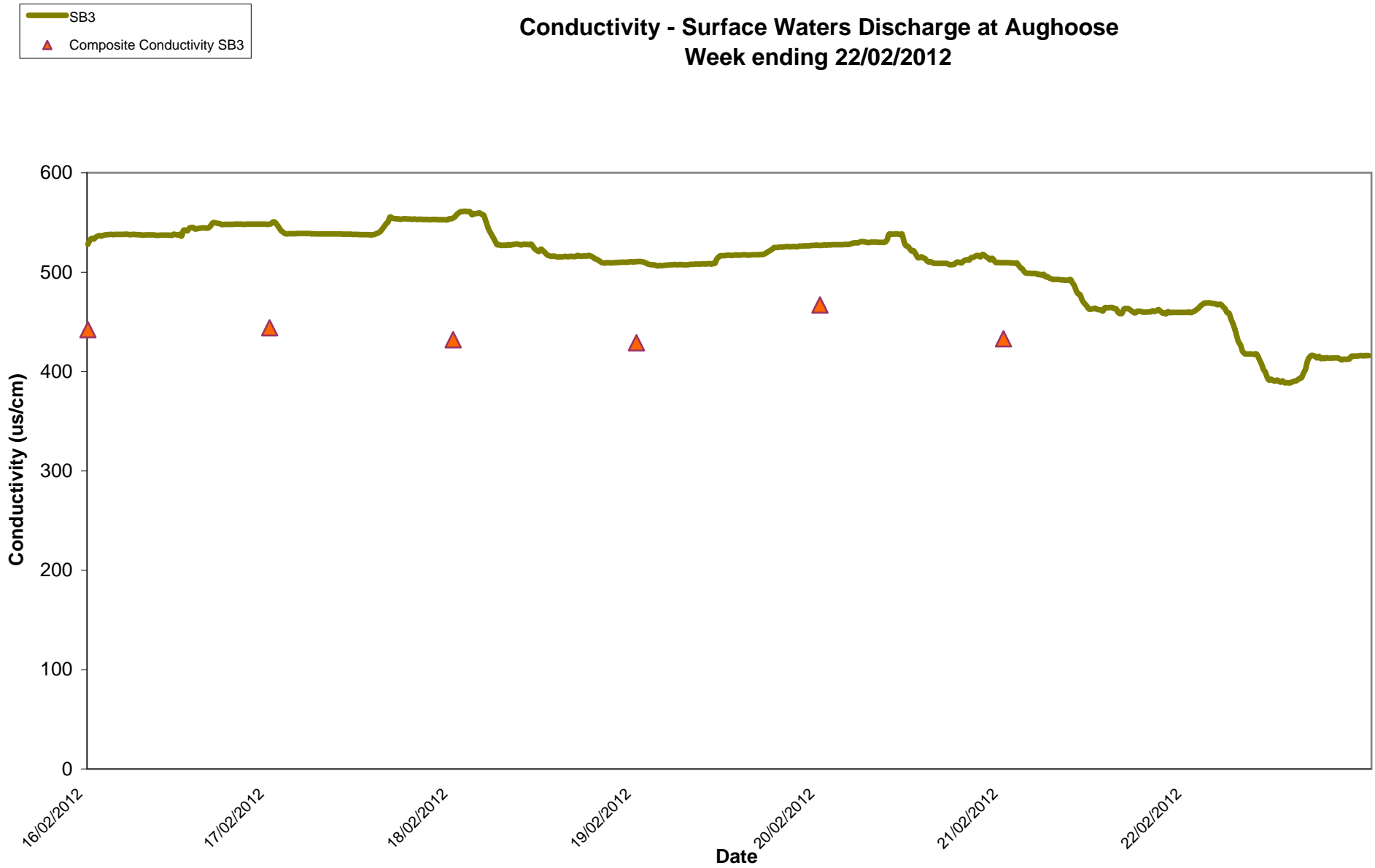
# TSS- Surface Waters Discharge at Aughooose Week ending 22/02/2012



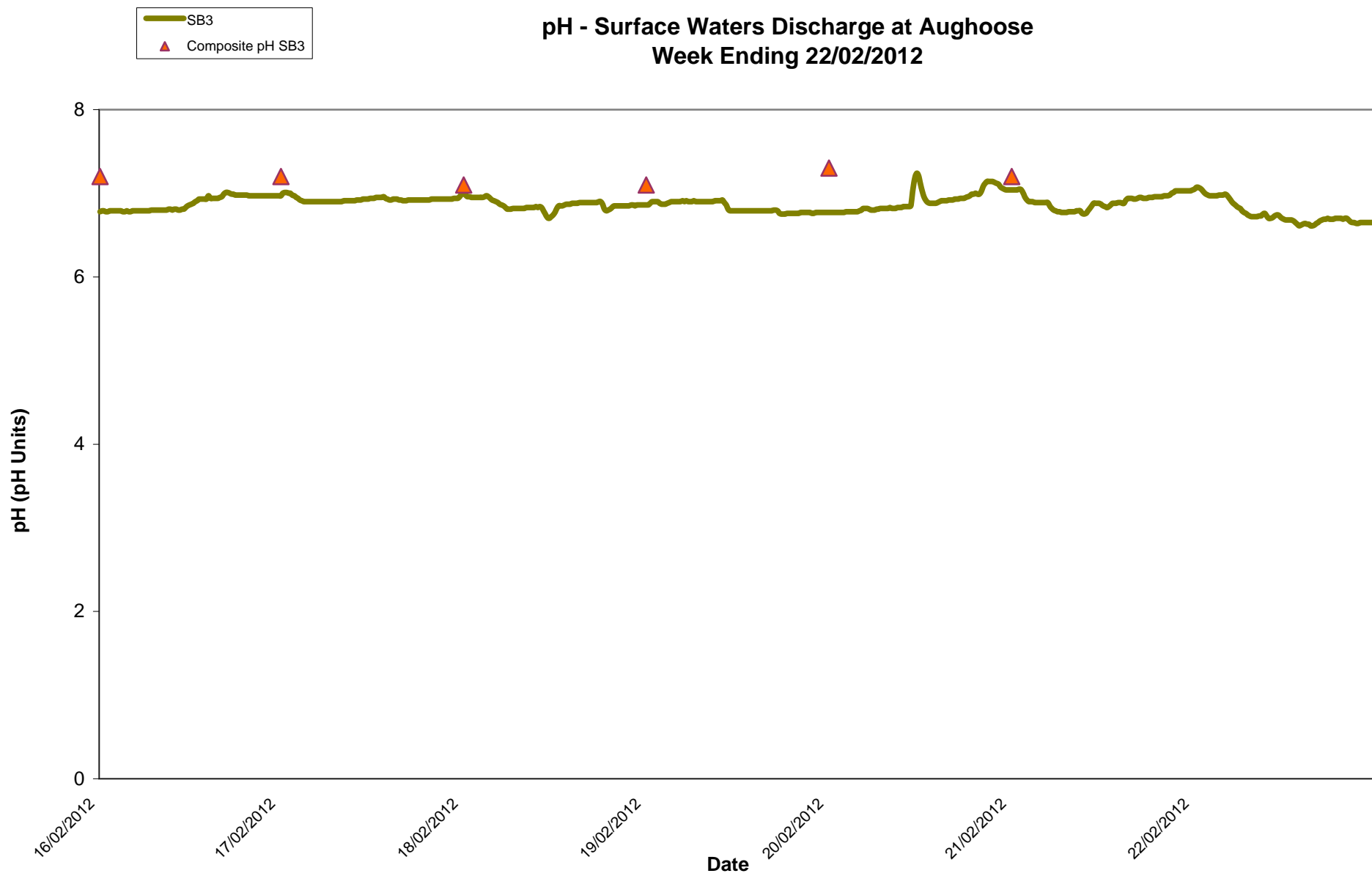
**Flow - Surface Waters Discharge at Aughooose**  
**Week ending 22/02/2012**



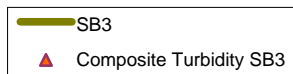
**Conductivity - Surface Waters Discharge at Aughooose  
Week ending 22/02/2012**



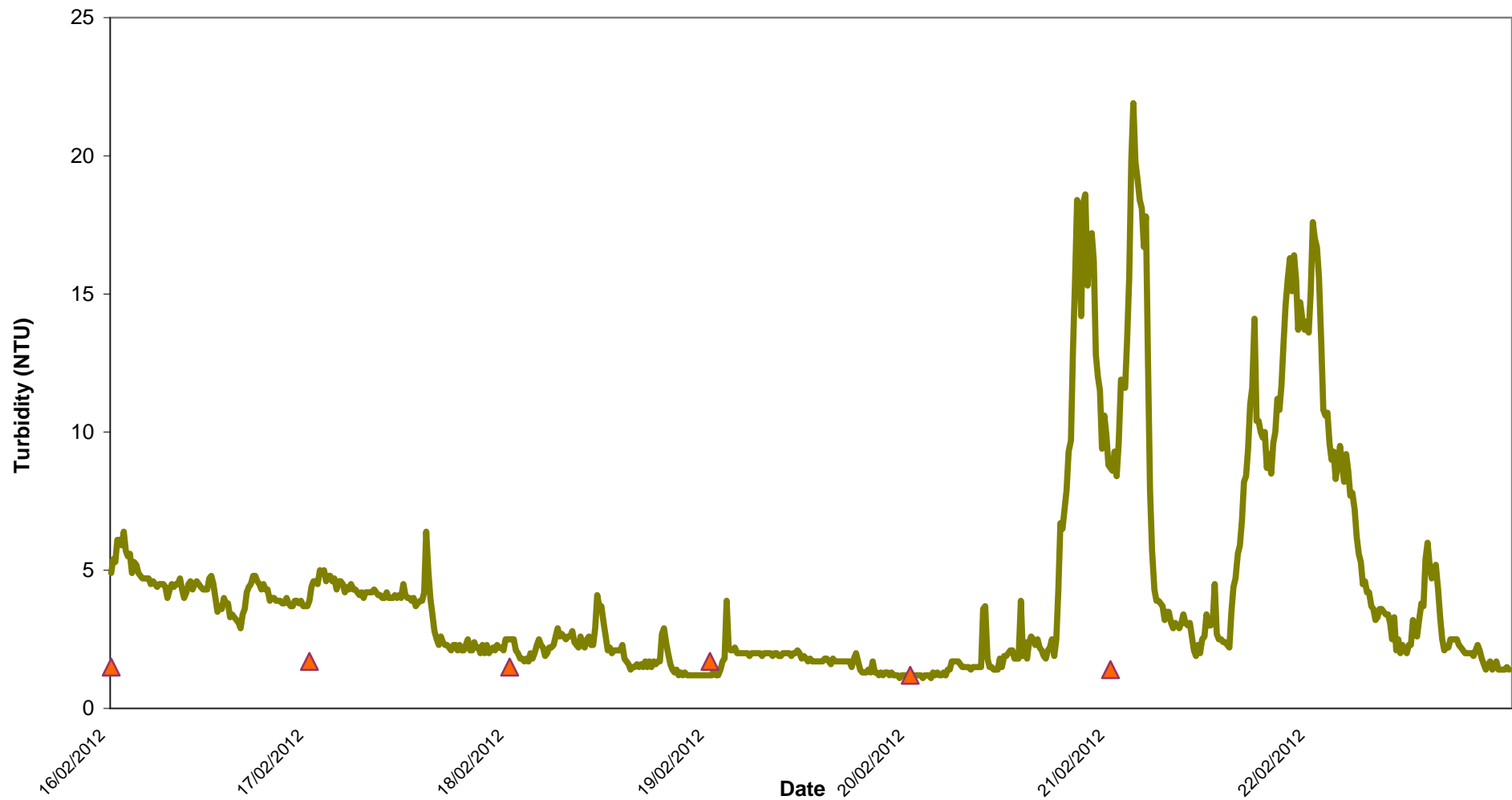
**pH - Surface Waters Discharge at Aughooose  
Week Ending 22/02/2012**



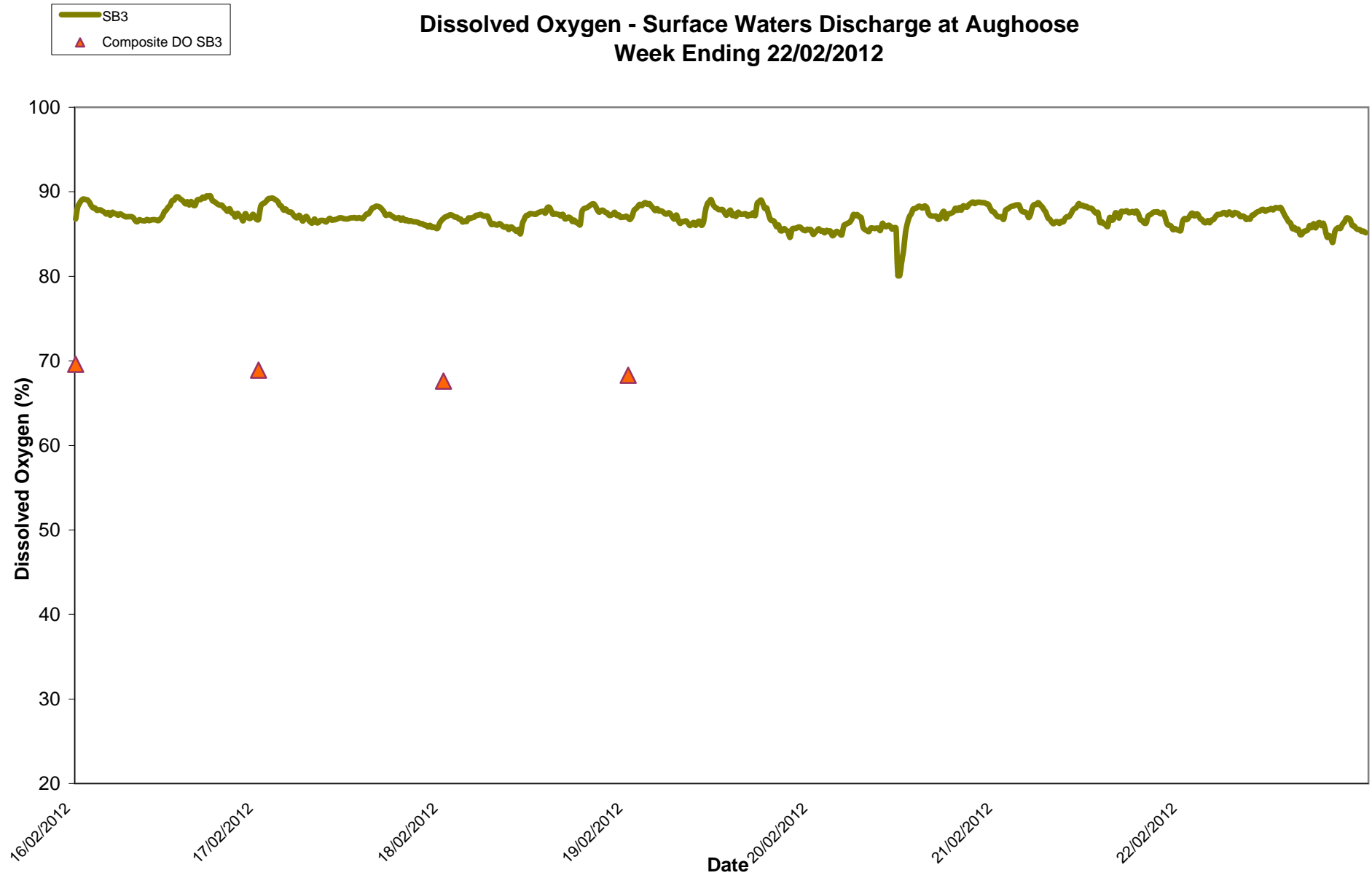




# Turbidity - Surface Waters Discharge at Aughooose Week Ending 22/02/2012



# Dissolved Oxygen - Surface Waters Discharge at Aughoose Week Ending 22/02/2012



## **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	16/02/2012	9.4	34.9	512	3.0	6.4
DL2	17/02/2012	Site closed due to protestor action				
DL2	20/02/2012	9.2	88.3	515	11.2	7.0
DL2	21/02/2012	9.8	94.3	423	2.9	6.8
DL2	22/02/2012	11.5	94.9	369	4.0	6.6
	= Indicative Only					
< LOD	= Below Limit of Detection		> LOD	= Above Limit of Detection		