

Interim Environmental Report	Period Ending: 26th November 2008
Compiled By: Siobhán Quinn & Aoife Reynolds	
Approved By: Tony Doyle	

1 Monitoring Data

1.1 Monitoring Equipment

Axonics	– Axonics plant operated as required during the reporting period.
PO ₄	– The PO ₄ analyser was operational during the reporting period. – The composite sampler was in place to cover any shortfalls in the PO ₄ analyser.
TSS	– The TSS analyser was operational during the reporting period. – The composite sampler was in place to cover any shortfalls in the TSS analyser.
Composite	– The composite sampler was operational during the reporting period.
Noise	– There is a single noise monitoring location currently being used – N1. – The other location is visible from off-site and because of current protestor action it cannot be guaranteed that the equipment remains undisturbed. – Telemetry is currently being set up at the noise monitoring station.
Vibration	– There is a single vibration monitoring location currently being used – V1. – The other location is visible from off-site and because of current protestor action it cannot be guaranteed that the equipment remains undisturbed.
Sondes	– The results are displayed graphically. o Any unusual values are explained on the relevant graph.
Weather Station	– The majority of data used for this reporting period was taken from the on-site meteorological station. Data for the 23 rd through to the 26 th was taken from Belmullet weather station. (Data for the 26 th is not yet available) The problem is being investigated.
Weirs	– Weirs were operational during the reporting period.

1.2 Rainfall Data

13/11/08	6.435	20/11/08	2.145
14/11/08	3.900	21/11/08	0.780
15/11/08	2.535	22/11/08	8.580
16/11/08	5.460	23/11/08	5.655
17/11/08	8.385	24/11/08	2.500
18/11/08	0.780	25/11/08	0.400
19/11/08	0.390	26/11/08	I.P.
Total Rainfall 47.945mm			

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1.3 Summary

Environment	Comments
Surface Water	There were no reported exceedances during the reporting period.
Groundwater	The groundwater data (Sonde) is within anticipated ranges.
Dust	All dust levels were within the set limits.
Weather	There was a total of 47.945mm of rainfall during the reporting period, with a temperature range of 5.5°C to 13.5°C. (These figures are based on the 13 th through to the 25 th of November only)
Noise	Technical error has been encountered in retrieving data from the noise meter. Results will be issued in the final report.
Vibration	No vibration exceedances were recorded during the reporting period, based on available results.

Note: All laboratory data generated on site should be considered indicative only.

2 Environmental Exceedences / Incidents / Complaints

There were no reported exceedances during the reporting period.

Surface Water Monitoring Record Sheet: Accredited Laboratory Results																	
	Date	Cond. µS/cm	Temp °C	Turbidity NTU	DO % Sat	pH pH units	TSS mg l ⁻¹	Ortho-phosphate as P µg l ⁻¹	Nitrate as N mg l ⁻¹	Nitrate as NO ₃ mg l ⁻¹	Total Phosphorus as P mg l ⁻¹	Ammonia as NH ₃ -N mg l ⁻¹	Nitrite as NO ₂ mg l ⁻¹	Aluminium (dissolved) µg l ⁻¹	Aluminium (total) µg l ⁻¹	Phosphate as PO ₄ -P mg l ⁻¹	TDS mg l ⁻¹
Action Limits		400		150		<3.5 or >7.5	25	40	1.5	4.0		0.2	0.025	100	135		
Target Limits		500		200		<3 or >8	35	70	2.6	6.0		0.5	0.05	150	200		
SP1	18/11/2008	245		5.5		7.7	<2	13		0.602	0.032	<0.005	<0.017	68	184	0.039	107
SP3	18/11/2008	320		5.4		7.8	<2	<10		1.230	0.020	0.030	<0.017	56	306	<0.030	138
Additional Monitoring																	
Axonics Monitoring																	
Pre Axonics	18/11/2008	308		289.0		7.4	165	23		1.262	0.236	0.030	<0.017	27	2319	0.070	134
Post Axonics	18/11/2008	318		1.7		7.2	<2	<10		1.329	0.037	0.007	<0.017	<20	139	<0.030	138
I.P.	= In Progress																
< LOD	= Below Limit of Detection																
> LOD	= Above Limit of Detection																
On site laboratory results included in Appendix 1																	
	Grey shaded areas denote parameters that cannot or were not analysed on-site or the lab																

Groundwater Monitoring Record Sheet

[illegible]

Graphs provided for MP1, MP2, MP4, MP6 and MP7: Temperature, Conductivity, and pH.

No groundwater monitoring during the reportin period.

Determinant Results

Columnar Results	Date Positioned	Date Removed	Ref. Number	Date Dispatched	Date Returned	Weight (mg/m ² /day)	Comments
Target (Consent) Limit: 350 mg m² d⁻¹ on as a 30 day average							
D1	25/07/2008	25/08/2008	182830	29/08/2008	04/09/2008	86	
D2	25/07/2008	25/08/2008	182831	29/08/2008	04/09/2008	166	
D3	25/07/2008	25/08/2008	182833	29/08/2008	04/09/2008	41	
D4	25/07/2008	25/08/2008	182834	29/08/2008	04/09/2008	76	
D1	25/08/2008	25/09/2008	185830	26/09/2008	30/09/2008	135	
D2	25/08/2008	25/09/2008	185831	26/09/2008	30/09/2008	92	
D3	25/08/2008	25/09/2008	185832	26/09/2008	30/09/2008	102	
D4	25/08/2008	25/09/2008	185833	26/09/2008	30/09/2008	83	
D1	25/09/2008	24/10/2008	188708	24/10/2008	28/10/2008	233	
D2	25/09/2008	24/10/2008	188709	24/10/2008	28/10/2008	186	
D3	25/09/2008	24/10/2008	188710	24/10/2008	28/10/2008	155	
D4	25/09/2008	24/10/2008	188711	24/10/2008	28/10/2008	208	
D1	24/10/2008	21/11/2008	191474	21/11/2008	27/11/2008	174	
D2	24/10/2008	21/11/2008	191475	21/11/2008	27/11/2008	167	
D3	24/10/2008	21/11/2008	191476	21/11/2008	27/11/2008	171	
D4	24/10/2008	21/11/2008	191477	21/11/2008	27/11/2008	180	
NDP = No Determination Possible							
Monitoring Points are numbered clockwise through the Cardinal Marks (N, E, S, W)							
Monitoring Results will be presented monthly							

Determinant Results												
Location	Air Temp. (Min)	Air Temp. (Max)	Start Date	Time	Duration	Serial No.	Wind		Results dB			*Comments
							Speed (m/s)*	Direction (Degrees)	L _{Aeq}	L _{Amax}	L _{Amin}	
Action Limit									60			
Target Limit									65			
N1	10.5	12.3	13/11/2008	08:00:00	14:00:00	2539533	4.7	58.9	I.P.	I.P.	I.P.	
N1	10.6	13.5	14/11/2008	08:00:00	14:00:00	2539533	7.2	35.9	I.P.	I.P.	I.P.	
N1	8.8	11.6	17/11/2008	08:00:00	14:00:00	2539533	6.4	70.2	I.P.	I.P.	I.P.	
N1	8.7	11.1	18/11/2008	08:00:00	14:00:00	2539533	4.0	126.2	I.P.	I.P.	I.P.	
N1	8.1	12.2	19/11/2008	08:00:00	14:00:00	2539533	4.0	104.4	I.P.	I.P.	I.P.	
N1	10.0	11.9	20/11/2008	08:00:00	14:00:00	2539533	5.3	115.9	I.P.	I.P.	I.P.	
N1	8.6	10.2	21/11/2008	08:00:00	14:00:00	2539533	6.0	142.4	I.P.	I.P.	I.P.	
N1	6.5	10.2	24/11/2008	08:00:00	14:00:00	2539533	11.7	na	I.P.	I.P.	I.P.	
N1	6.9	11.2	25/11/2008	08:00:00	14:00:00	2539533	5.7	na	I.P.	I.P.	I.P.	
N1	I.P.	I.P.	26/11/2008	08:00:00	14:00:00	2539533	I.P.	na	I.P.	I.P.	I.P.	

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

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Night Time Noise Monitoring Record Sheet

Determinant Results	
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Location	Air Temp. (Min)	Air Temp. (Max)	Start Date	Time	Duration	Serial No.	Wind		Results dB			*Comments
							Speed (m/s)*	Direction (Degrees)	L _{Aeq}	L _{Amax}	L _{Amin}	
Action Limit									50			
Target Limit									55			
N1	10.5	12.3	13/11/2008	22:00:00	10:00:00	2539533	4.7	58.9	I.P.	I.P.	I.P.	
N1	10.6	13.5	14/11/2008	22:00:00	10:00:00	2539533	7.2	35.9	I.P.	I.P.	I.P.	
N1	8.8	11.6	17/11/2008	22:00:00	10:00:00	2539533	6.4	70.2	I.P.	I.P.	I.P.	
N1	8.7	11.1	18/11/2008	22:00:00	10:00:00	2539533	4.0	126.2	I.P.	I.P.	I.P.	
N1	8.1	12.2	19/11/2008	22:00:00	10:00:00	2539533	4.0	104.4	I.P.	I.P.	I.P.	
N1	10.0	11.9	20/11/2008	22:00:00	10:00:00	2539533	5.3	115.9	I.P.	I.P.	I.P.	
N1	8.6	10.2	21/11/2008	22:00:00	10:00:00	2539533	6.0	142.4	I.P.	I.P.	I.P.	
N1	6.5	10.2	24/11/2008	22:00:00	10:00:00	2539533	11.7	na	I.P.	I.P.	I.P.	
N1	6.9	11.2	25/11/2008	22:00:00	10:00:00	2539533	5.7	na	I.P.	I.P.	I.P.	
N1	I.P.	I.P.	26/11/2008	22:00:00	10:00:00	2539533	I.P.	na	I.P.	I.P.	I.P.	

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

Flow Weir Record Sheet**Determinant Results**

Date	SP1			SP3		
	Max (l/s)	Min (l/s)	Avg (l/s)	Max (l/s)	Min (l/s)	Avg (l/s)
13/11/2008	28.58	11.70	21.61	13.58	5.13	10.24
14/11/2008	26.29	16.27	20.41	17.39	10.38	12.22
15/11/2008	26.29	14.42	18.17	13.88	7.23	9.64
16/11/2008	33.88	14.64	23.08	13.88	6.26	9.89
17/11/2008	36.93	16.03	26.11	15.13	6.26	10.51
18/11/2008	33.88	15.79	22.06	13.58	4.48	10.19
19/11/2008	17.49	12.50	15.18	9.83	6.74	9.00
20/11/2008	14.87	12.30	13.59	9.28	6.03	8.19
21/11/2008	35.01	9.66	21.29	9.83	3.10	6.64
22/11/2008	34.63	14.20	21.50	11.80	4.48	5.46
23/11/2008	37.72	14.64	24.61	11.80	3.10	7.48
24/11/2008	22.92	12.91	16.37	9.55	5.35	6.63
25/11/2008	12.91	7.24	9.83	6.50	2.38	4.67
26/11/2008	10.01	7.10	8.57	4.69	1.58	3.54

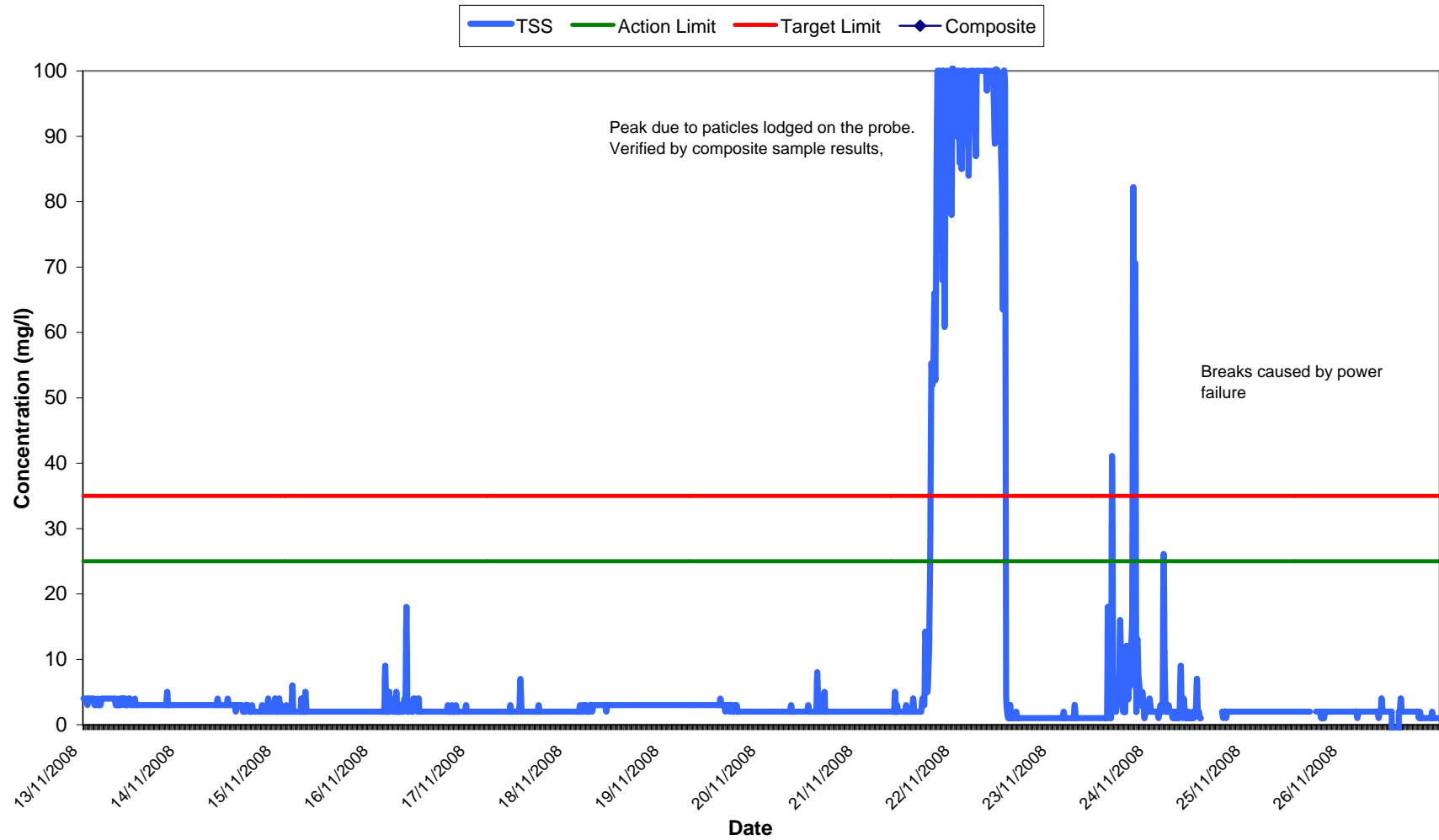
Note: Negative values indicate low flow conditions.

Vibration Monitoring Record Sheet

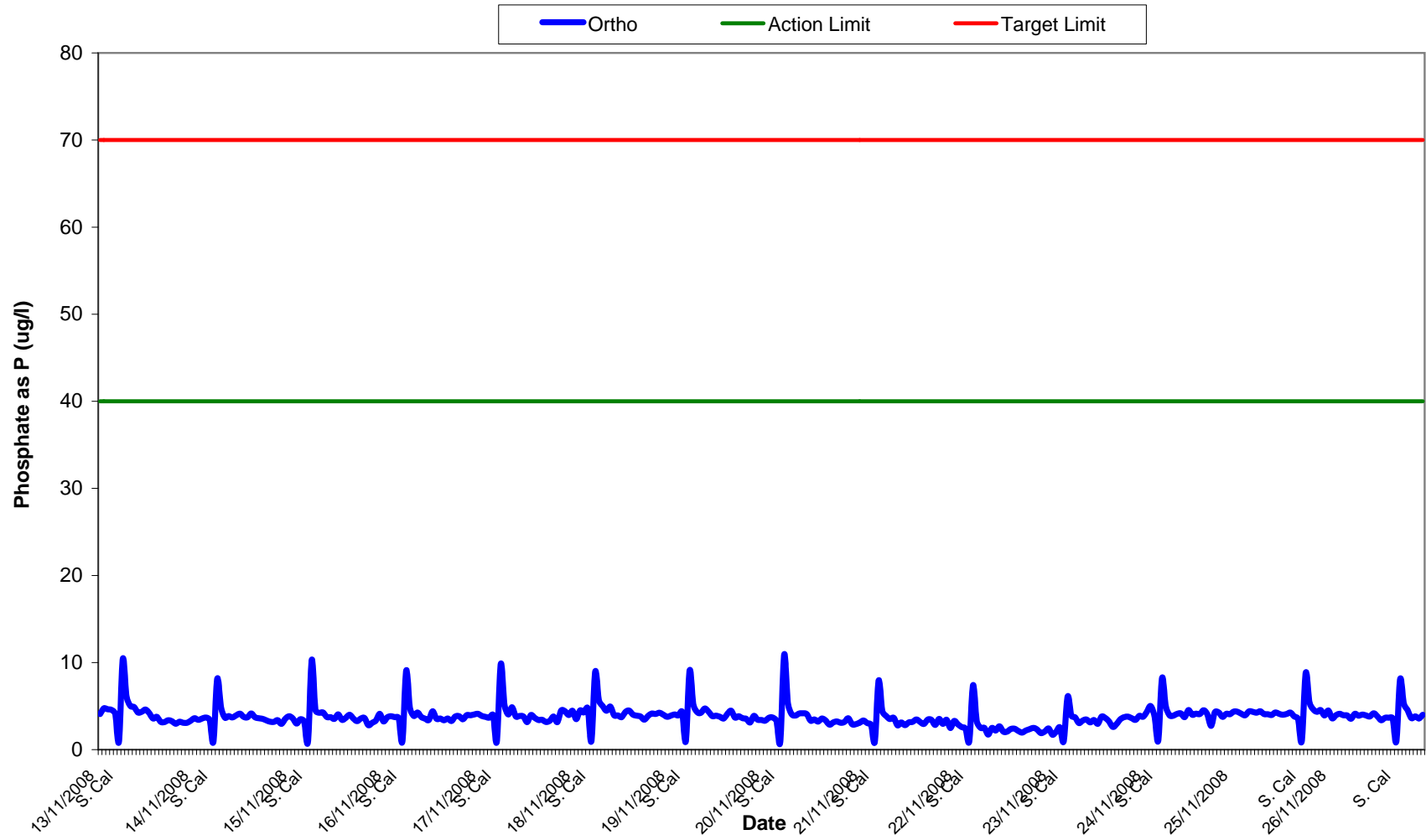
[illegible][illegible]

Vibration meter was located at V1 only.

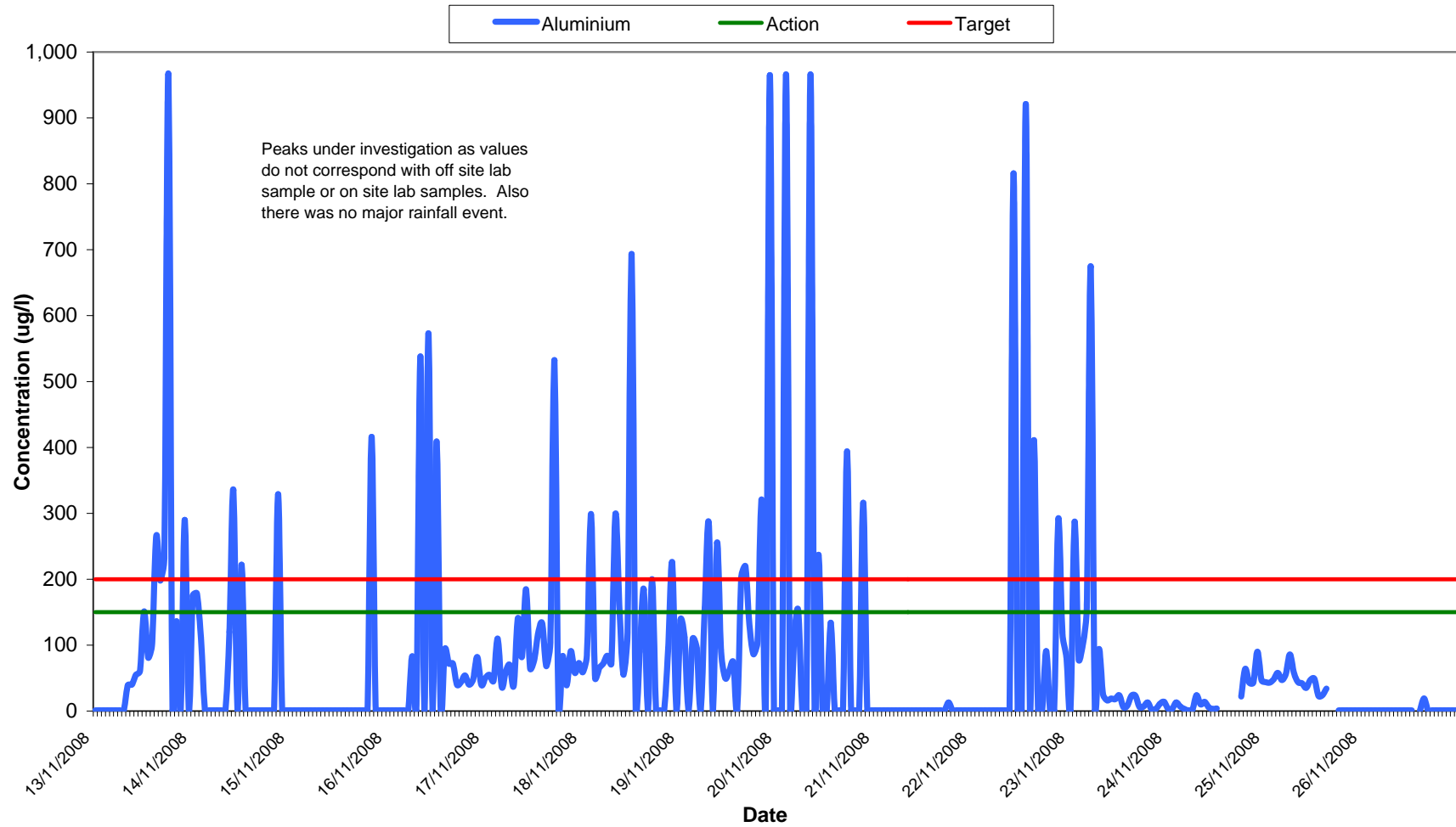
Total Suspended Solids Results at SP1 Wk 47-48



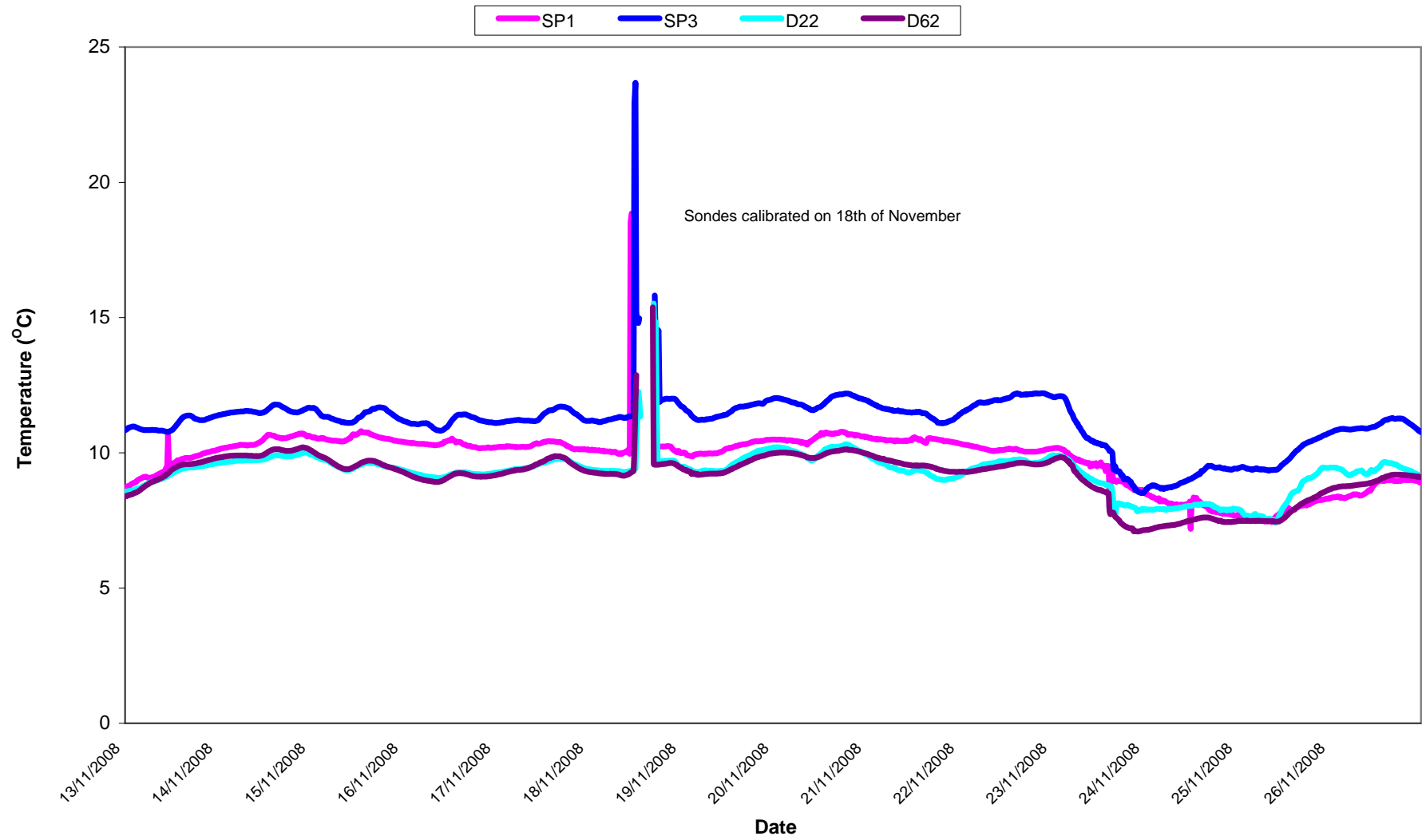
Orthophosphate Results at SP1
Wk 47-48



Aluminium Concentration at SP1 Wk 47-48



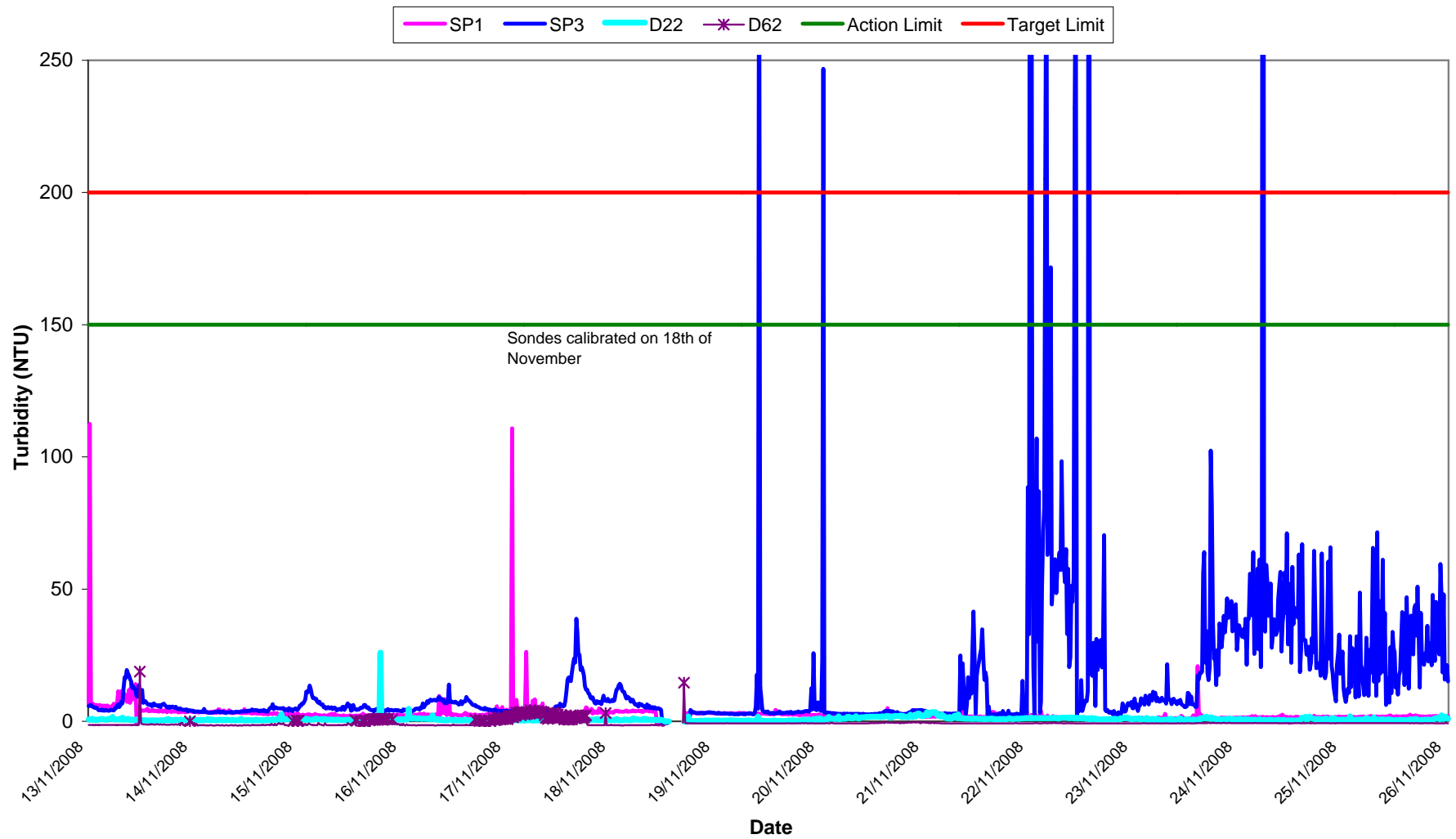
Temperature - Surface Waters Wk 47-48



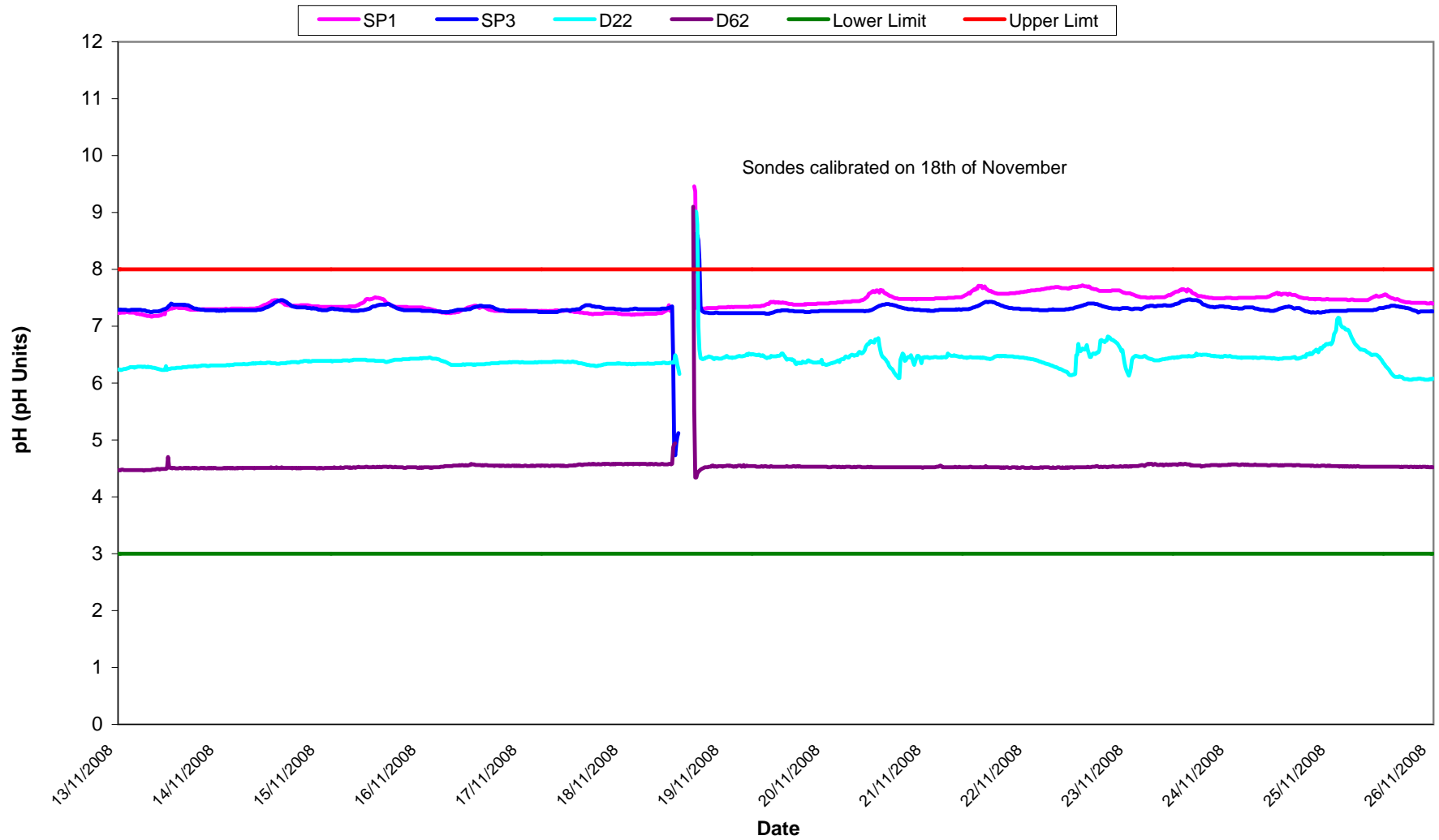
Conductivity - Surface Waters, Wk 47-48



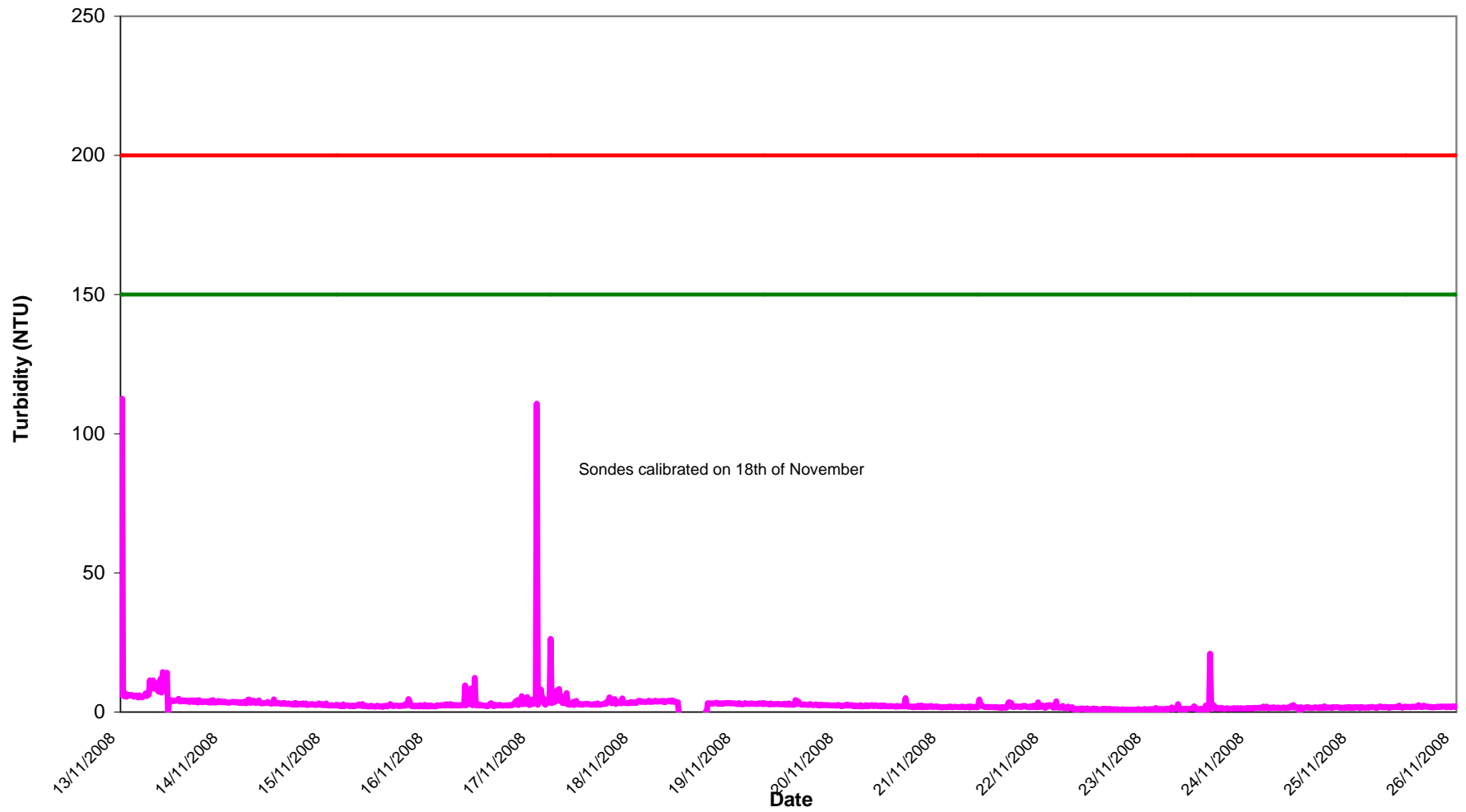
Turbidity - Surface Waters Wk 47-48



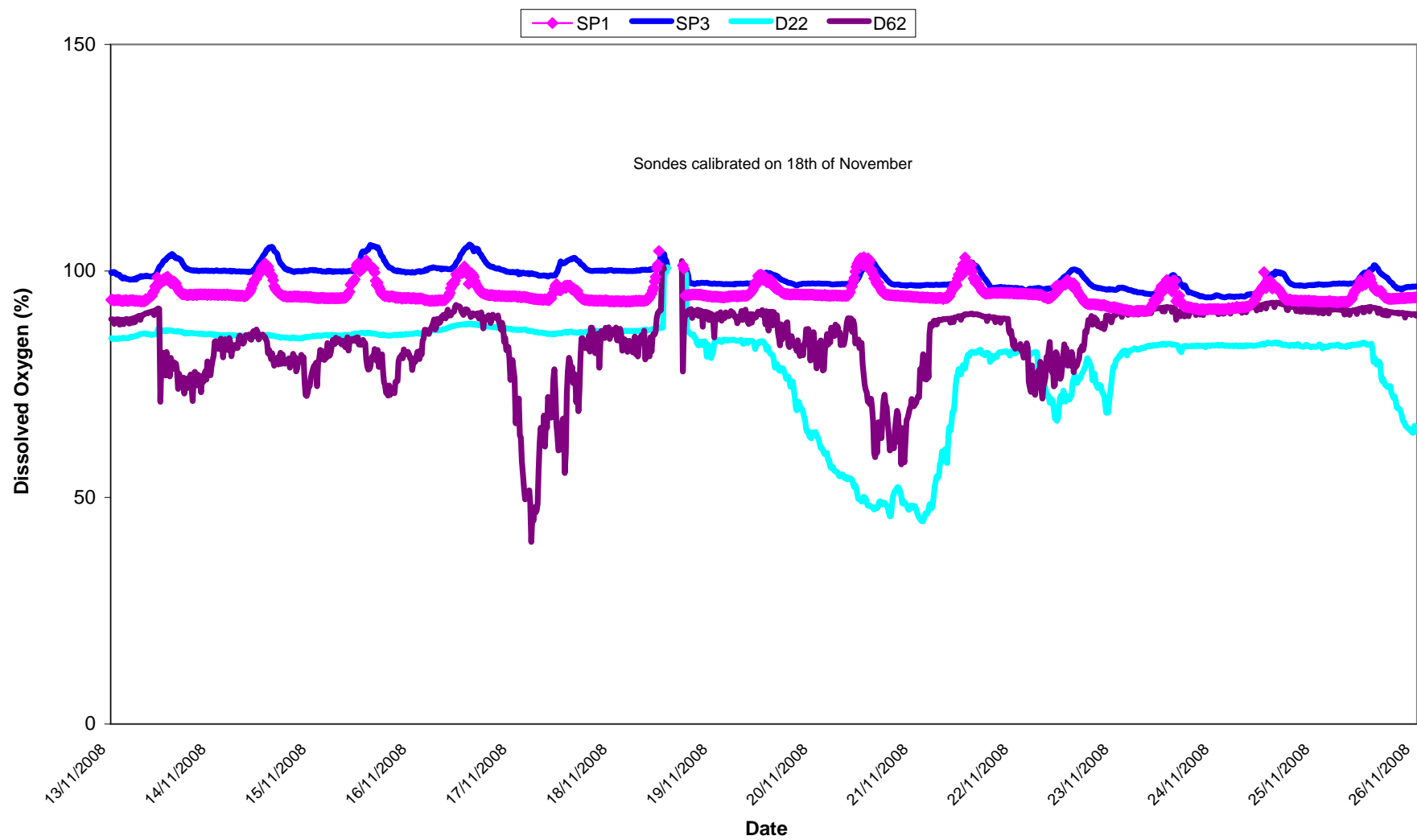
pH - Surface Waters Wk 47-48



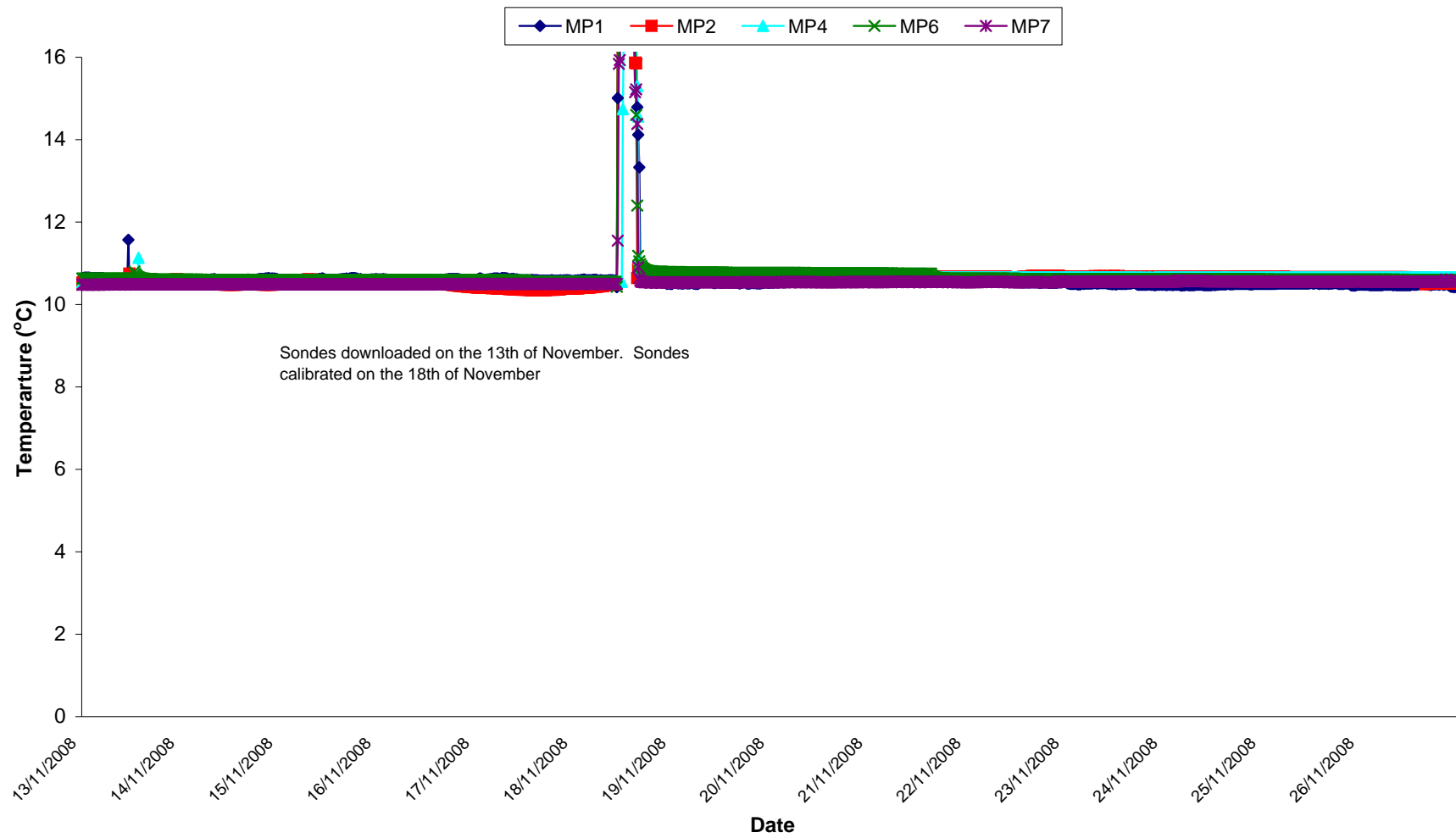
**Turbidity - Surface Waters @ SP1,
Wk 47-48**



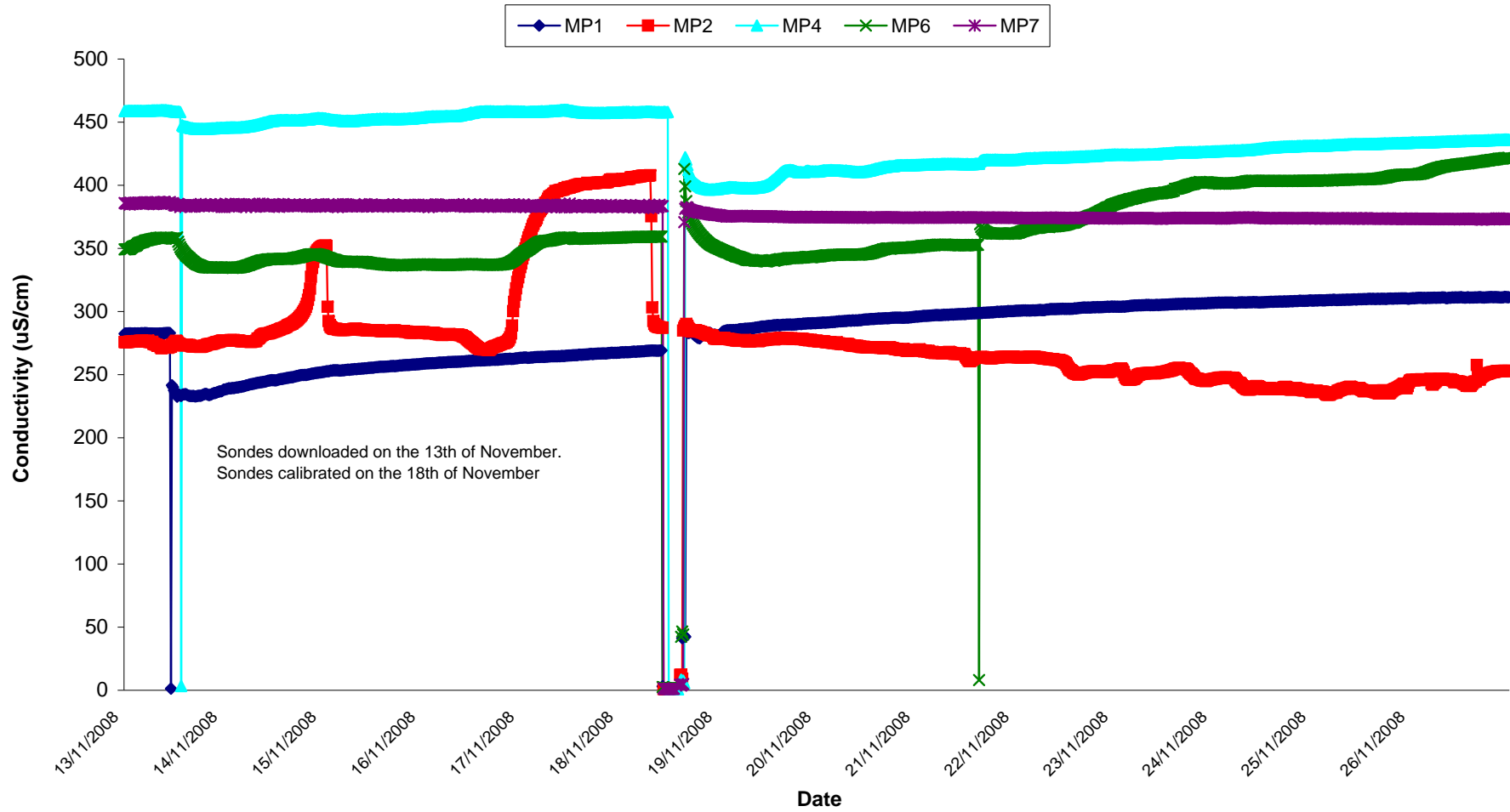
Dissolved Oxygen - Surface Waters, Wk 47-48



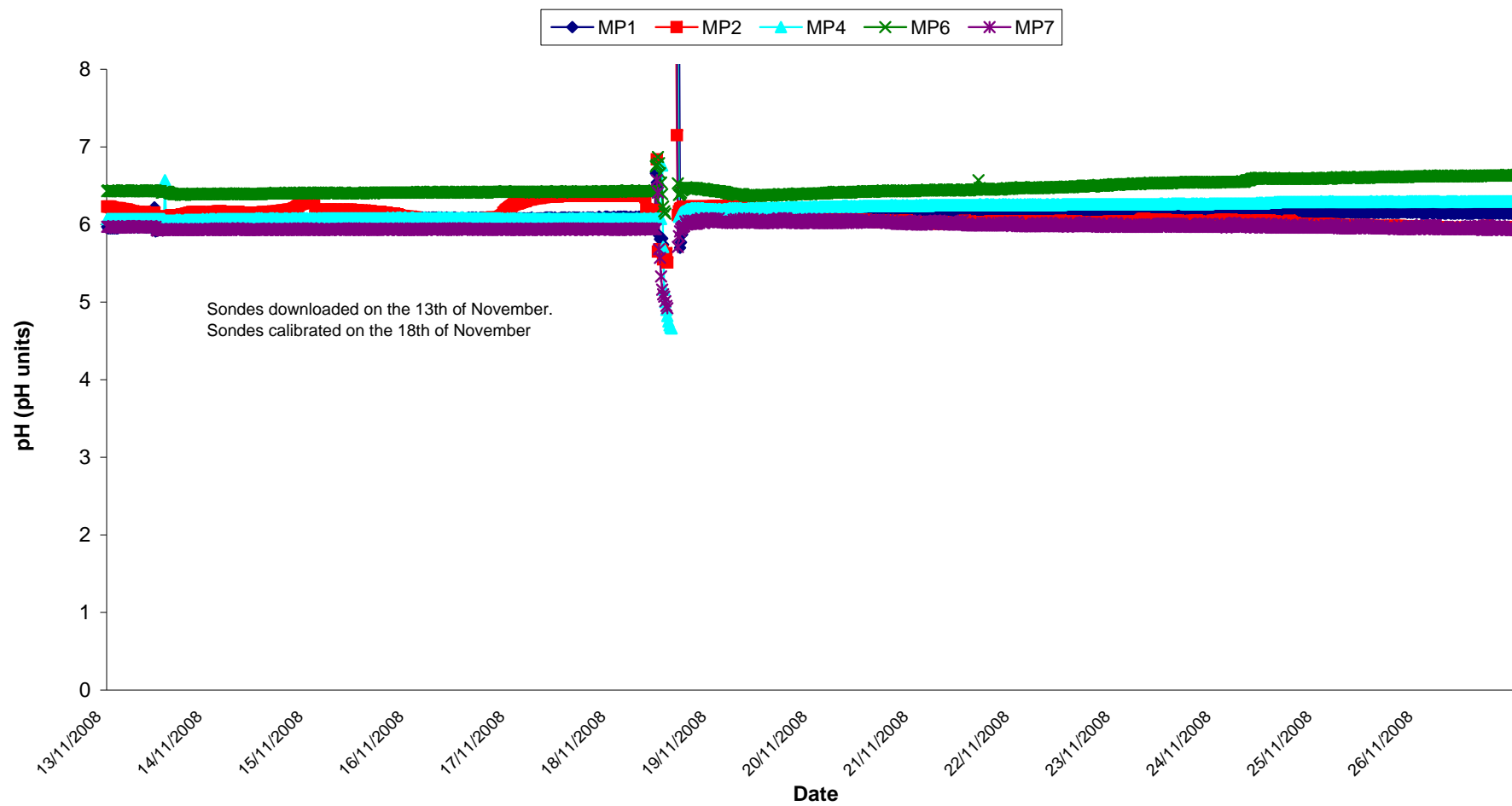
Temperature - Groundwaters Wk 47-48



Conductivity - Groundwaters Wk 47-48



pH - Groundwaters Wk 47-48



Appendix 1

