

1 Monitoring Data

Note: Due to a suspension of works the monitoring programme has been reduced.

Those parameters still being monitored include:

1. Daily water samples for on-site analysis
2. Daily sampling, for laboratory analysis, at SP1, SP3
3. Weekly sampling, for laboratory analysis, at D22 and D62
4. Monthly sampling, for laboratory analysis of the MP series
5. Downloading the in-situ Sondes, TSS & Orthophosphate analysers and the weather station

Vibration and noise monitoring have been suspended

All monitoring data is presented in tabular form, see attached. The sonde data is presented graphically.

1.1 Rainfall Data

The weather data is generated by the on-site weather station.

Date	Rainfall (mm)		Date	Rainfall (mm)
02/12/2005	31.8		09/12/2005	7.0
03/12/2005	8.0		10/12/2005	0.8
04/12/2005	6.8		11/12/2005	2.8
05/12/2005	7.8		12/12/2005	0.0
06/12/2005	3.8		13/12/2005	0.2
07/12/2005	12.2		14/12/2005	1.2
08/12/2005	6.0		15/12/2005	0.2
Total Rainfall = 88.6 mm				

1.2 Summary

Environment	Comments
Surface Water	<p>The TSS analyser is currently down. From communication with the manufacturer's technicians it is assumed a fuse has blown and an electrician is required to check. There is no on-line TSS data for the reporting period.</p> <p>The Orthophosphate analyser is currently mis-reading. This is being reviewed by the manufacturer's technicians in order to identify the exact nature of the problem. There is no on-line PO4 data for the reporting period.</p> <p>The results of daily samples issued to the accredited lab are presented overleaf. All results at SP1 are below the limits set.</p> <p>Until the technician can come on site to resolve the ongoing sonde dissolved oxygen probe calibration problem no dissolved oxygen data will be included.</p>
Groundwater	<p>The sonde data downloaded is shown graphically and is representative of concentrations normally recorded.</p> <p>There is no data available for MP1 for the reporting period. Upon arrival for download of the sonde, the sonde was gone. The loss of this sonde has been reported to MCC and will be reported to An Garda Siochana.</p> <p>Laboratory samples are currently being analysed.</p>
Weather	<p>There was a total of 88.6 mm of rainfall during the reporting period, with a temperature range of -1.9 to 11.7 °C</p>

The Axonics water treatment system has been brought on site and is currently being commissioned.

2 Environmental Incidents/Near misses/Complaints

There were no incidents/near misses or complaints reported.

Surface Water Monitoring Record Sheet											no...		1 of 1	
Conducted by							Approved by							
Name: Sandra Barber				Signed			Name Leslie Finnegan				Signed			
Determinant Results														
	Date	Cond. µS/cm	Temp °C	Turbidity NTU	DO % Sat	TSS mg l ⁻¹	pH	Ortho- phosphate as P µg l ⁻¹	Nitrate as N mg l ⁻¹	Total Phosphorus as P (sw) mg l ⁻¹	Ammonia as NH ₃ -N mg l ⁻¹	Ammonium as NH ₄ mg l ⁻¹	Nitrite as N mg l ⁻¹	Comments
Action Limits		400		150		25	<3.5 or >7.5	40			0.2			
Target Limits		500		200		35	<3 or >8	70			0.5			
Settlement Pond Monitoring														
SP1	06/12/05	189		27.9		15	6.8	35	0.22	0.063	0.048	0.062	0.005	
SP3	06/12/05	202		43.4		23	6.6	45	0.27	0.077	0.105	0.135	0.006	
SP1	07/12/05	187		28.5		16	6.4	35	0.15	0.069	0.042	0.054	0.005	
SP3	07/12/05	206		37.9		27	6.2	44	0.17	0.104	0.149	0.193	0.011	
SP1	08/12/05	231		14.9		11	6.3	39	0.122	0.061	0.047	0.061	0.005	
SP3	08/12/05	187		29.4		15	6.3	43	0.166	0.078	0.117	0.151	0.005	
SP1	09/12/05	169		18.5		5	6.3	38	0.1	0.08	0.05	0.064	0.005	
SP3	09/12/05	203		62.3		30	6.6	53	0.198	0.094	0.114	0.147	0.007	
SP1	12/12/05	183		36.4		18	6.3	I.P.	0.254	I.P.	0.014	0.018	0.009	
SP3	12/12/05	208		54		25	6.4	60	0.288	0.098	0.099	0.127	0.013	
SP1	13/12/05	201		42			7.1							
SP3	13/12/05	209		59			7.1							
SP1	14/12/05	200		41			6.1							
SP3	14/12/05	218		51			6.9							
SP1	15/12/05	237		38			7.3							
SP3	15/12/05	220		50			7.2							
Additional Surface Water Monitoring														
D22	06/12/05	198		1.9		4	5.9	84	0.1	0.1	0.025	0.032	0.005	
D62	06/12/05	167		0.8		4	4.4	43	0.1	0.067	0.022	0.029	0.005	
D22	09/12/05	191		6.8		4	6.2	82	0.1	0.106	0.024	0.031	0.005	
D62	09/12/05	157		3.8		13	4.4	43	0.1	0.075	0.021	0.027	0.005	
D22	13/12/05	208		1			6.4							
D62	13/12/05	189		28			4.7							

Note: LAB - Carried out by CLS Laboratories
 Grey shaded areas denote parameters that cannot be analysed on-site or the lab.
 Results detailed above are from on site grab samples only
 I.P. = In Progress

Groundwater Monitoring Record Sheet											no... 1 of 1		
Conducted by						Approved by							
Name: Sandra Barber				Signed		Name Leslie Finnegan				Signed			
Determinant Results													
Location	Date	DO % Sat	Temp °C	Cond. uS/cm	pH	TDS mg l ⁻¹	BOD mg l ⁻¹	TSS mg l ⁻¹	Phosphate as P ug l ⁻¹	Total Hardness mg/l CaCO3	Nitrite as NO ₂ mg l ⁻¹	Nitrate as NO ₃ mg l ⁻¹	Phosphate as PO ₄ mg l ⁻¹
MP 1													
MP 2													
MP 3													
MP 4													
MP 5													
MP 6													
MP 7													
MP 8													
MP 9													
MP 10a													
MEL BR4a													

Location	Date	Ammonia mg l ⁻¹	Arsenic ug l ⁻¹	Mercury ug l ⁻¹	Lead ug l ⁻¹	Aluminium ug l ⁻¹	Zinc ug l ⁻¹	Chromium ug l ⁻¹	Copper ug l ⁻¹	Cadmium ug l ⁻¹	Iron ug l ⁻¹	Tin ug l ⁻¹	
MP 1													
MP 2													
MP 3													
MP 4													
MP 5													
MP 6													
MP 7													
MP 8													
MP 9													
MP 10a													
MEL BR4a													

Note: Results detailed above are from on site grab samples only. Data recorded continuously is shown on the following graphs
 Graphs provided for MP1, MP2,MP4, MP6 and MP7 for: Temperature, Conductivity, and pH.

[illegible]

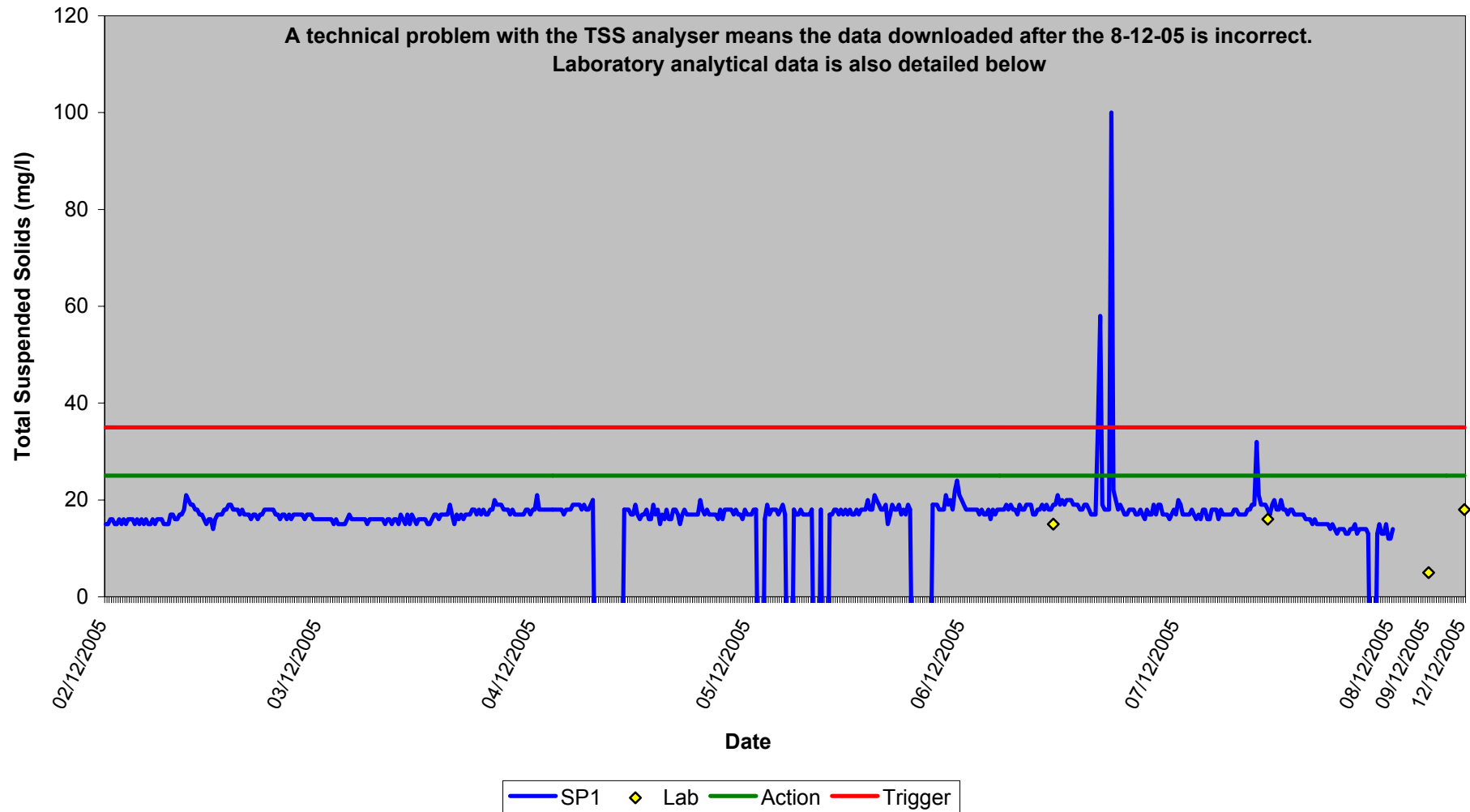
* Wind speeds in excess of 5 m/s negatively impact noise readings (as per EPA Guidance Note on Noise Measurement)

Dust Monitoring Record Sheet					no... 1 of 1		
Conducted by				Approved by			
Name: Sandra Barber		Signed		Name: Leslie Finnegan		Signed	
Determinant Results							
	Date Positioned	Date Removed	Ref. Number	Date Dispatched	Date Returned	Weight (mg/sq.m/day)	Comments
Target (Consent) Limit 350 mg m ² d ⁻¹ on as a 30 day average							
D1							
D2							
D3							
D4							
D1							
D2							
D3							
D4							
D1							
D2							
D3							
D4							
D1							
D2							
D3							
D4							
D1							
D2							
D3							
D4							

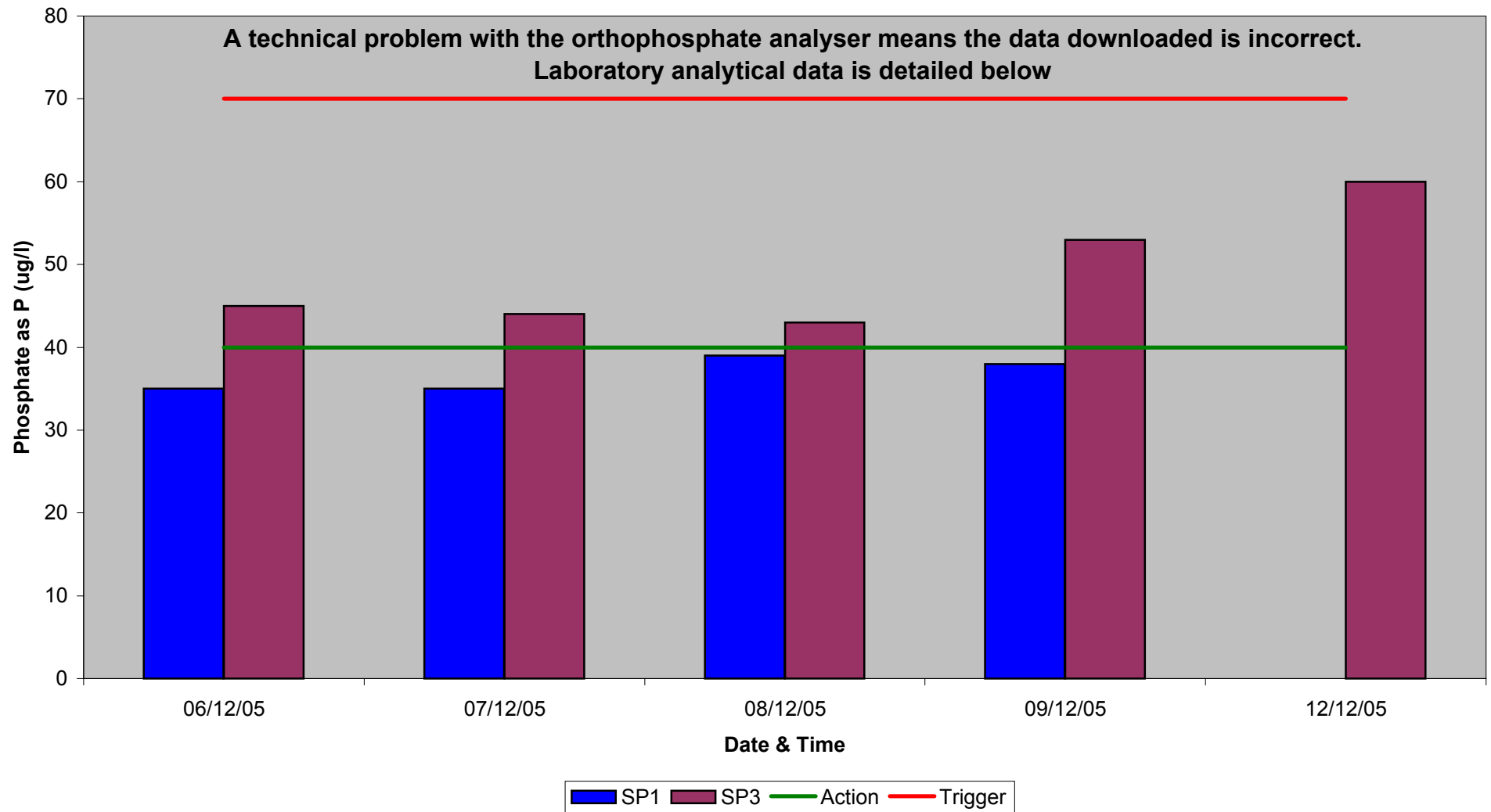
Monitoring Points are numbered clockwise through the Cardinal Marks (N, E, S, W)

Monitoring Results will be presented monthly

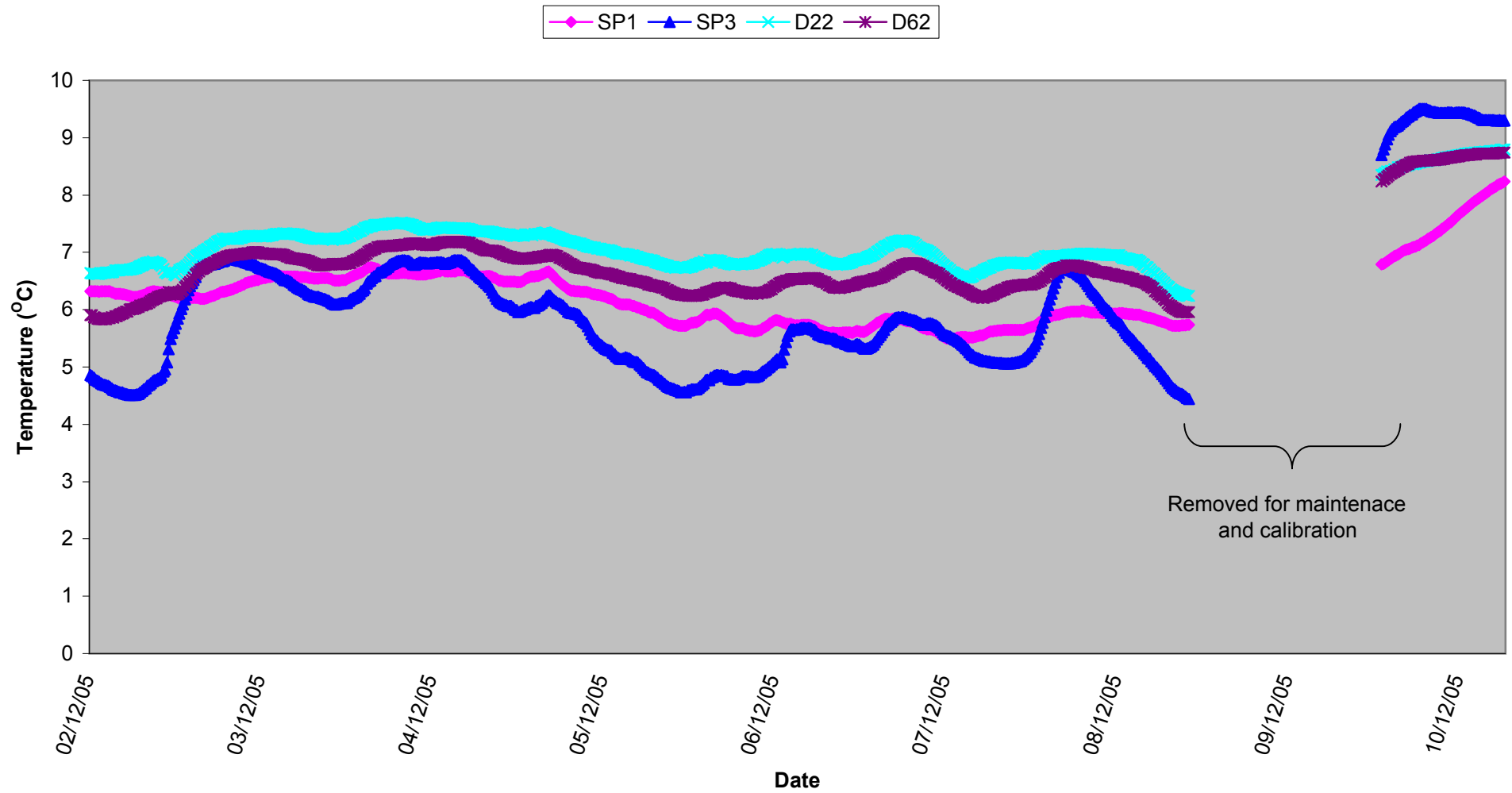
Total Suspended Solids Weeks 49/50



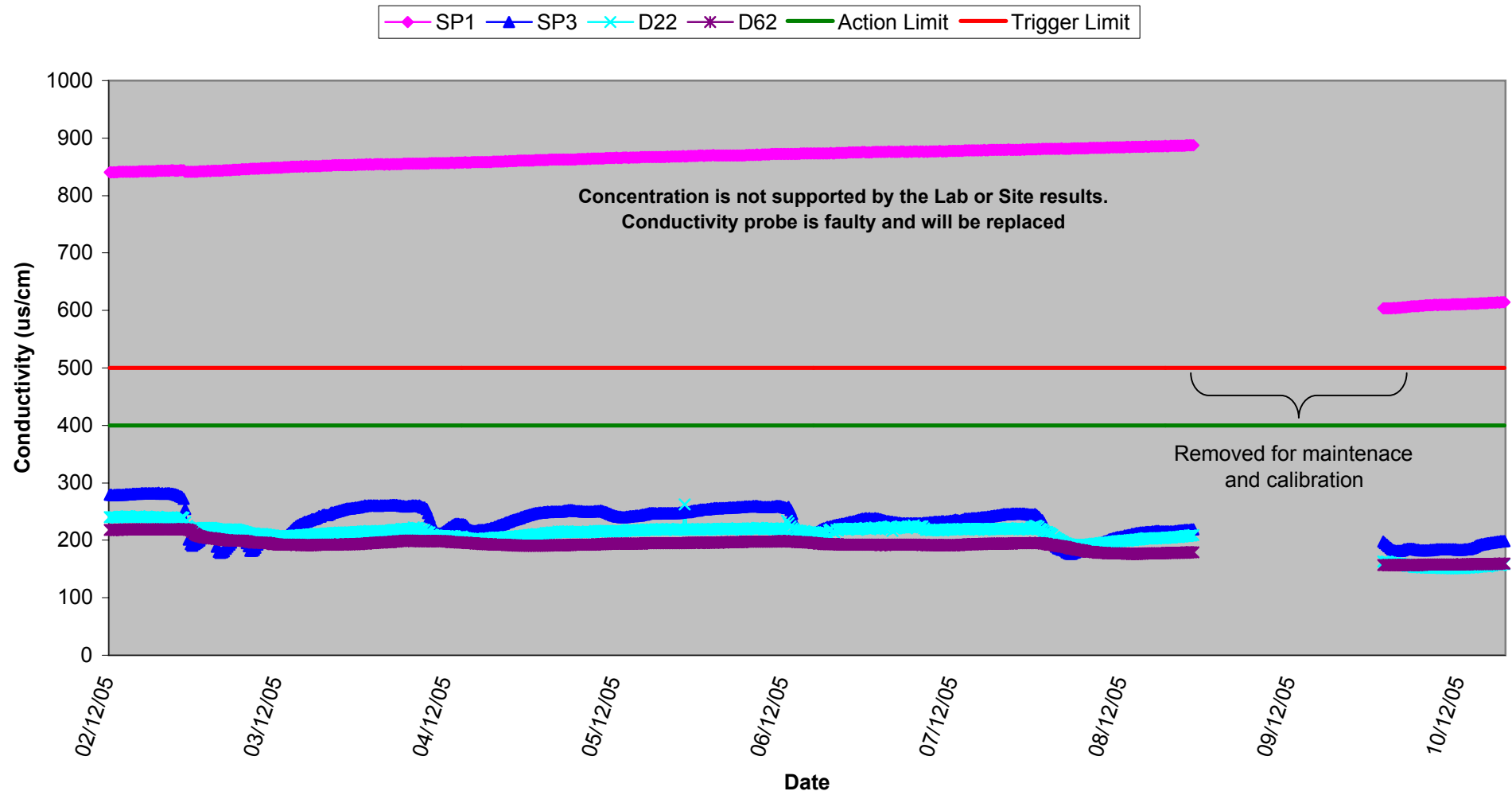
Orthophosphate,
Weeks 49/50



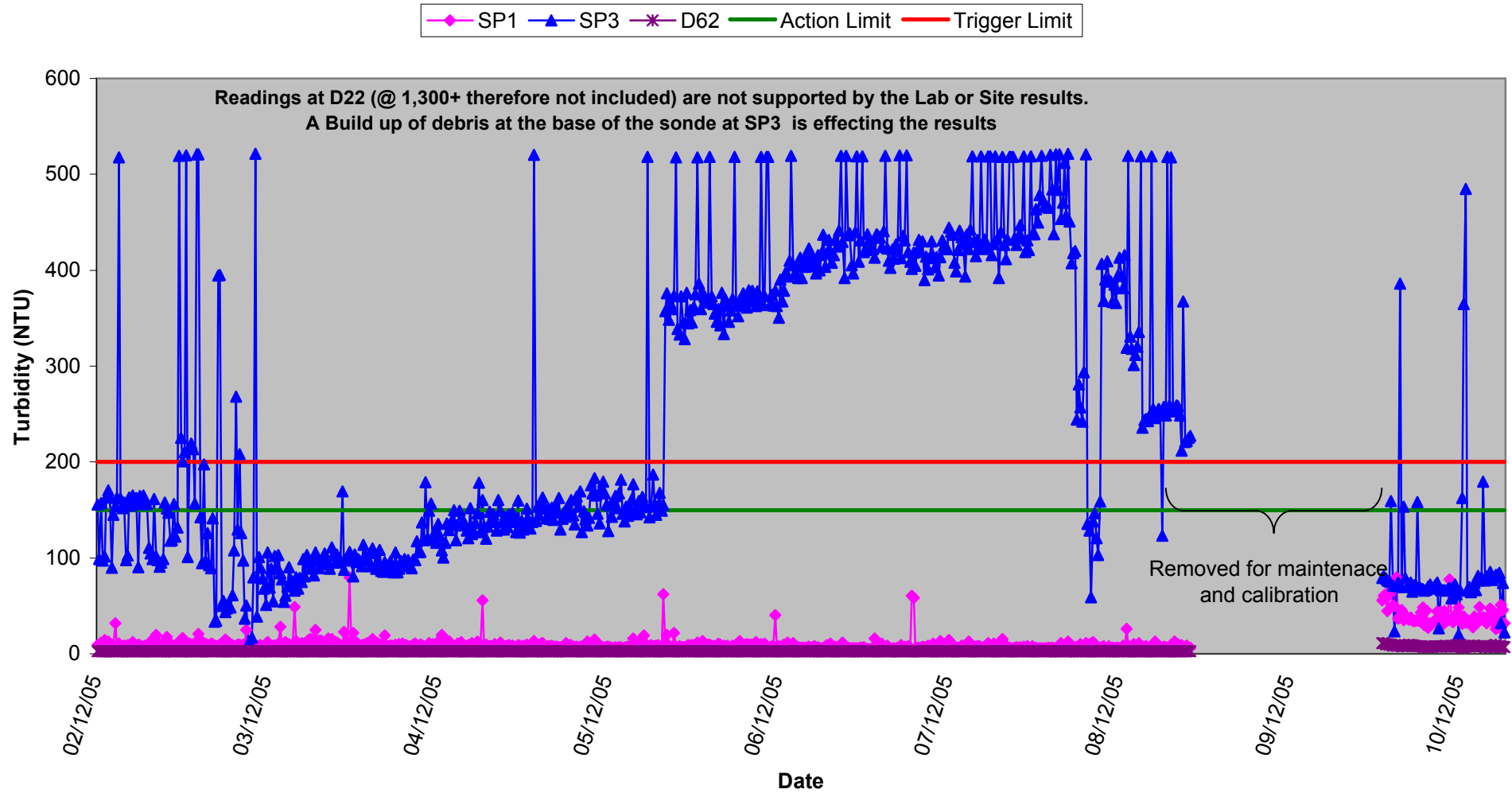
Temperature - Surface Waters,
Weeks 49/50 2005



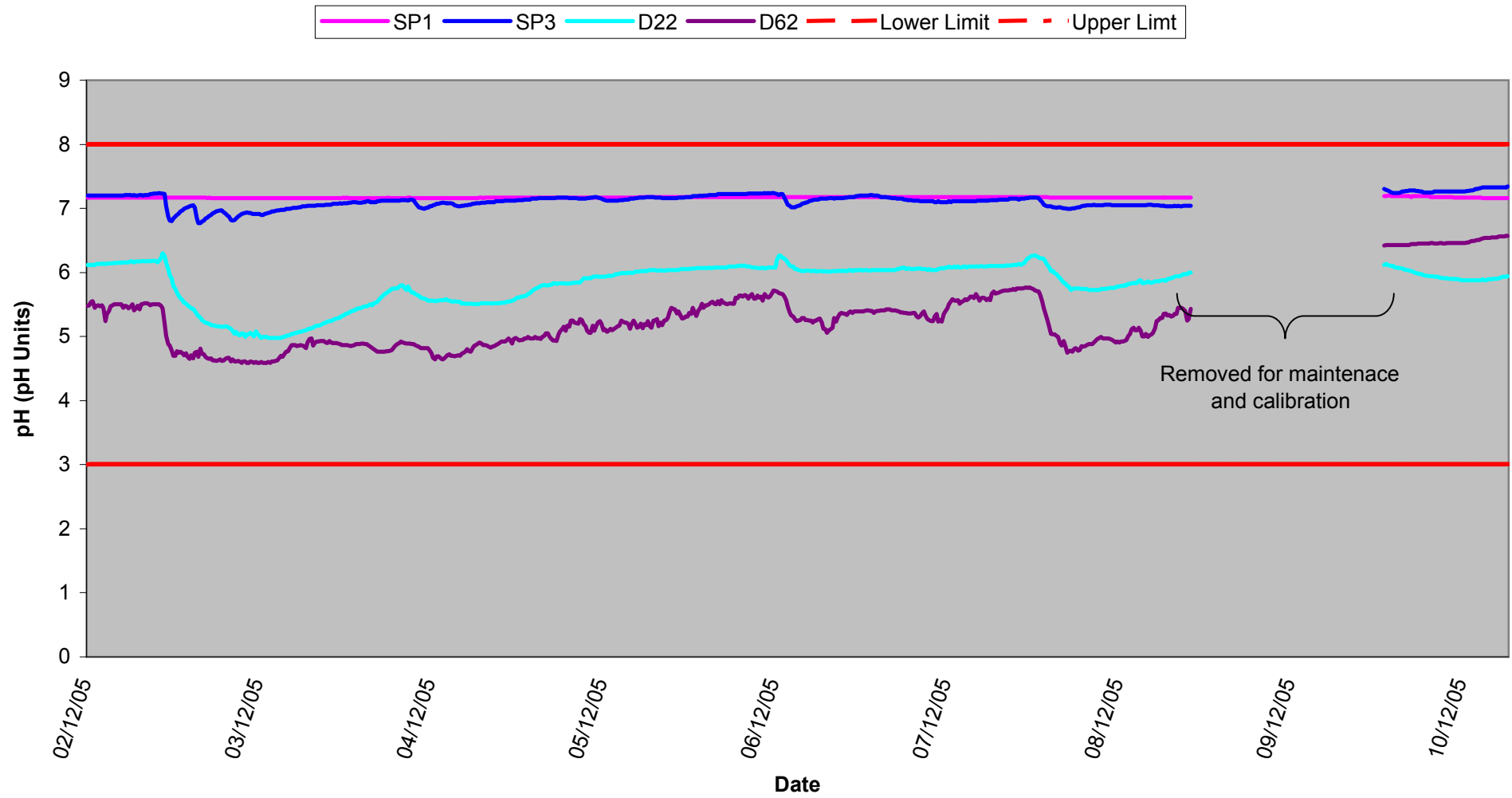
Conductivity - Surface Waters, Weeks 49/50 2005



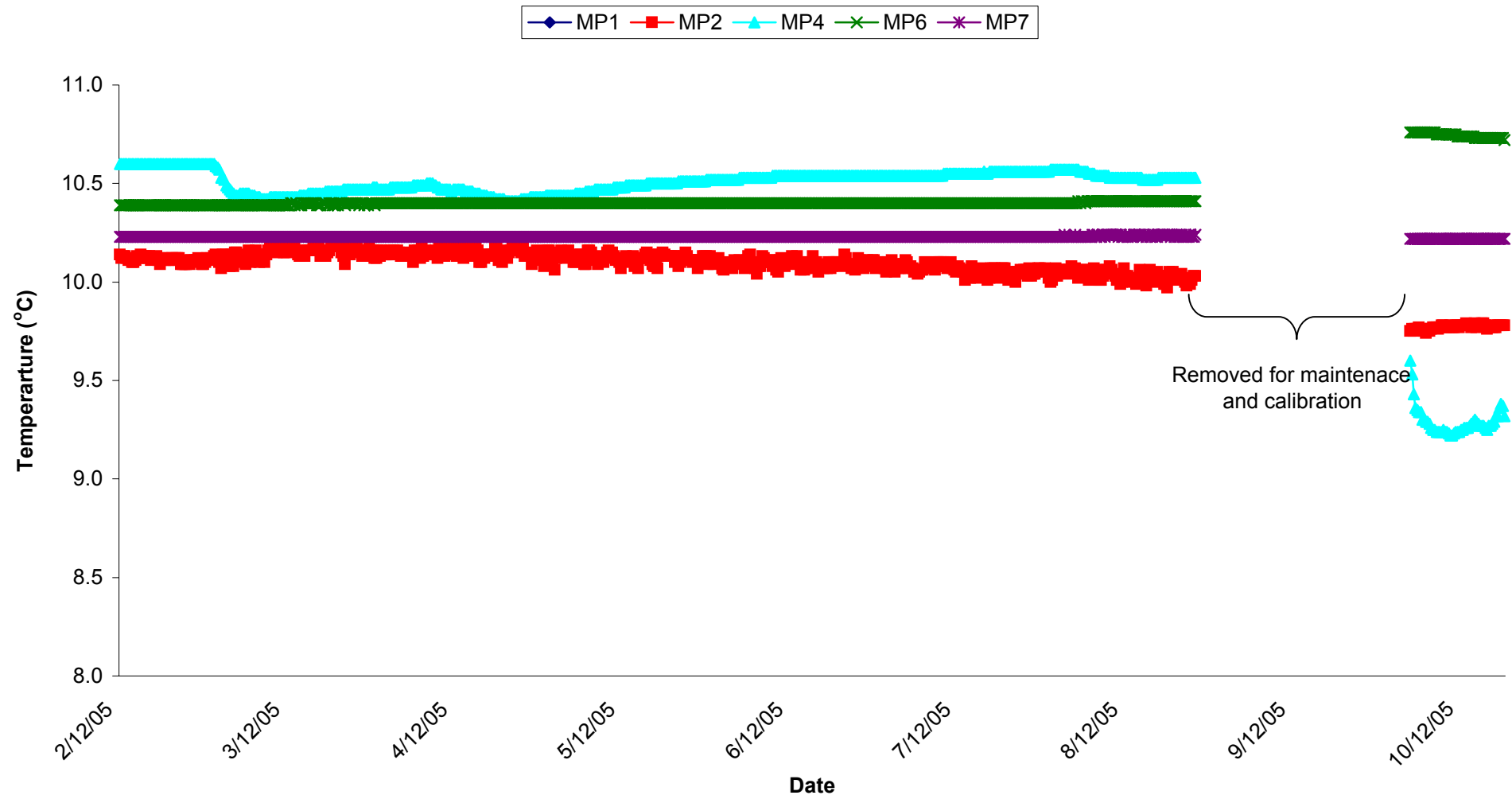
Turbidity - Surface Waters, Weeks 49/50 2005



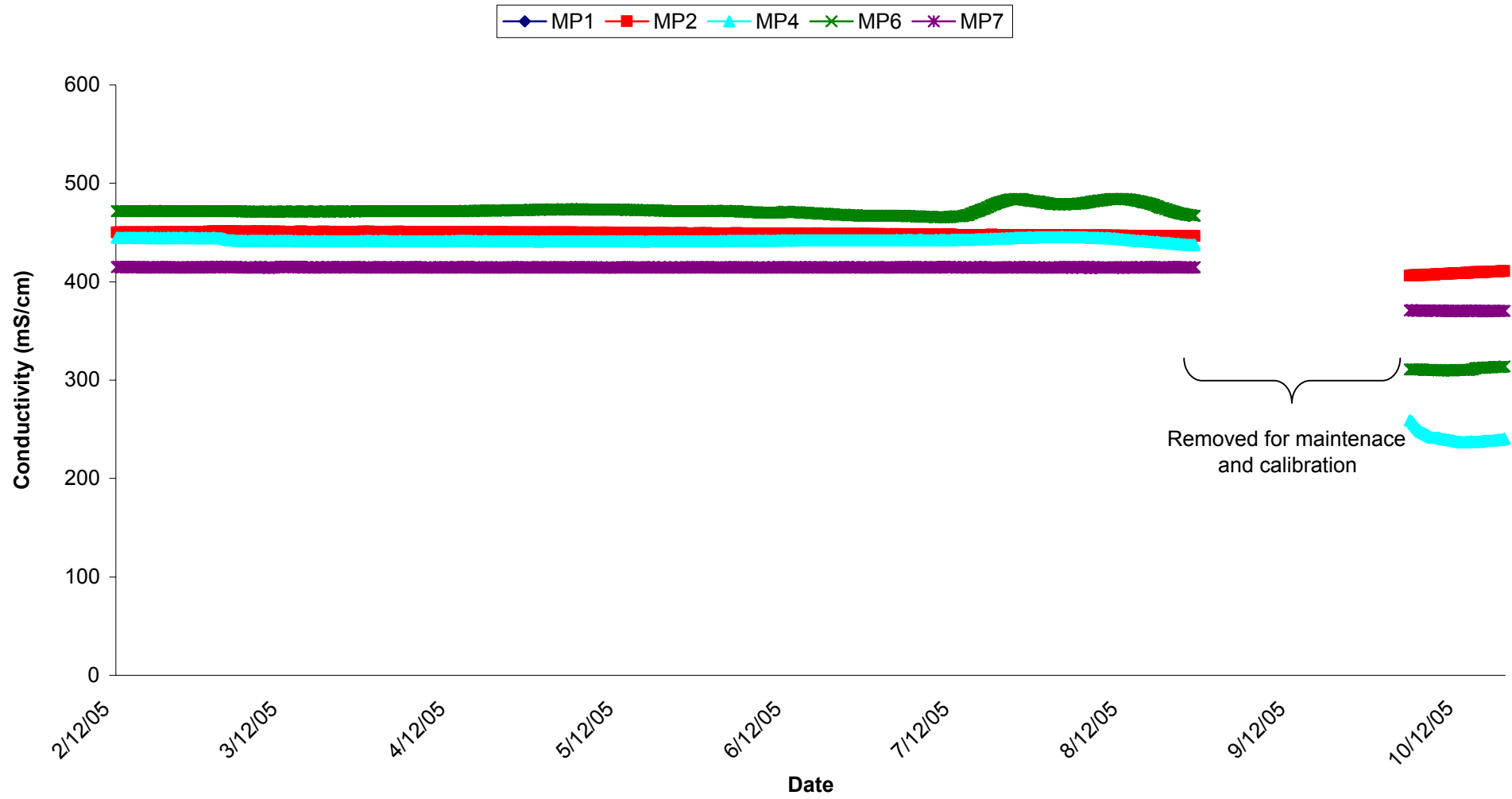
**pH - Surface Waters,
Weeks 49/50 2005**



Temperature - Groundwaters Weeks 49/50 2005



Conductivity - Groundwaters Weeks 49/50 2005



**pH - Groundwaters
Weeks 49/50 2005**

