

Weekly Environmental Report - Status	Week Ending: Thur. 28 th April 2005
Generated By: Sandra Barber	
Checked By: Wendy Hogben	

1 Monitoring Data

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

1.1 Rainfall Data

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

Date	22-Apr-05	23-Apr-05	24-Apr-05	25-Apr-05	26-Apr-05	27-Apr-05	28-Apr-05
Rainfall (mm)	1.8	0	0	1.4	2.6	3	14.2

Note: a heavy rainfall event was recorded on the afternoon of the 28-04-05.

1.2 Summary

Environment	Comments
Surface Water	The surface water sondes were relocated on the 22-04-05. The majority of peaks shown in the associated tables and graphs are associated with the heavy rain event of the 28-04-05.
Groundwater	Initial on-site results are detailed in the table, lab results to follow.
Noise	L _{Aeq} at N1 recorded between 52.2 and 57.8dB The noise meter at N2 was off-site all week
Vibration	No events were recorded on the meter in the last week.
Dust	Dust Gauges are due for collection on the 4 th May 2005
Weather	There was a total of 23 mm of rainfall during the reporting period, with an average temperature range of 3.9 to 17.2 °C

* The data defined above uses different parameters than those outlined in the Environmental Monitoring Plan (velocity in mm/sec). The Environmental Monitoring Plan has been updated to reflect this change.

2 Environmental Incidents/Near misses/Complaints

There was a single environmental incident.

During the construction of new lay-bys on the R314 the drain D16 was rerouted. During a period of heavy rainfall the loose material caused by the excavation and the wash from the stones in the lay-bys caused an increase in suspended solids in the drain.

Surface Water Monitoring Record Sheet											no...	1	of	1					
Conducted by					Approved by														
Name: Sandra Barber					Signed					Name Wendy Hogben					Signed				
Determinant Results																			
	Date	Cond.	Temp	Turbidity	DO	TSS*	Nitrate	Phosphate	pH	Ortho-phosphate* as P	Ammonia	*Comments							
		µS	°C	NTU	% Sat	mg l ⁻¹	mg l ⁻¹	mg l ⁻¹ PO ₄		mg l ⁻¹	mg l ⁻¹								
D12	22/04/2005	274	8.8	21.34	60		0	<10	6.58										
D16	22/04/2005	261	8.9	4.85	55		0	<10	6.13										
DS1	22/04/2005	245	8.1	2.66	95		0	<10	6.74										
SP1	23/04/2005	243	9.8	3.47	66		0	<10	6.05										
SP2	23/04/2005	244	9.9	6	86		0	<10	6.38										
SP1	25/04/2005	258	9.5	6.68	72		0	<10	6.25										
SP2	25/04/2005	243	9.1	2.11	85		0	<10	6.6										
SP1 - Lab	25/04/2005	200		2.2		< 4	< 0.1	0.045	6.3	0.015	< 0.005								
SP2 - Lab	25/04/2005	202		2.5		< 4	< 0.1	0.073	6.5	0.024	< 0.005								
SP1	26/04/2005	247	10.7	2.16	66		0	<10	6.26										
SP2	26/04/2005	236	11.1	3.18	83		0	<10	5.96										
SP1	27/04/2005	238	8.6	1.74	63		0	<10	7.79										
SP2	27/04/2005	236	9.4	1.45	87		0	<10	6.56										
SP1	28/04/2005	215	12.1	144	76		0	<10	5.64										
SP2	28/04/2005	206	12.2	11.82	80		0	<10	6.07										

* Carried out at CLS labs

§ Data not presented will be included in the next weekly report (Week ending Thursday 7th April 2005).

TSS and Orthophosphate analysis has reverted to the in-situ analysers and a single weekly grab sample

Groundwater Monitoring Record Sheet										no... 1 of ... 1			
Conducted by					Approved by								
Name: Sandra Barber					Signed			Name Wendy Hogben			Signed		
Determinant Results													
Location	Date	Cond. uS/cm	Temp °C	BOD mg l ⁻¹	DO % Sat	TSS* mg l ⁻¹	Phosphate as P mg l ⁻¹	pH	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	18-Apr-05	483	11.1		0			5.78					
MP 4													
MP 5	18-Apr-05	489	12.2		0			6.15					
MP 6													
MP 7													
MP 8	18-Apr-05	484	12.5		0			6.16					
MP 9	18-Apr-05	265	12.4		0			5.79					
MP 10a													
MEL BR4a	18-Apr-05	430	12.6		0			6.83					

Location	Date	TDS 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	18-Apr-05	271										
MP 4												
MP 5	18-Apr-05	331										
MP 6												
MP 7												
MP 8	18-Apr-05	318										
MP 9	18-Apr-05	181										
MP 10a												
MEL BR4a	18-Apr-05	295										

MP1, MP2, MP4, MP6 and MP7 have been installed with in-situ monitoring devices, these results are presented graphically

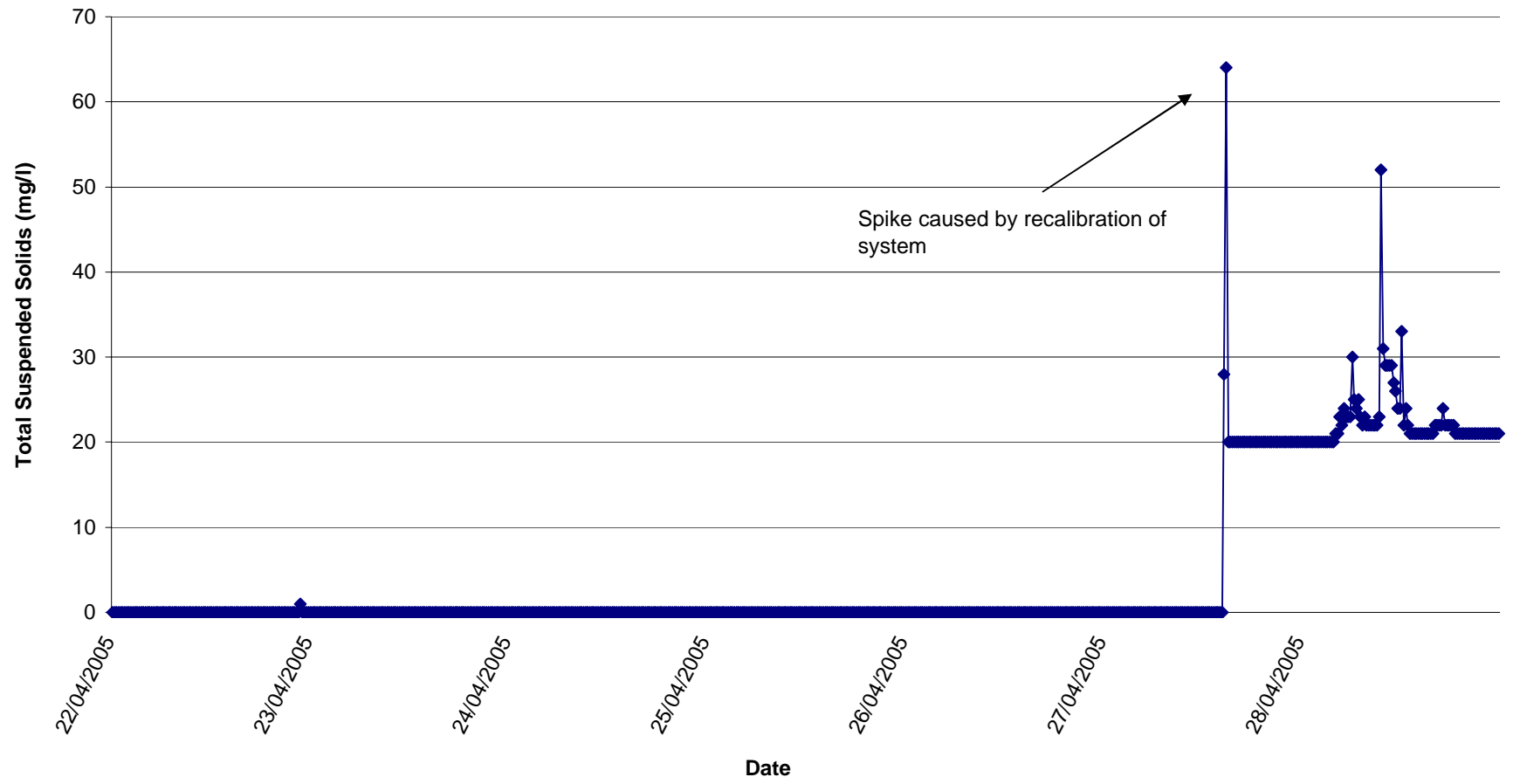
MP10a and MEL BR4a have been installed.

MP10a was not sampled this week as the bailer would not fit, there is a slight bend in the pipe. The bailer has been cut down to fit and the well will be sampled next week.

Noise Monitoring Record Sheet										no... 1	of ... 1	
Conducted by					Approved by							
Name: Sandra Barber			Signed		Name: Wendy Hogben			Signed				
Determinant Results												
Location	Start Date	Time	Duration	Serial No.	Wind		Results dB			*Comments		
					Speed (m/s)*	Direction (Degrees)	L _{Aeq}	L _{AFmin}	L _{AFmax}			
N1	22/04/2005	07:52:31	12:00:00	2343754	3.0	272.6	56	78.4	46.40			
N1	23/04/2005	09:07:08	12:00:00	2343754	1.9	260.8	52.2	74.9	46.40			
N1	26/04/2005	07:35:19	12:00:00	2343754	3.8	277.7	56.1	83.7	48.20			
N1	27/04/2005	07:44:12	12:00:00	2343754	4.1	155.9	55.7	79.2	46.50			
N1	28/04/2005	07:39:07	12:00:00	2343754	6.9	133.0	57.8	81.6	46.90			

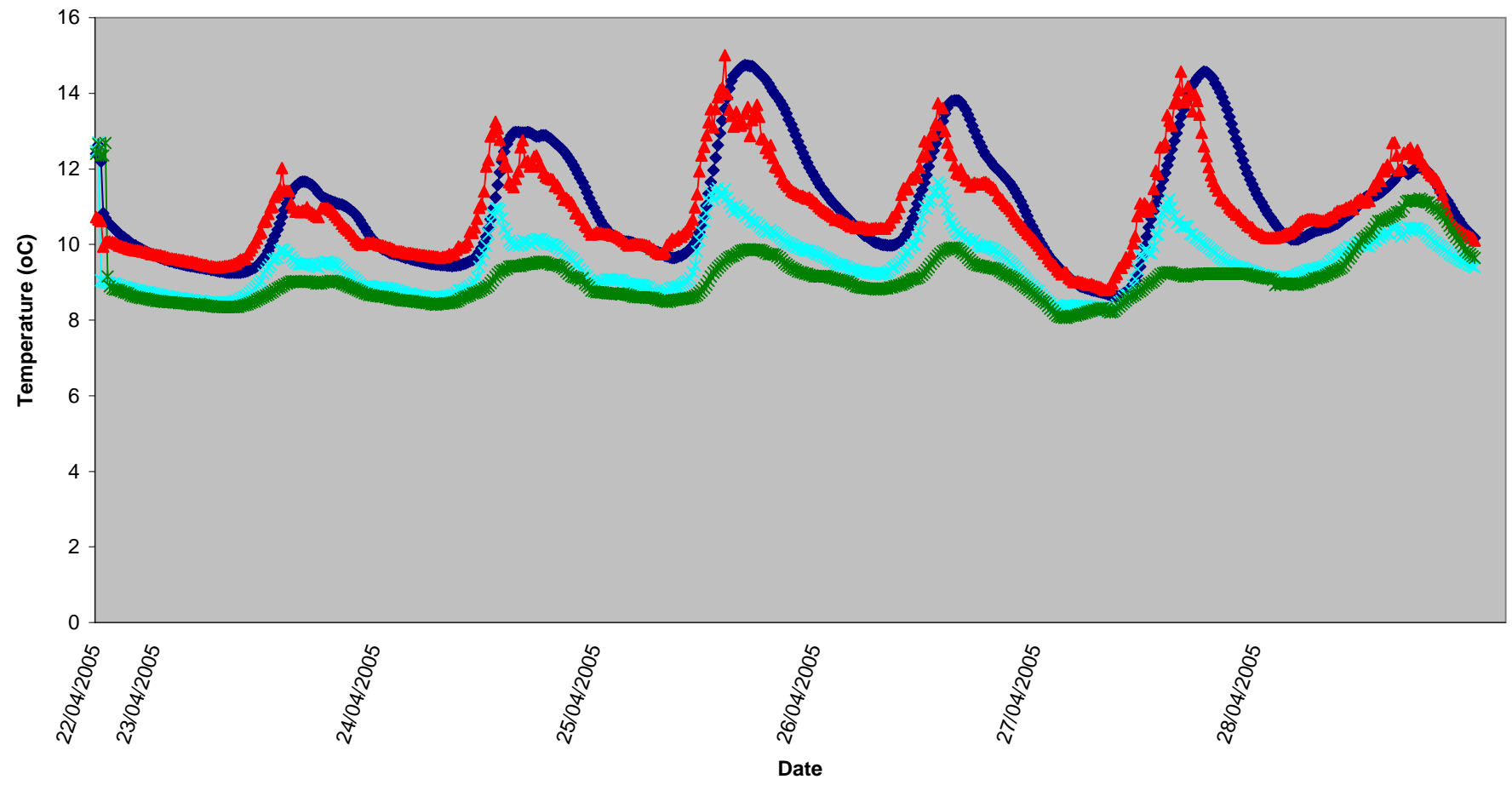
* Wind speeds in excess of 5 m/s negatively impact noise readings (as per EPA Guidance Note on Noise Measurement).

Surface Water (SP1)
Total Suspended Solids, Week 17 2005



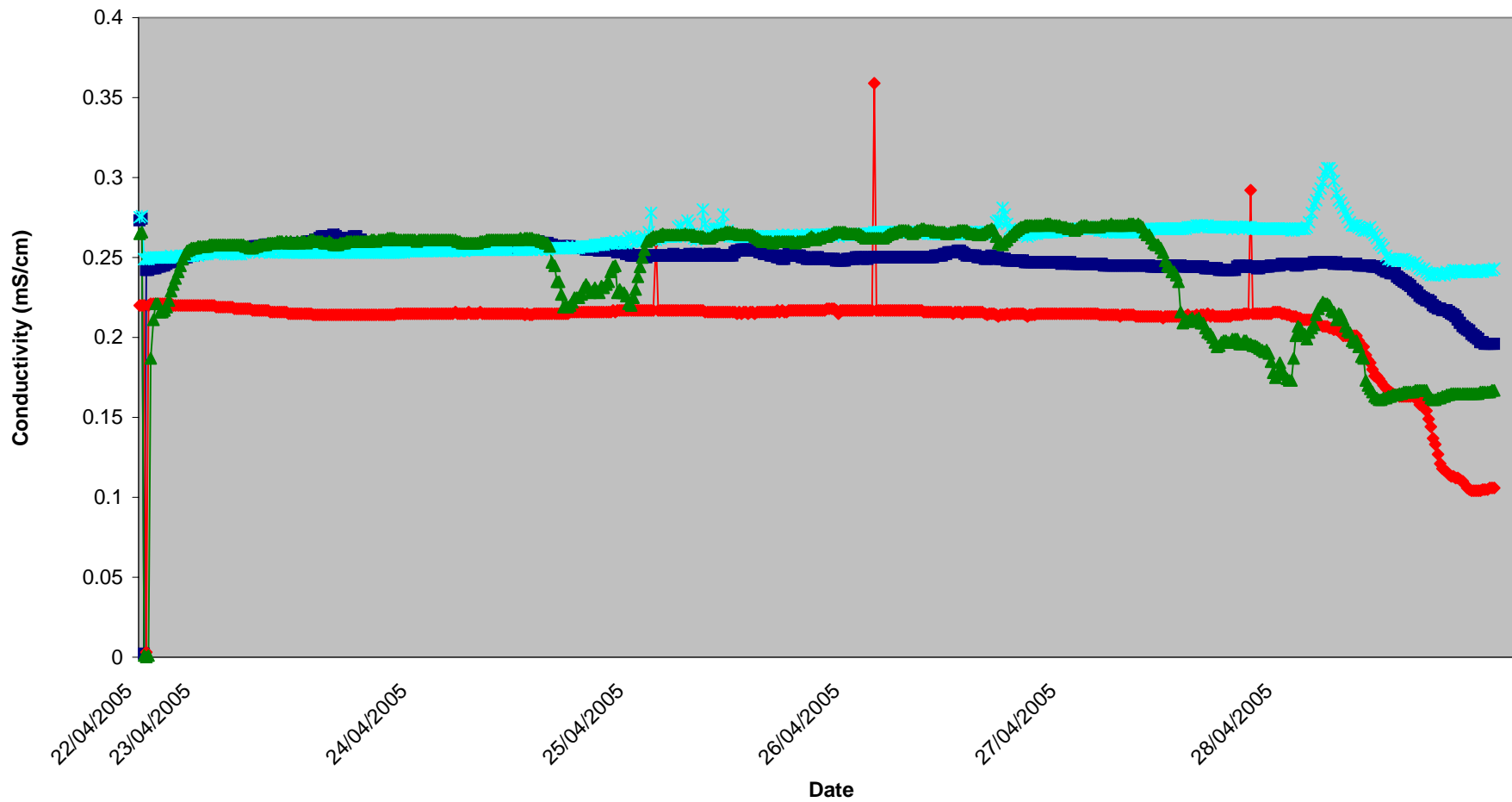
Surface Waters
Temperature, Week 17 2005

SP1 SP2 D22 D62



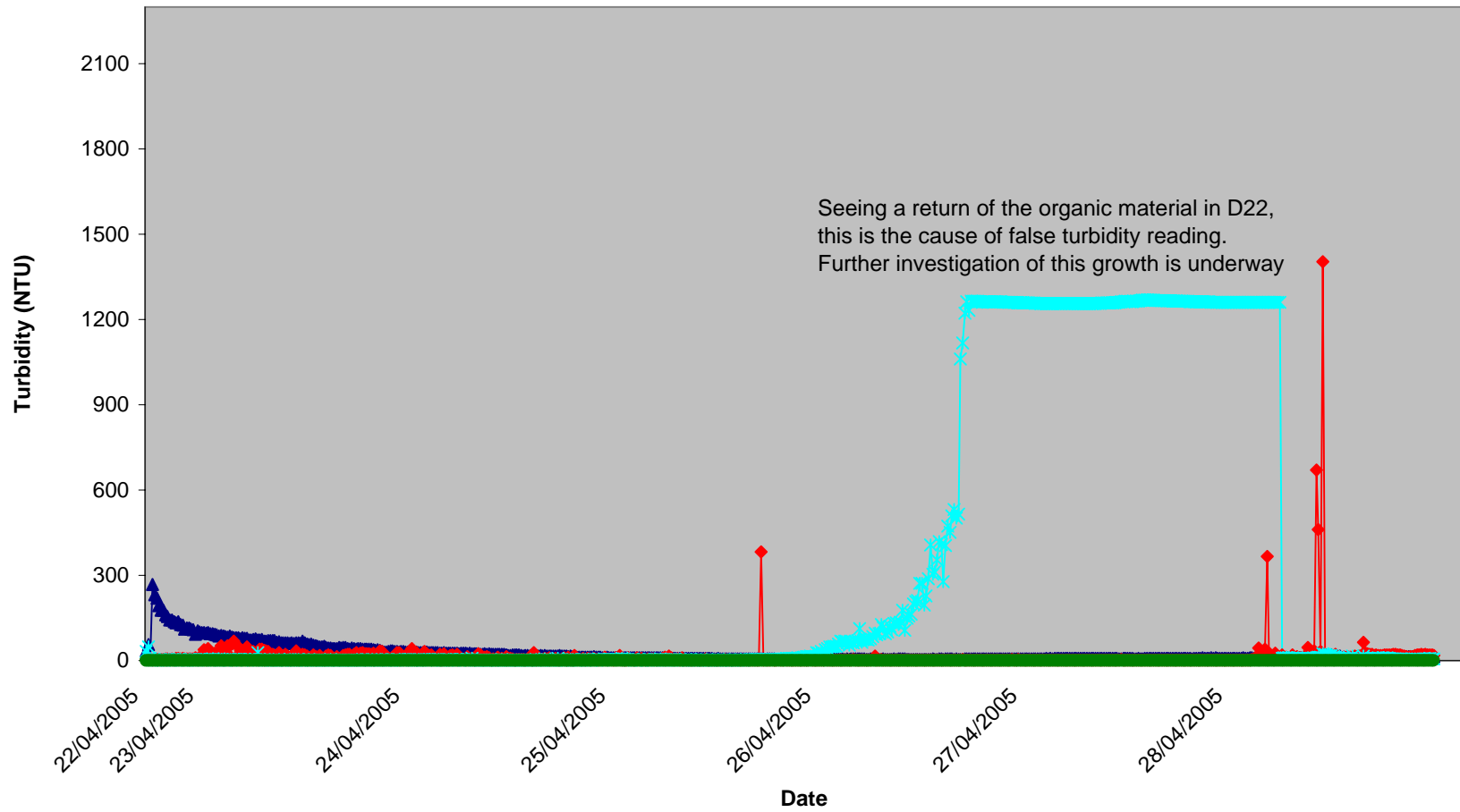
Surface Waters Conductivity, Week 17 2005

■ SP1 ◆ SP2 ✱ D22 ▲ D62



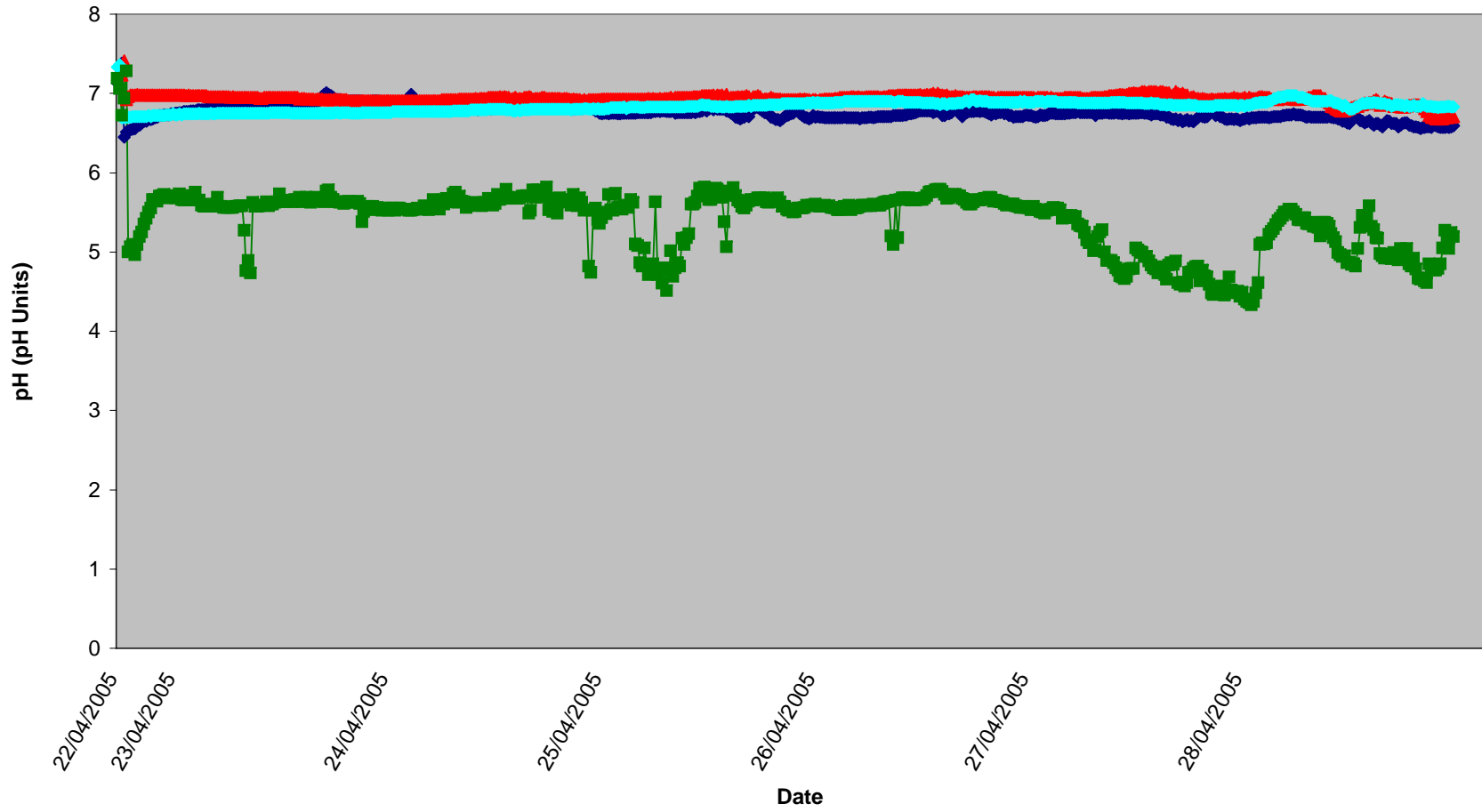
Surface Waters Turbidity, Week 17 2005

SP1 SP2 D22 D62



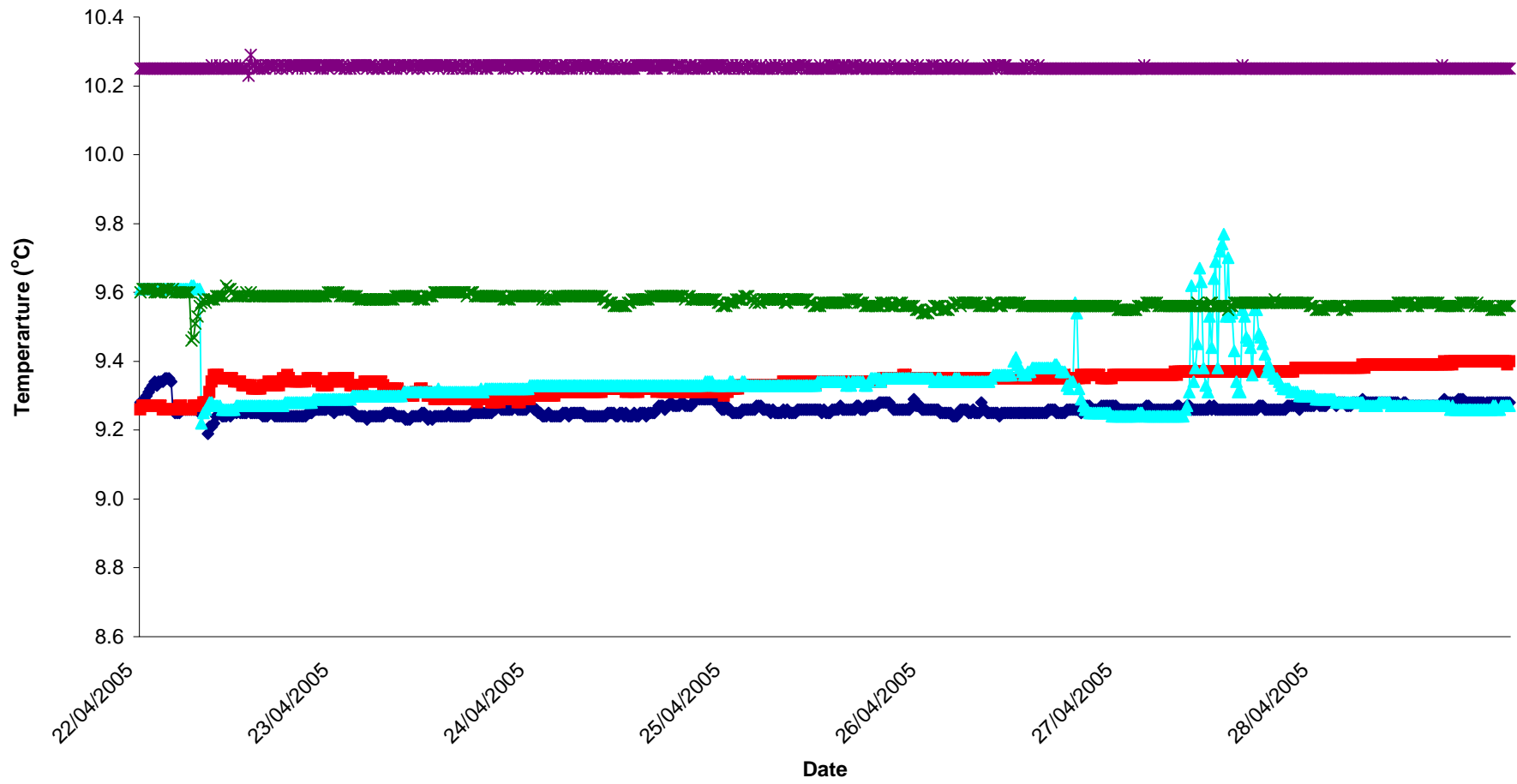
Surface Waters
pH, Week 17 2005

SP1 SP2 D22 D62



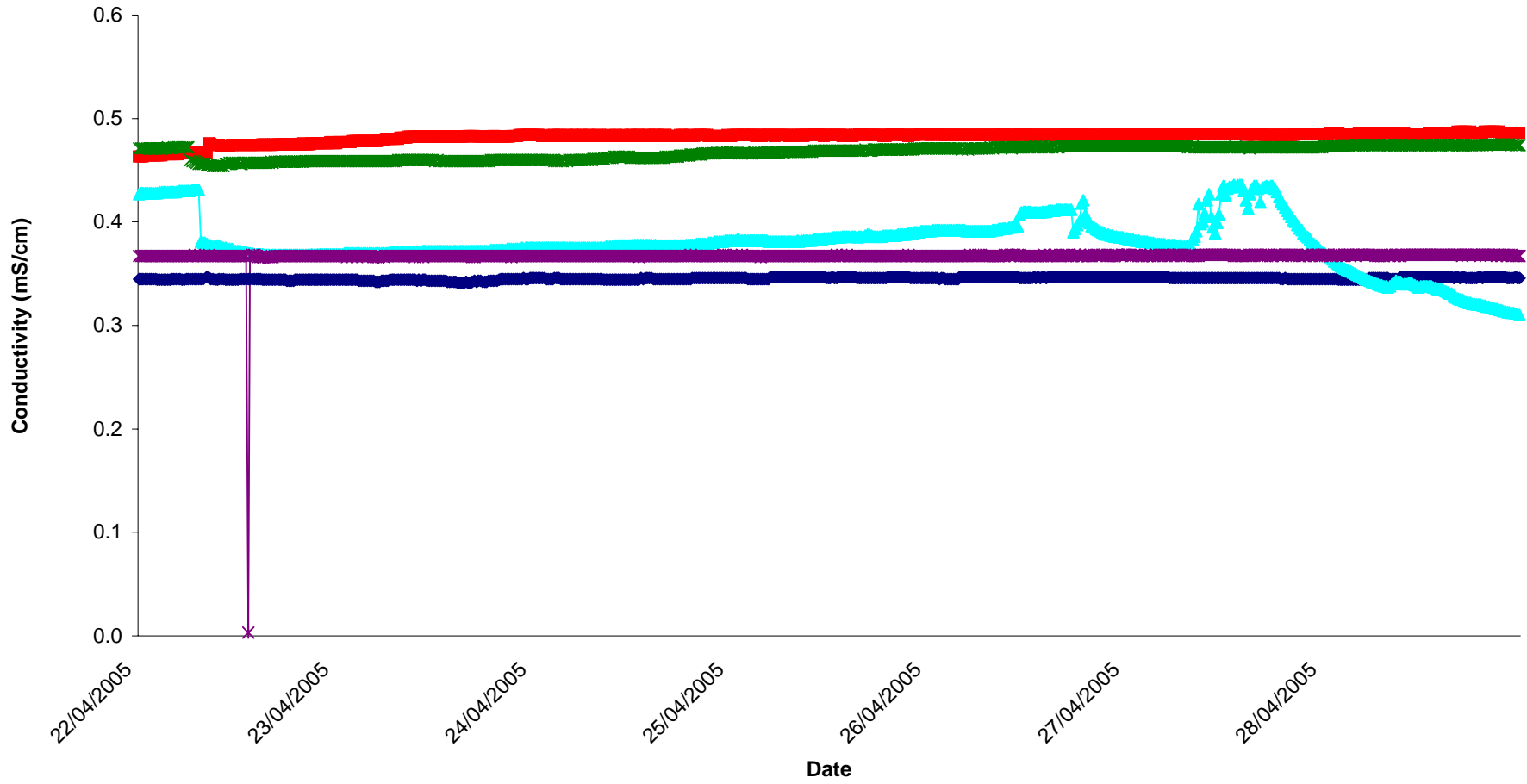
Groundwaters Temp, Week 17 2005

MP1 MP2 MP4 MP6 MP7



Groundwaters Conductivity, Week 17 2005

MP1 MP2 MP4 MP6 MP7



Groundwaters pH, Week 17 2005

MP1 MP2 MP4 MP6 MP7

