

## 1 Monitoring Data

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

### 1.1 Rainfall Data

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

Date	29-Apr-05	30-Apr-05	01-May-05	02-May-05	03-May-05	04-May-05	05-May-05
Rainfall (mm)	0.0	1.4	4.4	13.8	2.4	0.0	3.4

Note: a heavy rainfall event was recorded on the 2-May-05.

### 1.2 Summary

Environment	Comments
Surface Water	<p>The majority of change in concentration patterns shown in the associated tables and graphs are associated with the heavy rain event of the 02-05-05.</p> <p>Set limits were exceeded for both total suspended solids and orthophosphate. Both events are considered to be the after effect of the rain of the 02-05-05 and each exceedance event was of small duration (&lt; 1 hour).</p>
Groundwater	<p>Laboratory results are detailed in the appropriate table.</p> <p>The temperature rise seen in MP2 cannot currently be explained but will be investigated.</p> <p>The drop in conductivity in MP6 and MP7 may be due to the exposure of this probe to air</p>
Noise	<p>L<sub>Aeq</sub> at N1 recorded between 55 and 57dB</p> <p>The noise meter at N2 is malfunctioning, a part has been ordered</p>
Vibration*	<p>Max Pk Disp 17.8 mm with an associated acceleration 1.15 g was recorded. There were 2 No. smaller events associated. The results detailed are associated with the relocation of the meter and are probably caused by same.</p>
Dust	<p>The results for April are due next week</p>
Weather	<p>There was a total of 25.4 mm of rainfall during the reporting period, with an average temperature range of 5.4 to 16.6 °C</p>

Weekly Environmental Report - Status      Week Ending:    Thur. 5<sup>th</sup> May 2005

Generated By:            Sandra Barber

Checked By:             Wendy Hogben

## **2 Environmental Incidents/Near misses/Complaints**

There were no environmental incidents.

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. µS/cm	Temp °C	Turbidity NTU	DO % Sat	TSS mg l <sup>-1</sup>	Nitrate mg l <sup>-1</sup>	Phosphate mg l <sup>-1</sup> PO <sub>4</sub>	pH	Ortho-phosphate as P µg l <sup>-1</sup>	Total Ammonia mg l <sup>-1</sup>	Ammonium mg l <sup>-1</sup>	Nitrite mg l <sup>-1</sup>	Comments
<b>Action Limits</b>		<b>400</b>		<b>150</b>		<b>25</b>			<b>&lt;3.5 or &gt;7.5</b>	<b>40</b>	<b>0.2</b>			
<b>Target Limits</b>		<b>500</b>		<b>200</b>		<b>35</b>			<b>&lt;3 or &gt;8</b>	<b>70</b>	<b>0.5</b>			
<b>Settlement Pond Monitoring</b>														
SP1	29-Apr-05	185	10.5	8.6	80		0	<10	5.46					
SP2	29-Apr-05	196	11.0	12.1	83		0	<10	6.08					
SP1	03-May-05	163	*	14.7	*		0	<10	5.20					
SP2	03-May-05	178	*	18.5	*		0	<10	5.45					
SP1 - LAB	03-May-05	144		10.8		9	< 0.44	0.08	6.20	26	0.016	0.02	<0.005	
SP2 - LAB	03-May-05	154		14.4		10	< 0.44	0.099	6.70	32	0.006	<0.01	<0.005	
SP1	04-May-05	205		3.7			0	<10	5.71					
SP2	04-May-05	214		5.3			0	<10	6.09					
SP1	05-May-05	250	10.5	2.8			0	<10	6.53					
SP2	05-May-05	264	11.0	3.6			0	<10	6.69					
SP1														
SP2														
SP1														
SP2														
<b>Additional Surface Water Monitoring</b>														
D22	See graphs for all results													
D62	See graphs for all results													

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, Data recorded continuously is shown on the following graphs  
 Graphs provided for SP1, SP2, D22 and D62 for: Temperature, Turbidity, pH, Conductivity, Orthophosphate, Total Suspended Solids and Total Ammonia  
 pH Target and Action Limits to be approved by Statutory Authorities  
 \*The DO meter was dropped into a drain on the 3-05-05. A replacement has been ordered.

Conducted by Approved by  
 Name: Sandra Barber Name Wendy Hogben  
 Signed Signed

Determinant Results													
Location	Date	Cond. uS/cm	Temp °C	BOD mg l <sup>-1</sup>	DO % Sat	TDS* mg l <sup>-1</sup>	Phosphate as P mg l <sup>-1</sup>	pH	Total Hardness mg/l CaCO3	Nitrite as NO <sub>2</sub> mg l <sup>-1</sup>	Nitrate as NO <sub>3</sub> mg l <sup>-1</sup>	Phosphate as PO <sub>4</sub> mg l <sup>-1</sup>	Ammonia mg l <sup>-1</sup>
MP 1													
MP 2													
MP 3	18-Apr-05	483	11.1	4	0	199	0.17	5.78	98.1	< 0.017	< 0.44	0.521	
MP 4													
MP 5	18-Apr-05	489	12.2	7	0	244	0.181	6.15	171.3	< 0.017	< 0.44	0.554	
MP 6													
MP 7													
MP 8	18-Apr-05	484	12.5	5	0	224	< 0.03	6.16	127.6	< 0.017	< 0.44	< 0.03	
MP 9	18-Apr-05	265	12.4	5	0	132	0.109	5.79	72.6	< 0.017	7.97	0.334	
MP 10a													
MEL BR4a	18-Apr-05	430	12.6	< 1	0	230	0.011	6.83	167.9	< 0.017	< 0.44	0.033	

Location	Date	TDS mg l <sup>-1</sup>	Arsenic ug l <sup>-1</sup>	Mercury ug l <sup>-1</sup>	Lead ug l <sup>-1</sup>	Aluminium ug l <sup>-1</sup>	Zinc ug l <sup>-1</sup>	Chromium ug l <sup>-1</sup>	Copper ug l <sup>-1</sup>	Cadmium ug l <sup>-1</sup>	Iron ug l <sup>-1</sup>	Tin ug l <sup>-1</sup>
MP 1												
MP 2												
MP 3	18-Apr-05	271	< 1	0.09	< 1	< 3	< 3	< 1	< 1	< 0.4	969	< 1
MP 4												
MP 5	18-Apr-05	331	< 1	0.09	< 1	< 3	< 3	2	< 1	< 0.4	< 5	< 1
MP 6												
MP 7												
MP 8	18-Apr-05	318	< 1	< 0.05	< 1	< 3	< 3	< 1	< 1	< 0.4	< 5	< 1
MP 9	18-Apr-05	181	2	< 0.05	< 1	< 3	< 3	6	< 1	< 0.4	5096	< 1
MP 10a												
MEL BR4a	18-Apr-05	295	1	< 0.05	< 1	< 3	< 3	5	< 1	< 0.4	< 5	< 1

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.

Noise Monitoring Record Sheet										no...	1	of	1
Conducted by							Approved by						
Name: Sandra Barber					Signed		Name: Wendy Hogben					Signed	
Determinant Results													
Location	Air Temp.	Start Date	Time	Duration	Serial No.	Wind		Results dB			*Comments		
						Speed (m/s)*	Direction (Degrees)	L <sub>Aeq</sub>	L <sub>Amin</sub>	L <sub>Amax</sub>			
<b>Action Limit</b>								<b>60</b>					
<b>Target Limit</b>								<b>65</b>					
N1	10.8	29/04/2005	07:34:19	12:00:00	2343754	4.6	35.7	55.1	47.6	78.8			
N1	9.8	03/05/2005	08:25:07	12:00:00	2343754	5.5	147.8	56.7	46.3	78.0			
N1	10.1	04/05/2005	07:54:30	12:00:00	2343754	3.9	135.4	56.3	46.6	92.1			
N1	10.3	05/05/2005	07:56:53	12:00:00	2343754	4.8	89.2	56.2	46.6	84.1			

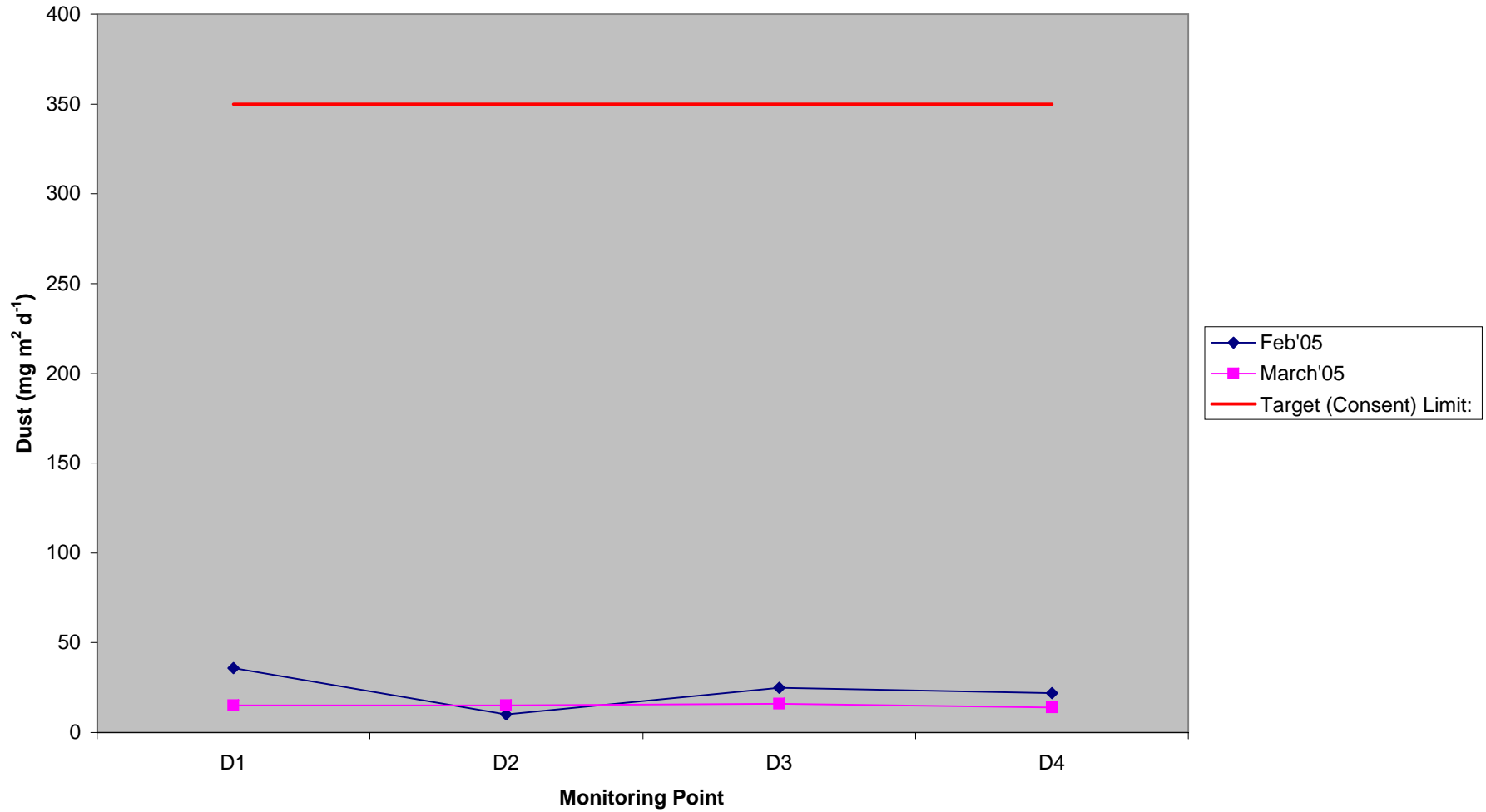
\* Wind speeds in excess of 5 m/s negatively impact noise readings (as per EPA Guidance Note on Noise Measurement).  
 Noise meter at N2 has been damaged, awaiting the delivery of replacement part

Dust Monitoring Record Sheet				no... 1 of 1			
Conducted by			Approved by				
Name: Sandra Barber		Signed		Name: Wendy Hogben		Signed	
Determinant Results							
	Date Positioned	Date Removed	Ref. Number	Date Dispatched	Date Returned	Weight (mg/sq.m/day)	Comments
<b>Target (Consent) Limit: 350 mg m<sup>2</sup> d<sup>-1</sup> on as a 30 day average</b>							
D1	31/01/2005	02/03/2005	59793	02/03/2005	24/03/2005	36	
D2	31/01/2005	02/03/2005	59794	02/03/2005	24/03/2005	10	
D3	31/01/2005	02/03/2005	59795	02/03/2005	24/03/2005	25	
D4	31/01/2005	02/03/2005	59796	02/03/2005	24/03/2005	22	
D1	02/03/2005	01/04/2005	61907	01/04/2005	08/04/2005	15	
D2	02/03/2005	01/04/2005	61908	01/04/2005	08/04/2005	15	
D3	02/03/2005	01/04/2005	61909	01/04/2005	08/04/2005	16	
D4	02/03/2005	01/04/2005	61910	01/04/2005	08/04/2005	14	
D1	01/04/2005	04/05/2005		04/05/2005			
D2	01/04/2005	04/05/2005		04/05/2005			
D3	01/04/2005	04/05/2005		04/05/2005			
D4	01/04/2005	04/05/2005		04/05/2005			
D1	03/06/2005						
D2	03/06/2005						
D3	03/06/2005						
D4	03/06/2005						

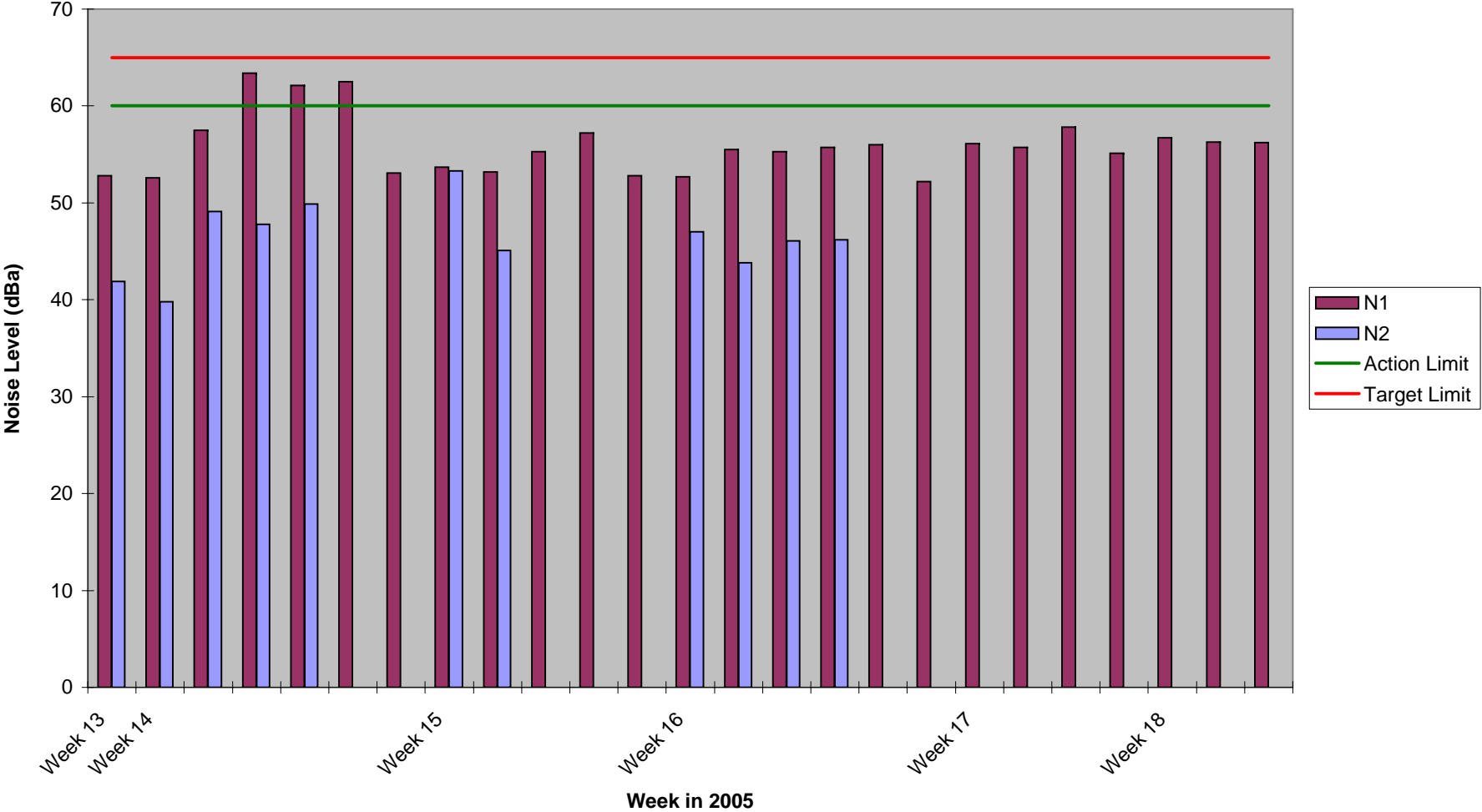
Monitoring Points are numbered clockwise through the Cardinal Marks (N, E, S, W)  
Monitoring Results will be presented monthly



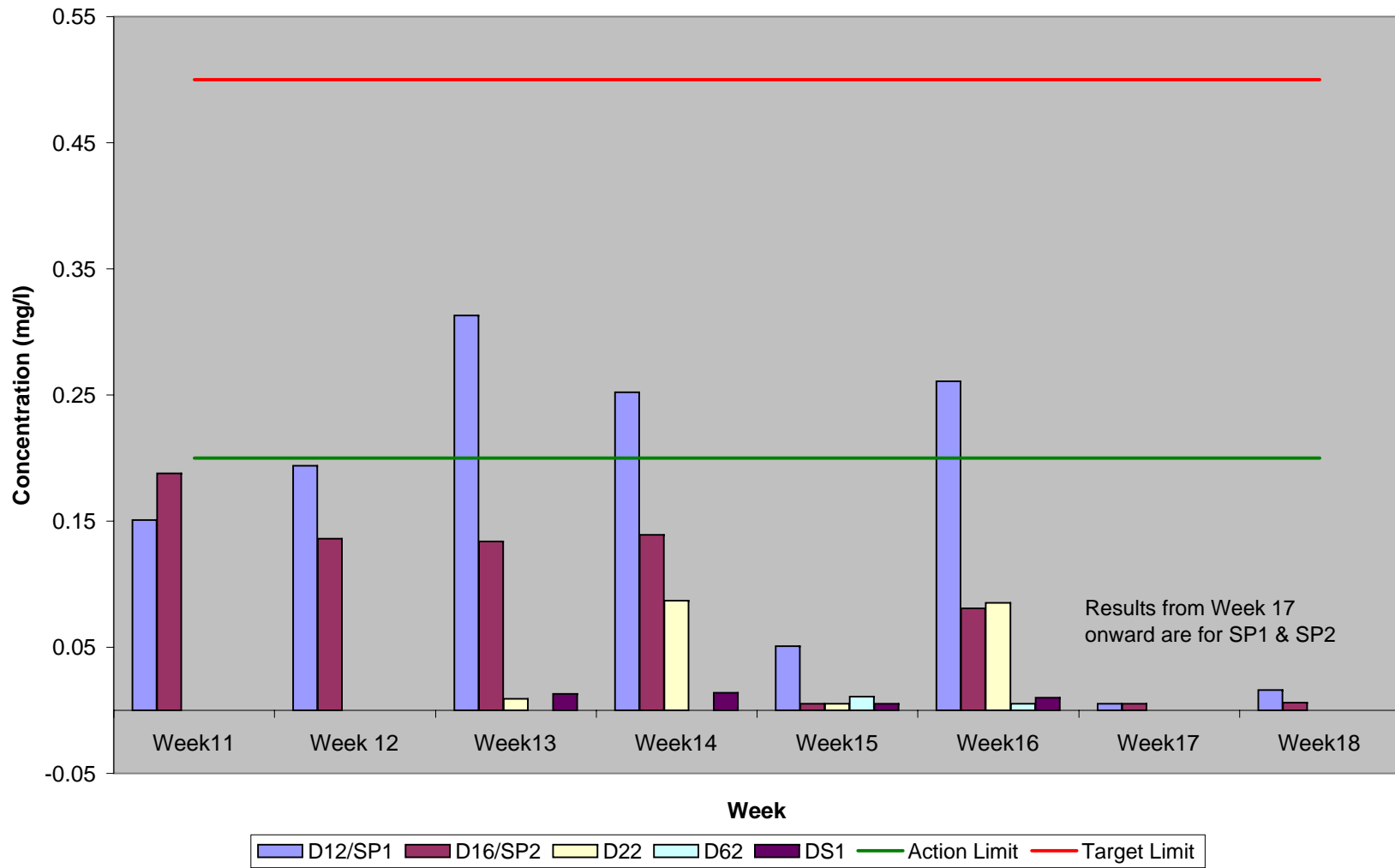
### Dust Compiled Results 2005



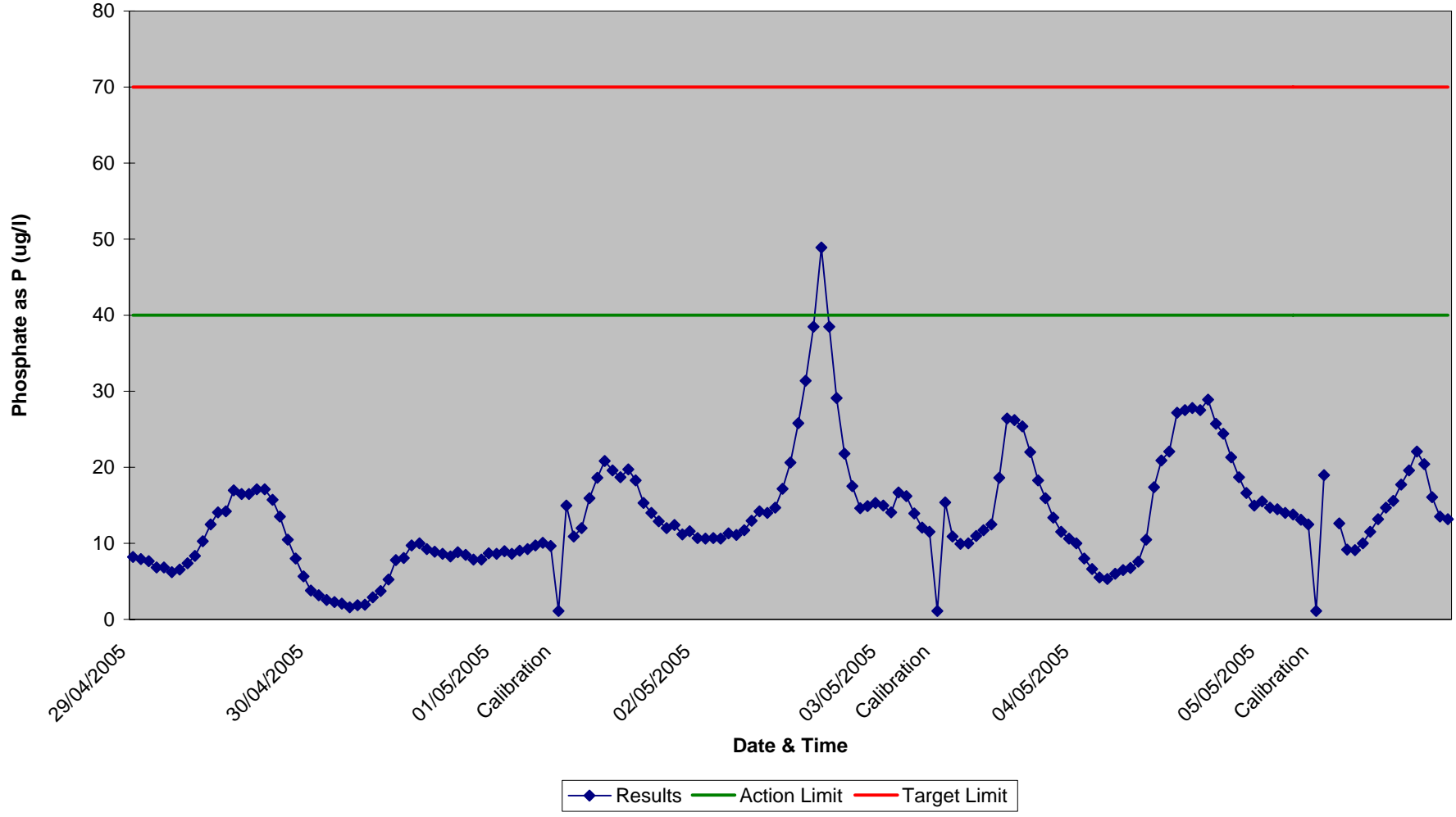
# Noise Monitoring Compiled Results 2005



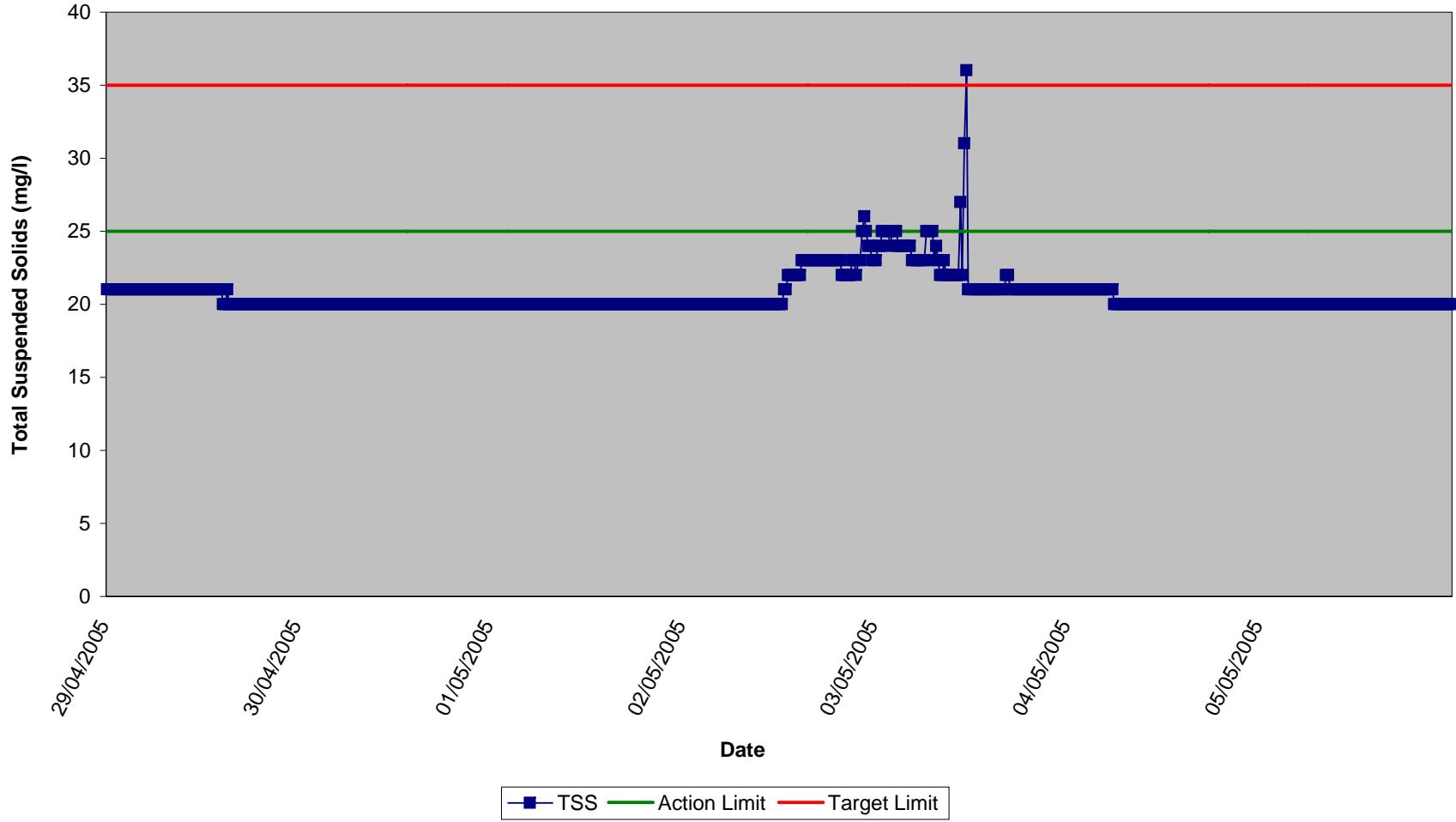
**Ammonia as NH<sub>3</sub>-N,  
Compiled Results 2005**



Surface Water (SP1)  
Orthophosphate, Week 18 2005

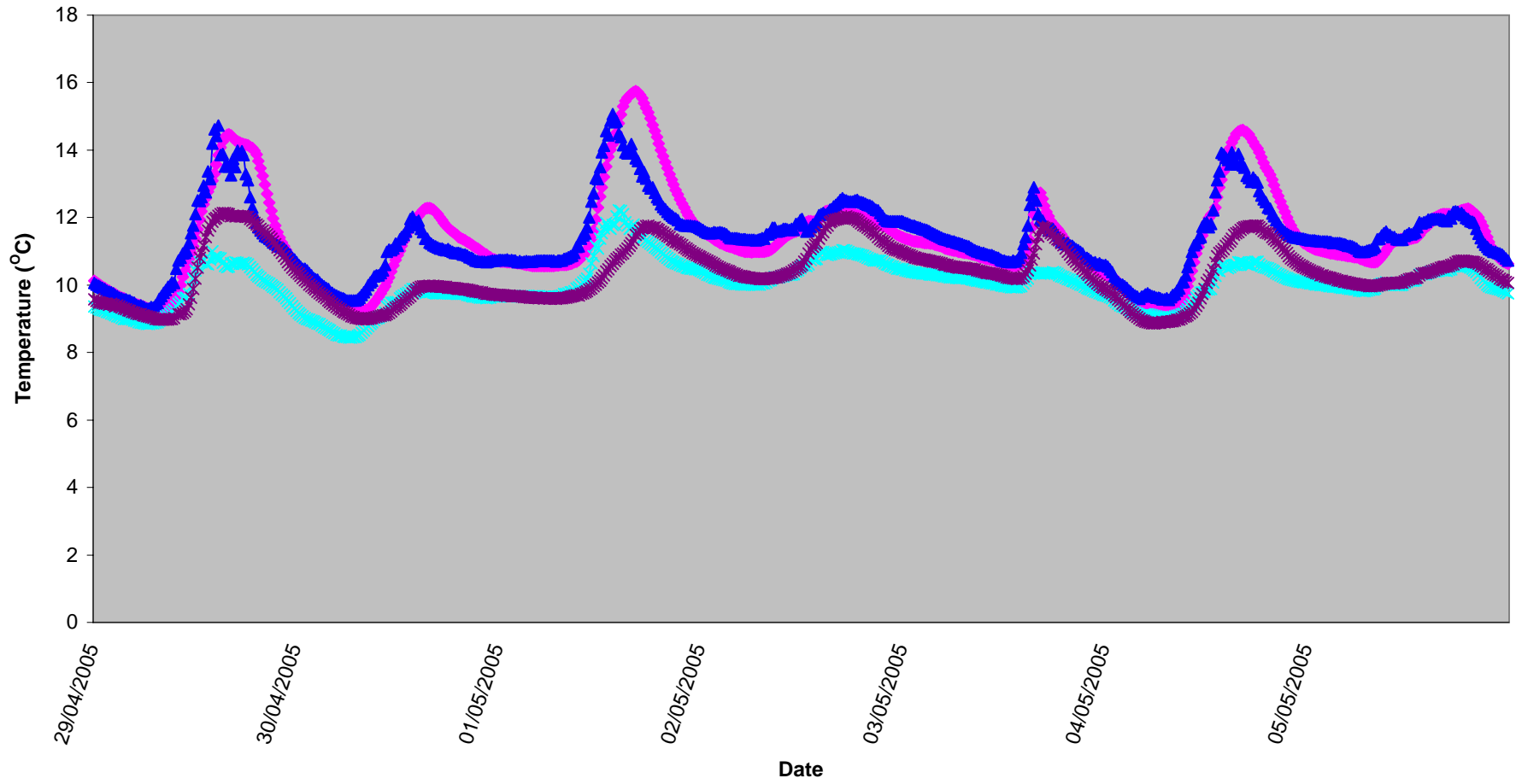


Surface Water (SP1)  
Total Suspended Solids, Week 18 2005

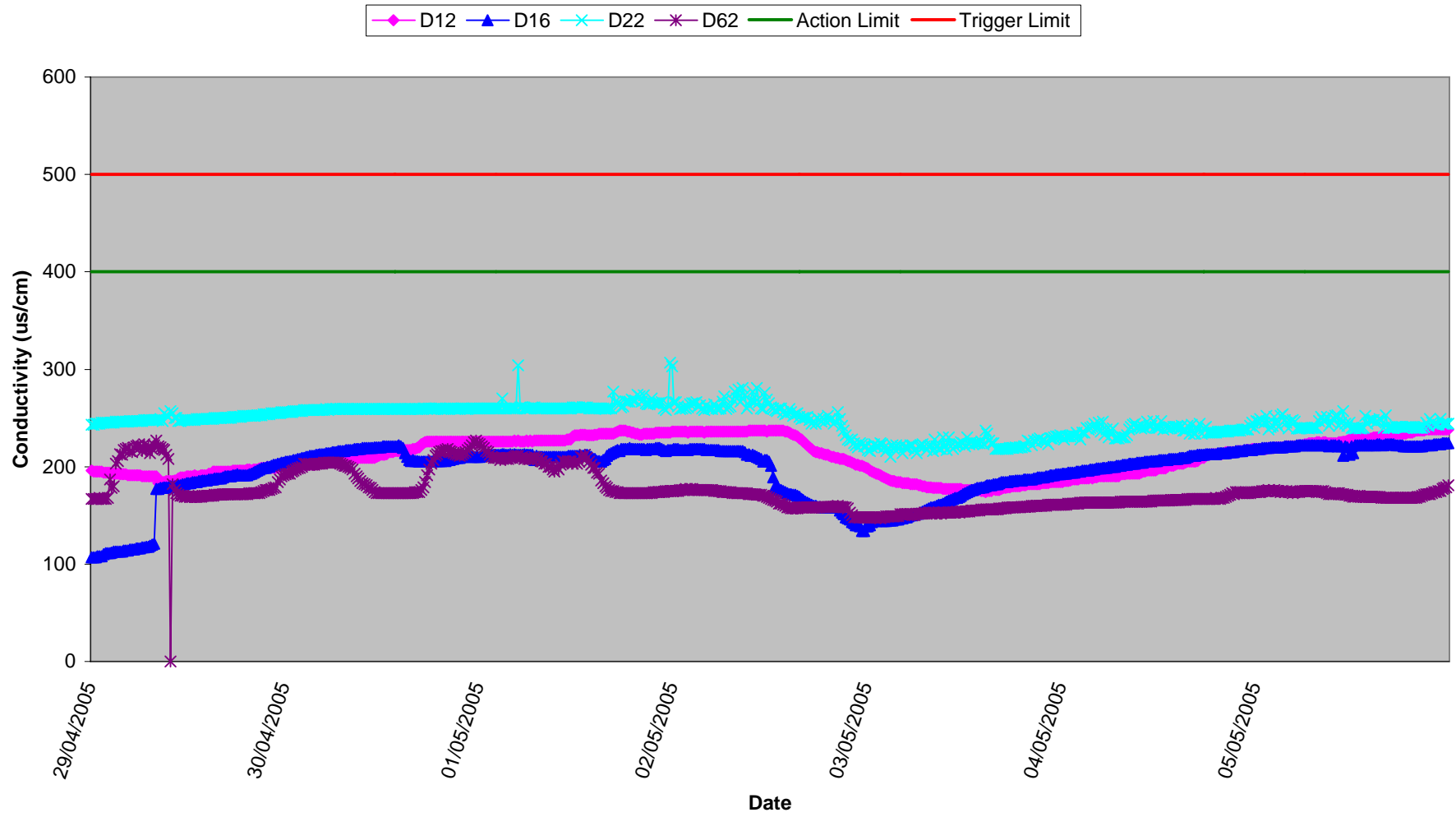


Surface Waters  
Temperature, Week 18 2005

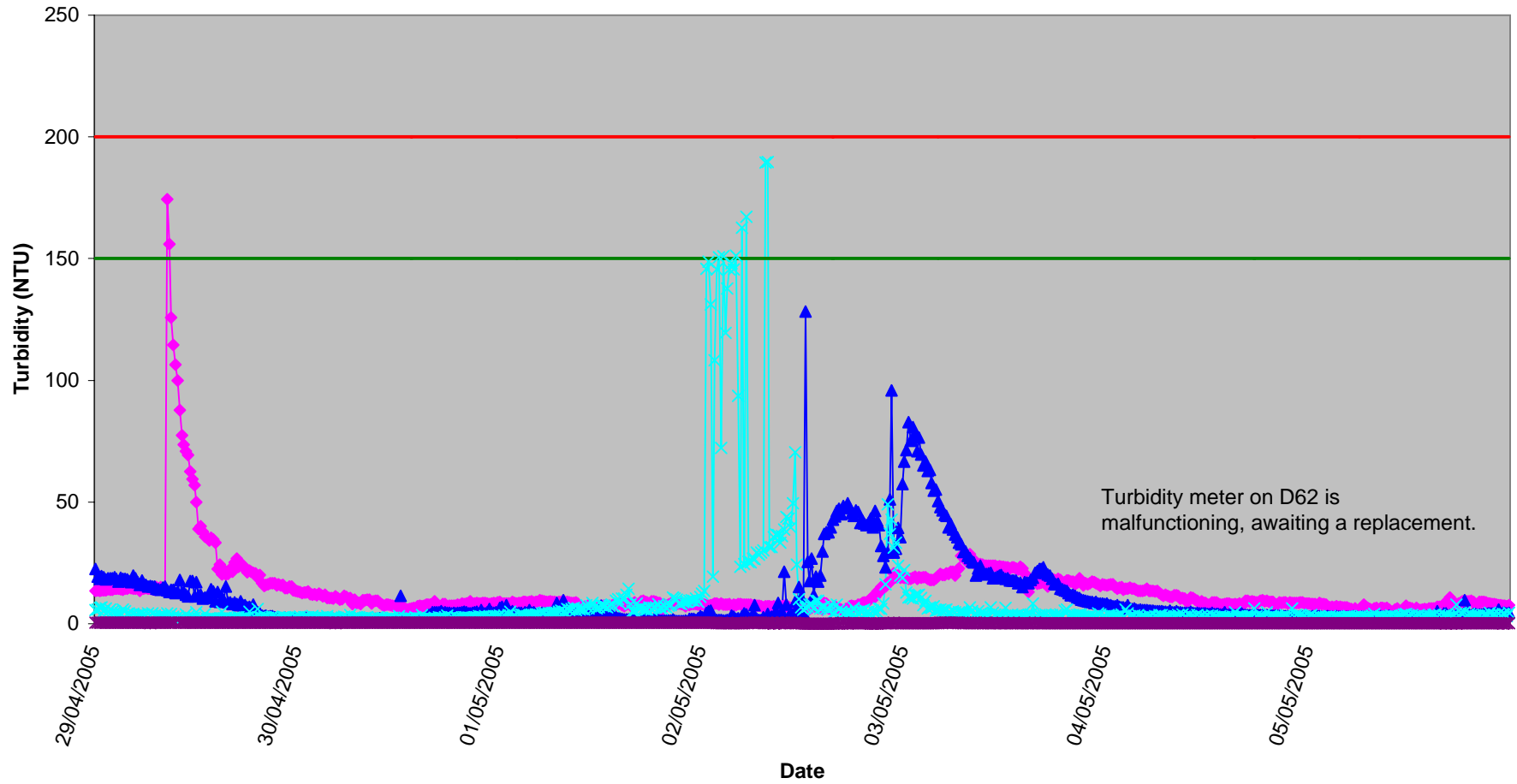
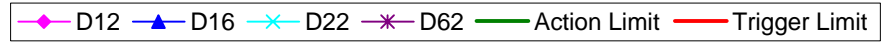
D12 D16 D22 D62



### Surface Waters Conductivity, Week 18 2005

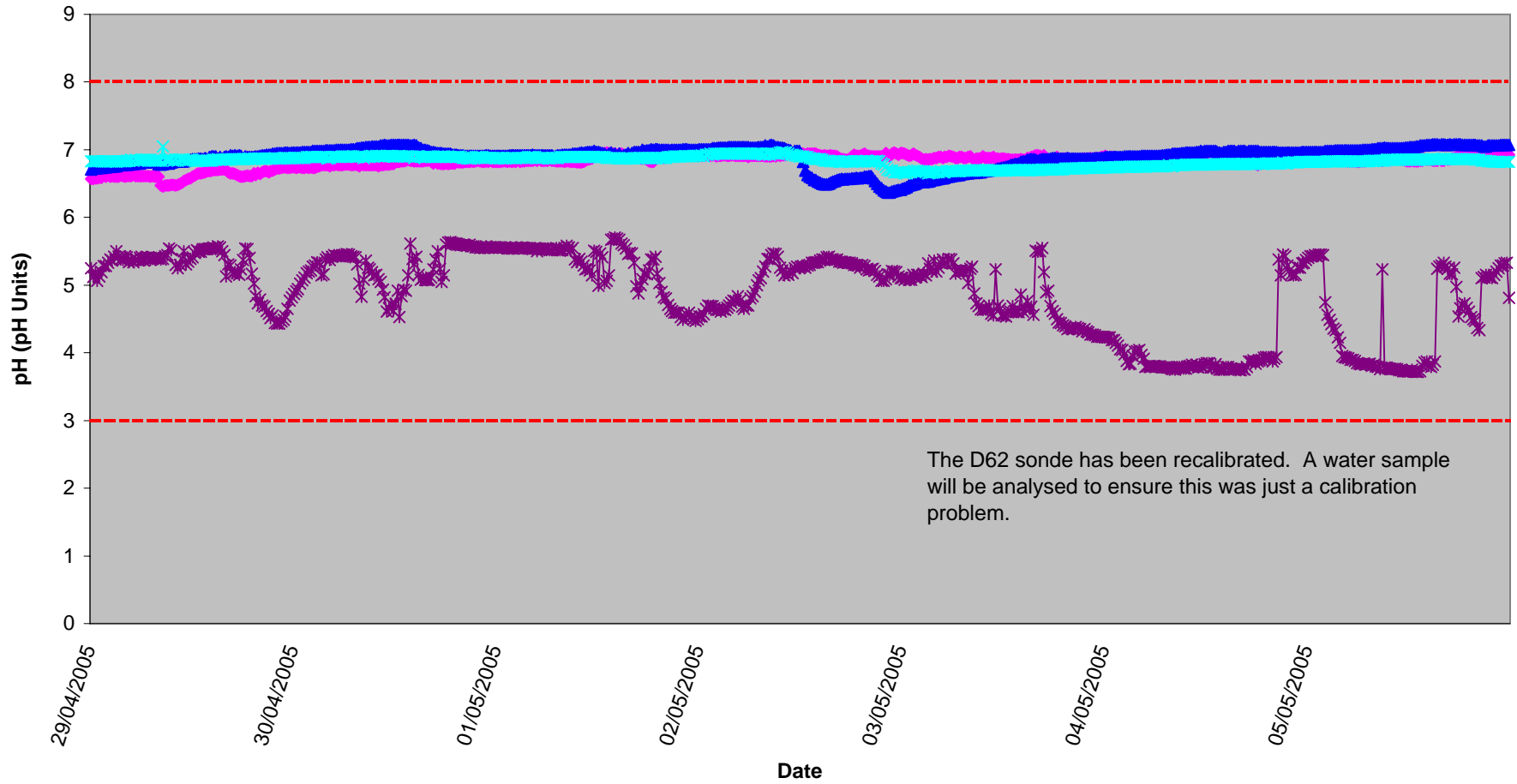


### Surface Waters Turbidity, Week 18 2005



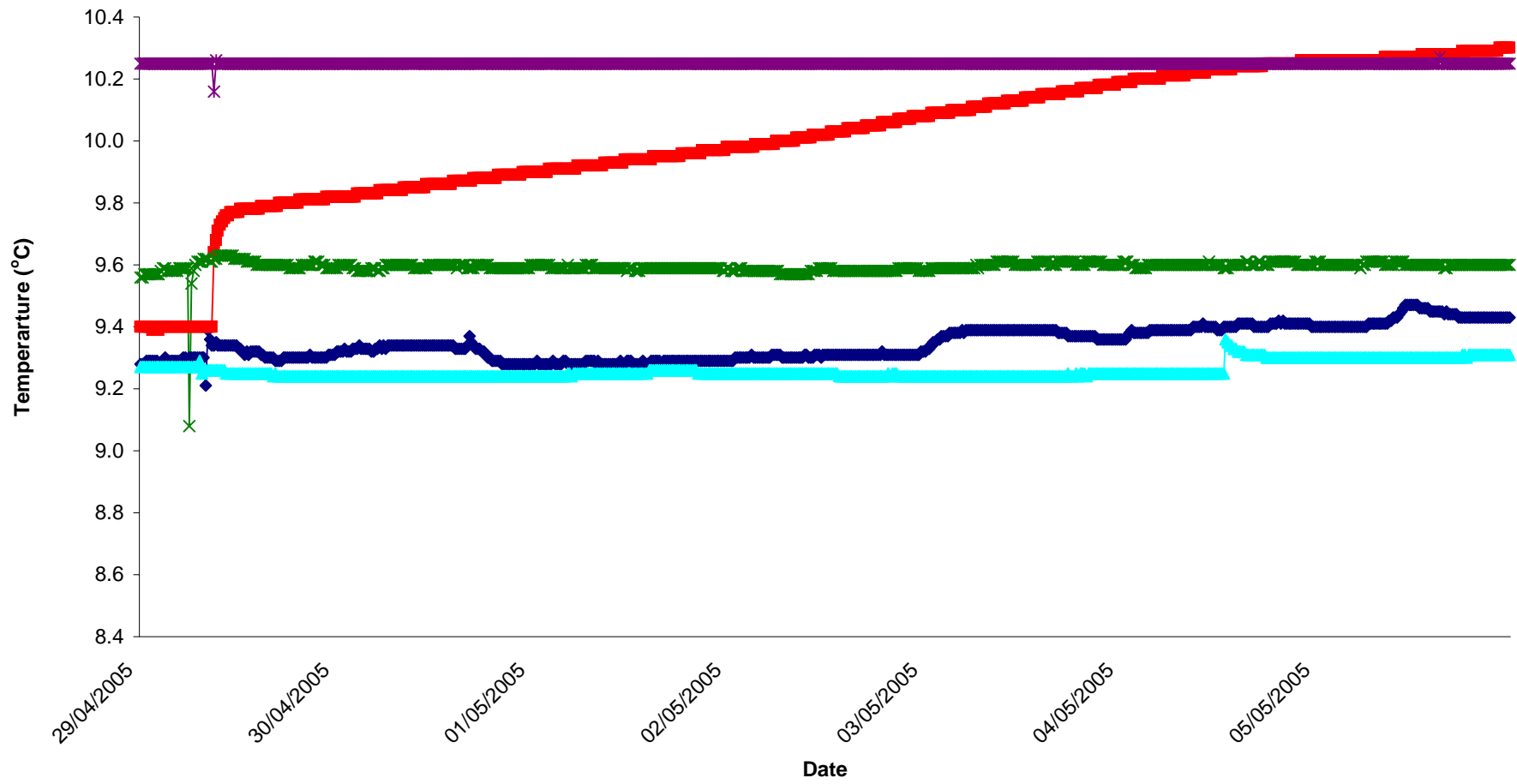
### Surface Waters pH, Week 18 2005

◆ D12 ▲ D16 ✕ D22 \* D62 --- Lower Limit - - - Upper Limit



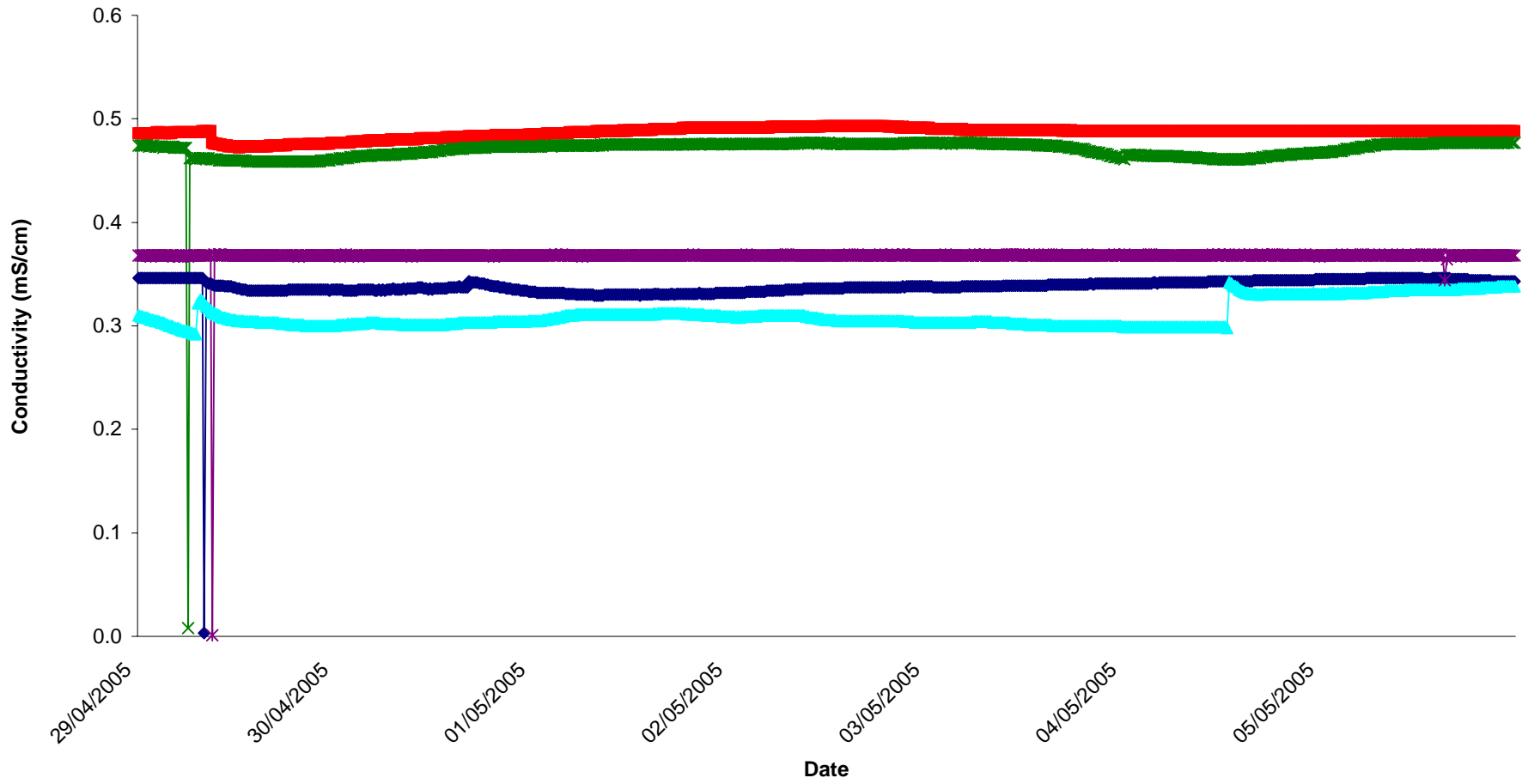
### Groundwaters Temp, Week 18 2005

—◆— MP1 —■— MP2 —▲— MP4 —×— MP6 —\*— MP7



### Groundwaters Conductivity, Week 18 2005

MP1 MP2 MP4 MP6 MP7



### Groundwaters pH, Week 18 2005

