

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	13-May-05	14-May-05	15-May-05	16-May-05	17-May-05	18-May-05	19-May-05
Rainfall (mm)	0	0	0	0.6	0	1.6	5.8

1.2 Summary

Environment	Comments
Surface Water	The exceedances highlighted on the following graphs are generally short lived and are not considered to have a significant impact on the environment. Mayo County Council was informed of all such occurrences (verbal or written communication depending on the duration).
Groundwater	The sonde data downloaded is shown graphically.
Noise	L _{Aeq} at N1 recorded between 53 and 56dB L _{Aeq} at N2 recorded between 41 and 45dB The results for both locations were below the 65 dB limit.
Vibration*	Max Pk Disp 0.9 mm with an associated acceleration 0.21 g was recorded. All events recorded appear to be associated with the movement of the meter.
Dust	No additional results until June 2005.
Weather	There was a total of 8 mm of rainfall during the reporting period, with an temperature range of 2.7 to 16.1 °C

2 Environmental Incidents/Near misses/Complaints

There were 2 No. incidents recorded this week:

Incident 1

East of the site on the southern side of the R314 an area for water retention had been generated using straw bales. There was a diesel spill (unknown origin and approx 0.25l) within the drain but the strawbales retained almost all of the spill. Spill kit material was utilized to mop up the spill, Booms were positioned down stream of the straw bales to sweep the surface of the flow and Matting was placed upstream of the boom, on either side of the bales. The majority of diesel was removed and the oil contaminated spill kit equipment was collected and bagged for appropriate disposal

Incident 2

On the southern edge of the 2nd ramped entrance into the terminal footprint, as you travel North to South on the access road, 2 No. Small grey fuel/oil drums were left adjacent to a pool of water. During the night (during inclement weather) one of the drums was blown over and the remaining contents (~ 1-2 litres) was spilt onto water surface. The oil was cleared using oil spill kits and the oil contaminated material was appropriately disposed of. At no time were any of the site drains at risk as the water was completely isolated from the surface water management system.

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	Nitrate mg l ⁻¹	Phosphate mg l ⁻¹ PO ₄	pH	Ortho-phosphate as P µg l ⁻¹	Total Ammonia mg l ⁻¹	Ammonium mg l ⁻¹	Nitrite 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	13-May-05	346		34.3			0.00	<10	5.6					
SP2		314		165.0			0.00	<10	6.6					
SP1	14-May-05	290		4.3			0.00	<10	6.1					
SP2		298		6.0			0.00	<10	6.7					
SP1 - Lab		224		3.5		<4	<0.1	0.12	6.5	0.038	0.051	0.065	<0.005	
SP2 - Lab		250		30.6		282	<0.1	0.49	6.6	0.159	<0.005	<0.01	<0.005	
SP1	16-May-05	285		5.9			0.00	<10	5.6					
SP2		351		13.1			0.00	<10	6.9					
SP1	17-May-05	31		8.5			0.00	<10	6.27					
SP2		348		57.0			0.00	<10	6.67					
SP1	18-May-05	322		7.5			0.00	<10	6.18					
SP2		343		323.0			0.00	<10	6.23					
SP1	19-May-05	338	17.0	15.7	70		0.00	<10	5.99					
SP2		240	17.3	27.3	82		0.00	<10	6.85					
Additional Surface Water Monitoring														
D22	Sonde Data Presented Graphically													
D62	Sonde Data Presented Graphically													

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 replacement probe was delivered on the 19-05-05

Groundwater Monitoring Record Sheet										no... 1 of 1			
Conducted by						Approved by							
Name: Sandra Barber				Signed		Name Leslie Finnegan				Signed			
Determinant Results													
Location	Date	Cond. uS/cm	Temp °C	BOD mg l ⁻¹	DO % Sat	TDS* 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	Ammonia 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	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													
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.

Noise Monitoring Record Sheet										no...	1	of	1
Conducted by								Approved by					
Name: Sandra Barber					Signed			Name: Leslie Finnegan				Signed	
Determinant Results													
Location	Air Temp.	Start Date	Time	Duration	Serial No.	Wind		Results dB			*Comments		
						Speed (m/s)*	Direction (Degrees)	L _{Aeq}	L _{Amin}	L _{Amax}			
Action Limit								60					
Target Limit								65					
N1	11.4	13/05/2005	08:29:44	12:00:00	2343753	3.8	240	53	47	75			
N1	10.6	14/05/2005	07:35:48	12:00:00	2343753	3.6	228	53	48	68			
N1	9.0	16/05/2005	08:15:25	12:00:00	2343753	4.4	189	55	47	86			
N1	8.1	17/05/2005	07:45:39	12:00:00	2343753	1.9	183	53	47	70			
N1	8.9	18/05/2005	07:49:21	12:00:00	2343753	3.5	178	56	47	90			
N1	11.7	19/05/2005	08:10:25	12:00:00	2343753	5.2	158	55	47	79			
N2	11.4	13/05/2005	08:47:56	12:00:00	2343754	3.8	240	45	< 30	65			
N2	10.6	14/05/2005	07:43:05	12:00:00	2343754	3.6	228	43	< 30	66			
N2	9.0	16/05/2005	07:43:05	12:00:00	2343754	4.4	189	44	< 30	71			
N2	8.1	17/05/2005	07:57:59	12:00:00	2343754	1.9	183	41	< 30	64			
N2	8.9	18/05/2005	07:57:25	12:00:00	2343754	3.5	178	43	< 30	62			
N2	11.7	19/05/2005	08:18:13	12:00:00	2343754	5.2	158	44	< 30	66			

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

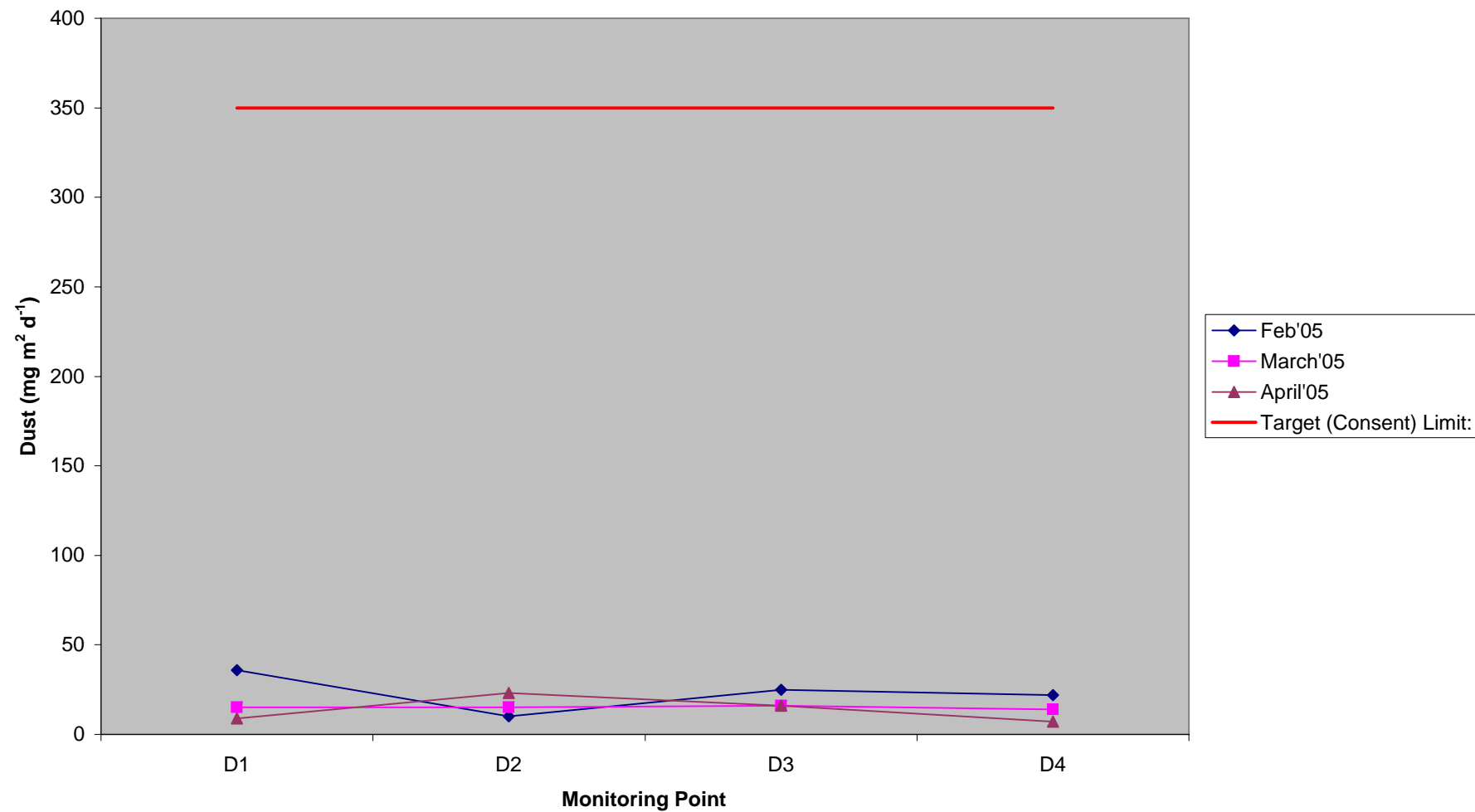
Dust Monitoring Record Sheet				no... 1 of 1			
Conducted by			Approved by				
Name: Sandra Barber		Signed		Name: Leslie Finnegan		Signed	
Determinant Results							
	Date Positioned	Date Removed	Ref. Number	Date Dispatched	Date Returned	Weight (mg/sq.m/day)	Comments
Target (Consent) Limit: 350 mg m² d⁻¹ on as a 30 day average							
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	64400	04/05/2005	09/05/2005	9	
D2	01/04/2005	04/05/2005	64401	04/05/2005	09/05/2005	23	
D3	01/04/2005	04/05/2005	64402	04/05/2005	09/05/2005	16	
D4	01/04/2005	04/05/2005	64403	04/05/2005	09/05/2005	7	
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

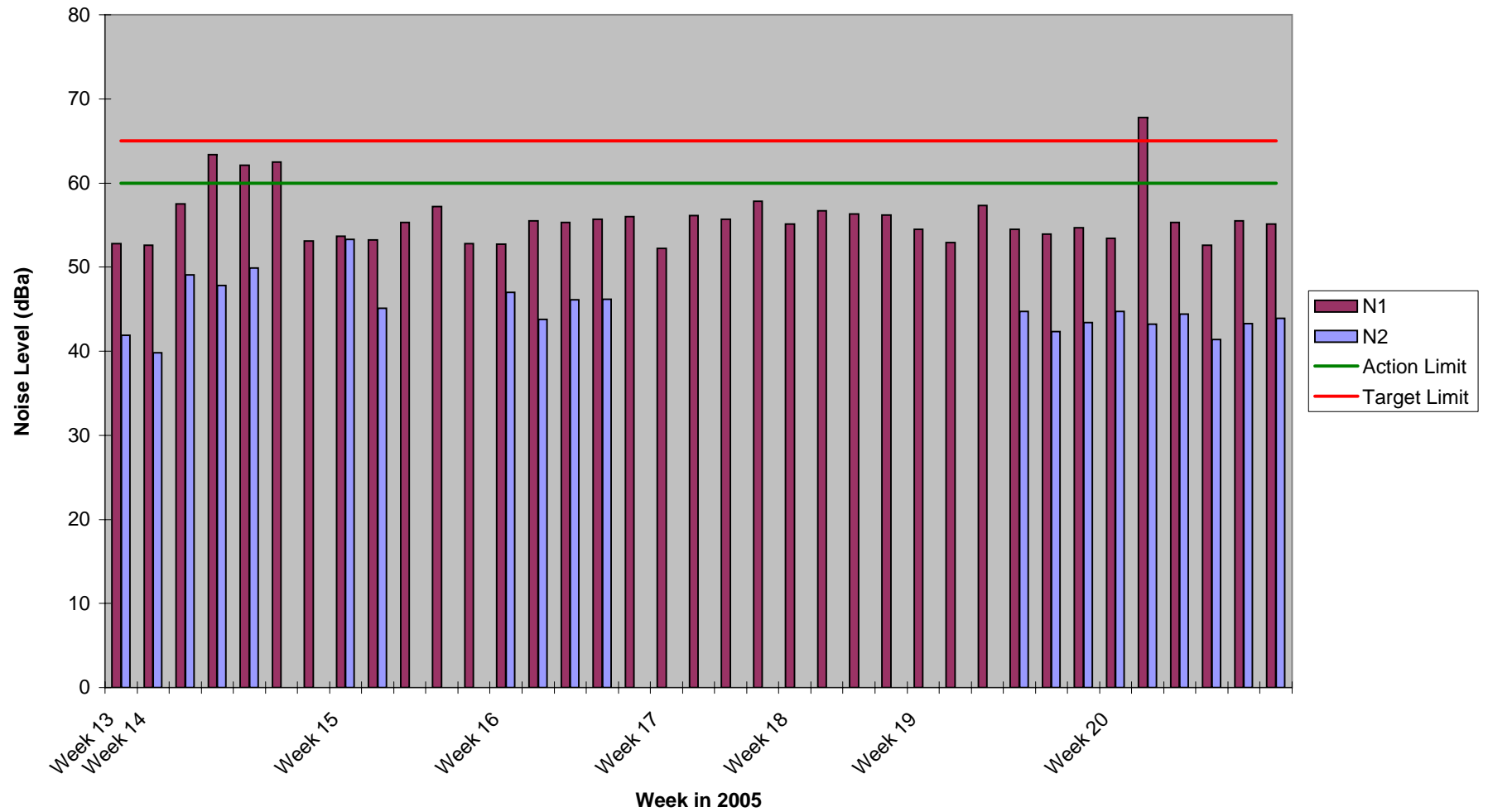
Vibration Monitoring Record Sheet			no... 1 of 1		
Conducted by			Approved by		
Name:	Sandra Barber	Signed	Name:	Leslie Finnegan	Signed
Determinant Results					
Location	Date Positioned	Date Removed	Event Time	Pk Disp (mm)	Accel (g)
V2	20/05/05	20/05/2005	15:09:57	0.069	0.066
				0.25	0.15
				0.069	0.093
V1	19/05/05	20/05/2005	08:07:51	0.23	0.62
				0.091	0.36
				0.47	0.21
V2	18/05/05	19/05/2005	11:21:49	0.21	0.013
				0.19	0.027
				0.2	0.027
V2	18/05/05	19/05/2005	07:52:34	0.04	0.08
				0.017	0.04
				0.022	0.04
V2	16/05/05	17/05/2005	08:04:15	0.51	0.17
				0.51	0.3
				0.9	0.21
V2	16/05/05	17/05/2005	08:00:42	0.064	0.08
				0.059	0.093
				0.042	0.093
V1	14/05/05	15/05/2005	07:40:35	0.053	0.053
				0.078	0.21
				0.069	0.15

Vibration meter was moved between V1 and V2 daily to provide indicative vibration levels accross the site

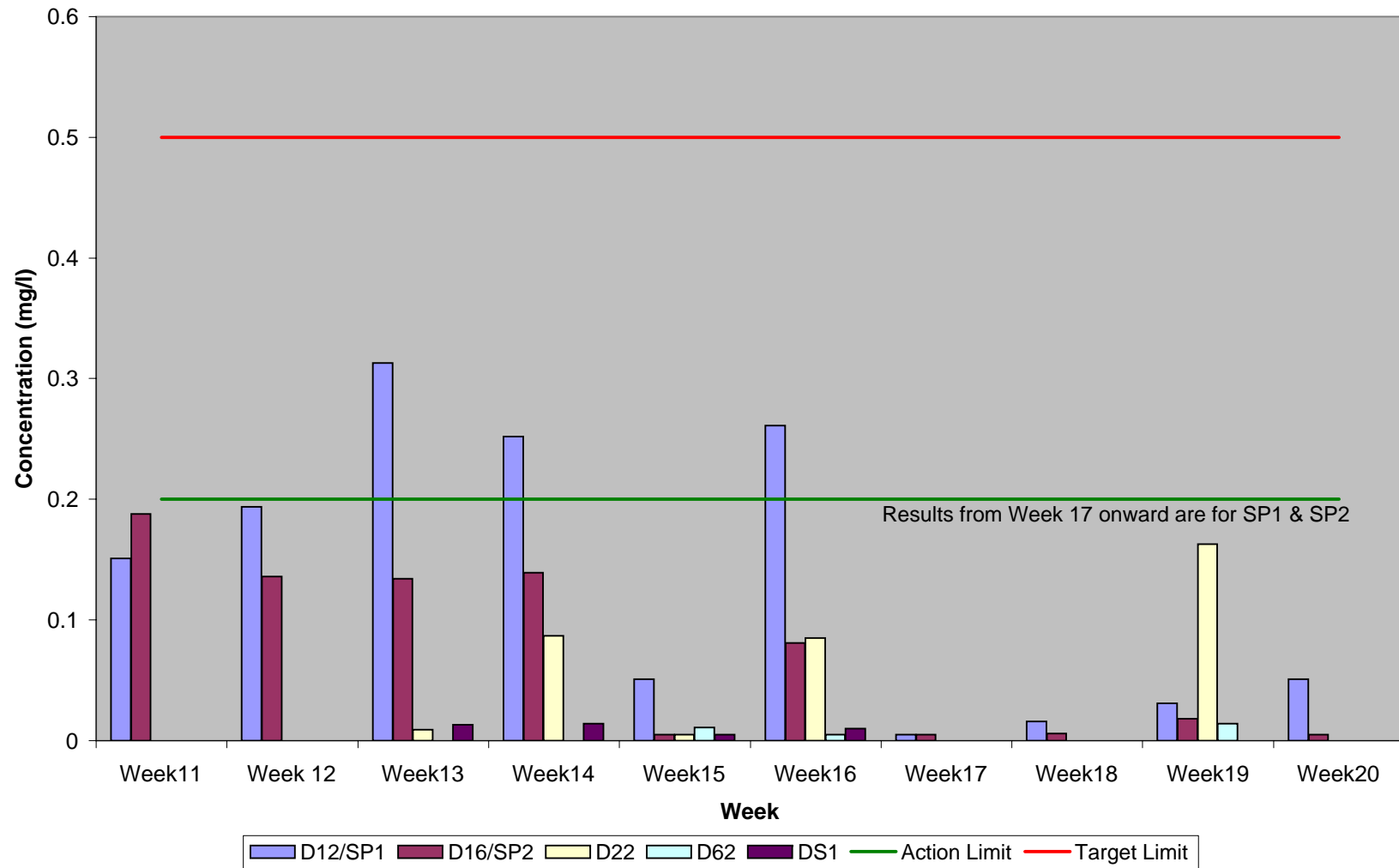
Dust Compiled Results 2005



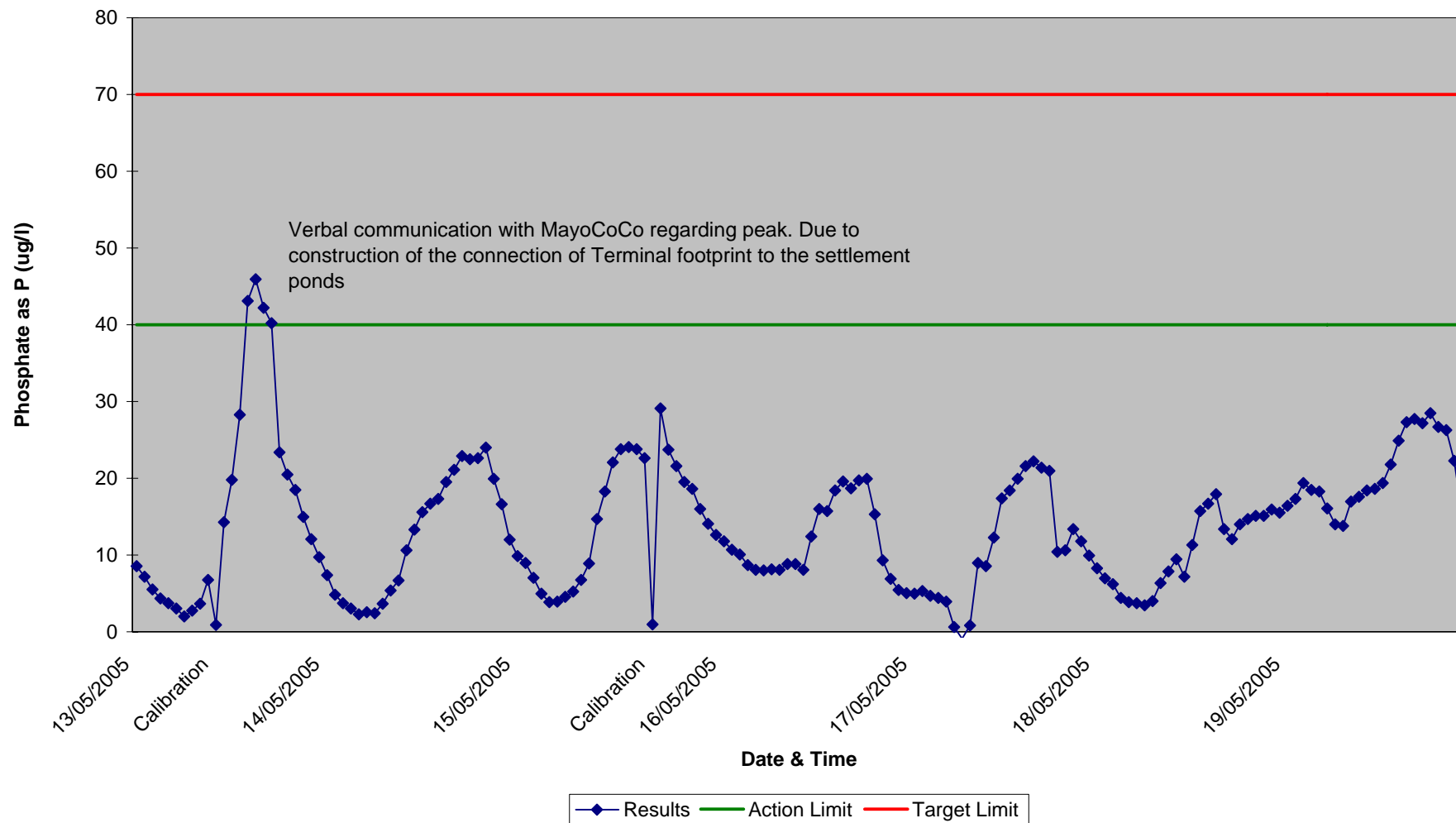
Noise Monitoring Compiled Results 2005



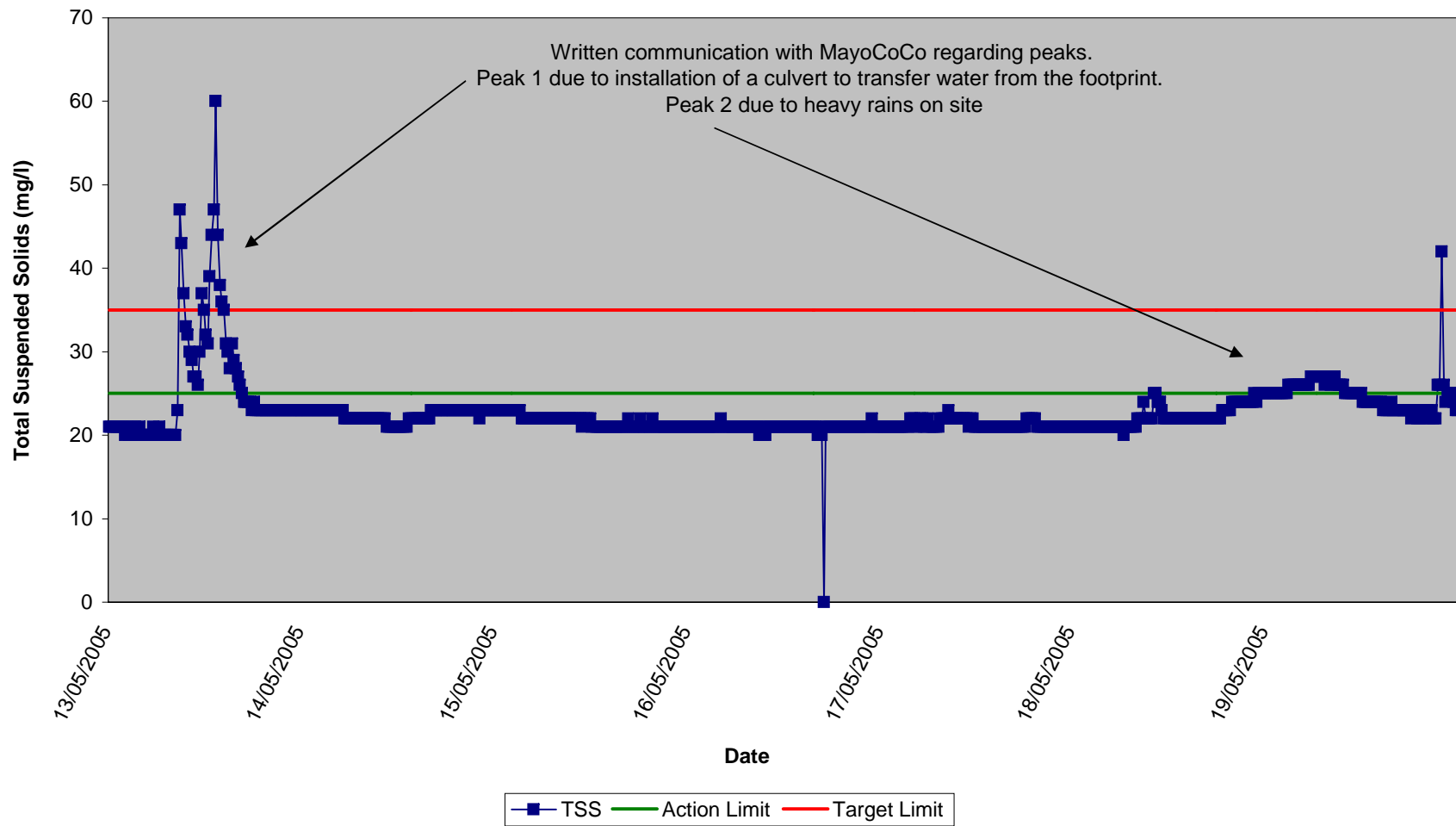
Ammonia as $\text{NH}_3\text{-N}$,
Compiled Results 2005



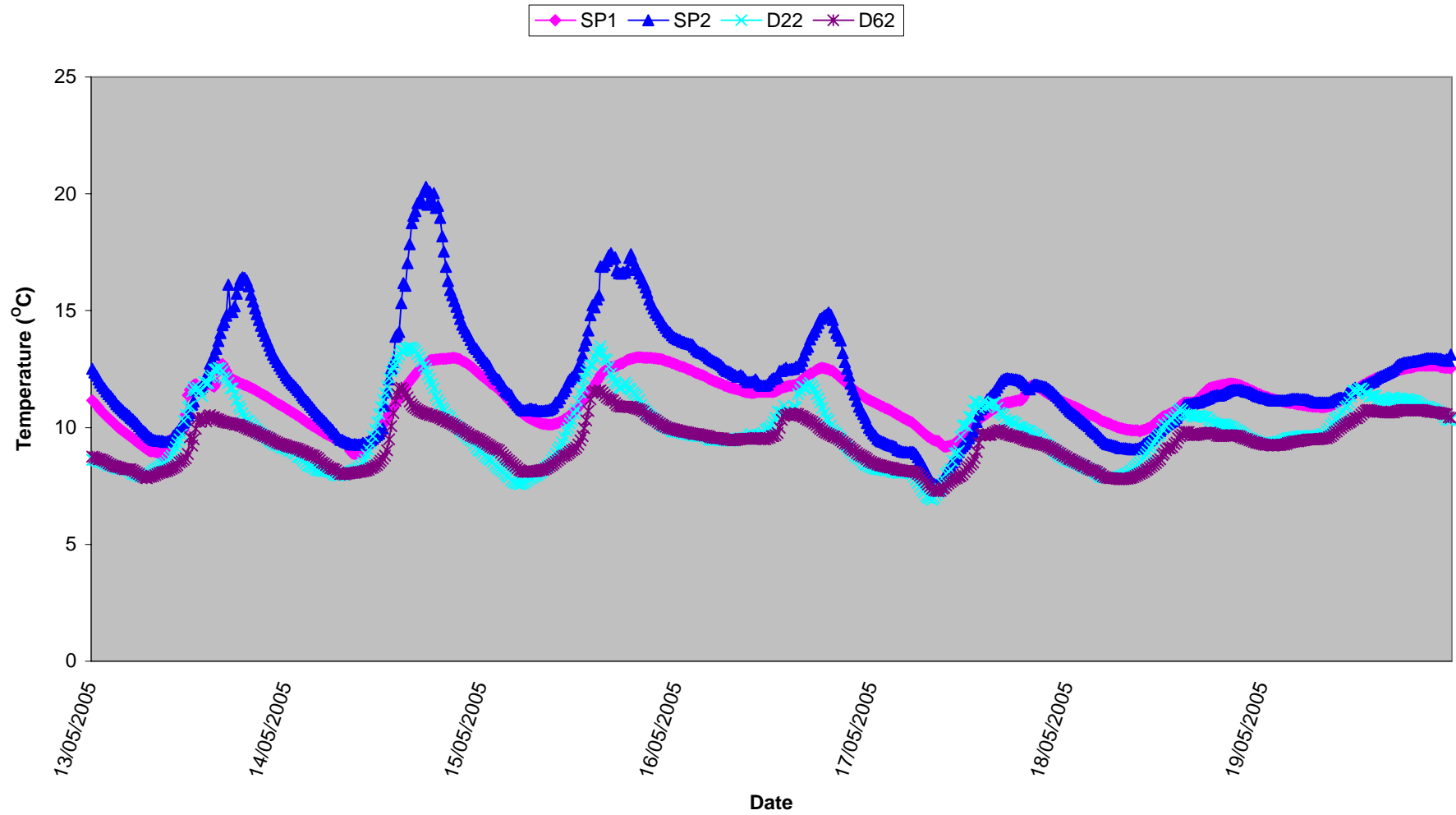
**Surface Water (SP1)
Orthophosphate, Week 20 2005**



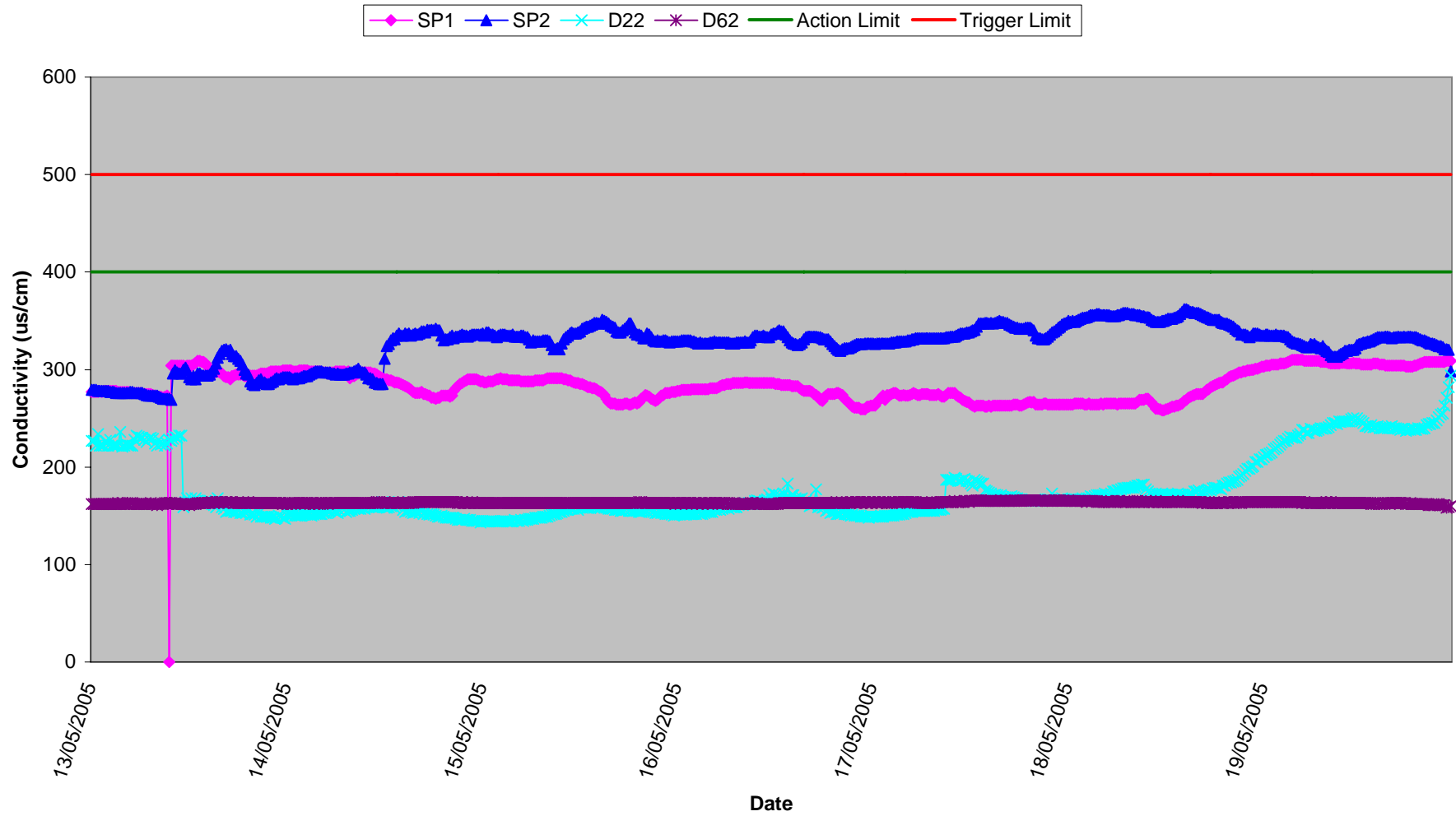
Surface Water (SP1)
Total Suspended Solids, Week 20 2005



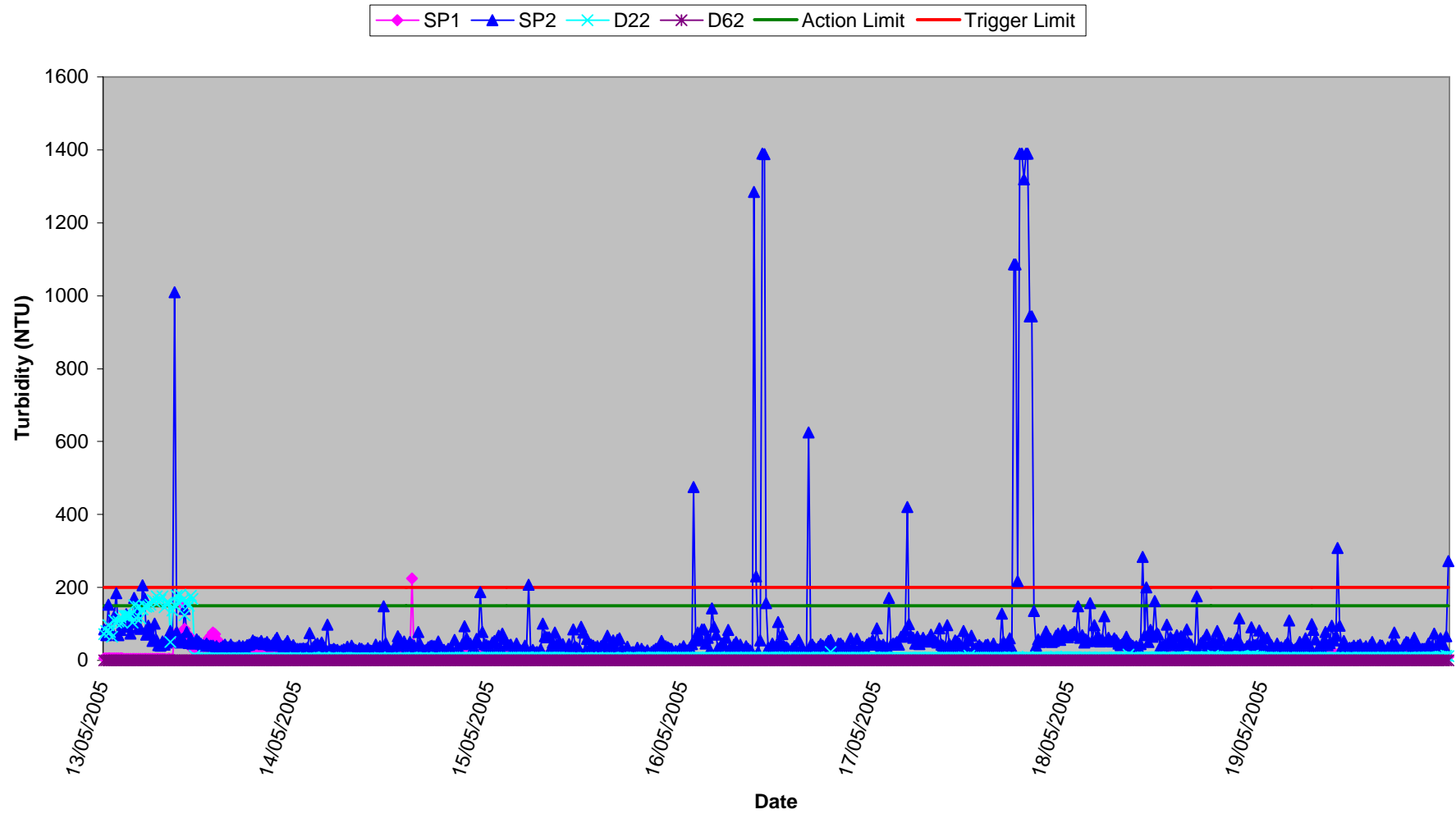
Surface Waters
Temperature, Week 20 2005



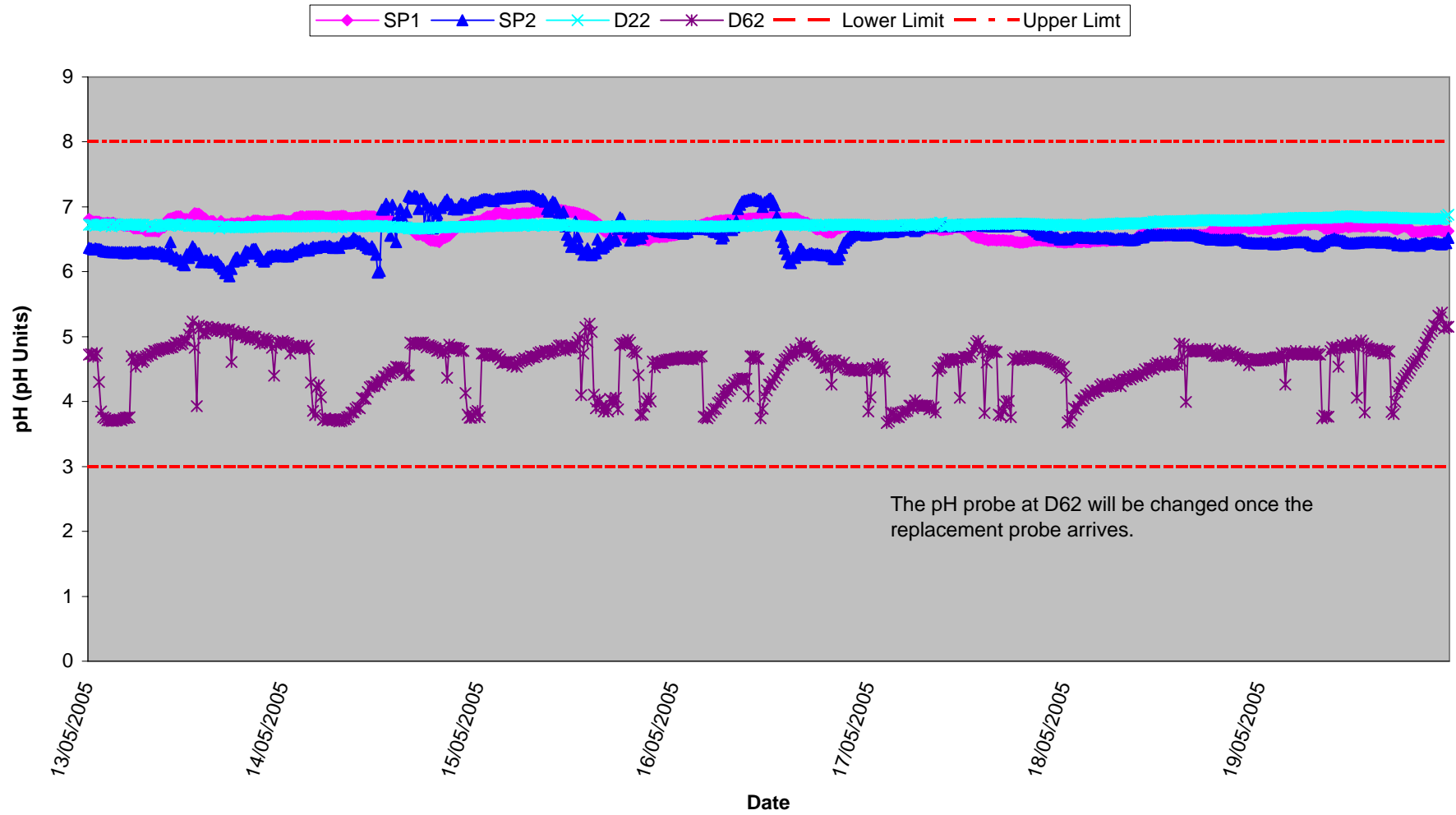
Surface Waters
Conductivity, Week 20 2005



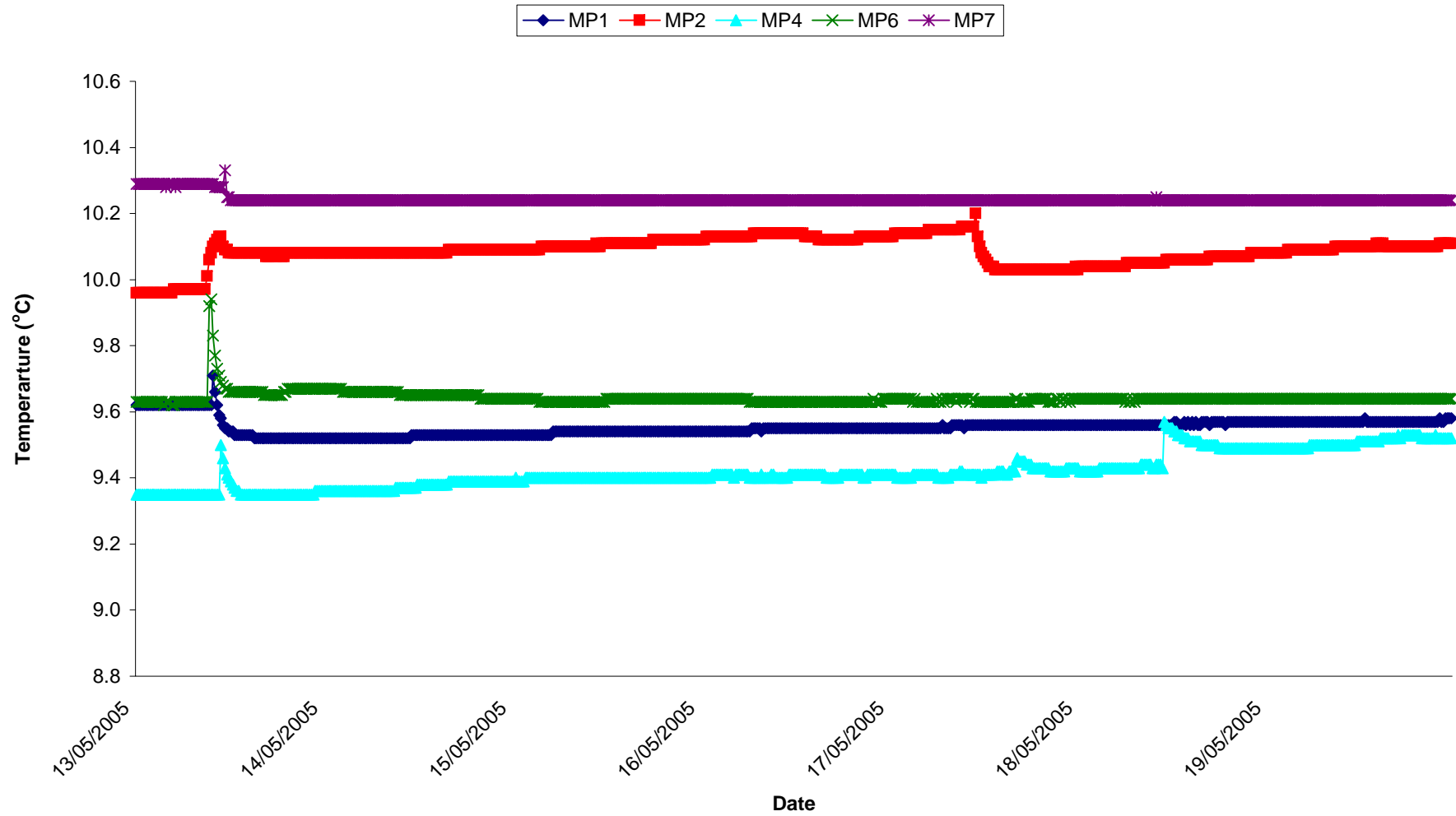
**Surface Waters
Turbidity, Week 20 2005**



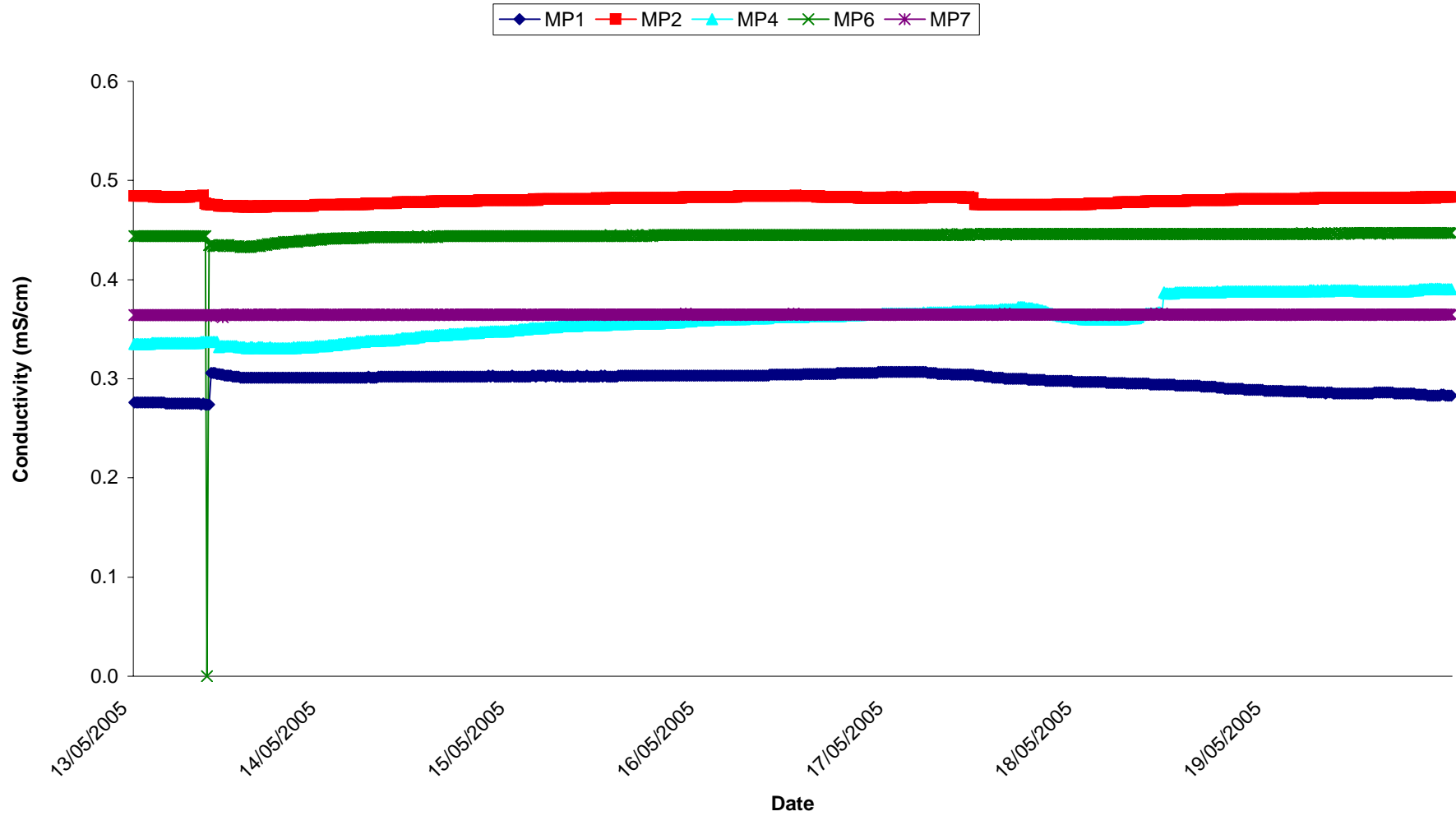
Surface Waters pH, Week 20 2005



Groundwaters
Temp, Week 20 2005



Groundwaters
Conductivity, Week 20 2005



Groundwaters pH, Week 20 2005

MP1 MP2 MP4 MP6 MP7

