

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	06-May-05	07-May-05	08-May-05	09-May-05	10-May-05	11-May-05	12-May-05
Rainfall (mm)	3.0	1.0	2.0	1.2	0.0	0.0	0.0

1.2 Summary

Environment	Comments
Surface Water	<p>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.</p> <p>The monitoring Sonde at SP2 was relocated to the new carrier drain up stream of the settlement ponds (now SP3). The data collected at SP3 shows the effectiveness of the settlement ponds when the data is compared with that collected at SP1.</p>
Groundwater	<p>The sonde data downloaded is shown graphically.</p> <p>There was a single event for MP6 when the sonde was probably exposed to the air.</p>
Noise	<p>L_{Aeq} at N1 recorded between 53 and 57dB</p> <p>L_{Aeq} at N2 recorded between 42 and 45dB</p> <p>The results for both locations are below the 65 dB limit.</p>
Vibration*	<p>Max Pk Disp 15.3 mm with an associated acceleration 0.7 g was recorded. There were 4 No. events associated with this high. The results detailed are probably associated with the movement of personnel past the meter. There are no other events recorded that day.</p>
Dust	<p>The results for dust deposition in April were between 9 and 23 m² d⁻¹, well below the 350 m² d⁻¹ limit.</p>
Weather	<p>There was a total of 7.2 mm of rainfall during the reporting period, with an temperature range of 2.5 to 15.1 °C</p>

Weekly Environmental Report - Status Week Ending: Thur. 12th May 2005

Generated By: Sandra Barber

Checked By: Leslie Finnegan

2 Environmental Incidents/Near misses/Complaints

There was a single near miss. Whilst transporting the double skinned waste oil tank to the bunded area the teleporter pierced the outer skin. There was no spill and the tank is now located in a bunded area with an oil interceptor.

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	06-May-05	263	10.5	4.2			0.00	<10	6.4							
SP2	06-May-05	270	11.0	7.0			0.00	<10	6.9							
SP1	07-May-05	247	11.0	4.6			0.00	<10	6.4							
SP2	07-May-05	245	11.5	5.1			0.00	<10	6.8							
SP1 - Lab	09-May-05	203		1.8		< 4	< 0.44	0.11	6.6	36	0.031	0.04	< 0.005			
SP2 - Lab	09-May-05	206		2.1		< 4	< 0.44	0.13	7.0	41	0.018	0.024	< 0.005			
SP1	09-May-05	251	9.0	1.9			0.00	<10	6.57							
SP2	09-May-05	258	9.5	2.6			0.00	<10	6.83							
SP1	10-May-05	274		4.6			0.00	<10	6.53							
SP2	10-May-05	276		4.0			0.00	<10	6.80							
SP1	11-May-05	294		16.4			0.00	<10	6.14							
SP2	11-May-05	272		6.5			0.00	<10	6.82							
SP1	12-May-05	291		7.0			0.00	<10	6.85							
SP2	12-May-05	304		5.1			0.00	<10	7.18							
Additional Surface Water Monitoring																
D22	08-May-05	245	10.0	4.5			0.00	<10	6.55							
D62	08-May-05	173	10.0	1.1			0.00	<10	5.64							
D22 - Lab	08-May-05	199		3.7		< 4	0.55	0.533	6.60	174	0.163	0.21	< 0.005			
D62 - Lab	08-May-05	151		0.7		< 4	< 0.44	0.071	6.00	23	0.014	0.019	< 0.005			
D22	Sonde Data: See graphs for all results															
D62	Sonde Data: 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.

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	9.7	06/05/2005	07:05:45	12:00:00	2343754	4.2	90	55	47	78			
N1	9.4	07/05/2005	07:50:24	12:00:00	2343754	5.9	132	53	46	78			
N1	7.4	09/05/2005	07:18:55	12:00:00	2343754	3.1	182	57	46	105			
N1	7.8	10/05/2005	09:15:13	12:00:00	2343754	2.3	212	55	46	78			
N1	7.8	11/05/2005	06:54:50	12:00:00	2343754	1.5	156	54	47	75			
N1	9.9	12/05/2005	07:04:08	12:00:00	2343754	2.5	233	55	47	86			
N2	7.8	10/05/2005	09:35:11	12:00:00	2343753	2.3	212	45	< 30	66			
N2	7.8	11/05/2005	07:10:35	12:00:00	2343753	1.5	156	42	< 30	67			
N2	9.9	12/05/2005	07:15:38	12:00:00	2343753	2.5	233	43	< 30	64			

* 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

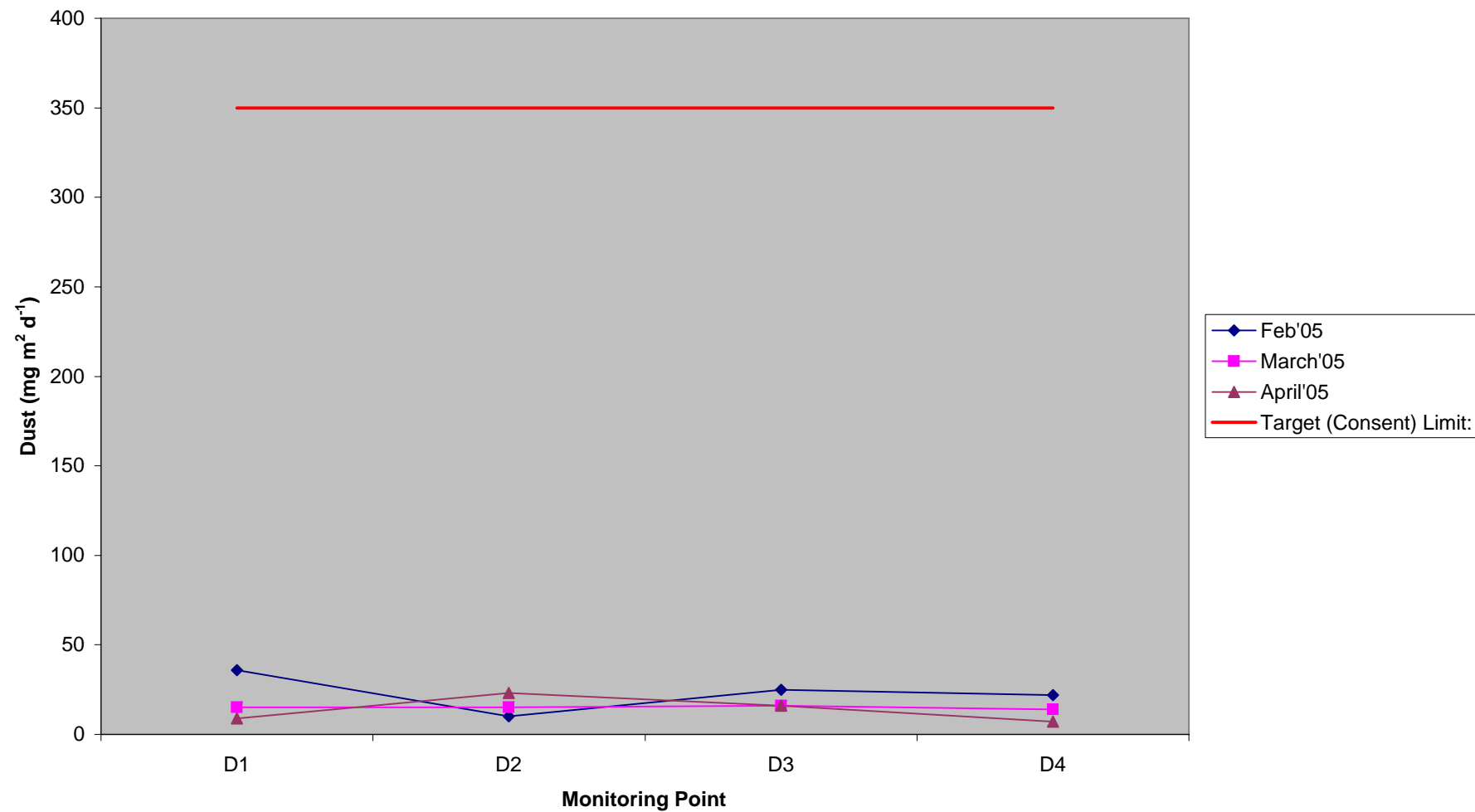
Dust Monitoring Record Sheet				no... 1 of 1			
Conducted by			Approved by				
Name: Sandra Barber		Signed		Name: Leslie Finnegan		Signed	
Determinant Results							
	Date Positioned	Date Removed	Ref. Number	Date Dispatched	Date Returned	Weight (mg/sq.m/day)	Comments
Target (Consent) Limit: 350 mg m² 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

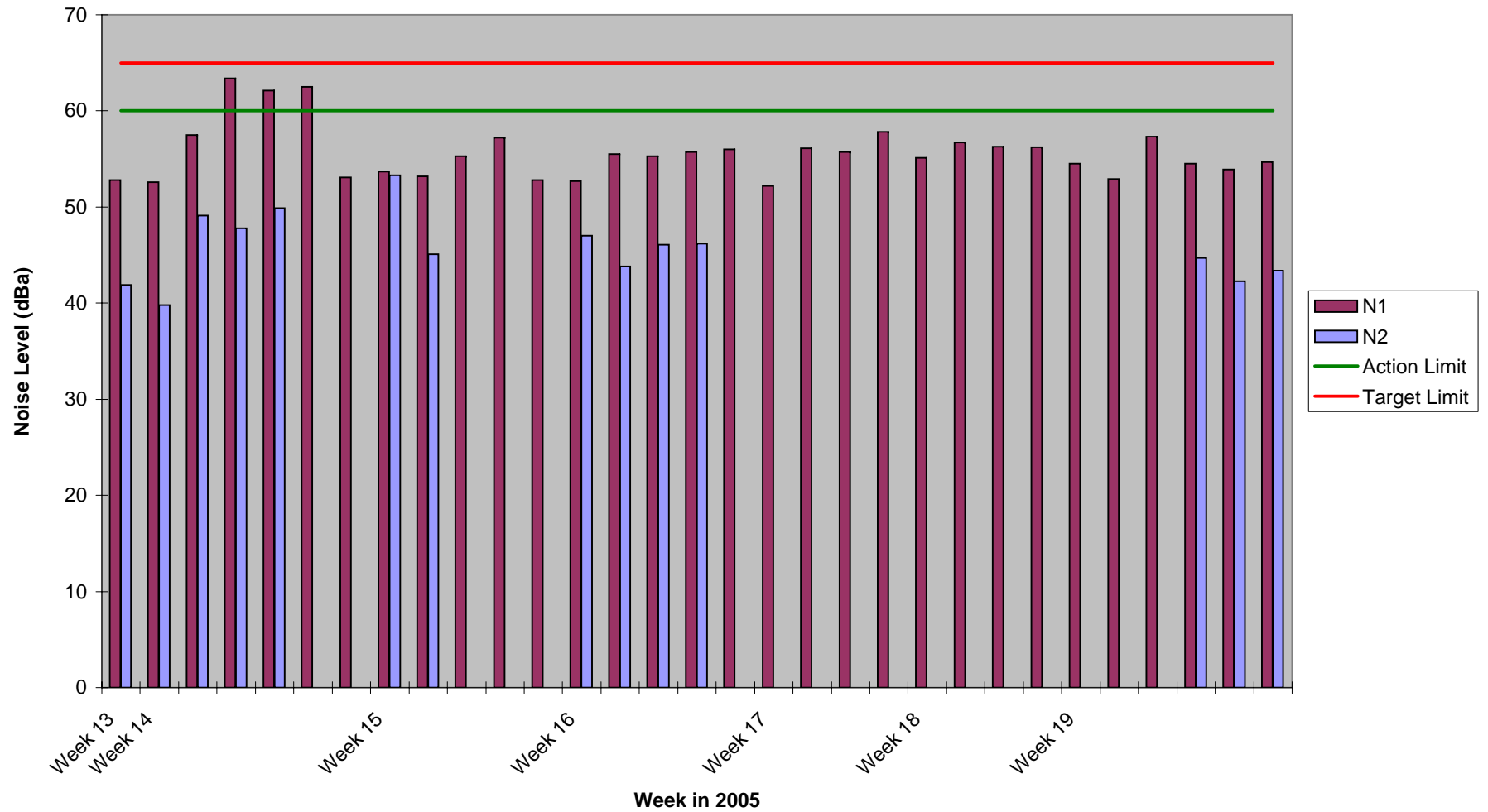
Vibration Monitoring Record Sheet			no... 1 of 1		
Conducted by			Approved by		
Name:	Sandra Barber	Signed	Name:	Leslie Finnegan	Signed
Determinant Results					
Location	Date Positioned	Date Removed	Event Time	Pk Disp (mm)	Accel (g)
V2	11/05/2005	12/05/2005	07:27:43	0.037	0.11
				0.061	0.066
				0.038	0.093
V2	11/05/2005	12/05/2005	07:27:27	0.063	0.066
				0.081	0.093
				0.073	0.11
V2	11/05/2005	12/05/2005	07:27:13	0.038	0.066
				0.042	0.053
				0.058	0.093
V2	11/05/2005	12/05/2005	07:17:18	0.05	0.08
				0.038	0.053
				0.035	0.053
V1	10/05/2005	11/05/2005	16:44:55	0.064	0.15
				0.033	0.093
				0.059	0.17
V1	10/05/2005	11/05/2005	10:11:51	0.056	0.027
				0.14	0.04
				0.013	0.013
V2	09/05/2005	10/05/2005	08:50:50	9.26	1.38
				11.7	1.35
				12.4	1.1
V2	09/05/2005	10/05/2005	08:50:39	2.5	0.15
				15.3	0.7
				2	0.08
V2	09/05/2005	10/05/2005	08:50:27	1.27	0.12
				0.4	0.19
				0.39	0.16
V2	09/05/2005	10/05/2005	08:49:43	0.17	0.58
				0.049	0.23
				0.024	0.19

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

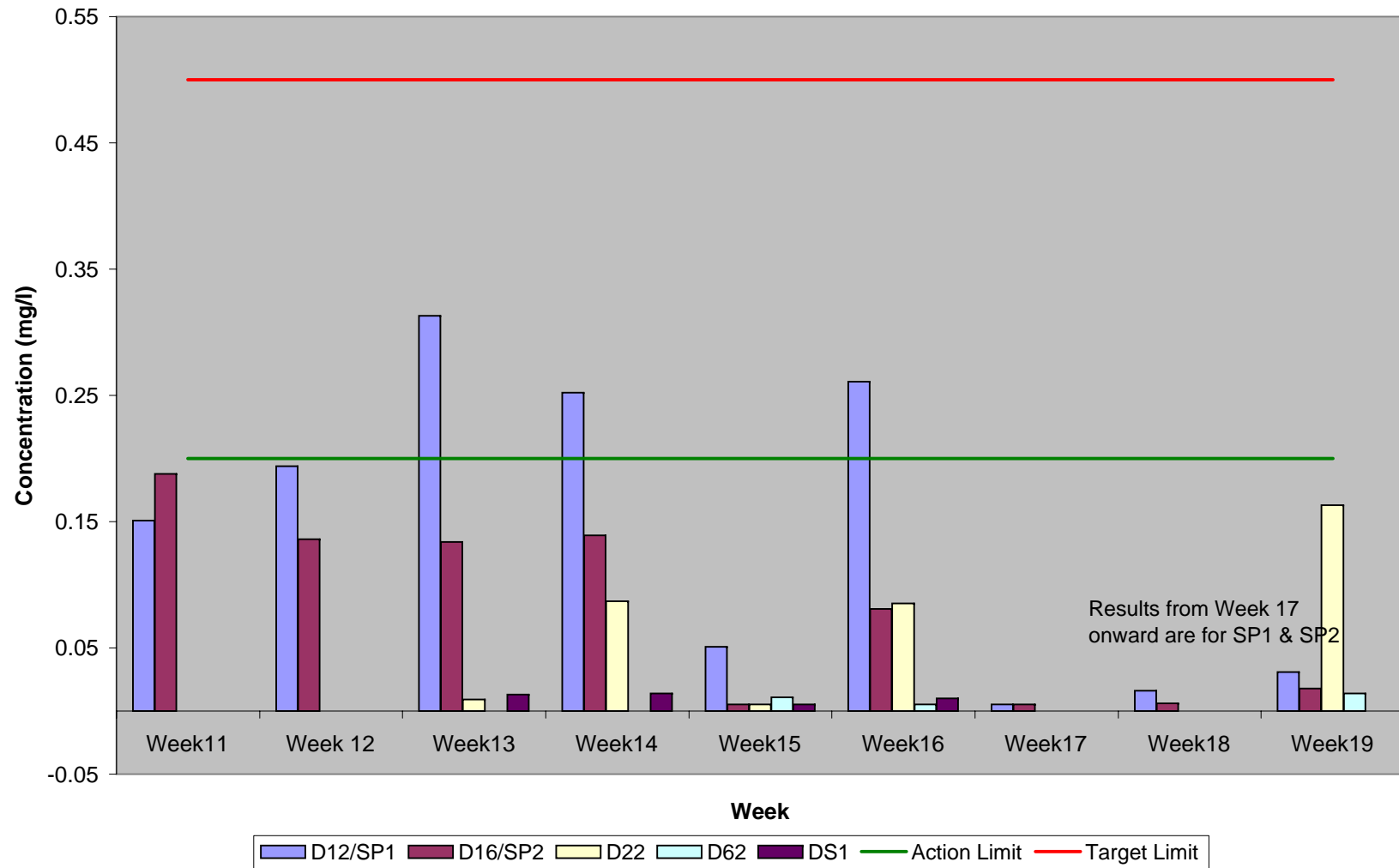
Dust Compiled Results 2005



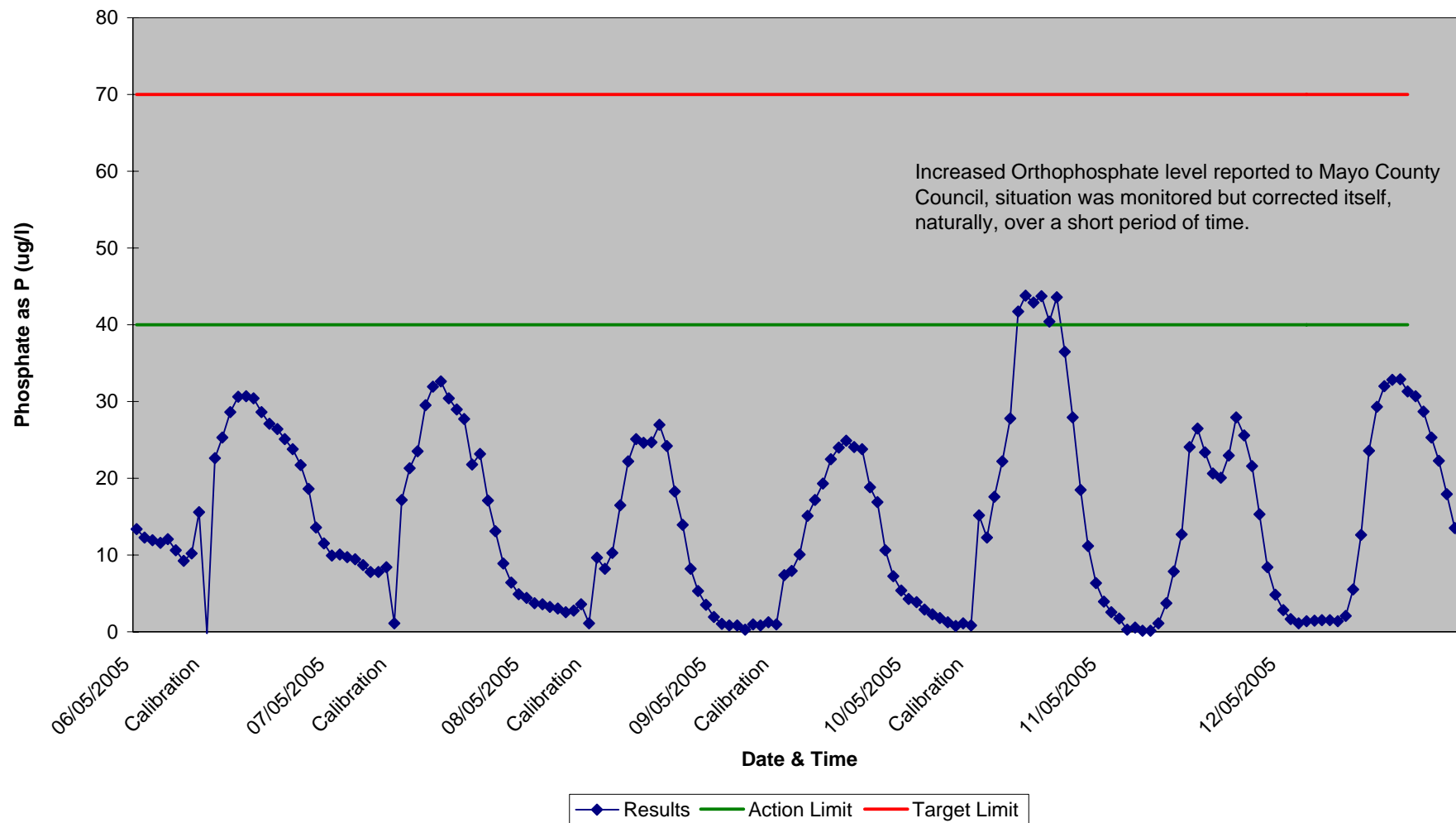
Noise Monitoring Compiled Results 2005



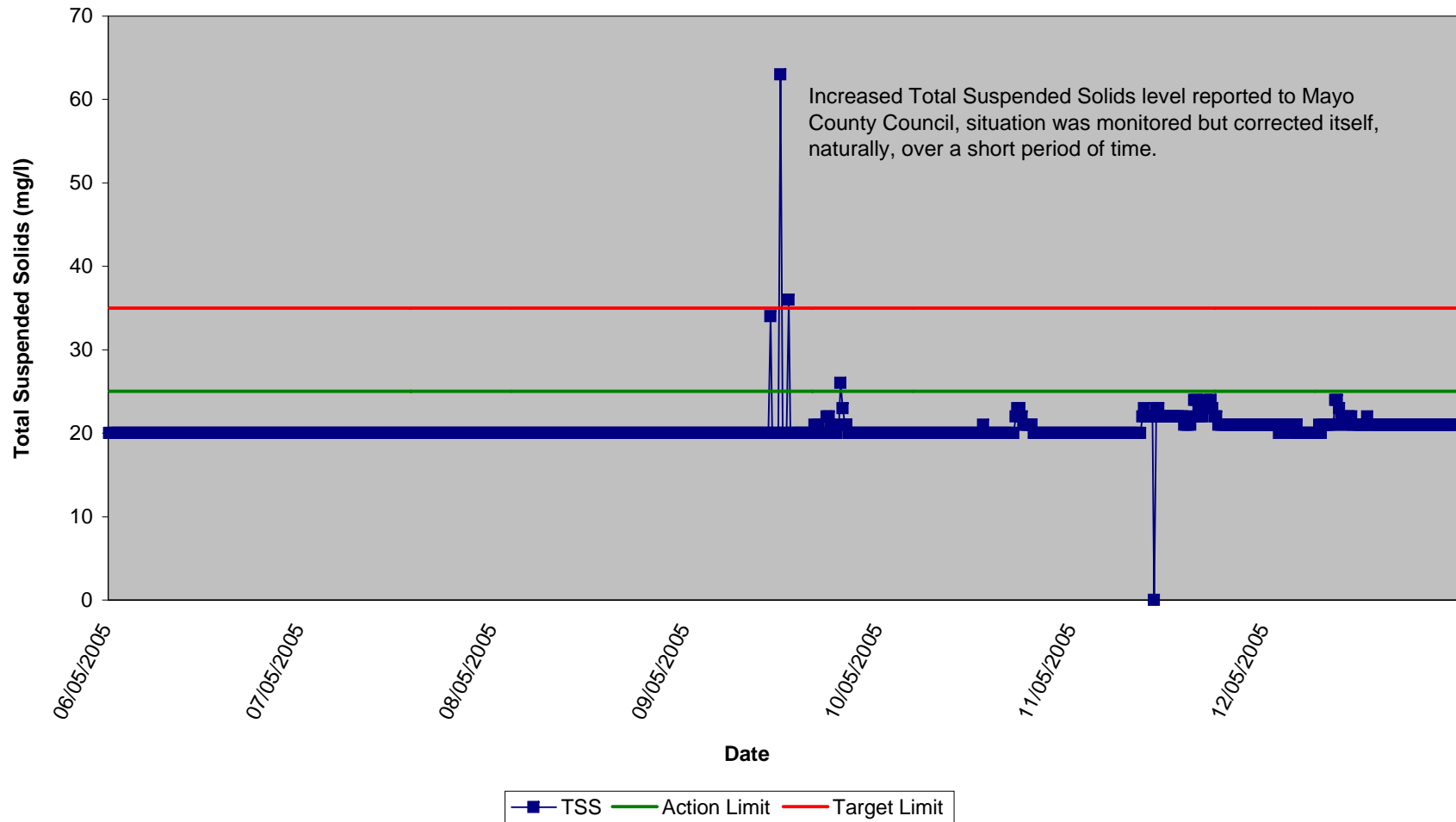
**Ammonia as $\text{NH}_3\text{-N}$,
Compiled Results 2005**



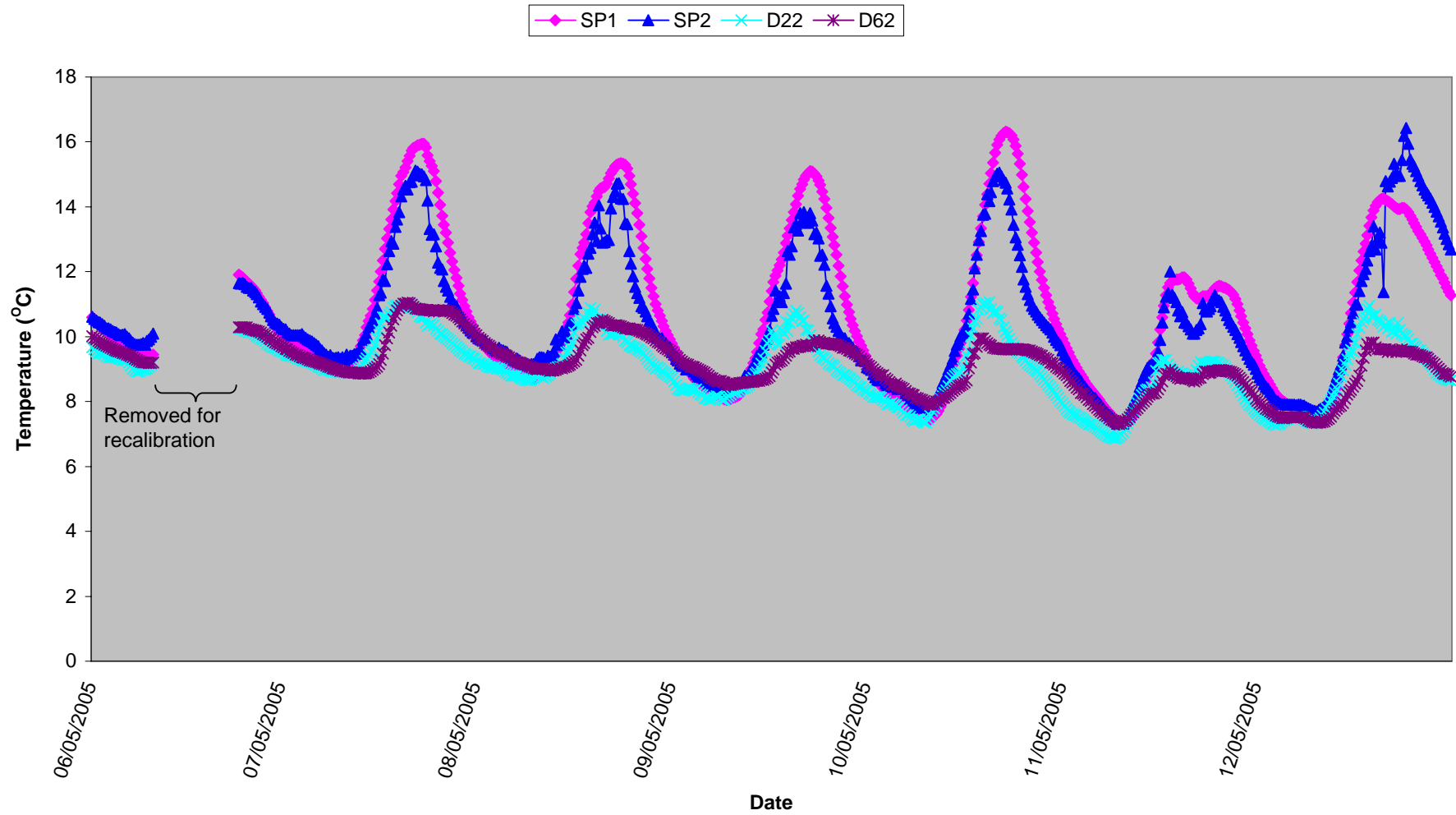
**Surface Water (SP1)
Orthophosphate, Week 19 2005**



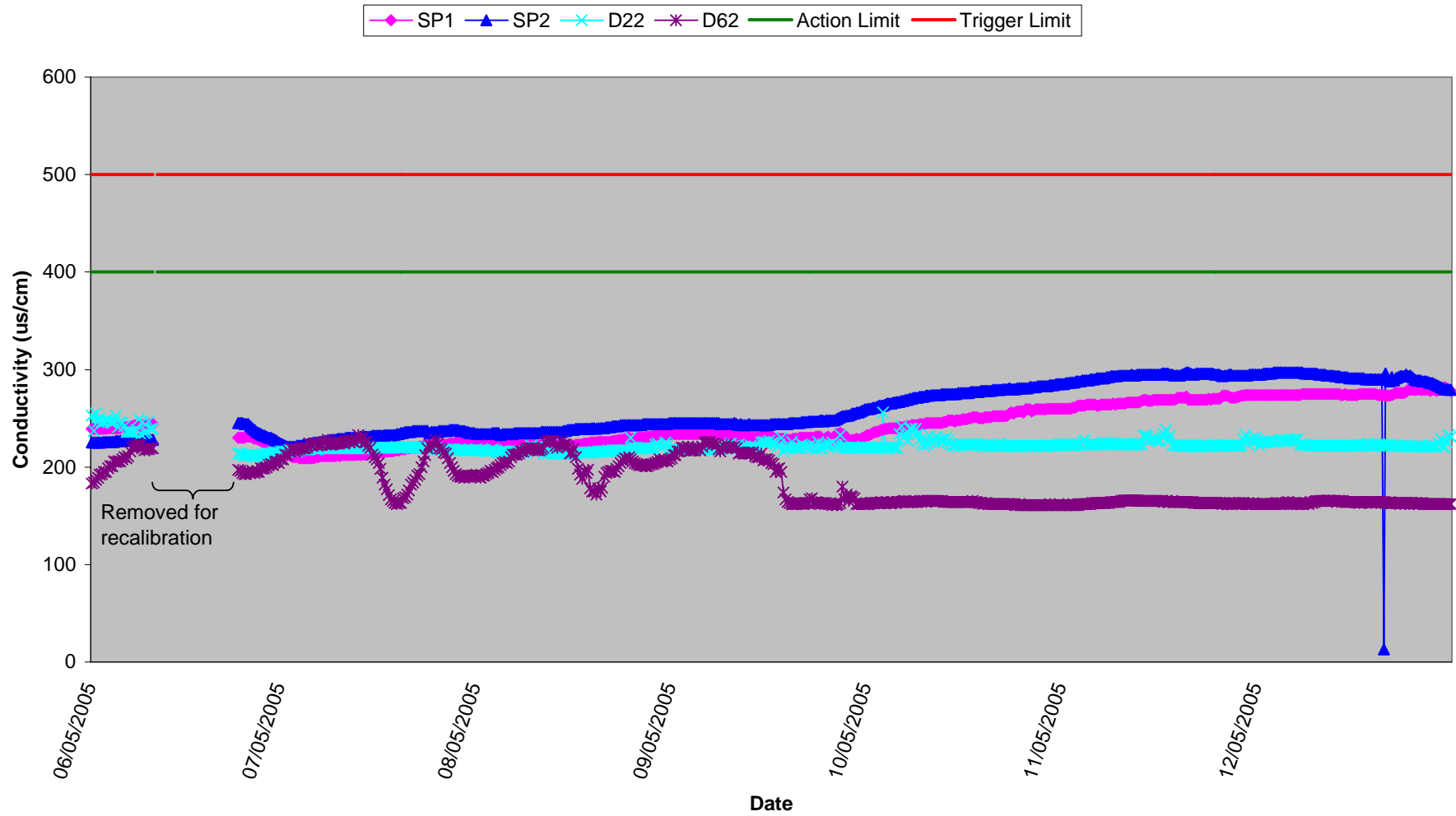
Surface Water (SP1)
Total Suspended Solids, Week 19 2005



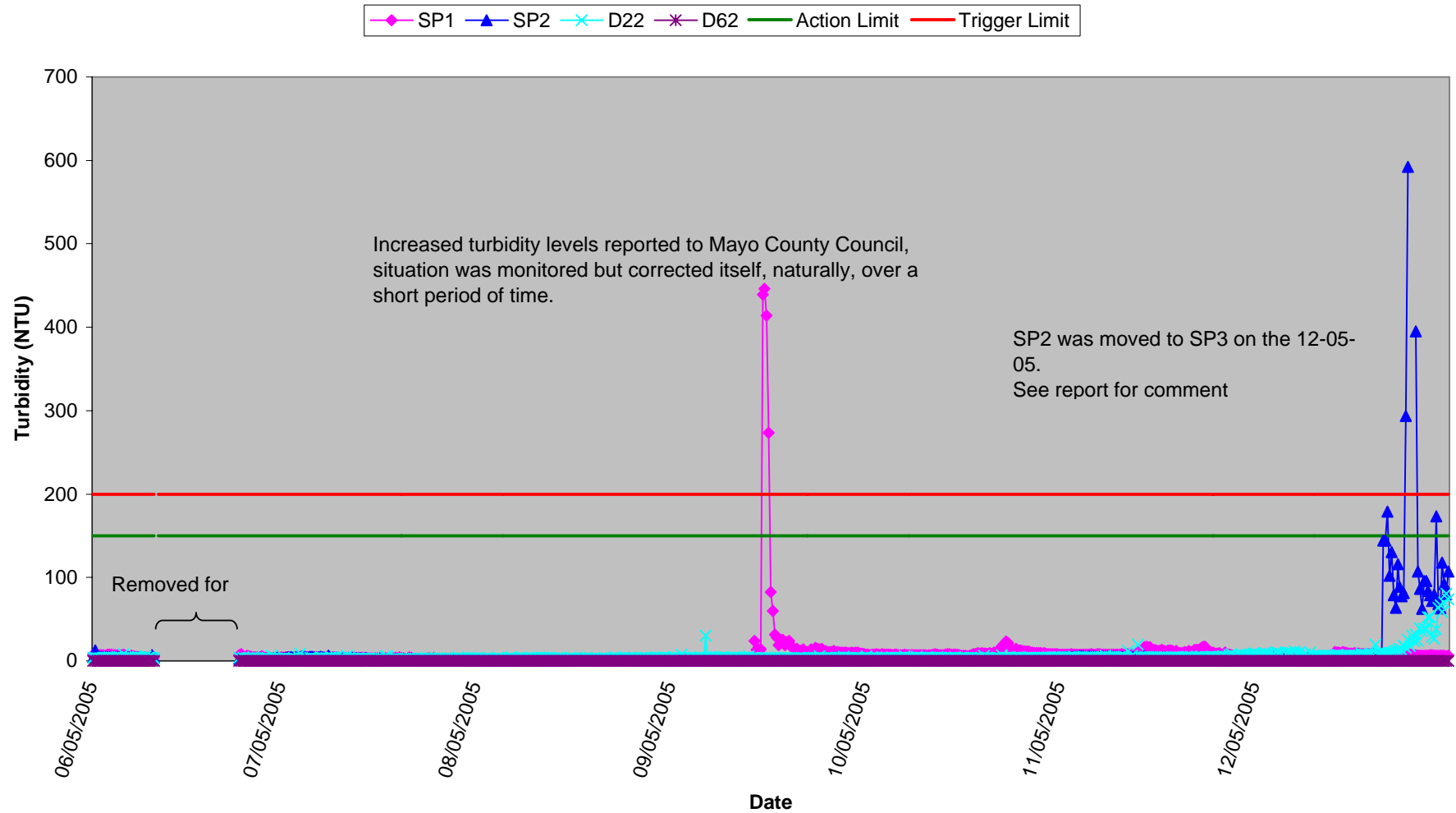
Surface Waters
Temperature, Week 19 2005



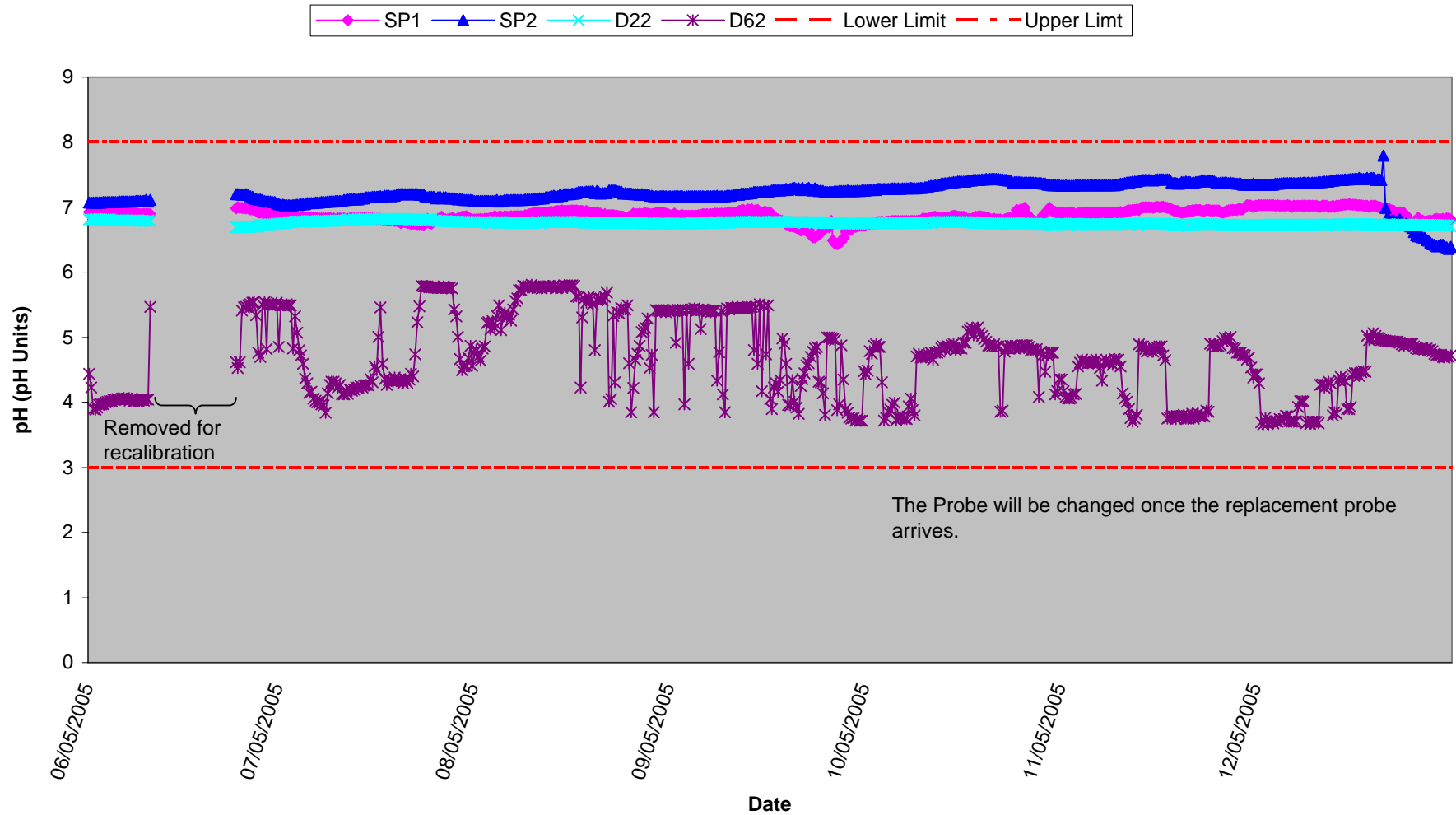
Surface Waters Conductivity, Week 19 2005



Surface Waters Turbidity, Week 19 2005

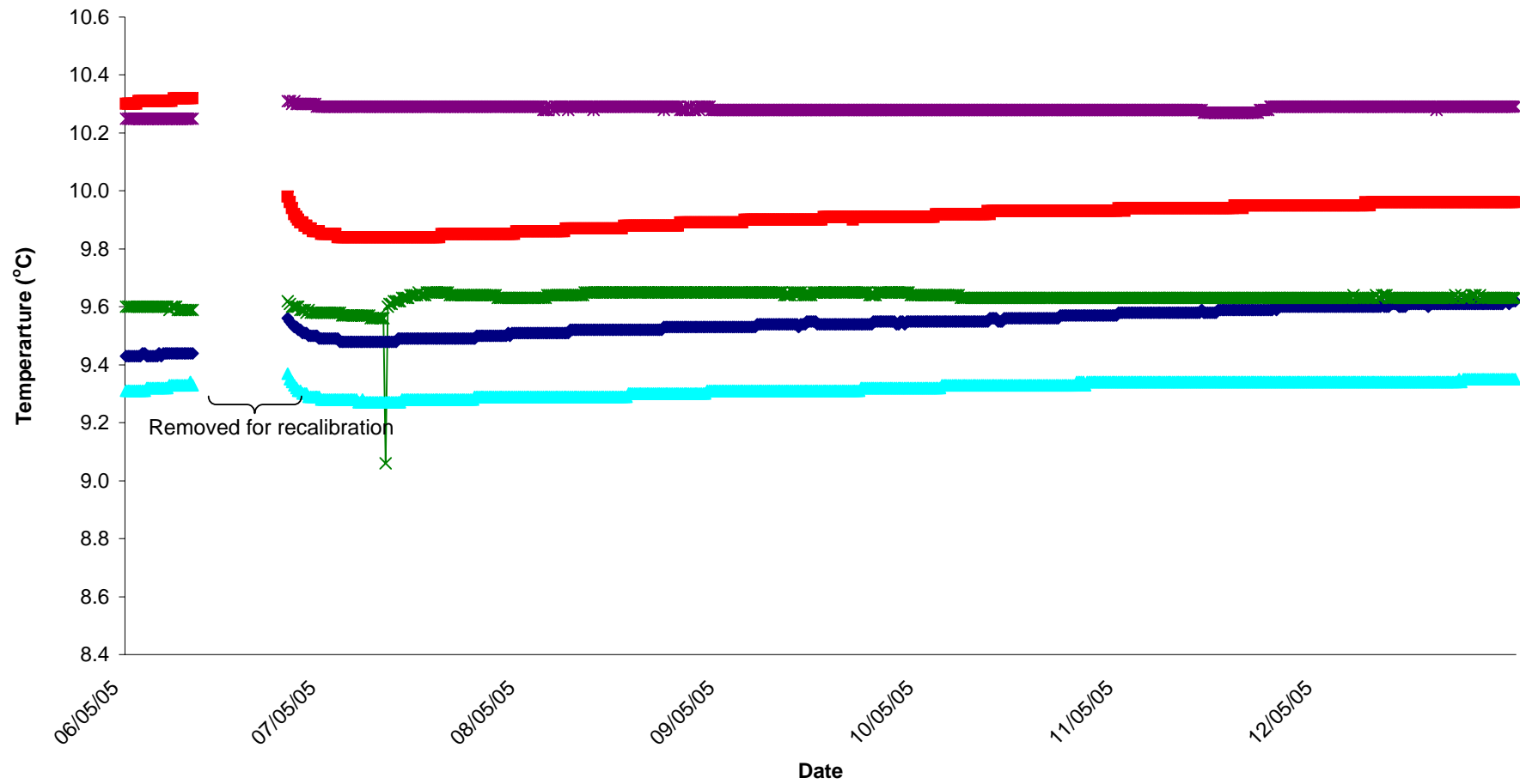


Surface Waters pH, Week 19 2005

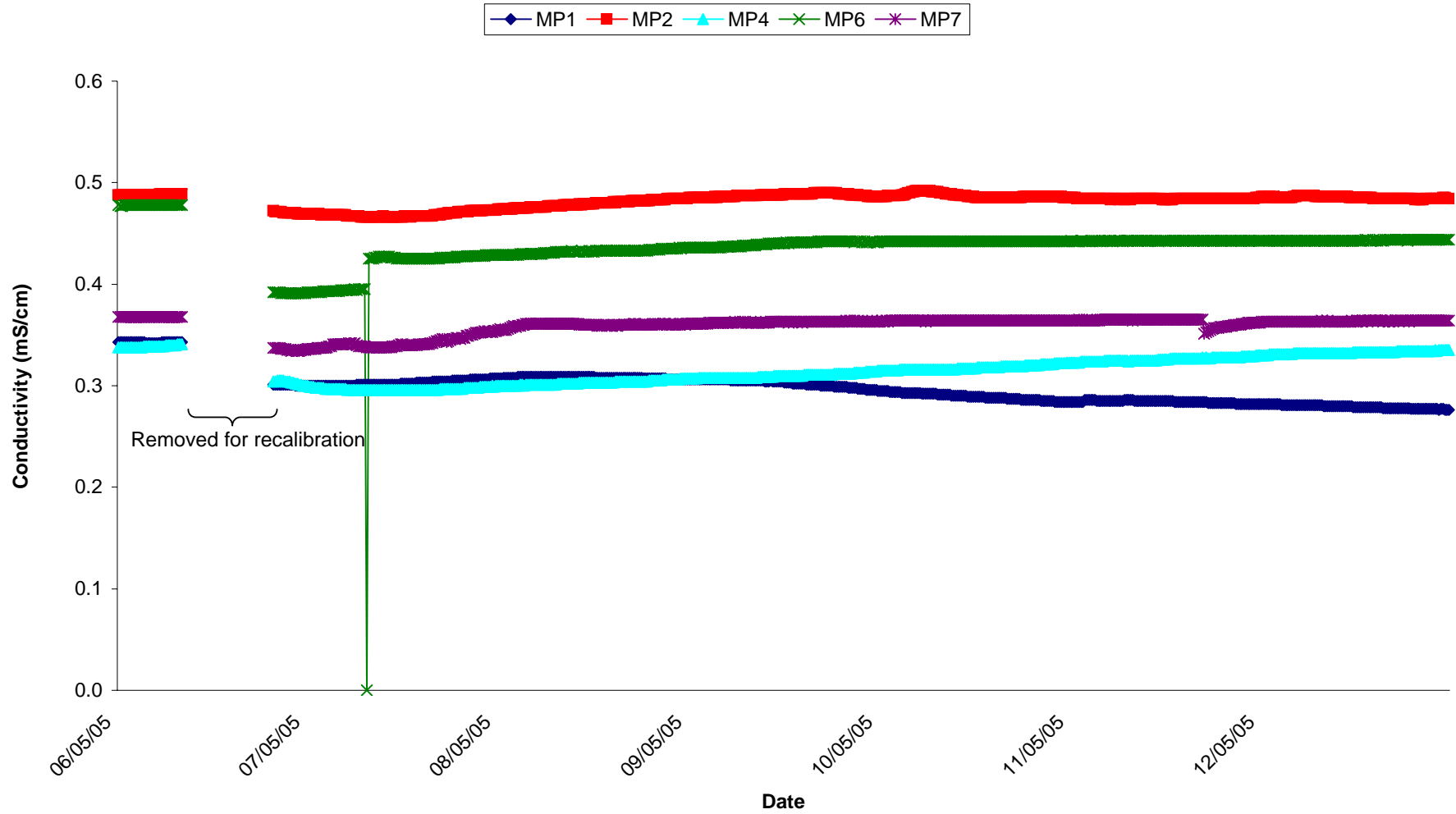


Groundwaters Temp, Week 19 2005

MP1 MP2 MP4 MP6 MP7



Groundwaters Conductivity, Week 19 2005



Groundwaters pH, Week 19 2005

