

## 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)
07/10/2005	14.0		14/10/2005	0.0
08/10/2005	0.8		15/10/2005	0.0
09/10/2005	21.8		16/10/2005	1.6
10/10/2005	43.6		17/10/2005	0.8
11/10/2005	0.2		18/10/2005	2.6
12/10/2005	0.8		19/10/2005	2.8
13/10/2005	0.0		20/10/2005	0.8
Total = 89.8 mm				

Weekly Environmental Report - Status	Week Ending: Thur. 20 <sup>th</sup> Oct 2005
Generated By: Sandra Barber	
Checked By: Leslie Finnegan	

## 1.2 Summary

Environment	Comments
Surface Water	<p>From the data available, on average all parameters were within the limits set.</p> <p>The TSS analyser maintained and calibrated on the 10-10-05. It is now functioning.</p> <p>The Orthophosphate analyser is currently not functioning due to a circuitry problem. A technician is arriving during Week 44 to fix this. Until this piece of equipment is repaired.</p> <p>Some of the sonde data results are not supported by either site or lab data. The probable cause is dirty probes. This equipment will be removed for cleaning in Week 43.</p> <p>All locations continue to experience problems with the in-stream dissolved oxygen probes.</p>
Groundwater	<p>The sonde data downloaded is shown graphically and is representative of concentrations normally recorded.</p> <p>Laboratory samples are currently being analysed.</p>
Weather	There was a total of 89.8 mm of rainfall during the reporting period, with a temperature range of 3.4 to 18.1 °C

## 2 Environmental Incidents/Near misses/Complaints

There were 2 No. near misses during the reporting period, the details are summarised in the Table below.

Date and Time	7-Oct-05	12-Oct-05
Location	Gate 1	Gate 2 – Access Road
Nature of Incident	<p>Whilst lifting a generator from it's bunding, for removal off site, there was a minor diesel spill.</p> <p>Spill was onto tarmac and immediately cleaned-up</p>	A piece of equipment was being moved for the 1 <sup>st</sup> time since gaining access to site. Small oil drops were seen of the surface of the access road.
Actions Taken	<ol style="list-style-type: none"> <li>1. Spill cleared using spill kit</li> <li>2. Oil contaminated waste appropriately disposed of.</li> </ol>	<ol style="list-style-type: none"> <li>1. Investigation into locating plant</li> <li>2. Spill volume (v.small) was onto tarmac</li> <li>3. Concluded plant had been loaded up and removed from site</li> </ol>
Category	Near miss	Near miss
Status	Closed	Closed

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 <sup>-1</sup>	pH	Ortho- phosphate as P µg l <sup>-1</sup>	Nitrate as N mg l <sup>-1</sup>	Total Phosphorus as P (sw) mg l <sup>-1</sup>	Ammonia as NH <sub>3</sub> -N mg l <sup>-1</sup>	Ammonium as NH <sub>4</sub> mg l <sup>-1</sup>	Nitrite as N mg l <sup>-1</sup>	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 - Lab	10-Oct-05	122		7.0		6	5.9	41	0.10	0.078	0.048	0.063	<0.005	
SP3 - Lab	10-Oct-05	142		6.7		5	5.8	35	0.10	0.077	0.096	0.124	<0.005	
SP1 - Lab	11-Oct-05	143		7.6		<4	6.5	31	0.10	0.062	0.039	0.051	<0.005	
SP3 - Lab	11-Oct-05	195		8.8		6	6.3	38	0.10	0.068	0.102	0.132	<0.005	
SP1 - Lab	12-Oct-05	218		6.9		<4	6.0	41	0.10	0.467	0.112	0.145	<0.005	
SP3 - Lab	12-Oct-05	167		6.9		<4	6.1	260	0.10	0.062	0.028	0.036	<0.005	
SP1 - Lab	13-Oct-05	176		6.3		<4	7.2	23	<0.1	0.058	0.022	0.029	<0.005	
SP3 - Lab	13-Oct-05	225		8.1		<4	7.0	37	0.13	0.066	0.102	0.132	<0.005	
SP1 - Lab	14-Oct-05	187		5.8		<4	7.2	20	0.10	0.055	0.018	0.024	<0.005	
SP3 - Lab	14-Oct-05	231		7.7		<4	6.5	39	0.10	0.059	0.107	0.138	<0.005	
SP1 - Lab	17-Oct-05	192		5.1		<4	7.0	10	0.11	0.041	0.017	0.022	<0.005	
SP3 - Lab	17-Oct-05	225		9.0		<4	6.8	19	0.18	0.064	0.069	0.089	0.009	
SP1	11-Oct-05	164	11.1	10.9	91		6.7							
SP3	11-Oct-05	209	9.5	9.2	95		6.6							
SP1	12-Oct-05	182	11.0	6.4	89		6.5							
SP3	12-Oct-05	225	9.7	6.7	93		6.5							
SP1	13-Oct-05	200	8.7	6.2	89		6.6							
SP3	13-Oct-05	234	7.9	7.9	88		6.6							
SP1	14-Oct-05	206		6.1			6.9							
SP3	14-Oct-05	237		26.9			6.8							
SP1	17-Oct-05	212	12.2	5.6	82		6.7							
SP3	17-Oct-05	250	12.7	4.5	87		6.7							
SP1	18-Oct-05	222	12.3	2.7	88		7.1							
SP3	18-Oct-05	245	13.1	1.5	85		7.0							
SP1	19-Oct-05	238	10.9	4.7	78		7.0							
SP3	19-Oct-05	257	10.9	11.0	78		6.7							
SP1	20-Oct-05	232	11.7	20.8	90		7.0							
SP3	20-Oct-05	255	10.4	29.28	89		6.9							
Additional Surface Water Monitoring														
D22 - Lab	10-Oct-05	153		3.9		5	5.1	92	0.10	0.137	0.018	0.023	<0.005	
D62 - Lab	10-Oct-05	120		1.5		<4	4.3	57	0.10	0.085	0.007	0.010	<0.005	
D22 - Lab	17-Oct-05	152		0.8		<4	4.6	28	0.10	0.045	0.018	0.023	<0.005	
D62 - Lab	17-Oct-05	172		1.8		<4	6.1	94	0.10	0.107	0.031	0.040	<0.005	
D22	12-Oct-05	211	11.2	2.5	80		6.1							
D62	12-Oct-05	159	10.8	1.6	86		4.5							
D22	17-Oct-05	208	11.8	0.5	80		6.2							
D62	17-Oct-05	117	11.9	0.2	77		4.5							

Note: LAB - Carried out by CLS Laboratories  
 Grey shaded areas denote parameters that cannot be analysed on-site.  
 Results detailed above are from on site grab samples only

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 <sup>-1</sup>	BOD  mg l <sup>-1</sup>	TSS  mg l <sup>-1</sup>	Phosphate as P  ug l <sup>-1</sup>	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>			
MP 1	14/10/2005			299	5.87	222	In Progress									
MP 2																
MP 3	14/10/2005			390	5.73	268	In Progress									
MP 4																
MP 5	14/10/2005			393	6.05	289	In Progress									
MP 6																
MP 7																
MP 8	14/10/2005			453	6.16	334	In Progress									
MP 9	14/10/2005						In Progress									
MP 10a	14/10/2005			706	6.43	513	In Progress									
MEL BR4a	14/10/2005			324	6.33	240	In Progress									

Location	Date	Ammonia 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	14/10/2005	In Progress											
MP 2													
MP 3	14/10/2005	In Progress											
MP 4													
MP 5	14/10/2005	In Progress											
MP 6													
MP 7													
MP 8	14/10/2005	In Progress											
MP 9	14/10/2005	In Progress											
MP 10a	14/10/2005	In Progress											
MEL BR4a	14/10/2005	In Progress											

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.

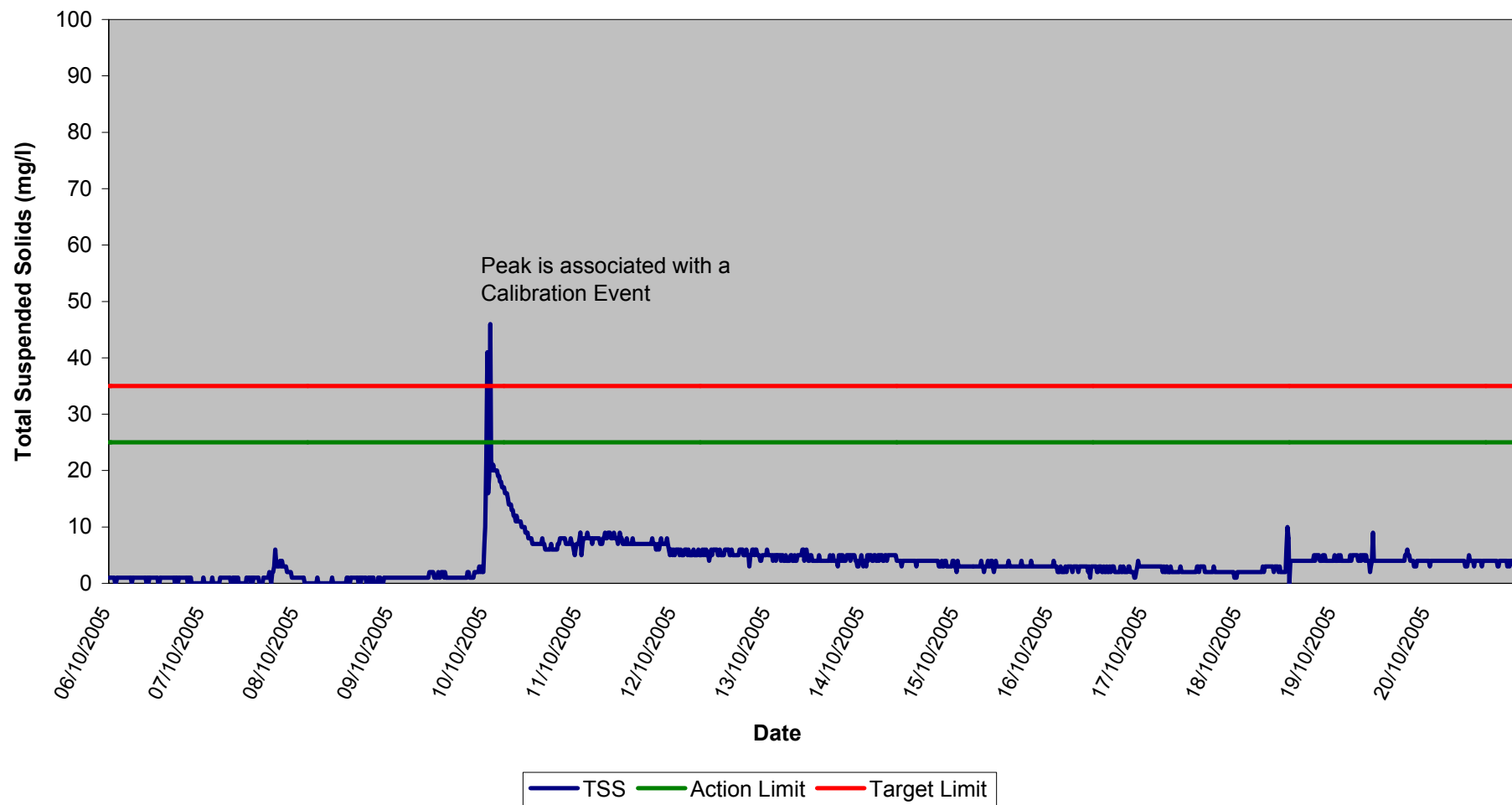


Dust Monitoring Record Sheet					no... 1 of 1		
Conducted by				Approved by			
Name: Sandra Barber		Signed		Name: Leslie Finnegan		Signed	
Determinant Results							
	Date Positioned	Date Removed	Ref. Number	Date Dispatched	Date Returned	Weight (mg/sq.m/day)	Comments
Target (Consent) Limit 350 mg m <sup>2</sup> d <sup>-1</sup> 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	04/05/2005	07/06/2005	67524	07/06/2005	10/06/2006	49	
D2	04/05/2005	07/06/2005	67525	07/06/2005	10/06/2006	29	
D3	04/05/2005	07/06/2005	67526	07/06/2005	10/06/2006	83	
D4	04/05/2005	07/06/2005	67527	07/06/2005	10/06/2006	44	
D1	07/06/2005	13/07/2005	70512	13/07/2005	18/07/2005	298	
D2	07/06/2005	13/07/2005	70513	13/07/2005	18/07/2005	354	
D3	07/06/2005	13/07/2005	70514	13/07/2005	18/07/2005	289	
D4	07/06/2005	13/07/2005	70515	13/07/2005	18/07/2005	270	
D1	13/07/2005	11/08/2005	77419	12/10/2005	24/10/2005	253	
D2	13/07/2005	11/08/2005	77420	12/10/2005	24/10/2005	111	
D3	13/07/2005	11/08/2005	77421	12/10/2005	24/10/2005	319	
D4	13/07/2005	11/08/2005	77422	12/10/2005	24/10/2005	123	

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

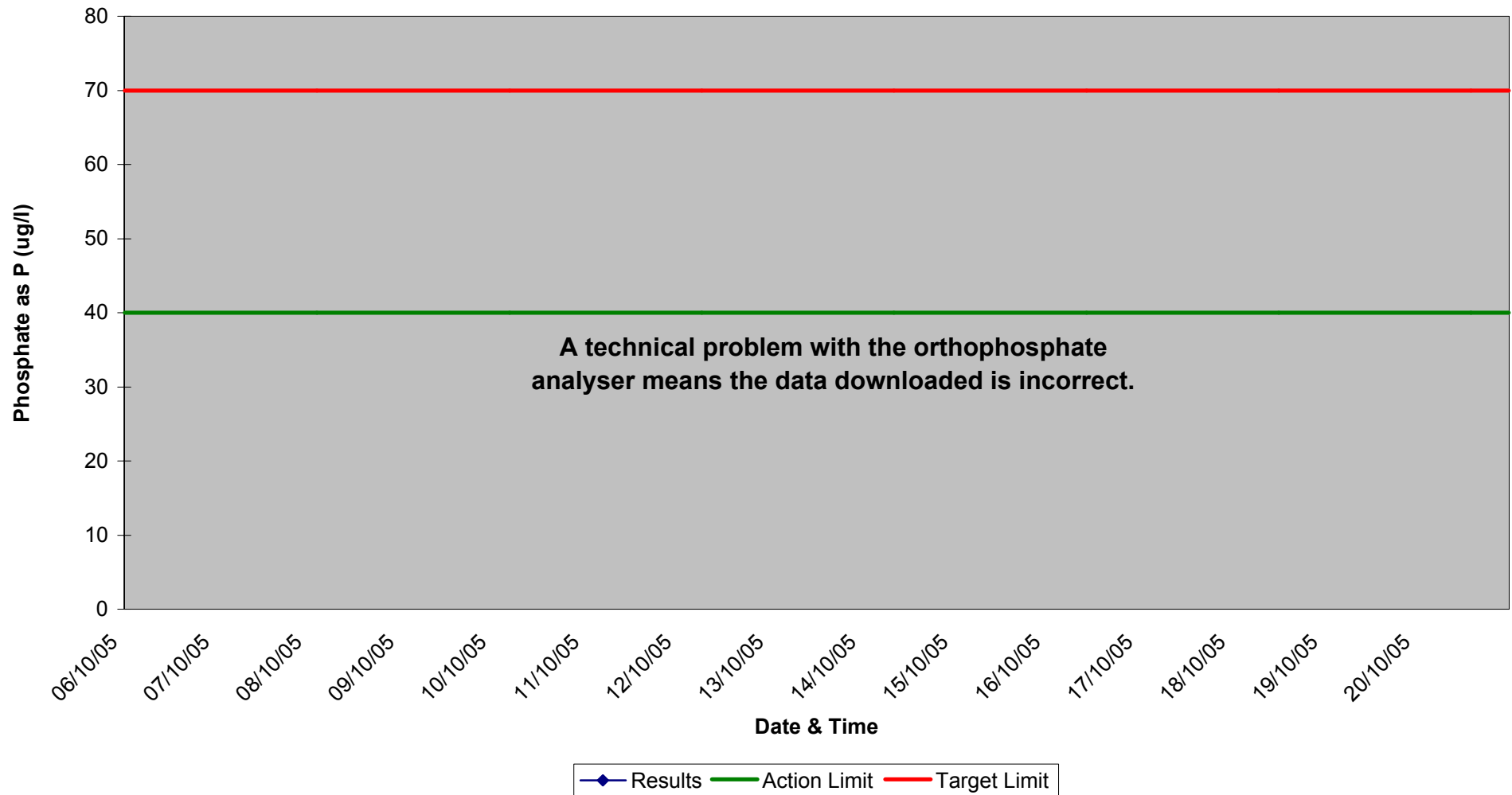


# Total Suspended Solids @ SP1, Weeks 41/42

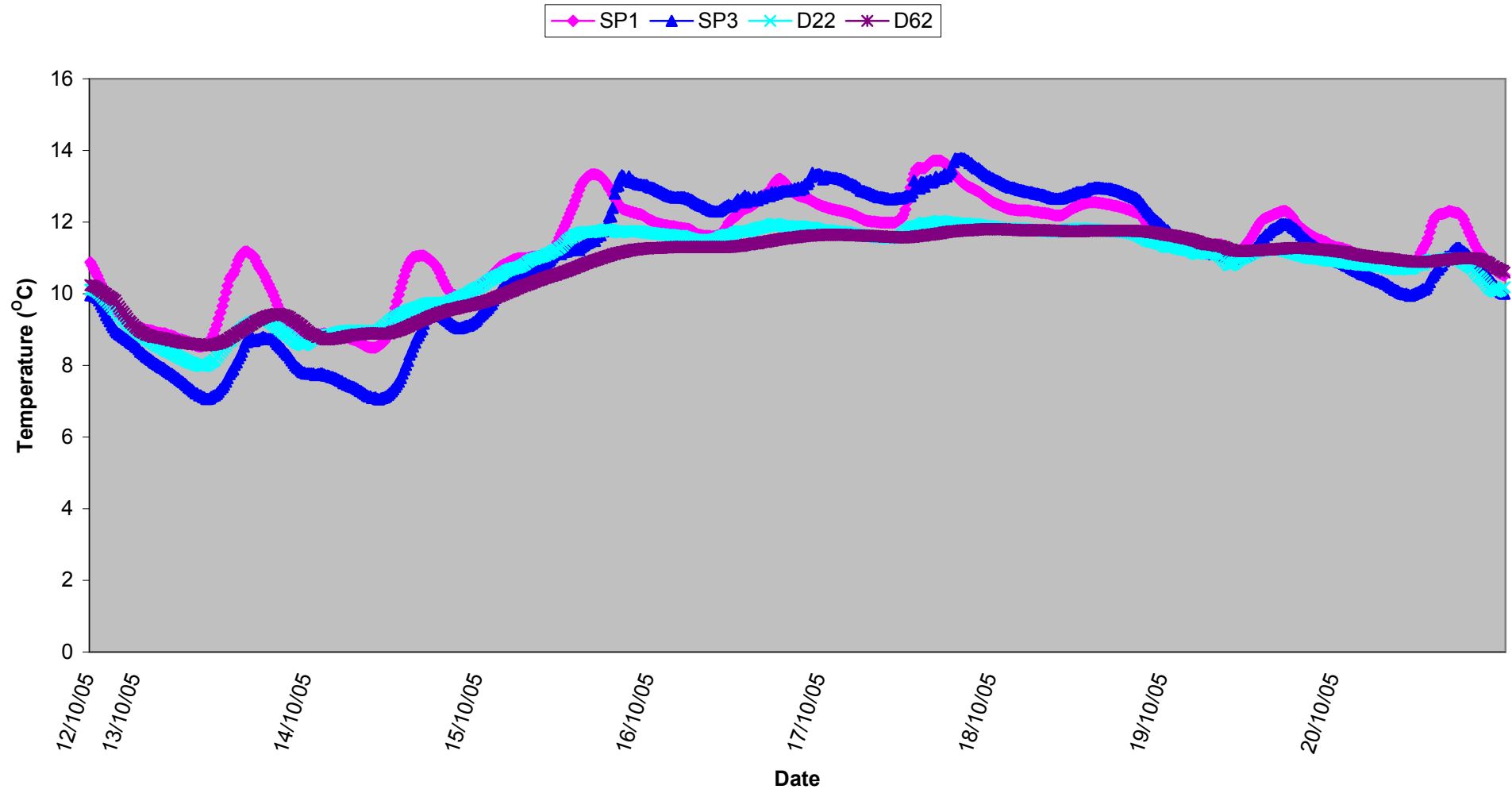




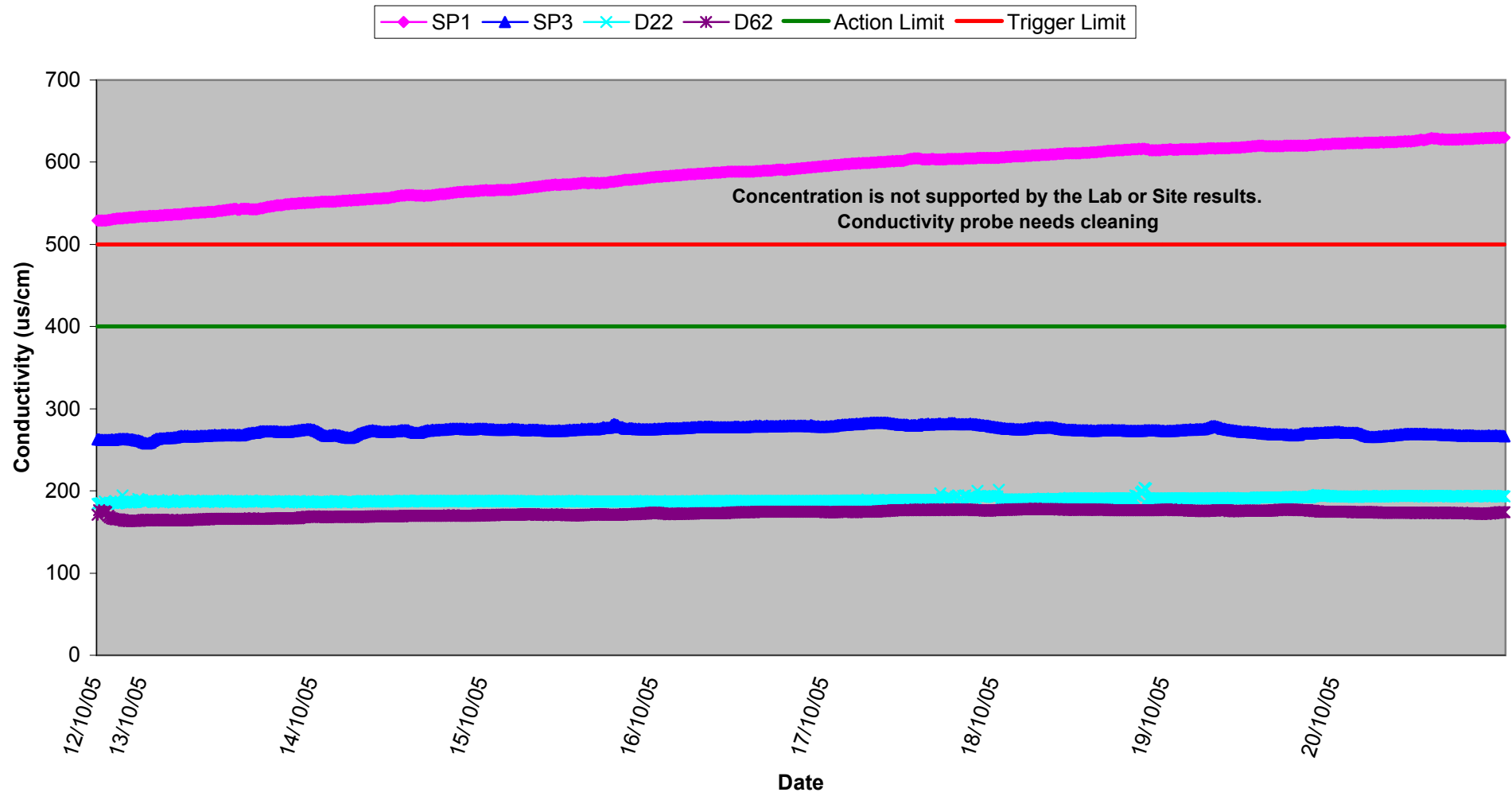
**Orthophosphate @ SP1,  
Weeks 41/42**



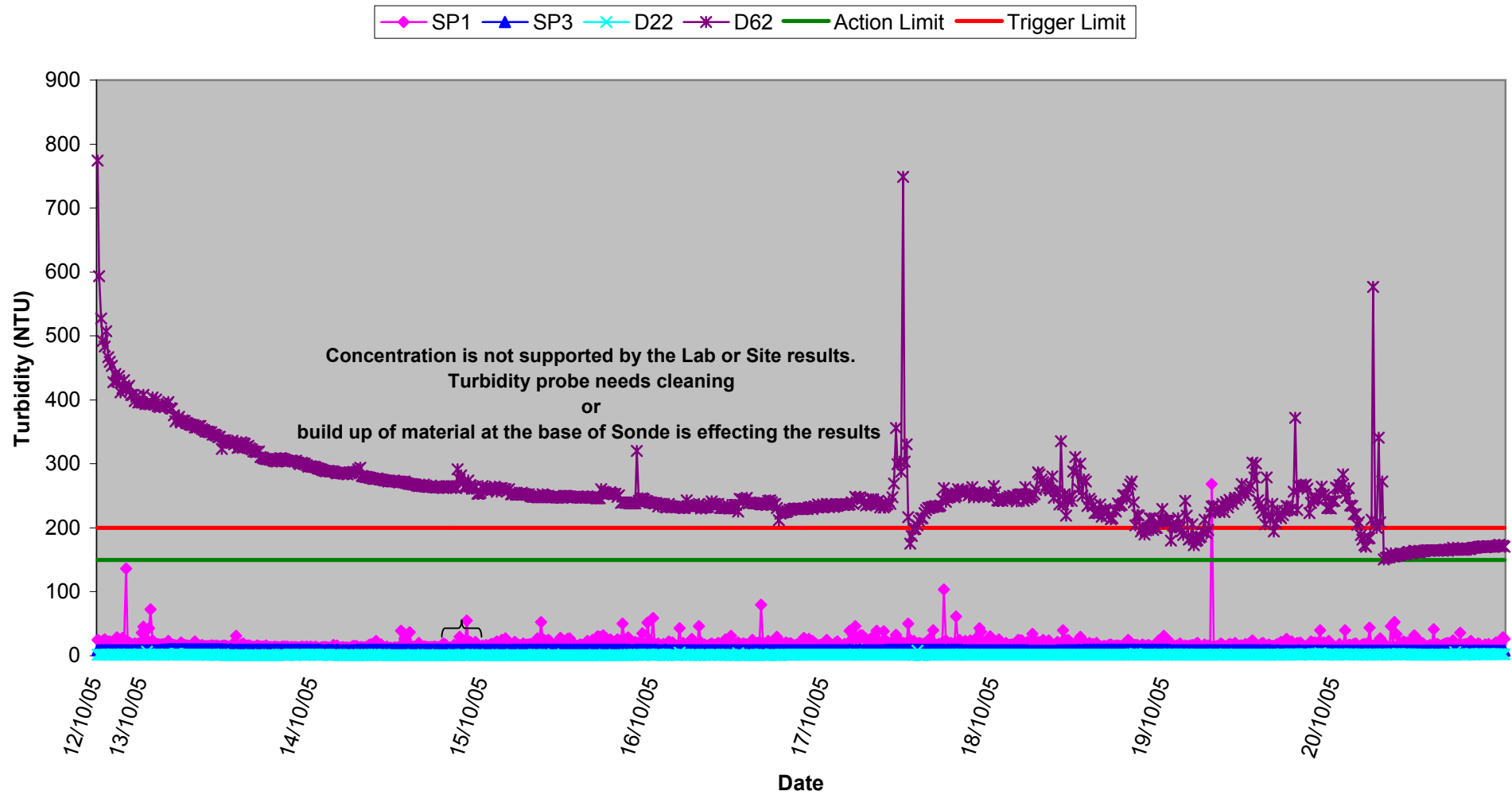
Temperature - Surface Waters,  
Weeks 41/42 2005



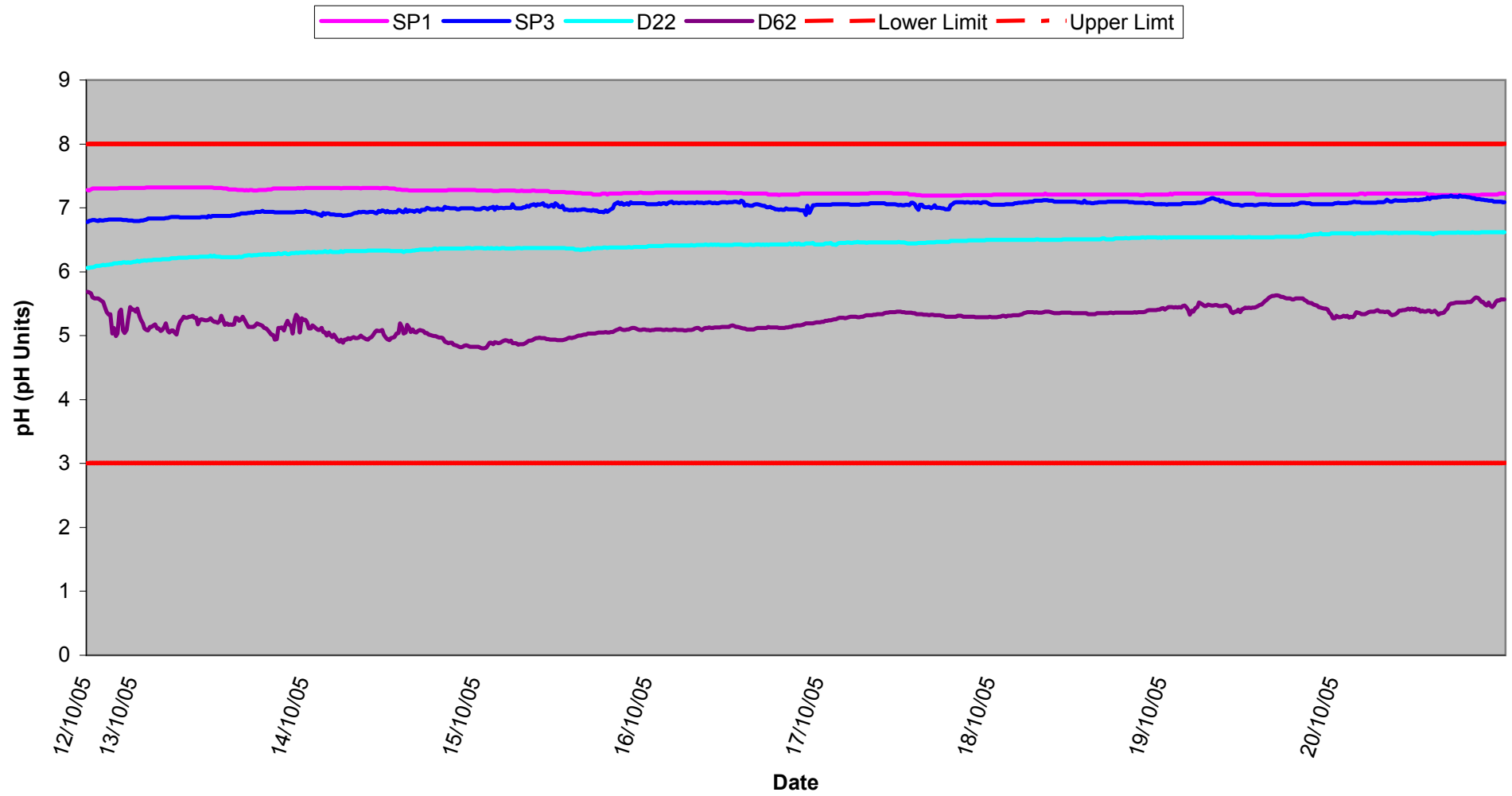
# Conductivity - Surface Waters, Weeks 41/42 2005



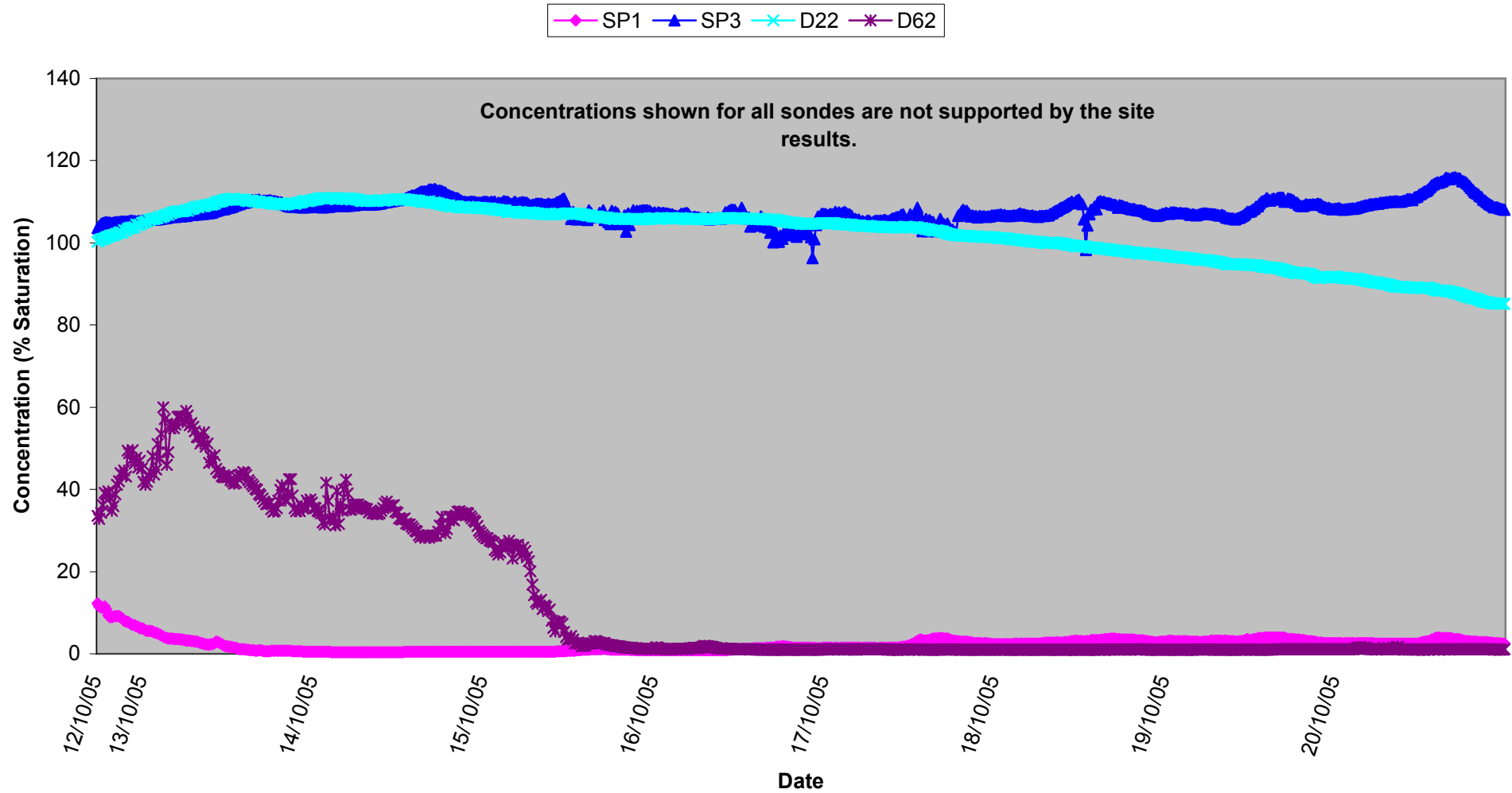
**Turbidity - Surface Waters,  
Weeks 41/42 2005**



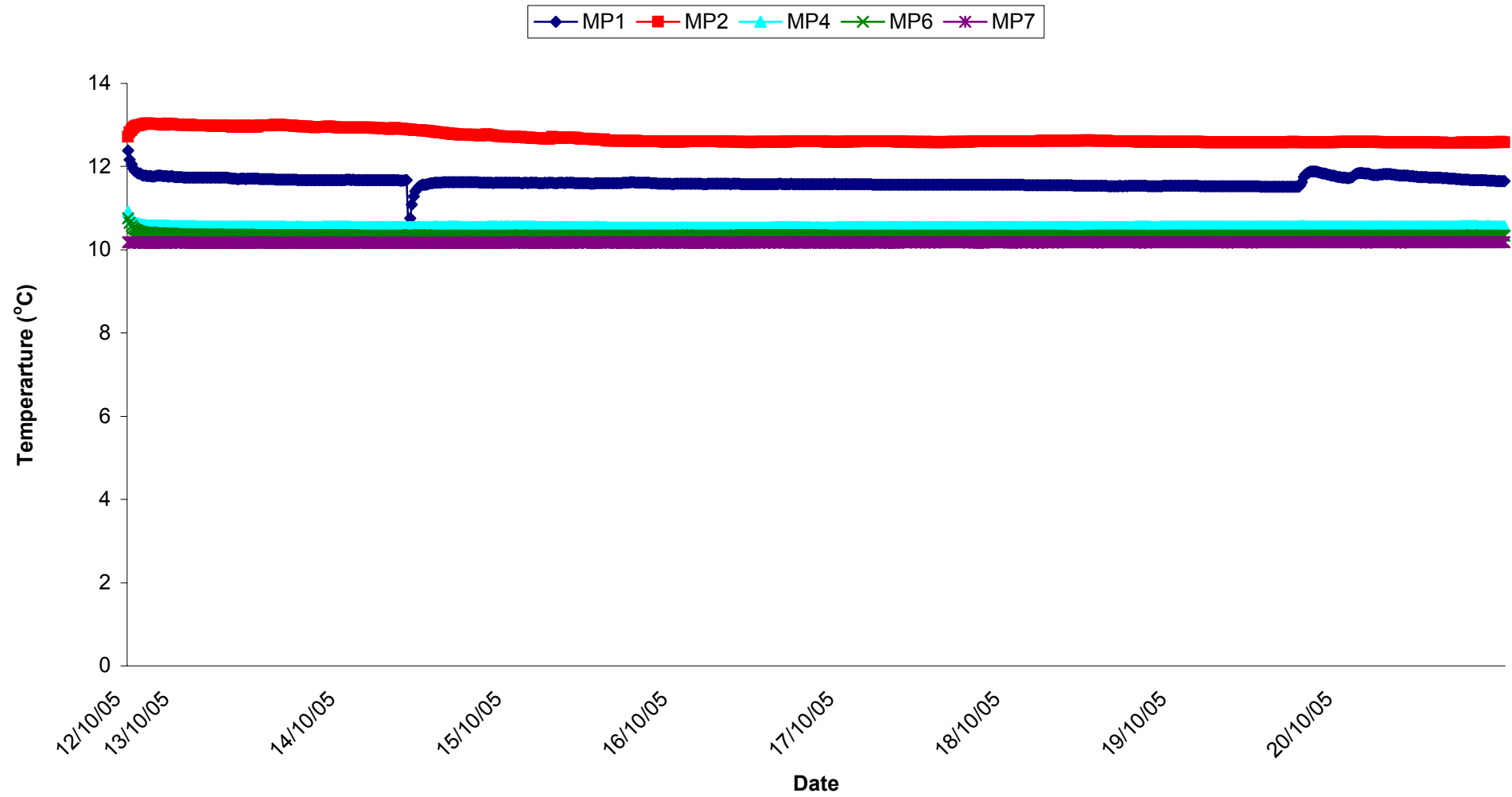
**pH - Surface Waters,  
Weeks 41/42 2005**



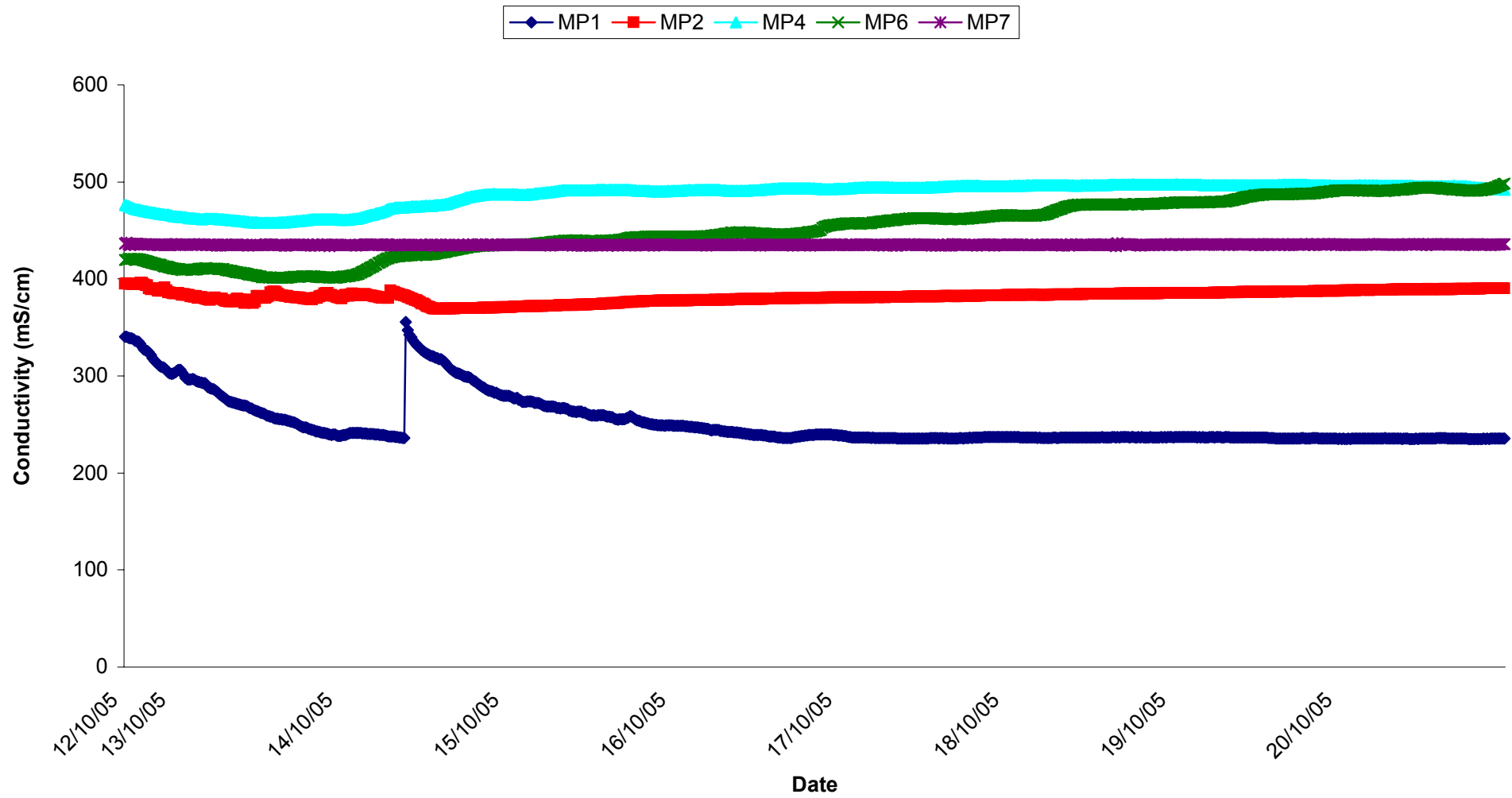
**Dissolved Oxygen - Surface Waters,  
Weeks 41/42 2005**



Temperature - Groundwaters  
Weeks 41/42 2005

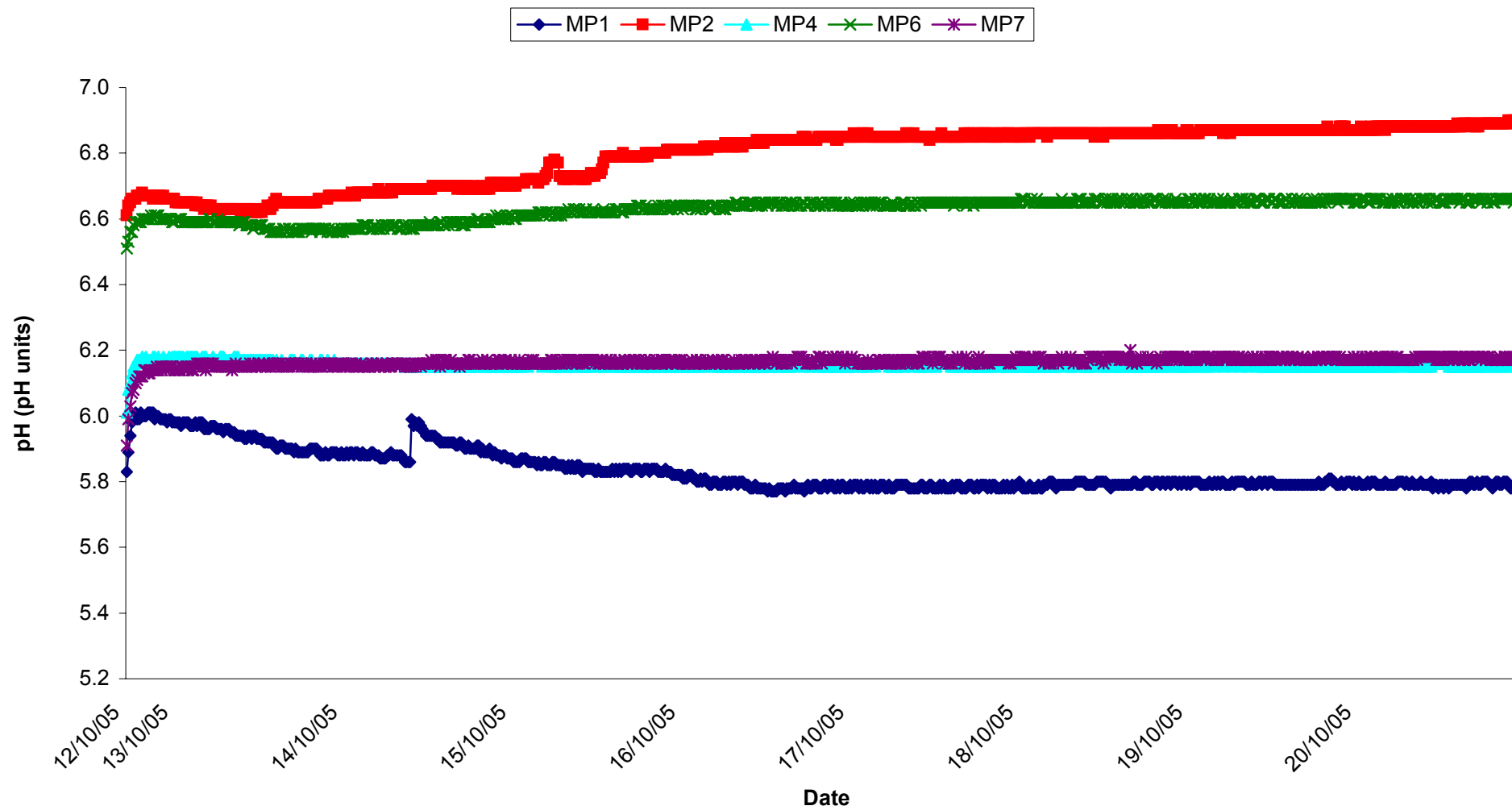


Conductivity - Groundwaters  
Weeks 41/42 2005





pH - Groundwaters  
Weeks 41/42 2005



Date	Air Temp	Relative Humidity	Wind Speed	Wind Direction	Sunshine	Rainfall
	Avg. (°C)	Avg. (%)	Avg. (m/s)	Avg. (°)	Total (Hours)	Total (mm)
07/10/2005	13.3	82.1	6.4	123	0.3	14.0
08/10/2005	9.0	79.1	3.4	87	1.0	0.8
09/10/2005	11.8	85.6	8.7	21	0.2	21.8
10/10/2005	9.7	97.0	2.2	90	0.2	43.6
11/10/2005	7.9	85.3	1.4	136	0.8	0.2
12/10/2005	7.6	84.3	1.9	144	0.7	0.8
13/10/2005	7.6	84.2	1.8	56	1.0	0.0
14/10/2005	10.6	76.6	5.0	321	1.2	0.0
15/10/2005	16.0	82.8	6.6	319	0.8	0.0
16/10/2005	15.0	84.9	4.8	302	0.4	1.6
17/10/2005	13.8	88.4	4.1	292	0.6	0.8
18/10/2005	12.8	90.8	3.6	282	0.1	2.6
19/10/2005	10.3	92.4	2.3	116	0.4	2.8
20/10/2005	10.4	85.0	4.0	64	0.7	0.8

07/10/2005	14.0
08/10/2005	0.8
09/10/2005	21.8
10/10/2005	43.6
11/10/2005	0.2
12/10/2005	0.8
13/10/2005	0.0

14/10/2005	0.0
15/10/2005	0.0
16/10/2005	1.6
17/10/2005	0.8
18/10/2005	2.6
19/10/2005	2.8
20/10/2005	0.8