

APPENDIX B

SOIL INFILTRATION TEST RESULTS

14301 Cwmgors, Neath Port Talbot

Remarks
1. Groundwater rising from bottom of trial pit to 2.85m bgl after 20 mins. 2. Trial pit generally stable in the short term. 3. Negligible infiltration observed. 4. Insufficient infiltration in order to calculate design rate

Final Excavation Depth (m)	Cycle 1	Cycle 2	Cycle 3
At end of testing cycle	2.90		
Water Depths (m)			
Water depth at start of test	1.71		
Water depth at end of test	1.71		
Effective depth (measured)	0.00		
% Effective storage depth	0.00		
Effective Storage Depths (m)			
Effective storage depth (100%)	1.19		
Effective storage depth (75%)	0.89		
Effective storage depth (50%)	0.60		
Effective storage depth (25%)	0.30		
Outflow Time (min)			
Time for measured outflow	239		
Time for 100% outflow			
Time for 75-25% outflow			
Volume of Outflow (m³)			
Over measured effective depth	0.00		
Over 100% effective depth	2.09		
From 75% - 25% effective depth	1.05		
Surface Area (m²)			
For 100% effective storage	8.90		
For 50% effective storage	5.33		
Over measured depth	1.76		
Soil Infiltration Rate (m/s)	Cycle 1	Cycle 2	Cycle 3
Over 100% effective depth	#DIV/0!		
Over measured depth	0.0E+00		
Over 75% - 25% effective depth	#DIV/0!		



14301 Cwmgors, Neath Port Talbot

Remarks
1. Minor groundwater seepage at 1.1m bgl. 2. Groundwater rising from bottom of trial pit to 2.55m bgl after 20 mins. 3. Trial pit generally stable in the short term. 4. Negligible infiltration observed. 5. Insufficient infiltration in order to calculate design rate

Final Excavation Depth (m)	At end of testing cycle
Water Depths (m)	
Water depth at start of test	
Water depth at end of test	
Effective depth (measured)	
% Effective storage depth	
Effective Storage Depths (m)	
Effective storage depth (100%)	
Effective storage depth (75%)	
Effective storage depth (50%)	
Effective storage depth (25%)	
Outflow Time (min)	
Time for measured outflow	
Time for 100% outflow	
Time for 75-25% outflow	
Volume or Outflow (m ³)	
Over measured effective depth	
Over 100% effective depth	
From 75% - 25% effective depth	
Surface Area (m ²)	
For 100% effective storage	
For 50% effective storage	
Over measured depth	
Soil Infiltration Rate (m/s)	
Over 100% effective depth	
Over measured depth	
Over 75% - 25% effective depth	



14301 Cwmgors, Neath Port Talbot

Remarks
1. No groundwater encountered. 2. Trial pit generally stable in the short term. 3. Negligible infiltration observed. 4. Insufficient infiltration in order to calculate design rate

Water Depth vs Time

Time (min.)

Water Depth (m)

Legend:

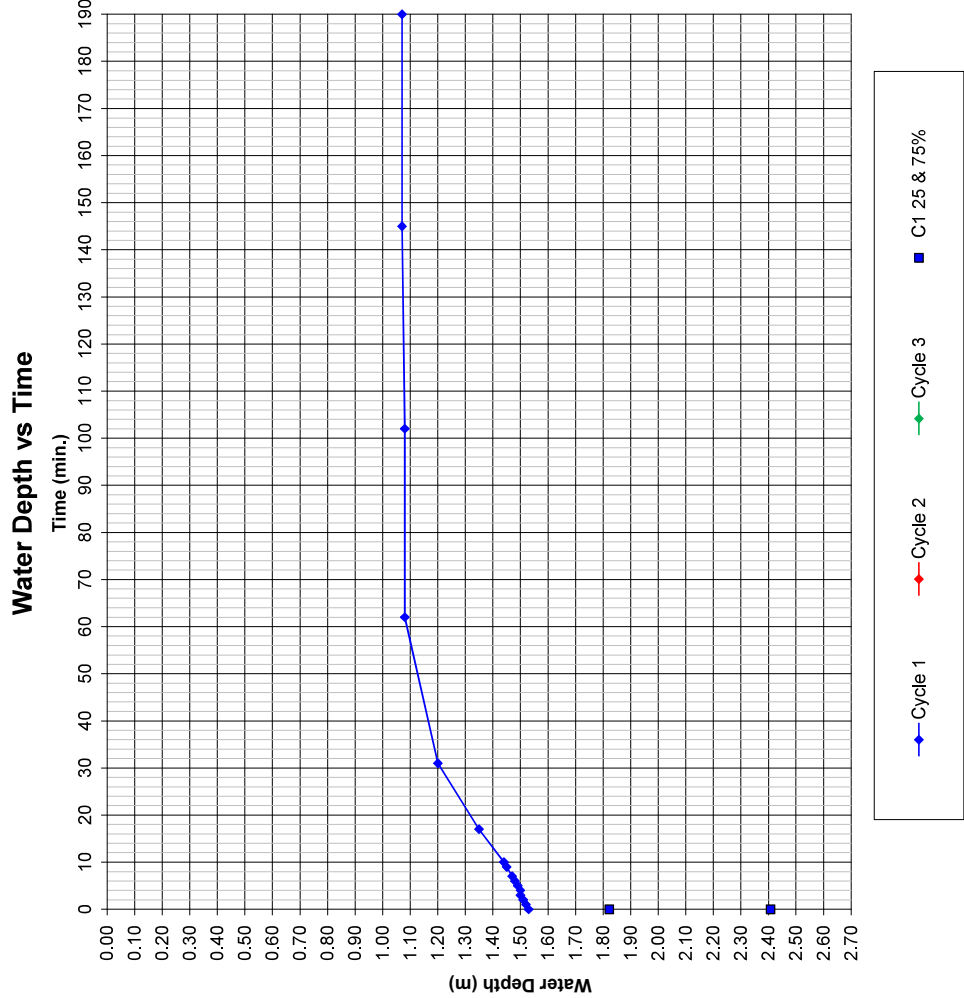
- Cycle 1
- C1 25 & 75%

Time (min.)	Water Depth (m) - Cycle 1	Water Depth (m) - C1 25 & 75%
0	1.85	
10	1.85	2.02
35	1.88	
70	1.92	
110	1.94	
150	1.95	
190	1.95	
250		2.48
255		2.50

14301 Cwmgors, Neath Port Talbot

Remarks
1. Major groundwater inflow at 0.65m bgl. 2. Trial pit generally stable in the short term. 3. Negligible infiltration observed. 4. Insufficient infiltration in order to calculate design rate 5. Rise in water level observed due to groundwater inflow.

		Cycle 1	Cycle 2	Cycle 3
Final Excavation Depth (m)	At end of testing cycle	2.70		
Water Depths (m)				
Water depth at start of test		1.53		
Water depth at end of test		1.53		
Effective depth (measured)		0.00		
% Effective storage depth		0.00		
Effective Storage Depths (m)				
Effective storage depth (100%)		1.17		
Effective storage depth (75%)		0.88		
Effective storage depth (50%)		0.59		
Effective storage depth (25%)		0.29		
Outflow Time (min)				
Time for measured outflow		190		
Time for 100% outflow				
Time for 75-25% outflow				
Volume of Outflow (m³)				
Over measured effective depth		0.00		
Over 100% effective depth		1.80		
From 75% - 25% effective depth		0.90		
Surface Area (m²)				
For 100% effective storage		8.33		
For 50% effective storage		4.93		
Over measured depth		1.54		
Soil Infiltration Rate (m/s)				
Over 100% effective depth		#DIV/0!		
Over measured depth		0.0E+00		
Over 75% - 25% effective depth		#DIV/0!		



14301 Cwmgors, Neath Port Talbot

Remarks
1. Groundwater rising from bottom of trial pit to 2.75m bgl after 20 mins. 2. Trial pit generally stable in the short term. 3. Negligible infiltration observed. 4. Insufficient infiltration in order to calculate design rate

Final Excavation Depth (m)	Cycle 1	Cycle 2	Cycle 3
At end of testing cycle	2.80		
Water Depths (m)			
Water depth at start of test	1.49		
Water depth at end of test	1.49		
Effective depth (measured)	0.00		
% Effective storage depth	0.00		
Effective Storage Depths (m)			
Effective storage depth (100%)	1.31		
Effective storage depth (75%)	0.98		
Effective storage depth (50%)	0.66		
Effective storage depth (25%)	0.33		
Outflow Time (min)			
Time for measured outflow	176		
Time for 100% outflow			
Time for 75-25% outflow			
Volume of Outflow (m³)			
Over measured effective depth	0.00		
Over 100% effective depth	2.20		
From 75% - 25% effective depth	1.10		
Surface Area (m²)			
For 100% effective storage	9.80		
For 50% effective storage	5.74		
Over measured depth	1.68		
Soil Infiltration Rate (m/s)			
Over 100% effective depth	#DIV/0!		
Over measured depth	0.0E+00		
Over 75% - 25% effective depth	#DIV/0!		
	Cycle 1	Cycle 2	Cycle 3

