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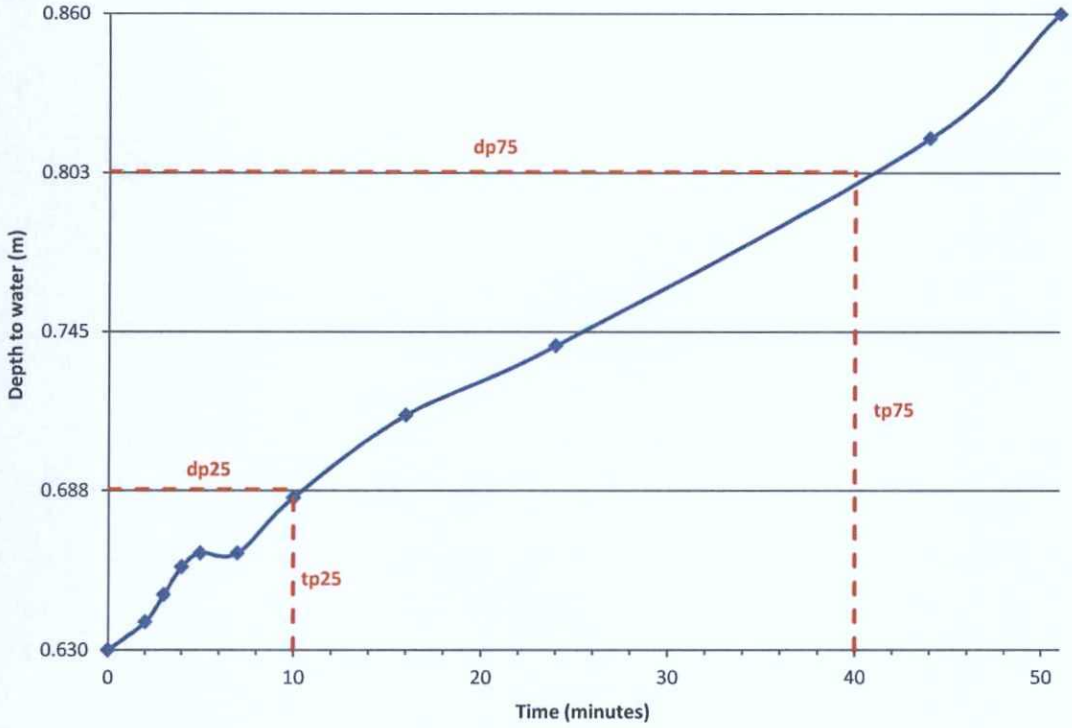
Plot showing time against depth to water:



Test observations:

TIME (mins)	DEPTH TO WATER (m)	TIME (mins)	DEPTH TO WATER (m)
0	0.63		
2	0.64		
3	0.65		
4	0.66		
5	0.665		
7	0.665		
10	0.685		
16	0.715		
24	0.74		
44	0.815		
51	0.86		

Calculations:

Soil infiltration rate (SIR), $f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$

V_{p75-25} = *effective storage volume of water in the trial pit between 75% (d_{p75}) and 25% (d_{p25}) effective depth*
= ***0.0161m³***

a_{p50} = *the internal surface area of the trial pit up to 50% effective depth and including the base*
= ***0.3125m²***

$t_{p75} - t_{p25}$ = *the time for the water level to fall from 75% to 25% effective depth*
= ***30 (minutes)***
= ***1800 (seconds)***

***f* = 2.86E-05 m/s**

Groundwater observations
No groundwater encountered.

Title
Soil infiltation test (following principles of the Building Research Establishment Digest 365 2007)

Trial pit dimensions (width x length)	Ground level	Location plan on drawing number		
0.35m x 0.4m	N/A	02		
Depth of trial pit at start of test (m)	**Co-ordinates**	**Trial pit number**	**Cycle number**	**Date of excavation**
0.86	-	HP103	1	09/04/2015

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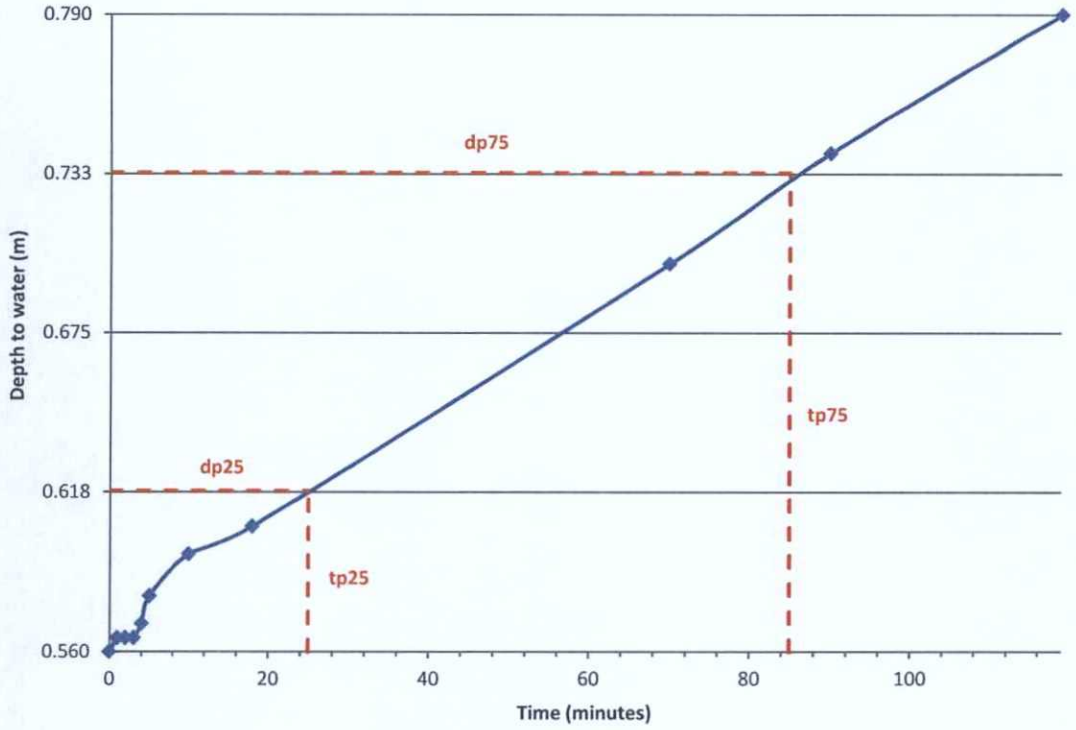
Plot showing time against depth to water:



Test observations:

TIME (mins)	DEPTH TO WATER (m)	TIME (mins)	DEPTH TO WATER (m)
0	0.56		
1	0.565		
2	0.565		
3	0.565		
4	0.57		
5	0.58		
10	0.595		
18	0.605		
70	0.7		
90	0.74		
119	0.79		

Calculations:

Soil infiltration rate (SIR), $f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$

V_{p75-25} = *effective storage volume of water in the trial pit between 75% (d_{p75}) and 25% (d_{p25}) effective depth*
= ***0.0161m³***

a_{p50} = *the internal surface area of the trial pit up to 50% effective depth and including the base*
= ***0.3125m²***

$t_{p75} - t_{p25}$ = *the time for the water level to fall from 75% to 25% effective depth*
= ***60 (minutes)***
= ***3600 (seconds)***

***f* = 1.43E-05 m/s**

Groundwater observations
No groundwater encountered.

Title
Soil infiltation test (following principles of the Building Research Establishment Digest 365 2007)

Trial pit dimensions (width x length)	Ground level
0.35m x 0.4m	N/A

Location plan on drawing number
02

Depth of trial pit at start of test (m)	Co-ordinates
0.79	-

Trial pit number	Cycle number	Date of excavation
HP103	2	09/04/2015

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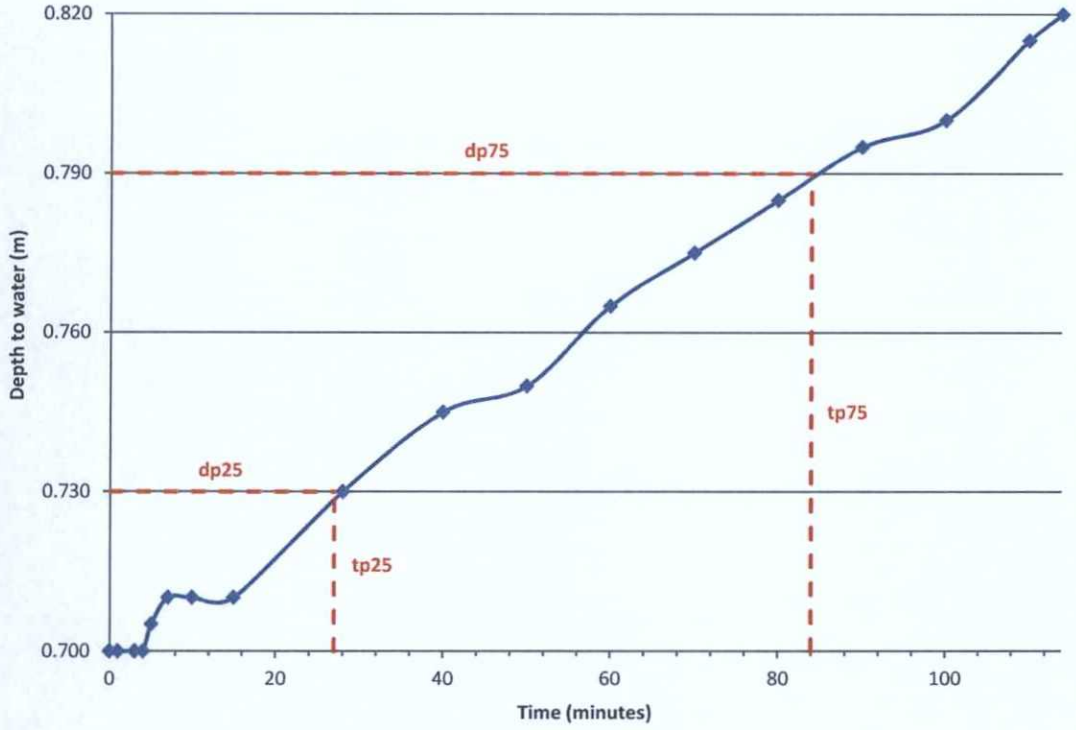
Plot showing time against depth to water:



Test observations:

TIME (mins)	DEPTH TO WATER (m)	TIME (mins)	DEPTH TO WATER (m)
0	0.7	110	0.815
1	0.7	114	0.82
3	0.7		
4	0.7		
5	0.705		
7	0.71		
10	0.71		
15	0.71		
28	0.73		
40	0.745		
50	0.75		
60	0.765		
70	0.775		
80	0.785		
90	0.795		
100	0.8		

Calculations:

Soil infiltration rate (SIR), $f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$

V_{p75-25} = *effective storage volume of water in the trial pit between 75% (d_{p75}) and 25% (d_{p25}) effective depth*
= ***0.0084m³***

a_{p50} = *the internal surface area of the trial pit up to 50% effective depth and including the base*
= ***0.23m²***

$t_{p75} - t_{p25}$ = *the time for the water level to fall from 75% to 25% effective depth*
= ***57 (minutes)***
= ***3420 (seconds)***

***f* = 1.07E-05 m/s**

Groundwater observations
No groundwater encountered.

Title
Soil infiltation test (following principles of the Building Research Establishment Digest 365 2007)

Trial pit dimensions (width x length)
0.35m x 0.4m

Ground level
N/A

Location plan on drawing number
02

Depth of trial pit at start of test (m)
0.82

Co-ordinates
-

Trial pit number
HP103

Cycle number
3

Date of excavation
09/04/2015