



Appendix 4E – BRE Infiltration Report



Dear Neo Environmental Ltd,

Please find below the results of your Infiltration testing. The information contained below is a summary of the site works carried out on 15th June 2022.

Geology

An examination of the available British Geological Survey data of the area for the site has been examined and indicates that the site has superficial drift deposits composed of Alluvium (clay, silt, sand and gravel) and River Terrace Deposits (sand and gravel), and bedrock deposits recorded as the Branscombe Mudstone Formation (mudstone).

Fieldworks

The programme of this investigation included the excavation of six trial pits. The locations of the soakaway tests were selected by the client. During this work, the soils encountered were logged in general accordance with BS5930: 1990, as amended in 2007.

Percolation Testing

During the soakaway tests the water achieved a fall from 75% to 25% of the effective depth of the storage volume. The results obtained from the soakaway tests are summarised below:



WS	Dimensions (m)	Depth (m)	Soil Description	Infiltration Rate (m/sec)	Drainage Characteristics
TP01 test1	0.80 x 0.40	0.60	Brown sandy CLAY.	3.2E-4	Good
TP01 test2	0.80 x 0.40	0.60	Brown sandy CLAY.	2.2E-4	Good
TP01 test3	0.80 x 0.40	0.60	Brown sandy CLAY.	1.6E-4	Good
TP02 test1	0.70 x 0.40	0.60	Orangish brown sandy CLAY.	1.4E-4	Good
TP02 test2	0.70 x 0.40	0.60	Orangish brown sandy CLAY.	1.1E-4	Good
TP02 test3	0.70 x 0.40	0.60	Orangish brown sandy CLAY.	1.1E-4	Good
TP03 test1	0.90 x 0.40	0.60	Orangish brown CLAY.	1.7E-4	Good
TP03 test2	0.90 x 0.40	0.60	Orangish brown CLAY.	1.4E-4	Good
TP03 test3	0.90 x 0.40	0.60	Orangish brown CLAY.	1.2E-4	Good
TP04 test1	0.80 x 0.40	0.60	Orangish brown CLAY.	1.1E-4	Good
TP04 test2	0.80 x 0.40	0.60	Orangish brown CLAY.	9.7E-5	Good
TP04 test3	0.80 x 0.40	0.60	Orangish brown CLAY.	7.6E-5	Good
TP05 test1	0.80 x 0.40	0.60	Orangish brown CLAY.	1.1E-4	Good
TP05 test2	0.80 x 0.40	0.60	Orangish brown CLAY.	1.0E-4	Good
TP05 test3	0.80 x 0.40	0.60	Orangish brown CLAY.	8.5E-5	Good
TP06 test1	1.00 x 0.40	0.60	Orangish brown clayey SAND.	1.9E-4	Good
TP06 test2	1.00 x 0.40	0.60	Orangish brown clayey SAND.	1.5E-4	Good
TP06 test3	1.00 x 0.40	0.60	Orangish brown clayey SAND.	1.2E-4	Good



Conclusion

The soils encountered beneath the site were found to be predominantly CLAY. The soakage rates obtained during the investigation were found to be good and permeable. Given the data from the test, it is considered that the use of shallow infiltration is suitable for this site.

References

- Building Research Establishment (BRE) Digest 365, *Soakaway Design*, September 1991.
- British Standards Institution (1999) BS5930: *Code of practice for site investigations*, B.S.I., London.
- British Standards Institution (2007), Amendment No 1, BS5930: *Code of practice for site investigations*, B.S.I., London.

Please do contact me on 01243 787150 or 07758 162624 should you have any questions.

Regards

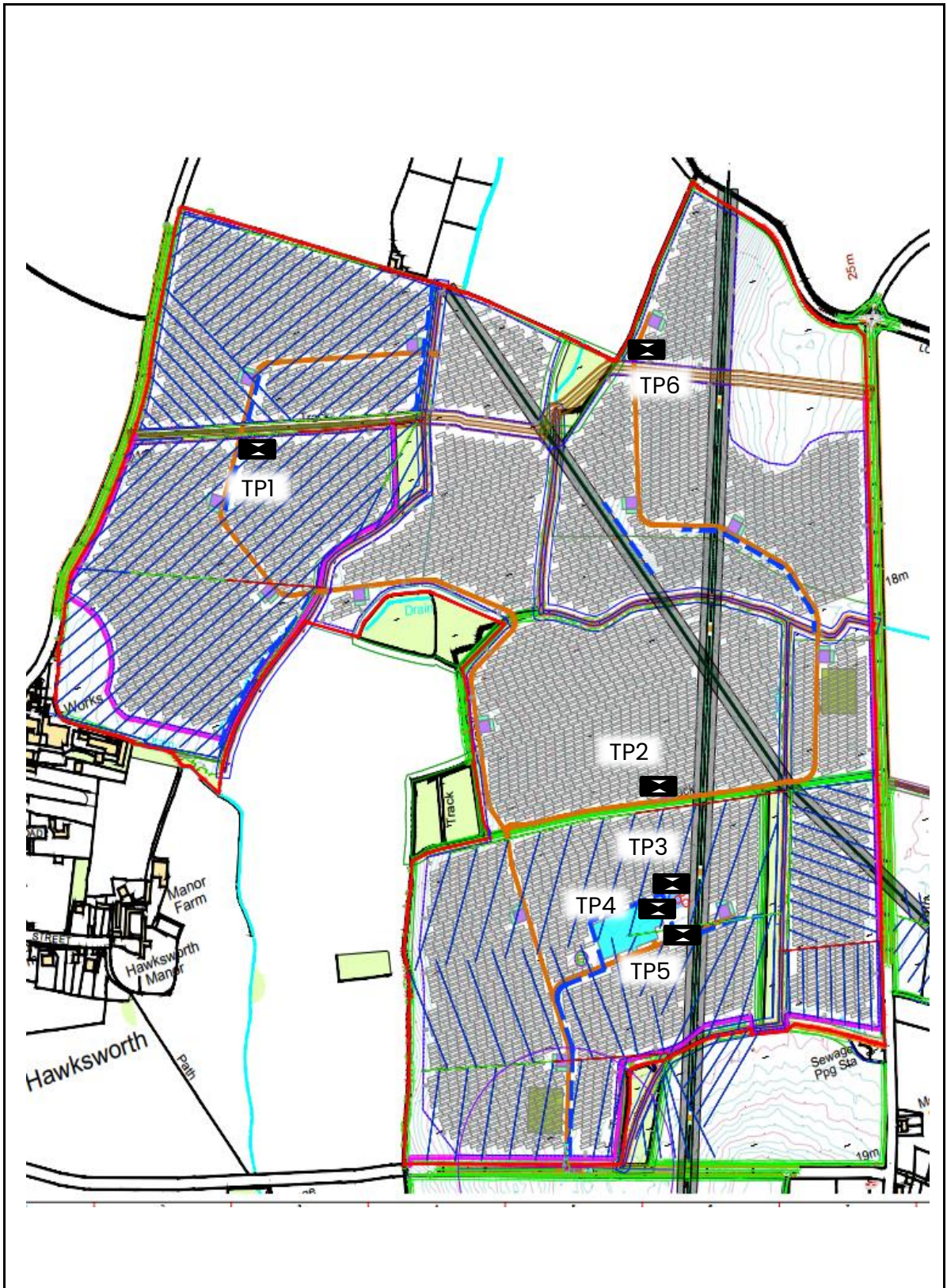
A handwritten signature in grey ink that reads 'Nick Hammond'.

Nick Hammond
Geo-Environmental Engineer



Appendix A





Site Investigation Plan



Land at Thoroton
 YEX4201
 Jun-22

Appendix B





www.yourenvironment.org
 info@yourenvironment.org
 01243 787150

Log of Boring
 Sheet 1 of

TP1
 1

YE Engineer N. Hammond

Location	Land at Thoroton, Nottingham, NG13 9DF
Date	June 15, 2022
Project Reference	YEX4201

Water level data	
Completion:	Depth <u>NA</u> m Elevation <u>NA</u> m

Width 0.4 m
 Length 0.8 m
 Depth 0.6 m

24 hour: Depth _____ m
 Elevation _____ m

Method (Trial pit, window etc) Trial Pit - Machine Excavation

Stratum depth (m)		Sample Depth		Sample Type	GW	Install Details	LITHOLOGY
From	To	From	To				
0.00						NONE	Brown clayey SAND. Sand is fine - medium.
0.40	0.40						Brown clayey, gravelly SAND. Sand is fine - medium. Gravel is medium - coarse, angular of chalk and flint fragment.
0.50	0.50						Brown sandy CLAY. Sand is fine - medium.
0.60							End of TP1

Remarks: .



www.yourenvironment.org
 info@yourenvironment.org
 01243 787150

Log of Boring
 Sheet 1 of

TP2
 1

YE Engineer N. Hammond

Location	Land at Thoroton, Nottingham, NG13 9DF
Date	June 15, 2022
Project Reference	YEX4201

Water level data	
Completion:	Depth <u>NA</u> m Elevation <u>NA</u> m
24 hour:	Depth <u> </u> m Elevation <u> </u> m

Width 0.4 m
 Length 0.7 m
 Depth 0.6 m

Method (Trial pit, window etc) Trial Pit - Machine Excavation

Stratum depth (m)		Sample Depth		Sample Type	GW	Install Details	LITHOLOGY
From	To	From	To				
0.00						NONE	Brown clayey SAND. Sand is fine - medium.
0.30							Orangish brown sandy CLAY. Sand is fine - medium.
0.60							End of TP2

Remarks: .



www.yourenvironment.org
 info@yourenvironment.org
 01243 787150

Log of Boring
 Sheet 1 of

TP3
 1

YE Engineer N. Hammond

Location	Land at Thoroton, Nottingham, NG13 9DF
Date	June 15, 2022
Project Reference	YEX4201

Water level data	
Completion:	Depth <u>NA</u> m Elevation <u>NA</u> m

Width 0.4 m
 Length 0.9 m
 Depth 0.6 m

24 hour: Depth _____ m
 Elevation _____ m

Method (Trial pit, window etc) Trial Pit - Machine Excavation

Stratum depth (m)		Sample Depth		Sample Type	GW	Install Details	LITHOLOGY
From	To	From	To				
0.00						NONE	Brown clayey SAND. Sand is fine - medium.
0.45							Orangish brown CLAY.
0.60							End of TP3

Remarks: .



www.yourenvironment.org
 info@yourenvironment.org
 01243 787150

Log of Boring
 Sheet 1 of

TP4
 1

YE Engineer N. Hammond

Location	Land at Thoroton, Nottingham, NG13 9DF
Date	June 15, 2022
Project Reference	YEX4201

Water level data	
Completion:	Depth <u>NA</u> m Elevation <u>NA</u> m

Width 0.4 m
 Length 0.8 m
 Depth 0.6 m

24 hour: Depth _____ m
 Elevation _____ m

Method (Trial pit, window etc) Trial Pit - Machine Excavation

Stratum depth (m)		Sample Depth		Sample Type	GW	Install Details	LITHOLOGY
From	To	From	To				
0.00						NONE	Brown clayey SAND. Sand is fine - medium.
0.45							Orangish brown CLAY.
0.60							End of TP4

Remarks: .



www.yourenvironment.org
 info@yourenvironment.org
 01243 787150

Log of Boring
 Sheet 1 of

TP5
 1

YE Engineer N. Hammond

Location	Land at Thoroton, Nottingham, NG13 9DF
Date	June 15, 2022
Project Reference	YEX4201

Water level data	
Completion:	Depth <u>NA</u> m Elevation <u>NA</u> m

Width 0.4 m
 Length 0.8 m
 Depth 0.6 m

24 hour: Depth _____ m
 Elevation _____ m

Method (Trial pit, window etc) Trial Pit - Machine Excavation

Stratum depth (m)		Sample Depth		Sample Type	GW	Install Details	LITHOLOGY
From	To	From	To				
0.00						NONE	Brown clayey SAND. Sand is fine - medium.
0.45							Orangish brown CLAY.
0.60							End of TP5

Remarks: .



www.yourenvironment.org
 info@yourenvironment.org
 01243 787150

Log of Boring
 Sheet 1 of

TP6
 1

YE Engineer N. Hammond

Location	Land at Thoroton, Nottingham, NG13 9DF
Date	June 15, 2022
Project Reference	YEX4201

Water level data	
Completion:	Depth <u>NA</u> m Elevation <u>NA</u> m

Width 0.4 m
 Length 1.0 m
 Depth 0.6 m

24 hour: Depth _____ m
 Elevation _____ m

Method (Trial pit, window etc) Trial Pit - Machine Excavation

Stratum depth (m)		Sample Depth		Sample Type	GW	Install Details	LITHOLOGY
From	To	From	To				
		m	m				
0.00						NONE	Brown clayey SAND. Sand is fine - medium.
0.30	0.30						Orangish brown clayey SAND. Sand is fine - medium.
0.60							End of TP6

Remarks: .

Appendix C

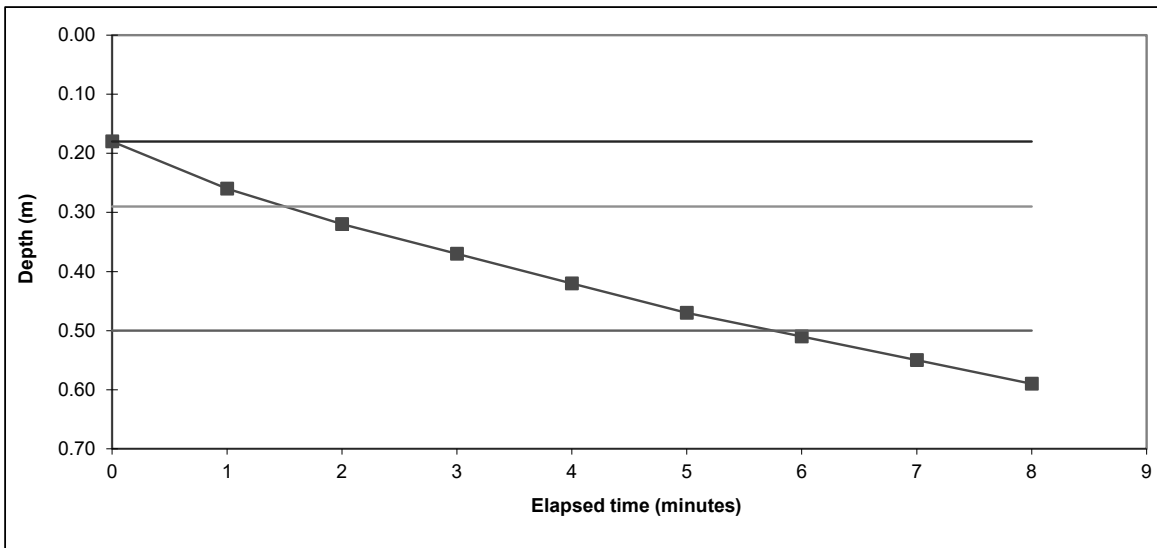


Your Environment

Soakaway Test

Trial Pit No:	TP1	Test No:	1	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.180		
1	0.260		
2	0.320		
3	0.370		
4	0.420		
5	0.470		
6	0.510		
7	0.550		
8	0.590		



Start water depth for analysis (mbgl)	0.18		
75% effective depth (mbgl):	0.29	Elapsed time (mins):	1.5
50% effective depth (mbgl):	0.39		
25% effective depth (mbgl):	0.50	Elapsed time (mins):	5.8
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.067	
Mean surface area of outflow (m ²):		0.82	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		4.3	

Soil infiltration rate (m/s):	3.2E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

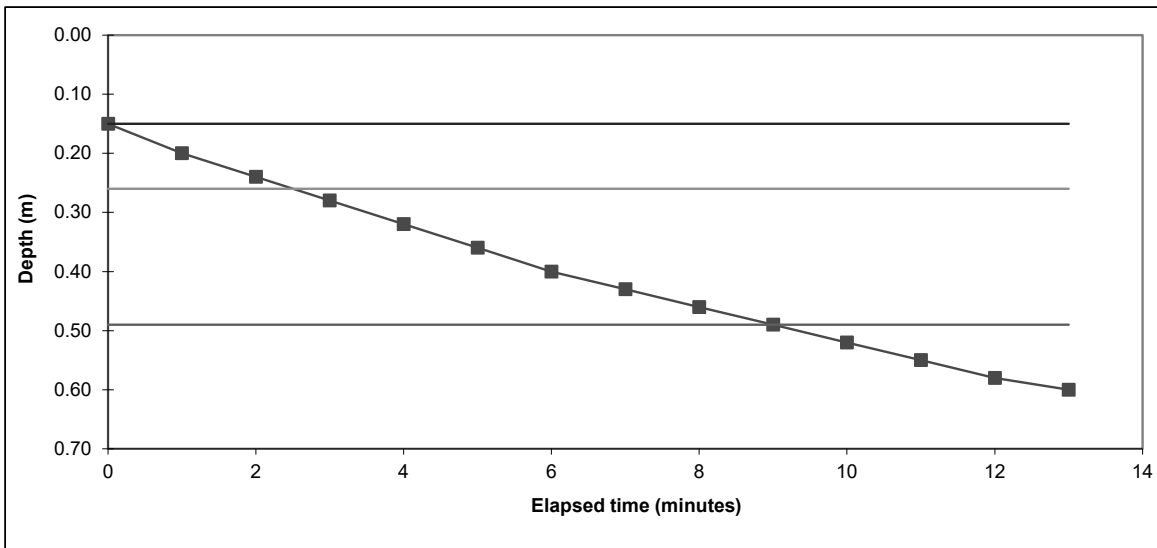
Client:	Neo Environmental Ltd	TP1
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP1	Test No:	2	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.150		
1	0.200		
2	0.240		
3	0.280		
4	0.320		
5	0.360		
6	0.400		
7	0.430		
8	0.460		
9	0.490		
10	0.520		
11	0.550		
12	0.580		
13	0.600		



Start water depth for analysis (mbgl)	0.15		
75% effective depth (mbgl):	0.26	Elapsed time (mins):	2.5
50% effective depth (mbgl):	0.38		
25% effective depth (mbgl):	0.49	Elapsed time (mins):	9.0
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.074	
Mean surface area of outflow (m ²):		0.85	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		6.5	

Soil infiltration rate (m/s):	2.2E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

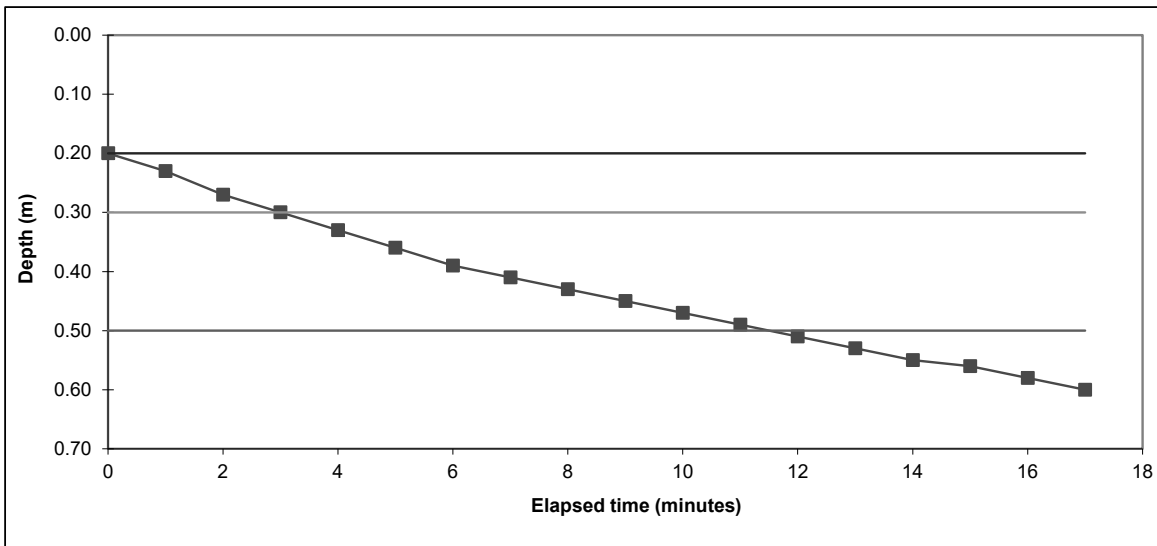
Client:	Neo Environmental Ltd	TP1
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP1	Test No:	3	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.200	14	0.550
1	0.230	15	0.560
2	0.270	16	0.580
3	0.300	17	0.600
4	0.330		
5	0.360		
6	0.390		
7	0.410		
8	0.430		
9	0.450		
10	0.470		
11	0.490		
12	0.510		
13	0.530		



Start water depth for analysis (mbgl)	0.20		
75% effective depth (mbgl):	0.30	Elapsed time (mins):	3.0
50% effective depth (mbgl):	0.40		
25% effective depth (mbgl):	0.50	Elapsed time (mins):	11.5
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.064	
Mean surface area of outflow (m ²):		0.80	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		8.5	

Soil infiltration rate (m/s):	1.6E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

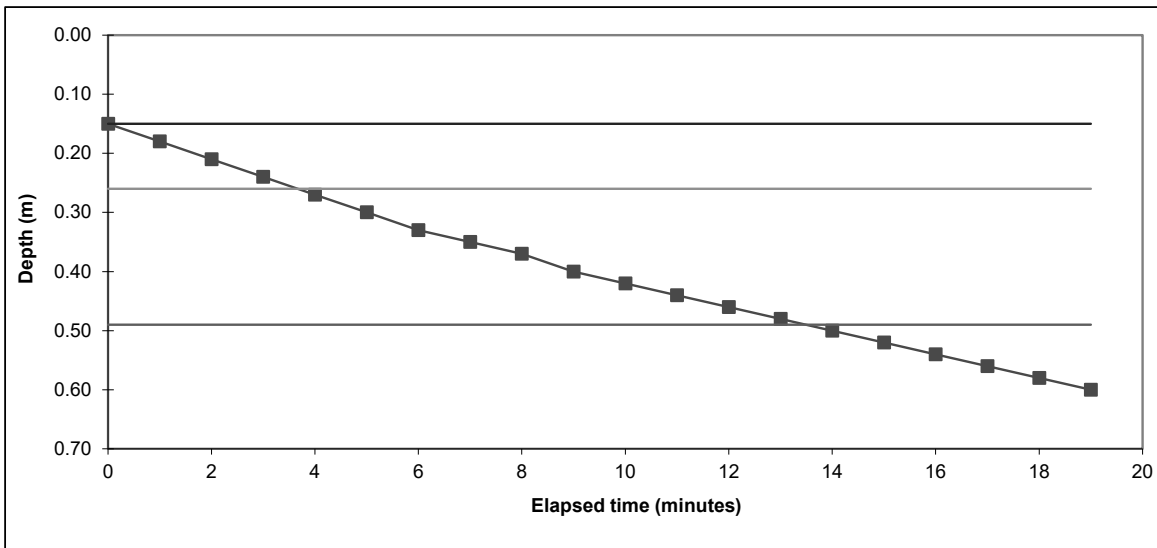
Client:	Neo Environmental Ltd	TP1
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP2	Test No:	1	Date:	15/06/2022
Length (m):	0.700	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.150	14	0.500
1	0.180	15	0.520
2	0.210	16	0.540
3	0.240	17	0.560
4	0.270	18	0.580
5	0.300	19	0.600
6	0.330		
7	0.350		
8	0.370		
9	0.400		
10	0.420		
11	0.440		
12	0.460		
13	0.480		



Start water depth for analysis (mbgl)	0.15		
75% effective depth (mbgl):	0.26	Elapsed time (mins):	3.7
50% effective depth (mbgl):	0.38		
25% effective depth (mbgl):	0.49	Elapsed time (mins):	13.5
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.064	
Mean surface area of outflow (m ²):		0.76	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		9.8	

Soil infiltration rate (m/s):	1.4E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

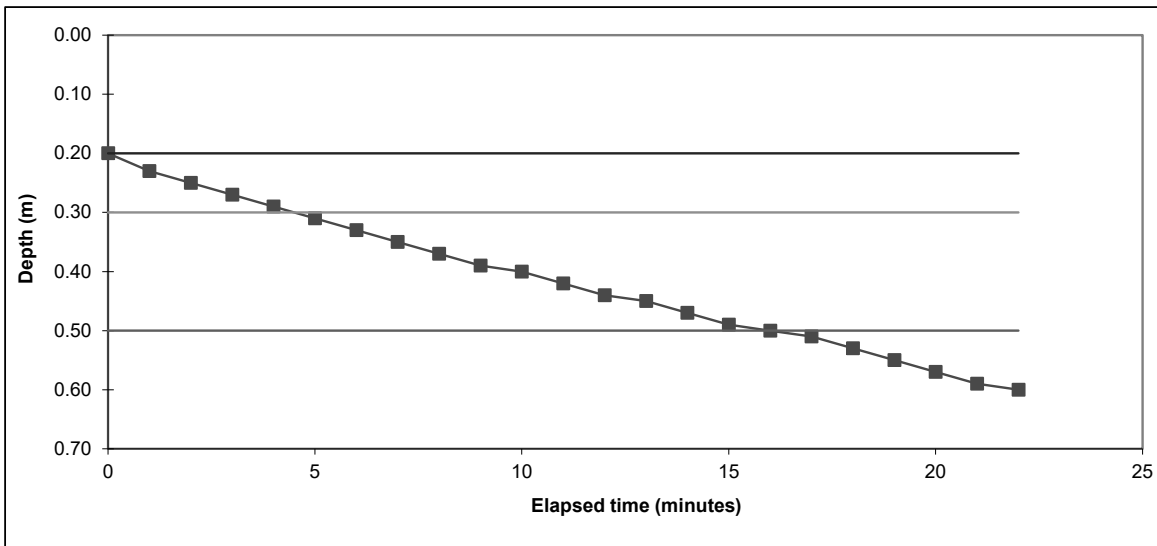
Client:	Neo Environmental Ltd	TP2
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP2	Test No:	2	Date:	15/06/2022
Length (m):	0.700	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.200	14	0.470
1	0.230	15	0.490
2	0.250	16	0.500
3	0.270	17	0.510
4	0.290	18	0.530
5	0.310	19	0.550
6	0.330	20	0.570
7	0.350	21	0.590
8	0.370	22	0.600
9	0.390		
10	0.400		
11	0.420		
12	0.440		
13	0.450		



Start water depth for analysis (mbgl)	0.20		
75% effective depth (mbgl):	0.30	Elapsed time (mins):	4.5
50% effective depth (mbgl):	0.40		
25% effective depth (mbgl):	0.50	Elapsed time (mins):	16.0
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.056
Mean surface area of outflow (m ²):			0.72
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			11.5

Soil infiltration rate (m/s):	1.1E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

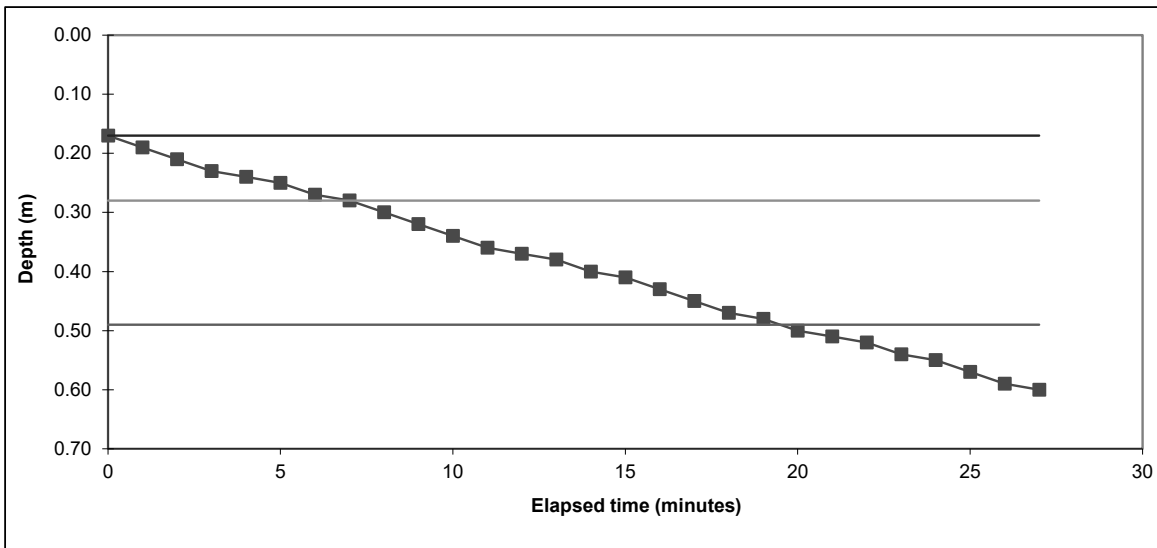
Client:	Neo Environmental Ltd	TP2
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP2	Test No:	3	Date:	15/06/2022
Length (m):	0.700	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.170	14	0.400
1	0.190	15	0.410
2	0.210	16	0.430
3	0.230	17	0.450
4	0.240	18	0.470
5	0.250	19	0.480
6	0.270	20	0.500
7	0.280	21	0.510
8	0.300	22	0.520
9	0.320	23	0.540
10	0.340	24	0.550
11	0.360	25	0.570
12	0.370	26	0.590
13	0.380	27	0.600



Start water depth for analysis (mbgl)	0.17		
75% effective depth (mbgl):	0.28	Elapsed time (mins):	7.0
50% effective depth (mbgl):	0.39		
25% effective depth (mbgl):	0.49	Elapsed time (mins):	19.5
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.059
Mean surface area of outflow (m ²):			0.74
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			12.5

Soil infiltration rate (m/s):	1.1E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

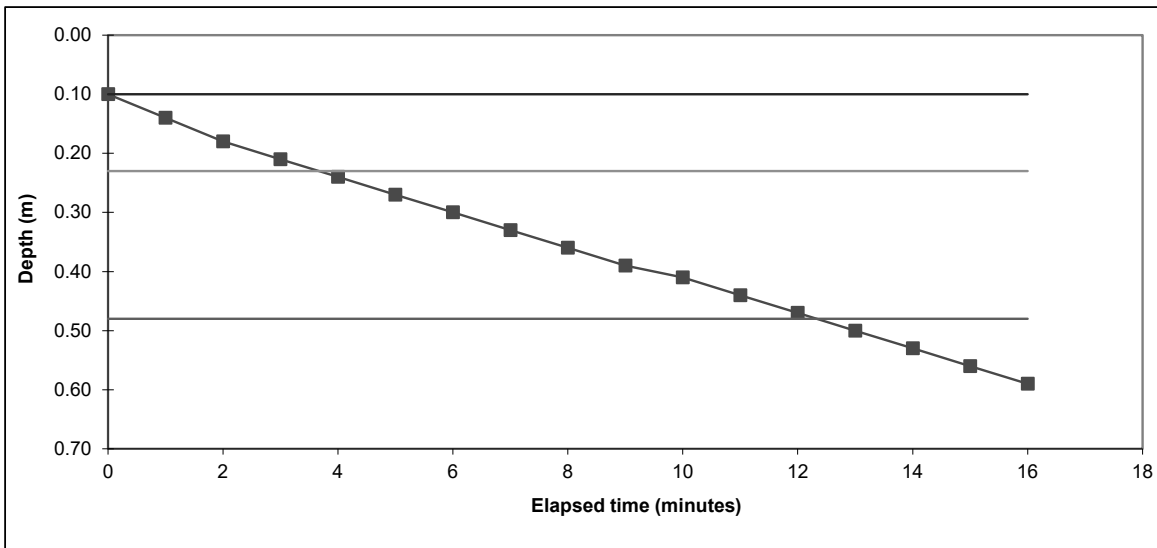
Client:	Neo Environmental Ltd	TP2
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP3	Test No:	1	Date:	15/06/2022
Length (m):	0.900	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.100	14	0.530
1	0.140	15	0.560
2	0.180	16	0.590
3	0.210		
4	0.240		
5	0.270		
6	0.300		
7	0.330		
8	0.360		
9	0.390		
10	0.410		
11	0.440		
12	0.470		
13	0.500		



Start water depth for analysis (mbgl)	0.10		
75% effective depth (mbgl):	0.23	Elapsed time (mins):	3.7
50% effective depth (mbgl):	0.35		
25% effective depth (mbgl):	0.48	Elapsed time (mins):	12.3
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.090	
Mean surface area of outflow (m ²):		1.01	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		8.6	

Soil infiltration rate (m/s):	1.7E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

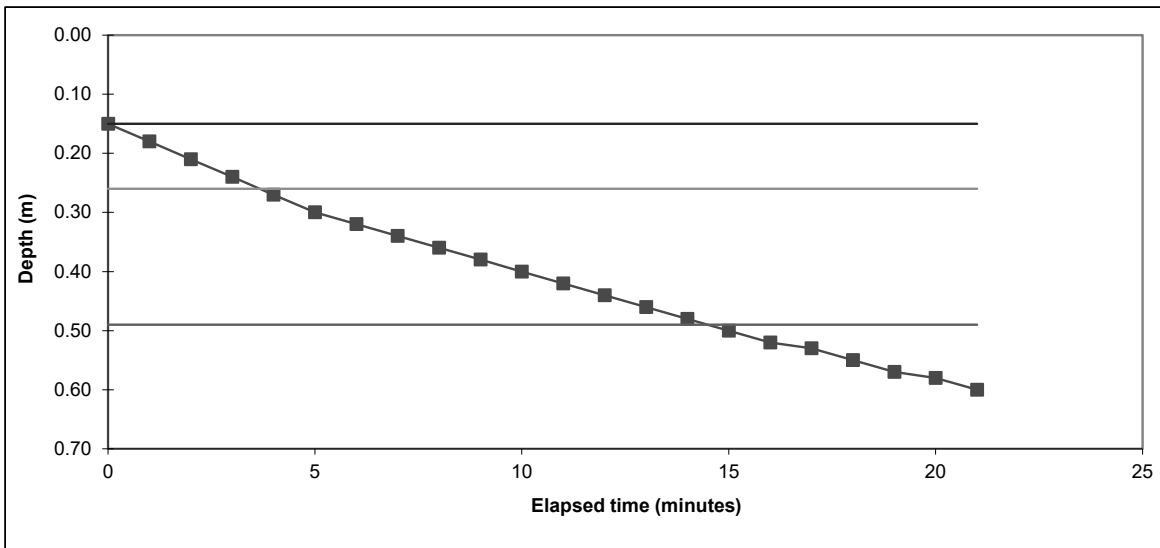
Client:	Neo Environmental Ltd	TP3
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP3	Test No:	2	Date:	15/06/2022
Length (m):	0.900	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.150	14	0.480
1	0.180	15	0.500
2	0.210	16	0.520
3	0.240	17	0.530
4	0.270	18	0.550
5	0.300	19	0.570
6	0.320	20	0.580
7	0.340	21	0.600
8	0.360		
9	0.380		
10	0.400		
11	0.420		
12	0.440		
13	0.460		



Start water depth for analysis (mbgl)	0.15		
75% effective depth (mbgl):	0.26	Elapsed time (mins):	3.7
50% effective depth (mbgl):	0.38		
25% effective depth (mbgl):	0.49	Elapsed time (mins):	14.5
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.083
Mean surface area of outflow (m ²):			0.93
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			10.8

Soil infiltration rate (m/s):	1.4E-4
--------------------------------------	---------------

Remarks: Results processed following BRE 365 (2007).

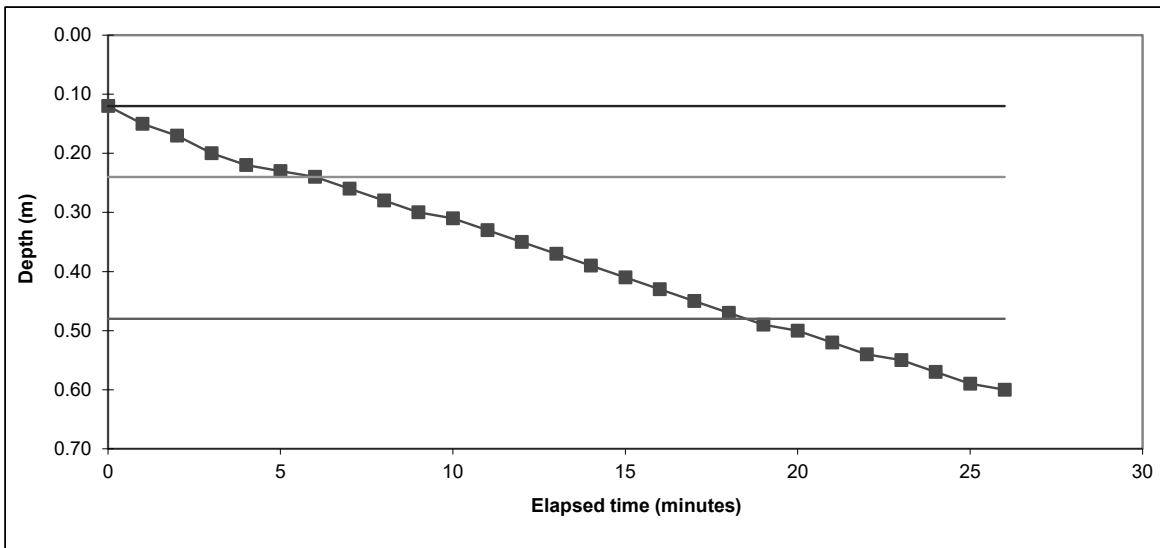
Client:	Neo Environmental Ltd	TP3
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP3	Test No:	3	Date:	15/06/2022
Length (m):	0.900	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.120	14	0.390
1	0.150	15	0.410
2	0.170	16	0.430
3	0.200	17	0.450
4	0.220	18	0.470
5	0.230	19	0.490
6	0.240	20	0.500
7	0.260	21	0.520
8	0.280	22	0.540
9	0.300	23	0.550
10	0.310	24	0.570
11	0.330	25	0.590
12	0.350	26	0.600
13	0.370		



Start water depth for analysis (mbgl)	0.12		
75% effective depth (mbgl):	0.24	Elapsed time (mins):	6.0
50% effective depth (mbgl):	0.36		
25% effective depth (mbgl):	0.48	Elapsed time (mins):	18.5
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.086
Mean surface area of outflow (m ²):			0.98
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			12.5

Soil infiltration rate (m/s):	1.2E-4
--------------------------------------	---------------

Remarks: Results processed following BRE 365 (2007).

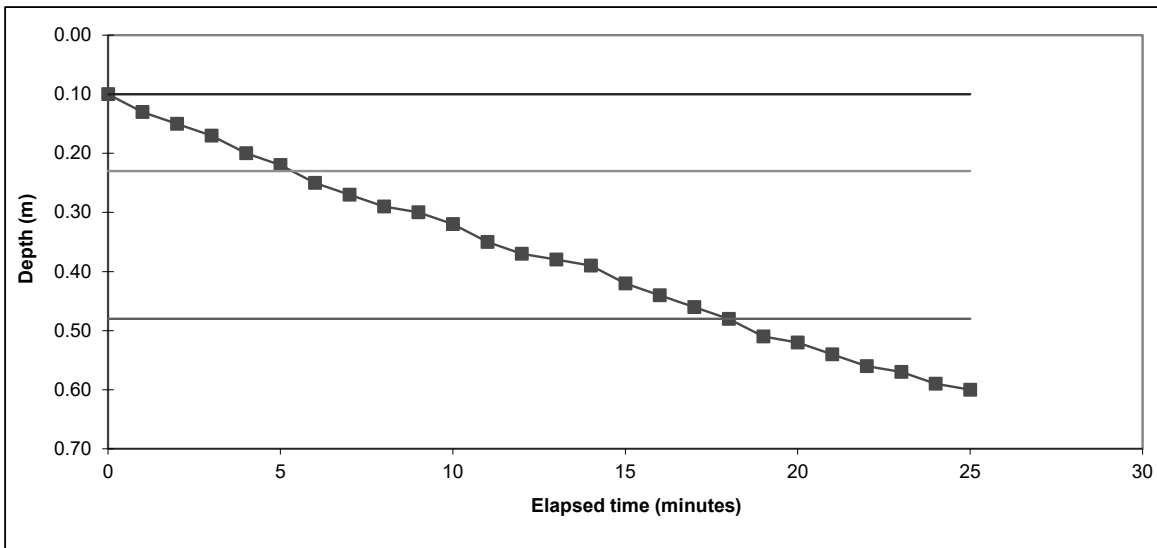
Client:	Neo Environmental Ltd	TP3
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP4	Test No:	1	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.100	14	0.390
1	0.130	15	0.420
2	0.150	16	0.440
3	0.170	17	0.460
4	0.200	18	0.480
5	0.220	19	0.510
6	0.250	20	0.520
7	0.270	21	0.540
8	0.290	22	0.560
9	0.300	23	0.570
10	0.320	24	0.590
11	0.350	25	0.600
12	0.370		
13	0.380		



Start water depth for analysis (mbgl)	0.10		
75% effective depth (mbgl):	0.23	Elapsed time (mins):	5.3
50% effective depth (mbgl):	0.35		
25% effective depth (mbgl):	0.48	Elapsed time (mins):	18.0
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.080
Mean surface area of outflow (m ²):			0.92
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			12.7

Soil infiltration rate (m/s):	1.1E-4
--------------------------------------	---------------

Remarks: Results processed following BRE 365 (2007).

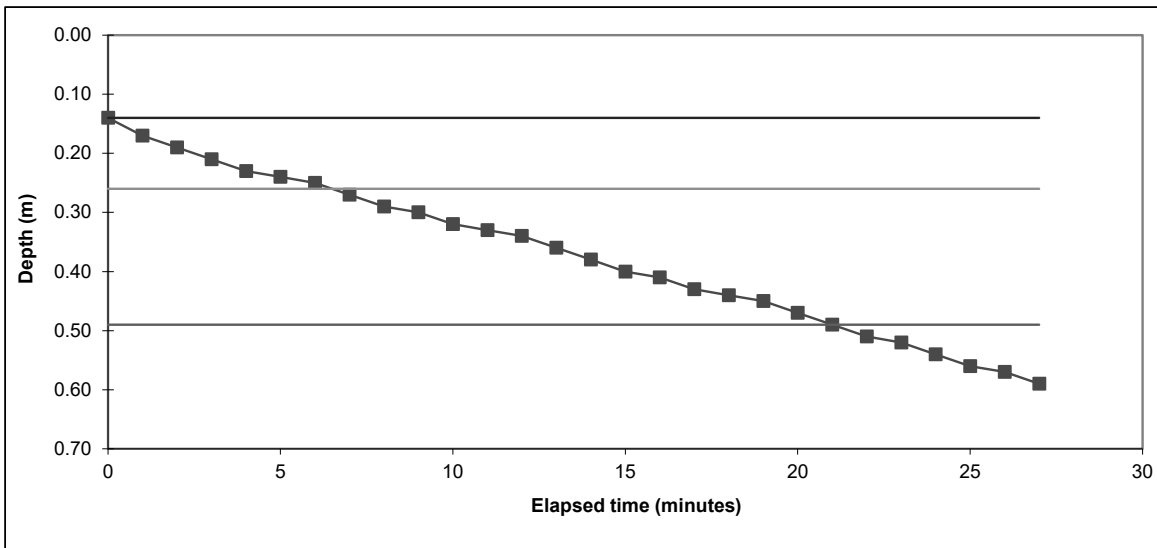
Client:	Neo Environmental Ltd	TP4
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP4	Test No:	2	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.140	14	0.380
1	0.170	15	0.400
2	0.190	16	0.410
3	0.210	17	0.430
4	0.230	18	0.440
5	0.240	19	0.450
6	0.250	20	0.470
7	0.270	21	0.490
8	0.290	22	0.510
9	0.300	23	0.520
10	0.320	24	0.540
11	0.330	25	0.560
12	0.340	26	0.570
13	0.360	27	0.590



Start water depth for analysis (mbgl)	0.14		
75% effective depth (mbgl):	0.26	Elapsed time (mins):	6.5
50% effective depth (mbgl):	0.37		
25% effective depth (mbgl):	0.49	Elapsed time (mins):	21.0
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.074
Mean surface area of outflow (m ²):			0.87
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			14.5

Soil infiltration rate (m/s):	9.7E-5
--------------------------------------	---------------

Remarks: Results processed following BRE 365 (2007).

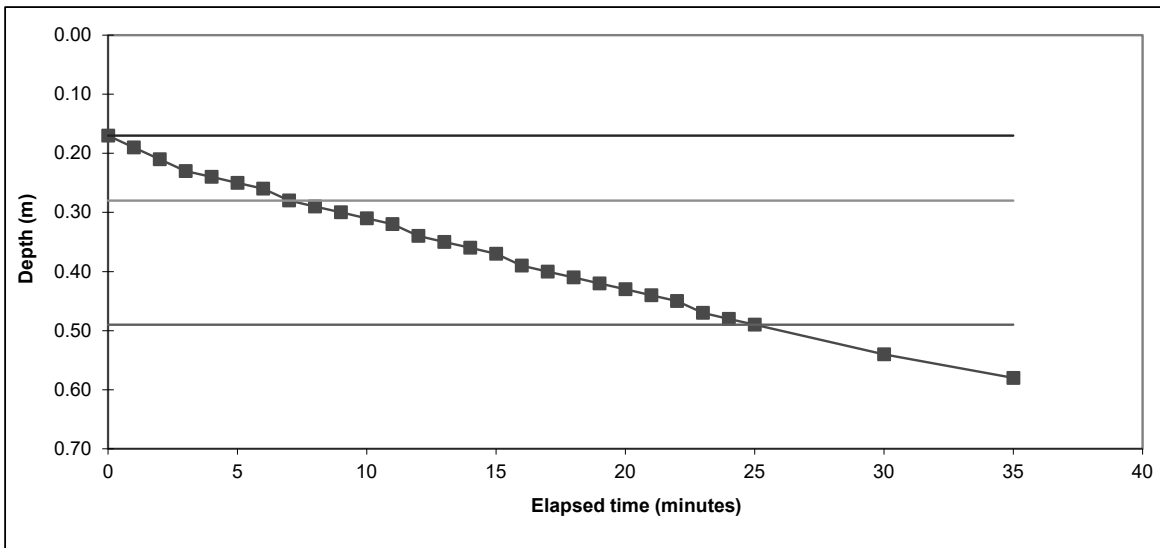
Client:	Neo Environmental Ltd	TP4
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP4	Test No:	3	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.170	14	0.360
1	0.190	15	0.370
2	0.210	16	0.390
3	0.230	17	0.400
4	0.240	18	0.410
5	0.250	19	0.420
6	0.260	20	0.430
7	0.280	21	0.440
8	0.290	22	0.450
9	0.300	23	0.470
10	0.310	24	0.480
11	0.320	25	0.490
12	0.340	30	0.540
13	0.350	35	0.580



Start water depth for analysis (mbgl)	0.17		
75% effective depth (mbgl):	0.28	Elapsed time (mins):	7.0
50% effective depth (mbgl):	0.39		
25% effective depth (mbgl):	0.49	Elapsed time (mins):	25.0
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.067
Mean surface area of outflow (m ²):			0.82
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			18.0

Soil infiltration rate (m/s):	7.6E-5
--------------------------------------	---------------

Remarks: Results processed following BRE 365 (2007).

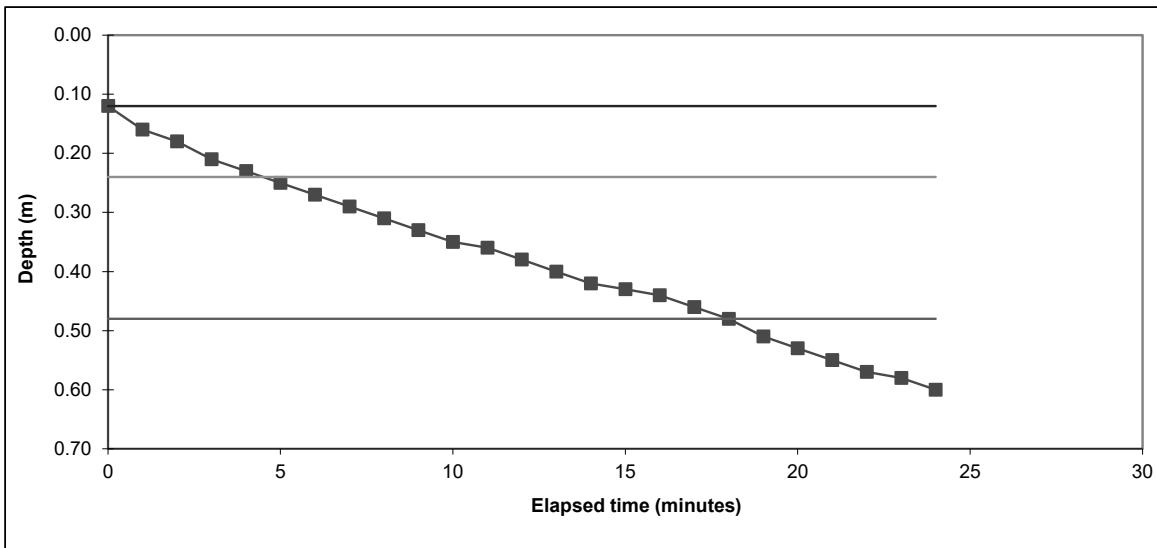
Client:	Neo Environmental Ltd	TP4
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP5	Test No:	1	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.120	14	0.420
1	0.160	15	0.430
2	0.180	16	0.440
3	0.210	17	0.460
4	0.230	18	0.480
5	0.250	19	0.510
6	0.270	20	0.530
7	0.290	21	0.550
8	0.310	22	0.570
9	0.330	23	0.580
10	0.350	24	0.600
11	0.360		
12	0.380		
13	0.400		



Start water depth for analysis (mbgl)	0.12		
75% effective depth (mbgl):	0.24	Elapsed time (mins):	4.5
50% effective depth (mbgl):	0.36		
25% effective depth (mbgl):	0.48	Elapsed time (mins):	18.0
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.077
Mean surface area of outflow (m ²):			0.90
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			13.5

Soil infiltration rate (m/s):	1.1E-4
--------------------------------------	---------------

Remarks: Results processed following BRE 365 (2007).

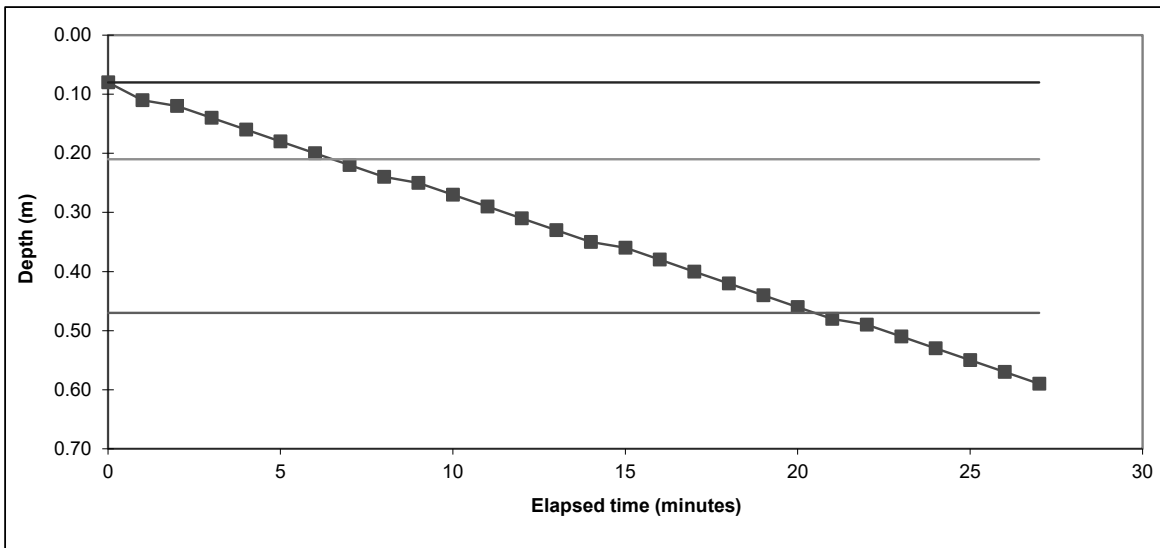
Client:	Neo Environmental Ltd	TP5
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP5	Test No:	2	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.080	14	0.350
1	0.110	15	0.360
2	0.120	16	0.380
3	0.140	17	0.400
4	0.160	18	0.420
5	0.180	19	0.440
6	0.200	20	0.460
7	0.220	21	0.480
8	0.240	22	0.490
9	0.250	23	0.510
10	0.270	24	0.530
11	0.290	25	0.550
12	0.310	26	0.570
13	0.330	27	0.590



Start water depth for analysis (mbgl)	0.08		
75% effective depth (mbgl):	0.21	Elapsed time (mins):	6.5
50% effective depth (mbgl):	0.34		
25% effective depth (mbgl):	0.47	Elapsed time (mins):	20.5
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.083	
Mean surface area of outflow (m ²):		0.94	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		14.0	

Soil infiltration rate (m/s):	1.0E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

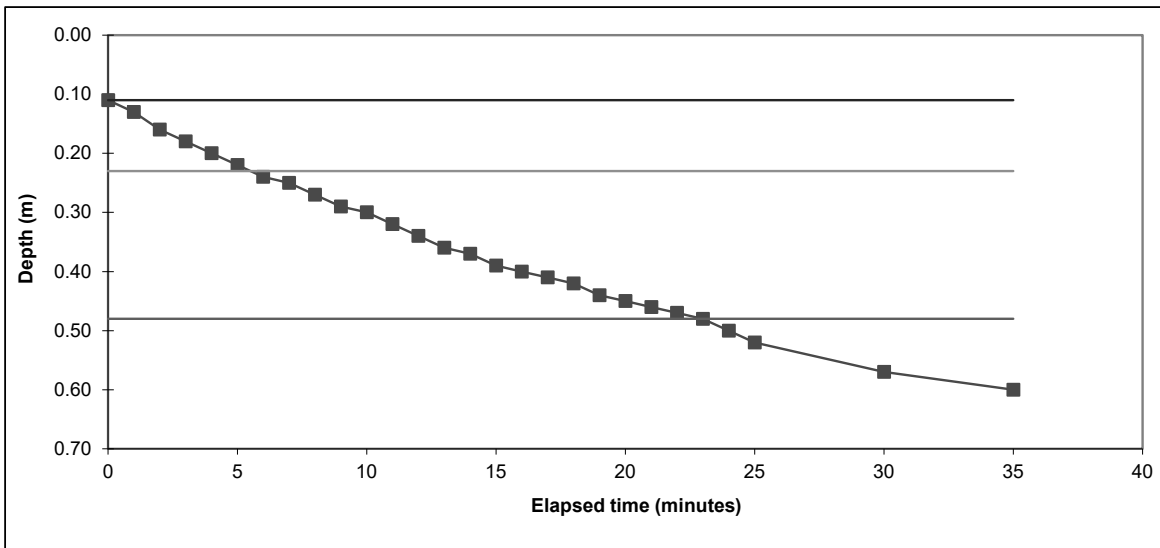
Client:	Neo Environmental Ltd	TP5
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP5	Test No:	3	Date:	15/06/2022
Length (m):	0.800	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.110	14	0.370
1	0.130	15	0.390
2	0.160	16	0.400
3	0.180	17	0.410
4	0.200	18	0.420
5	0.220	19	0.440
6	0.240	20	0.450
7	0.250	21	0.460
8	0.270	22	0.470
9	0.290	23	0.480
10	0.300	24	0.500
11	0.320	25	0.520
12	0.340	30	0.570
13	0.360	35	0.600



Start water depth for analysis (mbgl)	0.11		
75% effective depth (mbgl):	0.23	Elapsed time (mins):	5.5
50% effective depth (mbgl):	0.36		
25% effective depth (mbgl):	0.48	Elapsed time (mins):	23.0
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.080
Mean surface area of outflow (m ²):			0.90
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			17.5

Soil infiltration rate (m/s):	8.5E-5
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

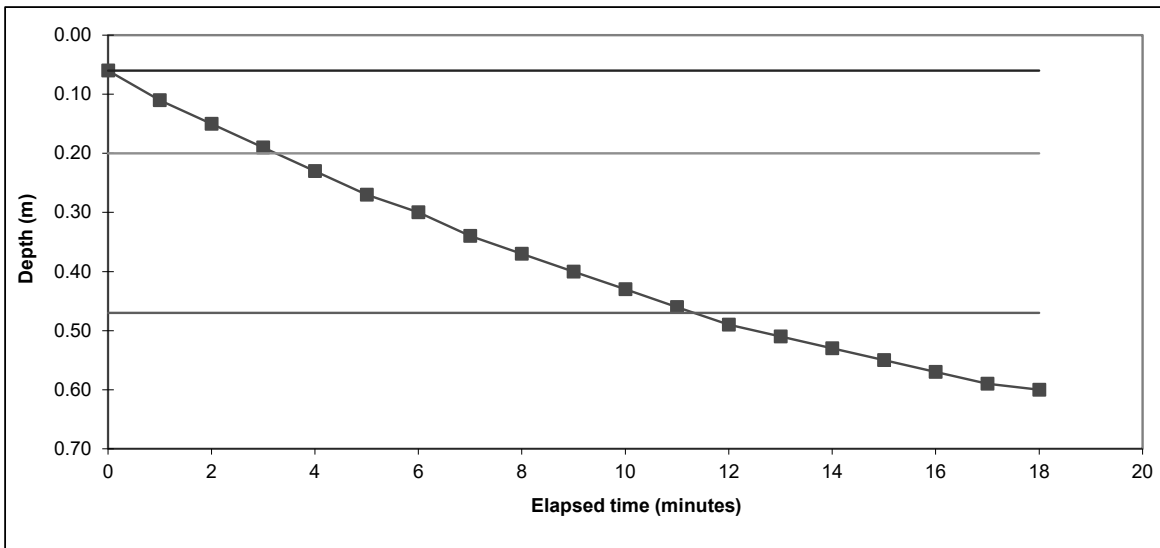
Client:	Neo Environmental Ltd	TP5
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP6	Test No:	1	Date:	15/06/2022
Length (m):	1.000	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.060	14	0.530
1	0.110	15	0.550
2	0.150	16	0.570
3	0.190	17	0.590
4	0.230	18	0.600
5	0.270		
6	0.300		
7	0.340		
8	0.370		
9	0.400		
10	0.430		
11	0.460		
12	0.490		
13	0.510		



Start water depth for analysis (mbgl)	0.06		
75% effective depth (mbgl):	0.20	Elapsed time (mins):	3.3
50% effective depth (mbgl):	0.33		
25% effective depth (mbgl):	0.47	Elapsed time (mins):	11.3
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.108	
Mean surface area of outflow (m ²):		1.16	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		8.0	

Soil infiltration rate (m/s):	1.9E-4
--------------------------------------	---------------

Remarks Results processed following BRE 365 (2007).

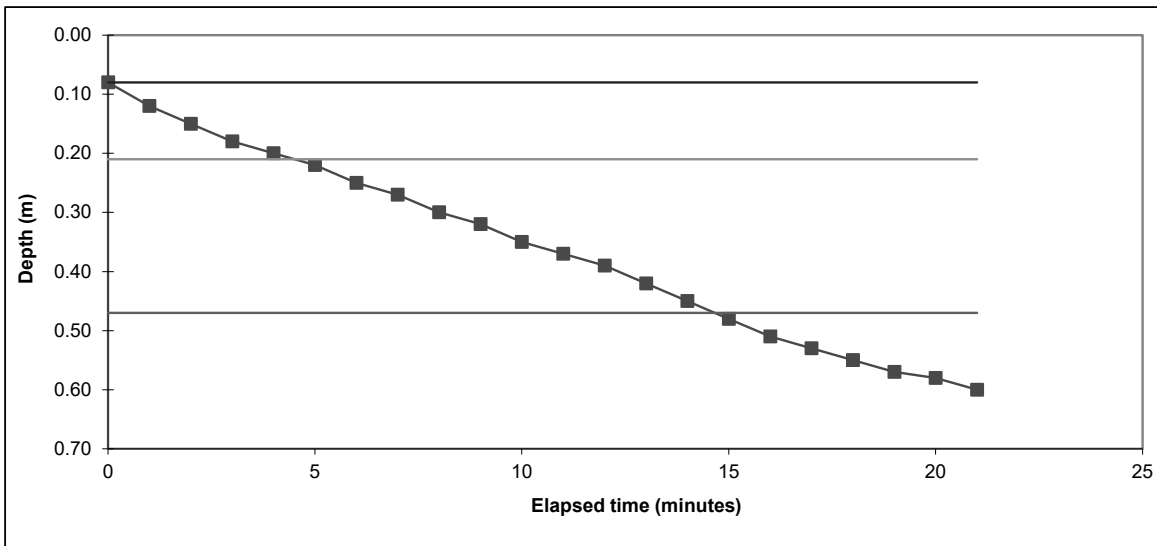
Client:	Neo Environmental Ltd	TP6
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP6	Test No:	2	Date:	15/06/2022
Length (m):	1.000	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.080	14	0.450
1	0.120	15	0.480
2	0.150	16	0.510
3	0.180	17	0.530
4	0.200	18	0.550
5	0.220	19	0.570
6	0.250	20	0.580
7	0.270	21	0.600
8	0.300		
9	0.320		
10	0.350		
11	0.370		
12	0.390		
13	0.420		



Start water depth for analysis (mbgl)	0.08		
75% effective depth (mbgl):	0.21	Elapsed time (mins):	4.5
50% effective depth (mbgl):	0.34		
25% effective depth (mbgl):	0.47	Elapsed time (mins):	14.7
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):			0.104
Mean surface area of outflow (m ²):			1.13
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):			10.2

Soil infiltration rate (m/s):	1.5E-4
--------------------------------------	---------------

Remarks: Results processed following BRE 365 (2007).

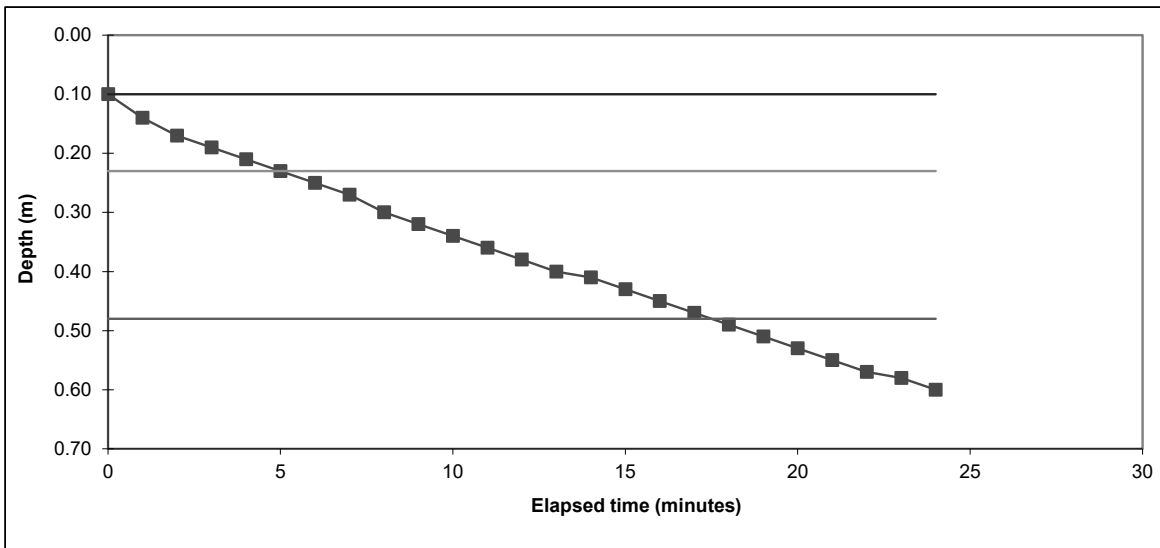
Client:	Neo Environmental Ltd	TP6
Site:	Land at Thoroton	

Your Environment

Soakaway Test

Trial Pit No:	TP6	Test No:	3	Date:	15/06/2022
Length (m):	1.000	Datum Height:		0.00 m agl	
Width (m):	0.40	Granular infill:	None		
Depth (m):	0.60	Porosity of infill:	1	(assumed)	

Elapsed time (minutes)	Water Depth (m below datum)	Elapsed time (minutes)	Water Depth (m below datum)
0	0.100	14	0.410
1	0.140	15	0.430
2	0.170	16	0.450
3	0.190	17	0.470
4	0.210	18	0.490
5	0.230	19	0.510
6	0.250	20	0.530
7	0.270	21	0.550
8	0.300	22	0.570
9	0.320	23	0.580
10	0.340	24	0.600
11	0.360		
12	0.380		
13	0.400		



Start water depth for analysis (mbgl)	0.10		
75% effective depth (mbgl):	0.23	Elapsed time (mins):	5.0
50% effective depth (mbgl):	0.35		
25% effective depth (mbgl):	0.48	Elapsed time (mins):	17.5
Base of soakage zone (mbgl):	0.60		
Volume outflow between 75% and 25% effective depth (m ³):		0.100	
Mean surface area of outflow (m ²):		1.10	
(side area at 50% effective depth + base area)			
Time for outflow between 75% and 25% effective depth (mins):		12.5	

Soil infiltration rate (m/s):	1.2E-4
--------------------------------------	---------------

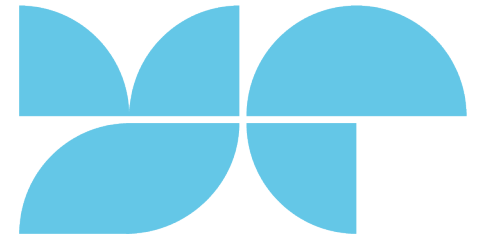
Remarks Results processed following BRE 365 (2007).

Client:	Neo Environmental Ltd	TP6
Site:	Land at Thoroton	

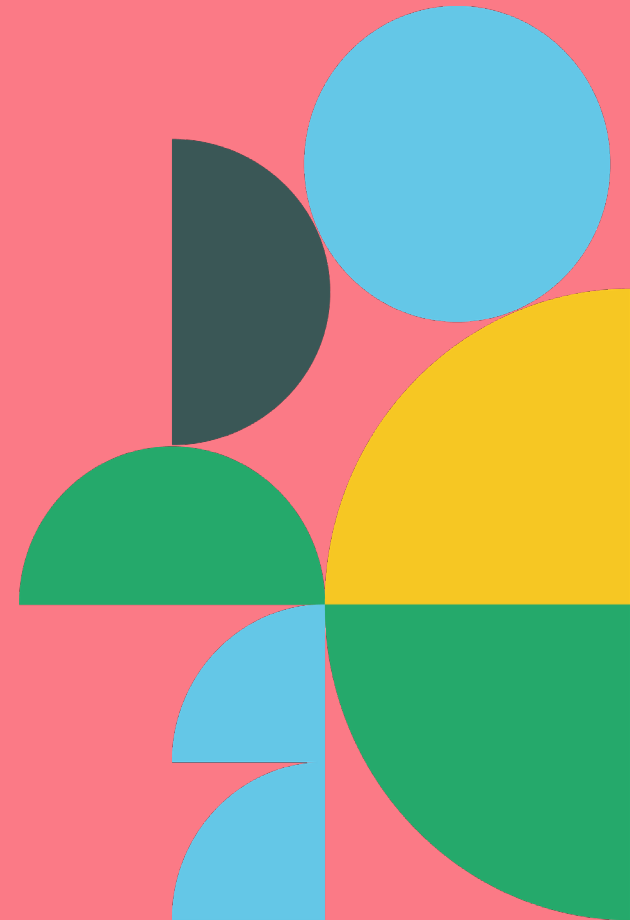
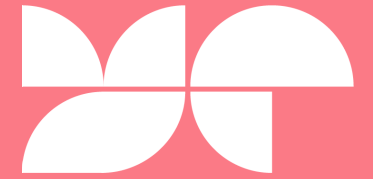
Appendix D



YEX4201
TP01 and TP02 Photos



YEX4201
TP03 and TP04 Photos



YEX4201
TP05 and TP06 Photos

