

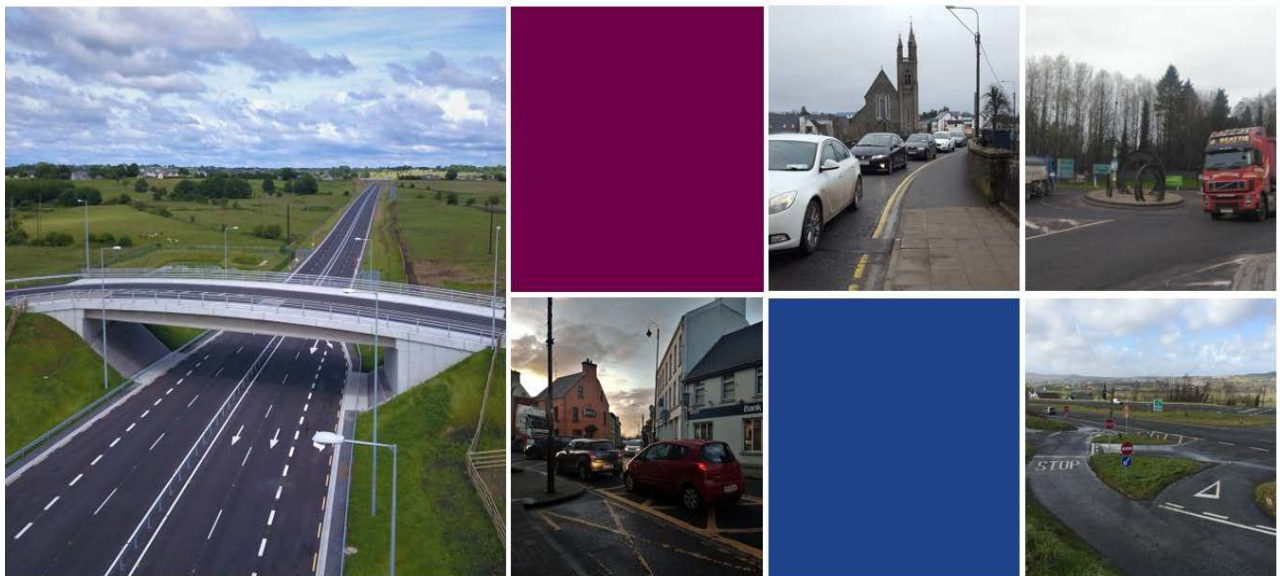
Appendix C10.02

Permeability Testing Results

Appendix C10.02

Permeability Testing Results

TEN-T Priority Route Improvement Project, Donegal



TT_MGT0337-RPS-P3-ZZ-RP-E-EN0001

EIAR

March 2026



Section 1

Permeability Testing Results

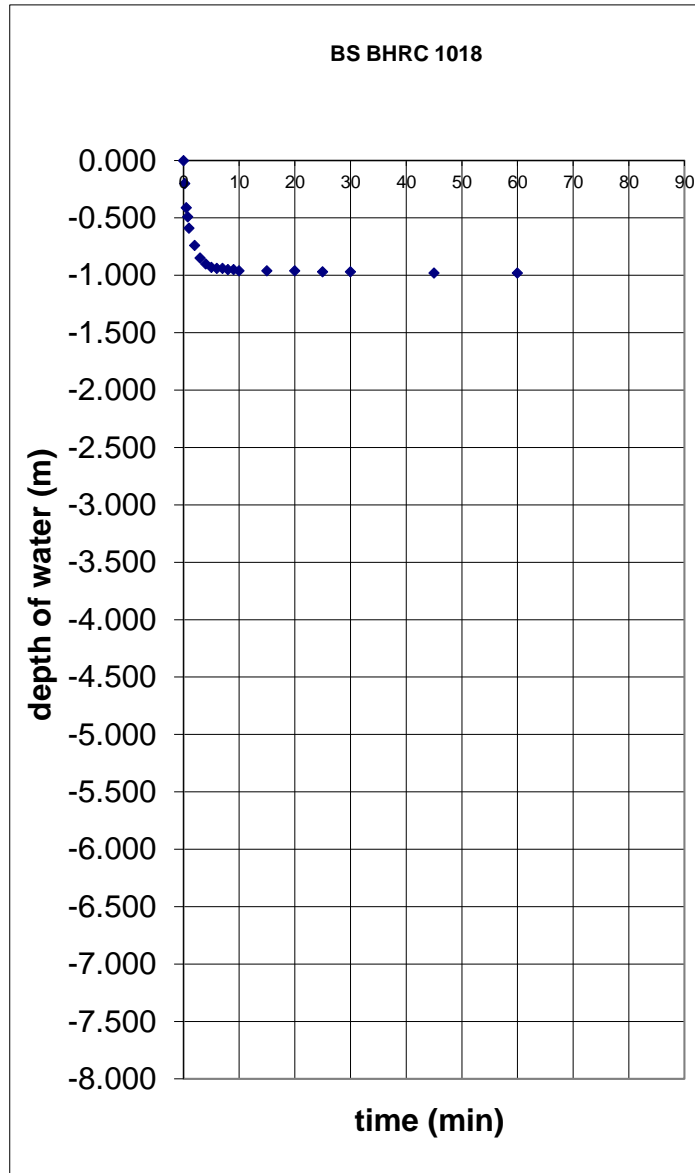
IRISH DRILLING LTD.
 Loughrea Co. Galway
 Tel: (091) 841274 Fax: (091) 880 861

Contract: Ten-T, Section 1
 Client: Donegal County Council
 Engineer: RPS
 Date: 08/07/2021
 Tested by: PC

Falling Head Permeability Test

Bottom of Borehole (below ground level):	20.00m	Borehole No.	BS BHRC1018
Bottom of Casing (below ground level):	N/A	Ground Level (mOD):	122.9
Diameter of Borehole:	96mm	Co-ordinates:	
Diameter of Standpipe:	50mm		615420.0E
Response Zone:	1.70m -20.00m BGL		898218.4N
Initial ground water level:	-0.99m		

time min	water level m	H m	H/Ho
0	0.000	0.990	1.00
0.25	-0.200	0.790	0.80
0.5	-0.410	0.580	0.59
0.75	-0.490	0.500	0.51
1	-0.590	0.400	0.40
2	-0.740	0.250	0.25
3	-0.850	0.140	0.14
4	-0.900	0.090	0.09
5	-0.930	0.060	0.06
6	-0.940	0.050	0.05
7	-0.940	0.050	0.05
8	-0.950	0.040	0.04
9	-0.950	0.040	0.04
10	-0.960	0.030	0.03
15	-0.960	0.030	0.03
20	-0.960	0.030	0.03
25	-0.970	0.020	0.02
30	-0.970	0.020	0.02
45	-0.980	0.010	0.01
60	-0.980	0.010	0.01



$k = 8.60 \times 10^{-5} \text{ m/s}$

Remarks:

Test carried out in 50mm diameter standpipe.
 Water readings recorded from ground level.

Ground Conditions:

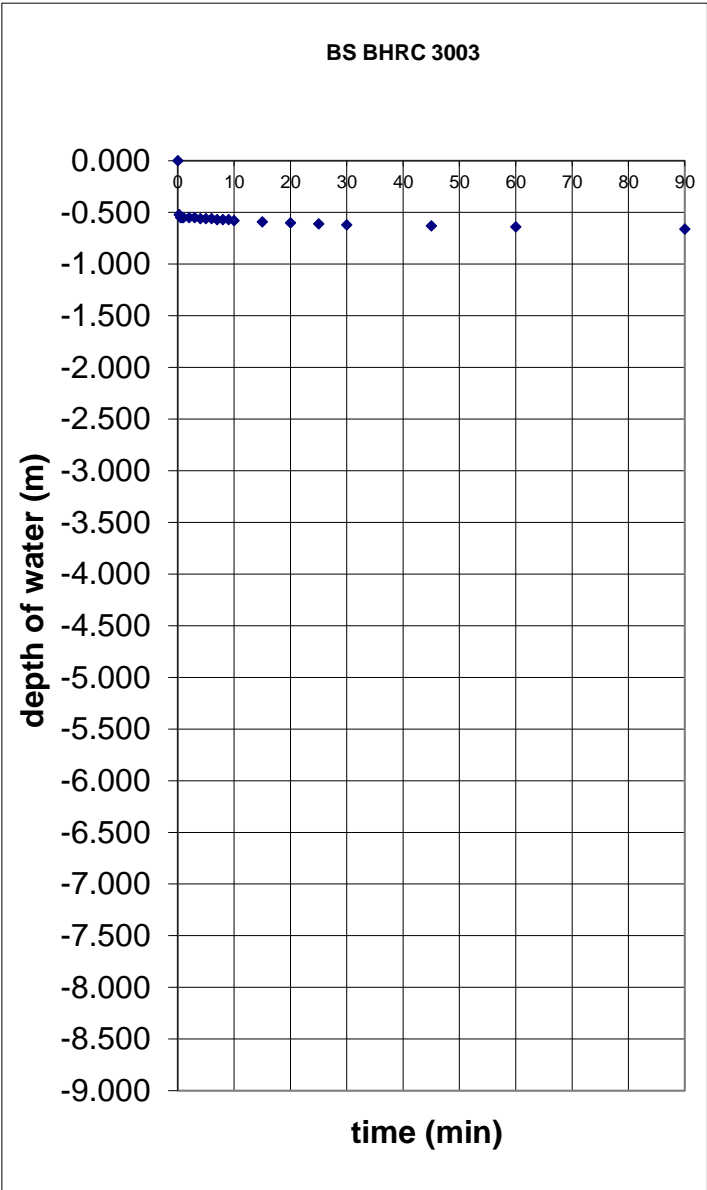
0.00-1.70m: Overburden (no recovery).
 1.70-20.00m: Bedrock

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 1 Client: Donegal County Council Engineer: RPS Date: 08/07/2021 Tested by: PC
--	--

Falling Head Permeability Test

Bottom of Borehole (below ground level):	20.00m	Borehole No.	BS BHRC3003
Bottom of Casing (below ground level):	N/A	Ground Level (mOD):	136.4
Diameter of Borehole:	96mm	Co-ordinates:	
Diameter of Standpipe:	50mm		614789.3E
Response Zone:	11.10m -17.10m BGL		897120.4N
Initial ground water level:	-0.67m		

time min	water level m	H m	H/Ho
0	0.000	0.670	1.00
0.25	-0.520	0.150	0.22
0.5	-0.550	0.120	0.18
0.75	-0.550	0.120	0.18
1	-0.550	0.120	0.18
2	-0.550	0.120	0.18
3	-0.550	0.120	0.18
4	-0.560	0.110	0.16
5	-0.560	0.110	0.16
6	-0.560	0.100	0.15
7	-0.570	0.100	0.15
8	-0.570	0.100	0.15
9	-0.570	0.100	0.15
10	-0.580	0.090	0.13
15	-0.590	0.080	0.12
20	-0.600	0.070	0.10
25	-0.610	0.060	0.09
30	-0.620	0.050	0.07
45	-0.630	0.040	0.06
60	-0.640	0.030	0.04
90	-0.660	0.010	0.01



$k=1.59 \times 10^{-5} \text{ m/s}$

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

0.00-2.00m: Overburden (brownish gey silty sandy CLAY with cobbles).
2.00-17.10m: Bedrock.

IRISH DRILLING LTD.
Loughrea Co. Galway

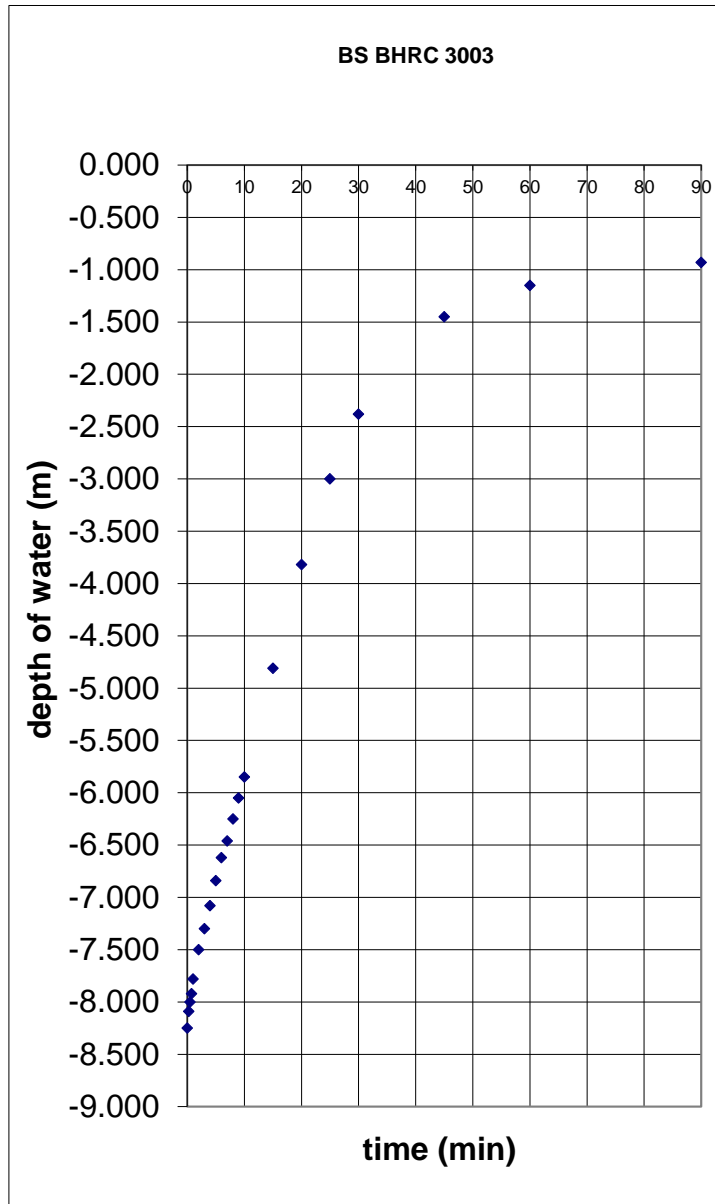
Tel: (091) 841274 Fax: (091) 880 861

Contract: Ten-T, Section 1
Client: Donegal County Council
Engineer: RPS
Date: 08/07/2021
Tested by: PC

Rising Head Permeability Test

Bottom of Borehole (below ground level):	20.00m	Borehole No.	BS BHRC3003
Bottom of Casing (below ground level):	N/A	Ground Level (mOD):	136.4
Diameter of Borehole:	96mm	Co-ordinates:	
Diameter of Standpipe:	50mm		614789.3E
Response Zone:	11.10m -17.10m BGL		897120.4N
Initial ground water level:	-0.67m		

time min	water level m	H m	H/Ho
0	-8.250	7.580	1.00
0.25	-8.090	7.420	0.98
0.5	-8.000	7.330	0.97
0.75	-7.920	7.250	0.96
1	-7.780	7.110	0.94
2	-7.500	6.830	0.90
3	-7.300	6.630	0.87
4	-7.080	6.410	0.85
5	-6.840	6.170	0.81
6	-6.620	5.950	0.78
7	-6.460	5.790	0.76
8	-6.250	5.580	0.74
9	-6.050	5.380	0.71
10	-5.850	5.180	0.68
15	-4.810	4.140	0.55
20	-3.820	3.150	0.42
25	-3.000	2.330	0.31
30	-2.380	1.710	0.23
45	-1.450	0.780	0.10
60	-1.150	0.480	0.06
90	-0.930	0.260	0.03



$k = 2.77 \times 10^{-5} \text{ m/s}$

Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

0.00-2.00m: Overburden (brownish grey silty sandy CLAY with cobbles).
2.00-17.10m: Bedrock.

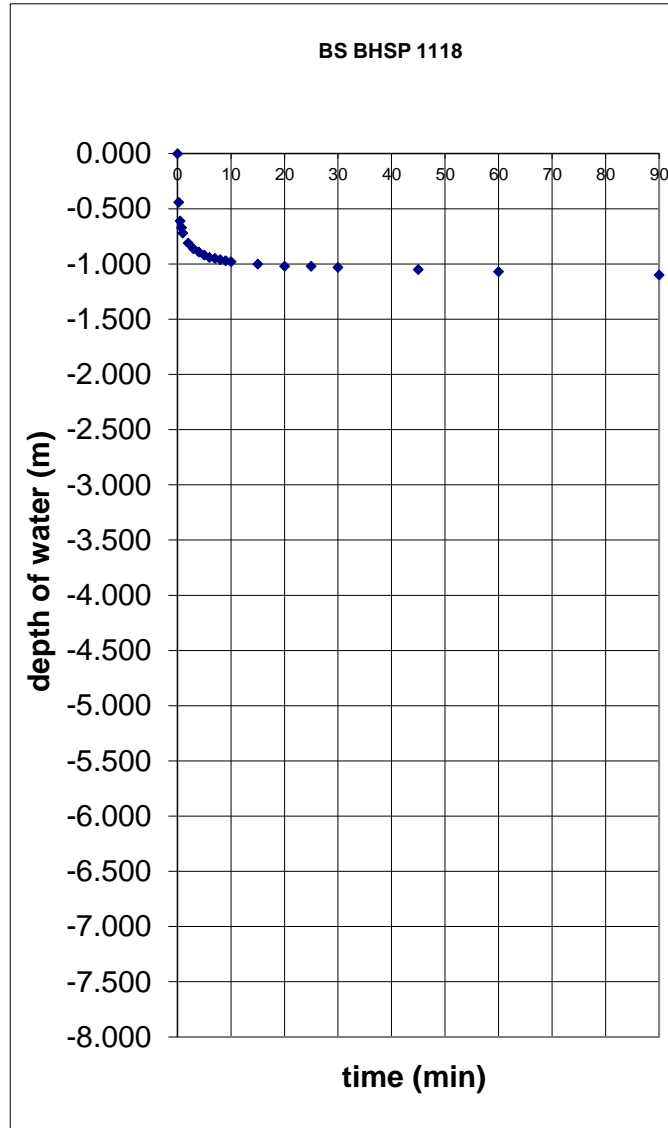
IRISH DRILLING LTD.
Loughrea Co. Galway
Tel: (091) 841274 Fax: (091) 880 861

Contract: Ten-T, Section 1
Client: Donegal County Council
Engineer: RPS
Date: 07/07/2021
Tested by: PC

Falling Head Permeability Test

Bottom of Borehole (below ground level):	20.00m	Borehole No.	BS BHSP1118
Bottom of Casing (below ground level):	N/A	Ground Level (mOD):	124.39
Diameter of Borehole:	96mm	Co-ordinates:	
Diameter of Standpipe:	50mm		614529.3E
Response Zone:	10.40m -14.80m BGL		897002.4N
Initial ground water level:	-1.15m		

time min	water level m	H m	H/Ho
0	0.000	1.150	1.000
0.25	-0.440	0.710	0.617
0.5	-0.610	0.540	0.470
0.75	-0.670	0.480	0.417
1	-0.720	0.430	0.374
2	-0.810	0.340	0.296
3	-0.860	0.290	0.252
4	-0.890	0.260	0.226
5	-0.920	0.230	0.200
6	-0.940	0.210	0.183
7	-0.950	0.200	0.174
8	-0.960	0.190	0.165
9	-0.970	0.180	0.157
10	-0.980	0.170	0.148
15	-1.000	0.150	0.130
20	-1.020	0.130	0.113
25	-1.020	0.130	0.113
30	-1.030	0.120	0.104
45	-1.050	0.100	0.087
60	-1.070	0.080	0.070
90	-1.100	0.050	0.043



$k = 2.09 \times 10^{-5} \text{ m/s}$

Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

0.00-0.40m: Brown CLAY.
0.40-2.00m: Greyish green silty sandy GRAVEL with cobbles.
2.00-3.90m: Greyish blue slightly sandy slightly gravelly silty CLAY with cobbles.
3.90-5.70m: Greyish brown GRAVEL.
5.70-10.40m: Grey sandy gravelly SILT with cobbles.
10.40-14.80m: BEDROCK.

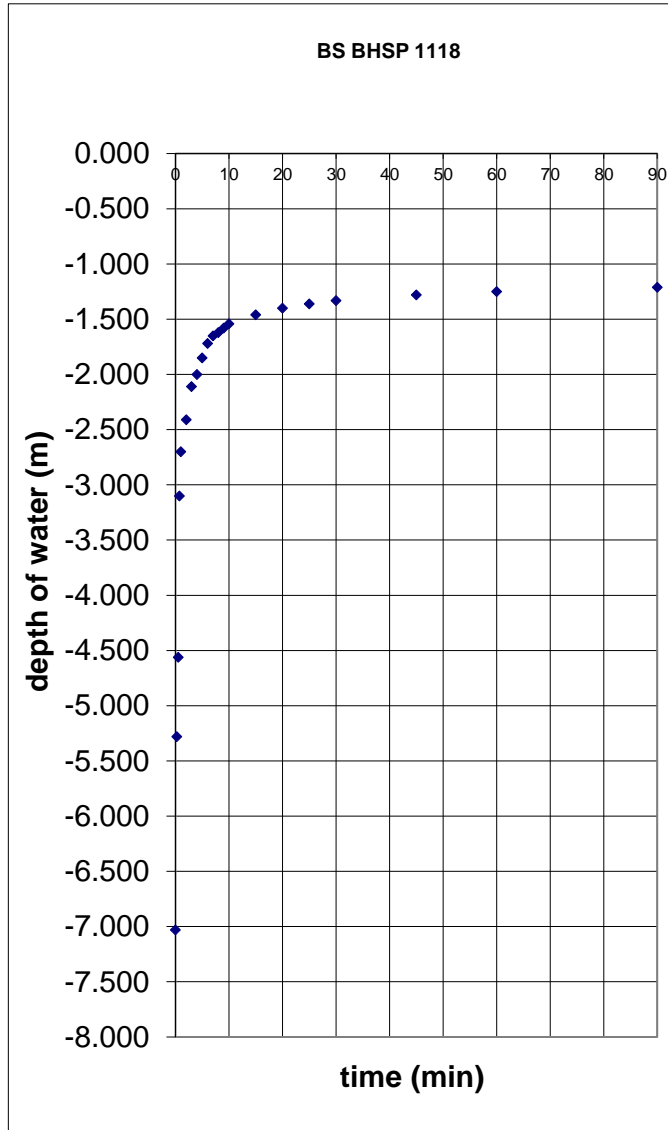
IRISH DRILLING LTD.
Loughrea Co. Galway
Tel: (091) 841274 Fax: (091) 880 861

Contract: Ten-T, Section 1
Client: Donegal County Council
Engineer: RPS
Date: 07/07/2021
Tested by: PC

Rising Head Permeability Test

Bottom of Borehole (below ground level):	20.00m	Borehole No.	BS BHSP1118
Bottom of Casing (below ground level):	N/A	Ground Level (mOD):	124.39
Diameter of Borehole:	96mm	Co-ordinates:	614529.3E 897002.4N
Diameter of Standpipe:	50mm		
Response Zone:	10.40m -14.80m BGL		
Initial ground water level:	-1.15m		

time min	water level m	H m	H/H ₀
0	-7.030	5.880	1.000
0.25	-5.280	4.130	0.702
0.5	-4.560	3.410	0.580
0.75	-3.100	1.950	0.332
1	-2.700	1.550	0.264
2	-2.410	1.260	0.214
3	-2.110	0.960	0.163
4	-2.000	0.850	0.145
5	-1.850	0.700	0.119
6	-1.720	0.570	0.097
7	-1.650	0.500	0.085
8	-1.620	0.470	0.080
9	-1.580	0.430	0.073
10	-1.540	0.390	0.066
15	-1.460	0.310	0.053
20	-1.400	0.250	0.043
25	-1.360	0.210	0.036
30	-1.330	0.180	0.031
45	-1.280	0.130	0.022
60	-1.250	0.100	0.017
90	-1.210	0.060	0.010




$k = 2.66 \times 10^{-5} \text{ m/s}$

Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

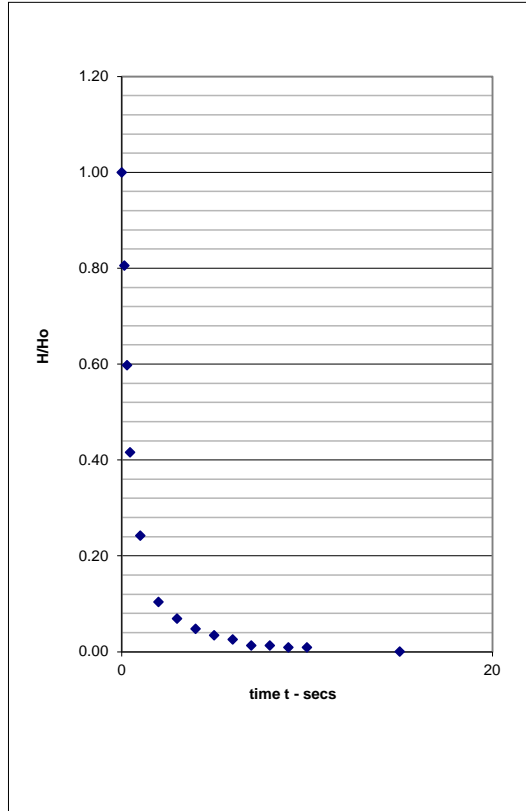
Ground Conditions:

- 0.00-0.40m: Brown CLAY.
- 0.40-2.00m: Greyish green silty sandy GRAVEL with cobbles.
- 2.00-3.90m: Greyish blue slightly sandy slightly gravelly silty CLAY with cobbles.
- 3.90-5.70m: Greyish brown GRAVEL.
- 5.70-10.40m: Grey sandy gravelly SILT with cobbles.
- 10.40-14.80m: BEDROCK.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 680110	Contract: TenT (Section1)	Borehole: BSBHRC3009A	
	Date: 28/08/2022	Revision:	
	Eng.: RPS	Operators: MM	


Bottom of borehole (below G.L.)	20.00m	Weather	Fair
Bottom of solid casing (below g.L.)	8.00m(Standpipe)	Type of test	Falling Head
Top of filter material (m O.D.)	7.00m	Diameter of borehole	0.10m
Initial water level (m bgl)	2.31m	Length of filter	10.00m
Ground level (m O.D.)		Diameter of filter	0.1m
		Type of piezometer	50mm uPVC

Falling HEAD TEST			
time min	water level m	H	H/Ho
0	0	2.31	1.00
0.15	0.45	1.86	0.81
0.3	0.93	1.38	0.60
0.45	1.35	0.96	0.42
1	1.75	0.56	0.24
2	2.07	0.24	0.10
3	2.15	0.16	0.07
4	2.2	0.11	0.05
5	2.23	0.08	0.03
6	2.25	0.06	0.03
7	2.28	0.03	0.01
8	2.28	0.03	0.01
9	2.29	0.02	0.01
10	2.29	0.02	0.01
15	2.31	0	0.00



L	10.000	m
D	0.100	m
F	11.850	
A	0.0079	m ²
t ₂ - t ₁	15	min

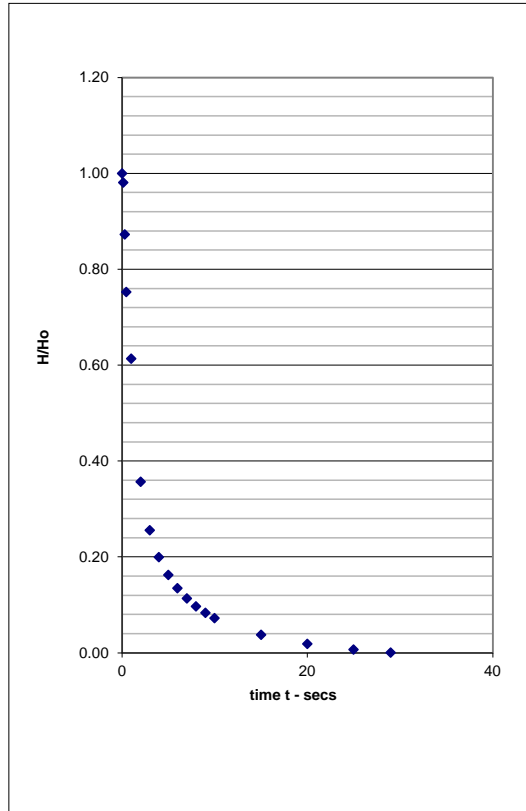
k (permeability) = 8.85E-07 m/sec

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 680110	Contract: TenT (Section1)	Borehole: BSBHRC3009A	
	Date: 28/08/2022	Revision:	
	Eng.: RPS	Operators: MM	

Bottom of borehole (below G.L.)	20.00m	Weather	Fair
Bottom of solid casing (below g.L.)	8.00m(Standpipe)	Type of test	Rising Head
Top of filter material (m O.D.)	7.00m	Diameter of borehole	0.10m
Initial water level (m bgl)	2.31m	Length of filter	10.00m
Initial water head difference	0.00m	Diameter of filter	0.1m
Ground level (m O.D.)		Type of piezometer	50mm uPVC


Rising HEAD TEST

time min	water level m	H	H/Ho
0	9.607	6.972	1.00
0.15	9.476	6.841	0.98
0.3	8.721	6.086	0.87
0.45	7.884	5.249	0.75
1	6.915	4.28	0.61
2	5.122	2.487	0.36
3	4.415	1.78	0.26
4	4.026	1.391	0.20
5	3.765	1.13	0.16
6	3.573	0.938	0.13
7	3.427	0.792	0.11
8	3.312	0.677	0.10
9	3.216	0.581	0.08
10	3.14	0.505	0.07
15	2.897	0.262	0.04
20	2.766	0.131	0.02
25	2.683	0.048	0.01
29	2.635	0	0.00



L	10.000	m
D	0.100	m
F	11.850	
A	0.0079	m ²
t ₂ - t ₁	29	min

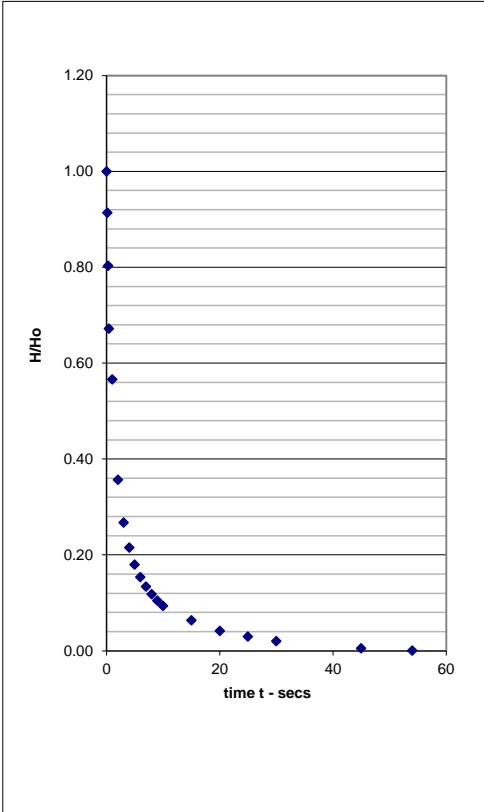
k (permeability) = 1.97E-07 m/sec

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 680110	Contract: TenT (Section1)	Borehole: BSBHRC3009A	
	Date: 28/08/2022	Revision:	
	Eng.: RPS	Operators: MM	

Bottom of borehole (below G.L.)	20.00m	Weather	Fair
Bottom of solid casing (below g.L.)	8.00m(Standpipe)	Type of test	Rising Head
Top of filter material (m O.D.)	7.00m	Diameter of borehole	0.10m
Initial water level (m bgl)	2.31m	Length of filter	10.00m
Ground level (m O.D.)		Diameter of filter	0.1m
		Type of piezometer	50mm uPVC


Rising HEAD TEST

time min	water level m	H	H/Ho
0	9.494	6.954	1.00
0.15	8.895	6.355	0.91
0.3	8.123	5.583	0.80
0.45	7.213	4.673	0.67
1	6.476	3.936	0.57
2	5.022	2.482	0.36
3	4.402	1.862	0.27
4	4.037	1.497	0.22
5	3.791	1.251	0.18
6	3.61	1.07	0.15
7	3.473	0.933	0.13
8	3.362	0.822	0.12
9	3.266	0.726	0.10
10	3.191	0.651	0.09
15	2.98	0.44	0.06
20	2.83	0.29	0.04
25	2.743	0.203	0.03
30	2.68	0.14	0.02
45	2.574	0.034	0.00
54	2.54	0	0.00



L	10.000	m
D	0.100	m
F	11.850	
A	0.0079	m ²
t ₂ - t ₁	54	min

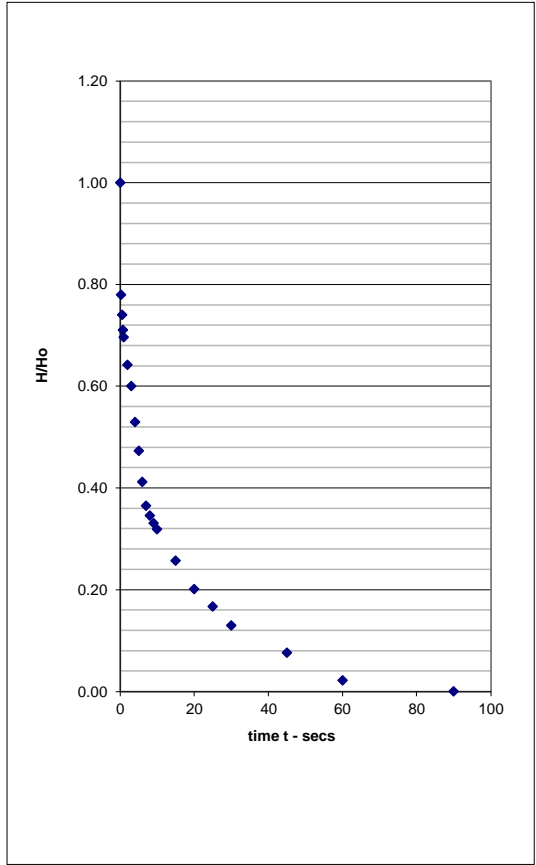
k (permeability) = 1.06E-07 m/sec

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 680110	Contract: TenT (Section1)	Borehole: BSBHRC3009	
	Date: 05/05/2022 Eng.: RPS	Revision: Operators: MM	

Bottom of borehole (below G.L.)	15.00m	Weather	Fair
Bottom of solid casing (below g.L.)	3.00m(Standpipe)	Type of test	Falling Head
Top of filter material (m O.D.)	12.00m	Diameter of borehole	0.10m
Initial water level (m bgl)	4.211m	Length of filter	12.00m
Ground level (m O.D.)		Diameter of filter	0.10m
		Type of piezometer	50mm uPVC

Falling HEAD TEST

time min	water level m	H	H/Ho
0	0.000	4.08	1.00
0.25	0.900	3.18	0.78
0.5	1.060	3.02	0.74
0.75	1.180	2.9	0.71
1	1.240	2.84	0.70
2	1.460	2.62	0.64
3	1.630	2.45	0.60
4	1.920	2.16	0.53
5	2.150	1.93	0.47
6	2.400	1.68	0.41
7	2.590	1.49	0.37
8	2.670	1.41	0.35
9	2.730	1.35	0.33
10	2.780	1.3	0.32
15	3.030	1.05	0.26
20	3.260	0.82	0.20
25	3.400	0.68	0.17
30	3.550	0.53	0.13
45	3.770	0.31	0.08
60	3.990	0.09	0.02
90	4.080	0	0.00



L 12.000 m
 D 0.100 m
 F 13.960
 A 0.0079 m²
 t₂ - t₁ 90 min

k (permeability) = 7.45E-08 m/sec

Section 2

Permeability Testing Results

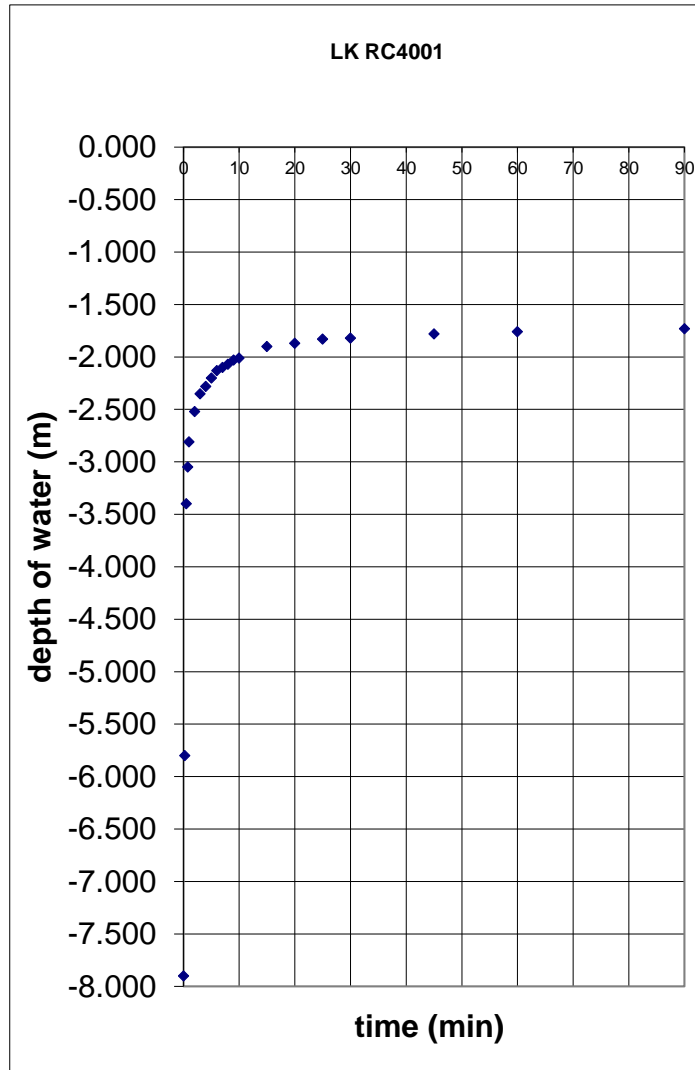
IRISH DRILLING LTD.
Loughrea Co. Galway
Tel: (091) 841274 Fax: (091) 880 861

Contract: Ten-T, Section 1
Client: Irish Water
Engineer: RPS
Date: 08/07/2021
Tested by: PC

Rising Head Permeability Test

Bottom of Borehole (below ground level):	20.50m	Borehole No.	LK RC4001
Bottom of Casing (below ground level):	N/A	Ground Level (mOD):	97.7
Diameter of Borehole:	96mm	Co-ordinates:	
Diameter of Standpipe:	50mm		619730.4E
Response Zone:	5.50m -20.50m BGL		909274.9N
Initial ground water level:	-1.62m		

time min	water level m	H m	H/Ho
0	-7.900	6.280	1.00
0.25	-5.800	4.180	0.53
0.5	-3.400	1.780	0.23
0.75	-3.050	1.430	0.18
1	-2.810	1.190	0.15
2	-2.520	0.900	0.11
3	-2.350	0.730	0.09
4	-2.280	0.660	0.08
5	-2.200	0.580	0.07
6	-2.130	0.510	0.06
7	-2.100	0.480	0.06
8	-2.070	0.450	0.06
9	-2.030	0.410	0.05
10	-2.010	0.390	0.05
15	-1.900	0.280	0.04
20	-1.870	0.250	0.03
25	-1.830	0.210	0.03
30	-1.820	0.200	0.03
45	-1.780	0.160	0.02
60	-1.760	0.140	0.02
90	-1.730	0.110	0.01



$K = 2.68 \times 10^{-5} \text{ m/s}$

Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

0.00-5.50m: Overburden (recovered as GRAVEL).
5.50-20.50m: Bedrock (weathered, recovered as fine to coarse gravel sized clasts).

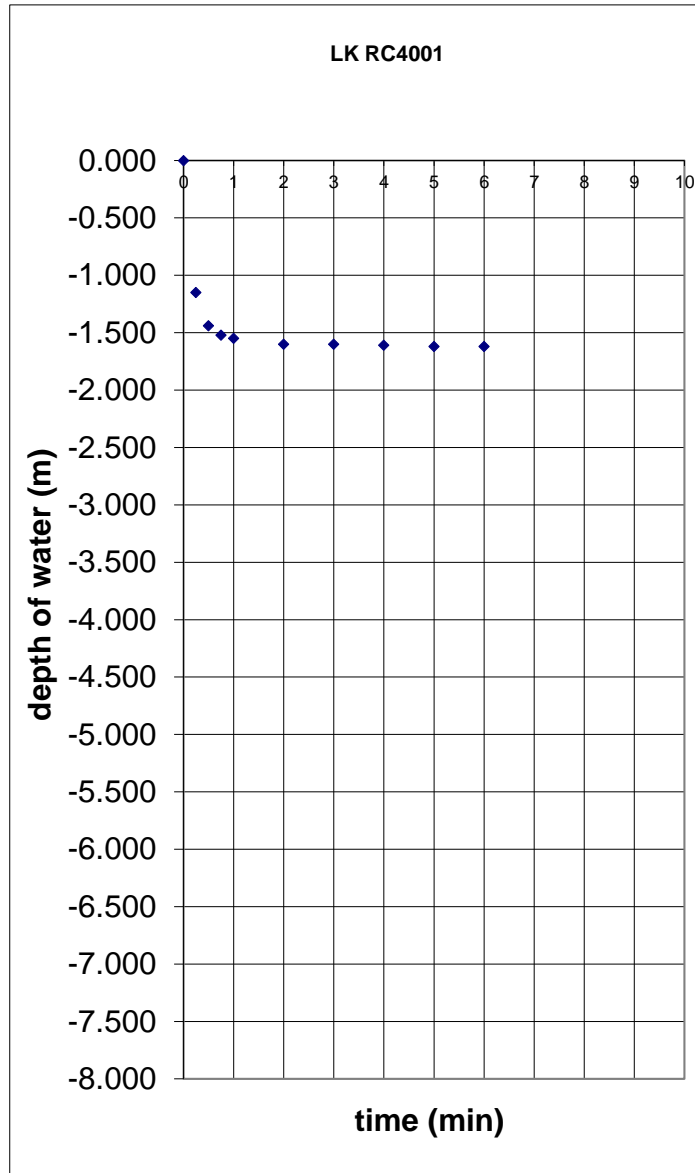
IRISH DRILLING LTD.
 Loughrea Co. Galway
 Tel: (091) 841274 Fax: (091) 880 861

Contract: Ten-T, Section 1
 Client: Irish Water
 Engineer: RPS
 Date: 08/07/2021
 Tested by: PC

Falling Head Permeability Test

Bottom of Borehole (below ground level):	20.50m	Borehole No.	LK RC4001
Bottom of Casing (below ground level):	N/A	Ground Level (mOD):	97.7
Diameter of Borehole:	96mm	Co-ordinates:	619730.4E 909274.9N
Diameter of Standpipe:	50mm		
Response Zone:	5.50m -20.50m BGL		
Initial ground water level:	-1.62m		

time min	water level m	H m	H/Ho
0	0.000	1.620	1.00
0.25	-1.150	0.470	0.29
0.5	-1.440	0.180	0.11
0.75	-1.520	0.100	0.06
1	-1.550	0.070	0.04
2	-1.600	0.020	0.01
3	-1.600	0.020	0.01
4	-1.610	0.010	0.01
5	-1.620	0.000	0.00
6	-1.620	0.000	0.00



$k = 5.47 \times 10^{-4} \text{ m/s}$

Remarks:

Test carried out in 50mm diameter standpipe.
 Water readings recorded from ground level.

Ground Conditions:

0.00-5.50m: Overburden (recovered as GRAVEL).
 5.50-20.50m: Bedrock (weathered, recovered as fine to coarse gravel sized clasts).

Section 3

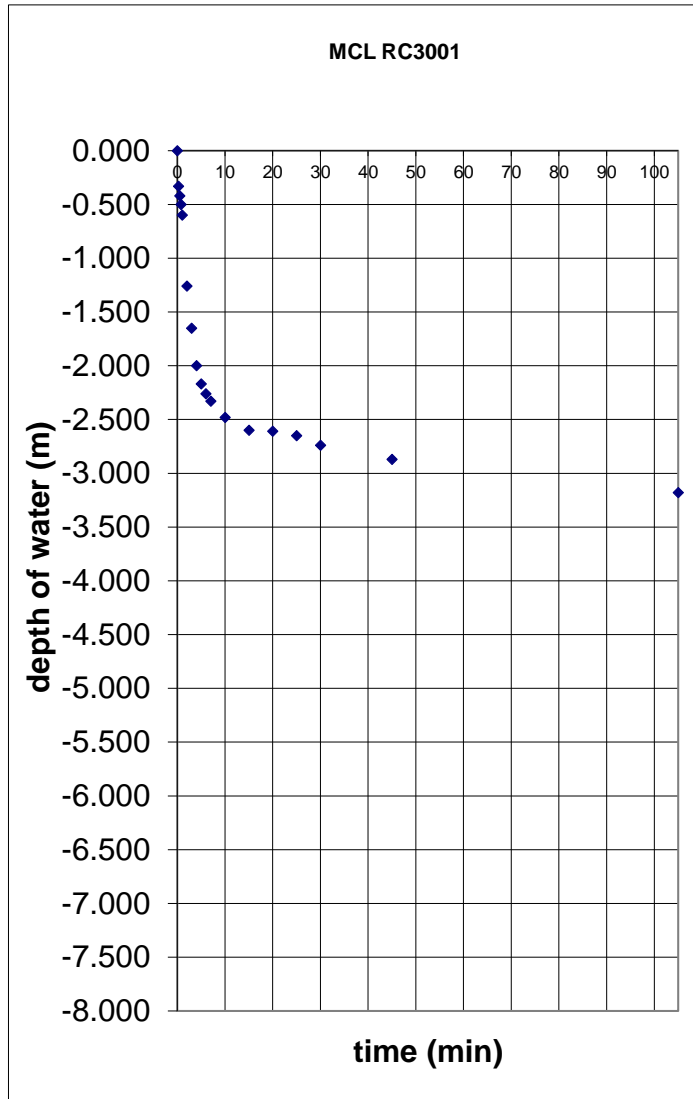
Permeability Testing Results

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 05/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 30.0m	Borehole No. MCL RC 3001
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 15.49
Diameter of Borehole: 96mm	Co-ordinates:
Diameter of Standpipe: 50mm	623736.3E
Response Zone: 2.50m -30.00m BGL	910613.6N
Initial ground water level: -4.43m	

time min	WL m
0	0.000
0.25	-0.330
0.5	-0.420
0.75	-0.500
1	-0.600
2	-1.260
3	-1.650
4	-2.000
5	-2.170
6	-2.260
7	-2.330
10	-2.480
15	-2.600
20	-2.610
25	-2.650
30	-2.740
45	-2.870
105	-3.180



Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

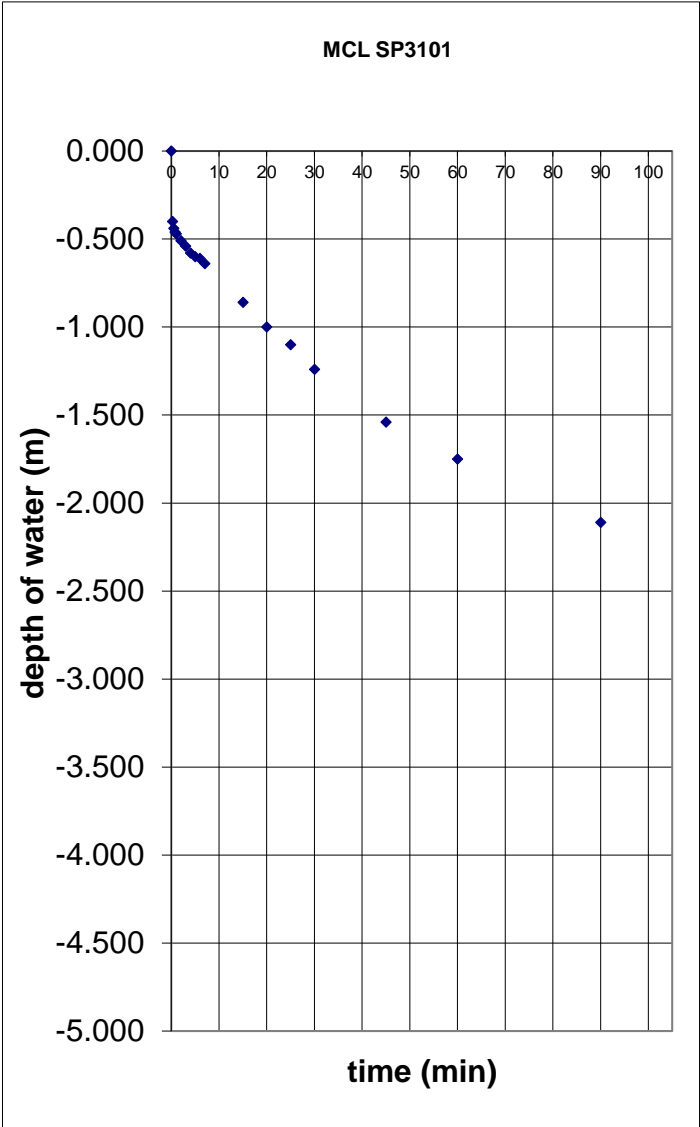
0.00-7.00m: Overburden (recovered as GRAVEL).
7.00-21.60m: Overburden (recovered as sandy gravelly silt with cobbles).
21.60-30.00m: Bedrock.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 05/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 15.0m	Borehole No. MCL SP 3101
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 28.88
Diameter of Borehole: 96mm	Co-ordinates:
Diameter of Standpipe: 50mm	623539.3.3E
Response Zone: 2.50m -15.00m BGL	910681.9N
Initial ground water level: -4.39m	

time min	WL m
0	0.000
0.25	-0.400
0.5	-0.440
0.75	-0.460
1	-0.470
2	-0.510
3	-0.540
4	-0.580
5	-0.600
6	-0.610
7	-0.640
10	0.720
15	-0.860
20	-1.000
25	-1.100
30	-1.240
45	-1.540
60	-1.750
90	-2.110



Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

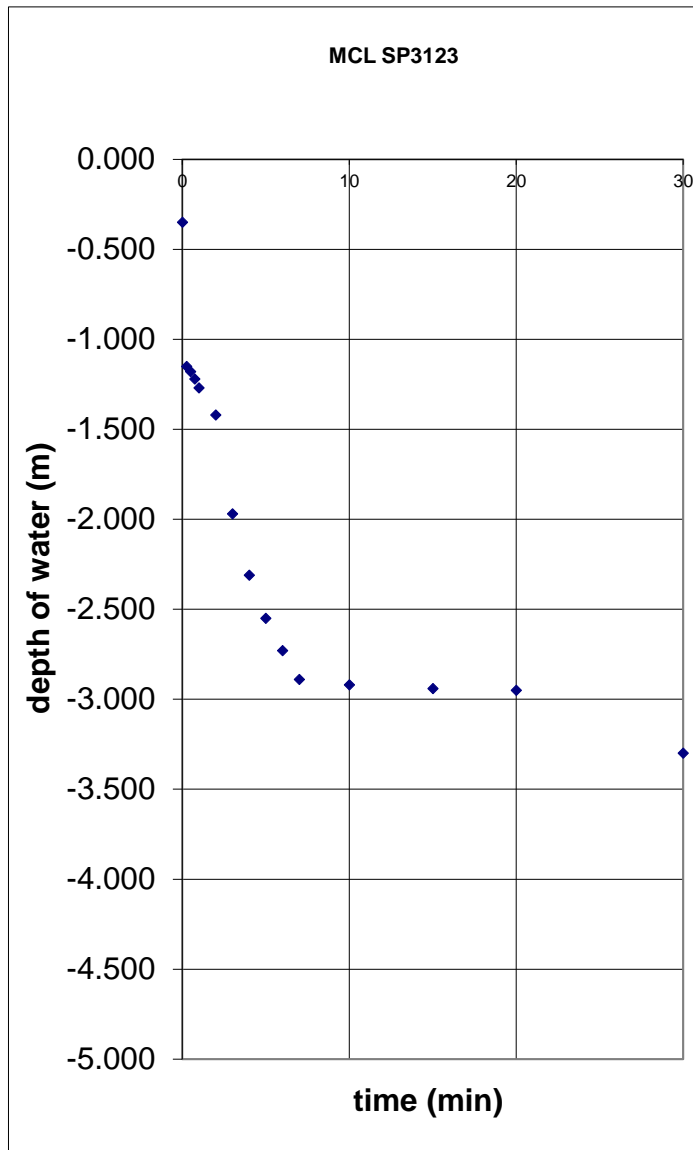
0.00-15.00m:Overburden (recovered as sandy gravelly silt with cobbles).

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 06/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 3.30m	Borehole No. MCL SP 3123
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 39.01
Diameter of Borehole: 200mm	Co-ordinates:
Diameter of Standpipe: 50mm	630763.1E
Response Zone: 1.20m -3.30m BGL	900358.6N
Initial ground water level: DRY	

time min	WL m
0	-0.350
0.25	-1.150
0.5	-1.180
0.75	-1.220
1	-1.270
2	-1.420
3	-1.970
4	-2.310
5	-2.550
6	-2.730
7	-2.890
10	-2.920
15	-2.940
20	-2.950
30	-3.300



Remarks:

Test carried out in 50mm diameter standpipe in cable percussive borehole.
Water readings recorded from ground level.

Ground Conditions:

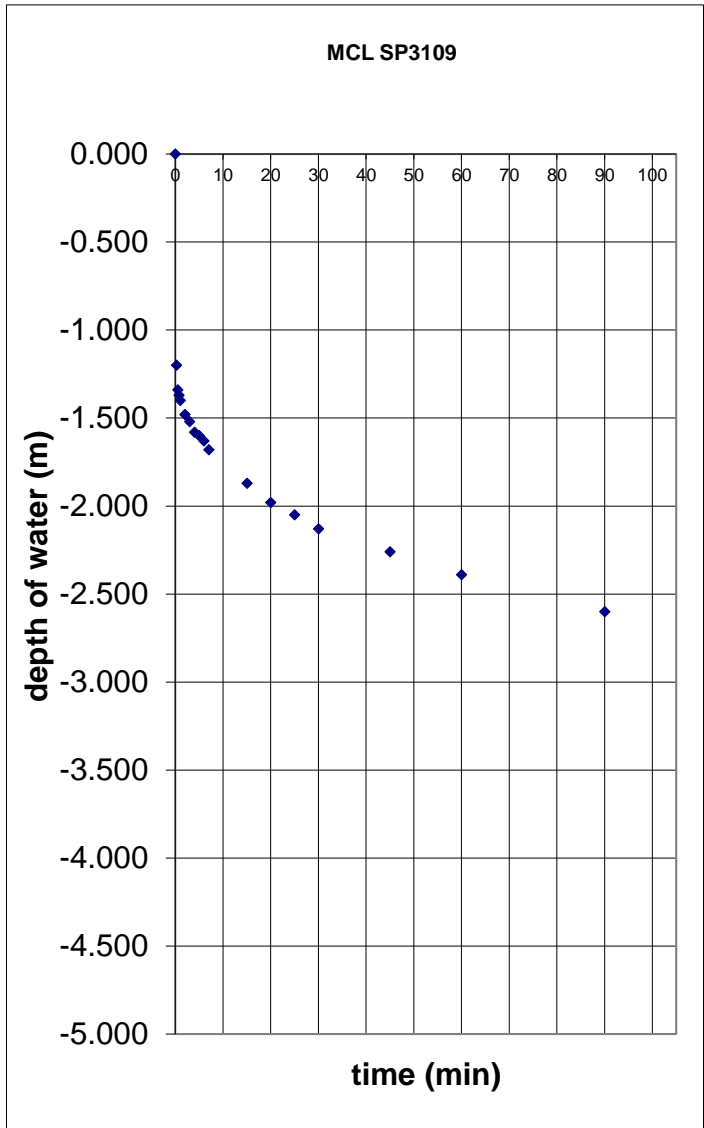
0.00-3.30m:Overburden.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 06/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 18.0m	Borehole No. MCL SP 3109
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 105.1
Diameter of Borehole: 96mm	Co-ordinates:
Diameter of Standpipe: 50mm	626122.8E
Response Zone: 5.50m -18.00m BGL	908428.8N
Initial ground water level: -3.97m	

time min	WL m
0	0.000
0.25	-1.200
0.5	-1.340
0.75	-1.370
1	-1.400
2	-1.480
3	-1.520
4	-1.580
5	-1.600
6	-1.630
7	-1.680
10	-1.750
15	-1.870
20	-1.980
25	-2.050
30	-2.130
45	-2.260
60	-2.390
90	-2.600



Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

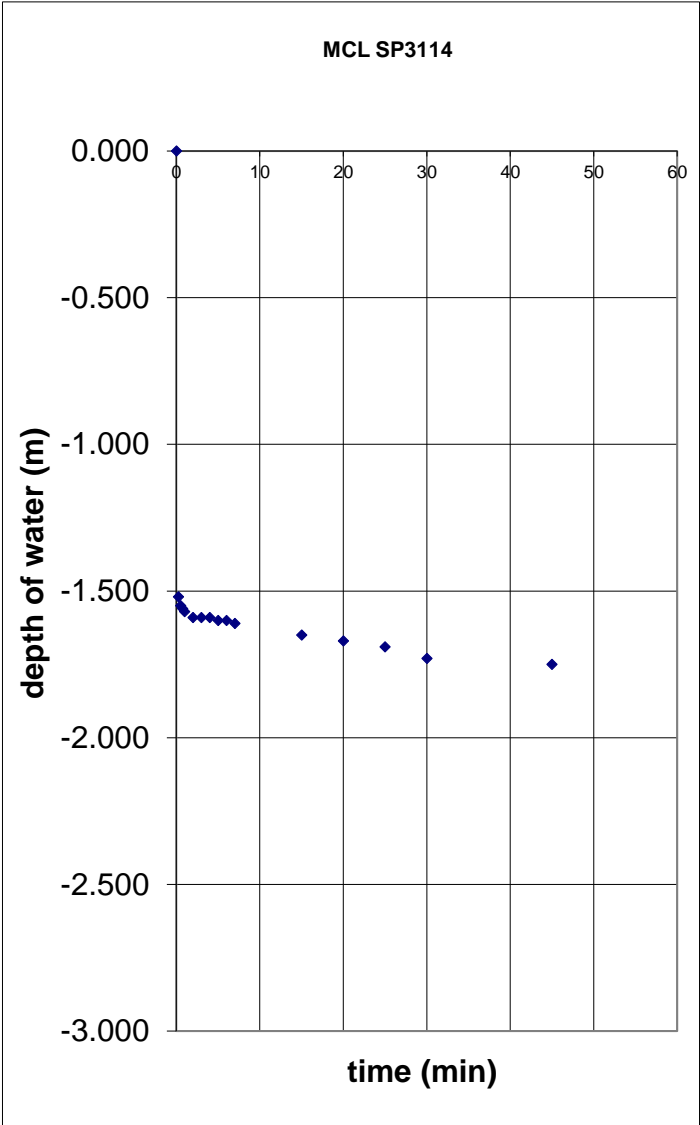
0.00-18.00m:Overburden.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 06/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 12.00m	Borehole No. MCL SP 3114
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 87.49
Diameter of Borehole: 96mm	Co-ordinates:
Diameter of Standpipe: 50mm	627952.7E
Response Zone: 5.50m -15.50m BGL	905978.7N
Initial ground water level: -1.75m	

time min	WL m
0	0.000
0.25	-1.520
0.5	-1.550
0.75	-1.560
1	-1.570
2	-1.590
3	-1.590
4	-1.590
5	-1.600
6	-1.600
7	-1.610
10	-1.630
15	-1.650
20	-1.670
25	-1.690
30	-1.730
45	-1.750



Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

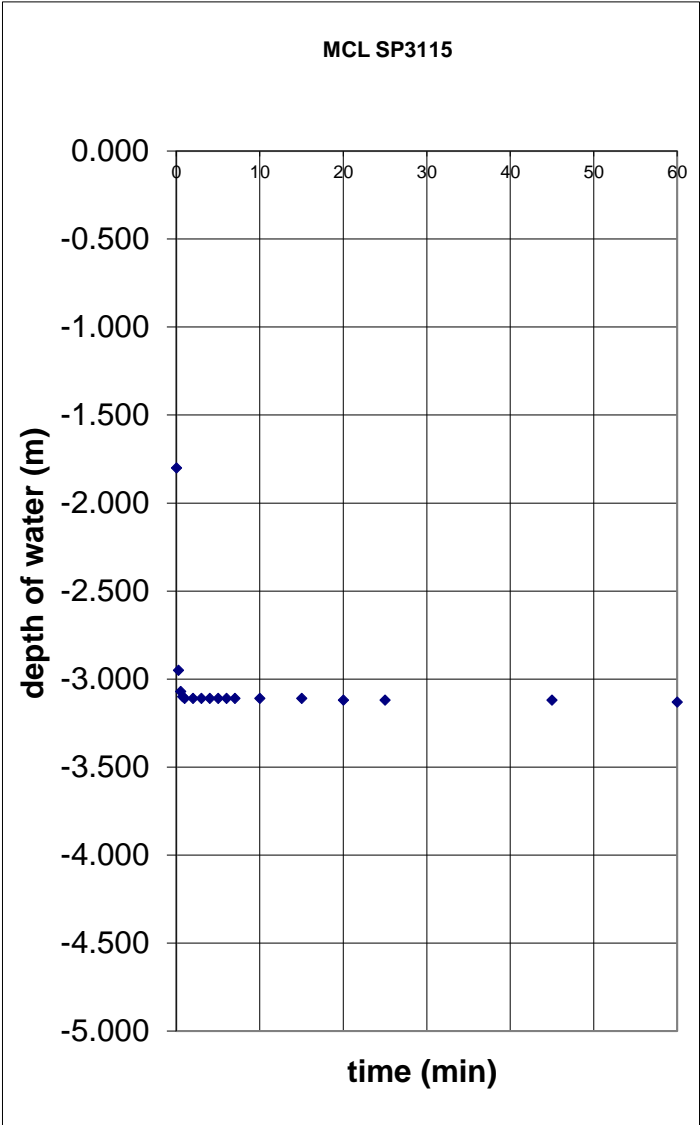
0.00-5.60m: Overburden.
5.60-12.00m: Bedrock.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 06/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 90.0m	Borehole No. MCL SP 3115
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 72.93
Diameter of Borehole: 96mm	Co-ordinates:
Diameter of Standpipe: 50mm	628157.7E
Response Zone: 10.00m -30.00m BGL	905577.2N
Initial ground water level: -3.13m	

time min	WL m
0	-1.800
0.25	-2.950
0.5	-3.070
0.75	-3.100
1	-3.110
2	-3.110
3	-3.110
4	-3.110
5	-3.110
6	-3.110
7	-3.110
10	-3.110
15	-3.110
20	-3.120
25	-3.120
45	-3.120
60	-3.130



Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.
Water egress faster than ability to fill standpipe.

Ground Conditions:

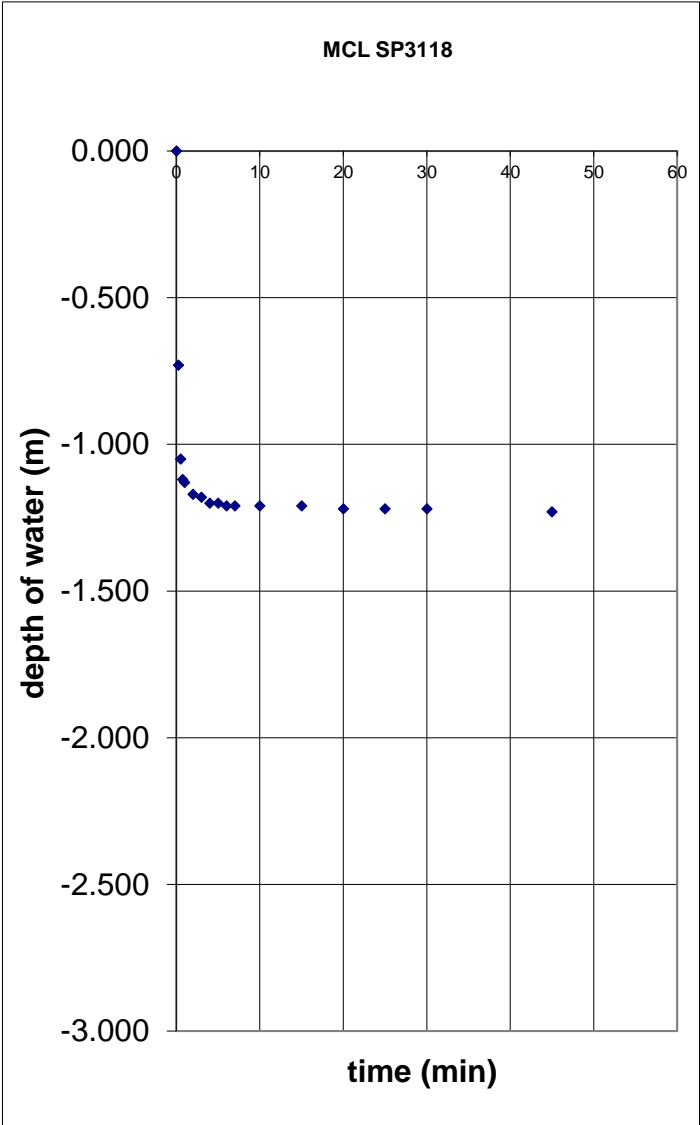
0.00-15.20m: Overburden.
15.20-83.80m: Weathered Bedrock.
83.80-90.00m; Bedrock.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 06/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 10.5m	Borehole No. MCL SP 3118
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 26.83
Diameter of Borehole: 96mm	Co-ordinates:
Diameter of Standpipe: 50mm	629422.5E
Response Zone: 3.50m -10.50m BGL	902961.5N
Initial ground water level: -1.23m	

time min	WL m
0	0.000
0.25	-0.730
0.5	-1.050
0.75	-1.120
1	-1.130
2	-1.170
3	-1.180
4	-1.200
5	-1.200
6	-1.210
7	-1.210
10	-1.210
15	-1.210
20	-1.220
25	-1.220
30	-1.220
45	-1.230



Remarks:

Test carried out in 50mm diameter standpipe.
Water readings recorded from ground level.

Ground Conditions:

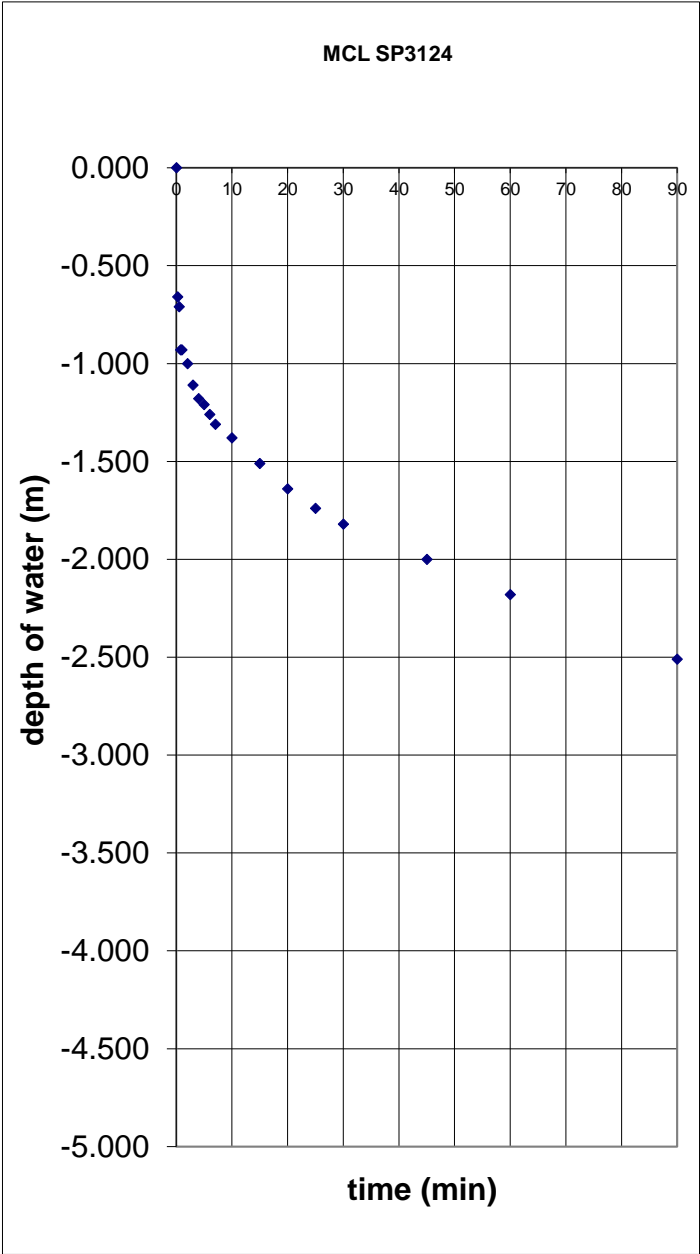
0.00-3.80m: Overburden.
3.80-10.50m: Weathered Bedrock.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 06/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 3.80m	Borehole No. MCL SP 3124
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 57.29
Diameter of Borehole: 200mm	Co-ordinates:
Diameter of Standpipe: 50mm	631806.2E
Response Zone: 0.70m -3.80m BGL	899267.3N
Initial ground water level: DRY	

time min	WL m
0	0.000
0.25	-0.660
0.5	-0.710
0.75	-0.930
1	-0.930
2	-1.000
3	-1.110
4	-1.180
5	-1.210
6	-1.260
7	-1.310
10	-1.380
15	-1.510
20	-1.640
25	-1.740
30	-1.820
45	-2.000
60	-2.180
90	-2.510



Remarks:

Test carried out in 50mm diameter standpipe in cable percussive borehole.
Water readings recorded from ground level.

Ground Conditions:

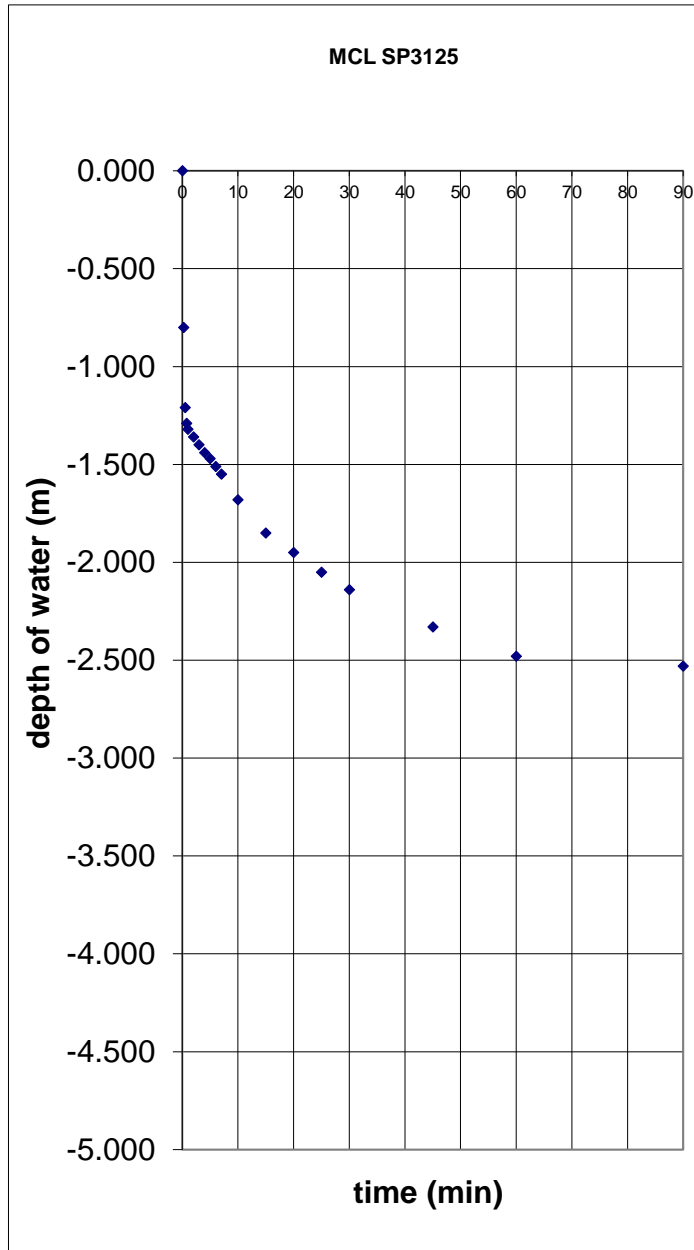
0.00-3.80m:Overburden.

IRISH DRILLING LTD. Loughrea Co. Galway Tel: (091) 841274 Fax: (091) 880 861	Contract: Ten-T, Section 3 Client: Irish Water Engineer: RPS Date: 06/07/2021 Tested by: PC
--	---

Falling Head Permeability Test

Bottom of Borehole (below ground level): 5.30m	Borehole No. MCL SP 3125
Bottom of Casing (below ground level): N/A	Ground Level (mOD): 64.704
Diameter of Borehole: 200mm	Co-ordinates:
Diameter of Standpipe: 50mm	631907E
Response Zone: 1.80m -5.30m BGL	899238.2N
Initial ground water level: -2.53	

time min	WL m
0	0.000
0.25	-0.800
0.5	-1.210
0.75	-1.290
1	-1.320
2	-1.360
3	-1.400
4	-1.440
5	-1.470
6	-1.510
7	-1.550
10	-1.680
15	-1.850
20	-1.950
25	-2.050
30	-2.140
45	-2.330
60	-2.480
90	-2.530



Remarks:

Test carried out in 50mm diameter standpipe in cable percussive borehole.
Water readings recorded from ground level.

Ground Conditions:

0.00-5.30m:Overburden.