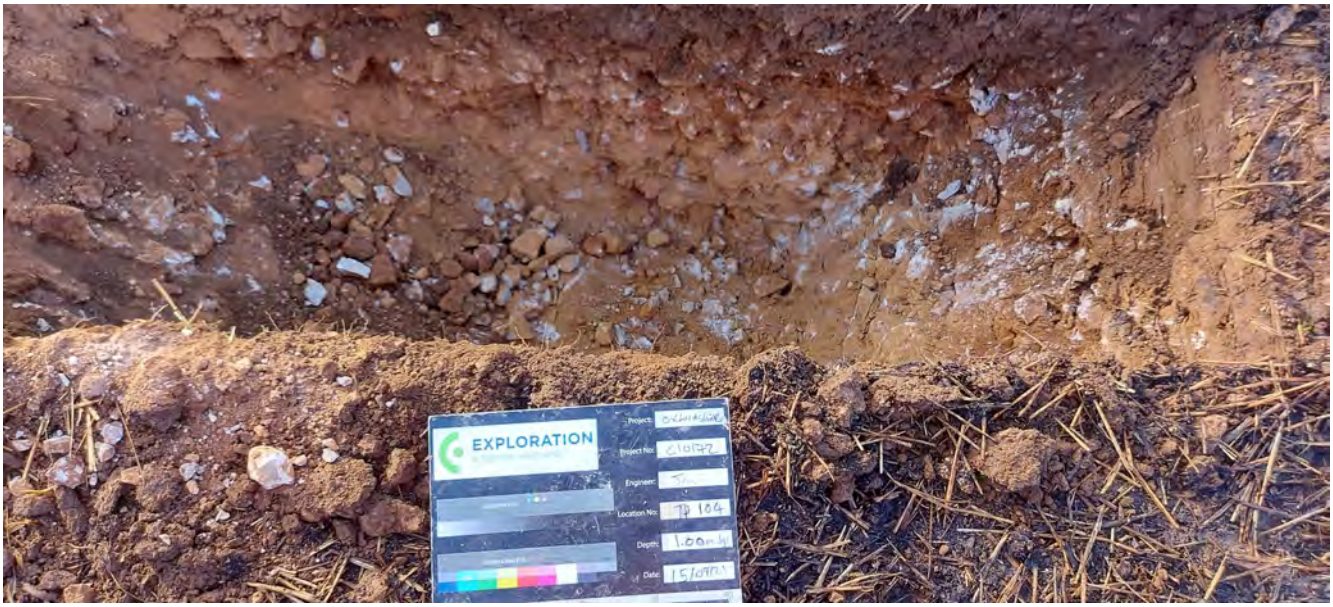
Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP103
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

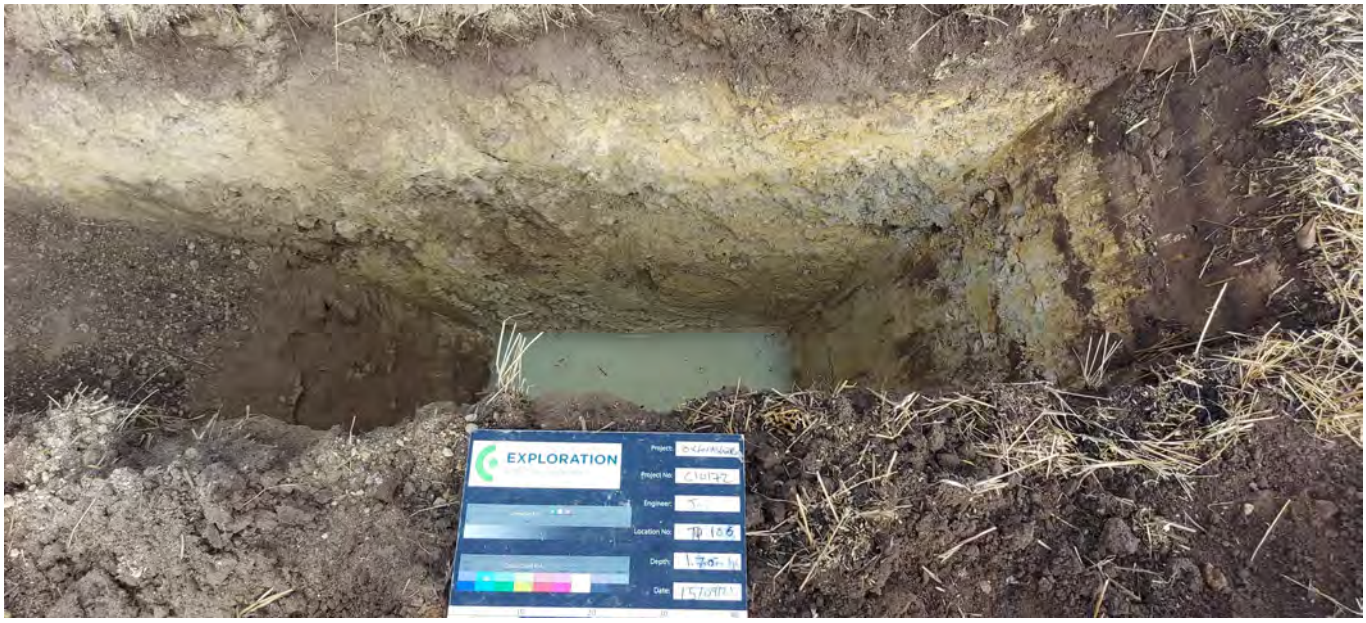


Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP104
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP105
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES



Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP106
Drawing:	C10172.TP_1
Date:	21/10/2021

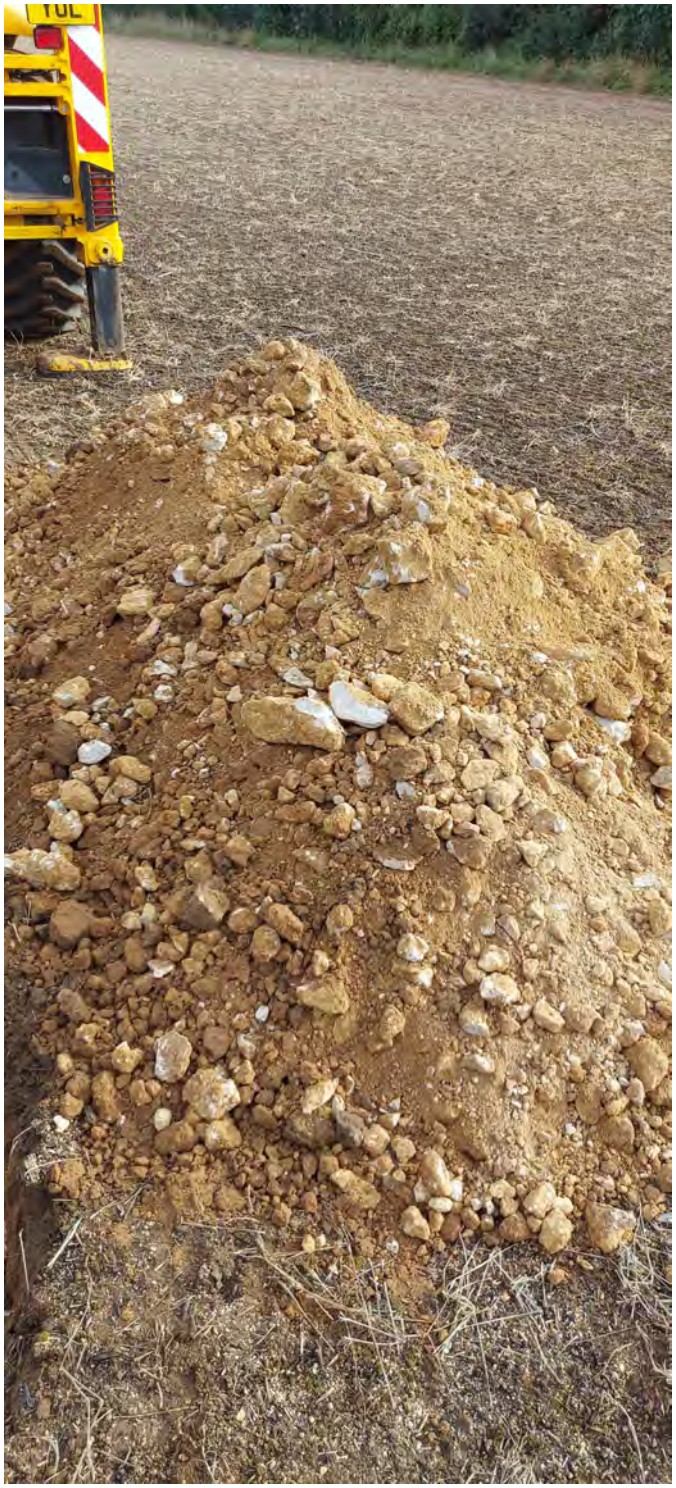
EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP107
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP108
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES



Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP109
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP110
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP111
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP112
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP113
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP114
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP115
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP116
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP117
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP118
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP119
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP120
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP121
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP122
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP123
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP124
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP125
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP126
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP127
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP128
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP129
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP130
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP131
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP132
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP133
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP134
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP135
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP136
Drawing:	C10172.TP_1
Date:	21/10/2021

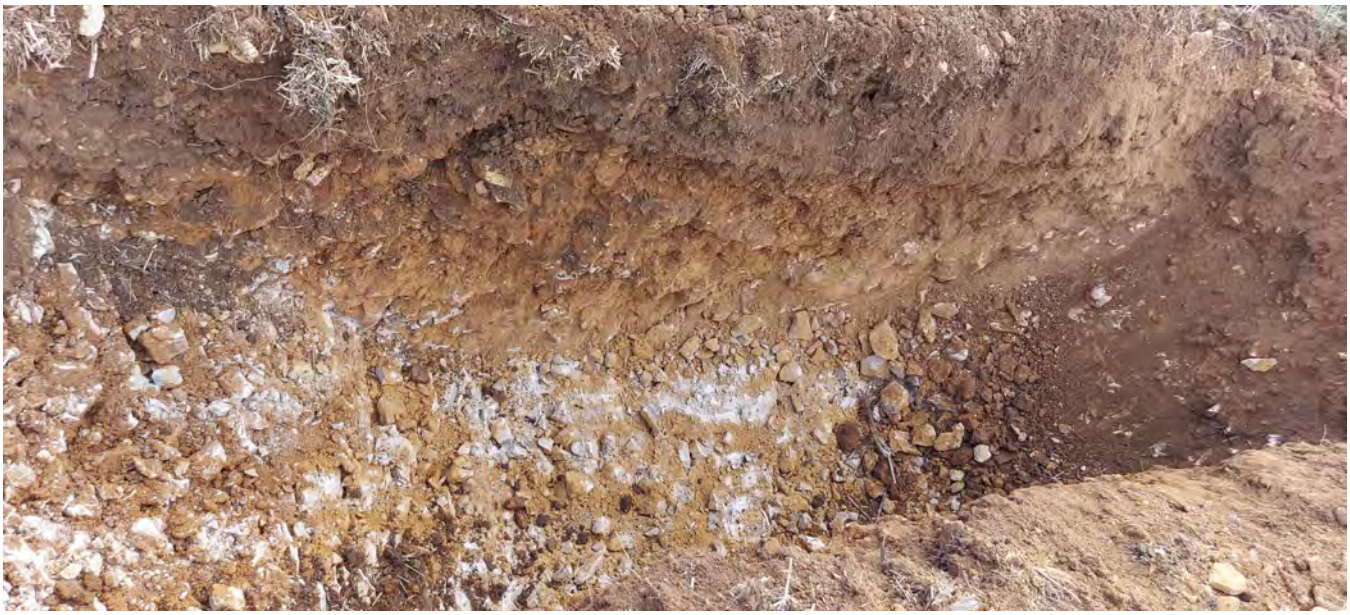
EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP137
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP138
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES



Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP139
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP140
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP141
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP142
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP143
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP144
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP145
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP146
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP147
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP148
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP149
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP150
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP151
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP152
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP153
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP154
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP155
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP156
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	TP157
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP158
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP159
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP160
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP163
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	TP188
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA01
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd

Title:	SA02
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA03
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA04
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA05
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA06
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA07
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA08
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA09
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION & TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA10
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

Contract:	Oxfordshire
Contract No.:	C10172
Client:	BWB Consulting Ltd
Title:	SA11
Drawing:	C10172.TP_1
Date:	21/10/2021

EXPLORATION
& TESTING ASSOCIATES

EXPLORATION
& TESTING ASSOCIATES

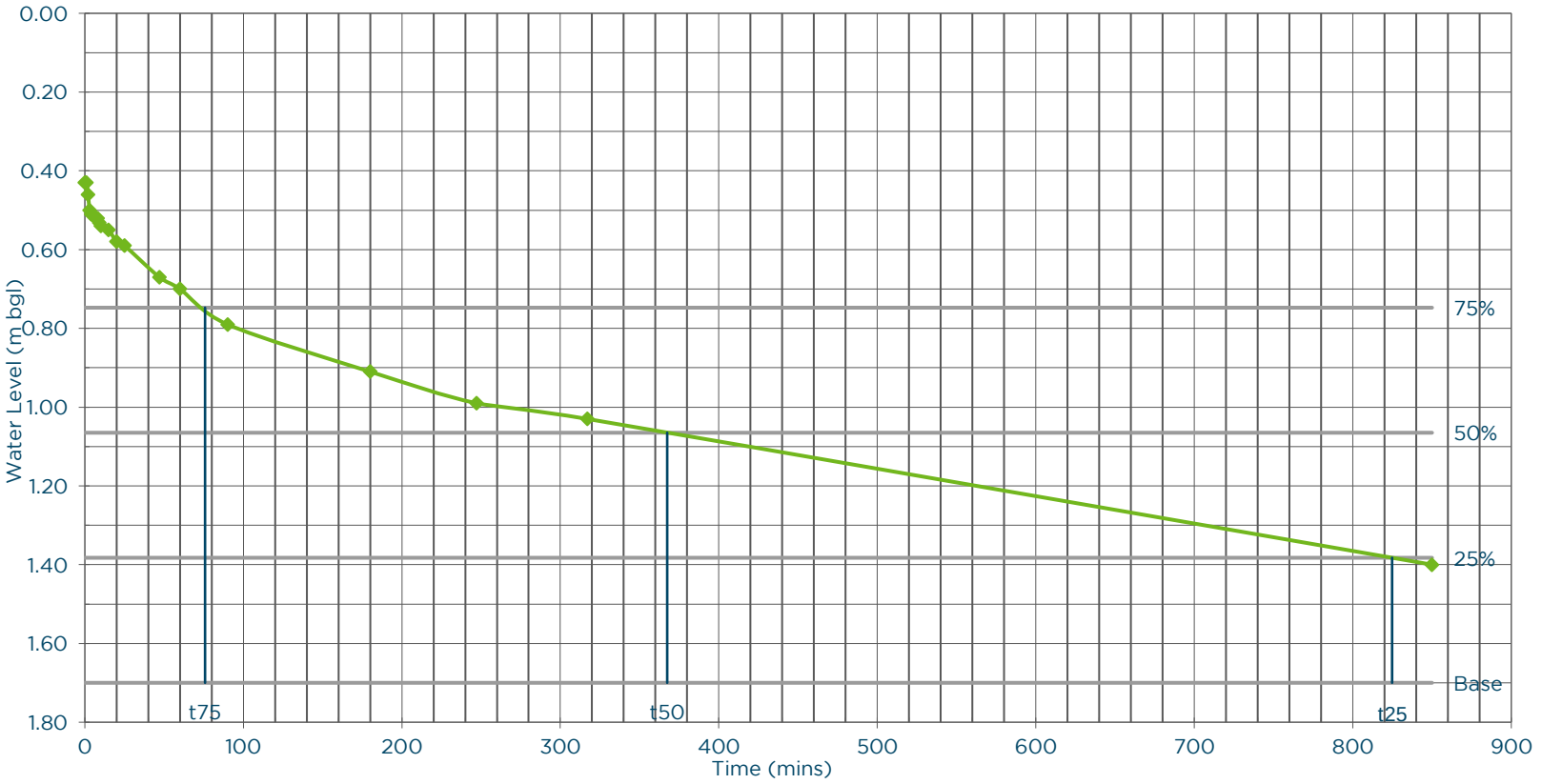
APPENDIX 3: PERMEABILITY TESTING RESULTS

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB
Date:	21/09/2021

Pit Information	
Location ID:	SA01
Depth (m):	1.70
Width (m):	0.70
Length (m):	2.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.43
1.0	0.43
2.0	0.46
3.0	0.50
4.0	0.51
5.0	0.51
6.0	0.52
7.0	0.52
8.0	0.52
9.0	0.53
10.0	0.54
15.0	0.55
20.0	0.58
25.0	0.59
47.0	0.67
60.0	0.70
90.0	0.79
180.0	0.91
247.0	0.99
317.0	1.03
850.0	*1.40*

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	9:13
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.70
Effective Storage Depth (m)	0.43
Effective Drop (m)	1.27
75% Effective Depth (m)	0.75
50% Effective Depth (m)	1.07
25% Effective Depth (m)	1.38
t_{75} (min)	75.83
t_{50} (min)	367.42
t_{25} (min)	824.79
V_{p75-25}	1.20
Adjusted V_p for Gravel Fill	1.20
a_{s50}	6.21
t_{p75-25}	748.96
Results	
Soil Infiltration Rate (m/s)	4.30E-06
Soil Infiltration Rate (mm/hr)	1.55E+01

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

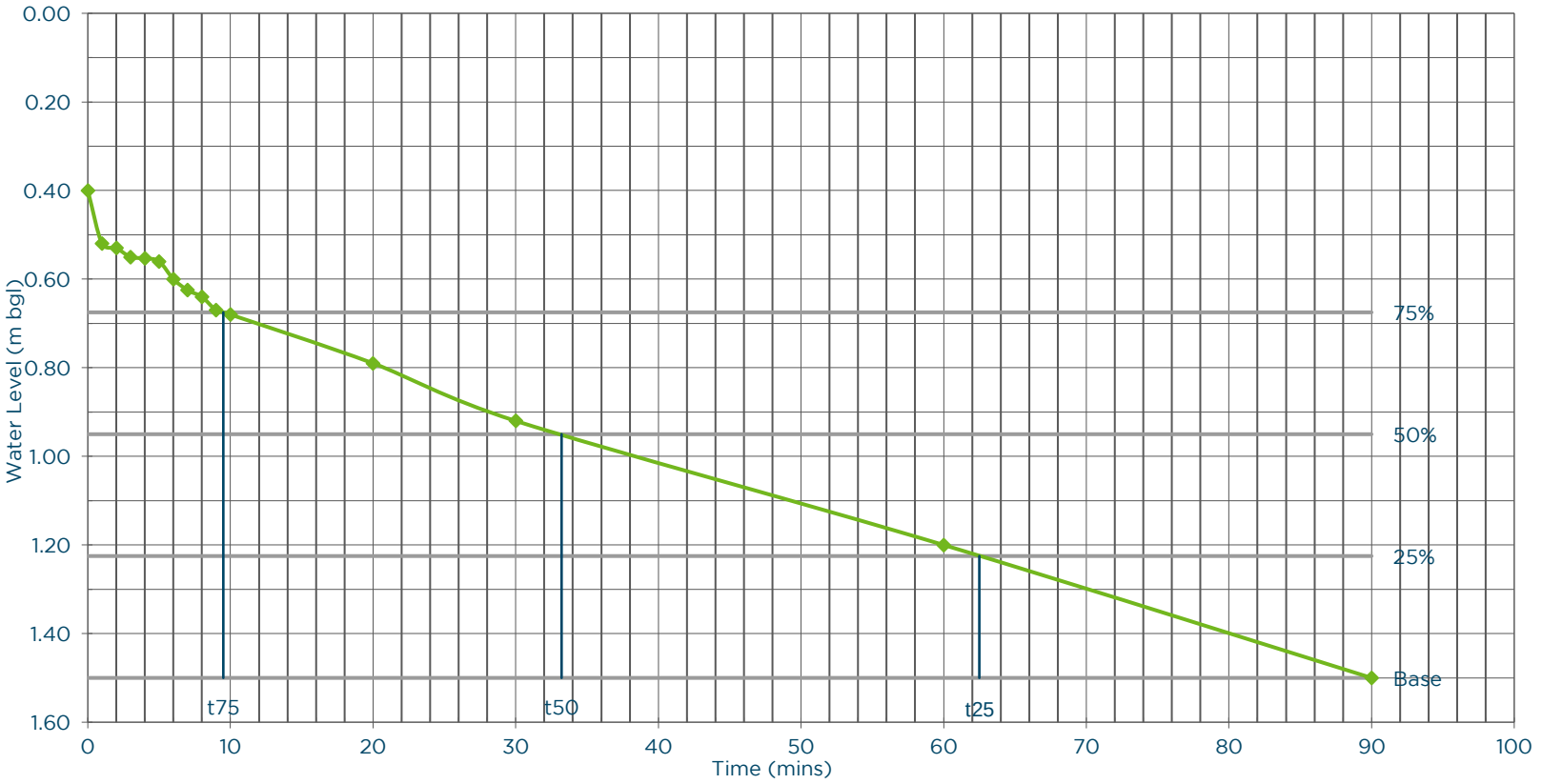
At 7 minutes small pit collapse on the south side. At 20 minutes small central collapse. Extrapolated from 317mins

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB
Date:	21/09/2021

Pit Information	
Location ID:	SA02
Depth (m):	1.50
Width (m):	0.70
Length (m):	2.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.40
1	0.52
2	0.53
3	0.55
4	0.55
5	0.56
6	0.60
7	0.63
8	0.64
9	0.67
10	0.68
20	0.79
30	0.92
60	1.20
90	1.50

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	11:06
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.50
Effective Storage Depth (m)	0.40
Effective Drop (m)	1.10
75% Effective Depth (m)	0.68
50% Effective Depth (m)	0.95
25% Effective Depth (m)	1.23
t_{75} (min)	9.50
t_{50} (min)	33.21
t_{25} (min)	62.50
V_{p75-25}	1.04
Adjusted V_p for Gravel Fill	1.04
a_{s50}	5.63
t_{p75-25}	53.00
Results	
Soil Infiltration Rate (m/s)	5.81E-05
Soil Infiltration Rate (mm/hr)	2.09E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

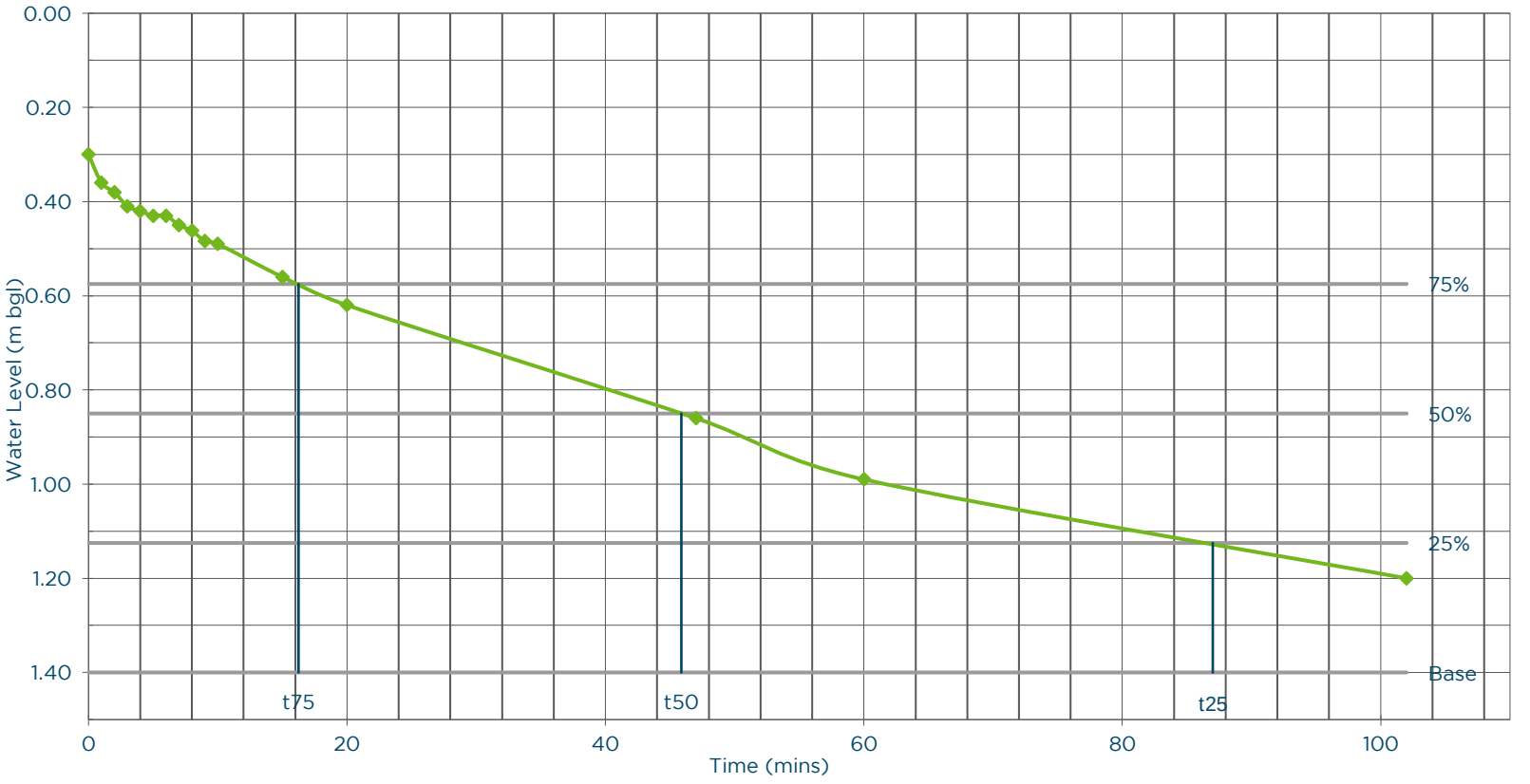
Small side wall collapse at 10 minutes. Fully drained by 90 minutes.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB
Date:	21/09/2021

Pit Information	
Location ID:	SA02
Depth (m):	1.40
Width (m):	0.70
Length (m):	2.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.30
1	0.36
2	0.38
3	0.41
4	0.42
5	0.43
6	0.43
7	0.45
8	0.46
9	0.48
10	0.49
15	0.56
20	0.62
47	0.86
60	0.99
102	1.20

Test Information and Calculation	
Test Reference/Number:	2
Test Start Time:	12:38
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.40
Effective Storage Depth (m)	0.30
Effective Drop (m)	1.10
75% Effective Depth (m)	0.58
50% Effective Depth (m)	0.85
25% Effective Depth (m)	1.13
t_{75} (min)	16.25
t_{50} (min)	45.88
t_{25} (min)	87.00
V_{p75-25}	1.04
Adjusted V_p for Gravel Fill	1.04
a_{s50}	5.63
t_{p75-25}	70.75
Results	
Soil Infiltration Rate (m/s)	4.35E-05
Soil Infiltration Rate (mm/hr)	1.57E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

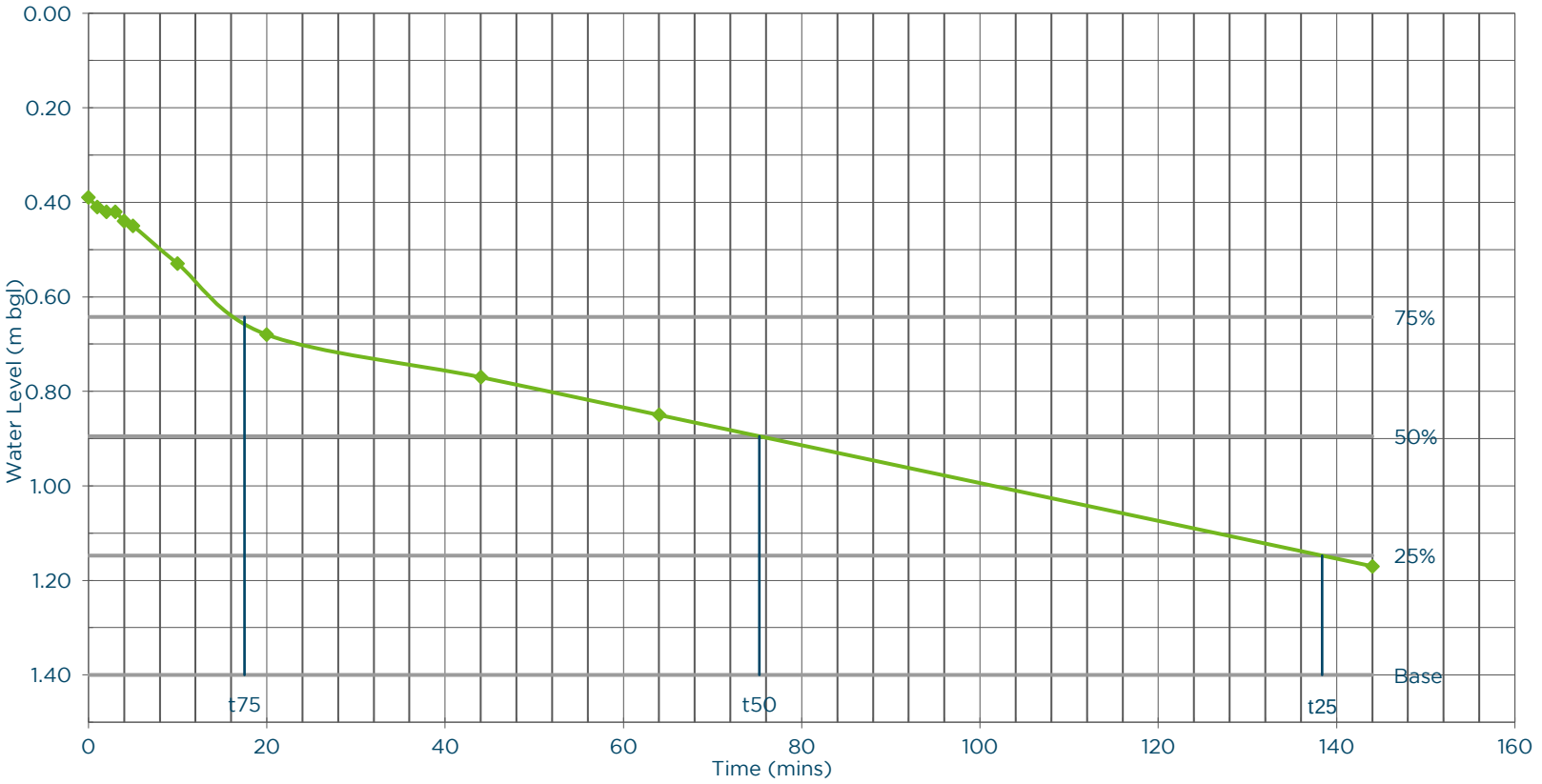
Base depth reduced to 1.4m following collapse during Test 1.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB
Date:	21/09/2021

Pit Information	
Location ID:	SA02
Depth (m):	1.40
Width (m):	0.70
Length (m):	2.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.39
1	0.41
2	0.42
3	0.42
4	0.44
5	0.45
10	0.53
20	0.68
44	0.77
64	0.85
144.0	*1.17*

Test Information and Calculation	
Test Reference/Number:	3
Test Start Time:	14:26
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.40
Effective Storage Depth (m)	0.39
Effective Drop (m)	1.01
75% Effective Depth (m)	0.64
50% Effective Depth (m)	0.90
25% Effective Depth (m)	1.15
t_{75} (min)	17.50
t_{50} (min)	75.25
t_{25} (min)	138.38
V_{p75-25}	0.95
Adjusted V_p for Gravel Fill	0.95
a_{s50}	5.32
t_{p75-25}	120.88
Results	
Soil Infiltration Rate (m/s)	2.47E-05
Soil Infiltration Rate (mm/hr)	8.90E+01

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

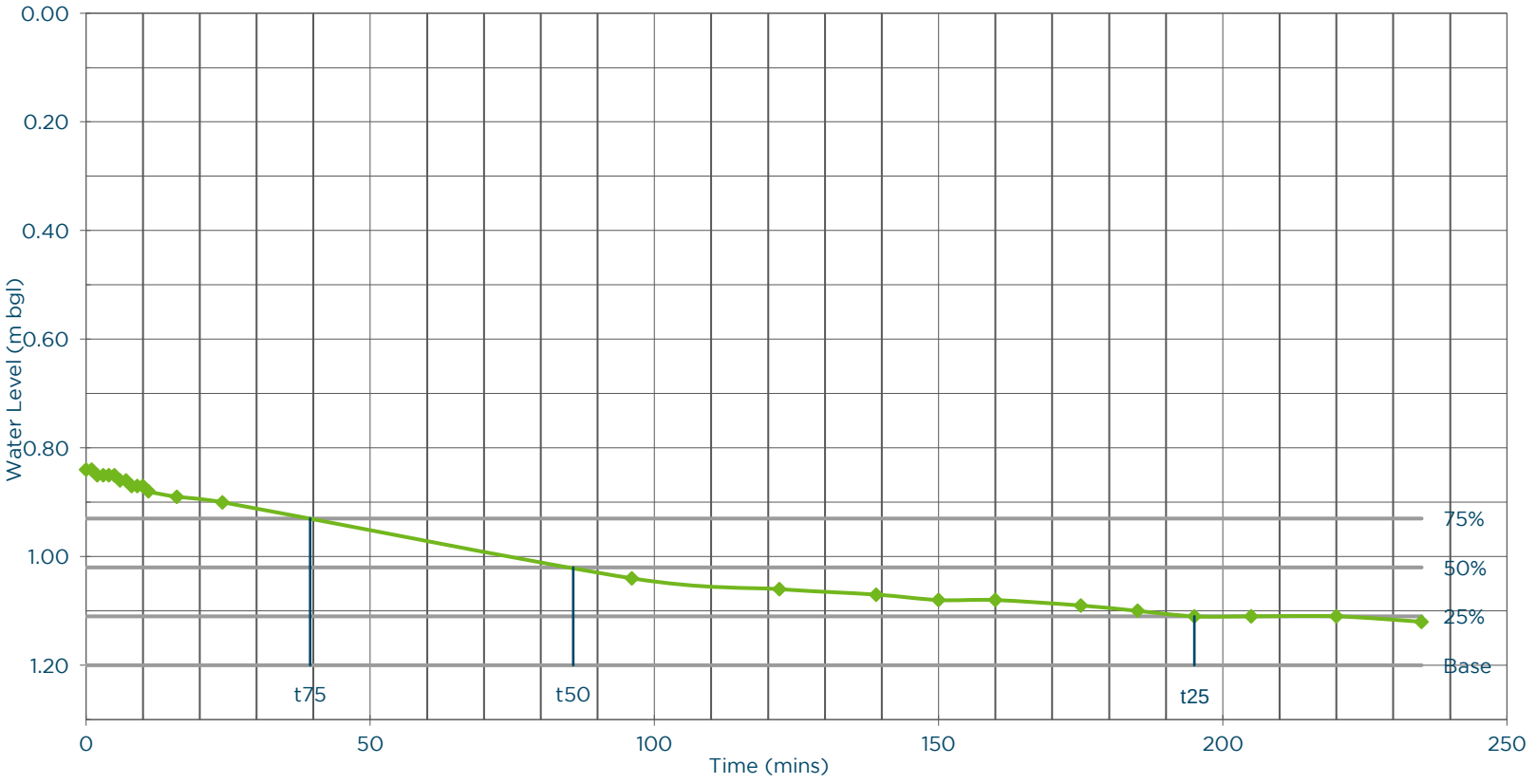
Test not completed due to time constraints. Italicised results are extrapolated values.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB
Date:	22/09/2021

Pit Information	
Location ID:	SA03
Depth (m):	1.20
Width (m):	0.70
Length (m):	2.70
Depth to Standing Water (m)	1.20



Time (min)	Depth (m)
0	0.84
1	0.84
2	0.85
3	0.85
4	0.85
5	0.85
6	0.86
7	0.86
8	0.87
9	0.87
10	0.87
11	0.88
16	0.89
24	0.90
96	1.04
122	1.06
139	1.07
150	1.08
160	1.08
175	1.09
185	1.10
195	1.11
205	1.11
220	1.11
235	1.12

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	8:54
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.20
Effective Storage Depth (m)	0.84
Effective Drop (m)	0.36
75% Effective Depth (m)	0.93
50% Effective Depth (m)	1.02
25% Effective Depth (m)	1.11
t_{75} (min)	39.43
t_{50} (min)	85.71
t_{25} (min)	195.00
V_{p75-25}	0.34
Adjusted V_p for Gravel Fill	0.34
a_{s50}	3.11
t_{p75-25}	155.57
Results	
Soil Infiltration Rate (m/s)	1.17E-05
Soil Infiltration Rate (mm/hr)	4.21E+01

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

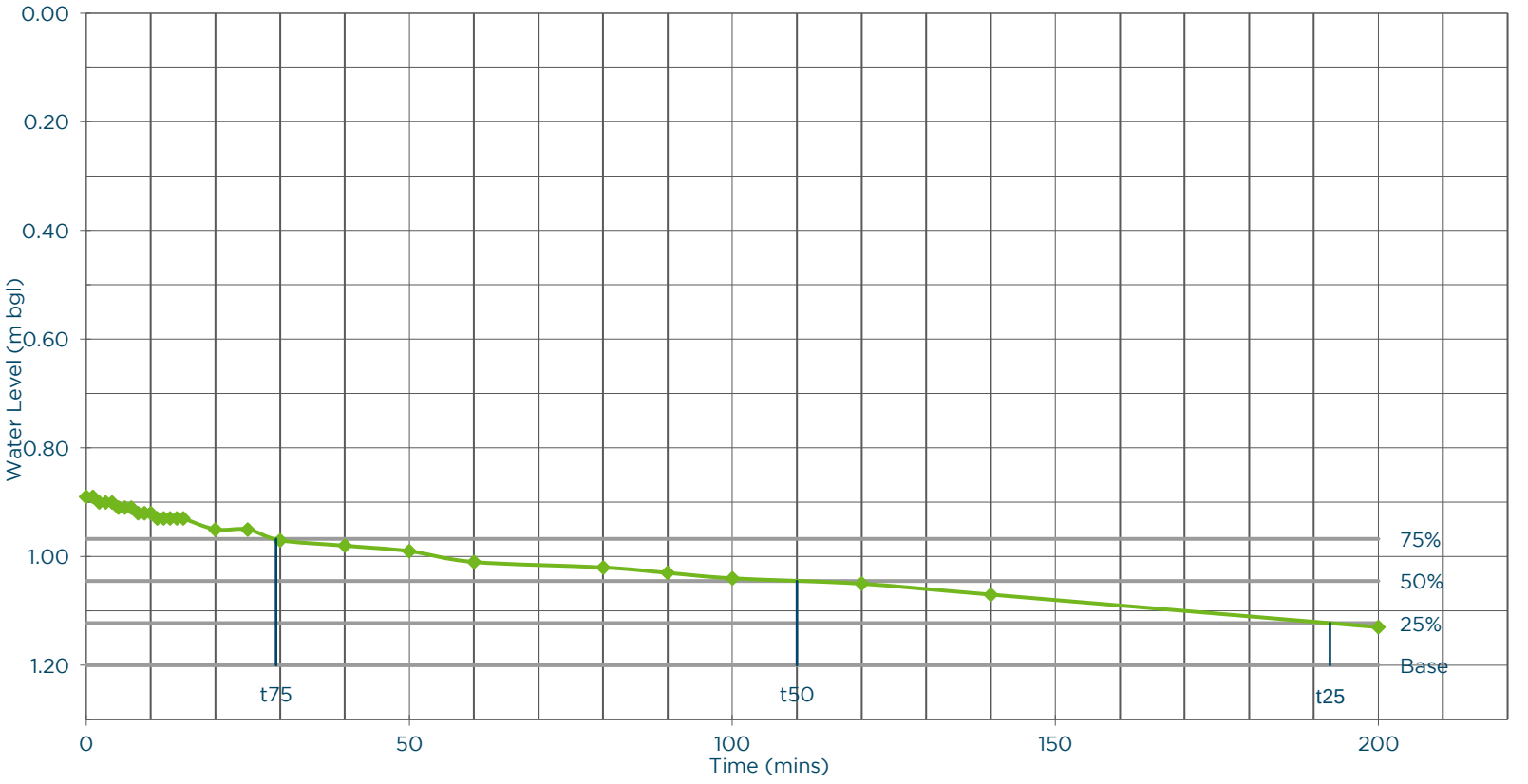
Perched water at 1.20m below ground level.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB
Date:	22/09/2021

Pit Information	
Location ID:	SA03
Depth (m):	1.20
Width (m):	0.70
Length (m):	2.70
Depth to Standing Water (m)	1.20



Time (min)	Depth (m)
0	0.89
1	0.89
2	0.90
3	0.90
4	0.90
5	0.91
6	0.91
7	0.91
8	0.92
9	0.92
10	0.92
11	0.93
12	0.93
13	0.93
14	0.93
15	0.93
20	0.95
25	0.95
30	0.97
40	0.98
50	0.99
60	1.01
80	1.02
90	1.03
100	1.04
120.0	1.05
140.0	1.07
200.0	*1.13*

Test Information and Calculation	
Test Reference/Number:	2
Test Start Time:	13:10
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.20
Effective Storage Depth (m)	0.89
Effective Drop (m)	0.31
75% Effective Depth (m)	0.97
50% Effective Depth (m)	1.05
25% Effective Depth (m)	1.12
t_{75} (min)	29.38
t_{50} (min)	110.00
t_{25} (min)	192.50
V_{p75-25}	0.29
Adjusted V_p for Gravel Fill	0.29
a_{s50}	2.94
t_{p75-25}	163.13
Results	
Soil Infiltration Rate (m/s)	1.02E-05
Soil Infiltration Rate (mm/hr)	3.66E+01

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

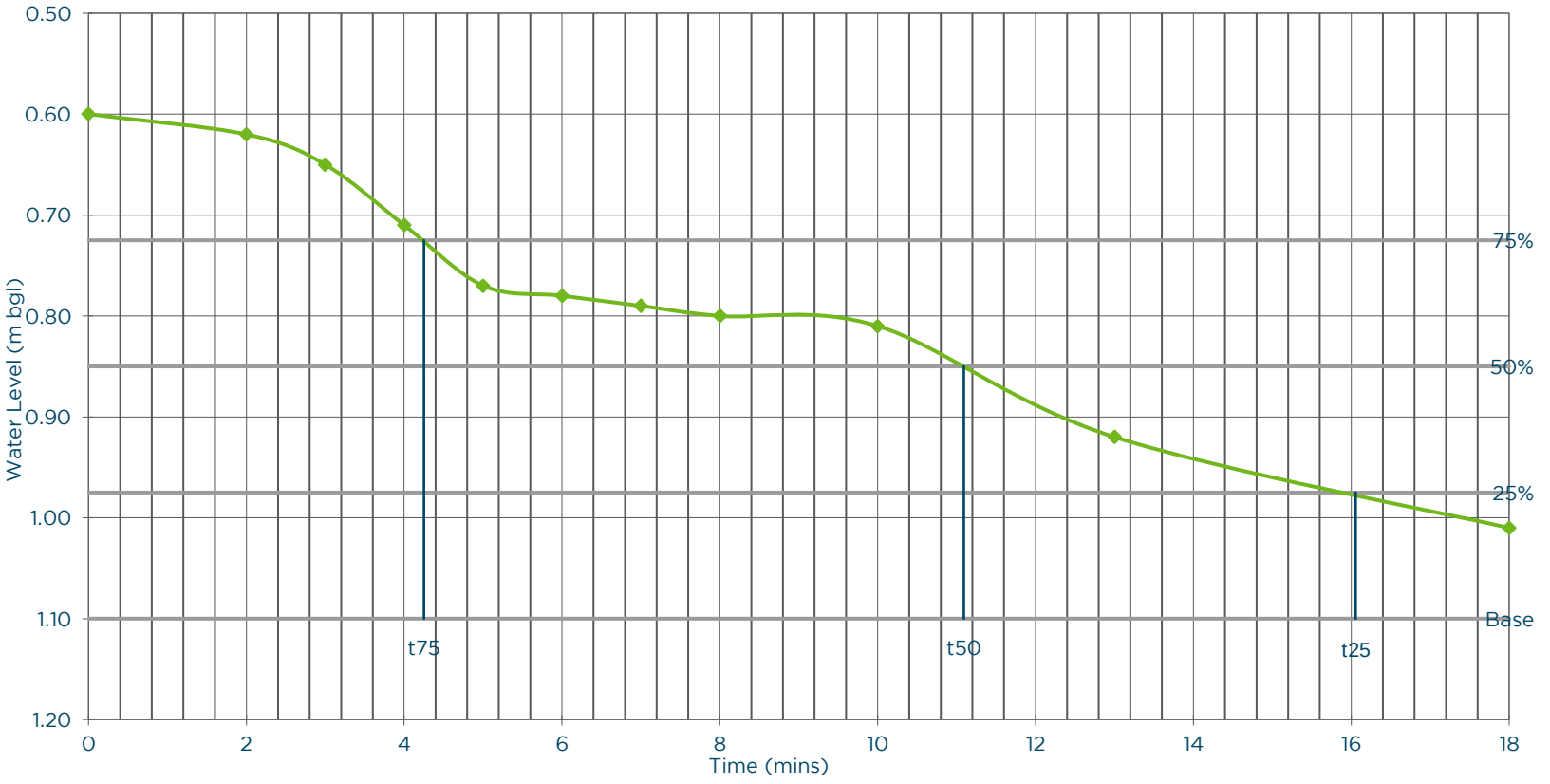
Partial pit collapse at 7 minutes and 20 minutes. Test not completed due to time constraints. Extrapolated values are italicised.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	14/09/2021

Pit Information	
Location ID:	SA04
Depth (m):	1.10
Width (m):	0.60
Length (m):	1.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.60
2.0	0.62
3.0	0.65
4.0	0.71
5.0	0.77
6.0	0.78
7.0	0.79
8.0	0.80
10.0	0.81
13.0	0.92
18.0	1.01

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	12:50
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.10
Effective Storage Depth (m)	0.60
Effective Drop (m)	0.50
75% Effective Depth (m)	0.73
50% Effective Depth (m)	0.85
25% Effective Depth (m)	0.98
t_{75} (min)	4.25
t_{50} (min)	11.09
t_{25} (min)	16.06
V_{p75-25}	0.26
Adjusted V_p for Gravel Fill	0.26
a_{s50}	2.17
t_{p75-25}	11.81
Results	
Soil Infiltration Rate (m/s)	1.66E-04
Soil Infiltration Rate (mm/hr)	5.97E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

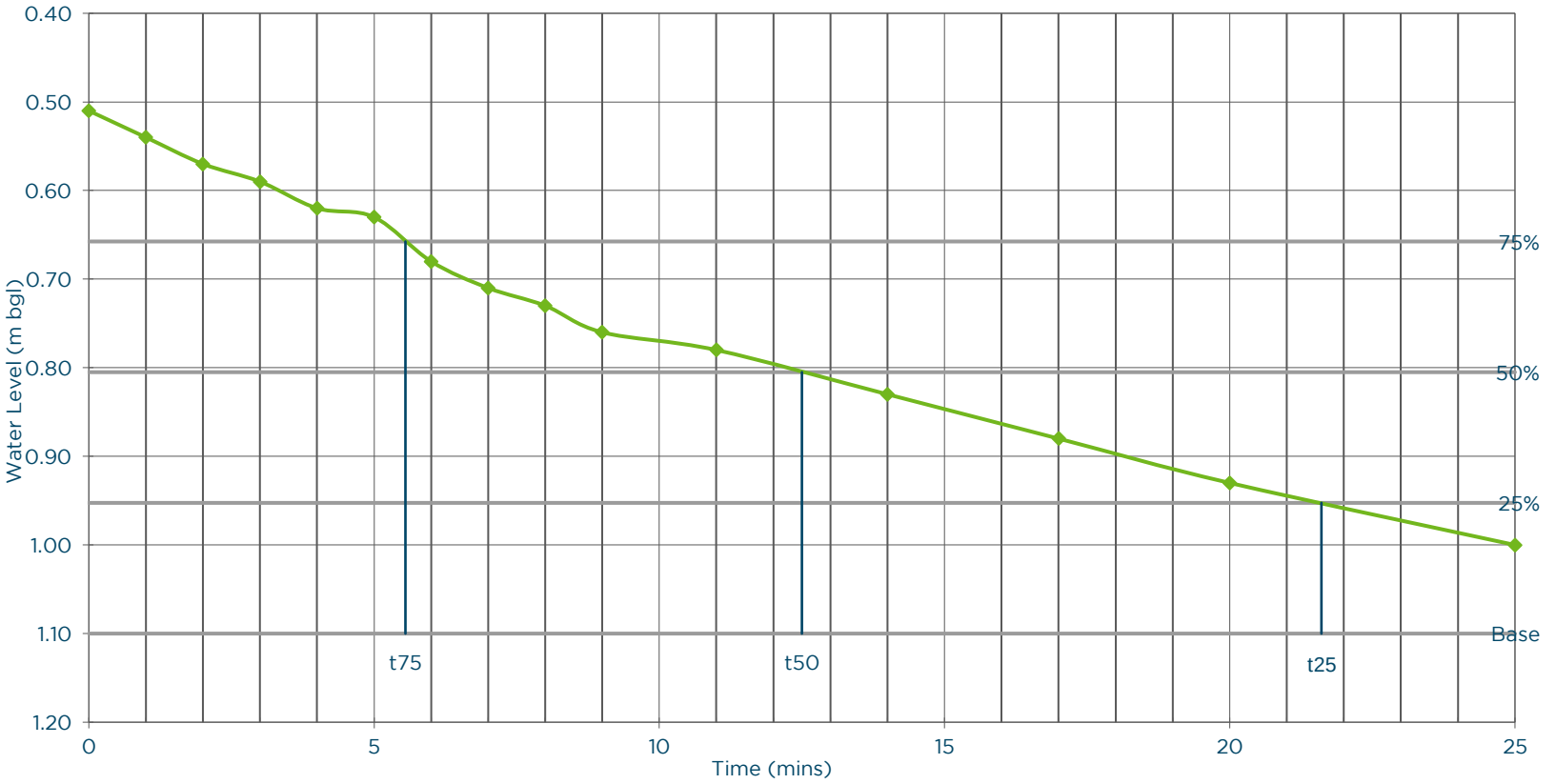
Comments

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	14/09/2021

Pit Information	
Location ID:	SA04
Depth (m):	1.10
Width (m):	0.60
Length (m):	1.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.51
1.0	0.54
2.0	0.57
3.0	0.59
4.0	0.62
5.0	0.63
6.0	0.68
7.0	0.71
8.0	0.73
9.0	0.76
11.0	0.78
14.0	0.83
17.0	0.88
20.0	0.93
25.0	1.00

Test Information and Calculation	
Test Reference/Number:	2
Test Start Time:	13:11
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.10
Effective Storage Depth (m)	0.51
Effective Drop (m)	0.59
75% Effective Depth (m)	0.66
50% Effective Depth (m)	0.81
25% Effective Depth (m)	0.95
t_{75} (min)	5.55
t_{50} (min)	12.50
t_{25} (min)	21.61
V_{p75-25}	0.30
Adjusted V_p for Gravel Fill	0.30
a_{s50}	2.38
t_{p75-25}	16.06
Results	
Soil Infiltration Rate (m/s)	1.31E-04
Soil Infiltration Rate (mm/hr)	4.73E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

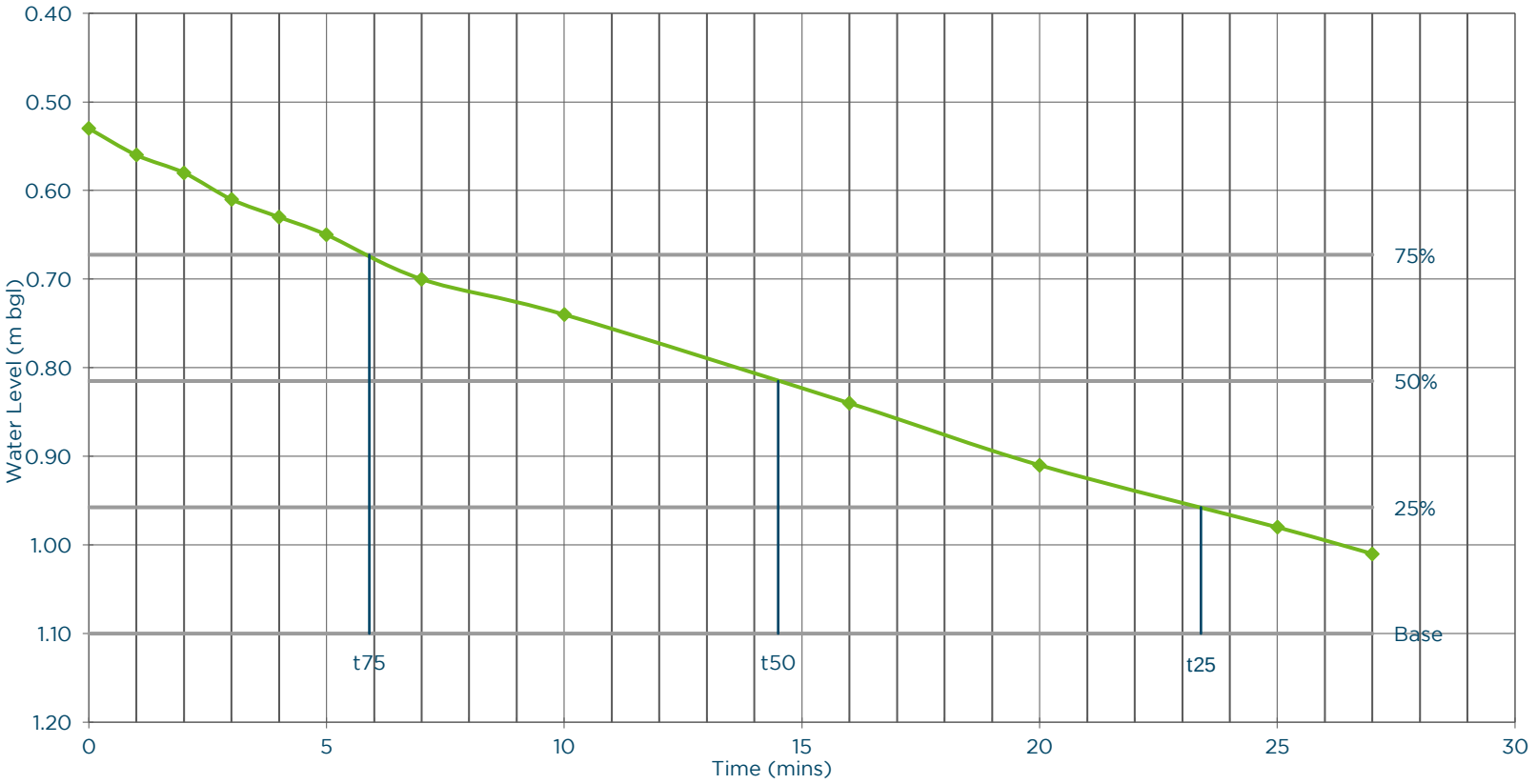
Comments

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	14/09/2021

Pit Information	
Location ID:	SA04
Depth (m):	1.10
Width (m):	0.60
Length (m):	1.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.53
1.0	0.56
2.0	0.58
3.0	0.61
4.0	0.63
5.0	0.65
7.0	0.70
10.0	0.74
16.0	0.84
20.0	0.91
25.0	0.98
27.0	1.01

Test Information and Calculation	
Test Reference/Number:	3
Test Start Time:	13:40
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.10
Effective Storage Depth (m)	0.53
Effective Drop (m)	0.57
75% Effective Depth (m)	0.67
50% Effective Depth (m)	0.82
25% Effective Depth (m)	0.96
t_{75} (min)	5.90
t_{50} (min)	14.50
t_{25} (min)	23.39
V_{p75-25}	0.29
Adjusted V_p for Gravel Fill	0.29
a_{s50}	2.33
t_{p75-25}	17.49
Results	
Soil Infiltration Rate (m/s)	1.19E-04
Soil Infiltration Rate (mm/hr)	4.28E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

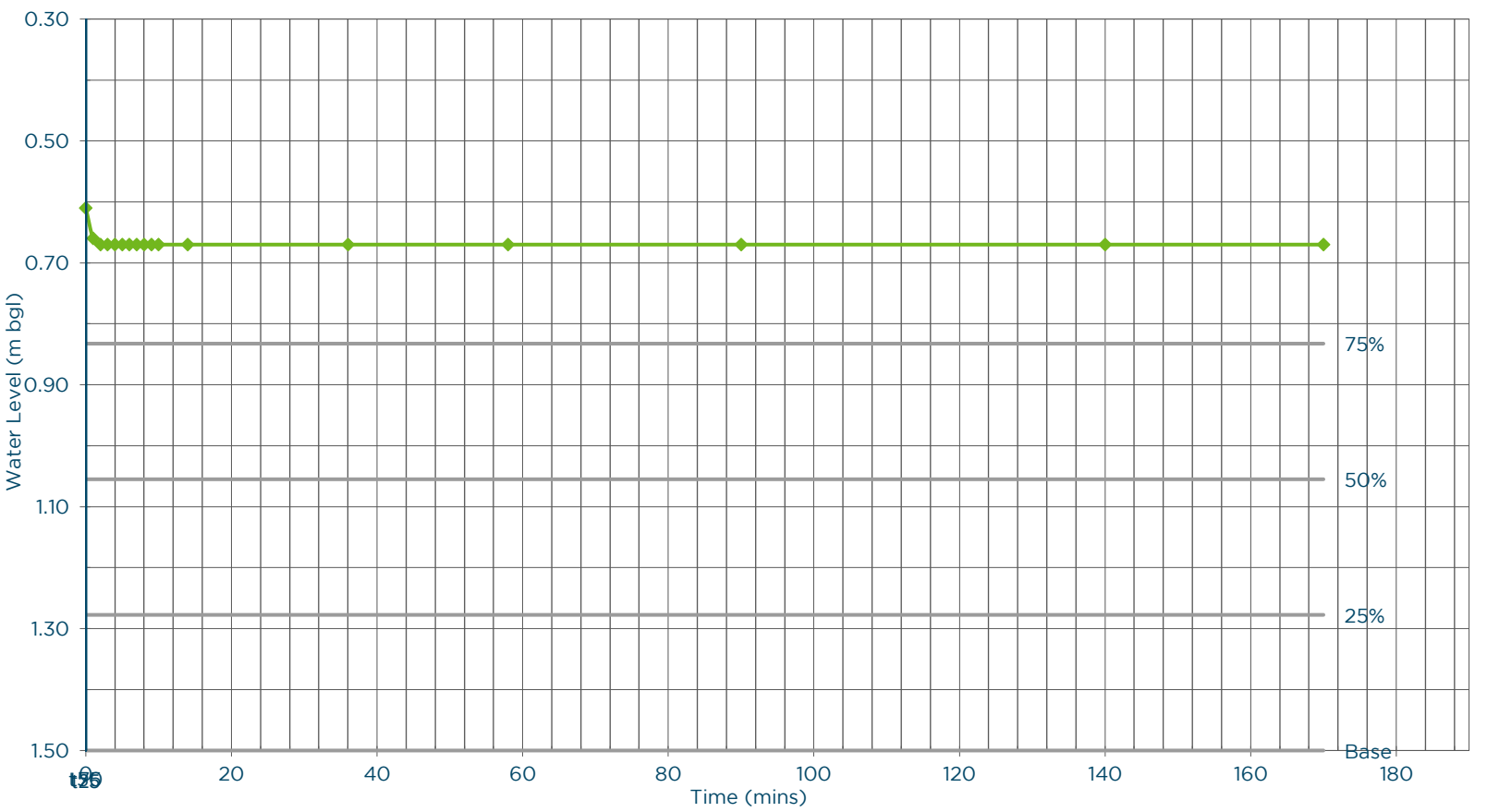
Comments

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	21/09/2021

Pit Information	
Location ID:	SA05
Depth (m):	1.50
Width (m):	0.60
Length (m):	2.80
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.61
1	0.66
2	0.67
3	0.67
4	0.67
5	0.67
6	0.67
7	0.67
8	0.67
9	0.67
10	0.67
14	0.67
36	0.67
58	0.67
90	0.67
140	0.67
170	0.67

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	09:13
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.50
Effective Storage Depth (m)	0.61
Effective Drop (m)	0.89
75% Effective Depth (m)	0.83
50% Effective Depth (m)	1.06
25% Effective Depth (m)	1.28
t_{75} (min)	0.00
t_{50} (min)	0.00
t_{25} (min)	0.00
V_{p75-25}	0.75
Adjusted V_p for Gravel Fill	0.75
a_{s50}	4.71
t_{p75-25}	0.00
Results	
Soil Infiltration Rate (m/s)	
Soil Infiltration Rate (mm/hr)	

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

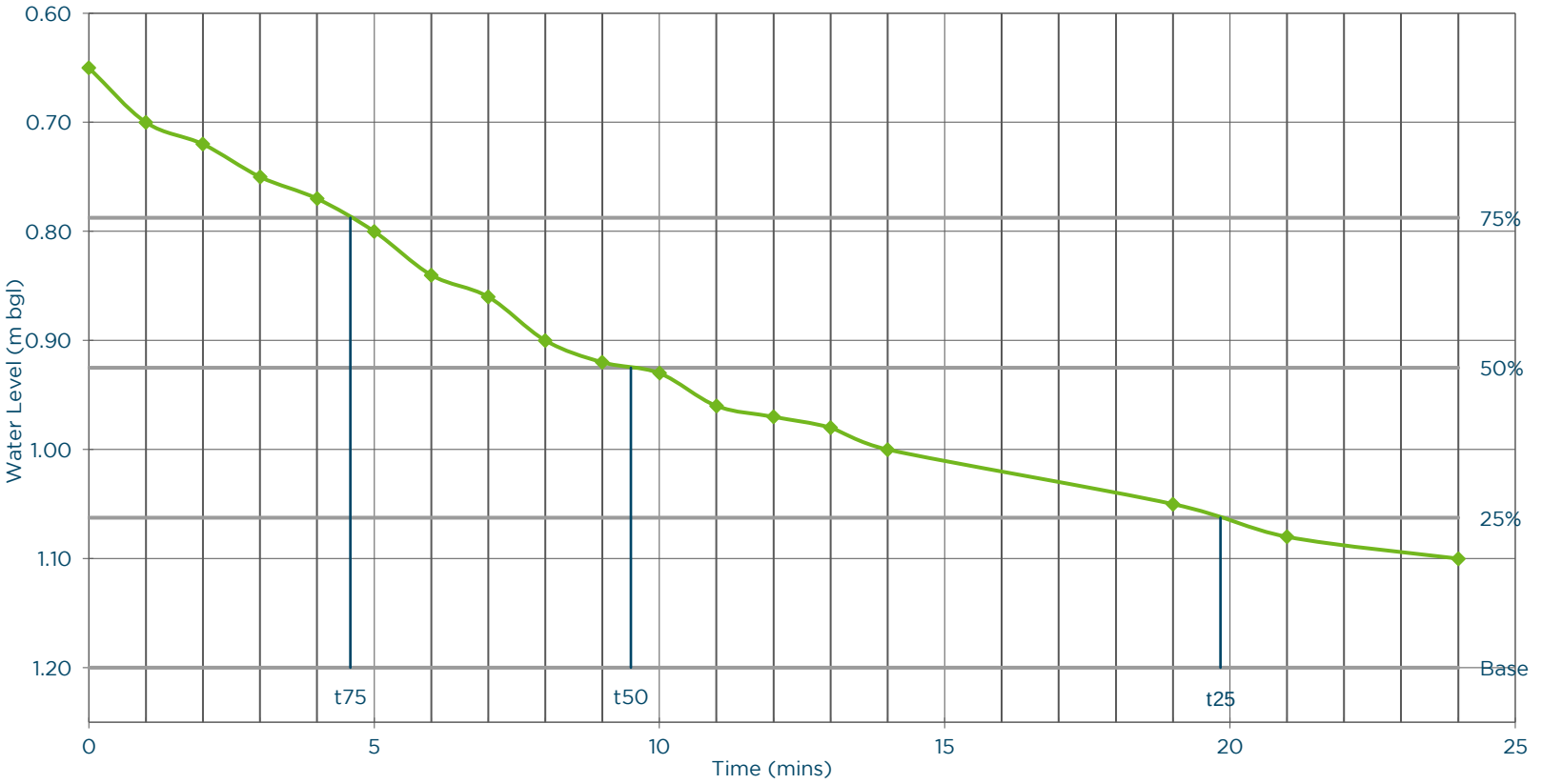
No drainage, test stopped after 3hrs.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	14/09/2021

Pit Information	
Location ID:	SA06
Depth (m):	1.20
Width (m):	0.60
Length (m):	1.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.65
1.0	0.70
2.0	0.72
3.0	0.75
4.0	0.77
5.0	0.80
6.0	0.84
7.0	0.86
8.0	0.90
9.0	0.92
10.0	0.93
11.0	0.96
12.0	0.97
13.0	0.98
14.0	1.00
19.0	1.05
21.0	1.08
24.0	1.10

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	10:30
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.20
Effective Storage Depth (m)	0.65
Effective Drop (m)	0.55
75% Effective Depth (m)	0.79
50% Effective Depth (m)	0.93
25% Effective Depth (m)	1.06
t_{75} (min)	4.58
t_{50} (min)	9.50
t_{25} (min)	19.83
V_{p75-25}	0.28
Adjusted V_p for Gravel Fill	0.28
a_{s50}	2.29
t_{p75-25}	15.25
Results	
Soil Infiltration Rate (m/s)	1.34E-04
Soil Infiltration Rate (mm/hr)	4.83E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

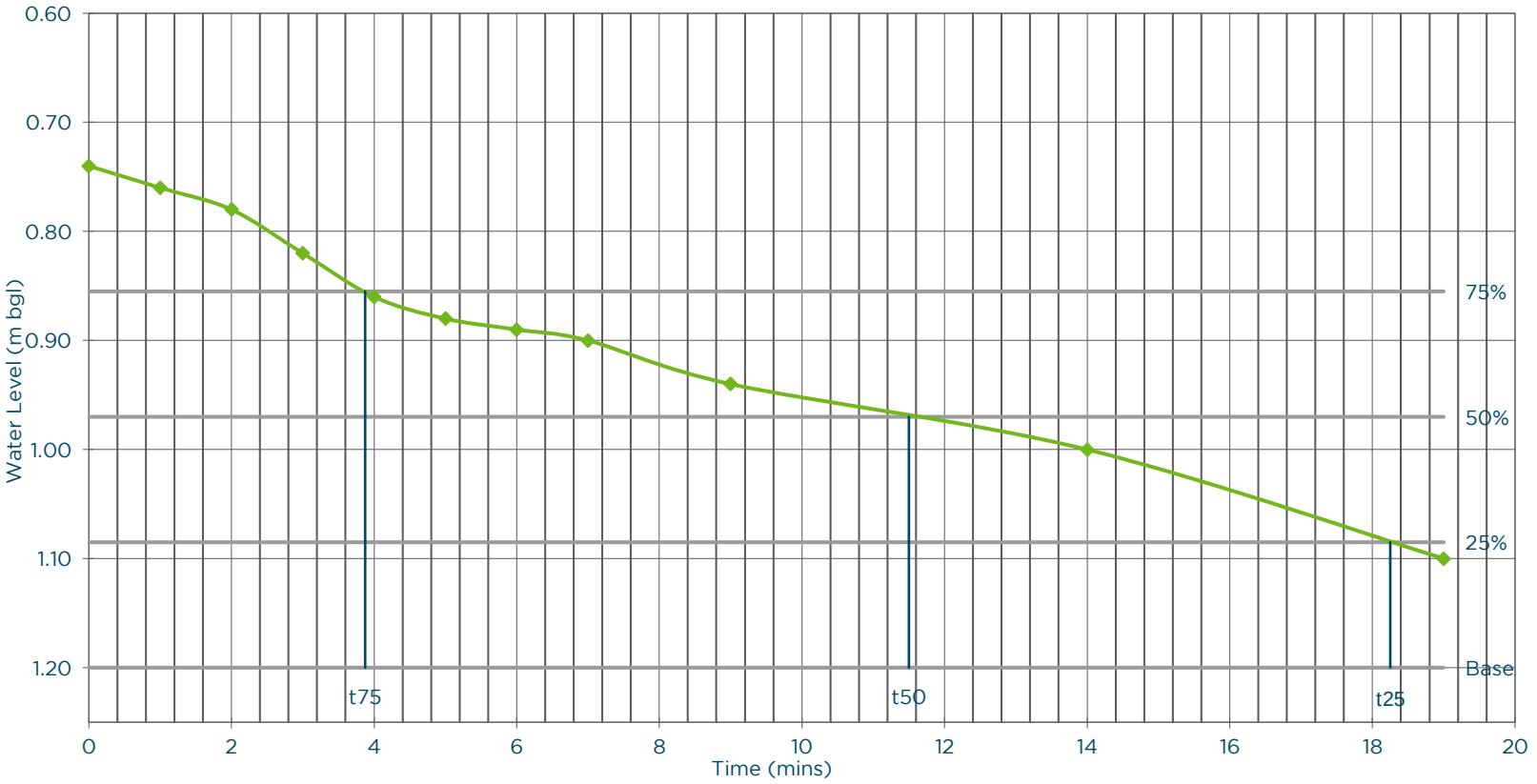
Fully drained at 11:00.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	14/09/2021

Pit Information	
Location ID:	SA06
Depth (m):	1.20
Width (m):	0.60
Length (m):	1.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.74
1.0	0.76
2.0	0.78
3.0	0.82
4.0	0.86
5.0	0.88
6.0	0.89
7.0	0.90
9.0	0.94
14.0	1.00
19.0	1.10

Test Information and Calculation	
Test Reference/Number:	2
Test Start Time:	11:04
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.20
Effective Storage Depth (m)	0.74
Effective Drop (m)	0.46
75% Effective Depth (m)	0.86
50% Effective Depth (m)	0.97
25% Effective Depth (m)	1.09
t_{75} (min)	3.88
t_{50} (min)	11.50
t_{25} (min)	18.25
V_{p75-25}	0.23
Adjusted V_p for Gravel Fill	0.23
a_{s50}	2.08
t_{p75-25}	14.38
Results	
Soil Infiltration Rate (m/s)	1.31E-04
Soil Infiltration Rate (mm/hr)	4.71E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

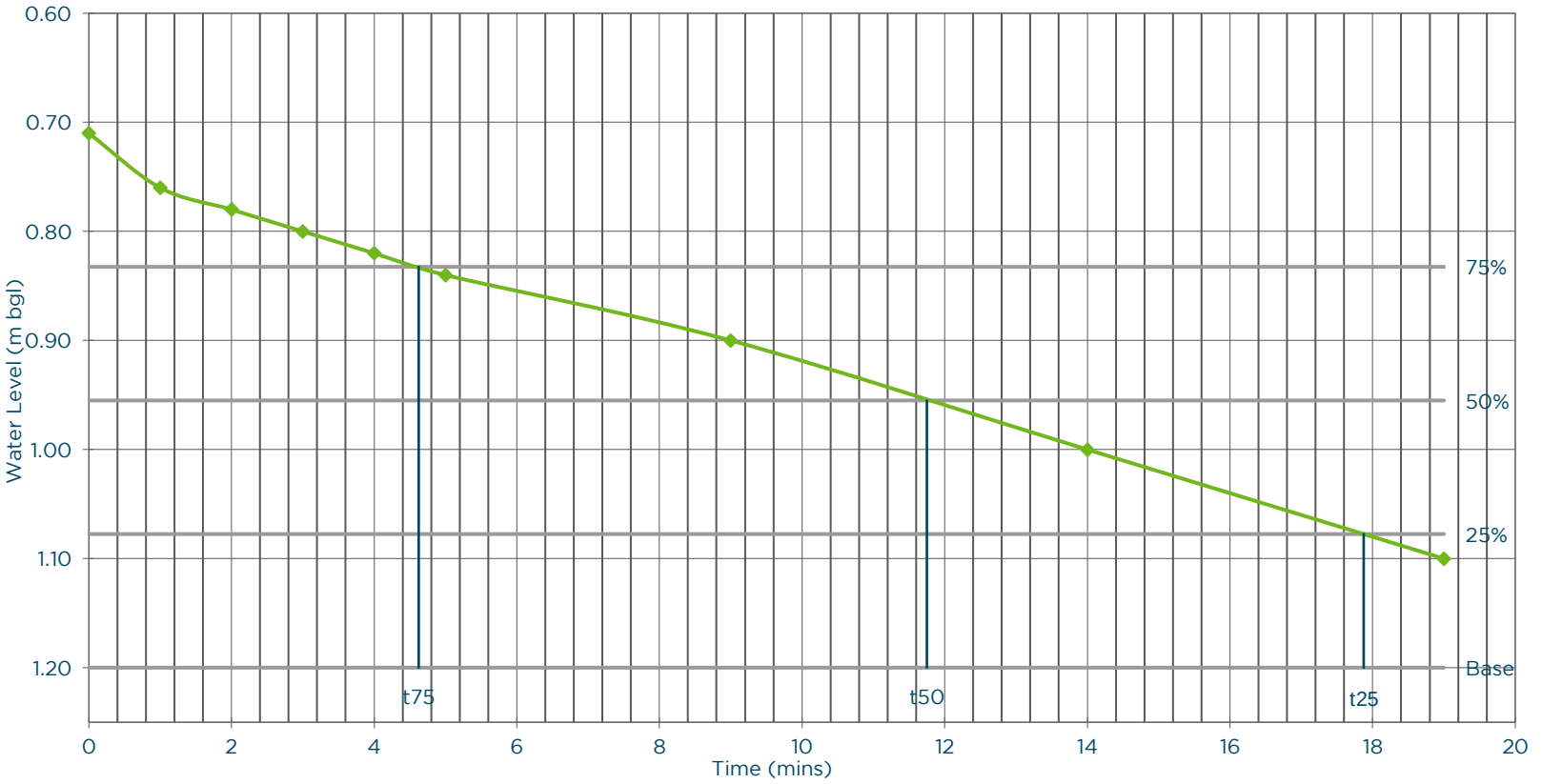
Fully drained at 11:20.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	14/09/2021

Pit Information	
Location ID:	SA06
Depth (m):	1.20
Width (m):	0.60
Length (m):	1.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.71
1.0	0.76
2.0	0.78
3.0	0.80
4.0	0.82
5.0	0.84
9.0	0.90
14.0	1.00
19.0	1.10

Test Information and Calculation	
Test Reference/Number:	3
Test Start Time:	11:25
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.20
Effective Storage Depth (m)	0.71
Effective Drop (m)	0.49
75% Effective Depth (m)	0.83
50% Effective Depth (m)	0.96
25% Effective Depth (m)	1.08
t_{75} (min)	4.63
t_{50} (min)	11.75
t_{25} (min)	17.88
V_{p75-25}	0.25
Adjusted V_p for Gravel Fill	0.25
a_{s50}	2.15
t_{p75-25}	13.25
Results	
Soil Infiltration Rate (m/s)	1.46E-04
Soil Infiltration Rate (mm/hr)	5.27E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

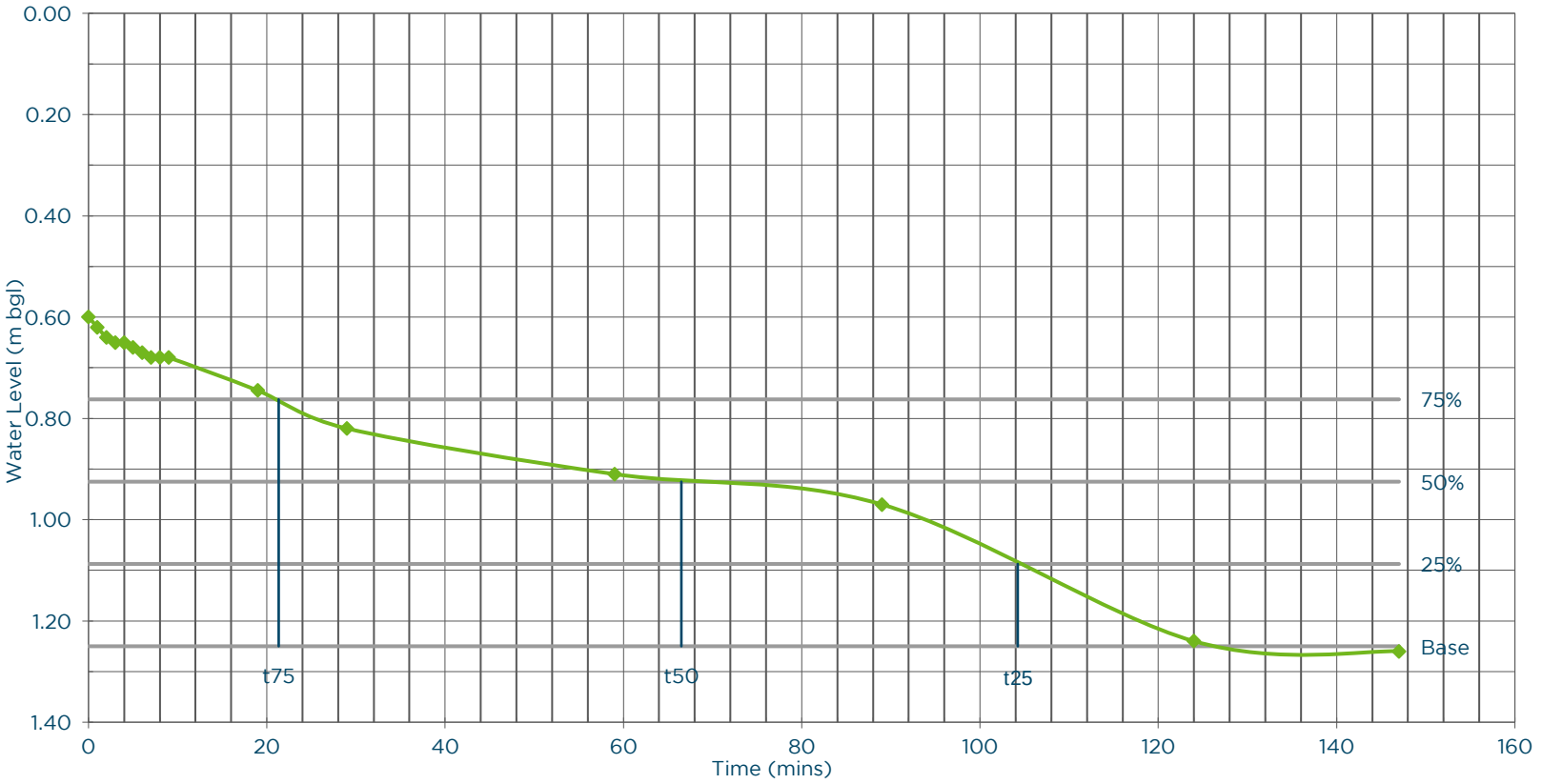
Fully drained at 11:45. Test pit backfilled.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	21/09/2021

Pit Information	
Location ID:	SA07
Depth (m):	1.25
Width (m):	0.70
Length (m):	2.60
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.60
1	0.62
2	0.64
3	0.65
4	0.65
5	0.66
6	0.67
7	0.68
8	0.68
9	0.68
19	0.75
29.0	0.82
59.0	0.91
89.0	0.97
124.0	1.24
147.0	1.26

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	11:42
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.25
Effective Storage Depth (m)	0.60
Effective Drop (m)	0.65
75% Effective Depth (m)	0.76
50% Effective Depth (m)	0.93
25% Effective Depth (m)	1.09
t_{75} (min)	21.33
t_{50} (min)	66.50
t_{25} (min)	104.23
V_{p75-25}	0.59
Adjusted V_p for Gravel Fill	0.59
a_{s50}	3.97
t_{p75-25}	82.90
Results	
Soil Infiltration Rate (m/s)	3.00E-05
Soil Infiltration Rate (mm/hr)	1.08E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

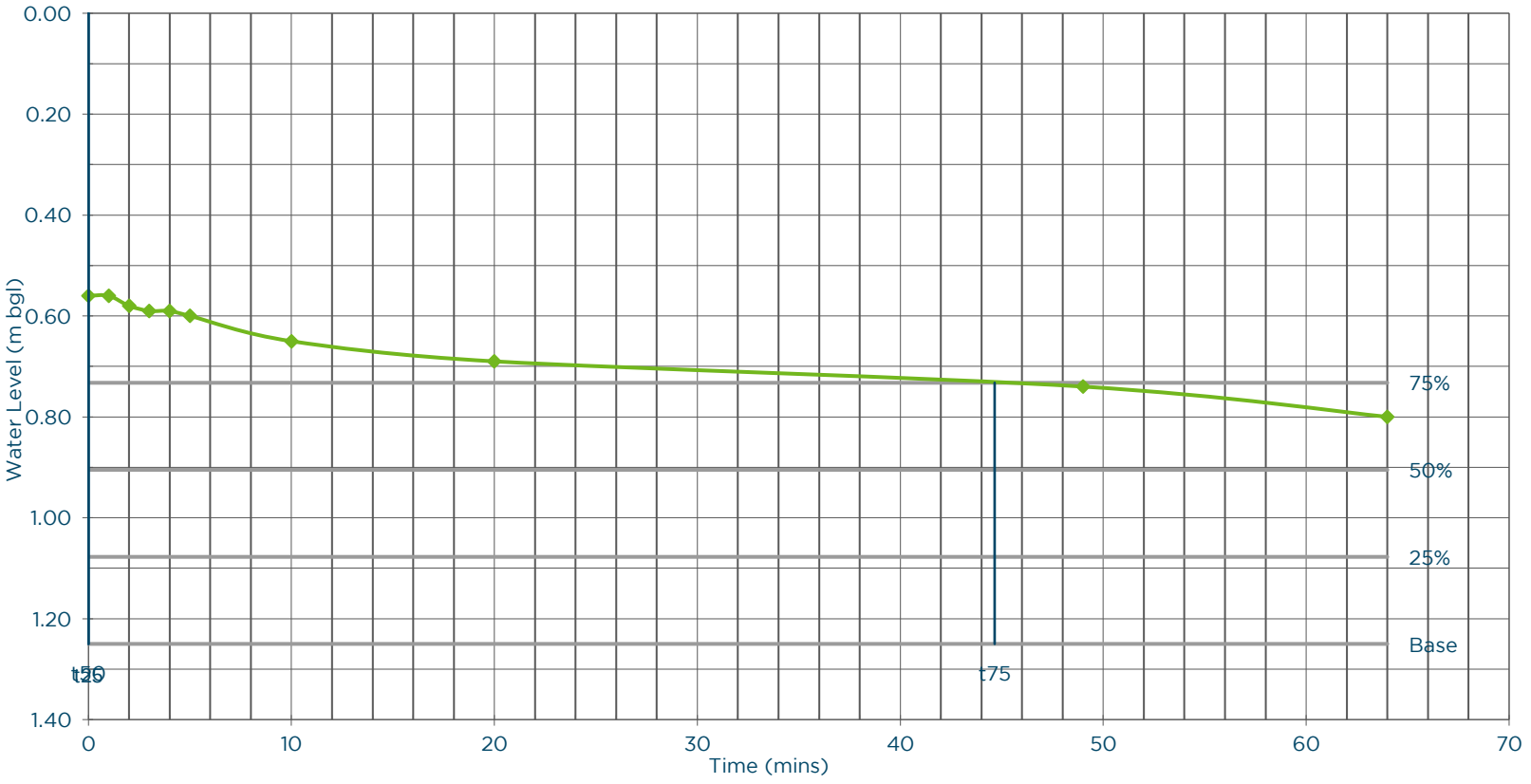
Comments

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	21/09/2021

Pit Information	
Location ID:	SA07
Depth (m):	1.25
Width (m):	0.70
Length (m):	2.60
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.56
1.0	0.56
2.0	0.58
3.0	0.59
4.0	0.59
5.0	0.60
10.0	0.65
20.0	0.69
49.0	0.74
64.0	0.80

Test Information and Calculation	
Test Reference/Number:	2
Test Start Time:	14:36
Method of Calculation	
Pit Gravel Filled?	No
Max. Depth (m)	1.25
Effective Storage Depth (m)	0.56
Effective Drop (m)	0.69
75% Effective Depth (m)	0.73
50% Effective Depth (m)	0.91
25% Effective Depth (m)	1.08
t_{75} (min)	44.65
t_{50} (min)	
t_{25} (min)	
V_{p75-25}	0.63
Adjusted V_p for Gravel Fill	0.63
a_{s50}	4.10
t_{p75-25}	

Results	
Soil Infiltration Rate (m/s)	N/A
Soil Infiltration Rate (mm/hr)	N/A

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

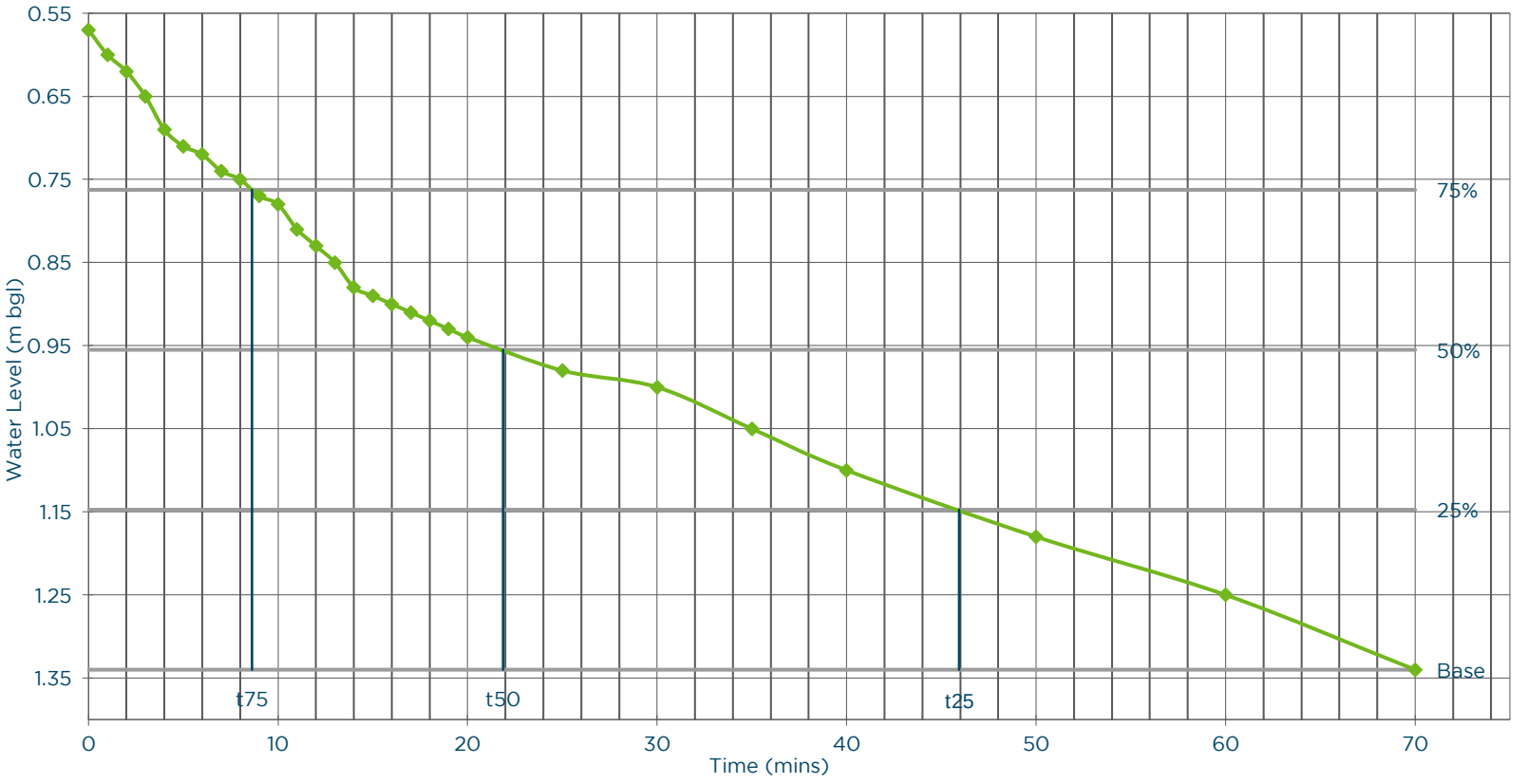
Test could not be completed due to time constraints. Backfilled at 15:55.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	21/09/2021

Pit Information	
Location ID:	SA08
Depth (m):	1.34
Width (m):	0.70
Length (m):	2.40
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.57
1	0.60
2	0.62
3	0.65
4	0.69
5	0.71
6	0.72
7	0.74
8	0.75
9	0.77
10	0.78
11.0	0.81
12.0	0.83
13.0	0.85
14.0	0.88
15.0	0.89
16.0	0.90
17.0	0.91
18.0	0.92
19.0	0.93
20.0	0.94
25.0	0.98
30.0	1.00
35.0	1.05
40.0	1.10
50.0	1.18
60.0	1.25
70.0	1.34

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	09:01
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.34
Effective Storage Depth (m)	0.57
Effective Drop (m)	0.77
75% Effective Depth (m)	0.76
50% Effective Depth (m)	0.96
25% Effective Depth (m)	1.15
t_{75} (min)	8.63
t_{50} (min)	21.88
t_{25} (min)	45.94
$V_{p75\text{-}25}$	0.65
Adjusted V_p for Gravel Fill	0.65
a_{s50}	4.07
$t_{p75\text{-}25}$	37.31
Results	
Soil Infiltration Rate (m/s)	7.10E-05
Soil Infiltration Rate (mm/hr)	2.56E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

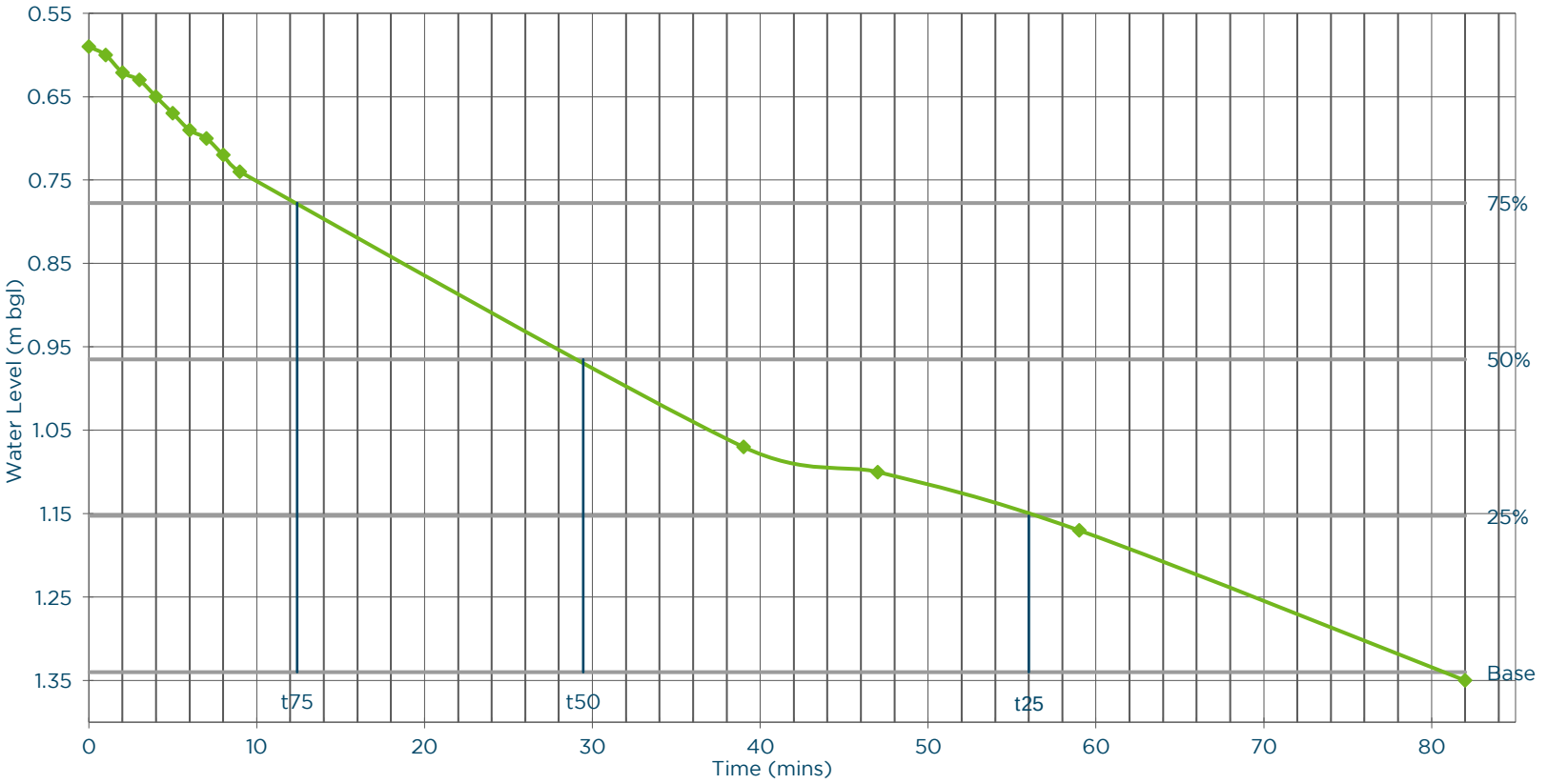
Fully drained at 10:09

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	21/09/2021

Pit Information	
Location ID:	SA08
Depth (m):	1.34
Width (m):	0.70
Length (m):	2.40
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.59
1	0.60
2	0.62
3	0.63
4	0.65
5	0.67
6	0.69
7	0.70
8	0.72
9	0.74
39	1.07
47.0	1.10
59.0	1.17
82.0	1.35

Test Information and Calculation	
Test Reference/Number:	2
Test Start Time:	10:12
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.34
Effective Storage Depth (m)	0.59
Effective Drop (m)	0.75
75% Effective Depth (m)	0.78
50% Effective Depth (m)	0.97
25% Effective Depth (m)	1.15
t_{75} (min)	12.41
t_{50} (min)	29.45
t_{25} (min)	56.00
V_{p75-25}	0.63
Adjusted V_p for Gravel Fill	0.63
a_{s50}	4.01
t_{p75-25}	43.59
Results	
Soil Infiltration Rate (m/s)	6.01E-05
Soil Infiltration Rate (mm/hr)	2.17E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

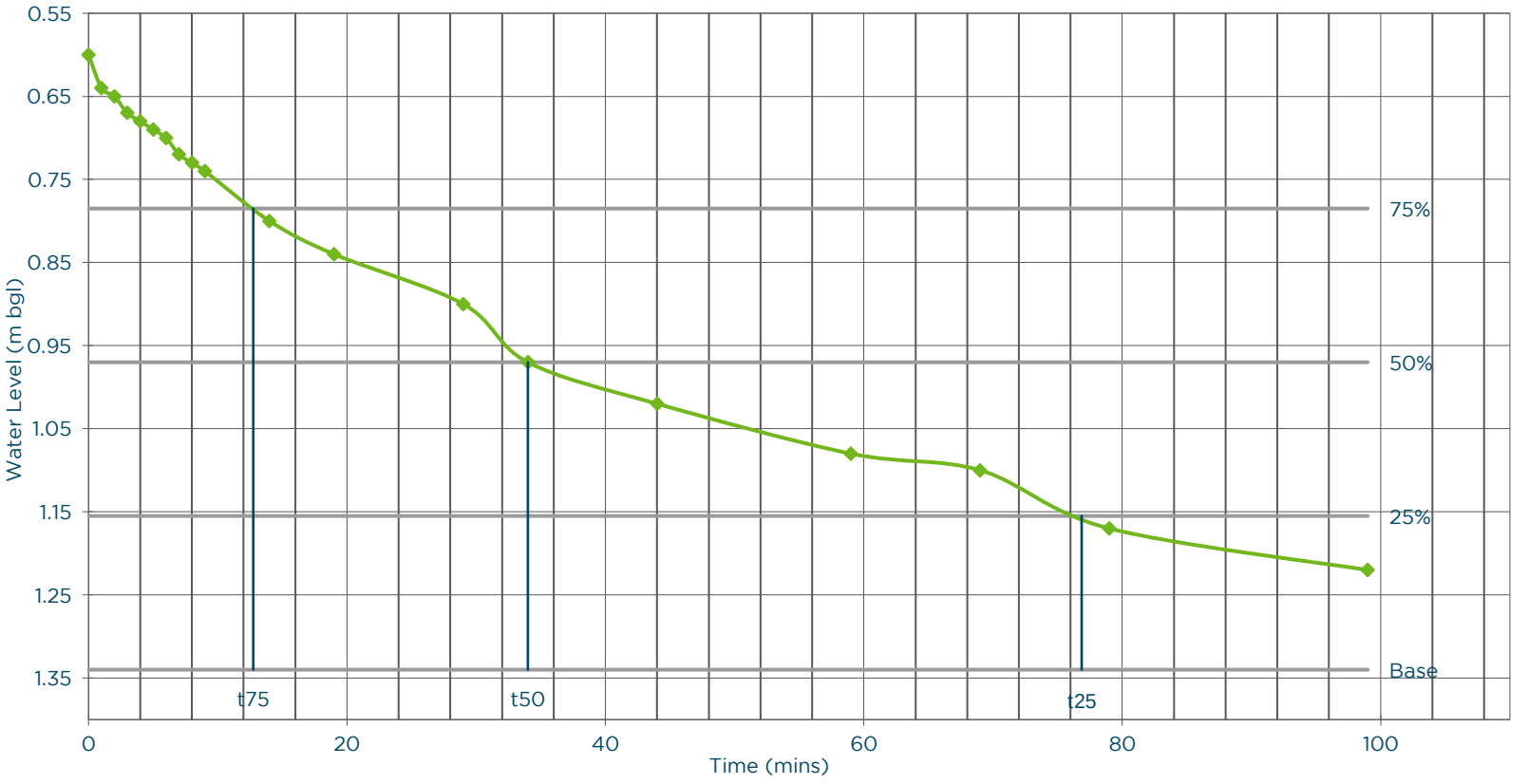
Fully drained at 11:35

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	21/09/2021

Pit Information	
Location ID:	SA08
Depth (m):	1.34
Width (m):	0.70
Length (m):	2.40
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.60
1	0.64
2	0.65
3	0.67
4	0.68
5	0.69
6	0.70
7	0.72
8	0.73
9	0.74
14	0.80
19.0	0.84
29.0	0.90
34.0	0.97
44.0	1.02
59.0	1.08
69.0	1.10
79.0	1.17
99.0	1.22

Test Information and Calculation	
Test Reference/Number:	3
Test Start Time:	11:40
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.34
Effective Storage Depth (m)	0.60
Effective Drop (m)	0.74
75% Effective Depth (m)	0.79
50% Effective Depth (m)	0.97
25% Effective Depth (m)	1.16
t_{75} (min)	12.75
t_{50} (min)	34.00
t_{25} (min)	76.86
V_{p75-25}	0.62
Adjusted V_p for Gravel Fill	0.62
a_{s50}	3.97
t_{p75-25}	64.11
Results	
Soil Infiltration Rate (m/s)	4.07E-05
Soil Infiltration Rate (mm/hr)	1.46E+02

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

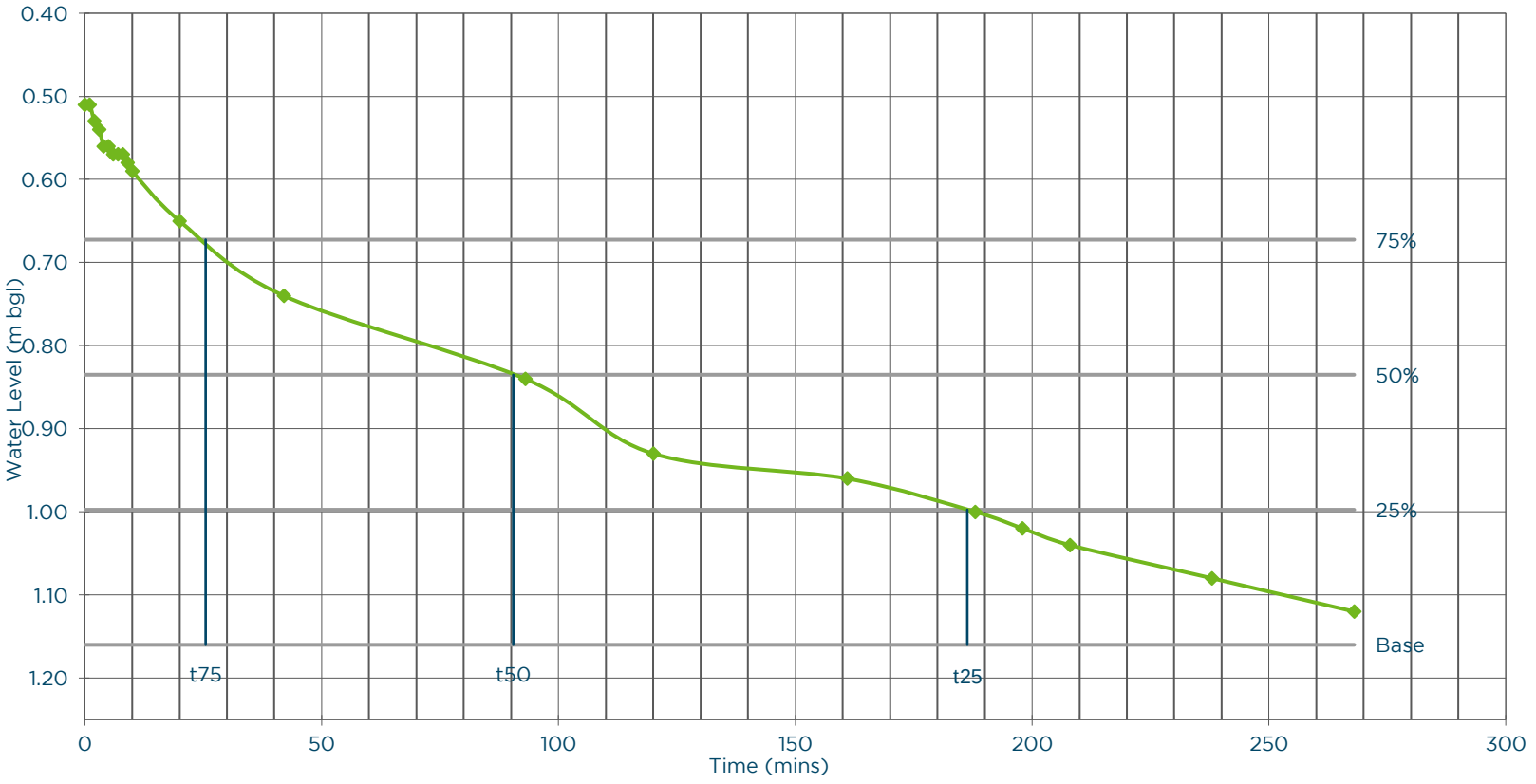
Fully drained at 13:40

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	23/09/2021

Pit Information	
Location ID:	SA09
Depth (m):	1.16
Width (m):	0.70
Length (m):	2.40
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.51
1.0	0.51
2.0	0.53
3.0	0.54
4.0	0.56
5.0	0.56
6.0	0.57
7.0	0.57
8.0	0.57
9.0	0.58
10.0	0.59
20.0	0.65
42.0	0.74
93.0	0.84
120.0	0.93
161.0	0.96
188.0	1.00
198.0	1.02
208.0	1.04
238.0	1.08
268.0	1.12

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	10:32
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.16
Effective Storage Depth (m)	0.51
Effective Drop (m)	0.65
75% Effective Depth (m)	0.67
50% Effective Depth (m)	0.84
25% Effective Depth (m)	1.00
t_{75} (min)	25.50
t_{50} (min)	90.45
t_{25} (min)	186.31
V_{p75-25}	0.55
Adjusted V_p for Gravel Fill	0.55
a_{s50}	3.70
t_{p75-25}	160.81
Results	
Soil Infiltration Rate (m/s)	1.53E-05
Soil Infiltration Rate (mm/hr)	5.51E+01

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

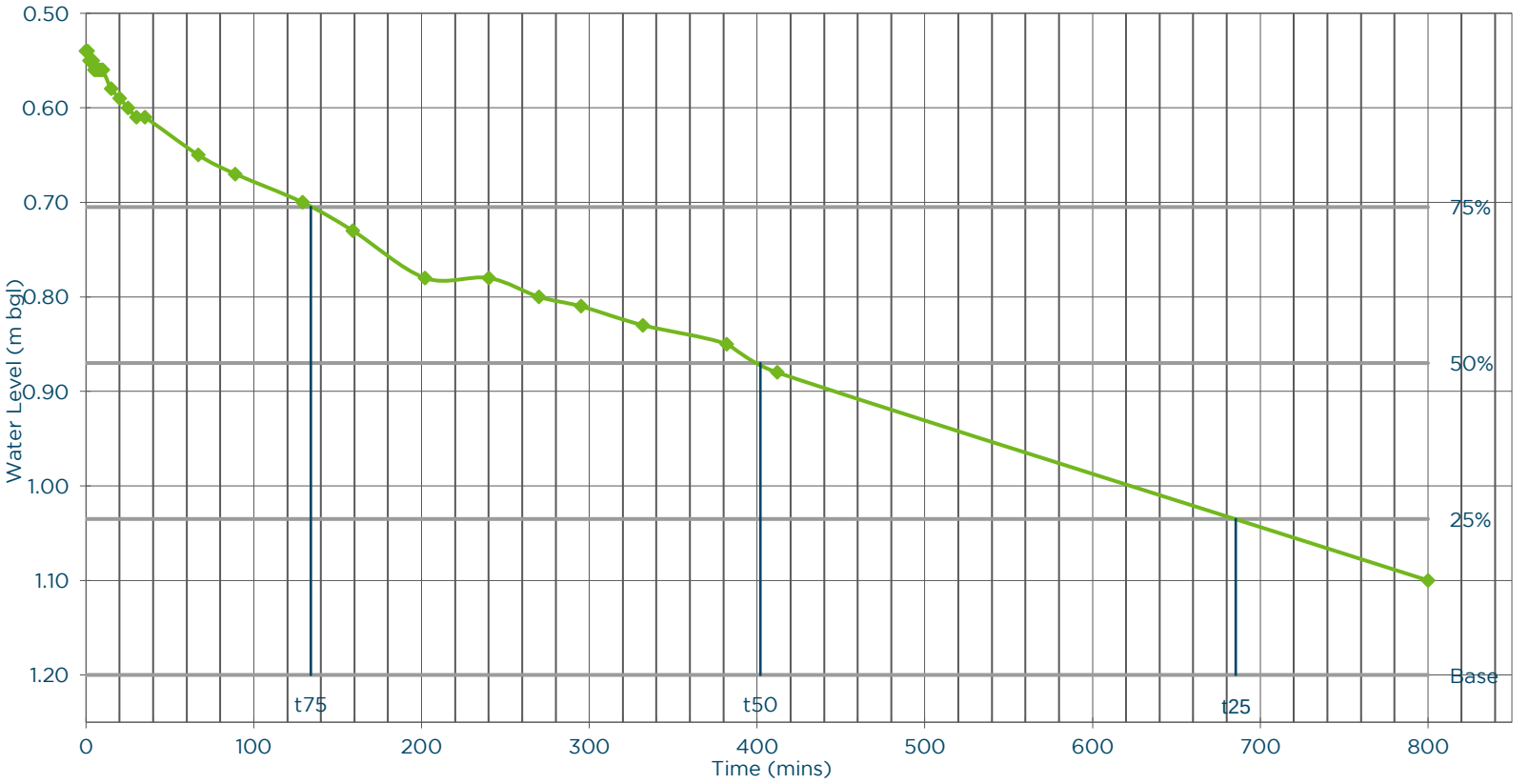
Drained at 15:00, not enough time to start a second test.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	23/09/2021

Pit Information	
Location ID:	SA10
Depth (m):	1.20
Width (m):	0.70
Length (m):	2.70
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0	0.54
1	0.54
2	0.55
3	0.55
4	0.55
5	0.56
6	0.56
7	0.56
8	0.56
9	0.56
10	0.56
15	0.58
20	0.59
25	0.60
30	0.61
35	0.61
67	0.65
89	0.67
129	0.70
159	0.73
202	0.78
240	0.78
270	0.80
295	0.81
332	0.83
382	0.85
412	0.88
800	*1.10*

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	08:38
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.20
Effective Storage Depth (m)	0.54
Effective Drop (m)	0.66
75% Effective Depth (m)	0.71
50% Effective Depth (m)	0.87
25% Effective Depth (m)	1.04
t_{75} (min)	134.00
t_{50} (min)	402.00
t_{25} (min)	685.36
V_{p75-25}	0.62
Adjusted V_p for Gravel Fill	0.62
a_{s50}	4.13
t_{p75-25}	551.36
Results	
Soil Infiltration Rate (m/s)	4.56E-06
Soil Infiltration Rate (mm/hr)	1.64E+01

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

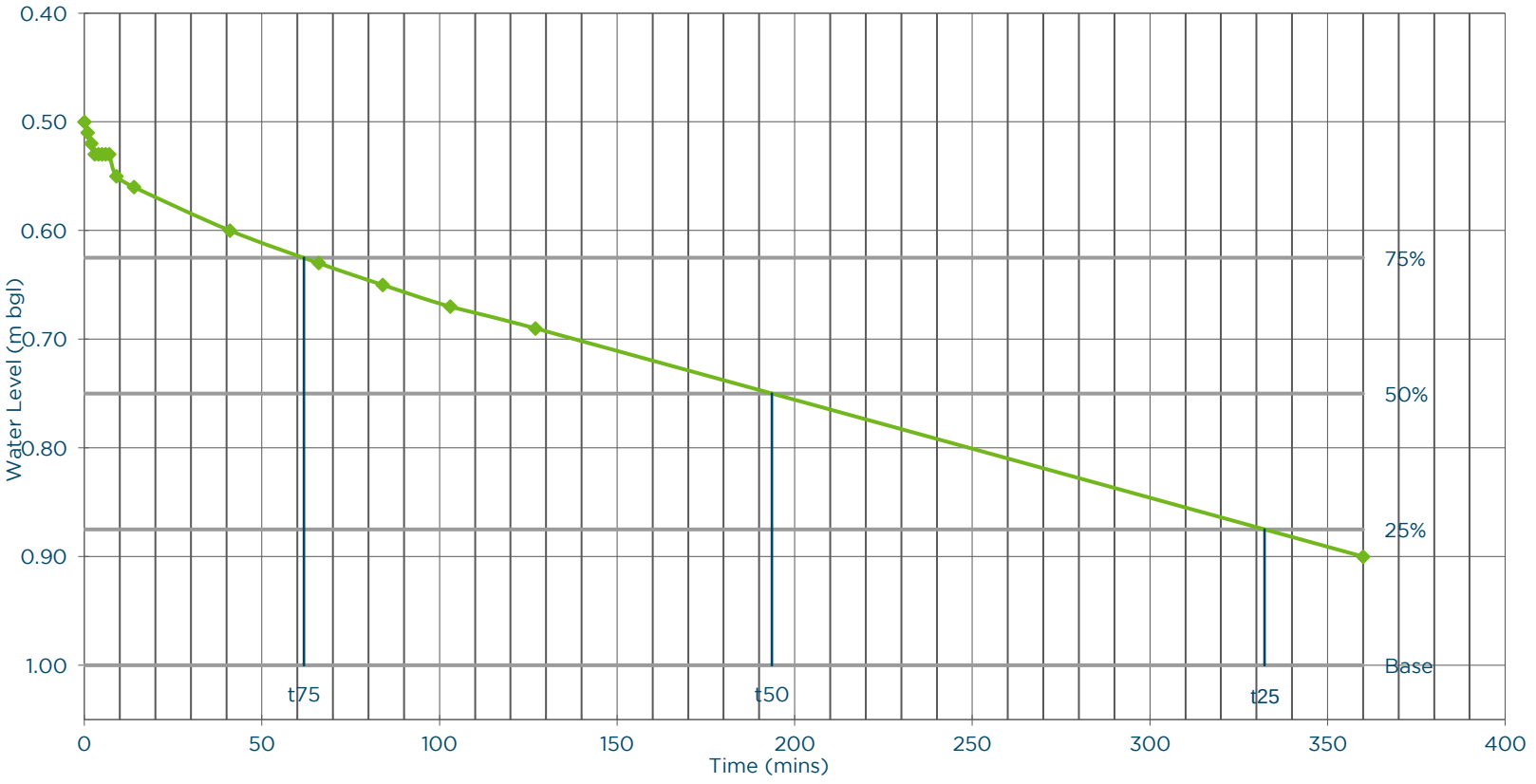
Test stopped and backfilled at at 15:30 due to time constraints. Italicised results are extrapolated values.

SOAKAWAY TESTING

EXPLORATION & TESTING ASSOCIATES

Contract Information	
Contract:	Oxfordshire
Contract No:	C10172
Client:	BWB Consulting
Date:	14/09/2021

Pit Information	
Location ID:	SA11
Depth (m):	1.00
Width (m):	0.60
Length (m):	1.60
Depth to Standing Water (m)	Dry



Time (min)	Depth (m)
0.0	0.50
1.0	0.51
2.0	0.52
3.0	0.53
4.0	0.53
5.0	0.53
6.0	0.53
7.0	0.53
9.0	0.55
14.0	0.56
41.0	0.60
66.0	0.63
84.0	0.65
103.0	0.67
127.0	0.69
360.0	*0.90*

Test Information and Calculation	
Test Reference/Number:	1
Test Start Time:	14:05
Method of Calculation	BRE365
Pit Gravel Filled?	No
Max. Depth (m)	1.00
Effective Storage Depth (m)	0.50
Effective Drop (m)	0.50
75% Effective Depth (m)	0.63
50% Effective Depth (m)	0.75
25% Effective Depth (m)	0.88
t_{75} (min)	61.83
t_{50} (min)	193.57
t_{25} (min)	332.26
V_{p75-25}	0.24
Adjusted V_p for Gravel Fill	0.24
a_{s50}	2.06
t_{p75-25}	270.43
Results	
Soil Infiltration Rate (m/s)	7.18E-06
Soil Infiltration Rate (mm/hr)	2.58E+01

References

BRE 365 *Soakaway design*, 2016, with reference to CIRIA Report 113 *Control of groundwater for temporary works*, 1986.

Comments

Test ended at 127 mins, as not enough time to finish test. Italicised results are extrapolated values.

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO01
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	119.06 m AOD
Groundwater Level:	5.45 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 15 s
t2= 70 s
H1= 5.45 m
H2= 0.65 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 25.82 s
K= 7.32E-06 m/s From (ii)
K= 7.33E-06 m/s From (iii)

Remarks

Elapsed (minutes	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	5.45	1.000
0.5	30	3.990	1.46	0.268
1.0	60	4.800	0.65	0.119
1.5	90	5.060	0.39	0.072

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO01
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	119.06 m AOD
Groundwater Level:	5.45 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L=	7.00	m	
D=	0.110	m	
L/D=	63.64		
t1=	15	s	
t2=	70	s	
H1=	5.45	m	
H2=	0.95	m	
a=	0.00196	m^2	
F=	10.3750		From (i)
T=	29.10	s	
K=	6.01E-06	m/s	From (ii)
K=	6.51E-06	m/s	From (iii)

Remarks

Elapsed (minutes	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	5.45	1.000
0.5	30	3.540	1.91	0.350
1.0	60	4.500	0.95	0.174
1.5	90	4.950	0.50	0.092
2.0	120	5.090	0.36	0.066

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO02
	Contract No:	C10172	Depth (m):	10.00
	Date:	11/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	117.24 m AOD
Groundwater Level:	3.96 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor corresponding to an H/Ho value of 0.37,
2 and "a" is the cross sectional area of the standpipe.

L=	7.00	m	
D=	0.110	m	
L/D=	63.64		
t1=	0	s	
t2=	70	s	
H1=	3.96	m	
H2=	0.40	m	
a=	0.00196	m^2	
F=	10.3750		From (i)
T=	42.05	s	
K=	6.20E-06	m/s	From (ii)
K=	4.50E-06	m/s	From (iii)

Remarks

Elapsed (minutes	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	3.96	1.000
0.5	30	1.780	2.18	0.551
1.0	60	3.560	0.40	0.101
1.5	90	3.810	0.15	0.038
2.0	120	3.880	0.08	0.020

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO02
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	117.24 m AOD
Groundwater Level:	4.04 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L=	7.00	m	
D=	0.110	m	
L/D=	63.64		
t1=	0	s	
t2=	80	s	
H1=	4.04	m	
H2=	0.62	m	
a=	0.00196	m^2	
F=	10.3750		From (i)
T=	45.50	s	
K=	4.44E-06	m/s	From (ii)
K=	4.16E-06	m/s	From (iii)

Remarks

Elapsed (minutes	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	4.04	1.000
0.5	30	1.610	2.43	0.601
1.0	60	3.420	0.62	0.153
1.5	90	3.720	0.32	0.079
2.0	120	3.790	0.25	0.062
2.5	150	3.870	0.17	0.042

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information				
	Contract:	Oxfordshire	Location ID:	RO03
	Contract No:	C10172	Depth (m):	10.00
	Date:	11/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions	
Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	119.20 m AOD
Groundwater Level:	4.12 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2) \quad \text{(ii)}$$

or

$$K = \frac{a}{F * T} \quad \text{(iii)}$$

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 30 s
t2= 250 s
H1= 2.29 m
H2= 0.31 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 79.47 s
K= 1.72E-06 m/s From (ii)
K= 2.38E-06 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	4.12	1.000
0.5	30	1.830	2.29	0.556
1.0	60	2.310	1.81	0.439
1.5	90	2.750	1.37	0.333
2.0	120	3.200	0.92	0.223
3.0	180	3.560	0.56	0.136
4.0	240	3.810	0.31	0.075
5.0	300	3.970	0.15	0.036

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO03
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	119.20 m AOD
Groundwater Level:	4.05 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L=	7.00	m	
D=	0.110	m	
L/D=	63.64		
t1=	30	s	
t2=	230	s	
H1=	2.06	m	
H2=	0.47	m	
a=	0.00196	m^2	
F=	10.3750		From (i)
T=	63.05	s	
K=	1.40E-06	m/s	From (ii)
K=	3.00E-06	m/s	From (iii)

Remarks

Elapsed (minutes	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	4.05	1.000
0.5	30	1.990	2.06	0.509
1.0	60	2.520	1.53	0.378
1.5	90	2.830	1.22	0.301
2.0	120	3.250	0.80	0.198
3.0	180	3.580	0.47	0.116
4.0	240	3.770	0.28	0.069
5.0	300	3.940	0.11	0.027

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO04
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	110.30 m AOD
Groundwater Level:	2.40 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L=	7.00	m	
D=	0.110	m	
L/D=	63.64		
t1=	10	s	
t2=	150	s	
H1=	2.40	m	
H2=	0.79	m	
a=	0.00196	m^2	
F=	10.3750		From (i)
T=	115.85	s	
K=	1.50E-06	m/s	From (ii)
K=	1.63E-06	m/s	From (iii)

Remarks

Elapsed (minutes	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	2.40	1.000
0.5	30	1.270	1.13	0.471
1.0	60	1.320	1.08	0.450
1.5	90	1.400	1.00	0.417
2.0	120	1.530	0.87	0.363
2.5	150	1.610	0.79	0.329
3.0	180	1.670	0.73	0.304
4.0	240	1.740	0.66	0.275
5.0	300	1.770	0.63	0.263
7.0	420	1.800	0.60	0.250
10.0	600	1.870	0.53	0.221
15.0	900	1.940	0.46	0.192
20.0	1200	2.000	0.40	0.167

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information				
	Contract:	Oxfordshire	Location ID:	RO04
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions	
Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	110.30 m AOD
Groundwater Level:	2.40 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 20 s
t2= 220 s
H1= 2.40 m
H2= 0.82 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 164.89 s
K= 1.02E-06 m/s From (ii)
K= 1.15E-06 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	2.40	1.000
0.5	30	0.740	1.66	0.692
1.0	60	0.970	1.43	0.596
1.5	90	1.180	1.22	0.508
2.0	120	1.310	1.09	0.454
3.0	180	1.580	0.82	0.342
4.0	240	1.690	0.71	0.296
5.0	300	1.750	0.65	0.271
7.0	420	1.770	0.63	0.263
10.0	600	1.860	0.54	0.225
15.0	900	1.950	0.45	0.188
20.0	1200	2.010	0.39	0.163

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO06
	Contract No:	C10172	Depth (m):	10.00
	Date:	11/10/2021	Operator:	TY
	Time:	10:30	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	113.64 m AOD
Groundwater Level:	5.55 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2) \quad \text{(ii)}$$

or

$$K = \frac{a}{F * T} \quad \text{(iii)}$$

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 30 s
t2= 840 s
H1= 4.15 m
H2= 0.53 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 295.45 s
K= 4.81E-07 m/s From (ii)
K= 6.41E-07 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	5.55	1.000
0.5	30	1.400	4.15	0.748
1.0	60	1.800	3.75	0.676
1.5	90	2.100	3.45	0.622
2.0	120	2.340	3.21	0.578
2.5	150	2.540	3.01	0.542
3.0	180	2.810	2.74	0.494
4.0	240	3.210	2.34	0.422
5.0	300	3.520	2.03	0.366
6.0	360	3.800	1.75	0.315
7.0	420	4.050	1.50	0.270
8.0	480	4.280	1.27	0.229
9.0	540	4.440	1.11	0.200
10.0	600	4.610	0.94	0.169
12.0	720	4.850	0.70	0.126
14.0	840	5.020	0.53	0.095
16.0	960	5.160	0.39	0.070

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO06
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	113.64 m AOD
Groundwater Level:	5.61 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2) \quad \text{(ii)}$$

or

$$K = \frac{a}{F * T} \quad \text{(iii)}$$

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 20 s
t2= 950 s
H1= 5.61 m
H2= 0.61 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 287.68 s
K= 4.52E-07 m/s From (ii)
K= 6.58E-07 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	5.61	1.000
0.5	30	1.620	3.99	0.711
1.0	60	1.900	3.71	0.661
1.5	90	2.160	3.45	0.615
2.0	120	2.410	3.20	0.570
3.0	180	2.930	2.68	0.478
4.0	240	3.280	2.33	0.415
5.0	300	3.600	2.01	0.358
7.0	420	4.090	1.52	0.271
10.0	600	4.580	1.03	0.184
15.0	900	5.000	0.61	0.109
20.0	1200	5.190	0.42	0.075

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO07
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	97.56 m AOD
Groundwater Level:	3.48 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2) \quad \text{(ii)}$$

or

$$K = \frac{a}{F * T} \quad \text{(iii)}$$

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 15 s
t2= 180 s
H1= 3.48 m
H2= 1.02 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 130.40 s
K= 1.41E-06 m/s From (ii)
K= 1.45E-06 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	3.48	1.000
0.5	30	1.500	1.98	0.569
1.0	60	1.600	1.88	0.540
1.5	90	1.910	1.57	0.451
2.0	120	2.130	1.35	0.388
2.5	150	2.310	1.17	0.336
3.0	180	2.460	1.02	0.293
4.0	240	2.710	0.77	0.221
5.0	300	2.900	0.58	0.167

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO07
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	97.56 m AOD
Groundwater Level:	3.48 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2) \quad \text{(ii)}$$

or

$$K = \frac{a}{F * T} \quad \text{(iii)}$$

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 20 s
t2= 360 s
H1= 3.48 m
H2= 0.61 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 193.16 s
K= 9.70E-07 m/s From (ii)
K= 9.80E-07 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	3.48	1.000
0.5	30	1.290	2.19	0.629
1.0	60	1.360	2.12	0.609
1.5	90	1.480	2.00	0.575
2.0	120	1.660	1.82	0.523
2.5	150	1.840	1.64	0.471
3.0	180	2.120	1.36	0.391
4.0	240	2.450	1.03	0.296
5.0	300	2.650	0.83	0.239
6.0	360	2.870	0.61	0.175

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO08
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	111.74 m AOD
Groundwater Level:	3.59 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2)$ (ii)

or

$K = \frac{a}{F * T}$ (iii)

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 0 s
t2= 40 s
H1= 3.59 m
H2= 0.99 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 26.10 s
K= 6.10E-06 m/s From (ii)
K= 7.25E-06 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	3.59	1.000
0.5	30	2.600	0.99	0.276
1.0	60	2.850	0.74	0.206
1.5	90	2.970	0.62	0.173
2.5	150	3.020	0.57	0.159
3.0	180	3.050	0.54	0.150
4.0	240	3.120	0.47	0.131
5.0	300	3.170	0.42	0.117
7.0	420	3.270	0.32	0.089
10.0	600	3.280	0.31	0.086
15.0	900	3.340	0.25	0.070

VARIABLE HEAD PERMEABILITY TEST

Variable Head (Falling) Permeability Test in Borehole Standpipe

EXPLORATION & TESTING ASSOCIATES

Contract Information

	Contract:	Oxfordshire	Location ID:	RO08
	Contract No:	C10172	Depth (m):	10.00
	Date:	21/10/2021	Operator:	TY
	Time:	-	Test Zone (m):	7.00

Initial Conditions

Base of Response Zone:	10.00 m BGL
Top of Reponse Zone:	3.00 m BGL
Diameter of borehole:	110 mm
Diameter of standpipe:	50 mm
Height of casing:	0.00 m AGL
Elevation of Borehole:	111.74 m AOD
Groundwater Level:	3.59 m BGL

TEST CALCULATION

Intake Factor, F

F= 10.38 (i)

Borehole Case 7
BS 5930: 1999

Permeability, K

$$K = \frac{a}{F * (t2 - t1)} * \ln(H1/H2) \quad \text{(ii)}$$

or

$$K = \frac{a}{F * T} \quad \text{(iii)}$$

1 Where T is the Basic Time Lag Factor
2 corresponding to an H/Ho value of 0.37, and "a" is the cross sectional area of the standpipe.

L= 7.00 m
D= 0.110 m
L/D= 63.64

t1= 0 s
t2= 60 s
H1= 3.59 m
H2= 0.92 m

a= 0.00196 m^2
F= 10.3750 From (i)
T= 40.24 s
K= 4.30E-06 m/s From (ii)
K= 4.70E-06 m/s From (iii)

Remarks

Elapsed (minutes)	Total Seconds	Water Depth	Head (metres)	H/Ho
0.0	0	0.000	3.59	1.000
0.5	30	2.050	1.54	0.429
1.0	60	2.670	0.92	0.256
1.5	90	2.860	0.73	0.203
2.0	120	2.940	0.65	0.181
3.0	180	3.000	0.59	0.164
4.0	240	3.060	0.53	0.148
5.0	300	3.150	0.44	0.123
7.0	420	3.270	0.32	0.089
10.0	600	3.360	0.23	0.064
15.0	900	3.410	0.18	0.050

EXPLORATION
& TESTING ASSOCIATES

APPENDIX 4: GAS AND GROUNDWATER MONITORING

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	28/09/2021

Background Readings:	O_2% v/v :	21.3	CO_2% v/v :	0.1	CH_4% v/v :	0.0	Weather Conditions :	Overcast, windy, with heavy rain in afteroon, 13°C	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Rising	Ground Conditions :	Dry, damp in the afternoon.	GA5000	JM

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS123	08:55	1008	-0.04	19.2	19.2	1.2	1.2	0.0	0.0	0	0	0.1	0.1	0.0	-	DRY	-	1.75
DS122	09:14	1008	-0.05	19.5	20.8	0.9	0.9	0.0	0.0	0	0	0.0	0.0	0.0	-	DRY	-	0.87
DS130	09:42	1009	-0.03	20.5	20.6	1.3	1.2	0.0	0.0	0	0	-0.1	-0.1	0.0	-	DRY	-	0.96
DS125	09:54	1008	0.02	20.9	20.9	1.2	1.2	0.0	0.0	0	0	-0.2	-0.2	0.0	-	DRY	-	0.98
RO08	10:06	1008	0.07	20.7	20.7	0.1	0.1	0.0	0.0	1	0	-0.1	-0.1	0.0	-	3.70	-	10.00
DS128	10:54	1006	-0.03	21.5	20.9	1.0	0.1	0.0	0.0	0	0	-0.4	-0.3	0.0	-	DRY	-	1.61
DS121	11:05	1008	-0.03	20.8	21.0	1.4	1.4	0.0	0.0	0	0	-0.2	-0.2	0.0	-	DRY	-	1.01
DS120	11:15	1007	0.03	20.9	20.9	1.0	0.9	0.0	0.0	1	0	-0.2	-0.2	0.0	-	DRY	-	0.90
RO07	11:25	1007	-0.02	17.8	21.6	1.4	0.2	0.0	0.0	1	0	-0.3	-0.2	0.0	-	3.90	-	10.00
DS106	11:57	1006	0.05	21.1	21.1	0.6	0.6	0.0	0.0	1	0	-0.3	-0.3	0.0	-	DRY	-	0.95
DS108	12:08	1003	0.05	20.9	20.9	0.7	0.7	0.0	0.0	1	0	0.0	0.0	0.0	-	DRY	-	1.00
RO03	12:20	1004	0.03	20.9	21.1	0.7	0.3	0.0	0.0	1	0	0.1	0.1	0.0	-	4.15	-	10.00
DS105	12:54	1005	0.07	21.2	21.4	0.7	0.6	0.0	0.0	1	0	0.3	0.3	0.0	-	DRY	-	1.05
DS104	13:03	1004	0.07	21.4	21.5	0.8	0.7	0.0	0.0	1	0	0.0	0.0	0.0	-	DRY	-	0.90
DS107	13:23	1005	0.07	21.6	21.7	0.3	0.3	0.0	0.0	1	0	0.3	0.0	0.0	-	DRY	-	0.99
RO02	13:34	1005	0.07	21.2	21.1	0.4	0.3	0.0	0.0	1	0	0.1	0.0	0.0	-	4.65	-	10.04
DS111	14:20	1000	0.00	21.7	21.7	0.6	0.6	0.0	0.0	1	0	0.0	0.0	0.0	-	DRY	-	0.86
DS103	14:30	1003	0.07	21.6	21.6	0.5	0.5	0.0	0.0	1	0	0.3	0.2	0.0	-	DRY	-	1.10
DS102	14:45	1002	0.05	20.0	20.0	1.6	1.6	0.0	0.0	1	0	0.3	0.3	0.0	-	DRY	-	1.10
DS101	14:53	1002	0.03	20.6	20.6	1.1	1.1	0.0	0.0	1	0	0.4	0.4	0.0	-	DRY	-	1.00
RO01	15:10	1002	0.03	20.8	20.8	0.7	0.7	0.0	0.0	1	0	0.3	0.3	0.0	-	5.75	-	10.00
DS112	15:28	1003	0.09	21.3	21.3	0.6	0.6	0.0	0.0	1	0	0.3	0.3	0.0	-	DRY	-	0.95

Remarks : Water sampling - RO08. W.L. 3.70mbgs, purged recharging at 7.6mbgs (W1-7.5mbgs). RO07 W.L. 3.9mbgs, purged, recharging at 6.8mbgs (W1-6.4m), RO03 W.L. 4.15m, purged, recharging at 8.0mbgs (W1-8.0m), RO02 W.L. 4.65m, manually purged recharging at 6.0m, (W1-6.0m)

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	28/09/2021

Background Readings:	O_2% v/v :	21.3	CO_2% v/v :	0.1	CH_4% v/v :	0.0	Weather Conditions :	Overcast, windy, with heavy rain in afteroon, 13°c	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Rising	Ground Conditions :	Dry, damp in the afternoon.	GA5000	JM

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS113	15:38	1003	0.03	21.3	21.3	0.7	0.7	0.0	0.0	1	0	0.3	0.3	0.0	-	DRY	-	1.10
RO05*	15:46	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	-	3.65	-	10.00
DS114	16:00	1002	0.03	21.3	21.4	0.8	0.8	0.0	0.0	1	0	0.2	0.2	0.0	-	DRY	-	1.10
DS115*	16:08	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	-	DRY	-	1.00
DS117	16:15	1003	0.07	21.7	21.8	0.3	0.3	0.0	0.0	1	1	0.2	0.2	0.0	-	DRY	-	0.80
RO06	16:20	1002	0.07	21.4	21.4	0	0	0.0	0.0	1	1	0.4	0.4	0.0	-	5.80	-	10.00
DS118	16:35	1003	0.03	21.6	21.6	0.6	0.6	0.0	0.0	1	0	0.3	0.3	0.0	-	DRY	-	1.00
DS110	16:45	1003	-1.05	21.8	21.9	0.2	0.2	0.0	0.0	1	1	6.1	6.1	0.0	-	0.60	-	3.00
RO04	17:00	1002	-0.21	21.5	21.7	0.2	0.2	0.0	0.0	2	1	0.2	0.2	0.0	-	3.00	-	10.15

Remarks : *could not gas monitor due to RO05 gas tap blocked, analyser pump flow stop working, DS115 gas tap open.

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	04/10/2021

Background Readings:	O_2% v/v :	21.1	CO_2% v/v :	0.1	CH_4% v/v :	0.4	Weather Conditions :	Clear, sunny, windy, 10°c	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Falling	Ground Conditions :	Damp	GA5000	JM

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS123	08:25	998	-0.10	18.8	18.8	4.5	4.5	0.3	0.3	0	0	0.3	0.3	0.2	-	Dry	-	1.75
DS122	08:32	999	-0.09	19.9	20.1	1.2	1.0	0.3	0.3	0	0	0.3	0.3	0.0	-	Dry	-	0.87
DS130	08:44	1000	-0.07	19.9	20.0	1.2	1.1	0.3	0.3	0	0	0.2	0.2	0.1	-	Dry	-	0.96
DS125	09:35	999	-0.10	20.5	20.5	1.1	1.1	0.3	0.3	0	0	0.5	0.5	0.1	-	Dry	-	0.98
RO08	09:10	999	-0.03	20.1	20.2	0.3	0.3	0.3	0.3	0	0	0.4	0.4	0.1	-	3.95	-	10.00
DS128	08:55	999	-0.10	20.3	20.3	1.0	1.0	0.3	0.3	0	0	0.3	0.3	0.0	-	Dry	-	1.61
DS121	09:52	999	-0.12	20.3	20.4	1.5	1.5	0.3	0.3	0	0	0.4	0.4	0.1	-	Dry	-	1.01
DS120	10:00	999	-0.02	20.4	20.4	1.0	1.0	0.3	0.3	0	0	0.4	0.4	0.0	-	Dry	-	0.90
RO07	09:42	999	-0.05	17.8	17.8	1.4	1.4	0.3	0.3	0	0	0.3	0.3	0.1	-	3.90	-	10.00
DS106	10:18	999	0.05	20.9	20.9	0.6	0.6	0.3	0.3	1	0	0.4	0.4	0.1	-	Dry	-	0.95
DS108	10:10	998	0.02	19.7	19.7	0.9	0.9	0.3	0.3	0	0	0.4	0.4	0.0	-	Dry	-	1.00
RO03	10:27	998	0.02	21.0	21.1	0.7	0.6	0.3	0.3	0	0	0.3	0.3	0.1	-	4.15	-	10.00
DS105	10:33	998	0.00	20.9	21.0	0.4	0.4	0.3	0.3	1	0	0.3	0.3	0.0	-	Dry	-	1.05
DS104	10:42	999	0.09	20.6	20.7	0.8	0.7	0.3	0.3	0	0	0.3	0.3	0.1	-	Dry	-	0.90
DS107	10:48	999	0.02	20.4	20.5	0.4	0.4	0.3	0.3	0	0	0.4	0.4	0.1	-	Dry	-	0.99
RO02	11:40	999	0.05	20.8	21.2	0.2	0.1	0.3	0.3	1	0	0.2	0.2	0.0	-	4.00	-	10.04
DS111	11:55	996	0.03	20.4	20.4	0.7	0.7	0.3	0.3	1	0	0.0	0.0	0.0	-	Dry	-	0.86
DS103	12:02	999	0.07	20.9	21.0	0.4	0.4	0.3	0.3	1	0	-0.1	-0.1	0.1	-	Dry	-	1.10
DS102	12:10	999	0.05	18.2	18.2	1.3	1.3	0.3	0.3	1	0	0.3	0.3	0.1	-	Dry	-	1.10
DS101	12:16	999	0.12	19.5	19.5	1.0	1.0	0.3	0.3	1	0	0.4	0.4	0.0	-	Dry	-	1.00
RO01	12:24	998	0.07	20.5	20.5	0.0	0.0	0.3	0.3	2	1	0.4	0.4	0.1	-	5.90	-	10.00
DS112	12:46	999	0.07	21.2	21.3	0.4	0.4	0.3	0.3	1	0	0.3	0.3	0.0	-	Dry	-	0.95

Remarks : RO01 W1 7.6 mbgs

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	04/10/2021

Background Readings:	O_2% v/v :	21.1	CO_2% v/v :	0.1	CH_4% v/v :	0.4	Weather Conditions :	Clear, sunny, windy, 10oc	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Falling	Ground Conditions :	Damp	GA5000	JM

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS113	13:15	999	0.07	20.8	20.9	0.6	0.6	0.4	0.3	1	0	0.2	0.2	0.0	-	Dry	-	1.10
RO05	12:53	999	0.09	21.7	21.8	0.0	0.0	0.3	0.3	2	0.0	0.0	0.0	0.1	-	3.10	-	10.00
DS114	13:23	999	0.09	20.7	20.8	0.7	0.7	0.4	0.4	2	0	0.3	0.3	0.0	-	Dry	-	1.10
DS115	13:28	999	0.12	19.9	19.9	1.0	1.0	0.3	0.3	2	0	0.2	0.2	0.1	-	Dry	-	1.00
DS117	13:45	999	0.07	21.4	21.5	0.3	0.3	0.3	0.3	2	0	0.3	0.3	0.2	-	Dry	-	0.80
RO06	13:52	999	0.10	20.9	20.9	0.0	0.0	0.3	0.3	2	1	0.3	0.3	0.1	-	5.70	-	10.00
DS118	14:14	999	0.03	21.2	21.2	0.5	0.5	0.3	0.3	2	0	0.5	0.5	0.1	-	Dry	-	1.00
DS110	13:35	1000	0.05	21.5	21.8	0.2	0.1	0.4	0.4	2	0	0.2	0.2	0.2	-	0.35	-	3.00
RO04	10:57	1000	-0.02	20.8	21.2	0.3	0.2	0.3	0.3	1	0	0.4	0.4	0.0	-	3.00	-	10.15

Remarks : RO04 W1 sample 5.0mbgs, RO06 W1 3.0mbgs, RO06 W1 8.0mbgs

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	11/10/2021

Background Readings:	O_2% v/v :	21.1	CO_2% v/v :	0.3	CH_4% v/v :	0.0	Weather Conditions :	Dry	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Falling	Ground Conditions :	Damp	GA5000	HBW

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS123	16:00	1020	-0.02	20.0	20.0	1.4	1.4	0.0	0.0	1	0	-0.1	-0.1	0.8	-	Dry	-	1.75
DS122	15:55	1020	-0.03	20.0	20.0	1.4	1.4	0.0	0.0	1	0	0.1	0.1	0.7	-	Dry	-	0.87
DS130	15:40	1020	-0.02	20.8	20.8	0.8	0.8	0.0	0.0	1	1	-0.2	-0.2	0.6	-	Dry	-	0.96
DS125	15:15	1020	0.03	21.1	21.1	0.8	0.8	0.0	0.0	1	1	-0.2	-0.2	0.3	-	Dry	-	0.98
RO08	15:30	1020	-0.02	20.3	20.3	0.7	0.7	0.0	0.0	1	1	-0.2	-0.2	0.5	-	3.69	-	10.00
DS128	15:20	1020	0.03	20.8	20.8	1.3	1.3	0.0	0.0	1	1	-0.2	-0.2	0.7	-	1.43	-	1.61
DS121	16:04	1020	0.02	20.1	20.1	1.4	1.4	0.0	0.0	1	1	-0.2	-0.2	0.8	-	Dry	-	1.01
DS120	16:10	1020	0.03	20.2	20.2	1.3	1.3	0.0	0.0	1	1	-0.2	-0.2	0.8	-	Dry	-	0.90
RO07	15:46	1020	0.03	12.9	12.9	2.0	2.0	0.0	0.0	2	0	-0.2	-0.2	0.6	-	3.68	-	10.00
DS106	14:59	1020	0.02	20.8	20.8	0.9	0.9	0.0	0.0	1	0	-0.1	-0.1	0.3	-	Dry	-	0.95
DS108	15:05	1020	-0.02	20.7	20.7	0.9	0.9	0.0	0.0	1	0	-0.2	-0.2	0.2	-	Dry	-	1.00
RO03	14:59	1020	0.02	20.8	20.8	0.9	0.9	0.0	0.0	1	0	-0.2	-0.2	0.2	-	4.10	-	10.00
DS105	14:52	1020	-0.02	20.5	20.5	0.8	0.8	0.0	0.0	1	2	-0.1	-0.1	0.5	-	Dry	-	1.05
DS104	14:40	1020	-0.02	21.1	21.1	0.3	0.3	0.0	0.0	1	0	-0.2	-0.2	0.2	-	Dry	-	0.90
DS107	14:25	1020	-0.02	21.1	21.1	0.3	0.3	0.0	0.0	1	0	-0.2	-0.2	0.2	-	Dry	-	0.99
RO02	14:06	1020	-0.02	21.2	21.2	0.3	0.3	0.0	0.0	1	1	-0.2	-0.2	0.1	-	3.96	-	10.04
DS111	14:10	1020	-0.02	20.2	20.2	0.3	0.3	0.0	0.0	0	0	-0.2	-0.2	0.1	-	Dry	-	0.86
DS103	13:17	1020	0.00	20.2	20.2	0.7	0.7	0.0	0.0	0	0	-0.1	-0.1	0.2	-	Dry	-	1.10
DS102	13:06	1020	-0.02	20.3	20.3	0.7	0.7	0.0	0.0	0	1	-0.1	-0.1	0.2	-	Dry	-	1.10
DS101	12:59	1020	-0.02	18.9	18.9	1.5	1.5	0.0	0.0	0	0	-0.1	-0.1	0.1	-	Dry	-	1.00
RO01	12:37	1020	-0.02	19.2	19.2	0.2	0.2	0.0	0.0	0	1	0.0	0.0	0.8	-	5.45	-	10.00
DS112	12:28	1020	-0.02	18.8	18.8	1.4	1.4	0.0	0.0	0	0	-0.1	-0.1	0.3	-	Dry	-	0.95

Remarks :

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	11/10/2021

Background Readings:	O_2% v/v :	21.1	CO_2% v/v :	0.3	CH_4% v/v :	0.0	Weather Conditions :	Dry	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Falling	Ground Conditions :	Damp	GA5000	HBW

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS113	12:16	1020	-0.02	20.5	20.8	0.2	0.2	0.0	0.0	0	0	0.1	0.1	0.0	-	Dry	-	1.75
RO05	11:07	1020	-0.10	20.9	20.9	0.2	0.2	0.0	0.0	0	0	0.2	0.2	0.0	-	3.01	-	0.87
DS114	10:59	1020	-0.09	19.8	19.8	1.2	1.2	0.0	0.0	0	0	0.2	0.2	0.0	-	Dry	-	0.96
DS115	10:49	1020	-0.09	19.6	19.6	1.7	1.7	0.0	0.0	0	0	0.2	0.2	0.0	-	Dry	-	1.00
DS117	16:27	1020	-0.02	20.7	20.7	0.9	0.9	0.0	0.0	1	0	-0.2	-0.2	0.8	-	Dry	-	0.80
RO06	16:33	1020	-0.02	19.9	19.9	0.2	0.2	0.0	0.0	1	1	-0.1	-0.1	0.1	-	5.50	-	10.00
DS118	16:44	1020	-0.02	21.0	21.0	0.8	0.8	0.0	0.0	1	1	-0.1	-0.1	0.1	-	Dry	-	1.00
DS110	17:00	1020	-0.02	20.9	20.9	0.8	0.8	0.0	0.0	1	1	-0.1	-0.1	0.9	-	0.39	-	3.00
RO04	13:37	1020	-0.02	20.4	20.4	0.5	0.5	0.0	0.0	1	1	-0.2	-0.2	0.1	-	2.75	-	10.15

Remarks :

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	18/10/2021

Background Readings:	O_2% v/v :	21.0	CO_2% v/v :	0.2	CH_4% v/v :	0.0	Weather Conditions :	Cloudy, slightly windy, 13°C	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Falling	Ground Conditions :	Damp	GA5000	JM

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS123	09:30	1006	-0.12	18.4	18.4	5.1	5.1	0.0	0.0	0	0	0.3	0.3	0.2	-	Dry	-	1.75
DS122	09:50	1006	-0.07	21.0	21.0	0.2	0.2	0.0	0.0	0	0	0.1	0.1	0.0	-	Dry	-	0.87
DS130	10:00	1006	-0.06	20.0	20.0	1.1	1.1	0.0	0.0	0	0	0.2	0.2	0.4	-	Dry	-	0.96
DS125	10:15	1006	-0.02	19.8	19.8	1.0	1.0	0.0	0.0	0	0	0.2	0.2	0.1	-	Dry	-	0.98
RO08	10:20	1006	0.02	20.8	20.8	0.4	0.4	0.0	0.0	1	0	0.3	0.3	0.4	-	3.57	-	10.00
DS128	10:28	1006	0.02	20.1	20.1	0.8	0.8	0.0	0.0	0	0	0.2	0.2	0.3	-	Dry	-	1.61
DS121	10:55	1006	0.03	20.2	20.2	1.2	1.2	0.0	0.0	0	0	0.1	0.1	0.2	-	Dry	-	1.01
DS120	11:02	1006	-0.02	20.3	20.3	1.0	1.0	0.0	0.0	0	0	0.1	0.1	0.1	-	Dry	-	0.90
RO07	10:38	1006	0.02	17.4	17.4	1.4	1.4	0.0	0.0	0	0	0.3	0.3	0.3	-	3.50	-	10.00
DS106	11:23	1006	0.03	21.0	21.0	0.2	0.2	0.0	0.0	1	0	0.1	0.1	0.4	-	Dry	-	0.95
DS108	11:15	1006	0.02	19.6	19.6	0.8	0.8	0.0	0.0	1	0	0.1	0.1	0.1	-	Dry	-	1.00
RO03	11:34	1006	0.05	20.9	20.9	0.5	0.5	0.0	0.0	1	0	0.4	0.3	0.2	-	4.15	-	10.00
DS105	11:42	1006	0.07	21.1	21.1	0.2	0.2	0.0	0.0	1	2	0.1	0.1	0.1	-	Dry	-	1.05
DS104	11:50	1006	0.03	21.4	21.4	0.3	0.3	0.0	0.0	1	0	0.1	0.1	0.3	-	Dry	-	0.90
DS107	11:57	1006	0.03	21.1	21.1	0.2	0.2	0.0	0.0	1	0	0.1	0.1	0.1	-	Dry	-	0.99
RO02	12:06	1006	0.01	20.8	20.8	0.1	0.1	0.0	0.0	1	0	0.3	0.3	0.1	-	4.75	-	10.04
DS111	12:15	1006	0.03	20.5	20.5	0.4	0.4	0.0	0.0	0	0	0.1	0.1	0.4	-	Dry	-	0.86
DS103	12:25	1006	0.04	20.7	20.7	0.3	0.3	0.0	0.0	1	0	0.1	0.1	0.3	-	Dry	-	1.10
DS102	12:35	1006	0.08	20.2	20.2	0.6	0.6	0.0	0.0	0	0	0.1	0.1	0.1	-	Dry	-	1.10
DS101	12:40	1006	0.09	19.9	19.9	1.0	1.0	0.0	0.0	1	0	0.1	0.1	0.0	-	Dry	-	1.00
RO01	12:45	1006	0.07	21.1	21.1	0.0	0.0	0.0	0.0	2	1	0.3	0.3	0.7	-	5.45	-	10.00
DS112	12:55	1006	0.04	20.9	20.9	0.3	0.3	0.0	0.0	1	0	0.1	0.1	0.2	-	Dry	-	0.95

Remarks :

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Oxfordshire
Contract No :	C10172
Date :	18/10/2021

Background Readings:	O_2% v/v :	21.0	CO_2% v/v :	0.2	CH_4% v/v :	0.0	Weather Conditions :	Cloudy, slightly windy, 13°C	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Falling	Ground Conditions :	Damp	GA5000	JM

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
DS113	13:10	1006	0.06	20.7	20.7	0.4	0.4	0.0	0.0	1	0	0.1	0.1	0.2	-	Dry	-	1.75
RO05	13:00	1006	0.08	21.1	21.1	0.1	0.1	0.0	0.0	0	0	0.2	0.2	0.1	-	3.05	-	0.87
DS114	13:20	1006	0.08	19.8	19.8	0.9	0.9	0.0	0.0	0	0	0.3	0.3	0.0	-	Dry	-	0.96
DS115	13:30	1006	0.10	19.9	19.9	1.1	1.1	0.0	0.0	0	0	0.2	0.2	0.0	-	Dry	-	1.00
DS117	13:40	1006	0.06	20.1	20.1	0.6	0.6	0.0	0.0	1	0	0.3	0.3	0.4	-	Dry	-	0.80
RO06	13:48	1006	0.10	20.9	21.0	0.2	0.2	0.0	0.0	1	1	0.3	0.3	0.1	-	5.35	-	10.00
DS118	13:55	1006	0.03	20.7	20.7	0.8	0.8	0.0	0.0	1	1	0.2	0.2	0.1	-	Dry	-	1.00
DS110	14:05	1006	0.04	21.4	21.4	0.3	0.3	0.0	0.0	1	1	0.2	0.2	0.5	-	0.40	-	3.00
RO04	14:10	1006	-0.02	20.8	20.8	0.4	0.4	0.0	0.0	1	1	0.2	0.2	0.1	-	2.62	-	10.15

Remarks :

NR -Not recorded