APPENDIX 12

Falling Head Test Results

Falling Head Test

|				
Job No:	ST15807	Diameter	50	mm
Contract Title:	Technical Reports at Blythe Park	Top Of Response Zone	0.00	m
Date of Test:	03/03/2017	Base of Response Zone	2.10	m
		Groundwater Level	2.10	m

Recorded Time			Total Time (secs)	Depth (m)	H/Ho
Hours	Minutes	Seconds			
0	0	0	0	0.00	1.000
0	0	15	15	0.03	0.986
0	0	30	30	0.05	0.976
0	0	45	45	0.08	0.964
0	1	0	60	0.10	0.952
0	2	0	120	0.14	0.933
0	3	0	180	0.19	0.910
0	4	0	240	0.23	0.890
0	5	0	300	0.28	0.867
0	10	0	600	0.50	0.762
0	15	0	900	0.57	0.729
0	20	0	1200	0.71	0.662
0	25	0	1500	0.82	0.610
0	30	0	1800	0.90	0.571

$H_0 =$	2.100
$H_1 =$	0.986
$H_2 =$	0.976
$t_1 =$	15
$t_2 =$	30
$F =$	3
$A =$	0.002

Coefficient of Permeability (k) (m/s)

4.27E-07
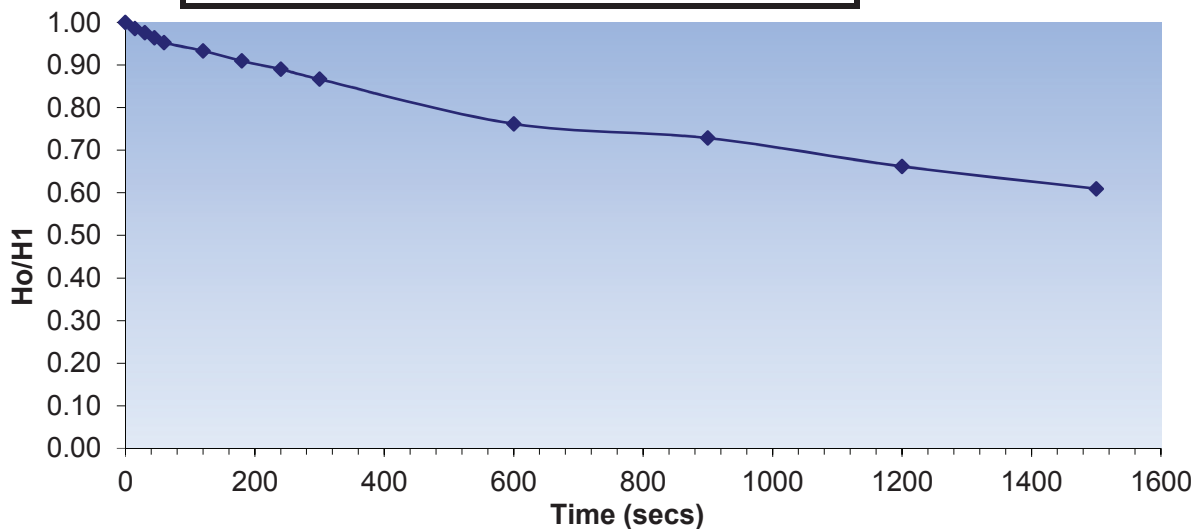
Key:

k = Coefficient of Permeability - calculated from the general approach in 25.4.6; Method 1 (BS5930)

F = Intake Factor - calculated from Equation D, Figure 6 from BS5930

A = Cross Sectional Area of well pack

H_1 = variable head measured at time t_1 after commencement of test

H_2 = variable head measured at time t_2 after commencement of test

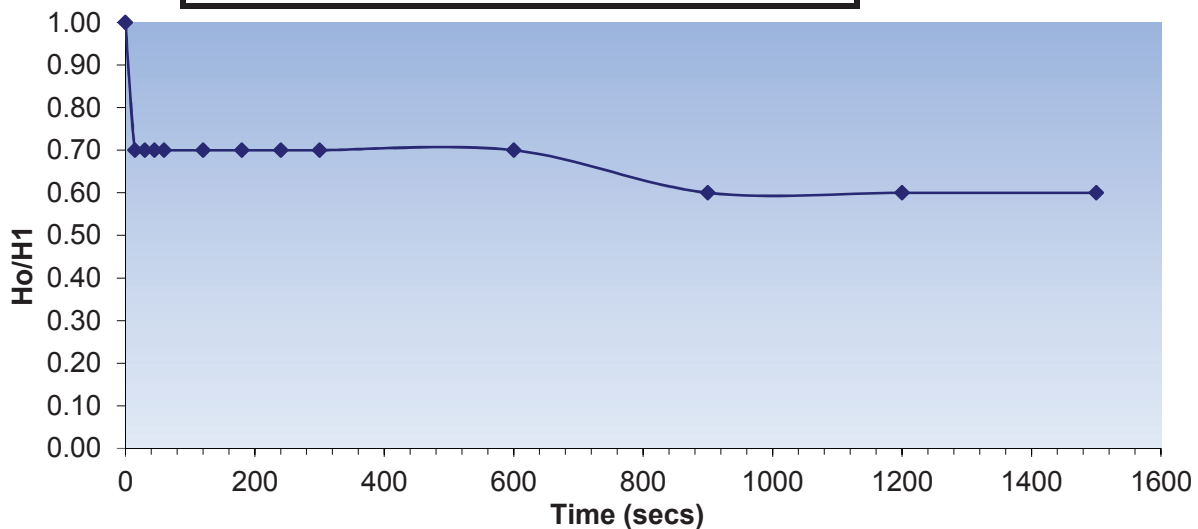# Falling Head Test

Borehole: WS07   **Test No:** 1 of 1

Job No:	ST15807
Contract Title:	Technical Reports at Blythe Park
Date of Test:	03/03/2017

Diameter	50 mm
Top Of Response Zone	0.00 m
Base of Response Zone	3.00 m
Groundwater Level	1.00 m

Recorded Time			Total Time (secs)	Depth (m)	H/Ho
Hours	Minutes	Seconds			
0	0	0	0	0.00	1.000
0	0	15	15	0.30	0.700
0	0	30	30	0.30	0.700
0	0	45	45	0.30	0.700
0	1	0	60	0.30	0.700
0	2	0	120	0.30	0.700
0	3	0	180	0.30	0.700
0	4	0	240	0.30	0.700
0	5	0	300	0.30	0.700
0	10	0	600	0.30	0.700
0	15	0	900	0.40	0.600
0	20	0	1200	0.40	0.600
0	25	0	1500	0.40	0.600
0	30	0	1800	0.40	0.600

$H_0 =$	1.000
$H_1 =$	0.700
$H_2 =$	0.700
$t_1 =$	15
$t_2 =$	30
$F =$	2
$A =$	0.002

Coefficient of Permeability (k) (m/s)

0.00E+00

Key:

k = Coefficient of Permeability - calculated from the general approach in 25.4.6; Method 1 (BS5930)

F = Intake Factor - calculated from Equation D, Figure 6 from BS5930

A = Cross Sectional Area of well pack

H_1 = variable head measured at time t_1 after commencement of test

H_2 = variable head measured at time t_2 after commencement of test

Falling Head Test

Job No:	ST15807	Diameter	50 mm
Contract Title:	Technical Reports at Blythe Park	Top Of Response Zone	0.00 m
Date of Test:	02/03/2017	Base of Response Zone	2.00 m
		Groundwater Level	1.30 m

Recorded Time			Total Time (secs)	Depth (m)	H/Ho
Hours	Minutes	Seconds			
0	0	0	0	0.00	1.000
0	0	15	15	0.05	0.962
0	0	30	30	0.07	0.946
0	0	45	45	0.09	0.931
0	1	0	60	0.15	0.885
0	2	0	120	0.35	0.731
0	3	0	180	0.45	0.654
0	4	0	240	0.50	0.615
0	5	0	300	0.50	0.615
0	10	0	600	0.70	0.462
0	15	0	900	1.00	0.231
0	20	0	1200	1.00	0.231
0	25	0	1500	1.00	0.231
0	30	0	1800	1.00	0.231

H_0 =	1.300
H_1 =	0.962
H_2 =	0.946
t_1 =	15
t_2 =	30
F =	2
A =	0.002

Coefficient of Permeability (k) (m/s)

1.02E-06

Key:

k = Coefficient of Permeability - calculated from the general approach in 25.4.6; Method 1 (BS5930)

F = Intake Factor - calculated from Equation D, Figure 6 from BS5930

A = Cross Sectional Area of well pack

H_1 = variable head measured at time t_1 after commencement of test

H_2 = variable head measured at time t_2 after commencement of test

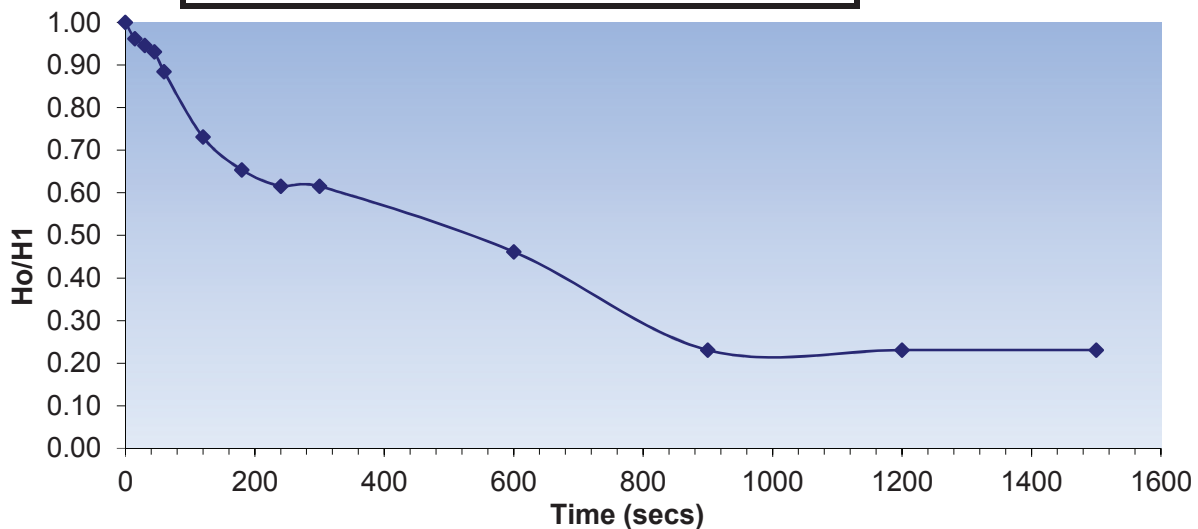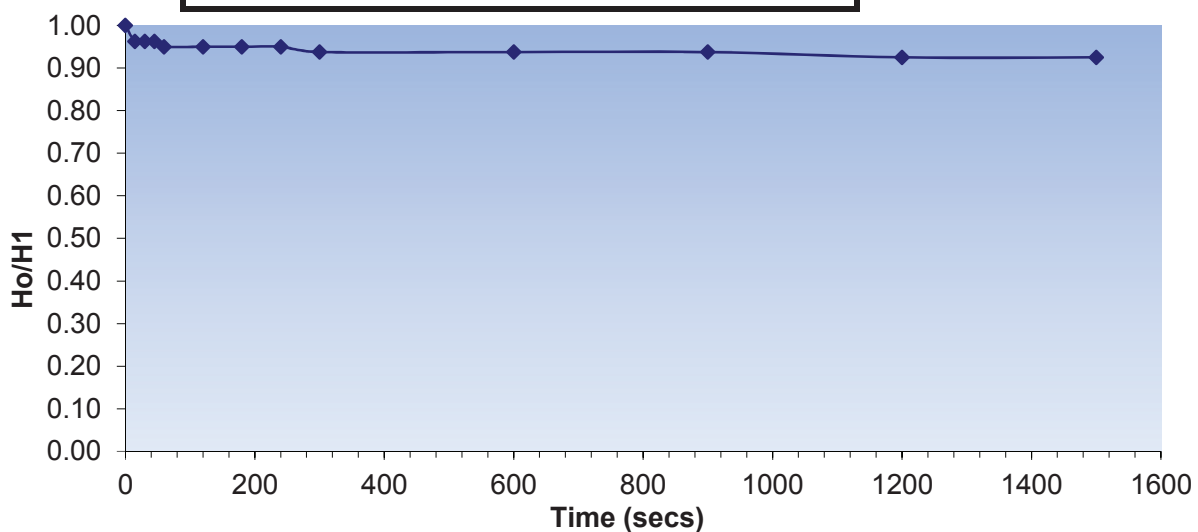# Falling Head Test

Borehole: **WS25**   **Test No:** **1 of 1**

Job No:	ST15807
Contract Title:	Technical Reports at Blythe Park
Date of Test:	01/03/2017

Diameter	50 mm
Top Of Response Zone	0.00 m
Base of Response Zone	2.20 m
Groundwater Level	0.80 m

Recorded Time			Total Time (secs)	Depth (m)	H/Ho
Hours	Minutes	Seconds			
0	0	0	0	0.00	1.000
0	0	15	15	0.03	0.963
0	0	30	30	0.03	0.963
0	0	45	45	0.03	0.963
0	1	0	60	0.04	0.950
0	2	0	120	0.04	0.950
0	3	0	180	0.04	0.950
0	4	0	240	0.04	0.950
0	5	0	300	0.05	0.938
0	10	0	600	0.05	0.938
0	15	0	900	0.05	0.938
0	20	0	1200	0.06	0.925
0	25	0	1500	0.06	0.925
0	30	0	1800	0.06	0.925

H_0 =	0.800
H_1 =	0.963
H_2 =	0.963
t_1 =	15
t_2 =	30
F =	1
A =	0.002

Coefficient of Permeability (k) (m/s)

0.00E+00

Key:

k = Coefficient of Permeability - calculated from the general approach in 25.4.6; Method 1 (BS5930)

F = Intake Factor - calculated from Equation D, Figure 6 from BS5930

A = Cross Sectional Area of well pack

H_1 = variable head measured at time t_1 after commencement of test

H_2 = variable head measured at time t_2 after commencement of test

Falling Head Test

Job No:	ST15807	
Contract Title:	Technical Reports at Blythe Park	
Date of Test:	28/02/2017	

Diameter	50 mm
Top Of Response Zone	0.00 m
Base of Response Zone	2.10 m
Groundwater Level	0.23 m

Recorded Time			Total Time (secs)	Depth (m)	H/Ho
Hours	Minutes	Seconds			
0	0	0	0	0.00	1.000
0	0	15	15	0.05	0.783
0	0	30	30	0.07	0.696
0	0	45	45	0.09	0.609
0	1	0	60	0.12	0.478
0	2	0	120	0.15	0.348
0	3	0	180	0.17	0.261
0	4	0	240	0.18	0.217
0	5	0	300	0.19	0.174
0	10	0	600	0.20	0.130
0	15	0	900	0.21	0.087
0	20	0	1200	0.21	0.087
0	25	0	1500	0.21	0.087
0	30	0	1800	0.21	0.087

H_0 =	0.230
H_1 =	0.783
H_2 =	0.696
t_1 =	15
t_2 =	30
F =	1
A =	0.002

Coefficient of Permeability (k) (m/s)

2.38E-05

Key:

k = Coefficient of Permeability - calculated from the general approach in 25.4.6; Method 1 (BS5930)

F = Intake Factor - calculated from Equation D, Figure 6 from BS5930

A = Cross Sectional Area of well pack

H_1 = variable head measured at time t_1 after commencement of test

H_2 = variable head measured at time t_2 after commencement of test