

SOAKAWAY TESTS TO BUILDING REGULATIONS

LOCATION CHAPEL FARM WHITCHURCH

WEATHER Dry

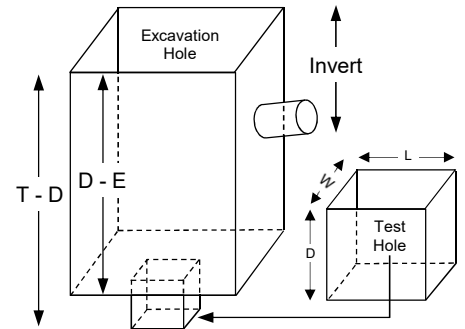
POSITION ON SITE Eastern side of site

HOLE NUMBER 3

TEST HOLE DIMENSIONS (mm)
Length 300
Width 300
Depth 300

DEPTH OF EXCAVATION TO THE TEST HOLE (m) 1.00 D - E

TOTAL DEPTH TO THE BOTTOM OF THE TEST HOLE (m) 1.30 T - D



DATES: 1st TEST 25-09-21 2nd TEST 25-09-21 3rd TEST 25-09-21

1st TEST			2nd TEST			3rd TEST		
DEPTH OF WATER (mm)	TIME (00:00 hrs.)	TIME ELAPSED (seconds)	DEPTH OF WATER (mm)	TIME (00:00 hrs.)	TIME ELAPSED (seconds)	DEPTH OF WATER (mm)	TIME (00:00 hrs.)	TIME ELAPSED (seconds)
300	01:00:00	0	300	01:00:00	0	300	01:00:00	0
275	01:05:00	300	278	01:05:00	300	285	01:05:00	300
225	01:15:00	900	255	01:10:00	600	265	01:10:00	600
200	01:25:00	1500	220	01:20:00	1200	240	01:20:00	1200
150	01:30:00	1800	175	01:30:00	1800	200	01:30:00	1800
100	01:35:00	2100	100	01:50:00	3000	140	01:50:00	3000
75	01:40:00	2400	55	02:00:00	3600	100	02:00:00	3600
50	01:45:00	2700	0	02:15:00	4500	35	02:20:00	4800
25	01:55:00	3300				0	02:30:00	5400
0	02:00:00	3600						

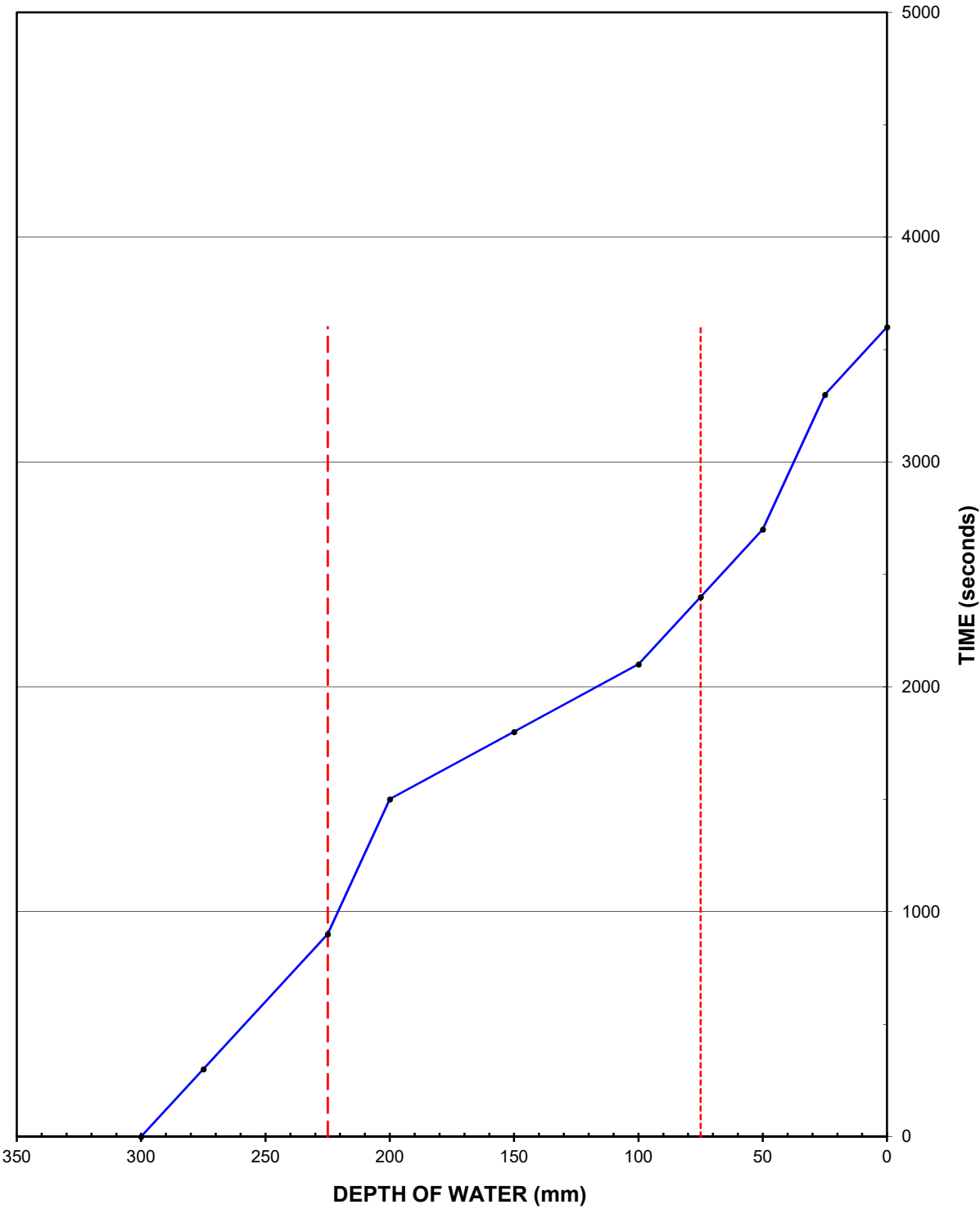
RECORDED BY G Cartwright

COMMENTS -

HOLE 3
SOAKAWAY TEST
1

KEY

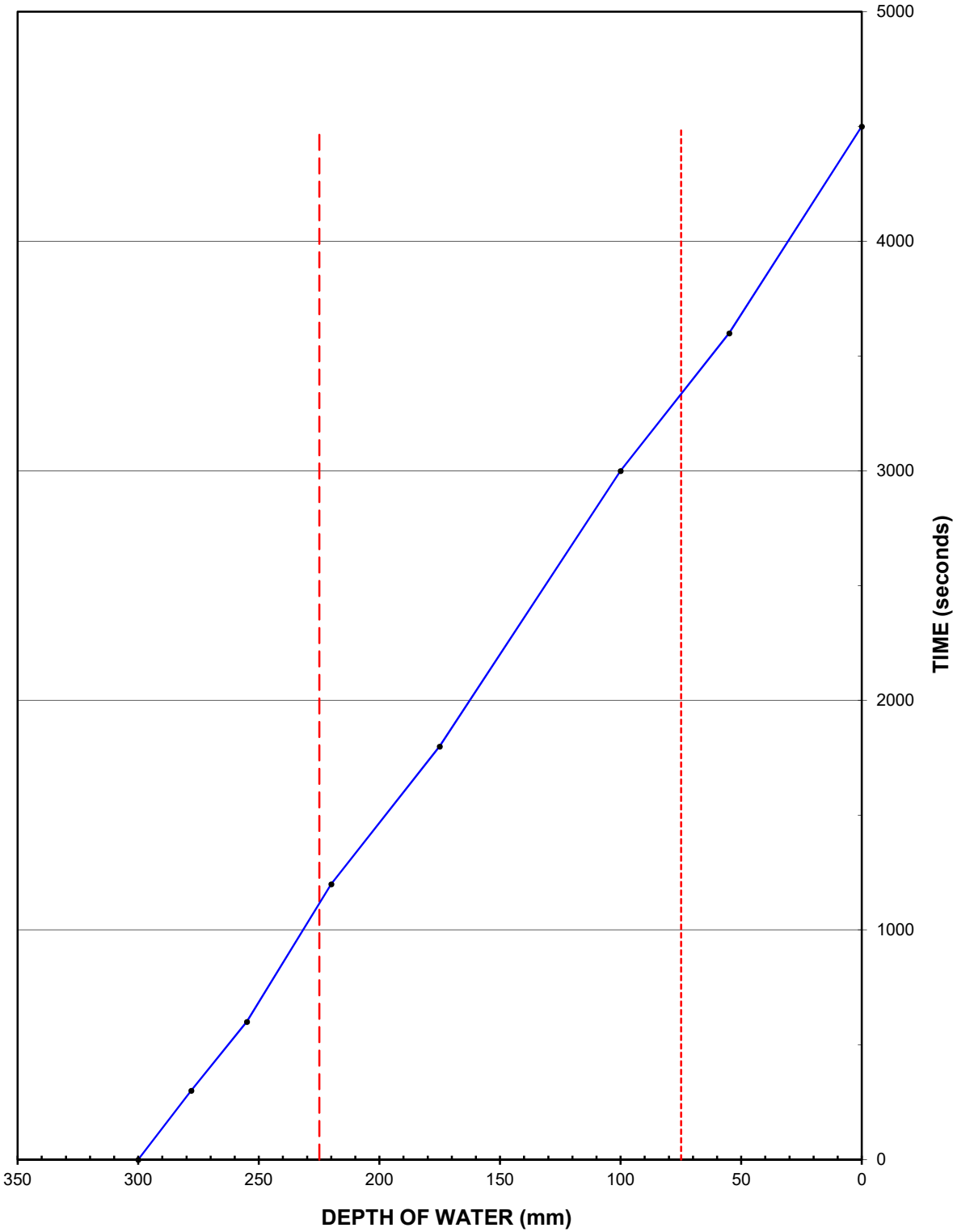
--- 75 % Water Depth --- 25 % Water Depth ●--- Water Level



HOLE 3
SOAKAWAY TEST
2

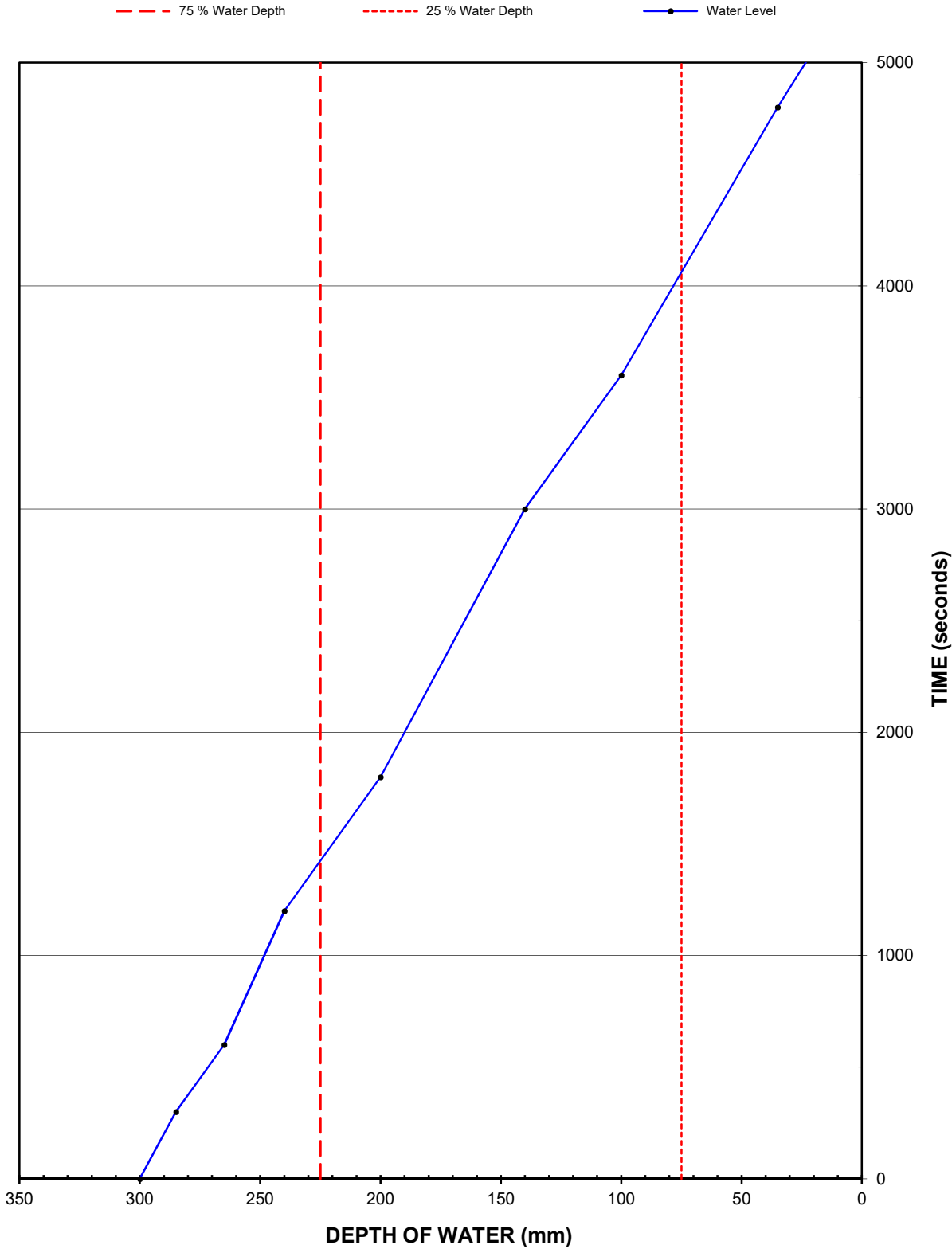
KEY

--- 75 % Water Depth - - - 25 % Water Depth —●— Water Level



HOLE 3
SOAKAWAY TEST
3

KEY



SOAKAWAY TESTS TO BUILDING REGULATIONS

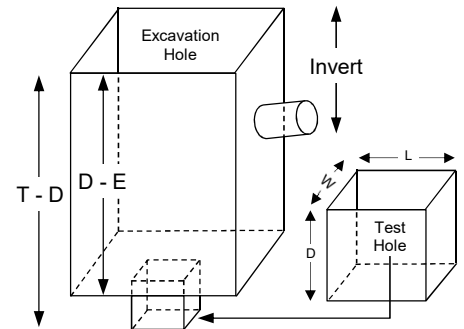
LOCATION CHAPEL FARM WHITCHURCH

WEATHER Dry

POSITION ON SITE Eastern side of site

HOLE NUMBER 4

TEST HOLE DIMENSIONS (mm)
Length 300
Width 300
Depth 300



DEPTH OF EXCAVATION TO THE TEST HOLE (m) 1.00 D - E

PROPOSED DEPTH TO INVERT OF OUTFALL PIPE (m) 0.70 Invert

TOTAL DEPTH TO THE BOTTOM OF THE TEST HOLE (m) 1.30 T - D

DATES: 1st TEST 25-09-21 2nd TEST 25-09-21 3rd TEST 25-09-21

1st TEST			2nd TEST			3rd TEST		
DEPTH OF WATER (mm)	TIME (00:00 hrs.)	TIME ELAPSED (seconds)	DEPTH OF WATER (mm)	TIME (00:00 hrs.)	TIME ELAPSED (seconds)	DEPTH OF WATER (mm)	TIME (00:00 hrs.)	TIME ELAPSED (seconds)
300	01:00:00	0	300	01:00:00	0	300	01:00:00	0
270	01:05:00	300	280	01:05:00	300	280	01:05:00	300
235	01:10:00	600	250	01:10:00	600	258	01:10:00	600
200	01:15:00	900	210	01:20:00	1200	215	01:20:00	1200
130	01:25:00	1500	140	01:30:00	1800	170	01:30:00	1800
100	01:30:00	1800	50	01:50:00	3000	100	01:50:00	3000
69	01:35:00	2100	0	02:00:00	3600	45	02:00:00	3600
40	01:40:00	2400				0	02:10:00	4200
0	01:45:00	2700						

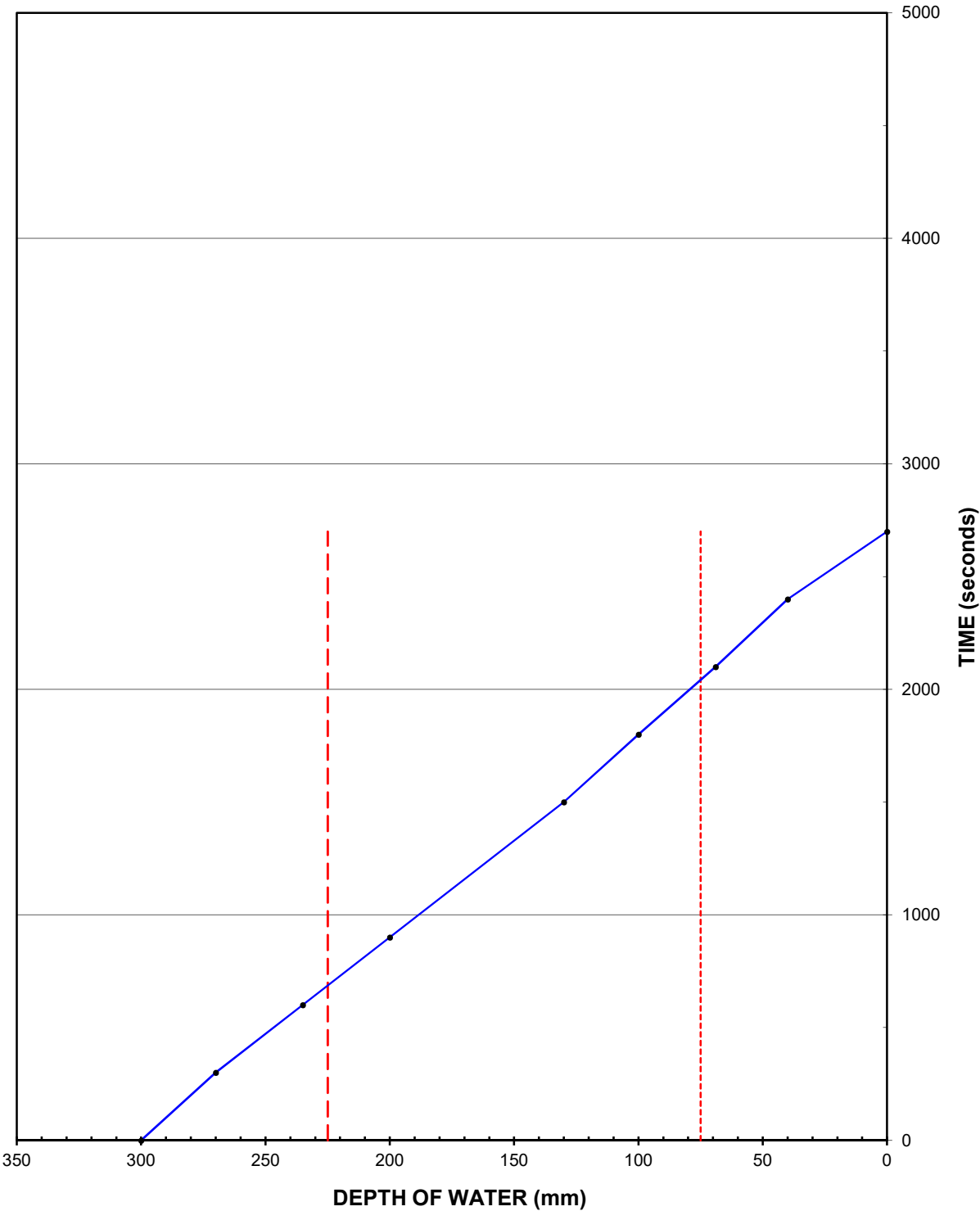
RECORDED BY G Cartwright

COMMENTS -

HOLE 4
SOAKAWAY TEST
1

KEY

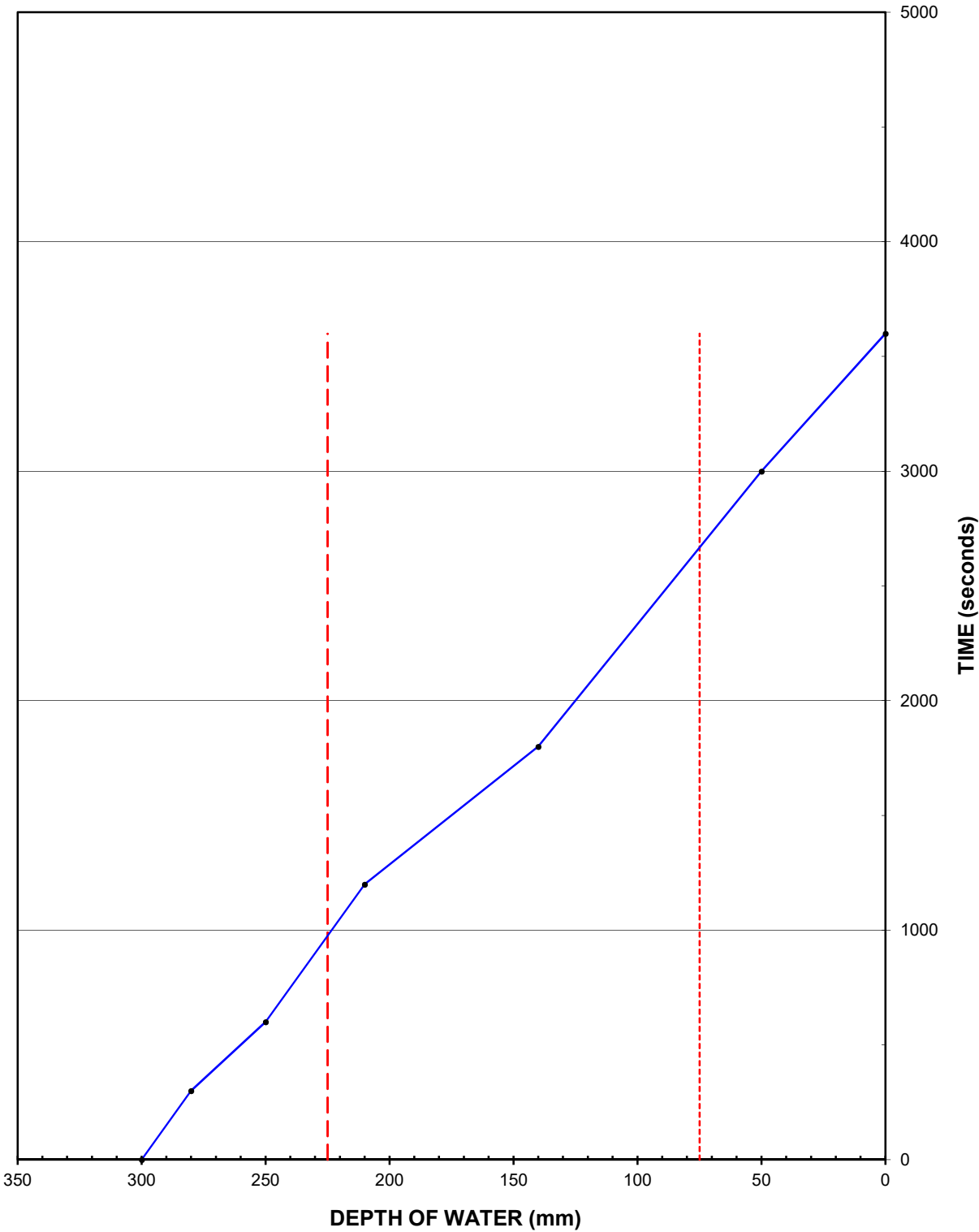
--- 75 % Water Depth --- 25 % Water Depth —●— Water Level



HOLE 4
SOAKAWAY TEST
2

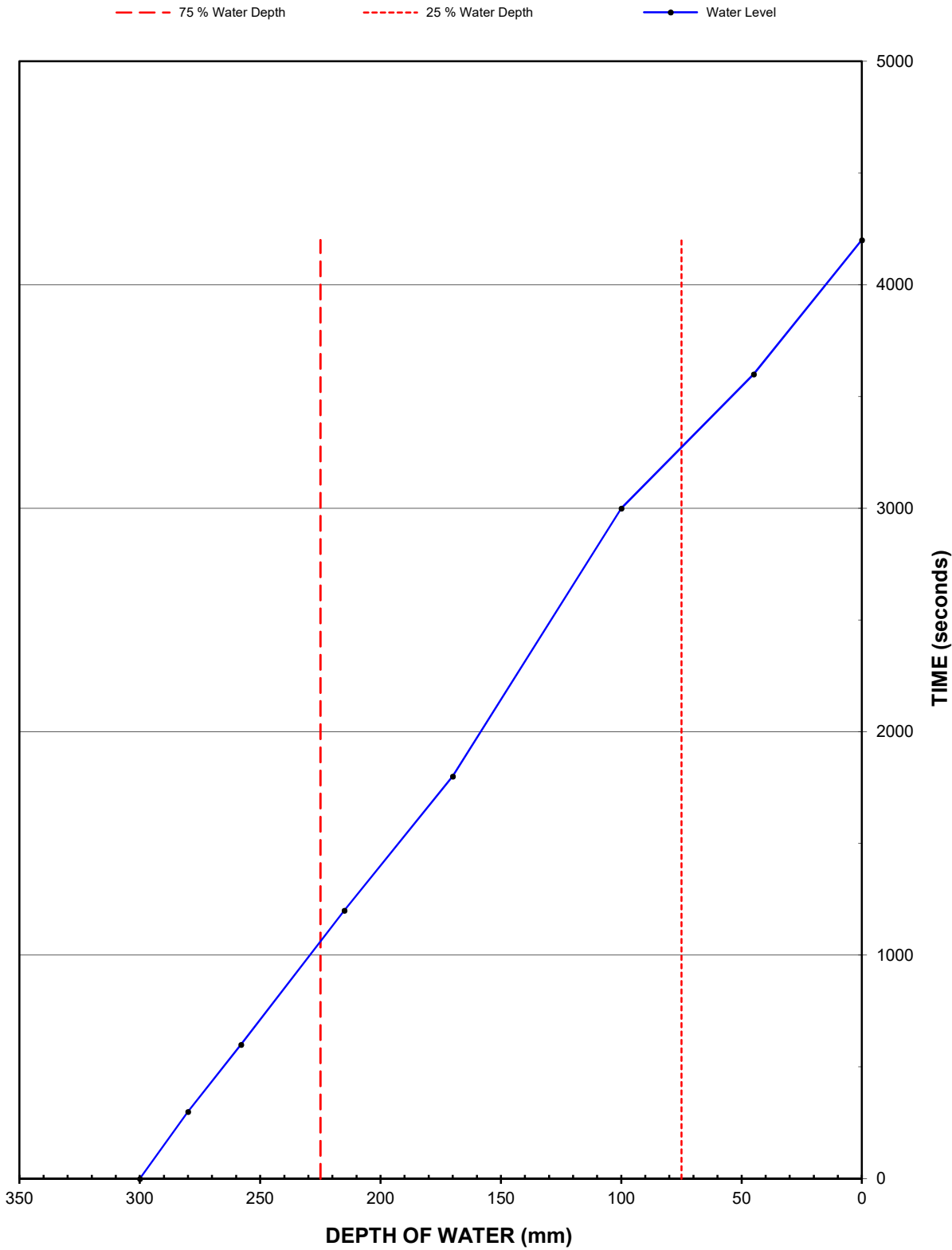
KEY

--- 75 % Water Depth - - - 25 % Water Depth —●— Water Level



HOLE 4
SOAKAWAY TEST
3

KEY



SOAKAWAY TESTS TO BUILDING REGULATIONS TEST RESULTS

HOLE No. 3

1st TEST			2nd TEST			3rd TEST		
PERCENTAGE DEPTH OF WATER	DEPTH (mm)	TIME (seconds)	PERCENTAGE DEPTH OF WATER	DEPTH (mm)	TIME (seconds)	PERCENTAGE DEPTH OF WATER	DEPTH (mm)	TIME (seconds)
100%	300	0	100%	300	0	100%	300	0
75%	225	900	75%	225	1112	75%	225	1430
25%	75	2400	25%	75	3335	25%	75	4065
$V_p = 10.0$			$V_p = 14.8$			$V_p = 17.6$		

AVERAGE $V_p = 14.1$

INFILTRATION RATE = 3.539E-05 m/s or 0.1274 m/hr

Infiltration Factor (IF) = 2

Infiltration Rate = $\frac{0.001}{IF \times V_p}$

HOLE No. 4

1st TEST			2nd TEST			3rd TEST		
PERCENTAGE DEPTH OF WATER	DEPTH (mm)	TIME (seconds)	PERCENTAGE DEPTH OF WATER	DEPTH (mm)	TIME (seconds)	PERCENTAGE DEPTH OF WATER	DEPTH (mm)	TIME (seconds)
100%	300	0	100%	300	0	100%	300	0
75%	225	684	75%	225	1026	75%	225	1059
25%	75	2038	25%	75	2670	25%	75	3278
$V_p = 9.0$			$V_p = 11.0$			$V_p = 14.8$		

AVERAGE $V_p = 11.6$

NOTE V_p IS LESS THAN 12 for this test. Check that the final average is greater than 12

INFILTRATION RATE = 4.313E-05 m/s or 0.1553 m/hr

Infiltration Factor (IF) = 2

Infiltration Rate = $\frac{0.001}{IF \times V_p}$

AVERAGE FOR TEST HOLES 3 & 4

THE AVERAGE $V_p = 12.9$

INFILTRATION RATE = 3.888E-05 m/s or 0.1400 m/hr

Infiltration Factor (IF) = 2

Infiltration Rate = $\frac{0.001}{IF \times V_p}$