

Datrys Consulting Engineers Ltd
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Project: 18056
Title: *Eleventh Ave, Llay*
Date: 09.05.18
Ref: Trial Pit 1, Porosity Test 1
Test Date: 18.04.18

Trial Pit Dimensions: Length (m) 2 Width (m) 1 Depth (m) 2.3

Time (mins)	Depth to water (m)	Rate of change (m/min)	Actual Water Depth (m)
0	1.610		0.690
3	1.650	0.01333	0.650
11	1.680	0.00375	0.620
18	1.750	0.01000	0.550
24	1.780	0.00500	0.520

Max effective storage depth	0.69 m
Volume Outflow, V_{p75-25}	0.69 m ³
Surface Area, a_{p50}	4.07 m ²
Time Taken, t_{p75-25}	49 min
Soil Infiltration Rate, f	5.80E-05 m/s

75% depth (m)	0.52	Calc 75% time (min)	24
25% depth (m)	0.17	Calc 25% time (min)	72

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Project: 18056
Title: *Eleventh Ave, Llay*
Date: 09.05.18
Ref: Trial Pit 1, Porosity Test 2
Test Date: 18.04.18

Trial Pit Dimensions: Length (m) 2 Width (m) 1 Depth (m) 2.3

Time (mins)	Depth to water (m)	Rate of change (m/min)	Actual Water Depth (m)
0	1.500		0.800
3	1.530	0.01000	0.770
11	1.560	0.00375	0.740
18	1.620	0.00857	0.680
24	1.660	0.00667	0.640
30	1.690	0.00500	0.610

Max effective storage depth	0.80 m
Volume Outflow, V_{p75-25}	0.80 m ³
Surface Area, a_{p50}	4.40 m ²
Time Taken, t_{p75-25}	62 min
Soil Infiltration Rate, f	4.85E-05 m/s

75% depth (m)	0.60	Calc 75% time (min)	31
25% depth (m)	0.20	Calc 25% time (min)	93

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Project: 18056
Title: *Eleventh Ave, Llay*
Date: 09.05.18
Ref: Trial Pit 2, Porosity Test 1
Test Date: 18.04.18

Trial Pit Dimensions: Length (m) 2 Width (m) 1 Depth (m) 2

Time (mins)	Depth to water (m)	Rate of change (m/min)	Actual Water Depth (m)
0	1.450		0.550
4	1.500	0.01250	0.500
11	1.620	0.01714	0.380
19	1.700	0.01000	0.300

Max effective storage depth	0.55 m
Volume Outflow, V_{p75-25}	0.55 m ³
Surface Area, a_{p50}	3.65 m ²
Time Taken, t_{p75-25}	20 min
Soil Infiltration Rate, f	1.25E-04 m/s

75% depth (m)	0.41	Calc 75% time (min)	10
25% depth (m)	0.14	Calc 25% time (min)	30

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Trial Pit Dimensions: Length (m) 2 Width (m) 1 Depth (m) 2

Time (mins)	Depth to water (m)	Rate of change (m/min)	Actual Water Depth (m)
0	1.450		0.550
5	1.500	0.01000	0.500
11	1.550	0.00833	0.450
16	1.590	0.00800	0.410

Max effective storage depth	0.55 m
Volume Outflow, Vp75-25	0.55 m ³
Surface Area, ap50	3.65 m ²
Time Taken, tp75-25	32 min
Soil Infiltration Rate, f	7.96E-05 m/s

75% depth (m)	0.41	Calc 75% time (min)	15
25% depth (m)	0.14	Calc 25% time (min)	47

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Test Date: 18.04.18

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Trial pit collapse after 6min

Trial Pit Dimensions: Length (m) 2

Width (m) 1

Depth (m) 2

Time (mins)	Depth to water (m)	Rate of change (m/min)	Actual Water Depth (m)
0	1.550		0.450
4	1.600	0.01250	0.400
6	1.620	0.01000	0.380

Max effective storage depth	0.45 m
Volume Outflow, Vp75-25	0.45 m ³
Surface Area, ap50	3.35 m ²
Time Taken, tp75-25	19 min
Soil Infiltration Rate, f	1.18E-04 m/s

75% depth (m)	0.34	Calc 75% time (min)	9
25% depth (m)	0.11	Calc 25% time (min)	29

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Test Date: 18.04.18

Trial Pit Dimensions: Length (m) 2 Width (m) 1 Depth (m) 2

Time (mins)	Depth to water (m)	Rate of change (m/min)	Actual Water Depth (m)
0	1.400		0.600
3	1.450	0.01667	0.550
10	1.560	0.01571	0.440
16	1.600	0.00667	0.400

Max effective storage depth	0.60 m
Volume Outflow, Vp75-25	0.60 m ³
Surface Area, ap50	3.80 m ²
Time Taken, tp75-25	23 min
Soil Infiltration Rate, f	1.16E-04 m/s

75% depth (m)	0.45	Calc 75% time (min)	11
25% depth (m)	0.15	Calc 25% time (min)	34