Percolation Test Report

Site Details

Site Address: Lower Rackery Barns, Dark Lane Burton, Wrexham, LL12 0AG

Grid Reference / Coordinates: 53.109734, -3.007821



Date of Test: 25th July 2025

Weather Conditions: Dry, no rainfall in previous 48hrs

Ground Conditions: Sandy Loam

Test Conducted By: Tom Phillips

1. Test Methodology (BS 6297:2007 + A1:2008)

- Three test holes were excavated to a depth and width of approximately 300mm below the proposed invert level of the drainage system.
- Each hole was filled with water to a depth of at least 300mm and allowed to soak overnight (pre-soak).
- The following day, the test holes were refilled with water to a depth of 300mm.
- The time taken in seconds for the water to drop from 75% full (225mm) to 25% full (75mm) was recorded.
- This procedure was repeated three times per hole, and the average times were used to calculate the percolation value (Vp).

1. Test Hole 1

Hole Dimensions: 300mm x 300mm

Depth below proposed invert level: 300mm

Trial	Time to fall from 225mm to 75mm (sec)
1	3450 sec
2	2940 sec
3	2825 sec

Average Time (Vp1): 3071 seconds

2. Test Hole 2

Hole Dimensions: 300mm x 300mm

Depth below proposed invert level: 300mm

Trial	Time to fall from 225mm to 75mm (sec)
1	3630 sec
2	3405 sec
3	3052 sec

Average Time (Vp2): 3362 seconds

3. Test Hole 3

Hole Dimensions: 300mm x 300mm

Depth below proposed invert level: 300mm

Trial	Time to fall from 225mm to 75mm (sec)
1	3510 sec
2	3305 sec
3	3145 sec

Average Time (Vp3): 3320 seconds

5. Final Percolation Value (Vp)

Vp = (Vp1 + Vp2 + Vp3) / 3 = 3251 seconds

Assessment: 3251/150= 21.67

- Acceptable Range (BS 6297): 15–100 seconds

- Result: Suitable for soakaway / drainage field use

6. Notes / Observations:

No observations to report.

7. Photos

Site excavations for suitability testing purposes, soil sampling and percolation.





Test hole 1



Test hole 2



Test Hole 3



8. Signature

Engineer/Surveyor Name: Tom Phillips

Company: S4S

Contact Information: 07821577074

Date: 06/08/2025