



INDEX AND EXPLANATION

1. Aquifers in which intergranular flow is significant

- a. Highly productive aquifers (not extensive)
- p Permian at Thornhill
  - d<sub>3</sub> Upper Old Red Sandstone in Fife

b. Locally important aquifers

- q' Recent: Blown sand
- q Quaternary sands and gravels
- p Permian in North West Grampian

2. Aquifers in which flow is dominantly in fissures and other discontinuities

- a. Highly productive aquifers (not extensive)
- p Permian
  - h<sub>1</sub> Carboniferous: Dinantian and Namurian
  - d<sub>1</sub> Upper Old Red Sandstone

b. Locally important aquifers

- t+p Triassic and Permian
- h<sub>2</sub> Carboniferous: Westphalian
- d<sub>1+2</sub> Lower and Middle Old Red Sandstone

3. Concealed aquifers, aquifers of limited potential, regions without significant groundwater

- a. Concealed aquifers; aquifers with limited or local potential
- q Quaternary: coastal and river alluvium
  - j Jurassic
  - p Permian at Stranraer
  - cb+pr Cambro-Ordovician and Precambrian Limestones

b. Regions underlain by impermeable rocks, generally without groundwater except at shallow depth

- s+o Silurian and Ordovician
- pr Precambrian
- v Extrusive rocks
- G Intrusive rocks

Surface water features

- Perennial river or stream
- Perennial river or stream in which the chloride ion concentration is known to exceed 1000 mg/l under low flow conditions
- Stream gauging station with mean annual runoff in m<sup>3</sup>/s, over catchment area in km<sup>2</sup>
- Hydrometric area boundary
- Freshwater loch, reservoir or standing water
- Loch or standing water in which the chloride ion concentration is known to exceed 1000 mg/l

Groundwater features

- Recognised mineral water spring or borehole with less than 1000 mg/l total dissolved solids.
- Spa water spring or well with greater than 1000 mg/l total dissolved solids
- Areas where the chloride ion concentration exceeds 1000 mg/l above -80 m O.D.

Sources of known abstraction (licences are not required):

- a) 10-19 l/s  
b) 20-29 l/s  
c) > 29 l/s
- normal discharge or pumping yield

- a) b) c)
- Springs
  - Springs used for public supply
  - Wells and boreholes
  - Sources of public supply
  - Artesian boreholes
  - Artesian boreholes used for public supply

- River or loch intake for public supply with ≥ 10 MI/d capacity

Artificial works

- Impounding reservoir with design yield ≥ 10 MI/d (figures in MI/d)
- Canal
- Hydroelectric station

Geological symbols

- Geological boundary
- Geological boundary beneath cover
- Fault
- Contours on the surface of the Old Red Sandstone in m relative to O.D.

Legend

- Study Area (500 m buffer either side of the Proposed Development)

Aquifer Classification

- Low Productivity Aquifer

Scale as indicated in map frame

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Project: Achany Extension Wind Farm  
Grid Connection: Environmental Appraisal

Title: Figure 7.6: Regional Hydrogeology

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