



**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<sub>1</sub> 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>2</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<sub>2</sub> 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 } normal discharge
  - b) 20-29 l/s } or pumping yield
  - c) > 29 l/s }
- 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**
- 24 Impounding reservoir with design yield ≥ 10 MI/d (figures in MI/d)
  - Canal
  - Hydroelectric station
- Geological symbols**
- Geological boundary
  - Geological boundary beneath cover
  - Fault
  - 1000- Contours on the surface of the Old Red Sandstone in m relative to O.D.

- Site Boundary
  - Study Area (Site Boundary 500 m Buffer)
- Aquifers in which flow is virtually all through fractures and other discontinuities**
- 2B - Moderately productive aquifer
  - 2C - Low productivity aquifer

1:250,000 on A3  
 0 5 10 Kilometres

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**Figure 10.6**  
**Regional Hydrogeology**  
**Oliver Forest Wind Farm**  
**Environmental Impact Assessment Report**

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