

Scale - 1:400,000 @A3

INDEX AND EXPLANATION

1. Aquifers in which intergranular flow is significant

- a. Highly productive aquifers (not extensive)
 - p Permian at Thornhill
 - d₁ 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
 - h₁ Carboniferous: Dinantian and Namurian
 - d₁ Upper Old Red Sandstone

b. Locally important aquifers

- +p Triassic and Permian
- h₁ Carboniferous: Westphalian
- d₁₊₂ 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

- a+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 m³/s, over catchment area in km²
- 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):

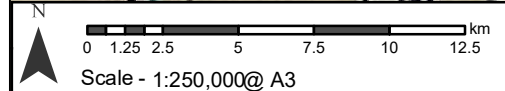
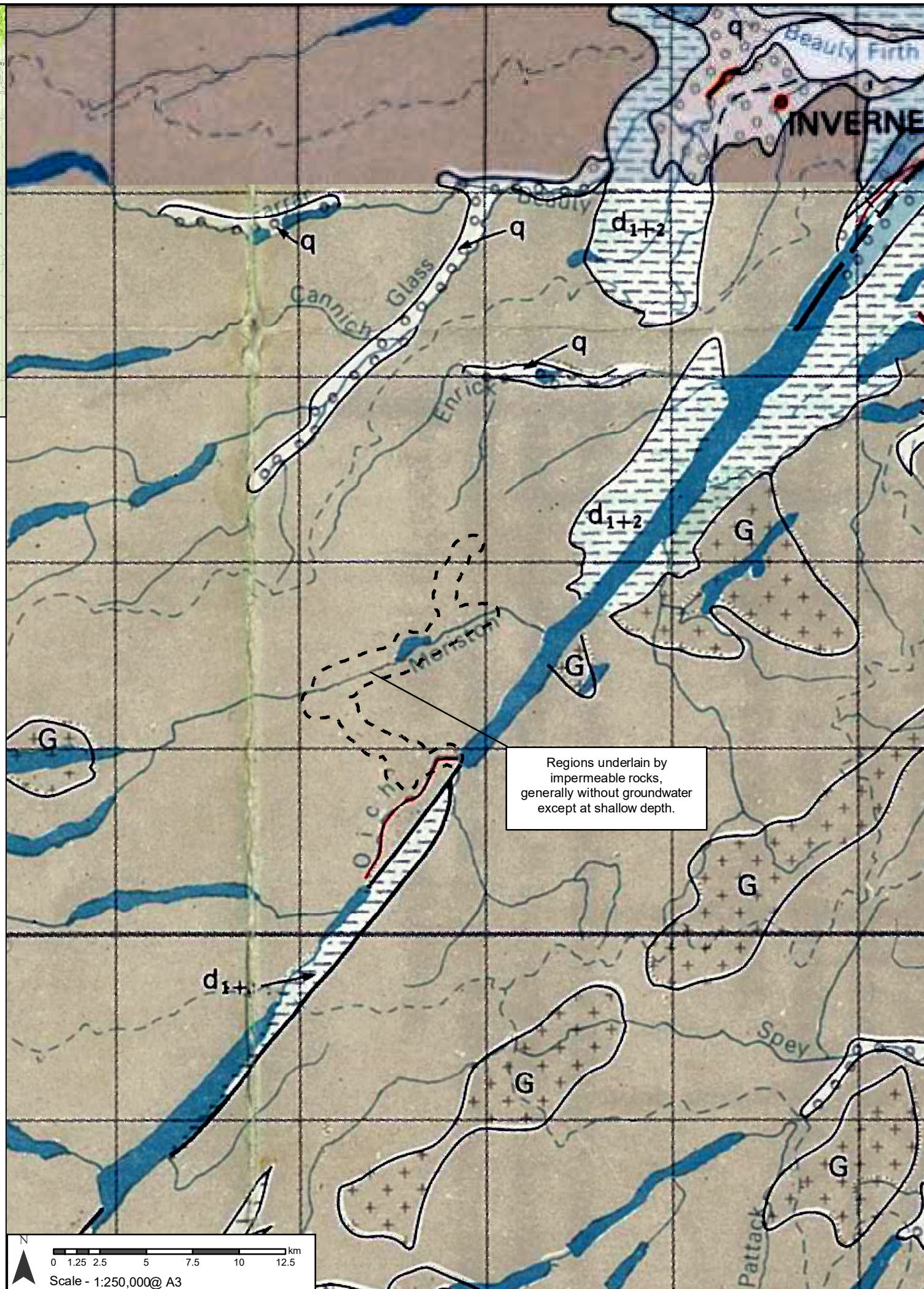
- a) 10-19 l/s } normal discharge or pumping yield
- b) 20-29 l/s }
- c) > 29 l/s }
- Springs
- Springs used for public supply
- Wells and boreholes
- Sources of public supply
- Artesian boreholes
- Artesian boreholes used for public supply
- River or loch intake for public supply with ≥ 10 Ml/d capacity

Artificial works

- Impounding reservoir with design yield ≥ 10 Ml/d (figures in Ml/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.



KEY

- Study Area
- Aquifer in which Flow is Virtually All Through Fractures and Other Discontinuities
 - 2B, Moderately productive aquifer
 - 2C, Low productivity aquifer

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Project No: LT295
Project: Bhlairaidh Extension Wind Farm Grid Connection Works Environmental Appraisal

Title: Figure 7.10 - Regional Hydrogeology

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