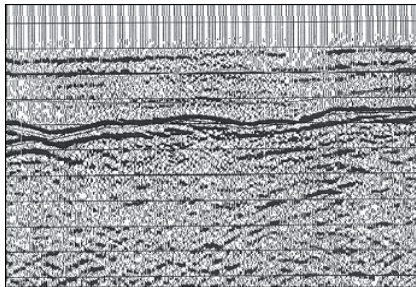




Cliff of Quaternary sediments  
West Cumbrian coast



Seismic reflection profile  
West Cumbria

## Geoscience

Nexia Solutions Geoscience Group provides multi disciplinary technical expertise across a wide range of technical areas including sub-surface investigation, assessment/interpretation, conceptualisation and visualisation. The group comprises a range of capabilities to support radioactive waste disposal and contaminated land management, primarily on nuclear licensed sites. Considerable expertise within the group gained through many years of operational and research experience, is continually furthered by operating within an environment of continual learning and innovation.

### Key Capabilities

Nexia Solutions Geoscience Group comprises a team of highly qualified and experienced geoscientists working within the following capabilities:

#### Geological interpretation and conceptualisation:

Comprises geologists expert in areas of geological interpretation: sedimentology, structural geology, stratigraphy, 2D, 3D and 4D modelling, and conceptualisation. The capability includes specialists in 3D conceptualisation and visualisation of the sub-surface and integration within Geographical Information Systems.

#### Site investigation

Comprises specialists in the design and implementation of site investigation programmes to support radioactive waste disposal and contaminated land management on nuclear licensed sites.

- Non-intrusive investigations:

A core team specialises in the investigation of the subsurface including radioactively contaminated land by geophysical methods. Expertise includes the interpretation of less and non-intrusive geophysical data, including high resolution seismic reflection and refraction, resistivity, ground penetrating radar, microgravity etc.

- Intrusive investigations:

Nexia Solutions' personnel design and supervise intrusive site investigations. Working closely with the customers, drilling companies and laboratories we ensure that soil and water samples are appropriately preserved and analysed swiftly.

#### Hydrogeology & hydrology

Nexia Solutions' hydrogeologists and hydrologists cover the hydrological and hydrogeological investigation of radioactively and non-radioactively contaminated land and groundwater, and are experts in 2D and 3D hydrogeological conceptualisation.

#### Geochemistry & biogeochemistry

The Geoscience Group provides expertise in geochemical interpretation and modelling, including the design and specification of biogeochemical codes for modelling the near-field of LLW repositories. The team has considerable experience in biogeochemical, radionuclide release and contaminant transport models.

**Dr Nick Smith**

BSc(Hons) PHD CGeol FGS EurGeol

Senior Research Technologist

T: +44 (0)1925 833403

E: nick.t.smith@nexasolutions.com

**Nexia Solutions Ltd, a BNFL Group Company**

Hinton House (H260), Risley, Warrington, Cheshire, WA3 6AS [www.nexasolutions.com/environment](http://www.nexasolutions.com/environment)