INEOS Shale is the division within INEOS Upstream Limited dedicated to exploring for gas within the shale layers of rock which lie 2,000 to 5,000 metres deep underground. With extensive licence interests across North and South Yorkshire, the East Midlands and Cheshire we are now ready to move into an operational exploration drilling phase. This leaflet provides information on a proposed well in Petroleum Exploration and Development Licence (PEDL) 304. We plan to submit a planning application to Rotherham Metropolitan Borough Council in the near future.

**Location of well:** The proposed well site is situated on land to the south of Dinnington Road, located to the west of the settlement of Woodsetts, Rotherham. This location has been chosen because it is within an area of interest to us based on seismic data.

**Purpose of well:** This vertical well has been designed to extract “core” samples of the rocks for laboratory analysis to identify their geological characteristics and gas-producing properties. A pressure transient test (PTT) will be undertaken following drilling to establish whether the target zone is over pressured (encouraging for shale gas extraction). No flow testing of the well would be undertaken. The well will be retained for technical and safety reasons as a “listening well” which would be used only if a well elsewhere was hydraulically fractured.

The information provided by this well when combined with other wells and existing and newly acquired seismic data from other parts of the wider basin will inform our future activities within the licence area.
**Depth of well:** The well will be drilled to a depth of approximately 2,800 metres.

**Drilling equipment:** A rig capable of drilling to the target depth would have a maximum operating height of 60 metres. The rig is modularised and will be delivered by lorry and assembled on site.

**Other considerations:** The site is located within Total Catchment Zone 3 of a groundwater Source Protection Zone. The site lies adjacent to and is bordered on the south by Dewidales Wood, an ancient/semi-natural woodland and within a wider landscape of agricultural land and scattered woodland. There would be no direct impact upon the ancient woodland and a buffer zone to avoid physical disturbance to the wood, and reduce indirect effects such as lighting on species using the wood will be incorporated into the project design. An Ecological Appraisal, and Landscape and Visual Appraisal will be submitted with the planning application.

**Expected duration:** Site construction and rig assembly will take up to three months. Drilling, coring and PTT will take up to five months with the drilling and coring being a 24 hour a day operation. Well suspension and rig removal will take up to one month.

**Transport movements:** There will be periods when traffic activity is high such as site construction, rig and equipment deliveries and subsequent removal, with fewer deliveries each day during well maintenance operations. All deliveries will be carefully planned and closely managed to minimise disruption to local residents.

**Noise:** Noise during the construction and drilling phases would be temporary. Noise emissions would be mitigated through the selection and location of plant and site facilities. A noise appraisal will be completed as part of the planning application.

**Waste capture, classification and safe disposal:** Waste from the site would be transported by road for disposal at an authorised waste disposal facility. Typical waste streams would be site construction materials, drilling mud (used to lubricate the drill bit and transport rock known as “cuttings” to the surface), cuttings and waste water, including surface water. Given this development is for a core well the production of Naturally Occurring Radioactive Material (NORM) is not expected.