



### Peterhead CCS FEED – Introduction to the Subsurface and Well Engineering Key Knowledge Deliverables

There are nineteen interrelated Key Knowledge Deliverables (KKDs) that provide the subsurface and well engineering technical basis for the Peterhead CCS project and its Storage Permit Application. The basic geological data is described in six of the KKD: the Petrophysical Modelling Report (11.111), Initial in Place Volumes Estimate (11.119), Seismic Interpretation Report (11.106), Pressure Volume Temperature Report (11.118), and Special Core Analysis Report and Geomechanics/Reactive Transport Modelling Core Analysis Reports (11.112). These are used to build the Static Geological Models that are described in the Static Models Report (11.108). The Dynamic (11.122), Geomechanical (11.115) and Geochemical Reactivity Models (11.116) are then constructed using the outputs of the Static Models. In a similar manner the collection of basic data about the existing wells in the geological structure is described in the Well Integrity Assessment (11.113). These data are combined with the results of the geological modelling and dynamic modelling to construct well designs and management plans that are described in the other seven well KKD (11.093, 11.097, 11.098, 11.099, 11.100, 11.104, and 11.126). An overall summary of the management plan is provided in the Storage Development Plan (11.128). This plan is augmented annually by the Annual storage report and plan (11.127) – this plan summarises the monitoring, facilities and injection performance in the period; places it into the context of the whole project; and outlines the detailed plan for the next year.

