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Oil & Gas
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CHALLENGE THREE

An analysis of North Brae production well data



Industry Context

Since powers under the Energy Act 2016 commenced in December 2016, UKCS field operators have been obliged to report daily production data, per wellbore, for the entire life of the field. This data is reported at the time that permanent cessation of production occurs. The Oil & Gas Authority (OGA) have applied this regulation to all field that ceased production since January 2018. The OGA have the power to disclose that reported data and plan to do so on 21st September 2020 to the OGTC under the Energy Act 2016 powers.

Challenge

The participants will be mentored by production engineers from TAQA who will be providing their industry expertise to support the solutions developed. The data available is from production wells in the North Brae field with daily flow rates, wellhead pressures, wellhead temperatures, down hole pressures and down hole temperatures. Choke positions and hours online are also available to the participants.

Using the Microsoft Power Platform, participants will work on well production data from the North Brae field to develop workflows and visualisations in to extract insights into potential remaining hydrocarbons in place, highlight recovery factor and indicate well performance with the overall aim to identify the most productive areas of the field and prospective areas for development. The aim is to explore what is achievable using the Microsoft tools (PowerBi, PowerAutomate, PowerApps, Power Virtual Agents) to maximise insights and explore the possibilities.