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Repsol Sinopec Brasil and Ouronova close R&D agreement

Published: 08/29/2022

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Brazilian deep technology company Ouronova and [Repsol Sinopec Brasil](#) have reached an agreement to develop a digital solution with artificial intelligence and machine learning resources to log wells that will be permanently abandoned, an Ouronova spokesman told BNamericas.

Called Plug & Abandonment Assistant, the technology will consist of a computing platform to add 'intelligence' to the interpretation of logging data, ensuring greater reliability in evaluating the quality and integrity of the cement layer in wells with multiple casings, Ouronova said in a statement due to be released on Tuesday, but obtained exclusively by BNamericas on Monday.

According to the companies, the digital tool will transform the way experts make their assessments, from being based solely on their knowledge to receiving input from the processing done by the algorithm. This is expected to ensure greater reliability, reducing time and costs, and supporting decision making.

"It will be a significant milestone in increasing the reliability of quality assessment and reducing the time needed to for completion of the task, resulting in less costly P&A operations, particularly for abandonment of subsea wells when logging is performed through the production through-tubing," said Eduardo Costa, CEO of Ouronova.

The P&A Assistant is aligned with the new regulations in oil and gas producing countries like Brazil that are abandoning prescriptive operations and prioritizing an approach based on risk.

Accurate assessment of the integrity and quality of cement adhesion to the casing and rock formation in which the well was drilled is critical to ensure that it is hydraulically isolated from the surrounding environment prior to abandonment. That is, permanently sealed and isolated to prevent future leakage from the reservoir to the outside or aquifers.

As the algorithm is able to explain in detail how and why it reached a certain conclusion, the analysis is no longer subjective but tangible, measurable and comparable. In addition to this decision support software, there will also be a module to help the operator optimize the planning and management of P&A campaigns.

"Projects such as the P&A Assistant open a new frontier in terms of technological development and business opportunities by bringing artificial intelligence to increase the quality of complex analyses that are extremely dependent on human skills such as well logging," said João Humberto Guandalini Batista, manager of well technology research at Repsol Sinopec Brasil.

Present in Brazil since 1997, Repsol Sinopec is the fourth largest oil and gas producer in the country, with average daily production of around 80,000 barrels from the Sapinhoá, Lapa and Albacora Leste fields.

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