

Expro Excellence Geothermal cased hole services identifies casing leak

Sustainable Energy Solutions | Geothermal



Objectives and background

- The customer was experiencing issues with a geothermal well, suspecting a casing integrity issue. The well was subsequently taken off line
- The customer needed to evaluate the condition of the well, remediate any issues and bring the well back on line
- Key objectives were to evaluate any integrity issues, including the requirement identify any external forces on the well that could cause the suspected integrity issue

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- Expro was sourced provide a fully integrated well integrity evaluation and remediation solution
- Expro ran a suite well integrity evaluation tools including a Multi-Finger Caliper (MFC), Cement Bond Log (CBL) a Magnetic Thickness Detector (MTD) and a Spectral Noise Logging (SNL) tool

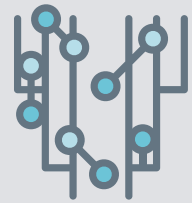
Expro Excellence

- The MFC enabled evaluation of the 13 3/8" casing geometry, with multiple anomalies identified
- With a bridge plug was set to isolate the section below the 10 3/4" liner hanger, the CBL was run into the well under quenched conditions to map the cement integrity behind the 13 3/8" casing
- The SNL tool was run to evaluate the source and path of any leaks. A leak along with its path was identified behind the casing between ~ 510m and ~590m
- The MTD tool was run to compliment the data gathered from the CBL, SNL and MFC
- Following the data evaluation and job planning phase, Expro executed the remediation phase by running a series of cement squeeze
- A CBL was run post cement squeeze to verify the quality of the cement job

Value to the client

- The customers casing integrity issue was successfully remediated
- By sourcing a fully integrated solution from Expro, this enabled the delivery of a safe and efficient outcome, with the well being brought back on line within budget

Well integrity



Integrated approach

