

DSI Completes First Geothermal PBL® Application in AsiaPacific, Delivering Time & Risk Reduction

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CHALLENGE

A major geothermal operator in New Zealand required intervention on a depleted well in Rotorua. The operation involved removing an obstruction at 2,500m, replacing a worn 7-in. shield liner, and cleaning five feed zones. This was originally planned as two separate runs, which would have increased time, cost, and operational risk.

SOLUTION

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EXECUTION

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- Milling performed at 300 GPM
- PBL® system activated and verified via pressure response
- Flow rate increased to 450 GPM for jet cleaning
- Five feed zones washed from 2,425 to 1,500m
- Tool deactivated and pulled to surface in excellent condition, no nozzle wear observed

RESULTS & BENEFITS

The deployment of the 4 ¾-in. PBL® Split Flow Bypass Tool proved highly effective in this geothermal intervention, delivering both operational and economic advantages.

Key Achievements:

- Eliminated an entire trip: By combining milling and highrate jet washing into a single BHA the Operator avoided a second run, saving both time and cost.
- Reduced safety exposure: Fewer trips meant less handling of tools and tubulars, lowering the risk of operational incidents and improving onsite HSE performance.
- Maintained tool integrity at high flow rates: The PBL® tool and its nozzles withstood flows up to 450 GPM without erosion or wear, confirming durability in harsh, abrasive geothermal environments.
- Enabled efficient debris removal & feed zone cleaning: Split Flow activation allowed targeted jetting across five feed zones, improving wellbore condition and restoring production pathway.
- Demonstrated geothermal readiness for future wells: This successful operation proves the PBL® system is not only suitable for oil & gas but highly capable in high-temperature, high-flow geothermal applications.

With this milestone, DSI advances its presence in geothermal drilling applications, offering operators a reliable, field-proven tool for circulation, hole cleaning, and multi-function intervention workflows.