

Western Energy

New Zealand Geothermal Workshop 2019

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Western Energy

Wireline Diagnostics & Intervention Completion Testing Production Testing Coil Tubing Well Intervention

Well Monitoring & Maintenance

Engineering & Operations Management Turn-key project

Turn-key project management





We Went Fishing

Engineering + Collaboration = Success







Got Enthalpy?

For the 2019 NZ Geothermal Association Seminar





Live Well Cleanout Developed in partnership with Contact Energy

Removing scale from production and injection wells while hot and flowing





2019 Western Energy



Live Well Cleanout

Previous rig cleanouts took 6 weeks

Hot - well integrity is not compromised

Fast - Cleanout is faster and more effective

Scale is removed – no fill or formation damage

The well is back online the same day

Better recovery - more Production





Live Well Cleanout

Cleaned out >35 wells for 5 clients in NZ & US Typically 1 day in hole Well online immediately 6-5/8" - 16" casing size Depths 700m-3000m 165-320 C (330-610 F)





Salton Sea, California

Significant well scaling issues Frequent cleanouts with limited success

Generation compromised Needed a new solution





Live Well Cleanout – Energy Source

Successful 16" casing live well cleanout

'Engineer-plan-execute'

Game changer for scale management





Game-changing innovation

"

Western Energy's innovative live-well cleanout approach has been a game changer for us in addressing wellbore scale.

Western Energy planned and delivered an effective solution that was instrumental to maximize well performance with minimal downtime.

We see their technology as an opportunity to reduce frequency of well cleaning events, increase operational efficiency, and maintain integrity and longevity of existing wells.

> DEREK BENSON Chief Operating Officer, Energy Source (USA)





Abandonment Campaign

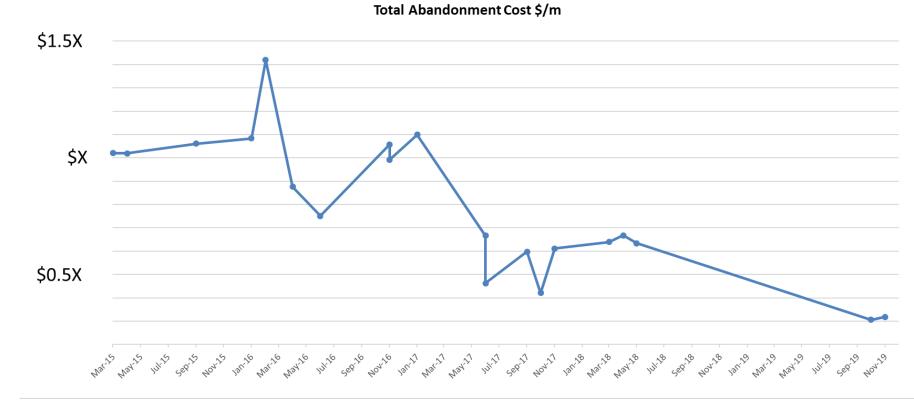
'Engineer-plan-execute' multi-well abandonment campaign





Abandonment cost reduction

Cost decrease through innovation and collaboration







Performance Testing

Fast rig-up Low emissions Remote monitoring









Wireline Services

New equipment New tools Great people Great service







NOW Hiring

Positions Available:

- Slickline Supervisor / Crew Chief
- Project Engineer
- Trainee operators and experienced operators for Wireline and Well Intervention
- Summer interns

For more information email karl@westernenergy.co.nz

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