Enhancing the capabilities of P&A barriers using expanding polymer grains.

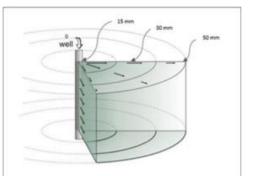
lain Lees
Resolute Energy Solutions

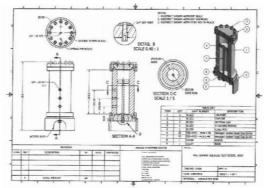


Expanding Polymer Grains

- Expand hundreds of times original size.
- Pumped in from surface.
- Form impermeable plug.
- Flexible & pressure resistant.
- Self-healing.





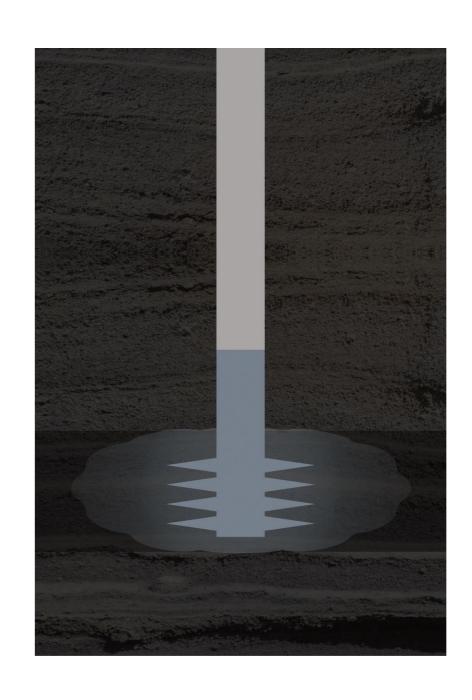






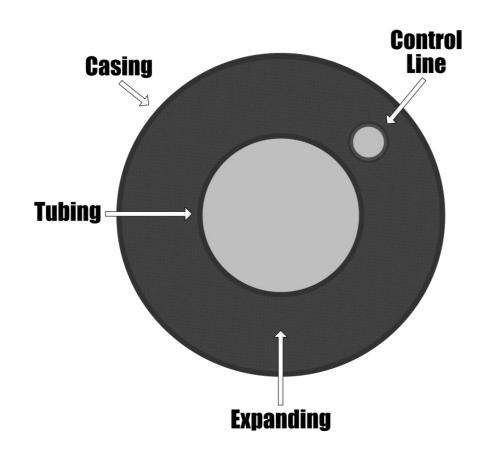
Barrier to The Barrier

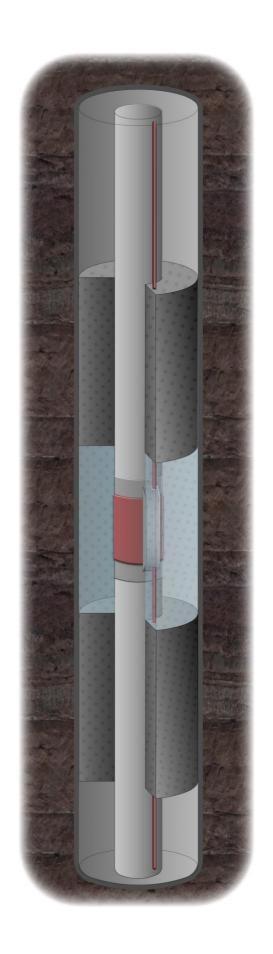
- Deeper seal into formation.
- Prevent reservoir fluid making contact with cement/resin/
- Flexible to better deal with formation changes.



Annular Sealing

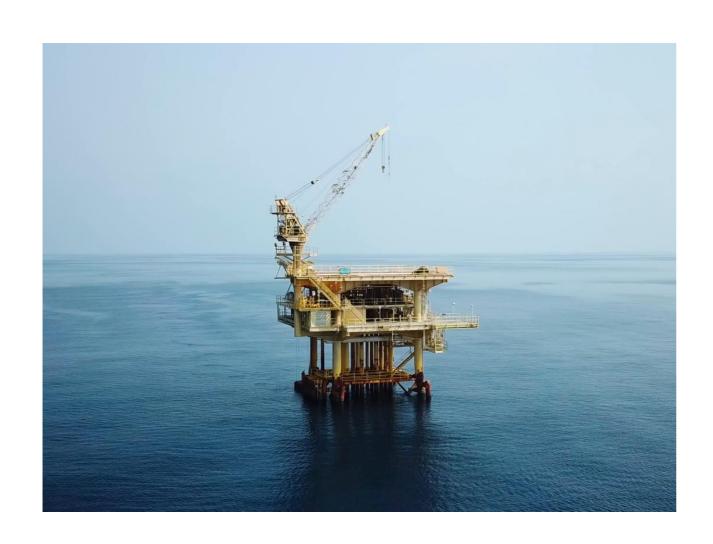
- Seal around control lines.
- Leave tubulars in situ.
- Cut rig time.





Offline/Rigless Operations

- Save time.
- Batch abandon.





Final thought...

"How long will your barrier last?"

Enhancing the capabilities of P&A barriers using expanding polymer grains.

300+ times expansion.
Pump-down.
Impermeable.
Flexible.
Pressure resistant.
Self-healing.



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