

Cost Effective Plugging Technologies

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Cost Effective Plugging Technologies

are not exclusively about the technology

- A. The E&P Sector exists today as a result of technology
- Access to new basins: deepwater offshore and artic
 - Improved drilling success rates driven by data collection, processing and interpretation
 - E&P developments today are safer, better, faster, and lower cost
- B. Technology advancements lead to more technology advancements
- Horizontal drilling example
- C. Efficiency gains accompany technology advancements to provide meaningful industry breakthroughs
- Drilling, Completion, Production, **and P&As**



Cost Effective Plugging Technologies are not exclusively about the technology

- A. Not every new technology works in all applications
 - Coiled tubing drilling
- B. Not every new technology makes sense
 - Nuclear fracking
- C. Not every new technology is commercially viable
 - Produced water treatment
- D. So why should we expect anything different for P&As?
- E. The good news is that P&A technology is derived from drilling, completion, and production technology that will always be seeking safer, better, faster, and lower cost



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P&A focused technology does exist

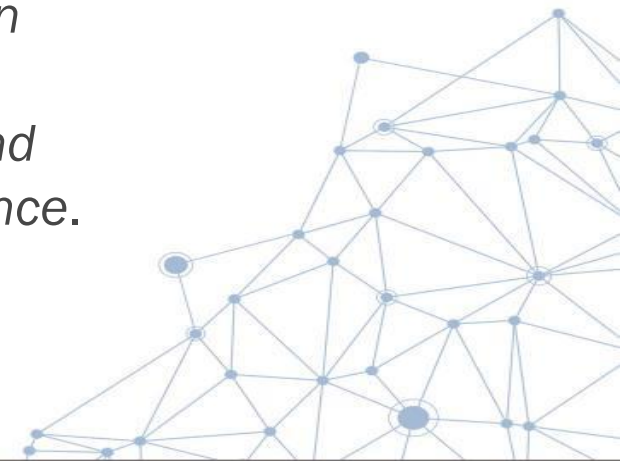
Q: Name one “new” technology exclusive to well P&As

A: Artificial Magma, from 2018 news reports:

*Developed by Interwell Norway, the **technique uses thermite – more commonly used in the welding** of railway track segments – which simulates the eruption of a volcano, creating artificial magma that fuses infrastructure to the surrounding rock.*

***It's very hard to say the price right now.** It's a question I've been asked a lot recently! We know we aren't able to compete with traditional onshore requirements consisting of just one plug and eight metres of cement. That is so cheap, we don't have a chance.*

[Artificial magma: Could it work for sealing offshore wells? \(offshore-technology.com\)](https://www.offshore-technology.com/news/artificial-magma-could-it-work-for-sealing-offshore-wells/)



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Regrow Act Funding

- A. \$4.7B being made available to address orphan wells
- B. Funds are available for State, Tribal, and Federal wells
- C. \$20M incentive for states that update their plugging rules
- D. “The Department is taking a thoughtful and methodical approach to implementing the orphaned oil and gas well program that aims to get money to states as quickly as possible...”
- E. “....while being responsible stewards of taxpayer dollars.”
- F. “....We are committed to ensuring states receive investments equitably and based on data-driven needs,”
DOI Secretary Haaland.

[Biden Administration Announces \\$1.15 Billion for States to Create Jobs Cleaning Up Orphaned Oil and Gas Wells | U.S. Department of the Interior](#)



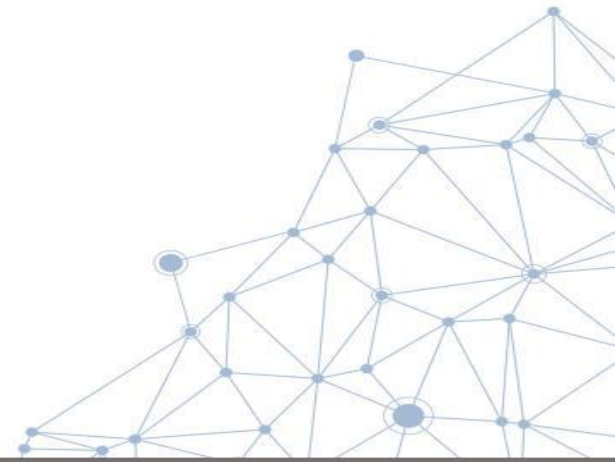
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Baksheesh

[Baksheesh Definition & Meaning - Merriam-Webster](#)

- A. If something new for well P&As is good, then the E&Ps should be using it already when drilling, completing or producing, with an exception made for Artificial Magma

- B. Field supervision is always wise, regardless of the P&A technology used



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Roundtable Topics

- A. Cost Effective Plugging Technologies
- B. Good field practices
- C. Poor field practices
- D. Technical or other best practices for state rule updates
- E. Plugging wells with unknown condition
- F. Anything else