

Expro Excellence

First closed loop return in descaling operation, ensuring zero controlled H₂S releases

Well Flow Management



Objectives and background

- The client was looking to identify a safe and efficient solution to perform descaling clean up operations in sour gas wells in order to remediate well accessibility and maximize production potential of their wells
- High levels of H₂S were expected during descaling operations where eliminating unnecessary exposure to well site personnel were of utmost importance
- Emphasis was placed on eliminating NORM risk during the clean up operations
- Expro were approach to provide a closed loop milling returns solution that minimized any potential risks of shutting down with coil tubing in the well whilst milling and circulating solids
- Returns were required to be handled in an enclosed system to ensure that any dissolved H₂S in water could be treated prior to disposal
- The deployment of the 4-Phase Intelligent Test Separator in tandem with a highly experienced crew in solids management and high H₂S environments at the well site were key to the client and Expro's success
- A H₂S treatment solution was implemented incorporating a surge tank recycling loop to ensure that the dissolved H₂S in the water was adequately treated prior to disposal
- Enclosed Solids Handling Tank (ESHT) was deployed to provide closed loop solids flushing capabilities to limit exposure of hazardous substances to the surrounding environment and personnel
- Successfully managed to recover 2,670kg of scale with no HSE incidents nor release of H₂S into the environment

Value to the client

- The deployment 4-Phase Intelligent Separator and it's proprietary functionalities such as it's intelligent control hierarchy and online solids removal system translated into:
 - Increased process safety and reduction in operating personnel in a high H₂S environment by enabling the automatic and remote control of the separator
 - Decreased process upset and loss of containment risk through online, real-time optimization of the separation efficiency whilst ensuring that accurate production data was obtained to optimize long-term production
- Expro's bespoke solution resulted in maximizing client work over efficiency by eliminating shutdowns during the descaling operations and led to an increase in overall safety on location

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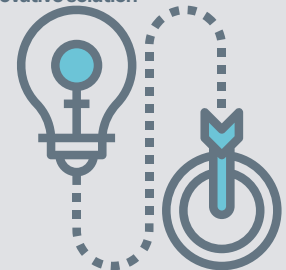
- Well testing equipment was equipped with Automatic Back Pressure (ABP) chokes to reduce personnel exposure to H₂S and NORMs



We are quite happy seeing this well getting back to commercial gas rate."

Client

Innovative solution



Contact

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