

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

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



Value to the client

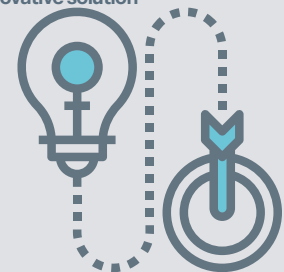
- The deployment 4-Phase Intelligent Separator and it's proprietary functionalities such as it's intelligent control hierarchy and online solids removal system translated into:
 - Increased process safety and reduction in operating personnel in a high H₂S environment by enabling the automatic and remote 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



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

Client

Innovative solution



Contact

For further information please contact:
welltesting@expro.com
 or visit
expro.com/wellflowmanagement