

# WSS FluidControl Saves Operator \$120k with New Innovative Secondary Recovery Process for Oil-based Mud

### Challenges

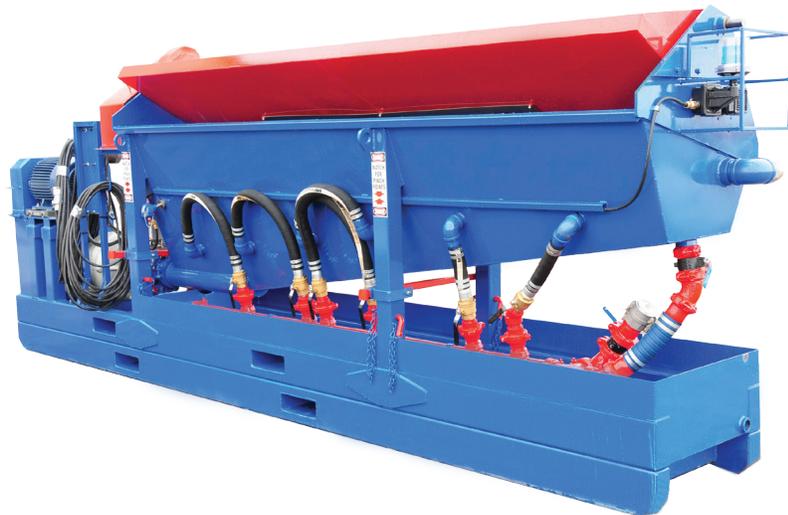
- Effective and efficient secondary recovery
- Secondary recovery without increasing low gravity solids
- Simple secondary recovery systems without large footprints or long rig-up and rig-down time

### Well Information

- Location: Alberta, Canada
- Application: Onshore Land
- Independent Operator

### Solution & Results

- WSS FluidControl proposed the new AFRS – Advanced Fluid Recovery System
- The AFRS system did not degrade solids into ultrafines unlike other secondary recovery systems
- The AFRS is automated thus not requiring full-time supervision and tracks and monitors the volume of recovered fluid
- The AFRS requires minimal footprint and is portable enough to move quickly to reduce non productive time



Over the course of the past fifteen years, the Canadian oil and gas market has seen numerous secondary recovery systems used in an effort to increase efficiencies and reduce costs with regards to recovered oil based mud (invert). The “grinder” process has been one that is most often utilized for secondary recovery. While this system is designed to create savings from recovered oil based mud, current units on the market present certain challenges. Typically this process costs more than it saves, there is usually significant increase low gravity solids past acceptable level, a compromise on environmental policies at the drill sites, such as invert on the ground and they have large footprints and are difficult to move. The demand for secondary recovery systems continues to grow as the existing market conditions require operators to become more cost efficient.

WellSite Services - FluidControl developed a secondary recovery system that was both efficient and effective in meeting the client’s needs without the shortfalls of alternative secondary recovery processes. Unlike our competitors we developed a system that does not degrade solids into ultrafines/low gravity solids while recovering invert. The AFRS does not require full time supervision while

still maintaining the highest of HS&E standards. Our system is also small enough to fit in tight locations and simple enough to quickly move with ease.

To eliminate the need to “grind,” we augmented our auger of our high-performance centrifuge and increased change-outs from 60-90 days to an impressive 180-200 days even in heavy wear projects/areas such as SAGD. Through this improvement in performance our centrifuges are able to accept cuttings directly from the shaker, eliminating the need to grind.

In a four well project in Alberta, Canada the AFRS was able to recover over 120 m<sup>3</sup> (754 bbl) over the 60 day period, saving the operator in excess of \$180,000 in mud costs all the while maintaining low gravity solids well within acceptable program levels. With the cost of the AFRS, the net savings to the operator was \$120,000. It is important to note, that savings from the operators reduced haul off material from using less stabilizing material, such as sawdust, has yet to be reported.

To learn more about how NOV can meet your waste management needs, contact a WSS FluidControl representative.

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