

Baroid Surface Solutions Waste Management

Mobile Vertical Cuttings Dryer Saves Operator over \$300K in OBM Recovery and Waste Volume Reduction

Location: US Mid-Continent

Challenge

On previous wells, the operator had disposed of all cuttings and liquid mud coming off the shakers. This was a waste of oil-based mud (OBM) and it also led to extremely high disposal costs, so the operator asked Baroid to find ways to reduce waste volumes and recover / reuse the valuable OBM.

Halliburton's Solution:

The Baroid Surface Solutions team recommended implementing a trailer-mounted Vertical Cuttings Dryer (VCD). The VCD unit is designed to provide efficient throughput even while drilling at high rates of penetration (ROP). The reduction in oil-on-cuttings (OOC) ratio translates to increased fluid recovery and lower waste volumes requiring transport and disposal.



The Baroid Surface Solutions Mobile VCD/ Centrifuge combination is easy to rig up and operate at any onshore rigsite.

On this well, the VCD unit recovered 2,398 bbl of oil off the cuttings, reducing the oil retained on cuttings (ROC) to 3.83%. While drilling in the 8.75" section, the shakers were constantly flooded with drilling fluid. The VCD unit was able to successfully recover these volumes for reuse.

Further, the VCD unit helped maintain mud property targets set by operator, including a low gravity solids (LGS) content below 5% the entire well.

In addition to the VCD unit, the operator agreed to install a Baroid DE-1000 centrifuge to process effluent from the VCD unit and assist with maintaining the specified mud properties.

The equipment was configured so that it was not necessary to run it 24 hr/day to achieve the desired results. The helped reduce potential for equipment failure. The operator was also able to save space and money because there was no need to provide rigsite housing for the Baroid personnel.

Economic Value Created:

The net saving for the customer was \$301,900. This represents a 40% reduction in trucking and disposal costs compared to previous wells.

The recovery of 2,398 bbl of OBM helped cut dilution requirements and mud treatment costs as well.

Baroid personnel had ZERO incidents throughout the well, and no equipment failures were reported.

From a safety perspective, the lower waste volumes significantly reduced the potential for trucking hazards and spills.

CHALLENGE	SOLUTION	RESULT
Excessive OBM retained on cuttings resulted in high waste disposal costs.	Baroid Surface Solutions installed a Mobile Vertical Cuttings Dryer/ Centrifuge equipment package	The customer saved \$301,900 due to a 40% reduction in trucking and disposal costs and recovered 2,398 bbl of OBM.