Case Study

Baroid Surface Solutions Waste Management

An Operator Recovers 500+ bbl OBM, Saves $70K with Mobile Vertical Cuttings Dryer

Location: US Mid-Continent

Operator’s Challenge
An operator has been using drying shakers to minimize oil-based mud (OBM) retained on the cuttings. However, the recovered volume was inadequate and the operator asked Baroid to propose a more efficient system.

Halliburton’s Solution
Historical well data was used to determine the type of equipment needed, including factors such as shale type, hole size and wellsite location. A Mobile Vertical Cuttings Dryer (MVCD)/centrifuge unit was recommended to reduce the amount of equipment and number of people required on location.

The MVCD/centrifuge unit allowed the operator to reuse the OBM retained on the cuttings as well as reduce the amount of ag-lime used to dry cuttings before disposal. These practices decreased the volume of cuttings requiring disposal, leading to savings and improved efficiencies for the operator.

For example, the MVCD/centrifuge unit was operated only 7 hours per day, compared with 24 hours per day for the competitor’s drying shakers. Overall, the unit was on location 9 of the 21 total days on the well. The shortened operational time (7 hr/day) reduced personnel exposure to equipment by over 400 hours over the duration of the well. Further, zero safety incidents occurred during the 132 hours that Baroid personnel were working at the wellsite.

Economic Value Created
A total of 534 bbl OBM was recovered during this well, reducing disposal costs by one-third as well as decreasing mud maintenance and diesel costs. The cost reduction was estimated to be $72,090 on the single well.

<table>
<thead>
<tr>
<th>CHALLENGE</th>
<th>SOLUTION</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>The operator wanted to recover OBM and reduce cuttings disposal costs.</td>
<td>Baroid installed a Mobile Vertical Cuttings Dryer/Centrifuge equipment package.</td>
<td>The operator recovered over 500 bbl of OBM and saved $72K in disposal costs.</td>
</tr>
</tbody>
</table>