1. Oil Based Mud

State of fluid: Drilling Fluids from a prominent producer, focus on (Oil based mud).

Expectations: Company required a low gravity solid reduction.

Process: Placed the Arc unit inline, in front of the small bowl centrifuge. The Fluid was run single pass.

The Results: The Arc unit created an additional 49% reduction in low gravity solids.

1. Water Based Mud

Fluid: Drilling Fluids (Water Based Mud). This specific mud was used for 7 wells in a row and there was a 5% total low gravity.

Expectations: Reduction in low gravity solids

Process: Placed the Arc unit inline in front of a small bowl centrifuge. The Fluid was run a single pass.

The results: Test results yielded a 51% additional reduction in low gravity solids.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Lab Tests** | | **Eff. EC Start** | **Eff. 10 Amp** | **Eff 100 Amp** | **Eff 200 Amp** |
|  | Whole mud Chlorides [mg/l] | 60000 | 55000 | 57000 | 56000 |
| vol % Solids | 20 | 19 | 13 | 13 |
| LGS % by vol | 16.9 | 16.16 | 9.09 | 9.24 |

(Log Gravity Solids)

Summary:

The producer performed their own retort testing.

The most effective results for both mud types tested was noted at 100 amps within the Arc Unit.

With an average reduction of low gravity solids at 50%, producers can expect a similar reduction in costs.

* Less detrimental impact on the drilling bits and screens
* Improved well bore stability
* Increased longevity of the fluids
* Improvement of recyclable mud and retained mud quality.

All of these factors add up to significant savings.