Control your cleanup
Uniformly remove OBM filter cake to optimize well productivity
The uniform effect all along the wellbore

Effective removal of drilling damage before putting wells on production maximises well performance, cashflow and NPV.

ORCA for OBM enables operators to retain and improve permeability in horizontal openhole completions and increase production in mature wells without the need for rig intervention.

ORCA’s uniform wellbore cleanup ensures the cleanest wells and maximizes production to deliver significant financial benefits.

Maximize production of new wells from day 1 or successfully remediate underperforming wells

- Optimize zonal coverage and achieve uniform radial and longitudinal fluid placement throughout the wellbore, thereby optimizing production from the whole of the horizontal section
- Maintain and improve permeability all along the payzone

Reduce pumping time by up to 75%

- Significantly reduce pumping time and remove the need for stimulation vessels and waiting on weather
- Mix using standard equipment
- Placement on new wells using the mud pumps and drillstring
- Placement for wells already on production via coiled tubing or bullheading
- Reduce or eliminate the need for swabbing

In some cases it is possible to use ORCA for OBM as a gravel packing fluid, where the filter cake remains intact during gravel placement before being broken down. Placement post gravel packing can be achieved using a wash pipe.

Improve HSE/environmental compliance

- Improve HSE on the rig, removing the need for the transport and handling of corrosive and hazardous conventional acids
- Benign non-corrosive formulations
- No need for corrosion inhibitors
- Protect intelligent completion hardware
- Leave in wellbore for months before flowing well
- No requirement for complex disposal post treatment
- ORCA for OBM chemicals are not regulated for transport, are low hazard and can be air freighted if necessary
Uniformly remove oil-based mud damage in long openhole horizontal and deviated wells in a single treatment

ORCA for OBM treatment fluids are used to treat filter cakes arising from drilling with oil-based drill-in fluids. ORCA for OBM treatment fluids are applied to treat new wells when first drilled or as remedial treatments for wells already on production.

ORCA for OBM is particularly suitable for treatments of wells drilled with oil-based, synthetic oil-based and ester-based drill-in fluids and ideally fluids containing carbonate weighting materials or formation fines. ORCA for OBM treatments are effective in a wide range of oilfield brine types and densities. Barite dissolution can also be achieved using other Cleansorb additives.

ORCA for OBM treatments optimize zonal coverage to regain and improve permeability along the payzone and improve mud damage removal for horizontal wells where lower draw down limits the ability for wells to ‘self-clean.’ Uniform wellbore cleanup ensures the cleanest wells and maximizes well production to deliver significant financial benefits.
Uniformly remove filter cake from sand control completions in a single treatment

Where sand control completions such as screen completions are used, solubilizing the filter cake using ORCA for OBM before placing the well on production enhances sand screen life by preventing the possibility of the filter cake lifting off and blocking the screen or other sand control completion if left untreated.

**FILTER CAKE IS A BARRIER TO PRODUCTION**

Untreated drilling mud filter cake can block and impede flow through sand screens when wells are activated.

**FILTER CAKE UNIFORMLY SOLUBILIZED**

ORCA fluid disrupts and dissolves drilling mud filter cake and acid soluble solids to enhance flow through screens.

**CLEAN WELLBORE OPTIMIZES PRODUCTION**

Uniform mud damage removal across the whole interval reduces the likelihood of flow ‘hot spots’ and enhances screen life.

**WELLBORE FACE & SCREEN BLOCKED WITH MUD**

**OPTIMAL FLOW THROUGH CLEAN SCREEN**
Uniformly remove emulsions formed during completion operations in a single treatment

ORCA for OBM may also be effective for remediation of emulsions formed during completion, for example when displacing liquid muds to clear brines. ORCA for OBM will effectively treat such damage.
Uniformly remove near wellbore damage in a single treatment

Near wellbore production related damage such as scales may be amenable to solubilization by ORCA for OBM, restoring productivity of damaged wells. If carbonate scaling is present the scale is often associated with hydrocarbon layers. ORCA for OBM may be formulated to dissolve both the carbonate and hydrocarbon components of such scales including paraffin and asphaltenes. Removal of near wellbore damage such as infiltrated drilling fluid solids may also be treated using ORCA for OBM.

**Near wellbore damage is a barrier to production**
- Damaged rock
  - Drilling fluid solids that infiltrate the formation are barriers to flow

**Near wellbore damage uniformly solubilized**
- Damage removed
  - Removal of solids that have infiltrated the formation restores the natural permeability of the formation and improves fluid flow

**Clean wellbore optimizes production**
- Removing scale damage
  - ORCA for OBM dissolves acid soluble scales such as calcium carbonate to restore flow

**Infiltrated damage**
- Production related damage
  - Scale may be deposited in the near wellbore formation or tubulars during production

**Scale damage removal**
- Scale damage
  - Drilling fluid solids that infiltrate the formation are barriers to flow
Laboratory validated

Uniform removal of OBM filter cake damage
ORCA for OBM is particularly suitable for treatments of filter cakes produced from commonly used oil-based drilling muds and drill-in fluids especially those containing:
- synthetic oil-based drill-in fluids
- ester-based drill-in fluids

Pre-treatment
The filter cake is fully intact and has formed a barrier all along the wellbore which can impair production and injection.

Post-treatment
After applying the ORCA for OBM in a single step the filter cake has been uniformly removed. All hydrocarbon damage has been removed and emulsions destroyed. All acid-soluble particles have been removed significantly improving the well productivity when flowing the well.

Proven and robust technology
- proprietary acid precursors and surfactant systems
- proprietary technology engineered for specific applications prepared by the Cleansorb team of chemists and field engineers
- effective on all common oil-based muds, drill-in fluids and completion brines
- technical validation and laboratory results available
- field case histories (cleansorb.com) prove the efficacy of the technology and its value to operators
Cleansorb
The innovative reservoir chemistry company

Cleansorb’s patented in-situ acid generation technologies achieve uniform radial and longitudinal distribution of cleanup and stimulation fluids in the target zone(s) without risk to the formation, environment or completion equipment.

Get in touch
Cleansorb has a team of ORCA for OBM specialists to advise you on the best strategy for your circumstances. Please email contact@cleansorb.com for more information.