



CleanDrill monovalent brine-based reservoir drill-in fluid

Our flexible and minimally damaging CleanDrill monovalent brine-based reservoir drill-in fluid (RDF) delivers high-performance in a wide variety of operations. With easy filter cake clean-up and low drawdown pressures.

With increased requirement for optimized open-hole drilling and completion, minimally damaging reservoir drill-in fluids are essential.

The CleanDrill™ monovalent brine-based RDF has been carefully designed by our fluids experts to meet your drill-in performance requirements and stringent reservoir integrity targets — while minimizing damage to the formation with simple filter cake clean-up and exceptionally low drawdown pressures.



Engineered for efficient cleanup and filter cake removal using ORCA for WBM technology

For efficient filter cake removal to optimize well productivity, ORCA uniform breaker technology is ideal. ORCA technology is a highly effective, single treatment filter cake cleanup solution available in formulations for oil-based and water-based drill-in fluid filter cakes.

For CleanDrill RDF cleanup applications, ORCA for WBM employs an "in-situ" organic acid generating package to dissolve acid soluble materials such as calcium carbonate present in the filter cake. This tailored and optimized acid generating package greatly improves acid placement in order to uniformly dissolve carbonate in the mud cake across the wellbore face. This uniform placement results in excellent zonal coverage across long open hole horizontal or directional sections.

<8 mL fluid loss and 96% flowback @106°F Soak time 7 days

The main advantages of CleanDrill RDF

- Monovalent system.
 (Also available, CleanDrill HD divalent brine-based RDF)
- Low rheological profile
- Excellent cuttings transport
- Superior fluid loss control
- Thin, impermeable, minimally damaging filter cake
- Efficient cleanup and removal of filter cake
- Additives for shale inhibition, temperature stabilization and lubrication.

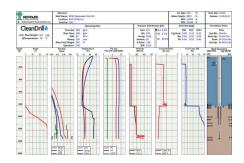
CLEANDRILL MONOVALENT BRINE-BASED RESERVOIR DRILL-IN FLUID

Expert support every step along the way

We understand no two wells are the same. Engineered to your bespoke reservoir specifications, CleanDrill RDF is field-proven to deliver in the world's most challenging conditions.

Keeping you one step ahead with ClearTrack modeling software

Our experts utilize lab testing specific to the design and development of fitfor-purpose reservoir drill-in fluid. Leveraging our ClearTrack™ fluids hydraulics modeling software along with reservoir information and associated samples to construct a properly blended RDF capable of anticipating and overcoming your unique challenges.



CleanDrill lab data

Formulation								
Density	1.10 sg							
Product	Units	Function	Conc.					
Water	bbl	Base Fluid	0.757					
1.2 sg NaCl	bbl	Brine	0.177					
Dry KCl	ppb	Brine	11.59					
CleanVis	ppb	Viscosifier	1.0					
CleanTrol	ppb	Fluid Loss	5.0					
MgO	ppb	pH Buffer	0.5					
NewPerm NF	ppb	Shale Inhibition	4.0					
TrueCarb 5	ppb	Bridging	20.0					
TrueCarb 25	ppb	Bridging	5.0					
Onyxide 200	ppb	Biocide	0.2					

Hot Roll/Static @ 75°F		BHR		AHR			ASA		
Properties	Spec	70	120	40	70	120	40	70	120
600 rpm		48	37	65	52	38	66	52	39
300 rpm		35	28	46	38	29	47	38	29
200 rpm		29	24	38	32	24	39	32	24
100 rpm		22	18	28	24	19	29	28	19
6 rpm	7-9	10	8	11	10	8	11	11	8
3 rpm	5-7	8	6	9	9	6	9	9	6
PV	<25	13	9	19	14	9	19	19	10
YP	14-22	22	19	27	24	20	28	27	19
10 sec gel		10	7	11	10	7	11	11	7
10 min gel		13	8	14	13	9	14	14	9
Mud Weight		1,10		1,10			1,10		
Top Brine								0,0	
Bottom Density								1,10	
Diff Denisty								0.0	