

Increase Your Permian Potential



HydraGlyde high-performance water-based drilling fluid system

A vibrant, multi-colored liquid splash, primarily in shades of red, blue, and yellow, set against a light blue background. The liquid is captured in motion, creating a sense of energy and movement. The splash originates from the left and moves towards the right, with various droplets and ripples visible. The colors are layered and mixed, giving it a complex, abstract appearance.

▶ **300** successful
projects worldwide



HydraGlyde* high-performance water-based drilling fluid system delivers the strength and reliability of oil-based drilling fluids in an economical water-based drilling fluid solution. With more than 300 successful projects worldwide, the system has helped Permian operators prevent NPT and reduce operating costs.

HydraGlyde system

Features

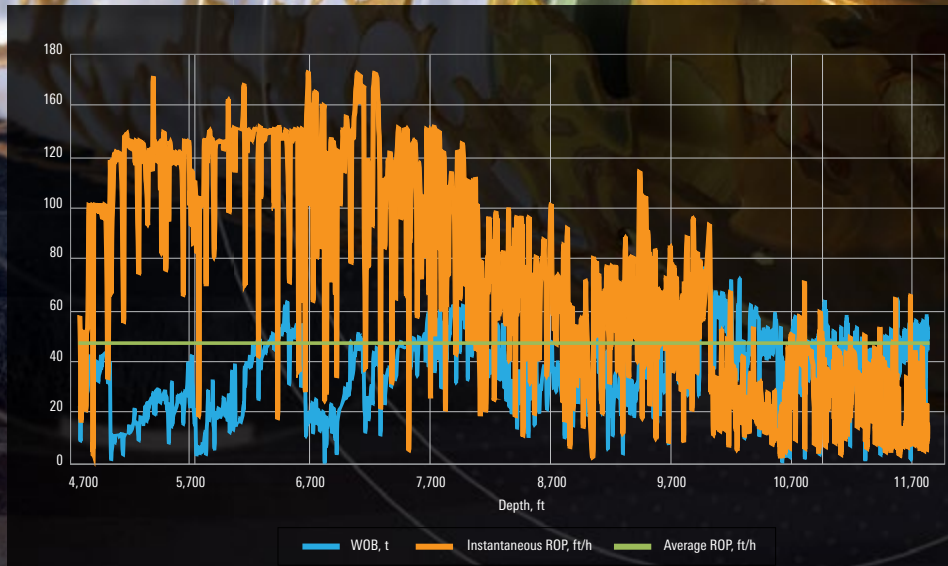
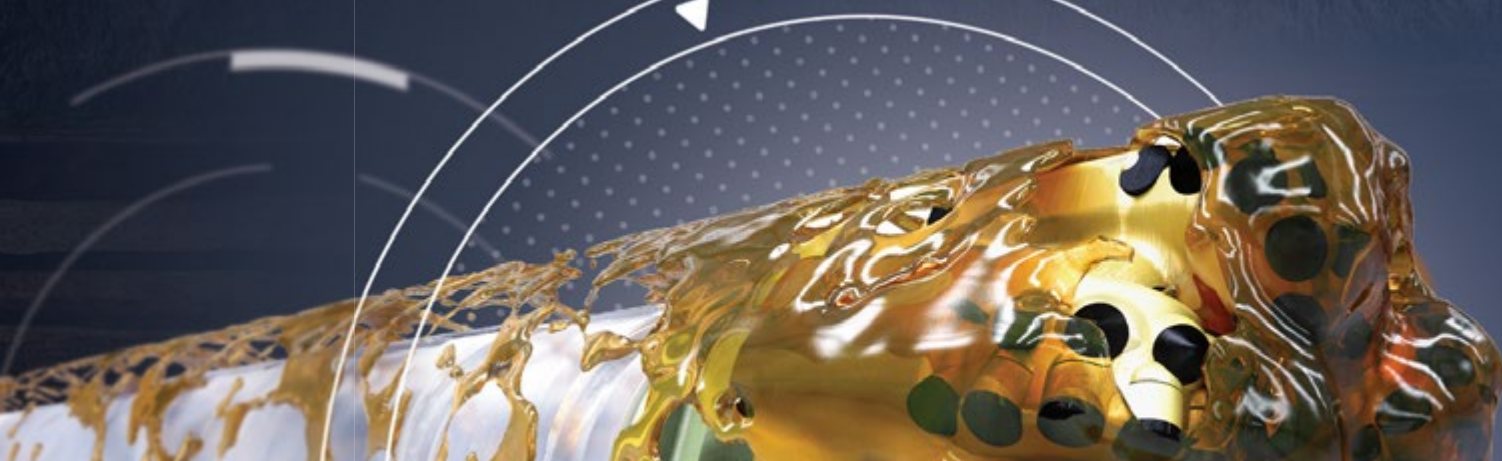
- High-lubricity water-based mud system
- Cost-efficient chemistries
- Stable rheological profile
- Shale inhibition
- Low coefficient of friction factors for laterals
- Stable, low-shear viscosity
- Thin, high-quality filtercake
- Low fluid loss
- Flexible design
- Minimal products required
- Compatibility with a variety of makeup water and brines

Benefits

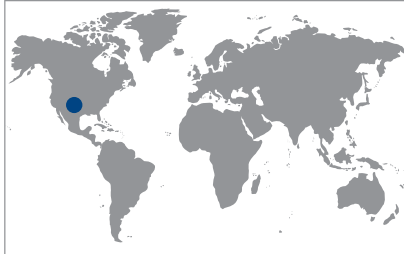
- Delivers high drilling rates in build and lateral sections
- Stabilizes shale sections while drilling
- Lowers torque and drag while drilling and running pipe
- Promotes trouble-free running of casing and completion equipment
- Provides excellent hole cleaning without sweeps
- Reduces dilution rates
- Decreases risk of differential sticking
- Minimizes NPT
- Saves drilling costs
- Elevates environmental profile

Typical HydraGlyde System Formulation

| Additive | Function | Concentration |
|--|---------------------------------|---------------|
| HydraSpeed* ROP-enhancing primary lubricant | ROP enhancement and lubrication | 8–12 lbm/bbl |
| HydraHib* shale inhibitor | Inhibition | 2–6 lbm/bbl |
| HydraCap* encapsulating additive | Encapsulation | 0.5–2 lbm/bbl |
| POLYPAC UL* ultralow-viscosity polyanionic cellulose | Fluid loss control | 1–3 lbm/bbl |
| DUO-VIS* biopolymer viscosifier | Cuttings suspension | 0.5–2 lbm/bbl |



The 7,000-ft [2,134-m] section was successfully drilled with two bit runs during 13 days to section TD. The fluid's inhibition properties held stable throughout the operation and ensured the planned ROP and success of the section. No bit balling or other downhole problems were encountered during drilling or tripping. The fluid system provided hole stability during the 6-day casing run, making the following cement job a success. The length of the casing run was due to casing tong restrictions and led to a longer openhole exposure than planned. The HydraGlyde Optima flexible high-performance water-based drilling fluid system secured the hole integrity, enabling the casing to be run and cemented properly.*



HydraGlyde System Eliminates NPT in 2-mi Permian Lateral

Operator avoids running contingency liner and achieves 59% cost savings

Challenge

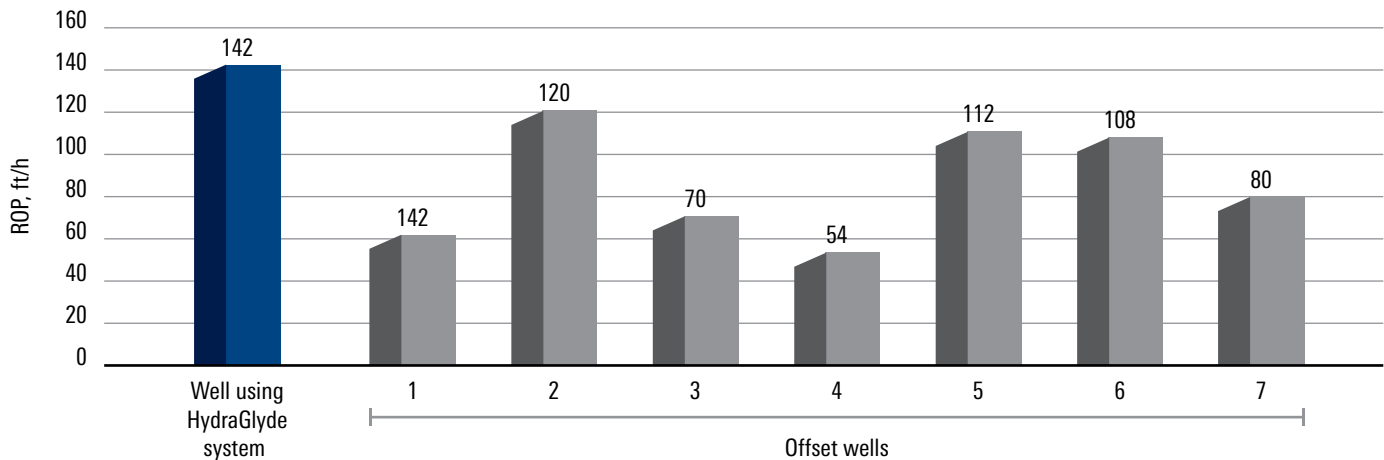
A 19,000-ft well in Martin County, Texas, presented complex curve and lateral geometry next to a recently fractured well. After drilling out the intermediate casing, the operator encountered water flow, which resulted in contamination of the OBM in the hole. The only potential solution was to run a contingency liner to shut off the flow. Running this extra string of casing would have caused delays in the delivery of the well, overspending of the AFE, and a continued risk of OBM contamination in the lateral.

Results

The operator consulted the M-I SWACO technical team, which recommended implementation of the HydraGlyde system. The system tolerated losses and water flows while drilling and negated the liner run in the curve. The operator drilled a 2-mi lateral in less than five days to TD with no bit trips. The average ROP stayed at approximately 2,000 ft per day. The solution helped achieve a cost savings of up to 59% in the lateral section, with zero diesel additions, zero OBM costs associated with lost fluid, and a reduction in disposal costs from using a water-based system.

“I would like to express my gratitude toward the effort that the M-I SWACO team put when facing this unusual technical challenge and their flawless execution of the plan. The system was built on location in such short notice, and it was maintained to enable the team to drill the well to TD with no issues. The team displayed outstanding technical knowledge, a professional attitude, and a commitment to support drilling operations.”

Drilling Engineer



HydraGlyde

high-performance water-based drilling fluid system

HYDRAHIB

- DBM-COMPARABLE ROP
- STABLE LOW LRVY
- LOW COEFFICIENT OF FRICTION VALUES
- EXCEPTIONAL HOLE CLEANING
- SUPERB WELLBORE STABILITY

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Put the HydraGlyde System to Work for You

Find out more about our HydraGlyde high-performance water-based drilling fluid system and how it is performing for customers.

slb.com/HydraGlyde

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