

Industry experience

Mr. Dave Messler

Sr. Trainer in Reservoir Drilling and Completion Fluids

Bio

Mr. Messler brings over 38 years of completions experience as a Field Engineer, Project Engineer, Training Instructor, and Technical Service Manager into the class room. For the last fifteen years he has specialized in fluids applications for open-hole completions, in the GoM, Brasil, Malaysia, and Australia while working in the M-I SWACO division of Schlumberger.

In various field and technical, and training positions, he has designed, and implemented completion and reservoir drilling fluids for a variety of sand face completion methods; predominantly: open-hole gravel packs, slotted liners, and standalone screens.

As a Trainer and Consultant his career arc has taken him to most major petroleum basins including: The west coast of the USA, the Gulf of Mexico, the North Sea, Latin America, Australia, and finally to Asia. In mid- 2015 he retired from Schlumberger's M-I SWACO unit in Malaysia. *As a Trainer, attached to M-I SWACO's Houston office, he was the Global Trainer for the WP product line focusing on Completion Fluids, Reservoir Drilling Fluids, and IWA Displacement and Workshop classes.*

Core Expertise

- Reservoir drilling fluids and breakers-testing and design.
- Trouble shooting RDF candidate fluid failures
- Formation damage minimization from reservoir drilling fluids.
- Non-damaging Fluid Loss Pills.
- Completion brines.
- Filtration.
- Well bore cleanups and displacements mechanical and chemical.
- Open-hole completion logistics and pit management.

Education

Texas A&M-Commerce, B.S. Industrial Technology- 1980
Baroid Drilling fluids school, 1981

Partial list of Completions Projects Directly Supervised

ExxonMobil: Janz field Australia, 2-well **OHGP** campaign
Shell: BC-10 Subsea Development. 11-well **OHGP** project in 6,150' of water.
Shell: Sa-G Subsea completion. 1-well **OHGP** in 2,200' of water.

Shell: BS-4 well test. **OHGP** in 6,000' of water
Shell: F-14, Formate based RDF project w chelant filter cake breaker; 2-well project.
BP: Holstein SPAR Development. 10 well **CHFP** campaign in 3,400' of water.
BP: Marlin SS-1, ST-1 Subsea intervention in 3,300' of water. **CHFP** completion.
BP: Pompano coiled tubing intervention campaign- 10 month program
BP: Amberjack, 2-well CHFP campaign using ZnBr₂.
BP: Pompano Platform. 6- HTHP **CHFP** completions using ZnBr₂ in 1,300' of water BP:
Nile, King, and King's Peak Subsea **CHFP** completions. 6-wells in +/-6,000' of water
BP: HTHP Shelf completions at Matagorda Island. 3 wells **CHFP** completions.
EEX Corp 1-well project – Garden Banks 387, 3,400' of water **CHFP**- ZnBr₂.
EEX Corp: 8-Well Campaign, West Cameron BLK 321; **CHFP** using ZnBr₂
Chevron Indonesia- Bangka project: NaBr fluid w/low water activity for 2-well
CHFP project.

Partial list of RDF and Completion Fluid Systems Developed

9.6 ppg NaCl based biopolymer RDF. Brazil, Compos basin OHGP development for IOC client. Used a chelant/enzyme breaker system to remove filter cake. Key challenges- Dynamic losses, ECD management.

9.9 ppg KCL based biopolymer RDF. Brazil, shallow water Compos field OHGP development for IOC client. Used a chelant/enzyme breaker to remove filter cake. Key challenges; drilling extended reach wells with water-based mud from a fixed platform.

9.0 ppg, Invert emulsion RDF, Malaysia, South Furious field. Key challenges; bridging of carbonate formation to minimize invasion of mud filtrate.

9.4 ppg, Invert emulsion RDF; Gulf of Thailand. Used an advanced filter cake breaker to remove OBM filter cake. Key challenges; hole stability, high BHT. Fluid and breaker combination increased production over previous SAS and flow back only completion method.

9.2 ppg, Invert emulsion RDF; Gulf of Thailand for SAS completions. Used an advanced filter cake breaker to remove filter cake. Key challenges; BHT-280 F.

10.0 ppg, Paraffin based invert emulsion RDF in New Zealand for SAS completions- 6 well campaign. Used an advanced filter cake breaker to remove filter cake. Key challenges; low BHT-120 F, losses while drilling, ECD management while drilling extended reach wells.

10.2 ppg, biopolymer based RDF in New Zealand. Key challenges; formation compatibility with salts.

10.0 ppg, Invert emulsion RDF in Gulf of Thailand. Used an advanced filter cake breaker to remove filter cake. Key challenges; mud weight using acid soluble solids, hole stability, high BHT. Fluid and breaker combination increased production over previous SAS and flow back only completion method.

10.5 ppg, Invert emulsion RDF and breaker system for Australia using both SAS, and OHGP completion methods. Key challenges; high BHT- 310 F, obtaining drilling properties at high

temps, compatibility with lower completion equipment, break through time for filter cake breaker.

10.1 ppg, NaBr based biopolymer RDF in Australia. 10-well campaign using OHGP's w shunt tube screens. Key challenges; high BHT-250 F, obtaining compatibility with breaker system and gravel pack carrier fluid.

9.6 ppg, biopolymer based RDF for Viet Nam using SAS completion method. Key challenges; high BHT-280 F, bridging high perm carbonate reservoir.

11.2 ppg, starch based RDF in Malaysia for SAS development. Key Challenges; high BHT-290 F, maintaining drilling properties with a divalent brine base at high temp.

11.9 ppg NaBr based biopolymer RDF and breaker system for Malaysia client. Key challenges; density maintenance, building a breaker system that would obtain the required density, high BHT- 230 F.

12.2 ppg potassium formate based biopolymer RDF for east Malaysia client for 2-well SAS project. Key challenges; high BHT, 24-hour break through time on filter cake breaker.

13.6 ppg Potassium/Cesium formate based biopolymer RDF in Malaysia. 6-well OHGP campaign. Key challenges; RDF/breaker compatibility, compatibility with lower completion equipment.

11.3 ppg, NaBr completion brine, TCT -18° F, water activity 0.76 w 5% MEG for Indonesia.

Language Skills

Conversant Portugues

Some Spanish

Native English

Publications

Three SPE technical papers on completion issues. SPE #'s **73711, 81071, 86503**