

Product True Flow

Dual String Flow

Locates and quantifies flow in a dual completion, even in the short string

What it delivers

Managing the performance of dual string wells is challenging. Access below the short string is always blocked, meaning that conventional diagnostics can't reveal flow where it really matters—at the reservoir.

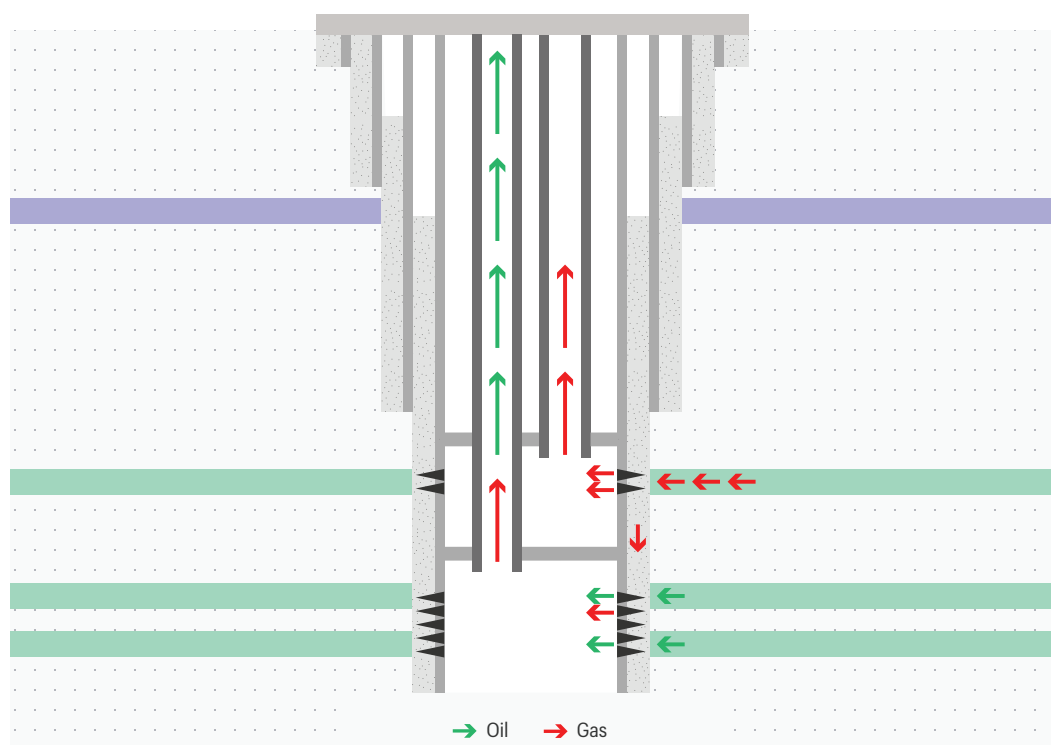
Dual String Flow locates and quantifies reservoir flow, even at the short-string reservoir.

Delivered by our True Flow system using the Chorus (acoustic) platform and the Cascade (thermal) platform; Dual String Flow provides the clarity and insight needed to manage well system performance more effectively.

Dual String Flow is used to diagnose unexpected or undesirable well system behavior, especially in relation to the short string. It can also be used proactively to ensure the well system is working optimally.

Well sketch shows a range of typical flow scenarios that Dual String Flow can locate and quantify.

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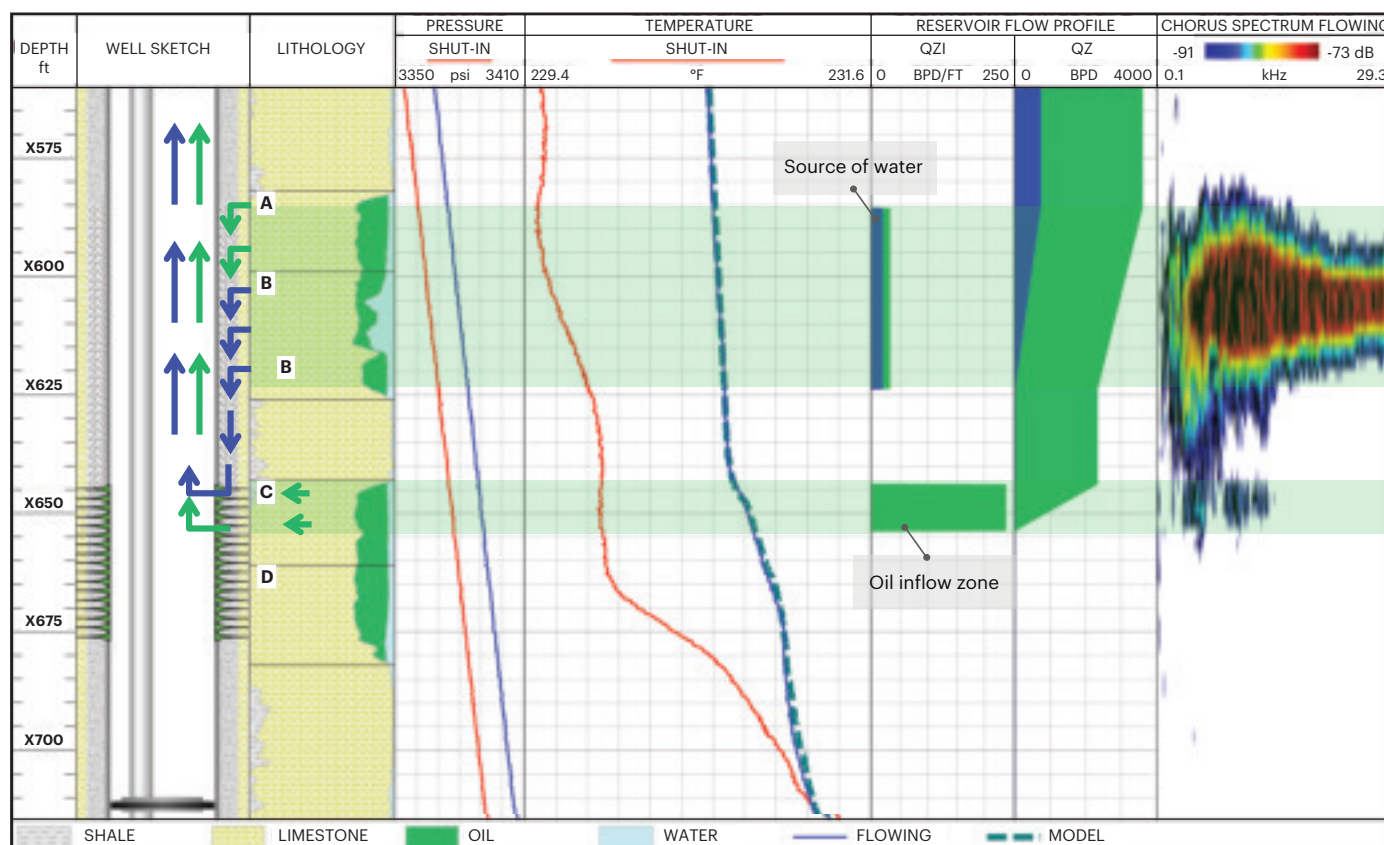
Indicative logplot for Dual String Flow
Logplot demonstrates a short string production evaluation through the long string. Target formation produces only oil from the upper part of the perforated interval (upper half of unit C). 35% of the total liquid production comes from behind casing crossflows from non-perforated units A and B, above the targeted formation. Unit B was initially saturated with water and most probably is the source of the high water content in the short string production.

Challenges

- Quantify flow profiles in well systems with dual completions
- Poor production or injectivity performance
- Unexpected change in well system performance
- Unexpected water or gas breakthrough
- Suspected cross-flow in wellbore or behind-casing
- Input for recalibrating reservoir model
- Reservoir flow assessment and characterisation

Benefits

- Understand the true sources of production and quantify flow profiles accurately
- Know where injection fluids are going and quantify flow profiles accurately
- Know source of gas breakthrough or unwanted production due to cross-flow and thief zones
- Better well and reservoir management decisions, precisely targeted
- Improve well system performance and extend productive life of asset
- Improve effectiveness of remedial effort



Case studies

CS012: Quantitative evaluation of reservoir flow reveals short-string production profile and guides workover planning in a dual-completion well

Technical papers

SPE-182889-MS: Quantitative Evaluation of the Reservoir Flow Profile of Short String Production with High Precision Temperature (HPT) Logging and Spectral Noise Logging (SNL) in the Long String of a Dual Completion Well

SPE-191558-18RPTC-RU: Rigless pre-workover diagnostic of a Dual String Completion

SPE-191011-MS: Defining Downhole Contribution/Injection Profile in Multi-

Zone Completion by Temperature and Spectral Noise Logging

SPE-183491-MS: Identification of thief zones and water allocation In Dual Water Injectors With Temperature & Spectral Noise Logging