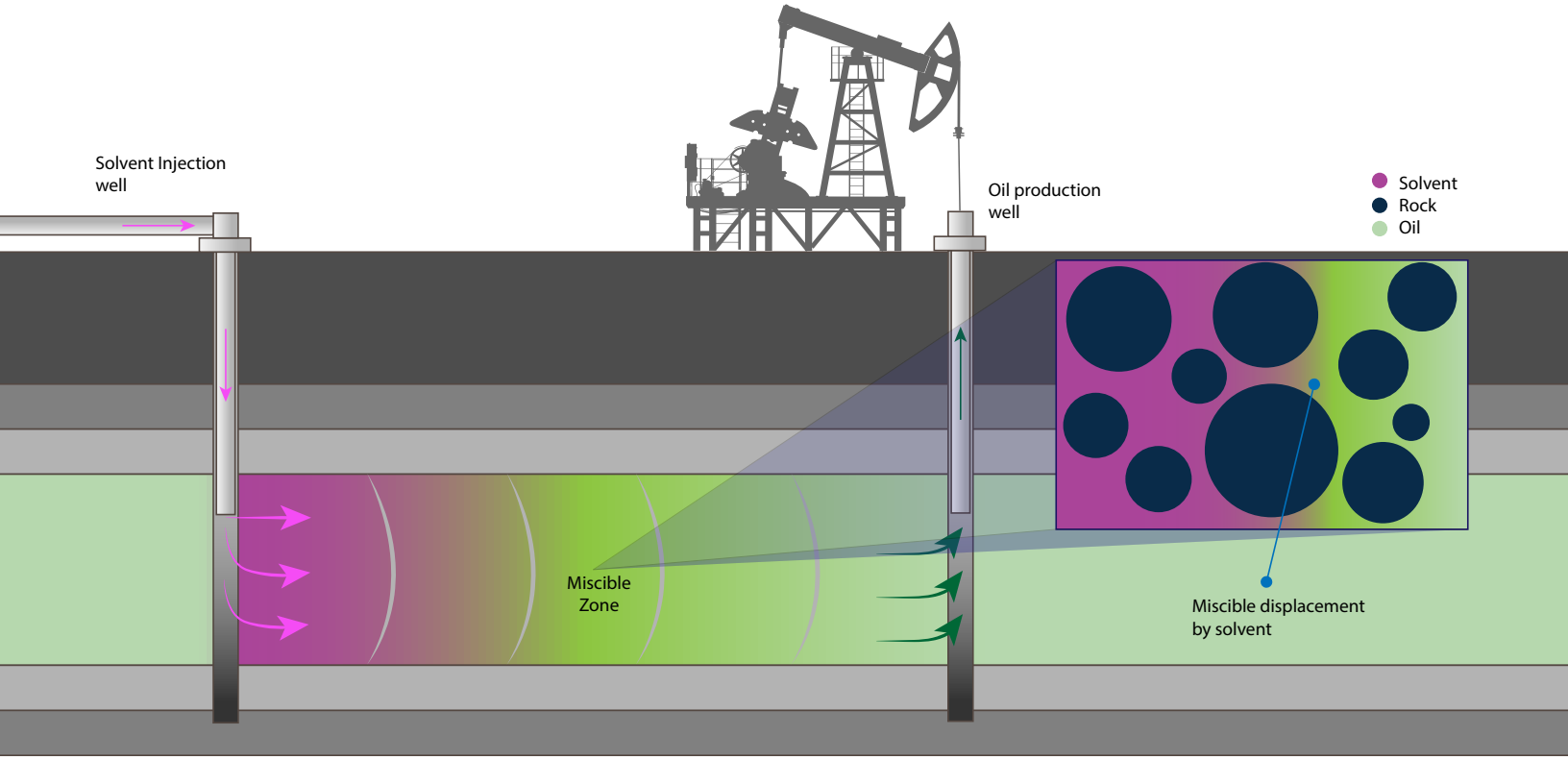
Interface FLUIDICS

Multi-Contact Miscibility

Rapid results with accuracy superior to slim tube testing

The Interface Fluidics rapid minimum miscibility pressure (MMP) test provides you with a faster, more accurate, and more cost effective assessment of MMP than traditional slim tube testing.

Interface Fluidics' technology platform offers several advantages over the conventional slim tube method to evaluate miscibility conditions incorporating a wide range of solvents. Interface Fluidics' optical-access enables first-of-its-kind visual insights into the oil displacement, solvent-oil interface phenomena, and asphaltene deposition. A smaller test footprint allows more rapid testing than a conventional slim tube.



Rapidly Assess an Expanded Number of Conditions Including:

- Different solvents: CO_2, N_2, HC, Flue gas
- Different oils: oils with different APIs and viscosities
- The impact of impurities on the MMP

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Rapidly Assess an Expanded Number of Miscibility Conditions

Interface Fluidics' slim tube like Multi-Contact Miscibility Test uses a porous microfluidic analogue, in place of a slim tube apparatus, to measure the miscibility conditions, including minimum miscibility pressure (MMP) and minimum miscibility enrichment (MME) of solvents with crude oils. The analogue is designed and fabricated to have a miniaturized porous pattern replicating the sandpack in the slim tube. The analogue facilitates multiple equilibrium contacts between oil and the injected solvent. The system's optical-access enables first-of-its-kind visual insights into the oil displacement, solvent-oil interface phenomena, and asphaltene deposition if present.

Your Benefits

- **Quick**: measure the MMP in 2-3 days which is significantly faster than the standard slim tube
- **High Accuracy and Repeatability**: provides data within ± 5 bar which is more accurate than the standard slim tube test
- **Small Sample Volume**: uses approximately 20 mL of live oil to measure the MMP
- **Visual Insights**: ability to observe solvent-oil interface; displacement efficiency; solid deposition
- **Cost Effective**: Equivalent or lower cost than traditional slim tube tests

Higher-quality results. Faster.

Oil Sample	Solvent	T (°C)	MMP (bar/psi)		Difference (%)
			Slim Tube Test [1]	Interface FLUIDICS	
C_5(43 mol %) + C_{16}	CO_2	50	103/1500	97.5/1414	-5.3%

[1] Christiansen, Richard L., and Hiemi Kim Haines. "Rapid measurement of minimum miscibility pressure with the rising-bubble apparatus." SPE Reservoir Engineering 2.04 (1987): 523-527.

Interface Fluidics is a technology company providing energy industry clients insights into the interactions and properties of reservoir fluids to help them improve their financial performance and ensure the responsible development of their oil and gas assets.

Contact us today to set up a business lunch

Interface FLUIDICS

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