Understanding Fluid Properties and Phase Behavior That Drive Superior Well Performance

Premier Corex PVT and organic geochemistry solutions provide detailed reservoir fluid properties that help our clients optimize well, reservoir, and production system simulations. They are also used to better understand which parts of the reservoir are being produced.

Premier Corex experts evaluate fluid composition, properties, and behavior through a range of standardized tests, such as constant composition expansion, differential liberation, constant volume depletion, as well as EOR-specific tests such as slim tubes, swell and vaporization experiments. The results are used to calibrate an equation-of-state for predicting reservoir fluid properties under different physical conditions. The origin of produced fluids can be interpreted by comparing produced fluid properties to results obtained from fluids extracted from drill cuttings or core samples.

Key Results

- Phase behavior of reservoir fluids
- Compositional data
- Oil and gas properties at both reservoir and surface conditions
- Identification of formations contributing to production

Generate High-Quality Reservoir Simulations For All Of Your Producing Assets.

Premier Corex PVT and organic geochemistry solutions generate valuable data for the calculation and valuation of resources and as inputs to reservoir models. Fluid properties are also used during special core analysis, EOR-related testing, and in well performance We provide PVT and organic geochemistry solutions with a quick-turn around producing high quality data that can be readily utilized in industry standard simulations.

Services Include:

- Field Sampling (separator samples, formation water, etc.)
- Sample Validation and Transfer
- Restoration of Sample to Reservoir Condition
- Recombination
- Oil Reservoir Evaluation
- Gas Reservoir Evaluation
- Gas Condensate Evaluation
- Compositional Analysis
- Solubility / Swelling Studies
- Phase Behavior Studies
- Bubble Point Pressure (at Ambient and Reservoir Temperature)
- Single Stage Flash
- Constant Composition Expansion (CCE)
- Differential Vaporization
- Viscosity
- Separation Testing
- Constant Volume Depletion (CVD)
- Stock Tank Oil Analysis
- Water Analysis
- Crude Oil Analysis
- Preparation of Oil, Synthetic Gas, Separated Gas, and Gas Containing H2S