



Waterflood Operations

Interfacing with core waterflood groups involving team members from Reservoir, Completions, Subsea, Flowlines/Risers, and Topsides to arrive at a design is crucial. Ultimately, the design will be defined at the interfaces, have a taken a lifecycle approach from detailed design, commissioning, start-up, and steady-state operations, and lead to more certainty in that the design will meet the basis of design and flexible enough to handle uncertainties.

The work process begins with understanding the water chemistry – which drives the souring, scaling, and corrosion aspects of the design. Understanding the voidage replacement requirements, expected availability of the system – the topsides throughput can be arrived at, and then working with completions a topsides pressure estimate is calculated. This information begins to form the basis of design in which novel technologies can be identified such as high pressure pumps or Oxygen Removal units.

Overall, GATE, LLC is instrumental in bringing definition to the project based on system engineering principles, time tested production chemistry, true offshore commissioning & start-up experience, and operational flow assurance techniques.

