

CASE STUDY

Application: Time-lapse Production Allocation Monitoring

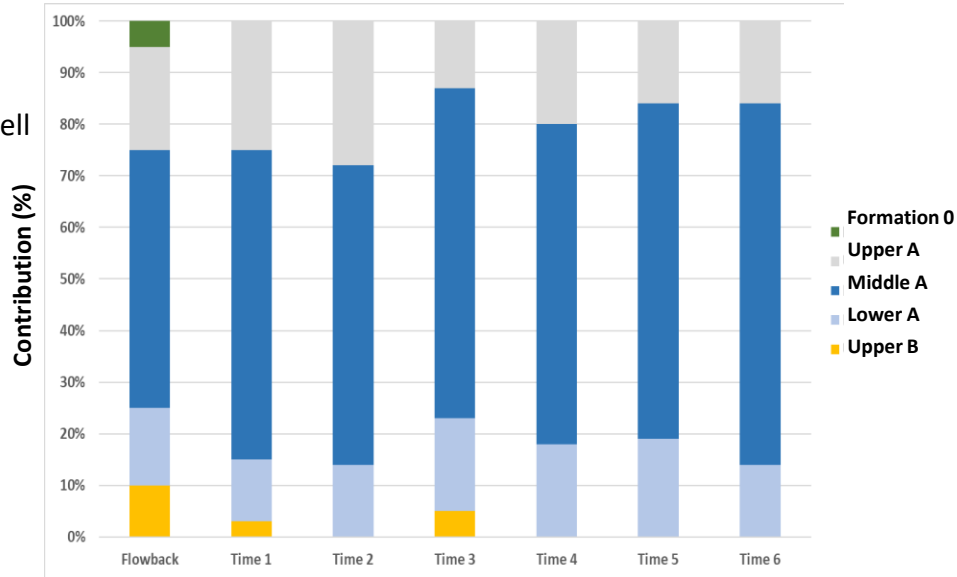
CHALLENGE

Operator needed a dynamic monitoring of vertical drainage quantification in order to optimize well stacking and timing of re-fracing

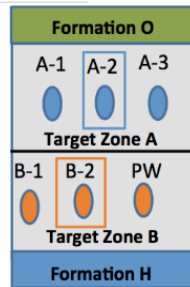
PROCESS

- Well core from pilot well was obtained
- Core geochemical fingerprint was collected and analyzed to establish baseline
- Separator produced oil samples were collected within the first few months of production, without operational interruption
- Produced fluid geochemical fingerprint was compared to the pilot well baseline to estimate drainage height and its change through time

Well A-2 Production Allocation Program



Well B-2 Shut In



RESULTS

- Geochemical fingerprint information provided dynamic monitoring of the drainage
- The drainage height was very dynamic through time and well communication between Zone A and Zone B producers was quantified
- Results were used to constrain frac model and reservoir model and revamp field development

