

DFIT FBA

A new DFIT method, called DFIT-FBA, has been developed by the University of Calgary and has been tested in the field. DFIT-FBA involves the creation of a small hydraulic fracture, followed by flowback of the injected fluids at a rate of ~ 2-5% of the injection rate.

The BCER accepts the DFIT FBA method as a valid test for determining closure and reservoir pressure and fulfilling the regulatory requirement for reservoir pressure testing.

Analysis Submission Expectations

- Include the following tables and plots
- Include a write up of the confidence level in the analysis of closure pressure and reservoir pressure.
- Include CSV file of the raw data
- Submit the CSV and PDF as TRGS through BCER [eSubmission](#)

DFIT Analysis Results

General Information
Well Authorization Number (WA)
UWI
Formation
Toe Depth (m TVD)
Test Date
Injection and Flow Data
Water Gradient
Volume Injected (m ³)
Avg Injection Rate (l/min)
Avg Flowback Rate (L/min)
Flowback Time (min)
Pre-closure Analysis
ISIP, Surface (kPa)
ISIP, Bottom-hole (kPa)
ISIP Gradient (kPa/m)
Closure Pressure, surface (kPa)
Closure Pressure, Bottom-hole (kPa)
Closure Pressure Gradient (kPa/m)
Post-closure Analysis
Reservoir Permeability (mD)
Reservoir Pressure (kPa)
Reservoir Pressure Gradient (kPa/m)

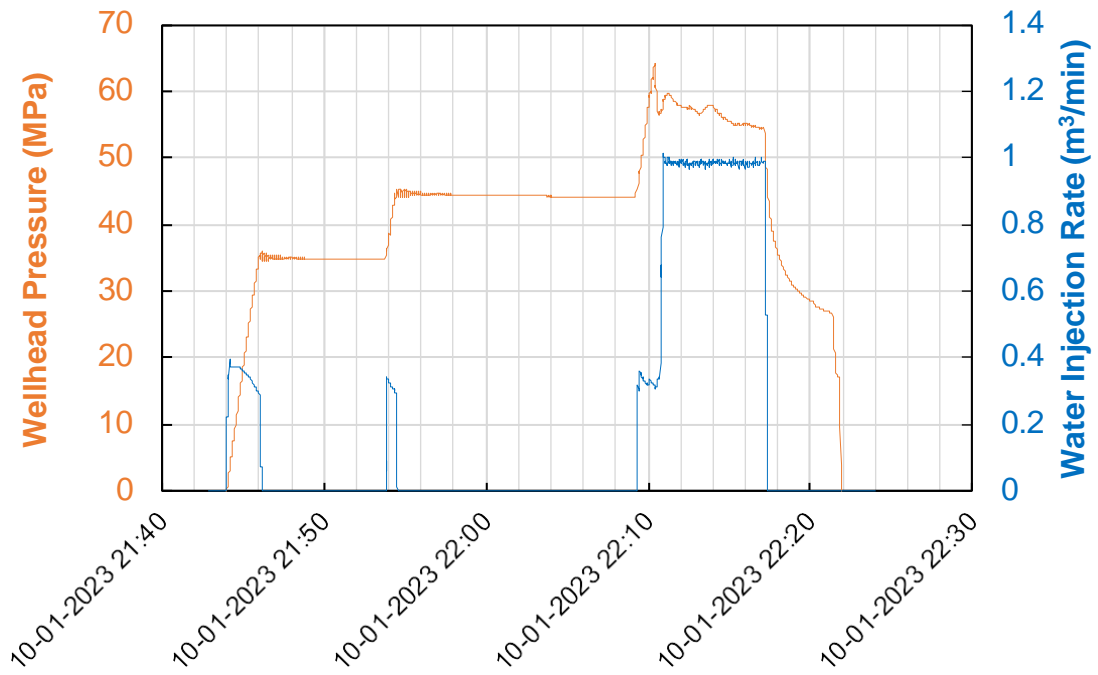
Write-up

Comment on surface of bottom hole gauges

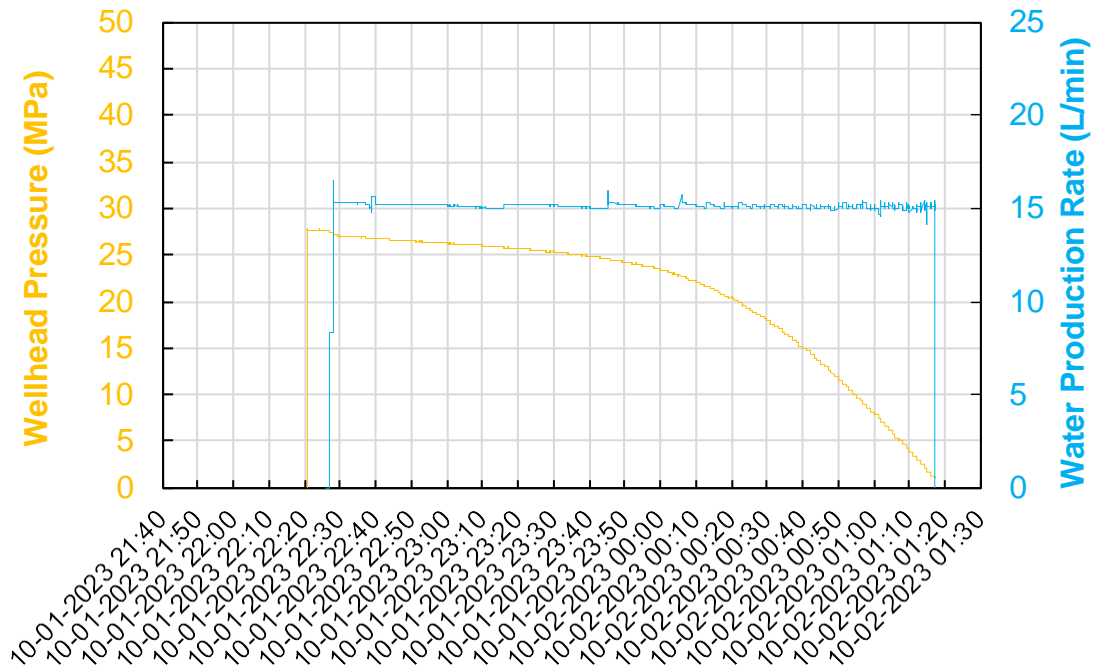
Comment on confidence level for data quality, ISIP, closure and reservoir pressure

Pressure and Rate Plots

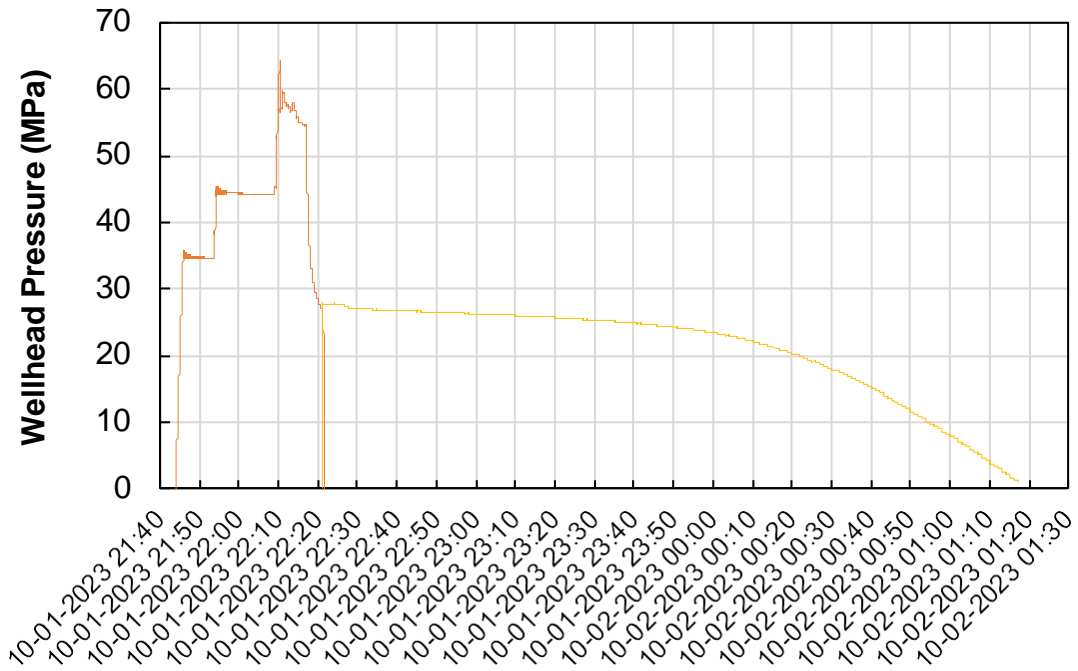
Injection Period (Pressure & Rate)



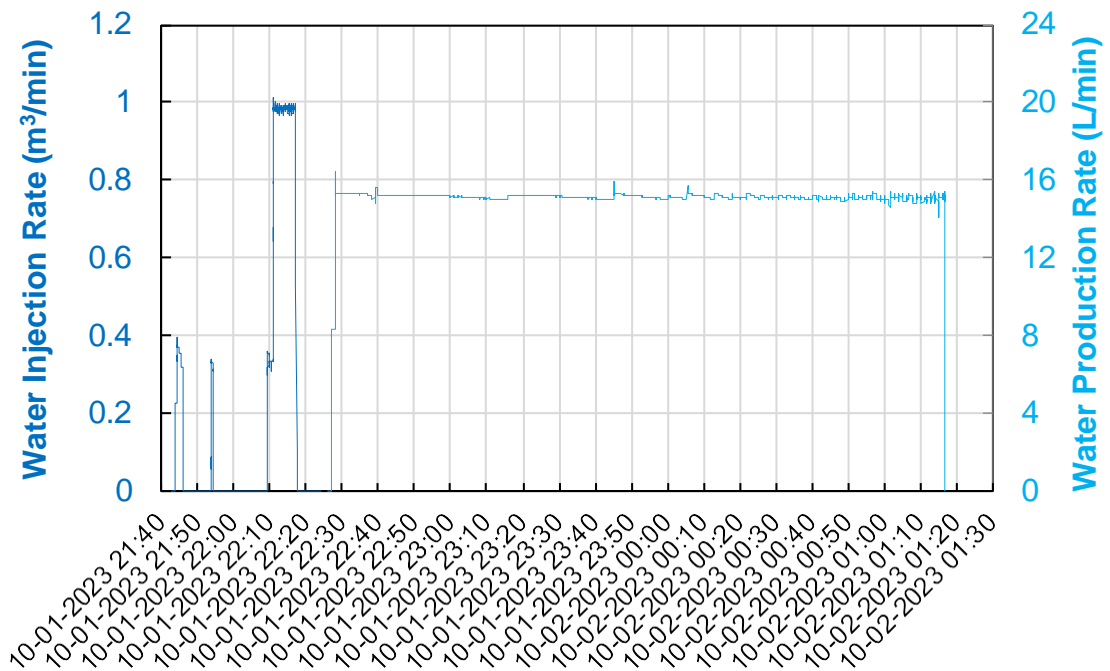
Flowback Period (Pressure & Rate)



Injection and Flowback (Pressure)

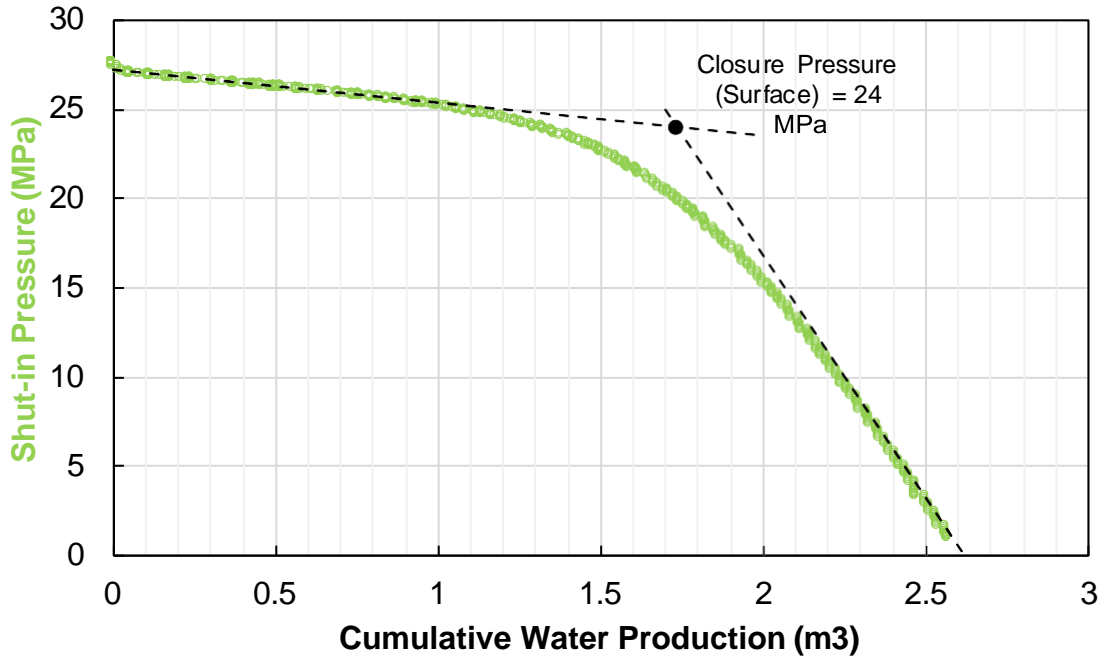


Injection and Flowback (Rate)

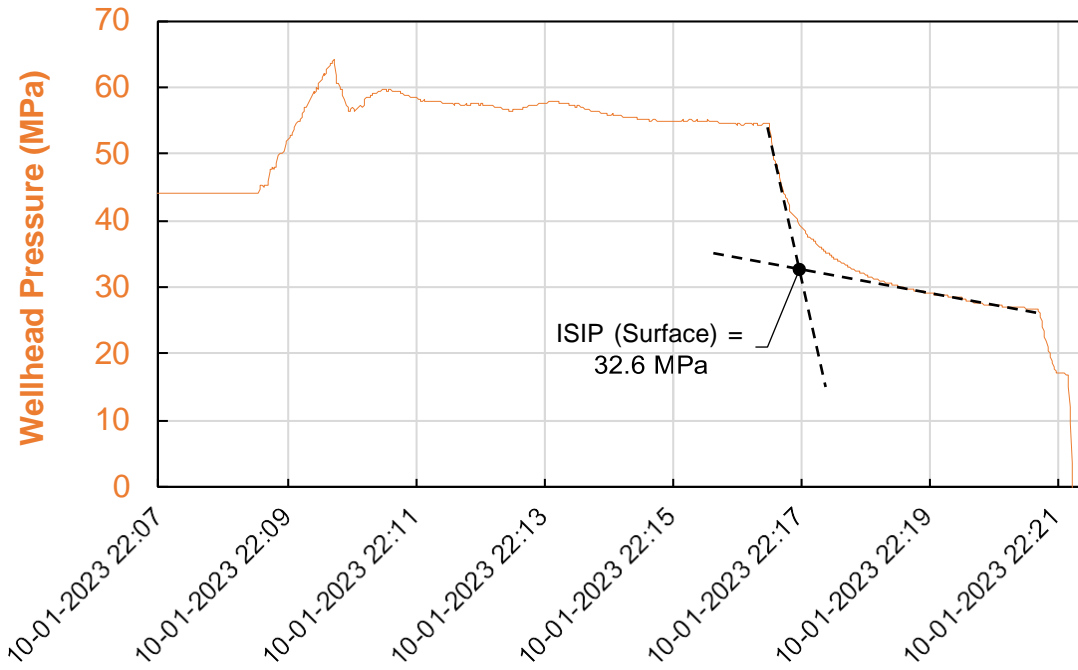


ISIP and Closure Pressure Analysis

Closure Pressure Analysis



ISIP Analysis



Reservoir Pressure Analysis

RNP and RNP'

