Biax Experiment

Exp. Name: pxxxx
Operator(s): Wood, Affinito, Marty

Date/Time: 24 Nov. 2020
Hydraulics start: 3687.5
Hydraulics end: 3694.7

Sample Block Thickness w/ no gouge:

Layer Thickness (total on bench): mm @sample
Under Load: mm
Material (Qtz, Granite, ?): WG, Saw-cut & 600-grit.
Particle Size, Size Distribution :

Load Cells: Contact Area: 0.0022292545 m^2

Load cell name	Calibrations (mV/kN)	Target stress (MPa)	Init. Voltage	Volt. @ load
44mm Solid Horiz	119.3033 (V/MPa): 0.26596	1, 7, 10, 20	0.2158	0.48176, 2.0775 , 2.87537, 5.53495
44mm Solid Horiz	119.3033 (V/MPa): 0.26596		0.2158	

Vessel Pressures: Pore Fluid: DI H2O

	Calibrations (V/MPa)	Pressures (MPa)	Init. Voltage	Volt. @ load
Pc	Gain: 0.1456	6	-0.1222	0.75116
PpA	1.5177	5.0, 4.5, 4.25, 3.0, 2.5, 2.25	-0.308	7.2804 , 6.52156, 6.14214, 4.24504, 3.4862 , 3.10678
PpB	1.483	3.0, 3.5, 3.75, 1.0, 1.5, 1.75	-0.363	4.08606, 4.82757, 5.19832, 1.12002, 1.86153, 2.23228

Data Logger Used: 16 channel

Control File: No

Horiz. DCDT: *short rod*
0.6438 mm/V

Vert. DCDT: Trans-Tek 2
2.8498 mm/V

Purpose/Description: Permeability test of saw-cut sample roughened with 600-grit.
Compre this sample to sample sent to Andy Rathbun at Chevron for profilometry before DAET/PP osc. experiment.

Acoustics Blocks used: SDS L-block v2

Horiz. Servo Settings				Vert. Servo Settings			
P	x	$\mathbf{D_{atten}}$	x	**P**	x	$\mathbf{D_{atten}}$	x
I	x	**Feedback**	x	**I**	x	**Feedback**	x
D	x	**E-gain**	x	**D**	x	**E-gain**	x

Experiment Notes

230 NS @ 1MPa
2750 NS ↗ 7MPa
3400 Pc ↗ 6MPa
4200 empty/refill Ppa/b
5200 begin saturation, Ppa = 1.5 MPa
10000 ↗ 10 Hz, adjust Ppa PID
10000 ↗ 10 Hz, Ppa ↗ 5 MPa, Ppb ↗ 3 MPa
31000 open Ppa valve, start flow
41050 Ppa ↘ 4.5 MPa, Ppb ↗ 3.5 MPa, open Ppa valve
52700 Ppa ↘ 4.25 MPa, Ppb ↗ 3.75 MPa, open Ppa valve
62550 NS ↗ 10 MPa
62800 ↗ 10 Hz, Ppa ↘ 3 MPa, Ppb ↘ 1 MPa, open Ppa valve
68000 Ppa ↘ 2.5 MPa, Ppb ↗ 1.5 MPa, open Ppa valve
72800 Ppa ↘ 2.25 MPa, Ppb ↗ 1.75 MPa, open Ppa valve
77100 NS ↗ 20 MPa, Ppa ↗ 3 MPa, Ppb ↘ 1 MPa, open Ppa valve
89000 Ppa ↘ 2.5 MPa, Ppb ↗ 1.5 MPa, open Ppa valve
99700 Ppa ↘ 2.25 MPa, Ppb ↗ 1.75 MPa, open Ppa valve
109300 ↘ 1Hz. Ppa, Ppb, Pc ↘ 0 MPa. NS ↘ 1 MPa.
110530 NS ↘ 0 MPa.