Biax Experiment

For current calibrations – `gpfs/group/cjm38/default/Calibrations/`

Revised: 30 Nov. 2021

Exp. Name: p5726
Operator(s): Wood
Temperature (°C):
Relative Humidity (%):

Date/Time: 10/05/2022
Hydraulics start: 5306.7
Hydraulics end:
Data Logger/Control File: 16-chan

Purpose/Description: Measure changes in perm. in response to NS/PP oscillations of sawcut sample roughened with 120 grit.
Sample Block Used and Thickness with **no** Sample: SDS Vessel 5x5 cm

Material: Westerly Granite
Benchtop Sample Thickness (mm): 32.5

Load Cells: Contact Area: 0.0022231311 m^2

Load cell name	Calibrations (mV/kN)	Target stress (MPa)	Init. Voltage	Volt. @ load
44mm Solid Horiz	129.984 (V/MPa): 0.289	4, 9.25, 18	0.072	1.22789, 2.74499, 5.27349
44mm Solid Vert	120.364 (V/MPa): 0.2676	0	0	0.

Vessel Pressures: Pore Fluid:H2O

Calibrations (V/MPa)	Pressures (MPa)	Init. Voltage	Volt. @ load
Pc: 0.1456	2, 8.25, 12	0.026	0.3172, 1.2272, 1.7732
PpA: 1.5177	2.6, 1.4	0	3.94602, 2.12478
PpB: 1.483	2.6	0	3.8558

Displacement Transducers

Name	*Gain (mm/V)*
Horiz. Load-point	0.658
Vert. Load-point	3.51
Horiz. On-Board	0.416

Horizontal Servo Settings	
P:	D_{atten}:
I:	Feedback:
D:	E-gain:
Vertical Servo Settings	
P:	D_{atten}
I:	Feedback:
D:	E-gain:

Chilled water at HPS	*Chiller Unit*	*Proc. water @ Chiller*
1. Temp In (°F):	6. Panel Temp (°F):	10. Temp In (°F):
2. Pres. In (psi):	7. Panel Pres. (psi):	11. Pres. In (psi):
3. Temp Out (°F):	8. Near Pres. In (psi):	12. Temp Out (°F):
4. Pres. Out (psi):	9. Near Pres. Out (psi):	13. Pres. Out (psi):
5. Flow (lpm):		
Hyd. Power Supply (HPS)		
14. Tank Temp (°C):	15. Temp. Out (°C):	16. Pres. Out (psi):

Experiment Notes

125 NS to 10 kN

950 Pc to 2 MPa

top seal leaks significantly. empty vessel. replace seal.