Biax Experiment

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

Revised: 30 Nov. 2021

Exp. Name: p5606WGSawcut600NSosc
Operator(s): Wood
Temperature (°C):
Relative Humidity (%):

Date/Time: 03/01/2022
Hydraulics start: 4859.3
Hydraulics end:
Data Logger/Control File: 16-chan

Purpose/Description:
Sample Block Used and Thickness with **no** Sample: SDS Vessel 5x5 cm

Material: Westerly Granite, Sawcut
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, 11, 13, 15, 18	-1.005	0.15089, 1.66799, 2.17369, 2.75163, 3.32957, 4.19649
44mm Solid Vert	120.364 (V/MPa): 0.2676	0	3.603	3.603

Vessel Pressures: Pore Fluid:DI H2O

Calibrations (V/MPa)	Pressures (MPa)	Init. Voltage	Volt. @ load
Pc: 0.1456	2, 8.25, 10.5, 12, 13.5, 12	-0.2498	0.0414, 0.9514, 1.279 , 1.4974, 1.7158, 1.4974
PpA: 1.5177	2.6, 1.4	-0.0532	3.89282, 2.07158
PpA: 1.483	2.6	-0.597	3.2588

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: 900	D_{atten}: 10
I: 80	Feedback: 512
D: 10	E-gain: 800
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

70 @ 5kN. check acoustics. put on front door.

2340 NS to 4 MPa

2880 Pc to 2 MPa

3050 fill PpB

3280 saturate sample.

7500 10 Hz. NS to 9.25 MPa, Pc to 8.25 MPa. Int DCDT doesn't seem to track stress increase.

12100 PpA & PpB to 2.6 MPa, Int DCDT still isn't registering changes.

21000 Practice NS oscillation. PpA to 1.4 MPa. Begin 0.5 MPa osc. @ 1 Hz. Int DCDT does not measure oscillation, even @ 1MPa amp.

39630 Remove stresses and remove door.

40640 adjust int dcdt

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