

# Biax Experiment

**Exp. Name:** p5458WGcutPerm5-20  
**Operator(s):** Wood

**Date/Time:** 01 Nov. 2020  
**Hydraulics start:** 3613.2  
**Hydraulics end:**

*Sample Block Thickness w/ no gouge:*

*Layer Thickness (total on bench):* mm @sample

*Under Load:* mm

*Material (Qtz, Granite, ?):* WG, Saw-cut & 80-grit.

*Particle Size, Size Distribution :*

## Load Cells:

Contact Area: 0.0022292545 m<sup>2</sup>

Load cell name	Calibrations (mV/kN)	Target stress (MPa)	Init. Voltage	Volt. @ load
44 mm Horiz.	HG: 119.303	1, 5, 20	0.79220	1.0582, 2.122 , 6.1113

## Vessel Pressure:

Pore Fluid: DI H2O

	Calibrations (V/MPa)	Pressures (MPa)	Init. Voltage	Volt. @ load
<b>Pc</b>	Gain: 0.1456	3.145	-0.153436	0.30448
<b>PpA</b>	HG: 1.517	2.5, 2.5, 2.5, 2.5	0.097009	3.88951, 3.88951, 3.88951, 3.88951
<b>PpB</b>	HG: 1.483	0.5, 1.0, 1.5, 2.0	0.049729	0.79123, 1.53273, 2.27423, 3.01573

**Data Logger Used:** 16 channel

**Control File:** No

**Horiz. DCDT:** Short Rod  
 HG: 0.64 mm/V

**Vert. DCDT:** TT2

*Purpose/Description:* Permeability test of saw-cut sample roughened with 80-grit.  
 Sample to be sent to Andy Rathbun at Chevron for profilometry before DAET/PP osc. experiment.

*Acoustics Blocks used:* SDS L-block v2

## Experiment Notes

- # 150 at 6kN. put on doors
- # 2710 plug in PpA/B ptrdx
- # 2980 empty/refill PpA/B
- # 3220 go to 5MPa
- # 3350 fill vessel
- # 3555 switch PpA/B to high gain
- # 3630 Ppa load offset
- # 3680 Ppb load offset
- # 4470 Pc at 3MPa
- # note: Pc load and displacement reversed in recorder – oops.
- # 7520 hydraulics shut off. chiller on, check hydraulics before next exp.
- # 8260 unplug/replug Ppb cable
- # 8625 start saturation
- # 9500 flowing through,  $\sim 13\mu m/s$ .  $k \approx 3 * 10^{-16} m^2$ . @ PpA = 1MPa.
- # 13000 connect PpB (valve closed).