Column Installation 2020_02_08
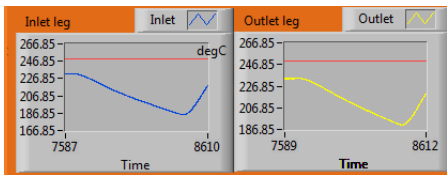
Notebook: Experimental
Created: 2020/02/09 19:41   **Updated:** 2020/02/09 20:21
**Author:** Niel Malan

Rails aligned	14:30 Don't push on rails.
Column threaded	14:35
Coaxial heater assembly mounted	14:46
Heaters inserted	15:01 Divoted Inlet: Bottom left Detector: Bottom left
Thermocouples inserted	15:11
Manifold bolted down	15:11
Cryo leak check	15:28 Required tightening for detector-end micro-union
Electrical connections	Lead solder
Remove plastic clips	OK
Final position	Inlet 19:02 Detector 19:09
Slide collars tightened	
Hydrogen leak check	Inlet 19:02 Detector 19:09
Hydrogen flow check	
FID flows check: Total H2	39.9
FID flows check: Air	304.8
Heater check	
Insulation tucked	N/A
Calibration trim	Trimmed

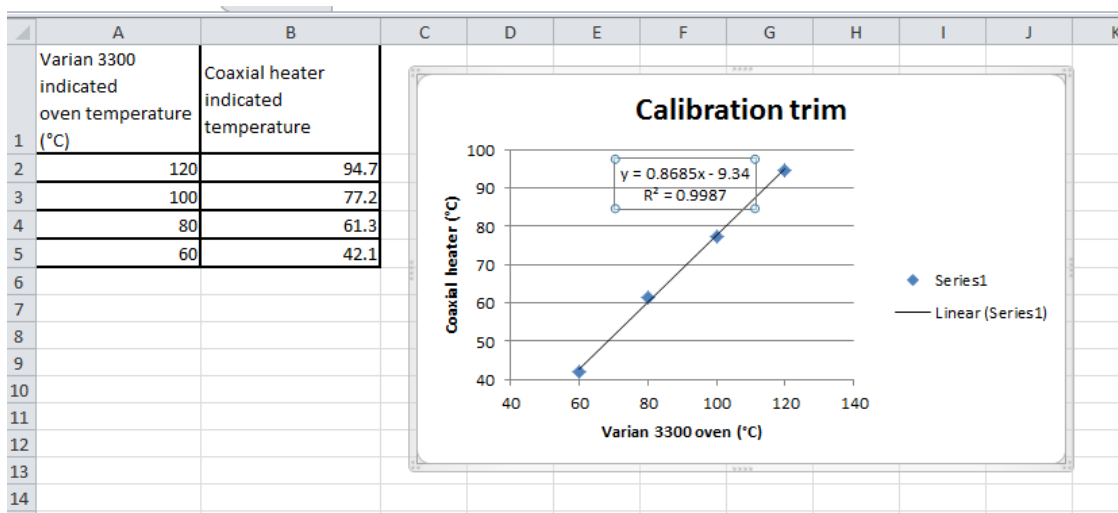|	m = 0.8685 c = -9.34
GC injection check	**6 microlitre hexane** Low-res Hi-res Log Recording Setting SCF FID 0.04379 FID 0.00 GC run
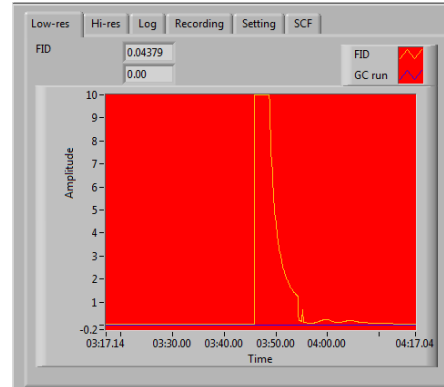
Calibration trim:

Calibration trim procedure:

1. Set trim to c = 0, m = 1
2. Collect calibration data.
3. Fit line to data:
    - x-axis thermocouple reading
    - y-axis coaxial heater reading
    - c is y-intercept
    - m is slope
4. Copy c and m to boxes above.
5. Set to default values.
6. Run the program
7. Check calibration

Varian 3300 indicated oven temperature (°C)	Coaxial heater indicated temperature
120	94.7
100	77.2
80	61.3
60	40

	A	B	C	D	E	F	G	H	I	J	K
1	Varian 3300 indicated oven temperature (°C)	Coaxial heater indicated temperature									
2	120	94.7									
3	100	77.2									
4	80	61.3									
5	60	42.1									
6											
7											
8											
9											
10											
11											
12											
13											
14											

Calibration trim

$y = 0.8685x - 9.34$
$R^2 = 0.9987$

Coaxial heater (°C) vs Varian 3300 oven (°C)

Series1
Linear (Series1)

m = 0.8685
c = -9.34