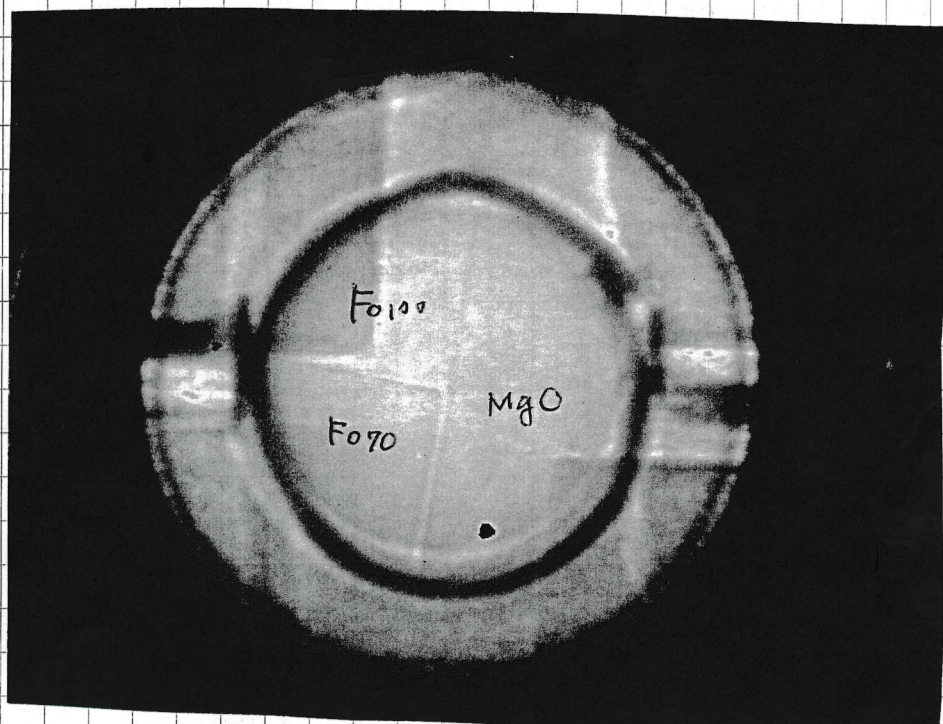


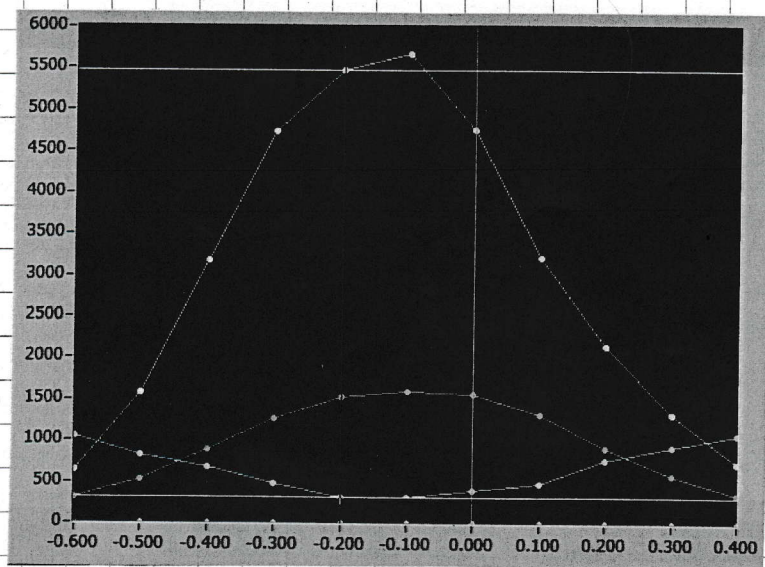
M2268

12:14 put a cell assembly, thinner B-epoxy rods in pyrophyllite gaskets



12:25

X scan

 $x' = -0.1$ 

12:30

M2268001

MgO 0 ton, R.T. 150 sec, $K = 0.7.2^\circ$ $x = -0.1$, $y = -1.6$, $z = -4.6$

D.T = 3.10 %

 $P = 0.03449 \pm 0.03360 \text{ GPa}$ $a = 4.211200 \pm 0.00029 \text{ \AA}$ $V = 74.682299 \pm 0.015608 \text{ \AA}^3$ $2\theta = 17.19848 \text{ deg.}$ $V/V_0 = 1.000000 \pm 0.000209$

TC $\begin{matrix} 0.25 \\ 0.3 \\ 1.5 \end{matrix}$

12:34

M2268002

lower

Fo 70

0 can, R.T., 100 sec, $\kappa = 0-7.2^\circ$ $x = -0.1$, $y = -1.1$, $z = -4.5$

12:39

M2268003

upper

Fo 100

0 can, R.T., 100 sec, $\kappa = 0-7.2^\circ$ $x = -0.1$, $y = -1.1$, $z = -4.85$

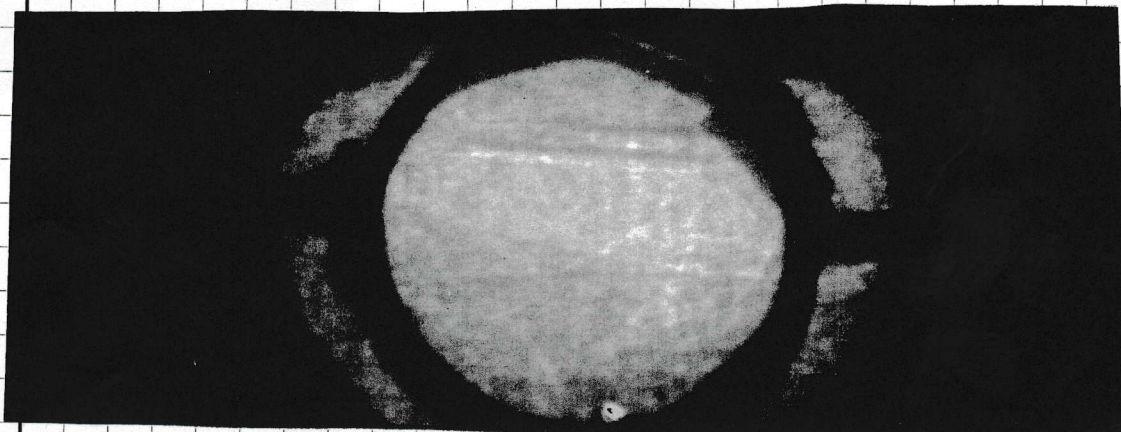
D.T. = 3.76 %

12:54

compress to 50 can

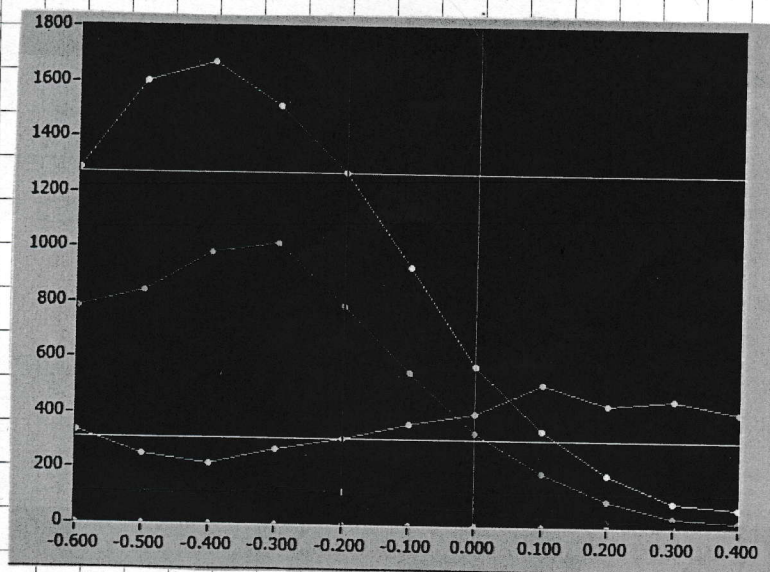
13:10

50 can



13:13

X scan

 $x = -0.4$ 

13:18

M2268004

MgO

50 can

R.T., 150 sec, $\kappa = 0-7.2^\circ$ $x = -0.4$, $y = -1.45$, $z = -2.97$

D.T. = 5.58 %

$$P = 5.87751 \pm 0.03634 \text{ GPa}$$

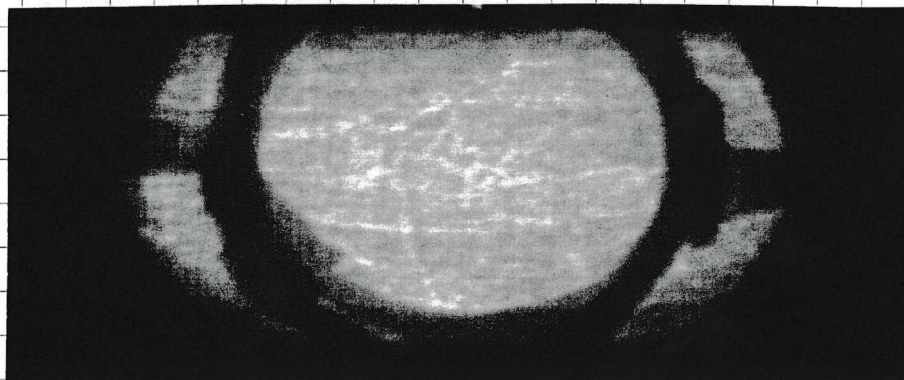
$$V = 72.197677 \pm 0.014179 \text{ \AA}^3$$

$$V/V_0 = 0.966731 \pm 0.000190$$

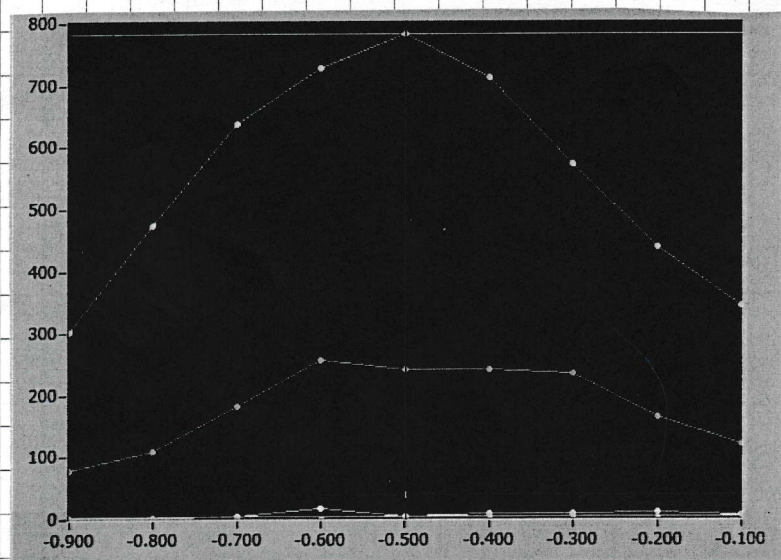
$$a = 4.168971 \pm 0.00027 \text{ \AA}$$

18:25 compress to 600 ton

16:24 At 6.0 MN



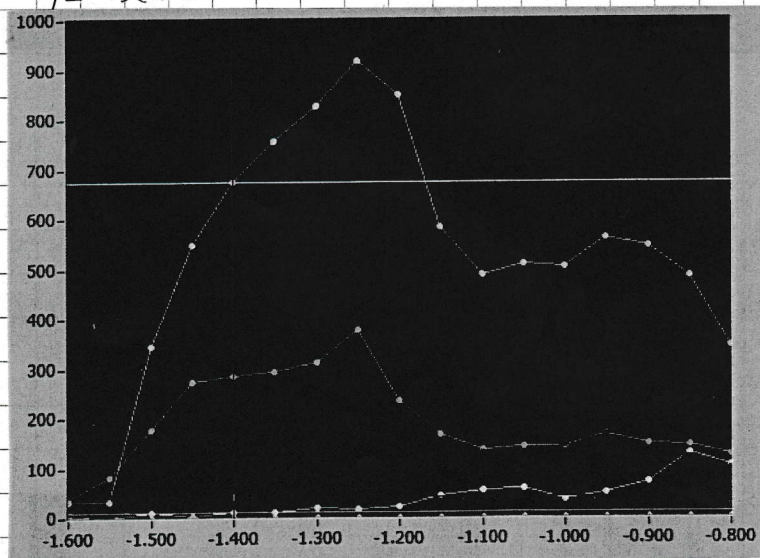
16:38 X-scan



$x \approx 0.5$

MgO

16:50 y2 scan

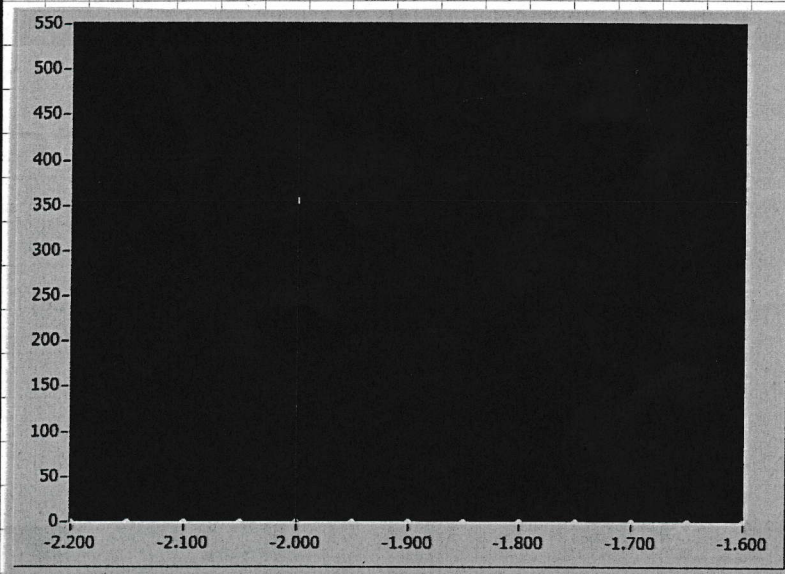


MgO $y_2 = -1.3$

For $y_2 = -1.0$
 For $y_2 = -1.0$

17:00 Communication error with Stage Scan.vi - Solved

17:30 Z scan on olivine samples



$$F_{0.7} \quad z = -1.80$$

$$F_{0.100} \quad z = -2.05$$

$$MgO \quad z = -1.9$$

17:31 (M2268005) MgO, 600 ton, RT, 100 sec $\kappa = 0 - 7.2^\circ$
 $x = -0.5$ $y = -1.3$ $z = -1.9$
 D.T. = 3.6%

$$P = 28.3342 \pm 0.08435$$

$$V = 65.390683 \pm 0.020198$$

$$V/V_0 = 0.875585 \pm 0.00027$$

17:42 Heating to 1700 K

Time	Temp.	V_1	I_1	R_1	P_1	V_2	I_2	R_2	P_2	Strobe
17:43	26.59	0.13	0.00	68754	0.00	0.001	1.26	0.0012	0.00	8.869
17:59	101.05	23.43	1.48	15.84	34.68	12.04	2.17	5.9	24.30	8.872
18:01	200.00	23.59	2.34	10.19	56.91	12.19	3.70	3.31	44.91	8.872
18:02	301.09	24.31	3.19	7.64	77.64	12.36	5.28	2.35	65.11	8.872
18:04	399.17	25.44	3.85	6.60	98.34	12.84	6.51	1.91	83.65	8.872
18:05	501.00	26.35	4.54	5.79	119.34	13.19	7.78	1.69	102.67	8.872
18:07	600.74	27.36	5.09	5.39	138.98	13.75	8.75	1.57	120.85	8.875
18:09	702.16	28.69	5.51	5.22	157.62	14.41	9.50	1.52	136.68	8.882
18:11	828.6	29.70	6.24	4.76	185.62	14.81	10.82	1.36	160.44	8.896

(M2268006) MgO 600 ton, 1700K 150 sec $\kappa = 0 - 7.2^\circ$

$$x = -0.5 \quad y = -1.3 \quad z = -1.9 \quad D.T. = 3.1\%$$

$$swt \neq \psi/20.4) \quad P = 23.2583 \pm 0.048 \quad V/V_0 = 0.909804$$

$$V = 67.931 \pm 0.004$$

M2268007 $F_{0100} - 600 \text{ ton}$, 1100 K , 300 sec

$$x = -0.5 \quad y = -1.0 \quad z = -2.0$$

$$P_c + R_w + A_k$$

M2268008 $F_{070} \quad 600 \text{ ton} \quad 1100 \text{ K} \quad 300 \text{ sec}$

$$x = -0.5 \quad y = -1.0 \quad z = -1.1$$

$$R_w + P_c + A_k$$

M2268009 M_{g0} , 600 ton , 1100 K , 300 sec

$$x = -0.5 \quad y = -1.3 \quad z = -1.85 \quad D.T. = 3.4\%$$

$$P = 22.758 \pm 0.051 \quad V/V_0 = 0.911543$$

$$V = 68.0761 \pm 0.015$$

M2268010 F_{0100} , 600 ton , 1100 K , 300 sec.

$$x = -0.5 \quad y = -1.0 \quad z = -2.0$$

$$P_c + R_w + A_k \text{ (no Brg)}$$

M2268011 $F_{070} \quad 6 \text{ MN} \quad 1100 \text{ K} \quad 300 \text{ sec}$

$$x = -0.5 \quad y = -1.0 \quad z = -1.75$$

$$D.T. = 1.7\%$$

M2268012 $M_{g0} \quad 6 \text{ MN} \quad 100 \text{ K} \quad 150 \text{ sec.}$

$$x = -0.5 \quad y = -1.3 \quad z = -1.85 \quad (6.4 \text{ slot})$$

$$P = 22.335 \pm 0.031$$

$$V = 68.19981$$

$$V/V_0 = 0.9139 \pm 0.0001$$

19:00

19:07

[M2268013] MgO 1100K, 150 sec, 6.16 MN

$$x = -0.5 \quad y = 1.3 \quad z = -1.85$$

$$P = 22.59218 \pm 0.0458$$

$$V = 68.124 \pm 0.00133$$

$$V/V_0 = 0.9121 \pm 0.001$$

19:15

[M2268014] MgO 1100K 150 sec 6.16 MN

$$x = 0.5 \quad y = -1.3 \quad z = -1.85$$

$$P = 22.528 \pm 0.059$$

$$V = 68.1434 \pm 0.007$$

$$V/V_0 = 0.90244 \pm 0.002$$

6 → 6.16 MN

24/7
19:30

[M2268015] MgO 1100 150 sec 6.5 MN

$$x = -0.5 \quad y = 1.3 \quad z = -1.8$$

$$P = 22.96228 \pm 0.04$$

$$V = 68.0169 \quad V/V_0 = 0.91075 \pm 0.$$

6.16 MN → 6.5 MN

19:45

[M2268016] MgO 1100 150 sec 6.7 MN

$$x = -0.5 \quad y = 1.3 \quad z = -1.75$$

$$P = 23.158 \pm 0.031$$

$$V = 67.960 \pm 0.009026$$

$$V/V_0 = 0.90990$$

6.6 → 6.7 MN

3.50 [M2268017] MgO 1100 K 150 sec 6.8 MN.

6.8 MN

$$x = -0.5 \quad y = +1.3 \quad z = -1.75$$

$$P = 23.3289 \pm 0.0814$$

$$V = 67.9106 \pm 0.023$$

$$V/V_0 = 0.909328 \pm 0.000314$$

6.8 MN for 5 min / 6.8 MN (3000 min)

6.9 MN for 5 min

7.0 MN for 10 min

7.1 MN for 15 min

7.2 MN for 20 min

7.3 MN for 25 min

7.4 MN for 30 min

7.5 MN for 40 min

7.5 MN (1000 min)

Heating to 1700 K

Time	Temp.	V_1	I_1	R_1	P_1	V_2	I_2	R_2	P_2	Stroke
0:06	827.4	30.95	6.44	4.80	199.88	15.39	11.17	1.38	172.6	9.130
0:09	928.6	31.26	7.00	4.47	218.64	15.52	12.24	1.26	190.2	9.131
0:10	1030.6	31.56	7.57	4.18	239.88	15.61	13.30	1.17	207.5	9.131
0:12	1134.7	33.47	7.52	4.51	253.98	16.89	12.97	1.30	219.6	9.131
0:14	1226.7	35.32	7.69	4.61	272.34	17.64	13.29	1.33	234.5	9.131
0:16	1328.6	36.56	8.11	4.33	297.48	18.22	14.10	1.29	257.9	9.131
0:17	1425.6	36.90	8.70	4.24	320.07	18.23	15.23	1.19	270.3	9.132

[M2268018] MgO 1700 K 150 sec 6.8 MN. D.T = 2.4

$$x = -0.5 \quad y = +1.3 \quad z = -1.7 \quad P = 23.44(8)$$

27 [M2268019] MgO 1700 K 300 sec 6.83 MN.

$$x = -0.5 \quad y = -1.25 \quad z = -1.7 \quad D.T = 3$$

$$P = 23.40(6)$$

20:32

M2268020 $F_0 100$ $1700 K$ $6.98 MN$, 300 sec

$$z = -1.85 \quad y = -1.0 \quad x = -0.5$$

Brg + Pc

20:40

M2268021 MgO $1700 K$ 7.02 MN 300 sec

$$x = -0.5 \quad y = -1.3 \quad z = -1.7, D.T. 7.6 \%$$

$$P = 23.4899 \pm 0.07 \quad v = 68.58 \pm 0.02 \quad v/v_0 = 0.923358$$

20:46

M2268022 $F_0 70$ $1700 K$ ~~6.0~~ 7.05 MN 300 sec

$$x = -0.5 \quad y = -1.0 \quad z = -1.5$$

Rw + St + fPc

$$D.T. = 1.8 \%$$

M2268023 MgO , $1700 K$, 300 sec, $7.12 MN$

$$x = -0.5 \quad y = -1.3 \quad z = -1.7 \quad D.T. = 2.3$$

$$P = 23.33219 \pm 0.05 \quad v = 65.03711 \pm 0.0175 \quad v/v_0 = 0.92411 \pm$$

M2268024 $F_0 100$, $1700 K$ 300 sec $D.T. -1.3$

$$x = -0.5 \quad y = -1.0 \quad z = -1.85$$

Brg + Pc

M2268025 ~~MgO~~ MgO , $1700 K$, ~~300 sec~~ ²⁰⁰ 300 sec, $7.18 MN$

$$x = -0.5 \quad y = -1.3 \quad z = -1.7 \quad D.T. 8.2 \%$$

$$P = 23.20775 \pm 0.07 \quad V = 63.09 \pm 0.22 \quad V/V_0 = 0.92493$$

12 M2268026 $F_0 = 7.0$, 1700 K 7.20 MN 300 sec

$$x = -0.5 \quad y = -1.0 \quad z = -1.55$$

$R_{wt} + S + fP_c$

\Rightarrow 7.2 MN \rightarrow 7.50 in 20 min [Pressure - Profile change]

M2268027 MgO , 1700 K 7.26 MN 300 sec

$$x = -0.5 \quad y = -1.0 \quad z = -1.70$$

$$P = 23.219 \pm 0.0617$$

$$V = 63.0925 \pm 0.019$$

$$V/V_0 = 0.924886 \pm 0.0002$$

Time	Temp.	V_1	I_1	R_1	P_1	V_2	I_2	R_2	P_2	Stroke
21:23	1427.6	34.28	9.47	3.62	323.87	16.76	16.88	0.99	2837	9.270

24 $F_0 = 1000$ M2268028 , 1700 K 7.36 MN 300 sec

$$x = 0.5 \quad y = -1.0 \quad z = -1.85 \quad D.T = 1.3\%$$

$B_{wt} + P_c$

~~$F_0 = 7.0$~~ M2268029 1700 K 7.50 MN 150 sec

$$D.T = 2.46$$

$$x = -0.5 \quad y = -1.3 \quad z = -1.7$$

$$P = 23.1483 \pm 0.07085$$

$$V = 63.03625 \pm 0.022$$

$$V/V_0 = 0.925203 \pm 0.0003$$

21:49

M2268030 $F_0 70$, 1700 K, 7.49 MN, 300 s

$x = -0.5$ $y = -1.0$ $z = -1.50$ (sample position corrected)
~~Brq + PC~~ $R_{nt} + SC + f_{PC}$

21:52

M2268031 $F_0 100$, 1700 K, 7.58 MN, 300 s

$x = -0.5$ $y = -1.0$ $z = -1.75$ D.T
~~1.75~~

Brq + PC

22:00

M2268032 MgO, 1700 K, 7.75 MN, 300 s

$x = -0.5$ $y = -1.3$ $z = -1.6$ D.T = 1.6.

($\Delta \text{lit} = 0.4$)

(Corrected)

$$P = 23.82032 \pm 0.17688$$

$$V = 68.885 \pm 0.0545$$

$$V/V_0 = 0.9223 \pm 0.0007$$

27.51(7)3

-(420), (422)

Time	Temp.	V_1	I_1	R_1	P_1	V_2	I_2	R_2	P_2	stroke
22:04	1425.9	34.05	9.56	3.56	326.19	16.64	17.07	0.97	283.8	9.35

Quench

22:05

M2268033 MgO - Repeat (32) 150 sec. 7.8 MN

$$P = 23.693 \pm 0.066$$

$$V = 68.93 \pm 0.020$$

$$V/V_0 = 0.9223 \pm 0.0002$$