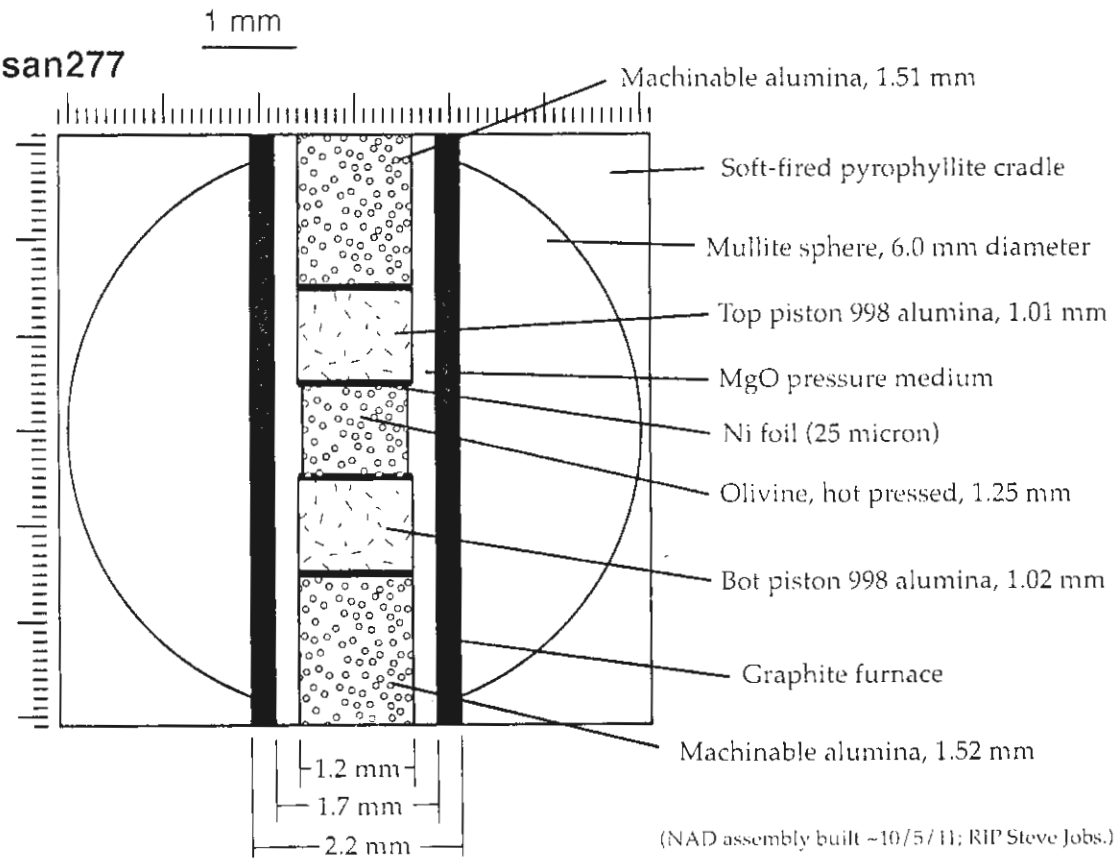
Page No.

0/6/2011 San 277



PCD Anvil in wedge #1 is from Rengwood Abrasives tapered set of anvils. Was used in san 276.

1651 SAN_277_0001.med 2θ calib Al_2O_3, 600-s.

1733 image #1 open press load=129

1759 ~~1740~~ ~~0001~~ 0002.med open press olivine, ~~max~~ imaging_and_diffraction_scan, 27.45, 27.45, 15.49, 0.8, 0.1; 600s

1829 2T, closed. McP fwd at 50%

1837 5T, McP to ~~20%~~ 35%

1842 Logger started, 10s interval

To Page No.

Witnessed & Understood by me.,	Date	Invented by	Date
		Recorded by	

om Page No.__

10/6/11 scan 277 (cont)

1855 10T, gap at top of Al block just closing up.
1908 13T, compressibility still +, McP to 50% for ~1 min to 15T

1914 18T Diddle speeds some more -- just realized this is probably just pushing diff rams home.

1921 19.6T stop

2146 28T might be back in business -- McP at 12%
30T McP to 8%

2242 McP restroked, now @ 40T
2253 Begin heating to 1100°C (284 W)

2313 @ 1100°C centering in x @ x=-10.0

2336 .0003.med, 600s, (21.65, 21.65, -15.34, 0.4, 0.1) image:3 l=111mm
Jogging rams

2358 ~11T load on Diff Rams. Slight lift of DXRTs seen

10/7/11 0000. Diff Rams Forward @ 0.001mm/s. Start Step (1): 1100°C, 40T
Happy 91st birthday, Grandpa CHD

0003	.0004.med,	600s	(21.7, 21.7, -15.34, 0.4, 0.1)	image #4	l: 111mm
0016	.0005.med,	600s	(", ", -15.35, ", ")	image #5	110mm
0030	.0006.med,	"	(21.8, 21.8, -15.36, ", ")	#6	109.0mm
0043	.0007.med,	"	(", ", -15.37, ", ")	#7	108.0mm
0056	.0008.med,	"	(21.9, 21.9, -15.38, ", ")	#8	107.5mm
0109	.0009.med,	"	(22.0, 22.0, -15.39, ", ")	#9	107.0mm
0123	.0010.med,	"	(22.1, 22.1, ", ", ")	#10	107.0mm
0146	x centering scan. x = -9.8				
0147	.0011.med,	"	(22.2, 22.2, -15.42, ", ")	#11	105.0mm
0159	.0012.med,	"	(22.3, 22.3, ", ", ")	#12	104.0mm
0211	.0013.med	"	(", ", ", ", ")	#13	103.0mm
0223	.0014.med	"	(22.5, 22.5, ", ", ")	#14	To Page No. 102.0m

Witnessed & Understood by mé,	Date	Invented by	Date
		Recorded by	

9/6/2011: San_277 (Continued)

Heating Log

t	T °C	W	m Ω	
2360	~400	137	51	40T 1100°C
2365	600	181	47	(Step 1)
2366	800	220	43	
2310	1000	261	40	
2313	1100	284	38	
7 0406	Quench			
0611	400	149	41	80T 1100°C
0613	600	144	39	(Step 2)
0614	800	233	37	
0614	1000	274	36	
0618	1100	296.5	35	
0823	1100	296	35	

itnessed & Understood by me.'	Date	Invented by	Date
		Recorded by	

from Page No. 10/7/2011 Sam 277 (Continued) length(

0825	-0015. med 600s (22.5, 22.5, -15.42, 0.4, 0.1)	image #15	102.0
2a	-0016. med " (22.6, 22.6, -15.42, 0.4, 0.1)	#16	100.0
0902	-0017. med " (22.7, 22.7, -15.42, 0.4, 0.1)	#17	100.0
0313	-0018. med " (22.8, 22.8, -15.42, 0.4, 0.1)	#18	99.5mm
0324	-0019. med " (22.9, 22.9, -15.42, 0.4, 0.1)	#19	98.5mm
0335	Check x centering: Still x=-9.8		
0341	-0020. med 600s. (23.0, 23.0, -15.40, 0.4, 0.1)	#20	97.0
0353	-0021. med " (23.1, 23.1, -15.40, 0.4, 0.1)	#21	96.0
0404	Slip Runs, 11% strain. End Slip (1)		95.0
0405	Begin cooling		
0409	Launched MCP to 8%, target 80T		
0418	47.5T MCP to 6%		
0435	55.3T MCP to 4%		
0517	65.0T		
0534	69.4T MCP to 5%		
0607	@ 80T Begin heating to 1100°C (297 W)		
0621	Centering in x = -9.8		
2a	0022 med, 600s, (23.0, 23.0, -15.38, 0.4, 0.1) image #22 l_{os} = 96 mm		
[illegible]			
0641	Diff Runs Forward @ 0.001 mm/s. Start Slip (1). 80T, 1100°C		
0643	0023. med, 600s, (23.1, 23.1, -15.39, 0.4, 0.1), image #23 l_i 95mm		

0739	0024 med midol, same all		#24 l_{ol} =	94mm
0754	25	(23.2, 23.2, —	#25	93.5
0809	26	23.3, 23.3, —	#26	92.5
0824	27	23.4, 23.4, —	#27	92.5
0839	28	23.5, 23.5, -15.34, —	#28	92.0
0854	29	same	#29	91.5
0909	30	23.6, 23.6, -15.31, —	#30	91.0
0924	31	~~23.7, 23.7~~ same	#31	90.5
0939	32	23.8, 23.8, -15.28	#32	90.0
0954	33	same	#33	89.5
1009	34	24.0, 24.0, —	#34	89.0

To Page No.

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by	

m Page No.__

10/7/11 San 277

1024 mid ol 0035 (24.1, 24.1, ——) Image #35 l_{ol} = 88.5 mm

1036 Image #36 l_{ol} = 88.0 mm
Stop diff runs End step 2

1037 Start cooling from 1100°C

1038 1000°C

1044 Heater off. Start MCP at -4%

1059 67 T MCP to -5%, Diff rms to -0.002 mm/s

1119 52 T MCP to -6%

itnessed & Understood by me,	Date	Invented by	Date
		Recorded by	