

Time	Boiler Temp	Boiler Output	Mixed return to Boiler	Delta T	Storage Top	Storage Mid	Storage Btm		Avg Storage Temp
7:15	71		118		127	120	118	lit small fire, pump on speed 2	122
7:30	100		120		127	120	118		
7:45	136	135	136	0	127	118	118		
8:00	151	145	142	9	127	118	118	loaded firebox, turned pump to speed 3	
8:15	160	156	147	13	127	120	120		
8:30	160	153	144	16	153	120	120		
8:45	160	153	145	15	158	120	120		
9:00	165	162	151	14	158	120	122		
9:15	168	162	149	19	162	120	122		
9:30	169	163	151	18	167	120	122		
9:45	172	165	151	21	169	138	122		
10:00	168	168	149	19	169	147	124	added a bit more wood, maybe 1/4 of firebox.	
10:15	172	167	153	19	169	149	122		
10:30	173	165	153	20	172	154	124		
10:45	169	162	151	18	171	158	140		
11:00	170	163	153	17	171	160	147		
11:15	167	169	156	11	171	160	156		
11:30	170	169	156	14	169	160	154	Shut down	161

Total BTU's produced = $8.3 \times 1000 \times (161 - 122) = 323,700$

$323,700 \text{ btu} / 4.25 \text{ hours} = 76,164 \text{ btu/hr.}$