Data Summary:

See Tables 1, and 2 below for individual run summary and Appendix D for full run information. Hang tag information can be found in Table 3 and Weighted averages can be found in Table 4.

Data Summary Part A

						θ	W_{fuel}	MC_{ave}	Q_{in}	Q_{out}
Category	Run No	Load% Capacity	Target Load	Actual Load	Actual Load	Test Duration	Wood Weight as-fired	Wood Moisture	Heat Input	Heat Output
			Btu/hr	Btu/hr	% of max	hrs	lb	% DB	Btu	Btu
I	5	≤ 15% of max	≤ 18,750	17,984	14.39	21.3	101.1	20.5	721,544	383,653
II	4	16-24% of max	20,000 to 30,000	27,899	22.32	14.7	95.1	20.4	679,946	408,999
III	3	25-50% of max	31,250 to 62,500	60,261	48.21	8.0	98.1	20.4	700,714	482,088
IV	1	Max capacity	125,000	119,457	95.57	5.2	103.1	20.2	737,654	617,401

Table 1: Part A

Data Summary Part B

			T2 Min	E_T	E	E	$E_{g/hr}$	$E_{g/kg}$	η_{del}	η_{SLM}
Category	Run No	Load% Capacity	Min Return H_2O Temp	Total PM Emissions	PM Output Based	PM Output Based	PM Rate	PM Factor	Delivered Efficiency	Stack Loss Efficiency
			°F	g	lbs/MMBtu Output	g/MJ	g/hr	g/kg	%	%
I	5	≤ 15% of max	169.6	68.09	0.3913	0.1683	3.19	1.79	53.2	71.6
II	4	16-24% of max	168.1	51.60	0.2779	0.1196	3.52	1.44	60.2	72.5
III	3	25-50% of max	160.1	42.62	0.1949	0.0838	5.33	. 1.15	68.8	75.8
IV	1	Max capacity	121.3	41.11	0.1468	0.0631	7.96	1.06	83.7	76.9

Table 2: Part B

Hang Tag Information:

Manufacturer:	Hardy Manufacturing		
Model Number:	KB-125		
8-Hour Output Rating:	Q_{out}-8hr	60,261	Btu/hr
8-Hour Average Efficiency:	η_{avg}-8hr	69%	**(Using higher heating value)**
		74%	(Using lower heating value)
Annual Efficiency Rating:	η_{avg}	61%	**(Using higher heating value)**
		65%	(Using lower heating value)
Particle Emissions:	E_{avg}	4.09	Grams/hr (average)
		0.30	Lbs/Million Btu Output

Table 3: Hang Tag

Year Round Use Weighting:

Category	Run No.	Weighting Factor (Fi)	$\eta_{del,i} \times F_i$	$\eta_{del\text{-}LHV,i} \times F_i$	$E_{g/MJ,i} \times F_i$	$E_{g/kg,i} \times F_i$	$E_{lb/MMBtu,i} \times F_i$	$E_{g/hr,i} \times F_i$
I	5	0.437	23.23529	25.01825	0.0735471	0.78223	0.1709981	1.39403
II	4	0.238	14.33712	15.4343	0.0284648	0.34272	0.0661402	0.8372364
III	3	0.275	18.92	20.36925	0.023045	0.317075	0.0535975	1.4650075
IV	1	0.050	4.185	4.5055	0.003155	0.052825	0.00734	0.39775
Totals:		**1.000**	**60.7**	**65.3**	**0.1282**	**1.49**	**0.30**	**4.09**

Table 4: Weighted Average