	B	C
1	**Source Description**	
2		
3	Phase II ID No.	767
4	EPA ID No.	TXD008077190
5	Facility Name	Goodyear Tire and Rubber Company
6	Facility Location	
7	City	Beaumont
8	State	TX
9	Unit ID Name/No.	Boiler B-103
10	Other Sister Facilities	Boilers B-101, B-102, B-104, B-105 (all identical units)
11	Number of Sister Facilities	4
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
14	Combustor Characteristics	Watertube boiler. B&W Model FO-27, installed 1961, refractory-lined carbon steel, 100,000 lb/hr steam @ 50 psig, 100 MMBtu/hr heat input
15	Capacity (MMBtu/hr)	100
16	Soot Blowing	Yes, typically once a week
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	NA
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liq. wastes with hexane, benzene, isoprene, toluene, etc.
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	
26	Height (ft)	
27	Gas Velocity (ft/sec)	37.4
28	Gas Temperature (°F)	310.5
29		
30	Permitting Status	Tier I metals, Tier III chlorine
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Cond Description**	
2		
3	**767C1**	
4		
5	Report Name/Date	Test Report for Recertification of Compliance of BIF Boilers B-101, B-102, B-103, B-104, & B-105, July 1995, Test Report II for ReCoC, Nov. 1995
6	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
7	Testing Firm	Radian Corp.
8	Testing Dates	July 11, 1995
9	Cond Dates	Jul-95
10	Condition Descr	CoC; max waste feedrate and steam prod rate
11	Content	PM, CO, HCl/Cl2
12		
13	**767C2**	
14		
15	Report Name/Date	Test Report for Recertification of Compliance of BIF Boilers B-101, B-102, B-103, B-104, & B-105, July 1995, Test Report II for ReCoC, Nov. 1995
16	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
17	Testing Firm	Radian Corp.
18	Testing Dates	July 12-13, 1995
19	Cond Dates	Jul-95
20	Condition Descr	CoC; less aggressive max waste feed and max prod rate
21	Content	PM, CO, HCl/Cl2
22		
23	**767C3**	
24		
25	Report Name/Date	Test Report for Recertification of Compliance of BIF Boilers B-101, B-102, B-103, B-104, & B-105, July 1995, Test Report II for ReCoC, Nov. 1995
26	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
27	Testing Firm	Radian Corp.
28	Testing Dates	July 27, 1995
29	Cond Dates	Jul-95
30	Condition Descr	CoC; min comb chamber exit temp
31	Content	CO
32		
33	**767C4**	
34		
35	Report Name/Date	Test Report for Recertification of Compliance of BIF Boilers B-101, B-102, B-103, B-104, & B-105, July 1995, Test Report II for ReCoC, Nov. 1995
36	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
37	Testing Firm	Radian Corp.
38	Testing Dates	July 13-14, 1995
39	Cond Dates	Jul-95
40	Condition Descr	CoC; similar to C1 but higher prod rate, lower chamber temp
41	Content	PM, CO, HCl/Cl2
42		
43	**767C5**	
44		
45	Report Name/Date	Test Report for Recertification of Compliance of BIF Boilers B-101, B-102, B-103, B-104, & B-105, July 1995, Test Report II for ReCoC, Nov. 1995
46	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
47	Testing Firm	Radian Corp.
48	Testing Dates	October 17, 1995
49	Cond Dates	Oct-95
50	Condition Descr	CoC; max prod rate, no ash spiking
51	Content	PM, CO
52		
53	Report Name/Date	Trial Burn Report for BIF Boilers B101-B105, July 1999
54	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
55	Testing Firm	Radian Corp.
56		
57	**767C6**	
58		
59	Report Name/Date	Trial Burn Report for BIF Boilers B101-B105, July 1999
60	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
61	Testing Firm	Radian Corp.
62	Testing Dates	January 21, 1998
63	Cond Dates	Jan-98
64	Condition Descr	Trial burn, max waste feed, max steam prod
65	Content	DRE, CO
66		

	B	C
67	**767C7**	
68		
69	Report Name/Date	Trial Burn Report for BIF Boilers B101-B105, July 1999
70	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
71	Testing Firm	Radian Corp.
72	Testing Dates	January 23, 1998
73	Cond Dates	Jan-98
74	Condition Descr	Trial burn, min comb chamber temp
75	Content	DRE
76		
77	**767C8**	
78	Report Name/Date	Risk Burn Report for BIF Boilers B101-B105, Revision 1, July 1999
79	Report Prepare	The Goodyear Tire and Rubber Co. and Radian Corp.
80	Testing Firm	Radian Corp.
81	Testing Dates	January 26-28, 1998
82	Cond Dates	Jan-98
83	Condition Descr	Risk burn, worst case cond, max waste feed and max prod
84	Content	PCDD/PCDF, metals

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions**											
2												
3		Comments	Units	7% O2								
4										Sootblowing		
5												
6	**767C1**	**Coc Testing**				R1		R2		R3		Cond Avg
7												
8	PM	E1	gr/dscf	y		0.036		0.031		0.096		0.035
9	CO (RA)	E1	ppmv	y		0		3.8		8.1		4.0
10	CO (MHRA)	E1	ppmv	y		0		9		10		6.3
11	HCl		lb/hr			1.56		1.65		1.57		
12	Cl2		lb/hr			0.022		0.028		0.058		
13												
14	Sampling Train	PM, HCl/Cl	E1									
15	Stack Gas Flowrate		dscfm			28273		27821		26126		27406.7
16	O2		%			9.5		9.2		9.1		9.3
17	Moisture		%			14.5		15.1		16.2		15.3
18	Temperature		°F			303		315.3		310.68		309.7
19												
20	HCl	E1	ppmv	y		11.99		12.56		12.62		12.39
21	Cl2	E1	ppmv	y		0.09		0.11		0.24		0.15
22	Total Chlorine	E1	ppmv	y		12.17		12.78		13.10		12.68
23												
24												
25												
26	**767C2**	**CoC Testing**				R1		R2		R3		Cond Avg
27										Sootblowing		
28	PM	E1	gr/dscf	y		0.019		0.019		0.02		0.014
29	CO (RA)	E1	ppmv	y		4.2		8.3		4.3		5.6
30	CO (MHRA)	E1	ppmv	y		7		10		11		9.3
31	HCl		lb/hr			1.49		1.54		1.38		
32	Cl2		lb/hr			0.042		0.24		0.015		
33												
34	Sampling Train	PM, HCl/Cl	E1									
35	Stack Gas Flowrate		dscfm			27000		27000		27000		27000
36	O2		%									
37	Moisture		%									
38	Temperature		°F									
39												
40	HCl	E1	ppmv	y		12.00		12.08		10.74		11.60
41	Cl2	E1	ppmv	y		0.17		0.97		0.06		0.40
42	Total Chlorine	E1	ppmv	y		12.34		14.02		10.86		12.41
43												
44	**767C3**	**CoC Testing**				R1		R2		R3		Cond Avg
45												
46	CO (RA)		ppmv	y		0		0		0		0.0
47	CO (MHRA)		ppmv	y		0		0		0		0.0
48												
49												
50	**767C4**	**CoC Testing**				R1		R2		R3		Cond Avg
51										Sootblowing		
52	PM	E1	gr/dscf	y		0.027		0.019		0.075		0.028
53	CO (RA)	E1	ppmv	y		3.2		38.4		42.5		28.0
54	CO (MHRA)	E1	ppmv	y		4		47		53		34.7
55	HCl		lb/hr	n		1.65		1.03		0.88		
56	Cl2		lb/hr	n		0.027		0.021		0.035		
57												
58	Sampling Train	PM, HCl/Cl	E1									
59	Stack Gas Flowrate		dscfm			28000		28000		28000		28000
60	O2		%									
61	Moisture		%									
62	Temperature		°F									
63												
64	HCl	E1	ppmv	y		12.81		7.79		6.60		9.07
65	Cl2	E1	ppmv	y		0.11		0.08		0.14		0.11
66	Total Chlorine	E1	ppmv	y		13.02		7.96		6.87		9.28
67												
68	**767C5**	**CoC Testing**				R1		R2		R3		Cond Avg
69										Sootblowing		
70	PM	E1	gr/dscf	y		0.0018		0.0021		0.0092		0.0023
71	CO	E1	ppmv	y		0		0		0		0

	B	C	D	E	F	G	H	I	J	K	L	M
72												
73	Sampling Train	PM	E1									
74	Stack Gas Flowrate		dscfm			34482		35458		34222		34721
75	O2		%									
76	Moisture		%									
77	Temperature		°F									
78												
79	**767C6**	**Trial Burn**				R1		R2		R3		Cond Avg
80												
81	CO (MHRA)	E1	ppmv	y		30		2		32		21.3
82												
83	POHC DRE	Toluene										
84	POHC Feedrate		lb/min			1.86E-05		5.35E-05		1.96E-05		
85	Emissions Rate											
86	DRE	E1	%			99.99981		99.99927		99.99654		
87												
88	Sampling Train	CO, DRE	E1									
89	Stack Gas Flowrate		dscfm			36884.9		35976.3		37561.7		36807.6
90	O2		%			10		8.7		9.4		9.4
91	Moisture		%			9.9		10.8		10		10.2
92	Temperature		°F			306		308		303		305.7
93												
94	**767C7**	**Trial Burn**				R1		R2		R3		Cond Avg
95												
96	CO (MHRA)	E1	ppmv	y		0		0		0		0.0
97												
98	POHC DRE	Toluene										
99	POHC Feedrate		lb/min			2.82E-05		3.52E-05		1.94E-05		
100	Emissions Rate											
101	DRE	E1	%			99.9942		99.99482		99.996185		
102												
103	Sampling Train	CO, DRE	E1									
104	Stack Gas Flowrate		dscfm			20256.1		21042.7		20656.7		20651.8
105	O2		%			11.2		11.2		11.2		11.2
106	Moisture		%			9.76		9.4		9.6		9.6
107	Temperature		°F			225		216		230		223.7
108												
109	**767C8**	**Risk Burn**				R1		R2		R3		Cond Avg
110												
111	Mercury		g/s			2.85E-07		1.26E-07		7.47E-07		
112	Antimony		g/s			6.28E-05		4.29E-05		3.37E-05		
113	Arsenic		g/s			4.70E-05		3.39E-05		5.00E-05		
114	Barium		g/s			3.94E-05		3.58E-05		3.94E-05		
115	Beryllium		g/s			6.74E-06		8.68E-06		6.67E-06		
116	Cadmium		g/s			1.72E-05		3.27E-05		2.24E-05		
117	Chromium		g/s			2.50E-05		1.90E-05		1.46E-04		
118	Cobalt		g/s			1.55E-05		3.86E-05		2.82E-05		
119	Lead		g/s			4.48E-05		4.02E-04		2.14E-04		
120	Manganese		g/s			3.73E-05		2.75E-05		3.73E-05		
121	Nickel		g/s			8.20E-05		3.03E-05		4.46E-05		
122	Selenium		g/s			3.42E-05		3.97E-05		2.40E-05		
123	Thallium		g/s			0		0		0		
124	Vanadium		g/s			1.97E-05		1.53E-05		7.20E-06		
125												
126	Sampling Train	PCDD/PCD	E1									
127	Stack Gas Flowrate		dscfm			33985		34884		34327		34398.7
128	Moisture		%			9.34		9.79		10.1		9.7
129	Temperature		°F			299		304		301		301.3
130												
131	Sampling Train	Metals	E2									
132	Stack Gas Flowrate		dscfm			34549		32776		33898		33741.0
133	Moisture		%			10.7		10.9		10.3		10.6
134	Temperature		°F			304		303		301		302.7
135												
136	Mercury	E2	µg/dscm	y		0.02		0.01		0.05		0.03
137	Antimony	E2	µg/dscm	y		4.69		3.29		2.48		3.49
138	Arsenic	E2	µg/dscm	y		3.51		2.60		3.68		3.26
139	Barium	E2	µg/dscm	y		2.94		2.75		2.90		2.86
140	Beryllium	E2	µg/dscm	y		0.50		0.67		0.49		0.55
141	Cadmium	E2	µg/dscm	y		1.28		2.51		1.65		1.81
142	Chromium	E2	µg/dscm	y		1.87		1.46		10.74		4.69

	B	C	D	E	F	G	H	I	J	K	L	M
143	Cobalt	E2	µg/dscm	y		1.16		2.96		2.08		2.07
144	Lead	E2	µg/dscm	y		3.35		30.85		15.75		16.65
145	Manganese	E2	µg/dscm	y		2.79		2.11		2.74		2.55
146	Nickel	E2	µg/dscm	y		6.13		2.33		3.28		3.91
147	Selenium	E2	µg/dscm	y		2.55		3.05		1.77		2.46
148	Thallium	E2	µg/dscm	y		0.00		0.00		0.00		0.00
149	Vanadium	E2	µg/dscm	y		1.47		1.17		0.53		1.06
150	SVM	E2	µg/dscm	y		4.63		33.36		17.39		18.46
151	LVM	E2	µg/dscm	y		5.88		4.73		14.91		8.51

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
1	**Feedstreams**																										
2																											
3	**767C1**	**CoC Testing**		R1			R2			R3		Cond Avg	R1			R2			R3		Cond Avg	R1			R2			R3		Cond Avg
4																											
5	Feedstream Number				F1			F1			F1		F1		F2			F2			F2		F3			F3			F3		F3
6	Feed Class				Liq HW			Liq HW			Liq HW		Liq HW		Spike			Spike			Spike		NG			NG			NG		NG
7	Feed Class 2				HW			HW			HW		HW		Spike			Spike			Spike		MF			MF			MF		MF
8	Feedstream Description				Waste			Waste			Waste		Waste		Spike			Spike			Spike		Natural gas			Natural gas			Natural gas		Natural gas
9	Feed Rate		lb/hr		5413			5402			5400		5405		67.78			63.76			62.24		64.6			889.3			876.4		768.1		844.6
10	Thermal Feedrate		MMBtu/hr		89.57			97.3375			66.84		84.6										19.315			19.03			16.68		18.3
11	Heating Value		Btu/lb		16546.8			18018.8			12378.2		15647.9																		
12	Moisture		wt %		0.02			0.04			0.02		0.03																		
13	Ash		lb/hr	nd											20.33			19.13			18.67		19.38								
14	Chlorine		lb/hr	nd											12.34			11.6			11.33		11.76								
15	Antimony		ppmw	nd	0.75	nd		0.75	nd		0.75		0.75																		
16	Arsenic		ppmw	nd	0.3	nd		0.3	nd		0.3		0.3																		
17	Barium		ppmw	nd	0.5	nd		0.5	nd		0.5		0.5																		
18	Beryllium		ppmw	nd	0.05	nd		0.05	nd		0.05		0.05																		
19	Cadmium		ppmw	nd	0.25	nd		0.25	nd		0.25		0.25																		
20	Chromium		ppmw	nd	0.5	nd		0.5	nd		0.5		0.5																		
21	Lead		ppmw		0.3			0.3	nd		0.25		0.3																		
22	Mercury		ppmw	nd	0.02	nd		0.02	nd		0.02		0.02																		
23	Silver		ppmw	nd	0.5	nd		0.5	nd		0.5		0.5																		
24	Thallium		ppmw	nd	0.5	nd		0.5	nd		0.5		0.5																		
25																											
26	Gas Flowrate				28273			27821			26126		27406.7		28273			27821			26126		27406.7								
27	Oxygen				9.5			9.2			9.1		9.3		9.5			9.2			9.1		9.3								
28																											
29	Estimated Firing Rate		MMBtu/hr																								
30																											
31	*Feedrate MTEC Calculations*																										
32	Ash		mg/dscm										234.0528		218.125			224.787			225.7										
33	Chlorine		ug/dscm										142066		132266			136413			136915.3										
34	Antimony		ug/dscm	100	47	100		46	100		49	100	47.2																		
35	Arsenic		ug/dscm	100	19	100		18	100		20	100	18.9																		
36	Barium		ug/dscm	100	31	100		31	100		33	100	31.5																		
37	Beryllium		ug/dscm	100	3	100		3	100		3	100	3.1																		
38	Cadmium		ug/dscm	100	16	100		15	100		16	100	15.7																		
39	Chromium		ug/dscm	100	31	100		31	100		33	100	31.5																		
40	Lead		ug/dscm		19			18	100		16	30	17.8																		
41	Mercury		ug/dscm	100	1	100		1	100		1	100	1.3																		
42	Silver		ug/dscm	100	31	100		31	100		33	100	31.5																		
43	Thallium		ug/dscm	100	31	100		31	100		33	100	31.5																		
44																											
45	SVM		ug/dscm	45	34	45		34	100		33	63	33.6																		
46	LVM		ug/dscm	100	53	100		52	100		55	100	53.5																		
47																											
48																											
49	**767C2**	**CoC Testing**		R1			R2			R3		Cond Avg	R1			R2			R3		Cond Avg	R1			R2			R3		Cond Avg
50																											
51	Feedstream Number				F1			F1			F1		F1		F2			F2			F2		F3			F3			F3		F3
52	Feed Class				Liq HW			Liq HW			Liq HW		Liq HW		Spike			Spike			Spike		NG			NG			NG		NG
53	Feed Class 2				HW			HW			HW		HW		Spike			Spike			Spike		MF			MF			MF		MF
54	Feedstream Description				Waste			Waste			Waste		Waste		Spike			Spike			Spike		Natural gas			Natural gas			Natural gas		Natural gas
55	Feed Rate		lb/hr		4952			4952			4953		5000		43.62			45.88			44.06		44								
56	Heating Value		Btu/lb		15209.3			16179.7			15854		15854																		
57	Moisture		wt %		0.02			0.02			0.03		0.02																		
58	Ash		lb/hr	nd									0		13.38			13.15			13.21		13.2								
59	Chlorine		lb/hr	nd	0.2			0.2			0.2		0.001		8.1			7.93			8.04		8								
60	Antimony		ppmw	nd	0.75	nd		0.75	nd		0.75		0.75																		

	B	AC	AD	AE	AF	AG	AH	AI	AJ
1	**Feedstreams**								
2									
3	**767C1**		R1		R2		R3		Cond Avg
4									
5	Feedstream Number		F4		F4		F4		F4
6	Feed Class		Total		Total		Total		Total
7	Feed Class 2		Total		Total		Total		Total
8	Feedstream Description		Total		Total		Total		Total
9	Feed Rate								
10	Thermal Feedrate		108.9		116.4		83.5		102.9
11	Heating Value								
12	Moisture								
13	Ash								
14	Chlorine								
15	Antimony								
16	Arsenic								
17	Barium								
18	Beryllium								
19	Cadmium								
20	Chromium								
21	Lead								
22	Mercury								
23	Silver								
24	Thallium								
25									
26	Gas Flowrate		28273		27821		26126		27406.7
27	Oxygen		9.5		9.2		9.1		9.3
28									
29	Estimated Firing Rate								102.1
30									
31	*Feedrate MTEC Calculation*								
32	Ash		234		218		225		226
33	Chlorine		142066		132266		136413		136915
34	Antimony	100	46.7	100	46.2	100	48.8	100	47.2
35	Arsenic	100	18.7	100	18.5	100	19.5	100	18.9
36	Barium	100	31.2	100	30.8	100	32.5	100	31.5
37	Beryllium	100	3.1	100	3.1	100	3.3	100	3.1
38	Cadmium	100	15.6	100	15.4	100	16.3	100	15.7
39	Chromium	100	31.2	100	30.8	100	32.5	100	31.5
40	Lead	0	18.7	0	18.5	100	16.3	30	17.8
41	Mercury	100	1.2	100	1.2	100	1.3	100	1.3
42	Silver	100	31.2	100	30.8	100	32.5	100	31.5
43	Thallium	100	31.2	100	30.8	100	32.5	100	31.5
44									
45	SVM	45	34.3	45	33.9	100	32.5	63	33.6
46	LVM	100	53.0	100	52.4	100	55.3	100	53.5
47									
48									
49	**767C2**		R1		R2		R3		Cond Avg
50									
51	Feedstream Number		F4		F4		F4		F4
52	Feed Class		Total		Total		Total		Total
53	Feed Class 2		Total		Total		Total		Total
54	Feedstream Description		Total		Total		Total		Total
55	Feed Rate								
56	Heating Value								
57	Moisture								
58	Ash								
59	Chlorine								
60	Antimony								

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
61	Arsenic		ppmw	nd	0.3	nd	0.3	nd	0.3		0.3																
62	Barium		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																
63	Beryllium		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05																
64	Cadmium		ppmw	nd	0.25	nd	0.25	nd	0.25		0.25																
65	Chromium		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																
66	Lead		ppmw		0.3		0.3		0.3		0.3																
67	Mercury		ppmw	nd	0.02	nd	0.02	nd	0.02		0.02																
68	Silver		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																
69	Thallium		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																
70																											
71	Gas Flowrate				27000		27000		27000		27000		27000		27000		27000		27000								
72	Oxygen				9.5		9.2		9.1		9.3		9.5		9.2		9.1		9.3								
73																											
74	Thermal Feedrate		MMBtu/hr		75.3		80.1		78.5		79.3																
75	Estimated Firing Rate		MMBtu/hr																								
76																											
77	*Feedrate MTEC Calculations*																										
78	Ash		mg/dscm								0		161.3		154.5		153.9		156.6								
79	Chlorine		ug/dscm										97649		93169		93668		94829.0								
80	Antimony		ug/dscm	100	45	100	44	100	43	100	43.9																
81	Arsenic		ug/dscm	100	18	100	17	100	17	100	17.6																
82	Barium		ug/dscm	100	30	100	29	100	29	100	29.3																
83	Beryllium		ug/dscm	100	3	100	3	100	3	100	2.9																
84	Cadmium		ug/dscm	100	15	100	15	100	14	100	14.6																
85	Chromium		ug/dscm	100	30	100	29	100	29	100	29.3																
86	Lead		ug/dscm		18		17		17		17.6																
87	Mercury		ug/dscm	100	1	100	1	100	1	100	1.2																
88	Silver		ug/dscm	100	30	100	29	100	29	100	29.3																
89	Thallium		ug/dscm	100	30	100	29	100	29	100	29.3																
90																											
91	SVM		ug/dscm	45	33	45	32	45	32	45	32.2																
92	LVM		ug/dscm	100	51	100	49	100	49	100	49.7																
93																											
94																											
95																											
96	**767C3**		**CoC Tesing**		R1		R2		R3		Cond Avg																
97																											
98	Feedstream Number				F1		F1		F1		F1																
99	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW																
100	Feed Class 2				HW		HW		HW		HW																
101	Feedstream Description				Waste		Waste		Waste		Waste																
102	Feed Rate		lb/hr		1126.8		1115.4		1120.7		1120.7																
103																											
104																											
105																											
106	**767C4**		CoC Testing		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
107																											
108	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3
109	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike		NG		NG		NG		NG
110	Feed Class 2				HW		HW		HW		HW		Spike		Spike		Spike		Spike		MF		MF		MF		MF
111	Feedstream Description				Waste		Waste		Waste		Waste		Spike		Spike		Spike		Spike		Natural gas		Natural gas		Natural gas		Natural gas
112	Feed Rate		lb/hr		5350		5292		5264		5302		50.4		40.9		48.1		46.4		2031.3		2127.6		2026.9		2061.9
113	Thermal Feedrate		MMBtu/hr		92.56		96.93		89.36		93.0										44.1		46.2		44.0		44.8
114	Heating Value		Btu/lb		17301.6		18316.8		17018.4		17116																
115	Moisture		wt %		0.04		0.03		0.02		0.03																
116	Ash		lb/hr								0		15.11		12.26		14.43		13.9								
117	Chlorine		lb/hr										9.17		7.44		8.75		8.5								
118	Antimony		ppmw	nd	0.75	nd	0.75	nd	0.75		0.75																
119	Arsenic		ppmw	nd	0.3	nd	0.3	nd	0.3		0.3																
120	Barium		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																

	B	AC	AD	AE	AF	AG	AH	AI	AJ
61	Arsenic								
62	Barium								
63	Beryllium								
64	Cadmium								
65	Chromium								
66	Lead								
67	Mercury								
68	Silver								
69	Thallium								
70									
71	Gas Flowrate		27000		27000		27000		27000
72	Oxygen		9.5		9.2		9.1		9.3
73									
74	Thermal Feedrate		75.3		80.1		78.5		79.3
75	Estimated Firing Rate		98.6		101.1		102.0		100.6
76									
77	*Feedrate MTEC Calculation*								
78	Ash	0	161	0	154	0	154	0	157
79	Chlorine	0	97649	0	93169	0	93668	0	94829
80	Antimony	100	22.4	100	21.8	100	21.6	100	43.9
81	Arsenic	100	9.0	100	8.7	100	8.7	100	17.6
82	Barium	100	14.9	100	14.5	100	14.4	100	29.3
83	Beryllium	100	1.5	100	1.5	100	1.4	100	2.9
84	Cadmium	100	7.5	100	7.3	100	7.2	100	14.6
85	Chromium	100	14.9	100	14.5	100	14.4	100	29.3
86	Lead	0	17.9	0	17.5	0	17.3	0	17.6
87	Mercury	100	0.6	100	0.6	100	0.6	100	1.2
88	Silver	100	14.9	100	14.5	100	14.4	100	29.3
89	Thallium	100	14.9	100	14.5	100	14.4	100	29.3
90									
91	SVM	23	33	23	32	23	32	45	32
92	LVM	50	51	50	49	50	49	100	50
93									
94									
95									
96	**767C3**								
97									
98	Feedstream Number								
99	Feed Class								
100	Feed Class 2								
101	Feedstream Description								
102	Feed Rate								
103									
104									
105									
106	**767C4**		R1		R2		R3		Cond Avg
107									
108	Feedstream Number		F4		F4		F4		F4
109	Feed Class		Total		Total		Total		Total
110	Feed Class 2		Total		Total		Total		Total
111	Feedstream Description		Total		Total		Total		Total
112	Feed Rate								
113	Thermal Feedrate		137		143		133		138
114	Heating Value								
115	Moisture								
116	Ash								
117	Chlorine								
118	Antimony								
119	Arsenic								
120	Barium								

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
121	Beryllium		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05																
122	Cadmium		ppmw	nd	0.25	nd	0.25	nd	0.25		0.25																
123	Chromium		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																
124	Lead		ppmw		0.3		0.3		0.3		0.3																
125	Mercury		ppmw	nd	0.02	nd	0.02	nd	0.02		0.02																
126	Silver		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																
127	Thallium		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5																
128																											
129	Gas Flowrate				28000		28000		28000		28000		28000		28000		28000		28000								
130	Oxygen				9.5		9.2		9.1		9.3		9.5		9.2		9.1		9.3								
131																											
132	Estimated Firing Rate		MMBtu/hr																								
133																											
134	*Feedrate MTEC Calculations*																										
135	Ash		mg/dscm										175.7		138.9		162.1		158.9								
136	Chlorine		ug/dscm										106600.6		84290.6		98299.0		96396.7								
137	Antimony		ug/dscm	100	47	100	45	100	44	100	45.3																
138	Arsenic		ug/dscm	100	19	100	18	100	18	100	18.1																
139	Barium		ug/dscm	100	31	100	30	100	30	100	30.2																
140	Beryllium		ug/dscm	100	3	100	3	100	3	100	3.0																
141	Cadmium		ug/dscm	100	16	100	15	100	15	100	15.1																
142	Chromium		ug/dscm	100	31	100	30	100	30	100	30.2																
143	Lead		ug/dscm		19		18		18		18.1																
144	Mercury		ug/dscm	100	1	100	1	100	1	100	1.2																
145	Silver		ug/dscm	100	31	100	30	100	30	100	30.2																
146	Thallium		ug/dscm	100	31	100	30	100	30	100	30.2																
147																											
148	SVM		ug/dscm	45	34	45	33	45	33	45	33.2																
149	LVM		ug/dscm	100	53	100	51	100	50	100	51.4																
150																											
151																											
152																											
153	**767C5**		**CoC Testing**		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
154																											
155	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3
156	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike		NG		NG		NG		NG
157	Feed Class 2				HW		HW		HW		HW		Spike		Spike		Spike		Spike		MF		MF		MF		MF
158	Feedstream Description				Waste		Waste		Waste		Waste		Spike		Spike		Spike		Spike		Natural gas		Natural gas		Natural gas		Natural gas
159	Feed Rate		lb/hr		4160		4097		4074		4110										1064.0		1109.0		1129.0		1100.7
160																											
161	Stack Gas Flowrate		dscfm																								
162																											
163	Estimated Firing Rate		MMBtu/hr																								
164																											
165																											
166	**767C6**		**Trial Burn**		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
167																											
168	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3
169	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike		NG		NG		NG		NG
170	Feed Class 2				HW		HW		HW		HW		Spike		Spike		Spike		Spike		MF		MF		MF		MF
171	Feedstream Description				Waste		Waste		Waste		Waste		oluene Spike		oluene Spike		luene Spike		Toluene Spike		Nat gas		Nat gas		Nat gas		Nat gas
172	Feed Rate		lb/hr		4883		5144		4906		4977		28.8		27.6		28.8		28.4								
173	Specific Gravity				0.793		0.793		0.793		0.793																
174	Stack Gas Flowrate		dscfm		36884.9		35976.26		37561.732		36807.6																
175	Oxygen		%		10		8.7		9.4		9.4																
176																											
177	Estimated Firing Rate		MMBtu/hr																								
178																											
179																											
180																											

	B	AC	AD	AE	AF	AG	AH	AI	AJ
121	Beryllium								
122	Cadmium								
123	Chromium								
124	Lead								
125	Mercury								
126	Silver								
127	Thallium								
128									
129	Gas Flowrate		28000		28000		28000		28000
130	Oxygen		9.5		9.2		9.1		9.3
131									
132	Estimated Firing Rate								104.3
133									
134	*Feedrate MTEC Calculation*								
135	Ash	0	176	0	139	0	162	0	159
136	Chlorine	0	106601	0	84291	0	98299	0	96397
137	Antimony	100	46.6	100	45.0	100	44.4	100	45.3
138	Arsenic	100	18.7	100	18.0	100	17.7	100	18.1
139	Barium	100	31.1	100	30.0	100	29.6	100	30.2
140	Beryllium	100	3.1	100	3.0	100	3.0	100	3.0
141	Cadmium	100	15.5	100	15.0	100	14.8	100	15.1
142	Chromium	100	31.1	100	30.0	100	29.6	100	30.2
143	Lead	0	18.7	0	18.0	0	17.7	0	18.1
144	Mercury	100	1.2	100	1.2	100	1.2	100	1.2
145	Silver	100	31.1	100	30.0	100	29.6	100	30.2
146	Thallium	100	31.1	100	30.0	100	29.6	100	30.2
147									
148	SVM	45	34.2	45	33.0	45	32.5	45	33.2
149	LVM	100	52.9	100	51.0	100	50.3	100	51.4
150									
151									
152									
153	**767C5**		R1		R2		R3		Cond Avg
154									
155	Feedstream Number		F4		F4		F4		F4
156	Feed Class		Total		Total		Total		Total
157	Feed Class 2		Total		Total		Total		Total
158	Feedstream Description		Total		Total		Total		Total
159	Feed Rate								
160									
161	Stack Gas Flowrate		34721		34721		34721		34721
162									
163	Estimated Firing Rate		121.2		121.2		121.2		121.2
164									
165									
166	**767C6**		R1		R2		R3		Cond Avg
167									
168	Feedstream Number		F4		F4		F4		F4
169	Feed Class		Total		Total		Total		Total
170	Feed Class 2		Total		Total		Total		Total
171	Feedstream Description		Total		Total		Total		Total
172	Feed Rate								
173	Specific Gravity								
174	Stack Gas Flowrate		36885		35976		37562		36808
175	Oxygen		10		9		9		9
176									
177	Estimated Firing Rate								136
178									
179									
180									

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
181																											
182	**767C7**		**Trial Burn**		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
183																											
184	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3
185	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike		NG		NG		NG		NG
186	Feed Class 2				HW		HW		HW		HW		Spike		Spike		Spike		Spike		MF		MF		MF		MF
187	Feedstream Description				Waste		Waste		Waste		Waste		oluene Spike		oluene Spike		luene Spike		Toluene Spike		Nat gas		Nat gas		Nat gas		Nat gas
188	Feed Rate		lb/hr		1198		1117		1104		1140		27		27.6		28.8		27.8								
189	Specific Gravity				0.772		0.772		0.772		0.772																
190	Stack Gas Flowrate		dscfm		20256.1		21042.67		20656.693		20651.829																
191	Oxygen		%		11.2		11.2		11.2		11.2																
192	Estimated Firing Rate		MMBtu/hr		19.2		17.9		17.7		18.2																
193	Estimated Firing Rate		MMBtu/hr																								
194																											
195																											
196	**767C8**		**Risk Burn**		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
197																											
198	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3
199	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike		NG		NG		NG		NG
200	Feed Class 2				HW		HW		HW		HW		Spike		Spike		Spike		Spike		MF		MF		MF		MF
201	Feedstream Description				Waste		Waste		Waste		Waste		oluene Spike		oluene Spike		luene Spike		Toluene Spike		Nat gas		Nat gas		Nat gas		Nat gas
202	Feed Rate		lb/hr		5103		5056		5056		5000																
203	Stack Gas Flowrate		dscfm		34549		32776		33898		33741																
204	Oxygen		%		10.7		10.9		10.3		10.633333																
205	Estimated Firing Rate		MMBtu/hr																								

	B	AC	AD	AE	AF	AG	AH	AI	AJ
181									
182	**767C7**		R1		R2		R3		Cond Avg
183									
184	Feedstream Number		F4		F4		F4		F4
185	Feed Class		Total		Total		Total		Total
186	Feed Class 2		Total		Total		Total		Total
187	Feedstream Description		Total		Total		Total		Total
188	Feed Rate								
189	Specific Gravity								
190	Stack Gas Flowrate		20256		21043		20657		20652
191	Oxygen		11		11		11		11
192	Estimated Firing Rate		19.2		17.9		17.7		18.2
193	Estimated Firing Rate								64
194									
195									
196	**767C8**		R1		R2		R3		Cond Avg
197									
198	Feedstream Number		F4		F4		F4		F4
199	Feed Class		Total		Total		Total		Total
200	Feed Class 2		Total		Total		Total		Total
201	Feedstream Description		Total		Total		Total		Total
202	Feed Rate								
203	Stack Gas Flowrate		34549		32776		33898		33741
204	Oxygen		11		11		10		11
205	Estimated Firing Rate								111.0

	A	B	C
1	**Process Information**		
2			
3	**767C1**		
4	Steam Prod	lb/hr	72800
5	Comb Cham Exit Temp	^{o}F	763
6			
7	**767C2**		
8	Steam Prod	lb/hr	82800
9	Comb Cham Exit Temp	^{o}F	783
10			
11	**767C3**		
12	Steam Prod	lb/hr	30900
13	Comb Cham Exit Temp	^{o}F	587
14			
15	**767C4**		
16	Steam Prod	lb/hr	87400
17	Comb Cham Exit Temp	^{o}F	797
18			
19	**767C5**		
20	Steam Prod	lb/hr	103000
21	Comb Cham Exit Temp	^{o}F	784
22			
23	**767C6**		
24	Steam Prod	lb/hr	102000
25	Comb Cham Exit Temp	^{o}F	803
26			
27	**767C7**		
28	Steam Prod	lb/hr	46400
29	Comb Cham Exit Temp	^{o}F	620
30			
31	**767C8**		
32	Steam Prod	lb/hr	102000
33	Comb Cham Exit Temp	^{o}F	776

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	**PCDD/PCDF**																	
2	N																	
3	Facility Name and ID:		Goodyear Tire and Rubber Company, 767															
4	Condition ID:		767C8															
5	Condition/Test Date:		Risk burn, maximum waste feed and maximum steam production condition, January 27, 1998															
6																		
7			I-TEF			Run 1					Run 2					Run 3		
8			Wght Fact		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ
9					Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND
10	Detected in sample volume (pg)																	
11		2,3,7,8-TCDD	1	nd					nd					nd				
12		TCDD Total	0	nd					nd					nd				
13		1,2,3,7,8-PCDD	0.5	nd					nd					nd				
14		PCDD Total	0	nd					nd					nd				
15		1,2,3,4,7,8-HxCDD	0.1	nd					nd					nd				
16		1,2,3,6,7,8-HxCDD	0.1	nd					nd					nd				
17		1,2,3,7,8,9-HxCDD	0.1	nd					nd					nd				
18		HxCDD Total	0	nd					nd					nd				
19		1,2,3,4,6,7,8-HpCDD	0.01	nd					nd					nd				
20		HpCDD Total	0	nd					nd					nd				
21		OCDD	0.001		18.3	0.018	18.3	0.018		23.3	0.023	23.3	0.023		21.9	0.022	21.9	0.022
22		2,3,7,8-TCDF	0.1	nd					nd					nd				
23		TCDF Total	0		7.0	0.000	7.0	0.000		3.2	0.000	3.2	0.000		4.3	0.000	4.3	0.000
24		1,2,3,7,8-PCDF	0.05	nd					nd					nd				
25		2,3,4,7,8-PCDF	0.5	nd					nd					nd				
26		PCDF Total	0	nd					nd					nd				
27		1,2,3,4,7,8-HxCDF	0.1	nd					nd					nd				
28		1,2,3,6,7,8-HxCDF	0.1	nd					nd					nd				
29		2,3,4,6,7,8-HxCDF	0.1	nd					nd					nd				
30		1,2,3,7,8,9-HxCDF	0.1	nd					nd					nd				
31		HxCDF Total	0	nd					nd					nd				
32		1,2,3,4,6,7,8-HpCDF	0.01	nd					nd					nd				
33		1,2,3,4,7,8,9-HpCDF	0.01	nd					nd					nd				
34		HpCDF Total	0	nd					nd					nd				
35		OCDF	0.001	nd					nd					nd				
36																		
37		Gas sample volume (dscf)				95.91		95.91			97.99		97.99			102.52		102.52
38		O2 (%)*				11.20		11.20			11.2		11.2			11.20		11.20
39																		
40		PCDD/PCDF (pg in sample)				0.02		0.02			0.023		0.023			0.0219		0.0219
41		PCDD/PCDF (ng/dscm @ 7% O2)		0.0		0.000010		0.000010	0.0		0.000012		0.000012	0.0		0.000011		0.000011
42																		
43		* O2 % is used from condition 767C7																
44																		
45		TEQ Cond Avg	0.000011															