	B	C
1	**Source Description**	
2		
3	Phase II ID No.	1013
4	EPA ID No.	TXD007376700
5	Facility Name	Celanese
6	Facility Location	
7	City	Pampa
8	State	TX
9	Unit ID Name/No.	Boiler No. 9
10	Other Sister Facilities	None (Phase II ID No. 1014 (boiler No. 10) is identical unit but was tested)
11	Number of Sister Facilities	0
12	Combustor Class	Coal-fired boiler
13	Combustor Type	Pulverized coal
14	Combustor Characteristics	Manufactured by Combustion Engineering, Model No. VU-40. Water tube, pulverized coal, corner t-fired, steam generating boiler. 750,000 lbs/hr steam capacity, 740 MMBtu/hr
15	Capacity (MMBtu/hr)	740
16	Soot Blowing	Yes; undefined frequency/duration
17	APCS Detailed Acronym	FF
18	APCS General Class	FF
19	APCS Characteristics	Baghouse, Joy Manufacturing Co, Model 77-023-02, 10 compartments w/ teflon finish filters, effective area 198,720 sq ft.
20	Hazardous Wastes	Liq
21	Haz Waste Description	Organic acids and solvent wastes, e.g., long-chain carboxylic acids, ketones, esters
22	Supplemental Fuel	Coal
23		Pulverized coal, still solids
24		
25	Stack Characteristics	
26	Diameter (ft)	
27	Height (ft)	
28	Gas Velocity (ft/sec)	
29	Gas Temperature (°F)	369
30		
31	Permitting Status	Tier IA for ash, chlorides, and metals, except Tier III for Cr
32	HWC Burn Status (Date if Terminated)	

	B	C
1	**Cond Description**	
2		
3	**1013C10**	
4		
5	Report Name/Date	Recertification of Compliance (ReCOC) for Celanese Boilers 9 & 10; No date, Report provided begins at Section 2.0
6	Report Prepare	Focus Environmental
7	Testing Firm	None Identified
8	Testing Dates	September 17, 1998
9	Cond Dates	Sep-98
10	Condition Descr	CoC; max waste feed rate
11	Content	PM, CO, Cr emissions; feed analysis for metals, ash, chlorides
12		
13	**1013C11**	
14		
15	Report Name/Date	Recertification of Compliance (ReCOC) for Celanese Boilers 9 & 10; No date, Report provided begins at Section 2.0
16	Report Prepare	Focus Environmental
17	Testing Firm	None Identified
18	Testing Dates	September 15, 1998
19	Cond Dates	Sep-98
20	Condition Descr	CoC; min combustion temp
21	Content	CO

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions**											
2												
3		Comments	Units	7% O2								
4										Sootblow		
5	**1013C10**					R1		R2		R3		Cond Avg
6												
7	PM	E1	gr/dscf	y		0.0272		0.0217		0.0243		0.0244
8	CO (RA)	E1	ppmv	y		13.6		12.2		16.4		14.1
9	CO (MHRA)	E1	ppmv	y		15.7		13.8		36.0		21.8
10	HCl		mg/dscm	n		1.91		1.76		2.77		
11	Cl2		mg/dscm	n		0.00		0.00		0.00		
12												
13	HCl		ppmv	n		1.26		1.16		1.83		
14	Cl2		ppmv	n		0.00		0.00		0.00		
15	Chromium		µg/dscm	n		6.25		10.29		7.08		
16												
17	Sampling Train	PM, HCl/Cl2	E1									
18	Stack Gas Flowrate		dscfm			212876		208115		201886		207626
19	O2		%			6.0		6.0		6.2		6.1
20	Moisture		%			10.28		10.57		11.63		11
21	Temperature		°F			359		373		376		369
22												
23	Sampling Train	Cr	E2									
24	Stack Gas Flowrate		dscfm			204759		201702		195346		200602
25	O2		%			6.0		6.0		6.2		6
26	Moisture		%			10.4		10.2		11.1		11
27	Temperature		°F			362		377		383		374
28												
29	HCl	E1	ppmv	y		1.17		1.09		1.73		1.33
30	Cl2	E1	ppmv	y		0.00		0.00		0.00		0.00
31	Total Chlorine	E1	ppmv	y		1.17		1.09		1.73		1.33
32	Chromium	E2	µg/dscm	y		5.8		9.6		6.7		7.38
33	LVM	E2	µg/dscm	y		5.8		9.6		6.7		7.38
34												
35	**1013C11**					R1		R2		R3		Cond Avg
36												
37	CO (RA)	E1	ppmv	y		13.13		9.83		18.7		13.9
38	CO (MHRA)	E1	ppmv	y		38		14.2		21.2		24.5
39												
40	Sampling Train	CO	E1									
41	Stack Gas Flowrate		dscfm									
42	O2		%			5.04		5.07		5.00		5.04
43	Moisture		%									
44	Temperature		°F									

	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	AC
1	**Feedstreams**																											
2																												
3																												
4	**1013C10**				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg	
5																												
6	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3		F3	
7	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Coal		Coal		Coal		Coal		Spike		Spike		Spike		Spike	
8	Feed Class 2				HW		HW		HW		HW		Coal		Coal		Coal		Coal		Spike		Spike		Spike		Spike	
9	Feedstream Description				HW		HW		HW		HW		Pulv Coal		Pulv Coal		Pulv Coal		Pulv Coal		Spike		Spike		Spike		Spike	
10	Feed Rate		lb/hr		15190		15280		15060		15177		57400		57180		56170		56916.67									
11	Feed Rate		scfm																									
12	Heating Value		Btu/lb		10149		10842		10615		10535		12222		12187		12191		12200									
13	Ash		lb/hr		135		66		21		74		5505		5472		5477		5484.67									
14	Chlorine		lb/hr		1.37	nd	0.15	nd	0.15		0.6	nd	1.72	nd	1.72	nd	1.69		1.71									
15	Antimony		lb/hr	nd	0.09	nd	0.09	nd	0.09		0.090	nd	0.34	nd	0.34	nd	0.34		0.34									
16	Arsenic		lb/hr	nd	0.02	nd	0.02	nd	0.02		0.020	nd	0.06	nd	0.06	nd	0.06		0.06									
17	Barium		lb/hr	nd	0.02	nd	0.02	nd	0.02		0.020		17.39		16.12		16.57		16.69									
18	Beryllium		lb/hr	nd	0	nd	0	nd	0		0.000		0.02		0.02		0.02		0.02									
19	Cadmium		lb/hr	nd	0.01	nd	0.01	nd	0.01		0.010	nd	0.03	nd	0.03	nd	0.03		0.03									
20	Chromium		lb/hr		1.86		0.7		0.42		0.993		0.1		0.08		0.1		0.09		5.340		6.270		5.370		5.66	
21	Lead		lb/hr		0.01	nd	0	nd	0		0.003	nd	0.29	nd	0.29	nd	0.28		0.29									
22	Mercury		lb/hr	nd	0.0005	nd	0.0005	nd	0.0005		0.001	nd	0.0019	nd	0.0019	nd	0.0019		0.00									
23	Nickel		lb/hr		0.23	nd	0.06		0.16		0.150	nd	0.23	nd	0.23	nd	0.22		0.23									
24	Selenium		lb/hr	nd	0.01	nd	0.01	nd	0.01		0.010		0.14		0.15		0.13		0.14									
25	Silver		lb/hr	nd	0.02	nd	0.02	nd	0.02		0.020	nd	0.06	nd	0.06	nd	0.06		0.06									
26	Thallium		lb/hr	nd	0.02	nd	0.02	nd	0.02		0.020	nd	0.06	nd	0.06	nd	0.06		0.06									
27	Zinc		lb/hr		0.05	nd	0.03	nd	0.03		0.037		0.48		0.37		0.43		0.43									
28																												
29	Stack Gas Flowrate		dscfm		204759		201702		195346		200602		204759		201702		195346		200602		204759		201702		195346		200602	
30	Oxygen		%		6.0		6.0		6.2		6.1		6.0		6.0		6.2		6.1		6.0		6.0		6.2		6.1	
31																												
32	Thermal Feedrate		MMBtu/hr		154		166		160		160		702		697		685		694									
33	Estimated Firing Rate		MMBtu/hr																									
34																												
35	*Feedrate MTEC Calculations*																											
36	Ash		mg/dscm		164.8		81.3		27.3		91.1		6709.2		6770.0		7091.2		6856.8		0.0		0.0		0.0			
37	Chlorine		µg/dscm		1669.7	100	185.6	100	194.2	18.5	683.2	100	2096.2	100	2128.0	100	2188.1	100	2137.4		0.0		0.0		0.0			
38	Antimony		µg/dscm	100	109.7	100	111.3	100	116.5	100	112.5	100	414.4	100	420.7	100	440.2	100	425.1		0.0		0.0		0.0			
39	Arsenic		µg/dscm	100	24.4	100	24.7	100	25.9	100	25.0	100	73.1	100	74.2	100	77.7	100	75.0		0.0		0.0		0.0			
40	Barium		µg/dscm	100	24.4	100	24.7	100	25.9	100	25.0		21193.9		19943.9		21453.7		20863.8		0.0		0.0		0.0			
41	Beryllium		µg/dscm	100	0.0	100	0.0	100	0.0	100	0.0		24.4		24.7		25.9		25.0		0.0		0.0		0.0			
42	Cadmium		µg/dscm	100	12.2	100	12.4	100	12.9	100	12.5	100	36.6	100	37.1	100	38.8	100	37.5		0.0		0.0		0.0			
43	Chromium		µg/dscm		2266.9		866.0		543.8		1225.6		121.9		99.0		129.5		116.8		6508.1		7757.3		6952.7		7072.7	
44	Lead		µg/dscm		12.2	100	0.0	100	0.0	0.0	4.1	100	353.4	100	358.8	100	362.5	100	358.3		0.0		0.0		0.0			
45	Mercury		µg/dscm	100	0.6	100	0.6	100	0.6	100	0.6	100	2.3	100	2.3	100	2.4	100	2.3		0.0		0.0		0.0			
46	Nickel		µg/dscm		280.3	100	74.2		207.2	13.2	187.2	100	280.3	100	284.6	100	284.8	100	283.2		0.0		0.0		0.0			
47	Selenium		µg/dscm	100	12.2	100	12.4	100	12.9	100	12.5		170.6		185.6		168.3		174.8		0.0		0.0		0.0			
48	Silver		µg/dscm	100	24.4	100	24.7	100	25.9	100	25.0	100	73.1	100	74.2	100	77.7	100	75.0		0.0		0.0		0.0			
49	Thallium		µg/dscm	100	24.4	100	24.7	100	25.9	100	25.0	100	73.1	100	74.2	100	77.7	100	75.0		0.0		0.0		0.0			
50	Zinc		µg/dscm		60.9	100	37.1	100	38.8	100	45.6		585.0		457.8		556.7		533.2		0.0		0.0		0.0			
51																												
52	SVM		µg/dscm	50	24.4	100	12.4	100	12.9	100	16.6	100	195.0	100	198.0	100	200.7	100	197.9									
53	LVM		µg/dscm	1.1	2291.2	2.8	890.8	4.5	569.7	2	1250.6	33	219.4	38	198.0	33	233.1	35	216.8		6508.1		7757.3		6952.7		7072.7	
54																												
55	**1013C11**				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg									
56																												
57	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2									
58	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Coal		Coal		Coal		Coal									
59	Feedstream Description						HW				Waste		Pulv Coal		Pulv Coal		Pulv Coal		Pulv Coal									
60	Feed Rate		lb/hr		7960		11610		8030		9200		57400		57180		56340		56973									

	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA
1																								
2																								
3																								
4	R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg	
5																								
6	F4		F4		F4		F4		F5		F5		F5		F5		F6		F6		F6		F6	
7	Misc Fuel		Misc Fuel		Misc Fuel		Misc Fuel		Misc Fuel		Misc Fuel		Misc Fuel		Misc Fuel		Total		Total		Total		Total	
8	MF		MF		MF		MF		MF		MF		MF		MF		Total		Total		Total		Total	
9	Bug Gas		Bug Gas		Bug Gas		Bug Gas		Vent Gas		Vent Gas		Vent Gas		Vent Gas		Total		Total		Total		Total	
10																								
11	704		717		719		713		681.76		675.81		675.4		677.66									
12																								
13																								
14																								
15																								
16																								
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28																								
29																								
30																								
31																								
32																	856		863		845		854	
33																							892	
34																								
35																								
36																	6874		6851		7119		6948	
37																56	3766	100	2314	100	2382	100	2821	
38																100	524	100	532	100	557	100	538	
39																100	97	100	99	100	104	100	100	
40																	21218		19969		21480		20889	
41																	24		25		26		25	
42																100	49	100	49	100	52	100	50	
43																	8897		8722		7626		8415	
44																100	366	100	359	100	363	100	362	
45																100	3	100	3	100	3	100	3	
46																50	561	100	359	42	492	65	470	
47																6.7	183		198		181		187	
48																100	97	100	99	100	104	100	100	
49																100	97	100	99	100	104	100	100	
50																	646		495		596		579	
51																								
52																94	219	100	210	100	214	100	214	
53																1.1	9019	1.1	8846	1.3	7755	1.2	8540	
54																								
55																								
56																								
57																								
58																								
59																								
60																								

	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	AC
61																												
62																												
63	**BIF Feedrate Limits**																											
64																												
65	Antimony		g/hr								105907																	
66	Arsenic		g/hr								816																	
67	Barium		g/hr								17784295																	
68	Beryllium		g/hr								1488																	
69	Cadmium		g/hr								1987																	
70	Chromium		g/hr								Tier III																	
71	Lead		g/hr								31970																	
72	Mercury		g/hr								106904																	
73	Silver		g/hr								1069044																	
74	Thallium		g/hr								177843																	
75	Chlorine		g/hr								142000																	

	A	B	C	D	E
1	**Process Information**				
2					
3	**1013C10**		R1	R2	R3
4					
5	Comb Chamb Temp	°F	1358.1	1363.6	1359.6
6	Steam Production Rate	M lb/hr	734.65	733.44	723.14
7	Baghouse Temp	°F	379.9	390.9	390.9
8					
9					
10	**1013C11**		R1	R2	R3
11					
12	Comb Chamb Temp	°F	1125	1133	1138
13	Steam Production Rate	M lb/hr	622	620	620
14	Baghouse Temp	°F	344	349	350