Appendix 6: Summary of statistics for fresh feedstocks

Fresh *Miscanthus* Study 1

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	12	26.5	23.2	10.3	44.4	10.9
	NCV	kJ/kg	12	12531	13301	8828	15924	2240
Dry Fuel Basis (d)	Ash	%wt	12	2.3	2.3	1.4	3.3	0.7
Dry Ash-free basis (DAF)	Volatile matter	%wt	12	82.7	82.9	79.8	85.2	1.6
	GCV	kJ/kg	12	19651	19633	19574	19830	75
	C	%wt	12	49.81	49.80	49.44	50.32	0.25
	H	%wt	12	6.04	6.03	5.99	6.14	0.04
	N	%wt	12	0.40	0.40	0.23	0.57	0.09
	S	%wt	12	0.01	0.01	0.01	0.02	0.00
	Cl	%wt	12	0.14	0.15	0.04	0.19	0.05
	O	%wt (by diff.)	12	43.62	43.65	42.84	44.06	0.34
Dry fuel basis	Ba	mg/kg	12	7.62	6.51	2.15	21.37	5.12
	Be	mg/kg	12	0.11	0.12	0.07	0.16	0.03
	Cr	mg/kg	12	0.23	0.16	0.07	0.79	0.21
	Co	mg/kg	12	0.11	0.12	0.07	0.16	0.03
	Cu	mg/kg	12	1.87	1.78	1.33	2.50	0.35
	Mo	mg/kg	12	0.21	0.18	0.07	0.44	0.13
	Ni	mg/kg	12	0.13	0.12	0.07	0.32	0.07
	V	mg/kg	11	0.12	0.12	0.07	0.17	0.03
	Zn	mg/kg	12	15.23	12.10	4.50	30.78	8.91
	Sb	mg/kg	5	0.04	0.05	0.01	0.08	0.03
	As	mg/kg	5	0.03	0.02	0.01	0.07	0.02
	Hg	mg/kg	5	0.00	0.00	0.00	0.01	0.00
	F	mg/kg	5	2.43	2.08	1.96	4.00	1.36
	Br	mg/kg	5	7.24	3.92	2.03	23.98	6.79
	Se	mg/kg	5	0.40	0.40	0.39	0.42	0.21
	Cd	mg/kg	7	0.05	0.04	0.01	0.12	0.04
	Pb	mg/kg	7	0.38	0.27	0.15	0.76	0.27
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	12	0.48	0.35	0.14	2.00	0.50
	BaO	%wt (na)	12	0.05	0.05	0.01	0.13	0.03
	$CaCO_3$	%wt (na)	12	15.84	13.27	8.87	29.02	6.44
	Fe_2O_3	%wt (na)	12	0.31	0.24	0.11	0.70	0.21
	K_2O	%wt (na)	12	19.68	20.15	10.56	26.66	5.89
	MgO	%wt (na)	12	3.22	2.91	1.29	6.51	1.48
	Mn_3O_4	%wt (na)	12	0.32	0.24	0.05	1.08	0.30
	Na_2O	%wt (na)	11	0.84	0.68	0.54	1.57	0.35

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
	P_2O_5	%wt (na)	12	6.36	6.99	2.82	9.81	2.49
	SiO_2	%wt (na)	12	52.74	53.42	38.40	66.77	9.44
	TiO_2	%wt (na)	12	0.09	0.09	0.01	0.22	0.06

Miscanthus In-field Variation Site 1 (Study 2)

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	20	38.3	39.0	31.9	42.6	3.0
	NCV	kJ/kg	20	10125	10042	9294	11345	617
Dry Fuel Basis (d)	Ash	%wt	20	2.4	2.4	1.6	2.8	0.3
Dry Ash-free basis (DAF)	Volatile matter	%wt	20	82.0	82.0	80.5	83.6	1.0
	GCV	kJ/kg	20	19669	19669	19508	19842	96
	C	%wt	20	50.14	50.16	49.90	50.33	0.12
	H	%wt	20	6.06	6.07	5.99	6.15	0.04
	N	%wt	20	0.53	0.55	0.38	0.61	0.06
	S	%wt	20	0.01	0.01	0.01	0.02	0.00
	Cl	%wt	20	0.20	0.21	0.15	0.25	0.03
	O	%wt (by diff.)	20	43.06	43.04	42.83	43.34	0.15
Dry fuel basis	Ba	mg/kg	20	2.73	2.55	1.87	3.94	0.58
	Be	mg/kg	20	0.13	0.13	0.10	0.16	0.02
	Cr	mg/kg	18	0.18	0.17	0.12	0.26	0.04
	Co	mg/kg	19	0.13	0.13	0.10	0.16	0.02
	Cu	mg/kg	18	1.94	1.91	1.59	2.41	0.23
	Mo	mg/kg	19	0.17	0.16	0.10	0.28	0.05
	Ni	mg/kg	19	0.13	0.13	0.10	0.16	0.02
	V	mg/kg	18	0.14	0.14	0.10	0.24	0.03
	Zn	mg/kg	20	8.02	7.44	4.63	11.16	1.87
	Sb	mg/kg	19	0.03	0.03	0.02	0.05	0.01
	As	mg/kg	19	0.03	0.03	0.02	0.04	0.01
	Hg	mg/kg	19	0.00	0.00	0.00	0.01	0.00
	F	mg/kg	20	2.00	2.01	1.92	2.05	0.04
	Br	mg/kg	20	2.30	2.01	1.92	4.09	0.74
	Se	mg/kg	20	0.45	0.41	0.38	0.77	0.09
	Cd	mg/kg	20	0.02	0.01	0.01	0.08	0.02
	Pb	mg/kg	17	0.28	0.24	0.18	0.59	0.11
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	20	0.24	0.21	0.14	0.59	0.12
	BaO	%wt (na)	20	0.06	0.02	0.01	0.14	0.05
	$CaCO_3$	%wt (na)	20	22.29	23.06	15.96	25.63	2.52
	Fe_2O_3	%wt (na)	19	0.32	0.25	0.18	0.70	0.14
	K_2O	%wt (na)	20	24.20	24.30	18.86	28.35	2.62
	MgO	%wt (na)	19	3.76	3.73	3.02	4.38	0.38
	Mn_3O_4	%wt (na)	19	0.15	0.14	0.11	0.31	0.04
	Na_2O	%wt (na)	19	0.56	0.55	0.45	0.71	0.06
	P_2O_5	%wt (na)	20	7.20	7.01	4.98	10.66	1.54
	SiO_2	%wt (na)	19	40.52	40.53	36.62	44.69	2.50
	TiO_2	%wt (na)	20	0.08	0.09	0.01	0.14	0.04

Miscanthus In-field Variation Site 2 (Study 2)

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	19	13.8	13.7	10.2	18.2	2.3
	NCV	kJ/kg	20	14829	15016	10948	15686	1025
Dry Fuel Basis (d)	Ash	%wt	20	2.3	2.3	1.9	2.9	0.2
Dry Ash-free basis (DAF)	Volatile matter	%wt	20	82.4	82.5	81.2	83.9	0.7
	GCV	kJ/kg	20	19578	19573	19443	19813	90
	C	%wt	20	49.32	49.26	48.90	50.09	0.31
	H	%wt	20	6.07	6.07	5.94	6.21	0.08
	N	%wt	20	0.36	0.36	0.27	0.44	0.05
	S	%wt	20	0.01	0.01	0.01	0.01	0.00
	Cl	%wt	20	0.15	0.15	0.10	0.20	0.03
	O	%wt (by diff.)	20	44.11	44.20	43.28	44.60	0.34
Dry fuel basis	Ba	mg/kg	20	6.93	7.00	4.66	8.28	0.93
	Be	mg/kg	20	0.12	0.12	0.10	0.13	0.01
	Cr	mg/kg	20	0.13	0.13	0.10	0.17	0.02
	Co	mg/kg	20	0.12	0.12	0.10	0.13	0.01
	Cu	mg/kg	20	2.09	2.13	1.71	2.38	0.17
	Mo	mg/kg	20	0.29	0.30	0.12	0.42	0.08
	Ni	mg/kg	20	0.12	0.12	0.10	0.13	0.01
	V	mg/kg	20	0.12	0.12	0.10	0.13	0.01
	Zn	mg/kg	20	23.37	23.17	14.85	30.91	3.29
	Sb	mg/kg	20	0.02	0.02	0.02	0.04	0.01
	As	mg/kg	20	0.02	0.02	0.02	0.03	0.00
	Hg	mg/kg	19	0.00	0.00	0.00	0.01	0.00
	F	mg/kg	18	1.95	1.97	1.85	2.01	0.04
	Br	mg/kg	20	8.57	7.92	3.97	15.85	2.89
	Se	mg/kg	20	0.39	0.40	0.37	0.45	0.02
	Cd	mg/kg	20	0.09	0.11	0.04	0.13	0.03
	Pb	mg/kg	19	0.19	0.18	0.10	0.45	0.07
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	20	0.20	0.20	0.14	0.25	0.03
	BaO	%wt (na)	20	0.04	0.04	0.03	0.05	0.01
	$CaCO_3$	%wt (na)	20	11.28	11.03	8.93	14.07	1.39
	Fe_2O_3	%wt (na)	20	0.15	0.16	0.12	0.18	0.02
	K_2O	%wt (na)	20	25.11	25.66	19.57	31.88	3.17
	MgO	%wt (na)	20	3.87	3.80	3.18	4.84	0.46
	Mn_3O_4	%wt (na)	20	0.29	0.27	0.18	0.48	0.09
	Na_2O	%wt (na)	20	0.62	0.62	0.53	0.77	0.06
	P_2O_5	%wt (na)	20	7.26	7.52	3.41	8.36	1.11
	SiO_2	%wt (na)	20	51.15	51.54	42.74	58.99	4.25
	TiO_2	%wt (na)	20	0.04	0.02	0.01	0.22	0.05

Miscanthus In-field Variation Site 3 (Study 2)

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	20	20.7	20.1	18.4	24.1	1.8
	NCV	kJ/kg	20	13757	13833	12929	14343	388
Dry Fuel Basis (d)	Ash	%wt	20	2.0	2.0	1.7	2.3	0.1
Dry Ash-free basis (DAF)	Volatile matter	%wt	20	83.6	83.9	81.6	85.5	1.1
	GCV	kJ/kg	19	19691	19684	19559	19928	86
	C	%wt	20	49.29	49.15	48.77	50.22	0.46
	H	%wt	20	6.10	6.10	6.02	6.20	0.05
	N	%wt	20	0.40	0.39	0.28	0.58	0.08
	S	%wt	20	0.01	0.01	0.01	0.01	0.00
	Cl	%wt	20	0.11	0.10	0.06	0.18	0.03
	O	%wt (by diff.)	20	44.10	44.29	43.12	44.69	0.48
Dry fuel basis	Ba	mg/kg	20	20.57	19.95	14.05	25.34	3.04
	Be	mg/kg	20	0.10	0.10	0.09	0.12	0.01
	Cr	mg/kg	20	0.13	0.12	0.10	0.22	0.03
	Co	mg/kg	20	0.10	0.10	0.09	0.12	0.01
	Cu	mg/kg	19	1.70	1.70	1.41	1.97	0.17
	Mo	mg/kg	20	0.10	0.10	0.09	0.12	0.01
	Ni	mg/kg	20	0.10	0.10	0.09	0.12	0.01
	V	mg/kg	20	0.10	0.10	0.09	0.12	0.01
	Zn	mg/kg	20	24.91	25.19	14.40	32.55	4.71
	Sb	mg/kg	20	0.02	0.02	0.02	0.04	0.01
	As	mg/kg	20	0.02	0.02	0.02	0.04	0.00
	Hg	mg/kg	20	0.00	0.00	0.00	0.01	0.00
	F	mg/kg	20	1.98	1.98	1.93	2.06	0.04
	Br	mg/kg	20	4.06	3.95	1.93	6.03	1.21
	Se	mg/kg	20	0.40	0.40	0.39	0.41	0.01
	Cd	mg/kg	20	0.30	0.29	0.11	0.59	0.14
	Pb	mg/kg	17	0.32	0.29	0.17	0.60	0.12
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	19	0.12	0.12	0.08	0.16	0.02
	BaO	%wt (na)	19	0.12	0.12	0.08	0.15	0.02
	$CaCO_3$	%wt (na)	19	11.16	11.22	7.90	13.33	1.45
	Fe_2O_3	%wt (na)	19	0.11	0.10	0.08	0.21	0.03
	K_2O	%wt (na)	20	19.50	20.27	11.04	28.59	4.80
	MgO	%wt (na)	19	3.41	3.34	2.87	4.51	0.41
	Mn_3O_4	%wt (na)	20	0.97	0.99	0.45	1.75	0.34
	Na_2O	%wt (na)	20	0.62	0.62	0.43	0.88	0.13
	P_2O_5	%wt (na)	20	3.25	3.04	1.95	4.83	0.95
	SiO_2	%wt (na)	19	61.06	60.49	54.81	67.77	4.37
	TiO_2	%wt (na)	20	0.03	0.01	0.01	0.11	0.04

Fresh Willow SRC

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	6	52.6	50.4	48.1	65.1	6.4
	NCV	kJ/kg	6	7430	7825	4885	8426	1313
Dry Fuel Basis (d)	Ash	%wt	6	1.8	1.7	1.2	2.8	0.6
Dry Ash-free basis (DAF)	Volatile matter	%wt	6	82.9	83.2	79.6	84.9	2.0
	GCV	kJ/kg	6	20074	20064	19789	20438	265
	C	%wt	6	50.48	50.72	48.91	51.32	0.85
	H	%wt	6	6.19	6.19	6.11	6.28	0.06
	N	%wt	6	0.61	0.60	0.34	0.96	0.23
	S	%wt	6	0.01	0.01	0.01	0.02	0.01
	Cl	%wt	6	0.02	0.02	0.01	0.03	0.01
	O	%wt (by diff.)	6	42.71	42.47	41.80	44.40	0.95
Dry fuel basis	Ba	mg/kg	6	11.64	11.11	4.51	20.80	5.51
	Be	mg/kg	6	0.09	0.08	0.06	0.15	0.03
	Cr	mg/kg	6	0.22	0.20	0.09	0.52	0.16
	Co	mg/kg	6	0.21	0.20	0.10	0.37	0.10
	Cu	mg/kg	6	4.36	4.17	2.23	7.33	1.78
	Mo	mg/kg	6	0.09	0.08	0.06	0.15	0.03
	Ni	mg/kg	6	0.71	0.56	0.37	1.43	0.42
	V	mg/kg	6	0.17	0.09	0.06	0.59	0.21
	Zn	mg/kg	6	88.21	76.80	60.48	158.40	36.68
	Sb	mg/kg	3	0.02	0.02	0.01	0.03	0.01
	As	mg/kg	3	0.02	0.02	0.01	0.04	0.02
	Hg	mg/kg	3	0.01	0.02	0.00	0.02	0.01
	F	mg/kg	3	2.13	1.98	1.80	2.60	1.20
	Br	mg/kg	3	2.13	1.98	1.80	2.60	1.20
	Se	mg/kg	3	0.43	0.40	0.36	0.52	0.24
	Cd	mg/kg	5	0.96	0.39	0.00	2.07	0.97
	Pb	mg/kg	5	0.59	0.30	0.18	1.71	0.63
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	6	0.63	0.35	0.21	1.34	0.55
	BaO	%wt (na)	6	0.08	0.07	0.03	0.16	0.05
	$CaCO_3$	%wt (na)	6	61.45	60.65	49.20	70.37	7.42
	Fe_2O_3	%wt (na)	6	0.45	0.33	0.21	0.99	0.30
	K_2O	%wt (na)	6	16.29	15.77	12.03	23.81	4.29
	MgO	%wt (na)	6	5.35	5.19	3.30	7.54	1.65
	Mn_3O_4	%wt (na)	6	0.44	0.37	0.24	0.71	0.21
	Na_2O	%wt (na)	6	0.48	0.41	0.18	0.99	0.28
	P_2O_5	%wt (na)	6	11.26	10.74	9.78	14.33	1.58
	SiO_2	%wt (na)	6	3.50	2.68	1.55	6.68	2.14
	TiO_2	%wt (na)	6	0.07	0.05	0.02	0.19	0.07

Willow IFV Site 1 (Study 2)

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	20	52.3	52.4	49.6	54.7	1.4
	NCV	kJ/kg	20	7462	7461	6946	7942	267
Dry Fuel Basis (d)	Ash	%wt	20	1.3	1.3	1.0	2.1	0.2
Dry Ash-free basis (DAF)	Volatile matter	%wt	20	84.0	84.0	83.3	84.9	0.4
	GCV	kJ/kg	20	19904	19874	19695	20205	138
	C	%wt	20	50.42	50.49	49.65	51.12	0.40
	H	%wt	20	6.18	6.18	6.10	6.31	0.07
	N	%wt	20	0.38	0.38	0.28	0.46	0.05
	S	%wt	20	0.01	0.01	0.01	0.01	0.00
	Cl	%wt	20	0.01	0.01	0.01	0.04	0.01
	O	%wt (by diff.)	20	43.01	42.96	42.38	43.73	0.34
Dry fuel basis	Ba	mg/kg	20	52.29	58.36	16.52	77.26	14.81
	Be	mg/kg	20	0.08	0.08	0.07	0.13	0.01
	Cr	mg/kg	19	0.18	0.18	0.12	0.27	0.04
	Co	mg/kg	19	0.33	0.36	0.15	0.55	0.12
	Cu	mg/kg	19	3.61	3.53	3.03	4.45	0.38
	Mo	mg/kg	19	0.08	0.08	0.07	0.13	0.01
	Ni	mg/kg	18	0.41	0.43	0.13	0.67	0.15
	V	mg/kg	19	0.09	0.08	0.07	0.17	0.02
	Zn	mg/kg	18	88.67	86.01	70.28	130.58	15.06
	Sb	mg/kg	17	0.02	0.02	0.01	0.03	0.00
	As	mg/kg	19	0.05	0.05	0.01	0.09	0.02
	Hg	mg/kg	19	0.00	0.00	0.00	0.00	0.00
	F	mg/kg	19	1.98	1.98	1.93	2.08	0.04
	Br	mg/kg	20	1.98	1.98	1.93	2.08	0.04
	Se	mg/kg	20	0.40	0.40	0.39	0.42	0.01
	Cd	mg/kg	20	1.50	1.22	0.33	3.15	0.85
	Pb	mg/kg	18	0.73	0.52	0.24	2.53	0.60
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	19	0.18	0.17	0.13	0.24	0.03
	BaO	%wt (na)	20	0.39	0.42	0.07	0.63	0.12
	$CaCO_3$	%wt (na)	20	61.52	61.19	53.70	77.13	4.75
	Fe_2O_3	%wt (na)	19	0.30	0.27	0.19	0.54	0.08
	K_2O	%wt (na)	20	17.41	17.23	11.16	24.45	2.56
	MgO	%wt (na)	20	5.77	5.86	2.57	6.75	0.95
	Mn_3O_4	%wt (na)	20	1.11	1.16	0.15	2.38	0.46
	Na_2O	%wt (na)	19	0.49	0.48	0.33	0.62	0.08
	P_2O_5	%wt (na)	20	11.27	11.64	6.88	14.74	1.73
	SiO_2	%wt (na)	19	1.16	1.17	0.72	1.93	0.34
	TiO_2	%wt (na)	19	0.07	0.06	0.05	0.15	0.03

Willow IFV Site 2 (Study 2)

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	20	51.4	51.5	49.4	54.0	1.2
	NCV	kJ/kg	20	7641	7628	7126	8066	244
Dry Fuel Basis (d)	Ash	%wt	20	1.6	1.6	1.4	1.9	0.2
Dry Ash-free basis (DAF)	Volatile matter	%wt	19	84.0	83.8	83.4	84.7	0.4
	GCV	kJ/kg	20	19940	19929	19727	20172	113
	C	%wt	20	50.39	50.32	49.88	51.16	0.33
	H	%wt	20	6.14	6.15	6.07	6.18	0.03
	N	%wt	20	0.54	0.54	0.43	0.73	0.07
	S	%wt	20	0.01	0.01	0.01	0.01	0.00
	Cl	%wt	20	0.01	0.01	0.01	0.02	0.00
	O	%wt (by diff.)	20	42.93	42.90	42.24	43.45	0.32
Dry fuel basis	Ba	mg/kg	20	9.04	8.82	5.13	14.17	2.58
	Be	mg/kg	20	0.09	0.09	0.08	0.12	0.01
	Cr	mg/kg	19	0.28	0.27	0.15	0.45	0.07
	Co	mg/kg	20	0.14	0.12	0.08	0.26	0.05
	Cu	mg/kg	19	4.79	4.79	3.56	5.78	0.47
	Mo	mg/kg	20	0.09	0.09	0.08	0.12	0.01
	Ni	mg/kg	20	1.19	1.13	0.60	2.20	0.42
	V	mg/kg	19	0.14	0.10	0.08	0.31	0.07
	Zn	mg/kg	20	99.55	95.89	78.75	134.55	13.80
	Sb	mg/kg	20	0.02	0.02	0.02	0.05	0.01
	As	mg/kg	19	0.04	0.03	0.02	0.07	0.02
	Hg	mg/kg	20	0.00	0.00	0.00	0.00	0.00
	F	mg/kg	19	2.00	2.00	1.93	2.07	0.04
	Br	mg/kg	20	2.00	2.00	1.93	2.12	0.05
	Se	mg/kg	20	0.40	0.40	0.39	0.41	0.00
	Cd	mg/kg	20	1.43	1.42	0.75	2.16	0.44
	Pb	mg/kg	19	0.39	0.39	0.17	0.71	0.13
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	19	0.90	0.71	0.30	2.45	0.63
	BaO	%wt (na)	20	0.06	0.06	0.03	0.09	0.02
	$CaCO_3$	%wt (na)	20	60.25	61.14	51.58	66.92	4.46
	Fe_2O_3	%wt (na)	18	0.45	0.39	0.20	0.98	0.22
	K_2O	%wt (na)	20	16.55	16.49	13.72	19.37	1.92
	MgO	%wt (na)	20	4.16	4.16	3.60	4.81	0.28
	Mn_3O_4	%wt (na)	20	0.16	0.17	0.07	0.30	0.05
	Na_2O	%wt (na)	20	0.33	0.34	0.24	0.46	0.05
	P_2O_5	%wt (na)	20	11.91	12.27	9.88	13.46	1.05
	SiO_2	%wt (na)	19	3.73	3.43	1.57	9.28	2.22
	TiO_2	%wt (na)	19	0.12	0.10	0.07	0.19	0.03

Willow IFV Site 3 (Study 2)

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	20	55.7	55.8	53.5	57.1	1.0
	NCV	kJ/kg	20	6751	6708	6498	7169	210
Dry Fuel Basis (d)	Ash	%wt	20	1.7	1.7	1.4	2.0	0.1
Dry Ash-free basis (DAF)	Volatile matter	%wt	20	84.1	84.1	83.1	85.1	0.4
	GCV	kJ/kg	19	19973	19967	19886	20074	53
	C	%wt	20	49.87	49.94	49.10	50.27	0.37
	H	%wt	20	6.19	6.21	6.02	6.29	0.09
	N	%wt	20	0.39	0.41	0.22	0.51	0.07
	S	%wt	20	0.01	0.01	0.01	0.01	0.00
	Cl	%wt	20	0.01	0.01	0.01	0.01	0.00
	O	%wt (by diff.)	20	43.56	43.46	43.02	44.28	0.48
Dry fuel basis	Ba	mg/kg	20	3.04	3.12	1.85	4.41	0.68
	Be	mg/kg	20	0.10	0.10	0.08	0.11	0.01
	Cr	mg/kg	20	0.11	0.10	0.09	0.15	0.01
	Co	mg/kg	20	0.12	0.11	0.09	0.17	0.02
	Cu	mg/kg	20	3.76	3.73	3.16	4.42	0.40
	Mo	mg/kg	20	0.10	0.10	0.08	0.11	0.01
	Ni	mg/kg	20	0.50	0.53	0.24	0.69	0.13
	V	mg/kg	20	0.10	0.10	0.08	0.12	0.01
	Zn	mg/kg	20	52.63	53.03	40.83	61.41	5.11
	Sb	mg/kg	20	0.02	0.02	0.02	0.02	0.00
	As	mg/kg	20	0.02	0.02	0.02	0.02	0.00
	Hg	mg/kg	19	0.00	0.00	0.00	0.01	0.00
	F	mg/kg	20	1.99	1.98	1.95	2.08	0.04
	Br	mg/kg	20	1.99	1.98	1.95	2.08	0.04
	Se	mg/kg	20	0.40	0.40	0.39	0.42	0.01
	Cd	mg/kg	20	1.58	1.64	0.35	3.18	0.91
	Pb	mg/kg	20	0.16	0.13	0.07	0.38	0.09
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	20	0.10	0.09	0.07	0.29	0.05
	BaO	%wt (na)	20	0.02	0.02	0.01	0.03	0.01
	$CaCO_3$	%wt (na)	20	76.68	76.07	73.37	80.48	2.18
	Fe_2O_3	%wt (na)	20	0.12	0.12	0.09	0.14	0.01
	K_2O	%wt (na)	20	11.85	11.90	9.96	13.29	0.91
	MgO	%wt (na)	20	2.19	2.26	1.86	2.51	0.21
	Mn_3O_4	%wt (na)	20	0.34	0.33	0.05	0.74	0.19
	Na_2O	%wt (na)	20	0.28	0.28	0.21	0.37	0.04
	P_2O_5	%wt (na)	20	7.64	7.84	6.25	8.78	0.85
	SiO_2	%wt (na)	20	0.76	0.75	0.50	1.22	0.19
	TiO_2	%wt (na)	20	0.01	0.01	0.01	0.01	0.00

Willow Leaves

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	9	63.7	64.3	54.6	68.5	3.9
	NCV	kJ/kg	9	5305	5248	4187	6997	765
Dry Fuel Basis (d)	Ash	%wt	9	8.0	8.2	6.7	9.9	1.0
Dry Ash-free basis (DAF)	Volatile matter	%wt	9	78.3	78.3	77.0	80.0	1.1
	GCV	kJ/kg	9	21997	22042	21445	22450	327
	C	%wt	9	54.29	54.25	53.54	55.72	0.67
	H	%wt	9	6.46	6.51	6.28	6.62	0.11
	N	%wt	9	2.85	2.94	2.11	3.55	0.46
	S	%wt	9	0.45	0.41	0.36	0.66	0.09
	Cl	%wt	9	0.16	0.16	0.14	0.18	0.02
	O	%wt (by diff.)	9	35.78	35.59	34.79	37.49	0.78
Dry fuel basis	Ba	mg/kg	9	26.90	22.55	4.27	60.67	18.44
	Be	mg/kg	9	0.42	0.41	0.35	0.53	0.05
	Cr	mg/kg	9	0.66	0.67	0.38	0.99	0.20
	Co	mg/kg	9	0.87	0.68	0.40	1.58	0.45
	Cu	mg/kg	9	8.03	7.76	5.65	10.80	1.54
	Mo	mg/kg	9	0.60	0.42	0.35	1.44	0.36
	Ni	mg/kg	9	9.05	6.76	1.90	19.90	5.56
	V	mg/kg	9	0.43	0.41	0.35	0.58	0.08
	Zn	mg/kg	9	209.95	191.53	56.24	424.74	119.48
	Sb	mg/kg	9	0.12	0.11	0.07	0.26	0.06
	As	mg/kg	9	0.10	0.08	0.07	0.17	0.03
	Hg	mg/kg	9	0.02	0.02	0.01	0.02	0.00
	F	mg/kg	9	2.97	3.09	1.95	4.06	0.98
	Br	mg/kg	9	18.61	19.84	2.06	27.26	6.70
	Se	mg/kg	9	0.43	0.40	0.38	0.70	0.10
	Cd	mg/kg	9	4.36	4.06	0.89	8.88	2.64
	Pb	mg/kg	9	0.81	0.64	0.35	1.89	0.56
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	9	0.25	0.23	0.15	0.54	0.12
	BaO	%wt (na)	9	0.04	0.03	0.01	0.08	0.03
	$CaCO_3$	%wt (na)	9	58.52	56.61	49.02	69.92	6.94
	Fe_2O_3	%wt (na)	9	0.24	0.23	0.16	0.38	0.06
	K_2O	%wt (na)	9	19.86	20.74	9.02	26.54	5.85
	MgO	%wt (na)	9	7.03	7.18	1.98	11.92	2.90
	Mn_3O_4	%wt (na)	9	0.56	0.40	0.22	1.15	0.35
	Na_2O	%wt (na)	9	0.35	0.35	0.28	0.47	0.06
	P_2O_5	%wt (na)	9	11.39	10.43	9.00	17.78	2.73
	SiO_2	%wt (na)	9	1.74	1.55	1.07	3.35	0.69
	TiO_2	%wt (na)	9	0.03	0.03	0.01	0.08	0.02

Poplar SRF Trunk

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	22	56.5	56.7	50.4	59.9	2.6
	NCV	kJ/kg	22	6543	6496	5870	6722	523
Dry Fuel Basis (d)	Ash	%wt	22	1.6	1.6	1.2	1.8	0.2
Dry Ash-free basis (DAF)	Volatile matter	%wt	22	84.4	84.3	83.5	84.5	0.5
	GCV	kJ/kg	22	19817	19838	19587	19963	99
	C	%wt	22	50.15	50.13	49.55	50.30	0.36
	H	%wt	22	6.12	6.14	6.02	6.19	0.05
	N	%wt	22	0.31	0.31	0.26	0.34	0.03
	S	%wt	22	0.01	0.01	0.01	0.01	0.00
	Cl	%wt	22	0.01	0.01	0.01	0.01	0.00
	O	%wt (by diff.)	22	43.42	43.46	42.75	44.02	0.40
Dry fuel basis	Ba	mg/kg	21	6.60	5.28	0.89	17.72	5.12
	Be	mg/kg	22	0.09	0.09	0.08	0.10	0.01
	Cr	mg/kg	22	0.15	0.11	0.08	0.28	0.08
	Co	mg/kg	22	0.13	0.11	0.08	0.22	0.05
	Cu	mg/kg	22	2.68	2.39	1.65	4.99	0.87
	Mo	mg/kg	22	0.09	0.09	0.08	0.10	0.01
	Ni	mg/kg	22	0.30	0.29	0.11	0.50	0.12
	V	mg/kg	21	0.12	0.09	0.08	0.19	0.06
	Zn	mg/kg	22	35.41	35.63	19.33	46.77	7.74
	Sb	mg/kg	10	0.02	0.02	0.02	0.03	0.01
	As	mg/kg	10	0.02	0.02	0.02	0.03	0.01
	Hg	mg/kg	10	0.01	0.00	0.00	0.03	0.01
	F	mg/kg	10	2.03	1.95	1.86	1.96	1.04
	Br	mg/kg	10	1.96	1.91	1.85	1.96	1.00
	Se	mg/kg	10	0.39	0.38	0.37	0.39	0.20
	Cd	mg/kg	20	0.43	0.45	0.04	0.59	0.27
	Pb	mg/kg	21	0.34	0.23	0.10	0.37	0.30
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	21	0.82	0.69	0.20	2.38	0.53
	BaO	%wt (na)	21	0.05	0.04	0.01	0.12	0.04
	$CaCO_3$	%wt (na)	21	69.12	69.19	58.05	76.03	5.14
	Fe_2O_3	%wt (na)	21	0.35	0.22	0.09	0.99	0.28
	K_2O	%wt (na)	21	15.54	14.05	9.85	22.91	4.03
	MgO	%wt (na)	21	5.33	5.01	3.44	8.10	1.39
	Mn_3O_4	%wt (na)	21	0.10	0.09	0.02	0.48	0.09
	Na_2O	%wt (na)	20	0.49	0.45	0.20	0.99	0.22
	P_2O_5	%wt (na)	21	5.63	5.71	4.13	6.72	0.80
	SiO_2	%wt (na)	21	2.54	1.97	0.32	9.90	2.37
	TiO_2	%wt (na)	20	0.04	0.03	0.01	0.11	0.04

Poplar SRF Tops

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	22	56.4	55.8	44.6	68.4	5.6
	NCV	kJ/kg	22	6648	6850	4106	9141	1193
Dry Fuel Basis (d)	Ash	%wt	22	4.5	4.6	2.5	6.7	1.2
Dry Ash-free basis (DAF)	Volatile matter	%wt	22	80.8	80.7	79.5	82.0	0.6
	GCV	kJ/kg	22	20642	20649	20280	21116	200
	C	%wt	21	51.64	51.65	50.37	52.77	0.70
	H	%wt	21	6.24	6.25	6.11	6.33	0.05
	N	%wt	21	1.11	1.18	0.75	1.81	0.33
	S	%wt	22	0.07	0.04	0.01	0.17	0.06
	Cl	%wt	22	0.03	0.03	0.01	0.06	0.01
	O	%wt (by diff.)	21	40.91	41.16	39.08	42.51	1.03
Dry fuel basis	Ba	mg/kg	22	11.86	10.50	1.74	43.90	8.92
	Be	mg/kg	22	0.23	0.24	0.13	0.33	0.06
	Cr	mg/kg	22	0.25	0.27	0.13	0.47	0.08
	Co	mg/kg	21	0.36	0.29	0.13	1.10	0.26
	Cu	mg/kg	22	7.33	7.09	3.47	11.07	2.18
	Mo	mg/kg	22	0.23	0.24	0.13	0.33	0.06
	Ni	mg/kg	22	1.58	1.28	0.46	4.88	1.14
	V	mg/kg	21	0.24	0.24	0.13	0.33	0.06
	Zn	mg/kg	22	82.12	80.27	32.04	157.20	29.48
	Sb	mg/kg	10	0.05	0.05	0.04	0.06	0.03
	As	mg/kg	10	0.06	0.06	0.04	0.08	0.03
	Hg	mg/kg	10	0.01	0.00	0.00	0.03	0.01
	F	mg/kg	10	2.11	1.96	1.91	2.59	1.09
	Br	mg/kg	10	3.64	1.93	1.84	19.05	4.00
	Se	mg/kg	10	0.39	0.39	0.37	0.41	0.20
	Cd	mg/kg	21	0.73	0.64	0.20	1.50	0.38
	Pb	mg/kg	20	0.43	0.29	0.13	1.44	0.38
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	22	0.24	0.25	0.09	0.48	0.11
	BaO	%wt (na)	22	0.03	0.03	0.00	0.08	0.02
	$CaCO_3$	%wt (na)	22	66.28	65.53	58.17	77.28	4.99
	Fe_2O_3	%wt (na)	22	0.16	0.15	0.07	0.36	0.07
	K_2O	%wt (na)	22	16.35	17.11	10.15	24.51	3.66
	MgO	%wt (na)	22	5.50	4.91	2.77	9.61	2.01
	Mn_3O_4	%wt (na)	22	0.10	0.10	0.03	0.25	0.05
	Na_2O	%wt (na)	22	0.60	0.61	0.15	1.10	0.27
	P_2O_5	%wt (na)	22	7.93	7.66	5.38	11.66	1.61
	SiO_2	%wt (na)	22	2.80	2.50	0.63	7.17	1.97
	TiO_2	%wt (na)	22	0.02	0.01	0.01	0.06	0.01

Poplar Leaves

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	11	69.3	69.6	61.7	73.1	3.1
	NCV	kJ/kg	11	3848	3790	3024	5396	618
Dry Fuel Basis (d)	Ash	%wt	11	9.1	9.1	7.6	10.9	0.9
Dry Ash-free basis (DAF)	Volatile matter	%wt	11	81.2	81.5	78.6	83.0	1.4
	GCV	kJ/kg	11	21216	21247	20838	21795	275
	C	%wt	11	53.43	53.42	52.63	54.62	0.61
	H	%wt	11	6.24	6.29	5.75	6.41	0.18
	N	%wt	11	2.69	2.63	2.38	3.30	0.30
	S	%wt	11	0.39	0.39	0.28	0.46	0.05
	Cl	%wt	11	0.09	0.08	0.06	0.12	0.02
	O	%wt (by diff.)	11	37.16	37.03	35.45	37.90	0.71
Dry fuel basis	Ba	mg/kg	11	11.72	9.17	2.64	27.06	7.73
	Be	mg/kg	11	0.46	0.47	0.37	0.56	0.05
	Cr	mg/kg	11	0.49	0.47	0.37	0.75	0.10
	Co	mg/kg	11	1.22	0.94	0.47	2.53	0.74
	Cu	mg/kg	11	9.29	9.15	6.94	11.93	1.46
	Mo	mg/kg	11	0.46	0.47	0.37	0.56	0.05
	Ni	mg/kg	11	4.02	3.95	1.21	7.76	1.89
	V	mg/kg	11	0.46	0.47	0.37	0.56	0.05
	Zn	mg/kg	11	157.82	158.18	82.00	229.42	45.53
	Sb	mg/kg	11	0.09	0.09	0.07	0.11	0.01
	As	mg/kg	11	0.09	0.09	0.07	0.11	0.01
	Hg	mg/kg	11	0.01	0.01	0.01	0.01	0.00
	F	mg/kg	11	2.30	2.09	1.91	3.34	0.49
	Br	mg/kg	11	10.04	2.58	1.91	19.99	9.07
	Se	mg/kg	11	0.42	0.39	0.38	0.55	0.06
	Cd	mg/kg	11	1.39	1.47	0.50	3.10	0.79
	Pb	mg/kg	11	0.21	0.20	0.09	0.40	0.10
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	11	0.28	0.28	0.23	0.34	0.03
	BaO	%wt (na)	11	0.02	0.01	0.00	0.04	0.01
	$CaCO_3$	%wt (na)	11	55.79	53.74	48.19	64.53	5.49
	Fe_2O_3	%wt (na)	11	0.11	0.11	0.07	0.19	0.03
	K_2O	%wt (na)	11	22.17	20.45	17.75	27.41	3.54
	MgO	%wt (na)	11	6.00	5.00	2.86	12.17	3.01
	Mn_3O_4	%wt (na)	11	0.14	0.14	0.06	0.23	0.06
	Na_2O	%wt (na)	11	0.26	0.21	0.06	0.49	0.14
	P_2O_5	%wt (na)	11	7.16	7.23	5.25	9.07	1.16
	SiO_2	%wt (na)	11	8.05	6.71	4.57	12.77	2.83
	TiO_2	%wt (na)	11	0.02	0.02	0.01	0.03	0.01

Spruce SRF trunk

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	23	59.9	60.0	56.1	62.8	1.8
	NCV	kJ/kg	23	6019	5983	5406	6871	383
Dry Fuel Basis (d)	Ash	%wt	24	0.4	0.4	0.2	0.8	0.2
Dry Ash-free basis (DAF)	Volatile matter	%wt	24	84.6	84.5	83.6	85.8	0.6
	GCV	kJ/kg	24	20116	20111	19960	20337	87
	C	%wt	24	50.23	50.43	48.74	50.92	0.56
	H	%wt	24	6.22	6.21	6.14	6.41	0.07
	N	%wt	24	0.26	0.25	0.17	0.45	0.08
	S	%wt	24	0.01	0.01	0.01	0.01	0.00
	Cl	%wt	24	0.01	0.01	0.01	0.03	0.01
	O	%wt (by diff.)	24	43.29	43.14	42.69	44.65	0.50
Dry fuel basis	Ba	mg/kg	24	16.27	15.60	5.90	40.13	8.03
	Be	mg/kg	24	0.02	0.02	0.01	0.04	0.01
	Cr	mg/kg	23	0.12	0.12	0.05	0.27	0.06
	Co	mg/kg	24	0.03	0.02	0.01	0.10	0.02
	Cu	mg/kg	23	1.50	1.34	0.82	2.55	0.50
	Mo	mg/kg	24	0.02	0.02	0.01	0.04	0.01
	Ni	mg/kg	24	0.13	0.11	0.03	0.30	0.07
	V	mg/kg	23	0.04	0.03	0.01	0.16	0.03
	Zn	mg/kg	24	8.22	7.74	4.78	12.90	2.66
	Sb	mg/kg	8	0.02	0.01	0.00	0.04	0.01
	As	mg/kg	8	0.01	0.01	0.00	0.02	0.01
	Hg	mg/kg	8	0.00	0.00	0.00	0.01	0.00
	F	mg/kg	8	2.30	1.96	1.93	3.87	1.17
	Br	mg/kg	8	1.94	1.94	1.92	1.96	0.93
	Se	mg/kg	8	0.39	0.39	0.39	0.39	0.19
	Cd	mg/kg	16	0.03	0.02	0.01	0.08	0.02
	Pb	mg/kg	16	0.28	0.14	0.08	1.31	0.31
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	22	1.94	1.61	0.64	6.11	1.23
	BaO	%wt (na)	23	0.56	0.52	0.26	1.10	0.22
	$CaCO_3$	%wt (na)	23	53.51	54.72	44.53	60.73	4.82
	Fe_2O_3	%wt (na)	22	1.12	0.97	0.09	3.07	0.65
	K_2O	%wt (na)	22	20.18	20.15	13.59	29.88	4.17
	MgO	%wt (na)	23	7.60	8.20	5.18	9.19	1.31
	Mn_3O_4	%wt (na)	23	2.57	2.09	0.81	6.72	1.57
	Na_2O	%wt (na)	22	0.31	0.27	0.18	0.63	0.12
	P_2O_5	%wt (na)	23	6.36	6.53	3.86	8.42	1.35
	SiO_2	%wt (na)	23	5.85	4.67	2.27	15.33	3.78
	TiO_2	%wt (na)	22	0.07	0.05	0.01	0.27	0.07

Spruce SRF Tops

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	24	55.9	54.6	48.0	67.9	4.4
	NCV	kJ/kg	24	7398	7716	4723	9110	1008
Dry Fuel Basis (d)	Ash	%wt	24	2.4	2.3	1.8	3.2	0.4
Dry Ash-free basis (DAF)	Volatile matter	%wt	24	78.5	78.5	76.8	79.8	0.9
	GCV	kJ/kg	24	21758	21769	21292	22144	231
	C	%wt	24	53.63	53.62	52.63	54.44	0.43
	H	%wt	24	6.46	6.45	6.35	6.59	0.07
	N	%wt	24	0.93	0.91	0.62	1.41	0.20
	S	%wt	24	0.04	0.04	0.02	0.07	0.01
	Cl	%wt	24	0.04	0.04	0.03	0.08	0.01
	O	%wt (by diff.)	24	38.90	39.01	37.90	40.12	0.54
Dry fuel basis	Ba	mg/kg	24	32.01	28.47	11.04	73.10	19.28
	Be	mg/kg	24	0.12	0.12	0.09	0.17	0.02
	Cr	mg/kg	24	0.37	0.32	0.21	0.70	0.12
	Co	mg/kg	24	0.12	0.12	0.09	0.17	0.03
	Cu	mg/kg	24	3.85	3.71	2.68	5.64	0.81
	Mo	mg/kg	24	0.12	0.12	0.09	0.17	0.02
	Ni	mg/kg	24	0.70	0.67	0.39	1.11	0.19
	V	mg/kg	24	0.22	0.22	0.12	0.36	0.07
	Zn	mg/kg	24	32.29	31.24	22.20	51.37	6.88
	Sb	mg/kg	9	0.04	0.03	0.02	0.11	0.03
	As	mg/kg	9	0.04	0.03	0.02	0.10	0.02
	Hg	mg/kg	8	0.02	0.02	0.02	0.02	0.01
	F	mg/kg	8	1.98	1.97	1.89	2.16	0.96
	Br	mg/kg	8	1.97	1.97	1.89	2.03	0.95
	Se	mg/kg	8	0.39	0.39	0.38	0.41	0.19
	Cd	mg/kg	16	0.08	0.09	0.02	0.16	0.06
	Pb	mg/kg	16	0.49	0.42	0.21	0.99	0.30
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	24	1.13	1.01	0.46	2.47	0.46
	BaO	%wt (na)	24	0.17	0.17	0.06	0.37	0.09
	$CaCO_3$	%wt (na)	24	45.41	44.65	38.67	53.33	3.91
	Fe_2O_3	%wt (na)	24	0.52	0.50	0.26	1.03	0.20
	K_2O	%wt (na)	24	19.82	20.44	14.19	24.53	3.09
	MgO	%wt (na)	24	7.60	8.03	4.57	10.50	1.43
	Mn_3O_4	%wt (na)	24	2.75	2.37	0.93	7.48	1.68
	Na_2O	%wt (na)	23	0.79	0.72	0.46	1.69	0.29
	P_2O_5	%wt (na)	23	10.32	10.88	5.78	15.25	2.73
	SiO_2	%wt (na)	23	11.20	10.14	7.25	21.11	3.98
	TiO_2	%wt (na)	24	0.04	0.02	0.01	0.15	0.04

Spruce SRF Bark

Analysis group	Variable	Units	No. of obs.	Mean	Median	Min	Max	Standard deviation
As Received fuel basis (ar)	Moisture content	%wt	24	58.2	58.9	53.0	64.5	2.9
	NCV	kJ/kg	24	6772	6649	5306	7919	729
Dry Fuel Basis (d)	Ash	%wt	24	2.3	2.3	1.8	2.9	0.3
Dry Ash-free basis (DAF)	Volatile matter	%wt	24	74.4	74.6	72.2	76.3	1.1
	GCV	kJ/kg	24	21392	21388	20852	22137	372
	C	%wt	24	53.94	54.01	51.53	55.36	0.75
	H	%wt	24	6.10	6.12	5.82	6.30	0.12
	N	%wt	24	0.58	0.57	0.40	0.87	0.11
	S	%wt	24	0.02	0.01	0.01	0.03	0.01
	Cl	%wt	24	0.04	0.04	0.02	0.05	0.01
	O	%wt (by diff.)	24	39.33	39.28	37.79	41.79	0.80
Dry fuel basis	Ba	mg/kg	24	132.50	113.85	58.19	243.51	60.74
	Be	mg/kg	24	0.12	0.12	0.09	0.14	0.01
	Cr	mg/kg	24	0.47	0.46	0.25	0.78	0.16
	Co	mg/kg	24	0.12	0.12	0.09	0.14	0.01
	Cu	mg/kg	24	4.35	4.15	2.57	6.27	1.00
	Mo	mg/kg	24	0.12	0.12	0.09	0.14	0.01
	Ni	mg/kg	24	0.82	0.84	0.40	1.23	0.24
	V	mg/kg	23	0.30	0.28	0.14	0.48	0.10
	Zn	mg/kg	24	66.19	63.90	50.60	90.04	11.24
	Sb	mg/kg	9	0.04	0.04	0.02	0.08	0.02
	As	mg/kg	9	0.05	0.03	0.02	0.13	0.03
	Hg	mg/kg	8	0.02	0.02	0.01	0.02	0.01
	F	mg/kg	8	2.02	2.04	1.93	2.11	0.97
	Br	mg/kg	8	4.81	4.16	3.86	6.28	2.39
	Se	mg/kg	8	0.41	0.41	0.39	0.45	0.20
	Cd	mg/kg	17	0.15	0.14	0.01	0.28	0.09
	Pb	mg/kg	18	0.50	0.43	0.14	1.41	0.32
Calculated ash oxides, %wt dry ash normalised for SO3 and Ca expressed as CaCO3	Al_2O_3	%wt (na)	24	0.96	0.90	0.55	1.89	0.34
	BaO	%wt (na)	24	0.69	0.60	0.30	1.25	0.30
	$CaCO_3$	%wt (na)	24	63.36	64.17	53.94	69.16	3.46
	Fe_2O_3	%wt (na)	24	0.38	0.36	0.23	0.70	0.12
	K_2O	%wt (na)	23	15.31	14.90	10.24	21.96	3.11
	MgO	%wt (na)	24	5.97	6.06	4.17	7.95	1.04
	Mn_3O_4	%wt (na)	22	2.73	2.17	1.39	5.81	1.25
	Na_2O	%wt (na)	24	0.78	0.73	0.35	1.59	0.29
	P_2O_5	%wt (na)	24	6.73	6.65	4.65	9.41	1.31
	SiO_2	%wt (na)	24	2.95	2.61	1.61	6.03	1.09
	TiO_2	%wt (na)	24	0.04	0.04	0.01	0.13	0.03