

23.1 Glass for XRF Monitoring																	Size (mm)					
	SiO ₂	Al ₂ O ₃	B ₂ O ₃	Na ₂ O	K ₂ O	MgO	CaO	TiO ₂	Fe ₂ O ₃	MnO	ZnO	Cr ₂ O ₃	CoO	F	SO ₃	P ₂ O ₅	Ø	H				
231 AC 111	53*	30*	...	10*	11*	44*	15.2*	2.7*	15.9*	1.6*	...	...	...	...	3.9*	3.1*	40	x 5		
* These are apparent concentrations, by comparison with discs prepared using 10:1 lithium borate This monitor also contains 38 other elements, at apparent concentrations of ~ 2000 ppm each																						
	SiO ₂	Na ₂ O	K ₂ O	Al ₂ O ₃	CaO	MgO	FeO	SnO	P ₂ O ₅	SrO	ZnO	SO ₃	B ₂ O ₃	TiO ₂	MnO	CoO	CdO	F	Type	Size (mm)		
231 X FESN 01	65	15	20	...	0.007	0.006	40	x 6	
231 X FESN 02	65	15	20	...	0.021	0.019	40	x 6	
231 X FESN 03	65	15	20	...	0.036	0.032	40	x 6	
231 X WM0	64	20	...	1	15	40	x 6	
231 X WM1	64	19.7	...	1	0.042	0.050	0.069	15	0.037	0.075	"wear metals"	40	x 6
231 X WM2	64	19.1	...	1	0.14	0.17	0.23	15	0.12	0.25	40	x 6	
231 X WM3	62.5	18	...	1	0.70	0.83	1.15	14	0.62	1.25	40	x 6	
231 X WM4	57.50	0.90	...	13.48	1.12	1.26	1.80	19.93	1.49	40	x 6	
231 X EAF-1	18	1	40	1	1	...	0.2	4	20.8	4.5	9	0.5	EAF	40	x 6	
231 X EAF-2B	10	5	2	18	30	...	1	1.5	26	2	0.5	4	Slags	40	x 6	
231 X EAF-3	1	9	18.5	9	20	...	1.8	0.2	27	0.5	4	9		40	x 6	
231 X M01	61.27	19.15	0.41	0.96	1.31	14.36	...	0.003	2.54		40	x 6	
231 X M02	59.96	18.74	0.74	0.94	1.75	14.05	...	0.005	3.81		40	x 6	
231 X M03	58.71	18.35	0.99	0.92	2.18	13.76	...	0.009	5.09		40	x 6	
231 X M04	57.45	17.95	1.24	0.90	2.62	13.47	...	0.015	6.36		40	x 6	
231 X FLX-1	65	13	1	2	1.6	...	0.1	13	2	0.3	2		40	x 6
231 X FLX-D1	10	13	0.5	0.5	31	22	0.5	34.5	...	0.5		Dolomite	40	x 6
	SiO ₂	K ₂ O	Al ₂ O ₃	CaO	MgO	SnO	PbO	P ₂ O ₅	B ₂ O ₃	TiO ₂	Cr ₂ O ₃	NiO	WO ₃	Size (mm)								
231 X PR2	20	9	...	...	20	1	3	...	43	...	...	...	4	40	x 6					
231 X PR3	38	...	20	4	10	...	...	10	13.5	3	1	0.5	...	40	x 6					
	SiO ₂	Na ₂ O	K ₂ O	Al ₂ O ₃	CaO	MgO	FeO	P ₂ O ₅	SrO	ZnO	B ₂ O ₃	TiO ₂	MnO	BaO	Cr ₂ O ₃	CuO	CoO	Size (mm)				
231 X S1	50	20	5.0	8.0	5.0	8.0	2.0	...	...	...	...	2.0	...	...	...	...	...	...	40	x 6
231 X S2	50	18	5.0	8.0	5.0	8.0	...	...	2.0	2.0	...	...	...	2.0	...	...	...	...	40	x 6
231 X S3	50	16	5.0	4.0	5.0	7.0	1.5	0.5	1.0	1.0	5.0	2.0	0.5	1.0	0.5	...	...	...	40	x 6
231 X S4	50	18	5.0	5.0	5.0	10.0	1.0	...	1.0	...	...	1.0	...	1.0	0.5	0.5	0.5	...	continued	
231 X S5	50	10	5.0	4.0	5.0	2.0	0.5	0.5	1.0	1.0	5.0	0.5	0.5	1.0	0.5	0.5	0.5	...	continued			
231 X S7	50	2.75	2.75	15	10.0	5.0	12	0.25	...	...	...	2.0	0.25	...	...	...	...	...	40	x 6
231 X S9	71.6	12.5	1.5	2.5	9.0	1.0	0.5	0.2	...	...	1.0	0.2	...	...	...	...	...	...	40	x 6
231 X S10	64.8	8.5	0.2	4.0	14.0	3.0	0.3	0.1	...	...	5.0	0.1	...	...	...	...	...	...	40	x 6
Continuation from above																	Size (mm)					
	V ₂ O ₅	NiO	ZrO ₂	Nb ₂ O ₅	Mo ₂ O ₃	CdO	SnO	Ta ₂ O ₃	WO ₃	F	PbO	Bi ₂ O ₃	La ₂ O ₃	CeO ₂	Ø		H					
231 X S4	1.0	0.5	...	...	...	...	...	...	...	...	...	...	...	...	40	x 6				
231 X S5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	3.0	3.0	0.5	0.5	40	x 6						
	Ag ₂ O	Al ₂ O ₃	As ₂ O ₃	B ₂ O ₃	BaO	Bi ₂ O ₃	Br	CaO	CdO	CeO ₂	Cl	CoO	Cr ₂ O ₃	CuO	Dy ₂ O ₃	Er ₂ O ₃	F	FeO	Size (mm)			
231 X S6M	...	5.9	...	5.0	1.3	...	...	4.7	0.3	0.5	0.2	0.6	0.4	0.5	0.3	0.3	...	0.5	...	
231 X FLX-O1	...	3	...	5	4	...	...	5	...	...	0.5	...	1	1	...	...	...	1	continued	
231 X FLX-S13	0.3	4	0.2	5	1.3	2	0.5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	1	0.5				
Continuation from above																	Size (mm)					
	Gd ₂ O ₃	GeO ₂	HfO ₂	In ₂ O ₃	K ₂ O	La ₂ O ₃	MgO	MnO	Mo ₂ O ₃	Na ₂ O	Nb ₂ O ₅	Nd ₂ O ₃	NiO	P ₂ O ₅	PbO	Pr ₆ O ₁₁	Rb ₂ O	Ø		H		
231 X S6M	0.3	...	0.4	...	4.4	0.4	1.7	0.3	0.5	8.8	0.6	0.3	0.5	0.6	2.1	0.3	...	...		
231 X FLX-O1	...	...	...	...	...	...	5	...	2	10	...	...	1	1	3	...	...	...	continued	
231 X FLX-S13	0.3	0.1	0.3	0.3	5	0.5	2	0.5	0.3	8	0.3	0.3	0.5	0.5	2	0.3	0.1	...				
Continuation from above																	Size (mm)					
	Sb ₂ O ₃	Sc ₂ O ₃	SeO ₂	SiO ₂	Sm ₂ O ₃	SnO	SO ₃	SrO	Ta ₂ O ₅	TeO ₂	TiO ₂	V ₂ O ₅	WO ₃	Y ₂ O ₃	Yb ₂ O ₃	ZnO	ZrO ₂	Ø		H		
231 X S6M	0.2	...	0.02	47.55	0.2	0.5	0.13	1.0	0.6	...	4.8	0.5	...	0.3	0.3	1.4	0.6	...	40	x 6		
231 X FLX-O1	...	...	...	50	...	1	0.5	...	...	...	1	1	...	...	...	4	...	...	40	x 6
231 X FLX-S13	0.2	0.1	0.3	48	0.3	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.2	0.2	1	0.5	...	40	x 6		

23. Glass/Glass Sand

Powders/Pieces/Discs

23.1 Glass		SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	B ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	Li ₂ O	SO ₃	ZnO	ZrO ₂	P ₂ O ₅	MnO	
CRM	231 B 89	65.35	0.01	0.18	0.049	...	0.21	0.03	5.70	8.40	...	0.03	...	0.005	0.23	0.088	
CRM	231 B 92	(75.0)	...	...	...	0.70	(8.3)	(0.1)	(13.1)	(0.6)	...	...	(0.2)	...	...	...
CRM	231 B 93a	80.8	0.014	2.28	0.028	12.56	0.01	0.005	3.98	0.014	...	...	...	0.042	...	...
CRM	231 B 620	72.08	0.018	1.80	0.043	...	7.11	3.69	14.39	0.41	...	0.28	...	...	...	...
CRM	231 B 621	71.13	0.014	2.76	0.040	...	10.71	0.27	12.74	2.01	...	0.13	...	0.007	...	...	continued
CRM	231 B 1411	58.04	0.02	5.68	0.050	10.94	2.18	0.33	10.14	2.97	...	...	3.85	...	...	...
CRM	231 B 1412	42.38	...	7.52	(0.031)	4.53	4.53	(4.69)	4.69	4.14	(4.50)	...	4.48	...	...	...
CRM	231 B 1830	73.07	0.011	0.12	0.121	...	8.56	3.90	13.75	0.04	...	0.26	...	...	...	...
CRM	231 B 1831	73.08	0.019	1.21	0.087	...	8.20	3.51	13.32	0.33	...	0.25	...	...	...	...
	231 GRE C1.1	71.97	0.04	1.08	0.103	...	8.63	3.78	13.41	0.59	...	0.23	...	...	...	...	continued
	231 GS 4	69.49	0.041	3.02	0.099	0.19	4.24	<0.05	15.45	0.57	...	<0.05	3.28	...	...	...
	231 GS 5	72.74	0.034	1.12	0.043	...	6.55	2.75	15.65	0.42	...	0.21	...	...	...	...
	231 GS 6	73.06	0.02	1.7	0.034	...	9.97	<0.1	14.65	<0.1	...	0.2	...	...	...	...
	231 GS 7	72.64	0.042	1.5	0.044	...	11.03	0.14	13.9	0.43	...	0.19	...	...	...	...	continued
	231 GS 8	56.34	0.02	0.05	0.01	0.36	<0.02	<0.02	0.23	11.85	...	...	...	...	...	...
	231 GS 9	56.7	0.03	1.4	0.045	...	0.1	...	4.0	8.4	...	...	...	...	...	...
	231 GS 10	72.7	0.097	1.62	0.325	...	10.7	1.81	12.2	0.35	...	0.05	...	...	...	...
	231 GS 11	70.7	0.068	1.83	0.342	...	10.3	2.14	13.6	0.69	...	0.06	...	...	...	...
CRM	231 F 126A	57.80	...	0.128	0.0055	...	1.033	0.512	3.58	10	0.495	...	1.02	...	...	...	continued

Continuation from above		Sb ₂ O ₃	F	Cl	PbO	BaO	As ₂ O ₃	CdO	SrO	L.O.I. 550°C	R.I.	Density	Form	Type	Size
	231 B 89	...	...	0.05	17.50	1.40	0.03	...	...	0.32	...	...	powder	lead-barium	45g
	231 B 92	...	...	...	...	...	...	...	...	...	...	...	powder	low boron	45 g
	231 B 93a	...	...	0.060	...	...	...	...	...	...	...	...	3 x disc	borosilicate	32 x 6
	231 B 620	...	...	...	...	...	0.056	...	...	...	...	...	3 x disc	soda-lime	32 x 6
	231 B 621	...	...	...	...	0.12	0.030	...	...	...	...	...	3 x disc	soda-lime	32 x 6
	231 B 1411	...	...	...	...	5.00	...	...	...	...	...	...	10 x platelet	soft borosilicate	32x32x3
	231 B 1412	...	...	...	4.40	4.67	...	4.38	4.55	...	...	...	8 x platelet	multicomponent	32x32x3
	231 B 1830	...	...	...	...	...	...	...	...	...	...	...	3 x square plate	soda lime	38 x 38
	231 B 1831	...	...	...	...	...	...	...	...	...	...	...	3 x square plate	soda lime	38 x 38
	231 GRE C1.1	...	...	...	...	...	...	...	...	...	...	...	...	Float	25g
	231 GS 4	...	4.96	...	...	...	...	...	...	0.22	...	...	Powder	Fluoride opal	25g
	231 GS 5	...	...	...	...	...	...	...	...	...	...	...	...	Na-Ca-Mg-Si	25g
	231 GS 6	...	...	...	...	...	...	...	...	...	...	...	...	Na-Ca-Si	25g
	231 GS 7	...	...	...	...	...	...	...	...	0.07	...	...	...	Na-Ca-Si	25g
	231 GS 8	...	...	...	30.59	...	0.32	...	...	0.21	...	...	...	Pb-K-Si	25g
	231 GS 9	...	...	...	28.4	...	0.4	...	...	0.4	...	...	...	...	25g
	231 GS 10	...	...	...	...	0.02	...	...	...	...	...	...	Powder	...	25g
	231 GS 11	...	...	...	...	0.03	...	...	...	...	...	...	...	...	25g
	231 F 126A	0.29	...	...	23.98	1.036	...	...	...	...	1.5597	2.99	...	Lead Crystal	300g

Note: 231 GS4 231, GS10 and 231 GS11 are also available in disc form, 40mmØ x 6mm

23.2 Glass Sand		SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃	ppm Cr ₂ O ₃	CaO	MgO	Na ₂ O	K ₂ O	ZrO ₂	L.O.I.	MnO	Others	Type	Size
CRM	232 B 81a	...	0.12	0.66	0.082	46	...	...	...	...	0.034	...	...	...	...	75g
CRM	232 B 165a	...	0.011	0.059	0.012	(1.0)	...	...	...	...	0.006	...	...	...	Low Iron	75g
CRM	232 B 1413	82.77	0.11	9.90	0.24	...	0.74	0.06	1.75	3.94	...	...	...	BaO 0.12	High-Alumina	75g
CRM	232 E 61	99.79	0.026	0.054	0.014	...	(0.004)	(0.003)	(0.002)	(0.007)	0.01	0.06	...	...	...	100g
CRM	232 E 62	99.62	0.036	0.11	0.072	...	(0.004)	(0.004)	(0.002)	(0.007)	0.01	0.1	...	...	...	100g
CRM	232 D SPS	99.32	0.035	0.248	0.037	...	0.029	0.0071	0.045	0.058	...	0.167	...	Trace elements	...	100g
CRM	232 A SA 49	99.6	(0.01)	(0.05)	(0.05)	...	(0.01)	(0.05)	(0.05)	(0.01)	...	...	(0.01)	Sr (5ppm)	Quartz	100g
	232 GS SS1	99.74	0.026	0.061	0.014	3.0	<0.02	<0.02	<0.02	<0.02	...	0.12	...	...	...	200g
	232 GS SS6	98.66	0.024	0.6	0.032	(2.5)	<0.02	<0.02	<0.02	0.4	...	0.14	...	...	...	200g
	232 GS SS8	95.63	0.073	2.07	0.26	(11.0)	0.06	0.12	0.2	1.06	...	0.48	...	...	...	200g
	232 GS SS9	97.24	0.044	1.35	0.103	(3.0)	0.02	0.06	0.1	0.82	...	0.24	...	...	...	200g