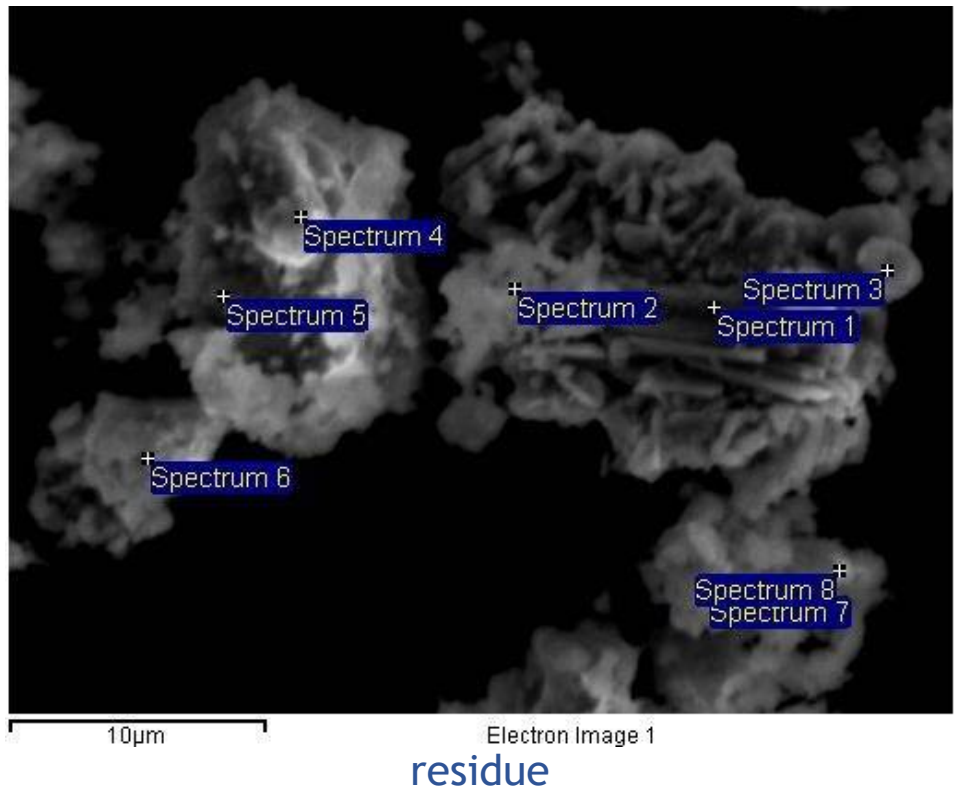
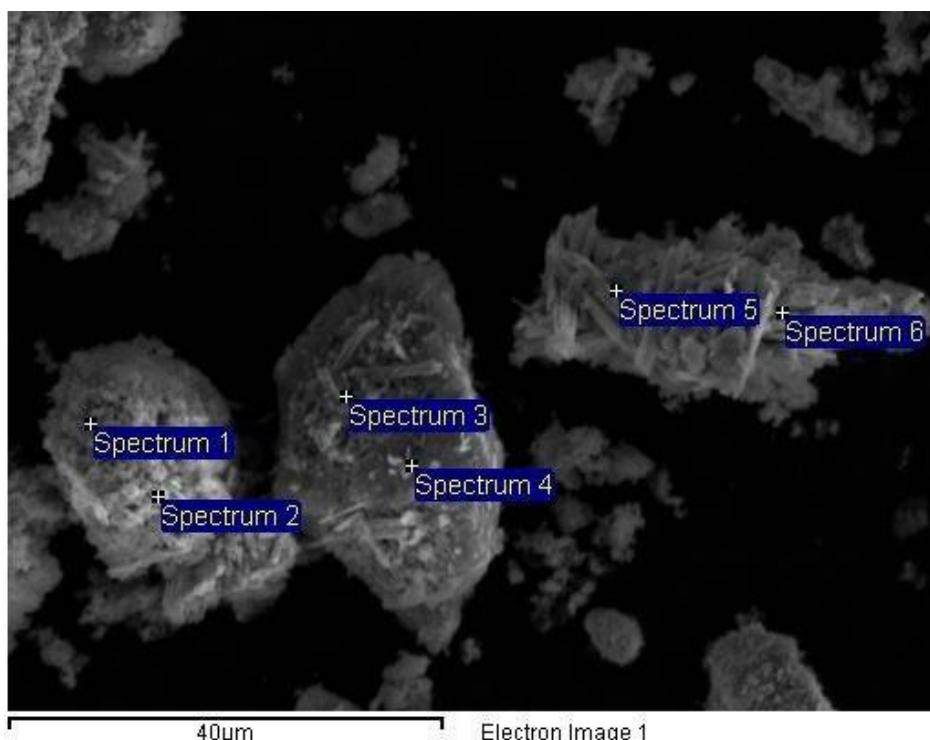


Figure 14: SEM mineral identifications in CaO, Na₂CO₃ and bauxite



Spectrum	In stats.	O	Na	Al	Si	Ca	Ti	Fe	Total
Spectrum 1	Yes	35.21	4.32			12.88		47.59	100.00
Spectrum 2	Yes	41.58	8.66	5.16		10.76		33.84	100.00
Spectrum 3	Yes	50.99	4.65			17.83	26.53		100.00
Spectrum 4	Yes	51.44	21.84	26.72					100.00
Spectrum 5	Yes	50.38	23.38	26.24					100.00
Spectrum 6	Yes	41.88	11.63	7.15	4.41	6.16	4.50	24.26	100.00
Spectrum 7	Yes	42.25	9.51	5.41	4.59	10.69	5.31	22.25	100.00
Spectrum 8	Yes	39.90	6.66	7.03	8.43	23.31		14.67	100.00
Max.		51.44	23.38	26.72	8.43	23.31	26.53	47.59	
Min.		35.21	4.32	5.16	4.41	6.16	4.50	14.67	

All results in weight%

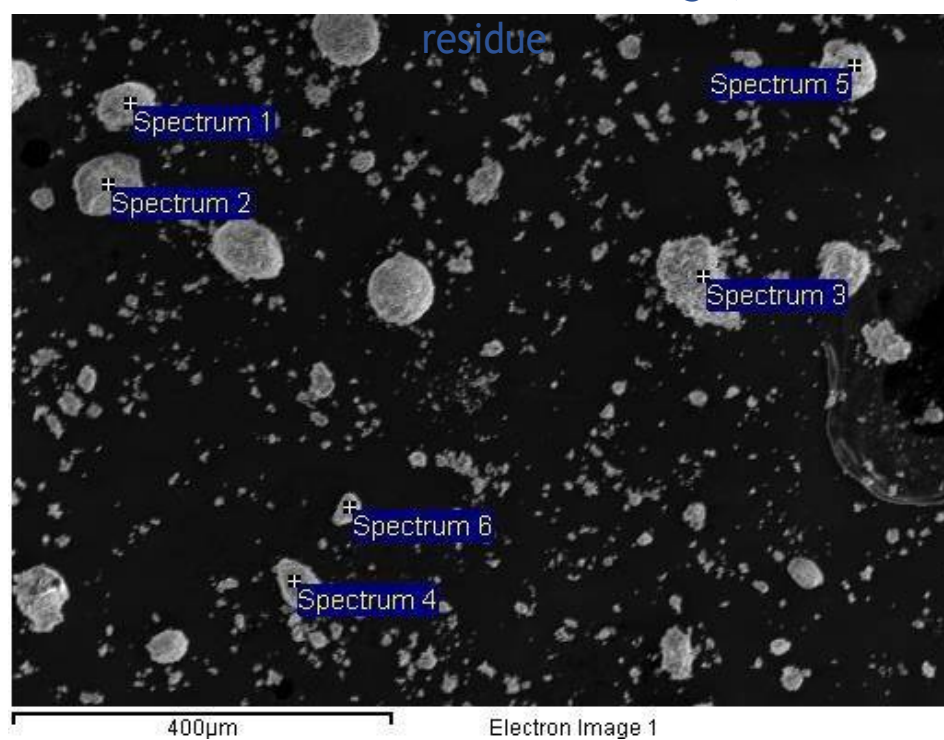


Spectrum	In stats.	O	Al	Si	Ca	Fe	Total
Spectrum 1	Yes	51.01		5.84	7.73	35.42	100.00
Spectrum 2	Yes	6.77			14.44	78.80	100.00
Spectrum 3	Yes	40.50	2.33	2.68	9.71	44.78	100.00
Spectrum 4	Yes	46.53	4.95	6.16	4.27	38.09	100.00
Spectrum 5	Yes	49.96	4.20	5.12	3.83	36.89	100.00
Spectrum 6	Yes	27.40			6.81	65.78	100.00

Max.		51.01	4.95	6.16	14.44	78.80	
Min.		6.77	2.33	2.68	3.83	35.42	

All results in weight%

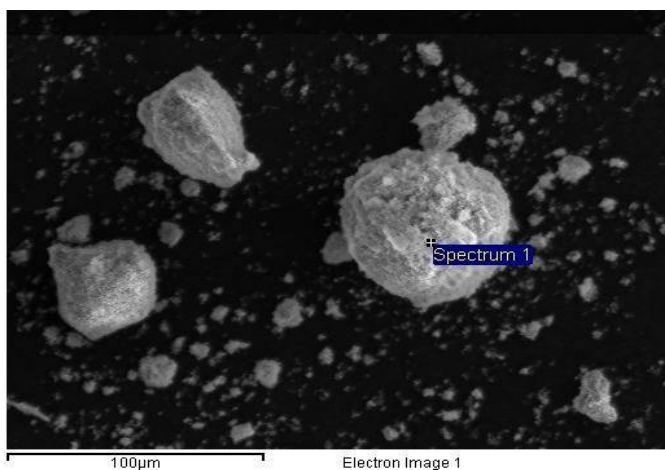
Figure 17: SEM mineral identifications in MgO, Na₂CO₃ and bauxite



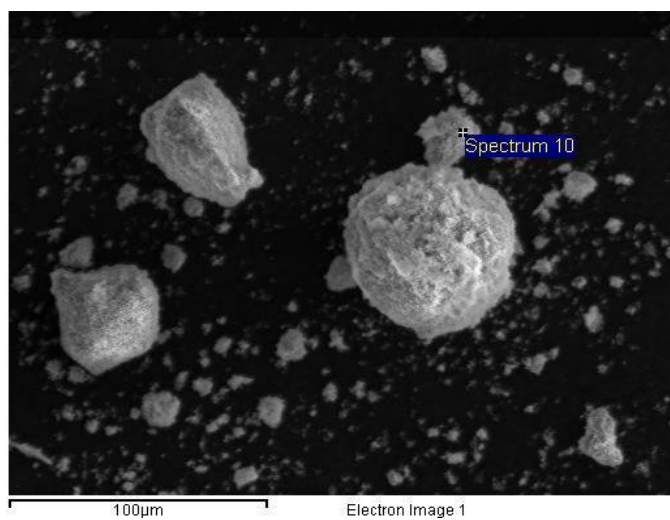
Spectrum	In stats.	O	Na	Mg	Al	Si	Ca	Ti	Fe	Total
Spectrum 1	Yes	37.76	9.71		7.02		10.64		34.86	100.00
Spectrum 2	Yes	43.21		56.79						100.00
Spectrum 3	Yes	29.02	4.81	22.61	4.31		5.33		33.92	100.00
Spectrum 4	Yes	48.52	7.38	5.28	4.16	3.03	5.77	3.42	22.44	100.00
Spectrum 5	Yes						12.51		87.49	100.00
Spectrum 6	Yes	25.72	9.97	2.59	2.37	2.18	11.45		45.73	100.00

Max.		48.52	9.97	56.79	7.02	3.03	12.51	3.42	87.49	
Min.		25.72	4.81	2.59	2.37	2.18	5.33	3.42	22.44	

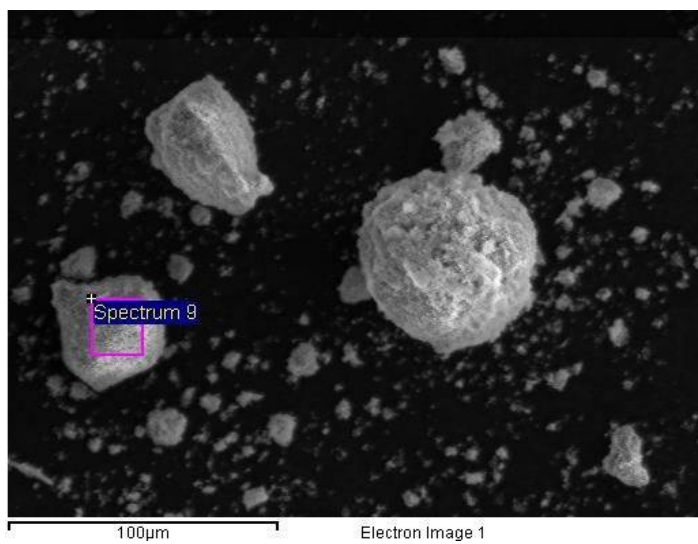
All results in weight%



Element	Weight%	Atomic%
O K	86.21	90.48
Mg K	13.79	9.52
Totals	100.00	

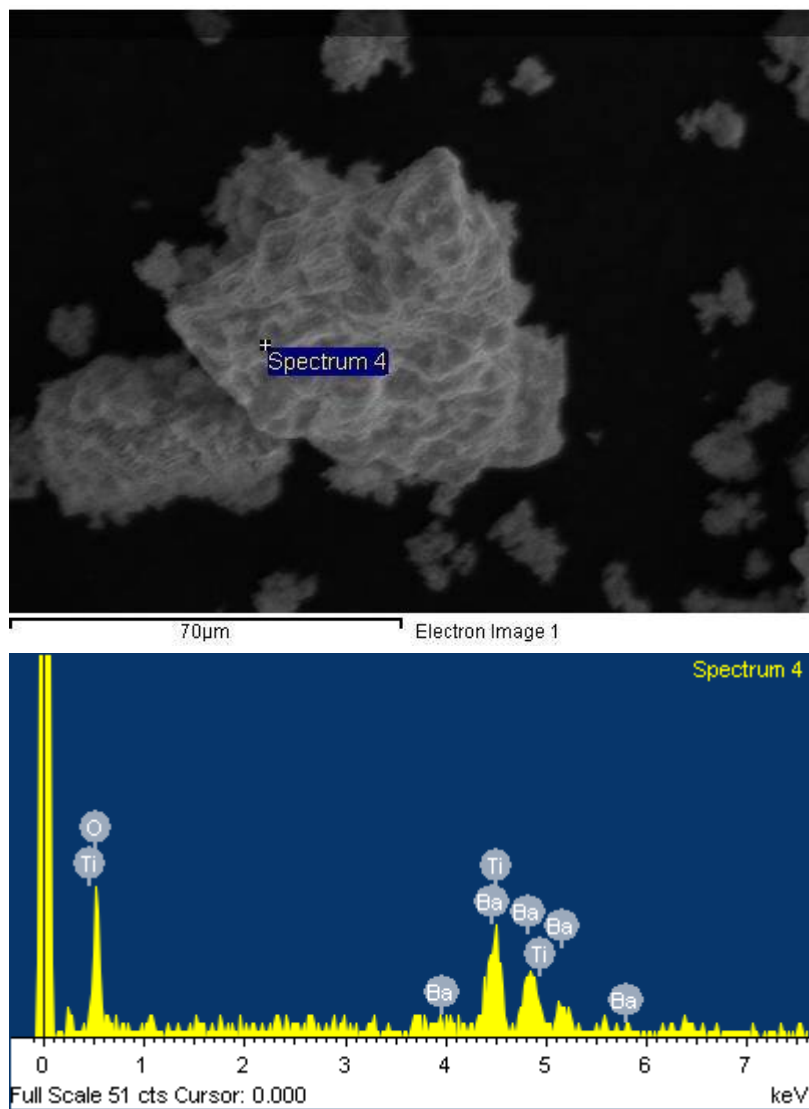


Element	Weight%	Atomic%
O K	22.78	43.45
Mg K	19.17	24.06
Ca K	3.55	2.71
Fe K	54.50	29.78
Totals	100.00	

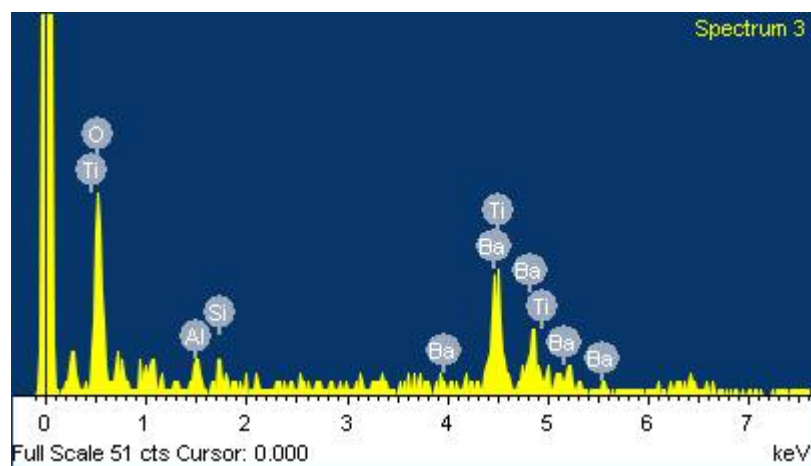
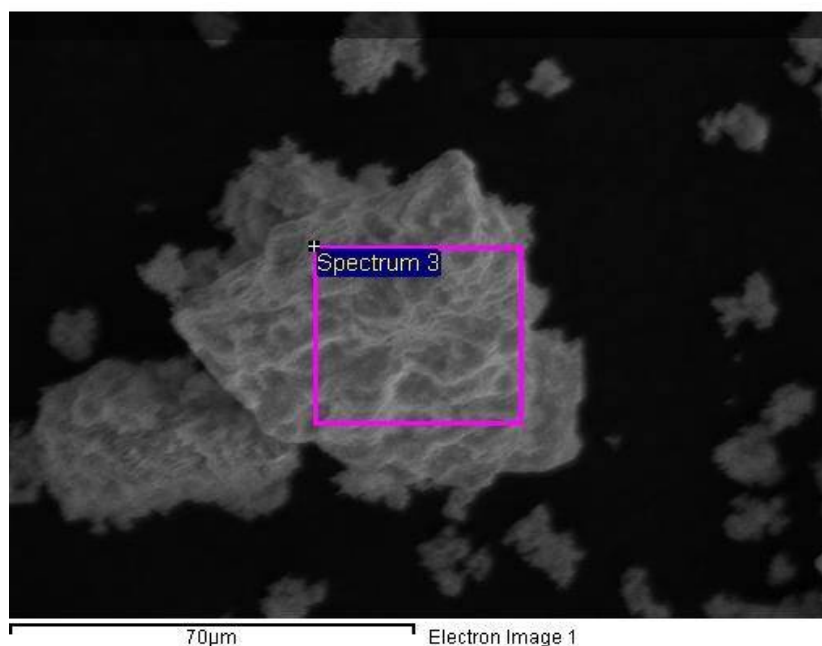


Element	Weight%	Atomic%
O K	40.46	63.98
Mg K	9.18	9.55
Al K	3.94	3.69
Si K	1.59	1.43
Ca K	4.10	2.59
Ti K	4.03	2.13
Fe K	36.71	16.63
Totals	100.00	

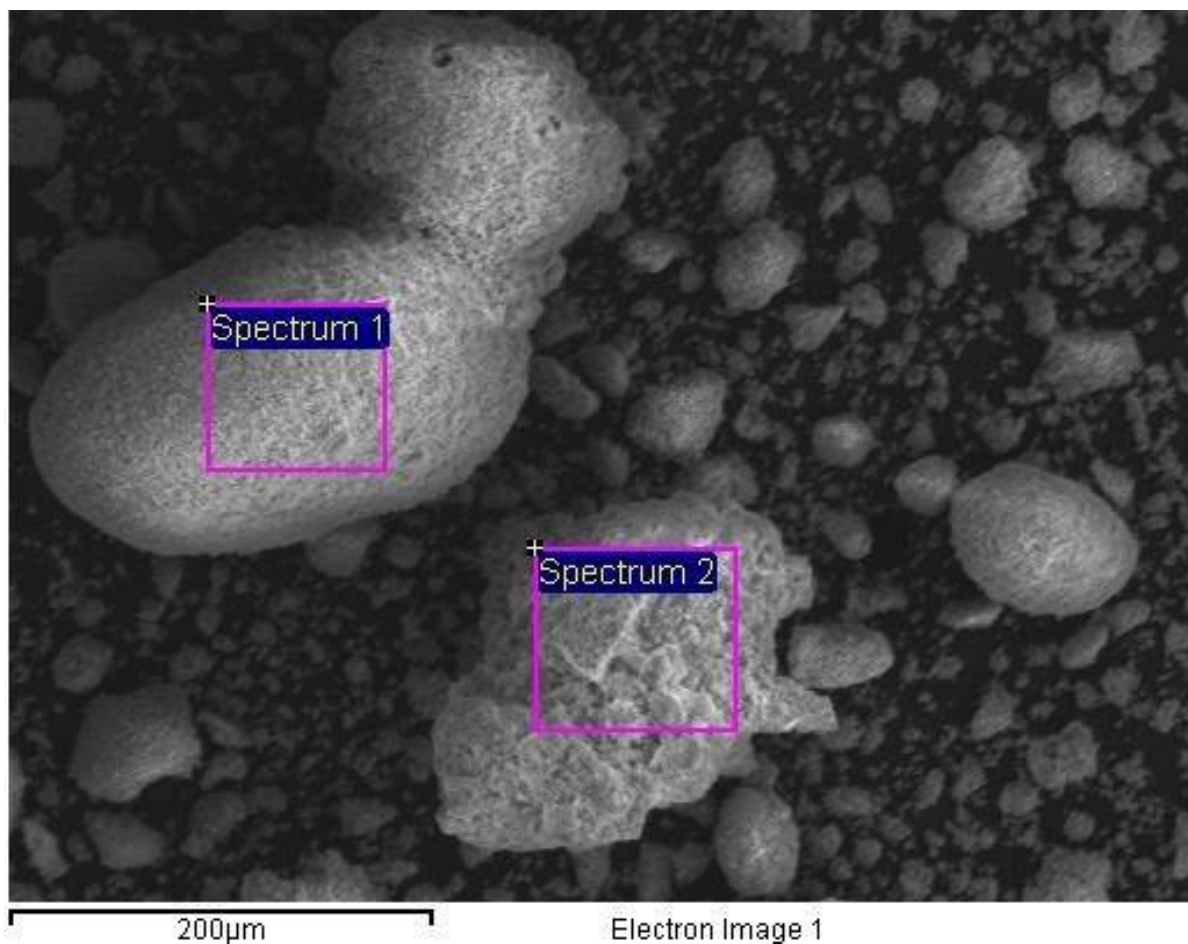
Figure 20: SEM mineral identifications in BaO, Na₂CO₃ and bauxite residue



Element	Weight%	Atomic%
O K	24.85	70.57
Ti K	7.42	7.03
Ba L	67.73	22.40
Totals	100.00	



Element	Weight%	Atomic%
O K	27.44	70.23
Al K	3.97	6.02
Si K	1.17	1.70
Ti K	3.48	2.98
Ba L	63.94	19.07
Totals	100.00	



Spectrum	In stats.	O	Al	Si	Ca	Ti	Fe	Ba	Total
Spectrum 1	Yes	36.89	2.59	3.91	6.68	5.42	31.46	13.05	100.00
Spectrum 2	Yes	29.68	2.40	3.52	4.35		14.92	45.12	100.00
Max.		36.89	2.59	3.91	6.68	5.42	31.46	45.12	
Min.		29.68	2.40	3.52	4.35	5.42	14.92	13.05	