

SAppendix 1: SEM-BSE images, and Mineral Geochemical Analyses from Electron Microprobe (EM) Wavelength Dispersive Spectrometer (WDS).

SAppendix 1-1: Representative SEM-BSE images and mineral analyses from EM-WDS of sample Newburn H-23 4353.5m.

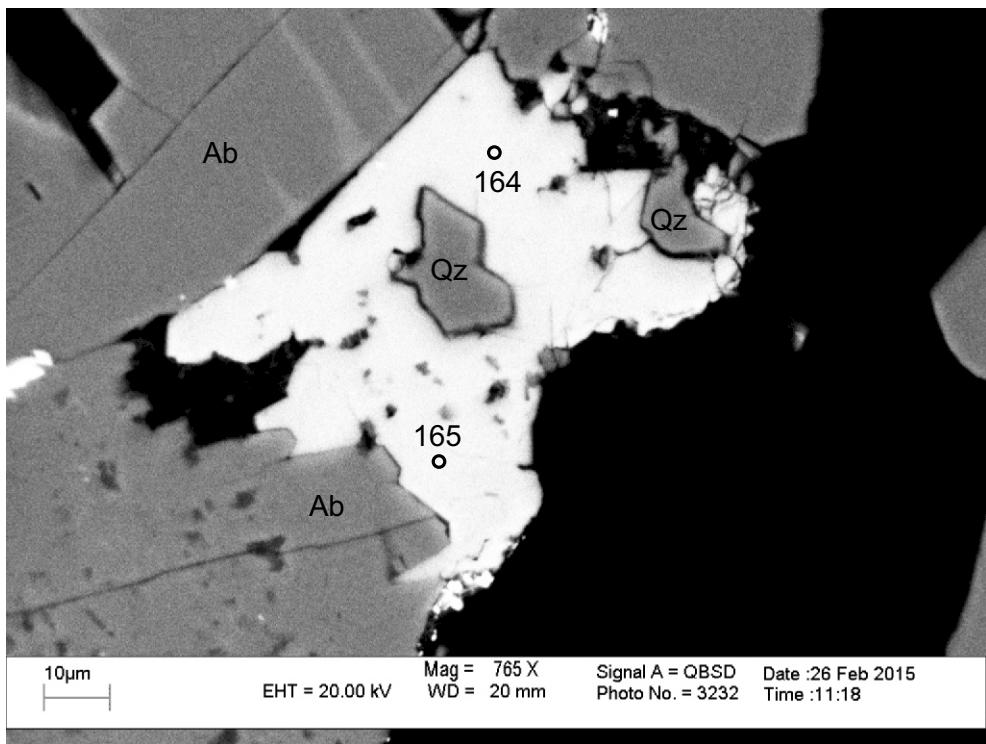


Figure 1-1.1: Sample Newburn H-23 4353.5m site 1 (probe). F-Fe-calcite (165) and Fe-calcite (164) engulf quartz.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
164	F-Fe-Cal	0.12		1.85	0.21	0.20	58.63	0.02	0.04	0.20		61.19
165	F-Fe-Cal	0.09	0.01	1.51	0.18	0.20	54.97	0.03	0.00	1.26	0.00	57.71

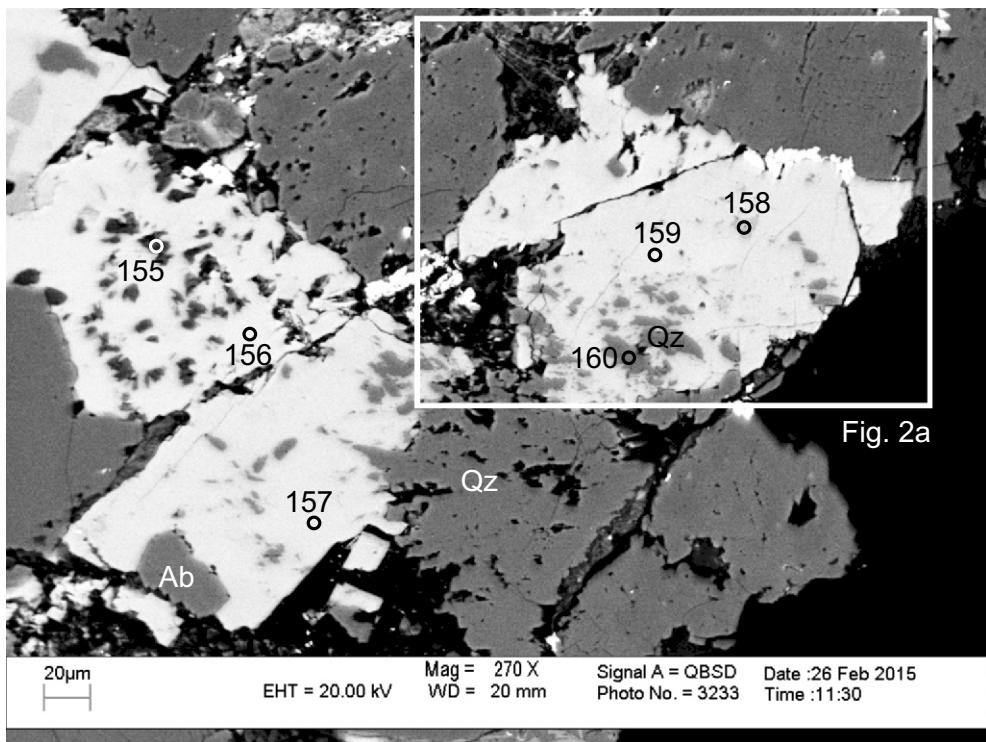


Figure 1-1.2: Sample Newburn H-23 4353.5m site 2 (probe). Fe-calcite (156,157,159) replaces albite (160), kaolinite (155), K-feldspar (158), and quartz.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
155	Kln+Cal	38.10	33.68	0.26	0.04	0.04	6.20	0.04	0.01		0.01	78.38
156	Fe-Cal	0.02	0.00	1.77	0.21	0.22	58.53	0.02	0.03		0.04	60.84
157	Fe-Cal	0.04	0.01	1.35	0.17	0.18	58.28	0.01				60.04
158	Kfs	67.07	18.87	0.07		0.01	0.47	0.62	15.88		0.02	103.00
159	Fe-Cal	0.02	0.02	1.76	0.20	0.29	59.64	0.02	0.00			61.94
160	Ab	70.84	20.94	0.01			0.32	11.88	0.06			104.05

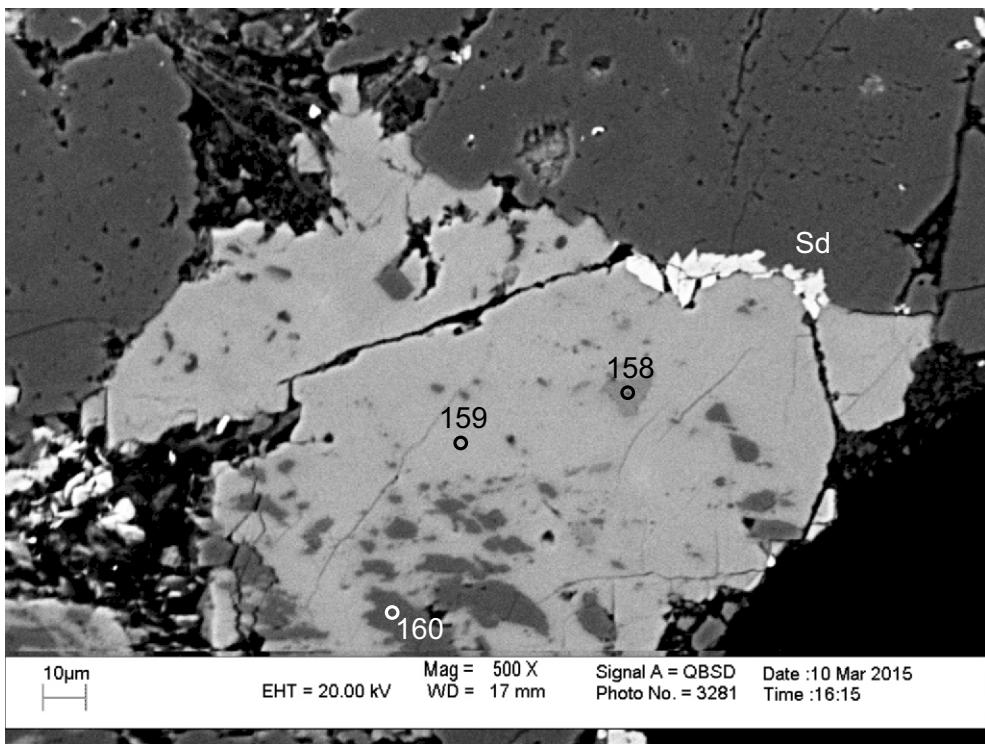


Figure 1-1.2a: Sample Newburn H-23 4353.5m site 2 (probe). Fe-Cal (159) replaces albite (160) and K-feldspar (158) and is replaced by siderite.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
158	Kfs	67.07	18.87	0.07		0.01	0.47	0.62	15.88		0.02	103.00
159	Fe-Cal	0.02	0.02	1.76	0.20	0.29	59.64	0.02	0.00			61.94
160	Ab	70.84	20.94	0.01			0.32	11.88	0.06			104.05

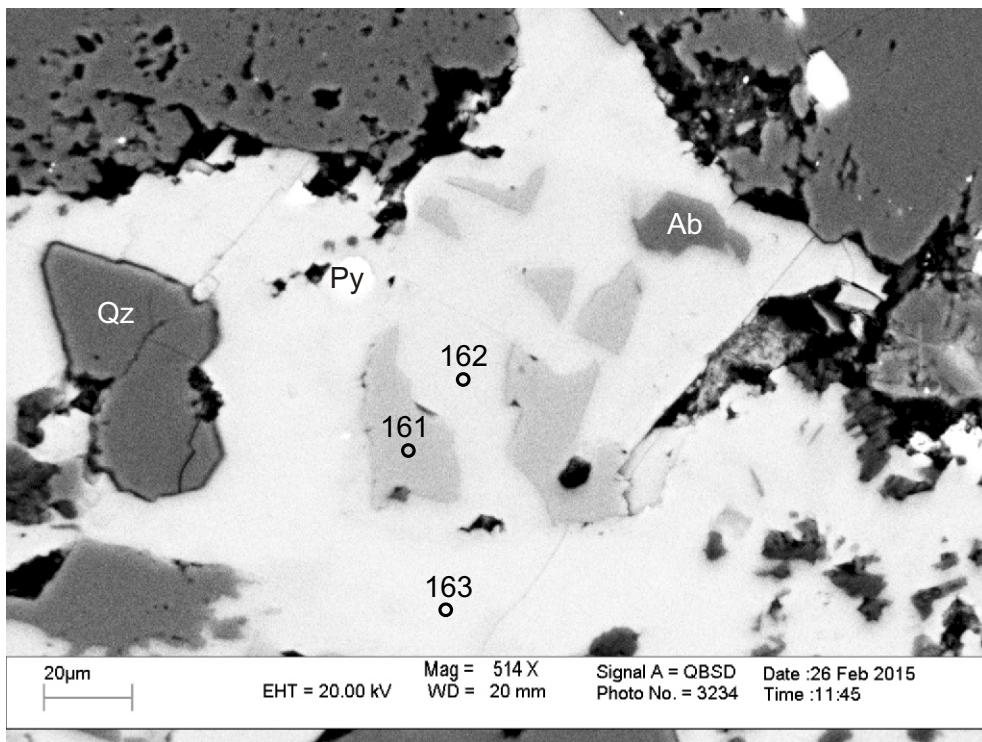


Figure 1-1.3: Sample Newburn H-23 4353.5m site 3 (probe). Fe-calcite (162,163) engulfs K-feldspar (161) and quartz. Pyrite (3) fills dissolution voids in Fe-calcite.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
161	Kfs	66.98	18.66	0.04	0.01	0.00	0.18	0.30	16.55		0.03	102.75
162	Fe-Cal	0.05	0.04	1.37	0.17	0.22	58.21	0.00	0.12			60.17
163	Fe-Cal	0.01	0.02	2.07	0.23	0.25	57.64	0.00	0.03		0.01	60.26

SAppendix 1-2: Representative SEM-BSE images and mineral analyses from EM-WDS of sample Newburn H-23 5213.5m.

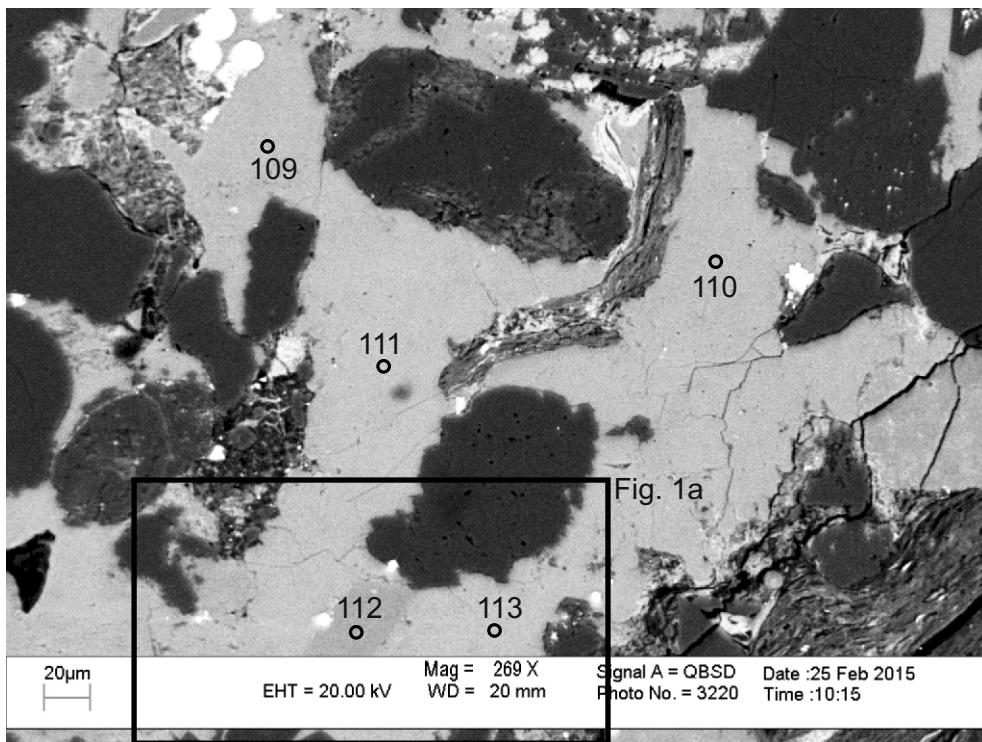


Figure 1-2.1: Sample Newburn H-23 5213.5m site 1 (probe). Fe-calcite (109-111,113) surrounds and replaces calcite (112).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
109	Fe-Cal	0.03	0.01	3.28	0.29	0.70	52.59	0.02	0.01		0.04	56.97
110	Fe-Cal	0.04	0.02	1.07	0.18	0.22	44.34	0.02	0.02			45.90
111	Fe-Cal	0.05		3.31	0.34	0.67	55.15	0.01	0.02		0.03	59.58
112	Cal	0.01	0.02	0.06	0.04	0.04	57.08	0.07			0.42	57.74
113	Fe-Cal	0.00	0.01	2.63	0.30	0.50	51.15	0.02	0.00		0.03	54.64

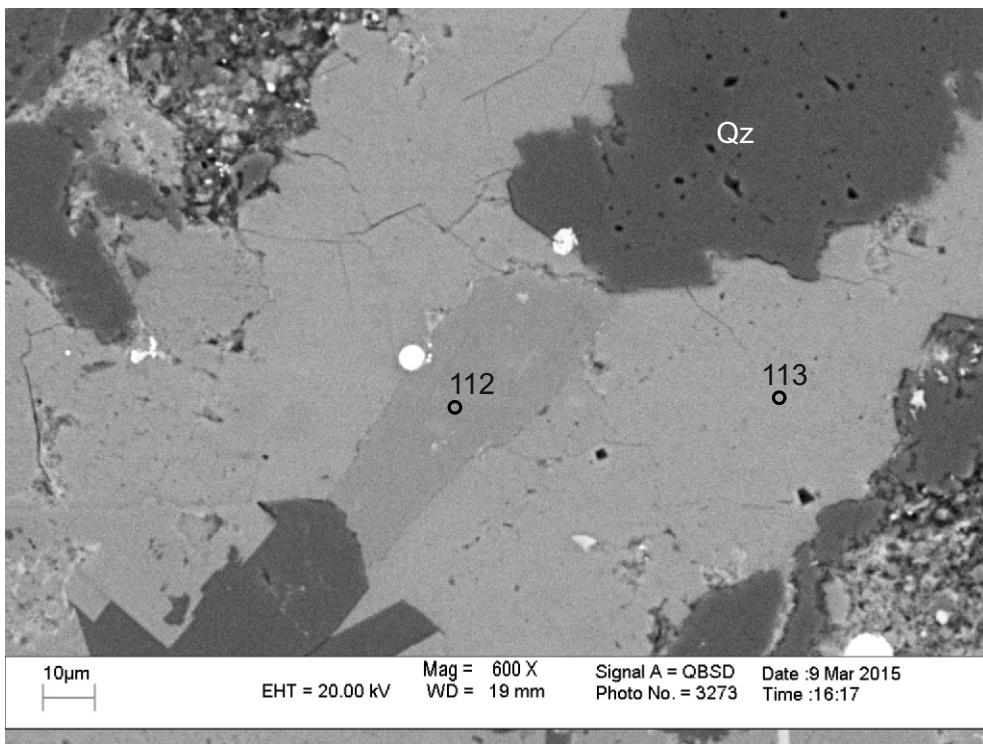


Figure 1-2.1a: Sample Newburn H-23 5213.5m site 1 (probe). Fe-calcite (113) replaces calcite (112). Fe-calcite (113) replaces quartz

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
112	Cal	0.01	0.02	0.06	0.04	0.04	57.08	0.07			0.42	57.74
113	Fe-Cal	0.00	0.01	2.63	0.30	0.50	51.15	0.02	0.00		0.03	54.64

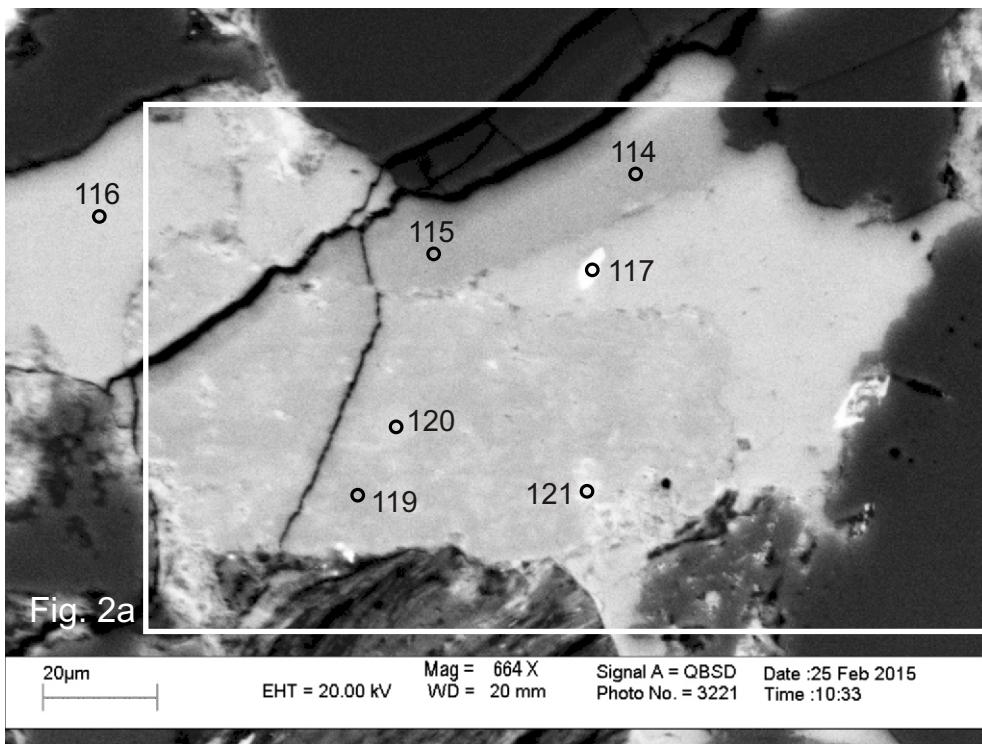


Figure 1-2.2: Sample Newburn H-23 5213.5m site 2 (probe). Fe-calcite (120) replaces Mg-calcite (115,119) and calcite (114). Siderite (117) fills a dissolution void in F-Fe-calcite (117). F-Fe-calcite (117) and Fe-calcite (116) surround and replace Mg-calcite.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
114	Cal	0.07	0.03	0.13	0.05	0.80	48.90	0.21	0.00		0.19	50.38
115	Mg-Cal	0.04	0.01	0.10	0.01	1.84	47.65	0.29			0.26	50.20
116	Fe-Cal	0.06	0.02	1.96	0.28	0.45	48.72		0.01		0.01	51.51
117	F-Fe-Cal+Sd	1.29	0.69	15.99	0.54	2.30	37.32	0.01	0.06	1.19	0.03	58.92
118	Cal	0.08	0.01	0.58	0.24	0.71	44.23	0.04	0.00		0.17	46.06
119	Mg-Cal			0.25		1.07	56.71		0.19		0.87	59.09
120	Fe-Cal	0.01		2.17	0.31	0.52	52.63				0.04	55.67
121	F-Cal+Chl	8.56	8.23	12.51	0.18	2.31	34.61	0.12	0.02	1.44	0.15	67.53

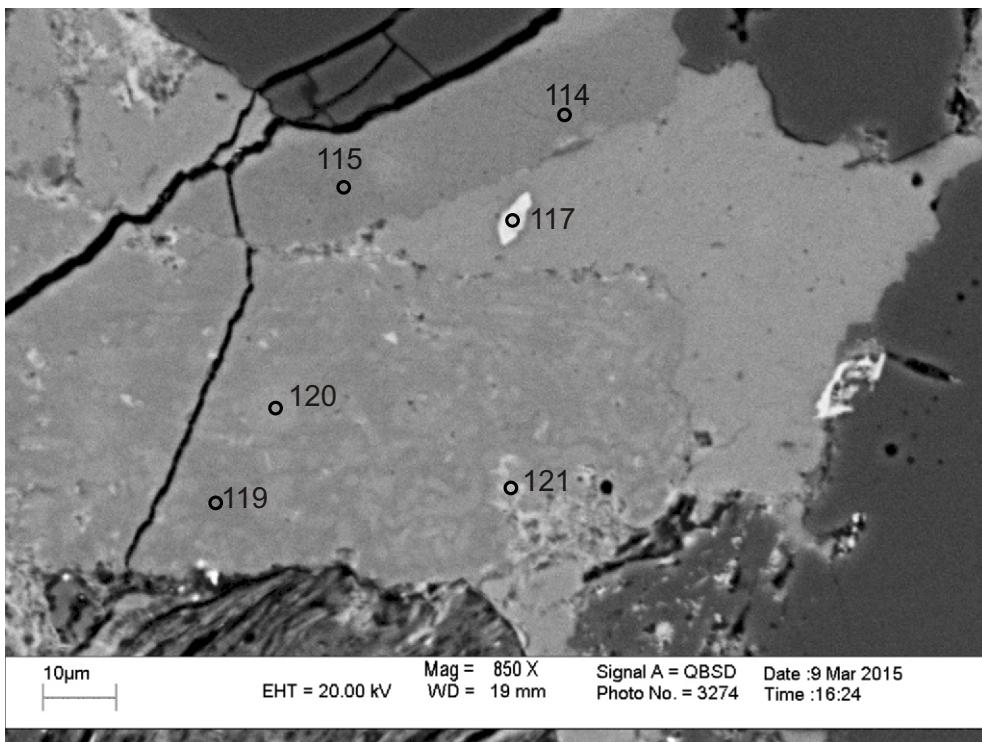


Figure 1-2.2a: Sample Newburn H-23 5213.5m site 2 (probe). Fe-calcite (120) replaces Mg-calcite (115,119) and calcite (114). Siderite (117) fills a dissolution void in F-Fe-calcite (117). F-Fe-calcite (117) appears to surround and replace Mg-calcite.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
114	Cal	0.07	0.03	0.13	0.05	0.80	48.90	0.21	0.00		0.19	50.38
115	Mg-Cal	0.04	0.01	0.10	0.01	1.84	47.65	0.29			0.26	50.20
117	Fe-F-Cal+Sd	1.29	0.69	15.99	0.54	2.30	37.32	0.01	0.06	1.19	0.03	58.92
119	Mg-Cal			0.25		1.07	56.71		0.19		0.87	59.09
120	Fe-Cal	0.01		2.17	0.31	0.52	52.63				0.04	55.67
121	F-Cal+Chl	8.56	8.23	12.51	0.18	2.31	34.61	0.12	0.02	1.44	0.15	67.53

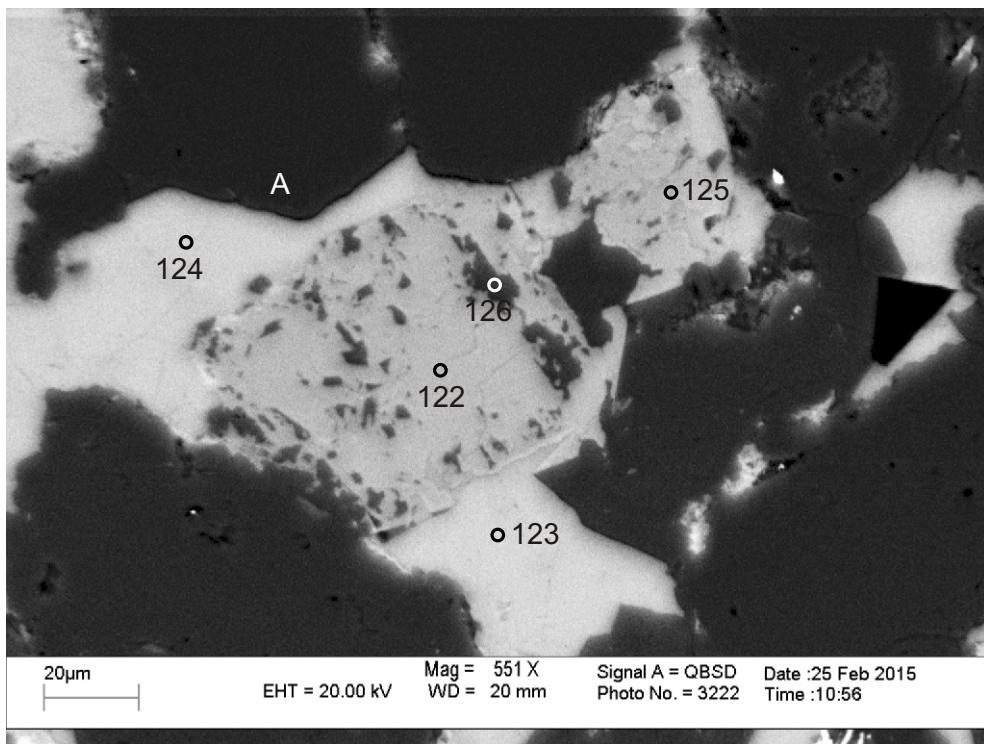


Figure 1-2.3: Sample Newburn H-23 5213.5m site 3 (probe). Ankerite (122,125) replaces and surrounds albite (126). Fe-calcite (123,124) surrounds and replaces ankerite (122,125) as well as quartz overgrowths (position A).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
122	Ank	0.05		12.16	0.58	9.23	27.79		0.01		0.02	49.83
123	Fe-Cal	0.06		2.66	0.32	0.62	51.01				0.01	54.67
124	Fe-Cal	0.06	0.01	3.20	0.35	0.73	54.43	0.00	0.01		0.01	58.80
125	Ank	0.12	0.06	9.29	0.44	6.82	35.53	0.01	0.01		0.02	52.29
126	Ab	69.57	20.41	0.28		0.04	0.25	12.06	0.00			102.61

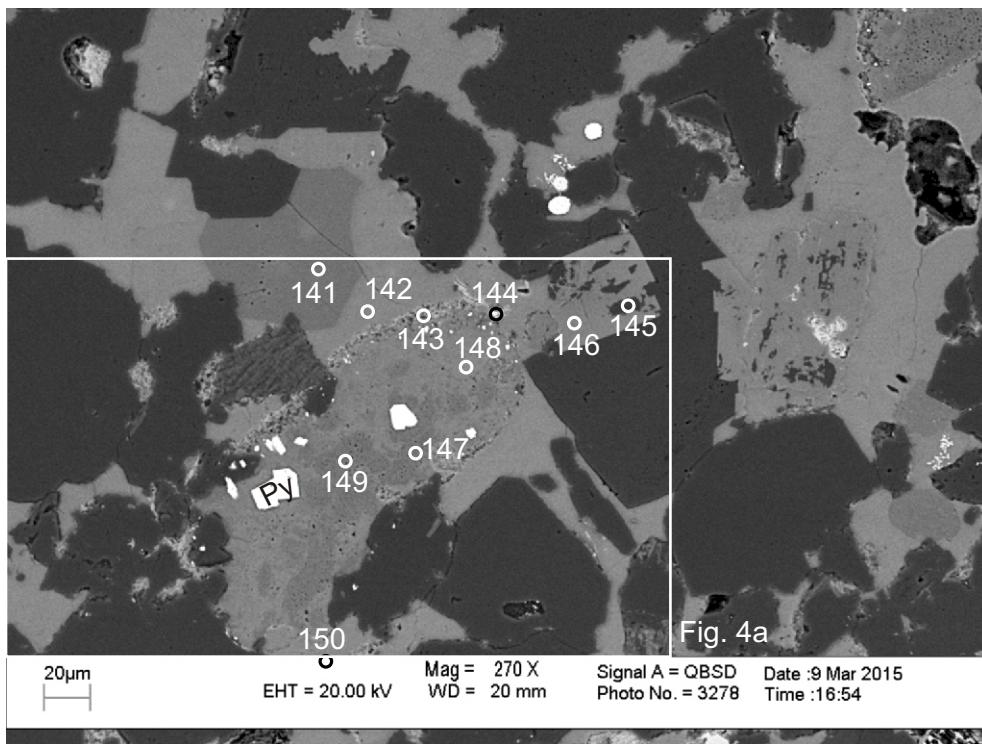


Figure 1-2.4: Sample Newburn H-23 5213.5m site 4 (probe). Mg-calcite (141,147,149) is replaced by Fe-calcite (142) and F-Fe-calcite (128). Pyrite (144) fills dissolution in F-Fe-calcite (148) and Mg-calcite and rims them. Ankerite (146) containing albite relics (145) is replaced by Fe-calcite.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
141	Mg-Cal		0.55	0.03	0.02	2.45	56.92	0.27	0.24		0.41	60.89
142	Fe-Cal	0.01	0.01	3.17	0.32	0.58	55.34		0.02		0.05	59.49
143	Chl	26.15	23.01	29.43	0.02	5.16	1.47	0.31	0.32	0.77	0.08	86.39
144	Chl+Py+Other	17.03	15.18	41.23	0.02	3.35	1.42	0.71	0.09	0.80	44.51	124.02
145	Ab	70.08	20.62	0.22	0.01	0.01	0.23	11.89	0.01		0.01	103.07
146	Ank	0.06		15.96	0.59	9.62	27.61	0.04				53.87
147	Mg-Cal	0.04	0.02	0.06	0.01	3.11	49.68	0.09	0.01		0.76	53.78
148	F-Fe-Cal	0.04	0.02	2.81	0.31	0.47	55.84	0.01	0.00	0.23	0.05	59.67
149	Mg-Cal	0.01	0.02	0.24	0.01	2.50	50.29	0.19	0.08		0.64	53.96
150	Fe-Cal	0.03	0.03	2.54	0.31	0.59	51.11	0.02	0.01		0.03	54.67

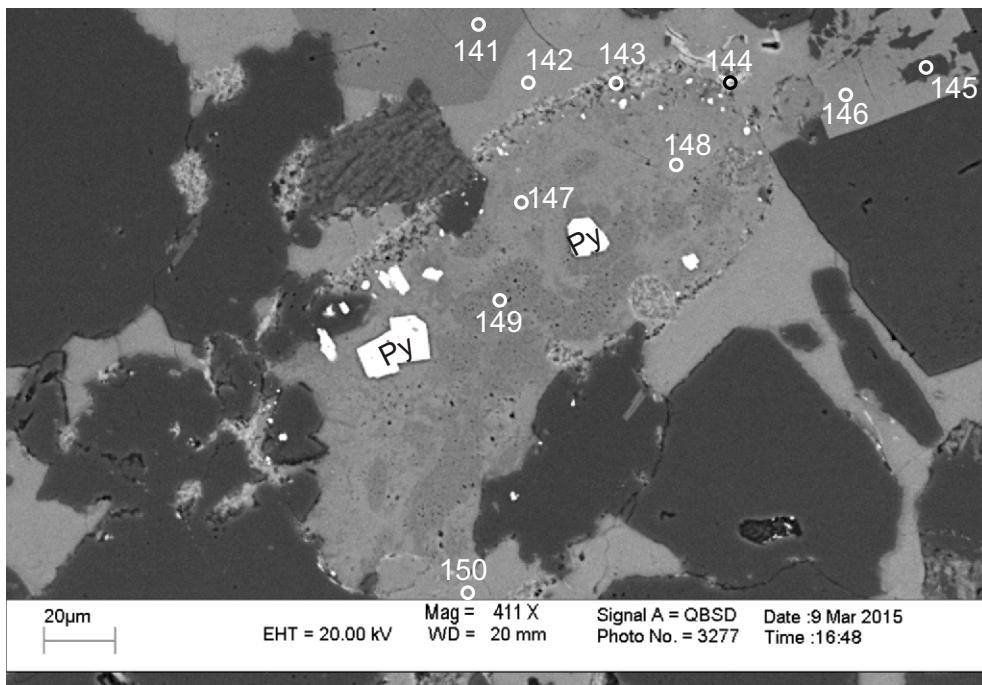


Figure 1-2.4a: Sample Newburn H-23 5213.5m site 4 (probe). Mg-calcite (141,147,149) is replaced by Fe-calcite (142) and F-Fe-calcite (128). Pyrite (144) fills dissolution in F-Fe-calcite (148) and Mg-calcite and rims them. Ankerite (146) containing albite relics (145) is replaced by Fe-calcite.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
141	Mg-Cal		0.55	0.03	0.02	2.45	56.92	0.27	0.24		0.41	60.89
142	Fe-Cal	0.01	0.01	3.17	0.32	0.58	55.34		0.02		0.05	59.49
143	Chl	26.15	23.01	29.43	0.02	5.16	1.47	0.31	0.32	0.77	0.08	86.39
144	Chl+Py+Other	17.03	15.18	41.23	0.02	3.35	1.42	0.71	0.09	0.80	44.51	124.02
145	Ab	70.08	20.62	0.22	0.01	0.01	0.23	11.89	0.01		0.01	103.07
146	Ank	0.06		15.96	0.59	9.62	27.61	0.04				53.87
147	Mg-Cal	0.04	0.02	0.06	0.01	3.11	49.68	0.09	0.01		0.76	53.78
148	Fe-F-Cal	0.04	0.02	2.81	0.31	0.47	55.84	0.01	0.00	0.23	0.05	59.67
149	Mg-Cal	0.01	0.02	0.24	0.01	2.50	50.29	0.19	0.08		0.64	53.96
150	Fe-Cal	0.03	0.03	2.54	0.31	0.59	51.11	0.02	0.01		0.03	54.67

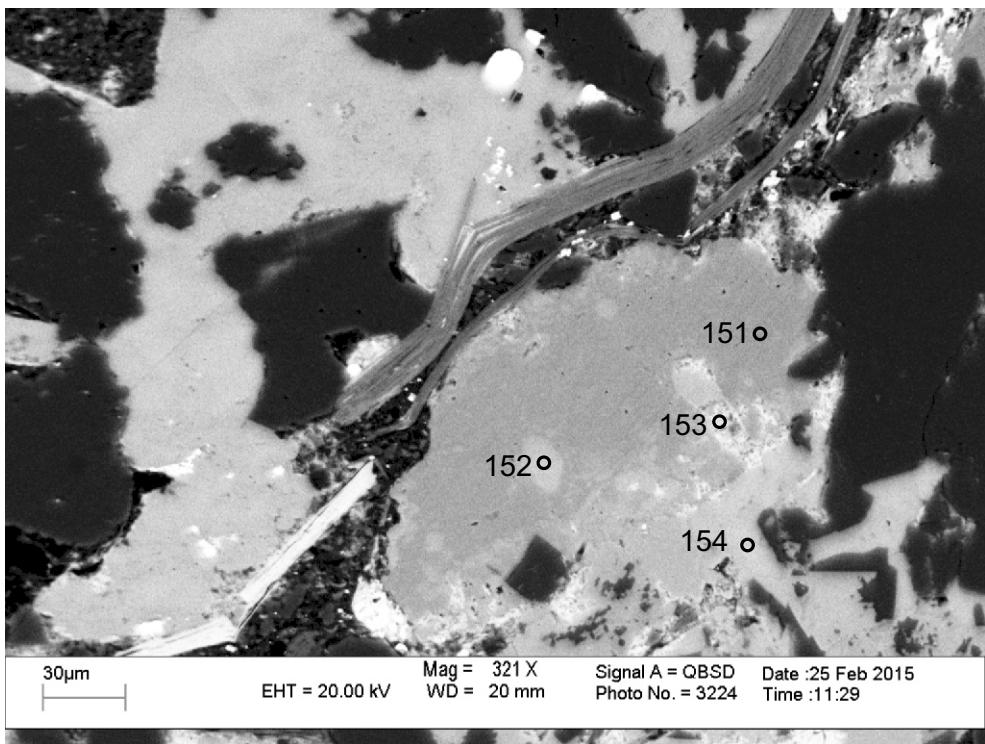


Figure 1-2.5: Sample Newburn H-23 5213.5m site 5 (probe). Calcite (151) is replaced by Fe-calcite (152,154) and both are cut by chlorite (153).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
151	Cal	0.05		0.07	0.01	0.81	55.55	0.29	0.02		0.34	57.13
152	Fe-Cal	0.02	0.01	1.99	0.26	0.42	50.46				0.04	53.20
153	Chl+Other	27.87	22.89	30.19	0.02	4.80	1.16	0.26	0.38	1.64	0.06	88.57
154	Fe-Cal	0.06	0.00	3.07	0.30	0.49	55.67	0.03		0.01	0.02	59.64

SAppendix 1-3: Representative SEM-BSE images and mineral analyses from EM-WDS of sample Newburn H-23 5403.6m.

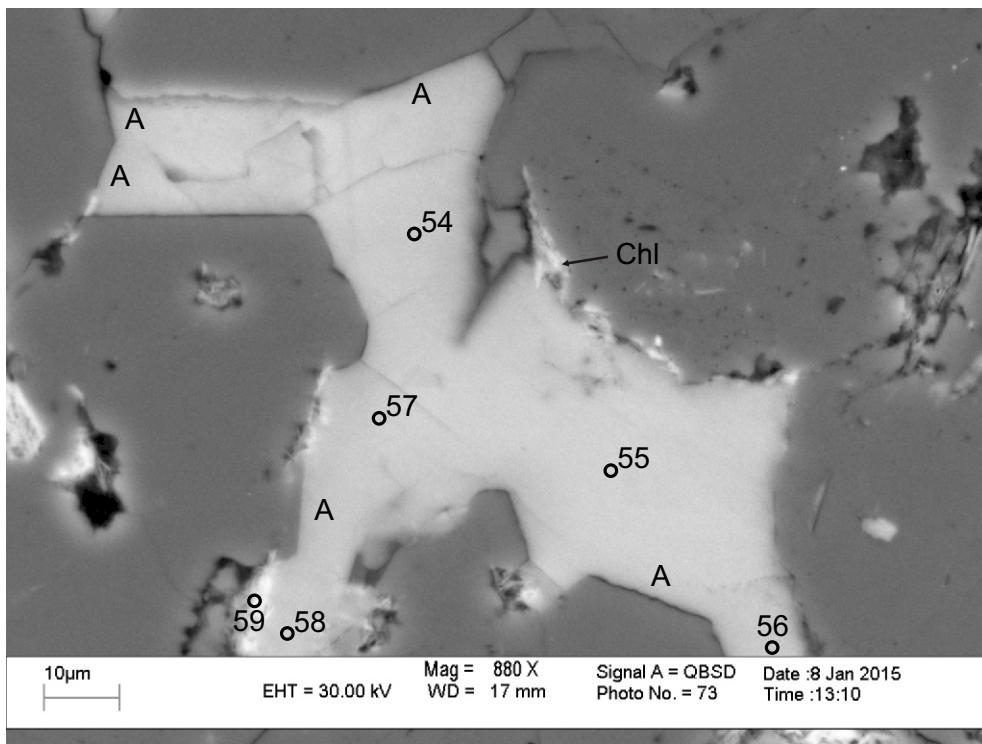


Figure 1-3.1: Sample Newburn H-23 5403.6m site 2 (probe). F-calcite (58,59), and F-Fe-calcite (54-57) are cut by chlorite and bounded by quartz overgrowths (positions A).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
54	F-Fe-Cal	0.17		2.78	0.77	0.41	55.89	0.03	0.01	0.77	0.02	60.52
55	F-Fe-Cal	0.11	0.00	2.86	0.77	0.39	56.16	0.02		0.80	0.02	60.78
56	F-Fe-Cal	0.23	0.02	2.96	0.75	0.37	53.57	0.03	0.02	1.24	0.01	58.69
57	F-Fe-Cal	0.16	0.01	2.35	0.70	0.43	56.28			1.82	0.02	61.01
58	Qz+F-Cal	35.43	0.13	1.25	0.42	0.26	32.77	0.12		2.31	0.06	71.78
59	Chl+F-Cal	12.00	10.92	15.73	0.33	2.14	29.92	0.22	0.08	3.28	0.00	73.26

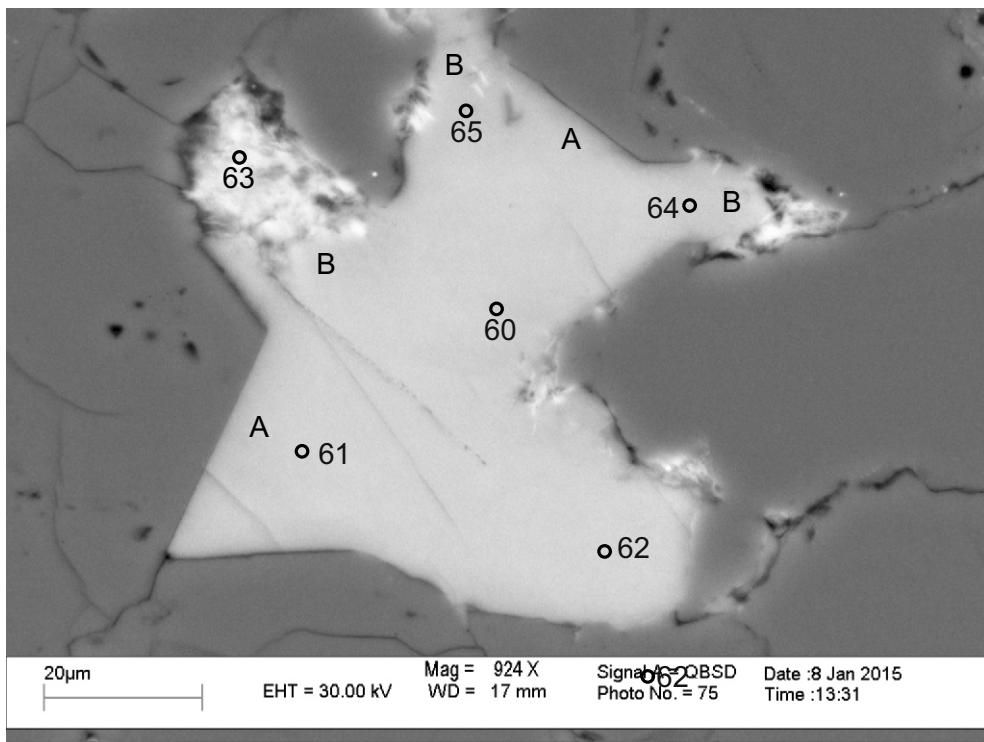


Figure 1-3.2: Sample Newburn H-23 5403.6m site 3 (probe). F-calcite (60) and F-Fe-cal (61,62,64,65) are in contact with quartz overgrowths (positions A). Fibrous chlorite cuts F-Fe-calcite (positions B).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
60	F-Cal	0.06	0.01	0.85	0.33	0.09	54.92	0.01	0.01	2.45		57.69
61	F-Fe-Cal	0.09		2.58	0.78	0.49	56.16	0.03	0.01	1.21		60.84
62	F-Fe-Cal	0.12	0.02	2.92	0.76	0.42	55.67			0.48	0.01	60.20
63	Chl	28.59	24.54	30.14	0.02	4.10	0.69	0.17	0.73	0.43	0.01	89.23
64	F-Fe-Cal	0.19	0.02	2.87	0.78	0.45	54.80			1.55	0.00	60.02
65	F-Fe-Cal	0.08	0.01	1.06	0.32	0.10	56.24	0.02		1.47	0.01	58.69

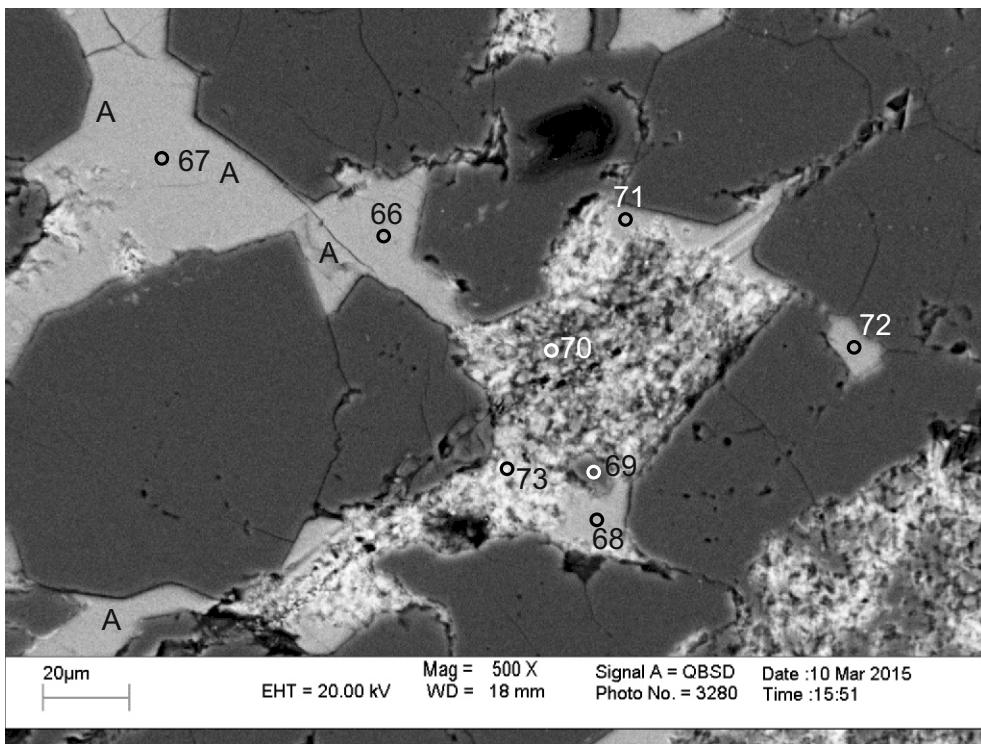


Figure 1-3.3: Sample Newburn H-23 5403.6m site 4 (probe). F-Fe-calcite (66-68,72) is bounded by quartz overgrowths (positions A). Chlorite (69-71,73) cuts F-Fe-cal.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
66	F-Fe-Cal	0.12	0.02	2.95	0.81	0.39	54.21	0.01		1.32		59.27
67	F-Fe-Cal	0.03	0.01	3.08	0.88	0.50	56.80	0.01	0.01	1.39	0.00	62.13
68	F-Fe-Cal	0.21	0.05	2.70	0.70	0.41	55.53	0.01		1.23		60.33
69	Chl+Other	37.93	15.19	24.99	0.02	2.70	3.23	0.20	0.30	1.82	0.28	85.90
70	Qz+Chl+Other	42.89	23.09	25.08	0.03	3.66	0.36	0.27	1.89	1.33	0.05	98.09
71	Chl+F-Cal	16.06	14.11	22.74	0.13	2.61	18.57	0.20	0.09	2.30	0.06	75.91
72	F-Fe-Cal	0.32		2.32	0.53	0.31	55.07	0.02		1.95		59.69
73	Chl+Other	24.66	20.09	31.80	0.02	3.96	0.45	0.39	0.24	3.04	0.09	83.46

SAppendix 1-4: Representative SEM-BSE images and mineral analyses from EM-WDS of sample Newburn H-23 5407m.

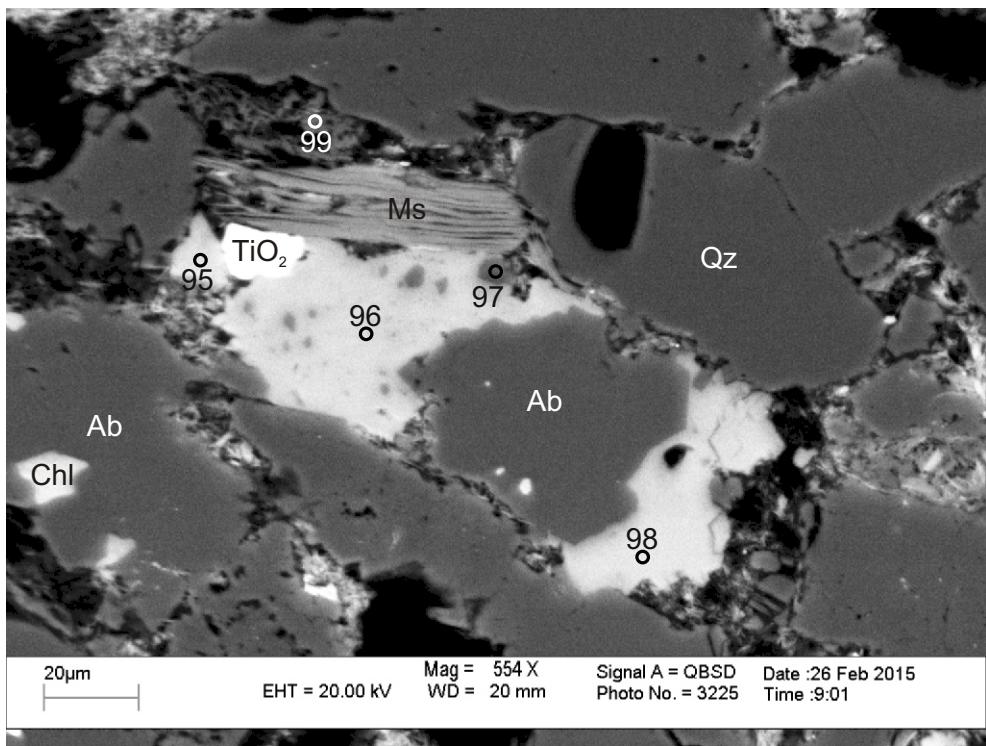


Figure 1-4.1: Sample Newburn H-23 5407m site 1 (probe). F-Fe-calcite (95,93,98) replaces and surrounds albite. Titania replaces F-Fe-calcite (95,96).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
95	F-Fe-Cal	0.16	0.02	2.12	0.39	0.34	57.21	0.02	0.03	1.01	0.01	60.89
96	F-Fe-Cal+Other	1.35	0.50	2.11	0.76	0.45	53.81	0.03	0.33	0.84	0.04	59.86
97	Ab	68.10	19.70	0.15	0.04	0.03	2.15	11.42	0.04	0.17	0.02	101.73
98	F-Fe-Cal	0.21	0.09	2.10	0.45	0.42	56.65	0.02	0.00	2.40		61.32
99	Ab	60.01	18.94	1.23	0.00	0.21	0.20	9.14	0.45	0.03	0.17	90.36

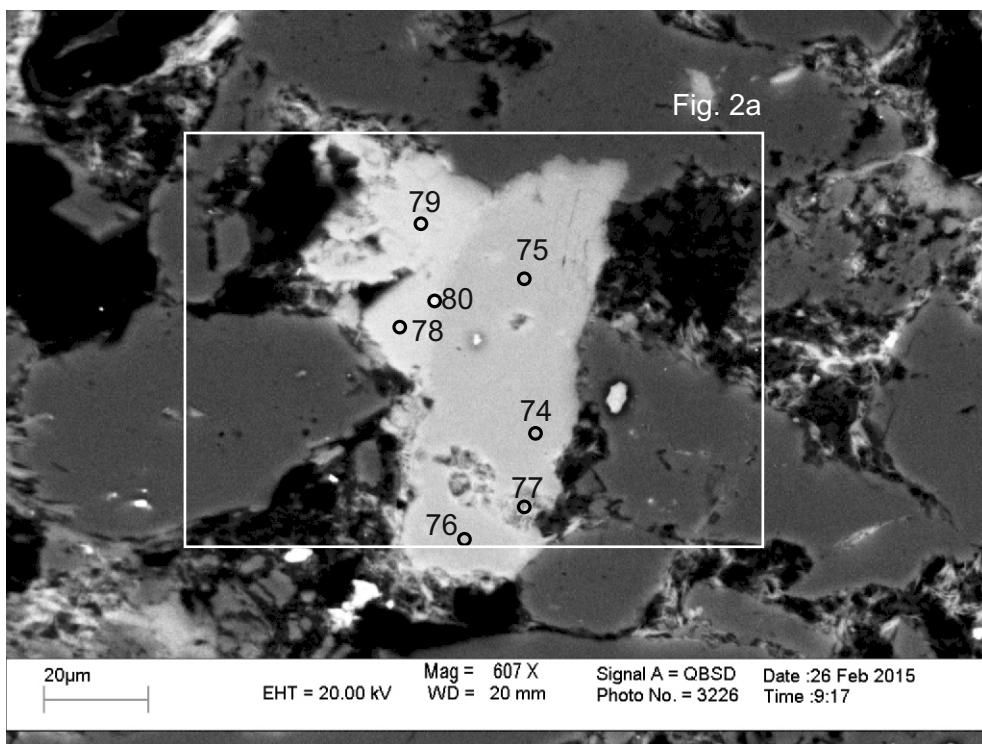


Figure 1-4.2: Sample Newburn H-23 5407m site 2 (probe). Calcite (74,76) and F-calcite (75) have dissolution voids filled by fibrous chlorite (77) and are replaced by F-Fe-calcite (78-80).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
74	Cal	0.03		0.16	0.04	0.45	61.19	0.14	0.04		0.94	62.98
75	F-Cal	0.03		0.11		0.48	55.23	0.20	0.03	0.38	1.02	57.32
76	Cal	0.03	0.01	0.26	0.01	0.51	54.00	0.16			0.94	55.92
77	Chl+Other	25.19	21.72	28.17	0.02	3.62	1.47	0.42	0.53	1.13	0.15	81.93
78	F-Fe-Cal	0.06	0.01	2.68	0.70	0.52	56.29	0.02	0.02	0.41	0.03	60.57
79	F-Fe-Cal	0.07	0.03	1.99	0.53	0.47	57.22	0.02	0.01	1.04	0.05	60.97
80	F-Fe-Cal+Other	1.06	0.56	3.16	0.24	0.60	51.60	0.16	0.00	2.14	0.64	59.24

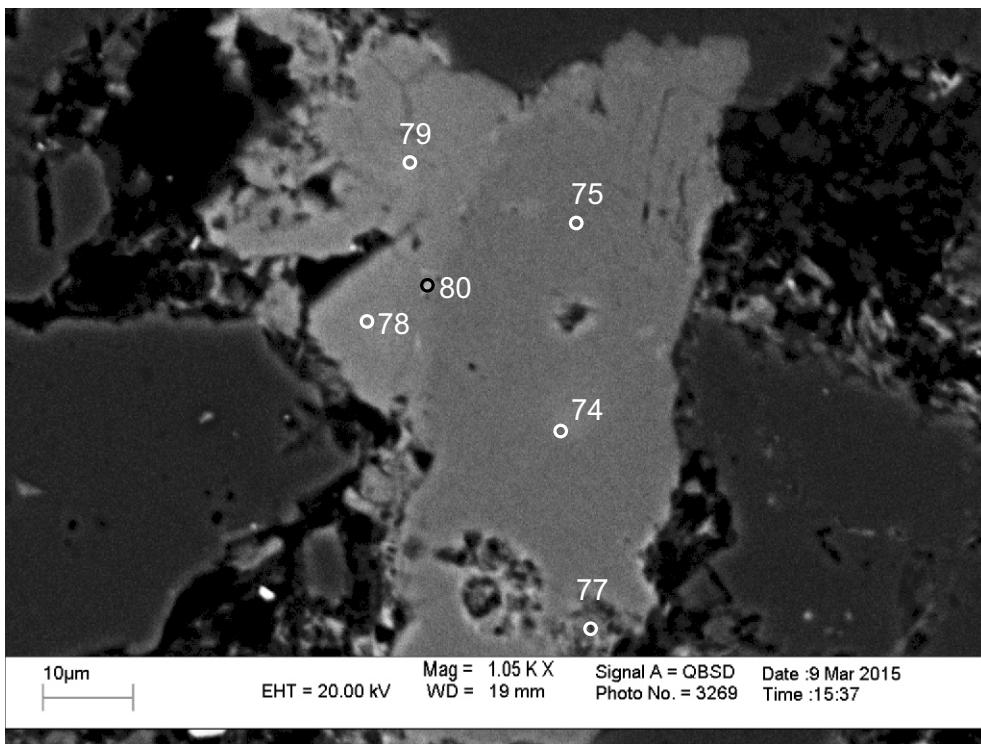


Figure 1-4.2a: Sample Newburn H-23 5407m site 2 (probe). Calcite (74,76) and F-calcite (75) have dissolution voids filled by fibrous chlorite (77) and are replaced by F-Fe-calcite (78-80).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
74	Cal	0.03		0.16	0.04	0.45	61.19	0.14	0.04		0.94	62.98
75	F-Cal	0.03		0.11		0.48	55.23	0.20	0.03	0.38	1.02	57.32
76	Cal	0.03	0.01	0.26	0.01	0.51	54.00	0.16			0.94	55.92
77	Chl+Other	25.19	21.72	28.17	0.02	3.62	1.47	0.42	0.53	1.13	0.15	81.93
78	F-Fe-Cal	0.06	0.01	2.68	0.70	0.52	56.29	0.02	0.02	0.41	0.03	60.57
79	F-Fe-Cal	0.07	0.03	1.99	0.53	0.47	57.22	0.02	0.01	1.04	0.05	60.97
80	F-Fe-Cal+Other	1.06	0.56	3.16	0.24	0.60	51.60	0.16	0.00	2.14	0.64	59.24

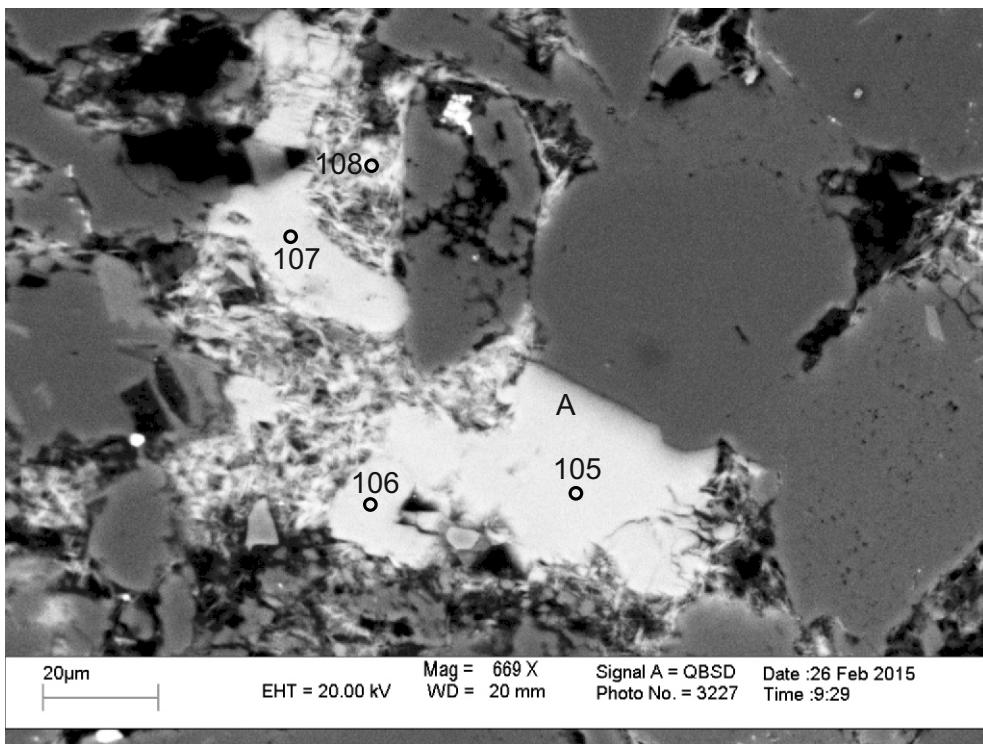


Figure 1-4.3: Sample Newburn H-23 5407m site 3 (probe). F-Fe-calcite (105-107) is cut by chlorite (108). F-Fe-calcite is covered by a quartz overgrowth (position A).

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
105	F-Fe-Cal	0.06	0.03	2.05	0.48	0.36	56.78	0.01	0.01	1.07		60.40
106	F-Fe-Cal	0.10	0.02	1.60	0.36	0.25	57.80	0.02	0.02	1.40	0.02	61.00
107	F-Fe-Cal	0.09		2.92	0.88	0.43	55.29	0.01	0.03	0.54	0.00	59.97
108	Chl	27.08	23.93	25.03	0.05	3.43	0.62	0.15	0.46	0.53	0.09	81.14

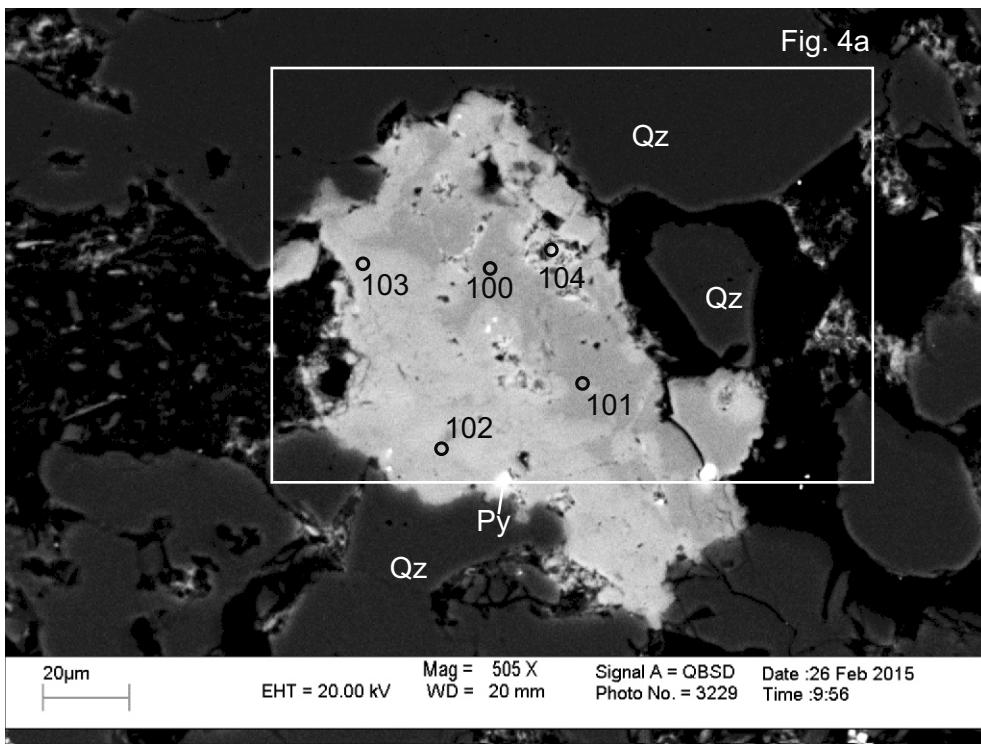


Figure 1-4.4: Sample Newburn H-23 5407m site 5 (probe). Mg-calcite (100,101) is replaced by F-Fe-calcite (102,103) and chlorite (104) fills dissolution voids in both.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
100	Mg-Cal	0.03	0.00	0.12	0.00	1.18	49.52	0.13			0.25	51.25
101	Mg-Cal	0.03		0.08		1.28	53.75	0.18	0.01		0.28	55.60
102	F-Fe-Cal	0.03	0.01	1.79	0.54	0.34	55.40	0.02		0.36	0.07	58.39
103	F-Fe-Cal	0.02	0.02	1.51	0.51	0.31	56.32	0.00		0.63	0.03	59.07
104	F-Cal+Chl	6.77	6.42	9.28	0.33	1.42	34.84	0.03	0.07	5.26	0.05	62.26

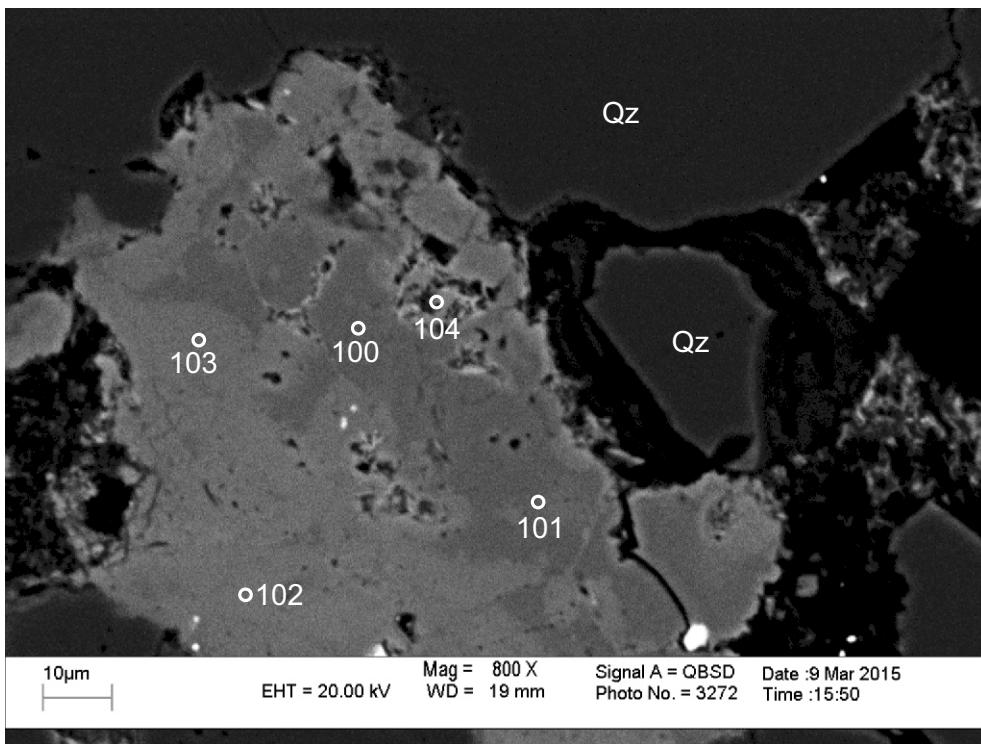


Figure 1-4.4a: Sample Newburn H-23 5407m site 5 (probe). Mg-calcite (100,101) is replaced by F-Fe-calcite (102,103) and chlorite (104) fills dissolution voids in both.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
100	Mg-Cal	0.03	0.00	0.12	0.00	1.18	49.52	0.13			0.25	51.25
101	Mg-Cal	0.03		0.08		1.28	53.75	0.18	0.01		0.28	55.60
102	F-Fe-Cal	0.03	0.01	1.79	0.54	0.34	55.40	0.02		0.36	0.07	58.39
103	F-Fe-Cal	0.02	0.02	1.51	0.51	0.31	56.32	0.00		0.63	0.03	59.07
104	F-Cal+Chl	6.77	6.42	9.28	0.33	1.42	34.84	0.03	0.07	5.26	0.05	62.26

SAppendix 1-5: Representative SEM-BSE images and mineral analyses from EM-WDS of sample Newburn H-23 5408.5m.

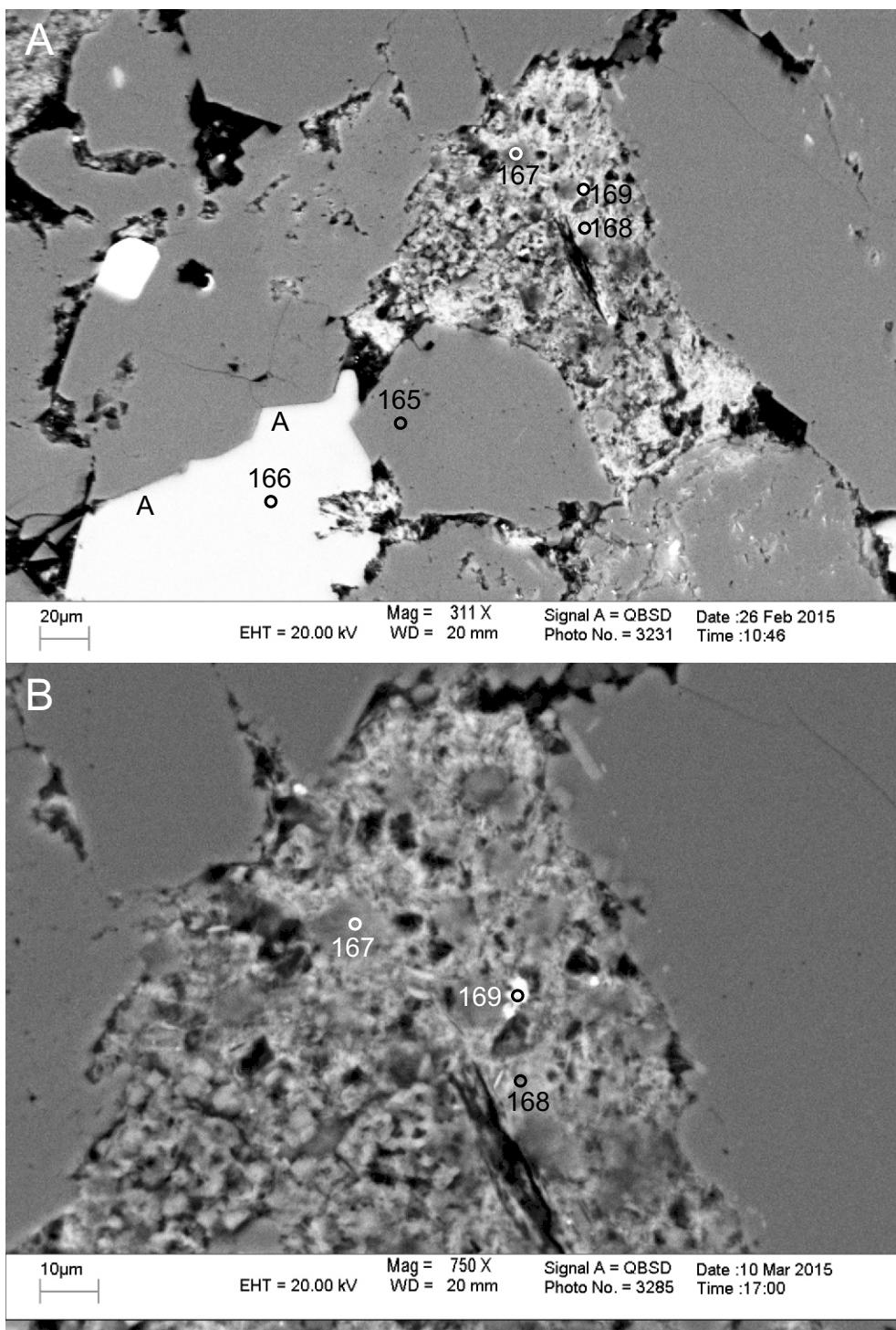


Figure 1-5.1: Sample Newburn H-23 5408.5 site 2 (probe). **A:** Fe-calcite (166) is bounded by quartz overgrowths (positions A). **B:** Possible clast composed of chlorite (168,169), titania (169), and possibly fluorite.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
166	Fe-Cal	0.04		2.16	0.48	0.35	57.37	0.02				60.42
167	F-Cal+Chl	7.21	6.00	6.99		1.10	22.43	1.03	0.23	5.86	0.29	48.67
168	Chl+Other	23.23	19.48	23.83	0.02	2.87	4.36	0.29	0.97	4.50	0.08	77.74
169	TiO ₂ +Chl+Other	4.60	1.70	2.09		0.27	6.85	0.29	0.11	6.90	0.16	20.07

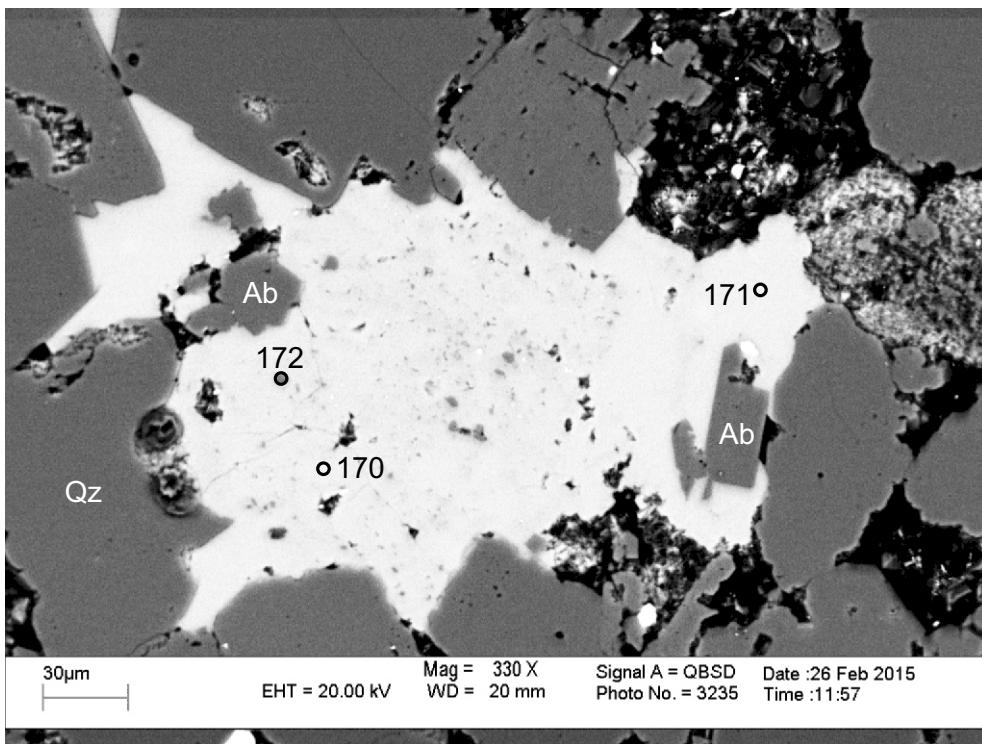


Figure 1-5.2: Sample Newburn H-23 5408.5m site 3 (probe). Fe-calcite (170,171) replaces albite and quartz.

No.	Mineral	SiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	F	SO ₃	Total
170	Fe-Cal	0.17	0.08	2.39	0.80	0.53	57.27	0.02				61.25
171	Fe-Cal	0.05	0.04	2.04	0.48	0.37	57.56	0.01		0.01		60.55
172	Qz+Cal	89.33	0.38	0.27	0.05	0.04	10.81	0.03	0.18		0.03	101.10