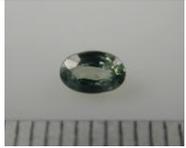
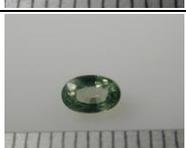
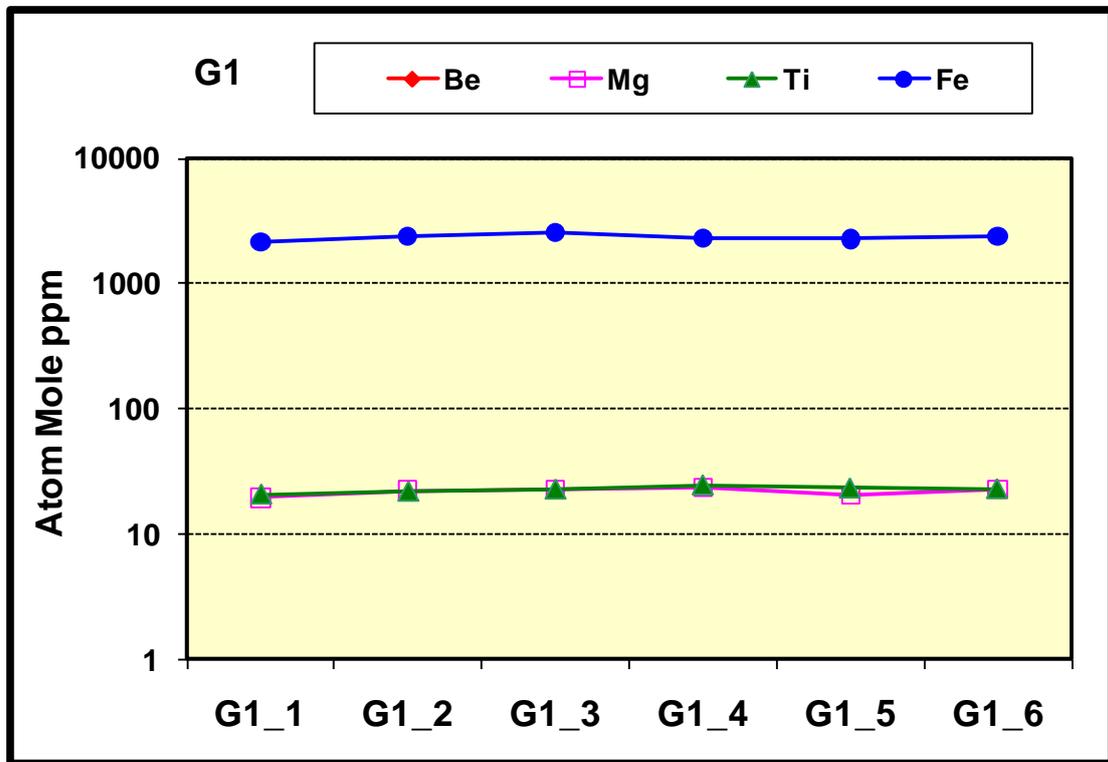
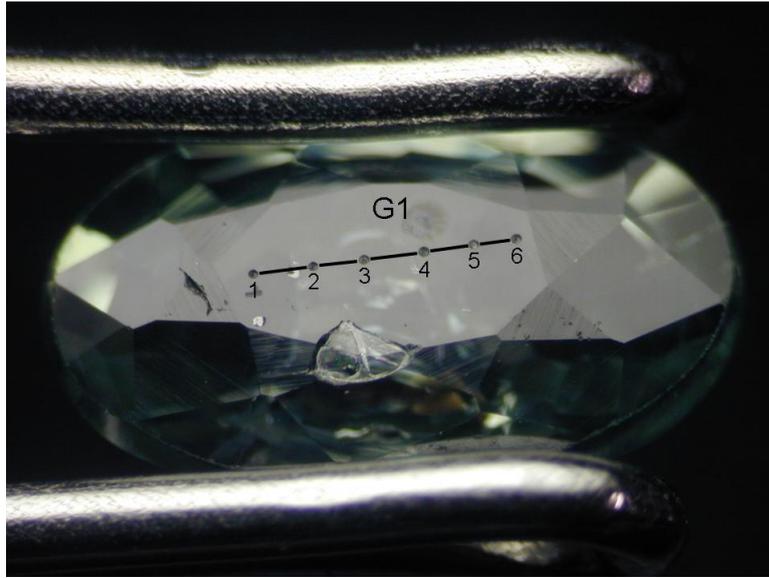


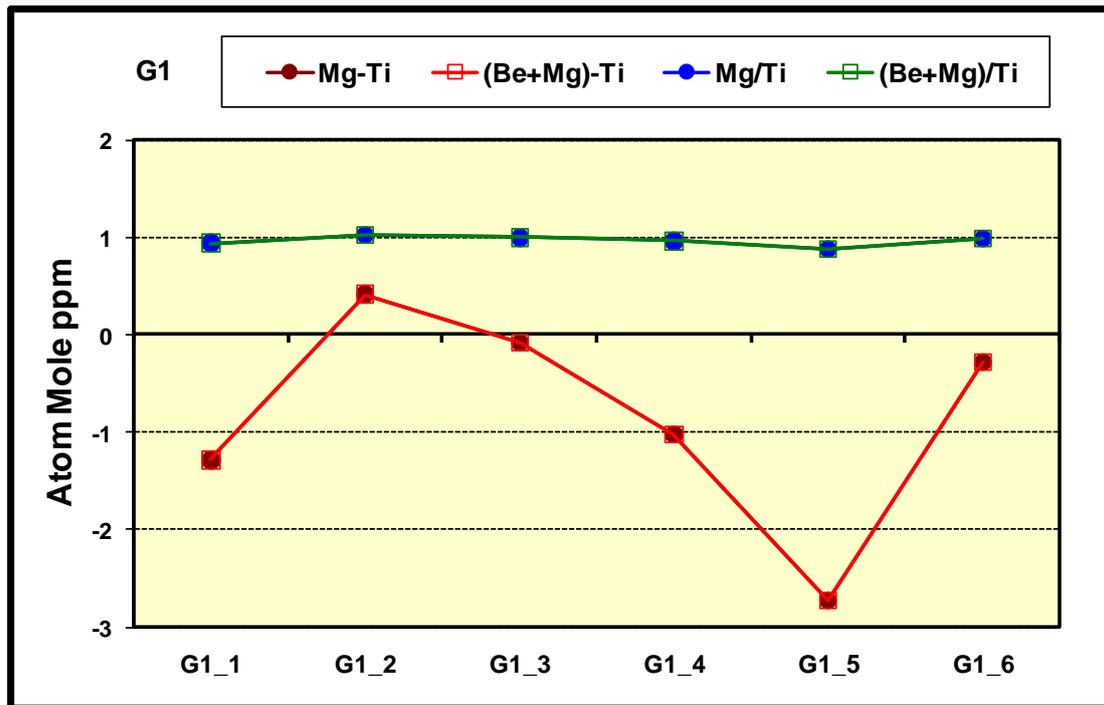
ภาคผนวก ข.: ผลวิเคราะห์ธาตุร่องรอยชุดตัวอย่าง _G

(RI = refractive indices, SG = specific gravity, SWUV = short wave ultraviolet,
LWUV = long wave ultraviolet)

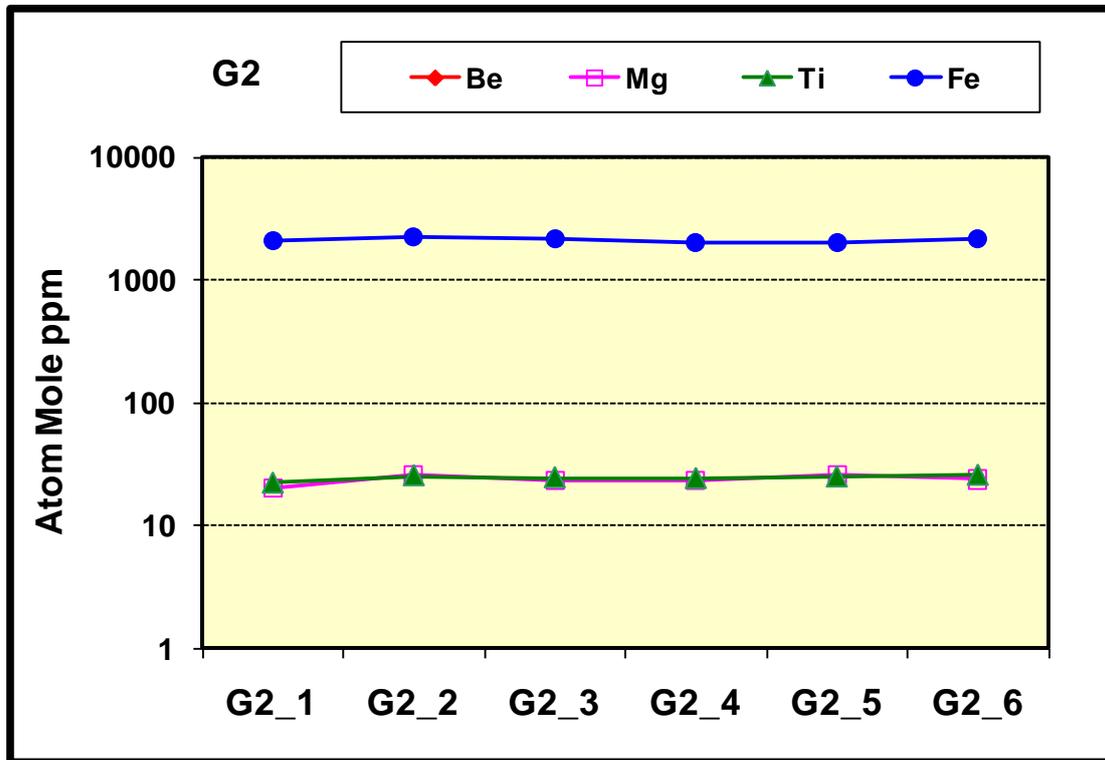
Sample no.	Weight (ct)	RI		Color	SG	Luminescence		Picture
		Min	Max			SW UV	LW UV	
1.G1	0.266	1.768	1.775	Green	3.912	Inert	Inert	
2.G2	0.310	1.765	1.772	Green	4.000	Inert	Inert	
3.G3	0.275	1.768	1.772	Green	4.259	Inert	Inert	
4.G4	0.250	1.768	1.772	Green	4.261	Inert	Inert	
5.G5	0.317	1.770	1.772	Green	4.025	Inert	Inert	
6.G6	0.274	1.768	1.772	Green	4.099	Inert	Inert	
7.G7	0.291	1.768	1.772	Green	3.972	Inert	Inert	
8.G8	0.258	1.768	1.772	Green	4.025	Inert	Inert	
9.G9	0.261	1.770	1.778	Green	3.813	Inert	inert	

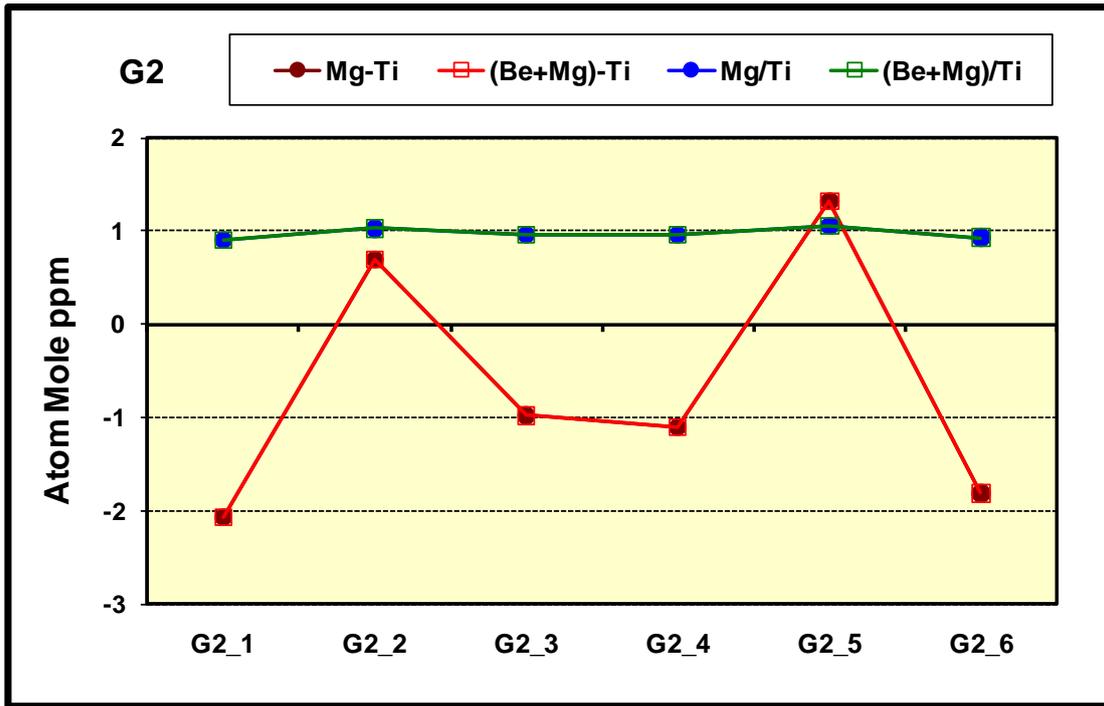
Sample no.	Weight (ct)	RI		Color	SG	Luminescence		Picture
		Min	Max			SW UV	LW UV	
10.G10	0.264	1.765	1.773	Green	4.128	Inert	Inert	
11.G11	0.324	1.770	1.773	Green	4.073	Inert	Inert	
12.G12	0.274	1.765	1.773	Green	4.106	Inert	Inert	
13.G13	0.330	1.765	1.773	Green	4.072	Inert	Inert	
14.G14	0.346	1.765	1.773	Green	3.980	Inert	Inert	
15.G15	0.424	1.765	1.770	Green	4.087	Inert	Inert	
16.G16	0.368	1.770	1.773	Green	4.079	Inert	Inert	



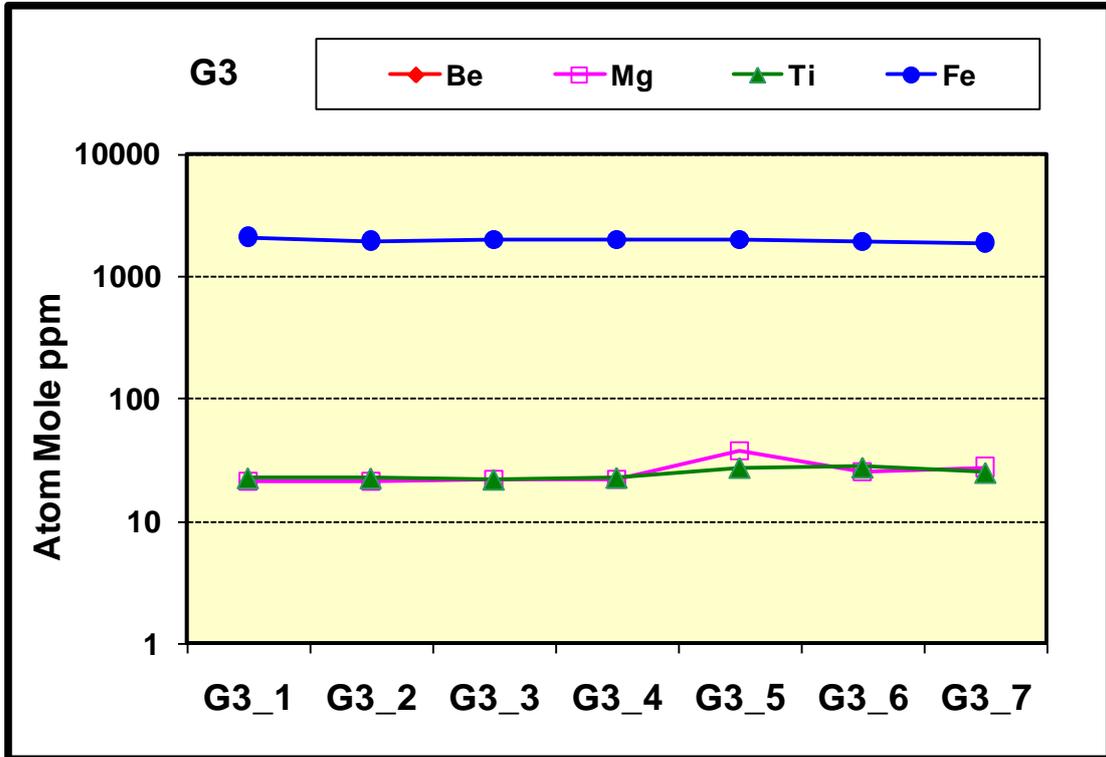
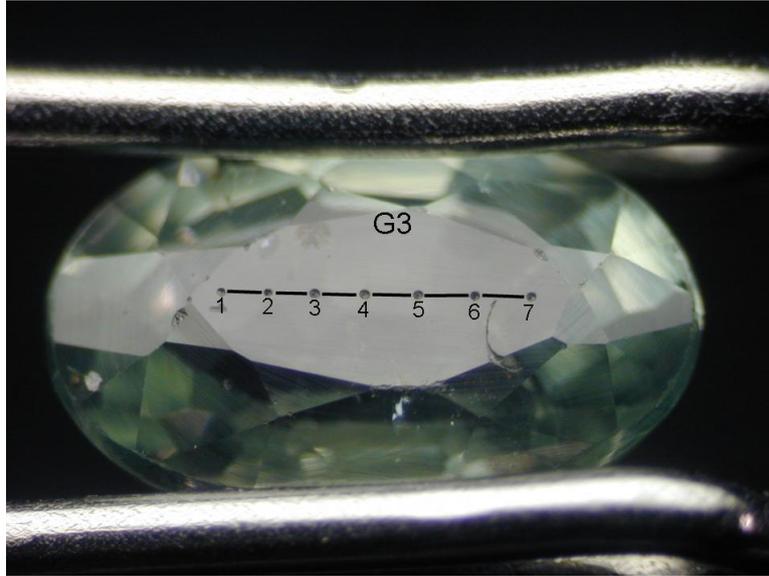


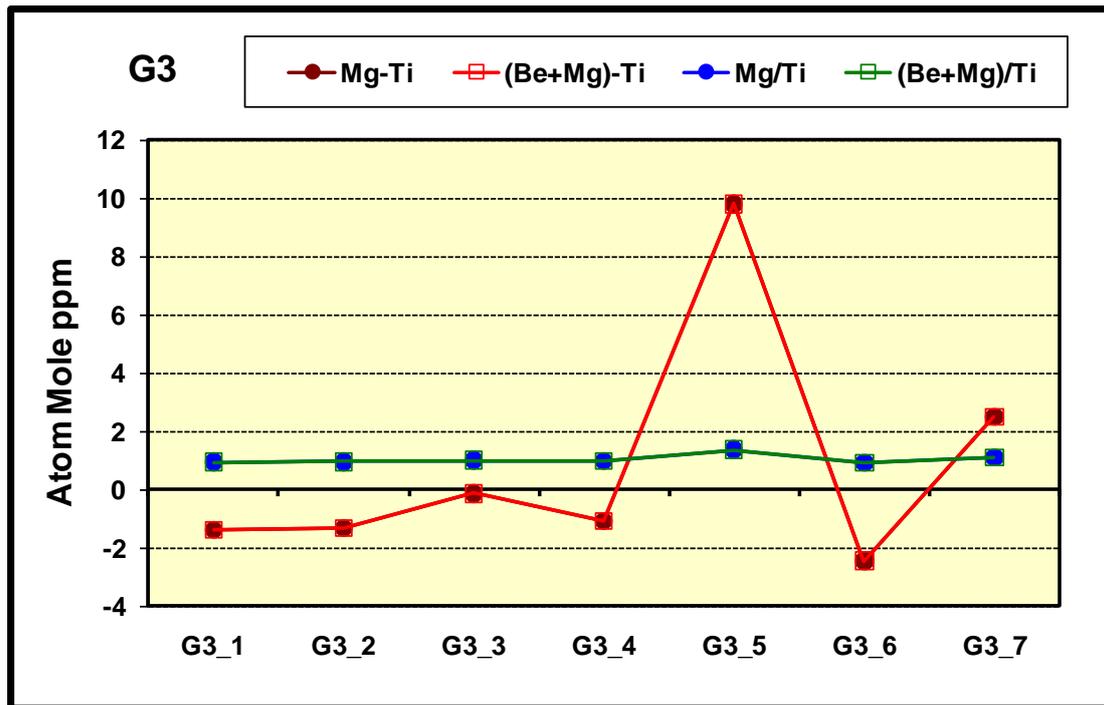
G1	G1_1	G1_2	G1_3	G1_4	G1_5	G1_6
Cation (ppm by weight)						
Be	<1.05	<0.28	<0.26	<0.25	<0.31	<0.32
Na	<4.93	<3.28	<3.60	<2.93	<3.85	<3.70
Mg	23.34	26.75	27.27	28.43	24.64	27.24
Al	529197.44	529197.44	529197.44	529197.44	529197.50	529197.44
Ti	49.04	51.74	53.94	58.46	55.02	54.36
V	12.36	16.39	16.31	14.69	14.91	15.93
Cr	5.11	8.46	7.58	6.48	8.97	8.95
Mn	<0.33	<0.24	<0.26	<0.21	<0.27	,0.26
Fe	5864.76	6641.2	6996.61	6288.77	6247.21	6619.08
Ga	45.99	48.46	54.91	50.61	48.24	52.75
Total %	53.28	53.32	53.35	53.32	53.33	53.34
Cations (Atom Mole ppm)						
Be	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00
Mg	19.48	22.31	22.73	23.71	20.55	22.71
Al	397809.73	397521.94	397390.97	397645.68	397664.90	397527.17
Ti	20.76	21.89	22.81	24.74	23.29	23.00
V	4.92	6.52	6.49	5.85	5.93	6.34
Cr	1.99	3.30	2.95	2.53	3.50	3.49
Mn	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2129.74	2409.95	2538.09	2282.77	2267.80	2401.96
Ga	37.66	40.52	35.73	37.37	37.19	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-1.29	0.41	-0.08	-1.03	-2.73	-0.29
Be-Ti	-20.76	-21.89	-22.81	-24.74	-23.29	-23.00
(Be+Mg)-Ti	-1.29	0.41	-0.08	-1.03	-2.73	-0.29
(Be+Mg)%	0.90	0.91	0.88	1.02	0.89	0.93
Ti %	0.96	0.89	0.88	1.06	1.01	0.94
Fe%	98.15	98.20	98.24	97.92	98.10	98.13
Mg/Ti	0.94	1.02	1.00	0.96	0.88	0.99
(Be+Mg)/Ti	0.94	1.02	1.00	0.96	0.88	0.99



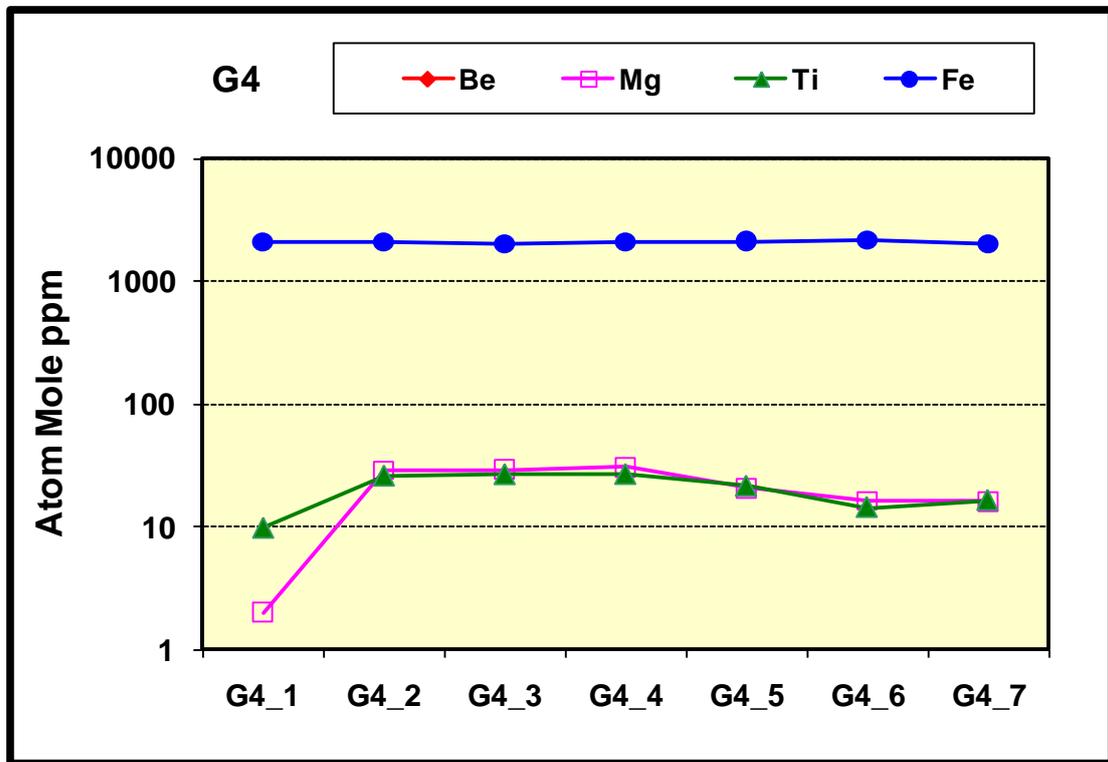
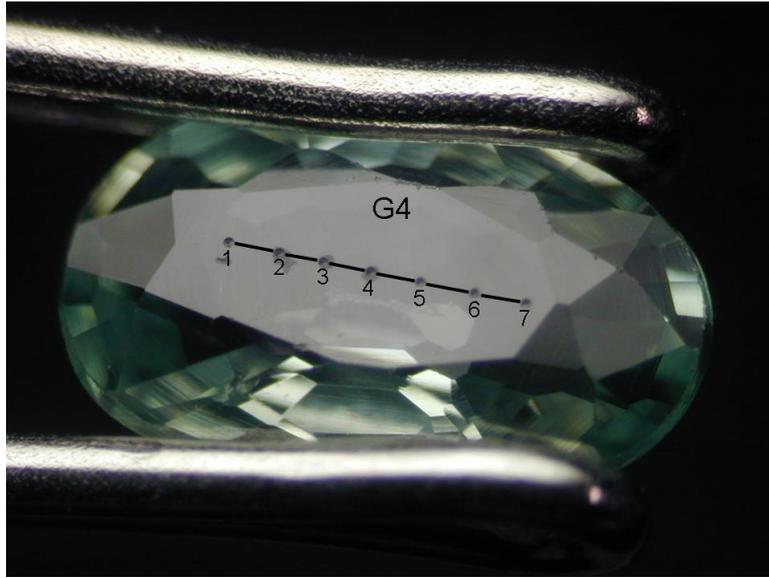


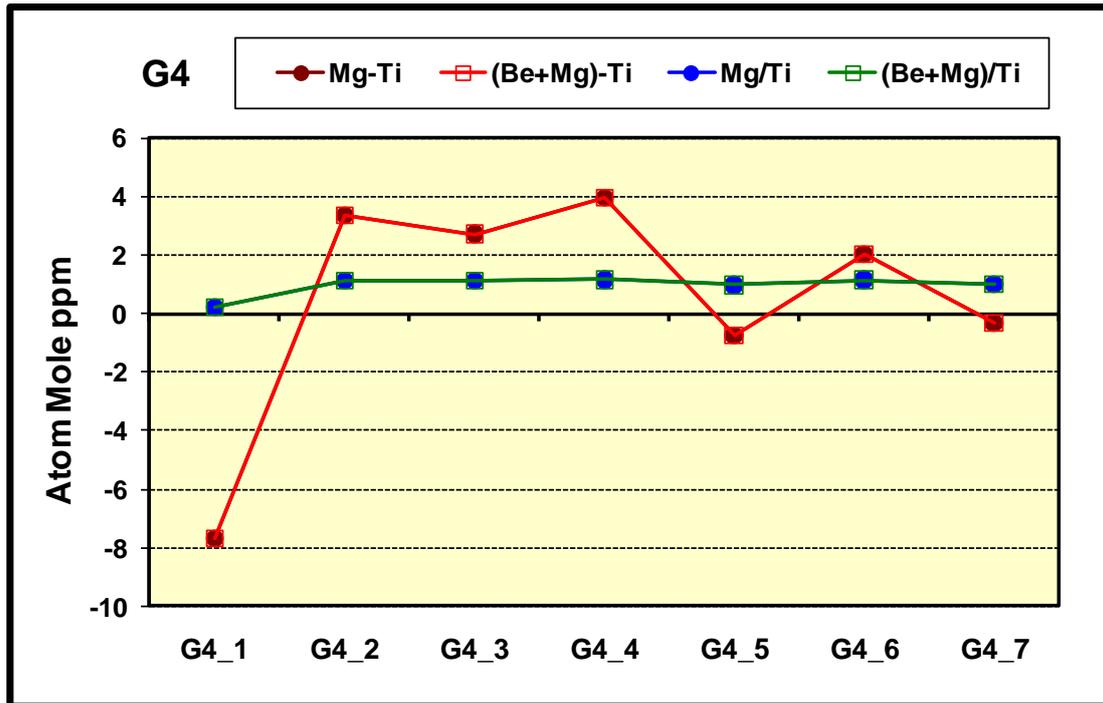
G2	G2_1	G2_2	G2_3	G2_4	G2_5	G2_6
Cation (ppm by weight)						
Be	<1.01	0.15	<0.21	<0.249	<0.107	<0.26
Na	<5.00	<3.62	<3.58	<3.30	<3.16	<3.47
Mg	23.88	31.09	28.02	27.41	31.16	28.35
Al	529197.50	529197.44	529197.50	529197.50	529197.44	529197.50
Ti	51.97	59.62	57.54	56.63	58.29	60.16
V	5.05	7.10	7.20	6.53	6.98	7.85
Cr	10.15	15.25	16.52	14.44	13.73	17.91
Mn	<0.29	<0.234	<0.23	<0.211	<0.201	<0.216
Fe	5780.22	6215.57	5888.6	5470.8	5569.36	5903.73
Ga	45.14	48.99	49.07	46.16	46.45	48.00
Total %	53.31	53.34	53.33	53.33	53.34	53.36
Cations (Atom Mole ppm)						
Be	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00
Mg	19.93	25.93	23.38	22.88	26.01	23.66
Al	397839.76	397669.47	397790.38	397944.12	397904.70	397783.05
Ti	22.01	25.23	24.36	23.99	24.69	25.47
V	2.01	2.83	2.87	2.60	2.78	3.13
Cr	3.96	5.95	6.44	5.63	5.36	6.99
Mn	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2099.20	2256.34	2138.29	1987.35	2022.95	2143.75
Ga	37.66	40.52	35.73	37.37	37.19	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-2.08	0.70	-0.98	-1.11	1.32	-1.82
Be-Ti	-22.01	-25.23	-24.36	-23.99	-24.69	-25.47
(Be+Mg)-Ti	-2.08	0.70	-0.98	-1.11	1.32	-1.82
(Be+Mg)%	0.93	1.12	1.07	1.12	1.25	1.08
Ti %	1.03	1.09	1.11	1.18	1.19	1.16
Fe%	98.04	97.78	97.82	97.70	97.56	97.76
Mg/Ti	0.91	1.03	0.96	0.95	1.05	0.93
(Be+Mg)/Ti	0.91	1.03	0.96	0.95	1.05	0.93



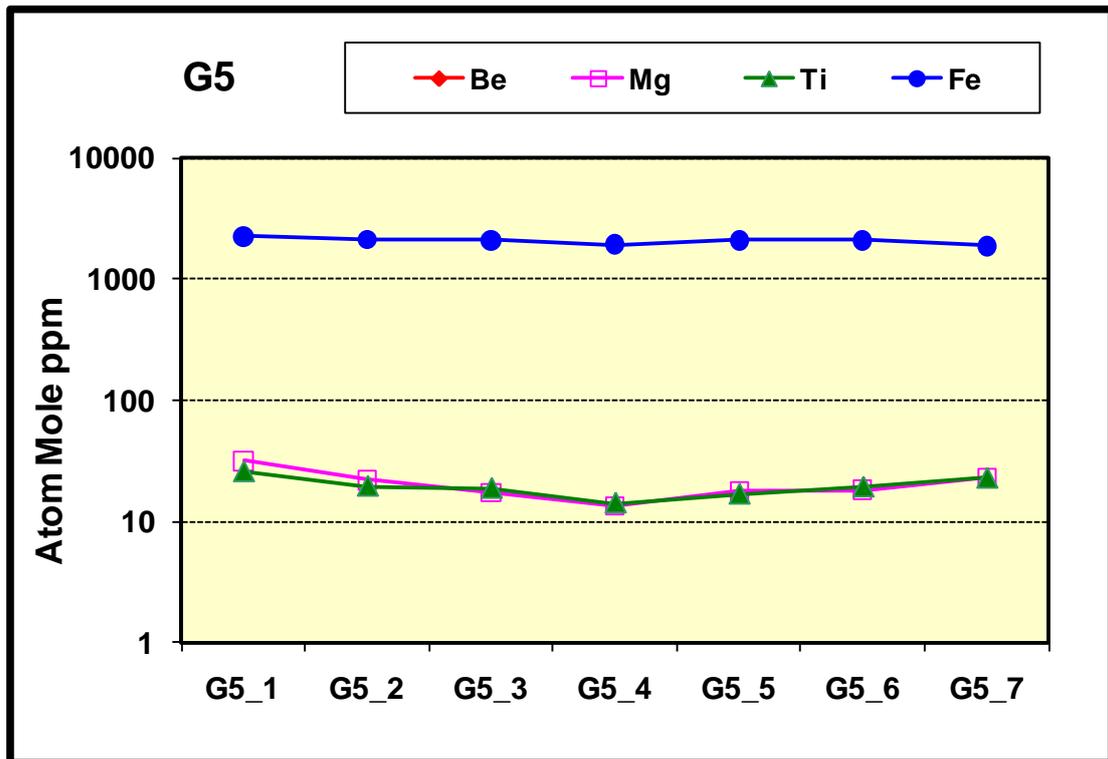
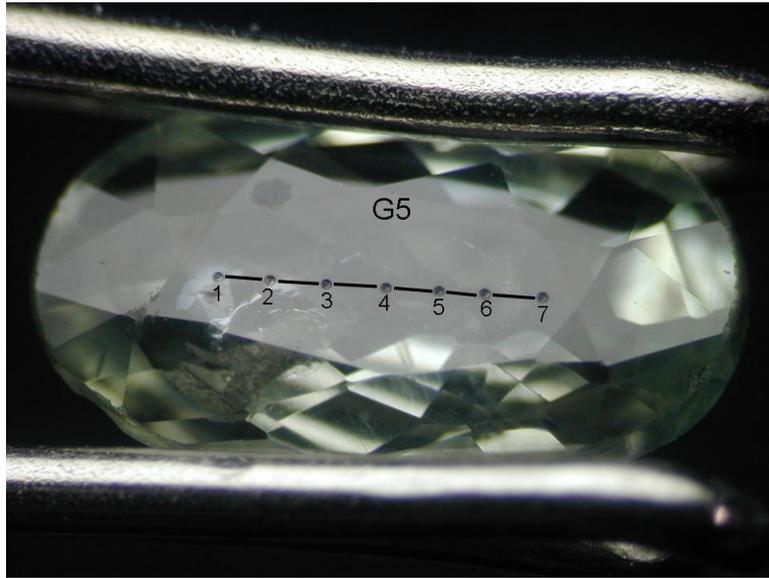


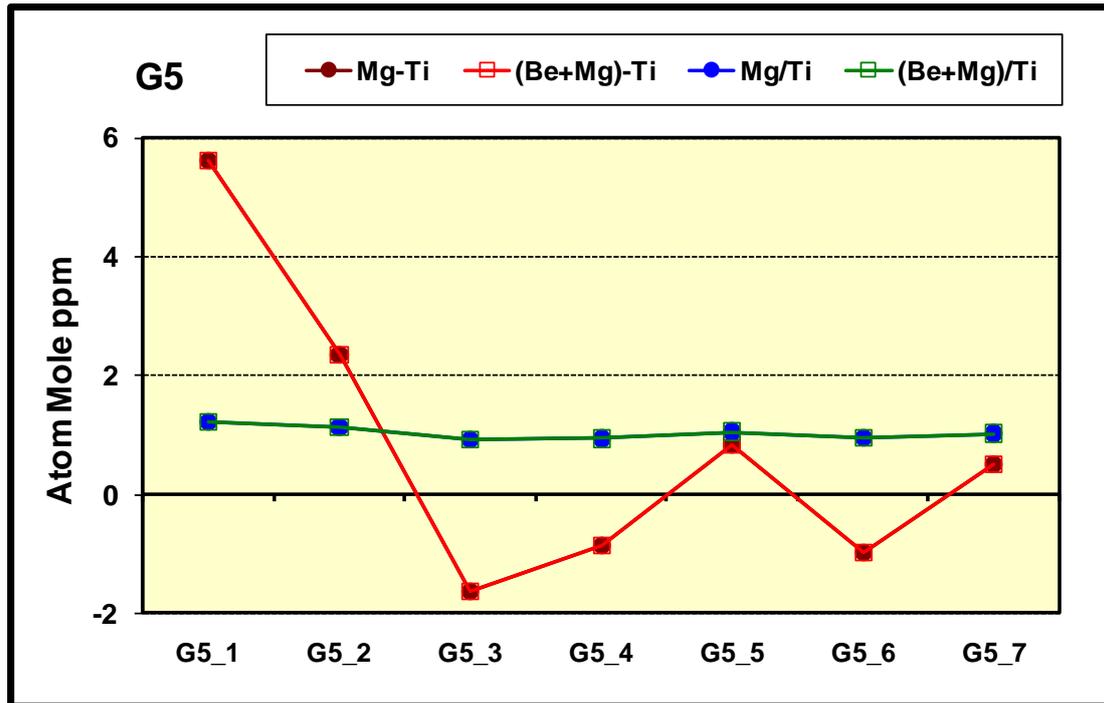
G3	G3_1	G3_2	G3_3	G3_4	G3_5	G3_6	G3_7
Cation (ppm by weight)							
Be	<0.95	<0.23	<0.19	<0.33	<0.236	<0.27	<0.30
Na	<5.25	<3.54	<3.86	4.01	<3.91	<3.93	5.81
Mg	25.61	25.61	26.37	26.16	44.83	30.36	33.11
Al	529197.50	529197.50	529197.50	529197.50	529197.50	529197.50	529197.50
Ti	53.78	53.64	52.31	54.16	65.24	65.64	59.41
V	10.34	11.24	11.58	11.05	11.37	11.11	11.10
Cr	<0.97	<0.81	<0.89	<0.87	0.85	<0.82	0.89
Mn	<0.28	<0.213	<0.232	<0.227	<0.232	<0.228	<0.210
Fe	5771.58	5376.66	5502.32	5488.32	5439.62	5360.81	5197.37
Ga	44.28	45.39	47.51	46.98	46.08	45.51	44.86
Total %	53.37	53.35	53.37	53.36	53.37	53.39	53.38
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	3.54	0.00	0.00	5.13
Mg	21.37	21.38	22.01	21.84	37.42	25.35	27.64
Al	397842.78	397984.86	397938.62	397939.92	397940.67	397981.60	398035.78
Ti	22.77	22.72	22.16	22.94	27.63	27.80	25.17
V	4.12	4.48	4.61	4.40	4.53	4.43	4.42
Cr	0.00	0.00	0.00	0.00	0.33	0.00	0.35
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2096.08	1953.35	1998.77	1993.69	1976.00	1947.58	1888.46
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-1.40	-1.34	-0.14	-1.10	9.79	-2.46	2.48
Be-Ti	-22.77	-22.72	-22.16	-22.94	-27.63	-27.80	-25.17
(Be+Mg)-Ti	-1.40	-1.34	-0.14	-1.10	9.79	-2.46	2.48
(Be+Mg)%	1.00	1.07	1.08	1.07	1.83	1.27	1.42
Ti %	1.06	1.14	1.08	1.13	1.35	1.39	1.30
Fe%	97.94	97.79	97.84	97.80	96.81	97.34	97.28
Mg/Ti	0.94	0.94	0.99	0.95	1.35	0.91	1.10
(Be+Mg)/Ti	0.94	0.94	0.99	0.95	1.35	0.91	1.10



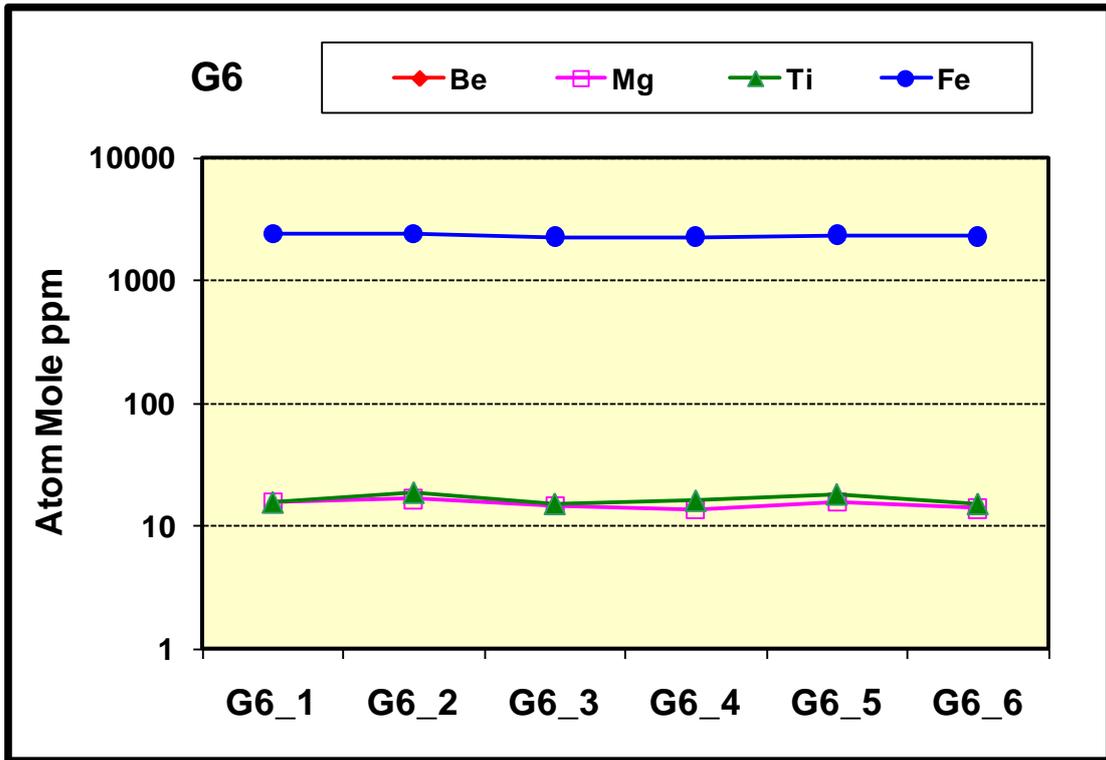
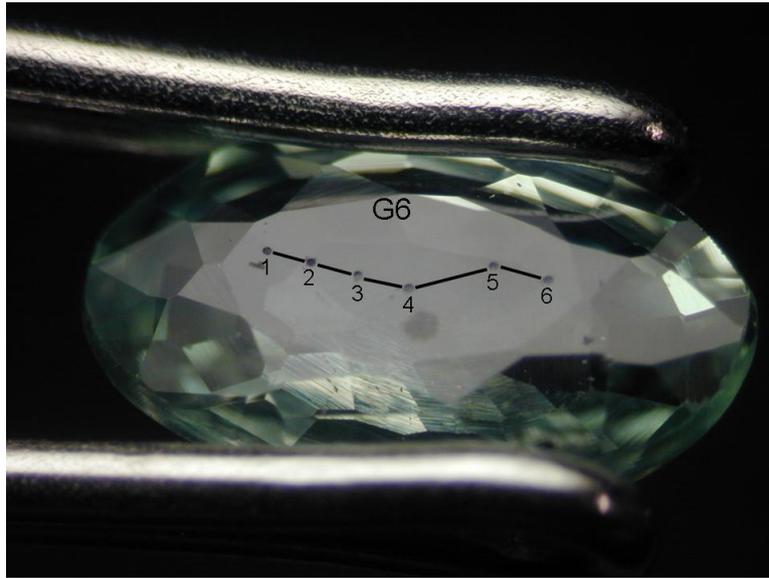


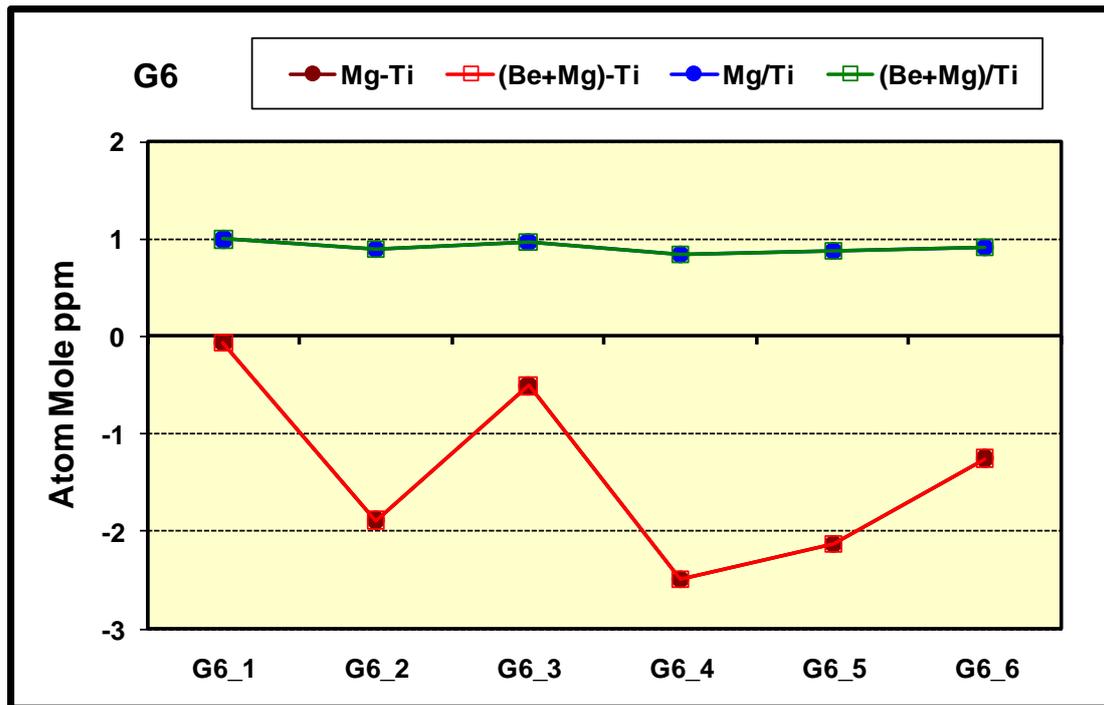
G4	G4_1	G4_2	G4_3	G4_4	G4_5	G4_6	G4_7
Cation (ppm by weight)							
Be	<3.07	<0.29	<0.40	<0.41	<0.29	<0.22	<0.25
Na	<11.47	<4.70	<4.71	<4.60	<4.64	<4.40	<4.22
Mg	2.4	34.7	34.77	36.39	24.54	19.53	19.11
Al	529197.38	529197.38	529197.38	529197.38	529197.38	529197.38	529197.38
Ti	22.86	60.49	62.12	62.39	50.12	33.71	38.48
V	3.67	15.36	14.77	14.82	14.97	14.75	15.53
Cr	26.44	38.79	41.1	43.37	43.7	37.59	36.69
Mn	<0.49	<0.25	0.26	<0.24	<0.24	<0.228	<0.218
Fe	5757.5	5734.78	5511.33	5763.19	5796.9	5864.31	5571.21
Ga	34.13	45.46	42.89	45.07	44.33	45.65	43.70
Total %	53.40	53.40	53.40	53.40	53.40	53.42	53.41
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mg	2.00	28.99	29.05	30.40	20.50	16.31	15.96
Al	398260.14	398217.73	398237.34	398250.26	398227.25	398165.82	398199.26
Ti	9.69	25.64	26.33	26.45	21.24	14.29	16.31
V	1.46	6.12	5.89	5.91	5.97	5.88	6.19
Cr	10.32	15.15	16.05	16.94	17.06	14.68	14.33
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	1706.44	1693.14	1672.86	1656.93	1695.07	1769.74	1735.23
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-7.69	3.35	2.71	3.95	-0.74	2.03	-0.35
Be-Ti	-9.69	-25.64	-26.33	-26.45	-21.24	-14.29	-16.31
(Be+Mg)-Ti	-7.69	3.35	2.71	3.95	-0.74	2.03	-0.35
(Be+Mg)%	0.12	1.66	1.68	1.77	1.18	0.91	0.90
Ti %	0.56	1.47	1.52	1.54	1.22	0.79	0.92
Fe%	99.32	96.87	96.80	96.68	97.60	98.30	98.17
Mg/Ti	0.21	1.13	1.10	1.15	0.96	1.14	0.98
(Be+Mg)/Ti	0.21	1.13	1.10	1.15	0.96	1.14	0.98



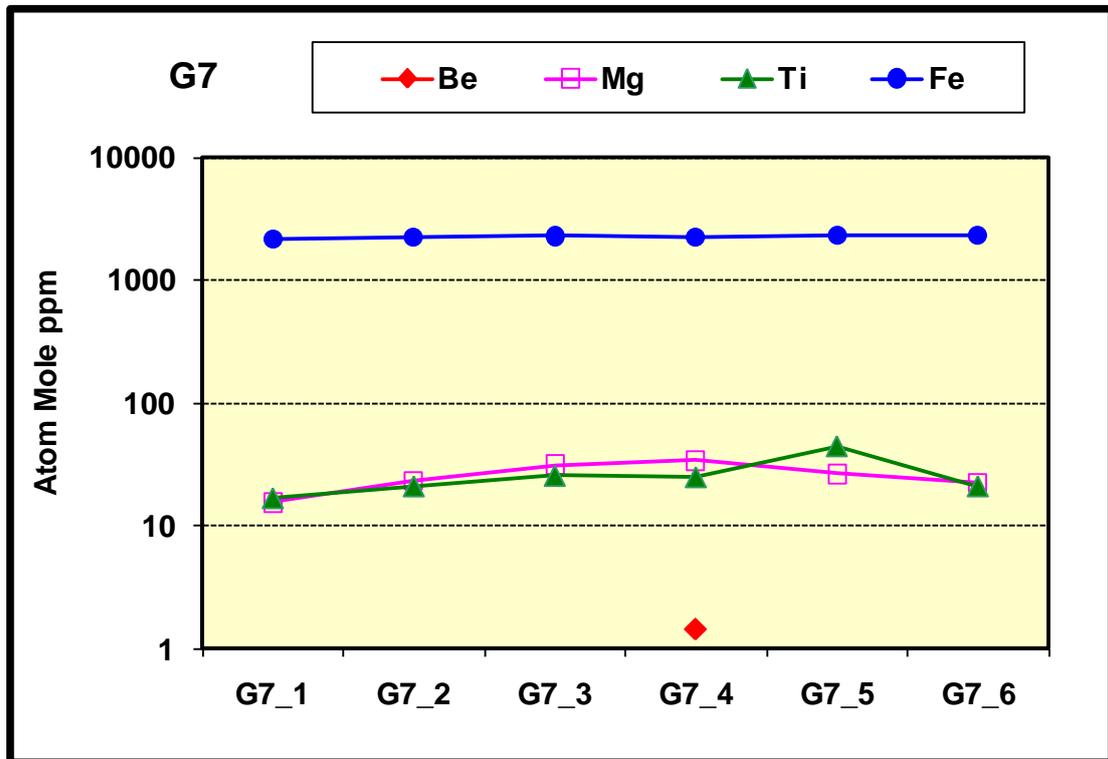


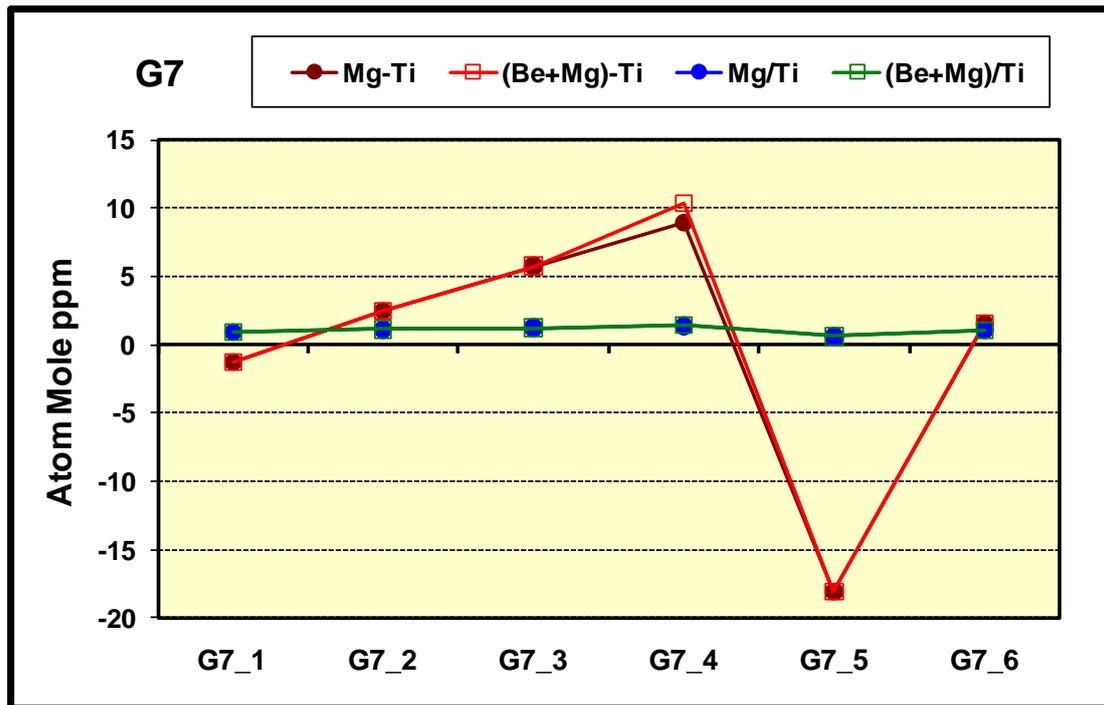
G5	G5_1	G5_2	G5_3	G5_4	G5_5	G5_6	G5_7
Cation (ppm by weight)							
Be	<1.45	<0.44	<0.31	<0.41	<0.30	<0.62	<0.28
Na	<8.64	<6.15	<4.96	<5.43	<6.05	<6.17	<5.53
Mg	37.48	26.08	20.40	15.86	20.99	21.76	27.72
Al	529197.44	529197.44	529197.44	529197.44	529197.44	529197.44	529197.44
Ti	60.59	45.85	44.04	33.27	39.39	45.21	53.42
V	15.01	13.04	13.57	12.47	15.40	14.45	13.85
Cr	<1.45	<1.09	1.19	<0.97	<1.08	<1.14	1.60
Mn	<0.42	<0.30	<0.25	<0.27	<0.29	<0.30	<0.27
Fe	6145.51	5863.84	5715.35	5295.99	5739.5	5725.06	5142.99
Ga	47.11	51.44	46.29	40.36	45.26	49.19	43.60
Total %	53.44	53.41	53.38	53.37	53.38	53.41	53.41
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mg	31.27	21.76	17.03	13.24	17.52	18.16	23.15
Al	397692.38	397809.26	397869.20	398031.68	397861.97	397863.34	398066.55
Ti	25.65	19.41	18.65	14.09	16.68	19.15	22.63
V	5.97	5.19	5.40	4.97	6.13	5.75	5.52
Cr	0.00	0.00	0.46	0.00	0.00	0.00	0.62
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2231.03	2129.40	2075.79	1924.27	2084.53	2079.29	1868.84
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	5.62	2.35	-1.62	-0.85	0.84	-0.98	0.51
Be-Ti	-25.65	-19.41	-18.65	-14.09	-16.68	-19.15	-22.63
(Be+Mg)-Ti	5.62	2.35	-1.62	-0.85	0.84	-0.98	0.51
(Be+Mg)%	1.37	1.00	0.81	0.68	0.83	0.86	1.21
Ti %	1.12	0.89	0.88	0.72	0.79	0.90	1.18
Fe%	97.51	98.10	98.31	98.60	98.39	98.24	97.61
Mg/Ti	1.22	1.12	0.91	0.94	1.05	0.95	1.02
(Be+Mg)/Ti	1.22	1.12	0.91	0.94	1.05	0.95	1.02



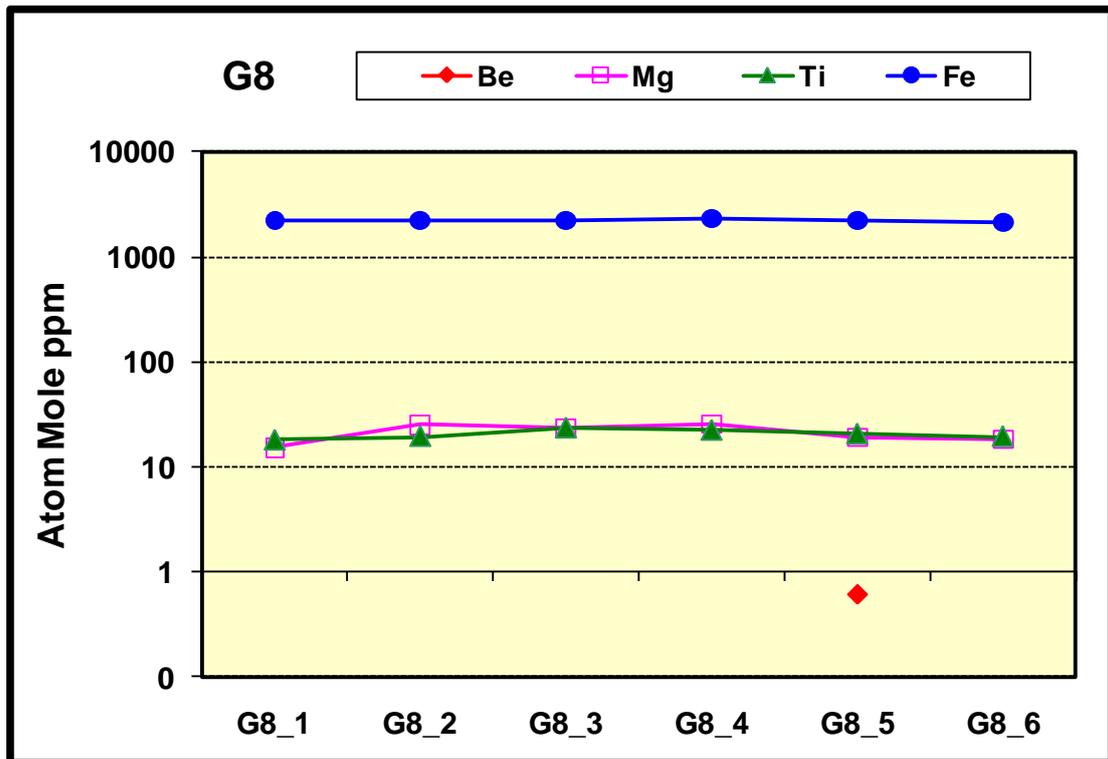
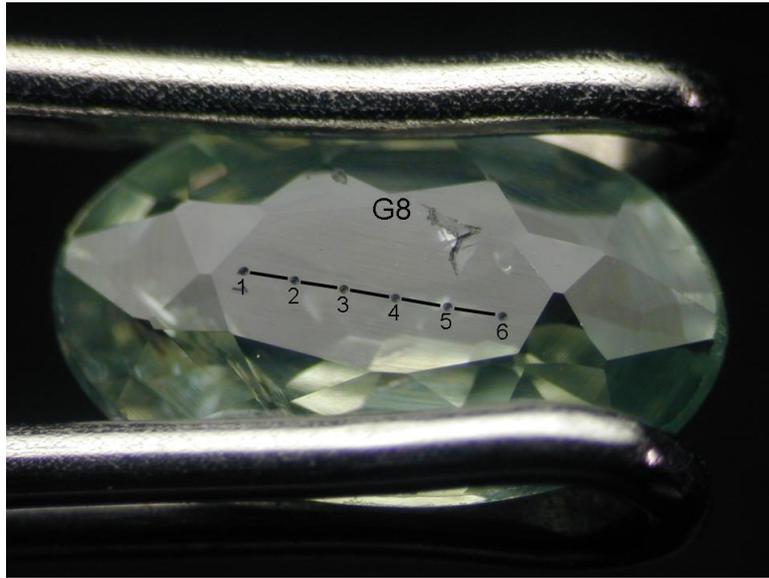


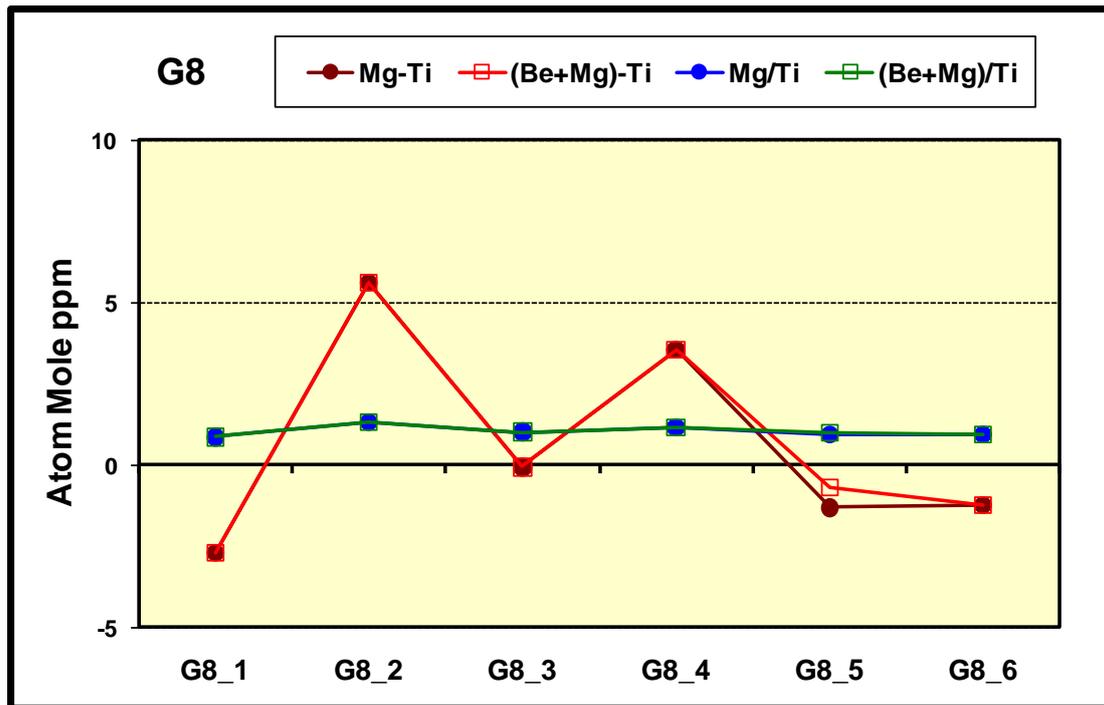
G6	G6_1	G6_2	G6_3	G6_4	G6_5	G6_6
Cation (ppm by weight)						
Be	<0.33	<0.51	<0.31	<0.21	<0.57	<0.30
Na	<6.55	<6.20	<6.14	<5.86	<6.48	<5.86
Mg	18.47	19.88	17.48	16.15	18.89	16.56
Al	529197.44	529197.44	529197.44	529197.44	529197.5	529197.44
Ti	36.56	43.64	35.65	37.72	42.27	35.60
V	35.42	33.86	32.58	31.13	33.1	31.96
Cr	21.01	22.44	24.21	25.35	39.67	66.36
Mn	<0.31	<0.29	<0.28	<0.26	<0.29	<0.26
Fe	6603.2	6565.51	6230.56	6250.64	6487.88	6287.07
Ga	51.18	47.45	47.98	45.78	47.33	48.36
Total %	53.47	53.51	53.47	53.48	53.49	53.51
Cations (Atom Mole ppm)						
Be	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00
Mg	15.40	16.58	14.58	13.47	15.75	13.81
Al	397535.72	397546.31	397672.17	397665.93	397569.37	397636.36
Ti	15.47	18.47	15.09	15.97	17.89	15.07
V	14.09	13.47	12.97	12.39	13.17	12.72
Cr	8.19	8.75	9.44	9.88	15.46	25.87
Mn	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2396.25	2382.63	2261.80	2269.05	2354.60	2282.10
Ga	37.66	40.52	35.73	37.37	37.19	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-0.07	-1.89	-0.51	-2.49	-2.13	-1.25
Be-Ti	-15.47	-18.47	-15.09	-15.97	-17.89	-15.07
(Be+Mg)-Ti	-0.07	-1.89	-0.51	-2.49	-2.13	-1.25
(Be+Mg)%	0.63	0.69	0.64	0.59	0.66	0.60
Ti %	0.64	0.76	0.66	0.69	0.75	0.65
Fe%	98.73	98.55	98.71	98.72	98.59	98.75
Mg/Ti	1.00	0.90	0.97	0.84	0.88	0.92
(Be+Mg)/Ti	1.00	0.90	0.97	0.84	0.88	0.92



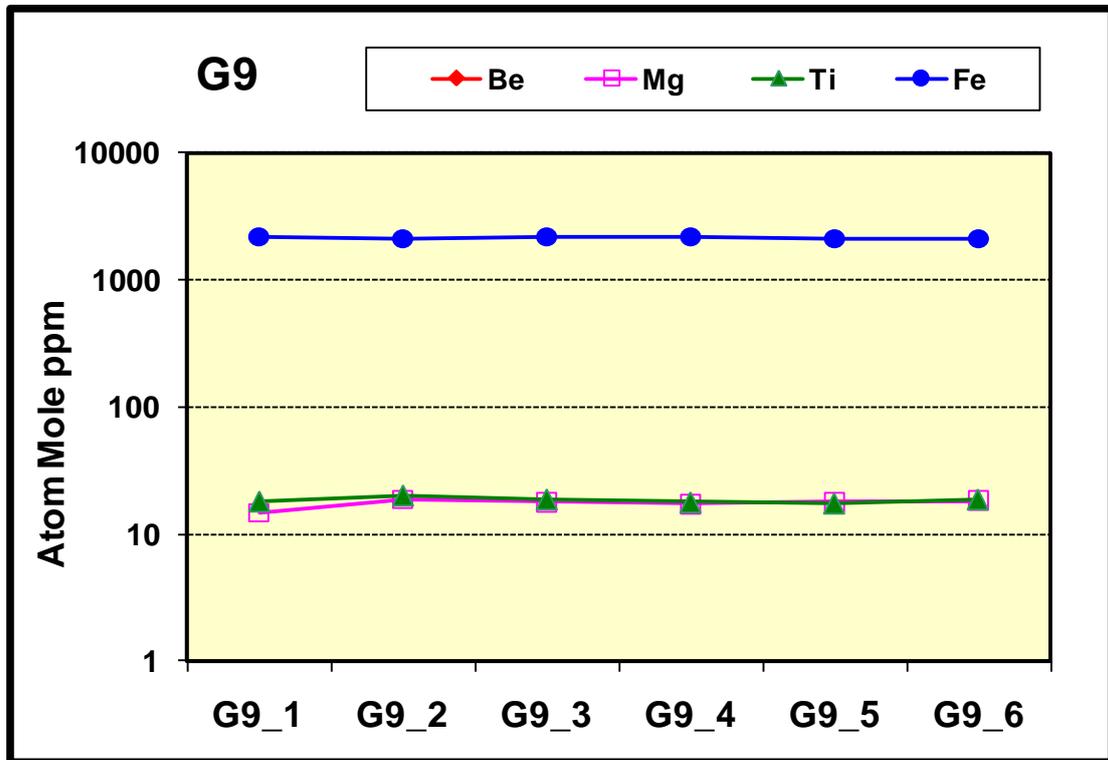
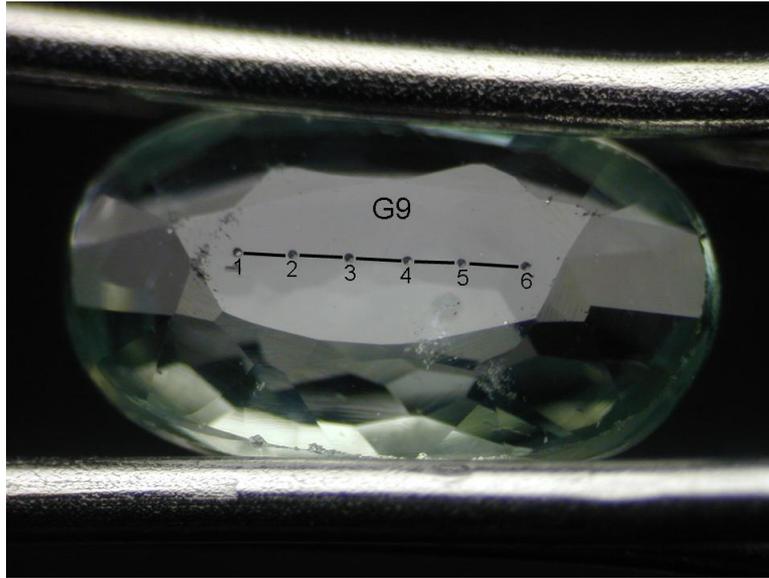


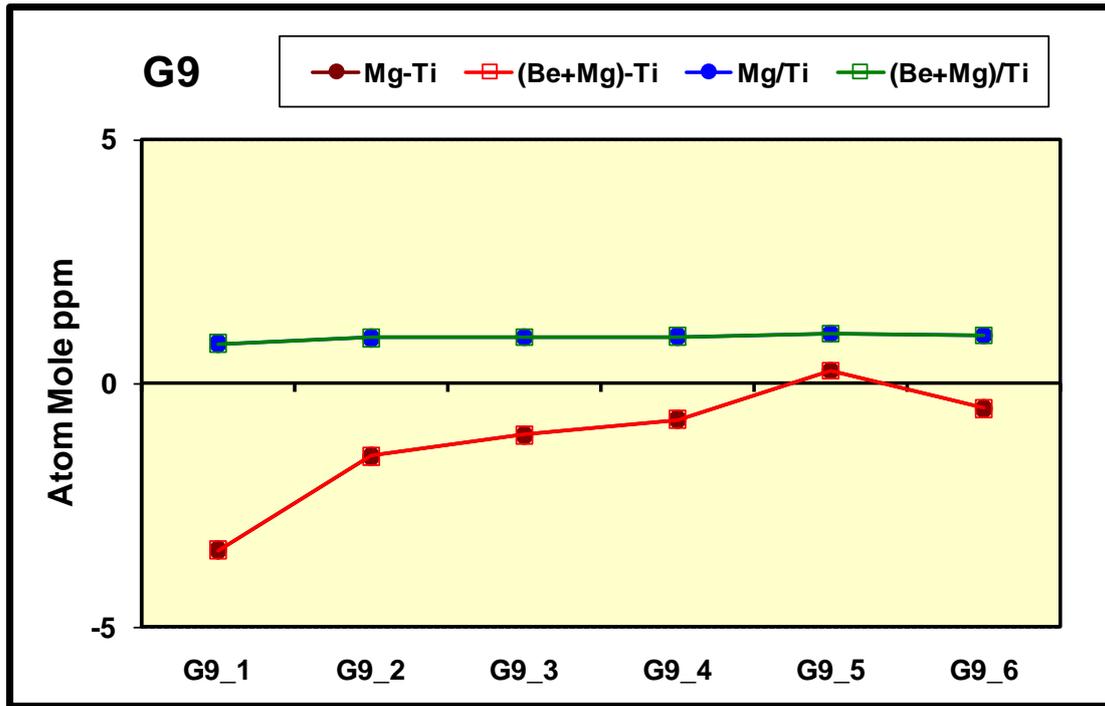
G7	G7_1	G7_2	G7_3	G7_4	G7_5	G7_6
Cation (ppm by weight)						
Be	<2.93	<0.53	<0.55	0.64	<0.55	<0.47
Na	<12.88	<8.51	<8.81	<8.29	<8.76	<9.28
Mg	18.49	28.00	37.41	40.47	31.50	26.97
Al	529197.38	529197.38	529197.38	529197.44	529197.38	529197.38
Ti	39.58	49.42	60.15	58.65	104.80	49.45
V	3.77	11.75	11.69	11.51	11.40	11.78
Cr	39.65	40.46	35.72	38.96	41.43	37.23
Mn	<0.53	<0.36	<0.38	<0.35	<0.38	<0.40
Fe	5915.53	6122.81	6274.94	6144.38	6319.74	6386.04
Ga	41.85	48.79	50.86	52.05	50.70	52.37
Total %	53.47	53.48	53.50	53.49	53.52	53.52
Cations (Atom Mole ppm)						
Be	0.00	0.00	0.00	1.44	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00
Mg	15.43	23.36	31.20	33.76	26.27	22.49
Al	397790.60	397698.25	397632.29	397674.54	397600.20	397604.31
Ti	16.76	20.92	25.46	24.82	44.35	20.93
V	1.50	4.68	4.65	4.58	4.54	4.69
Cr	15.47	15.78	13.93	15.19	16.15	14.51
Mn	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2148.07	2222.83	2277.68	2230.52	2293.75	2317.84
Ga	37.66	40.52	35.73	37.37	37.19	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-1.33	2.44	5.75	8.93	-18.08	1.57
Be-Ti	-16.76	-20.92	-25.46	-23.38	-44.35	-20.93
(Be+Mg)-Ti	-1.33	2.44	5.75	10.37	-18.08	1.57
(Be+Mg)%	0.71	1.03	1.34	1.54	1.11	0.95
Ti %	0.77	0.92	1.09	1.08	1.88	0.89
Fe%	98.52	98.05	97.57	97.38	97.01	98.16
Mg/Ti	0.92	1.12	1.23	1.36	0.59	1.07
(Be+Mg)/Ti	0.92	1.12	1.23	1.42	0.59	1.07



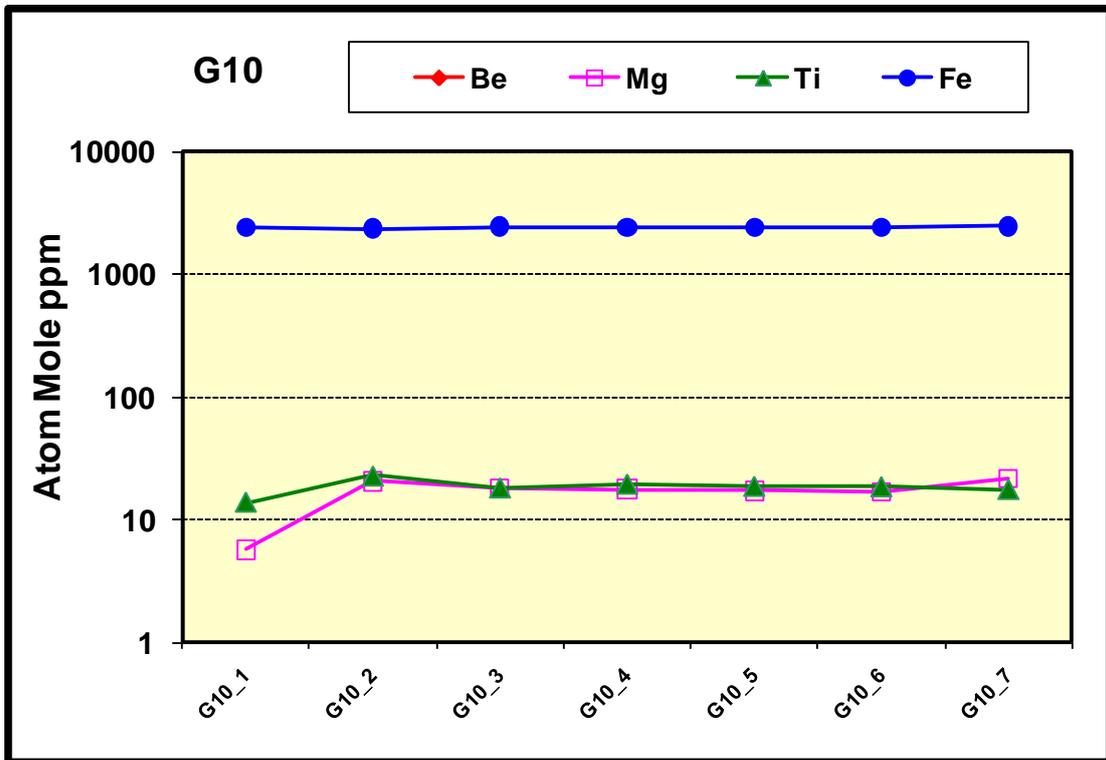
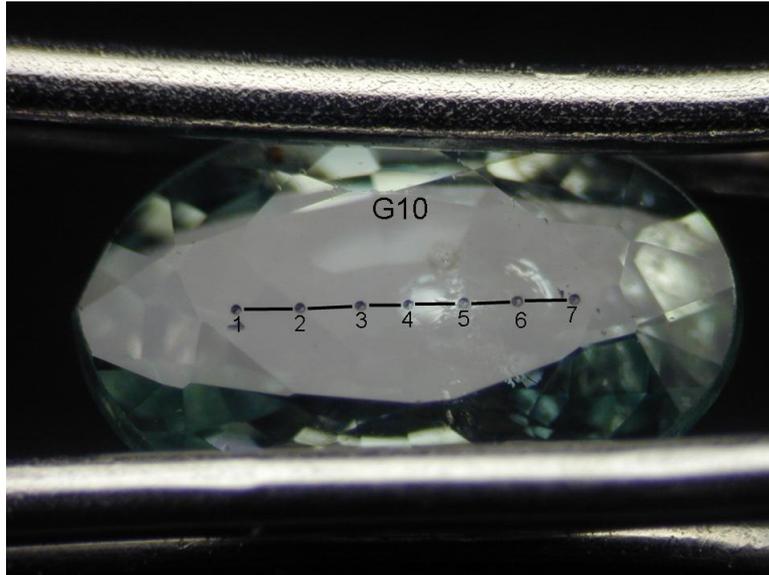


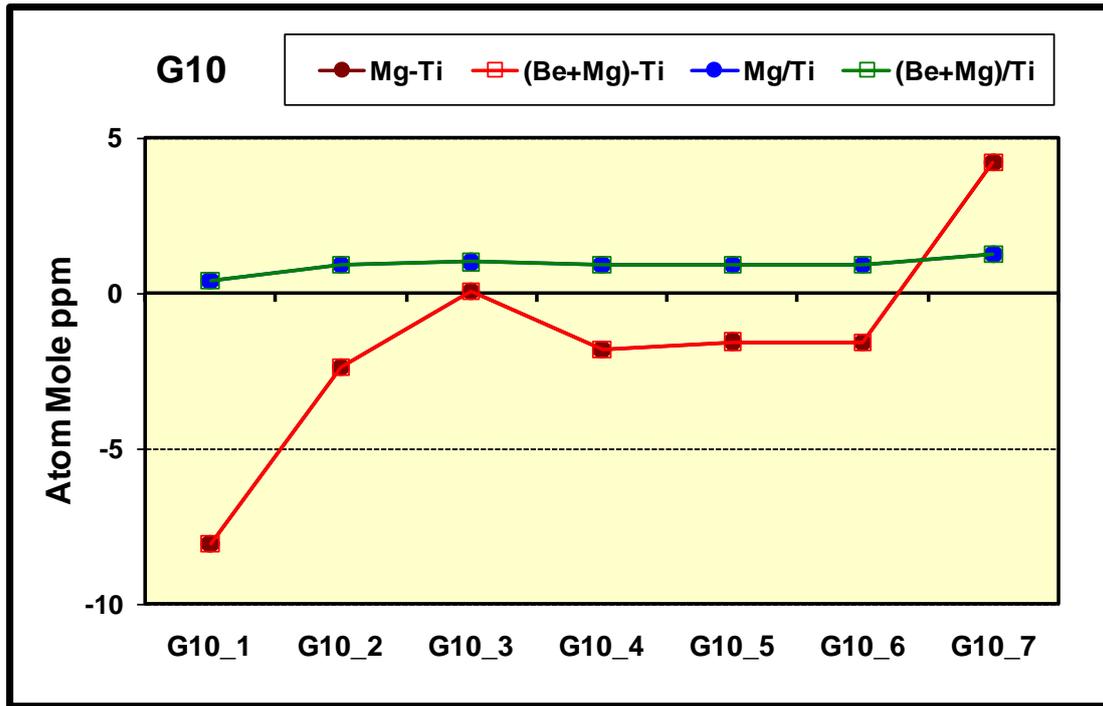
G8	G8_1	G8_2	G8_3	G8_4	G8_5	G8_6
Cation (ppm by weight)						
Be	<2.40	<0.72	<0.70	<0.60	0.27	<0.27
Na	<11.50	<8.21	<7.92	<8.36	<7.69	<7.56
Mg	18.20	29.95	27.89	30.85	22.97	21.72
Al	529197.38	529197.38	529197.44	529197.44	529197.44	529197.44
Ti	42.26	45.80	55.14	52.45	48.40	45.74
V	5.33	10.83	10.83	10.70	10.74	11.24
Cr	<1.72	2.78	<1.31	1.88	2.00	1.68
Mn	<0.48	<0.35	<0.34	<0.36	<0.33	<0.33
Fe	6171.72	6128.38	6180.83	6316.85	6164.13	5878.96
Ga	44.10	50.63	47.26	51.18	46.41	48.25
Total %	53.48	53.47	53.49	53.50	53.49	53.45
Cations (Atom Mole ppm)						
Be	0.00	0.00	0.00	0.00	0.61	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00
Mg	15.18	24.99	23.27	25.73	19.16	18.12
Al	397711.32	397710.59	397691.49	397639.27	397703.34	397808.45
Ti	17.89	19.39	23.34	22.20	20.49	19.37
V	2.12	4.31	4.31	4.26	4.27	4.48
Cr	0.00	1.08	0.00	0.73	0.78	0.66
Mn	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2240.66	2224.92	2243.85	2292.93	2237.86	2134.89
Ga	37.66	40.52	35.73	37.37	37.19	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-2.71	5.60	-0.07	3.53	-1.33	-1.24
Be-Ti	-17.89	-19.39	-23.34	-22.20	-19.88	-19.37
(Be+Mg)-Ti	-2.71	5.60	-0.07	3.53	-0.72	-1.24
(Be+Mg)%	0.67	1.10	1.02	1.10	0.87	0.83
Ti %	0.79	0.85	1.02	0.95	0.90	0.89
Fe%	98.55	98.04	97.97	97.95	98.23	98.27
Mg/Ti	0.85	1.29	1.00	1.16	0.94	0.94
(Be+Mg)/Ti	0.85	1.29	1.00	1.16	0.96	0.94



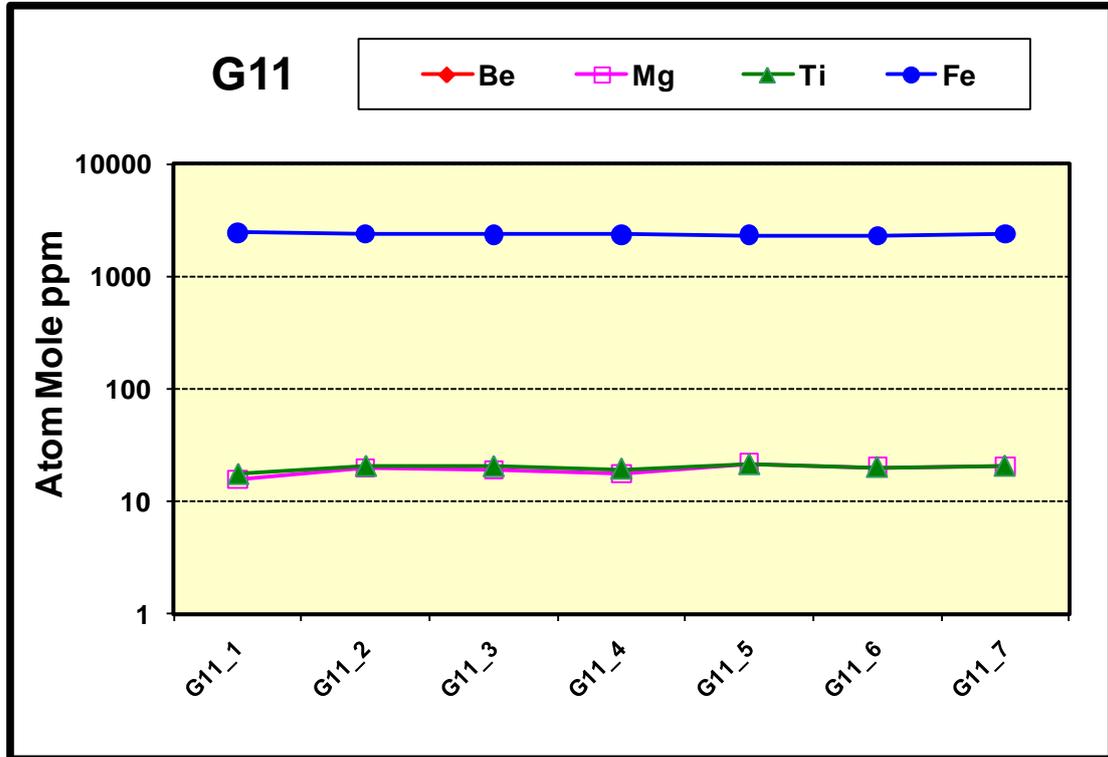
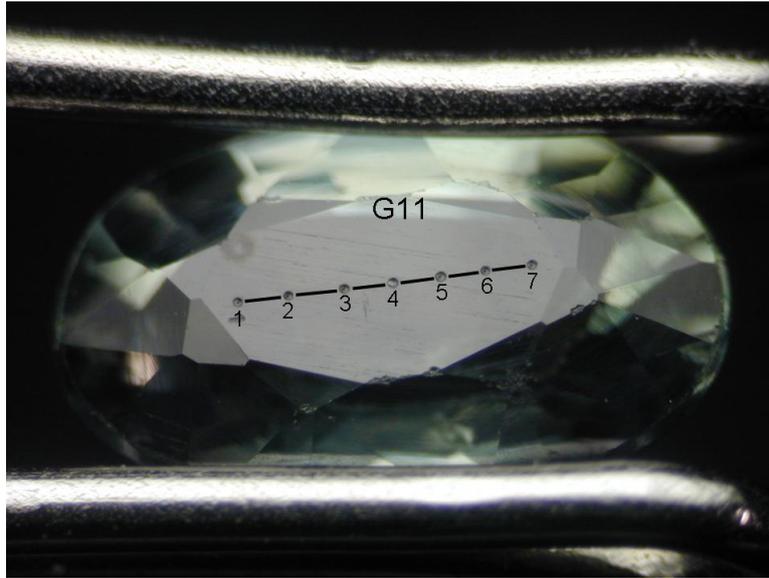


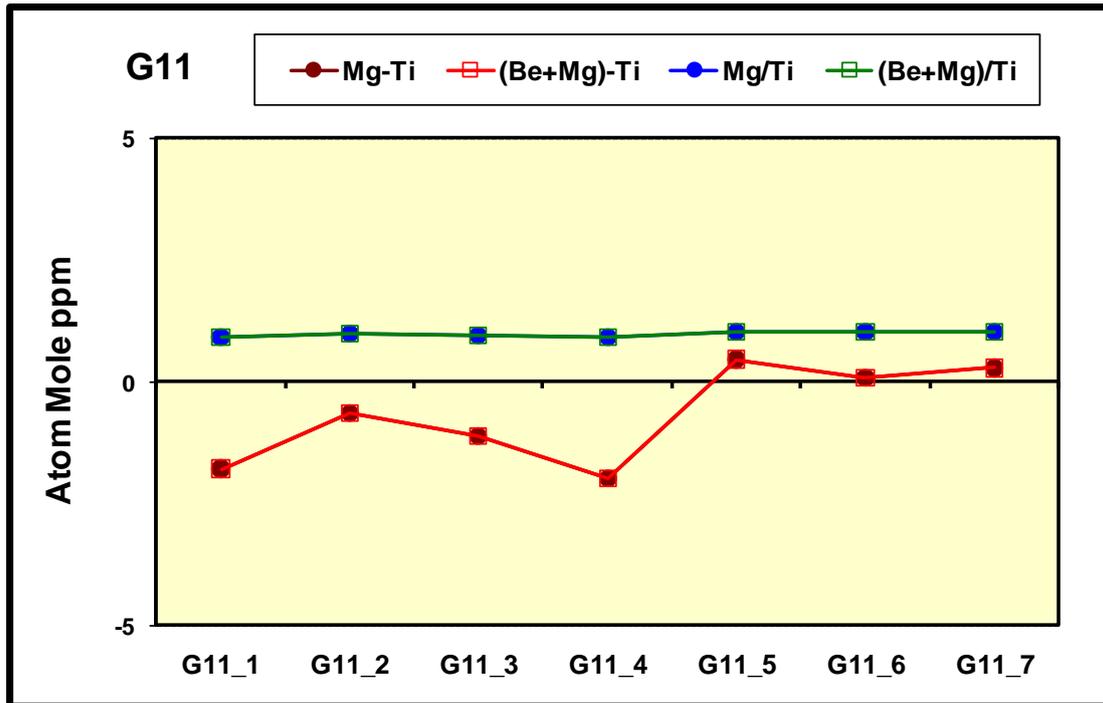
G9	G9_1	G9_2	G9_3	G9_4	G9_5	G9_6
Cation (ppm by weight)						
Be	<1.74	<0.27	<0.28	<0.36	<0.28	<0.17
Na	<6.86	<3.38	<3.69	<3.84	<4.04	<3.91
Mg	17.62	22.45	21.3	20.49	21.23	21.91
Al	529197.44	529197.44	529197.44	529197.44	529197.44	529197.44
Ti	42.82	47.79	44.5	42.14	41.25	44.41
V	15.01	18.04	17.2	17.75	16.97	17.25
Cr	2.35	4.41	4.75	5.69	6.75	9.96
Mn	<0.37	<0.241	<0.26	<0.27	<0.28	<0.27
Fe	6047.06	5795.51	6028.43	6010.35	5862.68	5887.33
Ga	49.03	49.24	51.77	51.7	52.51	50.97
Total %	53.17	53.16	53.18	53.18	53.19	53.19
Cations (Atom Mole ppm)						
Be	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00
Mg	14.70	18.73	17.77	17.10	17.72	18.28
Al	397750.41	397833.08	397750.78	397758.41	397811.16	397799.45
Ti	18.13	20.24	18.84	17.84	17.47	18.80
V	5.98	7.18	6.85	7.07	6.76	6.87
Cr	0.92	1.72	1.85	2.22	2.63	3.88
Mn	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2195.61	2104.72	2188.85	2182.33	2128.99	2137.88
Ga	37.66	40.52	35.73	37.37	37.19	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-3.43	-1.50	-1.07	-0.74	0.25	-0.52
Be-Ti	-18.13	-20.24	-18.84	-17.84	-17.47	-18.80
(Be+Mg)-Ti	-3.43	-1.50	-1.07	-0.74	0.25	-0.52
(Be+Mg)%	0.66	0.87	0.80	0.77	0.82	0.84
Ti %	0.81	0.94	0.85	0.80	0.81	0.86
Fe%	98.53	98.18	98.35	98.42	98.37	98.29
Mg/Ti	0.81	0.93	0.94	0.96	1.01	0.97
(Be+Mg)/Ti	0.81	0.93	0.94	0.96	1.01	0.97



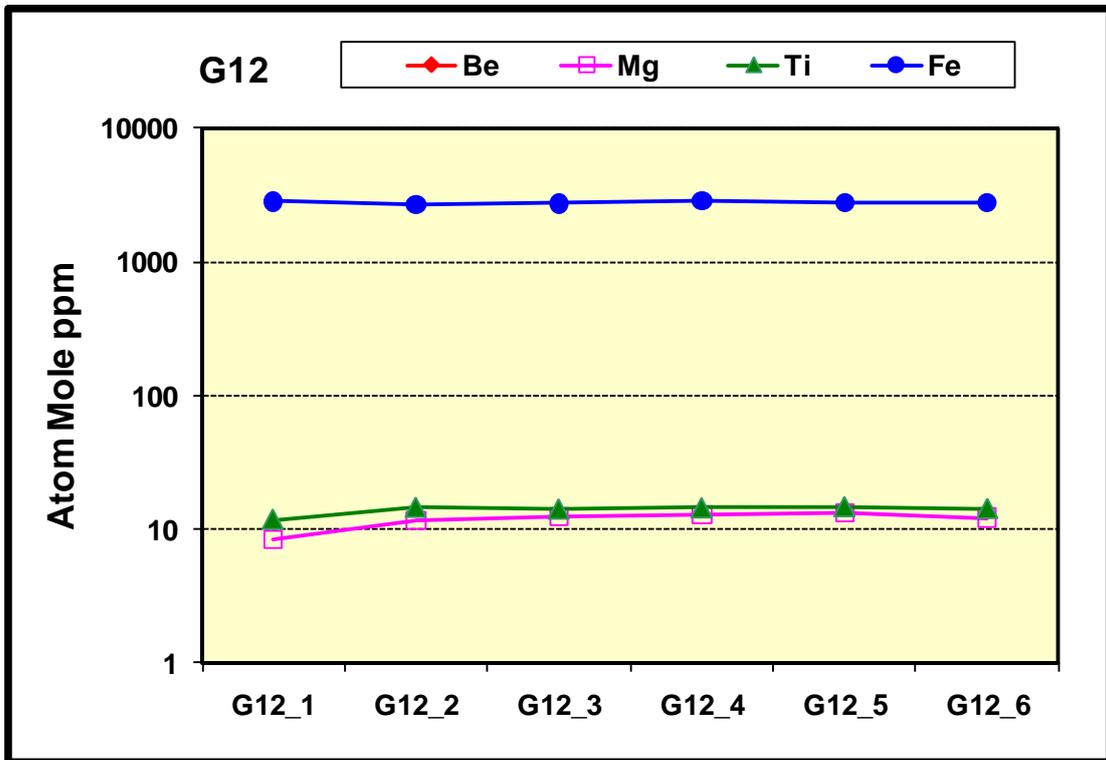
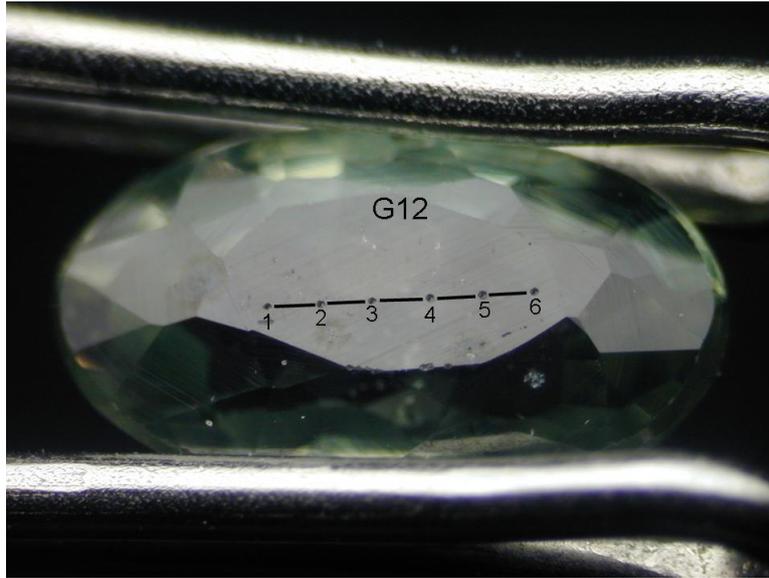


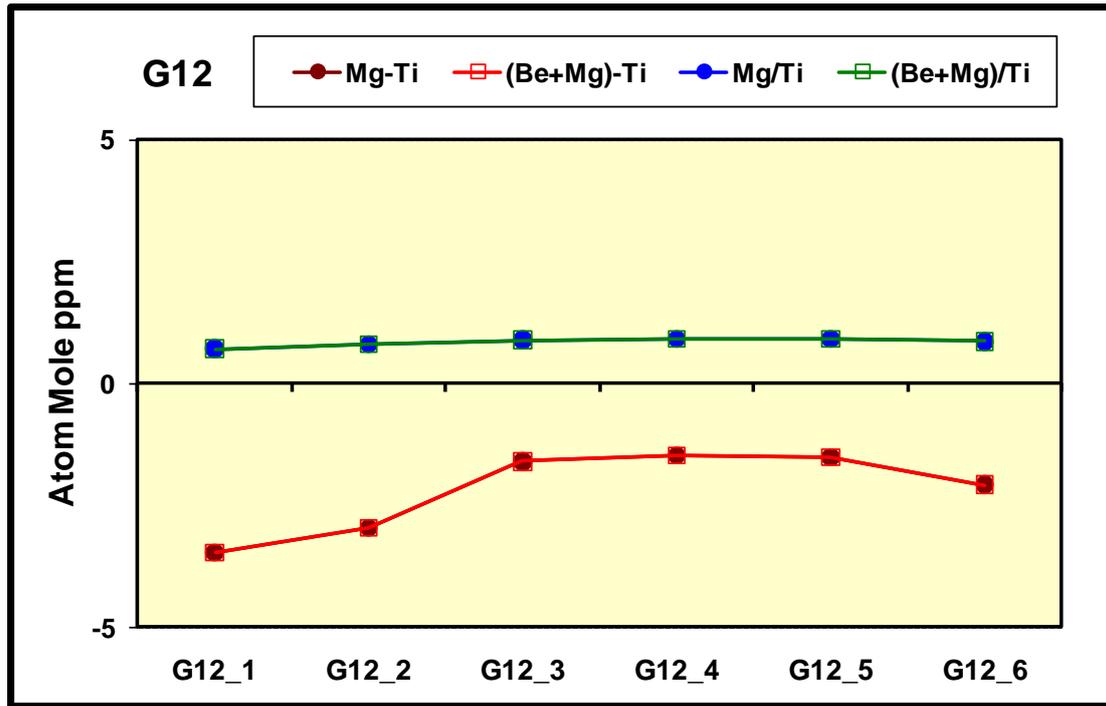
G10	G10_1	G10_2	G10_3	G10_4	G10_5	G10_6	G10_7
Cation (ppm by weight)							
Be	<2.92	<0.281	<0.37	<0.28	<0.28	<0.215	<0.24
Na	<11.22	<4.00	<4.09	<3.97	<3.96	<3.87	<3.70
Mg	6.82	24.59	21.84	21.25	20.61	20.37	26.19
Al	529197.38	529197.38	529197.38	529197.38	529197.38	529197.38	529197.38
Ti	32.55	54.12	42.91	46.22	44.32	43.93	41.70
V	<0.94	14.67	14.66	14.59	15.02	15.19	15.28
Cr	4.43	19.83	19.00	19.02	17.06	18.70	16.05
Mn	<0.50	<0.26	<0.26	<0.25	<0.25	<0.243	<0.229
Fe	6738.07	6518.54	6769.36	6625.55	6635.58	6621.51	6800.56
Ga	34.35	51.69	50.52	49.09	49.27	48.82	49.62
Total %	53.24	53.26	53.27	53.27	53.28	53.28	53.30
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mg	5.69	20.51	18.21	17.72	17.19	16.99	21.84
Al	397523.71	397562.31	397479.52	397530.91	397529.16	397534.02	397466.33
Ti	13.77	22.90	18.15	19.56	18.75	18.59	17.64
V	0.00	5.84	5.83	5.80	5.98	6.04	6.08
Cr	1.73	7.73	7.40	7.41	6.65	7.29	6.26
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2445.12	2365.68	2456.20	2404.33	2407.96	2402.88	2467.44
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-8.09	-2.39	0.06	-1.84	-1.57	-1.60	4.19
Be-Ti	-13.77	-22.90	-18.15	-19.56	-18.75	-18.59	-17.64
(Be+Mg)-Ti	-8.09	-2.39	0.06	-1.84	-1.57	-1.60	4.19
(Be+Mg)%	0.23	0.85	0.73	0.73	0.70	0.70	0.87
Ti %	0.56	0.95	0.73	0.80	0.77	0.76	0.70
Fe%	99.21	98.20	98.54	98.47	98.53	98.54	98.43
Mg/Ti	0.41	0.90	1.00	0.91	0.92	0.91	1.24
(Be+Mg)/Ti	0.41	0.90	1.00	0.91	0.92	0.91	1.24



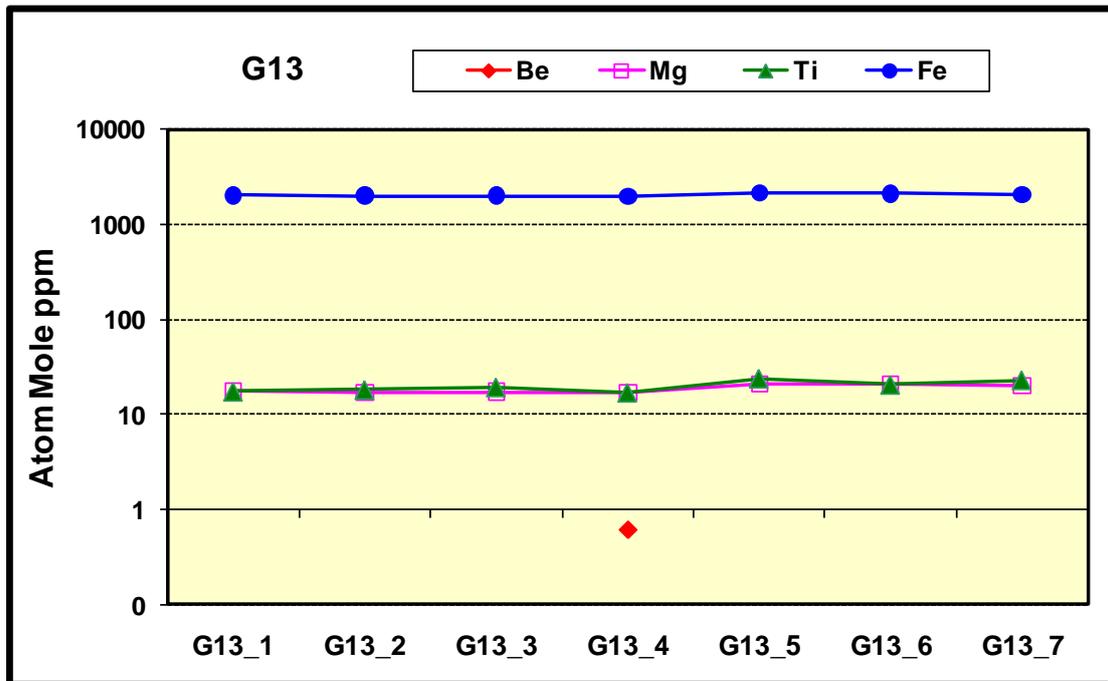
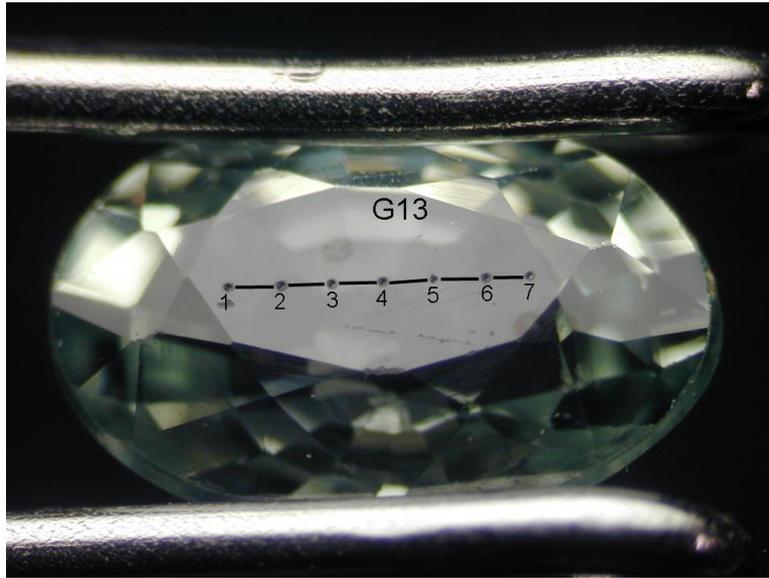


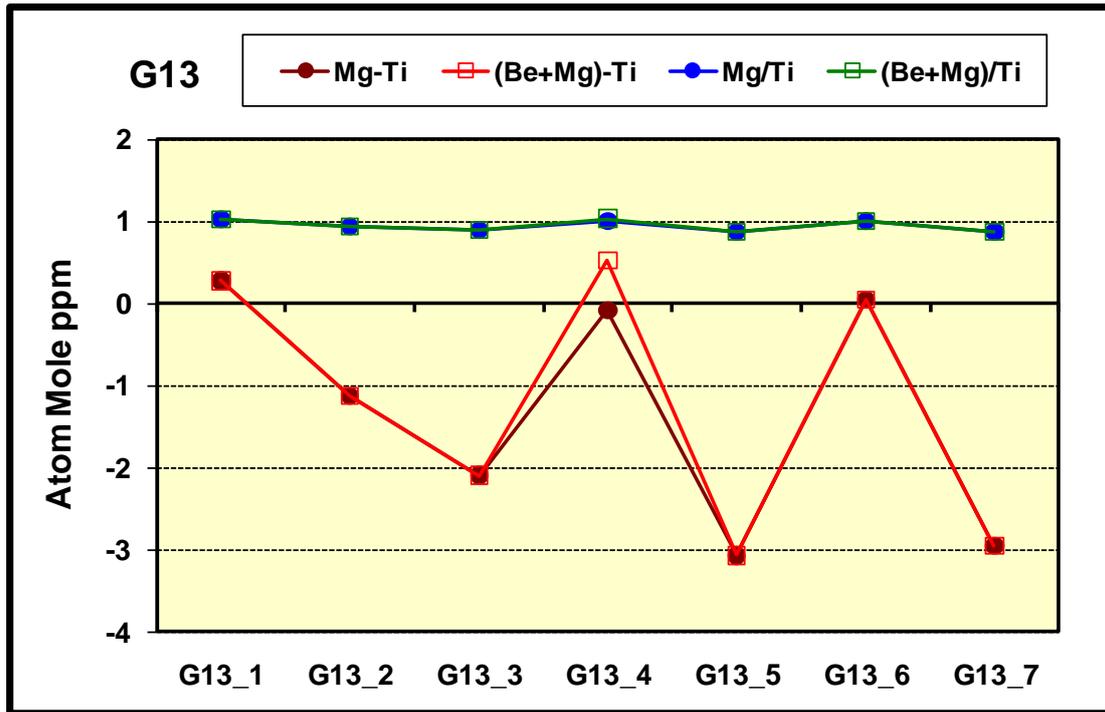
G11	G11_1	G11_2	G11_3	G11_4	G11_5	G11_6	G11_7
Cation (ppm by weight)							
Be	<1.90	<0.34	<0.30	<0.139	<0.29	<0.30	<0.36
Na	<8.36	<4.61	<4.66	<4.31	<4.06	<4.67	<4.24
Mg	18.8	23.86	23.18	20.91	26.07	24.23	25.05
Al	529197.38	529197.38	529197.38	529197.38	529197.38	529197.38	529197.4
Ti	41.29	48.58	48.35	45.94	50.31	47.60	48.72
V	34.98	41.32	39.58	41.17	39.74	39.24	39.85
Cr	<1.46	5.06	3.94	3.93	3.88	5.25	4.24
Mn	<0.43	<0.27	<0.28	<0.26	<0.238	<0.28	<0.24
Fe	6760.05	6605.22	6512.25	6510.71	6460.43	6416.74	6600.28
Ga	47.17	52.5	51.64	52.55	48.92	49.96	47.77
Total %	53.32	53.33	53.34	53.35	53.36	53.37	53.39
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mg	15.68	19.90	19.33	17.44	21.74	20.21	20.89
Al	397486.37	397528.94	397564.50	397567.06	397580.72	397598.51	397531.94
Ti	17.47	20.55	20.46	19.44	21.29	20.14	20.61
V	13.92	16.44	15.75	16.38	15.81	15.61	15.85
Cr	0.00	1.97	1.54	1.53	1.51	2.05	1.65
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2452.86	2396.94	2363.41	2362.87	2344.70	2328.95	2395.16
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-1.79	-0.66	-1.13	-2.00	0.45	0.06	0.27
Be-Ti	-17.47	-20.55	-20.46	-19.44	-21.29	-20.14	-20.61
(Be+Mg)-Ti	-1.79	-0.66	-1.13	-2.00	0.45	0.06	0.27
(Be+Mg)%	0.63	0.82	0.80	0.73	0.91	0.85	0.86
Ti %	0.70	0.84	0.85	0.81	0.89	0.85	0.85
Fe%	98.67	98.34	98.34	98.46	98.20	98.30	98.30
Mg/Ti	0.90	0.97	0.94	0.90	1.02	1.00	1.01
(Be+Mg)/Ti	0.90	0.97	0.94	0.90	1.02	1.00	1.01



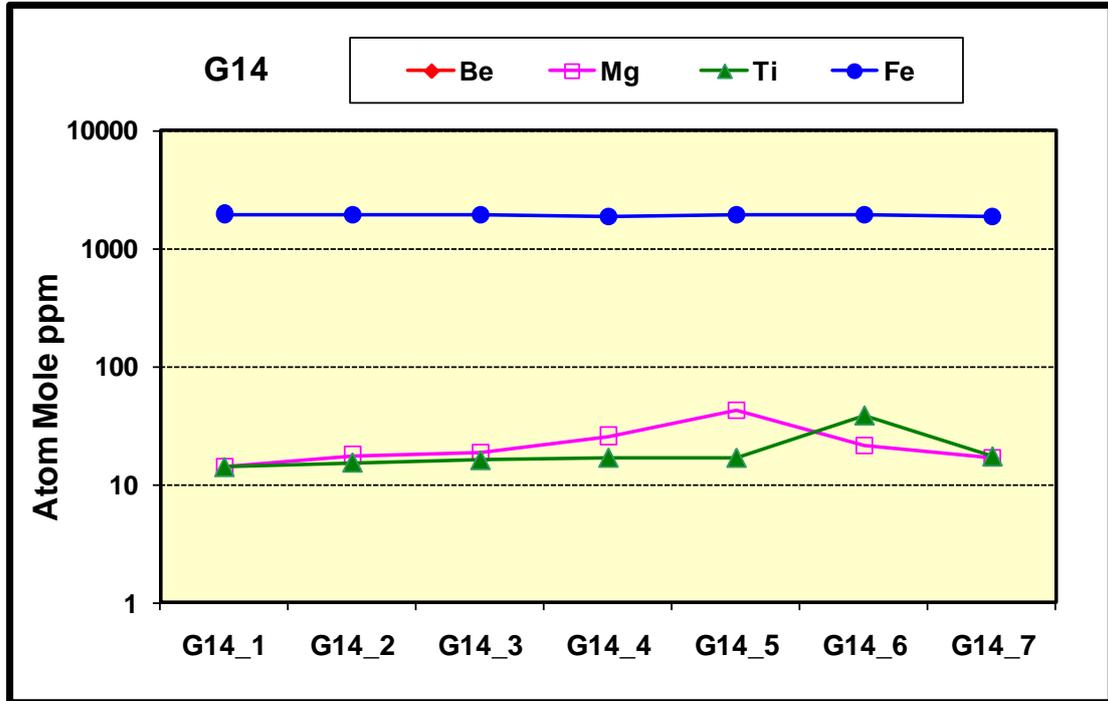
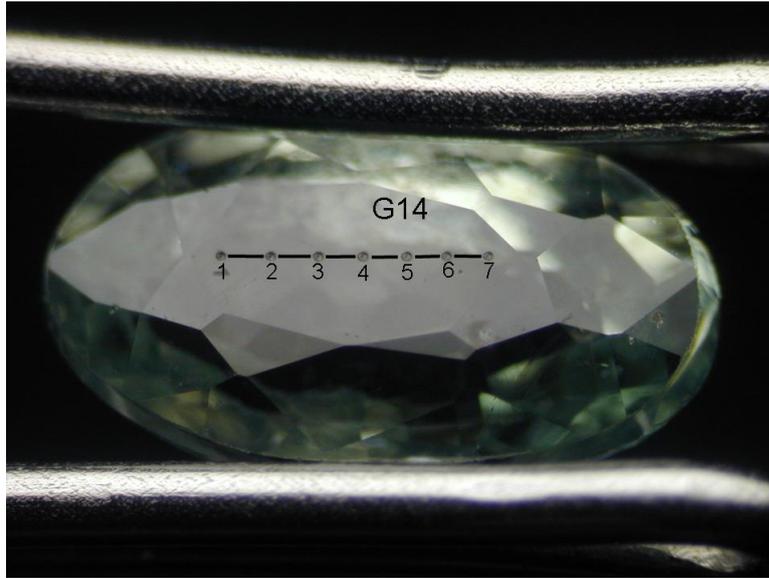


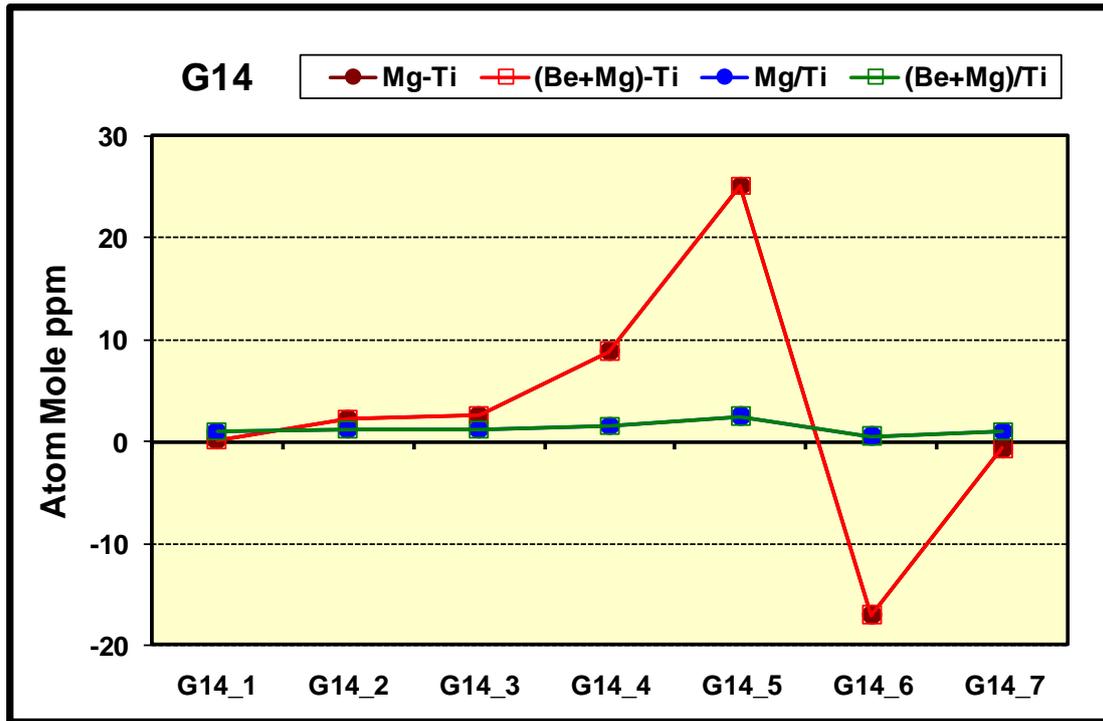
G12	G12_1	G12_2	G12_3	G12_4	G12_5	G12_6
Cation (ppm by weight)						
Be	<1.92	<0.55	<0.44	<0.58	0.2	<0.37
Na	<9.29	<5.72	<6.02	<6.33	<6.16	<5.68
Mg	9.96	13.88	14.97	15.49	15.83	14.59
Al	529197.31	529197.31	529197.31	529197.31	529197.31	529197.31
Ti	27.85	34.39	33.31	34.04	34.78	33.69
V	8.13	12.89	11.92	11.38	11.15	12.08
Cr	23.1	23.23	25.49	26.87	24.63	26.78
Mn	<0.46	<0.32	<0.34	<0.35	<0.34	<0.32
Fe	7797.78	7342.76	7546.53	7825.54	7609.34	7687.75
Ga	57.17	59.03	62.17	61.86	61.52	57.16
Total %	53.55	53.53	53.56	53.60	53.61	53.64
Cations (Atom Mole ppm)						
Be	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00
Mg	8.30	11.57	12.47	12.90	13.19	12.15
Al	397124.28	397279.66	397204.43	397103.03	397181.31	397154.63
Ti	11.77	14.54	14.08	14.39	14.70	14.24
V	3.23	5.13	4.74	4.52	4.43	4.80
Cr	8.99	9.05	9.93	10.46	9.59	10.43
Mn	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2826.82	2662.91	2736.29	2836.73	2758.91	2787.15
Ga	37.66	40.52	35.73	37.37	37.19	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-3.47	-2.97	-1.61	-1.48	-1.51	-2.09
Be-Ti	-11.77	-14.54	-14.08	-14.39	-14.70	-14.24
(Be+Mg)-Ti	-3.47	-2.97	-1.61	-1.48	-1.51	-2.09
(Be+Mg)%	0.29	0.43	0.45	0.45	0.47	0.43
Ti %	0.41	0.54	0.51	0.50	0.53	0.51
Fe%	99.30	99.03	99.04	99.05	99.00	99.06
Mg/Ti	0.70	0.80	0.89	0.90	0.90	0.85
(Be+Mg)/Ti	0.70	0.80	0.89	0.90	0.90	0.85



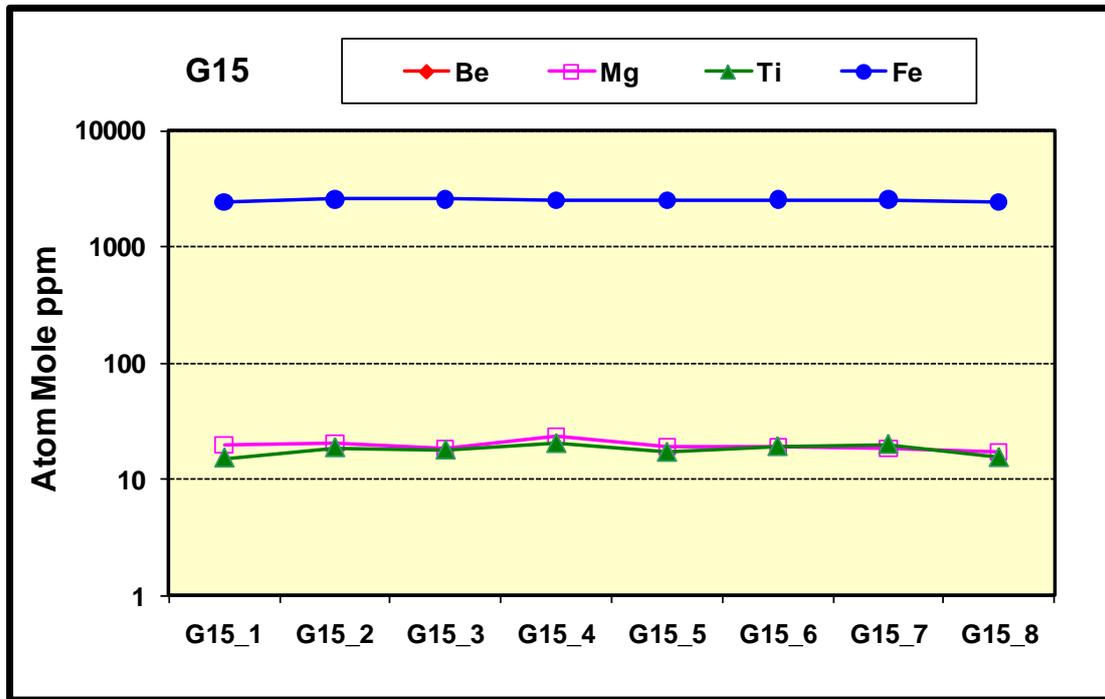
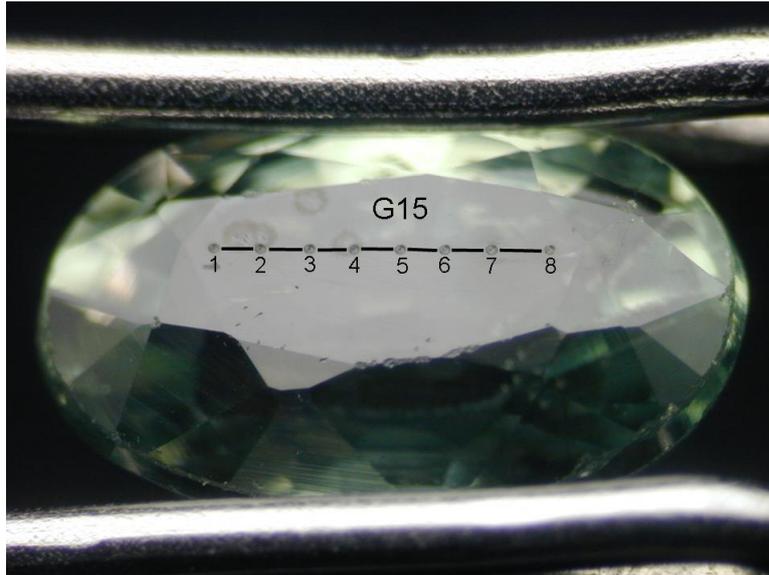


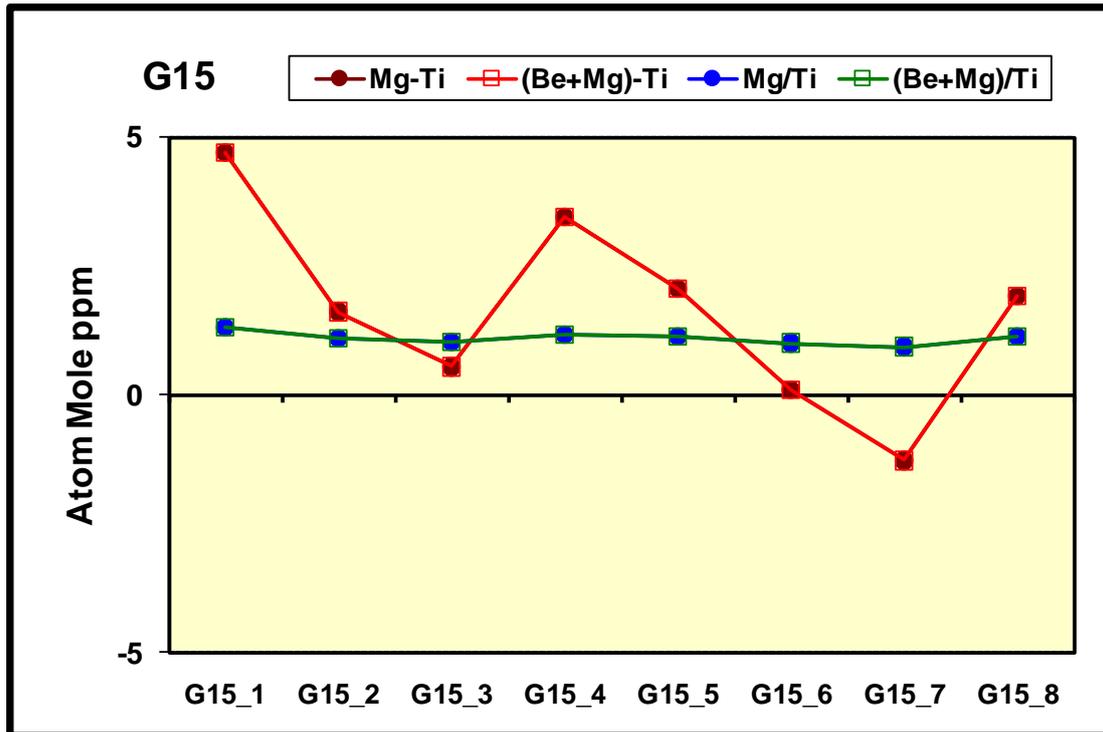
G13	G13_1	G13_2	G13_3	G13_4	G13_5	G13_6	G13_7
Cation (ppm by weight)							
Be	<0.53	<0.64	<0.37	0.27	<0.28	<0.70	<0.44
Na	<8.00	<7.81	<7.88	<7.77	<8.37	<7.93	<7.67
Mg	21.22	20.49	20.71	20.29	25.03	24.73	24.05
Al	529197.50	529197.50	529197.50	529197.44	529197.50	529197.50	529197.50
Ti	41.17	43.05	45.77	40.20	56.59	48.62	54.39
V	10.94	9.85	9.71	8.77	11.29	9.76	10.81
Cr	21.12	16.34	19.58	20.32	22.00	18.16	21.47
Mn	<0.40	<0.38	<0.37	<0.37	<0.40	<0.37	0.48
Fe	5575.53	5542.14	5551.39	5406.83	5876.28	5819.91	5714.89
Ga	51.29	51.91	51.50	51.37	55.13	48.74	51.17
Total %	53.36	53.37	53.37	53.38	53.40	53.35	53.40
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.61	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mg	17.71	17.10	17.29	16.94	20.89	20.64	20.07
Al	397912.10	397926.09	397920.33	397974.79	397792.21	397820.12	397853.78
Ti	17.44	18.23	19.38	17.03	23.96	20.59	23.03
V	4.36	3.92	3.87	3.49	4.49	3.89	4.30
Cr	8.24	6.38	7.64	7.93	8.58	7.08	8.38
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2025.23	2013.17	2016.50	1964.26	2133.83	2113.51	2075.55
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	0.28	-1.13	-2.10	-0.09	-3.07	0.05	-2.96
Be-Ti	-17.44	-18.23	-19.38	-16.42	-23.96	-20.59	-23.03
(Be+Mg)-Ti	0.28	-1.13	-2.10	0.52	-3.07	0.05	-2.96
(Be+Mg)%	0.86	0.83	0.84	0.88	0.96	0.96	0.95
Ti %	0.85	0.89	0.94	0.85	1.10	0.96	1.09
Fe%	98.29	98.28	98.21	98.27	97.94	98.09	97.97
Mg/Ti	1.02	0.94	0.89	0.99	0.87	1.00	0.87
(Be+Mg)/Ti	1.02	0.94	0.89	1.03	0.87	1.00	0.87



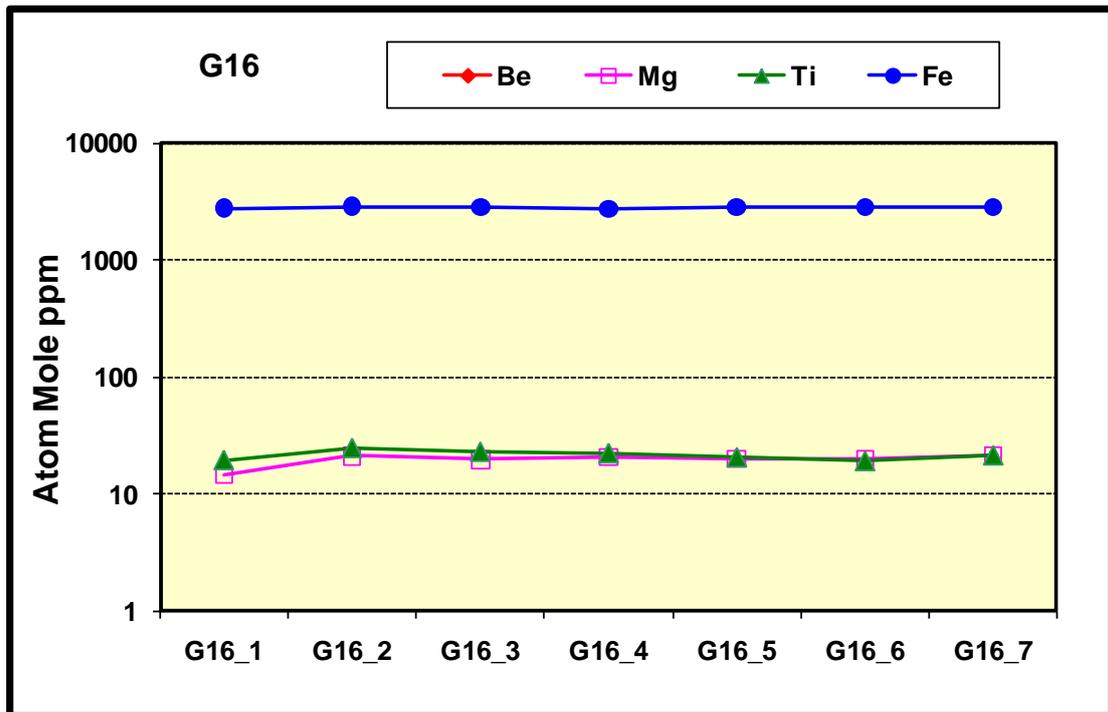
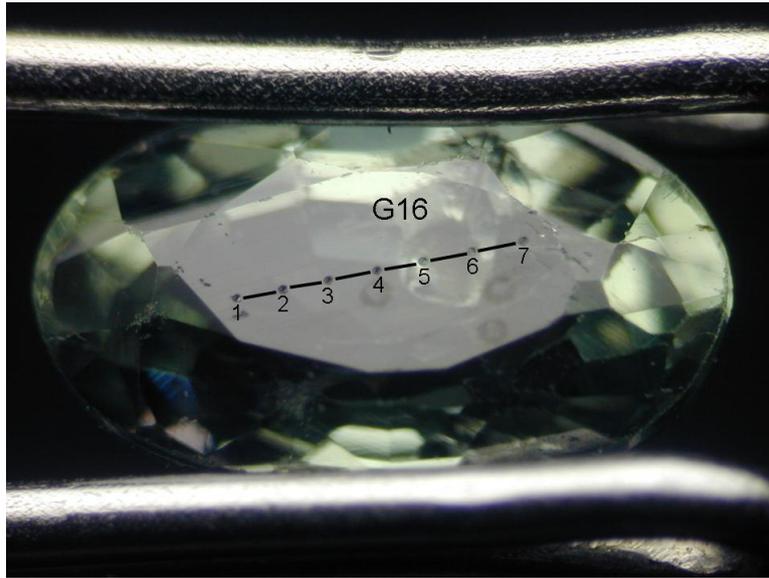


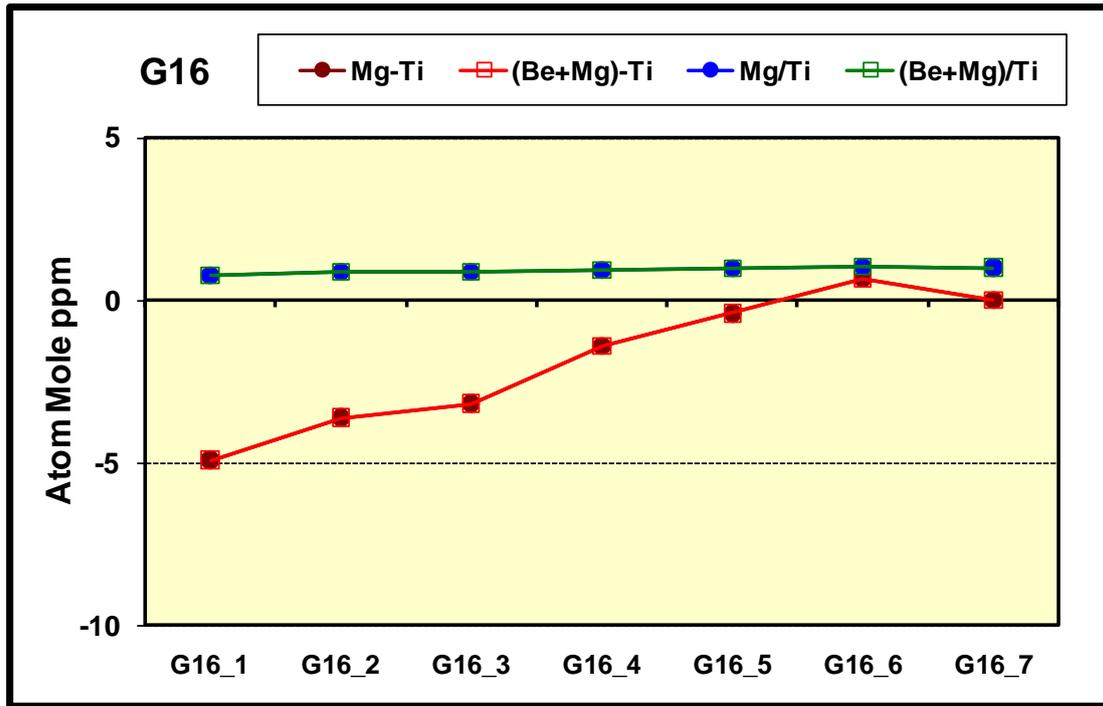
G14	G14_1	G14_2	G14_3	G14_4	G14_5	G14_6	G14_7
Cation (ppm by weight)							
Be	<2.04	<0.61	<0.48	<0.42	<0.37	<0.70	<0.34
Na	<10.68	<7.46	<7.15	<7.25	17.18	<7.42	<7.26
Mg	16.97	21.10	22.38	30.78	50.27	25.58	19.87
Al	529197.50	529197.44	529197.50	529197.50	529197.44	529197.44	529197.44
Ti	33.13	36.16	37.93	39.71	39.66	90.55	40.70
V	2.20	6.43	6.49	6.56	6.86	6.24	5.91
Cr	<1.76	3.01	2.43	2.83	2.31	3.00	2.63
Mn	<0.47	<0.34	<0.33	<0.32	0.41	<0.34	<0.32
Fe	5353.99	5265.92	5253.04	5167.28	5284.34	5250.84	5107.69
Ga	42.58	47.23	46.85	45.83	46.66	45.16	45.01
Total %	53.36	53.35	53.35	53.35	53.36	53.35	53.34
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	15.16	0.00	0.00
Mg	14.17	17.62	18.69	25.70	41.97	21.36	16.59
Al	398013.27	398036.22	398039.37	398062.77	397988.88	398015.70	398093.54
Ti	14.03	15.32	16.07	16.82	16.80	38.36	17.25
V	0.88	2.56	2.59	2.61	2.73	2.49	2.35
Cr	0.00	1.17	0.95	1.10	0.90	1.17	1.03
Mn	0.00	0.00	0.00	0.00	0.15	0.00	0.00
Fe	1945.25	1913.37	1908.70	1877.65	1919.83	1907.79	1856.14
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	0.13	2.30	2.62	8.88	25.17	-17.00	-0.65
Be-Ti	-14.03	-15.32	-16.07	-16.82	-16.80	-38.36	-17.25
(Be+Mg)-Ti	0.13	2.30	2.62	8.88	25.17	-17.00	-0.65
(Be+Mg)%	0.72	0.91	0.96	1.34	2.12	1.09	0.88
Ti %	0.71	0.79	0.83	0.88	0.85	1.95	0.91
Fe%	98.57	98.31	98.21	97.79	97.03	96.96	98.21
Mg/Ti	1.01	1.15	1.16	1.53	2.50	0.56	0.96
(Be+Mg)/Ti	1.01	1.15	1.16	1.53	2.50	0.56	0.96





G15	G15_1	G15_2	G15_3	G15_4	G15_5	G15_6	G15_7	G15_8
Cation (ppm by weight)								
Be	<1.42	<0.65	<0.37	<0.27	<0.37	<0.54	<0.72	<0.49
Na	<8.88	<8.09	<7.97	<8.13	<7.86	<8.08	<8.18	<8.58
Mg	23.76	24.16	21.9	28.29	22.76	22.86	22.19	20.6
Al	529197.44	529197.44	529197.44	529197.44	529197.44	529197.44	529197.4	529197.4
Ti	35.73	43.8	41.87	47.57	39.97	44.80	46.74	36.05
V	23.78	25.36	24.57	25.44	24.83	24.54	24.41	23.79
Cr	8.06	10.45	7.54	8.23	8.2	8.40	6.97	9.46
Mn	<0.39	<0.35	<0.34	<0.35	<0.33	<0.33	<0.33	<0.35
Fe	6728.12	7042.62	7021.95	6880.67	6836.77	7007.17	6989.73	6665.34
Ga	47.13	53.35	49.96	50.89	48.66	49.65	51.89	49.58
Total %	53.48	53.52	53.50	53.50	53.52	53.51	53.53	53.49
Cations (Atom Mole ppm)								
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mg	19.81	20.14	18.26	23.58	18.98	19.06	18.50	17.18
Al	397497.43	397376.99	397389.54	397431.89	397456.39	397392.60	397398.59	397521.30
Ti	15.12	18.53	17.71	20.12	16.91	18.95	19.77	15.25
V	9.46	10.09	9.77	10.12	9.88	9.76	9.71	9.46
Cr	3.14	4.07	2.94	3.21	3.20	3.27	2.72	3.69
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2441.34	2554.69	2547.27	2496.29	2480.51	2541.93	2535.64	2418.71
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	4.69	1.61	0.55	3.46	2.07	0.11	-1.27	1.92
Be-Ti	-15.12	-18.53	-17.71	-20.12	-16.91	-18.95	-19.77	-15.25
(Be+Mg)-Ti	4.69	1.61	0.55	3.46	2.07	0.11	-1.27	1.92
(Be+Mg)%	0.80	0.78	0.71	0.93	0.75	0.74	0.72	0.70
Ti %	0.61	0.71	0.69	0.79	0.67	0.73	0.77	0.62
Fe%	98.59	98.51	98.61	98.28	98.57	98.53	98.51	98.68
Mg/Ti	1.31	1.09	1.03	1.17	1.12	1.01	0.94	1.13
(Be+Mg)/Ti	1.31	1.09	1.03	1.17	1.12	1.01	0.94	1.13





G16	G16_1	G16_2	G16_3	G16_4	G16_5	G16_6	G16_7
Cation (ppm by weight)							
Be	<3.48	<0.80	<0.76	<0.34	<0.72	<0.62	<0.49
Na	<15.76	<11.49	<10.87	<10.36	<11.10	<10.96	<10.59
Mg	17.35	25.13	23.50	24.96	24.06	23.58	25.51
Al	529197.44	529197.44	529197.44	529197.44	529197.44	529197.44	529197.44
Ti	45.85	58.08	53.85	52.56	48.37	44.95	50.24
V	35.80	46.18	43.97	41.99	42.51	40.31	41.69
Cr	58.04	65.79	72.78	68.08	72.23	70.31	73.81
Mn	<0.61	<0.45	<0.41	<0.40	<0.43	<0.42	<0.40
Fe	7640.8	7903.7	7821.38	7593.94	7769.84	7717.11	7798.78
Ga	49.89	59.68	60.25	55.89	60.11	55.89	55.58
Total %	53.59	53.62	53.60	53.59	53.62	53.60	53.61
Cations (Atom Mole ppm)							
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mg	14.45	20.93	19.57	20.79	20.04	19.64	21.25
Al	397144.79	397028.71	397059.45	397144.49	397080.66	397104.30	397069.28
Ti	19.38	24.54	22.76	22.22	20.44	19.00	21.23
V	14.23	18.35	17.47	16.69	16.89	16.02	16.57
Cr	22.60	25.61	28.33	26.51	28.12	27.38	28.74
Mn	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	2770.06	2864.53	2834.91	2753.07	2816.38	2797.44	2826.79
Ga	37.66	40.52	35.73	37.37	37.19	35.73	35.73
Total (Atom Mole %)	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Mg-Ti	-4.93	-3.61	-3.19	-1.42	-0.40	0.64	0.01
Be-Ti	-19.38	-24.54	-22.76	-22.22	-20.44	-19.00	-21.23
(Be+Mg)-Ti	-4.93	-3.61	-3.19	-1.42	-0.40	0.64	0.01
(Be+Mg)%	0.52	0.72	0.68	0.74	0.70	0.69	0.74
Ti %	0.69	0.84	0.79	0.79	0.72	0.67	0.74
Fe%	98.79	98.44	98.53	98.46	98.58	98.64	98.52
Mg/Ti	0.75	0.85	0.86	0.94	0.98	1.03	1.00
(Be+Mg)/Ti	0.75	0.85	0.86	0.94	0.98	1.03	1.00