

Table KZ-1879

ROCK				OLIVINE				
		MgO, wt%	Cu, ppm	Fo, mol%	NiO, wt%	MnO, wt%	Δ CaO, wt%	Δ Fo rims*
1710.1	(12,5)**	11.59	87	70.8-76.1	0.11-0.15	0.40-0.47 0.34-0.38 (3)	0.19 to 0.11	+0.5 to -1.1
1713.6	(10,7)	12.11	86	71.2-73.8	0.09-0.15	0.38-0.44	0.19 to 0.09	+0.5 to -0.8
1718.4	(11,5)	11.18	76	70.6-75.9	0.11-0.15	0.38-0.48	0.16 to 0.11 0.24 (1)	+0.4 to -0.6
1720.2	(10,5)	14.44	60	71.0-72.7	0.12-0.15	0.37-0.44	0.19 to 0.11 0.29 to 0.11 (1)	-0.1 to -2.7
1722.6	(13,5)	13.84	69	71.6-75.8	0.12-0.15	0.36-0.45	0.15 to 0.08	0 to -1.9
1725.2	(11,5)	11.97	66	72.6-73.9	0.12-0.15	0.39-0.45	0.16 to 0.10	+0.3 to -0.2
1729.4	(11,6)	12.72	61	73.8-76.8	0.13-0.15	0.37-0.42 0.32 (1)	0.19 to 0.10	+0.4 to -0.7
1731.8	(10,6)	15.06	60	73.9-74.9	0.14-0.16	0.34-0.39	0.20 to 0.09	+0.5 to -0.4
1734.7	(11,6)	17.32	50	74.9-77.6	0.12-0.16	0.32-0.38	0.18 to 0.10 0.32 (1)	+0.7 to -0.2
1738.3	(10,6)	13.28	63	73.9-76.1	0.13-0.17	0.35-0.39	0.16 to 0.09	+0.6 to -0.3
1743.1	(11,8)	10.32	93	69.3-74.6	0.13-0.18	0.40-0.47 0.36 (1)	0.15 to 0.11	+0.7 to -0.9
1746	(13,6)	21.47	94	74.7-76.7	0.16-0.19	0.32-0.39	0.16 to 0.09	+0.3 to -0.4
1752.5	(10,1)	27.92	5600	77.8-80.3	0.20-0.24	0.27-0.33	0.16 to 0.12	+0.2
1757	(10,5)	29.59	4800	78.3-80.7	0.21-0.25	0.24-0.32	0.15 to 0.10	+0.4 to -0.1
1761	(11,0)	28.90	5000	78.4-80.1	0.23-0.27	0.26-0.32	0.14	--
1763.1	(13,0)	28.92	4000	77.5-78.6	0.24-0.29	0.30-0.34	0.14	--
1767.9	(10,2)	26.19	3400	77.5-78.7	0.22-0.29	0.28-0.34	0.13 to 0.10	+0.2 to -0.9
1768.5A	(10,5)	13.60	4700	71.2-75.7	0.23-0.31	0.35-0.40	0.21 to 0.12	+0.5 to -0.7
1768.5B	(10,5)	16.84	6600	72.3-74.3	0.20-0.24	0.33-0.39	0.19 to 0.09	+1.1 to -1.1
1772.1	(11,5)	25.32	850	76.0-79.9	0.21-0.26	0.31-0.34 0.25 (1)	0.16 to 0.10	+0.3 to -0.2
1773	(11,5)	15.34	4100	72.3-75.4	0.19-0.23	0.32-0.40	0.19 to 0.11	+0.2 to -0.5
1777.4	(11,5)	15.70	4000	69.9-71.8	0.18-0.27	0.35-0.41	0.15 to 0.10	+0.3 to -0.5
1785.5	(3,2)	9.44	6000	65.4-67.7	0.14-0.17	0.44-0.47	0.17 to 0.10	+1.2 to +0.4

*Indicates the range over which analyzed rims differ in composition from their cores; +, rim has a higher Fo content than core.

**Indicates that cores of 12 grains were analyzed and rims on 5 of those grains.

Note:

1729.4 : 76.8 Fo + 0.32 Mn; 1720.2 : 72.7 Fo + 0.29 Ca + -2.7 Δ Fo (rest -0.1 to -0.6); 1743.1 : 74.6 Fo + 0.35 Mn;
1772.1 : 79.9 Fo + 0.25 Mn.

Table SG-28

		ROCK		OLIVINE				
		MgO, wt%	Cu, ppm	Fo, mol%	NiO, wt%	MnO, wt%	Δ CaO, wt%	Δ Fo rims*
1885	(12,6)**	16.51	160	74.6-80.9	0.08-0.12	0.29-0.38	0.29 to 0.16	+0.1 to -1.4
1886.4	(12,6)	15.11	870	74.5-81.9	0.03-0.07	0.28-0.38	0.29 to 0.16	-1.2 to -2.4
1890.1	(9,3)	14.70	160	72.1-79.9	0.04-0.07	0.35-0.42 (7) 0.29-0.33 (2)	0.29 to 0.16	-0.2 to -2.2
1899.6	(8,2)	12.52	138	72.3-79.4	0.07-0.10	0.38-0.41 (5) 0.30-0.34 (3)	0.25 to 0.17	-1.1 to -2.8
1924.3	(2,2)	11.57	114	76.2-77.1	0.05-0.07	0.33-0.36	0.21 to 0.16	0 to -0.2
1931.3	(10,4)	23.43	98	77.6-80.2	0.07-0.13	0.30-0.36 (9) 0.46 (1)	0.26 to 0.14	+1.4 to -0.4
1941.7	(12,2)	23.24	210	77.2-82.4	0.09-0.11	0.25-0.34	0.28 to 0.17	+0.1 to -0.5
1955.7	(10,1)	23.96	600	77.9-81.5	0.06-0.12	0.27-0.32	0.31 to 0.18	-2.0
1976.8	(10,3)	15.80	76	74.5-82.8 70.2-72.4 (P)***	0.08-0.12	0.24-0.31 0.39 (1) 0.43 (P)	0.29 to 0.32	-0.1 to -2.5
1986.1	(10,3)	24.30	210	80.3-83.7	0.09-0.12	0.23-0.30	0.30 to 0.24	-1.4 to -2.7
2010.5	(11,5)	19.90	215	76.5-83.1	0.09-0.12	0.22-0.35	0.32 to 0.24	-1.2 to -6.1

*Indicates the range over which analyzed rims differ in composition from their cores; +, rim has a higher Fo content than core.

**Indicates that cores of 12 grains were analyzed and rims on 6 of those grains.

***Irregular patchy areas in 3 grains are Fe rich.

Table NP-29

		ROCK		OLIVINE				
		MgO, wt%	Cu, ppm	Fo, mol%	NiO, wt%	MnO, wt%	Δ CaO, wt%	Δ Fo rims*
603	(10,2)**	10.91	3000	62.4-66.9	0.04-0.08	0.51-0.62	0.22 to 0.17	0 to -0.7
617.6	(17,6)	9.33	98	63.6-67.4	0.07-0.11	0.48-0.56	0.22 to 0.15	+0.1 to -3.0
628	(8,1)	7.31	88	59.9-62.4	0.05-0.08	0.51-0.59	0.30 to 0.15	-0.8
637.9	(10,3)	8.38	102	60.7-64.1	0.06-0.09	0.52-0.60	0.25 to 0.17	-0.5 to -2.6
655.7	(11,4)	9.07	116	59.9-64.0	0.05-0.10	0.51-0.60	0.24 to 0.17	-3.9 to -4.6
658.7	(11,5)	8.91	110	63.9-71.9	0.07-0.11	0.46-0.54 0.42 (2)	0.22 to 0.17	+1.0 to -0.6
667	(16,4)	8.65	118	61.5-75.2	0.08-0.15	0.48-0.53 (13) 0.37-0.41 (3)	0.22 to 0.17	+0.5 to -1.2
669.7	(20,7)	9.72	152	62.5-73.0	0.10-0.16	0.45-0.55 0.38 (1)	0.23 to 0.17 0.31 (1)	+0.3 to -2.6
678.2	(10,4)	16.14	134	72.0-73.2	0.14-0.17	0.37-0.45	0.16 to 0.14	+0.3 to -0.6
681.2	(10,6)	23.06	164	77.3-79.1	0.18-0.20	0.31-0.37	0.17 to 0.15	+0.6 to -0.1
683.6	(11,4)	18.35	3900	74.4-77.8	0.17-0.23	0.33-0.43	0.16 to 0.14	+0.4 to -0.1
684.4	(12,6)	19.75	5300	74.8-77.9	0.25-0.30	0.32-0.40	0.24 to 0.12	+0.4 to +0.1
691.6	(11,5)	10.30	9100	67.5-73.2	0.20-0.28	0.37-0.48	0.18 to 0.14	+0.4 to -0.8

*Indicates the range over which analyzed rims differ in composition from their cores; +, rim has a higher Fo content than core.

**Indicates that cores of 10 grains were analyzed and rims on 2 of those grains.

Note:

681.2: two grains with cores - Fo78 + 0.23 NiO and rims - Fo 78 + 0.17 NiO.

Table KZ-1713

ROCK				OLIVINE				
		MgO, wt%	Cu, ppm	Fo, mol%	NiO, wt%	MnO, wt%	Δ CaO, wt%	Δ Fo rims*
833	(5,4)**	7.40	66	61.2-63.5	0.05-0.07	0.50-0.59	0.19 to 0.12	-0.2 to -1.9
840.5	(12,6)	7.78	73	64.7-66.9	0.07-0.10	0.47-0.54	0.22 to 0.09	0 to -0.7
844.5	(10,7)	8.17	78	63.9-66.8	0.07-0.10	0.47-0.53	0.20 to 0.09	+0.5 to -0.5
853	(10,8)	10.08	83	70.0-77.7	0.10-0.16	0.31-0.46	0.20 to 0.08	+0.3 to -0.7
860	(10,7)	9.53	88	69.3-76.3	0.11-0.15	0.33-0.46	0.18 to 0.09	+0.4 to -0.4
864	(12,8)	11.58	102	72.2-76.8	0.12-0.18	0.34-0.43	0.19 to 0.09	+0.2 to -0.5
866	(11,9)	10.87	82	71.3-72.8	0.13-0.17	0.36-0.43	0.15 to 0.09	+0.7 to -0.3
870.5	(10,6)	10.41	65	70.1-72.3	0.11-0.15	0.43-0.46	0.13 to 0.09	+0.7 to -0.2
876	(11,5)	10.22	190	66.5-70.1	0.10-0.15	0.44-0.48	0.13 to 0.09	+0.4 to -0.7
879	(12,9)	15.89	122	73.2-75.7	0.14-0.17	0.33-0.38	0.15 to 0.09	+0.5 to -0.2
880	(10,2)	25.95	3700	79.2-80.1	0.21-0.26	0.26-0.31	0.15 to 0.09	+0.7 to -0.2
883.8	(12,5)	29.13	5600	79.0-79.9	0.22-0.28	0.26-0.32	0.14 to 0.08	+0.3 to -0.1
888.3	(13,6)	27.49	7350	79.1-81.4	0.18-0.25	0.27-0.32	0.13 to 0.08	+0.4 to -0.1
896.9	(12,8)	27.28	9700	75.4-78.4	0.18-0.27	0.29-0.33	0.14 to 0.07	+0.4 to -0.2
902.8	(13,8)	27.04	13800	75.0-78.3	0.17-0.27	0.27-0.37	0.14 to 0.09	+0.5 to -0.3
910.5	(10,8)	20.56	8900	70.0-73.2	0.19-0.29	0.34-0.42	0.14 to 0.08	+0.8 to -0.7
922.9	(4,0)	10.88	16900	60.8-68.9	0.17-0.21	0.41-0.50	0.09	--

*Indicates the range over which analyzed rims differ in composition from their cores; +, rim has a higher Fo content than core.

**Indicates that cores of 5 grains were analyzed and rims on 4 of those grains.

Table KZ-1799

ROCK				OLIVINE				
		MgO, wt%	Cu, ppm	Fo, mol%	NiO, wt%	MnO, wt%	Δ CaO, wt%	Δ Fo rims*
1255	(5,3)**	6.20	174	55.8-61.3	0.03-0.05	0.58-0.70	0.28 to 0.16	+0.7 to -3.9
1259	(6,2)	8.37	99	61.1-63.5	0.04-0.07	0.54-0.59	0.20 to 0.10	0 to -0.7
1269	(7,4)	7.01	116	57.7-61.9	0.04-0.06	0.57-0.63	0.22 to 0.10	-0.2 to -1.3
1275	(4,3)	6.72	95	57.1-62.2	0.04-0.08	0.55-0.62	0.24 to 0.13	-0.4 to -2.0
1314	(11,5)	9.25	650	62.6-70.7	0.13-0.15	0.42-0.52	0.16 to 0.09	+0.7 to -0.2
1318.9	(14,9)	15.28	1050	70.4-77.6	0.10-0.17	0.33-0.46	0.18 to 0.11	+0.3 to -1.3
1319.8	(14,6)	25.45	3500	77.4-79.6	0.18-0.26	0.27-0.32	0.20 to 0.10	+0.3 to -0.3
1321.5	(11,5)	27.18	4900	76.1-81.5	0.18-0.33	0.24-0.38	0.20 to 0.08	+0.6 to -0.4
1324.9	(15,8)	23.11	4800	75.9-78.4	0.15-0.22	0.31-0.34	0.17 to 0.08	+2.2 to -0.2
1328	(12,7)	24.93	2600	75.8-78.8	0.15-0.23	0.28-0.37	0.24 to 0.09	+0.4 to -0.4
1330.8	(14,6)	21.94	5100	73.7-77.4	0.17-0.26	0.31-0.41	0.19 to 0.09	+0.6 to -0.3
1332	(13,5)	15.38	19000	67.6-77.0	0.14-0.23	0.32-0.38 0.52 (1)	0.27 to 0.12	+0.2 to -2.1
1335	(14,2)	12.39	21000	71.7-76.9	0.13-0.23	0.35-0.46	0.23 to 0.11	0
1337.5	(7,2)	9.04	6200	65.6-68.6	0.14-0.22	0.47-0.52	0.17 to 0.11	+0.1
1339	(15,10)	9.48	3500	62.3-69.6	0.08-0.15	0.42-0.53	0.21 to 0.12	+0.4 to -1.7

*Indicates the range over which analyzed rims differ in composition from their cores; +, rim has a higher Fo content than core.

**Indicates that cores of 5 grains were analyzed and rims on 3 of those grains.

Note:.

1255: CaO jumps 0.28 to 0.40 in grain zoned 59.8 to 55.9; 1332: 67.6 Fo = 0.52 MnO and 0.23 NiO.

KEY



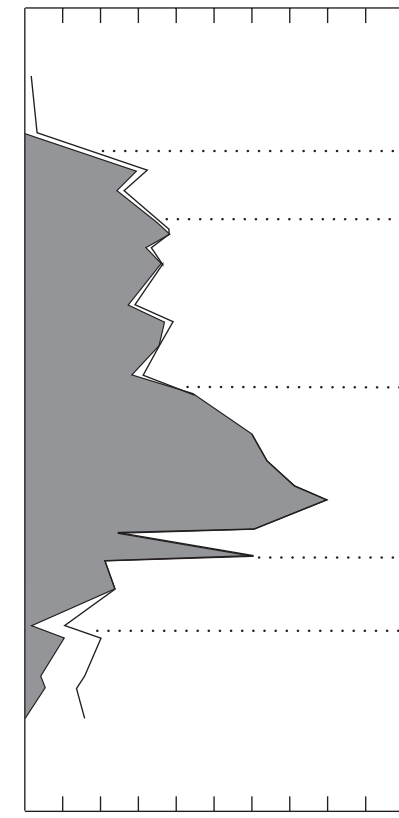
Olivine:

a - first generation

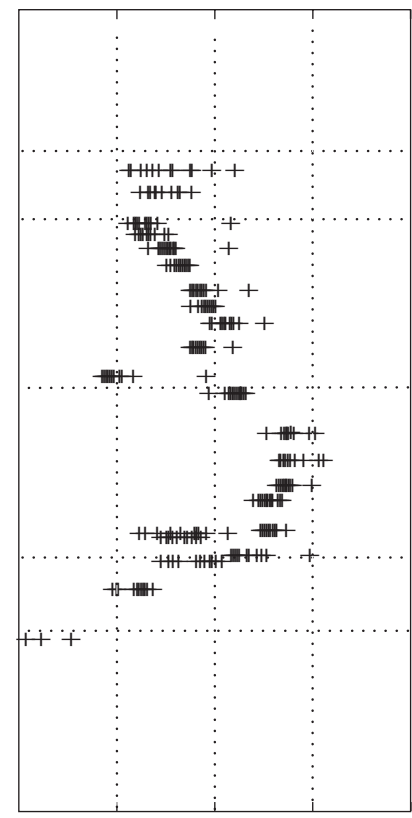
b - second generation

KZ-1879

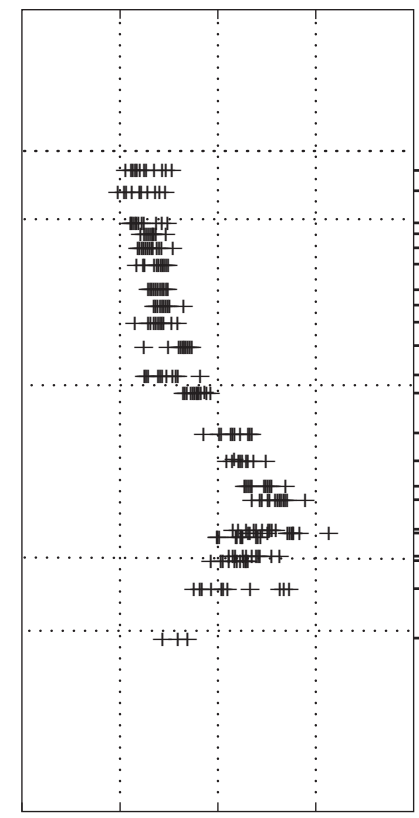
1694.7	Devonian hornfels
1695.8	Contaminated gabbrodolerite
1707.1	Leucocratic gabbro
1718.2	Olivine gabbrodolerite
1745.0	Olivine gabbrodolerite/picritic-like gabbrodolerite
1772.5	Picritic gabbrodolerite/olivine-rich picritic gabbrodolerite
1784.4	Olivine gabbrodolerite
1796.05	Taxitic gabbrodolerite
1798.3	Massive ore
1800.7	Contact gabbrodolerite
1810.2	Massive Ore
1812.5	Devonian hornfels
	Undefined gabbrodolerite



Olivine, modal %

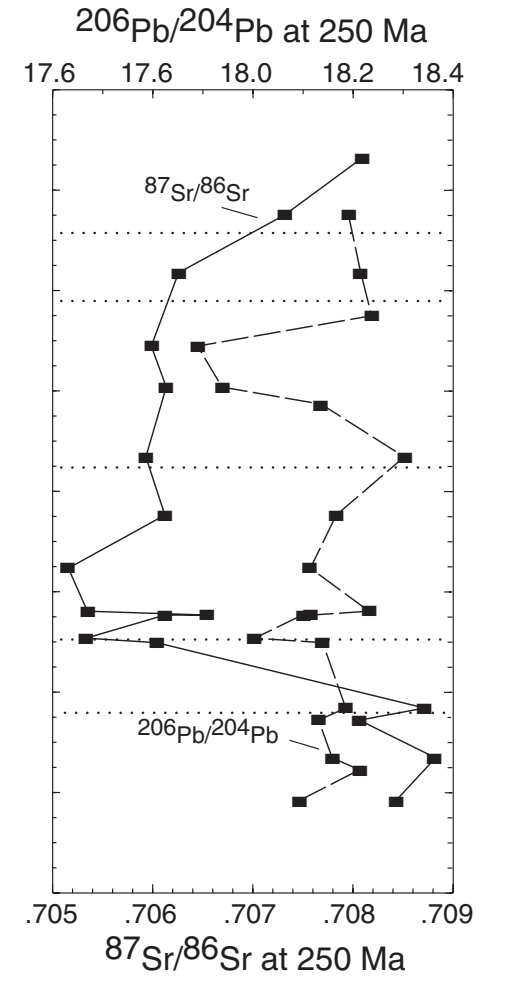
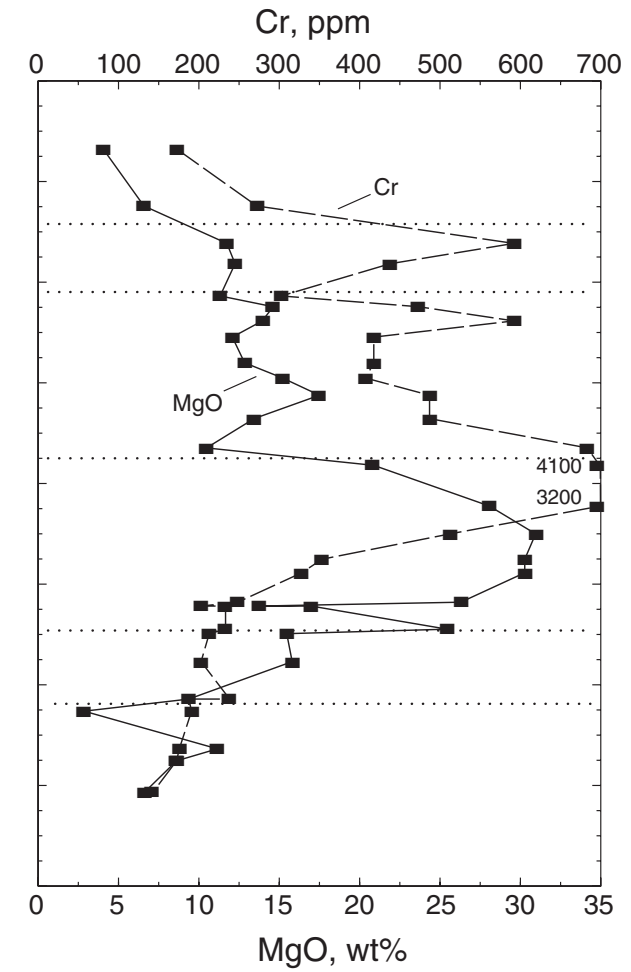


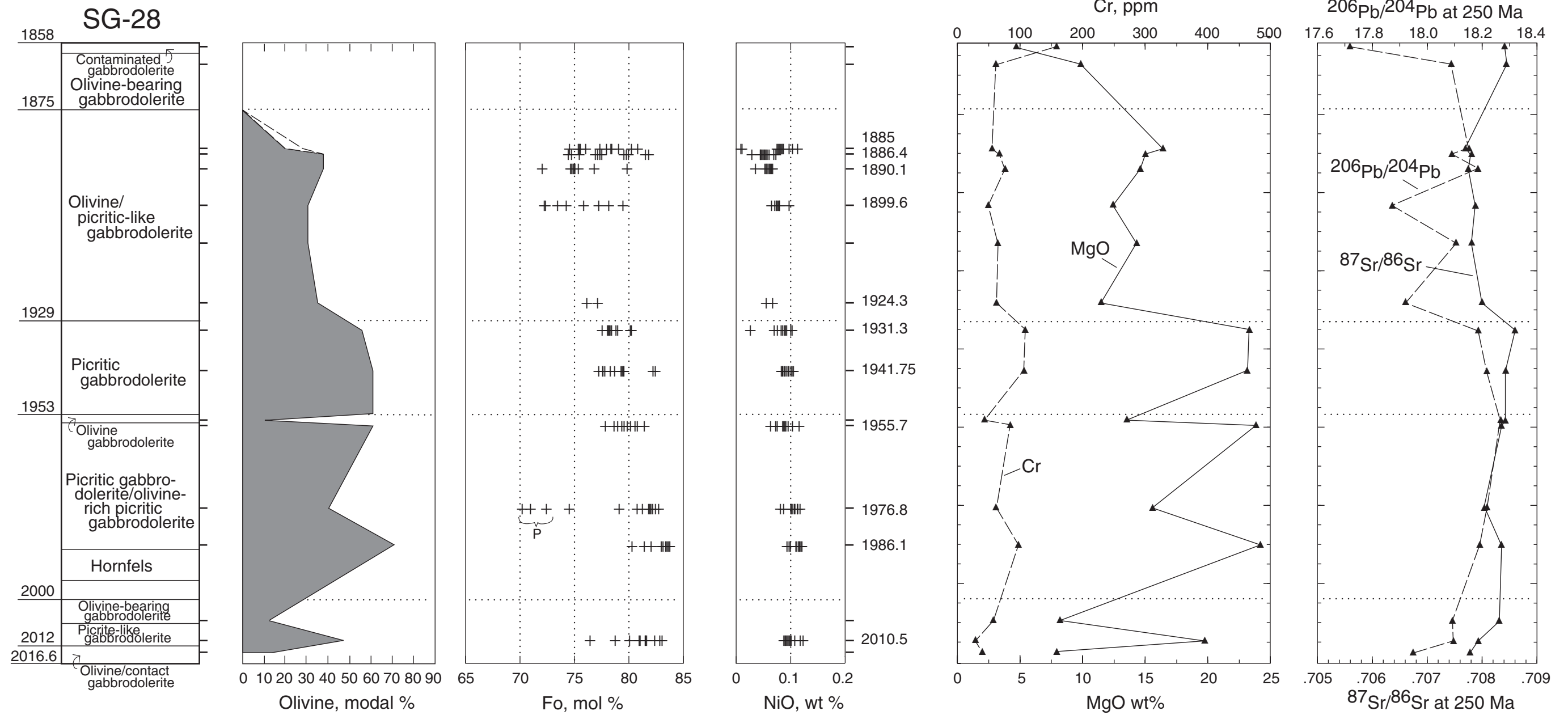
Fo, mol %



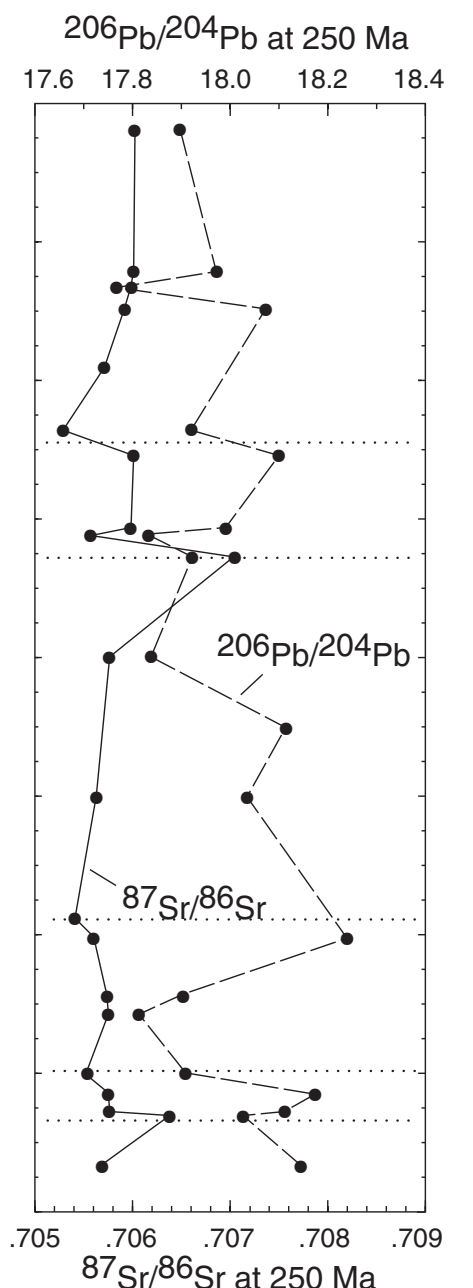
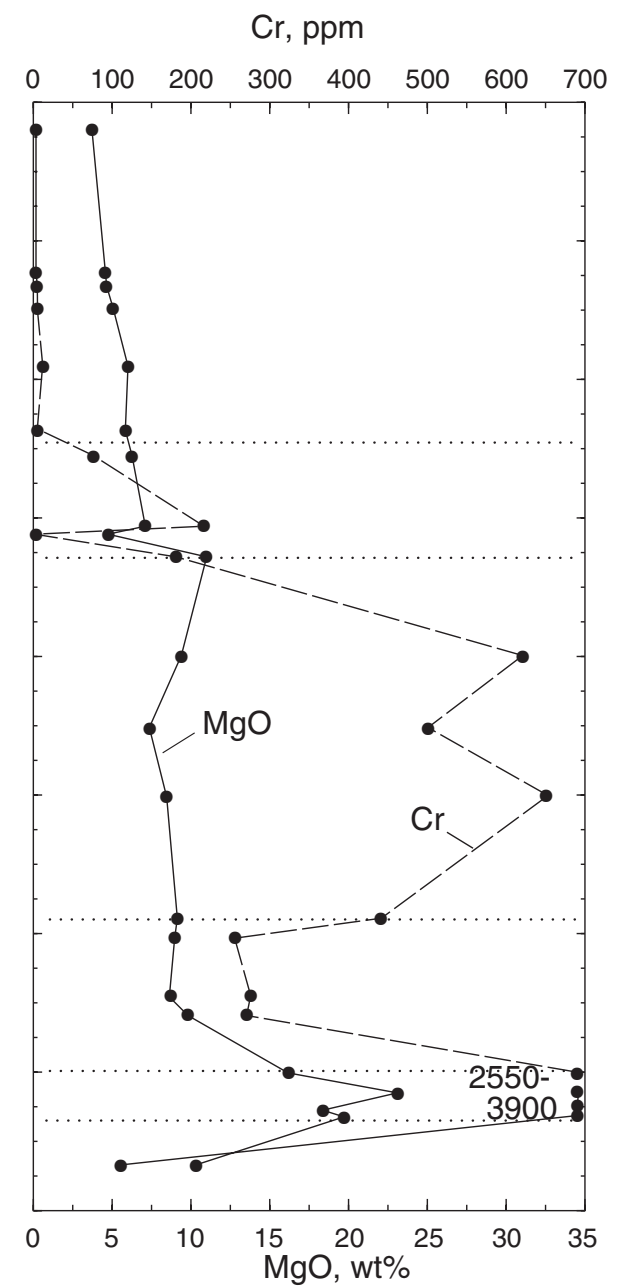
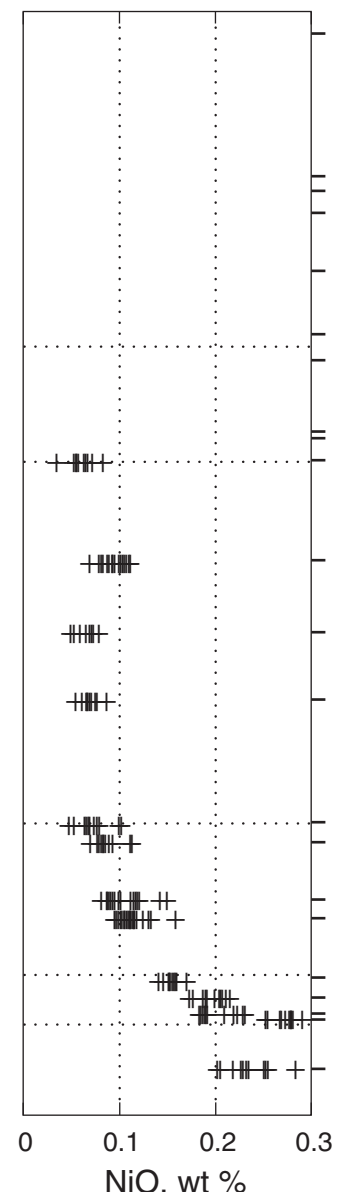
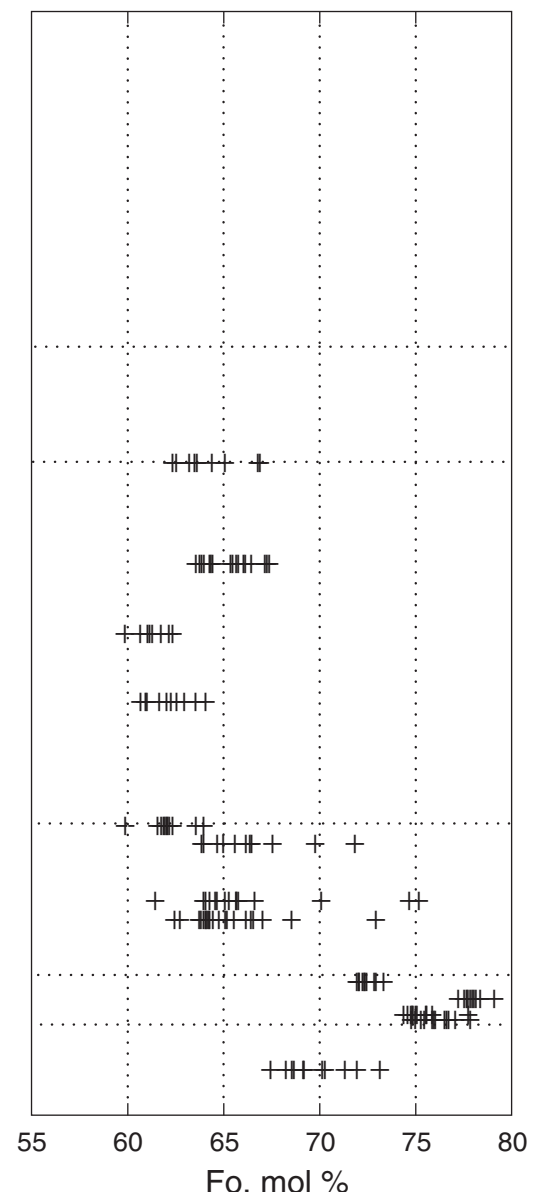
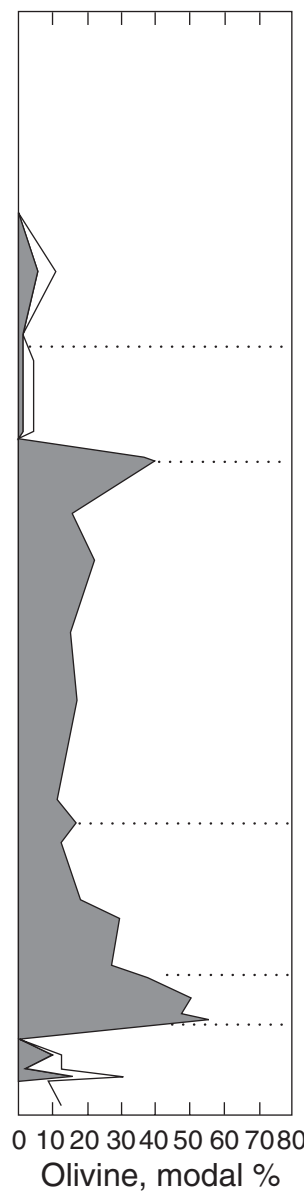
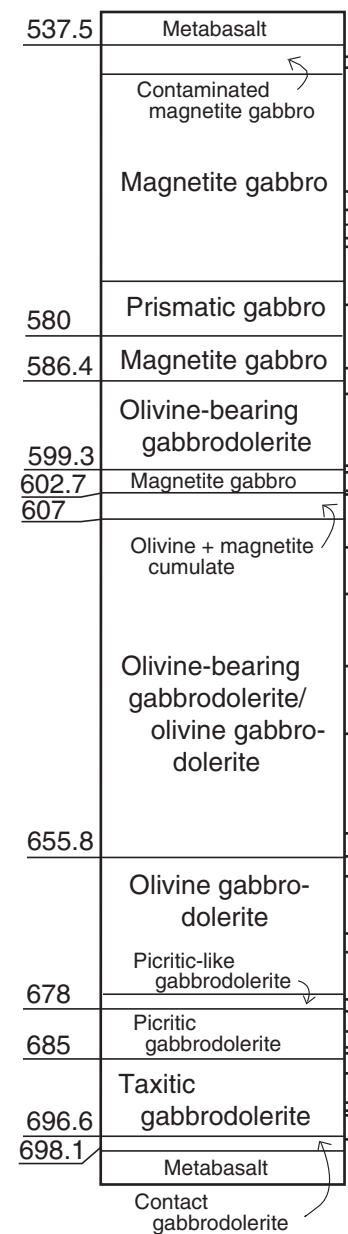
NiO, wt %

1710.1
1713.6
1718.4
1720.2
1722.6
1725.2
1729.4
1731.8
1734.7
1738.3
1743.1
1746
1752.5
1757
1761
1763.1
1767.9
1768.5A
1768.5B
1772.1
1773
1777.4
1785.5





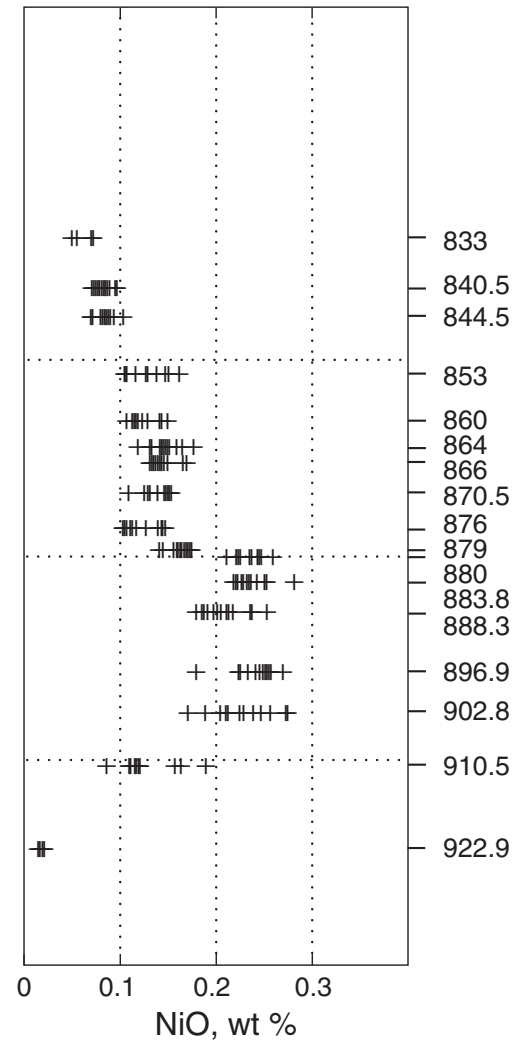
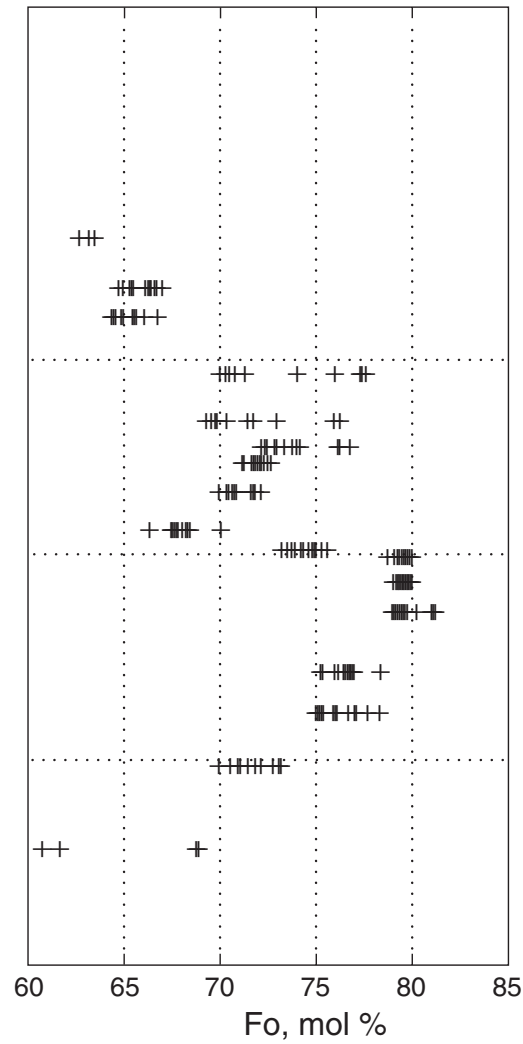
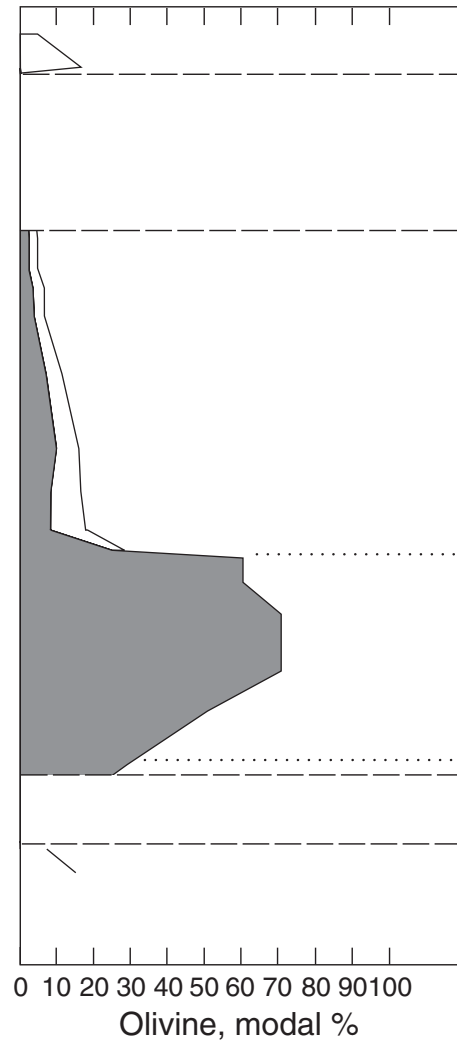
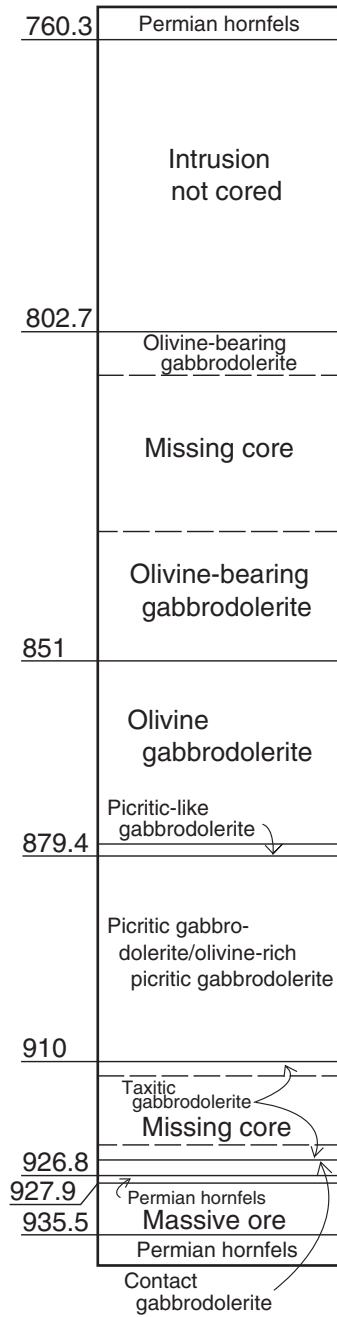
NP-29



603
617.6
628
637.9
655.7
658.7
667
669.7
678.2
681.2
683.6
684.4
691.6

2550-3900

KZ-1713



833
840.5
844.5
853
860
864
866
870.5
876
879
880
883.8
888.3
896.9
902.8
910.5
922.9

KZ-1799

