TABLE A. BULK CHEMICAL COMPOSITION OF SERPENTINE SAMPLES *

Sample	CH35a	CH52c	CH98a	CH98b	CH146	CH187	TS18c
SiO_2 (wt.%)	38.68	29.55	35.05	40.15	40.59	39.39	38.09
TiO_2	0.02	0.374	0.03	0.015	0.024	0.023	0.032
Al_2O_3	0.49	16.72	0.54	0.37	0.77	1.09	8.44
Fe_2O_3 (t)**	7.58	5.55	6.83	7.54	7.59	8.99	8.19
MnO	0.1	0.277	0.127	0.1	0.093	0.105	0.107
MgO	38.56	29.65	39.97	41.82	36.65	38	30.59
CaO	0.65	4.41	0.64	0.29	1.05	0.33	3.22
Na_2O	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.16
K_2O	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005
P_2O_5	0.004	0.081	0.005	0.006	0.004	<0.001	0.003
LOI***	13.8	14.7	17	9.8	13.1	11.8	11.1
Cr (ppm)	2121	32	2718	2604	2581	2778	3159
V	28	48	19	18	34	37	27
Co	107	<10	97	110	93	113	94
Zn	49	21	51	54	30	32	45
Ni	2222	16	2255	2825	2260	2393	1387
Ga	<10	13	<10	<10	<10	<10	<10
Zr	<5	69	<5	<5	<5	<5	<5
Y	<5	29	<5	<5	<5	<5	<5
Sr	10	28	24	12	17	5	36
Pb	140	<10	450	111	<15	315	15
Th	<10	<10	14	<10	<10	11	<10
U	<10	<10	30	<10	<10	17	<10
Os (ppb)	2.2	0.08	3.77	1.4	3.0	1.6	0.27
Ir	2.25	0.041	1.53	2.95	1.39	2.83	0.187
Pt	2.1	1.2285	1.4635	6.8075	5.0735	5.467	2.03
Pd	8.36	11.8	2.23	4.69	2.84	20.1	5.82
Re	0.013	0.013	0.012	0.020	0.027	0.20	0.078
Total (wt.%)	100.33	101.32	100.70	100.65	100.36	100.26	100.40

* The concentration of major and minor elements was determined on fused disks using a Philips PW-2400 X-ray fluorescent spectrometer in Ottawa.

** Fe total is expressed as Fe_2O_3

The contents of Rb Nb La, Ce, Nd and Ba are below detection limits,< 5 ppm for Rb and Nb and 50 ppm for the rest of elements.

*** Loss of ignition, determined after heating samples for >1hr at 1050 C

TABLE B. OLIVINE AND CHROMITE COMPOSITIONS

Mineral	Olivine	Olivine		chromite	chromite	chromite	chromite	chromite
Sample	CH98b	CH98b		CH35a	CH98a	CH98b	CH146	CH187
SiO2	42.73	42.67	SIO2	0.03	0.02	0.00	0.00	0.04
TiO2	0.04	0.04	TiO2	0.10	0.04	0.04	0.19	0.07
FeO	3.95	3.81	Al2O3	18.80	8.82	9.29	6.66	9.82
Cr2O3	0.00	0.00	Cr2O3	42.67	57.07	58.74	53.49	55.90
MgO	54.83	54.78	Fe2O3	7.33	3.82	2.92	9.94	4.48
MnO	0.25	0.16	FeO	27.45	22.90	21.70	23.00	21.98
NiO	0.00	0.00	MgO	7.88	6.74	7.72	6.30	7.42
CaO	0.02	0.03	MnO	0.68	0.00	0.00	0.00	0.00
NiO	0.00	0.00	NiO	0.09	0.03	0.05	0.05	0.00
			ZnO	0.02	0.00	0.16	0.29	0.21
Total	101.82	101.48	total	100.25	99.64	100.84	100.13	100.40
Calc. based on 4 O			Calc. based on 32 O					
Si	1.00	1.00	Si	0.00	0.00	0.00	0.00	0.01
Ti	0.00	0.00	Ti	0.00	0.01	0.01	0.04	0.01
Fe	0.08	0.07	Al	5.77	2.85	2.94	2.17	3.13
Mg	1.91	1.92	Cr	8.78	12.36	12.46	11.71	11.95
Mn	0.00	0.00	Fe3+	1.44	0.79	0.59	2.07	0.91
Ni	0.00	0.00	Fe2+	4.77	5.24	4.87	5.33	4.97
Al	0.00	0.00	Mg2+	3.06	2.75	3.09	2.60	2.99
Ca	0.00	0.00	Mn2+	0.15	0.00	0.00	0.00	0.00
Total	3.00	3.00	Ni2+	0.02	0.01	0.01	0.01	0.00
			Zn2+	0.00	0.00	0.03	0.06	0.04
% Fo	96.11	96.25						
			Cr#	0.60	0.81	0.81	0.84	0.79
			Mg#	0.39	0.34	0.39	0.33	0.38