APPENDIX 7A

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); GARNET

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Garnet class[1]	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ni-in-garnet (°C)[3] Ryan et al., 1996	Ni-in-garnet(°C)[4] Griffin et al., 1989	Ni-in-garnet (°C)[5] Canil, 1999	Ni-in-garnet(°C)[6] Avg. (Griffin + Canil)
Gar15SUV001row3grain1 - 1	2015_1	1-3_001	andradite	garnet	G9	0.25-0.5	263400	20900	20910	0.77	29.1	10.29	95.5	67.2		21.34	161.4	32.7	167.3	21.44	4.47	8.78	0.737	3	0.403	0.779	0.0856	0.511	0.0781	1.761	369.92			
Gar15SUV001row3grain1 - 2	2015_1	1-3_001_rpt	andradite	garnet	G9	0.25-0.5	260500	20600	20530	0.85	28.06	10.24	96.4	65.3		20.5	154.6	31.38	160.8	21.17	4.4	8.84	0.73	2.89	0.394	0.76	0.0896	0.505	0.0783	1.701	377.74			
Gar15SUV001row3grain2 - 1	2015_1	1-3_002	andradite	garnet	G9	0.25-0.5	251000	56600	56400	13.78	18.4	161.7	136.7	47.3	5.91	4.71	65.5	17.58	105	27.8	5.34	30.2	4.49	30.2	6.03	15.93	2.24	13.4	1.615	1.57	716.89			
Gar15SUV001row4grain1 - 1	2015_1	1-4_001	almandine	garnet	G0	0.5-1.0	9860	1020	1037		0.162	2980	5.02	1.07		0.0043	0.025	0.0251	0.859	11.05	0.09	58.7	22.8	215	42	150.5	31.7	294	39.3	0.945				
Gar15SUV001row4grain1 - 2	2015_1	1-4_001_rpt	almandine	garnet	G0	0.5-1.0	10280	1128	1144		0.166	3170	5.48	1.19		0.0016	0.0193	0.0295	0.867	12.78	0.111	64.8	25.3	240	46.1	158.1	31.9	284	35.2	1.05				
Gar15SUV001row6grain1 - 1	2015_1	1-6_001	spessartine	garnet	G0	0.25-0.5	3470	853	855		0.439	3730	3.53	0.133			0.0056	0.0127	0.385	3.95	0.0088	31.5	12.91	168	53.2	280	82.3	1055	221	0.287				
Gar15SUV001row6grain1 - 2	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3580	934	945		0.563	4300	4.3	0.181			0.0087	0.0165	0.482	4.64	0.0114	36.2	14.8	194	63.2	343	103.7	1356	291	0.34				
Gar15SUV001row6grain1 - 3	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3280	880	881		0.445	3700	3.99	0.57		0.0012	0.0106	0.0137	0.503	4.11	0.008	32	13.02	165	52.1	272	80.1	1024	214	0.276				
Gar15SUV001row6grain1 - 4	2015_1	1-6_001_rpt	spessartine	garnet	G0	0.25-0.5	3630	930	945		0.588	4340	4.55	0.174			0.0104	0.0107	0.538	4.61	0.0135	36.1	14.91	196	63.2	347	106	1382	291	0.364				
Gar15SUV001row6grain2 - 1	2015_1	1-6_002	spessartine	garnet	G0	0.25-0.5	4980	852	855		0.773	7830	16.8	5.57	0.0009	0.0072	0.0492	0.0261	1.07	15.1	0.0125	122.6	49.5	552	143.1	632	169	1900	343	1.7				
Gar15SUV001row6grain2 - 2	2015_1	1-6_002_rpt	spessartine	garnet	G0	0.25-0.5	5090	690	700		0.227	2970	6.55	41		0.025	0.101	0.0217	0.225	3.05	0.005	40.5	19.8	212	49.3	194	47.8	498	81.6	0.645				
Gar15SUV001row6grain2 - 3	2015_1	1-6_002_rpt	spessartine	garnet	G0	0.25-0.5	4750	996	981		0.723	6780	18.1	21.9		0.0501	0.309	0.087	0.99	8.44	0.0136	88.3	40.6	475	127	569	153.7	1760	327	1.69				
Gar15SUV003row4grain2 - 1	2015_1	1-4_002	almandine	garnet	G3	0.25-0.5	57500	1045	1055	13.6	0.027	50.7	12.72	0.0034		0.0067	0.117	0.0749	1.285	1.72	0.762	4.23	1.027	9.44	1.97	5.36	0.668	4	0.47	0.133	714.46			
Gar15SUV003row4grain2 - 2	2015_1	1-4_002_rpt	almandine	garnet	G3	0.25-0.5	59800	1167	1174	13.63	0.0196	60.1	13.5	0.0031		0.0159	0.166	0.091	1.39	1.89	0.849	4.41	1.039	9.71	2.19	6.5	0.894	5.85	0.682	0.15	714.87			
Gar15SUV003row4grain3 - 1	2015_1	1-4_003	almandine	garnet	G0	0.25-0.5	51600	490	483	0.61	0.132	1950	4.4	0.0032		0.0042	0.108	0.106	2.19	9.53	1.26	70.1	25.5	293	80.4	280	40.7	274	37	0.124	352.23			
Gar15SUV004row2grain1 - 1	2015_1	missing	garnet	missing EPMA		0.25-0.5	37900	673	675	21.9	0.149	19.7	28.8	0.077		0.0186	0.211	0.0804	1.058	0.733	0.313	1.39	0.312	2.96	0.76	2.7	0.44	3.22	0.488	0.472	810.83			
Gar15SUV004row2grain1 - 2	2015_1	missing	garnet	missing EPMA		0.25-0.5	38300	669	680	21.9	0.148	20.14	29.4	0.088		0.0182	0.221	0.0873	1.092	0.745	0.313	1.35	0.319	2.98	0.774	2.69	0.439	3.13	0.515	0.426	810.83			
Gar15SUV005row4grain4 - 1	2015_1	1-4_004	almandine	garnet	G0	0.5-1.0	4650	22.8	22.9		0.159	721	4.1				0.0243	0.0142	0.229	0.421	0.0063	4.11	2.92	58.2	27	161	36.3	333	58.6	0.097				
Gar15SUV005row4grain4 - 2	2015_1	1-4_004_rpt	almandine	garnet	G0	0.5-1.0	7450	35.1	34.5		0.144	954	2.2	0.0023			0.0269	0.0193	0.465	1.024	0.0213	6.6	4.47	81.7	33.3	169.8	34.3	281	43.8	0.075				
Gar15SUV005row4grain4 - 3	2015_1	1-4_004_rpt	almandine	garnet	G0	0.5-1.0	10200	46	45.1	0.41	0.089	985	1.33	0.0021			0.0222	0.0238	0.541	1.51	0.0267	10.22	6.46	99.4	32.5	134.3	23.4	171	24.2	0.033	324.19			
Gar15SUV005row4grain5 - 1	2015_1	1-4_005	almandine	garnet	G3	0.25-0.5	47700	960	950	6.77	0.0186	50.5	13.14	0.004			0.0659	0.0478	0.799	1.38	0.717	4.36	0.995	8.61	1.9	5.84	0.866	5.56	0.76	0.171	600.72			
Gar15SUV006row4grain6 - 1	2015_1	1-4_006	almandine	garnet	G0	0.25-0.5	19450	121.6	121.2		0.086	962	2.97	0.003		0.0025	0.0468	0.0403	1.088	5.3	0.121	30.5	11.36	120.3	32.7	121.3	20.88	155.4	23.01	0.086				
Gar15SUV006row4grain6 - 2	2015_1	1-4_006_rpt	almandine	garnet	G0	0.25-0.5	23500	130.3	129.8	0.42	0.074	1153	3.06	0.0039		0.0019	0.0611	0.0622	1.33	5.9	0.128	30.8	11.5	136.9	39.8	137.8	22.4	156.6	21.79	0.061	325.82			
Gar15SUV006row4grain7 - 1	2015_1	1-4_007	almandine	garnet	G0	0.25-0.5	21600	129	126.3	0.71	0.056	1401	3.15	0.0047		0.0055	0.0905	0.0854	1.67	7.1	0.354	49.6	19.27	202	51.3	155.8	20.4	115.1	14.1	0.089	363.65			
Gar15SUV006row4grain7 - 2	2015_1	1-4_007_rpt	almandine	garnet	G0	0.25-0.5	20900	122.1	122.5	0.61	0.054	1374	3.23	0.0042		0.0037	0.1	0.083	1.61	6.97	0.33	48.8	18.92	197.5	47.7	140.6	18.23	104	12.33	0.096	352.23			
Gar15SUV009row2grain2 - 1	2015_1	1-2-2	garnet	garnet	G9	0.25-0.5	38600	735	749	27.4	0.066	16.15	15.7	0.071		0.0129	0.112	0.0349	0.448	0.536	0.337	1.44	0.309	2.61	0.605	1.99	0.36	2.47	0.434	0.249	862.97			
Gar15SUV009row4grain8 - 2	2015_1	1-4_008_rpt	garnet	garnet	G4	0.25-0.5	13710	584	582	0.7	0.0157	341	21.8	0.0041			0.157	0.171	3.99	8.42	0.535	25.1	6.3	54.9	11.92	33.8	4.51	28.2	3.41	0.314	362.56			
Gar15SUV014row2grain3 - 1	2015_1	1-2-3	garnet	garnet	G10	0.25-0.5	28500	102.8	103.4	47.8	3.19	1.64	10.37	0.982		0.703	4.81	0.908	4.6	0.913	0.276	0.745	0.08	0.376	0.0595	0.217	0.0531	0.543	0.158	0.177	1017.10	1074.72	1042.12	1058.42
Gar15SUV014row2grain3 - 2	2015_1	1-2-3_rpt	garnet	garnet	G10	0.25-0.5	26000	94	94	44.2	2.62	1.527	10.63	0.99		0.609	4.25	0.849	4.56	0.975	0.322	0.781	0.088	0.376	0.0495	0.187	0.0462	0.617	0.136	0.212	994.30	1049.86	1027.73	1038.80
Gar15SUV014row2grain3 - 3	2015_1	1-2-3_rpt	garnet	garnet	G10	0.25-0.5	24500	89.4	90.2	42.1	2.77	1.424	8.73	0.851		0.625	4.27	0.794	4.13	0.744	0.264	0.61	0.074	0.301	0.0494	0.177	0.0485	0.557	0.127	0.154	978.36	1032.51	1017.55	1025.03
Gar15SUV014row2grain4 - 1	2015_1	1-2-4	garnet	garnet	G10D	0.25-0.5	21900	161	156	46.3	4.6	1.423	5.33	1.83	0.86	2.13	4.13	0.771	4.74	1.101	0.333	0.755	0.0727	0.348	0.0537	0.11	0.019	0.228	0.062	0.055	1007.15	1063.86	1035.86	1049.86
Gar15SUV019row1grain1 - 1	Mount 3	127	garnet	garnet	G11	0.18-0.25	57500	4860	4830	179.3	0.736	66.2	145.4	0.316	-0.09	0.0275	0.455	0.217	2.8	2.52	1.259	5.74	1.261	10.53	2.6	8.19	1.252	8.67	1.302	3.22	1630.79	1758.53	1367.30	1562.91
Gar15SUV019row1grain1 - 2	Mount 3	128	garnet	garnet	G11	0.18-0.25	70200	4300	4310	139.6	0.706	50.1	121.5	0.354	-0.114	0.0112	0.216	0.139	2.13	3.47	1.805	7.46	1.377	9.73	1.918	5.38	0.726	4.6	0.672	2.59	1473.51	1580.49	1293.95	1437.22
Gar15SUV019row2grain5 - 1	2015_1	1-2_005	garnet	garnet	G9	0.25-0.5	37500	3870	3910	89.2	0.405	15.41	44.7	0.384		0.0347	0.413	0.141	1.288	0.936	0.465	1.88	0.361	2.83	0.656	1.96	0.285	2.17	0.301	1.15	1248.55	1329.21	1177.85	1253.53
Gar15SUV019row2grain5 - 2	2015_1	1-2_005_rpt	garnet	garnet	G9	0.25-0.5	37000	3840	3880	88.2	0.387	15.68	44.4	0.449		0.0355	0.394	0.131	1.3	0.924	0.437	1.81	0.379	3	0.66	1.93	0.297	2.02	0.307	1.2	1243.64	1323.76	1175.15	1249.45
Gar15SUV019row2grain5 - 3	2015_1	1-2_005_rpt	garnet	garnet	G9	0.25-0.5	36900	3900	3910	87.3	0.416	14.99	43.7	0.421		0.0327	0.407	0.14	1.35	1.002	0.468	1.81	0.346	2.69	0.606	1.83	0.279	1.95	0.29	1.098	1239.19	1318.83	1172.70	1245.77
Gar15SUV019row2grain6 - 1	2015_1	1-2_006	garnet	garnet	G9	0.25-0.5	34900	41.4	41.2	19.2	1.055	1.33	0.188	0.188		0.332	1.029	0.1	0.199	0.0105	0.0074		0.0029	0.071	0.0531	0.25	0.071	0.744	0.177	0.0021	782.38	820.72	883.88	852.30
Gar15SUV019row2grain6 - 2	2015_1	1-2_006_rpt	garnet	garnet	G9	0.25-0.5	36200	39.7	41.4	18.3	1.091	1.458	0.266	0.197		0.352	1.127	0.107	0.274	0.038	0.0124	0.026	0.0028	0.088	0.0464	0.297	0.077	0.864	0.164	0.0026	772.37	809.98	876.60	843.29
Gar15SUV019row3grain1 - 1	Mount 3	156	almandine	garnet	G0	0.18-0.25	16930	451	466	6.67	0.011	152.5	133.7	0.0161	0.048	-0.0014	0.0323	0.119	5.99	19.9	0.936	37.2	5.79	35.2	5.97	14.71	1.87	11.38	1.537	2.12	598.57			
Diop15SUV019row3grain6 - 1	Mount 3	161	diopside	garnet	G0	0.18-0.25	5620	180	0.384	2	5.56	0.037	50.5	0.29	12.16	0.12	1.971	0.46	7.09	0.042	0.749	0.15									454.28			
Gar15SUV020row2grain7 - 1	2015_1	1-2_007	garnet	garnet	G9	0.25-0.5	35400	2210	2220	73.1	0.356	15.35	25.2	0.367		0.0209	0.264	0.102	0.928	0.742	0.355	1.5	0.339	2.6	0.616	1.93	0.292	2.08	0.338	0.616	1166.17	1238.16	1131.60	1184.88
Gar15SUV020row2grain7 - 2	2015_1	1-2_007_rpt	garnet	garnet	G9	0.25-0.5	32900	2079	2210	67.8	0.345	14.43	23.46	0.314		0.0193	0.258	0.0954	0.912	0.698	0.336	1.4	0.267	2.35	0.575	1.8	0.257	1.94	0.288	0.506	1137.30	1206.37	1114.87	1160.62
Gar15SUV020row2grain7 - 3	2015_1	1-2_007_rpt	garnet	garnet	G9	0.25-0.5	34900	2210	2220	71.7	0.325	14.85	24.7	0.363		0.024	0.27	0.096	0.978	0.762	0.353	1.38	0.298	2.58	0.597	1.89	0.279	2.01	0.325	0.616	1158.64	1229.86	1127.26	1178.56
Gar15SUV020row6grain3 - 1	2015_1	1-6_003	spessartine	garnet	G0	0.25-0.5	9280	946	953		0.619	5720	3.82	1.47		0.022	0.059	0.022	0.632	6.16	0.0395	62.3	27.5	373	127.1	607	145.8	1446	260	0.289				
Gar15SUV020row6grain3 - 2	2015_1	1-6_003_rpt	spessartine	garnet	G0	0.25-0.5	7540	1217	1230		0.28	4600	5.28	0.506		0.0026	0.0246	0.0268	1.151	11.7	0.0463	83.9	29.6	312	78.1	298	64.6	600	95.9	0.478				
Gar15SUV024row1grain1 - 1	2015_1	1-1-1	GO[2]	garnet	G9	0.25-0.5	39500	4050	4110	44.7	0.37	12.96	38.5	0.332		0.0251	0.304	0.1065	1.12	0.72	0.342	1.47	0.27	2.24	0.525	1.6	0.252	1.77	0.277	0.916	996.35			
Gar15SUV024row1grain1 - 2	2015_1	1-1-2	GO	garnet	G0	0.25-0.5	7750	324	334	3.54	0.028	133.4	56.8	0.0057			0.0428	0.0772	3.03	9.34	0.612	15.66	2.87	22.9	5.37	16.82	2.35	15.55	2.27	0.67	516.22			
Gar15SUV024row1grain2 - 2	2015_1	1-1-2_rpt	GO	garnet	G0	0.25-0.5	8090	303	309	2.8		134.3	79.6	0.0047			0.0707	0.0848	2.77	8.65	0.592	16.5	3.07	23.2	5.03	15.21	2.13	14.3	2.02	1.26	489.54			
Gar15SUV024row1grain2 - 3	2015_1	1-1-2_rpt	GO	garnet	G0	0.25-0.5	7750	258	262	2.62		116.5	62.3	0.0056			0.0564	0.0623	2.26	7.03	0.482	13.94	2.64	20.3	4.41	13.35	1.85	12.1	1.76	1.29	482.31			
Gar15SUV024row2grain8 - 1	2015_1	1-2_008	garnet	garnet	G9	0.25-0.5	35700	2188	2185	51.7	0.488	21.7	56.6	0.5		0.0358	0.424	0.157	1.65	1.27	0.68	2.58	0.546	3.99	0.876	2.56	0.349	2.33	0.354	1.248	1042.26	1102.18	1057.77	1079.98

Sample	Batch	Code	Mineral	Type	Grp	Size																												
Gar15SUV024row2grain8 - 2	2015_1	1-2_008	garnet	garnet	G9	0.25-0.5	34700	2106	2098	50.4	0.467	21.4	55.8	0.48		0.0294	0.395	0.141	1.75	1.29	0.624	2.46	0.514	3.91	0.841	2.52	0.349	2.19	0.343	1.212	1033.98	1093.14	1052.65	1072.89
Gar15SUV024row5grain1 - 1	2015_1	1-5_001	almandine	garnet	G0	0.25-0.5	52500	69.6	72.6		0.056	132.6	3.74	0.0067		0.0247	0.191	0.0899	1.26	1.48	1.585	4.99	1.103	10.17	2.85	8.84	1.143	7.51	1.211	0.063				
Gar15SUV024row5grain2 - 1	2015_1	1-5_002	almandine	garnet	G3	0.25-0.5	59100	796	802	0.32	0.0449	332	11.72	0.0041		0.0294	0.513	0.281	4.34	7.65	2.54	24.1	5.78	52.6	12.49	41.5	6.3	45.3	6.58	0.251	307.94			
Gar15SUV024row5grain2 - 2	2015_1	1-5_002_rpt	almandine	garnet	G3	0.25-0.5	58300	848	852		0.0454	343	13.23	0.0073		0.0187	0.502	0.271	4.57	7.78	2.31	25	6.11	54	13.01	43.4	6.56	47.6	7.05	0.253				
Gar15SUV024row5grain3 - 1	2015_1	1-5_003	almandine	garnet	G0	0.25-0.5	8210	227	236	1.69	0.05	189	23.6	0.054	1.38	0.0013	0.0121	0.0105	0.316	3.15	0.146	16.97	4.39	35.1	6.93	20	2.82	17.8	2.46	0.512	437.82			
Gar15SUV024row5grain4 - 1	2015_1	1-5_004	almandine	garnet	G3	0.25-0.5	49500	721	734	5.46	0.082	66.6	14.55			0.0085	0.19	0.129	2.15	3.1	1.6	7.23	1.493	11.92	2.58	8.17	1.157	8.17	1.125	0.168	570.75			
Gar15SUV024row5grain4 - 2	2015_1	1-5_004_rpt	almandine	garnet	G3	0.25-0.5	53100	766	770	5.29	0.168	70	14.46			0.0115	0.217	0.139	2.14	3.07	1.68	7.44	1.58	12.24	2.64	8.18	1.204	8.25	1.16	0.172	566.52			
Gar15SUV024row5grain5 - 1	2015_1	1-5_005	almandine	garnet	G3	0.25-0.5	67900	1478	1469	14.67	0.0265	13.5	41.4	0.0052		0.0055	0.187	0.162	2.82	2.42	1.406	3.25	0.502	2.98	0.455	1.017	0.117	0.704	0.094	0.371	728.62			
Gar15SUV024row5grain5 - 2	2015_1	1-5_005_rpt	almandine	garnet	G3	0.25-0.5	67200	1514	1518	15.2	0.063	15.07	43.1	0.0132		0.094	0.55	0.21	2.79	2.49	1.419	3.31	0.519	3.23	0.559	1.31	0.171	0.973	0.141	0.454	735.39			
Gar15SUV024row5grain6 - 1	2015_1	1-5_006	almandine	garnet	G0	0.25-0.5	8890	180	178.7			191	20.7	0.0022	0.007	0.00089	0.0519	0.0593	1.36	3.98	0.085	17.2	4.5	34.7	6.84	17.7	2.29	12.95	1.6	0.563				
Gar15SUV025row3grain3 - 1	2015_1	1-3_003	andradite	garnet	G9	0.25-0.5	268000	81700	81500	0.96	4.27	341	1832	8.77		5.41	29	6.22	47.7	25.9	13.57	42.6	7.43	55.4	12	34.4	5.3	34.5	4.92	32.8	387.63			
Gar15SUV025row3grain4 - 1	2015_1	1-3_004	andradite	garnet	G9	0.25-0.5	244500	23500	23370		2.839	173	497	62.7		58.7	194.7	27.5	142.1	37.2	8.04	31.9	4.14	24.12	4.19	10.88	1.64	10.45	1.391	2.42				
Gar15SUV026row2grain9 - 1	2015_1	1-2_009	garnet	garnet	G10	0.25-0.5	33800	254	255	23	3.24	1.081	1.56	0.274		0.973	2.87	0.298	1.07	0.161	0.0266	0.086	0.0163	0.151	0.0373	0.179	0.0353	0.405	0.099	0.047	821.82	863.11	912.12	887.61
Gar15SUV026row2grain9 - 2	2015_1	1-2_009_rpt	garnet	garnet	G10	0.25-0.5	33800	231	231	22	3.13	1.039	1.74	0.301		0.874	3.4	0.452	1.84	0.242	0.0368	0.082	0.0167	0.119	0.0394	0.142	0.0371	0.381	0.086	0.048	811.84	852.37	905.04	878.71
Diop15SUV026row3grain3 - 1	2015_3	3-3_003	diopside	garnet	G0	0.25-0.5	247500		8330	0.92	0.207	18.11	613	18.71	0.038	3.55	19.17	3.777	20.98	5.08	3.134	3.84	0.593	3.64	0.687	1.88	0.263	1.9	0.288	19.16	384.13			
Diop15SUV026row3grain3 - 2	2015_3	3-3_003	diopside	garnet	G0	0.25-0.5	247700		7780	0.96	0.155	17.1	537.7	15.42		3.831	20.83	4.041	21.71	5	3.249	3.68	0.552	3.47	0.653	1.817	0.272	1.85	0.277	15.9	387.63			
Diop15SUV026row3grain4 - 1	2015_3	3-3_004	diopside	garnet	G0	0.25-0.5	219200		10.01	0.37	0.361	0.016	0.0169	0.0004		0.413	1.341	0.078	0.075	0.0053	0.0115			0.00063	0.0011			1.18E-07	5.68E-07		317.35			
Diop15SUV026row3grain4 - 2	2015_3	3-3_004_rpt	diopside	garnet	G0	0.25-0.5	220800		1.1	0.42	0.33				0.00084	0.374	0.952	0.0647	0.07	0	0.0139	0.0016						2.89E-07	7.01E-07	0.0006	325.82			
Gar15SUV028row1grain3 - 1	Mount 3	129	garnet	garnet	G9	0.18-0.25	66700	3480	3370	168.8	0.544	19.24	47.2	0.638	-0.104	0.0345	0.42	0.133	1.56	1.12	0.538	2.1	0.408	3.37	0.745	2.37	0.359	2.74	0.422	1.26	1590.33	1712.54	1349.00	1530.77
Gar15SUV028row1grain4 - 1	Mount 3	130	garnet	garnet	G11	0.18-0.25	79100	12240	11860	259	1.658	41.6	173.8	1.085	-0.093	0.122	1.602	0.532	4.79	3.1	1.247	5.01	0.999	7.65	1.631	4.82	0.708	4.92	0.735	4.59	1921.14	2092.40	1488.46	1790.43
Gar15SUV028row2grain10 - 1	2015_1	1-2_010	garnet	garnet	G9	0.5-1.0	48100	1167	1174	30.9	0.754	15.04	69.6	0.36	0.023	0.233	2.14	0.564	4.42	2.75	1.193	3.6	0.543	3.49	0.61	1.68	0.221	1.48	0.208	0.929	893.06	939.98	961.37	950.67
Gar15SUV028row2grain10 - 2	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	50000	1222	1224	30.2	0.626	15.09	69.4	0.403		0.261	2.19	0.569	4.39	2.79	1.209	3.71	0.556	3.6	0.639	1.642	0.228	1.459	0.23	1.015	887.20	933.64	957.40	945.52
Gar15SUV028row2grain10 - 3	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	51900	1268	1279	30	0.62	15.74	71	0.434		0.26	2.26	0.594	4.48	2.79	1.226	3.81	0.577	3.71	0.661	1.716	0.217	1.54	0.215	0.992	885.52	931.82	956.25	944.04
Gar15SUV028row2grain10 - 4	2015_1	1-2_010_rpt	garnet	garnet	G9	0.5-1.0	46600	1156	1155	30.4	0.725	14.36	66.7	0.381	0.026	0.233	2.282	0.56	4.1	2.66	1.189	3.51	0.529	3.45	0.602	1.576	0.212	1.326	0.199	0.931	888.89	935.46	958.54	947.00
Gar15SUV028row2grain11 - 1	2015_1	1-2-11	garnet	garnet	G9	0.25-0.5	43200	3500	3500	77.1	0.526	14.45	40.8	0.487		0.0401	0.465	0.169	1.6	1.09	0.472	1.85	0.36	2.74	0.521	1.58	0.229	1.48	0.222	0.892	1187.33	1261.50	1143.69	1202.59
Diop15SUV028row3grain5 - 1	2015_3	3-3_005	diopside	garnet	G0	0.25-0.5	255300		1651	8.65	5.63	11.46	43	29.41	4.02	1.325	5.28	1.102	6.93	2.37	0.63	1.93	0.323	2.03	0.395	1.215	0.177	1.213	0.189	0.893	637.56			
Diop15SUV028row3grain5 - 2	2015_3	3-3_005_rpt	diopside	garnet	G0	0.25-0.5	256400		4190	7.48	8.06	17.1	93.8	17.9	10.3	2.97	6.19	0.878	4.47	1.93	0.301	2.31	0.426	3.14	0.659	1.946	0.293	2.11	0.284	2.17	615.35			
Diop15SUV028row3grain6 - 1	2015_3	3-3_006	diopside	garnet	G0	0.25-0.5	251700		2167	5.68	116.3	29	43.1	4.45	6.53	59.8	152	19	71	11.6	3.05	7.73	0.968	5.82	1.013	2.53	0.349	2.05	0.238	0.824	576.10			
Gar15SUV030row2grain12 - 1	2015_1	1-2-12	garnet	garnet	G9	0.25-0.5	46500	7.51	7.5	32.9	0.65	0.478	13.21	0.723		0.45	3.74	0.836	5.18	1.24	0.283	0.514	0.0363	0.134	0.0126	0.049	0.0145	0.167	0.0421	0.167	909.41	957.67	972.36	965.01
Gar15SUV030row2grain12 - 2	2015_1	1-2-12_rpt	garnet	garnet	G9	0.25-0.5	45000	7.76	7.17	32.1	0.434	0.442	9.89	0.708		0.405	2.91	0.592	3.5	0.856	0.215	0.374	0.029	0.106	0.0157	0.051	0.0145	0.15	0.036	0.11	902.94	950.66	968.02	959.34
Gar15SUV051row2grain13 - 1	2015_1	1-2-13	garnet	garnet	G9	0.25-0.5	47100	667	668	58.5	2.99	4.42	9.93	1.869		0.468	3.95	0.823	3.91	0.73	0.206	0.776	0.114	0.812	0.178	0.555	0.0933	0.669	0.119	0.218	1083.94	1147.79	1083.20	1115.50
Gar15SUV051row2grain13 - 2	2015_1	1-2-13_rpt	garnet	garnet	G9	0.25-0.5	47000	664	671	60.6	2.98	4.55	10.16	1.908		0.441	4.04	0.871	4.4	0.826	0.209	0.719	0.116	0.887	0.184	0.544	0.085	0.751	0.115	0.288	1096.32	1161.37	1090.64	1126.00
Gar15SUV051row3grain6 - 1	2015_1	1-3_006	andradite	garnet	G0	0.25-0.5	256500	29300	29100	0.49	2.173	175.8	483	6.12		5.86	49.1	11.62	77	27.3	8.56	31.4	4.96	33.4	6.58	18.06	2.66	17.16	2.45	16.87	336.45			
Gar15SUV052row5grain7 - 1	2015_1	1-5_007	almandine	garnet	G0	0.5-1.0	273000	88100	87800	5.07	2.86	58	123.5	45.9	0.057	7.2	31.9	6.35	40	14.84	4.18	16.25	2.38	14.62	2.55	5.9	0.702	3.57	0.433	7.57	560.90			
Gar15SUV052row5grain7 - 2	2015_1	1-5_007	almandine	garnet	G0	0.5-1.0	8630	30.8	29.7		0.149	1193	14.28	0.0075	0.0011	0.00063	0.0026	0.003	0.102	0.94	0.054	15.9	9.45	129.3	41.5	173	34.9	285	45.4	0.437				
Gar15SUV052row5grain8 - 2	2015_1	1-5_007_rpt	almandine	garnet	G0	0.5-1.0	8550	35.4	35.8		0.117	1229	27.3	0.0154	0.0023	0.134	1.27	0.059	20.1			11	142	41.6	164.5	31.4	250	37.5	0.842				
Gar15SUV052row5grain8 - 2	2015_1	1-5_008	almandine	garnet	G0	0.5-1.0	32000	340	337		0.177	2036	11.42	0.0054	0.002	0.0088	0.233	0.205	4.88	11.43	0.147	50.7	18.22	228	71.7	293	54.9	431	65	0.275				
Gar15SUV052row5grain8 - 3	2015_1	1-5_008_rpt	almandine	garnet	G0	0.5-1.0	32700	302	299		0.171	1774	8.24	0.0076		0.0144	0.286	0.213	4.14	9.9	0.161	46.6	16.53	202	64.6	265	48.9	380	58.4	0.237				
Gar15SUV052row5grain8 - 3	2015_1	1-5_008_rpt	almandine	garnet	G0	0.5-1.0	31300	328	329		0.183	1993	10.21	0.0058	0.0078	0.0102	0.261	0.215	4.52	11.15	0.136	49.6	17.75	221	71.1	291	54.6	426	64.6	0.272				
Gar15SUV052row5grain9 - 1	2015_1	1-5_009	almandine	garnet	G0	0.5-1.0	7190	140.9	136.9	1.6		256	7.68		0.013	0.00032	0.0079	0.01	0.439	1.75	0.0547	5.2	2.09	29	8.77	27.6	3.32	17.59	2	0.199	432.63			
Gar15SUV052row5grain9 - 2	2015_1	1-5_009_rpt	almandine	garnet	G0	0.5-1.0	7020	122.7	123.9	1.39		137.2	4.44		0.0035	0.0244	0.0253	0.619	1.17	0.0489	4.65	2.05	23.7	5.08	11.39	1.147	6.41	0.853	0.134	419.64			
Gar15SUV052row5grain9 - 3	2015_1	1-5_009_rpt	almandine	garnet	G0	0.5-1.0	6470	131	131.5	0.79		52.5	5.95	0.00109		0.0249	0.0343	0.841	1.82	0.0551	7.2	2.241	14.82	1.92	3.45	0.354	1.95	0.282	0.145	371.93			
Gar15SUV053row5grain10 - 1	2015_1	1-5_010	almandine	garnet	G0	0.25-0.5	48600	322	320		0.0237	247	10.66	0.0048		0.0139	0.214	0.143	2.85	5.1	1.7	16.2	3.82	35.3	9.14	34.5	5.93	47.5	7.98	0.177				
Gar15SUV053row5grain10 - 2	2015_1	1-5_010_rpt	almandine	garnet	G0	0.25-0.5	52200	386	382		0.0213	238	12.67	0.0063		0.0163	0.315	0.196	3.21	5.54	1.76	17.1	4.07	36.3	8.85	30.7	4.86	38.3	6.29	0.217				
Gar15SUV053row5grain11 - 1	2015_1	1-5_011	almandine	garnet	G0	0.25-0.5	10280	82	82			780	3.1	0.0022		0.0095	0.274	0.213	4.03	12.62	0.138	76.1	25.1	199	28.8	51.1	4.74	24.4	2.6	0.123				
Gar15SUV053row5grain11 - 2	2015_1	1-5_011_rpt	almandine	garnet	G0	0.25-0.5	9770	83.2	83			652	3.44	0.0046		0.0056	0.262	0.207	4.14	13.65	0.115	79.2	24.5	180.5	24.4	40.7	3.71	18.38	1.901	0.094				
Gar16SUV015row1grain6 - 1	Mount 1	226	garnet	garnet	G9	0.25-0.5	35800	447	471	73.2	0.116	2.73	6.81	0.609	-0.003	0.0584	0.358	0.0686	0.446	0.13	0.0392	0.132	0.0323	0.348	0.0967	0.362	0.0684	0.625	0.1026	0.158	1166.71	1238.75	1131.90	1185.33
Gar16SUV015row1grain1 - 1	Mount 1	missing	GO	missing EPMA		0.25-0.5	27320	2921	2993	99.3	0.49	9.02	32.8	0.3	0.001	0.0288	0.319	0.102	0.986	0.653	0.275	1.081	0.203	1.623	0.347	1.012	0.157	1.165	0.174	0.84	1296.98			
Gar16SUV023row1grain11 - 1	Mount 3	136	garnet	garnet	G9	0.18-0.25	76200	1058	1044	184.4	0.408	7.35	3.37	1.084	0.078	0.1	0.92	0.236	1.58	0.359	0.089	0.286	0.077	0.853	0.279	1.021	0.21	1.84	0.363	0.085	1650.20	1780.63	1375.95	1578.29
Gar16SUV023row1grain11 - 1	Mount 3	137	garnet	garnet	G9	0.18-0.25	73800	3110	3100	107.5	1.27	15.81	65.3	0.97	5.1	0.115	1.098	0.404	4.13	2.75	1.108	3.53	0.526	3.33	0.667	1.79	0.245	1.77	0.267	1.39	1334.84	1425.12	1224.07	1324.59
Gar16SUV023row1grain12 - 1	Mount 3	138	garnet	garnet	G10	0.18-0.25	58600	56.2	58.2	31.8	13.17	1.709	114.5	0.266	0.201	0.6	11.28	3.84	27.8	8.1	1.836	3.93	0.244	0.752	0.0662	0.125	0.0176	0.201	0.064	3.35	900.49	948.01	966.38	957.19
Gar16SUV023row1grain13 - 1	Mount 3	139	garnet	garnet	G1	0.18-0.25	74300	7600	7790	130.7	0.791	24.33	78.3	0.672	0.247	0.059	0.628	0.227	2.25	1.47	0.704	2.82	0.562	4.57	1.045	3.16	0.49	3.45	0.54	2.16	1436.34			
Gar16SUV023row1grain14 - 1	Mount 3	140	garnet	garnet	G10	0.18-0.25	38100	35	26.1	59.9	1.69	0.115	0.88	0.184	0.08	1.21	2.85	0.213	0.89	0.185	0.031	0.012	0.006	0.017	0.0007	0.018	0.011	0.193	0.069	0.015	1092.22	1156.86	1088.18	1122.52
Gar16SUV023row1grain2 - 1	Mount 1	222	GO	garnet	G1	0.25-0.5	35200	4080	4200	79	0.525	14.08	48.4	0.374	0	0.0449	0.445	0.145	1.457	0.971	0.454	1.63	0.325	2.46	0.579	1.78	0.265	1.825	0.276	1.314	1197.21			
Gar16SUV023row1grain3 - 1	Mount 1	223	GO	garnet	G4	0.25-0.5	28000	1435	1492	89.8	0.241	14.13	14.28	0.196	0.001	0.0121	0.179	0.069	0.671	0.435	0.199	0.95	0.223	2.04	0.557	1.845	0.291	2.11	0.307	0.403	1251.49			
Gar16SUV023row1grain6 - 1	Mount 3	132	garnet	garnet	G9	0.18-0.25	100500	714	688	41.4	0.859	4.3	27.9	0.515	-0.076	0.16	2.087	0.857	7.8	2.33	0.664	1.56	0.158	0.493	0.107	1.038	0.202	0.565			973.42	1027.13	1014.37	1020.75
Gar16SUV023row1grain7 - 1	Mount 3	133	garnet	garnet	G1	0.18-0.25	62800	6120	5840	118.1	0.599	40.9	75.2	0.512	-0.08	0.0267	0.383	0.166	1.81	1.89	0.995	4.79	1.088	8.29	1.635	4.42	0.621	3.94	0.561	1.77	1382.13			
Gar16SUV023row1grain8 - 1	Mount 3	134	garnet	garnet	G9	0.18-0.25	75700	2548	2449	110.8	1.326	15.24	69.4	1.059	-0.044	-0.098	1.435	0.581	6.05	3.59	1.301	3.9	0.566	3.38	0.583	1.5	0.217	1.554	0.252	1.294	1349.75	1441.76	1231.83	1336.79
Gar16SUV023row1grain9 - 1	Mount 3	135	garnet	garnet	G9	0.18-0.25	93000	3350	3270	145.8	1.246	7.1	51.4	1.454	0.024	0.137	1.495	0.506	4.88	2.79	0.985	2.61	0.334	1.71	0.278	0.63	0.0874	0.641	0.141	1.31	1498.93	1609.13	1306.21	1457.67
Gar16SUV023row2grain1 - 1	Mount 1	227	garnet	garnet	G10	0.25-0.5	33300	760	764	70.2	0.566	2.37	29.6	0.603	0.012	0.0451	0.569	0.195	1.877	1.176	0.406	1.264	0.157	0.775	0.0958	0.174	0.0215	0.218	0.0616	0.674	1150.50	1220.89	1122.55	1171.72

Sample	Mount	No.	Mineral	Class	G	Size																										T3	T4	T5	T6
Gar16SUV023row2grain1 - 1	Mount 3	141	garnet	garnet	G9	0.18-0.25	64200	722	753	95.3	0.623	10.63	15.32	2.47	-0.045	0.131	1.505	0.395	2.98	0.95	0.317	1.02	0.164	1.341	0.39	1.48	0.266	2.17	0.38	0.261	1278.06	1361.94	1193.90	1277.92
Gar16SUV023row2grain10 - 1	Mount 1	236	garnet	garnet	G10	0.25-0.5	39000	17.19	18.5	26.7	3.27	0.388	2.28	0.509	29.5	2.43	6.58	0.847	3.32	0.438	0.089	0.256	0.0218	0.116	0.0188	0.0454	0.0079	0.109	0.0296	0.04	856.69	900.69	936.50	918.59
Gar16SUV023row2grain10 - 1	Mount 3	150	garnet	garnet	G9	0.18-0.25	84800	4710	5050	111.6	1.614	53.2	115.1	1.116	0.099	0.098	1.39	0.558	5.81	4.19	1.95	7.88	1.606	10.96	2.142	5.08	0.645	3.58	0.48	2.37	1353.33	1445.76	1233.69	1339.73
Gar16SUV023row2grain11 - 1	Mount 3	237	garnet	garnet	G12	0.25-0.5	56700	83.5	85.8	25.42	1.036	0.916	13.59	2.79	0.014	0.766	4.71	0.924	4.8	1.03	0.259	0.43	0.0406	0.122	0.0252	0.29	0.072	0.138			844.96	888.04	928.36	908.20
Gar16SUV023row2grain11 - 1	Mount 3	151	garnet	garnet	G9	0.18-0.25	64500	3450	3710	120.8	0.945	38.5	116.2	0.528	0.016	0.0307	0.587	0.256	3.18	2.66	1.345	5.25	1.019	7.12	1.524	4.18	0.611	3.87	0.568	2.59	1393.92	1491.14	1254.48	1372.81
Gar16SUV023row2grain12 - 1	Mount 3	238	garnet	garnet	G11	0.25-0.5	37500	2862	2909	78.3	0.617	5.46	94.3	0.374	-0.005	0.0315	0.427	0.184	2.34	1.89	0.645	1.93	0.211	1.209	0.211	0.589	0.0955	0.688	0.1154	2.324	1193.58	1268.40	1147.23	1207.81
Gar16SUV023row2grain12 - 1	Mount 3	152	garnet	garnet	G9	0.18-0.25	91500	2060	2160	91.8	1.45	17.4	43.4	2.02	0.28	0.293	3.15	0.886	8.2	3.19	1.19	3.43	0.514	3.1	0.69	2.1	0.326	2.87	0.416	0.79	1261.23	1343.26	1184.78	1264.02
Gar16SUV023row2grain13 - 1	Mount 3	239	garnet	garnet	G9	0.25-0.5	42500	1963	1940	76.2	0.948	3.66	35.3	0.632	0.012	0.0588	0.899	0.395	4.11	1.74	0.548	1.36	0.163	0.856	0.1401	0.369	0.049	0.393	0.0788	0.887	1102.73	1168.39	1094.47	1131.43
Gar16SUV023row2grain13 - 1	Mount 3	153	garnet	garnet	G11	0.18-0.25	69100	4570	4860	148.2	0.607	37.4	73.2	0.605	0.054	0.0428	0.536	0.153	2.11	2.38	0.828	3.1	0.686	6.02	1.494	4.87	0.769	5.69	0.887	1.93	1508.67	1620.12	1310.87	1465.50
Gar16SUV023row2grain14 - 1	Mount 3	154	garnet	garnet	G9	0.18-0.25	61300	740	775	143.6	0.356	12.86	19.87	0.68	0.032	0.0255	0.434	0.192	1.77	0.713	0.254	0.86	0.181	1.72	0.474	1.76	0.319	2.39	0.439	0.317	1489.95	1599.01	1301.90	1450.46
Gar16SUV023row2grain2 - 1	Mount 1	228	garnet	garnet	G11	0.25-0.5	41900	3000	3050	56.5	0.742	13.74	44.6	0.51	1.85	0.209	1.2	0.21	1.96	1.212	0.593	2.09	0.384	2.74	0.529	1.412	0.201	1.31	0.198	1.003	1071.94	1134.64	1075.95	1105.30
Gar16SUV023row2grain2 - 1	Mount 3	142	garnet	garnet	G9	0.18-0.25	72900	4050	4170	181.2	0.775	18.23	69.7	0.692	0.027	0.064	0.77	0.27	2.48	1.5	0.631	2.26	0.4	3.07	0.693	2.23	0.379	2.55	0.428	1.437	1638.04	1766.78	1370.54	1568.66
Gar16SUV023row2grain3 - 1	Mount 1	229	garnet	garnet	G11	0.25-0.5	51000	3760	3810	58	0.48	14.4	42.4	0.426	-0.001	0.0287	0.345	0.136	1.434	1.03	0.487	1.85	0.353	2.71	0.563	1.563	0.226	1.428	0.203	1.018	1080.96	1144.52	1081.41	1112.96
Gar16SUV023row2grain3 - 1	Mount 3	143	garnet	garnet	G9	0.18-0.25	67100	586	602	89.7	1.238	21.16	108	1.339	0.168	0.138	1.505	0.55	6.01	4.76	2.02	6.41	0.949	5.04	0.834	1.99	0.308	2.37	0.439	1.68	1251.00	1331.92	1179.19	1255.56
Gar16SUV023row2grain4 - 1	Mount 1	230	garnet	garnet	G9	0.25-0.5	47500	1951	1954	58.4	0.747	5.05	16.17	0.747	0.027	0.0708	0.854	0.346	3.29	1.023	0.305	0.893	0.1456	0.907	0.191	0.548	0.0825	0.735	0.132	0.543	1083.84	1147.14	1082.84	1114.99
Gar16SUV023row2grain4 - 1	Mount 3	144	garnet	garnet	G10	0.18-0.25	48000	64.1	66.8	71.7	8.87	18.03	49.8	1.014	0.163	0.963	9.91	2.3	11.65	3.12	1.216	4.1	0.576	3.5	0.695	2.08	0.326	2.79	0.553	0.838	1158.64	1229.86	1127.26	1178.56
Gar16SUV023row2grain5 - 1	Mount 1	231	garnet	garnet	G9	0.25-0.5	36800	1930	1940	76.2	2.39	2.25	25.3	3.36	23.9	1.39	4.17	0.532	3.3	1.311	0.419	1.209	0.126	0.613	0.0849	0.324	0.0616	0.571			1182.62	1256.29	1141.00	1198.65
Gar16SUV023row2grain5 - 1	Mount 3	145	garnet	garnet	G10D	0.18-0.25	47000	36.6	41.7	85.4	9.83	0.255	1.95	0.619	-0.084	3.03	12.92	1.308	3.9	0.296	0.062	0.092	0.0083	0.041	0.0085	0.046	0.0107	0.172	0.064	0.025	1229.74	1308.37	1167.48	1237.92
Gar16SUV023row2grain6 - 1	Mount 1	232	garnet	garnet	G9	0.25-0.5	40300	2279	2286	62.5	0.735	4.05	45.3	0.593	0.024	0.0582	0.63	0.212	2.02	1.484	0.631	2.13	0.282	1.423	0.16	0.295	0.0342	0.369	0.0878	1.224	1107.35	1173.47	1097.22	1135.34
Gar16SUV023row2grain6 - 1	Mount 1	146	garnet	garnet	G12	0.25-0.5	101100	89.4	90	36.4	5.44	0.98	4.63	0.683	-0.077	0.477	4.48	1.553	15.02	2.83	0.556	0.694	0.0577	0.228	0.0286	0.078	0.0199	0.203	0.07	0.091	936.74	987.29	990.50	988.89
Gar16SUV023row2grain7 - 1	Mount 3	233	garnet	garnet	G10	0.25-0.5	11120	12.3	11.48	22.66	18.63	0.448	1.43	0.089	0.135	0.226	4.08	0.916	4.77	0.846	0.214	0.329	0.0276	0.113	0.0199	0.076	0.026	0.338	0.1005	0.027	818.46	859.49	909.74	884.61
Gar16SUV023row2grain7 - 1	Mount 3	147	garnet	garnet	G9	0.18-0.25	74000	4710	4940	160.8	0.728	20.93	58.7	0.704	-0.036	0.0478	0.578	0.186	2.12	1.57	0.723	2.69	0.52	3.85	0.816	2.36	0.409	2.84	0.444	1.52	1559.01	1677.03	1334.56	1505.79
Gar16SUV023row2grain8 - 1	Mount 1	234	garnet	garnet	G1	0.25-0.5	33100	3610	3640	111.3	0.699	10.3	50.7	0.46	0.2	0.0639	0.54	0.169	1.552	0.919	0.418	1.525	0.28	2.05	0.418	1.181	0.165	1.137	0.18	1.207	1351.99			
Gar16SUV023row2grain8 - 1	Mount 3	148	garnet	garnet	G9	0.18-0.25	73700	1745	1826	104.4	1.218	25.5	89.8	1.161	0.092	0.112	1.401	0.526	5.69	3.64	1.453	4.17	0.587	4.12	0.951	3.21	0.511	3.85	0.61	1.345	1320.66	1409.33	1216.62	1312.98
Gar16SUV023row2grain9 - 1	Mount 1	235	garnet	garnet	G9	0.25-0.5	45000	1690	1712	79.7	0.628	2.16	17.06	0.571	0.81	0.0806	0.671	0.197	1.88	0.935	0.314	0.829	0.0978	0.493	0.0761	0.209	0.0368	0.303	0.0637	0.356	1200.82	1276.39	1151.32	1213.86
Gar16SUV023row2grain9 - 1	Mount 3	149	garnet	garnet	G11	0.18-0.25	74100	5190	5560	145.5	1.047	27	76.2	0.819	0.081	0.0592	0.74	0.266	2.64	1.88	0.919	3.75	0.773	5.51	1.073	2.77	0.36	2.24	0.339	1.93	1497.71	1607.75	1305.63	1456.69
Gar16SUV023row3grain1 - 1	Mount 1	240	garnet	garnet	G9	0.25-0.5	42200	205.4	212.4	46.6	0.023	4.77	2.95	0.577	0.008	0.0487	0.313	0.0637	0.434	0.186	0.066	0.217	0.0506	0.579	0.181	0.681	0.138	1.106	0.173	0.044	1009.15	1066.05	1037.13	1051.59
Gar16SUV023row3grain2 - 1	Mount 1	241	garnet	garnet	G9	0.25-0.5	49900	2540	2640	80.8	0.972	7.31	34	0.922	-0.004	0.0937	1.031	0.345	3.23	1.78	0.697	2.11	0.302	1.82	0.291	0.653	0.0736	0.461	0.0808	0.799	1206.47	1282.64	1154.49	1218.56
Gar16SUV023row3grain2 - 1	Mount 3	157	almandine	garnet	G4	0.18-0.25	49000	356	367	0.22	0.052	686	20.9	0.0106	-0.016	0.0231	0.75	0.625	12.8	27.8	0.717	77	16.54	124.7	26.6	78.5	12.01	82.8	12.09	0.417	284.98			
Gar16SUV023row3grain3 - 1	Mount 1	242	garnet	garnet	G9	0.25-0.5	42800	1309	1349	65.7	0.659	3.8	27.9	0.756	0.059	0.0614	0.737	0.264	2.42	1.146	0.373	0.97	0.132	0.804	0.146	0.413	0.0619	0.489	0.0849	0.782	1125.57	1193.48	1107.99	1150.73
Gar16SUV023row3grain4 - 1	Mount 3	243	garnet	garnet	G9	0.25-0.5	43900	1827	1876	47.4	1.125	14.55	52.9	0.993	-0.007	0.0739	1.08	0.421	4.46	3.02	1.206	3.71	0.567	3.2	0.545	1.277	0.163	0.984	0.148	0.974	1014.46	1071.84	1040.47	1056.15
Gar16SUV023row3grain4 - 1	Mount 3	159	grossular	garnet	G9	0.18-0.25	462000	3460	3490	0.82	0.576	112.6	30.3	10.29	-0.001	0.0258	0.666	0.428	6.67	7.51	1.403	14.3	2.82	19.26	3.59	10.02	1.466	9.76	1.236	1.59	374.88			
Gar16SUV023row3grain5 - 1	Mount 1	244	garnet	garnet	G9	0.25-0.5	32000	829	858	59.6	0.219	9.03	8.89	0.413	0.052	0.0322	0.299	0.0923	0.703	0.377	0.187	0.649	0.156	1.371	0.35	1.099	0.196	1.359	0.224	0.203	1090.45	1154.93	1087.12	1121.02
Gar16SUV023row4grain1 - 1	Mount 1	254	almandine	garnet	G3	0.25-0.5	49000	958	946	0.97	0.028	125.2	30.6	0.0029	0.029	0.0237	0.379	0.216	3.27	3.56	1.594	9.12	2.263	20.4	5.1	15.28	2.222	14.29	2.007	0.316	388.48			
Gar16SUV023row4grain2 - 1	Mount 1	255	almandine	garnet	G3	0.25-0.5	43600	360	358	3.05	0.018	111.7	15.98	0.0007	0.036	0.0035	0.114	0.0898	1.8	3.29	1.083	9.23	2.13	17.38	4.09	12.64	1.944	13.03	1.898	0.232	499.06			
Hercy16SUV023row7grai5 - 1	Mount 1 1_7_5		hercynite	andradite	G0	0.25-0.5	229200	19020	18930	2.22	35.33	8.673	105.45	160.52	-0.012	23.78	146.2	28.01	128.9	14.28	2.953	6.206	0.506	1.934	0.2572	0.525	0.0627	0.376	0.0657	1.436	464.86			
Gar16SUV025row3grain6 - 1	Mount 1	245	garnet	garnet	G10D	0.25-0.5	26500	76	75.9	38.8	2.38	0.926	5.08	0.426	-0.005	0.69	4.96	0.849	4.31	0.666	0.154	0.324	0.0353	0.164	0.0339	0.1	0.02	0.161	0.0398	0.105	954.66	1006.74	1002.23	1004.49
Gar16SUV025row3grain7 - 1	Mount 1	246	garnet	garnet	G9	0.25-0.5	38900	288	285	42.5	0.277	5.33	16.3	0.579	0.004	0.0564	0.772	0.27	2.27	0.93	0.303	0.85	0.1251	0.854	0.195	0.67	0.1114	0.91	0.176	0.17	981.16	1035.56	1019.35	1027.45
Gar16SUV027row3grain11 - 1	Mount 1	251	andradite	andradite	G0	0.5-1.0	236700	16380	16070	2.14	1.203	61.1	312.3	6.17	0.001	6.35	38.9	7.09	37.2	9.61	4.4	10.13	1.628	11.02	2.34	7.12	1.072	7.2	1.062	7.43	461.10			
Gar16SUV027row3grain12 - 1	Mount 1	252	andradite	andradite	G0	0.25-0.5	242300	30000	29730	4.79	1.38	34.85	96.5	7.56	0.007	1.401	8.86	2.151	15.28	5.73	1.89	6.62	1.045	7.01	1.397	3.95	0.548	3.41	0.453	0.955	553.50			
Chr16SUV027row5grain10 - 1	Mount 2	155	chromite	andradite	G0	0.25-0.5	224100	34270	34340	9.5	23.43	16.58	238	262.4	4.4	28.16	178.4	31.16	135.7	18.34	4.606	10.98	1.102	4.899	0.679	1.449	0.1645	0.971	0.1627	9.22	652.49			
Gar16SUV028row1grain4 - 1	Mount 1	224	GO	garnet	G3	0.5-1.0	42100	843	902	1.11	0.025	52	18.18	0.0006	0.039	0.002	0.0265	0.0281	0.817	1.68	0.576	4.91	1.068	8.8	2.02	6.35	0.952	6.58	0.907	0.248	399.82			
Gar16SUV028row1grain5 - 1	Mount 1	225	GO	garnet	G1	0.25-0.5	34400	3790	3940	101.2	0.384	19.38	52.2	0.146	0.001	0.0273	0.317	0.123	1.155	0.925	0.461	1.91	0.393	3.32	0.786	2.62	0.405	2.84	0.417	1.441	1305.86			
Gar16SUV028row3grain13 - 1	Mount 1	253	andradite	andradite	G0	0.25-0.5	249800	2.32	0.38	1.99	0.032	6.4	0.0118	0.0004	0.015	12.18	47.7	6.44	24.6	3.61	1.51	2.82	0.27	1.25	0.188	0.39	0.038	0.158	0.0082	0.0006	453.77			
Gar16SUV028row3grain8 - 1	Mount 1	248	garnet	garnet	G0	0.5-1.0	43900	2235	2226	76.7	0.805	7.34	35.8	0.658	0.081	0.106	0.732	0.234	2.169	1.435	0.574	1.94	0.287	1.737	0.283	0.695	0.085	0.546	0.0811	0.849	1185.24	1259.19	1142.50	1200.84
Gar16SUV028row3grain9 - 1	Mount 1	249	garnet	garnet	G10	0.25-0.5	32200	42.9	42.7	22.99	0.69	1.011	8.67	0.263	-0.015	0.244	2.74	0.833	6.35	1.61	0.38	0.814	0.0664	0.264	0.0357	0.137	0.0359	0.453	0.108	0.141	821.72	863.00	912.05	887.53
Gar16SUV028row4grain3 - 1	Mount 1	256	almandine	garnet	G0	0.5-1.0	7570	291	287	24.5	0.005	4.3	46.4	0.039	0.0119	0.49	0.331	5.11	4.43	0.912	2.54	0.259	1.17	0.161	0.404	0.0544	0.359	0.0531	1.059			836.32			
Gar16SUV028row4grain4 - 1	Mount 1	257	almandine	garnet	G0	0.5-1.0	29200	88.2	86.7	0.62	0.014	48.5	8.26	0.0029	0.035	0.0016	0.091	0.1134	3.21	5.33	1.569	8.04	1.306	8.57	1.627	4.7	0.71	4.79	0.675	0.123	353.43			
Gar16SUV028row4grain5 - 1	Mount 1	258	almandine	garnet	G3	0.25-0.5	65100	804	806	3.01	0.014	75.6	13.68	-0.0008	0.042	0.0014	0.0222	0.0415	1.096	2.13	0.913	4.46	1.258	12.13	2.83	8.36	1.133	7.11	0.97	0.18	497.57			
Gar16SUV028row4grain6 - 1	Mount 1	259	almandine	garnet	G4	0.25-0.5	35300	263	267	11.09	0.03	39.5	17.45	0.0678	0.003	0.0736	0.998	0.1058	0.509	1.123	0.606	4.03	0.954	7.16	1.543	4.41	0.619	4.05	0.609	0.268	678.24			
Diop16SUV028row6grain3 - 1	Mount 1	276	diopside	garnet	G0	0.25-0.5	1021	37	0.85	0.27	9.65	0.054	21.49	0.15	3.66	0.1	0.332	0.11	0.685	0.0095	0.0253	0.016										297.30			
Gar16SUV030row3grain10 - 1	Mount 1	250	garnet	garnet	G9	0.5-1.0	38500	2106	2108	67.2	2.5	4.61	30	0.471	7.1	1.98	3.9	0.384	2.09	1.212	0.47	1.54	0.229	1.156	0.185	0.417	0.0578	0.444	0.0773	0.719	1133.96	1202.71	1112.92	1157.81

[1] Garnet Classification: Grütter et al. 2004

[2] GO = eclogitic garnet

[3] °C (Ni-in-Garnet); Ryan et al. 1996; =1000/(1.506-0.189*(LN(Ni ppm)))-273

[4] °C (Ni-in-Garnet); Griffin_et_al.,1989; =1000/((-0.435*((LOG((Ni ppm)/30))+0.83))-273

[5] °C (Ni-in-Garnet); Canil, 1999; =(8772/(2.53-(LN((Ni(grt)/Ni(ol)))))-273.15

[6] °C (Ni-in-Garnet); average of methods 4 and 5

Shading identifies duplicate analyses on a single grain

APPENDIX 7B

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); Spinel-CHROMITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Note	Si	Ca	Ti_47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Chr15SUV015row5grain1 - 1	Mount3	181	chromite	chromite	0.18-0.25		1039	-10	24730	24210	264400	278200	824	0.05	0.0046	4.29	1.826	0.024	0.0004	-7.10E-06	0.00021	-2.33E-05	-3.19E-06	0.0019	-0.000675	-1.18E-06	-1.13E-05	-2.45E-06	-1.84E-06	0.0008	0.0073	0.003	0.85
Chr15SUV018row5grain2 - 1	Mount3	182	chromite	chromite	0.18-0.25	Very pitted	1687	84	2403	2331	469000	492000	1685	0.191	0.165	1.571	0.48	0.244	0.0496	0.125	0.0182	0.13	0.011	0.0191	0.051	0.0049	0.034	0.0068	0.019	0.0024	0.0036	0.0015	0.021
Chr15SUV018row5grain3 - 1	Mount3	183	chromite	chromite	0.18-0.25		1581	-9	6650	6780	141200	148000	2130	0.018	0.0012	0.517	0.211	-0.002	-4.41E-05	-1.60E-05	-4.10E-06	-4.98E-05	-7.69E-06	0.0009	-0.001249	-2.82E-06	-2.55E-05	-5.21E-06	-4.47E-06	-2.85E-05	-0.0001653	-0.0001029	0.016
Chr15SUV018row5grain4 - 1	Mount3	184	chromite	chromite	0.18-0.25		1950	-75	1200	1200	156300	166300	3297	-0.011	-0.0004	0.202	0.121	-0.006	-4.58E-05	-1.68E-05	-4.40E-06	-5.06E-05	-8.35E-06	0.0009	-0.001152	-3.08E-06	-2.67E-05	-5.28E-06	-4.91E-06	-2.94E-05	-0.000171	0.0045	0.023
Chr15SUV018row5grain5 - 1	Mount3	185	chromite	chromite	0.18-0.25		1104	29	6900	6990	284500	299100	1248	0.011	0.0024	1.67	0.289	-0.009	-3.00E-05	0.0019	0.0013	-3.33E-05	0.0022	-0.0001504		0.0021	-2.15E-06	-1.85E-05	-3.53E-06	-3.52E-06	-1.96E-05	0.003	-7.15E-05	0.039
Chr15SUV019row5grain6 - 1	Mount3	186	chromite	chromite	0.18-0.25		938	-22	12420	12470	284000	301900	2135	0.028	0.027	5.03	0.441	0.002	-2.80E-05		0.0019	-2.77E-06		0.0018	-5.55E-06	-0.0001362		0.0076	-2.10E-06	-1.73E-05	-3.17E-06	-3.35E-06	0.00038	0.003	-6.51E-05	0.279
Chr15SUV019row5grain7 - 1	Mount3	187	chromite	chromite	0.18-0.25		1130	71	11920	11990	274400	286400	1086	0.028	0.0044	2.95	0.592	0.021	-2.26E-05	-8.87E-06	-2.42E-06	-2.32E-05	-5.45E-06	0.0028	0.0035	-2.10E-06	-1.52E-05	-2.37E-06	-3.43E-06	-1.40E-05	0.008	-5.31E-05	0.086
Chr15SUV019row5grain8 - 1	Mount3	188	chromite	chromite	0.18-0.25		973	83	288.4	288.4	430600	458800	115.6	0.0219	0.0039	0.293	0.311	0.006	0.0047		0.0037	0.00129	-1.57E-05	-3.84E-06	0.0029	0.0073	-1.49E-06		0.0011	-1.59E-06	0.0008	0.001	0.0098	0.0009	0.027
Chr15SUV019row5grain9 - 1	Mount3	189	chromite	chromite	0.18-0.25		1296	139	13080	13150	297600	308000	1753	0.023	0.0136	1.6	0.348	-0.007	-2.43E-05		0.0017	-2.75E-06	-2.44E-05	-6.31E-06	0.004	0.0001403	-2.45E-06		0.006	-2.51E-06	-4.09E-06	0.0076	0.082	0.003	0.04
Chr15SUV028row5grain10 - 1	Mount3	190	chromite	chromite	0.18-0.25		1221	79	3980	3910	252400	255000	1639	0.01	0.0035	0.464	0.268	0.027	-2.58E-05	-1.04E-05	-2.89E-06	-2.53E-05	-6.91E-06	-0.0001173	0.0002134	-2.69E-06	-1.80E-05	-2.55E-06	-4.42E-06	-1.55E-05	-9.41E-05	0.01	0.18
Chr15SUV028row5grain11 - 1	Mount3	191	chromite	chromite	0.18-0.25		829	130	12010	12030	301400	319100	1789	0.018	0.0162	6.52	1.11	-0.013	0.0041	0.0108	0.0009	0.01	-6.00E-06	0.0004	0.0002196	-2.36E-06	0.0092	-2.11E-06	-3.86E-06	-1.30E-05	0.007	0.0028	0.434
Chr15SUV028row5grain12 - 1	Mount3	192	chromite	chromite	0.18-0.25		1046	58	2565	2578	286500	299900	1909	0.011	0.0031	0.601	0.221	0.009	0.00063	-8.26E-06	0.0012	0.0081	-5.80E-06	0.0008	0.0002358	-2.26E-06	-1.44E-05	-1.90E-06	-3.76E-06	0.002	0.015	0.0036	0.055
Chr15SUV030row5grain13 - 1	Mount3	193	chromite	chromite	0.18-0.25		1140	7	8804	8781	281500	296300	1700	0.028	0.0047	0.844	0.272	0.002	-2.22E-05	-9.64E-06	-2.80E-06	-1.91E-05	-7.52E-06	-9.44E-05	0.0001733	-2.96E-06	-1.70E-05	-1.85E-06	-5.13E-06	-1.29E-05	0.013	0.0032	0.008
Chr15SUV030row5grain14 - 1	Mount3	194	chromite	chromite	0.18-0.25		1100	56	8407	8543	306400	319500	1516	0.015	0.0061	1.162	0.362	0.014	-2.25E-05		0.004	-2.87E-06		0.0044	-7.90E-06	-9.51E-05		0.013	-3.11E-06	-1.74E-05	-1.82E-06	-5.35E-06	0.002	0.011	0.0008	0.12
Chr16SUV013row3grain1 - 1	Mount 2	127	chromite	chromite	0.25-0.5		1940	440	640	661	272600	363000	247.9	0.29	0.0214	0.87	0.68	0.81	0.022	0.048	0.0072	0.033	0.009	0.0006	-0.0007	0.00039	0.0019	0.00096	0.0028	0.00185	0.0033	0.0022	0.0109
Chr16SUV013row3grain2 - 1	Mount 2	128	chromite	chromite	0.25-0.5		1412	266	9750	9690	223900	282200	1798	0.046	0.0092	1.267	0.71	0.014	0.00115	0.0031	0.00085	0.0039	0.0005	0.0019	0.0001	-0.00027	0.0019	9.00E-05	0.0011	0.00081	-0.0023	0.0013	0.0362
Chr16SUV014row3grain3 - 1	Mount 2	129	chromite	chromite	0.25-0.5		1137	187	8360	8310	288400	357400	1409	0.062	0.008	1.705	0.978	0.027	0.00176	0.0035	0.00118	0.0063	0.0036	0.0036	0.0011	8.00E-05	0.0024	0.0059	0.0014	0.00082	0.0021	0.00045	0.0697
Chr16SUV014row3grain4 - 1	Mount 2	130	chromite	chromite	0.25-0.5		1450	147	21370	21250	332900	346800	2056	0.224	0.0179	9.81	2.135	0.004	0.0034	0.0051	0.00162	0.0084	0.0019	0.0032	0.0036	0.00086	0.0049	0.00137	0.0026	0.00053	0.0007	0.00109	0.5
Chr16SUV018row3grain6 - 1	Mount 2	131	chromite	chromite	0.25-0.5		1136	193	904	906	263800	272500	1348	0.0221	0.0069	0.493	0.558	0.002	0.0005	0.00075	0.00079	0.0032	0.0013	0.0025	0.0044	-1.00E-05	-1.37E-05	0.00061	0.0023	0.00062	0.0026	0.00057	0.0065
Chr16SUV018row3grain8 - 1	Mount 2	132	chromite	chromite	0.25-0.5		1327	206	2879	2920	250900	264000	1437	0.04	0.0065	0.539	0.505	0.023	0.00116	0.00014	0.00092	0.0028	0.0036	0.0033	-0.0017	0.00011	0.0016	0.00042	0.00024	-1.23E-06	-0.001	0.00055	0.0028
Chr16SUV018row3grain9 - 1	Mount 2	133	chromite	chromite	0.25-0.5		1820	270	769	730	273800	292000	1195	0.021	0.0062	0.443	0.561	0.009	-0.0005	0.0022	0.00102	0.0028	0.0071	0.0028	0.0029	0.00082	-1.71E-05	0.00036	0.0014	0.00023	0.0014	0.0002	-0.0035
Ilm16SUV023row4grain1 - 1	Mount3	166	ilmenite	chromite	0.18-0.25		1570	12	9780	9960	270200	299000	2004	0.025	0.0006	1.01	0.318	0.005	0.00057	0.00015	-2.35E-06	0.0008	-8.28E-08	0.002	0.013	2.88E-07	-1.23E-05	-5.34E-06	1.27E-06	-2.05E-05	0.014	0.0067	0.032
Ilm16SUV023row4grain10 - 1	Mount3	175	ilmenite	chromite	0.18-0.25		1217	64	15620	15800	240000	253200	1976	0.041	0.0067	2.56	0.61	0.06	0.00081	0.0104	0.00027	-4.29E-05	-2.27E-06	-0.0001722	0.01	0.00043	-1.43E-05	-4.63E-06	-4.79E-07	-2.01E-05	0.0031	0.0007	0.113
Chr16SUV023row3grain10 - 1	Mount 2	134	chromite	chromite	0.25-0.5		1083	75	15210	15120	297400	313600	1181	0.091	0.0133	2.236	0.76	0.019	0.00039	0.0021	0.00064	0.0018	0.0036	0.0022	0.0072	0.00016	0.0042	0.00081	0.0029	0.00054	0.0014	0.00073	0.086
Chr16SUV023row3grain11 - 1	Mount 2	135	chromite	chromite	0.25-0.5		1173	91	28600	28550	237600	261300	1420	0.152	0.0218	4.41	1.047	0.056	0.0026	0.0044	0.00125	0.004	0.0036	0.0023	0.0004	0.00068	0.0069	0.00173	0.0033	0.00033	0.0066	0.00213	0.193
Chr16SUV023row3grain12 - 1	Mount 2	136	chromite	chromite	0.25-0.5		1039	-16	10480	10380	151300	229900	1945	0.088	0.0064	1.195	0.804	0.047	-0.0002	0.0037	0.00011	0.0036	-5.64E-05	-0.0015	-0.0115	-0.0002	-2.71E-05	0.00054	0.0007	0.00046	-0.0011	0.0017	0.0287
Chr16SUV023row4grain1 - 1	Mount 2	137	chromite	chromite	0.25-0.5		888	182	369	367	168200	278600	1221	0.05	0.0152	0.554	0.538	-0.006	0.0364	0.0947	0.0048	0.0197	0.004	0.0016	-0.001	0.00033	0.0048	0.00068	0.0031	0.00058	0.0027	0.0022	0.0047
Chr16SUV023row4grain2 - 1	Mount 2	138	chromite	chromite	0.25-0.5		1336	230	6000	6090	150500	272200	1939	0.055	0.0099	1.093	0.641	0.083	0.0004	0.007	0.00094	0.0034	0.0018	0.0033	0.0023	0.00086	-1.90E-05	-1.10E-06	0.002	0.0009	-0.0025	0.0029	0.041
Chr16SUV023row4grain3 - 1	Mount 2	139	chromite	chromite	0.25-0.5		900	113	7510	7490	178200	331400	1531	0.062	0.0234	3.489	0.905	0.013	0.0013	0.0062	0.00188	0.0118	0.0062	0.0036	0.0095	0.0016	0.0097	0.0014	0.0034	0.00084	0.0007	0.0016	0.126
Chr16SUV023row4grain4 - 1	Mount 2	140	chromite	chromite	0.25-0.5		1430	1070	4940	4830	143100	285000	1761	49	0.296	3.18	4.13	22.5	9.3	11.5	0.75	2.09	0.214	0.057	0.131	0.0109	0.061	0.0111	0.0325	0.00201	0.0111	0.0045	0.06
Chr16SUV023row4grain5 - 1	Mount 2	141	chromite	chlorite?	0.25-0.5		160500	16950	8350	8190	4390	9900	71.9	167.4	0.0331	0.507	2.652	3.56	1.579	2.4	0.187	0.535	0.034	0.296	0.0115	0.00114	0.0041	0.00129	0.0057	0.00106	0.0097	0.0062	0.0335
Chr16SUV023row4grain6 - 1	Mount 2	142	chromite	chromite	0.25-0.5		970	196	752	754	177500	318600	828	0.47	0.0138	0.521	0.62	0.134	0.0146	0.087	0.0068	0.0243	0.0117	0.0048	0.005	0.00028	0.0035	0.00112	0.001	0.00038	-0.0004	0.00111	-0.0026
Chr16SUV023row4grain7 - 1	Mount 2	143	chromite	chromite	0.25-0.5		1075	235	4360	4370	132000	223000	2190	0.065	0.0053	2.236	0.613	0.834	0.094	0.0155	0.00158	0.0106	0.0061	0.0023	-0.0106	0.0018	0.0068	9.00E-05	0.0022	0.00035	0.0009	0.00106	0.0048
Chr16SUV023row6grain1 - 1	Mount3	195	chromite	chromite	0.18-0.25		1004	23	1120	1117	377900	391800	742	0.0199	0.002	0.206	0.273	0.006	-1.87E-05	0.00024	-2.42E-06	-1.53E-05	-6.78E-06	0.0011	0.0087	0.0007	-1.46E-05	-1.46E-06	-4.58E-06	0.0014	0.021	0.0012	0.0026
Chr16SUV023row6grain10 - 1	Mount3	204	chromite	chromite	0.18-0.25		1322	40	12760	12640	305400	319400	1800	0.015	0.0038	2.19	0.451	0.007	0.007	0.026	0.0023	-9.91E-06	-9.65E-06	0.0009	-0.00309	-3.94E-06	-1.78E-05	-7.24E-07	-6.79E-06	-1.11E-05	-6.15E-05	-4.37E-05	0.097
Chr16SUV023row6grain11 - 1	Mount3	205	chromite	chromite	0.18-0.25	Pitted grain	1485	-21	5620	5830	313500	340000	1867	0.067	0.0283	1.096	0.343	0.445	0.0315	0.061	0.012	0.029	0.02	0.0074	0.017	0.0019	0.0045	0.0011	-8.38E-06	-1.10E-05	0.0038	0.0017	0.021
Chr16SUV023row6grain12 - 1	Mount3	206	chromite	chromite	0.18-0.25	Pitted grain	981	-10	8130	8310	378000	407000	1338	0.037	0.0503	1.101	0.345	0.296	0.0374	0.136	0.0181	0.108	0.045	0.004	0.0069	0.0031	0.031	0.0016	0.008	-8.56E-06	0.0046	0.002	0.045
Chr16SUV023row6grain13 - 1	Mount3	207	chromite	chromite	0.18-0.25		1004	-1	329	331.7	330200	336600	895	0.024	0.0012	0.19	0.246	0.005	-2.05E-05	0.0019	-3.88E-06	0.0051	-1.37E-05	-6.68E-05	-0.00654	-5.56E-06	-2.36E-05	-2.65E-07	-1.03E-05	-1.26E-05	-6.89E-05	-4.97E-05	-0.0002242
Chr16SUV023row6grain14 - 1	Mount3	208	chromite	chromite	0.18-0.25		1214	32	12890	13180	206800	212200	1771	0.022	0.0053	0.956	0.244	0.031	-2.28E-05	0.001	0.0016	-7.18E-06	-1.57E-05	-7.21E-05	-0.00782	-6.31E-06	-2.69E-05	-1.97E-07	-1.16E-05	0.0009	-7.67E-05	0.015	0.043
Chr16SUV023row6grain15 - 1	Mount3	209	chromite	chromite	0.18-0.25		1256	49	12800	12840	314800	329100	1817	0.017	0.0108	2.82	0.426	0.069	0.001	-9.16E-06	0.0013	-4.39E-06	-1.09E-05	-4.78E-05	-0.0008	0.0021	-1.86E-05	-6.76E-08	0.0086	-9.52E-06	-5.19E-05	-3.74E-05	0.121

Sample	Mount	No	Mineral	Size	Note																												
Chr16SUV023row6grain2 - 1	Mount3	196	chromite chromite	0.18-0.25		1254	20	15170	15290	292600	302800	1674	0.029	0.0084	2.25	0.403	-0.01	0.00064	-9.16E-06	-2.71E-06	-1.64E-05	-7.68E-06		0.0024	-0.0001393	-3.03E-06	-1.63E-05	-1.55E-06	-5.18E-06	-1.20E-05		-7.50E-05	0.0037	0.12
Chr16SUV023row6grain3 - 1	Mount3	197	chromite chromite	0.18-0.25		1101	100	4404	4474	252700	265000	1720	0.236	0.0204	0.779	0.194	0.034	0.0023	0.0078	0.00071		0.0017	-5.17E-06	0.0012	0.0098	-2.04E-06	-1.08E-05	0.0009	0.003	0.0005	-4.89E-05	0.0007	0.044
Chr16SUV023row6grain4 - 1	Mount3	198	chromite chromite	0.18-0.25		927	23	2612	2670	343100	363400	1046	0.0108	0.0036	1.266	0.264	0.017	0.00052	-6.76E-06	-2.02E-06	-1.13E-05	-5.90E-06	-5.98E-05	0.0095	-2.34E-06		0.0071	-1.05E-06	-3.93E-06	0.001	0.0065	0.0078	0.054
Chr16SUV023row6grain5 - 1	Mount3	199	chromite chromite	0.18-0.25		1420	97	14130	14290	266000	276500	1640	0.029	0.0069	1.601	0.343	0	-1.88E-05	-9.15E-06	-2.81E-06	-1.24E-05	-8.96E-06	-7.21E-05	0.003	-3.60E-06	-1.71E-05	-1.05E-06	-6.04E-06	-1.13E-05	0.0026	0.008	0.081
Chr16SUV023row6grain6 - 1	Mount3	200	chromite chromite	0.18-0.25		1437	100	3384	3442	299800	316400	884	0.018	0.0037	0.545	0.207	0.057	-2.27E-05	-1.12E-05	0.00035	0.0045	0.0016	-8.65E-05	-0.002358	-4.39E-06	-2.06E-06	-1.21E-06	-7.39E-06	-1.38E-05	-7.97E-05	0.001	0.075
Chr16SUV023row6grain7 - 1	Mount3	201	chromite chromite	0.18-0.25		1549	166	1348	1350	347900	363800	1519	0	0.0028	0.462	0.233	0.024	-1.94E-05		0.0004	-3.00E-06	-1.20E-05	-9.56E-06	0.0007	0.0012	0.00049	0.0092	-9.64E-07	-6.53E-06	0.0029	0.015	0.001	0.02
Chr16SUV023row6grain8 - 1	Mount3	202	chromite chromite	0.18-0.25		1157	135	2028	2072	254500	263800	832	0.01	0.0069	0.203	0.17	0.029	-2.37E-05	0.00037	0.00086	-1.43E-05	-1.20E-05	-8.96E-05	-0.00324	-4.83E-06	-2.21E-05	-1.10E-06	-8.27E-06	-1.44E-05	0.01	0.0018	0.024
Chr16SUV023row6grain9 - 1	Mount3	203	chromite chromite	0.18-0.25		1674	69	5461	5560	201800	207900	2531	0.011	0.0044	0.694	0.253	0.046	-2.94E-05		0.0024	-4.74E-06	-1.69E-05	-1.54E-05	-0.0001091	-0.004527	-6.26E-06	-2.83E-05	-1.27E-06	-1.07E-05	-1.78E-05	-0.0001017	-7.20E-05	0.008
Chr16SUV024row4grain10 - 1	Mount 2	146	chromite chromite	0.25-0.5	Inclusions	12800	2240	1279	1242	249400	367500	893	2.54	0.136	7.9	4.24	23.4	0.317	0.87	0.097	0.371	0.078	0.0134	0.06	0.0084	0.0368	0.0079	0.0174	0.0026	0.0153	0.0027	0.186	
Chr16SUV024row4grain8 - 1	Mount 2	144	chromite chromite	0.25-0.5		798	92	23560	23440	184100	292900	1068	0.139	0.0107	7.34	1.123	0.09	0.0029	0.0088	0.00139	0.0062	0.0024	0.0019	-0.003	0.00032	0.0033	0.00063	0.00096	0.0004	0.0001	0.00064	0.285	
Chr16SUV024row4grain9 - 1	Mount 2	145	chromite chromite	0.25-0.5		1253	89	3079	3097	234400	356600	1517	0.052	0.0065	0.842	0.719	0.022	0.00048	0.0024	0.00108	0.0021	0.0092	0.0018	0.0001	0.00052	0.0015	0.00046	0.0014	0.00149	0.0004	0.00143	0.0203	
Chr16SUV027row5grain1 - 1	Mount 2	147	chromite chromite	0.5-1.0		1101	296	7500	7600	194800	251300	2207	0.055	0.0054	0.842	0.628	0.036	-8.00E-05	0.0014	0.00088	0.0016	0.0046	0.0053	0.004	0.0003	0.0013	0.0001	-8.47E-06	-2.02E-06	0.0009	0.00068	0.0164	
Chr16SUV027row5grain11 - 1	Mount 2	156	chromite chromite	0.25-0.5		1523	155	2672	2727	215100	310900	1552	0.035	0.0087	0.945	0.699	0.025	0.0024	0.038	0.0035	0.0206	0.0057	0.0039	0.0029	0.00044	0.0029	0.00059	0.0011	0.00071	-0.0022	0.00095	0.0338	
Chr16SUV027row5grain12 - 1	Mount 2	157	chromite chromite	0.25-0.5		1442	185	15100	15260	169100	254000	1516	0.081	0.0134	1.847	0.7	0.018	0.00025	0.00049	0.00089	0.002	0.0068	0.0021	0.0149	0.00067	0.003	0.00026	0.00077	0.00084	-0.0003	0.00119	0.068	
Chr16SUV027row5grain2 - 1	Mount 2	148	chromite chromite	0.5-1.0		841	124	408	427	265300	298300	1743	0.021	0.0056	0.553	1.747	0.028	0.0009	0.00083	0.00101	0.0015	0.0017	0.0002	0.0002	0.00073	-2.14E-05	0.00114	-9.38E-06	0.00093	-0.003	0.00056	0.0037	
Chr16SUV027row5grain3 - 1	Mount 2	149	chromite chromite	0.5-1.0		1213	236	2131	2139	242400	264800	1890	0.017	0.0173	1.324	0.724	-0.002	0.0008	0.0013	0.00108	0.002	0.0042	0.0036	-0.009	0.00093	0.0084	0.00071	0.0026	0.00098	-0.002	0.00094	0.0297	
Chr16SUV027row5grain4 - 1	Mount 2	150	chromite chromite	0.25-0.5		1320	136	14260	14340	270200	310800	1387	0.24	0.0116	2.081	0.818	0.04	0.00067	0.0043	0.00101	0.0048	0.0009	0.0012	-0.0032	0.00028	0.0023	0.00082	0.0015	0.00136	0.0098	0.0014	0.0783	
Chr16SUV027row5grain6 - 1	Mount 2	151	chromite chromite	0.25-0.5		2540	930	3920	3900	172000	204700	2280	9.5	0.138	1.86	1.64	15.6	0.73	1.44	0.145	0.46	0.044	0.0213	0.055	0.005	0.0238	0.005	0.0142	0.00154	0.0095	0.0014	0.034	
Chr16SUV027row5grain7 - 1	Mount 2	152	chromite chromite	0.25-0.5		1346	59	11080	11060	261100	312400	1850	0.067	0.0134	1.978	0.754	0.022	0.00014	0.00092	0.00084	0.0054	0.0036	0.0023	-0.0012	0.00171	0.0023	0.00034	0.0033	0.00026	-0.0006	0.002	0.073	
Chr16SUV027row5grain8 - 1	Mount 2	153	chromite chromite	0.25-0.5		1273	96	16460	16580	193900	245300	1726	0.101	0.0113	2.99	1.695	0.103	0.0003	0.003	0.00135	0.005	-3.25E-05	0.0039	-0.0014	0.00031	0.0016	0.0003	-1.01E-05	-2.22E-06	-0.0016	0.0019	0.098	
Chr16SUV027row5grain9 - 1	Mount 2	154	chromite chromite	0.25-0.5		1434	199	3779	3811	211400	295900	1115	0.032	0.0101	0.897	0.68	0.051	0.0063	0.024	0.0061	0.039	0.0038	0.0017	0.0101	0.0002	0.003	-1.60E-06	0.001	0.00063	0	0.00076	0.0296	
Chr16SUV028row6grain1 - 1	Mount 2	158	chromite chromite	0.25-0.5		1311	245	3990	3720	185500	282900	1827	0.05	0.0076	0.932	0.796	0.16	0.0051	0.004	0.00148	0.0082	0.0027	0.0016	0.0075	0.00035	0.0024	0.00041	0.0018	-2.31E-06	-0.0019	0.00067	0.0193	
Chr16SUV028row6grain10 - 1	Mount 2	167	chromite chromite	0.5-1.0		2499	245	2960	3050	102700	159500	2350	0.075	0.0054	0.477	0.437	0.043	0.0037	0.016	0.00105	0.0034	0.0035	0.0029	0.006	0.00075	0.0007	-2.68E-06	0.0017	0.00108	0.0022	0.00055	0.0061	
Chr16SUV028row6grain11 - 1	Mount 2	168	chromite chromite	0.25-0.5		2261	294	9170	9170	165600	261600	1695	0.063	0.0051	1.19	0.682	0.018	0.0012	0.0008	0.0008	0.0069	0.0052	0.0008	-0.0009	0.00039	0.0021	0.00043	0.0022	0.0008	0.0034	0.0016	0.047	
Chr16SUV028row6grain12 - 1	Mount 2	169	chromite chromite	0.25-0.5		2187	295	7570	7630	166900	268300	1988	0.065	0.0079	0.938	0.671	0.019	-0.00025	0.0013	0.00134	0.0028	0.0037	0.0032	0.0079	0.00053	0.0017	-2.03E-06	0.00058	0.0022	0.0063	0.0012	0.0268	
Chr16SUV028row6grain13 - 1	Mount 2	170	chromite chromite	0.25-0.5		2076	264	6900	7010	178100	279500	1778	0.068	0.0055	1.029	0.712	0.045	0.00102	0.0015	0.00029	0.0043	0.0034	0.0017	0.0125	0.00074	0.0014	0.00057	0.0015	0.00038	0.0024	0.0038	0.0299	
Chr16SUV028row6grain14 - 1	Mount 2	171	chromite chromite	0.25-0.5		1997	217	9310	8840	169500	261300	1929	0.112	0.0109	1.334	0.702	0.05	0.0019	0.0012	0.00064	0.0027	0.0018	0.0033	0.0057	0.00074	0.0007	0.00035	0.0019	0.00047	0.0047	0.0007	0.0408	
Chr16SUV028row6grain2 - 1	Mount 2	159	chromite chromite	0.25-0.5		1579	221	5360	5240	194200	293300	1817	0.329	0.0198	4.51	0.874	0.43	0.027	0.0462	0.0075	0.0219	0.007	0.0057	0.02	0.00153	0.0045	0.00117	0.0026	0.00038	0	0.00037	0.153	
Chr16SUV028row6grain3 - 1	Mount 2	160	chromite chromite	0.25-0.5		1192	203	7140	7080	183500	283600	1582	0.046	0.0076	1.009	1.543	0.057	0.00066	-1.00E-05	0.00037	0.0039	0.0029	0.0014	-0.0001	0.00017	0.0034	0.00029	0.0018	0.0007	0.0017	0.0027	0.032	
Chr16SUV028row6grain4 - 1	Mount 2	161	chromite chromite	0.25-0.5		1390	242	1792	1823	188300	296900	1610	0.024	0.0058	1.517	1.614	0.031	0.00144	0.0018	0.00101	0.0042	0.002	0.0011	0.0037	0.0075	0.0013	0.00035	0.001	0.00036	0.0006	0.00086	0.0136	
Chr16SUV028row6grain5 - 1	Mount 2	162	chromite chromite	0.25-0.5		1428	218	4463	4570	176700	281700	1746	0.03	0.0063	1.044	1.072	0.025	0.00122	0.002	0.00087	0.0056	0.0016	0.0023	0.0025	0.00065	-2.03E-05	0.00045	0.0019	0.00048	-0.0004	0.00078	0.0207	
Chr16SUV028row6grain6 - 1	Mount 2	163	chromite chromite	0.25-0.5		1797	182	11970	11920	154300	247000	1895	0.068	0.0089	1.798	0.804	0.014	0.0007	0.0015	0.00143	0.004	-2.89E-05	0.0013	0.0038	0.0015	-2.44E-05	0.00021	0.0009	0.00064	0.001	0.00095	0.055	
Chr16SUV028row6grain7 - 1	Mount 2	164	chromite chromite	0.25-0.5		2007	200	9920	9770	167800	270000	1831	0.044	0.0096	1.082	0.726	0.05	0.0038	0.0062	0.0018	0.0021	0.0055	0.0029	0.0063	0.00051	0.0012	-1.42E-05	0.00062	0.0038	0.00044	0.0276		
Chr16SUV028row6grain8 - 1	Mount 2	165	chromite chromite	0.25-0.5		2211	257	7520	7630	139700	223500	1952	0.091	0.0094	0.842	0.633	0.282	0.0061	0.0108	0.004	0.0038	0.0049	0.0035	-0.0014	0.00105	-2.69E-05	-2.42E-06	0.0027	-3.16E-06	-0.0026	0.0015	0.03	
Chr16SUV028row6grain9 - 1	Mount 2	166	chromite chromite	0.5-1.0		1922	213	14190	14060	177300	281500	1478	0.085	0.0143	2.171	0.752	0.048	0	0.0018	0.00137	0.0052	0.0052	0.0043	0.0045	0.00068	0.0028	0.00074	0.0026	0.00053	0.0045	0.0023	0.085	
Chr16SUV028row7grain10 - 1	Mount 2	181	chromite chromite	0.25-0.5		1272	169	22620	22430	188300	252700	1637	0.138	0.0165	2.863	1.14	0.063	0.033	0.037	0.0051	0.0106	0.0062	0.0017	0.0058	0.00133	0.0037	0.00073	0.002	0.00089	0.0016	0.002	0.124	
Chr16SUV028row7grain11 - 1	Mount 2	182	chromite chromite	0.25-0.5		1321	135	18610	18950	185600	247100	2320	0.117	0.0152	2.359	0.736	0.021	0.00053	0.0003	0.00137	0.0055	0.0041	0	0.0068	0.00102	0.0007	0.0003	0.0034	0.00057	0.0036	0.0024	0.095	
Chr16SUV028row7grain12 - 1	Mount 2	183	chromite chromite	0.25-0.5		1315	169	2200	2207	208600	270000	880	0.075	0.0364	0.865	0.615	0.105	0.0071	0.0104	0.0033	0.0125	0.003	0.0041	-0.0014	0.00062	0.0093	0.00137	0.0045	0.00051	0.009	0.00055	0.0157	
Chr16SUV028row7grain4 - 1	Mount 2	175	chromite chromite	0.25-0.5		1404	341	16980	16980	190400	291400	1629	0.112	0.0153	2.721	0.838	0.031	-0.00019	0.00064	0.00074	0.0024	0.0038	0.0017	0.005	0.00041	0.0028	8.00E-05	0.0026	0.00026	0.0021	0.00052	0.111	
Chr16SUV028row7grain5 - 1	Mount 2	176	chromite chlorite?	0.25-0.5	Has cracks	154500	1592	3990	3950	7000	11200	70.5	1.927	0.0257	0.212	0.57	0.057	1.517	2.642	0.224	0.546	0.083	0.0196	0.0244	0.0033	0.0093	0.00108	-1.59E-05	0.00069	0.0023	0.00018	0.047	
Chr16SUV028row7grain6 - 1	Mount 2	177	chromite chromite	0.25-0.5		1520	539	14590	14360	124100	189100	1943	0.096	0.0098	1.72	0.533	0.012	0.0034	0.0086	0.00133	0.0017	-2.15E-05	0.0032	0	0.00086	0.00029	0.00072	0.0029	0.00051	0.0065	0.004	0.067	
Chr16SUV028row7grain8 - 1	Mount 2	179	chromite chromite	0.25-0.5		1332	135	14050	14160	202100	286200	1692	0.084	0.0096	2.223	0.787	0.046	0.00138	0.0025	0.00065	0.0028	0.0051	0.0007	0.0084	0.00052	0.0028	0.00046	0.0009	0.00173	0.01	0.0015	0.103	
Chr16SUV030row7grain13 - 1	Mount 2	184	chromite chromite	0.25-0.5		1257	138	1600	1590	216400	274100	1856	0.023	0.0054	0.578	0.602	-0.002	0.00082	0.0013	0.00143	0.003	0.001	0.0025	0.0012	0.00079	0.0029	0.00025	0.0021	0.00063	-0.0001	0.00088	0.0063	

APPENDIX 7C

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); Spinel-ALUMINIUM SERIES

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Si	Ca	Ti_m47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Gah16SUV024row6grain4 - 1	Mount 1	1_6_4	gahnite	gahnite	0.25-0.5	885	-7	23.7	19	10.76	12	7.8	0.006	0	-0.0031	0	-0.036	-0.00117	-0.00059	-0.0003318	5.48E-05	1.95E-07	-0.0009	0.01	0.00014	-3.81E-05	-4.47E-07	-3.82E-05	-5.37E-05	-0.0201	-1.52E-05	0.001
Gah16SUV024row6grain5 - 1	Mount 1	1_6_5	gahnite	gahnite	0.5-1.0	698	-16	11.4	9.6	120.5	143.5	-0.7	0.009	0.0003	-0.0029	-0.0014	-0.034	-0.00086	-0.00078	-0.0002706	0.001	-1.71E-06	0	0.003	-6.25E-05	-3.61E-05	-5.19E-07	-3.57E-05	0.00053	-0.001	-1.43E-05	0.0006
Gah16SUV024row6grain6 - 1	Mount 1	1_6_6	gahnite	gahnite	0.25-0.5	819	-49	6.8	5.4	691	824	-0.89	-0.017	-0.0013	0.0028	-0.0002	-0.038	-0.0005	0.0006	0.00017	3.51E-05	-3.77E-06	-0.0016	-0.0069	-6.42E-05	-3.72E-05	-6.39E-07	0.0006	0.00039	-0.0094	0.0026	0.0017
Gah16SUV024row6grain7 - 1	Mount 1	1_6_7	gahnite	gahnite	0.25-0.5	988	3	20.7	18.7	8.36	6	261.9	0.012	0.0008	-0.0031	0.0009	-0.024	-0.00088	-0.00025	-0.00049	2.79E-05	-6.16E-06	-0.0028	-0.004	0.00038	-4.00E-05	-7.92E-07	-3.88E-05	-5.36E-05	0.012	-1.57E-05	-2.98E-05
Gah16SUV024row6grain8 - 1	Mount 1	1_6_8	gahnite	gahnite	0.25-0.5	1670	48	10.4	8.9	661.4	777.6	28.18	0.021	0.0176	0.309	0.0179	0.097	0.0358	0.107	0.0097	0.043	0.0075	0.0037	0.002	0.0024	0.0058	0.00046	0.0023	0.0006	-0.0031	0.0022	0.0232
Spinel16SUV013row6grain9 - 1	Mount 1	1_6_9	spinel	spinel	0.25-0.5	1108	146	63.9	66.4	307	377.2	21	0.002	0.0038	-0.0021	-0.0014	-0.05	-0.0002	-0.00141	0.00036	0.0017	-2.41E-05	-0.0012	-0.0107	-8.18E-05	-5.15E-05	-1.85E-06	-4.40E-05	-6.20E-05	-0.0161	-2.01E-05	0.0039
Spinel16SUV023row6grain10 - 1	Mount 1	1_6_10	spinel	spinel	0.25-0.5	895	135	225.5	227.2	263.8	327.1	34.44	0.026	0.0007	0.0003	0.0056	0.053	-0.001	0.0003	0.0011	0.0017	0.0019	-0.0004	-0.01	0.00031	0.0006	-1.98E-06	-4.53E-05	0.00028	-0.0134	-2.10E-05	0.0051
Spinel16SUV028row6grain11 - 1	Mount 1	1_6_11	spinel	spinel	0.25-0.5	864	111	232.9	232.2	146.9	182.4	62.7	-0.014	0.001	-0.0011	0.0016	-0.017	-0.0009	-0.00171	-0.000463	-6.53E-05	-3.21E-05	-0.0026	0.008	0.00032	-5.62E-05	-2.29E-06	-4.77E-05	-6.46E-05	-0.0036	-2.16E-05	0.0052
Hercy15SUV018row7grain1 - 1	Mount 1	1_7_1	hercynite	chlorite?	0.25-0.5	169100	831	924.5	920.5	3.47	0.39	-0.9	1.68	0.0123	0.341	0.647	0.038	0.946	1.402	0.12	0.294	0.082	0.02	0.025	0.0036	0.0083	0.00032	-2.79E-05	0.0002	-0.0029	0.00117	0.1
Hercy15SUV018row7grai2 - 1	Mount 1	1_7_2	hercynite	gahnite	0.25-0.5	888	18	36.9	35.4	4.8	1.02	-1.95	-0.012	-0.0024	-0.0034	-0.0024	-0.017	-0.00134	-0.00165	5.00E-05	-9.01E-05	-3.75E-05	-0.0006	0.008	0.00065	0.0006	-2.40E-06	-4.65E-05	0.0017	-0.0043	0.0011	0.0012
Hercy16SUV018row7grai3 - 1	Mount 1	1_7_3	hercynite	spinel/hercynite	0.25-0.5	1435	24	2873	2884	370.6	506.4	984.7	-0.016	-0.0015	0.074	0.0349	-0.01	0.0001	-0.0013	-0.00031	-0.0001102	-4.40E-05	0.0012	-0.013	0.0016	0.0019	-2.99E-06	-4.91E-05	-6.49E-05	-0.0008	0.0009	0.0021
Hercy16SUV018row7grai4 - 1	Mount 1	1_7_4	hercynite	spinel/hercynite	0.25-0.5	1119	102	1607	1617	115.6	160.5	335.8	0.065	0.0004	0.057	0.0041	-0.033	-0.0001	-0.0023	-0.00091	-0.000226	-7.43E-05	0.0098	-0.029	0.00017	-8.20E-05	-4.91E-06	-5.84E-05	-7.51E-05	-0.00092	-3.08E-05	0.0012
Hercy16SUV023row7grai6 - 1	Mount 1	1_7_6	hercynite	spinel/hercynite	0.25-0.5	2796	279	887	877	36.9	24.5	1977	0.031	-0.0019	0.0267	0.0093	0.048	-0.00109	0.0002	-0.00021	-0.0001621	-5.06E-05	0.0037	-0.008	-6.27E-05	-4.86E-05	-3.17E-06	0.0027	-4.44E-05	0.0042	0.0007	0.015
Hercy16SUV023row7grai7 - 1	Mount 1	1_7_7	hercynite	spinel/hercynite	0.25-0.5	2056	216	1805	1817	800.6	1175	620.9	0.03	-0.0038	0.033	0.0187	0.074	0.0003	-0.0002	-0.000883	-0.0001953	-5.96E-05	0.0025	0	0.00016	-5.47E-05	-3.68E-06	-3.91E-05	0.00021	0.000306	0.00025	-0.0001239
Hercy16SUV023row7grai8 - 1	Mount 1	1_7_8	hercynite	spinel/hercynite	0.25-0.5	2212	141	4721	4744	162	224.2	1242	0.066	0.0068	0.114	0.0258	0.129	0.0059	0.024	0.0013	0.0045	-6.04E-05	0.0045	-0.005	0.0008	0.0023	0.0011	-3.79E-05	0.00027	-0.001187	-1.99E-05	0.0068
Hercy16SUV027row7grai9 - 1	Mount 1	1_7_9	hercynite	spinel/hercynite	0.5-1.0	1678	88	3396	3445	2467	3581	1337	0.045	0.0014	0.069	0.032	0.027	0.0004	-0.0009	-0.000887	-0.000214	-6.26E-05	0.0066	-0.004	-6.51E-05	-5.41E-05	-3.86E-06	-3.77E-05	-4.63E-05	-0.002811	-2.01E-05	0.0031
Hercy16SUV027row7grai10 - 1	Mount 1	1_7_10	hercynite	spinel/hercynite	0.25-0.5	1403	76	1583	1590	4891	7013	1429	0.063	0.0005	0.095	0.0399	0.009	-0.0007	-0.0004	-0.000889	-0.0002256	-6.57E-05	0.0023	0.016	0.00048	0.0011	-4.06E-06	-3.75E-05	-4.54E-05	-0.004267	0.0011	0.0034

APPENDIX 7D

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); ILMENITE

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Si	Ca	Ti_m47	Ti_m49	Cr_m52	Cr_m53	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Ilm16SUV014row8grai1 - 1	Mount 1	296	IM crustal	ilmenite	0.5-1.0	920	43	321500	325900	12.1	11.82	57.6	1.03	3.77	1467	133.8	0.058	0.0075	0.0283	0.0049	0.0414	0.0183	0.002	0.068	0.0371	0.565	0.284	2.126	0.596	6.6	1.412	27.24
Ilm16SUV014row8grai11 - 1	Mount 1	306	IM crustal	ilmenite	0.25-0.5	1620	1280	310200	312800	12.6	10.75	118	1.88	0.227	9.64	364.8	0.83	0.072	0.126	0.0141	0.056	0.0091	0.0218	0.023	0.00172	0.0094	0.0055	0.0362	0.0168	0.308	0.1199	0.993
Ilm16SUV014row8grai12 - 1	Mount 1	307	IM crustal	ilmenite	0.25-0.5	704	19	339200	340900	26.2	25.89	9.78	1.295	0.0908	0.307	319.1	0.002	0.033	0.0563	0.0046	0.0158	0.002	0.0049	-0.0014	0.00032	0.0028	0.0008	0.0014	0.00076	0.0052	0.002	0.0233
Ilm16SUV014row8grai2 - 1	Mount 1	297	IM crustal	ilmenite	0.25-0.5	954	155	319800	320600	15.3	13.18	32.12	1.093	0.959	1294	697	-0.01	-0.00014	-0.00035	0.00011	0.0021	0.0046	-0.0002	0.0165	0.0088	0.138	0.0657	0.501	0.1344	1.528	0.36	40.35
Ilm16SUV014row8grai3 - 1	Mount 1	298	IM crustal	ilmenite	0.25-0.5	1057	209	321600	326600	13.7	9.93	22.77	1.171	4.81	648.4	214.5	-0.006	0.00025	0.00096	0.00068	0.0144	0.0254	0.0032	0.111	0.0571	0.754	0.335	1.976	0.47	4.63	0.848	15.88
Ilm16SUV014row8grai5 - 1	Mount 1	300	IM crustal	ilmenite	0.25-0.5	821	59	319900	325000	20.5	20.63	42.3	1.189	0.91	1091	330.2	0.007	0.00122	0.0023	0.00043	0.0054	0.0045	0.0026	0.021	0.0075	0.133	0.063	0.432	0.1169	1.229	0.263	23.44
Ilm16SUV014row8grai6 - 1	Mount 1	301	IM crustal	ilmenite	0.25-0.5	772	25	325200	326700	4.5	0.84	31.41	1.171	1.787	355.7	161	0.01	0.00235	0.0054	0.0037	0.0219	0.0139	0.0025	0.06	0.0247	0.347	0.1698	1.097	0.253	2.57	0.515	7.76
Ilm16SUV014row8grai7 - 1	Mount 1	302	IM crustal	ilmenite	0.25-0.5	819	19	318600	321500	43.9	50.9	31.43	1.158	0.939	911	220.7	0.028	0.00267	0.0043	0.00101	0.0036	0.0018	0.0009	0.019	0.0104	0.167	0.0959	0.671	0.1721	1.905	0.4	28.21
Ilm16SUV014row8grai8 - 1	Mount 1	303	IM crustal	ilmenite	0.25-0.5	940	116	324400	328800	118.5	136.5	10.82	1.311	0.0923	10.28	177.4	0.45	0.0372	0.0576	0.0033	0.0162	0.0034	0.0001	-0.0003	0.00073	0.0016	0.00056	0.0014	0.00129	0.0163	0.009	0.458
Ilm16SUV014row8grai9 - 1	Mount 1	304	IM crustal	ilmenite	0.25-0.5	822	62	324400	323700	8.8	5.97	22.86	1.251	1.757	990	192.9	0.081	0.0259	0.0632	0.0059	0.0289	0.0142	0.0018	0.06	0.0203	0.324	0.149	0.851	0.21	2.076	0.403	34.52
Ilm16SUV023row4grain11 - 1	Mount3	176	ilmenite	ilmenite	0.18-0.25	712	132	345700	346000	20560	21480	1337	0.4	0.0506	153.6	1898	0.045	0.00121	0.0083	0.00149	0.012	0.0046	0.0029	0.016	0.00076	0.005	0.00042	0.0046	0.00048	0.0068	0.0027	5.92
Ilm16SUV023row4grain12 - 1	Mount3	177	ilmenite	ilmenite	0.18-0.25	646	-4	319500	319400	4.12	2.14	394	0.381	4.57	2230	306.9	0.053	0.002	0.071	0.0087	0.059	0.103	0.0051	0.216	0.081	0.66	0.207	1.04	0.29	3.22	0.627	64.3
Ilm16SUV023row4grain13 - 1	Mount3	178	ilmenite	ilmenite	0.18-0.25	1009	171	332900	334100	11910	12270	1036	0.425	0.0593	153.3	1674	0.099	0.00036	0.0094	0.0015	0.0154	-1.52E-06	0.00051	0.0052	0.00094	0.0074	0.00106	0.0062	0.00023	0.0062	0.0007	5.96
Ilm16SUV023row4grain14 - 1	Mount3	179	ilmenite	ilmenite	0.18-0.25	994	161	342000	338300	10540	10990	779	0.46	0.0597	159.4	1853	0.074	0.00075	0.0113	0.0025	0.0102	0.0028	0.00026	0.0055	0.00051	0.0032	0.00042	0.0098	0.00084	0.018	0.0084	5.73
Ilm16SUV023row4grain15 - 1	Mount3	180	ilmenite	ilmenite	0.18-0.25	887	108	306100	301200	11820	12140	632	0.41	0.0634	317	3575	-0.0021	0.00056	0.0062	0.00111	0.0052	0.0018	0.001	0.005	0.00019	0.004	0.0009	0.0049	-8.70E-06	0.0075	0.0021	10.65
Ilm16SUV023row4grain2 - 1	Mount3	167	ilmenite	ilmenite	0.18-0.25	836	175	351900	358300	23260	25850	1686	1.08	0.0478	169.2	1502	1.14	0.104	0.183	0.0222	0.072	0.0075	0.0015	0.0046	9.33E-08	0.0078	0.0013	0.0038	0.00074	0.013	0.0033	6.13
Ilm16SUV023row4grain3 - 1	Mount3	168	ilmenite	ilmenite	0.18-0.25	635	145	343400	349100	20620	22220	1362	0.331	0.12	161	1948	0.06	0.06	0.097	0.0256	0.059	0.0128	0.0066	0.028	0.0061	0.026	0.0061	0.0147	0.0016	0.013	0.0043	5.8
Ilm16SUV023row4grain4 - 1	Mount3	169	ilmenite	ilmenite	0.18-0.25	662	134	334900	335500	20200	22160	1224	0.313	0.0467	176.7	2213	0.097	0.00057	0.0058	0.0006	0.0038	0.0032	0.0016	0.0102	0.00134	0.0017	0.00054	0.0058	0.0017	0.0046	0.001	6.73
Ilm16SUV023row4grain5 - 1	Mount3	170	ilmenite	ilmenite	0.18-0.25	666	116	332800	331300	12120	13080	880	0.327	0.0473	163.1	1951	-0.01762	0.0026	0.0088	0.00039	0.0063	-3.17E-07	0.0012	0.0049	0.00016	0.0133	0.0011	0.0037	0.00074	0.03	0.0034	6.12
Ilm16SUV023row4grain6 - 1	Mount3	171	ilmenite	ilmenite	0.18-0.25	704	113	340100	343200	19930	21230	1380	0.364	0.0499	150.7	1862	0.122	9.00E-05	0.0054	0.00105	0.0049	0.0054	0.0011	0.0048	0.00015	0.0019	0.0013	0.0006	0.0035	0.014	-3.43E-05	5.51
Ilm16SUV023row4grain7 - 1	Mount3	172	ilmenite	ilmenite	0.18-0.25	864	120	332900	336900	14050	14640	950	0.385	0.0566	171	1795	0.1	0.00021	0.0072	0.00062	0.0048	-7.36E-07	0.0016	0.0056	0.00126	0.0099	0.00066	0.0041	-8.52E-06	0.0062	0.0058	6.56
Ilm16SUV023row4grain8 - 1	Mount3	173	ilmenite	ilmenite	0.18-0.25	737	70	321600	324100	4.12	2	22.66	0.384	3.565	2294	724	0.064	0.0003	0.0022	0.00169	0.0169	0.0162	0.0035	0.096	0.0371	0.488	0.166	1.021	0.238	2.63	0.542	73.6
Ilm16SUV023row4grain9 - 1	Mount3	174	ilmenite	ilmenite	0.18-0.25	805	158	349100	350100	11880	12350	886	0.411	0.0572	143	1837	0.085	0.00077	0.0056	0.0016	0.0077	0.0028	0.0014	0.0052	0.00035	0.0056	-1.91E-06	0.005	0.0012	0.0116	0.0016	5.56
Ilm16SUV023row4grai13 - 1	Mount 1	308	IM crustal	ilmenite	0.25-0.5	1034	-55	326400	321900	3.6	0.51	0.55	1.191	0.1064	112.1	421.7	0.026	0.0022	0.0064	0.00034	0.0058	-4.65E-05	0.0017	-0.0016	0.0001	0.0018	0.0018	0.0234	0.0116	0.198	0.0783	17.64
Ilm16SUV027row9grai1 - 1	Mount 1	427	IM crustal	ilmenite	0.25-0.5	1018	10	338200	339200	151	171.3	1.59	1.259	0.0925	21.33	310.7	0.116	0.0168	0.0439	0.0038	0.0131	0.0018	0.0014	-0.0006	0.00039	0.0011	0.00013	0.003	0.00227	0.0341	0.0226	1.25
Ilm16SUV027row9grai2 - 1	Mount 1	311	IM crustal	ilmenite	0.25-0.5	856	6	319800	319000	110.8	122.4	42.9	1.246	2.58	2060	313.9	0.148	0.155	0.235	0.0358	0.128	0.058	0.0068	0.125	0.0383	0.444	0.177	0.96	0.223	2.18	0.429	67.5
Ilm16SUV027row9grai3 - 1	Mount 1	312	IM crustal	ilmenite	0.25-0.5	960	71	331000	330300	645	733	64.4	1.294	0.117	33.2	67.6	0.34	0.03	0.072	0.0111	0.036	0.0058	0.0015	0.011	0.00102	0.0096	0.0028	0.0292	0.0026	0.465	0.1518	2.552
Ilm16SUV027row9grai4 - 1	Mount 1	313	IM crustal	ilmenite	0.25-0.5	745	49	320900	322400	18.3	15.46	0.09	1.292	0.212	9.86	754	0.25	0.0896	0.224	0.033	0.13	0.0278	0.0033	0.0242	0.0038	0.0299	0.0067	0.0388	0.013	0.225	0.0751	0.964
Ilm16SUV027row9grai5 - 1	Mount 1	314	IM crustal	ilmenite	0.25-0.5	1260	1	315800	323000	13.9	11.59	32.42	1.286	2.812	1729	204.1	0.83	0.0091	0.025	0.0033	0.0208	0.0189	0.0055	0.078	0.0163	0.46	0.1856	1.032	0.25	2.32	0.45	43.2
Ilm16SUV027row9grai6 - 1	Mount 1	315	IM crustal	ilmenite	0.25-0.5	997	67	274300	273300	12.4	7.98	2.28	1.08	2.825	1246	1265	0.074	0.0085	0.1403	0.0209	0.181	0.109	0.037	0.179	0.0507	0.512	0.1435	0.621	0.1284	1.253	0.253	24.32
Ilm16SUV027row9grai7 - 1	Mount 1	316	IM crustal	ilmenite	0.25-0.5	907	5	314400	317700	444.2	475	26.85	1.231	0.095	16.7	306.8	0.057	0.0109	0.0221	0.00116	0.0091	0.00025	0.0004	0.0006	0.00038	0.002	0.00119	0.014	0.0103	0.166	0.0665	1.01
Ilm16SUV027row9grai8 - 1	Mount 1	317	IM crustal	ilmenite	0.25-0.5	783	13	322300	318800	12.7	7.92	7.68	1.261	1.278	1052	400	0.003	0.00033	3.00E-05	0.00075	0.0048	0.0053	0.0018	0.0173	0.0129	0.18	0.1047	0.512	0.197	2.093	0.401	39.34
Ilm16SUV027row9grai9 - 1	Mount 1	318	IM crustal	ilmenite	0.25-0.5	861	55	318200	316200	2928	3175	382.7	1.209	0.1318	402.8	1356	0.055	0.00093	0.0064	0.00162	0.0058	0.0057	0.0009	0.0048	0.00149	0.0099	0.00269	0.0074	0.00202	0.0081	0.0041	13.88
Chr16SUV028row9grai7 - 1	Mount 2	178	chromite	ilmenite	0.25-0.5	1360	349	329700	328900	350	330	12.7	1.662	1.923	1165	84.1	0.24	0.0241	0.027	0.0032	0.0154	0.0056	0.0024	0.0384	0.0156	0.25	0.1457	1.045	0.29	3.16	0.645	24.45
Ilm16SUV028row9grain10 - 1	Mount 1	319	IM crustal	ilmenite	0.25-0.5	668	28	322100	322600	65.4	66.5	13.64	1.256	3.65	1176	387.5	0.005	2.00E-05	0.00154	0.00058	0.0049	0.0097	0.0001	0.09	0.0387	0.643	0.306	1.883	0.448	4.3	0.763	75.2
Ilm16SUV028row9grain11 - 1	Mount 1	320	IM crustal	ilmenite	0.25-0.5	787	95	327300	326300	162.9	176.4	38.7	1.304	3.29	1649	155.3	-0.008	0.0031	0.0065	0.00189	0.0159	0.012	0.0008	0.07	0.0301	0.422	0.217	1.468	0.433	4.84	1.146	21.03
Ilm16SUV028row9grai12 - 1	Mount 1	321	IM crustal	ilmenite	0.25-0.5	699	35	313300	314800	233.9	254.5	21.27	1.268	0.0901	5.6	552	0.044	0.0328	0.0424	0.0047	0.0124	0.0029	0.0019	0.0016	0.00023	0.0019	-3.87E-06	0.0032	0.00137	0.0209	0.0122	0.285
Ilm16SUV028row9grain13 - 1	Mount 1	322	IM crustal	ilmenite	0.25-0.5	868	20	324300	326600	79.9	83.2	16.11	1.356	0.0977	5.83	265.3	0.331	0.093	0.147	0.0131	0.0344	0.0055	0.0015	0.0025	0.00054	0.008	0.00076	0.0021	0.00133	0.0336	0.0196	0.451
Ilm16SUV014row8grai10 - 1	Mount 1	305	IM crustal	pseudorutile	0.25-0.5	3023	582	379700	385900	224.2	266.3	87.5	33.89	10.25	317.5	298.5	861	58.35	80.3	9.27	30.72	4.48	0.96	3.19	0.452	2.692	0.569	2.621	0.632	6.71	1.495	17.32
Ilm16SUV014row8grai4 - 1	Mount 1	299	IM crustal	pseudorutile	0.25-0.5	2280	368	365700	370200	874	1132	53.55	16.44	3.681	310.1	135.6	318.3	22.43	29.31	4.098	13.88	2.21	0.445	1.446	0.208	1.149	0.205	0.611	0.1114	1.008	0.193	7.81
Ilm16SUV023row8grai14 - 1	Mount 1	309	IM crustal	pseudorutile	0.25-0.5	3159	769	389000	391400	1588	1847	206.1	73.4	14.28	373.4	87.2	772	31.81	63.3	7.9	26.13	4.27	0.868	3.189	0.549	3.87	0.901	3.27	0.601	4.24	0.735	10.41
Ilm16SUV028row9grain14 - 1	Mount 1	323	IM crustal	pseudorutile	0.25-0.5	1671	659	418400	414700	183.8	211.5	18.47	68.41	39.58	897	808	326.6	71	156	12.22	37.42	5.58	1.258	5.26	0.989	7.35	1.687	5.49	0.827	5.48	0.813	16.41
Chr16SUV028row7grain1 - 1	Mount 2	173	chromite	pseudorutile	0.25-0.5	1050	512	359100	360600	271	540	11.4	20.44	3.862	51.8	498.7	458.1	17.39	24.92	2.691	8.93	1.445	0.312	1.146	0.1693	0.956	0.172	0.454	0.0639	0.44	0.0789	1.289
Chr16SUV028row7grain2 - 1	Mount 2	174	chromite	pseudorutile	0.25-0.5	35000	6700	367500	375300	2870	3930	303.8	25.7	5.99	602	352.1	435.8	28.21	43.1	5.37	17.84	2.96	0.585	2	0.303	1.719	0.334	1.348	0.308	3.08	0.623	30.66
Chr16SUV028row7grain9 - 1	Mount 2	180	chromite	pseudorutile	0.25-0.5	1153	336	352100	353500	1259	1610	323.4	11.1	8.26	144.2	499.7	157	34.2	43.3	6.32	21.72	3.21	0.618	2.2	0.317	1.891	0.431	1.699	0.349	3.19	0.639	4.31

APPENDIX 7E

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); OLIVINE

Sample #	Mount	EPMA #	ODM Min ID	EPMA Min ID	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Diop15SUV006row3grain1 - 1	2015_3	111	diopside	olivine	0.25-0.5	1702		69.6	1357		0.148	0.0359						6.27E-06	0.001	0.0019		0.00075	0.0116	0.0051	0.0199	0.0037	0.054	0.0123
Diop15SUV006row3grain1 - 2	2015_3	111_rpt	diopside	olivine	0.25-0.5	1707		61.9	1160	0.042	0.233	0.082	0.0029	0.105	0.043	0.19	0.0076	0.058	0.0073	0.0027	0.0127	0.002	0.031	0.0092	0.032	0.0065	0.075	0.0146
Olv15SUV030row3grain5 - 1	Mount 3	160	forsterite	olivine	0.18-0.25	146.7	4.8	-0.015	0.039	0.0006	0.036	0.0002	0.00067	0.0058	0.0034	0.0076	0.017	0.119	0.0039	0.0341	0.008							
Olv16SUV014row4grain7 - 1	Mount 1	260	forsterite	olivine	0.25-0.5	163.7	4	0.025	0.026	-0.0018	0.032	0.0022	0.00063	0.0008	0.003	0.0047	0.012	0.054	0.0045	0.0408	0.018							
Olv16SUV014row5grain1 - 1	Mount 1	262	fayalite	olivine	0.25-0.5	317.9	10	0.001	0.1	0.0016	0.038	0.0041	0.0011	0.014	0.0033	0.0168	0.035	0.399	0.0084	0.199	0.0037							
Olv16SUV014row5grain2 - 1	Mount 1	263	fayalite	olivine	0.25-0.5	603	22	0.02	0.13	0.0009	0.04	0.0031	0.00065	0.0008	0.0023	0.0175	0.037	0.409	0.011	0.16	0.01							
Olv16SUV014row5grain3 - 1	Mount 1	264	fayalite	olivine	0.25-0.5	318	9.3	0.037	0.11	0.0023	0.09	0.039	0.0025	0.045	0.0036	0.0307	0.042	0.458	0.012	0.128	0.0047							
Olv16SUV014row5grain4 - 1	Mount 1	265	fayalite	olivine	0.25-0.5	284.6	8.9	0.015	0.057	0.0012	0.033	-0.0015	0.00055	0.0005	0.0019	0.0131	0.026	0.276	0.0066	0.111	0.0072							
Olv16SUV014row5grain5 - 1	Mount 1	266	fayalite	olivine	0.25-0.5	569	19	0.068	0.1	0.0011	0.1	0.0138	0.0013	0.0185	0.003	0.0339	0.038	0.533	0.01	0.162	0.0062							
Olv16SUV016row5grain10 - 1	Mount 1	271	fayalite	olivine	0.25-0.5	347	14	-0.009	0.18	0.0002	0.035	0.0085	0.0014	0.027	0.0041	0.0254	0.036	0.599	0.014	0.265	0.013							
Olv16SUV016row5grain11 - 1	Mount 1	272	fayalite	olivine	0.25-0.5	163.9	6.5	-0.011	0.071	0.0001	0.061	0.0034	0.00068	0.019	0.0033	0.0148	0.035	0.206	0.0065	0.0482	0.0088							
Olv16SUV016row5grain12 - 1	Mount 1	273	fayalite	olivine	0.25-0.5	358.8	9.9	-0.018	0.082	-0.0004	0.032	0	0.00045	0.008	0.0021	0.0232	0.028	0.371	0.0097	0.119	0.0052							
Olv16SUV016row5grain6 - 1	Mount 1	267	fayalite	olivine	0.25-0.5	213.4	5.8	0.006	0.084	-0.0006	0.031	0.0058	0.0017	0.0096	0.0036	0.0226	0.031	0.282	0.0071	0.083	0.0028							
Olv16SUV016row5grain7 - 1	Mount 1	268	fayalite	olivine	0.25-0.5	166.6	4.9	0.002	0.032	0.0003	0.033	0.0024	0.001	-0.000191	0.003	0.0073	0.015	0.089	0.0042	0.0277	0.0057							
Olv16SUV016row5grain8 - 1	Mount 1	269	fayalite	olivine	0.25-0.5	478	14	0.031	0.079	0.0034	0.035	0.004	0.0009	0.0091	0.0036	0.0097	0.039	0.281	0.0081	0.09	0.007							
Olv16SUV016row5grain9 - 1	Mount 1	270	fayalite	olivine	0.25-0.5	329.2	9.8	0.004	0.11	0.0004	0.029	0.0077	0.00091	0.026	0.0033	0.0351	0.037	0.461	0.0095	0.114	0.0068							
Olv16SUV028row4grain8 - 1	Mount 1	261	forsterite	olivine	0.25-0.5	215.1	7.3	0.036	0.022	-0.0016	0.03	0.0009	0.00083	-0.0001721	0.0019	0.0032	0.0091	0.071	0.0037	0.0477	0.02							

APPENDIX 7F

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); CLINOPYROXENE (CPX)

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Note	Mg	Si	Ca	Sc	Ti_47	Ti_49	V	Cr_52	Cr_53	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
Diop15SUV004row1grain3 - 1	2015_3	3-1_003	low-CR_DC	cpx		115500	230000	146700	48.23		2930	123.6	7070	7020	606.7	34.04	317.3	2.91	23.07	2.343		100.99	2.093	4.88	0.07	0.45	1.235	4.155	0.636	3.03	0.754	0.23	0.661	0.077	0.477	0.089	0.178	0.0283	0.154	0.0279	0.223	0.0024	0.066	0.004	0.00057
Diop15SUV004row1grain3 - 2	2015_3	3-1_003_rpt	low-CR_DC	cpx		117490	210000	146040	45.1		2330	89.3	8405	8350	533.4	30.84	326	2.97	17.1	1.705	0.0099	90.13	1.444	2.925	0.043	1.13	0.886	2.886	0.444	2.22	0.479	0.16	0.477	0.062	0.324	0.0502	0.121	0.0185	0.103	0.0182	0.158	0.001	0.096	0.0041	0.00027
Diop15SUV004row1grain4 - 1	2015_3	3-1_004	low-CR_DC	cpx		119280	233500	147200	44.94		2391	112.9	8777	8676	618.3	34.98	375.5	8.08	23.08	1.691	0.0115	83.35	1.487	3.23	0.0592	0.138	0.861	2.851	0.44	2.15	0.511	0.167	0.442	0.0593	0.381	0.0676	0.154	0.0171	0.129	0.0179	0.147	0.0022	0.0499	0.003	0.00015
Diop15SUV014row1grain1 - 1	2015_3	3-1_001	Cr-diopside	cpx		119200	223000	148300	74.17		740.8	203	6490	6391	681.8	22.36	382.4	0.786	11.96	2.41		251.6	11.69	29.08	0.387	0.08	8.556	32.5	4.858	22.38	4.58	1.451	3.4	0.435	2.412	0.437	1.088	0.161	0.978	0.127	0.578	0.0292	0.779	0.323	0.0611
Diop15SUV014row1grain1 - 2	2015_3	3-1_001_rpt	Cr-diopside	cpx		116330	221300	147410	74.13		770.9	204.1	6520	6490	669.3	21.97	379.1	0.746	11.11	2.327		250.5	11.91	30.59	0.407	0.088	8.504	32.76	4.856	22.53	4.62	1.468	3.41	0.426	2.57	0.45	1.139	0.158	1.017	0.1361	0.703	0.0272	0.677	0.336	0.0643
Diop15SUV018row3grain2 - 1	2015_3	112	Cr-diopside	cpx		80430	171000	179450	1.271		955	2.85	6.2	4.3	1597	4.82	0.787	0.087	9.04	6.24	0.102	14.15	2.96	192.6	4.34	4.3	8.14	13.5	1.33	4.71	0.786	0.107	0.546	0.0867	0.573	0.123	0.33	0.0492	0.35	0.0534	4.62	0.23	1.35	5.8	0.542
Diop15SUV018row3grain2 - 2	2015_3	112	Cr-diopside	cpx		50700	138000	178600	1.761		1370	4.22	7.9	5.89	1870	1.77	1.06	0.105	6.38	5.75	0.0307	4.42	13.8	361	12.2	2.06	6.7	19	2.93	13.3	2.41	0.349	1.67	0.276	1.99	0.458	1.55	0.251	1.99	0.322	7.35	0.93	1.362	6.1	2.97
Diop15SUV019row3grain7 - 1	Mount 3	162	low_Cr diop	cpx	Has cracks			1651		31	9.61						1.3					0.183	0.11	80	0.26	15.47	0.087	1.958	0.32	6.65	0.032	0.875	0.11												
Diop15SUV019row3grain8 - 1	Mount 3	missing	low-CR_DC	missing				4970		110	22.49						0.39					0.0578	0.033	4.08	0.031	2.21	0.033	0.515	0.12	2.06	0.013	0.239	0.06												
Diop15SUV019row3grain9 - 1	Mount 3	163	low-CR_DC	cpx				5370		120	21.18						0.4					0.0664	0.11	3.84	0.031	2.16	0.036	0.533	0.1	2.067	0.017	0.246	0.059												
Diop15SUV021row1grain5 - 1	2015_3	3-1_005	low-CR_DC	cpx		126400	226000	133400	108.08		3220	538.8	4216	4298	1422	50.8	318.1	2.86	36.6	6.96	1.54	12.06	12.04	16.54	0.297	7.5	1.304	4.3	0.713	4.07	1.57	0.431	1.99	0.351	2.331	0.511	1.381	0.187	1.283	0.178	0.782	0.0203	0.269	0.148	0.0321
Diop15SUV021row1grain5 - 2	2015_3	3-1_005_rpt	low-CR_DC	cpx		119300	229000	134080	76.83		1788	357.7	7729	7884	1130.6	43.42	315.8	0.951	26.32	4.45		8.75	7.09	5.36	0.0181	0.036	0.446	1.94	0.381	2.21	0.899	0.243	1.26	0.192	1.357	0.279	0.75	0.1014	0.698	0.0977	0.273	0.0016	0.154	0.0122	0.0027
Diop15SUV021row1grain6 - 1	2015_3	3-1_006	low-CR_DC	cpx		130570	227300	135510	83.64		1902	297.9	8976	8819	1237	45.91	330.6	2.44	28.69	4.9	0.29	8.75	7.75	7.23	0.0288	0.165	0.488	2.019	0.379	2.354	0.994	0.289	1.236	0.204	1.471	0.302	0.924	0.123	0.823	0.112	0.337		0.083	0.0415	0.0028
Diop15SUV024row1grain2 - 1	2015_3	3-1_002	low-CR_DC	cpx		115710	229500	160300	29.99		530.3	99.55	4020	3982	1300	45.76	812.5	0.141	53.56	5.44	0.0268	12.09	10.38	28.24	0.0298	1.22	15.2	55.64	6.761	22.71	3.33	1.115	2.026	0.312	1.99	0.368	1.085	0.155	1.066	0.15	0.91	0.0057	0.93	0.205	0.0577
Diop15SUV024row1grain2 - 2	2015_3	3-1_002_rpt	Cr-diopside	cpx		113030	223000	158900	29.68		489.1	97.15	4021	3972	1258.7	44.54	811.6	0.201	50.07	5.25		11.73	10.04	26.86	0.0258	0.029	14.24	52.4	6.379	21.73	3.11	1.065	1.855	0.299	1.842	0.373	1.086	0.168	0.995	0.148	0.815	0.0063	0.935	0.201	0.0491
Diop15SUV027row1grain7 - 1	2015_3	3-1_007	low-CR_DC	cpx		110230	241100	152700	50.86		168.9	166.1	2851	2791	1614	44.12	556.5	0.098	58.99	5		8.11	41.6	21.45	0.0252		15.94	59.12	7.074	25.96	6.26	0.774	5.57	1.038	7.28	1.448	4.19	0.638	4.33	0.602	1.285	0.0086	0.853	0.203	0.348
Diop15SUV027row1grain7 - 2	2015_3	3-1_007_rpt	low-CR_DC	cpx		110800	232000	153400	50.87		170.1	162.3	2842	2769	1612	44.48	559.9	0.146	57.5	4.92		7.9	43.13	21.52	0.0234		15.87	60.34	7.193	26.59	6.4	0.808	5.96	1.037	7.33	1.461	4.32	0.643	4.31	0.609	1.322	0.0141	0.864	0.206	0.339
Diop15SUV028row1grain8 - 1	2015_3	3-1_008	low-CR_DC	cpx		110440	201700	129130	95.64		2413	357.6	6452	6727	1023.4	40.62	306.6	2.75	23.86	5.5	0.05	9.67	8.54	9.14	0.0327	0.122	0.482	2.024	0.397	2.56	1.047	0.348	1.482	0.25	1.763	0.338	0.946	0.124	0.825	0.1072	0.44	0.004	0.095	0.0185	0.00182
Diop15SUV028row1grain8 - 2	2015_3	3-1_008_rpt	low-CR_DC	cpx		134400	240000	128260	73.3		1751	263.4	5207	5057	1347	50.01	366.4	3.91	31.42	3.85	0.102	7.14	6.2	4.91	0.024	0.206	0.302	1.29	0.256	1.71	0.724	0.229	0.991	0.166	1.289	0.255	0.653	0.101	0.666	0.091	0.242	0.0011	0.198	0.025	0.00198
Diop15SUV028row1grain9 - 1	2015_3	3-1_009	low-CR_DC	cpx		118230	213800	134040	94.88		2495	351.1	7881	8130	1100.5	43.21	330.3	1.57	25.25	5.64		9.66	8.68	9.09	0.0272		0.489	1.97	0.392	2.58	1.025	0.352	1.369	0.242	1.754	0.364	0.975	0.1235	0.862	0.115	0.498	0.0029	0.0339	0.0146	0.00125
Diop15SUV028row3grain10 - 1	Mount 3	164	low-CR_DC	cpx	Has cracks			2504		54	14.85						0.2					0.0372	0.03	0.78	0.01	0.772	0.02	0.242	0.085	1.035	0.012	0.118	0.036												
Diop15SUV032row2grain1 - 1	2015_3		low-CR_DC	cpx		116670	232000	142460	82.29		1392.1	191.7	6446	6248	964	38.7	279.6	2.21	22.01	4.39	0.361	1.53	4.673	3.083	0.0325	1.53	0.166	0.569	0.1126	0.773	0.404	0.189	0.66	0.1188	0.923	0.187	0.492	0.0715	0.436	0.0689	0.163	0.0043	0.361	0.005	0.00301
Diop15SUV032row2grain1 - 2	2015_3	3-2_001	low-CR_DC	cpx		116990	225000	139290	80.53		1732	215.1	5583	5415	990	41.6	277.5	0.392	21.89	4.83	0.52	7.69	5.71	4.34	0.018	0.97	0.128	0.64	0.141	1.035	0.518	0.203	0.863	0.156	1.107	0.237	0.623	0.0893	0.561	0.0749	0.219		0.0153	0.0014	0.00065
Diop15SUV032row2grain2 - 1	2015_3	3-2_002	low-CR_DC	cpx		130530	244800	140370	67.47		1544	240.7	5981	5790	1119	44	316.4	0.65	25.89	3.5		9.21	5.65	4.23	0.0178	0.188	0.413	1.605	0.298	1.865	0.655	0.215	0.96	0.162	1.173	0.212	0.618	0.0835	0.601	0.0833	0.215		0.0435	0.0041	0.00222
Diop15SUV032row2grain2 - 2	2015_3	3-2_002_rpt	low-CR_DC	cpx		121300	231000	140760	86		2064	315.1	8077	8020	1049	41.65	302.6	0.85	26.8	5.25	0.127	11.21	7.58	7.3	0.0277	2.99	0.688	2.375	0.419	2.434	0.995	0.302	1.274	0.208	1.518	0.301	0.855	0.115	0.756	0.1	0.386		0.54	0.0138	0.0057
Diop15SUV032row2grain3 - 1	2015_3	3-2_003	low-CR_DC	cpx		118600	230200	136430	85.23		2201	306.7	7555	7490	1040.4	41.84	328.6	2.565	24.3	5.23	0.028	10.4	7.8	6.99	0.0235	0.063	0.454	1.888	0.38	2.45	0.971	0.346	1.278	0.219	1.567	0.311	0.914	0.118	0.774	0.1154	0.366	0.0023	0.169	0.0141	0.00176
Diop15SUV032row2grain4 - 1	2015_3	3-2_004	low-CR_DC	cpx		131930	240700	135230	78.3		1874	266	6906	6610	1260	47.73	348.8	3.03	29.8	4.41	0.0103	8.57	6.61	5.01	0.0268	0.086	0.355	1.469	0.294	1.872	0.756	0.279	1.048	0.176	1.314	0.257	0.721	0.099	0.658	0.0955	0.271		0.185	0.021	0.00214
Diop15SUV032row2grain4 - 2	2015_3	3-2_004_rpt	low-CR_DC	cpx		121950	206300	135070	75.01		1869	261.6	6478	6319	1115.1	43.86	326.7	2.85	26.1	4.31		9.43	6.182	4.9	0.0208	0.0064	0.324	1.443	0.268	1.802	0.78	0.255	1.007	0.179	1.233	0.257	0.708	0.0858	0.61	0.0802	0.263		0.0266	0.0055	0.00097
Diop15SUV032row2grain5 - 1	2015_3	3-2_005	low-CR_DC	cpx		131000	211000	141980	66.54		1441	226.7	6606	6370	1103	43.69	338	0.536	25.97	3.581	0.0181	8.79	5.3	3.7	0.0166	0.06	0.351	1.469	0.269	1.746	0.697	0.211	0.877	0.145	1.015	0.218	0.588	0.082	0.446	0.0804	0.175		0.169	0.0085	0.00103
Diop15SUV032row2grain6 - 1	2015_3	3-2_006	low-CR_DC	cpx		122490	208200	138150	92.8		2221	360.4	7790	7850	1167.7	46.35	307.5	2.12	27.84	5.38	0.0204	10.14	8.14	7.41	0.0269	0.443	0.46	2.02	0.385	2.44	0.987	0.335	1.317	0.242	1.578	0.315	0.928	0.126	0.773	0.122	0.424	0.0022	0.092	0.0071	0.0031
Diop15SUV032row2grain6 - 2	2015_3	3-2_006_rpt	low-CR_DC	cpx		118800	206900	138290	83.06		2036	324.2	5770	5750	1101	44.82	287.1	0.817	26.12	4.49		10.64	6.86	5.59	0.0173	0.113	0.449	1.798	0.34	2.162	0.891	0.302	1.205	0.203	1.462	0.279	0.801	0.0937	0.668	0.0859	0.287		0.0371	0.008	0.00112
Diop15SUV032row2grain7 - 1	2015_3	3-2_007	low-CR_DC	cpx		116200	189000	141000	94.99		2558	381	7443	7506	1036	42.39	335.5	2.75	24.66	5.85		10.85	7.92	8.25	0.0266	0.23	0.406	1.814	0.377	2.308	0.988	0.351	1.39	0.238	1.596	0.324	0.83	0.116	0.792	0.0937	0.485	0.0036	0.154	0.0109	0.00085
Diop15SUV032row2grain8 - 1	2015_3	3-2_008	low-CR_DC	cpx		121440	211000	133530	64.81		1623	220.6	4506	4314	1044.6	41.8	396.2	0.641	24.39	3.471	0.0127	8.994	5.26	3.758	0.0099		0.311	1.282	0.263	1.565	0.666	0.228	0.867	0.1555	1.096	0.208	0.595	0.0743	0.513	0.0727	0.229		0.0257	0.0046	0.00032
Diop15SUV032row2grain9 - 1	2015_3	3-2_009	low-CR_DC	cpx		117300	205000	138550	89.96		2409	325.9	7440	7416	1070.1	42.93	333.2	2.04	24.84	5.58		10.69	8.46	7.75	0.0284		0.464	1.966	0.392	2.5	1.041	0.355	1.372	0.249	1.686	0.356	0.985	0.1268	0.831	0.123	0.41		0.0275	0.0064	0.00086
Diop15SUV052row2grain10 - 1	2015_3	3-2_010	Cr-diopside	cpx		117670	204700	134130	81.48		1856	278.5	8144	7831	1050.9	40.95	304.2	0.46	24.29	4.51		9.28	7.18	6.21	0.026		0.467	1.905	0.368	2.388	0.889	0.263	1.137	0.207	1.376	0.278	0.836	0.1024	0.785	0.1012	0.338		0.0367	0.0114	0.00176
Diop16SUV019row6grain1 - 1	Mount 1	274	Cr-diopside	cpx				802		57	79.4						0.36					2.74	0.66	26.1	0.16	2.24	0.041	0.288	0.11	1.08	0.021	0.19	0.11												
Diop16SUV019row6grain2 - 1	Mount 1	275	Cr-diopside	cpx				118.3		4.5	61.2						0.051					0.0005	0.038	3.001	0.026	0.471	0.014	0.0366	0.034	0.177	0.0071	0.068	0.041												

APPENDIX 7G

GEOLOGICAL SURVEY OF CANADA

Banks Island samples - LA-ICPMS rare earth element (REE) chemistry (ppm); RUTILE

Sample #	Mount	EPMA#	ODM ID	EPMA ID	Grain Size	Ti_m47	Si	Ca	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Rut16SUV013row1grain1 - 1	Mount 2	2_1_1	red rutile	rutile	0.25-0.5	4.12E+08	3600	470	593600	2.23	4.76	3.38	179.8	982	72.6	2.66	6.4	0.77	2.84	0.731	0.181	0.669	0.1207	0.763	0.149	0.419	0.0564	0.413	0.0553	8.38
Rut16SUV013row1grain2 - 1	Mount 2	2_1_2	red rutile	rutile	0.25-0.5	6.57E+08	1100	91	600100	0.05	2.094	0.528	2648	185.3	0.88	0.785	1.025	0.0933	0.3	0.0359	0.0347	0.061	0.0122	0.114	0.0276	0.105	0.0171	0.097	0.0154	107.6
Rut16SUV013row1grain3 - 1	Mount 2	2_1_3	red rutile	rutile	0.25-0.5	6.77E+08	800	146	600900	0.04	1.599	0.1011	33.1	1645	0.038	0.00095	0.0011	-0.00019	0.0036	0.0029	0.0019	0.0052	-0.00019	-0.00029	0.00038	0.00069	0.00015	0.0009	1.00E-05	1.44
Rut16SUV013row1grain4 - 1	Mount 2	2_1_4	red rutile	rutile	0.25-0.5	8.97E+08	200	160	602400	0.145	1.632	0.1092	1219	1330	0.038	0.00322	0.0027	6.00E-05	0.0062	0.002	0.00025	0.0034	0.00025	0.00095	0.00039	-1.22E-05	0.00029	-0.0014	8.00E-06	62.75
Rut16SUV013row1grain5 - 1	Mount 2	2_1_5	red rutile	rutile	0.25-0.5	6.79E+08	500	281	605600	0.05	1.653	0.1138	1143	757.5	0.087	0.0396	0.0844	0.0088	0.032	0.0041	0.0039	0.0044	0.00037	0.0023	0.00071	0.00017	-9.00E-05	-0.0003	-0.0004	54.13
Rut16SUV013row1grain6 - 1	Mount 2	2_1_6	red rutile	rutile	0.25-0.5	6.63E+08	-300	292	594000	0.05	1.667	0.1178	1297	1695	0.044	0.00078	0.00101	-0.00024	0.0057	0.0054	0.0001	0.0042	-0.00021	0.0033	3.00E-05	0.00128	5.00E-05	-0.0013	-0.00056	69.8
Rut16SUV013row1grain7 - 1	Mount 2	2_1_7	red rutile	rutile	0.25-0.5	7.81E+08	1100	128	602000	0.203	1.629	0.1172	1116	1986	0.135	0.00131	0.00166	0.00068	0.0016	0.001	0.0007	0.0018	0.0006	0.00094	0.00035	0.00092	0.00036	0.0015	6.00E-05	66.31
Rut16SUV013row1grain8 - 1	Mount 2	2_1_8	red rutile	rutile	0.25-0.5	6.45E+08	-500	211	596100	0.21	1.738	0.1216	824.9	3373	0.091	0.0052	0.0069	0.00135	0.0039	0.0029	0	-0.0027	0.0002	0.0009	7.00E-05	9.00E-05	0.00038	-0.0009	0.0012	50.58
Rut16SUV022row1grain9 - 1	Mount 2	2_1_9	red rutile	rutile	0.25-0.5	7.45E+08	200	237	591000	0.22	1.692	0.13	2445	4627	0.052	0.00106	0.00143	0.00072	0.0046	0.0041	0.0011	0.0043	4.00E-05	0.0015	0.00049	0.00094	-0.00011	-0.001	-0.00018	116.5
Rut16SUV022row1grain10 - 1	Mount 2	2_1_10	red rutile	rutile	0.25-0.5	6.32E+08	1300	660	588300	0.34	2.08	0.132	1279	2267	1.17	0.036	0.087	0.0129	0.038	0.0091	0.002	0.0061	0.00051	0.0047	0.00043	0.0017	0.00079	0.0039	0.00033	68.5
Rut16SUV022row1grain11 - 1	Mount 2	2_1_11	red rutile	rutile	0.25-0.5	6.97E+08	-800	315	597000	0.29	1.707	0.1208	1413	1618	0.063	0.0464	0.088	0.0109	0.052	0.0087	0.0002	0.0049	-1.00E-05	0.0012	0.00042	0.00031	0.00034	-0.001	0.00027	71.9
Rut16SUV023row2grain1 - 1	Mount 2	2_2_1	red rutile	rutile	0.25-0.5	8.09E+08	800	285	595500	0.32	1.7	0.1311	1257	1931	0.053	0.0072	0.0179	0.0039	0.0175	0.005	0.00051	0.0095	0.00059	0.0035	0.0007	0.0024	0.00051	0.0043	0.00075	52.12
Rut16SUV023row2grain2 - 1	Mount 2	2_2_2	red rutile	rutile	0.25-0.5	6.44E+08	100	126	601300	0.37	1.669	0.1191	260	1992	0.015	0.0032	0.0034	0.00064	0.0018	0.0026	0	-0.0028	0.00049	0.00035	0.0001	0.00022	0.00055	0.0002	-0.0004	6.15
Rut16SUV023row2grain3 - 1	Mount 2	2_2_3	red rutile	rutile	0.25-0.5	8.68E+08	-500	167	591800	0.213	1.735	0.1277	2081	3492	0.048	0.002	0.0051	0.00101	0.0034	0.0014	-0.00024	0.0039	0.00046	0.0009	0.00047	0.00128	0.00035	0.0013	0.00106	92.4
Rut16SUV023row2grain4 - 1	Mount 2	2_2_4	red rutile	rutile	0.25-0.5	9.04E+08	-200	212	593600	0.135	1.709	0.1196	1260	2446	0.077	3.00E-05	0.00027	0.00066	0.0046	0.0023	0.0004	0.0014	0.00047	0.0017	0.00039	0.00081	0.00043	0.0037	0.00256	54.43
Rut16SUV024row2grain6 - 1	Mount 2	2_2_6	red rutile	rutile	0.25-0.5	7.64E+08	300	313	597300	0.166	1.754	0.1282	997.4	2333	0.034	0.011	0.037	0.00295	0.0188	0.0025	0.0008	-0.0005	-0.00013	0.00077	0.00058	0.0018	0.00046	0.0028	0.00099	45.29
Rut16SUV024row2grain8 - 1	Mount 2	2_2_8	red rutile	rutile	0.25-0.5	7.69E+08	0	103	588800	0.1	1.85	0.1293	559.8	936	1.25	0.186	0.405	0.0356	0.099	0.0082	0.0024	0.0057	0.00103	0.0039	0.00034	0.0021	9.00E-05	0.0014	9.00E-05	28.77
Rut16SUV024row2grain9 - 1	Mount 2	2_2_9	red rutile	rutile	0.25-0.5	6.79E+08	1000	176	598000	0.018	1.76	0.1496	2366	1094	0.081	0.0413	0.096	0.0076	0.0285	0.007	0.0006	-0.0003	0.00143	0.0088	0.00166	0.0027	0.00057	0.0071	0.00039	75.2
Rut16SUV024row2grain10 - 1	Mount 2	2_2_10	red rutile	rutile	0.25-0.5	6.84E+08	4200	1360	598100	0.48	3.47	0.349	1021	1209	9.8	0.297	0.81	0.084	0.374	0.067	0.0163	0.046	0.0071	0.054	0.0098	0.0271	0.0042	0.0343	0.0055	37.15

APPENDIX 7H

Sample #	Mount	EPMA #	ODM ID	EPMA ID	Grain Size	Ca	Ti_m47	Ti_m49	Ni	Sr	Y	Zr	Nb	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Ves15SUV001row8grain1 - 1	Mount 2	185	vesuvianite	garnet	0.25-0.5	534000	3600	3950	6.66	0.265	21.14	285	11.82	0.008	6.3	47.6	10.58	60.8	10.84	2.89	5.96	0.869	4.84	0.862	2.42	0.349	2.52	0.439	7.79
Ves15SUV001row8grain3 - 1	Mount 2	187	vesuvianite	vesuvianite	0.25-0.5	591000	9690	10660	0.96	204.8	20.21	334.8	35.1	0.034	40.8	85.7	9.87	38.6	7.19	1.147	5.48	0.761	4.38	0.833	2.17	0.32	1.88	0.278	9.37
Ves15SUV001row8grain4 - 1	Mount 2	188	vesuvianite	garnet	0.25-0.5	497000	4100	4470	2.02	0.149	27.5	47.8	11.01	0.146	1.428	9.78	2.197	15.79	6.84	4.8	7.44	1.016	5.78	0.998	2.512	0.311	1.74	0.257	1.255
Ves15SUV001row8grain5 - 1	Mount 2	189	vesuvianite	garnet	0.25-0.5	534000	4380	4720	1.43	0.189	26.87	137.7	232.4	0.029	6.26	57.1	13.18	74.2	14.28	4.72	7.69	0.935	5.04	0.954	2.64	0.376	2.4	0.363	3.59
Ves15SUV001row8grain6 - 1	Mount 2	190	vesuvianite	garnet	0.25-0.5	527000	1657	1780	17.69	0.671	44.4	3.94	32.9	0.073	19.53	37.3	2.69	10.52	3.06	1.516	3.96	0.788	6.23	1.492	5.06	0.836	5.48	0.704	0.101
Ves15SUV002row8grain8 - 1	Mount 2	191	vesuvianite	garnet	0.5-1.0	529000	17100	18350	1.3	0.626	23.9	190.4	7.71	0.193	5.33	40.2	8.24	47.4	15.29	3.54	14.21	1.526	6.7	0.853	1.72	0.173	1.12	0.159	4.18
Ves15SUV002row8grain9 - 1	Mount 2	192	vesuvianite	garnet	0.5-1.0	551000	28900	30200	3.41	0.684	27.7	232.1	83.1	0.075	10.15	82.5	15.65	69	8.98	2.66	6.51	0.956	5.73	1.086	2.87	0.389	2.57	0.368	8.35
Ves15SUV002row8grain10 - 1	Mount 2	193	vesuvianite	garnet	0.5-1.0	522000	14140	15080	0.78	0.18	60.6	202	163.6	0.077	11.41	71.9	14.72	90.3	27.4	8.99	21.3	2.83	15.4	2.68	6.51	0.805	4.43	0.544	5.48
Ves15SUV003row9grain1 - 1	Mount 2	196	vesuvianite	garnet	0.25-0.5	535000	3103	3320	1.28	0.199	37.9	71.3	36.1	0.146	9.16	78.3	17.69	97.1	19.76	5.34	11.97	1.451	8.05	1.434	3.87	0.517	3.3	0.449	1.84
Ves15SUV003row9grain2 - 1	Mount 2	198	vesuvianite	garnet	0.25-0.5	524000	2181	2276	9.17	0.391	21.22	1.386	10.98	0.106	4.92	26.56	4.48	21.04	4.74	1.664	4.65	0.693	4.38	0.84	2.35	0.309	1.84	0.222	0.0041
Ves15SUV003row9grain3 - 1	Mount 2	199	vesuvianite	garnet	0.25-0.5	548000	15470	16420	11.92	0.282	32.63	128.2	7.02	-0.001	2.27	15.39	3.08	17.28	4.58	2.366	5.32	0.919	6.22	1.297	3.75	0.503	3.27	0.432	4.75
Ves15SUV003row9grain4 - 1	Mount 2	200	vesuvianite	garnet	0.25-0.5	512000	2020	2130	1.22	0.166	447	0.542	15.08	0.039	1.812	12.87	3.29	29.4	24.5	6.31	52.1	10.51	75.3	15.2	40.8	5.08	27.3	2.88	0.0062
Ves15SUV003row9grain5 - 1	Mount 2	201	vesuvianite	garnet	0.25-0.5	532000	5780	6100	0.62	0.587	52.3	143.5	86.2	-0.009	7.08	57.1	11.85	64.6	14.49	2.78	11.01	1.569	9.39	1.83	5.28	0.83	5.63	0.786	2.66
Ves15SUV005row9grain6 - 1	Mount 2	202	vesuvianite	garnet	0.25-0.5	513000	4290	4510	-0.1	0.436	40.3	168.8	4.03	0.01	2.62	28.1	6.94	38.9	9.34	2.06	7.99	1.184	7.62	1.458	4.35	0.655	4.26	0.616	4.39
Ves15SUV010row9grain7 - 1	Mount 2	203	vesuvianite	garnet	0.5-1.0	549000	1981	2101	1.88	0.191	4.13	27.5	5.43	0.082	1.037	7.28	1.625	7.69	1.28	0.606	0.871	0.123	0.82	0.148	0.402	0.0571	0.39	0.06	0.869
Ves15SUV010row9grain8 - 1	Mount 2	204	vesuvianite	garnet	0.5-1.0	551000	4730	4950	17	2.02	13	11.1	0.961	3.9	3.8	17	2.65	12.07	2.48	1.35	2.79	0.419	2.67	0.463	1.18	0.149	0.99	0.111	0.185
Ves15SUV010row9grain9 - 1	Mount 2	206	vesuvianite	garnet	0.5-1.0	523000	2710	2834	0.15	2.6	37.5	123.8	7.35	0.143	10	48.5	10.45	53	9.95	1.84	7.16	1.063	6.83	1.408	4.22	0.618	4.03	0.548	3.6
Ves15SUV010row9grain10 - 1	Mount 2	207	vesuvianite	garnet	0.5-1.0	537000	5800	6100	15.78	0.901	20.13	7.16	105	0.03	4.06	27.11	5.61	32.7	7.62	3.52	6.52	0.789	4.09	0.701	1.624	0.209	1.21	0.164	0.082
Ves15SUV010row9grain11 - 1	Mount 2	208	vesuvianite	garnet	0.5-1.0	524000	16580	17380	21.93	0.84	90.3	27.46	43.1	0.9	4.69	27.79	4.9	23.31	4.64	2.7	6.22	1.298	12.04	3.08	11.13	1.864	13.44	1.997	0.27
Ves15SUV010row9grain12 - 1	Mount 2	209	vesuvianite	garnet	0.25-0.5	525000	801	828	0.45	0.507	26.99	1.106	15.66	0.079	3.21	21.61	4.85	34.6	9.6	3.09	5.63	0.757	4.5	0.872	2.51	0.369	2.57	0.389	0.017
Ves15SUV010row9grain13 - 1	Mount 2	210	vesuvianite	andradite	0.25-0.5	589000	370	361	0.36	0.207	24.6	57.7	0.806	0.045	6.6	54	8.05	24.62	2.69	1.291	2.82	0.485	3.62	0.779	2.61	0.46	3.72	0.663	1.55
Ves15SUV014row9grain14 - 1	Mount 2	211	vesuvianite	garnet	0.25-0.5	468000	3620	3800	1.13	0.276	18.53	52.6	7.35	-0.014	4.55	38.2	7.04	27.42	3.78	1.274	3.27	0.519	3.61	0.717	1.98	0.3	1.81	0.264	1.112
Ves15SUV015row10grain1 - 1	Mount 2	212	vesuvianite	vesuvianite	0.25-0.5	571000	5080	5290	0.71	329	1.92	544	41.5	0.66	1.85	6.5	0.88	3.24	0.369	0.071	0.164	0.0311	0.236	0.033	0.175	0.0375	0.254	0.0458	2.31
Ves15SUV021row10grain2 - 1	Mount 2	213	vesuvianite	andradite	0.25-0.5	514000	12980	13430	3.94	0.333	27.1	321	3.53	0.25	0.64	3.07	0.799	7.64	3.11	1.47	3.58	0.666	4.72	1	3.11	0.469	2.58	0.459	9.7
Ves15SUV024row10grain3 - 1	Mount 2	215	vesuvianite	garnet	0.25-0.5	513000	4970	5170	55.9	0.291	132.5	457	79.4	0.053	13.39	67.3	12.39	73.8	23.9	4.47	24.35	3.9	25.55	5.2	14.84	2.221	15.52	2.388	10.34
Ves15SUV024row10grain4 - 1	Mount 2	216	vesuvianite	andradite	0.25-0.5	553000	485	497	1.89	0.451	9.53	0.506	0.7	0.033	0.296	3.05	1.076	10.39	4.31	1.62	3.47	0.403	2.29	0.369	0.907	0.126	0.671	0.085	-0.0003
Ves15SUV024row10grain5 - 1	Mount 2	218	vesuvianite	garnet	0.25-0.5	518000	7630	7930	2.48	1.91	89	216.4	25.57	0.273	16.09	76.9	14.35	76.4	19.37	5.25	17.22	2.597	16.63	3.18	8.91	1.286	8.06	1.092	7.53
Ves15SUV024row10grain6 - 1	Mount 2	219	vesuvianite	talc?	0.25-0.5	588000	1084	1118	2.77	217	2.9	10.84	1.251	0.56	271	387	27	53.6	3.27	0.904	1.3	0.138	0.754	0.121	0.306	0.0348	0.146	0.0178	0.248
Ves15SUV026row10grain7 - 1	Mount 2	221	vesuvianite	garnet	0.5-1.0	561000	2710	2800	17.13	0.747	18.85	3.51	9.82	-0.051	11.63	51.4	6.63	26.3	4.56	1.9	3.66	0.529	3.4	0.731	2.14	0.378	2.91	0.488	0.036
Ves15SUV027row10grain8 - 1	Mount 2	222	vesuvianite	garnet	0.5-1.0	538000	15780	16170	0.4	1.59	52.3	90.1	12.19	1.9	4.45	25.1	5.05	29.6	9.58	3.29	9.88	1.576	10.27	2	5.51	0.777	5.05	0.642	1.03
Ves15SUV050row10grain9 - 1	Mount 2	223	vesuvianite	garnet	0.25-0.5	522000	5420	5590	2.75	35.7	41.6	56.8	23.4	19.9	2.83	12	3.23	22.5	7.63	1.475	7.87	1.207	7.88	1.552	4.43	0.647	4.08	0.565	1.043
Ves15SUV050row10grain10 - 1	Mount 2	224	vesuvianite	vesuvianite	0.25-0.5	517000	2004	2074	5.31	8.74	12.28	52.5	2.97	4.32	12.95	26.14	3.26	13.69	2.94	0.786	2.26	0.368	2.37	0.477	1.35	0.198	1.38	0.183	1.149
Ves15SUV050row10grain11 - 1	Mount 2	226	vesuvianite	garnet	0.25-0.5	414000	8930	9200	4.58	3.04	58.1	151.3	28.7	3.55	3.79	18.33	4.15	26.2	7.81	2.56	7.72	1.376	10.05	2.02	5.93	0.865	4.9	0.586	3.19
Ves15SUV050row10grain12 - 1	Mount 2	229	vesuvianite	garnet	0.25-0.5	539000	5970	6170	3.7	2.5	29.4	72.8	19.6	4.1	14.04	67.7	10.09	42.6	9	3.02	7.23	0.999	6.21	1.147	3.18	0.483	2.88	0.384	1.89
Ves16SUV013row10grain13 - 1	Mount 2	230	vesuvianite	garnet	0.25-0.5	469000	3850	3950	6.5	7.6	66.7	218.8	113.3	2.08	6.62	39.2	7.43	41	10.41	3.45	9.18	1.521	10.12	2.26	7.33	1.179	8.37	1.225	5.7