

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	0.25-0.5	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