

APPENDIX 6F

GEOLOGICAL SURVEY OF CANADA
Banks Island samples - EPMA chemistry: OLIVINE

GSC Sample #	Mount	Grain #	EPMA #	Sample Material	ODM Min ID	EPMA Min ID	Grain Size	WT %														Total	MAGNUM ¹				
								SiO2	TiO2	Al2O3	Cr2O3	MnO	FeO	MgO	CaO	Na2O	K2O	Nb2O5	NiO	ZnO	V2O3			P2O5			
15SUV006	2015_3	3_7	3-3_007	stream sediments	bronzite	olivine	0.25-0.5	36.30	0.00	0.00	0.00	0.46	35.32	27.59	0.17	0.00	0.00									99.84	0.58
15SUV006	2015_3	3_1	3-3_001	stream sediments	diopside	olivine	0.25-0.5	38.31	0.00	0.03	0.00	0.32	22.51	37.78	0.25	0.00	0.00									99.20	0.75
15SUV001	2015_2	3_1	2-3_001	stream sediments	fayalite	olivine	0.25-0.5	37.35	0.06	0.03	0.00	0.42	28.02	33.74	0.28	0.00	0.00									99.90	0.68
15SUV005	2015_2	3_2	2-3_002	stream sediments	fayalite	olivine	0.25-0.5	36.18	0.00	0.02	0.00	0.47	33.93	29.18	0.30	0.00	0.00								100.08	0.61	
15SUV005	2015_2	3_3	2-3_003	stream sediments	fayalite	olivine	0.25-0.5	34.39	0.00	0.00	0.00	0.60	43.05	21.50	0.21	0.00	0.00									99.75	0.47
15SUV005	2015_2	3_4	2-3_004	stream sediments	fayalite	olivine	0.25-0.5	36.16	0.03	0.02	0.00	0.48	33.94	28.97	0.26	0.00	0.00									99.86	0.60
15SUV005	2015_2	3_5	2-3_005	stream sediments	fayalite	olivine	0.25-0.5	39.34	0.00	0.02	0.05	0.23	15.55	43.51	0.27	0.00	0.00									98.97	0.83
15SUV006	2015_2	3_6	2-3_006	stream sediments	fayalite	olivine	0.25-0.5	37.72	0.00	0.00	0.00	0.34	25.69	35.64	0.31	0.00	0.00									99.70	0.71
15SUV006	2015_2	3_7	2-3_007	stream sediments	fayalite	olivine	0.25-0.5	35.80	0.00	0.03	0.00	0.49	35.91	27.23	0.29	0.00	0.00									99.75	0.57
15SUV006	2015_2	3_8	2-3_008	stream sediments	fayalite	olivine	0.25-0.5	36.92	0.00	0.00	0.00	0.41	29.71	32.19	0.28	0.00	0.00									99.51	0.66
15SUV010	2015_2	4_1	2-4_001	stream sediments	fayalite	olivine	0.25-0.5	35.26	0.00	0.02	0.03	0.51	37.79	25.85	0.23	0.00	0.00									99.69	0.55
15SUV010	2015_2	4_2	2-4_002	stream sediments	fayalite	olivine	0.25-0.5	35.14	0.00	0.00	0.00	0.53	39.89	24.19	0.26	0.00	0.00									100.01	0.52
15SUV010	2015_2	4_3	2-4_003	stream sediments	fayalite	olivine	0.25-0.5	34.98	0.02	0.00	0.00	0.55	40.70	23.56	0.25	0.00	0.00									100.06	0.51
15SUV020	2015_2	4_5	2-4_005	stream sediments	fayalite	olivine	0.25-0.5	35.98	0.04	0.00	0.00	0.44	34.39	28.72	0.14	0.00	0.00									99.71	0.60
15SUV020	2015_2	4_6	2-4_006	stream sediments	fayalite	olivine	0.25-0.5	35.29	0.02	0.00	0.00	0.50	38.48	25.43	0.24	0.00	0.00									99.96	0.54
15SUV023	2015_2	4_7	2-4_007	till	fayalite	olivine	0.25-0.5	36.17	0.02	0.00	0.00	0.47	34.95	28.01	0.27	0.00	0.00									99.89	0.59
15SUV023	2015_2	4_8	2-4_008	till	fayalite	olivine	0.25-0.5	35.85	0.00	0.00	0.00	0.48	36.27	27.00	0.27	0.00	0.00									99.87	0.57
15SUV023	2015_2	4_9	2-4_009	till	fayalite	olivine	0.25-0.5	35.75	0.02	0.00	0.00	0.52	35.94	27.20	0.27	0.00	0.00									99.70	0.57
15SUV023	2015_2	4_10	2-4_010	till	fayalite	olivine	0.25-0.5	34.67	0.02	0.00	0.00	0.57	42.35	22.42	0.26	0.00	0.00									100.29	0.49
16SUV014	Mount1_042	1_5_1	262	stream sediments	fayalite	olivine	0.25-0.5	35.85	0.00	0.00	0.00	0.52	38.44	25.35	0.20	0.00	0.00	0.00	0.10	0.03	0.00	0.00	0.00	0.00	100.49	0.54	
16SUV014	Mount1_043	1_5_2	263	stream sediments	fayalite	olivine	0.25-0.5	35.02	0.04	0.02	0.00	0.63	41.99	22.65	0.23	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.03	0.03	100.65	0.49	
16SUV014	Mount1_044	1_5_3	264	stream sediments	fayalite	olivine	0.25-0.5	36.02	0.03	0.03	0.00	0.54	36.08	27.18	0.28	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	100.23	0.57	
16SUV014	Mount1_045	1_5_4	265	stream sediments	fayalite	olivine	0.25-0.5	35.72	0.00	0.00	0.00	0.56	38.74	25.31	0.22	0.00	0.00	0.00	0.04	0.03	0.00	0.00	0.00	0.00	100.63	0.54	
16SUV014	Mount1_046	1_5_5	266	stream sediments	fayalite	olivine	0.25-0.5	35.64	0.00	0.00	0.00	0.58	38.46	25.31	0.27	0.00	0.00	0.00	0.05	0.03	0.00	0.00	0.03	0.03	100.37	0.54	
16SUV016	Mount1_047	1_5_6	267	stream sediments	fayalite	olivine	0.25-0.5	36.65	0.00	0.02	0.00	0.46	33.61	29.41	0.30	0.00	0.00	0.00	0.09	0.04	0.00	0.02	0.00	0.00	100.60	0.61	
16SUV016	Mount1_048	1_5_7	268	stream sediments	fayalite	olivine	0.25-0.5	37.67	0.00	0.00	0.00	0.40	27.02	34.58	0.30	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	100.10	0.70	
16SUV016	Mount1_049	1_5_8	269	stream sediments	fayalite	olivine	0.25-0.5	35.59	0.00	0.00	0.00	0.56	39.19	25.00	0.25	0.00	0.00	0.00	0.08	0.04	0.00	0.00	0.00	0.00	100.70	0.53	
16SUV016	Mount1_050	1_5_9	270	stream sediments	fayalite	olivine	0.25-0.5	36.60	0.02	0.00	0.00	0.50	33.61	29.23	0.29	0.00	0.00	0.00	0.08	0.03	0.00	0.00	0.00	0.00	100.35	0.61	
16SUV016	Mount1_051	1_5_10	271	stream sediments	fayalite	olivine	0.25-0.5	36.84	0.03	0.00	0.00	0.39	32.38	30.42	0.13	0.00	0.00	0.00	0.14	0.03	0.00	0.00	0.00	0.00	100.36	0.63	
16SUV016	Mount1_052	1_5_11	272	stream sediments	fayalite	olivine	0.25-0.5	36.29	0.00	0.00	0.00	0.49	34.73	28.48	0.29	0.00	0.00	0.00	0.07	0.03	0.00	0.00	0.00	0.00	100.37	0.59	
16SUV016	Mount1_053	1_5_12	273	stream sediments	fayalite	olivine	0.25-0.5	35.74	0.02	0.02	0.00	0.55	38.25	25.61	0.24	0.04	0.00	0.00	0.05	0.03	0.00	0.00	0.00	0.00	100.56	0.54	
15SUV001	2015_2	1_1	2-1_001	stream sediments	forsterite	olivine	0.25-0.5	39.77	0.00	0.03	0.00	0.21	12.96	45.38	0.20	0.00	0.00									98.55	0.86
15SUV001	2015_2	1_2	2-1_002	stream sediments	forsterite	olivine	0.25-0.5	40.31	0.00	0.05	0.08	0.15	10.98	47.16	0.23	0.00	0.00									98.96	0.88
15SUV008	2015_2	1_3	2-1_003	stream sediments	forsterite	olivine	0.25-0.5	39.31	0.00	0.02	0.00	0.29	16.61	42.65	0.30	0.00	0.00									99.18	0.82
15SUV008	2015_2	1_4	2-1_004	stream sediments	forsterite	olivine	0.25-0.5	38.92	0.00	0.04	0.00	0.31	19.96	39.95	0.31	0.00	0.00									99.49	0.78
15SUV008	2015_2	1_5	2-1_005	stream sediments	forsterite	olivine	0.25-0.5	39.39	0.00	0.04	0.00	0.31	16.99	42.26	0.31	0.00	0.00									99.30	0.82
15SUV008	2015_2	1_6	2-1_006	stream sediments	forsterite	olivine	0.25-0.5	38.79	0.00	0.03	0.04	0.30	20.20	39.91	0.30	0.00	0.00									99.57	0.78
15SUV008	2015_2	1_7	2-1_007	stream sediments	forsterite	olivine	0.25-0.5	40.65	0.00	0.04	0.04	0.21	12.09	46.09	0.38	0.00	0.00									99.50	0.87
15SUV008	2015_2	1_9	2-1_009	stream sediments	forsterite	olivine	0.25-0.5	39.33	0.00	0.02	0.03	0.23	16.48	42.84	0.29	0.00	0.00									99.22	0.82
15SUV009	2015_2	1_10	2-1_010	stream sediments	forsterite	olivine	0.25-0.5	40.25	0.00	0.06	0.08	0.16	10.99	47.19	0.27	0.00	0.00									99.00	0.88
15SUV020	2015_2	2_1	2-2_001	stream sediments	forsterite	olivine	0.25-0.5	37.63	0.00	0.02	0.00	0.35	26.72	34.43	0.20	0.00	0.00									99.35	0.70
15SUV020	2015_2	2_2	2-2_002	stream sediments	forsterite	olivine	0.25-0.5	36.29	0.00	0.00	0.00	0.45	34.28	28.71	0.24	0.00	0.00									99.97	0.60
15SUV020	2015_2	2_3	2-2_003	stream sediments	forsterite	olivine	0.25-0.5	40.86	0.00	0.06	0.06	0.12	8.94	48.99	0.14	0.00	0.00									99.17	0.91
15SUV020	2015_2	2_4	2-2_004	stream sediments	forsterite	olivine	0.25-0.5	39.86	0.00	0.04	0.08	0.20	12.52	45.74	0.29	0.00	0.00									98.73	0.87
15SUV025	2015_2	2_5	2-2_005	stream sediments	forsterite	olivine	0.25-0.5	39.50	0.00	0.03	0.00	0.28	16.11	43.37	0.16	0.00	0.00									99.45	0.83
15SUV026	2015_2	2_6	2-2_006A	stream sediments	forsterite	olivine	0.25-0.5	40.16	0.00	0.05	0.03	0.17	11.25	46.92	0.28	0.00	0.00									98.86	0.88
15SUV026_rpt	2015_2	2_6_rpt	2-2-6B	stream sediments	forsterite	olivine	0.25-0.5	39.78	0.00	0.04	0.07	0.19	12.52	45.67	0.27	0.00	0.00									98.54	0.87
15SUV026	2015_2	2_7	2-2_007	stream sediments	forsterite	olivine	0.25-0.5	39.39	0.00	0.04	0.00	0.21	16.29	42.86	0.25	0.02	0.00									99.06	0.82
15SUV030	Mount3_034	3_3_5	160	Beaufort Formation	forsterite	olivine	0.18-0.25	38.53	0.00	0.03	0.00	0.25	18.71	41.51	0.22	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.06	0.00	99.56	0.80	
15SUV050	2015_2	2_8	2-2_008	stream sediments	forsterite	olivine	0.25-0.5	40.07	0.00	0.05	0.08	0.16	11.14	46.81	0.27	0.00	0.00									98.58	0.88
15SUV051	2015_2	2_9	2-2_009	stream sediments	forsterite	olivine	0.25-0.5	40.10	0.00	0.06	0.00	0.21	13.79	44.80	0.34	0.00</											