

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	220000	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	Cr-diopside	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	3-2_001	low-CR_DC	cpx		116670	232000	140040	82.29		1392.1	191.7	6446	6248	964	38.7	279.6	2.21	22.01	4.39	0.361	7.85	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_rpt	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	224000	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	1.23										