

Appendix 4E

Geological Survey of Canada
Banks Island KIM samples - KIMBERLITE INDICATOR MINERAL COUNTS - CORRECTED FOR
EPMA GEOCHEMISTRY DETERMINATIONS and then NORMALIZED TO 50 g OF THE
NONFERROMAGNETIC HMC 0.25-0.50 mm PICKING FRACTION

Sample Number	Sample Material ¹	normalization conversion to 50 g of 0.25- 0.5 mm picking fraction	Selected MMSIMs ²			KIMs ³						
			0.25 to 0.5 mm			0.25 to 0.5 mm						Total (KIMs)
			Low-Cr diopside	Cpy	Gh	GP	GO	DC	IM	CR	FO	
15SUV001	SS	0.616	0	8.6	0	0	0	0	1.8	12.9	1.2	16.0
15SUV002	SS	0.762	0	3.8	0	0	0	0	0	10.7	0	10.7
15SUV003	SS	0.643	0	9.0	0	0	0	0	0.6	9.6	0	10.3
15SUV004	SS	0.593	1.2	59.3	0	0.6	0	0	0	1.2	0	1.8
15SUV005	SS	1.053	0	15.8	0	0	0	0	0	1.1	0	1.1
15SUV006	SS	1.188	0	4.8	0	0	0	0	0	1.2	0	1.2
15SUV008	SS	4.348	0	0	0	0	0	0	0	4.3	26.1	30.4
15SUV009	SS	1.563	0	4.7	0	1.6	0	0	0	60.9	1.6	64.1
15SUV010	SS	0.864	0	1.7	0	0	0	0	0	1.7	0	1.7
15SUV014	SS	0.928	0	9.3	0	1.9	0	0.9	0.9	4.6	0	8.3
15SUV015	BF	0.861	0	0	0	0	0	0	0	0	0	0
15SUV018	BF	6.579	0	0	0	0	0	0	0	19.7	0	19.7
15SUV019*	BF	0.824	0	0	0	1.6	0	0	0	0	0	1.6
15SUV020	SS	1.166	0	10.5	0	1.2	0	0	4.7	40.8	2.3	49.0
15SUV021	SS	1.416	1.4	5.7	0	0	0	0	0	0	0	0
15SUV022	T	55.556	0	0	0	0	0	0	0	0	0	0
15SUV023	T	71.429	0	0	0	0	0	0	0	0	0	0
15SUV024	GF	7.463	0	0	0	14.9	7.5	7.5	0	7.5	0	37.3
15SUV025	SS	1.845	0	9.2	0	0	0	0	0	1.8	1.8	3.7
15SUV026	SS	1.037	0	1.0	0	1.0	0	0	0	7.3	3.1	11.4
15SUV027	SS	2.688	2.7	8.1	0	0	0	0	0	0	0	0
15SUV028	BF	5.814	11.6	0	5.8	5.8	0	0	0	0	0	5.8
15SUV030	BF	2.717	0	0	0	2.7	0	0	0	13.6	0	16.3
15SUV031	SS	1.217	0	15.8	0	0	0	0	0	1.2	0	1.2
15SUV032	SS	1.812	16.3	10.9	0	0	0	0	0	0	0	0
15SUV033	SS	7.042	0	7.0	0	0	0	0	0	0	0	0
15SUV050	SS	1.302	0	9.1	0	0	0	0	0	3.9	1.3	5.2
15SUV051	SS	1.050	0	20.0	0	1.1	0	0	1.1	3.2	4.2	9.5
15SUV052	SS	1.008	1.0	50.4	0	0	0	0	0	0	0	0
15SUV053	SS	1.441	0	57.6	0	0	0	0	0	0	0	0
15SUV054	T	10.638	0	10.6	0	0	0	0	0	21.3	0	21.3
15SUV055*	SS	1.302	0	16.9	0	0	0	0	0	0	0	0
16SUV013	GF	2.762	0	0	0	0	0	0	0	0	0	0
16SUV014	SS	1.385	0	6.9	0	0	0	0	0	5.5	0	5.5
16SUV015	SS	3.521	0	14.1	0	3.5	0	0	3.5	0	0	7.0
16SUV016	SS	2.513	0	2.5	0	0	0	0	0	0	0	0
16SUV017	GF	62.500	0	0	0	0	0	0	0	0	0	0
16SUV018	GF	33.333	0	0	0	0	0	0	0	133.3	0	133.3
16SUV019	T	14.286	0	0	0	0	0	0	0	0	0	0
16SUV020	T	10.638	0	0	0	0	0	0	0	0	0	0
16SUV022	R	71.429	0	0	0	0	0	0	0	0	0	0
16SUV023	BF	19.231	0	0	0	365.4	0.0	0	173.1	173.1	0	711.5
16SUV024	R	7.692	0	0	0	0	0	0	0	23.1	0	23.1
16SUV025	SS	0.715	0	7.9	0	1.4	0	0	0	0	0	1.4
16SUV026	BF	2.119	0	0	0	0	0	0	0	0	0	0
16SUV027	SS	1.089	0	7.6	0	0	0	0	2.2	43.6	0	45.8
16SUV028	SS	1.104	0	1.1	0	1.1	1.1	0	1	13.2	1.1	17.7
16SUV030	SS	2.660	0	0	0	0	0	0	0	2.7	0	2.7

¹Sample Material: BF=Beaufort Formation, GF=glaciofluvial, R=bedrock, SS=stream sediment, T=till

²Metamorphosed/Magmatic Massive Sulphide Indicator Minerals; Cpy=Chalcopyrite, Gh=Gahnite

³Kimberlite Indicator Minerals: CR=Chromite, DC=Cr-diopside, FO=forsterite, GO=Eclogitic garnet, GP=Peridotitic garnet, IM=Mg-ilmenite

*sample 15SUV019 is a field duplicate of 15SUV018; 15SUV055 is a field duplicate of 15SUV031

**Shading identifies Beaufort Formation samples

KIM Percentage Compositions						
	GP	GO	DC	IM	CR	FO
# of 0.25-0.5 mm KIMs (n=1282.5)	403.8	8.6	8.4	191.8	627.2	42.8
% of 0.25-0.5 mm KIMs	31.5	0.7	0.7	15.0	48.9	3.3