

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)

OVERBURDEN DRILLING MANAGEMENT LIMITED
107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1
TELEPHONE: (613) 226-1771
FAX NO.: (613) 226-8753
EMAIL: odm@storm.ca

DATA TRANSMITTAL REPORT

DATE: **42405.66813**

ATTENTION: **Mr. Rod Smith**

CLIENT: **Geological Survey of Canada
Rm 166 - 3303-33 Street N.W.
Calgary, AB
T2L 2A7**

E-mail **rod.smith@nrcan.gc.ca**

NO. OF PAGES: _____

PROJECT: **Banks Island**

FILE NAME: **20157051 - GSC - Smith - (15SUV) - October 2015**

SAMPLE NUMBERS: **15SUV-001 to 055**

BATCH NUMBER: **see list at right**

NO. OF SAMPLES: **see list at right**

THESE SAMPLES WERE PROCESSED FOR: **KIMBERLITE INDICATORS
Selected MMSIMs**

SPECIFICATIONS:

1. 0.18 to 0.25 mm fraction from selected samples processed and picked for additional KIM and selected MMSIM indicator mineral grains.

REMARKS: _____

Remy Huneault, P.Geo.
President

Page #	Batch #	Sent	Sample Numbers
1	7051	12 Jan 16	15SUV001 to 006, 008 to 010, 014, 015 and 017 to 025
2	7052	12 Jan 16	15SUV026 to 033 and 050 to 055
1	7127	03 Feb 16	15SUV-015, 018, 019, 028 and 030. (0.18 to 0.25 mm extra grain picking)

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OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)

GOLD GRAIN SUMMARY SHEET

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
15SUV001	1	1	0	0	96.4	10	10	0	0
15SUV002	0	0	0	0	72.4	0	0	0	0
15SUV003	0	0	0	0	70.8	0	0	0	0
15SUV004	0	0	0	0	101.6	0	0	0	0
15SUV005	1	0	1	0	80.0	1	0	1	0
15SUV006	0	0	0	0	80.8	0	0	0	0
15SUV008	0	0	0	0	36.0	0	0	0	0
15SUV009	1	1	0	0	45.6	1	1	0	0
15SUV010	0	0	0	0	92.8	0	0	0	0
15SUV014	0	0	0	0	74.0	0	0	0	0
15SUV015	0	0	0	0	32.8	0	0	0	0
15SUV017	1	0	0	1	71.6	<1	0	0	<1
15SUV018	0	0	0	0	43.6	0	0	0	0
15SUV019	1	1	0	0	52.8	28	28	0	0
15SUV020	1	1	0	0	86.4	133	133	0	0
15SUV021	1	1	0	0	84.8	<1	<1	0	0
15SUV022	0	0	0	0	80.4	0	0	0	0
15SUV023	0	0	0	0	75.2	0	0	0	0
15SUV024	0	0	0	0	62.0	0	0	0	0
15SUV025	0	0	0	0	72.4	0	0	0	0
15SUV026	1	1	0	0	72.4	52	52	0	0
15SUV027	0	0	0	0	78.0	0	0	0	0
15SUV028	0	0	0	0	31.6	0	0	0	0
15SUV029	0	0	0	0	55.2	0	0	0	0
15SUV030	0	0	0	0	53.6	0	0	0	0
15SUV031	0	0	0	0	57.6	0	0	0	0
15SUV032	0	0	0	0	73.2	0	0	0	0
15SUV033	0	0	0	0	88.0	0	0	0	0
15SUV050	0	0	0	0	76.8	0	0	0	0
15SUV051	0	0	0	0	66.4	0	0	0	0
15SUV052	1	0	1	0	107.2	13	0	13	0
15SUV053	2	1	1	0	92.0	127	125	2	0
15SUV054	0	0	0	0	64.0	0	0	0	0
15SUV055	1	1	0	0	48.8	8	8	0	0

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OVERBURDEN DRILLING MANAGEMENT LIMITED (2015) DETAILED GOLD GRAIN SHEET

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
15SUV001	Yes	18 C	75	100	1			1	1	10	~10 grains pyrite (25-50µm).
								1	96.4	10	
15SUV002	Yes	NO VISIBLE GOLD									~200 grains pyrite (25-100µm).
15SUV003	Yes	NO VISIBLE GOLD									1 grain galena (75µm). ~100 grains pyrite (25-100µm).
15SUV004	Yes	NO VISIBLE GOLD									~10 grains galena (75-100µm). ~2000 grains pyrite (25-250µm). ~5000 grains marcasite (25-100µm).
15SUV005	Yes	8 C	25	50		1		1	1	1	~0.5% pyrite (25-1000µm).
								1	80.0	1	~200 grains marcasite (25-75µm).
15SUV006	Yes	NO VISIBLE GOLD									~2000 grains pyrite (25-1000µm). ~200 grains marcasite (25-75µm).
15SUV008	Yes	NO VISIBLE GOLD									~10 grains pyrite (25-50µm).
15SUV009	Yes	5 C	25	25	1			1	1	1	~10 grains pyrite (25-50µm).
								1	45.6	1	
15SUV010	Yes	NO VISIBLE GOLD									~10 grains pyrite (25-50µm).
15SUV014	Yes	NO VISIBLE GOLD									~500 grains pyrite (25-100µm). ~500 grains marcasite (25-50µm).
15SUV015	Yes	NO VISIBLE GOLD									~1% pyrite (25-1000µm). ~1% marcasite (25-100µm).
15SUV017	Yes	5 C	25	25				1	1	<1	No Sulphides.
								1	71.6	<1	
15SUV018	Yes	NO VISIBLE GOLD									~30 grains galena (25-500µm). ~20 grains pyrite (25-100µm).
15SUV019	Yes	20 C	75	125	1			1	1	28	~5000 grains pyrite (25-250µm).
								1	52.8	28	Gold grain viald.
15SUV020	Yes	50 M	150	200	1			1	1	133	~100 grains pyrite (25-100µm).
								1	86.4	133	
15SUV021	Yes	5 C	25	25	1			1	1	<1	~2000 grains pyrite (25-250µm).
								1	84.8	<1	~200 grains marcasite (25-75µm).
15SUV022	Yes	NO VISIBLE GOLD									~0.5% pyrite (25-1000µm).
15SUV023	Yes	NO VISIBLE GOLD									~5000 grains pyrite (25-1000µm).
15SUV024	Yes	NO VISIBLE GOLD									~1000 grains pyrite (25-250µm). ~1000 grains marcasite (25-50µm).
15SUV025	Yes	NO VISIBLE GOLD									~2000 grains pyrite (25-250µm).
15SUV026	Yes	50 M	75	125	1			1	1	52	~20 grains pyrite (25-50µm).
								1	72.4	52	
15SUV027	Yes	NO VISIBLE GOLD									~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-75µm).
15SUV028	Yes	NO VISIBLE GOLD									~20 grains pyrite (25-100µm). 5 grains marcasite (50-75µm).

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
DETAILED GOLD GRAIN SHEET

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight* (g)	Calculated V.G. Assay in HMC (ppb)	Metallic Minerals in Pan Concentrate	
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total				
15SUV029	Yes	NO VISIBLE GOLD									No Sulphides.	
15SUV030	Yes	NO VISIBLE GOLD									~20 grains pyrite (25-75µm).	
15SUV031	Yes	NO VISIBLE GOLD									~1000 grains pyrite (25-250µm).	
15SUV032	Yes	NO VISIBLE GOLD									~5000 grains pyrite (25-1000µm). ~50 grains marcasite (25-75µm).	
15SUV033	Yes	NO VISIBLE GOLD									5 grains galena (50-75µm). ~0.5% pyrite (25-1000µm). ~0.5% marcasite (25-100µm).	
15SUV050	Yes	NO VISIBLE GOLD									~50 grains pyrite (25-100µm).	
15SUV051	Yes	NO VISIBLE GOLD									~100 grains pyrite (25-100µm).	
15SUV052	Yes	25 M	50	125			1	<div>1</div>		13	~2000 grains pyrite (25-1000µm).	
								1	107.2	13	~2000 grains marcasite (25-100µm).	
15SUV053	Yes	10 C	25	75			1	<div>1</div>		2	~2000 grains pyrite (25-1000µm).	
		50 M	125	225		1		1		125	~500 grains marcasite (25-100µm).	
								2	92.0	127		
15SUV054	Yes	NO VISIBLE GOLD									No Sulphides.	
15SUV055	Yes	13 C	50	75		1		<div>1</div>		8	~1000 grains pyrite (25-250µm).	
								1	48.8	8	~50 grains marcasite (25-75µm).	

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OVERBURDEN DRILLING MANAGEMENT LIMITED (2015) LABORATORY SAMPLE LOG

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Weight (kg wet)					Sample Description												CLASS	
						Clasts (> 2.0 mm)*					Matrix (<2.0 mm)								
											Percentage					Distribution			
	Bulk Rec'd	Archived Split	Table Split	+2.0 mm Clasts	Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	ORG	SD	CY		
15SUV001	24.9	0.0	24.9	0.8	24.1	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV002	22.4	0.0	22.4	4.3	18.1	P	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV003	21.7	0.0	21.7	4.0	17.7	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV004	27.9	0.0	27.9	2.5	25.4	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV005	23.0	0.0	23.0	3.0	20.0	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV006	22.4	0.0	22.4	2.2	20.2	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV008	26.5	0.0	26.5	17.5	9.0	C	100	Tr	0	0	S	FMC	Y	N	N	OC	NA	SAND + GRAVEL	
15SUV009	25.3	0.0	25.3	13.9	11.4	C	100	Tr	0	0	S	FMC	Y	N	N	OC	NA	SAND + GRAVEL	
15SUV010	25.6	0.0	25.6	2.4	23.2	G	100	Tr	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL	
15SUV014	20.1	0.0	20.1	1.6	18.5	G	100	Tr	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL	
15SUV015	24.2	0.0	24.2	16.0	8.2	C	100	Tr	0	0	S	FMC	Y	N	N	DOC	NA	SAND + GRAVEL	
15SUV017	18.6	0.0	18.6	0.7	17.9	G	0	100	0	0	S	FM	-	N	N	OC	NA	SAND + GRAVEL	
15SUV018	21.9	0.0	21.9	11.0	10.9	P	100	Tr	0	0	S	FMC	Y	N	N	DOC	NA	SAND + GRAVEL	
15SUV019	27.3	0.0	27.3	14.1	13.2	P	95	Tr	5	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL	
15SUV020	24.0	0.0	24.0	2.4	21.6	G	95	5	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL	
15SUV021	23.2	0.0	23.2	2.0	21.2	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV022	23.9	0.0	23.9	3.8	20.1	P	100	Tr	0	0	U	-	+	+	N	LOC	LOC	TILL	
15SUV023	21.9	0.0	21.9	3.1	18.8	P	100	Tr	0	0	U	-	+	+	N	LOC	LOC	TILL	
15SUV024	16.6	0.0	16.6	1.1	15.5	G	100	Tr	0	0	S	MC	-	N	N	DOC	NA	SAND + GRAVEL	
15SUV025	19.6	0.0	19.6	1.5	18.1	G	100	Tr	0	0	S	MC	-	N	N	GY	NA	SAND + GRAVEL	
15SUV026	19.9	0.0	19.9	1.8	18.1	G	100	Tr	0	0	S	MC	-	N	N	GY	NA	SAND + GRAVEL	
15SUV027	22.0	0.0	22.0	2.5	19.5	G	100	Tr	0	0	S	C	-	N	N	GY	NA	SAND + GRAVEL	
15SUV028	25.4	0.0	25.4	17.5	7.9	C	100	Tr	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL	
15SUV029	16.6	0.0	16.6	2.8	13.8	P	10	90	Tr	0	U	+	Y	-	N	LOC	LOC	TILL	
15SUV030	24.7	0.0	24.7	11.3	13.4	C	100	Tr	0	0	S	FMC	Y	N	N	OC	NA	SAND + GRAVEL	
15SUV031	15.3	0.0	15.3	0.9	14.4	G	100	Tr	0	0	S	MC	N	N	N	LOC	NA	SAND + GRAVEL	
15SUV032	19.6	0.0	19.6	1.3	18.3	G	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL	
15SUV033	22.1	0.0	22.1	0.1	22.0	G	100	Tr	0	0	S	FM	Y	N	N	LOC	NA	SAND + SILT	
15SUV050	22.0	0.0	22.0	2.8	19.2	G	100	Tr	0	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV051	20.1	0.0	20.1	3.5	16.6	G	100	Tr	Tr	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV052	30.2	0.0	30.2	3.4	26.8	G	100	Tr	Tr	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV053	25.0	0.0	25.0	2.0	23.0	G	60	0	40	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL	
15SUV054	18.7	0.0	18.7	2.7	16.0	C	30	Tr	70	0	U	Y	Y	Y	N	OC	OC	TILL	
15SUV055	13.1	0.0	13.1	0.9	12.2	G	30	Tr	70	0	S	MC	N	N	N	LOC	NA	SAND + GRAVEL	

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
LABORATORY SAMPLE LOG

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Weight (g)													
	<2.0 mm Table Concentrate													
	Total	-0.18 mm	0.18 to 2.0 mm Heavy Liquid Separation S.G 3.20						0.25-2.0 mm HMC S.G.>3.2					
			Total	Lights <3.2 S.G.	I total 0.18 to 0.25 mm HMC	Total	<0.25 mm (wash)	Mag HMC	Nonferromagnetic HMC					
									Total	Processed Split				
										Total				
										%	Weight	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
Total	-0.18 mm	Total	Lights <3.2 S.G.	I total 0.18 to 0.25 mm HMC	Total	<0.25 mm (wash)	Mag HMC	Total						
15SUV001	1,763.8	512.0	1,251.8	939.5	61.9	250.4	16.7	93.1	140.6	100	140.6	81.2	37.5	21.9
15SUV002	1,453.2	302.0	1,151.2	858.2	32.6	260.4	9.6	105.7	145.1	100	145.1	65.6	45.2	34.3
15SUV003	1,408.2	247.8	1,160.4	853.2	29.8	277.4	11.4	88.5	177.5	100	177.5	77.8	66.2	33.5
15SUV004	2,715.3	1,019.3	1,696.0	1,313.7	106.2	276.1	14.2	120.8	141.1	100	141.1	84.3	33.7	23.1
15SUV005	2,263.7	723.6	1,540.1	1,360.5	29.9	149.7	3.5	58.9	87.3	100	87.3	47.5	27.0	12.8
15SUV006	1,291.9	379.6	912.3	786.0	39.0	87.3	2.8	27.1	57.4	100	57.4	42.1	11.0	4.3
15SUV008	1,112.7	506.2	606.5	574.9	8.9	22.7	2.6	2.5	17.6	100	17.6	11.5	4.4	1.7
15SUV009	1,655.3	530.5	1,124.8	917.2	13.0	194.6	7.3	45.9	141.4	100	141.4	32.0	63.5	45.9
15SUV010	1,764.3	649.9	1,114.4	911.4	23.3	179.7	11.1	23.8	144.8	100	144.8	57.9	61.8	25.1
15SUV014	1,792.4	365.2	1,427.2	1,162.5	20.5	244.2	13.9	43.8	186.5	100	186.5	53.9	78.6	54.0
15SUV015	1,391.1	487.1	904.0	722.6	28.1	153.3	23.5	2.4	127.4	100	127.4	58.1	49.0	20.3
15SUV017	1,367.8	669.3	698.5	481.2	96.6	120.7	14.6	26.0	80.1	100	80.1	72.4	7.5	0.2
15SUV018	961.7	239.5	722.2	683.2	4.3	34.7	0.7	0.6	33.4	100	33.4	7.6	13.4	12.4
15SUV019	1,339.1	362.2	976.9	855.3	25.1	96.5	4.2	0.5	91.8	100	91.8	60.7	22.5	8.6
15SUV020	1,288.3	323.6	964.7	652.9	27.8	284.0	5.9	115.1	163.0	100	163.0	42.9	66.4	53.7
15SUV021	1,021.3	312.7	708.6	582.9	26.0	99.7	2.5	34.7	62.5	100	62.5	35.3	20.5	6.7
15SUV022	930.2	380.8	549.4	546.2	1.1	2.1	0.2	0.4	1.5	100	1.5	0.9	0.4	0.2
15SUV023	958.8	322.9	635.9	633.5	0.9	1.5	0.0	0.4	1.1	100	1.1	0.7	0.3	0.1
15SUV024	1,793.4	460.1	1,333.3	1,312.5	9.8	11.0	0.8	2.4	7.8	100	7.8	6.7	0.8	0.3
15SUV025	1,778.6	788.6	990.0	884.8	17.3	87.9	2.1	12.5	73.3	100	73.3	27.1	15.5	30.7
15SUV026	1,686.1	561.1	1,125.0	949.7	33.4	141.9	2.1	25.5	114.3	100	114.3	48.2	36.2	29.9
15SUV027	1,375.6	290.2	1,085.4	1,013.3	9.3	62.8	3.3	8.1	51.4	100	51.4	18.6	20.0	12.8
15SUV028	1,109.2	245.0	864.2	844.1	4.6	15.5	0.6	1.9	13.0	100	13.0	8.6	2.5	1.9
15SUV029	951.7	511.3	440.4	283.8	68.5	88.1	5.0	8.3	74.8	100	74.8	56.9	15.2	2.7
15SUV030	1,152.7	321.9	830.8	763.8	22.1	44.9	1.8	12.9	30.2	100	30.2	18.4	7.4	4.4
15SUV031	1,502.0	499.1	1,002.9	858.1	47.0	97.8	3.5	38.7	55.6	100	55.6	41.1	10.0	4.5
15SUV032	1,002.4	411.4	591.0	501.1	20.7	69.2	1.4	24.0	43.8	100	43.8	27.6	13.8	2.4
15SUV033	1,085.2	731.8	353.4	322.3	14.8	16.3	0.8	4.7	10.8	100	10.8	7.1	2.8	0.9
15SUV050	1,538.3	499.7	1,038.6	927.7	25.1	85.8	3.0	17.5	65.3	100	65.3	38.4	19.3	7.6
15SUV051	1,294.7	340.5	954.2	792.4	24.6	137.2	3.4	50.4	83.4	100	83.4	47.6	29.2	6.6
15SUV052	1,479.0	584.9	894.1	674.7	58.7	160.7	8.1	74.9	77.7	100	77.7	49.6	20.2	7.9
15SUV053	1,197.0	465.6	731.4	579.7	47.3	104.4	5.4	45.5	53.5	100	53.5	34.7	14.9	3.9
15SUV054	725.9	311.3	414.6	395.9	7.3	11.4	1.2	3.4	6.8	100	6.8	4.7	1.7	0.4
15SUV055	1,417.0	429.0	988.0	860.3	37.8	89.9	4.2	32.9	52.8	100	52.8	38.4	10.3	4.1

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL COUNTS

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

[illegible]

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.

P = Number of picked grains in sample.

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OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV002	Augite-goethite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 andradite candidates = 3 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 9 CR candidates = 9 CR; 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 3 barite candidates = 3 barite.	Augite-goethite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 andradite candidates = 3 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 9 CR candidates = 9 CR; 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 3 barite candidates = 3 barite.
15SUV003	Goethite-orthopyroxene/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 4 CR candidates = 2 CR and 2 hercynite. SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 14 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 11 CR; 5 FO versus diopside candidates = 5 vesuvianite; and 1 blue-green gahnite versus spinel candidate = 1 hercynite.	Goethite-orthopyroxene/diopside	SEM checks from 0.5-1.0 mm fraction: 4 CR candidates = 2 CR and 2 hercynite. SEM checks from 0.25-0.5 mm fraction: 2 GO versus almandine candidates = 2 almandine; 14 IM versus crustal ilmenite candidates = 1 IM, 2 crustal ilmenite and 11 CR; 5 FO versus diopside candidates = 5 vesuvianite; and 1 blue-green gahnite versus spinel candidate = 1 hercynite.
15SUV004	Augite-goethite/diopside-marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 GP; 1 blue-green gahnite versus spinel candidate = 1 spinel; 3 sphalerite versus rutile candidates = 3 sphalerite; 1 galena candidate = 1 galena; 5 barite versus diopside candidates = 5 barite; and 5 augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite. Also picked an additional 6 of ~20 sphalerite from 0.25-0.5 mm fraction.	Augite-goethite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 GP; 1 blue-green gahnite versus spinel candidate = 1 spinel; 3 sphalerite versus rutile candidates = 3 sphalerite; 1 galena candidate = 1 galena; 5 barite versus diopside candidates = 5 barite; and 5 augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite. Also picked an additional 6 of ~20 sphalerite from 0.25-0.5 mm fraction.
15SUV005	Augite/diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 1 CR versus tourmaline candidate = 1 CR; and 5 FO versus diopside candidates = 4 fayalite and 1 vesuvianite.	Augite/diopside	SEM check from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 almandine. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 1 CR versus tourmaline candidate = 1 CR; and 5 FO versus diopside candidates = 4 fayalite and 1 vesuvianite.
15SUV006	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 orange GO versus almandine candidates = 2 almandine; 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; 5 FO versus diopside candidates = 3 fayalite, 1 diopside and 1 bronzite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 orange GO versus almandine candidates = 2 almandine; 3 IM versus crustal ilmenite candidates = 2 crustal ilmenite and 1 CR; 5 FO versus diopside candidates = 3 fayalite, 1 diopside and 1 bronzite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV008	Augite/diopside assemblage.	Augite/diopside	
15SUV009	Augite-goethite/diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus almandine candidate = 1 almandine; and 1 FO versus diopside candidate = 1 FO.	Augite-goethite/diopside	SEM check from 0.5-1.0 mm fraction: 1 CR candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 GP; 1 GO versus almandine candidate = 1 almandine; and 1 FO versus diopside candidate = 1 FO.
15SUV010	Goethite-almandine/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 5 FO versus titanite candidates = 5 vesuvianite; and 1 malachite candidate = 1 malachite. SEM checks from 0.25-0.5 mm fraction: 3 CR versus tourmaline candidates = 2 CR and 1 tourmaline; and 5 FO versus favalite candidates = 3 favalite and 2 vesuvianite.	Goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 5 FO versus titanite candidates = 5 vesuvianite; and 1 malachite candidate = 1 malachite. SEM checks from 0.25-0.5 mm fraction: 3 CR versus tourmaline candidates = 2 CR and 1 tourmaline; and 5 FO versus fayalite candidates = 3 favalite and 2 vesuvianite.
15SUV014	Goethite-augite/diopside-marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 GP; 3 IM versus crustal ilmenite candidates = 1 IM, 1 CR and 1 hercynite; 5 CR versus tourmaline candidates = 3 CR, 1 hercynite and 1 tourmaline; 1 FO versus vesuvianite candidate = 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 4 from 0.25-0.5 mm fraction.	Goethite-augite/diopside-marcasite	SEM checks from 0.25-0.5 mm fraction: 1 GP versus ruby corundum candidate = 1 GP; 3 IM versus crustal ilmenite candidates = 1 IM, 1 CR and 1 hercynite; 5 CR versus tourmaline candidates = 3 CR, 1 hercynite and 1 tourmaline; 1 FO versus vesuvianite candidate = 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 4 from 0.25-0.5 mm fraction.
15SUV015	No KIM remarks.		

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV017	Hornblende/titanite-zircon assemblage. SEM checks from 0.5-1.0 mm fraction: 4 IM versus CR candidates = 4 CR; 1 CR versus Cr-magnetite candidate = 1 CR; and 2 FO versus diopside candidates = 2 FO.	Hornblende/titanite-zircon	SEM checks from 0.5-1.0 mm fraction: 4 IM versus CR candidates = 4 CR; 1 CR versus Cr-magnetite candidate = 1 CR; and 2 FO versus diopside candidates = 2 FO.
15SUV018	SEM checks from 0.25-0.5 mm fraction: 4 CR versus crustal ilmenite candidates = 3 CR and 1 crustal ilmenite.		SEM checks from 0.25-0.5 mm fraction: 4 CR versus crustal ilmenite candidates = 3 CR and 1 crustal ilmenite.
15SUV019	No KIM remarks.		
15SUV020	Augite-goethite-almandine/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 hercynite; and 3 CR versus tourmaline candidates = 1 CR, 1 tourmaline and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 spessartine; 15 IM versus crustal ilmenite candidates = 4 IM, 8 crustal ilmenite and 3 CR; 14 CR versus hercynite candidates = 14 CR; and 7 FO versus fayalite candidates = 4 FO and 3 fayalite. Also picked 1 malachite from 0.25-0.5 mm fraction.	Augite-goethite-almandine/diopside	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 IM and 1 hercynite; and 3 CR versus tourmaline candidates = 1 CR, 1 tourmaline and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 spessartine; 15 IM versus crustal ilmenite candidates = 4 IM, 8 crustal ilmenite and 3 CR; 14 CR versus hercynite candidates = 14 CR; and 7 FO versus fayalite candidates = 4 FO and 3 fayalite. Also picked 1 malachite from 0.25-0.5 mm fraction.
15SUV021	SEM checks from 0.5-1.0 mm fraction: 2 FO versus fayalite candidates = 1 fayalite and 1 hedenbergite; and 1 barite candidate = 1 barite. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 vesuvianite; 1 sphalerite candidate = 1 sphalerite; and 4 anglesite candidates = 4 pyrite + calcite.		SEM checks from 0.5-1.0 mm fraction: 2 FO versus fayalite candidates = 1 fayalite and 1 hedenbergite; and 1 barite candidate = 1 barite. SEM checks from 0.25-0.5 mm fraction: 2 FO versus diopside candidates = 2 vesuvianite; 1 sphalerite candidate = 1 sphalerite; and 4 anglesite candidates = 4 pyrite + calcite.
15SUV022	No KIM remarks.		
15SUV023	SEM checks from 0.25-0.5 mm fraction: 4 FO versus fayalite candidates = 4 fayalite.		SEM checks from 0.25-0.5 mm fraction: 4 FO versus fayalite candidates = 4 fayalite.
15SUV024	SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 almandine; 11 GO versus almandine candidates = 2 GO (Cr-poor pyrope), 6 almandine, 2 staurolite and 1 zircon; 10 CR versus crustal ilmenite candidates = 1 CR and 9 crustal ilmenite; and 4 FO versus vesuvianite candidates = 4 vesuvianite.		SEM checks from 0.25-0.5 mm fraction: 1 GP versus almandine candidate = 1 almandine; 11 GO versus almandine candidates = 2 GO (Cr-poor pyrope), 6 almandine, 2 staurolite and 1 zircon; 10 CR versus crustal ilmenite candidates = 1 CR and 9 crustal ilmenite; and 4 FO versus vesuvianite candidates = 4 vesuvianite.
15SUV025	Goethite/diopside-marcasite assemblage. SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; 1 galena candidate = 1 galena. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 CR; 3 CR versus hercynite candidates = 1 hercynite and 2 andradite; and 1 FO versus diopside candidate = 1 FO. Also picked 1 sphalerite from 1.0-2.0 mm fraction; 3 sphalerite from 0.5-1.0 mm fraction; and 8 sphalerite and 3 galena from 0.25-0.5 mm fraction.	Goethite/diopside-marcasite	SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; 1 galena candidate = 1 galena. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 4 crustal ilmenite and 1 CR; 3 CR versus hercynite candidates = 1 hercynite and 2 andradite; and 1 FO versus diopside candidate = 1 FO. Also picked 1 sphalerite from 1.0-2.0 mm fraction; 3 sphalerite from 0.5-1.0 mm fraction; and 8 sphalerite and 3 galena from 0.25-0.5 mm fraction.
15SUV026	Goethite-augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 IM versus crustal ilmenite candidates = 1 crustal ilmenite, 1 CR and 1 hercynite; and 1 FO versus diopside candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 crustal ilmenite and 4 CR; and 6 FO versus diopside candidates = 3 FO, 2 diopside and 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 2 from 0.25-0.5 mm fraction.	Goethite-augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 IM versus crustal ilmenite candidates = 1 crustal ilmenite, 1 CR and 1 hercynite; and 1 FO versus diopside candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 1 crustal ilmenite and 4 CR; and 6 FO versus diopside candidates = 3 FO, 2 diopside and 1 vesuvianite. Also picked 1 sphalerite from 0.5-1.0 mm fraction and 2 from 0.25-0.5 mm fraction.
15SUV027	Goethite-siderite/marcasite-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 1 sphalerite candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 sphalerite versus vesuvianite candidates = 5 vesuvianite.	Goethite-siderite/marcasite-diopside	SEM checks from 0.5-1.0 mm fraction: 1 sphalerite candidate = 1 vesuvianite. SEM checks from 0.25-0.5 mm fraction: 5 sphalerite versus vesuvianite candidates = 5 vesuvianite.
15SUV028	SEM check from 0.25-0.5 mm fraction: 1 CR versus hematite candidate = 1 hematite.		SEM check from 0.25-0.5 mm fraction: 1 CR versus hematite candidate = 1 hematite.
15SUV029	Hornblende-almandine/diopside-titanite-apatite assemblage. SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 4 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 3 FO versus diopside candidates = 3 diopside; and 1 blue-green gahnite versus spinel candidate = 1 spinel.	Hornblende-almandine/diopside-titanite-apatite	SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 4 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; 3 FO versus diopside candidates = 3 diopside; and 1 blue-green gahnite versus spinel candidate = 1 spinel.
15SUV030	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite.		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite.
15SUV031	Augite/diopside assemblage.	Augite/diopside	
15SUV032	Augite/diopside assemblage.	Augite/diopside	
15SUV033	Augite/diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 IM versus rutile candidate = 1 crustal ilmenite.	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 IM versus rutile candidate = 1 crustal ilmenite.

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15SUV001	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 3 GO versus almandine candidates = 1 almandine and 2 spessartine; 4 IM versus crustal ilmenite candidates = 2 IM and 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 24 IM versus crustal ilmenite candidates = 3 IM, 8 crustal ilmenite, 11 CR and 2 andradite; 10 FO versus diopside candidates = 2 FO, 1 fayalite and 7 vesuvianite; and 5 grey-brown augite (major paramagnetic assemblage mineral) versus orthopyroxene candidates = 5 augite.
15SUV050	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite andidate = 1 CR; 1 FO versus diopside candidate = 1 FO; and 5 sphalerite candidates = 1 sphalerite and 4 vesuvianite. Also picked 5 sphalerite from 0.5-1.0 mm fraction and 2 additional sphalerite from 0.25-0.5 mm fraction.	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite andidate = 1 CR; 1 FO versus diopside candidate = 1 FO; and 5 sphalerite candidates = 1 sphalerite and 4 vesuvianite. Also picked 5 sphalerite from 0.5-1.0 mm fraction and 2 additional sphalerite from 0.25-0.5 mm fraction.
15SUV051	Augite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 CR versus hercynite candidates = 1 CR and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 andradite; 3 CR versus rutile candidates = 2 CR and 1 andradite; and 4 FO versus diopside candidates = 4 FO.	Augite/diopside	SEM checks from 0.5-1.0 mm fraction: 2 CR versus hercynite candidates = 1 CR and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 IM and 2 andradite; 3 CR versus rutile candidates = 2 CR and 1 andradite; and 4 FO versus diopside candidates = 4 FO.
15SUV052	Augite-hematite/diopside-macassite assemblage. SEM checks from 0.5-1.0 mm fraction: 3 GP versus almandine candidates = 3 almandine. Also picked 1 galena from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction.	Augite-hematite/diopside-macassite	SEM checks from 0.5-1.0 mm fraction: 3 GP versus almandine candidates = 3 almandine. Also picked 1 galena from 0.5-1.0 mm fraction and 1 from 0.25-0.5 mm fraction.
15SUV053	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 2 almandine.	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 GP versus almandine candidates = 2 almandine.
15SUV054	Augite-hematite-almandine/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 CR versus rutile candidates = 2 CR; and 1 FO versus diopside candidate = 1 zoisite.	Augite-hematite-almandine/diopside	SEM checks from 0.25-0.5 mm fraction: 2 CR versus rutile candidates = 2 CR; and 1 FO versus diopside candidate = 1 zoisite.
15SUV055	Augite/diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 grossular (lost in transfer to vial).	Augite/diopside	SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 grossular (lost in transfer to vial).

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
MMS INDICATOR MINERAL DATA
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
	>1 amp		<1.0 amp		>1.0 amp						<0.8 amp						>1.0 amp					
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz					
15SUV015	0	Tr sphalerite (2 gr) Tr barite (1 gr)	99 (~300,000 gr)	25	0	0	0	Tr	Tr	0	0	0	0	0	0	0	0	0	Siderite-goethite/marcasite assemblage. SEM checks from 0.5-1.0 mm fraction: 2 sphalerite versus monazite candidates = 2 sphalerite. SEM check from 0.25-0.5 mm fraction: 4 sphalerite versus vesuvianite candidates = 2 sphalerite and 2 vesuvianite; and 2 barite candidates = 1 barite and 1 dolomite.	0.5-1.0 mm fraction: 2 sphalerite 0.25-0.5 mm fraction: 2 sphalerite 2 vesuvianite resembling sphalerite 1 barite 1 dolomite resembling barite	Siderite-goethite/marcasite	SEM checks from 0.5-1.0 mm fraction: 2 sphalerite versus monazite candidates = 2 sphalerite. SEM check from 0.25-0.5 mm fraction: 4 sphalerite versus vesuvianite candidates = 2 sphalerite and 2 vesuvianite; and 2 barite candidates = 1 barite and 1 dolomite.
15SUV018	0	0.4% galena (10 gr) Tr barite (1 gr)	0.1 (3 gr)	95	0	0	Tr (1 gr)	15	Tr	0	0	0	0	0	0	Tr (3 gr; see KIM data)	0	0	Goethite/diopside-kyanite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 barite versus kyanite candidates = 1 barite, 3 kyanite and 1 diopside.	0.25-0.5 mm fraction: 10 galena 1 barite 1 diopside resembling barite 3 kyanite 1 red rutile 3 chromite (picked as KIMs)	Goethite/diopside-kyanite	SEM checks from 0.25-0.5 mm fraction: 5 barite versus kyanite candidates = 1 barite, 3 kyanite and 1 diopside.
15SUV019	0	0	Tr (10 gr)	99	0	0	0	40	0	0	0	0	0	0	0	0	0	15	Goethite/diopside-kyanite-monazite assemblage.		Goethite/diopside-kyanite-monazite	
15SUV022	Tr (2 gr)	0	70 (~3000 gr)	Tr	0	0	0	Tr	Tr	0	0	Tr	0	0	0	0	Tr	Tr	Almandine-augite/marcasite-diopside assemblage.	0.25-0.5 mm fraction: 2 chalcopyrite	Almandine-augite/marcasite-diopside	
15SUV023	0.5 (10 gr)	Tr sphalerite (1 gr)	50 (~1000 gr)	0	0	0	0	0	Tr	Tr	0	Tr	Tr	0	0	Tr	0	0	Almandine-augite-hematite/marcasite-diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 sphalerite versus titanite candidate = 1 barite. SEM checks from 0.25,0.5 mm fraction: 1 yellow sphalerite candidate = 1 sphalerite; 2 barite versus apatite candidates = 2 apatite; and 1 hercynite versus tourmaline candidate = 1 tourmaline.	0.5-1.0 mm fraction: 1 chalcopyrite 0.25-0.5 mm fraction: 10 chalcopyrite 1 sphalerite 2 apatite resembling barite 1 tourmaline resembling hercynite	Almandine-augite-hematite/marcasite-diopside	SEM check from 0.5-1.0 mm fraction: 1 sphalerite versus titanite candidate = 1 barite. SEM checks from 0.25,0.5 mm fraction: 1 yellow sphalerite candidate = 1 sphalerite; 2 barite versus apatite candidates = 2 apatite; and 1 hercynite versus tourmaline candidate = 1 tourmaline.
15SUV024	0	0	Tr (1 gr)	1	0	0	0	Tr	0	0	0	Tr	0	0	0	Tr (1 gr; see KIM data)	0	Tr	Almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)	Almandine-augite/diopside	
15SUV028	0	Tr barite (5 gr)	Tr (10 gr)	90	1 blue-green gahnite; 1 blue-green spinel	Tr low-Cr diopside (2 gr)	Tr (2 gr)	1	Tr	0	Tr	Tr	0	0	0	Tr	0	0	Goethite/diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 2 barite candidates = 2 barite. SEM checks from 0.25-0.5 mm fraction: 3 barite versus diopside candidates = 1 barite and 2 diopside; and 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.	0.5-1.0 mm fraction: 2 barite 0.25-0.5 mm fraction: 5 barite 2 diopside resembling barite 1 gahnite 1 spinel 2 low-Cr diopside 2 red rutile	Goethite/diopside	SEM checks from 0.5-1.0 mm fraction: 2 barite candidates = 2 barite. SEM checks from 0.25-0.5 mm fraction: 3 barite versus diopside candidates = 1 barite and 2 diopside; and 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.
15SUV030	0	Tr barite (2 gr)	0	60	0	0	Tr (10 gr)	Tr	Tr	0	0	1	0	0	0	Tr (6 gr; see KIM data)	0	0	Goethite-almandine-augite/diopside assemblage.	0.25-0.5 mm fraction: 2 barite 10 red rutile 6 chromite (picked as KIMs)	Goethite-almandine-augite/diopside	

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015) PARAMAGNETIC/NONPARAMAGNETIC FRACTION WEIGHTS

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Weight 0.25-0.5 mm Nonferromagnetic Heavy Mineral Fractions (g)				
	Total	Paramagnetic			Nonparamagnetic
		Strongly (<0.6 amp)	Moderately (0.6-0.8 amp)	Weakly (0.8-1.0 amp)	>1.0 amp
15SUV015	58.1	19.54	3.70	4.14	30.73
15SUV018	7.6	0.09	0.91	5.87	0.75
15SUV019	60.7	0.95	19.31	33.31	7.13
15SUV022	0.9	0.07	0.17	0.27	0.40
15SUV023	0.7	0.06	0.18	0.21	0.25
15SUV024	6.7	0.52	1.90	2.03	2.25
15SUV028	8.6	0.29	0.96	4.82	2.54
15SUV030	18.4	1.39	6.67	6.54	3.80

Sample Number	Weight 0.18 to 0.25 mm Nonferromagnetic Heavy Mineral Fractions (g)				
	Total	Paramagnetic			Nonparamagnetic
		Strongly (<0.6 amp)	Moderately (0.6-0.8 amp)	Weakly (0.8-1.0 amp)	>1.0 amp
15SUV015	19.5	4.39	1.25	1.21	12.65
15SUV018	4.1	0.08	2.66	1.16	0.20
15SUV019	22.7	3.32	11.35	4.38	3.65
15SUV028	3.5	0.20	1.19	1.31	0.80
15SUV030	16.5	3.85	7.12	3.14	2.39

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015) -0.18 mm HEAVY MINERAL PROCESSING

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Weight (g)				
	-0.18 mm Table Concentrate				
	Total	Heavy Liquid Separation S.G. 3.2			
		Lights	-0.18 mm HMC		
			Total	Mag	Non Mag
15SUV015	423.5	455.0	31.5	0.6	30.9
15SUV018	218.0	228.4	10.4	0.2	10.2
15SUV019	321.0	341.4	20.4	0.4	20.0
15SUV024	442.1	450.7	8.6	1.6	7.0
15SUV028	239.1	241.7	2.6	0.4	2.2
15SUV030	280.7	291.0	10.3	7.2	3.1

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
0.18 to 0.25 mm HEAVY MINERAL PROCESSING WEIGHTS
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Sample Number	Weights (g)		
	0.18 to 0.25 mm		
	Total	Mag	Non Mag
			Total
15SUV001	61.9	19.0	42.9
15SUV002	32.6	9.4	23.2
15SUV003	29.8	10.3	19.5
15SUV004	106.2	34.4	71.8
15SUV005	29.9	7.0	22.9
15SUV006	39.0	10.5	28.5
15SUV008	8.9	1.6	7.3
15SUV009	13.0	3.6	9.4
15SUV010	23.3	4.3	19.0
15SUV014	20.5	5.2	15.3
15SUV015	28.1	0.6	27.5
15SUV017	96.6	8.4	88.2
15SUV018	4.3	0.1	4.2
15SUV019	25.1	0.3	24.8
15SUV020	27.8	8.8	19.0
15SUV021	26.0	6.3	19.7
15SUV022	1.1	0.2	0.9
15SUV023	0.9	0.2	0.7
15SUV024	9.8	1.7	8.1
15SUV025	17.3	2.6	14.7
15SUV026	33.4	7.5	25.9
15SUV027	9.3	1.4	7.9
15SUV028	4.6	0.6	4.0
15SUV029	68.5	5.9	62.6
15SUV030	22.1	5.4	16.7
15SUV031	47.0	14.3	32.7
15SUV032	20.7	5.7	15.0
15SUV033	14.8	1.6	13.2
15SUV050	25.1	5.1	20.0
15SUV051	25.6	6.6	19.0
15SUV052	58.7	19.7	39.0
15SUV053	47.3	19.0	28.3
15SUV054	7.3	2.0	5.3
15SUV055	37.8	12.5	25.3

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL COUNTS (0.18 to 0.25 mm)

File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

Total Number of Samples in this Report = 5

Sample Number	Number of Grains																				
	Selected MMSiMs						KIM Count 0.18 to 0.25 mm										Total (KIMs)				
	Low-Cr diopside		Cpy		Gh		GP		GO		DC		IM		CR				FO		
	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P			T	P	
15-SUV-015	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
15-SUV-018	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	4	4
15-SUV-019	3	3	2	2	0	0	2	2	0	0	0	0	0	0	0	4	4	0	0	6	6
15-SUV-028	2	2	0	0	0	0	2	2	0	0	0	0	0	0	0	3	3	0	0	5	5
15-SUV-030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	3	3

T = Total number of grains in sample. Total is estimated if number is greater than number of picked grains.
P = Number of picked grains in sample.

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015)
KIMBERLITE INDICATOR MINERAL PICKING FOOTNOTES (0.18 to 0.25 mm)
File Name: 20157051 - GSC - Smith - (15SUV) - October 2015

SAMPLE NO.	REMARKS:	INPUT ASSEMBLAGE	INPUT REMARKS
15-SUV-015	Siderite-goethite/marcasite assemblage.	Siderite-goethite/marcasite	
15-SUV-018	Goethite/diopside-kyanite assemblage. SEM checks from 0.18-0.25 mm fraction: 4 CR versus rutile candidates = 4 CR; and 2 green garnite versus spinel candidates = 2 hercynite (1 with minor Zn).	Goethite/diopside-kyanite	SEM checks from 0.18-0.25 mm fraction: 4 CR versus rutile candidates = 4 CR; and 2 green garnite versus spinel candidates = 2 hercynite (1 with minor Zn).
15-SUV-019	Goethite/marcasite assemblage. SEM checks from 0.18-0.25 mm fraction: 3 GP versus almandine candidates = 2 GP and 1 almandine; 2 CR versus tourmaline candidates = 1 CR and 1 hematite; and 2 FO versus diopside candidates = 1 diopside and 1 apatite.	Goethite/marcasite	SEM checks from 0.18-0.25 mm fraction: 3 GP versus almandine candidates = 2 GP and 1 almandine; 2 CR versus tourmaline candiates = 1 CR and 1 hematite; and 2 FO versus diopside candidates = 1 diopside and 1 apatite.
15-SUV-028	Goethite-almandine/diopside assemblage.	Goethite-almandine/diopside	
15-SUV-030	Almandine-goethite/diopside assemblage. SEM check from 0.18-0.25 mm fraction: 1 FO versus diopside candidate= 1 FO .	Almandine-goethite/diopside	SEM check from 0.18-0.25 mm fraction: 1 FO versus diopside candidate= 1 FO .

APPENDIX 3A

OVERBURDEN DRILLING MANAGEMENT LIMITED (2015) LABORATORY ABBREVIATIONS SEDIMENT LOG

Largest Clasts Present: G: Granules P: Pebbles C: Cobbles	Matrix Organics: ORG: Y: Organics present in matrix N: Organics absent or negligible in matrix +: Matrix is mainly organic
Clast Composition: V/S: Volcanics and/or sediments GR: Granitics LS: Limestone, carbonates OT: Other Lithologies (refer to footnotes) TR: Only trace present NA: Not applicable OX: Very oxidized, undifferentiated	Matrix Colour: Primary: BE: Beige BR: Brick Red GY: Grey GB: Grey-beige GN: Green GG: Grey-green MN: Maroon PP: Purple PK: Pink PB: Pink-Beige
Matrix Grain Size Distribution: S/U: Sorted or Unsorted SD: Sand (F: Fine; M: Medium; C: Coarse) ST: Silt CY: Clay Y: Fraction present +: Fraction more abundant than normal -: Fraction less abundant than normal N: Fraction not present	Secondary (soil): OC: Ochre BN: Brown BK: Black Secondary Colour Modifier: L: Light M: Medium D: Dark

GOLD GRAIN LOG

Thickness: VG: Visible gold grains M: Actual measured thickness of grain (microns) C: Thickness of grain (microns) calculated from measured width and length
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KIM (kimberlite indicator mineral) LOG

GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
CR: Chromite
FO: Forsterite

MMSIM (metamorphosed or magmatic massive sulphide indicator mineral) and PCIM (porphyry Cu indicator mineral) LOGS

Adr: Andradite	Cpy: Chalcopyrite	Gth: Goethite	Opx: Orthopyroxene	St: Staurolite
Ap: Apatite	Cr: Chromite	Ilm: Ilmenite	Py: Pyrite	Tm: Tourmaline
Ase: Anatase	Fay: Fayalite	Ky: Kyanite	Sil: Sillimanite	Ttn: Titanite
Aspy: Arsenopyrite	Gh: Gahnite	Mz: Monazite	Spi: Spinel	Zir: Zircon
Ax: Axinite	Gr: Grossular	Ol: Olivine	Sps: Spessartine	