ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **IMPALA CANADA LTD.**
BUSINESS NUMBER 131081184
556 TENTH AVE
THUNDER BAY ON P7B 2R2

Finalized Date: 7-FEB-2020
Account: MZI

CERTIFICATE TB20013965

Project: 18-101

P.O. No.: 182449

This report is for 78 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 17-JAN-2020.

The following have access to data associated with this certificate:

MATT BODNAR DENIS DECHARTE	KAITLYN CHOVANCAK CLAIRE MCGUINNESS	SAM DAVIES LDIM WEBTRIEVE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-23	Pulp Login - Rcvd with Barcode
LOG-21	Sample logging - ClientBarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-32	Fine Crushing 90% <2mm
SPL-21	Split sample - riffle splitter
PUL-35	Pulv 250 g Split to 95%<106 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Ni-OG62	Ore Grade Ni - Four Acid	
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver

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CERTIFICATE OF ANALYSIS TB20013965

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	PGM-ICP23 Au ppb 1	PGM-ICP23 Pd ppb 1	PGM-ICP23 Pt ppb 5	ME-ICP61 Cu ppm 1	ME-ICP61 Ni ppm 1	ME-ICP61 Co ppm 1	ME-ICP61 Mg % 0.01	ME-ICP61 Ag ppm 0.5	Cu-OG62 Cu ppm 10	Ni-OG62 Ni ppm 10
PP19-104681		2.63	<1	<1	<5	2	1	<1	12.10	<0.5		
PP19-104682		0.07	4410	2020	1260	88	88	63	0.26	1.0		
PP19-104683		2.46	4	58	18	78	257	45	4.93	<0.5		
PP19-104684		2.47	3	59	17	78	277	48	5.25	<0.5		
PP19-104685		2.51	2	51	13	77	265	47	4.91	<0.5		
PP19-104686		2.63	3	59	16	65	260	47	5.15	<0.5		
PP19-104687		2.52	5	53	16	57	261	45	4.98	<0.5		
PP19-104688		2.56	3	61	20	83	274	46	5.20	<0.5		
PP19-104689		3.97	5	59	16	79	272	45	5.27	<0.5		
PP19-104690		3.55	5	56	18	102	275	48	5.20	<0.5		
PP19-104691		2.45	4	57	17	91	277	50	5.25	<0.5		
PP19-104692		2.85	4	59	19	89	282	51	5.29	<0.5		
PP19-104693		2.46	5	59	16	90	285	51	5.35	<0.5		
PP19-104694		2.46	4	56	18	88	278	49	5.49	<0.5		
PP19-104695		2.62	3	54	17	88	273	48	5.34	<0.5		
PP19-104696		2.55	3	57	19	81	255	47	5.00	<0.5		
PP19-104697		1.64	8	37	15	160	270	53	5.13	<0.5		
PP19-104698		3.51	4	16	6	133	257	48	4.89	<0.5		
PP19-104699		2.52	3	54	16	73	273	49	5.18	<0.5		
PP19-104700		1.80	3	47	20	70	262	48	5.18	<0.5		
PP19-104701		0.07	73	591	283	4660	4470	119	4.11	2.1		
PP19-104702		3.15	4	42	16	100	285	50	5.41	<0.5		
PP19-104703		2.51	3	49	16	76	274	49	5.32	<0.5		
PP19-104704		2.59	4	47	17	91	283	49	5.45	<0.5		
PP19-104705		2.58	4	51	15	92	270	49	5.21	<0.5		
PP19-104706		2.66	1	46	15	71	268	49	5.38	<0.5		
PP19-104707		2.19	3	43	12	94	266	49	5.14	<0.5		
PP19-104708		2.27	4	46	16	98	268	51	5.56	<0.5		
PP19-104709		2.05	4	45	14	99	280	51	5.68	<0.5		
PP19-104710		2.34	4	43	16	99	263	50	5.41	<0.5		
PP19-104711		1.88	3	43	13	96	260	49	5.33	<0.5		
PP19-104712		2.36	3	50	13	93	266	49	5.30	<0.5		
PP19-104713		2.09	2	44	13	89	263	48	5.20	<0.5		
PP19-104714		2.18	2	47	16	97	276	50	5.44	<0.5		
PP19-104715		2.11	3	25	7	79	235	46	4.92	<0.5		
PP19-104716		2.03	3	46	14	91	252	48	5.08	<0.5		
PP19-104717		2.28	1	39	12	83	236	47	4.87	<0.5		
PP19-104718		2.12	1	36	14	101	241	50	5.05	<0.5		
PP19-104719		2.11	3	25	10	181	240	49	5.15	<0.5		
PP19-104720		1.98	<1	31	11	64	257	49	5.33	<0.5		

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Project: 18-101

CERTIFICATE OF ANALYSIS TB20013965

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	PGM-ICP23 Au ppb 1	PGM-ICP23 Pd ppb 1	PGM-ICP23 Pt ppb 5	ME-ICP61 Cu ppm 1	ME-ICP61 Ni ppm 1	ME-ICP61 Co ppm 1	ME-ICP61 Mg % 0.01	ME-ICP61 Ag ppm 0.5	Cu-OG62 Cu ppm 10	Ni-OG62 Ni ppm 10
PP19-104721		2.08	<1	<1	<5	<1	1	<1	12.65	<0.5		
PP19-104722		2.02	<1	28	11	21	247	48	5.12	<0.5		
PP19-104723		2.04	2	34	13	117	268	50	5.49	<0.5		
PP19-104724		2.31	2	33	11	103	261	48	5.28	<0.5		
PP19-104725		2.09	<1	28	10	31	260	48	5.17	<0.5		
PP19-104726		2.03	2	33	11	174	291	50	4.65	<0.5		
PP19-104727		2.41	6	125	63	580	426	79	4.91	<0.5		
PP19-104728		2.09	3	46	28	149	288	46	5.39	<0.5		
PP19-104729		1.91	3	25	11	414	214	55	4.95	<0.5		
PP19-104730		2.22	4	13	<5	399	109	67	4.40	<0.5		
PP19-104731		2.06	<1	37	12	13	282	41	5.08	<0.5		
PP19-104732		2.13	1	39	17	18	235	37	4.05	<0.5		
PP19-104733		1.64	<1	59	28	13	246	44	5.47	<0.5		
PP19-104734		1.44	<1	14	10	10	361	66	8.38	<0.5		
PP19-104735		1.05	3	4	<5	4	103	31	3.54	<0.5		
PP19-104736		2.19	<1	<1	<5	2	6	5	0.47	<0.5		
PP19-104737		2.14	<1	<1	<5	15	14	15	1.30	<0.5		
PP19-104738		2.10	<1	<1	<5	75	7	14	1.15	<0.5		
PP19-104739		2.21	<1	<1	<5	45	11	11	0.78	<0.5		
PP19-104740		2.14	<1	<1	<5	21	14	12	0.95	<0.5		
PP19-104741		0.08	203	3530	813	>10000	>10000	936	3.91	4.0	16150	46600
PP19-104742		2.23	<1	<1	<5	47	62	21	1.57	<0.5		
PP19-104743		1.90	<1	<1	<5	44	31	22	1.60	<0.5		
PP19-104744		2.28	<1	<1	<5	32	33	24	1.70	<0.5		
PP19-104745		2.42	<1	<1	<5	61	22	25	1.72	<0.5		
PP19-104746		2.36	<1	<1	<5	28	30	22	1.69	<0.5		
PP19-104747		2.25	<1	<1	<5	37	16	12	0.92	<0.5		
PP19-104748		2.27	<1	<1	<5	1	6	8	0.57	<0.5		
PP19-104749		2.07	<1	<1	<5	15	7	8	0.57	<0.5		
PP19-104750		2.30	<1	<1	<5	6	3	9	0.69	<0.5		
PP19-104751		2.27	<1	<1	<5	36	7	10	0.71	<0.5		
PP19-104752		2.20	<1	<1	<5	19	9	7	0.57	<0.5		
PP19-104753		2.18	<1	<1	<5	27	6	6	0.40	<0.5		
PP19-104754		2.26	<1	<1	<5	14	14	9	0.76	<0.5		
PP19-104755		2.19	<1	<1	<5	43	9	8	0.61	<0.5		
PP19-104756		2.41	<1	<1	<5	29	6	9	0.64	<0.5		
PP19-104757		2.22	<1	<1	<5	29	6	6	0.36	<0.5		
PP19-104758		0.07	63	590	285	4560	4360	115	3.91	1.5		

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CERTIFICATE OF ANALYSIS TB20013965

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

Applies to Method:	CRU-32	CRU-QC	LOG-21	LOG-23
	PUL-35	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Cu-OG62	ME-ICP61	ME-OG62	Ni-OG62
	PGM-ICP23			