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: 5-FEB-2020
Account: MZI

CERTIFICATE TB20013994

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 TB20013994

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
PP19-104759		1.35	<1	1	<5	1	2	1	11.80	<0.5		
PP19-104760		0.07	4820	2060	1340	87	84	61	0.25	<0.5		
PP19-104761		2.15	<1	1	<5	13	4	5	0.42	<0.5		
PP19-104762		2.21	<1	<1	<5	10	5	4	0.30	<0.5		
PP19-104763		2.30	<1	<1	<5	12	2	4	0.26	<0.5		
PP19-104764		2.17	<1	<1	<5	27	9	14	1.00	<0.5		
PP19-104765		2.60	<1	<1	<5	18	6	8	0.54	<0.5		
PP19-104766		2.28	<1	<1	<5	8	8	8	0.60	<0.5		
PP19-104767		2.14	<1	<1	<5	9	8	7	0.53	<0.5		
PP19-104768		2.47	<1	<1	<5	9	8	9	0.64	<0.5		
PP19-104769		2.26	<1	<1	<5	10	9	9	0.64	<0.5		
PP19-104770		2.50	2	<1	<5	222	237	53	4.26	<0.5		
PP19-104771		2.43	7	33	13	186	247	61	5.16	<0.5		
PP19-104772		2.31	13	52	23	176	329	77	6.62	<0.5		
PP19-104773		2.47	18	52	22	233	362	78	6.90	<0.5		
PP19-104774		2.51	10	47	26	173	293	68	5.73	<0.5		
PP19-104775		2.22	<1	15	8	65	157	35	2.58	<0.5		
PP19-104776		2.37	10	51	24	140	308	69	6.09	<0.5		
PP19-104777		2.49	12	41	19	213	336	73	6.63	<0.5		
PP19-104778		2.35	12	67	34	302	371	73	6.79	<0.5		
PP19-104779		0.07	85	584	332	4540	4300	111	3.80	1.8		
PP19-104780		2.32	16	43	18	307	440	84	7.93	<0.5		
PP19-104781		2.64	5	31	13	141	357	78	7.27	<0.5		
PP19-104782		2.44	14	17	9	227	444	86	8.22	<0.5		
PP19-104783		2.42	15	26	14	278	394	88	8.28	<0.5		
PP19-104784		1.52	14	22	13	255	364	83	7.79	<0.5		
PP19-104785		2.75	29	149	61	392	425	81	7.38	<0.5		
PP19-104786		3.23	20	103	37	154	297	49	4.99	<0.5		
PP19-104787		2.39	15	66	26	128	263	45	4.81	<0.5		
PP19-104788		2.35	14	44	16	134	263	46	4.86	<0.5		
PP19-104789		2.48	16	65	21	172	248	46	4.18	<0.5		
PP19-104790		2.33	15	54	23	167	278	45	4.42	<0.5		
PP19-104791		2.41	28	83	28	228	345	52	4.91	<0.5		
PP19-104792		2.29	22	71	31	184	321	50	4.69	<0.5		
PP19-104793		2.31	22	175	50	204	321	46	4.40	<0.5		
PP19-104794		2.50	21	211	65	114	330	43	4.80	<0.5		
PP19-104795		2.41	13	21	17	103	282	42	4.53	<0.5		
PP19-104796		2.29	8	2	<5	145	293	45	4.77	<0.5		
PP19-104797		2.34	6	2	<5	143	271	46	4.64	<0.5		
PP19-104798		2.40	5	2	<5	145	243	46	4.70	<0.5		

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Finalized Date: 5-FEB-2020
Account: MZI

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CERTIFICATE OF ANALYSIS TB20013994

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
PP19-104799		2.04	<1	<1	<5	1	2	1	11.45	<0.5		
PP19-104800		2.16	3	4	5	125	209	43	4.22	<0.5		
PP19-104801		2.35	18	85	36	204	225	50	4.32	<0.5		
PP19-104802		2.24	18	106	60	212	267	51	4.43	<0.5		
PP19-104803		2.21	19	189	48	344	361	47	4.23	<0.5		
PP19-104804		2.25	11	44	18	208	256	40	3.86	<0.5		
PP19-104805		2.31	6	19	6	236	260	47	4.32	<0.5		
PP19-104806		2.35	4	13	5	140	237	42	4.35	<0.5		
PP19-104807		2.36	4	4	<5	152	236	47	4.75	<0.5		
PP19-104808		2.20	6	17	8	271	288	54	4.62	<0.5		
PP19-104809		2.06	<1	2	<5	6	174	30	3.71	<0.5		
PP19-104810		2.45	<1	1	<5	8	182	31	3.83	<0.5		
PP19-104811		1.79	3	23	11	142	296	54	4.66	<0.5		
PP19-104812		2.77	<1	1	<5	43	46	11	1.05	<0.5		
PP19-104813		2.55	3	4	<5	170	242	62	5.21	<0.5		
PP19-104814		1.79	<1	3	<5	147	176	55	4.12	<0.5		
PP19-104815		1.50	<1	<1	<5	27	18	7	0.52	<0.5		
PP19-104816		2.09	<1	<1	<5	1	10	3	0.39	<0.5		
PP19-104817		1.95	<1	<1	<5	6	12	5	0.48	<0.5		
PP19-104818		2.07	<1	<1	<5	4	13	5	0.45	<0.5		
PP19-104819		0.12	238	3440	819	>10000	>10000	993	3.91	3.7	16400	46500
PP19-104820		2.10	<1	<1	<5	11	23	6	0.53	<0.5		
PP19-104821		2.08	8	17	5	121	196	45	3.93	<0.5		
PP19-104822		2.25	19	172	21	169	302	44	4.58	<0.5		
PP19-104823		2.18	36	297	35	350	428	49	5.12	<0.5		
PP19-104824		2.09	271	1760	154	1075	1135	57	4.72	0.6		
PP19-104825		2.30	30	145	17	239	260	43	4.10	<0.5		
PP19-104826		2.15	10	65	10	149	212	45	4.39	<0.5		
PP19-104827		2.26	6	33	8	121	229	45	4.69	<0.5		
PP19-104828		2.58	67	522	46	816	315	29	2.59	0.7		
PP19-104829		2.56	65	1200	92	635	492	18	0.90	0.5		
PP19-104830		2.54	86	908	75	561	422	12	0.57	<0.5		
PP19-104831		2.08	80	952	94	703	710	53	5.53	0.5		
PP19-104832		2.09	226	2410	222	1255	1170	58	4.43	0.6		
PP19-104833		1.99	60	380	52	506	414	36	3.59	<0.5		
PP19-104834		2.42	147	676	74	788	678	47	3.89	<0.5		
PP19-104835		2.25	12	120	15	150	214	26	2.58	<0.5		
PP19-104836		0.07	87	582	290	4610	4450	115	3.95	2.1		

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CERTIFICATE OF ANALYSIS TB20013994

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			