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 TB20013896

Project: 18-300

P.O. No.: 212623

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:

KAITLYN CHOVANCAK STU GIBBINS LDIM WEBTRIEVE	SAM DAVIES MARK LACOMBE	DENIS DECHARTE LINETTE MACINNIS

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 TB20013896

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
PP19-104837		2.04	<1	<1	<5	1	1	2	11.75	<0.5		
PP19-104838		0.07	4450	2090	1300	84	82	61	0.25	0.5		
PP19-104839		2.32	132	855	78	594	659	55	5.05	0.5		
PP19-104840		2.01	45	684	63	301	468	48	5.37	<0.5		
PP19-104841		2.27	37	242	37	341	342	44	4.60	<0.5		
PP19-104842		2.23	100	668	95	510	601	50	5.10	<0.5		
PP19-104843		2.31	233	1480	117	783	1090	63	5.78	<0.5		
PP19-104844		2.37	97	604	71	526	588	52	5.24	<0.5		
PP19-104845		2.40	186	1280	123	709	805	59	5.77	<0.5		
PP19-104846		2.05	247	1930	292	963	1085	58	4.94	0.5		
PP19-104847		2.31	288	1240	144	847	754	54	5.56	<0.5		
PP19-104848		2.35	148	1420	151	652	968	69	7.04	<0.5		
PP19-104849		2.31	83	649	59	492	727	58	5.71	<0.5		
PP19-104850		1.03	257	1330	117	1020	986	56	5.51	<0.5		
PP19-104851		1.35	8	119	37	55	524	80	10.90	<0.5		
PP19-104852		2.47	8	94	34	54	526	80	11.00	<0.5		
PP19-104853		2.51	7	100	34	58	520	79	10.80	<0.5		
PP19-104854		2.32	7	100	34	57	502	76	10.50	<0.5		
PP19-104855		2.32	7	80	35	59	514	79	10.70	<0.5		
PP19-104856		2.65	7	94	30	53	514	79	10.75	<0.5		
PP19-104857		0.07	57	617	301	4670	4620	115	3.86	2.0		
PP19-104858		2.53	6	93	32	71	552	81	10.45	<0.5		
PP19-104859		2.41	6	118	34	56	554	81	10.40	<0.5		
PP19-104860		2.65	3	94	34	31	554	82	10.75	<0.5		
PP19-104861		2.53	4	92	31	46	504	79	9.87	<0.5		
PP19-104862		2.54	4	79	29	45	522	80	10.25	<0.5		
PP19-104863		2.61	6	86	36	52	551	81	10.65	<0.5		
PP19-104864		2.40	6	94	32	51	525	77	10.20	<0.5		
PP19-104865		2.55	9	122	37	68	554	80	10.60	<0.5		
PP19-104866		2.66	11	82	32	71	543	80	10.55	<0.5		
PP19-104867		2.48	3	141	36	22	545	79	10.55	<0.5		
PP19-104868		2.60	11	89	32	69	553	81	10.80	<0.5		
PP19-104869		2.55	7	73	30	55	570	83	11.10	<0.5		
PP19-104870		2.82	7	104	36	55	589	85	11.35	<0.5		
PP19-104871		2.72	10	163	48	56	605	87	11.55	<0.5		
PP19-104872		2.68	8	95	34	49	565	82	10.85	<0.5		
PP19-104873		2.21	12	107	37	56	531	78	10.40	<0.5		
PP19-104874		2.22	13	173	40	60	549	78	10.50	<0.5		
PP19-104875		2.26	9	101	33	41	558	81	10.75	<0.5		
PP19-104876		2.54	8	125	38	48	601	87	11.50	<0.5		

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CERTIFICATE OF ANALYSIS TB20013896

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
PP19-104877		2.81	1	1	<5	2	1	1	11.55	<0.5		
PP19-104878		2.30	7	110	33	32	580	85	11.20	<0.5		
PP19-104879		2.48	3	95	36	38	564	83	10.85	<0.5		
PP19-104880		2.44	3	234	51	35	556	80	10.75	<0.5		
PP19-104881		2.48	4	97	32	24	553	80	10.75	<0.5		
PP19-104882		2.47	4	122	49	25	543	79	10.35	<0.5		
PP19-104883		2.30	5	119	41	29	589	85	11.35	<0.5		
PP19-104884		2.49	5	113	36	30	571	82	11.00	<0.5		
PP19-104885		2.46	5	113	37	31	573	83	11.00	<0.5		
PP19-104886		2.45	6	108	39	34	566	84	10.80	<0.5		
PP19-104887		2.35	7	129	39	39	567	86	10.90	<0.5		
PP19-104888		2.22	5	102	35	29	523	78	9.97	<0.5		
PP19-104889		2.30	7	179	43	29	542	78	10.40	<0.5		
PP19-104890		2.58	6	96	33	36	576	83	11.20	<0.5		
PP19-104891		2.24	5	125	34	47	547	79	10.75	<0.5		
PP19-104892		2.16	3	132	37	38	556	81	11.00	<0.5		
PP19-104893		2.24	3	166	35	32	471	75	10.35	<0.5		
PP19-104894		2.50	4	130	38	57	470	75	10.40	<0.5		
PP19-104895		2.39	5	114	35	66	486	77	10.85	<0.5		
PP19-104896		2.42	5	96	37	117	549	84	11.70	<0.5		
PP19-104897		0.12	265	3480	790	>10000	>10000	968	4.10	4.1	16550	47000
PP19-104898		2.35	7	141	46	182	585	85	11.45	<0.5		
PP19-104899		2.52	6	106	44	187	567	83	11.50	<0.5		
PP19-104900		2.66	9	208	52	210	551	83	11.25	<0.5		
PP19-104901		2.63	6	94	36	221	547	83	11.20	<0.5		
PP19-104902		2.70	7	86	32	217	540	83	11.40	<0.5		
PP19-104903		2.52	6	90	35	234	555	85	11.35	<0.5		
PP19-104904		2.60	2	134	45	240	548	86	11.25	<0.5		
PP19-104905		2.63	5	110	38	268	554	86	11.50	<0.5		
PP19-104906		2.62	6	100	34	303	552	84	11.30	<0.5		
PP19-104907		2.44	4	158	40	297	539	81	11.00	<0.5		
PP19-104908		2.59	5	96	37	299	535	84	11.15	<0.5		
PP19-104909		2.54	5	150	41	298	520	83	11.05	<0.5		
PP19-104910		2.59	5	114	36	309	516	81	10.75	<0.5		
PP19-104911		2.67	6	123	41	338	547	91	11.35	<0.5		
PP19-104912		2.41	5	131	40	352	526	88	11.00	<0.5		
PP19-104913		2.26	5	110	36	333	509	88	10.65	<0.5		
PP19-104914		0.07	90	616	322	4400	4210	112	3.93	2.0		

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CERTIFICATE OF ANALYSIS TB20013896

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			