



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Fireweed Zinc Ltd.**
Suite 1020, 800 Pender Street
Vancouver British Columbia V5C 2V6 Canada

Submitted By: Confirmation & Email Distribution List
Receiving Lab: Canada-Whitehorse
Received: July 25, 2019
Report Date: August 18, 2019
Page: 1 of 2

CERTIFICATE OF ANALYSIS

WHI19000262.1

CLIENT JOB INFORMATION

Project: MacMillan Pass
Shipment ID: FWZ19-BV-012
P.O. Number
Number of Samples: 27

SAMPLE DISPOSAL

RTRN-PLP Return After 90 days
RTRN-RJT Return After 60 days

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-500	26	Crush, split and pulverize 500g rock to 200 mesh			WHI
SLBHP	1	Sort, label and box pulps			WHI
CRUBW	26	Extra clean rock wash between samples in crusher			WHI
PULSW	26	Extra Wash with Silica between each sample			WHI
AQ270	27	1:1:1 Aqua Regia digestion ICP-ES/ICP-MS analysis	1	Completed	VAN
LF725	27	Li2B4O7/LiBO2 fusion, analysis by XRF		Completed	VAN
TC000	27	Total C/S Analysis by Leco	0.1	Completed	VAN
TC007	27	Graphite and Organic C by Leco After Ignition	0.1	Completed	VAN
TC006	27	Inorganic Carbon	0.2	Completed	VAN
TC009	27	Sulfide and Sulfate	0.1	Completed	VAN
SHP01	27	Per sample shipping charges for branch shipments			VAN

ADDITIONAL COMMENTS

V205 from LF725 is Qualitative Data only.

Invoice To: Fireweed Zinc Ltd.
Suite 1020, 800 Pender Street
Vancouver British Columbia V5C 2V6
Canada

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
*** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Page:

2 of 2

Part:

1 of 3

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	Method Analyte Unit MDL	WGHT	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.01	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001
3200728	Drill Core	5.67	16.8	42.9	87.3	530	<0.5	64.9	4.4	37	2.24	30	2.0	3.6	27	1.2	10.0	<0.5	76	0.15	0.107
3200729	Drill Core	7.15	17.3	81.1	403.6	10307	1.0	89.0	6.0	45	3.38	40	2.2	3.9	26	23.6	12.5	<0.5	70	0.16	0.099
3200730	Drill Core	4.09	14.9	85.0	1526.1	21012	1.1	79.6	5.7	59	3.70	48	2.1	4.5	45	42.2	9.0	<0.5	77	0.21	0.136
3200731	Drill Core	3.95	16.9	95.6	7278.2	104809	2.5	54.4	9.5	48	2.68	26	2.1	3.0	28	92.7	7.3	<0.5	81	0.07	0.054
3200732	Drill Core	4.06	17.6	94.6	655.1	31886	1.1	84.8	9.4	103	4.40	52	3.0	3.5	32	46.9	8.9	<0.5	96	0.26	0.144
3200733	Drill Core	4.96	16.1	58.4	1628.5	36901	1.1	69.4	6.6	90	3.53	49	2.3	4.0	37	47.9	7.2	<0.5	101	0.22	0.112
3200734	Drill Core	5.18	16.8	72.5	11603.4	75571	2.5	68.0	11.7	49	2.60	55	2.1	2.8	41	185.4	8.0	<0.5	288	0.08	0.066
3200735	Drill Core	4.53	11.0	64.5	4843.1	34587	1.3	65.4	8.7	34	1.79	56	1.9	2.7	51	96.6	5.3	<0.5	427	0.10	0.088
3200736	Drill Core	3.59	13.0	65.1	7040.5	52009	1.5	66.7	15.1	851	3.34	121	1.7	3.2	46	114.0	5.2	<0.5	406	0.11	0.096
3200737	Drill Core	2.83	8.3	25.9	6462.5	56962	0.7	43.1	7.3	2700	3.94	31	1.8	2.4	46	60.8	5.7	<0.5	227	0.06	0.049
3200738	Drill Core	1.47	8.2	49.7	15318.0	112809	1.1	20.5	7.7	101	0.76	20	1.3	1.1	23	67.1	13.8	<0.5	123	<0.01	0.028
3200739	Drill Core	4.42	8.6	31.3	23554.4	72870	1.0	47.2	8.6	67	1.09	40	2.8	1.6	77	208.7	15.3	<0.5	192	0.02	0.108
3200740	Rock Pulp	0.08	2.6	334.9	>40000	107113	97.3	24.1	24.8	1279	7.69	136	1.3	6.8	16	316.5	160.8	0.6	<10	3.78	0.040
3200741	Drill Core	1.47	8.0	39.5	14248.2	74342	0.9	35.5	6.5	46	1.63	53	3.8	1.8	39	152.5	22.7	<0.5	244	0.03	0.056
3200742	Drill Core	1.49	7.8	39.8	15840.3	77460	1.1	31.0	6.4	46	1.41	48	3.8	1.5	37	148.8	25.1	<0.5	217	0.02	0.056
3200743	Drill Core	2.28	12.7	44.1	12505.7	71882	1.3	51.5	9.3	64	1.88	38	3.6	2.9	82	159.2	20.7	<0.5	377	0.09	0.120
3200744	Drill Core	2.79	6.7	24.4	5571.9	64379	0.9	23.7	4.8	39	0.70	27	1.8	1.2	32	41.0	3.0	<0.5	182	0.04	0.045
3200745	Drill Core	4.22	6.1	26.6	6618.4	62374	0.5	28.5	5.3	23	0.53	15	2.2	1.0	38	54.9	2.6	<0.5	183	0.04	0.048
3200746	Drill Core	4.94	7.6	82.4	21727.2	81423	2.4	39.8	7.1	45	0.70	23	3.2	1.6	67	202.9	6.8	<0.5	201	0.07	0.095
3200747	Drill Core	3.02	14.7	108.2	4056.8	75209	1.4	82.1	8.7	853	2.86	44	3.3	4.1	157	50.5	10.2	<0.5	442	0.26	0.207
3200748	Drill Core	4.18	16.5	144.9	523.5	36464	0.6	107.0	8.8	149	2.60	43	2.9	3.9	132	35.6	13.3	<0.5	513	0.25	0.187
3200749	Drill Core	6.57	4.1	49.9	42.8	1623	<0.5	103.4	9.8	569	3.49	37	2.2	5.0	40	1.4	12.8	<0.5	124	0.11	0.090
3200750	Drill Core	7.26	5.1	43.2	40.9	1815	0.5	73.0	14.5	532	2.81	22	1.3	5.4	44	0.9	7.3	<0.5	55	0.31	0.071
3200751	Drill Core	7.00	3.3	136.3	34.8	2714	<0.5	95.4	18.5	2190	6.60	15	1.3	6.1	44	1.1	6.3	<0.5	39	0.19	0.091
3200752	Drill Core	5.95	3.4	260.9	39.5	152	<0.5	82.9	10.3	914	4.74	17	2.3	6.3	104	1.3	7.7	<0.5	38	0.14	0.180
3200753	Drill Core	7.39	4.6	113.1	41.5	77	0.6	77.1	11.1	120	2.78	24	2.0	6.8	62	1.2	8.3	<0.5	39	0.16	0.102
3200754	Drill Core	6.78	4.7	122.5	36.4	187	0.7	103.1	11.9	93	2.09	31	2.4	6.8	53	2.3	10.1	<0.5	41	0.14	0.133



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Page:

2 of 2

Part:

2 of 3

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	Method Analyte Unit MDL	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	LF725	LF725	LF725	LF725	LF725
		La	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se	SiO2	Al2O3	Fe2O3	CaO	MgO
		ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	%
		0.5	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	0.01	0.01	0.01	0.01	0.01
3200728	Drill Core	9.9	12.8	0.02	908	0.003	1.90	<0.01	0.14	<0.5	0.15	2.0	1.1	1.62	<5	5	72.37	8.21	3.41	0.24	0.25
3200729	Drill Core	7.0	15.0	0.01	363	0.003	1.97	<0.01	0.11	<0.5	1.22	2.1	7.6	3.64	<5	5	69.83	7.41	5.21	0.25	0.19
3200730	Drill Core	8.1	15.6	0.01	302	0.003	2.36	<0.01	0.13	<0.5	2.51	5.2	11.0	4.45	<5	7	66.58	7.41	5.55	0.32	0.14
3200731	Drill Core	7.2	14.7	0.01	168	0.002	1.01	<0.01	0.12	<0.5	10.94	2.2	4.3	7.38	<5	18	67.58	4.00	3.99	0.12	0.11
3200732	Drill Core	8.3	18.6	0.01	274	0.002	2.96	<0.01	0.10	<0.5	3.84	4.1	15.9	5.00	<5	6	62.06	7.80	6.51	0.38	0.12
3200733	Drill Core	9.1	18.0	<0.01	360	0.002	2.65	<0.01	0.09	<0.5	4.11	3.1	11.5	4.37	<5	6	65.83	6.83	5.20	0.33	0.09
3200734	Drill Core	10.0	48.3	<0.01	228	0.037	1.74	<0.01	0.07	<0.5	4.41	2.2	6.0	5.88	7	10	67.39	4.48	3.73	0.13	0.02
3200735	Drill Core	10.0	72.6	<0.01	414	0.083	1.49	<0.01	0.03	<0.5	2.00	3.6	4.0	3.18	<5	4	75.91	5.00	2.68	0.15	0.02
3200736	Drill Core	9.0	74.6	<0.01	295	0.109	1.54	<0.01	0.02	<0.5	2.39	3.3	5.4	4.66	5	5	69.43	4.24	4.76	0.18	0.02
3200737	Drill Core	5.9	49.1	0.01	370	0.063	0.88	<0.01	<0.01	0.5	1.61	1.9	1.9	3.49	<5	3	37.73	2.97	5.63	0.09	0.03
3200738	Drill Core	2.3	25.7	<0.01	183	0.030	0.20	<0.01	0.01	1.2	4.06	0.6	2.2	6.15	<5	7	53.09	2.45	1.14	<0.01	<0.01
3200739	Drill Core	3.4	40.1	<0.01	247	0.052	0.77	<0.01	<0.01	0.6	2.42	1.6	2.1	4.87	<5	4	35.89	3.01	1.62	0.05	<0.01
3200740	Rock Pulp	17.3	11.2	2.06	84	0.011	0.76	<0.01	0.49	<0.5	4.57	2.3	45.0	10.84	<5	<2	34.05	6.89	11.43	5.29	3.81
3200741	Drill Core	5.3	48.2	<0.01	215	0.067	0.36	<0.01	<0.01	3.3	10.22	2.8	1.8	5.34	<5	5	40.92	2.80	2.34	0.05	<0.01
3200742	Drill Core	4.4	41.2	<0.01	216	0.059	0.38	<0.01	<0.01	2.1	10.85	2.6	2.1	5.35	<5	5	37.89	2.45	2.07	0.05	<0.01
3200743	Drill Core	10.1	81.6	<0.01	216	0.112	0.68	<0.01	<0.01	3.4	8.28	2.8	2.0	5.42	<5	7	55.96	3.89	2.73	0.13	<0.01
3200744	Drill Core	5.0	38.5	<0.01	334	0.055	0.31	<0.01	<0.01	4.1	2.16	1.2	1.6	3.83	<5	2	32.13	1.97	1.04	0.07	<0.01
3200745	Drill Core	5.9	38.6	<0.01	346	0.054	0.34	<0.01	<0.01	<0.5	1.84	1.0	1.3	3.56	<5	3	27.03	1.98	0.84	0.07	<0.01
3200746	Drill Core	5.2	42.4	<0.01	321	0.060	0.54	<0.01	<0.01	<0.5	11.37	2.1	1.7	4.77	<5	6	33.68	2.24	1.06	0.11	<0.01
3200747	Drill Core	13.9	85.5	<0.01	257	0.133	1.84	<0.01	0.03	<0.5	15.35	5.2	1.6	4.52	7	7	64.08	5.60	4.12	0.37	0.02
3200748	Drill Core	12.7	89.6	<0.01	568	0.110	3.13	<0.01	0.13	<0.5	8.11	6.2	2.2	2.76	9	6	66.31	7.36	3.82	0.37	0.02
3200749	Drill Core	16.2	29.7	<0.01	2367	0.018	4.15	<0.01	0.07	<0.5	0.34	8.9	0.5	0.85	9	<2	65.63	8.93	5.11	0.18	0.05
3200750	Drill Core	20.4	16.7	0.08	>5000	0.003	4.29	<0.01	0.12	<0.5	0.21	3.2	0.6	0.21	8	<2	66.74	9.95	4.15	0.46	0.24
3200751	Drill Core	11.2	10.8	0.02	447	0.003	2.26	<0.01	0.13	<0.5	0.17	3.2	<0.5	3.12	<5	2	63.82	8.11	9.86	0.28	0.19
3200752	Drill Core	11.4	12.6	0.02	291	0.003	0.98	<0.01	0.15	<0.5	0.14	3.9	<0.5	4.19	<5	2	67.95	8.94	7.23	0.22	0.26
3200753	Drill Core	15.5	13.8	0.02	696	0.004	0.68	<0.01	0.23	<0.5	0.11	2.6	<0.5	2.85	<5	2	72.66	10.46	4.31	0.22	0.41
3200754	Drill Core	17.0	15.2	0.02	1466	0.003	0.78	<0.01	0.22	<0.5	0.14	3.7	<0.5	2.09	<5	3	73.78	11.50	3.44	0.22	0.42



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2 of 2

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3 of 3

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		K2O	MnO	TiO2	P2O5	Cr2O3	Ba	Cu	Pb	Zn	LOI	SUM_T	V2O5	TOT/C	TOT/S	C/ORG	C/GRA	CO2	S/S-	SO4
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-5.11	0.01	0.01	0.02	0.02	0.02	0.02	0.08	0.05
3200728	Drill Core	1.15	0.02	0.39	0.25	<0.01	4.75	<0.01	0.01	0.05	7.62	99.31	0.13	2.22	2.76	1.33	0.88	<0.08	2.09	2.01
3200729	Drill Core	0.85	0.03	0.34	0.25	0.01	4.68	<0.01	0.06	1.05	8.32	99.28	0.11	2.58	4.88	1.38	1.18	<0.08	3.76	3.34
3200730	Drill Core	0.73	0.02	0.28	0.30	0.01	5.51	<0.01	0.18	2.13	8.65	98.99	0.10	2.29	5.90	1.22	1.06	<0.08	4.22	5.03
3200731	Drill Core	0.61	0.02	0.24	0.13	<0.01	2.21	<0.01	0.76	10.38	7.78	100.81	0.08	2.00	8.20	1.16	0.83	<0.08	3.68	13.56
3200732	Drill Core	0.58	0.03	0.31	0.33	0.01	6.83	<0.01	0.11	3.17	9.40	99.23	0.11	2.39	6.97	1.32	1.05	<0.08	5.05	5.78
3200733	Drill Core	0.47	0.03	0.29	0.27	0.01	6.29	<0.01	0.19	3.69	7.77	98.95	0.11	2.13	6.25	0.98	1.14	<0.08	4.28	5.91
3200734	Drill Core	0.17	0.03	0.27	0.18	0.01	4.08	<0.01	1.21	7.34	8.32	99.74	0.10	2.18	6.93	0.95	1.21	<0.08	2.78	12.47
3200735	Drill Core	0.06	0.03	0.27	0.29	<0.01	2.81	<0.01	0.49	3.44	8.26	100.62	0.11	2.39	3.97	1.15	1.23	<0.08	1.81	6.47
3200736	Drill Core	0.04	0.12	0.24	0.24	0.01	3.61	<0.01	0.72	5.06	7.87	98.25	0.08	2.01	5.68	0.99	0.90	0.46	2.75	8.80
3200737	Drill Core	0.02	0.35	0.15	0.18	0.01	22.33	<0.01	0.66	5.49	7.34	86.96	0.05	1.08	9.20	0.34	0.18	2.07	0.66	25.61
3200738	Drill Core	0.05	0.03	0.14	0.16	<0.01	13.54	<0.01	1.53	10.93	5.58	93.03	0.04	0.06	9.40	0.05	<0.02	<0.08	1.60	23.41
3200739	Drill Core	0.03	0.03	0.14	0.29	<0.01	24.37	<0.01	2.39	7.01	6.21	85.77	0.04	0.10	10.67	0.08	<0.02	<0.08	0.72	29.85
3200740	Rock Pulp	3.49	0.18	0.21	0.09	<0.01	0.08	0.02	4.81	10.75	13.45	97.66	0.01	2.49	11.25	0.52	<0.02	7.22	5.85	16.21
3200741	Drill Core	0.01	0.03	0.14	0.17	<0.01	22.23	<0.01	1.41	7.19	5.65	87.41	0.06	0.07	10.82	0.07	<0.02	<0.08	2.00	26.47
3200742	Drill Core	0.01	0.03	0.14	0.16	<0.01	24.50	<0.01	1.62	7.58	5.45	86.78	0.04	0.07	10.75	0.06	<0.02	<0.08	0.65	30.30
3200743	Drill Core	0.01	0.03	0.25	0.28	0.01	12.58	<0.01	1.23	7.05	6.79	94.23	0.08	0.13	8.35	0.11	<0.02	<0.08	1.52	20.49
3200744	Drill Core	<0.01	0.03	0.09	0.09	<0.01	30.70	<0.01	0.57	6.18	3.87	81.87	0.03	0.09	11.06	0.06	<0.02	<0.08	<0.05	33.99
3200745	Drill Core	<0.01	0.03	0.11	0.12	0.01	34.01	<0.01	0.68	6.03	3.73	80.12	0.03	0.06	11.53	0.04	<0.02	<0.08	0.13	34.20
3200746	Drill Core	<0.01	0.03	0.12	0.22	0.01	27.16	<0.01	2.29	8.02	5.08	85.34	0.04	0.16	11.05	0.13	<0.02	<0.08	<0.05	33.09
3200747	Drill Core	0.04	0.13	0.26	0.47	0.02	4.91	<0.01	0.40	7.38	8.61	98.81	0.08	2.07	5.78	1.20	0.65	0.79	1.38	13.19
3200748	Drill Core	0.19	0.04	0.35	0.46	0.01	7.09	<0.01	0.06	3.67	7.60	99.09	0.12	2.56	4.55	1.32	1.21	0.14	2.23	6.94
3200749	Drill Core	0.23	0.09	0.45	0.20	<0.01	9.96	<0.01	<0.01	0.16	6.20	98.40	0.05	0.97	3.20	0.52	0.31	0.52	2.30	2.71
3200750	Drill Core	0.59	0.09	0.56	0.18	<0.01	10.26	<0.01	<0.01	0.18	5.09	99.77	0.06	1.21	2.16	0.62	0.36	0.84	1.80	1.09
3200751	Drill Core	0.93	0.29	0.43	0.21	<0.01	5.28	<0.01	<0.01	0.27	7.92	98.29	0.05	1.43	4.36	0.56	0.27	2.17	3.59	2.30
3200752	Drill Core	1.57	0.14	0.47	0.40	<0.01	3.39	0.02	<0.01	0.01	6.85	97.86	0.05	1.03	4.85	0.59	0.28	0.59	4.10	2.26
3200753	Drill Core	2.46	0.04	0.57	0.24	0.01	1.63	<0.01	<0.01	<0.01	5.10	98.32	0.07	1.34	2.98	0.73	0.59	<0.08	2.77	0.62
3200754	Drill Core	2.76	0.04	0.60	0.30	<0.01	1.38	<0.01	<0.01	0.02	4.86	99.49	0.06	1.27	2.14	0.71	0.54	0.08	1.94	0.59



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MacMillan Pass

Report Date:

August 18, 2019

Page:

1 of 2

Part:

1 of 3

QUALITY CONTROL REPORT

WHI19000262.1

	Method	WGHT	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001
3200728	Drill Core	5.67	16.8	42.9	87.3	530	<0.5	64.9	4.4	37	2.24	30	2.0	3.6	27	1.2	10.0	<0.5	76	0.15	0.107
Pulp Duplicates																					
3200731	Drill Core	3.95	16.9	95.6	7278.2	104809	2.5	54.4	9.5	48	2.68	26	2.1	3.0	28	92.7	7.3	<0.5	81	0.07	0.054
REP 3200731	QC		16.8	93.1	7387.1	104855	2.5	53.9	10.2	42	2.71	24	1.9	3.0	28	87.9	7.5	<0.5	76	0.07	0.061
3200733	Drill Core	4.96	16.1	58.4	1628.5	36901	1.1	69.4	6.6	90	3.53	49	2.3	4.0	37	47.9	7.2	<0.5	101	0.22	0.112
REP 3200733	QC																				
3200743	Drill Core	2.28	12.7	44.1	12505.7	71882	1.3	51.5	9.3	64	1.88	38	3.6	2.9	82	159.2	20.7	<0.5	377	0.09	0.120
REP 3200743	QC																				
3200745	Drill Core	4.22	6.1	26.6	6618.4	62374	0.5	28.5	5.3	23	0.53	15	2.2	1.0	38	54.9	2.6	<0.5	183	0.04	0.048
REP 3200745	QC																				
3200746	Drill Core	4.94	7.6	82.4	21727.2	81423	2.4	39.8	7.1	45	0.70	23	3.2	1.6	67	202.9	6.8	<0.5	201	0.07	0.095
REP 3200746	QC																				
3200752	Drill Core	5.95	3.4	260.9	39.5	152	<0.5	82.9	10.3	914	4.74	17	2.3	6.3	104	1.3	7.7	<0.5	38	0.14	0.180
REP 3200752	QC																				
Core Reject Duplicates																					
3200732	Drill Core	4.06	17.6	94.6	655.1	31886	1.1	84.8	9.4	103	4.40	52	3.0	3.5	32	46.9	8.9	<0.5	96	0.26	0.144
DUP 3200732	QC		17.8	95.5	656.7	31261	1.1	83.6	9.3	108	4.40	50	3.1	3.9	33	48.8	9.0	<0.5	97	0.25	0.138
Reference Materials																					
STD COO1	Standard																				
STD COO1	Standard																				
STD GGC-10	Standard																				
STD GGC-10	Standard																				
STD GGC-10	Standard																				
STD GS311-1	Standard																				
STD GS910-4	Standard																				
STD OREAS133B(D)	Standard																				
STD OREAS605	Standard		4.8	49111.0	855.7	2119	977.0	1531.4	94.6	88	3.63	1680	0.9	2.9	49	13.8	280.3	18.9	<10	0.18	0.009
STD OREAS72B	Standard																				
STD OREAS927-AR	Standard		1.0	10576.4	222.5	715	4.7	29.9	29.0	1102	8.12	11	1.7	13.6	13	1.1	1.1	68.1	34	0.31	0.051



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Report Date:

August 18, 2019

Page:

1 of 2

Part:

2 of 3

QUALITY CONTROL REPORT

WHI19000262.1

	Method Analyte Unit MDL	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	LF725	LF725	LF725	LF725	LF725
		La	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se	SiO2	Al2O3	Fe2O3	CaO	MgO
		ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	%
		0.5	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	0.01	0.01	0.01	0.01	0.01
3200728	Drill Core	9.9	12.8	0.02	908	0.003	1.90	<0.01	0.14	<0.5	0.15	2.0	1.1	1.62	<5	5	72.37	8.21	3.41	0.24	0.25
Pulp Duplicates																					
3200731	Drill Core	7.2	14.7	0.01	168	0.002	1.01	<0.01	0.12	<0.5	10.94	2.2	4.3	7.38	<5	18	67.58	4.00	3.99	0.12	0.11
REP 3200731	QC	7.1	14.9	<0.01	168	0.002	1.00	<0.01	0.12	<0.5	11.10	2.5	4.4	7.51	<5	16					
3200733	Drill Core	9.1	18.0	<0.01	360	0.002	2.65	<0.01	0.09	<0.5	4.11	3.1	11.5	4.37	<5	6	65.83	6.83	5.20	0.33	0.09
REP 3200733	QC																				
3200743	Drill Core	10.1	81.6	<0.01	216	0.112	0.68	<0.01	<0.01	3.4	8.28	2.8	2.0	5.42	<5	7	55.96	3.89	2.73	0.13	<0.01
REP 3200743	QC																56.17	3.89	2.73	0.13	<0.01
3200745	Drill Core	5.9	38.6	<0.01	346	0.054	0.34	<0.01	<0.01	<0.5	1.84	1.0	1.3	3.56	<5	3	27.03	1.98	0.84	0.07	<0.01
REP 3200745	QC																27.09	1.95	0.82	0.07	<0.01
3200746	Drill Core	5.2	42.4	<0.01	321	0.060	0.54	<0.01	<0.01	<0.5	11.37	2.1	1.7	4.77	<5	6	33.68	2.24	1.06	0.11	<0.01
REP 3200746	QC																				
3200752	Drill Core	11.4	12.6	0.02	291	0.003	0.98	<0.01	0.15	<0.5	0.14	3.9	<0.5	4.19	<5	2	67.95	8.94	7.23	0.22	0.26
REP 3200752	QC																				
Core Reject Duplicates																					
3200732	Drill Core	8.3	18.6	0.01	274	0.002	2.96	<0.01	0.10	<0.5	3.84	4.1	15.9	5.00	<5	6	62.06	7.80	6.51	0.38	0.12
DUP 3200732	QC	8.8	18.5	<0.01	290	0.003	2.97	<0.01	0.09	<0.5	3.65	3.8	16.5	4.97	<5	6	62.18	7.86	6.48	0.38	0.13
Reference Materials																					
STD COO1	Standard																				
STD COO1	Standard																				
STD GGC-10	Standard																				
STD GGC-10	Standard																				
STD GGC-10	Standard																				
STD GS311-1	Standard																				
STD GS910-4	Standard																				
STD OREAS133B(D)	Standard																34.44	7.12	11.49	5.20	3.77
STD OREAS605	Standard	7.4	29.2	0.03	146	0.010	0.77	0.03	0.14	6.8	1.64	1.3	16.3	7.74	7	78					
STD OREAS72B	Standard																51.38	8.98	10.02	3.99	16.11
STD OREAS927-AR	Standard	28.1	38.9	1.90	50	0.095	3.23	<0.01	0.27	5.3	0.19	4.2	<0.5	1.80	9	16					



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Report Date:

August 18, 2019

Page:

1 of 2

Part:

3 of 3

QUALITY CONTROL REPORT

WHI19000262.1

	Method Analyte Unit MDL	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	TC000	TC000	TC005	TC005	TC006	TC008	TC008
		K2O	MnO	TiO2	P2O5	Cr2O3	Ba	Cu	Pb	Zn	LOI	SUM_T	V2O5	TOT/C	TOT/S	C/ORG	C/GRA	CO2	S/S-	SO4
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-5.11	0.01	0.01	0.02	0.02	0.02	0.02	0.08	0.05	0.05
3200728	Drill Core	1.15	0.02	0.39	0.25	<0.01	4.75	<0.01	0.01	0.05	7.62	99.31	0.13	2.22	2.76	1.33	0.88	<0.08	2.09	2.01
Pulp Duplicates																				
3200731	Drill Core	0.61	0.02	0.24	0.13	<0.01	2.21	<0.01	0.76	10.38	7.78	100.81	0.08	2.00	8.20	1.16	0.83	<0.08	3.68	13.56
REP 3200731	QC																	<0.08		
3200733	Drill Core	0.47	0.03	0.29	0.27	0.01	6.29	<0.01	0.19	3.69	7.77	98.95	0.11	2.13	6.25	0.98	1.14	<0.08	4.28	5.91
REP 3200733	QC																	1.00		
3200743	Drill Core	0.01	0.03	0.25	0.28	0.01	12.58	<0.01	1.23	7.05	6.79	94.23	0.08	0.13	8.35	0.11	<0.02	<0.08	1.52	20.49
REP 3200743	QC	<0.01	0.03	0.26	0.29	<0.01	12.56	<0.01	1.25	7.04	6.79	94.42	0.08							
3200745	Drill Core	<0.01	0.03	0.11	0.12	0.01	34.01	<0.01	0.68	6.03	3.73	80.12	0.03	0.06	11.53	0.04	<0.02	<0.08	0.13	34.20
REP 3200745	QC	<0.01	0.03	0.11	0.12	<0.01	33.94	<0.01	0.69	6.05	3.73	80.08	0.03				<0.02			
3200746	Drill Core	<0.01	0.03	0.12	0.22	0.01	27.16	<0.01	2.29	8.02	5.08	85.34	0.04	0.16	11.05	0.13	<0.02	<0.08	<0.05	33.09
REP 3200746	QC													0.16	11.21					
3200752	Drill Core	1.57	0.14	0.47	0.40	<0.01	3.39	0.02	<0.01	0.01	6.85	97.86	0.05	1.03	4.85	0.59	0.28	0.59	4.10	2.26
REP 3200752	QC																			2.24
Core Reject Duplicates																				
3200732	Drill Core	0.58	0.03	0.31	0.33	0.01	6.83	<0.01	0.11	3.17	9.40	99.23	0.11	2.39	6.97	1.32	1.05	<0.08	5.05	5.78
DUP 3200732	QC	0.58	0.03	0.30	0.32	0.01	6.93	<0.01	0.10	3.16	9.13	99.18	0.12	2.36	6.95	1.37	0.98	<0.08	4.93	6.06
Reference Materials																				
STD COO1	Standard																	2.34		
STD COO1	Standard																	2.29		
STD GGC-10	Standard																	4.56		
STD GGC-10	Standard																	4.61		
STD GGC-10	Standard																	4.51		
STD GS311-1	Standard													0.99	2.43					
STD GS910-4	Standard													2.69	8.39					
STD OREAS133B(D)	Standard	3.48	0.16	0.22	0.12	<0.01	0.08	0.06	5.03	11.38	0.00	85.84	0.01							
STD OREAS605	Standard																			
STD OREAS72B	Standard	1.33	0.15	0.33	0.05	0.14	0.03	0.02	<0.01	<0.01	5.12	98.91	0.02							
STD OREAS927-AR	Standard																			



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Report Date:

August 18, 2019

Page:

2 of 2

Part:

1 of 3

QUALITY CONTROL REPORT

WHI19000262.1

		WGHT	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01
STD RTS-3A	Standard																			
STD RTS-3A	Standard																			
STD SY-4(D)	Standard																			
STD GS311-1 Expected																				
STD GS910-4 Expected																				
STD COO1 Expected																				
STD RTS-3A Expected																				
STD SY-4(D) Expected																				
STD OREAS72B Expected																				
STD OREAS133B(D) Expected																				
STD OREAS605 Expected			4.75	49800	856	2170	984	1568	96	86	3.75	1674	0.92		49	13.6	307	19	7.8	0.182
STD OREAS927-AR Expected			1.06	10715	212	726	4.9	30.9	29.4	1110	8.15	13.5	1.7	12.5	13.1	1.1	1.3	66	34	0.3
STD GGC-10 Expected																				
BLK	Blank																			
BLK	Blank																			
BLK	Blank																			
SI BLK	Blank																			
BLK	Blank																			
BLK	Blank		<0.5	<0.5	0.6	13	<0.5	<0.5	<0.5	<5	<0.01	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<10	<0.01
BLK	Blank																			
Prep Wash																				
ROCK-WHI	Prep Blank		0.9	2.2	1.5	33	<0.5	1.0	3.2	504	1.78	<5	0.5	1.8	24	<0.5	<0.5	<0.5	23	0.65
ROCK-WHI	Prep Blank		1.1	2.2	1.4	32	<0.5	0.6	3.4	508	1.87	<5	<0.5	2.3	23	<0.5	<0.5	<0.5	23	0.63



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Report Date:

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Page:

2 of 2

Part:

2 of 3

QUALITY CONTROL REPORT

WHI19000262.1

		AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	AQ270	LF725	LF725	LF725	LF725	LF725
		La	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	SiO2	Al2O3	Fe2O3	CaO	MgO
		ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	%
		0.5	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	0.01	0.01	0.01	0.01	0.01
STD RTS-3A	Standard																				
STD RTS-3A	Standard																				
STD SY-4(D)	Standard																49.98	20.88	6.22	7.96	0.52
STD GS311-1 Expected																					
STD GS910-4 Expected																					
STD COO1 Expected																					
STD RTS-3A Expected																					
STD SY-4(D) Expected																	49.9	20.69	6.21	8.05	0.54
STD OREAS72B Expected																	51.16	8.97	9.724	3.96	15.933
STD OREAS133B(D) Expected																	33.83	6.91	11.67	5.4	3.73
STD OREAS605 Expected		7.5	27.5	0.0289	160	0.01	0.73	0.0328	0.134	7.1	1.7	1.05	15.9	7.86	6.7	79					
STD OREAS927-AR Expected		26.9	41.7	1.94	51.4	0.085	3.25	0.011	0.27	4.9	0.12	4.74		1.77	9.09	15.5					
STD GGC-10 Expected																					
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
SI BLK	Blank																98.90	0.29	0.02	0.02	0.02
BLK	Blank																				
BLK	Blank	<0.5	<0.5	<0.01	10	<0.001	<0.01	<0.01	<0.01	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2					
BLK	Blank																				
Prep Wash																					
ROCK-WHI	Prep Blank	6.7	2.3	0.43	60	0.097	0.81	0.07	0.09	<0.5	<0.05	3.3	<0.5	<0.05	<5	<2	71.34	13.99	3.19	2.34	0.85
ROCK-WHI	Prep Blank	6.5	2.6	0.41	56	0.106	0.88	0.09	0.10	<0.5	<0.05	3.0	<0.5	<0.05	<5	<2	71.02	14.14	3.35	2.32	0.86



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Project:

MacMillan Pass

Report Date:

August 18, 2019

Page:

2 of 2

Part:

3 of 3

QUALITY CONTROL REPORT

WHI19000262.1

		LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	LF725	TC000	TC000	TC005	TC005	TC006	TC008	TC008	
		K2O	MnO	TiO2	P2O5	Cr2O3	Ba	Cu	Pb	Zn	LOI	SUM_T	V2O5	TOT/C	TOT/S	C/ORG	C/GRA	CO2	S/S-	SO4
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-5.11	0.01	0.01	0.02	0.02	0.02	0.02	0.08	0.05	0.05
STD RTS-3A	Standard																			3.39
STD RTS-3A	Standard																			3.62
STD SY-4(D)	Standard	1.69	0.11	0.29	0.14	<0.01	0.04	<0.01	0.01	<0.01	4.56	99.78	<0.01							
STD GS311-1 Expected														1.02	2.35					
STD GS910-4 Expected														2.65	8.27					
STD COO1 Expected																			2.37	
STD RTS-3A Expected																				3.3
STD SY-4(D) Expected		1.66	0.108	0.287	0.131	0.0345			4.56											
STD OREAS72B Expected		1.313	0.13	0.355	0.061	0.142	0.0335	0.0193	5.12											
STD OREAS133B(D) Expected							0.08	0.032	5.06	11.35										
STD OREAS605 Expected																				
STD OREAS927-AR Expected																				
STD GGC-10 Expected																	4.79			
BLK	Blank													<0.02	<0.02					
BLK	Blank																		<0.08	
BLK	Blank																			<0.05
SI BLK	Blank	<0.01	0.02	0.03	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.00	99.32	<0.01							
BLK	Blank																<0.02			
BLK	Blank																			
BLK	Blank																<0.02			
Prep Wash																				
ROCK-WHI	Prep Blank	2.01	0.10	0.34	0.09	<0.01	0.09	<0.01	<0.01	<0.01	0.86	99.92	<0.01	0.11	<0.02	0.07	<0.02	0.16	<0.05	0.09
ROCK-WHI	Prep Blank	2.01	0.11	0.33	0.09	<0.01	0.08	<0.01	<0.01	<0.01	0.75	99.77	<0.01	0.10	<0.02	0.04	<0.02	0.23	<0.05	0.08