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: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Submitted By: Quentin Yarie
Receiving Lab: Canada-Timmins
Received: August 22, 2019
Report Date: October 07, 2019

CERTIFICATE OF ANALYSIS TIM19001842.2

CLIENT JOB INFORMATION

Project: SPJ
Shipment ID:
P.O. Number
Number of Samples: 19

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
PRP85-500	19	Crush split and pulverize 250g of sample to 200mesh			TIM
SHP01	19	Per sample shipping charges for branch shipments			TIM
FA450	18	50g Lead Collection Fire Assay Fusion - AAS Finish	50	Completed	TIM
EN002	19	Environmental disposal charge-Fire assay lead waste			TIM
MA200	19	4 Acid digestion ICP-MS analysis	0.25	Completed	VAN
EN001-MA	19	Environmental disposal fee - Multi-acid neutralization			VAN

ADDITIONAL COMMENTS

Version 2 - Elements set to re-order alphabetically

Invoice To: MacDonald Mines Exploration Ltd.
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
Marcus Lau
MARCUS LAU
Production Manager

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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Project: SPJ
Report Date: October 07, 2019

CERTIFICATE OF ANALYSIS TIM19001842.2

	Method	WGHT	FA450	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Wgt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Hf	In	K	La	Li
	Unit	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	MDL	0.01	0.005	0.1	0.01	1	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.01	0.1	0.05	0.01	0.1	0.1
802351	Grab Sample	1.93	0.136	0.2	4.03	142	35	<1	4.8	0.10	<0.1	14	130.4	28	44.0	3.29	1.3	<0.05	0.26	6.5	0.6
802352	Grab Sample	1.23	0.798	1.8	0.13	807	4	<1	54.6	0.26	<0.1	8	1645.1	9	232.5	34.67	0.2	0.06	0.03	4.0	0.8
802353	Grab Sample	1.26	0.023	<0.1	4.49	65	23	1	0.6	0.21	<0.1	35	48.3	71	89.4	5.17	2.9	<0.05	0.34	12.3	3.8
802354	Grab Sample	1.29	0.057	0.1	1.56	463	8	<1	6.4	0.04	<0.1	7	687.4	19	36.3	26.69	0.4	<0.05	0.18	3.4	2.5
802355	Grab Sample	3.20	0.023	<0.1	4.67	41	36	<1	0.8	0.14	<0.1	9	44.5	24	11.2	2.12	1.1	<0.05	0.33	4.3	2.4
802356	Grab Sample	2.31	0.042	0.2	4.62	536	53	1	3.4	1.00	<0.1	35	250.4	49	238.6	8.28	2.2	<0.05	0.26	11.1	8.0
802357	Grab Sample	1.96	8.620	<0.1	4.95	8	5	3	0.5	0.50	<0.1	68	29.2	78	321.1	14.22	2.4	0.09	0.02	32.2	9.2
802358	Grab Sample	2.51	3.409	<0.1	4.40	5	31	<1	0.6	0.05	<0.1	33	7.7	42	95.0	9.60	1.1	0.10	0.05	16.1	6.8
802359	Grab Sample	2.81	5.752	0.4	3.75	20	60	<1	0.4	0.04	<0.1	28	19.2	81	215.3	9.79	1.5	0.05	0.06	14.0	4.7
802360	Grab Sample	2.72	7.455	0.5	2.68	40	22	1	1.3	2.40	<0.1	8	159.7	80	62.4	29.26	1.1	<0.05	0.10	3.6	4.0
802361	Grab Sample	1.48	0.796	<0.1	4.22	10	11	1	0.1	8.18	<0.1	27	12.1	120	18.8	7.81	2.1	0.06	0.05	11.8	4.3
802362	Grab Sample	1.51	>10	0.2	1.11	653	199	<1	<0.1	0.05	<0.1	4	12.5	4	46.3	1.08	0.2	<0.05	0.56	1.8	2.3
802363	Grab Sample	1.15	0.011	<0.1	0.24	4	24	<1	<0.1	0.11	<0.1	5	1.4	3	9.4	0.71	<0.1	<0.05	0.08	1.8	0.8
802364	Grab Sample	1.38		<0.1	0.51	165	15	<1	<0.1	0.06	<0.1	9	4.8	2	52.6	1.88	0.2	<0.05	0.04	4.8	1.7
802365	Grab Sample	1.49	2.612	<0.1	6.25	2747	119	2	<0.1	0.89	<0.1	27	17.4	6	157.7	4.21	3.4	0.08	1.76	14.0	13.9
802366	Grab Sample	3.02	>10	<0.1	4.00	2269	152	1	<0.1	1.10	<0.1	14	18.2	5	98.0	3.69	2.0	0.05	1.41	6.8	7.3
802367	Grab Sample	2.57	0.385	<0.1	0.23	978	26	<1	<0.1	0.05	0.2	<1	22.3	2	34.7	1.13	<0.1	<0.05	0.09	0.4	1.4
802368	Grab Sample	2.16	3.891	<0.1	2.83	191	377	<1	<0.1	0.05	<0.1	12	16.7	7	77.4	3.40	1.1	0.08	1.15	4.9	9.3
802369	Grab Sample	2.51	0.008	<0.1	6.53	33	84	3	0.3	1.66	<0.1	37	32.9	77	91.1	3.38	3.1	<0.05	0.07	13.9	4.3

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Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: October 07, 2019

CERTIFICATE OF ANALYSIS TIM19001842.2

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Unit	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	1	0.1	0.001	0.1	0.1	0.001	0.1	0.1	0.005	0.1	0.1	1	1	0.1	1	0.1	0.5	0.1	0.001
802351	Grab Sample	0.11	30	2.1	5.074	0.7	150.8	0.049	5.8	3.6	<0.005	3.2	1.1	1	7	0.8	43	<0.1	1.2	2.1	0.036
802352	Grab Sample	0.11	30	0.3	0.030	0.1	2109.5	0.128	44.1	1.9	0.006	>10	4.4	<1	67	<0.1	4	<0.1	10.0	1.0	0.020
802353	Grab Sample	1.41	72	0.6	4.388	8.7	175.4	0.094	5.5	9.1	<0.005	3.1	1.0	6	8	2.5	26	0.7	<0.5	6.3	0.259
802354	Grab Sample	0.46	45	0.3	0.932	0.5	228.9	0.015	24.9	11.5	0.014	>10	2.8	2	46	<0.1	18	<0.1	1.8	1.6	0.031
802355	Grab Sample	0.85	40	1.7	4.234	0.6	56.1	0.063	2.3	5.8	<0.005	0.8	0.2	4	4	0.1	41	<0.1	<0.5	1.8	0.024
802356	Grab Sample	1.97	139	<0.1	3.156	0.9	1243.9	0.045	6.0	15.0	0.006	6.7	1.5	11	21	0.3	29	<0.1	1.0	7.1	0.054
802357	Grab Sample	2.84	394	0.2	0.179	5.1	41.4	0.223	8.5	0.8	<0.005	2.3	0.3	14	3	<0.1	6	0.4	<0.5	9.0	0.179
802358	Grab Sample	1.75	270	0.3	1.127	1.2	32.8	0.021	5.9	3.7	<0.005	0.7	0.3	9	<1	<0.1	8	0.1	0.7	2.9	0.059
802359	Grab Sample	1.61	200	1.1	0.712	2.4	15.5	0.024	9.8	4.5	<0.005	0.4	1.0	19	3	0.1	6	0.2	<0.5	3.1	0.100
802360	Grab Sample	0.10	125	0.3	0.797	1.3	75.2	0.033	9.2	2.0	<0.005	6.0	5.1	1	17	1.8	203	0.1	0.6	1.3	0.124
802361	Grab Sample	1.00	259	0.4	0.449	7.8	26.4	0.053	7.9	0.6	<0.005	0.9	3.5	11	3	2.8	375	0.6	<0.5	3.9	0.251
802362	Grab Sample	0.16	180	0.2	0.015	0.4	7.1	0.007	2.9	20.2	<0.005	0.1	0.3	7	1	0.2	4	<0.1	<0.5	0.5	0.079
802363	Grab Sample	0.07	246	0.3	0.049	<0.1	7.4	0.002	2.8	2.8	<0.005	<0.1	0.2	3	<1	<0.1	9	<0.1	<0.5	0.6	0.007
802364	Grab Sample	0.29	172	0.3	0.035	0.5	3.1	0.004	5.0	1.6	<0.005	0.2	0.2	2	<1	<0.1	5	<0.1	<0.5	0.5	0.042
802365	Grab Sample	0.61	320	1.0	2.515	5.9	6.5	0.060	14.3	48.2	<0.005	1.1	0.8	19	3	1.1	95	0.5	2.2	7.9	0.475
802366	Grab Sample	0.43	312	0.7	1.592	3.5	2.9	0.037	15.7	50.7	<0.005	1.0	0.6	11	<1	0.5	89	0.3	1.7	4.6	0.315
802367	Grab Sample	0.07	150	0.3	0.013	<0.1	16.4	<0.001	6.0	3.4	<0.005	0.2	0.4	<1	<1	<0.1	2	<0.1	0.6	<0.1	0.004
802368	Grab Sample	0.67	298	0.4	0.070	1.9	10.5	0.021	14.0	42.0	<0.005	<0.1	0.3	17	<1	0.7	6	0.1	<0.5	2.5	0.293
802369	Grab Sample	1.86	85	0.2	6.243	8.6	95.8	0.038	8.0	0.8	<0.005	0.8	0.6	10	4	2.5	40	0.5	<0.5	5.3	0.365

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Project: SPJ
Report Date: October 07, 2019

CERTIFICATE OF ANALYSIS TIM19001842.2

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Tl	U	V	W	Y	Zn	Zr
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	0.5	0.1	1	0.1	0.1	1	0.1
802351	Grab Sample	<0.5	0.7	11	0.7	1.8	2	49.0
802352	Grab Sample	<0.5	0.5	4	0.2	2.5	6	4.6
802353	Grab Sample	<0.5	1.7	73	0.4	6.7	9	100.4
802354	Grab Sample	<0.5	0.9	16	0.3	1.7	8	14.0
802355	Grab Sample	<0.5	0.9	26	0.6	1.8	5	35.7
802356	Grab Sample	<0.5	2.2	74	0.4	11.2	6	77.9
802357	Grab Sample	<0.5	6.6	64	6.1	15.1	21	82.0
802358	Grab Sample	<0.5	1.0	53	3.0	4.3	18	38.5
802359	Grab Sample	<0.5	0.7	60	5.8	7.2	16	55.1
802360	Grab Sample	<0.5	1.7	209	1.0	5.9	3	39.6
802361	Grab Sample	<0.5	2.7	121	>200	11.4	5	65.1
802362	Grab Sample	<0.5	0.2	61	1.1	2.8	7	6.8
802363	Grab Sample	<0.5	0.3	4	0.5	5.0	8	2.2
802364	Grab Sample	<0.5	0.6	15	0.4	4.5	21	5.6
802365	Grab Sample	<0.5	2.6	105	2.9	17.6	23	124.0
802366	Grab Sample	<0.5	1.6	70	1.8	14.5	23	74.0
802367	Grab Sample	<0.5	<0.1	10	0.1	0.7	76	0.5
802368	Grab Sample	<0.5	0.9	162	2.1	5.8	30	38.1
802369	Grab Sample	<0.5	2.0	105	0.3	14.9	4	107.1

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QUALITY CONTROL REPORT TIM19001842.2

	Method	WGHT	FA450	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Wgt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Hf	In	K	La	Li
	Unit	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	MDL	0.01	0.005	0.1	0.01	1	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.01	0.1	0.05	0.01	0.1	0.1
Pulp Duplicates																					
802354	Grab Sample	1.29	0.057	0.1	1.56	463	8	<1	6.4	0.04	<0.1	7	687.4	19	36.3	26.69	0.4	<0.05	0.18	3.4	2.5
REP 802354	QC		0.061																		
Reference Materials																					
STD OREAS25A-4A	Standard			<0.1	8.98	10	149	<1	0.4	0.26	<0.1	48	7.4	118	34.9	6.62	4.1	0.06	0.48	22.0	37.1
STD OREAS45E	Standard			0.3	7.00	14	254	<1	0.2	0.06	<0.1	24	60.1	945	788.9	24.73	2.9	0.06	0.33	11.3	6.7
STD OXC145	Standard		0.211																		
STD OXC145	Standard		0.210																		
STD OXH139	Standard		1.299																		
STD OXH139	Standard		1.307																		
STD OXN134	Standard		7.628																		
STD OXN134	Standard		7.620																		
STD OXC145 Expected			0.212																		
STD OXN134 Expected			7.667																		
STD OXH139 Expected			1.312																		
STD OREAS25A-4A Expected					8.87	9.94	147	0.93	0.37	0.301		47.3	7.7	115	33.9	6.6	4.14	0.09	0.482	21.8	36.7
STD OREAS45E Expected				0.311	6.78	16.3	252		0.28	0.065	0.06	23.5	57	979	780	24.12	3.11	0.099	0.324	11	6.58
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank			<0.1	<0.01	<1	2	<1	<0.1	<0.01	<0.1	<1	<0.2	<1	<0.1	<0.01	<0.1	<0.05	<0.01	<0.1	<0.1
Prep Wash																					
ROCK-TIM	Prep Blank		<0.005	<0.1	6.50	1	807	1	<0.1	1.46	<0.1	24	3.9	5	4.2	2.07	1.6	<0.05	1.58	11.9	3.4

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	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Unit	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	1	0.1	0.001	0.1	0.1	0.001	0.1	0.1	0.005	0.1	0.1	1	1	0.1	1	0.1	0.5	0.1	0.001
Pulp Duplicates																					
802354	Grab Sample	0.46	45	0.3	0.932	0.5	228.9	0.015	24.9	11.5	0.014	>10	2.8	2	46	<0.1	18	<0.1	1.8	1.6	0.031
REP 802354	QC																				
Reference Materials																					
STD OREAS25A-4A	Standard	0.35	538	2.4	0.131	20.5	49.9	0.049	25.1	56.2	<0.005	<0.1	0.6	12	2	4.1	44	1.4	<0.5	15.6	0.917
STD OREAS45E	Standard	0.17	545	2.4	0.056	5.9	449.8	0.034	18.4	20.1	<0.005	<0.1	1.0	88	2	1.0	15	0.5	<0.5	13.2	0.545
STD OXC145	Standard																				
STD OXC145	Standard																				
STD OXH139	Standard																				
STD OXH139	Standard																				
STD OXN134	Standard																				
STD OXN134	Standard																				
STD OXC145 Expected																					
STD OXN134 Expected																					
STD OXH139 Expected																					
STD OREAS25A-4A Expected		0.327	480	2.41	0.131	20.9	45.8	0.048	25.2	61		0.047	0.65	13.7	2.4	4.06	48.5	1.4		15.8	0.93
STD OREAS45E Expected		0.156	570	2.4	0.059	6.8	454	0.034	18.2	21.2		0.046	1	93	2.97	1.32	15.9	0.54	0.1	12.9	0.559
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.01	<1	<0.1	0.001	<0.1	<0.1	<0.001	0.4	<0.1	<0.005	<0.1	0.1	<1	<1	<0.1	<1	<0.1	<0.5	<0.1	<0.001
Prep Wash																					
ROCK-TIM	Prep Blank	0.50	633	1.5	3.396	5.1	1.0	0.041	5.4	30.3	<0.005	<0.1	0.3	6	<1	0.5	186	0.4	<0.5	2.7	0.197

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	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Tl	U	V	W	Y	Zn	Zr
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	0.5	0.1	1	0.1	0.1	1	0.1
Pulp Duplicates								
802354	Grab Sample	<0.5	0.9	16	0.3	1.7	8	14.0
REP 802354	QC							
Reference Materials								
STD OREAS25A-4A	Standard	<0.5	2.9	162	2.0	10.2	44	147.5
STD OREAS45E	Standard	<0.5	2.4	314	1.0	7.7	54	98.7
STD OXC145	Standard							
STD OXC145	Standard							
STD OXH139	Standard							
STD OXH139	Standard							
STD OXN134	Standard							
STD OXN134	Standard							
STD OXC145 Expected								
STD OXN134 Expected								
STD OXH139 Expected								
STD OREAS25A-4A Expected		0.35	2.94	157	2	10.5	44.4	155
STD OREAS45E Expected		0.15	2.41	322	1.07	8.28	46.7	97
BLK	Blank							
BLK	Blank							
BLK	Blank							
BLK	Blank							
BLK	Blank	<0.5	<0.1	<1	<0.1	<0.1	<1	<0.1
Prep Wash								
ROCK-TIM	Prep Blank	<0.5	1.1	32	0.3	15.1	39	49.4

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Submitted By: Quentin Yarie
Receiving Lab: Canada-Timmins
Received: August 22, 2019
Report Date: September 12, 2019

CERTIFICATE OF ANALYSIS TIM19001842M.1

CLIENT JOB INFORMATION

Project: SPJ
Shipment ID:
P.O. Number
Number of Samples: 1

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
PUL85	1	Pulverize to 85% passing 200 mesh			TIM
SPTRF	1	Split samples by riffle splitter			TIM
FS652	1	Metallic Sieve 1 kg to 150 mesh - save + and - fraction			TIM
FS652	1	Metallic Fire Assay - duplicate minus fraction analysis	50	Completed	TIM
EN002	1	Environmental disposal charge-Fire assay lead waste			TIM

ADDITIONAL COMMENTS

Invoice To: MacDonald Mines Exploration Ltd.
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8
Canada

CC:

SCOTT INGLIS
Fire Assay Manager

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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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9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: September 12, 2019

CERTIFICATE OF ANALYSIS TIM19001842M.1

	Method	M150 1kg	FA450	FA450	FS652	FS652	FS652
	Analyte	TotWt	-Au	-Au + Au Wt		+ Au	Au Total
	Unit	g	gm/t	gm/t	g	gm/t	gm/t
	MDL	1	0.005	0.005	0.01	0.05	0.05
802364	Grab Sample	745	2.020	2.264	31.78	121.49	7.23

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PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: September 12, 2019

QUALITY CONTROL REPORT TIM19001842M.1

	Method	M150 1kg	FA450	FA450	FS652	FS652	FS652
	Analyte	TotWt	-Au	-Au	+ Au Wt	+ Au	Au Total
	Unit	g	gm/t	gm/t	g	gm/t	gm/t
	MDL	1	0.005	0.005	0.01	0.05	0.05
Reference Materials							
STD OXC145	Standard			0.210			
STD OXC145	Standard		0.210				
STD OXH139	Standard			1.329			
STD OXH139	Standard		1.307				
STD OXN134	Standard		7.620				
STD OXQ90	Standard				50.00	25.34	
STD OXQ90 Expected						24.88	
BLK	Blank			<0.005			
BLK	Blank			<0.005			
BLK	Blank				50.00	<0.05	
BLK	Blank		<0.005				
BLK	Blank		<0.005				
Prep Wash							
ROCK-TIM	Prep Blank	950	<0.005	<0.005	33.75	<0.05	<0.05

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PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Submitted By: Quentin Yarie
Receiving Lab: Canada-Timmins
Received: September 19, 2019
Report Date: September 24, 2019

CERTIFICATE OF ANALYSIS TIM19001842N.1

CLIENT JOB INFORMATION

Project: SPJ
Shipment ID:
P.O. Number
Number of Samples: 2

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
PUL85	2	Pulverize to 85% passing 200 mesh			TIM
SPTRF	2	Split samples by riffle splitter			TIM
FS652	2	Metallic Sieve 1 kg to 150 mesh - save + and - fraction			TIM
FS652	2	Metallic Fire Assay - duplicate minus fraction analysis	50	Completed	TIM
EN002	2	Environmental disposal charge-Fire assay lead waste			TIM
FA550	2	Lead collection fire assay 50G fusion - Grav finish	50	Completed	TIM
FA550	2	Lead collection fire assay 50G fusion - Grav finish	50	Completed	TIM

ADDITIONAL COMMENTS

Invoice To: MacDonald Mines Exploration Ltd.
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8
Canada

CC:

SCOTT INGLIS
Fire Assay Manager

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PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: September 24, 2019

CERTIFICATE OF ANALYSIS TIM19001842N.1

	Method	M150 1kg	FA450	FA450	FS652	FS652	FS652	FA550	FA550
	Analyte	TotWt	-Au	-Au + Au Wt		+ Au	Au Total	-Au	-Au
	Unit	g	gm/t	gm/t	g	gm/t	gm/t	gm/t	gm/t
	MDL	1	0.005	0.005	0.01	0.05	0.05	0.9	0.9
802362	Grab Sample	720	>10	>10	25.88	191.62	18.53	12.1	12.0
802366	Grab Sample	1040	>10	>10	32.38	176.65	13.11	8.3	7.4

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Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: September 24, 2019

QUALITY CONTROL REPORT TIM19001842N.1

	Method	M150 1kg	FA450	FA450	FS652	FS652	FS652	FA550	FA550
	Analyte	TotWt	-Au	-Au	+ Au Wt	+ Au	Au Total	-Au	-Au
	Unit	g	gm/t	gm/t	g	gm/t	gm/t	gm/t	gm/t
	MDL	1	0.005	0.005	0.01	0.05	0.05	0.9	0.9
Reference Materials									
STD OXP116	Standard							15.2	
STD OXP116	Standard								15.2
STD OXQ90	Standard							25.1	
STD OXQ90	Standard							25.2	
STD OXQ90	Standard								25.1
STD OXQ90	Standard								25.2
STD OXQ90	Standard				50.34	25.11			
STD OXQ90 Expected						24.88			
BLK	Blank							<0.9	
BLK	Blank								<0.9
BLK	Blank				50.00	<0.05			
Prep Wash									
ROCK-TIM	Prep Blank	980	>10	>10	32.32	<0.05	<0.05	<0.9	<0.9

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PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Submitted By: Quentin Yarie
Receiving Lab: Canada-Timmins
Received: October 17, 2019
Report Date: November 05, 2019

CERTIFICATE OF ANALYSIS TIM19002336.1

CLIENT JOB INFORMATION

Project: SPJ
Shipment ID:
P.O. Number
Number of Samples: 19

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
PRP85-500	19	Crush split and pulverize 250g of sample to 200mesh			TIM
SHP01	19	Per sample shipping charges for branch shipments			TIM
SLBHP	0	Sort, label and box pulps			TIM
FA450	19	50g Lead Collection Fire Assay Fusion - AAS Finish	50	Completed	TIM
EN002	19	Environmental disposal charge-Fire assay lead waste			TIM
MA200	19	4 Acid digestion ICP-MS analysis	0.25	Completed	VAN
EN001-MA	19	Environmental disposal fee - Multi-acid neutralization			VAN
PF370	3	Fusion digestion (Na2O2) to 200 mL, analyzed by ICP-ES.	0.25	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: MacDonald Mines Exploration Ltd.
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8
Canada

CC: Quentin Yarie
Nicholas Wray

MAY LAI
Data Validation Specialist

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PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: November 05, 2019

CERTIFICATE OF ANALYSIS TIM19002336.1

	Method	WGHT	FA450	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Wgt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Hf	In	K	La	Li
	Unit	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	MDL	0.01	0.005	0.1	0.01	1	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.01	0.1	0.05	0.01	0.1	0.1
3482951	Grab Sample	1.63	<0.005	<0.1	5.72	5	23	<1	<0.1	0.41	<0.1	6	3.5	20	3.0	0.46	1.6	<0.05	0.25	2.9	0.8
3482952	Grab Sample	2.93	0.132	<0.1	6.39	19	18	<1	<0.1	1.99	<0.1	23	41.2	45	3.3	0.94	2.4	<0.05	0.12	10.4	0.8
3482953	Grab Sample	1.33	0.027	<0.1	7.47	10	31	<1	<0.1	0.17	<0.1	30	15.7	188	4.4	0.47	2.7	<0.05	0.39	14.0	0.8
3482954	Grab Sample	1.04	<0.005	<0.1	6.72	4	271	2	0.2	0.17	<0.1	52	22.5	106	3.1	4.37	2.8	0.05	1.09	24.4	11.7
3482955	Grab Sample	2.66	0.043	<0.1	6.56	11	18	<1	<0.1	0.07	<0.1	35	38.2	93	4.6	9.20	4.0	0.07	0.05	11.3	28.8
3482956	Grab Sample	1.79	0.100	<0.1	6.97	14	21	<1	0.1	0.07	<0.1	34	64.1	103	9.5	9.70	4.0	0.07	0.02	11.1	27.7
3482957	Grab Sample	1.37	4.889	0.1	3.02	367	13	<1	8.1	6.88	<0.1	47	1356.1	30	25.7	16.11	1.7	<0.05	0.33	22.8	2.5
3482958	Grab Sample	0.91	6.235	<0.1	4.88	8	43	<1	<0.1	6.86	<0.1	8	19.3	59	2.6	5.19	2.9	<0.05	0.54	3.2	11.3
3482959	Grab Sample	3.31	0.599	0.3	4.04	5	48	<1	0.2	0.25	<0.1	51	18.6	65	>10000	4.92	1.2	0.60	0.35	25.1	12.1
3482960	Grab Sample	2.37	0.490	0.8	0.44	6	9	3	0.3	9.83	<0.1	112	31.3	8	>10000	2.51	0.1	0.45	0.03	45.4	1.6
3482961	Grab Sample	0.41	0.463	3.2	1.42	3	16	<1	0.6	0.18	0.4	8	44.5	12	>10000	5.30	0.2	0.91	0.07	3.8	5.3
3482962	Grab Sample	2.56	0.007	<0.1	6.52	12	75	1	0.4	0.18	<0.1	14	64.5	97	49.7	5.83	2.5	<0.05	0.82	7.3	21.5
3482963	Grab Sample	2.57	0.005	<0.1	1.81	6	59	<1	<0.1	0.39	<0.1	14	6.2	13	24.3	1.72	0.3	<0.05	0.54	10.2	4.7
3482964	Grab Sample	0.74	0.006	<0.1	6.16	5	68	<1	0.3	0.16	<0.1	3	52.7	84	9.2	5.31	2.6	<0.05	0.44	1.3	16.1
3482965	Grab Sample	1.75	<0.005	<0.1	7.12	4	446	2	0.5	0.35	<0.1	39	29.4	122	31.7	5.63	3.4	0.06	1.80	19.4	22.5
3482966	Grab Sample	0.55	<0.005	<0.1	3.47	4	87	<1	<0.1	0.05	<0.1	12	5.9	32	10.8	1.42	2.1	<0.05	0.44	5.8	1.9
3482967	Grab Sample	1.39	<0.005	<0.1	6.47	7	130	<1	0.2	0.31	<0.1	15	16.4	110	15.5	3.35	2.8	<0.05	0.63	6.4	11.8
3482968	Grab Sample	1.66	<0.005	<0.1	6.48	12	711	2	0.4	1.47	<0.1	62	22.0	120	50.7	4.07	3.2	0.07	1.87	30.0	35.5
3482969	Grab Sample	1.97	0.011	<0.1	5.82	7	13	1	<0.1	1.30	<0.1	5	10.4	78	10.2	0.57	3.7	<0.05	0.07	1.8	0.3

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: November 05, 2019

CERTIFICATE OF ANALYSIS TIM19002336.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Unit	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	1	0.1	0.001	0.1	0.1	0.001	0.1	0.1	0.005	0.1	0.1	1	1	0.1	1	0.1	0.5	0.1	0.001
3482951	Grab Sample	0.16	117	0.2	7.445	0.7	5.7	0.025	2.0	0.6	<0.005	<0.1	0.2	1	<1	0.1	26	<0.1	<0.5	1.3	0.025
3482952	Grab Sample	0.93	224	1.3	7.135	1.4	20.2	0.042	1.7	0.5	<0.005	0.2	0.3	3	<1	0.3	38	0.1	<0.5	4.1	0.056
3482953	Grab Sample	0.01	40	0.2	7.406	2.5	8.8	0.072	3.3	3.7	<0.005	<0.1	0.2	1	<1	0.8	36	0.2	<0.5	8.3	0.102
3482954	Grab Sample	1.81	256	0.8	3.705	3.0	63.4	0.062	1.2	46.7	<0.005	<0.1	0.3	12	<1	1.5	90	0.2	<0.5	7.4	0.144
3482955	Grab Sample	7.54	2485	0.2	0.026	3.0	142.2	0.041	1.0	1.1	<0.005	<0.1	0.2	12	<1	0.5	3	0.3	0.6	12.6	0.101
3482956	Grab Sample	7.43	2547	0.6	0.022	2.2	205.0	0.043	1.5	0.9	<0.005	0.1	0.2	11	<1	0.3	4	0.2	<0.5	12.8	0.086
3482957	Grab Sample	3.72	1206	1.4	2.040	1.3	831.1	0.027	7.1	6.6	<0.005	>10	0.3	6	4	0.3	74	0.1	0.5	4.6	0.041
3482958	Grab Sample	4.96	2996	0.2	2.603	1.9	109.6	0.036	1.2	3.6	<0.005	<0.1	0.2	9	<1	0.2	72	0.2	0.7	9.1	0.066
3482959	Grab Sample	1.83	298	0.5	1.695	3.1	50.1	0.047	3.5	5.4	<0.005	1.2	0.3	9	6	0.7	62	0.3	<0.5	3.9	0.184
3482960	Grab Sample	5.92	568	0.2	0.204	0.2	8.0	0.004	11.0	1.0	<0.005	1.0	0.3	50	6	0.5	37	<0.1	1.4	0.4	0.011
3482961	Grab Sample	1.00	206	0.4	0.379	0.1	32.5	0.012	7.3	2.4	<0.005	2.6	0.4	4	11	1.2	27	<0.1	<0.5	0.6	0.018
3482962	Grab Sample	3.06	344	1.3	2.772	6.4	102.3	0.060	1.4	7.2	<0.005	0.2	0.2	11	<1	1.4	77	0.6	<0.5	6.9	0.310
3482963	Grab Sample	0.85	196	0.2	0.590	1.1	20.3	0.028	7.9	6.3	<0.005	<0.1	0.2	2	<1	0.4	42	<0.1	<0.5	2.0	0.051
3482964	Grab Sample	2.87	365	1.6	2.996	6.2	91.9	0.053	1.9	6.9	<0.005	0.2	0.2	10	<1	1.2	91	0.6	<0.5	8.1	0.296
3482965	Grab Sample	1.92	694	1.1	2.699	7.9	80.5	0.044	3.0	82.9	<0.005	<0.1	0.4	14	<1	2.2	87	0.8	<0.5	11.5	0.389
3482966	Grab Sample	0.13	53	0.7	3.505	1.6	12.5	0.010	5.3	13.7	<0.005	<0.1	0.2	3	<1	0.7	64	0.2	<0.5	3.3	0.078
3482967	Grab Sample	1.43	440	0.1	4.847	6.5	60.9	0.066	1.9	16.2	<0.005	<0.1	0.3	8	<1	1.4	82	0.6	<0.5	6.7	0.323
3482968	Grab Sample	1.56	574	1.3	2.657	7.7	75.9	0.057	10.4	79.9	<0.005	0.3	0.6	13	<1	1.7	204	0.6	<0.5	9.2	0.371
3482969	Grab Sample	0.55	177	0.2	7.065	7.0	9.1	0.046	1.7	<0.1	<0.005	<0.1	1.0	5	<1	1.4	20	0.6	<0.5	6.6	0.300

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PHONE (604) 253-3158

Client: **MacDonald Mines Exploration Ltd.**
145 Wellington St. West, Suite 1001
Toronto Ontario M5J 1H8 Canada

Project: SPJ
Report Date: November 05, 2019

CERTIFICATE OF ANALYSIS TIM19002336.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	PF370
	Analyte	Tl	U	V	W	Y	Zn	Zr	Cu
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.5	0.1	1	0.1	0.1	1	0.1	0.005
3482951	Grab Sample	<0.5	0.3	15	0.7	1.1	2	53.0	
3482952	Grab Sample	<0.5	0.8	27	1.6	3.2	5	86.4	
3482953	Grab Sample	<0.5	2.3	102	2.1	4.1	12	106.7	
3482954	Grab Sample	<0.5	2.3	100	0.5	6.5	14	98.6	
3482955	Grab Sample	<0.5	4.4	88	1.9	16.3	54	143.9	
3482956	Grab Sample	<0.5	5.6	111	1.2	16.7	50	145.4	
3482957	Grab Sample	<0.5	3.8	59	1.7	9.7	6	61.4	
3482958	Grab Sample	<0.5	5.8	64	1.7	16.0	8	104.4	
3482959	Grab Sample	<0.5	1.2	57	0.2	16.8	29	43.7	1.579
3482960	Grab Sample	<0.5	0.3	7	0.1	120.8	17	4.0	1.485
3482961	Grab Sample	<0.5	0.7	30	<0.1	2.0	37	10.3	3.327
3482962	Grab Sample	<0.5	2.6	105	0.6	6.1	22	93.8	
3482963	Grab Sample	<0.5	0.6	14	<0.1	4.0	14	11.5	
3482964	Grab Sample	<0.5	3.1	96	0.4	5.0	23	93.5	
3482965	Grab Sample	<0.5	4.4	117	1.3	15.5	57	121.6	
3482966	Grab Sample	<0.5	0.6	29	0.2	2.4	3	79.5	
3482967	Grab Sample	<0.5	3.6	84	1.0	12.0	27	92.5	
3482968	Grab Sample	0.6	3.4	100	1.6	18.8	88	114.9	
3482969	Grab Sample	<0.5	2.3	66	4.5	5.9	<1	135.4	

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Project: SPJ
Report Date: November 05, 2019

QUALITY CONTROL REPORT TIM19002336.1

	Method	WGHT	FA450	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Wgt	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Hf	In	K	La	Li
	Unit	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	MDL	0.01	0.005	0.1	0.01	1	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.01	0.1	0.05	0.01	0.1	0.1
Pulp Duplicates																					
3482954	Grab Sample	1.04	<0.005	<0.1	6.72	4	271	2	0.2	0.17	<0.1	52	22.5	106	3.1	4.37	2.8	0.05	1.09	24.4	11.7
REP 3482954	QC			<0.1	6.93	5	256	<1	0.1	0.18	<0.1	57	21.8	100	2.6	4.32	2.7	<0.05	1.06	26.4	10.9
Core Reject Duplicates																					
3482969	Grab Sample	1.97	0.011	<0.1	5.82	7	13	1	<0.1	1.30	<0.1	5	10.4	78	10.2	0.57	3.7	<0.05	0.07	1.8	0.3
DUP 3482969	QC		0.012	<0.1	6.92	7	14	<1	<0.1	1.35	<0.1	6	11.3	78	9.6	0.61	3.9	<0.05	0.09	2.3	0.4
Reference Materials																					
STD MP1B	Standard																				
STD OREAS149	Standard																				
STD OREAS25A-4A	Standard			<0.1	8.81	10	158	<1	0.4	0.26	<0.1	46	8.0	122	36.1	6.81	4.3	0.12	0.48	22.0	37.2
STD OREAS45H	Standard			0.1	8.15	19	377	<1	0.2	0.13	<0.1	27	91.9	645	781.6	21.53	3.5	0.09	0.20	14.9	14.4
STD OREAS684	Standard																				
STD OXC145	Standard		0.211																		
STD OXH139	Standard		1.233																		
STD OXN134	Standard		7.423																		
STD OXC145 Expected			0.212																		
STD OXN134 Expected			7.667																		
STD OXH139 Expected			1.312																		
STD OREAS25A-4A Expected					8.87	9.94	147	0.93	0.37	0.301		47.3	7.7	115	33.9	6.6	4.14	0.09	0.482	21.8	36.7
STD OREAS45H Expected				0.147	7.99	16.9	332	1.09	0.17	0.135		23.6	88	602	767	19.52	3.6	0.1	0.205	12.4	13.1
STD MP1B Expected																					
STD OREAS149 Expected																					
STD OREAS684 Expected																					
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank			<0.1	<0.01	<1	<1	<1	<0.1	<0.01	<0.1	<1	<0.2	2	0.3	<0.01	<0.1	<0.05	<0.01	<0.1	<0.1
BLK	Blank																				
Prep Wash																					
ROCK-TIM	Prep Blank		<0.005	<0.1	6.81	11	869	1	<0.1	1.51	<0.1	26	3.8	2	2.8	2.09	1.9	<0.05	1.66	13.7	3.1

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Project: SPJ
Report Date: November 05, 2019

QUALITY CONTROL REPORT TIM19002336.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Unit	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	1	0.1	0.001	0.1	0.1	0.001	0.1	0.1	0.005	0.1	0.1	1	1	0.1	1	0.1	0.5	0.1	0.001
Pulp Duplicates																					
3482954	Grab Sample	1.81	256	0.8	3.705	3.0	63.4	0.062	1.2	46.7	<0.005	<0.1	0.3	12	<1	1.5	90	0.2	<0.5	7.4	0.144
REP 3482954	QC	1.81	259	0.7	3.684	2.8	65.0	0.059	1.2	49.2	<0.005	<0.1	0.3	12	<1	1.4	90	0.2	<0.5	7.5	0.132
Core Reject Duplicates																					
3482969	Grab Sample	0.55	177	0.2	7.065	7.0	9.1	0.046	1.7	<0.1	<0.005	<0.1	1.0	5	<1	1.4	20	0.6	<0.5	6.6	0.300
DUP 3482969	QC	0.63	181	0.1	7.119	6.6	10.2	0.051	2.2	0.3	<0.005	<0.1	0.9	6	<1	1.4	24	0.5	<0.5	8.9	0.286
Reference Materials																					
STD MP1B	Standard																				
STD OREAS149	Standard																				
STD OREAS25A-4A	Standard	0.35	517	2.6	0.136	20.0	47.2	0.054	26.3	58.2	<0.005	<0.1	0.8	12	2	4.5	48	1.5	<0.5	15.4	0.946
STD OREAS45H	Standard	0.29	426	1.7	0.095	14.0	439.6	0.025	13.7	24.5	<0.005	<0.1	0.6	62	1	2.2	31	0.9	<0.5	8.5	0.877
STD OREAS684	Standard																				
STD OXC145	Standard																				
STD OXH139	Standard																				
STD OXN134	Standard																				
STD OXC145 Expected																					
STD OXN134 Expected																					
STD OXH139 Expected																					
STD OREAS25A-4A Expected		0.327	480	2.41	0.131	20.9	45.8	0.048	25.2	61		0.047	0.65	13.7	2.4	4.06	48.5	1.4		15.8	0.93
STD OREAS45H Expected		0.238	380	1.55	0.09	14.8	423	0.023	11.9	22.5			0.63	57	2.02	1.93	27.1	1.08		7.26	0.878
STD MP1B Expected																					
STD OREAS149 Expected																					
STD OREAS684 Expected																					
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.01	<1	<0.1	<0.001	<0.1	<0.1	<0.001	<0.1	0.2	<0.005	<0.1	<0.1	<1	<1	<0.1	<1	<0.1	<0.5	<0.1	<0.001
BLK	Blank																				
Prep Wash																					
ROCK-TIM	Prep Blank	0.48	673	1.3	3.410	6.0	1.0	0.042	3.0	36.7	<0.005	<0.1	0.2	7	<1	0.8	216	0.4	<0.5	3.1	0.232

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	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	PF370
	Analyte	Tl	U	V	W	Y	Zn	Zr	Cu
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.5	0.1	1	0.1	0.1	1	0.1	0.005
Pulp Duplicates									
3482954	Grab Sample	<0.5	2.3	100	0.5	6.5	14	98.6	
REP 3482954	QC	<0.5	2.2	99	0.5	6.5	14	94.8	
Core Reject Duplicates									
3482969	Grab Sample	<0.5	2.3	66	4.5	5.9	<1	135.4	
DUP 3482969	QC	<0.5	2.8	66	4.5	7.5	<1	138.6	
Reference Materials									
STD MP1B	Standard								3.110
STD OREAS149	Standard								0.035
STD OREAS25A-4A	Standard	<0.5	3.2	159	2.0	10.2	44	154.5	
STD OREAS45H	Standard	<0.5	1.9	266	0.9	10.5	40	125.2	
STD OREAS684	Standard								0.104
STD OXC145	Standard								
STD OXH139	Standard								
STD OXN134	Standard								
STD OXC145 Expected									
STD OXN134 Expected									
STD OXH139 Expected									
STD OREAS25A-4A Expected		0.35	2.94	157	2	10.5	44.4	155	
STD OREAS45H Expected			1.68	263	0.99	10.4	39.7	131	
STD MP1B Expected									3.069
STD OREAS149 Expected									0.037
STD OREAS684 Expected									0.1001
BLK	Blank								
BLK	Blank								
BLK	Blank	<0.5	<0.1	<1	<0.1	<0.1	<1	<0.1	
BLK	Blank								<0.005
Prep Wash									
ROCK-TIM	Prep Blank	<0.5	1.4	33	0.3	16.7	38	56.1	

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