



BUREAU MINERAL LABORATORIES
VERITAS Canada

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

Client: **Geological Survey of Canada (Van)**
625 Robson Street
1st Floor, Rm 100
Vancouver BC V6B 5J3 CANADA

Submitted By: Jim Ryan
Receiving Lab: Canada-Vancouver
Received: March 11, 2016
Report Date: March 18, 2016
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN16000461.1

CLIENT JOB INFORMATION

Project: GEM Cordillera
Shipment ID: NRCAN-07M052461W
P.O. Number: 3000590741
Number of Samples: 16

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP80-250	16	Crush, split and pulverize 250 g rock to 200 mesh			VAN
LF202	16	Total Whole Rock Characterization with AQ200	0.2	Completed	VAN

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
PICKUP-RJT Client to Pickup Rejects

ADDITIONAL COMMENTS

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

Invoice To: Geological Survey of Canada (Van)
625 Robson Street
1st Floor, Rm 100
Vancouver BC V6B 5J3
CANADA

CC: Wendy Chiu
Alex Zagorevski



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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CERTIFICATE OF ANALYSIS

VAN16000461.1

	Method Analyte Unit MDL	WGHT	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200
		Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs
		kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm
		0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2	0.1
15RAY-EW067A	Rock	0.98	63.52	16.70	5.08	2.79	4.32	2.36	2.41	0.74	0.27	0.09	0.009	<20	16	1.3	99.82	2136	3	9.8	5.4
15RAY-EW108A	Rock	0.44	45.21	15.87	11.32	9.65	10.49	2.22	1.25	1.33	0.30	0.17	0.051	89	34	1.8	99.69	428	<1	41.2	2.3
15RAY-EW110A	Rock	1.12	54.31	15.70	10.94	4.64	8.94	2.54	0.78	0.79	0.04	0.16	0.005	36	37	0.9	99.82	355	<1	24.8	0.7
15RAY-EW195A	Rock	0.78	54.58	18.99	7.97	2.86	7.82	3.84	1.00	0.74	0.30	0.15	<0.002	<20	13	1.5	99.82	579	2	16.5	0.5
15RAY-JC075A	Rock	0.87	51.23	16.05	9.40	6.65	8.49	4.38	1.23	0.83	0.10	0.16	0.022	44	36	1.2	99.79	231	<1	31.6	0.7
15RAY-JC101A	Rock	0.48	55.56	17.34	7.51	2.85	8.18	3.47	0.27	0.69	0.22	0.14	0.005	<20	15	3.5	99.80	866	2	18.3	1.4
15RAY-JR074A	Rock	1.27	49.76	13.40	9.92	11.43	8.20	3.12	0.04	0.53	0.06	0.19	0.080	129	50	3.0	99.73	74	<1	46.8	<0.1
15RAY-JR074C	Rock	1.00	75.72	12.56	2.84	0.43	0.91	6.17	0.05	0.17	0.02	0.03	<0.002	<20	8	1.0	99.95	115	<1	0.5	0.2
15RAY-JR075A	Rock	0.91	37.79	0.50	7.83	42.96	0.43	<0.01	<0.01	<0.01	<0.01	0.11	0.403	2228	8	9.6	99.95	<1	<1	106.9	<0.1
15RAY-JR076A	Rock	1.51	50.11	12.55	9.04	11.89	9.80	2.81	0.07	0.45	0.03	0.16	0.074	103	55	2.7	99.74	15	<1	47.5	<0.1
15RAY-JR080A	Rock	0.87	55.15	17.15	8.73	3.22	7.84	2.61	2.60	0.81	0.36	0.19	<0.002	<20	17	0.9	99.76	1512	2	16.7	1.2
15RAY-JR087A	Rock	0.68	52.78	16.68	9.69	4.77	7.85	3.15	2.11	1.12	0.48	0.16	0.008	<20	26	0.8	99.73	962	3	19.7	1.3
15RAY-JR147A	Rock	1.06	52.04	15.47	13.33	4.18	7.96	3.55	0.65	1.53	0.22	0.19	0.002	<20	32	0.6	99.80	289	<1	28.6	1.0
15RAY-JR150A	Rock	0.95	59.06	16.53	7.44	3.10	6.42	3.52	1.43	0.62	0.15	0.15	0.004	<20	23	1.4	99.86	435	<1	15.4	1.7
15RAY-JR252A	Rock	1.10	52.71	14.20	10.80	4.39	6.54	2.74	2.05	2.16	0.61	0.20	0.013	43	22	3.2	99.75	957	2	35.6	0.8
15RAY-JR252B	Rock	1.91	67.82	13.61	5.57	0.60	0.47	2.53	4.90	0.74	0.20	0.02	0.004	<20	9	3.1	99.91	3215	5	14.1	1.4



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Project: GEM Cordillera

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CERTIFICATE OF ANALYSIS

VAN16000461.1

Method Analyte Unit MDL		LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200
		Ga ppm 0.5	Hf ppm 0.1	Nb ppm 0.1	Rb ppm 0.1	Sn ppm 1	Sr ppm 0.5	Ta ppm 0.1	Th ppm 0.2	U ppm 0.1	V ppm 8	W ppm 0.5	Zr ppm 0.1	Y ppm 0.1	La ppm 0.1	Ce ppm 0.1	Pr ppm 0.02	Nd ppm 0.3	Sm ppm 0.05	Eu ppm 0.02	Gd ppm 0.05
15RAY-EW067A	Rock	17.0	3.2	10.2	89.5	<1	614.1	0.5	16.2	1.4	77	<0.5	139.9	15.3	49.8	93.7	9.92	36.2	5.49	1.52	4.32
15RAY-EW108A	Rock	19.3	3.1	8.8	30.9	1	527.3	0.3	0.6	0.3	265	0.6	105.5	28.2	15.2	41.8	6.21	29.1	6.26	1.67	6.19
15RAY-EW110A	Rock	14.5	1.1	0.6	17.7	<1	325.7	<0.1	0.4	0.2	316	0.6	34.3	10.5	3.3	6.8	0.97	4.4	1.36	0.52	1.91
15RAY-EW195A	Rock	18.9	2.0	2.9	19.8	<1	807.9	<0.1	0.6	0.3	152	<0.5	77.5	17.7	10.2	23.3	3.19	14.5	3.65	1.19	3.74
15RAY-JC075A	Rock	14.4	2.0	2.2	27.1	<1	296.0	0.2	1.0	0.3	251	<0.5	66.0	20.2	5.6	13.8	1.97	8.7	2.51	0.84	3.24
15RAY-JC101A	Rock	16.8	2.9	5.8	5.1	<1	852.5	0.3	2.9	0.9	139	<0.5	124.6	16.9	17.2	36.8	4.27	17.5	3.70	1.09	3.43
15RAY-JR074A	Rock	10.6	1.1	0.9	<0.1	<1	199.1	<0.1	0.3	0.1	262	<0.5	37.5	12.3	3.0	7.0	1.02	5.7	1.48	0.51	2.04
15RAY-JR074C	Rock	14.0	8.1	4.5	<0.1	<1	80.5	0.3	0.4	0.2	<8	<0.5	279.6	56.7	8.3	26.3	4.08	19.7	6.61	1.28	8.07
15RAY-JR075A	Rock	<0.5	<0.1	0.3	<0.1	<1	<0.5	<0.1	<0.2	<0.1	28	<0.5	2.5	0.2	<0.1	<0.1	<0.02	<0.3	<0.05	<0.02	<0.05
15RAY-JR076A	Rock	8.4	0.9	0.4	<0.1	<1	104.4	<0.1	0.2	0.1	249	<0.5	31.9	9.6	2.2	5.3	0.75	3.6	1.20	0.47	1.61
15RAY-JR080A	Rock	17.9	3.5	8.7	64.5	<1	785.6	0.5	5.8	2.3	177	0.6	124.0	19.8	23.2	45.9	5.66	22.3	4.51	1.29	4.35
15RAY-JR087A	Rock	19.7	4.0	13.7	58.3	2	858.1	0.6	5.5	0.8	221	<0.5	169.5	23.8	35.4	76.1	8.93	34.7	7.01	1.64	6.14
15RAY-JR147A	Rock	18.1	2.3	1.9	17.7	<1	325.5	0.1	0.9	0.3	370	<0.5	82.6	26.7	6.0	15.9	2.47	12.3	3.63	1.30	4.57
15RAY-JR150A	Rock	14.7	1.8	5.2	37.8	<1	414.9	0.2	2.3	1.0	143	0.6	69.9	19.0	12.3	26.8	3.25	13.8	2.98	1.09	3.27
15RAY-JR252A	Rock	17.5	7.3	24.7	55.3	2	399.2	1.4	7.6	2.5	156	0.6	335.9	53.3	54.3	113.0	12.95	53.0	10.87	2.62	11.24
15RAY-JR252B	Rock	18.1	6.6	18.9	175.9	4	95.6	1.3	18.8	12.9	54	1.3	264.9	46.5	33.2	69.6	8.15	31.6	6.39	1.24	6.94



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CERTIFICATE OF ANALYSIS

VAN16000461.1

Method Analyte Unit MDL		LF200	LF200	LF200	LF200	LF200	LF200	LF200	TC000	TC000	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
		Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ni	As	Cd	Sb	Bi	Ag	Au
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb
		0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.5	0.1	0.1	0.1	0.1	0.5
15RAY-EW067A	Rock	0.54	2.91	0.57	1.48	0.21	1.28	0.19	0.03	<0.02	<0.1	7.4	3.2	83	11.8	<0.5	<0.1	<0.1	<0.1	<0.1	0.8
15RAY-EW108A	Rock	0.87	5.51	0.99	2.74	0.41	2.46	0.37	0.06	<0.02	0.3	34.7	3.5	32	50.1	2.9	<0.1	0.5	<0.1	<0.1	0.6
15RAY-EW110A	Rock	0.31	2.08	0.46	1.24	0.19	1.24	0.19	0.03	<0.02	0.2	45.0	2.4	27	9.4	0.7	<0.1	<0.1	<0.1	0.1	6.1
15RAY-EW195A	Rock	0.52	3.12	0.62	1.79	0.25	1.68	0.24	0.04	<0.02	<0.1	23.5	0.6	43	3.0	<0.5	<0.1	<0.1	<0.1	<0.1	0.9
15RAY-JC075A	Rock	0.52	3.57	0.74	2.07	0.30	2.11	0.29	0.07	<0.02	<0.1	32.0	1.8	29	13.9	0.6	<0.1	0.2	<0.1	<0.1	<0.5
15RAY-JC101A	Rock	0.51	3.00	0.61	1.69	0.25	1.59	0.26	0.63	<0.02	0.5	22.0	4.0	65	10.0	0.9	<0.1	0.2	<0.1	<0.1	<0.5
15RAY-JR074A	Rock	0.32	2.28	0.43	1.25	0.20	1.25	0.19	0.03	<0.02	<0.1	52.2	<0.1	37	56.9	<0.5	<0.1	<0.1	<0.1	<0.1	1.2
15RAY-JR074C	Rock	1.47	9.99	2.08	6.73	1.01	6.46	1.03	0.02	<0.02	1.1	19.1	0.2	10	0.6	<0.5	<0.1	<0.1	<0.1	<0.1	1.4
15RAY-JR075A	Rock	<0.01	<0.05	<0.02	0.04	<0.01	0.05	<0.01	0.07	<0.02	0.2	3.2	<0.1	18	2026.6	<0.5	<0.1	<0.1	<0.1	<0.1	2.3
15RAY-JR076A	Rock	0.26	1.70	0.34	1.13	0.16	0.99	0.14	0.03	<0.02	0.2	16.2	<0.1	17	30.3	<0.5	<0.1	<0.1	<0.1	<0.1	1.1
15RAY-JR080A	Rock	0.63	3.89	0.72	2.11	0.31	2.08	0.30	0.03	<0.02	0.5	3.5	2.4	44	2.6	0.9	<0.1	<0.1	<0.1	<0.1	1.0
15RAY-JR087A	Rock	0.80	4.62	0.83	2.21	0.34	2.14	0.32	0.02	<0.02	0.5	6.7	1.0	57	5.8	<0.5	<0.1	<0.1	<0.1	<0.1	1.4
15RAY-JR147A	Rock	0.73	4.69	0.99	2.87	0.43	2.76	0.42	0.02	<0.02	0.3	39.3	0.6	36	4.4	<0.5	<0.1	<0.1	<0.1	<0.1	0.6
15RAY-JR150A	Rock	0.51	3.01	0.67	2.02	0.29	1.94	0.31	0.02	<0.02	0.4	9.5	2.3	36	4.4	1.3	0.1	0.4	<0.1	<0.1	1.5
15RAY-JR252A	Rock	1.63	10.14	1.89	5.14	0.74	4.83	0.72	0.55	0.08	1.8	15.3	5.2	115	36.2	1.3	0.9	<0.1	<0.1	<0.1	1.7
15RAY-JR252B	Rock	1.09	7.36	1.50	4.37	0.69	4.52	0.75	0.11	0.03	1.3	6.7	9.4	99	16.7	4.3	3.4	<0.1	0.2	<0.1	2.3



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CERTIFICATE OF ANALYSIS

VAN16000461.1

Method Analyte Unit MDL		AQ200	AQ200	AQ200
		Hg	Tl	Se
		ppm	ppm	ppm
		0.01	0.1	0.5
15RAY-EW067A	Rock	<0.01	0.4	<0.5
15RAY-EW108A	Rock	<0.01	0.1	<0.5
15RAY-EW110A	Rock	<0.01	<0.1	<0.5
15RAY-EW195A	Rock	<0.01	<0.1	<0.5
15RAY-JC075A	Rock	<0.01	<0.1	<0.5
15RAY-JC101A	Rock	<0.01	<0.1	<0.5
15RAY-JR074A	Rock	<0.01	<0.1	<0.5
15RAY-JR074C	Rock	<0.01	<0.1	0.9
15RAY-JR075A	Rock	<0.01	<0.1	<0.5
15RAY-JR076A	Rock	<0.01	<0.1	<0.5
15RAY-JR080A	Rock	<0.01	0.1	<0.5
15RAY-JR087A	Rock	<0.01	0.2	<0.5
15RAY-JR147A	Rock	<0.01	<0.1	<0.5
15RAY-JR150A	Rock	<0.01	<0.1	<0.5
15RAY-JR252A	Rock	<0.01	0.1	<0.5
15RAY-JR252B	Rock	0.02	0.2	1.6



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QUALITY CONTROL REPORT

VAN16000461.1

	Method Analyte Unit MDL	WGHT	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200
		Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs
		kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm
		0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2	0.1
15RAY-JR076A	Rock	1.51	50.11	12.55	9.04	11.89	9.80	2.81	0.07	0.45	0.03	0.16	0.074	103	55	2.7	99.74	15	<1	47.5	<0.1
Pulp Duplicates																					
15RAY-EW067A	Rock	0.98	63.52	16.70	5.08	2.79	4.32	2.36	2.41	0.74	0.27	0.09	0.009	<20	16	1.3	99.82	2136	3	9.8	5.4
REP 15RAY-EW067A																					
15RAY-JR252B	Rock	1.91	67.82	13.61	5.57	0.60	0.47	2.53	4.90	0.74	0.20	0.02	0.004	<20	9	3.1	99.91	3215	5	14.1	1.4
REP 15RAY-JR252B	QC		67.50	13.72	5.66	0.61	0.47	2.55	4.96	0.75	0.21	0.02	0.003	20	9	3.1	99.90	3338	8	14.4	1.3
Core Reject Duplicates																					
15RAY-JR087A	Rock	0.68	52.78	16.68	9.69	4.77	7.85	3.15	2.11	1.12	0.48	0.16	0.008	<20	26	0.8	99.73	962	3	19.7	1.3
DUP 15RAY-JR087A	QC		52.78	16.68	9.62	4.76	7.88	3.15	2.11	1.12	0.49	0.16	0.008	<20	26	0.8	99.72	994	1	19.2	1.5
Reference Materials																					
STD DS10	Standard																				
STD GS311-1	Standard																				
STD GS910-4	Standard																				
STD OREAS45EA	Standard																				
STD SO-18	Standard		58.34	14.07	7.55	3.36	6.35	3.63	2.12	0.69	0.79	0.39	0.544	44	24	1.9	99.80	495	<1	25.9	6.2
STD SO-19	Standard		60.74	13.89	7.39	2.88	5.90	4.06	1.27	0.70	0.31	0.13	0.485	455	26	1.9	99.80	490	19	23.2	4.8
STD GS311-1 Expected																					
STD GS910-4 Expected																					
STD SO-18 Expected			58.47	14.23	7.67	3.35	6.42	3.71	2.17	0.69	0.83	0.39	0.55	44	25			514		26.2	7.1
STD SO-19 Expected			61.13	13.95	7.47	2.88	6	4.11	1.29	0.69	0.32	0.13	0.5	470	27			486	20	24	4.5
STD DS10 Expected																					
STD OREAS45EA Expected																					
BLK	Blank																				
BLK	Blank		0.02	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	0.0	<0.01	<1	<1	<0.2	<0.1
BLK	Blank																				
Prep Wash																					
ROCK-VAN	Prep Blank		71.33	14.13	3.05	0.81	2.54	4.28	2.23	0.35	0.09	0.08	<0.002	<20	7	1.0	99.94	841	<1	3.9	0.3
ROCK-VAN	Prep Blank		70.94	14.13	3.02	0.80	2.58	4.21	2.23	0.35	0.09	0.08	<0.002	<20	7	1.4	99.94	843	<1	3.5	0.3



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

QUALITY CONTROL REPORT

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	Method Analyte Unit MDL	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200
		Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.1	0.1	0.1	1	0.5	0.1	0.2	0.1	8	0.5	0.1	0.1	0.1	0.1	0.1	0.02	0.3	0.05	0.02
15RAY-JR076A	Rock	8.4	0.9	0.4	<0.1	<1	104.4	<0.1	0.2	0.1	249	<0.5	31.9	9.6	2.2	5.3	0.75	3.6	1.20	0.47	1.61
Pulp Duplicates																					
15RAY-EW067A	Rock	17.0	3.2	10.2	89.5	<1	614.1	0.5	16.2	1.4	77	<0.5	139.9	15.3	49.8	93.7	9.92	36.2	5.49	1.52	4.32
REP 15RAY-EW067A																					
15RAY-JR252B	Rock	18.1	6.6	18.9	175.9	4	95.6	1.3	18.8	12.9	54	1.3	264.9	46.5	33.2	69.6	8.15	31.6	6.39	1.24	6.94
REP 15RAY-JR252B	QC	17.6	6.9	19.5	176.6	3	95.7	1.4	19.4	13.4	57	0.9	265.1	48.5	33.7	72.0	8.25	32.4	6.68	1.25	7.44
Core Reject Duplicates																					
15RAY-JR087A	Rock	19.7	4.0	13.7	58.3	2	858.1	0.6	5.5	0.8	221	<0.5	169.5	23.8	35.4	76.1	8.93	34.7	7.01	1.64	6.14
DUP 15RAY-JR087A	QC	20.3	4.6	13.2	58.3	2	891.9	0.6	5.4	0.8	224	<0.5	184.7	23.4	33.1	73.2	8.84	35.2	6.90	1.68	6.28
Reference Materials																					
STD DS10	Standard																				
STD GS311-1	Standard																				
STD GS910-4	Standard																				
STD OREAS45EA	Standard																				
STD SO-18	Standard	15.7	8.9	19.2	26.8	14	396.0	6.6	9.5	15.2	196	14.0	289.7	29.1	12.3	27.9	3.19	12.8	2.76	0.85	3.07
STD SO-19	Standard	15.4	3.4	68.6	18.3	19	339.8	4.6	12.9	20.7	164	10.2	114.0	35.6	67.2	156.3	18.93	72.7	12.87	3.66	10.28
STD GS311-1 Expected																					
STD GS910-4 Expected																					
STD SO-18 Expected		17.6	9.8	19.3	28.7	15	407.4	7.4	9.9	16.4	200	14.8	290	29	12.3	27.1	3.45	14	3	0.89	2.93
STD SO-19 Expected		17.5	3.1	68.5	19.5	19	317.1	4.9	13	19.4	165	9.8	112	35.5	71.3	161	19.4	75.7	13.7	3.81	10.53
STD DS10 Expected																					
STD OREAS45EA Expected																					
BLK	Blank																				
BLK	Blank	<0.5	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.2	<0.1	<8	<0.5	0.5	<0.1	<0.1	<0.1	<0.02	<0.3	<0.05	<0.02	<0.05
BLK	Blank																				
Prep Wash																					
ROCK-VAN	Prep Blank	12.7	3.5	6.8	44.1	<1	219.5	0.4	3.0	1.4	34	<0.5	142.8	17.5	13.6	26.5	3.09	11.7	2.53	0.78	2.64
ROCK-VAN	Prep Blank	11.6	3.3	6.0	43.7	<1	215.9	0.4	3.0	1.3	33	0.6	130.4	16.8	12.7	24.4	2.83	11.4	2.49	0.74	2.65



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: Geological Survey of Canada (Van)

625 Robson Street
1st Floor, Rm 100
Vancouver BC V6B 5J3 CANADA

Project: GEM Cordillera

Report Date: March 18, 2016

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QUALITY CONTROL REPORT

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	Method Analyte Unit MDL	LF200	LF200	LF200	LF200	LF200	LF200	LF200	TC000	TC000	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
		Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ni	As	Cd	Sb	Bi	Ag	Au	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	
		0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.5	0.1	0.1	0.1	0.1	0.5	
15RAY-JR076A	Rock	0.26	1.70	0.34	1.13	0.16	0.99	0.14	0.03	<0.02	0.2	16.2	<0.1	17	30.3	<0.5	<0.1	<0.1	<0.1	<0.1	1.1	
Pulp Duplicates																						
15RAY-EW067A	Rock	0.54	2.91	0.57	1.48	0.21	1.28	0.19	0.03	<0.02	<0.1	7.4	3.2	83	11.8	<0.5	<0.1	<0.1	<0.1	<0.1	0.8	
REP 15RAY-EW067A	QC											0.1	6.8	3.2	80	11.7	<0.5	0.2	<0.1	<0.1	0.1	1.7
15RAY-JR252B	Rock	1.09	7.36	1.50	4.37	0.69	4.52	0.75	0.11	0.03	1.3	6.7	9.4	99	16.7	4.3	3.4	<0.1	0.2	<0.1	2.3	
REP 15RAY-JR252B	QC	1.13	7.56	1.48	4.73	0.74	4.97	0.76														
Core Reject Duplicates																						
15RAY-JR087A	Rock	0.80	4.62	0.83	2.21	0.34	2.14	0.32	0.02	<0.02	0.5	6.7	1.0	57	5.8	<0.5	<0.1	<0.1	<0.1	<0.1	1.4	
DUP 15RAY-JR087A	QC	0.85	4.85	0.89	2.41	0.33	2.18	0.33	<0.02	<0.02	0.3	6.3	0.9	53	5.2	0.6	<0.1	<0.1	<0.1	<0.1	1.2	
Reference Materials																						
STD DS10	Standard											11.8	147.7	144.9	366	75.8	45.0	2.5	7.5	11.2	2.1	146.9
STD GS311-1	Standard									1.03	2.40											
STD GS910-4	Standard									2.80	8.51											
STD OREAS45EA	Standard											1.4	656.3	13.8	32	367.2	9.5	<0.1	0.3	0.2	0.3	53.3
STD SO-18	Standard	0.47	2.83	0.58	1.65	0.24	1.71	0.26														
STD SO-19	Standard	1.30	7.74	1.26	3.85	0.51	3.43	0.51														
STD GS311-1 Expected										1.02	2.35											
STD GS910-4 Expected										2.65	8.27											
STD SO-18 Expected		0.53	3	0.62	1.84	0.27	1.79	0.27														
STD SO-19 Expected		1.41	7.5	1.39	3.78	0.55	3.55	0.53														
STD DS10 Expected												13.6	154.61	150.55	370	74.6	46.2	2.62	9	11.65	2.02	91.9
STD OREAS45EA Expected												1.6	709	14.3	31.4	381	10.3	0.03	0.32	0.26	0.26	53
BLK	Blank									<0.02	<0.02											
BLK	Blank	<0.01	<0.05	<0.02	<0.03	<0.01	<0.05	<0.01														
BLK	Blank											<0.1	<0.1	<0.1	<1	<0.1	0.8	<0.1	<0.1	<0.1	<0.1	<0.5
Prep Wash																						
ROCK-VAN	Prep Blank	0.41	2.81	0.59	1.85	0.28	2.08	0.35	0.03	<0.02	0.4	4.5	1.3	31	0.7	1.1	<0.1	<0.1	<0.1	<0.1	<0.5	
ROCK-VAN	Prep Blank	0.42	2.61	0.57	1.88	0.31	2.13	0.36	0.03	<0.02	0.4	5.6	1.3	33	1.1	1.3	<0.1	<0.1	<0.1	<0.1	0.5	



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www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: Geological Survey of Canada (Van)

625 Robson Street

1st Floor, Rm 100

Vancouver BC V6B 5J3 CANADA

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QUALITY CONTROL REPORT

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Method Analyte Unit MDL		AQ200	AQ200	AQ200
		Hg	Tl	Se
		ppm	ppm	ppm
		0.01	0.1	0.5
15RAY-JR076A	Rock	<0.01	<0.1	<0.5
Pulp Duplicates				
15RAY-EW067A	Rock	<0.01	0.4	<0.5
REP 15RAY-EW067A	QC	<0.01	0.4	<0.5
15RAY-JR252B	Rock	0.02	0.2	1.6
REP 15RAY-JR252B	QC			
Core Reject Duplicates				
15RAY-JR087A	Rock	<0.01	0.2	<0.5
DUP 15RAY-JR087A	QC	<0.01	0.3	<0.5
Reference Materials				
STD DS10	Standard	0.26	5.0	2.5
STD GS311-1	Standard			
STD GS910-4	Standard			
STD OREAS45EA	Standard	<0.01	<0.1	0.8
STD SO-18	Standard			
STD SO-19	Standard			
STD GS311-1 Expected				
STD GS910-4 Expected				
STD SO-18 Expected				
STD SO-19 Expected				
STD DS10 Expected		0.3	5.1	2.3
STD OREAS45EA Expected			0.072	0.78
BLK	Blank			
BLK	Blank			
BLK	Blank	<0.01	<0.1	<0.5
Prep Wash				
ROCK-VAN	Prep Blank	<0.01	<0.1	<0.5
ROCK-VAN	Prep Blank	<0.01	<0.1	<0.5