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To: **COPPER NORTH**  
**1120 - 1095 W. PENDER STREET**  
**VANCOUVER BC V6E 2M6**

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Total # Pages: 4 (A - C)  
Plus Appendix Pages  
Finalized Date: 13-AUG-2015  
Account: COPNOR

**CERTIFICATE WH15113459**

Project: COL-15-01

This report is for 100 Rock samples submitted to our lab in Whitehorse, YT, Canada on 30-JUL-2015.

The following have access to data associated with this certificate:

HARLAN MEADE

JACK MILTON

**SAMPLE PREPARATION**

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
LOG-21	Sample logging - ClientBarCode

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61	33 element four acid ICP-AES	ICP-AES
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	VARIABLE
Cu-AA05	Cu (nonsulfide) - sulfuric	AAS
Cu-AA62	Ore grade Cu - four acid / AAS	AAS
Au-AA23	Au 30g FA-AA finish	AAS

To: **COPPER NORTH**  
**ATTN: JACK MILTON**  
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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:

  
Colin Ramshaw, Vancouver Laboratory Manager



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**CERTIFICATE OF ANALYSIS WH15113459**

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA23 Au ppm	ME-ICP61 Ag ppm	ME-ICP61 Al %	ME-ICP61 As ppm	ME-ICP61 Ba ppm	ME-ICP61 Be ppm	ME-ICP61 Bi ppm	ME-ICP61 Ca %	ME-ICP61 Cd ppm	ME-ICP61 Co ppm	ME-ICP61 Cr ppm	ME-ICP61 Cu ppm	ME-ICP61 Fe %	ME-ICP61 Ga ppm
		0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
E899868		6.54	0.174	1.7	8.30	7	1900	1.4	2	0.96	<0.5	7	14	3590	2.33	20
E899869		7.26	0.201	1.8	8.47	5	2470	1.5	<2	0.97	<0.5	6	12	4630	2.28	20
E899870		6.46	0.097	1.1	7.94	<5	1990	1.3	<2	1.04	<0.5	6	12	2160	2.25	20
E899871		6.63	0.081	0.7	7.97	<5	1930	1.1	2	0.94	<0.5	5	11	2140	2.08	20
E899872		6.66	0.086	1.7	7.26	<5	1680	1.1	<2	1.69	<0.5	5	11	1415	2.65	20
E899873		8.18	0.660	6.3	7.96	5	1570	1.3	7	1.22	<0.5	8	14	4880	4.51	20
E899874		8.28	0.227	1.7	8.24	<5	1650	1.5	2	1.40	<0.5	4	13	2710	1.99	20
E899875		5.85	0.074	0.6	8.76	<5	2050	1.5	<2	1.98	<0.5	6	10	1005	2.99	20
E899876		6.44	0.043	<0.5	7.50	<5	3530	1.2	<2	3.16	<0.5	5	7	581	2.09	20
E899877		6.68	0.034	<0.5	8.00	<5	1770	1.3	<2	2.01	<0.5	4	15	758	2.05	20
E899878		7.20	0.127	2.0	6.15	12	2070	0.9	5	4.87	0.6	4	10	1525	2.16	20
E899879		7.49	0.039	<0.5	8.10	<5	2280	1.0	2	1.99	<0.5	6	13	905	2.60	20
E899880		7.82	0.113	1.4	7.72	<5	1430	1.2	<2	1.87	<0.5	4	13	2110	2.09	20
E899881		6.58	0.050	0.5	8.37	<5	2850	1.2	<2	1.46	<0.5	7	18	959	3.40	20
E899882		7.38	0.087	0.7	8.02	<5	1760	1.3	<2	1.52	<0.5	5	12	1330	2.58	20
E899883		7.54	0.023	<0.5	7.91	<5	1470	1.6	4	1.98	<0.5	4	11	515	2.28	20
E899884		6.55	0.065	1.0	8.04	<5	2320	1.5	<2	1.52	<0.5	9	30	1720	4.33	20
E899885		7.56	0.044	1.0	7.65	<5	1610	1.2	<2	2.83	<0.5	6	17	906	2.75	20
E899886		7.71	0.090	0.8	8.13	<5	1720	1.4	6	4.09	<0.5	12	16	1735	4.66	20
E899887		6.83	0.075	0.8	8.22	<5	2110	1.3	<2	1.84	<0.5	9	15	2360	2.97	20
E899888		6.49	0.098	1.9	8.26	<5	2140	1.3	4	2.30	<0.5	9	20	3310	3.41	20
E899889		7.18	0.119	1.7	7.78	<5	2960	1.2	5	1.99	<0.5	6	21	3690	2.62	20
E899890		7.80	0.308	4.5	8.12	<5	3670	1.6	13	2.01	<0.5	21	10	>10000	4.87	20
E899891		7.46	0.350	9.0	7.98	8	6610	1.7	7	2.92	0.6	39	15	>10000	7.59	20
E899892		6.01	0.010	<0.5	6.20	<5	1290	1.3	<2	3.48	<0.5	4	7	299	1.98	20
E899893		7.00	0.055	0.5	8.02	<5	570	1.7	<2	2.14	<0.5	2	14	683	0.89	20
E899894		6.73	0.066	0.5	8.41	6	400	1.7	4	1.94	<0.5	3	17	951	1.09	20
E899895		7.81	0.671	5.3	7.93	<5	740	1.8	14	2.14	<0.5	6	15	>10000	2.22	20
E899896		7.48	0.111	1.0	7.81	5	290	1.9	<2	1.95	<0.5	<1	11	1990	0.94	20
E899897		6.34	0.289	1.9	7.25	<5	1120	1.4	5	1.66	<0.5	<1	18	2820	1.12	20
E899898		7.62	0.402	3.0	7.68	8	740	1.5	8	1.81	<0.5	4	13	6520	1.69	20
E899899		6.13	0.064	<0.5	7.62	6	250	1.7	<2	1.85	<0.5	<1	13	1180	1.05	20
E899900		6.93	0.060	<0.5	7.19	5	410	1.4	<2	1.69	<0.5	2	14	1450	0.94	20
E899935		5.63	<0.005	<0.5	2.57	<5	100	<0.5	6	8.20	0.8	91	32	14	24.8	20
E899936		4.10	<0.005	<0.5	2.41	<5	120	<0.5	9	7.42	1.0	76	21	10	25.2	20
E899937		8.68	0.085	3.4	8.42	<5	2570	1.0	<2	1.79	<0.5	17	7	6040	5.52	20
E899938		6.71	0.103	2.5	7.87	<5	950	0.9	5	3.29	<0.5	21	7	5960	5.40	20
E899939		6.77	0.178	2.3	7.77	<5	1400	1.2	<2	2.72	<0.5	15	10	5550	4.90	20
E899940		8.77	0.129	2.8	8.01	<5	900	1.0	9	3.36	<0.5	20	7	7090	5.49	20
E899941		6.56	0.067	2.1	8.28	<5	580	0.9	<2	4.00	<0.5	21	1	5500	6.12	20



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**CERTIFICATE OF ANALYSIS WH15113459**

Sample Description	Method Analyte Units LOR	ME-ICP61 K %	ME-ICP61 La ppm	ME-ICP61 Mg %	ME-ICP61 Mn ppm	ME-ICP61 Mo ppm	ME-ICP61 Na %	ME-ICP61 Ni ppm	ME-ICP61 P ppm	ME-ICP61 Pb ppm	ME-ICP61 S %	ME-ICP61 Sb ppm	ME-ICP61 Sc ppm	ME-ICP61 Sr ppm	ME-ICP61 Th ppm	ME-ICP61 Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01
E899868		4.80	10	0.96	411	4	2.91	6	980	12	0.01	<5	8	546	<20	0.28
E899869		4.18	10	0.89	409	4	3.21	4	840	13	0.02	<5	7	625	<20	0.24
E899870		4.30	10	0.85	397	13	2.75	4	850	52	0.01	<5	7	538	<20	0.23
E899871		4.66	10	0.71	393	2	2.59	5	840	13	0.01	<5	7	404	<20	0.23
E899872		3.46	10	0.69	381	17	2.36	3	790	9	0.01	<5	6	298	<20	0.22
E899873		3.40	20	0.81	411	12	3.03	5	940	12	0.01	<5	7	466	<20	0.21
E899874		3.17	20	0.93	416	8	3.32	5	1040	11	0.02	<5	7	619	<20	0.25
E899875		2.32	20	0.87	630	2	3.60	3	940	8	0.01	<5	7	832	<20	0.25
E899876		2.30	10	0.44	569	2	2.90	1	730	6	0.04	<5	5	676	<20	0.21
E899877		3.98	10	0.62	395	6	2.86	4	780	7	<0.01	<5	7	577	<20	0.21
E899878		2.68	10	0.29	737	67	1.56	1	690	51	0.05	<5	5	320	<20	0.18
E899879		5.08	10	0.57	458	155	2.29	4	980	12	0.01	<5	6	481	<20	0.26
E899880		3.88	10	0.61	408	5	2.90	5	830	11	0.01	<5	6	414	<20	0.24
E899881		5.56	10	1.05	574	3	2.41	5	810	10	<0.01	<5	8	565	<20	0.28
E899882		4.79	10	0.72	381	7	2.68	3	670	11	0.01	<5	7	424	<20	0.22
E899883		3.79	10	0.64	396	8	2.98	4	870	9	<0.01	<5	7	484	<20	0.24
E899884		4.74	10	0.86	438	41	2.32	7	870	22	0.03	<5	11	381	<20	0.28
E899885		4.04	10	0.49	511	12	2.41	4	820	14	0.01	<5	9	374	<20	0.25
E899886		2.53	10	0.99	674	11	2.78	7	1080	12	0.02	<5	15	508	<20	0.39
E899887		4.48	10	1.08	404	29	2.54	5	740	5	0.02	<5	10	499	<20	0.29
E899888		4.58	10	1.17	553	8	2.62	7	770	15	0.01	<5	10	548	<20	0.27
E899889		3.68	10	0.84	499	3	2.88	4	900	13	0.03	<5	9	500	<20	0.23
E899890		2.93	10	1.70	777	7	2.58	9	1140	10	0.07	<5	12	565	<20	0.37
E899891		2.46	10	1.85	1025	57	1.96	16	1400	13	0.15	<5	15	368	<20	0.42
E899892		2.59	20	0.36	574	2	1.93	2	680	8	0.02	<5	5	259	<20	0.18
E899893		0.94	<10	0.26	219	1	3.91	<1	810	6	<0.01	<5	2	684	<20	0.30
E899894		0.90	10	0.43	263	2	4.27	1	780	6	<0.01	<5	7	636	<20	0.43
E899895		1.53	<10	1.24	356	8	3.64	5	1020	7	0.01	<5	14	484	<20	0.51
E899896		0.90	<10	0.74	155	1	4.18	3	910	2	<0.01	<5	8	455	<20	0.38
E899897		1.72	<10	0.50	195	1	3.52	3	760	8	0.01	<5	5	540	<20	0.30
E899898		2.18	<10	1.01	217	7	3.44	5	950	9	<0.01	<5	10	468	<20	0.35
E899899		1.00	<10	0.74	165	2	4.19	2	990	3	<0.01	<5	9	476	<20	0.40
E899900		1.28	<10	0.70	157	2	3.64	1	820	6	<0.01	<5	8	485	<20	0.26
E899935		0.18	<10	5.41	1640	<1	0.40	92	440	8	<0.01	<5	45	126	<20	1.15
E899936		0.20	<10	4.77	1560	1	0.43	88	490	2	<0.01	<5	41	149	<20	1.06
E899937		2.99	10	1.45	636	154	2.54	7	1240	9	0.11	<5	15	636	<20	0.45
E899938		1.94	<10	1.97	616	23	2.78	11	1190	7	0.01	<5	19	602	<20	0.57
E899939		2.53	10	1.58	545	32	2.46	4	1210	7	0.01	<5	16	601	<20	0.48
E899940		2.01	<10	1.90	623	39	2.73	5	1400	2	0.01	<5	17	601	<20	0.57
E899941		1.92	<10	2.08	653	42	2.68	2	1790	5	0.01	<5	19	533	<20	0.66



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**CERTIFICATE OF ANALYSIS WH15113459**

Sample Description	Method Analyte Units LOR	ME-ICP61 Ti ppm 10	ME-ICP61 U ppm 10	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	Cu-AA05 Cu % 0.001	Cu-AA62 Cu % 0.001
E899868		<10	<10	87	10	36		0.328	0.356
E899869		<10	<10	77	10	41		0.431	0.457
E899870		<10	<10	78	<10	49		0.201	0.228
E899871		<10	<10	75	<10	40		0.201	0.217
E899872		<10	<10	71	<10	49		0.122	0.142
E899873		<10	<10	105	30	45		0.457	0.491
E899874		<10	<10	71	30	37		0.237	0.267
E899875		<10	<10	75	<10	58		0.085	0.104
E899876		<10	<10	62	<10	50		0.052	0.061
E899877		<10	<10	67	10	31		0.062	0.080
E899878		<10	<10	59	<10	95		0.091	0.151
E899879		<10	<10	73	<10	62		0.068	0.094
E899880		<10	<10	69	10	61		0.194	0.210
E899881		<10	<10	97	10	63		0.083	0.097
E899882		<10	<10	82	10	34		0.115	0.139
E899883		<10	<10	76	<10	37		0.043	0.055
E899884		<10	<10	144	<10	55		0.147	0.179
E899885		<10	<10	103	<10	69		0.070	0.094
E899886		<10	<10	173	<10	64		0.155	0.178
E899887		<10	<10	107	30	44		0.227	0.248
E899888		<10	<10	123	20	60		0.296	0.328
E899889		<10	<10	90	<10	48		0.353	0.383
E899890		<10	<10	148	<10	83	1.170	1.075	1.171
E899891		<10	<10	204	10	167	1.820	1.535	1.844
E899892		<10	<10	71	<10	57		0.020	0.030
E899893		<10	<10	51	<10	18		0.057	0.072
E899894		<10	<10	80	<10	25		0.082	0.098
E899895		<10	<10	177	10	48	1.015	0.926	0.987
E899896		<10	<10	95	<10	18		0.162	0.209
E899897		<10	<10	73	<10	24		0.252	0.299
E899898		<10	<10	131	10	32		0.546	0.637
E899899		<10	<10	96	<10	20		0.088	0.126
E899900		<10	<10	70	<10	23		0.102	0.158
E899935		<10	<10	1125	<10	146		<0.001	0.003
E899936		<10	<10	1070	<10	127		<0.001	0.002
E899937		<10	<10	209	<10	73		0.471	0.614
E899938		<10	<10	250	<10	75		0.502	0.585
E899939		<10	<10	209	<10	66		0.453	0.537
E899940		<10	<10	245	<10	72		0.594	0.687
E899941		<10	<10	292	<10	68		0.448	0.527



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Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA23 Au ppm	ME-ICP61 Ag ppm	ME-ICP61 Al %	ME-ICP61 As ppm	ME-ICP61 Ba ppm	ME-ICP61 Be ppm	ME-ICP61 Bi ppm	ME-ICP61 Ca %	ME-ICP61 Cd ppm	ME-ICP61 Co ppm	ME-ICP61 Cr ppm	ME-ICP61 Cu ppm	ME-ICP61 Fe %	ME-ICP61 Ga ppm
		0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
E899942		6.71	0.086	2.9	8.19	<5	430	0.9	6	3.53	<0.5	17	5	7310	5.78	20
E899943		5.36	0.186	4.2	7.88	<5	1150	0.8	3	2.59	<0.5	11	7	6290	6.29	20
E899944		6.38	0.074	2.7	7.90	<5	640	0.9	6	3.28	<0.5	18	12	4230	7.73	20
E899945		7.88	0.025	0.9	7.84	<5	270	0.8	2	4.45	<0.5	25	7	1970	6.58	20
E899946		8.81	0.084	2.4	7.80	<5	960	1.0	<2	2.49	<0.5	12	10	5910	5.11	20
E899947		8.26	0.124	4.3	7.74	<5	1240	0.8	9	2.41	<0.5	18	13	8020	6.55	20
E899948		10.07	0.117	4.7	8.48	<5	1110	1.0	<2	2.44	<0.5	25	10	4930	6.75	20
E899949		8.19	0.062	0.8	8.09	<5	1050	1.0	<2	2.97	<0.5	14	9	6120	4.78	20
E899950		7.78	0.094	2.1	8.00	5	1560	1.1	<2	2.63	<0.5	10	11	5490	3.48	20
E899951		6.28	0.106	2.2	7.78	<5	1770	1.1	5	1.69	<0.5	11	8	7310	3.07	20
E899952		7.47	0.074	2.9	8.52	<5	850	1.1	3	2.58	<0.5	29	7	9700	4.50	20
E899953		7.29	0.172	4.3	7.71	5	1390	1.2	<2	2.42	1.4	19	64	7700	4.86	20
E899954		6.81	0.076	1.6	8.82	<5	1080	1.3	5	2.65	0.5	15	42	4640	4.19	20
E899955		6.07	0.033	1.4	8.21	<5	1750	1.5	<2	1.76	<0.5	7	10	3390	2.34	20
E899956		7.91	0.068	2.6	8.04	<5	470	1.3	<2	3.39	<0.5	15	13	6140	4.36	20
E899957		7.38	0.033	1.3	8.06	<5	530	1.4	<2	2.53	<0.5	11	9	4350	3.99	20
E899958		7.53	0.040	1.7	8.24	<5	870	1.1	3	2.25	<0.5	12	8	5920	3.92	20
E899959		7.21	0.213	3.0	8.46	<5	690	1.0	<2	2.89	<0.5	12	8	6510	4.11	20
E899960		7.71	0.218	2.1	8.33	6	720	0.9	7	3.19	<0.5	25	9	5590	5.90	20
E899961		8.09	0.147	2.0	8.00	<5	480	0.9	6	3.60	<0.5	20	22	7360	5.95	20
E899962		8.36	0.157	1.0	7.51	<5	1870	0.9	<2	1.16	<0.5	2	12	1450	1.17	20
E899963		6.67	0.009	0.7	8.85	8	770	1.4	<2	1.82	<0.5	5	8	1390	2.94	20
E899964		8.58	0.051	<0.5	8.46	<5	940	1.3	<2	2.10	<0.5	6	9	872	2.64	20
E899965		7.62	0.250	2.0	8.71	<5	1580	1.3	3	2.42	<0.5	8	13	3620	2.86	20
E899966		8.04	0.045	0.5	8.50	<5	950	1.4	<2	2.30	<0.5	8	8	888	2.85	20
E899967		6.25	0.419	0.9	7.76	<5	1030	1.5	6	2.13	<0.5	5	14	6110	1.75	20
E899968		8.89	0.055	0.5	7.97	<5	1160	1.4	3	2.67	<0.5	6	13	1310	2.11	20
E899969		4.24	0.155	4.7	8.01	<5	1100	1.2	3	2.32	<0.5	45	11	>10000	5.17	20
E899970		8.91	0.111	5.0	8.85	<5	670	1.0	<2	2.92	<0.5	25	9	8150	5.66	20
E899971		6.38	<0.005	<0.5	8.12	<5	2310	1.3	<2	2.51	<0.5	16	7	1660	2.61	20
E899972		8.86	0.069	2.9	8.32	<5	1400	1.0	2	2.16	<0.5	30	8	6440	5.32	20
E899973		8.63	0.169	5.7	8.41	<5	1340	0.8	3	2.11	<0.5	32	7	8580	6.39	20
E899974		9.59	0.052	1.6	8.97	<5	690	0.9	<2	4.43	<0.5	29	6	2760	6.22	20
E899975		8.71	0.010	<0.5	8.70	<5	530	0.8	5	5.45	<0.5	27	17	1380	7.17	20
E899976		9.23	0.053	2.7	8.64	<5	820	0.9	<2	4.35	<0.5	23	14	3800	6.72	20
E899977		7.11	0.047	1.8	8.77	<5	890	1.0	4	2.96	<0.5	21	5	4720	5.05	20
E899978		7.50	0.034	1.3	8.68	<5	860	1.0	<2	3.18	<0.5	22	7	3870	5.07	20
E899979		8.43	0.061	1.3	8.87	<5	190	1.0	<2	5.96	<0.5	29	4	4830	6.86	20
E899980		9.17	<0.005	<0.5	7.70	16	1540	1.4	<2	1.13	<0.5	5	6	210	2.52	20
E899981		8.01	0.005	<0.5	7.61	15	2090	1.3	<2	1.52	<0.5	7	6	272	3.05	20



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Sample Description	Method Analyte Units LOR	ME-ICP61 K %	ME-ICP61 La ppm	ME-ICP61 Mg %	ME-ICP61 Mn ppm	ME-ICP61 Mo ppm	ME-ICP61 Na %	ME-ICP61 Ni ppm	ME-ICP61 P ppm	ME-ICP61 Pb ppm	ME-ICP61 S %	ME-ICP61 Sb ppm	ME-ICP61 Sc ppm	ME-ICP61 Sr ppm	ME-ICP61 Th ppm	ME-ICP61 Ti %
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01
E899942		1.95	10	2.07	554	88	2.49	5	1450	5	0.01	<5	19	502	<20	0.62
E899943		3.60	10	1.94	527	134	2.09	4	1320	6	0.01	<5	17	463	<20	0.57
E899944		2.10	10	1.93	694	136	2.37	5	1400	4	0.15	<5	21	506	<20	0.62
E899945		1.39	<10	2.14	791	42	2.80	4	1380	3	0.02	5	18	539	<20	0.60
E899946		2.23	10	1.51	601	112	2.40	4	1060	7	0.01	<5	15	545	<20	0.44
E899947		3.20	10	1.92	598	88	2.15	6	1270	7	0.03	<5	19	465	<20	0.57
E899948		2.99	10	1.69	557	24	2.46	2	1260	8	0.21	<5	18	555	<20	0.57
E899949		1.88	10	1.39	587	8	3.07	5	1190	8	0.01	<5	13	586	<20	0.47
E899950		3.04	10	1.33	423	13	2.71	6	1170	7	0.01	<5	13	621	<20	0.44
E899951		3.56	10	1.06	370	6	2.49	5	1030	8	<0.01	<5	9	630	<20	0.32
E899952		1.69	10	1.42	726	20	3.17	6	1020	6	0.01	<5	11	673	<20	0.42
E899953		1.43	10	1.60	1635	94	2.75	11	1160	28	0.03	<5	13	668	<20	0.42
E899954		1.56	10	1.36	805	25	3.41	14	1180	12	<0.01	<5	9	891	<20	0.40
E899955		3.14	10	0.97	383	2	2.88	3	840	11	<0.01	5	7	596	<20	0.26
E899956		1.29	10	1.99	681	32	3.24	8	1310	9	<0.01	<5	19	541	<20	0.57
E899957		1.52	10	1.50	633	6	3.34	5	1220	7	<0.01	<5	12	578	<20	0.45
E899958		1.66	10	1.23	674	3	3.17	4	1080	9	0.01	<5	9	643	<20	0.40
E899959		1.33	10	1.48	542	21	3.57	5	1060	5	0.01	<5	12	573	<20	0.44
E899960		1.58	10	1.93	766	10	3.12	7	1360	8	<0.01	<5	16	563	<20	0.55
E899961		1.16	10	2.21	903	5	3.06	6	1180	7	<0.01	<5	21	534	<20	0.59
E899962		3.81	<10	0.50	251	<1	2.74	3	880	6	<0.01	<5	4	603	<20	0.24
E899963		1.27	10	0.46	503	1	3.70	4	1120	11	<0.01	<5	8	814	<20	0.29
E899964		1.30	10	0.80	524	1	3.65	3	970	7	<0.01	<5	6	942	<20	0.29
E899965		1.64	10	1.03	564	<1	3.99	4	1270	2	0.01	<5	6	952	<20	0.34
E899966		1.38	10	0.87	594	<1	3.69	<1	900	7	<0.01	<5	6	903	<20	0.28
E899967		1.10	10	0.89	312	<1	3.67	3	990	2	0.01	<5	5	777	<20	0.27
E899968		1.15	10	0.83	464	<1	3.64	2	920	5	<0.01	<5	8	837	<20	0.32
E899969		2.17	10	1.88	807	144	2.62	5	1360	7	0.01	<5	16	572	<20	0.52
E899970		1.93	20	2.00	732	116	2.89	4	1330	5	0.02	<5	17	633	<20	0.54
E899971		2.19	10	0.66	597	1	3.24	2	800	7	<0.01	<5	7	913	<20	0.25
E899972		2.95	10	1.51	631	34	2.40	4	1260	4	0.01	<5	15	505	<20	0.49
E899973		3.67	20	1.67	480	65	2.00	4	1300	4	0.09	<5	16	483	<20	0.53
E899974		1.91	10	1.95	626	35	2.80	3	1680	3	0.02	<5	17	596	<20	0.59
E899975		1.41	10	2.52	937	12	2.82	7	1360	3	0.01	<5	24	629	<20	0.69
E899976		1.70	10	2.09	856	16	3.03	6	1300	3	0.18	<5	20	698	<20	0.59
E899977		2.16	10	1.76	402	42	2.85	5	1590	4	0.05	5	16	578	<20	0.61
E899978		1.98	10	1.68	645	15	3.17	4	1450	4	0.02	<5	14	680	<20	0.55
E899979		0.94	10	2.74	1320	12	2.98	8	1400	6	0.01	6	26	643	<20	0.68
E899980		2.26	10	0.35	498	2	3.20	1	890	8	<0.01	<5	6	564	<20	0.21
E899981		3.08	20	0.63	592	1	2.64	2	1040	8	<0.01	<5	7	619	<20	0.25



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**CERTIFICATE OF ANALYSIS WH15113459**

Sample Description	Method Analyte Units LOR	ME-ICP61 Ti ppm 10	ME-ICP61 U ppm 10	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	Cu-AA05 Cu % 0.001	Cu-AA62 Cu % 0.001
E899942		<10	<10	273	<10	63		0.611	0.721
E899943		<10	<10	281	<10	66		0.478	0.642
E899944		10	<10	286	40	67		0.267	0.416
E899945		<10	<10	278	<10	51		0.128	0.197
E899946		<10	<10	204	10	64		0.471	0.600
E899947		<10	<10	270	20	75		0.634	0.804
E899948		<10	<10	251	30	68		0.332	0.480
E899949		<10	<10	192	<10	70		0.534	0.614
E899950		<10	<10	182	<10	52		0.477	0.538
E899951		<10	<10	131	<10	52		0.663	0.739
E899952		<10	<10	179	10	72		0.819	0.955
E899953		<10	10	167	<10	329		0.649	0.799
E899954		10	<10	135	<10	152		0.395	0.463
E899955		<10	<10	99	<10	38		0.280	0.357
E899956		<10	<10	268	<10	66		0.481	0.615
E899957		<10	<10	206	10	75		0.363	0.445
E899958		<10	<10	161	<10	84		0.556	0.617
E899959		<10	<10	193	<10	68		0.571	0.665
E899960		<10	<10	248	<10	75		0.431	0.549
E899961		<10	<10	281	10	63		0.613	0.700
E899962		<10	<10	74	<10	25		0.128	0.155
E899963		<10	<10	81	<10	51		0.103	0.146
E899964		<10	<10	77	<10	57		0.057	0.093
E899965		<10	<10	101	<10	62		0.313	0.362
E899966		<10	10	76	<10	59		0.058	0.093
E899967		<10	<10	94	<10	41		0.538	0.602
E899968		<10	<10	99	<10	45		0.105	0.138
E899969		<10	10	228	<10	90	1.295	1.065	1.263
E899970		<10	10	240	<10	79		0.612	0.814
E899971		<10	<10	72	<10	50		0.136	0.173
E899972		<10	<10	217	10	69		0.464	0.637
E899973		<10	<10	235	10	66		0.560	0.869
E899974		<10	<10	261	<10	50		0.169	0.267
E899975		<10	<10	315	<10	63		0.090	0.138
E899976		<10	<10	255	<10	79		0.277	0.360
E899977		<10	10	253	<10	58		0.332	0.467
E899978		<10	<10	212	<10	57		0.295	0.393
E899979		10	<10	292	<10	87		0.404	0.466
E899980		<10	<10	74	<10	41		0.009	0.022
E899981		<10	<10	90	<10	43		0.012	0.029



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Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA23 Au ppm	ME-ICP61 Ag ppm	ME-ICP61 Al %	ME-ICP61 As ppm	ME-ICP61 Ba ppm	ME-ICP61 Be ppm	ME-ICP61 Bi ppm	ME-ICP61 Ca %	ME-ICP61 Cd ppm	ME-ICP61 Co ppm	ME-ICP61 Cr ppm	ME-ICP61 Cu ppm	ME-ICP61 Fe %	ME-ICP61 Ga ppm
		0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
E899982		8.44	0.008	<0.5	7.71	<5	2150	1.3	3	2.03	<0.5	5	6	238	2.34	20
E899983		7.70	0.016	0.8	7.54	<5	1520	1.2	<2	0.98	<0.5	5	5	733	2.62	20
E899984		7.17	<0.005	0.5	7.70	<5	2490	1.0	<2	1.32	<0.5	8	25	374	3.23	20
E899985		8.50	0.200	2.7	8.04	<5	1310	1.4	2	1.78	<0.5	9	26	1880	3.59	20
E899986		8.79	0.121	2.3	7.95	26	880	1.5	3	2.01	<0.5	11	44	7520	4.20	20
E899987		7.94	0.074	0.9	7.78	38	1550	0.9	<2	1.45	<0.5	7	21	2290	3.52	20
E899988		8.01	0.145	2.1	7.62	6	2060	0.8	3	1.88	<0.5	6	13	4390	3.16	20
E899989		6.73	0.062	0.7	7.95	<5	1040	1.7	<2	2.45	<0.5	8	35	1160	3.32	20
E899990		5.99	0.268	2.4	7.46	<5	1990	1.1	4	0.98	<0.5	5	12	3050	3.11	20
E899991		7.92	0.339	7.5	5.84	<5	2500	<0.5	8	0.60	<0.5	2	14	7140	1.69	10
E899992		7.05	0.075	1.0	6.72	<5	2280	0.7	3	0.44	<0.5	4	9	2430	2.10	10
E899993		5.51	0.133	1.4	7.86	<5	3320	0.6	2	0.65	<0.5	5	10	3650	4.91	20
E899994		6.16	0.047	0.7	7.68	<5	1730	1.7	<2	2.99	<0.5	8	6	1320	3.95	20
E899995		7.85	0.087	1.0	7.69	<5	1140	2.5	<2	1.68	<0.5	20	69	3600	11.30	20
E899996		7.10	0.068	0.5	7.81	<5	1060	1.9	3	2.27	<0.5	9	41	1440	4.68	20
E899997		7.03	0.208	1.6	7.94	<5	1880	1.3	3	1.68	<0.5	8	21	4140	4.22	20
E899998		5.73	0.204	1.3	7.19	<5	1510	1.5	<2	3.15	<0.5	15	66	2980	6.42	20
E899999		6.22	0.107	0.9	7.78	<5	1620	1.5	4	1.96	<0.5	9	23	2120	3.91	20
E900000		8.13	0.092	0.8	8.00	<5	1780	1.6	2	2.20	<0.5	6	23	1440	3.18	20
E899525		6.64	0.121	1.1	8.00	<5	850	1.4	4	1.37	<0.5	2	16	1190	0.95	20





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Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti
		%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
		0.01	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01
E899982		3.13	20	0.39	532	<1	2.93	<1	790	9	<0.01	<5	5	567	<20	0.21
E899983		3.04	20	0.68	393	1	2.87	<1	960	6	<0.01	<5	5	399	<20	0.21
E899984		3.56	10	1.03	664	1	3.15	4	910	8	<0.01	<5	8	480	<20	0.24
E899985		3.13	10	1.29	674	7	3.15	6	1080	6	0.01	<5	13	428	<20	0.37
E899986		2.49	10	1.27	899	14	3.51	10	1050	5	<0.01	<5	16	452	<20	0.40
E899987		4.62	10	0.11	794	45	2.32	4	940	21	0.01	<5	11	339	<20	0.28
E899988		4.78	10	0.49	581	22	2.34	6	810	10	0.06	7	9	293	<20	0.29
E899989		2.97	20	1.19	645	17	3.30	7	1090	5	<0.01	<5	16	452	<20	0.39
E899990		4.22	20	0.19	457	37	2.47	3	910	7	0.02	<5	8	369	<20	0.27
E899991		5.12	10	0.07	216	86	1.11	<1	630	13	0.08	<5	4	305	<20	0.17
E899992		3.50	10	0.09	364	78	2.47	3	800	5	0.06	<5	5	352	<20	0.19
E899993		5.34	10	0.10	454	50	1.87	2	790	9	0.05	<5	4	451	<20	0.21
E899994		2.76	10	1.08	842	2	3.21	1	1460	6	0.01	<5	10	798	<20	0.30
E899995		3.08	20	2.22	884	66	2.41	19	1410	8	<0.01	<5	18	476	<20	0.37
E899996		3.89	10	1.84	710	8	2.63	8	1170	5	<0.01	<5	15	479	<20	0.33
E899997		4.97	10	1.45	539	12	2.71	9	900	11	0.02	<5	10	536	<20	0.31
E899998		3.31	10	2.29	864	8	2.54	13	1350	4	0.01	<5	16	462	<20	0.40
E899999		4.47	10	1.32	565	6	2.70	8	860	6	<0.01	<5	10	519	<20	0.30
E900000		4.14	10	1.38	582	3	3.00	6	870	5	<0.01	<5	11	611	<20	0.31
E899525		2.87	<10	0.56	156	3	3.66	3	890	5	<0.01	<5	6	468	<20	0.21

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*



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**CERTIFICATE OF ANALYSIS WH15113459**

Sample Description	Method Analyte Units LOR	ME-ICP61 TI ppm 10	ME-ICP61 U ppm 10	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	Cu-AA05 Cu % 0.001	Cu-AA62 Cu % 0.001
E899982		<10	<10	67	<10	37		0.012	0.024
E899983		<10	<10	74	<10	32		0.061	0.078
E899984		<10	<10	88	<10	57		0.025	0.039
E899985		<10	<10	140	<10	58		0.151	0.186
E899986		<10	<10	162	<10	67		0.591	0.730
E899987		<10	<10	109	10	53		0.137	0.235
E899988		<10	<10	103	<10	40		0.313	0.432
E899989		<10	<10	144	<10	39		0.083	0.121
E899990		<10	<10	88	<10	39		0.232	0.304
E899991		<10	<10	52	<10	26		0.598	0.738
E899992		<10	<10	57	<10	32		0.147	0.257
E899993		<10	<10	110	<10	45		0.209	0.373
E899994		<10	<10	112	<10	59		0.113	0.139
E899995		<10	<10	243	190	73		0.281	0.353
E899996		<10	<10	160	<10	46		0.123	0.147
E899997		<10	<10	154	10	40		0.352	0.417
E899998		<10	<10	239	10	65		0.265	0.309
E899999		<10	<10	144	<10	39		0.188	0.221
E900000		<10	<10	126	<10	37		0.128	0.151
E899525		<10	<10	66	<10	19		0.090	0.126



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**CERTIFICATE OF ANALYSIS WH15113459**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.			
	CRU-31	CRU-QC	LOG-21	PUL-31
	PUL-QC	SPL-21	WEI-21	
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	Au-AA23	Cu-AA05	Cu-AA62	Cu-OG62
	ME-ICP61	ME-OG62		