



ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: ANGLOGOLD ASHANTI MINNESOTA INC.
6300 S. SYRACUSE WAY #500
CENTENNIAL CO 80111
USA

Page: 1
Total # Pages: 3 (A - G)
Plus Appendix Pages
Finalized Date: 17-JUN-2017
Account: AAMICLSR

CERTIFICATE VA17104273

Project: Minnesota

This report is for 43 Pulp samples submitted to our lab in Vancouver, BC, Canada on 26-MAY-2017.

The following have access to data associated with this certificate:

TREVOR BURR

PERTH DATA

ANDREW TYRELL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
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WEI-21	Received Sample Weight
LOG-24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
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ME-MS61L	Super Trace Lowest DL 4A by ICP-MS	ICP-MS
ME-MS41L	Super Trace Lowest DL AR by ICP-MS	
C-IR07	Total Carbon (Leco)	LECO
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

To: ANGLOGOLD ASHANTI MINNESOTA INC.
ATTN: PERTH DATA
6300 S. SYRACUSE WAY #500
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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 VA17104273

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-ICP21 Au ppm	ME-MS61L Ag ppm	ME-MS61L Al %	ME-MS61L As ppm	ME-MS61L Ba ppm	ME-MS61L Be ppm	ME-MS61L Bi ppm	ME-MS61L Ca %	ME-MS61L Cd ppm	ME-MS61L Ce ppm	ME-MS61L Co ppm	ME-MS61L Cr ppm	ME-MS61L Cs ppm	ME-MS61L Cu ppm
		0.02	0.001	0.002	0.01	0.05	1	0.02	0.005	0.01	0.005	0.01	0.005	0.3	0.01	0.02
R863528		0.12	0.001	0.079	7.13	4.53	560	1.62	0.232	5.67	0.161	68.5	15.45	83.8	4.65	30.3
R863529		0.24	<0.001	0.055	7.05	1.87	570	1.61	0.120	1.99	0.065	53.3	9.58	53.6	1.91	20.7
R863530		0.24	<0.001	0.051	7.02	1.29	590	1.38	0.132	1.95	0.068	48.7	9.93	56.6	1.80	20.1
R863531		0.08	<0.001	0.063	7.26	1.86	550	1.33	0.165	2.82	0.103	61.6	23.3	160.5	2.33	38.4
R863533		0.08	0.001	0.073	6.90	4.89	570	1.32	0.249	6.27	0.185	66.5	15.25	81.8	4.60	29.3
R863534		0.06	<0.001	0.069	7.32	1.99	670	1.47	0.194	2.17	0.098	67.4	16.70	100.5	3.24	34.0
R863536		0.14	0.005	0.069	7.19	1.56	620	1.50	0.184	2.17	0.080	62.2	14.80	95.0	2.61	30.7
R863537		0.08	0.003	0.060	6.34	1.14	920	1.98	0.589	5.49	0.090	86.2	30.1	175.5	6.54	82.9
R863539		0.10	<0.001	0.065	6.57	3.02	540	1.22	0.199	5.95	0.130	62.9	13.70	73.7	3.44	25.8
R863540		0.16	<0.001	0.055	6.55	1.43	580	1.31	0.147	2.21	0.080	71.1	12.10	86.1	1.83	24.5
R863541		0.16	0.001	0.082	6.72	1.41	550	1.24	0.112	2.41	0.135	46.2	13.60	116.0	1.39	25.8
R863542		0.02	<0.001	0.052	6.62	3.02	660	1.24	0.129	2.62	0.100	69.0	13.50	102.0	1.52	26.0
R863543		0.04	0.002	0.095	7.11	2.49	540	1.32	0.277	1.87	0.075	73.1	24.5	174.5	2.44	53.6
R863544		0.12	0.002	0.096	7.38	4.40	550	1.30	0.332	1.89	0.081	72.1	28.3	190.0	2.67	65.1
R863546		0.02	<0.001	0.080	7.37	2.01	630	1.43	0.191	2.19	0.120	69.9	16.30	104.5	2.08	32.4
R863547		0.12	0.001	0.057	7.54	1.45	590	1.09	0.186	1.82	0.080	51.3	19.50	139.0	2.43	42.4
R863548		0.10	0.001	0.077	6.83	1.76	540	1.17	0.236	1.35	0.081	53.8	18.35	130.5	2.22	41.5
R863550		0.12	<0.001	0.062	6.43	3.65	500	1.28	0.191	5.92	0.145	60.2	13.60	73.3	3.63	25.6
R863551		0.12	<0.001	0.058	6.88	1.69	600	1.29	0.146	2.61	0.106	58.7	14.85	96.3	2.48	29.6
R863552		0.12	<0.001	0.057	7.19	1.30	640	1.32	0.147	2.04	0.085	56.7	17.55	122.5	2.50	34.5
R863554		0.16	<0.001	0.050	6.83	1.71	590	1.32	0.129	1.89	0.079	49.6	11.75	66.5	1.85	23.7
R863555		0.10	<0.001	0.049	6.70	1.90	570	1.44	0.134	2.03	0.134	59.9	10.30	57.8	1.41	18.65
R863556		0.12	0.001	0.064	7.13	1.29	382	0.88	0.087	4.45	0.107	34.0	35.5	135.0	1.14	87.6
R863557		0.16	<0.001	0.067	6.88	2.30	351	0.83	0.075	4.25	0.119	33.4	34.0	129.0	1.04	79.5
R863558		0.10	<0.001	0.065	6.76	1.07	346	0.85	0.079	4.97	0.081	34.8	32.2	136.5	0.92	74.7
R863560		0.10	<0.001	0.067	6.78	4.08	550	1.25	0.202	5.99	0.158	61.8	14.35	76.6	3.75	26.8
R863561		0.10	0.006	0.052	6.89	2.10	550	1.15	0.128	3.66	0.084	46.4	12.60	87.1	2.04	20.9
R863563		0.12	<0.001	0.064	6.81	4.00	540	1.23	0.200	6.32	0.154	64.0	14.15	74.7	3.76	25.8
R863565		0.04	0.001	0.063	6.85	1.73	490	1.15	0.138	2.75	0.149	52.5	24.0	66.9	1.60	137.0
R863566		0.06	0.001	0.067	6.84	1.46	401	1.04	0.103	3.33	0.208	44.3	29.8	57.1	1.20	173.5
R863568		0.10	0.001	0.062	6.67	3.54	530	1.24	0.196	6.30	0.156	62.8	14.10	74.8	3.82	26.5
R863569		0.02	<0.001	0.075	6.68	3.98	540	1.35	0.214	5.85	0.164	65.3	14.55	78.7	3.95	27.7
R863570		0.02	0.001	0.050	6.45	1.43	460	1.02	0.117	2.55	0.084	55.2	15.35	66.4	1.11	50.8
R863571		0.14	0.001	0.048	6.77	1.11	570	1.26	0.124	2.09	0.073	46.5	12.90	66.4	1.73	36.3
R863572		0.06	0.008	0.065	6.76	1.48	460	1.12	0.119	2.58	0.069	40.5	19.00	72.3	1.23	66.0
R863574		0.14	<0.001	0.078	6.90	5.60	520	1.65	0.226	5.96	0.174	64.3	15.10	82.7	4.76	28.8
R863575		0.12	<0.001	0.047	6.44	1.26	550	1.37	0.117	2.07	0.063	62.6	9.90	57.2	1.26	18.70
R863576		0.04	<0.001	0.101	7.20	1.55	680	1.57	0.178	2.16	0.095	64.9	20.1	169.0	2.23	51.8
R863577		0.02	<0.001	0.070	6.92	2.20	600	1.61	0.177	2.61	0.097	64.6	16.30	93.5	2.09	37.3
R863578		0.14	<0.001	0.063	5.97	2.94	490	1.42	0.158	5.68	0.115	54.0	12.15	65.4	2.81	20.8



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Sample Description	Method Analyte Units LOR	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	
		Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
		%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
		0.002	0.05	0.05	0.004	0.005	0.01	0.005	0.2	0.01	0.2	0.02	0.001	0.005	0.08	0.001
R863528		3.63	17.50	0.24	3.11	0.047	2.01	32.5	43.4	2.33	633	0.89	1.365	8.76	47.3	0.063
R863529		2.04	15.30	0.20	3.75	0.029	1.91	24.4	15.0	0.76	370	0.58	2.70	5.13	27.2	0.090
R863530		1.950	14.85	0.09	3.28	0.030	1.94	21.3	13.6	0.74	365	0.55	2.71	4.60	27.1	0.086
R863531		3.66	16.00	0.12	3.83	0.032	1.66	28.1	16.6	1.09	960	7.90	2.58	5.76	68.5	0.095
R863533		3.34	16.80	0.11	2.98	0.050	1.87	33.0	40.2	2.32	634	0.94	1.105	8.66	45.2	0.058
R863534		3.15	17.75	0.13	3.74	0.045	2.17	32.7	26.3	1.29	526	1.02	2.30	6.72	50.6	0.082
R863536		2.78	16.10	0.13	3.44	0.037	1.93	31.0	20.0	1.21	527	0.64	2.48	5.57	47.8	0.094
R863537		4.21	15.25	0.16	4.35	0.050	2.83	37.6	37.6	4.55	703	1.85	1.895	4.28	173.5	0.305
R863539		3.01	15.45	0.12	3.34	0.042	1.83	31.7	29.5	2.36	549	0.64	1.520	7.41	40.2	0.064
R863540		2.36	13.95	0.12	3.52	0.042	1.69	35.7	13.2	0.97	484	0.50	2.44	4.99	38.9	0.104
R863541		2.51	13.90	0.12	2.81	0.033	1.62	19.80	11.4	1.19	563	0.40	2.67	4.27	49.5	0.097
R863542		2.87	13.85	0.14	3.51	0.032	1.81	33.6	12.1	1.02	583	2.37	2.48	4.80	42.2	0.110
R863543		4.53	17.50	0.14	3.41	0.060	1.88	35.3	20.2	1.94	811	0.72	2.01	5.94	87.5	0.103
R863544		4.81	18.35	0.14	3.13	0.066	1.90	35.5	22.7	2.13	821	0.96	2.00	6.03	100.5	0.109
R863546		3.05	16.05	0.14	3.86	0.036	1.89	32.7	15.9	1.05	652	1.21	2.69	5.74	49.0	0.117
R863547		3.57	17.80	0.13	2.75	0.042	1.66	23.0	19.0	1.57	579	0.87	2.49	4.70	65.1	0.078
R863548		3.34	15.05	0.12	3.04	0.035	1.67	25.8	15.0	1.29	531	0.67	2.27	5.00	59.9	0.094
R863550		2.93	15.45	0.14	2.97	0.048	1.74	30.0	32.5	2.26	525	0.75	1.315	7.47	40.2	0.059
R863551		2.87	15.85	0.13	3.42	0.043	1.88	29.2	19.7	1.28	548	0.65	2.36	5.58	46.0	0.086
R863552		3.21	16.90	0.13	3.19	0.038	1.95	26.6	18.5	1.32	594	0.80	2.52	5.76	56.5	0.090
R863554		2.20	14.90	0.12	3.30	0.033	1.89	21.8	13.8	0.80	445	0.61	2.65	5.00	31.9	0.087
R863555		2.00	14.30	0.13	3.73	0.027	1.79	27.9	10.9	0.66	458	0.47	2.66	4.66	27.3	0.096
R863556		6.65	16.80	0.13	3.02	0.059	1.18	14.15	20.9	2.47	1340	2.14	1.980	4.73	66.7	0.065
R863557		6.29	16.20	0.12	2.75	0.063	1.14	14.40	18.4	2.33	1295	1.65	1.920	4.41	62.0	0.061
R863558		6.14	15.30	0.11	2.54	0.055	1.00	15.00	17.4	2.46	1225	2.69	1.810	4.37	64.9	0.060
R863560		3.06	16.20	0.12	3.15	0.046	1.85	30.7	32.3	2.34	555	0.77	1.470	7.81	42.2	0.061
R863561		2.51	15.40	0.12	3.07	0.034	1.72	20.4	17.0	1.45	497	1.11	2.35	5.17	38.9	0.075
R863563		3.06	16.35	0.13	3.21	0.053	1.84	32.1	33.1	2.42	554	0.79	1.420	7.90	40.8	0.062
R863565		4.64	15.90	0.13	3.24	0.056	1.49	22.0	13.0	1.30	829	0.53	2.29	5.27	34.4	0.082
R863566		6.06	16.65	0.13	2.68	0.063	1.20	18.40	11.6	1.70	1045	0.78	2.17	4.60	33.6	0.076
R863568		3.00	15.90	0.14	3.31	0.045	1.81	31.8	33.2	2.42	551	0.76	1.380	7.78	41.4	0.061
R863569		3.13	16.15	0.14	3.39	0.047	1.81	32.8	34.9	2.29	556	0.76	1.335	7.77	42.7	0.061
R863570		3.24	14.45	0.12	3.49	0.044	1.43	24.2	9.9	0.99	676	0.50	2.31	4.84	29.1	0.086
R863571		2.74	15.15	0.13	3.14	0.038	1.81	20.4	14.6	1.00	520	0.58	2.47	4.91	30.4	0.077
R863572		3.80	15.30	0.12	3.08	0.049	1.44	17.35	12.7	1.27	747	0.48	2.32	4.94	35.8	0.082
R863574		3.29	17.80	0.09	3.04	0.054	1.81	32.0	41.3	2.25	571	0.90	1.110	8.20	45.1	0.056
R863575		2.03	14.70	0.10	3.83	0.027	1.71	29.4	9.5	0.66	485	0.33	2.59	4.33	24.5	0.100
R863576		3.76	18.70	0.10	2.85	0.036	2.01	29.5	23.2	1.43	720	2.26	2.46	5.01	83.9	0.110
R863577		3.01	15.40	0.13	3.62	0.023	1.82	29.8	17.8	1.18	593	1.04	2.41	5.89	49.8	0.108
R863578		2.61	14.40	0.10	3.03	0.037	1.63	26.7	29.3	2.20	478	0.61	1.510	7.20	34.5	0.062



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		Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Ti	U
		ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
		0.01	0.02	0.002	0.01	0.02	0.01	0.2	0.02	0.02	0.01	0.04	0.004	0.001	0.004	0.01
R863528		14.80	91.0	0.002	0.08	0.36	11.45	<0.2	1.55	265	0.59	0.05	8.82	0.316	0.519	2.32
R863529		15.70	65.9	<0.002	0.05	0.12	7.13	0.3	0.81	452	0.37	<0.04	6.00	0.221	0.366	1.64
R863530		15.50	60.4	<0.002	0.03	0.12	6.71	0.2	0.79	461	0.34	<0.04	5.46	0.209	0.344	1.36
R863531		13.90	52.1	0.002	0.20	0.18	9.93	0.4	1.22	533	0.46	0.04	7.88	0.290	0.361	1.56
R863533		14.45	85.8	0.003	0.08	0.43	11.15	0.6	1.45	244	0.59	0.04	9.23	0.297	0.492	2.35
R863534		17.65	82.9	<0.002	0.03	0.17	10.65	0.3	1.25	401	0.49	0.04	8.14	0.284	0.486	2.00
R863536		14.95	74.8	<0.002	0.03	0.14	9.81	0.3	0.92	450	0.39	<0.04	6.83	0.274	0.396	1.60
R863537		11.00	108.5	<0.002	0.03	0.11	13.15	0.3	1.14	791	0.24	<0.04	5.12	0.341	0.636	1.38
R863539		13.25	76.2	<0.002	0.05	0.30	9.97	0.3	1.24	296	0.54	<0.04	8.21	0.285	0.430	1.86
R863540		14.45	67.8	<0.002	0.05	0.13	8.85	0.2	0.80	463	0.36	<0.04	6.56	0.256	0.338	1.56
R863541		12.20	49.4	<0.002	0.06	0.12	9.42	0.5	0.61	477	0.37	<0.04	4.13	0.258	0.291	1.09
R863542		13.70	57.0	<0.002	0.09	0.13	8.84	0.4	1.07	525	0.34	0.04	6.94	0.272	0.334	1.35
R863543		19.60	57.7	<0.002	0.06	0.16	16.10	0.4	1.06	327	0.42	0.09	5.89	0.407	0.375	1.23
R863544		16.05	57.2	<0.002	0.10	0.16	17.15	0.3	1.12	333	0.42	0.08	5.35	0.406	0.400	1.31
R863546		16.50	62.0	<0.002	0.12	0.15	9.78	0.3	0.89	475	0.41	<0.04	8.54	0.300	0.354	1.80
R863547		14.15	58.1	<0.002	0.04	0.14	12.15	0.2	0.87	385	0.32	0.05	5.96	0.290	0.337	1.27
R863548		13.60	61.0	<0.002	0.03	0.21	11.40	0.2	0.89	314	0.45	0.04	6.56	0.319	0.344	1.49
R863550		12.80	77.0	0.002	0.05	0.33	10.15	0.4	1.27	269	0.51	<0.04	7.96	0.277	0.431	1.84
R863551		14.25	74.4	<0.002	0.05	0.13	10.45	0.2	0.94	414	0.41	<0.04	6.72	0.277	0.375	1.62
R863552		14.55	73.2	<0.002	0.08	0.12	11.65	0.2	0.90	436	0.65	<0.04	6.06	0.290	0.384	1.60
R863554		15.70	61.8	<0.002	0.06	0.10	8.04	0.2	0.87	441	0.39	<0.04	5.69	0.238	0.364	1.46
R863555		16.30	57.5	<0.002	0.08	0.08	7.51	<0.2	0.72	462	0.35	<0.04	7.62	0.236	0.318	1.60
R863556		11.10	44.2	<0.002	0.10	0.11	29.3	0.3	0.98	318	0.33	<0.04	3.44	0.560	0.212	0.79
R863557		10.05	43.4	<0.002	0.10	0.10	28.6	0.5	0.87	299	0.29	<0.04	3.71	0.539	0.224	0.74
R863558		12.75	36.5	0.002	0.09	0.12	27.8	0.5	0.97	331	0.29	<0.04	3.89	0.518	0.182	0.80
R863560		13.65	79.5	0.002	0.06	0.34	10.40	0.4	1.32	292	0.54	0.04	7.88	0.291	0.438	1.90
R863561		12.45	55.5	<0.002	0.04	0.17	8.66	0.2	0.87	406	0.40	<0.04	5.70	0.248	0.349	1.19
R863563		13.60	79.9	0.002	0.07	0.34	10.60	0.6	1.29	286	0.54	0.04	8.27	0.288	0.453	1.90
R863565		12.55	50.6	<0.002	<0.01	0.16	16.15	0.2	0.90	372	0.36	0.04	5.93	0.456	0.296	0.96
R863566		9.54	40.4	<0.002	<0.01	0.18	23.3	0.4	0.81	319	0.31	<0.04	4.68	0.555	0.222	0.73
R863568		13.25	79.6	0.002	0.06	0.34	10.35	0.5	1.30	279	0.52	0.05	8.28	0.289	0.444	1.86
R863569		13.80	81.0	0.002	0.06	0.35	10.60	0.5	1.30	273	0.55	<0.04	8.65	0.287	0.462	2.02
R863570		12.20	43.3	<0.002	0.07	0.18	11.75	0.3	0.79	399	0.34	0.04	7.44	0.372	0.262	1.58
R863571		13.40	58.0	<0.002	0.02	0.12	9.84	0.2	0.82	410	0.36	<0.04	5.28	0.280	0.337	1.07
R863572		11.25	43.5	<0.002	0.03	0.22	14.00	0.4	0.80	385	0.83	0.06	4.57	0.389	0.263	0.88
R863574		13.45	89.2	0.002	0.07	0.42	11.90	0.2	1.41	242	0.59	<0.04	9.39	0.296	0.491	2.32
R863575		14.00	57.3	<0.002	0.06	0.09	7.38	<0.2	0.69	444	0.35	<0.04	8.75	0.237	0.310	1.66
R863576		15.25	62.8	<0.002	0.08	0.13	12.50	<0.2	1.04	476	0.36	<0.04	6.67	0.300	0.368	1.62
R863577		15.10	64.0	<0.002	0.13	0.15	10.00	0.4	0.99	445	0.39	0.04	7.82	0.285	0.366	1.67
R863578		11.35	70.5	<0.002	0.08	0.26	9.50	0.3	1.10	293	0.47	<0.04	7.13	0.264	0.381	1.61



ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: ANGLOGOLD ASHANTI MINNESOTA INC.
6300 S. SYRACUSE WAY #500
CENTENNIAL CO 80111
USA

Page: 2 - D
Total # Pages: 3 (A - G)
Plus Appendix Pages
Finalized Date: 17-JUN-2017
Account: AAMICLSR

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CERTIFICATE OF ANALYSIS VA17104273

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		V	W	Y	Zn	Zr	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
		ppm 0.1	ppm 0.008	ppm 0.01	ppm 0.2	ppm 0.1	ppm 0.0002	ppm 0.001	% 0.01	ppm 0.01	ppm 10	ppm 0.5	ppm 0.01	ppm 0.001	% 0.01	ppm 0.001
R863528		108.5	0.821	14.35	82.6	104.0	0.0012	0.077	1.79	3.79	10	158.0	0.60	0.223	4.55	0.144
R863529		50.0	0.420	11.85	43.5	129.5	0.0003	0.048	0.81	1.31	<10	71.5	0.20	0.100	0.56	0.044
R863530		50.9	0.402	10.55	40.8	115.5	0.0019	0.034	0.75	1.25	<10	66.3	0.16	0.090	0.50	0.034
R863531		78.9	101.5	13.80	59.4	140.5	0.0004	0.059	1.36	1.86	<10	172.0	0.20	0.121	0.87	0.059
R863533		118.0	0.824	14.15	79.5	99.8	0.0013	0.077	1.69	4.53	20	196.5	0.72	0.245	5.66	0.172
R863534		84.7	5.10	13.25	70.8	125.0	0.0010	0.066	1.66	1.80	10	154.5	0.40	0.178	1.12	0.075
R863536		71.9	0.696	13.35	57.4	121.5	0.0008	0.068	1.33	1.75	<10	137.0	0.39	0.163	0.84	0.061
R863537		103.0	3.46	16.80	79.6	153.5	0.0035	0.075	3.18	1.01	<10	745	1.37	0.583	4.83	0.080
R863539		89.2	0.594	13.50	66.4	111.0	0.0011	0.061	1.36	2.80	10	119.0	0.45	0.165	4.82	0.097
R863540		59.6	0.436	13.85	47.1	119.5	0.0005	0.043	0.84	1.37	<10	81.6	0.28	0.093	0.69	0.043
R863541		64.2	0.314	12.10	43.9	102.0	0.0009	0.035	0.71	0.95	<10	56.4	0.15	0.084	0.54	0.046
R863542		61.6	0.399	13.20	49.4	127.0	0.0009	0.054	0.75	1.71	<10	69.3	0.29	0.102	1.05	0.051
R863543		120.0	1.150	19.65	98.4	117.0	0.0022	0.100	1.87	2.25	<10	73.2	0.61	0.252	0.74	0.051
R863544		128.0	1.255	19.85	105.5	113.0	0.0078	0.100	2.00	3.92	<10	83.3	0.52	0.284	0.76	0.067
R863546		70.9	0.440	14.75	62.4	138.0	0.0006	0.093	1.00	3.31	<10	109.5	0.25	0.144	0.65	0.070
R863547		91.1	1.255	11.30	72.5	99.8	0.0012	0.058	1.73	0.98	<10	148.0	0.33	0.142	0.52	0.057
R863548		84.1	1.045	12.70	63.8	107.0	0.0010	0.063	1.48	1.52	<10	100.5	0.39	0.195	0.46	0.139
R863550		96.0	0.629	13.50	66.8	103.5	0.0014	0.064	1.52	3.71	10	124.5	0.56	0.186	5.31	0.132
R863551		77.4	0.550	13.40	61.0	131.0	0.0007	0.056	1.30	1.59	<10	123.5	0.32	0.129	1.35	0.090
R863552		85.0	0.654	16.60	66.1	114.5	0.0006	0.060	1.44	1.31	<10	145.5	0.27	0.120	0.62	0.078
R863554		60.3	0.352	11.90	49.1	118.5	0.0007	0.039	0.91	1.30	<10	83.1	0.20	0.095	0.51	0.399
R863555		52.2	1.165	12.95	37.1	132.5	0.0010	0.062	0.66	1.17	<10	58.7	0.19	0.094	0.58	0.047
R863556		214	7.66	18.25	119.0	109.5	0.0006	0.062	2.34	0.89	<10	85.5	0.20	0.063	1.84	0.065
R863557		210	12.40	17.15	111.5	90.2	0.0009	0.064	2.41	0.89	10	81.9	0.24	0.061	1.97	0.075
R863558		205	4.19	16.80	95.7	93.8	0.0010	0.066	2.42	0.99	<10	97.3	0.17	0.056	2.25	0.056
R863560		97.7	0.808	13.70	70.0	109.5	0.0013	0.075	1.44	3.38	10	126.5	0.56	0.180	5.05	0.131
R863561		72.8	3.10	11.20	47.6	105.0	0.0005	0.043	1.07	1.66	10	79.9	0.29	0.107	2.24	0.066
R863563		100.0	0.693	14.25	69.8	111.5	0.0010	0.064	1.48	3.52	10	123.5	0.60	0.179	5.45	0.132
R863565		139.5	4.33	18.40	66.8	111.5	0.0010	0.035	1.26	1.52	<10	71.8	0.20	0.108	0.69	0.112
R863566		194.0	10.40	21.8	77.1	87.0	0.0015	0.050	1.64	1.29	<10	54.2	0.20	0.079	0.93	0.173
R863568		97.3	0.634	13.85	69.6	115.5	0.0013	0.067	1.54	3.49	10	134.5	0.50	0.178	5.71	0.144
R863569		100.0	0.712	13.90	70.9	109.5	0.0011	0.063	1.62	3.80	10	142.0	0.65	0.198	5.20	0.147
R863570		93.3	0.414	15.70	45.9	125.0	0.0008	0.050	0.85	1.26	<10	39.1	0.19	0.082	0.64	0.043
R863571		76.0	0.368	12.40	49.9	107.5	0.0006	0.044	1.02	1.02	<10	68.2	0.22	0.089	0.57	0.043
R863572		110.0	0.849	15.60	57.7	106.5	0.0020	0.110	1.25	1.24	<10	44.6	0.23	0.083	0.70	0.037
R863574		120.5	0.744	14.80	79.8	109.5	0.0019	0.078	1.69	5.13	20	148.0	0.74	0.232	5.47	0.175
R863575		52.9	0.306	13.75	34.1	146.5	0.0004	0.031	0.52	0.68	<10	46.6	0.17	0.066	0.45	0.044
R863576		90.3	1.805	13.35	70.2	113.0	0.0009	0.071	1.70	1.51	<10	120.5	0.47	0.147	0.92	0.071
R863577		68.3	0.568	14.45	59.0	130.0	0.0005	0.058	1.04	1.84	<10	107.0	0.39	0.131	1.28	0.071
R863578		77.0	0.544	12.95	58.3	109.0	0.0009	0.048	1.13	2.79	10	96.5	0.40	0.131	4.78	0.098



ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: ANGLOGOLD ASHANTI MINNESOTA INC.
6300 S. SYRACUSE WAY #500
CENTENNIAL CO 80111
USA

Page: 2 - E
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		Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg
		ppm 0.003	ppm 0.001	ppm 0.01	ppm 0.005	ppm 0.01	% 0.001	ppm 0.004	ppm 0.005	ppm 0.002	ppm 0.004	ppm 0.005	% 0.01	ppm 0.002	ppm 0.1	% 0.01
R863528		56.4	14.20	61.8	2.29	30.1	2.77	6.70	0.112	0.539	0.013	0.025	0.45	29.6	26.6	1.95
R863529		43.7	8.41	39.4	1.105	20.6	1.500	3.56	0.079	0.258	<0.004	0.014	0.25	22.5	11.6	0.56
R863530		40.4	8.00	38.4	1.070	19.85	1.430	3.39	0.068	0.226	<0.004	0.010	0.24	21.2	10.6	0.52
R863531		47.6	19.45	144.0	1.845	37.2	2.78	5.53	0.130	0.225	0.011	0.015	0.57	24.9	14.4	0.84
R863533		53.3	13.75	54.1	2.05	28.0	2.60	6.24	0.100	0.538	0.018	0.029	0.41	27.8	25.3	2.03
R863534		61.4	15.90	85.0	2.33	34.4	2.86	6.94	0.124	0.464	0.005	0.020	0.53	32.7	22.9	1.19
R863536		48.1	12.40	74.0	1.880	30.1	2.31	5.48	0.112	0.338	<0.004	0.020	0.45	25.6	17.3	1.00
R863537		75.4	28.5	218	6.57	83.5	3.94	10.90	0.193	0.441	<0.004	0.033	2.41	35.8	39.8	4.18
R863539		47.9	11.15	49.9	1.850	24.0	2.23	5.09	0.097	0.473	0.008	0.019	0.35	25.4	19.7	1.99
R863540		51.8	9.32	53.2	1.210	21.7	1.700	3.67	0.097	0.253	<0.004	0.012	0.26	26.8	11.4	0.64
R863541		36.2	8.67	59.1	0.816	22.6	1.480	2.89	0.082	0.192	<0.004	0.009	0.19	17.35	8.2	0.56
R863542		54.4	10.10	59.8	0.879	25.3	2.01	3.40	0.118	0.259	<0.004	0.011	0.21	28.4	9.1	0.61
R863543		68.5	20.8	132.5	1.480	51.4	3.76	7.74	0.170	0.300	<0.004	0.024	0.24	37.6	18.0	1.52
R863544		66.3	23.3	153.5	1.830	56.4	3.89	8.25	0.170	0.294	<0.004	0.026	0.28	36.6	19.6	1.66
R863546		49.5	13.30	71.3	1.285	32.3	2.23	4.58	0.112	0.265	<0.004	0.012	0.33	25.8	12.7	0.73
R863547		44.6	16.95	108.5	1.815	40.9	2.93	7.06	0.124	0.340	<0.004	0.017	0.51	23.3	16.7	1.25
R863548		47.3	16.60	100.0	1.700	40.3	2.84	6.16	0.123	0.316	<0.004	0.015	0.42	25.5	13.2	1.06
R863550		50.4	12.35	52.2	1.960	25.9	2.39	5.70	0.103	0.486	0.012	0.019	0.38	26.7	22.6	2.08
R863551		48.2	13.10	74.5	1.715	29.9	2.34	5.55	0.112	0.353	0.004	0.016	0.42	25.7	16.7	1.09
R863552		45.3	15.30	100.0	1.830	34.5	2.70	6.30	0.106	0.289	<0.004	0.014	0.53	23.9	16.5	1.08
R863554		41.2	9.61	47.4	1.190	24.0	1.760	3.91	0.076	0.253	<0.004	0.014	0.30	21.7	11.4	0.61
R863555		45.0	7.98	36.6	0.817	20.2	1.460	2.93	0.074	0.233	<0.004	0.009	0.20	23.0	8.3	0.45
R863556		23.6	24.4	67.8	0.586	79.2	4.73	7.54	0.144	0.309	<0.004	0.022	0.19	10.80	17.6	1.36
R863557		25.1	24.9	65.8	0.561	78.2	4.81	7.82	0.151	0.314	<0.004	0.025	0.21	11.55	16.6	1.34
R863558		22.3	25.6	82.4	0.485	72.6	4.60	6.99	0.146	0.354	<0.004	0.019	0.16	10.30	14.9	1.56
R863560		47.9	11.60	50.3	1.805	24.6	2.32	5.52	0.095	0.500	0.009	0.020	0.36	25.1	21.1	2.04
R863561		39.5	9.47	54.4	1.185	20.5	1.760	4.18	0.074	0.384	<0.004	0.013	0.27	20.4	13.2	1.08
R863563		49.9	12.25	51.8	1.865	25.4	2.38	5.41	0.096	0.517	0.010	0.021	0.37	26.1	21.9	2.14
R863565		39.1	18.00	40.5	1.060	133.5	2.87	4.89	0.121	0.263	0.004	0.013	0.17	19.50	11.5	0.77
R863566		31.1	22.0	35.4	0.795	174.5	3.76	6.36	0.158	0.203	<0.004	0.019	0.14	14.00	11.5	1.01
R863568		50.1	12.40	52.8	1.905	25.9	2.42	5.74	0.098	0.514	0.013	0.021	0.38	26.7	22.9	2.26
R863569		49.9	12.90	54.9	1.940	26.7	2.52	6.20	0.093	0.500	0.015	0.029	0.40	26.1	25.0	2.10
R863570		36.3	11.50	34.1	0.586	52.2	2.03	3.47	0.104	0.218	<0.004	0.011	0.13	19.00	8.6	0.59
R863571		37.4	10.05	43.5	1.020	35.3	1.940	4.21	0.094	0.286	<0.004	0.014	0.23	18.95	12.2	0.69
R863572		34.5	14.80	46.1	0.714	67.6	2.61	4.61	0.112	0.254	<0.004	0.014	0.15	16.80	11.3	0.87
R863574		51.8	13.85	53.6	2.08	28.7	2.58	6.37	0.100	0.529	0.022	0.025	0.40	27.6	26.0	2.01
R863575		40.8	6.87	30.8	0.699	17.25	1.260	2.46	0.071	0.214	<0.004	0.009	0.15	20.4	7.5	0.36
R863576		64.5	18.55	162.0	1.600	53.9	3.22	8.10	0.129	0.317	<0.004	0.021	0.37	32.0	23.5	1.23
R863577		54.7	13.35	78.5	1.450	36.2	2.30	5.21	0.094	0.302	<0.004	0.017	0.32	28.4	15.6	0.95
R863578		43.3	9.57	43.8	1.590	21.2	1.910	4.46	0.070	0.418	0.012	0.024	0.28	22.3	18.7	1.98



ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

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		Mn	Mo	Na	Nb	Ni	P	Pb	Pd	Pt	Rb	Re	S	Sb	Sc	Se
		ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
		0.1	0.01	0.001	0.002	0.04	0.001	0.005	0.001	0.002	0.005	0.001	0.01	0.005	0.005	0.1
R863528		499	0.64	0.057	0.245	41.1	0.059	8.65	<0.001	0.005	36.5	0.002	0.08	0.166	6.23	0.6
R863529		198.0	0.50	0.022	0.223	23.9	0.088	4.07	<0.001	0.002	16.75	<0.001	0.06	0.049	3.07	0.1
R863530		183.0	0.45	0.018	0.235	23.0	0.085	3.98	<0.001	0.002	16.40	<0.001	0.06	0.045	2.91	0.2
R863531		515	7.66	0.085	0.191	57.6	0.087	4.09	0.001	0.002	27.4	0.002	0.21	0.104	4.90	0.3
R863533		535	0.64	0.051	0.204	38.5	0.054	9.62	<0.001	0.004	34.1	0.002	0.10	0.189	5.94	0.5
R863534		411	0.96	0.048	0.207	48.3	0.082	7.40	0.002	0.004	36.0	0.001	0.05	0.083	6.05	0.3
R863536		344	0.61	0.034	0.168	41.3	0.090	5.19	<0.001	0.003	28.6	<0.001	0.06	0.059	4.90	0.1
R863537		608	1.77	0.054	0.058	163.0	0.295	5.65	<0.001	0.004	102.5	0.001	0.06	0.052	10.25	0.4
R863539		404	0.42	0.044	0.264	31.6	0.059	6.39	<0.001	0.004	28.6	0.001	0.07	0.114	4.87	0.4
R863540		244	0.36	0.022	0.186	29.8	0.099	4.24	<0.001	0.002	18.40	<0.001	0.07	0.041	3.57	0.1
R863541		216	0.35	0.020	0.153	29.3	0.090	2.94	0.001	0.002	12.25	<0.001	0.08	0.035	2.92	0.2
R863542		287	2.09	0.027	0.170	31.0	0.106	3.97	0.001	0.002	14.95	<0.001	0.12	0.071	3.44	0.3
R863543		510	0.65	0.026	0.078	72.3	0.099	10.90	0.001	0.004	15.95	<0.001	0.09	0.079	7.47	0.3
R863544		519	0.90	0.027	0.078	81.2	0.104	8.66	<0.001	0.003	19.55	0.001	0.12	0.069	8.23	0.4
R863546		346	0.90	0.022	0.198	39.4	0.106	5.76	<0.001	0.002	20.2	<0.001	0.14	0.052	4.27	0.3
R863547		389	0.58	0.031	0.083	55.7	0.075	4.77	0.001	0.004	27.9	0.001	0.07	0.057	6.06	0.2
R863548		363	0.60	0.023	0.079	55.4	0.097	6.43	<0.001	0.003	24.8	0.001	0.06	0.072	5.33	0.2
R863550		441	0.63	0.041	0.216	35.1	0.056	7.47	0.001	0.003	31.8	0.002	0.09	0.125	5.46	0.6
R863551		353	0.68	0.030	0.206	39.5	0.086	5.57	<0.001	0.002	26.8	0.001	0.09	0.053	5.28	0.2
R863552		397	0.77	0.030	0.156	49.4	0.090	4.87	0.001	0.002	28.7	<0.001	0.10	0.050	5.90	0.2
R863554		249	0.44	0.021	0.191	27.0	0.085	4.63	<0.001	0.002	18.60	<0.001	0.08	0.036	3.63	0.2
R863555		203	0.37	0.018	0.227	22.0	0.098	4.24	<0.001	0.002	12.30	<0.001	0.11	0.047	2.84	0.3
R863556		731	1.91	0.121	0.107	43.6	0.060	5.04	<0.001	0.003	10.60	0.001	0.12	0.050	8.60	0.4
R863557		762	1.54	0.150	0.089	42.8	0.059	4.48	<0.001	0.004	10.95	0.001	0.13	0.042	9.08	0.3
R863558		690	2.44	0.106	0.122	49.8	0.058	8.24	0.002	0.003	9.19	0.001	0.12	0.054	7.09	0.4
R863560		424	0.61	0.035	0.235	33.1	0.060	7.29	0.001	0.004	29.2	0.002	0.08	0.148	5.22	0.5
R863561		300	0.91	0.039	0.230	27.5	0.073	4.41	<0.001	0.003	18.60	0.001	0.06	0.080	3.83	0.2
R863563		438	0.62	0.035	0.248	34.4	0.059	7.43	<0.001	0.003	30.3	0.002	0.09	0.141	5.21	0.4
R863565		329	0.41	0.044	0.180	24.6	0.080	4.02	<0.001	0.002	14.50	0.001	0.01	0.083	5.71	0.2
R863566		424	0.64	0.083	0.124	23.6	0.073	2.84	<0.001	0.002	10.45	0.001	0.02	0.072	8.04	0.4
R863568		447	0.57	0.039	0.264	35.2	0.061	7.50	<0.001	0.005	31.1	0.002	0.08	0.148	5.53	0.5
R863569		453	0.55	0.041	0.242	36.2	0.060	7.79	<0.001	0.004	32.3	0.002	0.08	0.152	5.91	0.5
R863570		267	0.44	0.021	0.157	20.6	0.086	3.22	0.002	0.002	8.39	<0.001	0.10	0.051	3.93	0.2
R863571		272	0.38	0.026	0.156	23.9	0.076	3.44	0.001	0.002	16.60	<0.001	0.05	0.039	4.22	0.3
R863572		365	0.40	0.026	0.127	27.6	0.080	2.88	<0.001	0.003	10.70	<0.001	0.06	0.045	5.75	0.2
R863574		490	0.64	0.047	0.204	38.6	0.054	9.28	0.001	0.004	34.9	0.003	0.08	0.162	6.07	0.7
R863575		210	0.38	0.014	0.177	16.95	0.095	3.26	<0.001	<0.002	11.60	<0.001	0.08	0.032	2.52	0.1
R863576		548	2.25	0.035	0.101	79.0	0.102	7.76	<0.001	0.002	22.3	0.001	0.10	0.054	7.50	0.1
R863577		372	1.12	0.021	0.141	44.1	0.103	7.96	<0.001	0.002	22.8	<0.001	0.11	0.076	5.49	0.2
R863578		358	0.53	0.033	0.250	27.5	0.059	5.79	<0.001	0.002	24.2	0.001	0.07	0.103	4.58	0.3



ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: ANGLOGOLD ASHANTI MINNESOTA INC.
6300 S. SYRACUSE WAY #500
CENTENNIAL CO 80111
USA

Page: 2 - G
Total # Pages: 3 (A - G)
Plus Appendix Pages
Finalized Date: 17-JUN-2017
Account: AAMICLSR

Project: Minnesota

CERTIFICATE OF ANALYSIS VA17104273

Sample Description	Method Analyte Units LOR	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	C-IR07
		Sn	Sr	Ta	Te	Th	Ti	Ti	U	V	W	Y	Zn	Zr
		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	0.01	0.005	0.01	0.002	0.001	0.002	0.005	0.1	0.001	0.003	0.1	0.01
R863528		0.81	60.4	<0.005	0.02	7.69	0.100	0.216	1.515	54.7	0.078	10.60	66.7	21.7
R863529		0.40	17.70	<0.005	0.02	5.23	0.069	0.101	1.050	29.0	0.111	7.38	32.7	8.80
R863530		0.36	16.25	<0.005	0.02	4.71	0.068	0.098	0.993	28.2	0.190	6.95	30.5	8.06
R863531		0.92	37.0	<0.005	0.03	5.79	0.116	0.192	1.030	50.7	54.2	7.82	44.3	8.00
R863533		0.80	70.0	<0.005	0.04	7.65	0.082	0.206	1.625	54.0	0.049	11.05	66.7	21.7
R863534		0.79	34.5	<0.005	0.03	7.61	0.127	0.212	1.470	56.3	2.60	9.76	63.2	17.20
R863536		0.57	34.6	<0.005	0.01	5.11	0.109	0.162	0.944	45.8	0.227	8.24	48.5	12.20
R863537		1.02	297	<0.005	0.03	2.93	0.250	0.515	0.653	92.1	1.895	12.00	71.4	21.0
R863539		0.64	51.6	<0.005	0.03	6.17	0.090	0.173	1.160	44.5	0.066	9.03	51.5	18.25
R863540		0.38	27.6	<0.005	0.02	4.54	0.075	0.118	0.884	31.8	0.073	7.74	34.3	8.57
R863541		0.30	20.6	<0.005	0.02	3.23	0.066	0.078	0.649	28.3	0.082	6.40	25.7	6.30
R863542		0.67	40.3	<0.005	0.01	4.76	0.070	0.092	0.977	31.7	0.229	7.82	33.2	8.36
R863543		0.51	36.7	<0.005	0.05	4.84	0.099	0.087	0.665	70.1	0.199	12.55	81.2	10.35
R863544		0.55	41.2	<0.005	0.06	4.52	0.106	0.112	0.761	76.9	0.254	12.95	84.3	11.00
R863546		0.53	24.2	<0.005	0.02	5.70	0.085	0.125	1.185	39.6	0.104	8.51	44.5	8.91
R863547		0.47	32.8	<0.005	0.03	4.60	0.110	0.156	0.764	54.9	0.418	6.94	58.5	11.45
R863548		0.42	27.8	<0.005	0.04	5.11	0.084	0.152	0.844	48.7	0.276	8.21	53.0	10.50
R863550		0.73	63.8	<0.005	0.03	6.67	0.090	0.186	1.280	49.1	0.058	9.91	58.5	19.60
R863551		0.53	29.8	<0.005	0.03	5.46	0.109	0.153	1.000	48.4	0.112	8.60	50.1	12.65
R863552		0.51	22.6	<0.005	0.02	5.09	0.123	0.174	0.985	55.8	0.187	8.19	54.9	10.30
R863554		0.41	17.20	<0.005	0.02	4.81	0.079	0.112	1.110	34.3	0.106	7.43	36.9	8.97
R863555		0.36	16.70	<0.005	0.02	5.91	0.062	0.080	1.085	27.2	0.082	7.69	28.9	7.81
R863556		0.66	44.8	<0.005	0.01	2.36	0.252	0.063	0.443	126.5	3.38	10.65	92.7	11.10
R863557		0.56	42.9	<0.005	0.01	2.60	0.251	0.060	0.431	131.5	5.61	10.65	89.7	11.25
R863558		0.73	62.1	<0.005	0.01	2.20	0.309	0.055	0.497	124.0	2.55	10.70	82.1	12.15
R863560		0.65	55.0	<0.005	0.03	6.52	0.086	0.188	1.240	46.3	0.077	9.45	55.2	20.4
R863561		0.45	34.9	<0.005	0.01	4.97	0.085	0.115	0.908	35.6	1.480	7.51	36.9	14.30
R863563		0.70	59.4	<0.005	0.03	6.54	0.088	0.182	1.225	48.9	0.061	9.74	57.7	21.1
R863565		0.37	18.30	<0.005	0.04	4.76	0.130	0.095	0.517	67.7	2.85	8.99	44.2	9.30
R863566		0.41	19.75	<0.005	0.03	3.43	0.168	0.067	0.371	97.2	7.93	9.94	50.7	7.11
R863568		0.75	60.4	<0.005	0.03	6.71	0.093	0.191	1.265	50.2	0.056	10.15	58.7	20.4
R863569		0.73	59.8	<0.005	0.02	6.82	0.093	0.191	1.300	51.7	0.057	9.96	60.2	19.85
R863570		0.31	16.85	<0.005	0.02	5.10	0.084	0.057	0.588	44.7	0.139	7.59	30.4	7.35
R863571		0.41	18.90	<0.005	0.01	4.46	0.094	0.094	0.734	41.3	0.092	7.39	37.2	10.15
R863572		0.33	19.55	<0.005	0.05	4.27	0.114	0.061	0.518	58.3	0.286	8.63	42.3	8.70
R863574		0.83	70.5	<0.005	0.04	7.36	0.081	0.201	1.435	55.8	0.046	11.10	68.2	21.7
R863575		0.25	15.35	<0.005	0.01	5.65	0.055	0.077	0.807	25.4	0.086	6.68	22.5	7.13
R863576		0.62	42.9	<0.005	0.03	5.89	0.125	0.137	1.060	66.0	0.903	8.87	61.3	11.30
R863577		0.49	31.6	<0.005	0.03	6.38	0.079	0.134	1.085	42.7	0.100	8.71	49.2	9.50
R863578		0.48	51.4	<0.005	0.02	5.71	0.078	0.147	0.988	40.4	0.035	7.88	45.8	15.55



ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
 www.alsglobal.com

To: ANGLOGOLD ASHANTI MINNESOTA INC.
 6300 S. SYRACUSE WAY #500
 CENTENNIAL CO 80111
 USA

Page: 3 - A
 Total # Pages: 3 (A - G)
 Plus Appendix Pages
 Finalized Date: 17-JUN-2017
 Account: AAMICLSR

Project: Minnesota

CERTIFICATE OF ANALYSIS VA17104273

Sample Description	Method Analyte Units LOR	WEI-21	Au-ICP21	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
		Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
		kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
		0.02	0.001	0.002	0.01	0.05	1	0.02	0.005	0.01	0.005	0.01	0.005	0.3	0.01	0.02
R863579		0.02	0.053	0.055	6.09	2.21	440	1.28	0.133	2.88	0.143	80.7	27.1	354	1.22	40.4
R863580		0.08	<0.001	0.109	7.30	4.58	600	1.84	0.260	4.28	0.142	69.1	18.45	96.1	4.56	35.1
R863581		0.10	0.026	0.146	7.27	2.57	600	1.71	0.152	1.97	0.078	61.9	14.20	75.7	2.05	27.0



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 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
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Page: 3 - B
 Total # Pages: 3 (A - G)
 Plus Appendix Pages
 Finalized Date: 17-JUN-2017
 Account: AAMICLSR

Project: Minnesota

CERTIFICATE OF ANALYSIS VA17104273

Sample Description	Method Analyte Units LOR	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
		Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
		%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
		0.002	0.05	0.05	0.004	0.005	0.01	0.005	0.2	0.01	0.2	0.02	0.001	0.005	0.08
R863579		4.02	13.35	0.14	4.42	0.031	1.42	38.3	12.4	2.30	951	1.08	1.990	5.86	115.5
R863580		3.70	18.85	0.13	3.23	0.045	2.04	33.9	47.3	2.10	629	0.68	1.545	9.15	53.8
R863581		2.58	16.25	0.12	3.63	0.025	1.91	29.0	16.5	0.83	491	0.57	2.59	5.84	38.4



ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
 www.alsglobal.com

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 CENTENNIAL CO 80111
 USA

Page: 3 - C
 Total # Pages: 3 (A - G)
 Plus Appendix Pages
 Finalized Date: 17-JUN-2017
 Account: AAMICLSR

Project: Minnesota

CERTIFICATE OF ANALYSIS VA17104273

Sample Description	Method Analyte Units LOR	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L	ME-MS61L
		Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
		ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
		0.01	0.02	0.002	0.01	0.02	0.01	0.2	0.02	0.02	0.01	0.04	0.004	0.001	0.004	0.01
R863579		12.45	50.5	<0.002	0.29	0.13	13.90	0.3	0.93	347	0.45	<0.04	12.05	0.415	0.276	1.65
R863580		14.75	97.4	<0.002	0.06	0.28	12.70	0.4	1.55	285	0.61	<0.04	9.34	0.329	0.529	2.05
R863581		18.00	73.2	<0.002	0.09	0.10	9.11	0.3	0.93	454	0.40	0.05	7.33	0.266	0.371	1.59



2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

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Total # Pages: 3 (A - G)

Plus Appendix Pages

Finalized Date: 17-JUN-2017

Account: AAMICLSR

CERTIFICATE OF ANALYSIS VA17104273

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 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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 6300 S. SYRACUSE WAY #500
 CENTENNIAL CO 80111
 USA

Page: 3 - E
 Total # Pages: 3 (A - G)
 Plus Appendix Pages
 Finalized Date: 17-JUN-2017
 Account: AAMICLSR

Project: Minnesota

CERTIFICATE OF ANALYSIS VA17104273

Sample Description	Method Analyte Units LOR	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L
		Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg
		ppm 0.003	ppm 0.001	ppm 0.01	ppm 0.005	ppm 0.01	% 0.001	ppm 0.004	ppm 0.005	ppm 0.002	ppm 0.004	ppm 0.005	% 0.01	ppm 0.002	ppm 0.1	% 0.01
R863579		49.8	18.75	128.0	0.768	40.2	2.31	3.77	0.105	0.234	<0.004	0.011	0.15	25.2	9.3	0.86
R863580		62.7	15.35	73.3	2.75	34.9	2.93	7.67	0.103	0.587	0.015	0.033	0.47	32.0	32.6	1.79
R863581		48.7	10.90	55.0	1.365	25.8	1.830	4.40	0.089	0.268	<0.004	0.017	0.29	24.5	12.2	0.59



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 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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 CENTENNIAL CO 80111
 USA

Page: 3 - F
 Total # Pages: 3 (A - G)
 Plus Appendix Pages
 Finalized Date: 17-JUN-2017
 Account: AAMICLSR

Project: Minnesota

CERTIFICATE OF ANALYSIS VA17104273

Sample Description	Method Analyte Units LOR	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L
		Mn	Mo	Na	Nb	Ni	P	Pb	Pd	Pt	Rb	Re	S	Sb	Sc	Se
		ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
		0.1	0.01	0.001	0.002	0.04	0.001	0.005	0.001	0.002	0.005	0.001	0.01	0.005	0.005	0.1
R863579		325	1.04	0.022	0.169	73.2	0.089	5.04	<0.001	0.002	12.15	<0.001	0.30	0.079	3.83	0.3
R863580		511	0.51	0.058	0.222	44.7	0.062	8.96	<0.001	0.003	41.2	0.001	0.05	0.141	7.67	0.4
R863581		253	0.41	0.019	0.155	33.3	0.090	5.67	<0.001	<0.002	23.9	<0.001	0.09	0.054	4.18	0.2



ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
 www.alsglobal.com

To: ANGLOGOLD ASHANTI MINNESOTA INC.
 6300 S. SYRACUSE WAY #500
 CENTENNIAL CO 80111
 USA

Page: 3 - G
 Total # Pages: 3 (A - G)
 Plus Appendix Pages
 Finalized Date: 17-JUN-2017
 Account: AAMICLSR

Project: Minnesota

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Sample Description	Method Analyte Units LOR	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	ME-MS41L	C-IR07
		Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	C
		ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.01	0.005	0.01	0.002	0.001	0.002	0.005	0.1	0.001	0.003	0.1	0.01	0.01
R863579		0.41	19.25	<0.005	0.03	7.81	0.079	0.094	0.865	47.2	0.247	7.72	67.2	7.91	0.21
R863580		0.79	56.8	<0.005	0.05	8.81	0.118	0.249	1.405	62.6	0.049	9.98	72.3	22.3	1.52
R863581		0.40	21.0	<0.005	0.02	6.03	0.072	0.128	1.030	35.4	0.080	7.78	45.1	8.37	0.17



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North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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To: ANGLOGOLD ASHANTI MINNESOTA INC.
6300 S. SYRACUSE WAY #500
CENTENNIAL CO 80111
USA

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CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).
ME-MS41L

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Au-ICP21 C-IR07 LOG-24 ME-MS41L
ME-MS61L WEI-21