



Australian Laboratory Services Pty. Ltd.
32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 (7) 3243 7222 Fax: +61 (7) 3243 7218
www.alsglobal.com

Page: 1
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 18-JUL-2017
Account: RIOTINWA

QC CERTIFICATE PH17135413

Project: EB80023019

P.O. No.: EB80023019

This report is for 24 Drill Core samples submitted to our lab in Perth, WA, Australia on 4-JUL-2017.

The following have access to data associated with this certificate:

ADAM BLACK

LAB RESULTS

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-31	Fine crushing - 70% <2mm
WSH-21	"Wash" crushers
WSH-22	"Wash" pulverizers
PUL-32	Pulverize 1000g to 85% < 75 um
SPL-22	Split sample - rotary splitter
LEV-01	Waste Disposal Levy
LOG-22	Sample login - Rcd w/o BarCode
BAG-01	Bulk Master for Storage
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS61L	Super Trace Lowest DL 4A by ICP-MS	ICP-MS

To: RIO TINTO EXPLORATION PTY LTD
ATTN: ADAM BLACK
EXPLORATION OFFICE
PO BOX 175
BELMONT WA 6104

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:

Cameron Brosnan, Laboratory Manager, Perth

QC CERTIFICATE OF ANALYSIS PH17135413

Method Analyte Units LOR	ME-MS61L Ag ppm 0.002	ME-MS61L Al % 0.01	ME-MS61L As ppm 0.05	ME-MS61L Ba ppm 1	ME-MS61L Be ppm 0.02	ME-MS61L Bi ppm 0.005	ME-MS61L Ca % 0.01	ME-MS61L Cd ppm 0.005	ME-MS61L Ce ppm 0.01	ME-MS61L Co ppm 0.005	ME-MS61L Cr ppm 0.3	ME-MS61L Cs ppm 0.01	ME-MS61L Cu ppm 0.02	ME-MS61L Fe % 0.002	ME-MS61L Ga ppm 0.05
Sample Description															
STANDARDS															
GBM908 - 10	2.95	7.20	58.9	1160	1.56	1.205	3.97	1.705	107.0	26.7	142.5	4.03	3790	5.60	22.4
Target Range - Lower Bound	2.70	6.40	51.3	934	1.30	1.120	3.33	1.545	99.0	23.4	125.5	3.48	3380	4.98	18.65
Upper Bound	3.30	7.84	62.8	1265	1.63	1.380	4.10	1.895	121.0	28.6	154.5	4.28	3880	6.10	22.9
OREAS 24b	0.088	8.08	10.05	780	2.68	0.687	1.16	0.043	93.7	16.55	131.0	10.45	40.0	4.50	22.1
OREAS 24b	0.074	8.12	8.56	790	2.58	0.612	1.16	0.055	88.8	15.85	118.5	10.55	38.3	4.53	19.85
Target Range - Lower Bound	0.070		7.47	608	2.28	0.607	0.96	0.037	76.8	15.20		9.62	35.3		18.05
Upper Bound	0.090		9.24	824	2.83	0.753	1.20	0.061	93.8	18.60		11.80	40.7		22.2
OREAS 601	50.7	6.40	330	680	1.95	21.1	1.36	8.20	67.3	5.25	40.7	6.90	1055	2.47	22.2
Target Range - Lower Bound	44.3	5.66	276	747	1.84	18.80	1.17	7.07	56.7	4.62	37.5	6.04	939	2.23	18.30
Upper Bound	54.1	6.94	338	1015	2.30	23.0	1.45	8.65	69.3	5.66	46.5	7.40	1080	2.73	22.5
BLANKS															
BLANK	0.005	<0.01	<0.05	<1	<0.02	<0.005	<0.01	<0.005	<0.01	0.008	0.3	<0.01	<0.02	<0.002	<0.05
BLANK	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	<0.002	<0.05
Target Range - Lower Bound	<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	<0.002	<0.05
Upper Bound	0.004	0.02	0.10	2	0.04	0.010	0.02	0.010	0.02	0.010	0.6	0.02	0.04	0.004	0.10
DUPLICATES															
10343142	0.051	7.36	<0.05	80	1.70	0.100	0.05	<0.005	73.0	8.29	8.3	4.48	10.40	1.110	23.0
DUP	0.057	7.20	<0.05	80	1.75	0.110	0.05	<0.005	72.5	8.13	8.7	4.38	10.15	1.080	22.6
Target Range - Lower Bound	0.049	6.91	<0.05	73	1.62	0.095	0.04	<0.005	69.1	7.79	7.8	4.20	9.90	1.040	21.6
Upper Bound	0.059	7.65	0.10	87	1.83	0.115	0.06	0.010	76.4	8.63	9.2	4.66	10.65	1.150	24.0



Australian Laboratory Services Pty. Ltd.
 32 Shand Street
 Stafford
 Brisbane QLD 4053
 Phone: +61 (7) 3243 7222 Fax: +61 (7) 3243 7218
 www.alsglobal.com

Project: EB80023019

Page: 2 - B
 Total # Pages: 2 (A - D)
 Plus Appendix Pages
 Finalized Date: 18-JUL-2017
 Account: RIOTINWA

QC CERTIFICATE OF ANALYSIS PH17135413

Method Analyte Units LOR	ME-MS61L Ge ppm 0.05	ME-MS61L Hf ppm 0.004	ME-MS61L In ppm 0.005	ME-MS61L K % 0.01	ME-MS61L La ppm 0.005	ME-MS61L Li ppm 0.2	ME-MS61L Mg % 0.01	ME-MS61L Mn ppm 0.2	ME-MS61L Mo ppm 0.02	ME-MS61L Na % 0.001	ME-MS61L Nb ppm 0.005	ME-MS61L Ni ppm 0.08	ME-MS61L P % 0.001	ME-MS61L Pb ppm 0.01	ME-MS61L Rb ppm 0.02
Sample Description															
STANDARDS															
GBM908 - 10	0.21	3.65	0.045	2.18	53.7	11.4	1.91	827	71.8	2.16	10.80	2260	0.100	2070	174.0
Target Range - Lower Bound	0.18	3.42	0.064	1.87	49.5	9.8	1.61	720	57.9	1.935	9.63	2030		1860	153.0
Upper Bound	0.40	4.18	0.092	2.31	60.5	12.4	1.99	880	70.8	2.37	11.80	2480		2270	187.0
OREAS 24b	0.18	4.25	0.086	2.92	46.2	53.0	1.71	467	4.10	0.834	15.50	68.5	0.072	22.9	175.0
OREAS 24b	0.18	4.07	0.074	2.94	43.4	53.6	1.71	459	3.50	0.842	14.85	60.9	0.073	20.8	171.0
Target Range - Lower Bound	<0.05	3.51	0.063		38.2	48.4			3.49		13.15	53.9		20.8	147.5
Upper Bound	0.26	4.29	0.091		46.6	59.6			4.31		16.05	66.1		25.4	180.5
OREAS 601	0.18	4.58	1.730	2.16	33.9	20.5	0.38	486	4.38	1.440	13.15	23.7	0.046	335	93.2
Target Range - Lower Bound	<0.05	4.06	1.550	1.88	27.8	18.3	0.34	432	3.46	1.305	11.35	21.8		296	87.3
Upper Bound	0.27	4.98	1.910	2.32	34.0	22.8	0.44	528	4.28	1.595	13.85	26.8		362	106.5
BLANKS															
BLANK	<0.05	<0.004	<0.005	<0.01	<0.005	<0.2	<0.01	<0.2	<0.02	0.002	<0.005	<0.08	<0.001	0.11	<0.02
BLANK	<0.05	<0.004	<0.005	<0.01	<0.005	0.4	<0.01	<0.2	<0.02	0.002	<0.005	<0.08	<0.001	0.06	<0.02
Target Range - Lower Bound	<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	<0.01	<0.02
Upper Bound	0.10	0.008	0.010	0.02	0.010	0.4	0.02	0.4	0.04	0.002	0.010	0.16	0.002	0.02	0.04
DUPLICATES															
10343142	0.11	5.60	0.006	3.70	29.5	8.5	0.37	64.2	0.21	0.036	17.40	7.97	0.012	7.95	117.0
DUP	0.13	5.92	0.019	3.62	29.4	8.5	0.36	63.3	0.22	0.036	17.75	7.57	0.012	8.11	114.5
Target Range - Lower Bound	0.06	5.47	0.007	3.47	28.0	7.9	0.34	60.4	0.18	0.033	16.70	7.30	0.010	7.62	110.0
Upper Bound	0.18	6.05	0.018	3.85	30.9	9.1	0.39	67.1	0.25	0.039	18.45	8.24	0.014	8.44	121.5



Australian Laboratory Services Pty. Ltd.
 32 Shand Street
 Stafford
 Brisbane QLD 4053
 Phone: +61 (7) 3243 7222 Fax: +61 (7) 3243 7218
 www.alsglobal.com

Project: EB80023019

Page: 2 - C
 Total # Pages: 2 (A - D)
 Plus Appendix Pages
 Finalized Date: 18-JUL-2017
 Account: RIOTINWA

QC CERTIFICATE OF ANALYSIS PH17135413

Method Analyte Units LOR	ME-MS61L Re ppm 0.002	ME-MS61L S % 0.01	ME-MS61L Sb ppm 0.02	ME-MS61L Sc ppm 0.01	ME-MS61L Se ppm 0.2	ME-MS61L Sn ppm 0.02	ME-MS61L Sr ppm 0.02	ME-MS61L Ta ppm 0.01	ME-MS61L Te ppm 0.04	ME-MS61L Th ppm 0.004	ME-MS61L Ti % 0.001	ME-MS61L Tl ppm 0.004	ME-MS61L U ppm 0.01	ME-MS61L V ppm 0.1	ME-MS61L W ppm 0.008
STANDARDS															
GBM908 - 10	0.003	0.38	1.81	19.50	0.7	3.37	290	0.82	0.09	17.95	0.661	1.225	2.31	139.5	3.59
Target Range - Lower Bound	<0.002	0.33	1.51	17.10	1.5	2.95	259	0.73	<0.04	16.55	0.595	1.085	2.06	124.0	2.97
Upper Bound	0.006	0.43	1.89	20.9	2.5	3.65	316	0.92	0.14	20.2	0.729	1.335	2.54	152.0	4.03
OREAS 24b	<0.002	0.21	0.91	16.70	0.3	4.53	129.0	1.37	<0.04	17.80	0.457	0.907	3.27	112.0	4.05
OREAS 24b	0.002	0.21	0.86	15.25	<0.2	4.04	124.5	1.11	<0.04	16.25	0.455	0.838	3.06	108.0	3.74
Target Range - Lower Bound	<0.002		0.84	13.75	<0.2	3.81	111.5	1.03	<0.04	14.75	0.391	0.770	2.74		3.09
Upper Bound	0.006		1.07	16.85	0.9	4.70	136.5	1.29	0.08	18.05	0.480	0.950	3.38		4.19
OREAS 601	0.002	1.09	34.1	5.07	13.3	4.19	227	0.99	17.10	10.80	0.178	1.175	4.05	25.9	6.58
Target Range - Lower Bound	<0.002	0.95	27.3	4.36	10.6	3.72	207	0.93	14.35	10.55	0.161	1.085	3.59	22.9	4.92
Upper Bound	0.004	1.19	33.5	5.35	13.4	4.60	253	1.15	17.65	12.85	0.199	1.335	4.41	28.3	6.68
BLANKS															
BLANK	0.003	<0.01	<0.02	0.01	<0.2	<0.02	<0.02	<0.01	<0.04	<0.004	<0.001	0.014	0.01	0.1	<0.008
BLANK	0.003	<0.01	<0.02	<0.01	<0.2	<0.02	<0.02	<0.01	<0.04	<0.004	<0.001	0.014	0.01	0.1	<0.008
Target Range - Lower Bound	<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	<0.1	<0.008
Upper Bound	0.004	0.02	0.04	0.02	0.4	0.04	0.04	0.02	0.08	0.008	0.002	0.008	0.02	0.2	0.016
DUPLICATES															
10343142	0.003	0.28	0.07	6.67	1.9	2.69	4.25	0.85	<0.04	42.7	0.111	0.261	5.75	29.8	1.125
DUP	<0.002	0.28	0.15	6.77	<0.2	2.92	4.44	0.87	<0.04	45.0	0.111	0.266	5.75	28.7	1.160
Target Range - Lower Bound	<0.002	0.26	0.08	6.37	0.8	2.64	4.11	0.81	<0.04	41.7	0.104	0.240	5.45	27.7	1.050
Upper Bound	0.004	0.30	0.14	7.07	1.3	2.97	4.58	0.91	0.08	46.0	0.118	0.287	6.05	30.8	1.235



Australian Laboratory Services Pty. Ltd.
 32 Shand Street
 Stafford
 Brisbane QLD 4053
 Phone: +61 (7) 3243 7222 Fax: +61 (7) 3243 7218
 www.alsglobal.com

Project: EB80023019

Page: 2 - D
 Total # Pages: 2 (A - D)
 Plus Appendix Pages
 Finalized Date: 18-JUL-2017
 Account: RIOTINWA

QC CERTIFICATE OF ANALYSIS PH17135413

Sample Description	Method Analyte Units LOR	ME-MS61L Y ppm 0.01	ME-MS61L Zn ppm 0.2	ME-MS61L Zr ppm 0.1	ME-MS61L Au ppm 0.0004	ME-MS61L Pt ppm 0.004	ME-MS61L Pd ppm 0.002
STANDARDS							
GBM908-10		38.8	1100	138.0	0.854	0.012	<0.002
Target Range - Lower Bound		35.3	941	118.0			
Upper Bound		43.1	1150	160.0			
OREAS 24b		21.6	113.0	147.5	0.0027	<0.004	0.008
OREAS 24b		20.8	109.5	135.5	0.0039	<0.004	0.002
Target Range - Lower Bound		18.35		114.0			
Upper Bound		22.5		154.0			
OREAS 601		12.20	1370	171.0	0.779	<0.004	0.016
Target Range - Lower Bound		10.05	1195	131.5			
Upper Bound		12.35	1465	178.5			
BLANKS							
BLANK		<0.01	<0.2	0.1	<0.0004	<0.004	<0.002
BLANK		<0.01	0.3	<0.1	0.0008	<0.004	0.004
Target Range - Lower Bound		<0.01	<0.2	<0.1	<0.0004	<0.004	<0.002
Upper Bound		0.02	0.4	0.2	0.0008	0.008	0.004
DUPLICATES							
10343142		19.05	130.0	144.5	0.0017	<0.004	0.004
DUP		17.10	127.0	144.0	0.0015	<0.004	<0.002
Target Range - Lower Bound		17.15	122.0	133.5	0.0011	<0.004	<0.002
Upper Bound		19.00	135.0	155.0	0.0021	0.008	0.004



Australian Laboratory Services Pty. Ltd.
32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 (7) 3243 7222 Fax: +61 (7) 3243 7218
www.alsglobal.com

Project: EB80023019

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 18-JUL-2017
Account: RIOTINWA

QC CERTIFICATE OF ANALYSIS PH17135413

	CERTIFICATE COMMENTS			
Applies to Method:	ANALYTICAL COMMENTS			
	Au, Pt & Pd determinations by this method are semi-quantitative due to the small sample weight used (0.25g) ME-MS61L			
Applies to Method:	LABORATORY ADDRESSES			
	Processed at ALS Perth located at 31 Denninup Way, Malaga, Australia. NATA Accreditation does not cover the performance of ALS Perth Sample Preparation which is processed at 79 Distinction Road, Wangara, WA, Australia			
	BAG-01	CRU-31	LEV-01	LOG-22
	ME-MS61L	PUL-32	PUL-QC	SPL-22
	WEI-21	WSH-21	WSH-22	