



Australian Laboratory Services Pty. Ltd.
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Page: 1
Total # Pages: 2 (A - D)
Plus Appendix Pages
Finalized Date: 18-JUL-2017
Account: RIOTINWA

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



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Page: 2 - A
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CERTIFICATE OF ANALYSIS PH17135413

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	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
10343128		0.28	<0.002	9.46	0.40	335	3.63	0.117	0.15	<0.005	22.7	39.8	127.0	0.74	3.26	9.31
10343129		0.19	0.035	7.84	1.02	265	0.77	0.055	7.27	0.147	25.0	48.5	134.0	0.84	74.4	8.81
10343130		0.14	0.025	7.10	0.45	60	0.69	0.109	7.84	0.033	25.8	37.9	114.5	0.31	82.8	8.47
10343131		0.15	0.052	7.46	0.70	550	1.44	0.286	4.07	0.087	23.9	36.6	42.3	0.30	157.0	8.45
10343132		0.17	0.076	8.01	1.18	230	2.57	0.466	5.36	0.196	35.0	47.3	86.2	0.44	70.8	11.75
10343133		0.32	0.011	13.10	0.37	168	3.70	0.011	0.25	0.008	13.45	20.9	54.7	0.77	71.2	5.72
10343134		0.22	0.050	12.80	0.31	359	2.83	0.032	0.22	0.005	114.5	24.1	83.9	0.64	72.2	6.90
10343135		0.24	0.005	13.25	0.49	480	2.90	0.008	0.12	0.009	175.5	17.75	105.0	0.82	83.7	4.14
10343136		0.18	0.025	11.30	0.92	31	5.98	0.047	0.09	0.009	17.90	68.6	434	0.62	464	11.40
10343137		0.57	0.033	8.97	0.78	800	0.65	0.954	4.87	0.009	21.8	44.9	127.0	0.88	56.5	8.07
10343138		0.36	0.072	8.97	0.39	990	0.67	0.350	5.62	0.053	24.9	48.6	135.5	0.76	94.9	8.56
10343139		0.06	0.098	5.87	1.84	53	1.19	0.160	3.20	0.473	140.0	22.9	31.6	1.53	8.13	1.160
10343140		0.08	0.106	4.71	0.29	74	1.43	0.263	0.56	0.049	80.0	17.70	56.3	3.64	14.95	1.390
10343141		0.08	0.022	0.49	0.24	27	0.18	<0.005	0.05	0.007	2.64	3.71	11.1	0.15	2.98	0.960
10343142		0.04	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
10343143		0.12	0.157	7.38	0.53	176	2.82	0.382	0.31	0.027	48.3	44.7	45.7	4.86	913	8.89
10343144		0.06	0.009	8.70	0.27	136	2.42	0.068	0.20	0.026	62.3	60.9	52.9	7.64	2.43	7.41
10343145		0.10	0.032	5.52	4.30	91	2.60	0.198	0.15	0.027	23.2	26.4	30.9	4.85	4.63	15.05
10343146		0.08	0.021	8.93	2.19	138	1.71	0.080	0.11	0.017	18.40	15.05	78.8	5.09	16.70	7.43
10343147		0.10	0.011	10.05	1.40	490	1.71	0.053	0.15	0.009	112.0	33.3	85.7	5.57	0.96	5.64
10343148		0.11	0.010	9.35	1.75	540	1.76	0.052	0.09	0.022	102.0	31.1	79.4	4.66	1.45	4.50
10343149		0.06	0.005	11.85	0.43	980	2.15	0.072	0.13	<0.005	35.8	35.8	102.5	9.31	2.07	6.29
10343150		0.09	0.032	8.34	0.34	480	2.45	0.103	0.13	0.023	90.8	12.70	60.4	12.30	4.44	2.83
10343151		0.08	0.008	6.61	<0.05	530	1.20	0.039	0.12	0.006	90.5	13.25	48.2	4.72	2.92	3.77



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Page: 2 - B
 Total # Pages: 2 (A - D)
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CERTIFICATE OF ANALYSIS PH17135413

Sample Description	Method Analyte Units LOR	ME-MS61L Ga ppm 0.05	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
10343128		23.0	0.17	2.38	0.043	2.74	8.30	93.6	9.90	302	0.47	0.022	6.76	63.1	0.053	5.01
10343129		19.55	0.18	2.46	0.060	0.70	11.00	21.6	4.38	1420	0.83	1.660	7.83	76.6	0.065	5.32
10343130		20.2	0.23	2.24	0.055	0.21	12.00	28.2	3.90	1430	1.10	2.23	6.55	66.5	0.054	3.32
10343131		17.20	0.12	1.290	0.072	2.57	12.10	38.0	3.26	1260	0.51	1.275	3.70	38.7	0.048	3.73
10343132		23.5	0.20	2.63	0.084	1.06	15.90	16.8	2.74	1620	0.45	2.45	8.62	42.1	0.094	23.9
10343133		35.8	0.14	15.35	0.010	2.47	9.20	114.0	8.22	82.5	0.09	0.062	8.12	50.7	0.103	10.50
10343134		35.5	0.28	12.80	0.043	3.94	68.7	111.0	8.61	109.5	0.02	0.054	9.40	68.5	0.103	12.80
10343135		40.4	0.36	10.65	0.040	4.01	106.0	92.4	7.05	82.3	0.04	0.094	15.50	75.6	0.057	13.35
10343136		44.2	0.24	1.095	0.020	0.55	5.20	154.0	10.60	496	0.27	0.013	5.48	144.5	0.039	74.7
10343137		21.6	0.22	1.915	0.049	3.70	9.71	36.3	3.79	1260	0.48	1.180	5.12	62.7	0.057	7.23
10343138		20.3	0.16	1.880	0.059	2.88	10.85	27.3	3.84	1340	0.35	1.335	5.44	69.9	0.060	5.83
10343139		8.29	0.20	5.71	<0.005	2.63	77.7	13.6	0.08	48.3	0.68	0.026	10.85	13.25	>1.00	39.5
10343140		8.28	0.12	3.87	0.008	2.00	39.3	29.6	0.10	45.3	0.28	0.038	7.65	9.01	0.229	19.90
10343141		0.87	<0.05	0.136	<0.005	0.17	1.425	23.3	0.03	82.0	0.32	0.018	0.443	2.98	0.011	6.51
10343142		23.0	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
10343143		30.8	0.19	2.66	0.037	1.81	22.4	78.8	3.96	849	0.83	0.036	13.05	53.6	0.049	89.4
10343144		27.9	0.17	2.97	0.022	1.98	28.5	100.0	1.13	273	0.25	0.063	10.90	174.0	0.086	6.98
10343145		14.50	0.16	1.780	0.021	1.00	10.15	125.0	0.34	126.0	1.19	0.071	4.35	36.0	0.059	21.8
10343146		17.45	0.10	1.455	0.034	1.48	8.91	110.5	0.57	156.0	0.23	0.100	3.89	22.0	0.043	15.30
10343147		26.3	0.21	7.05	0.048	2.22	52.1	77.9	1.17	279	0.20	0.152	17.95	58.2	0.072	6.98
10343148		26.2	0.19	4.70	0.014	3.45	51.5	38.0	0.88	164.5	0.20	0.253	13.60	62.1	0.041	12.45
10343149		34.5	0.15	6.97	0.118	4.52	13.40	51.7	1.86	951	0.66	0.201	21.3	70.4	0.054	14.70
10343150		23.1	0.14	4.47	0.042	3.23	43.4	40.9	0.91	302	0.92	0.099	11.90	26.7	0.040	10.25
10343151		16.55	0.18	7.30	0.045	2.26	44.4	32.8	1.07	300	0.21	0.105	9.77	28.0	0.044	8.41



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Page: 2 - C
 Total # Pages: 2 (A - D)
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CERTIFICATE OF ANALYSIS PH17135413

Sample Description	Method Analyte Units LOR	ME-MS61L Rb ppm 0.02	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
10343128		68.4	<0.002	<0.01	0.26	31.0	0.4	0.97	7.98	0.46	<0.04	1.490	0.741	0.362	5.80	226
10343129		19.90	0.002	0.06	0.06	31.6	0.5	0.99	305	0.52	<0.04	1.500	0.891	0.118	0.39	264
10343130		6.73	0.002	0.03	0.04	27.1	0.3	1.10	135.0	0.42	<0.04	1.200	0.744	0.032	0.38	220
10343131		81.8	0.004	0.04	0.10	35.1	<0.2	4.14	164.5	0.35	<0.04	1.855	0.477	0.329	0.67	253
10343132		28.3	0.004	0.24	0.16	44.7	0.9	2.04	256	0.52	0.06	3.71	1.080	0.174	0.91	395
10343133		70.6	<0.002	0.01	0.10	10.35	<0.2	2.19	18.50	0.66	<0.04	28.1	0.221	0.146	10.95	66.4
10343134		114.0	0.002	0.01	0.18	13.15	0.8	4.57	16.95	0.95	<0.04	29.5	0.237	0.206	91.3	92.3
10343135		106.0	<0.002	<0.01	0.14	18.40	<0.2	3.75	26.8	1.20	<0.04	40.5	0.357	0.234	11.70	125.0
10343136		26.8	<0.002	0.06	0.37	42.5	<0.2	24.4	9.38	0.26	0.12	1.620	0.473	0.162	1310	249
10343137		61.5	<0.002	0.04	0.03	27.7	0.4	0.91	329	0.35	0.04	1.265	0.607	0.148	1.51	214
10343138		51.9	<0.002	0.07	<0.02	30.3	0.4	0.92	336	0.36	<0.04	1.390	0.644	0.112	0.78	232
10343139		73.3	0.003	0.84	0.27	2.70	0.4	0.98	37.2	0.75	<0.04	59.2	0.077	0.297	23.9	18.1
10343140		63.5	0.002	1.21	0.28	4.42	<0.2	1.10	13.75	0.46	<0.04	34.3	0.074	0.633	18.10	23.4
10343141		5.66	0.007	0.11	0.22	0.50	<0.2	0.23	5.02	0.03	<0.04	1.170	0.011	0.063	3.53	3.7
10343142		117.0	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
10343143		89.8	0.002	0.20	0.08	32.3	1.5	2.90	6.34	0.99	0.11	13.60	0.642	0.355	500	434
10343144		138.0	0.003	<0.01	0.55	45.5	0.3	2.37	8.52	0.93	<0.04	10.60	0.559	0.711	12.60	187.5
10343145		56.7	0.002	0.07	3.43	32.4	1.9	1.71	9.85	0.32	0.07	4.67	0.465	0.330	62.9	1370
10343146		89.5	0.002	0.04	1.54	46.8	<0.2	1.60	7.02	0.29	0.05	4.81	0.508	0.656	30.8	523
10343147		80.0	<0.002	0.01	0.51	14.60	0.4	6.05	7.65	1.47	<0.04	19.45	0.406	0.492	9.29	104.5
10343148		143.5	0.002	<0.01	0.23	14.80	0.2	4.50	19.25	1.18	0.05	18.45	0.321	0.515	7.41	129.5
10343149		82.8	0.004	<0.01	0.09	17.70	<0.2	6.22	28.3	1.78	<0.04	10.95	0.466	0.924	4.93	106.5
10343150		167.5	0.007	0.01	0.26	12.50	<0.2	4.25	22.9	1.04	<0.04	16.85	0.288	0.808	3.51	84.8
10343151		112.0	0.003	0.01	0.06	7.53	<0.2	2.06	13.95	0.82	<0.04	17.80	0.254	0.478	3.51	46.1



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Page: 2 - D
 Total # Pages: 2 (A - D)
 Plus Appendix Pages
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CERTIFICATE OF ANALYSIS PH17135413

Sample Description	Method Analyte Units LOR	ME-MS61L W ppm 0.008	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	PUL-QC Pass75um % 0.01
10343128		0.749	12.40	66.5	93.2	0.0026	<0.004	<0.002	85.9
10343129		0.362	17.60	142.5	91.7	<0.0004	0.006	<0.002	
10343130		0.270	15.90	43.4	82.2	0.0010	<0.004	0.003	
10343131		0.554	21.0	96.3	43.5	<0.0004	<0.004	<0.002	
10343132		0.233	37.1	166.0	102.0	0.0010	0.006	<0.002	
10343133		3.02	12.70	128.0	>500	0.0032	0.009	<0.002	
10343134		4.25	27.0	152.0	412	0.0035	0.004	<0.002	
10343135		4.59	30.6	115.0	366	0.0028	0.010	0.008	
10343136		1.895	36.1	461	35.2	0.0020	0.008	<0.002	
10343137		0.826	15.75	114.5	76.3	0.0014	<0.004	<0.002	
10343138		0.501	16.75	119.0	71.0	<0.0004	<0.004	<0.002	
10343139		0.595	28.5	253	159.5	0.0030	<0.004	0.003	
10343140		1.110	14.10	310	102.0	0.0054	<0.004	<0.002	
10343141		0.222	0.48	57.6	4.1	<0.0004	<0.004	<0.002	
10343142		1.125	19.05	130.0	144.5	0.0017	<0.004	0.004	
10343143		1.045	63.7	60.0	90.8	0.0027	<0.004	0.009	
10343144		0.611	15.75	74.6	123.0	0.0007	<0.004	<0.002	
10343145		4.80	177.0	21.0	61.1	0.0023	<0.004	<0.002	
10343146		1.505	8.33	28.8	50.6	<0.0004	<0.004	<0.002	
10343147		1.275	23.1	53.8	249	0.0040	<0.004	0.007	
10343148		3.08	14.65	52.8	155.5	0.0031	<0.004	<0.002	
10343149		4.36	10.30	142.5	244	0.0064	0.005	0.003	
10343150		1.905	13.75	70.3	167.0	0.0044	<0.004	0.003	
10343151		1.295	15.65	53.4	267	0.0050	<0.004	0.011	



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Page: Appendix 1
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	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	