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No: 825, Corporate Site No: 23001.

## CERTIFICATE AD18159773

This report is for 64 Rock samples submitted to our lab in Adelaide, SA, Australia on 4-JUL-2018.

The following have access to data associated with this certificate:

EARTH AI OPERATIONS

ISABELLA SYKES

ROMAN TESLYUK

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
BAG-01	Bulk Master for Storage
CRU-21	Crush entire sample >70% -6 mm
LEV-01	Waste Disposal Levy
PUL-32	Pulverize 1000g to 85% < 75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS41	Ultra Trace Aqua Regia ICP-MS	

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Plus Appendix Pages

Finalized Date: 23-JUL-2018

This copy reported on 24-JUL-2018

Account: EARTOP

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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# CERTIFICATE OF ANALYSIS AD18159773

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1
EAIELK008R		0.87	0.001	0.02	0.19	0.5	<0.02	<10	90	<0.05	0.02	0.03	<0.01	5.31	0.7	3
EAIELK010R		0.30	0.002	0.03	0.49	2.5	<0.02	<10	230	0.18	0.08	0.06	<0.01	10.70	1.5	6
EAIELK017R		1.14	<0.001	0.02	0.06	0.9	<0.02	<10	50	<0.05	0.04	0.03	<0.01	1.65	0.4	6
EAIELK020R		1.18	0.007	0.01	0.24	0.6	<0.02	<10	200	0.15	0.02	0.01	<0.01	12.15	0.6	6
EAIELK032R		0.58	0.001	0.01	0.23	0.9	<0.02	<10	220	0.08	0.03	0.02	0.01	3.55	0.8	5
EAIELK041R		1.50	<0.001	0.01	1.42	0.4	<0.02	<10	910	6.08	0.03	0.02	0.04	13.30	6.6	14
EAIELK048F		2.47	0.011	0.16	0.10	22.6	<0.02	10	150	0.78	13.90	0.11	0.01	3.97	5.6	8
EAIELK066F		1.66	0.011	0.18	0.09	17.2	<0.02	20	70	1.01	5.42	0.10	<0.01	2.65	6.7	8
EAIELK097R		1.89	<0.001	<0.01	0.28	0.5	<0.02	<10	150	0.10	0.03	0.01	<0.01	6.63	0.4	4
EAIELK101R		0.66	<0.001	0.01	0.17	0.6	<0.02	<10	40	0.08	0.04	<0.01	<0.01	1.93	1.0	5
EAIELK115R		0.50	<0.001	0.01	0.03	0.4	<0.02	<10	10	<0.05	0.03	<0.01	<0.01	1.03	0.4	3
EAIELK116R		0.42	<0.001	0.02	6.37	1.7	<0.02	<10	660	3.11	0.09	0.09	<0.01	25.2	40.8	209
EAIELK116R_1		0.23	<0.001	0.01	4.70	2.6	<0.02	<10	640	4.13	0.09	0.09	0.03	34.8	41.9	207
EAIELK119R		1.22	<0.001	0.01	2.19	2.3	<0.02	<10	470	3.25	0.63	0.25	<0.01	43.4	38.2	107
EAIELK121R		0.92	0.001	0.01	1.11	2.2	<0.02	<10	420	1.12	0.07	0.10	0.01	28.6	9.7	50
EAIELK126R		0.26	<0.001	0.01	1.24	13.0	<0.02	<10	1290	1.47	0.07	0.03	0.01	15.15	3.4	14
EAIELK130R		0.51	<0.001	0.01	1.58	2.1	<0.02	<10	410	0.27	0.17	0.02	<0.01	15.95	0.9	16
EAIELK138R		0.20	<0.001	0.02	1.73	4.2	<0.02	<10	680	0.41	0.12	0.02	<0.01	36.0	1.4	26
EAIELK155R		1.35	<0.001	0.01	0.68	4.1	<0.02	10	940	0.48	0.09	0.03	0.02	38.1	3.5	10
EAIELK159R		0.96	<0.001	0.03	0.24	1.3	<0.02	<10	630	0.10	0.05	0.02	<0.01	10.25	0.6	7
EAIELK175R		0.47	<0.001	0.07	1.24	143.0	<0.02	10	560	3.50	1.15	0.03	0.08	10.45	10.5	20
EAIELK176R		0.97	<0.001	0.05	0.90	230	<0.02	<10	210	3.39	2.12	0.01	0.07	6.46	9.3	31
EAIELK176R_1		1.38	<0.001	0.09	0.78	257	<0.02	<10	390	3.97	1.74	0.03	0.10	6.40	12.1	28
EAIELK184R		0.81	<0.001	0.02	2.14	24.0	<0.02	10	210	8.98	0.09	0.06	0.09	22.7	16.0	59
EAIELK185R		1.24	<0.001	0.03	2.63	2.3	<0.02	<10	150	6.88	0.03	0.51	0.08	12.40	0.9	3
EAIELK185R_1		0.54	<0.001	0.03	3.72	4.6	<0.02	10	80	7.92	0.06	0.60	0.10	13.50	1.0	4
EAIELK188R		1.78	<0.001	0.04	1.34	47.4	<0.02	<10	50	10.30	0.05	0.04	0.12	4.09	51.7	71
EAIELK194R		0.91	<0.001	0.01	0.93	64.3	<0.02	<10	130	7.16	0.02	0.06	0.15	3.78	52.6	153
EAIELK196R		0.71	<0.001	0.01	0.94	28.1	<0.02	<10	250	7.36	0.03	0.08	0.06	5.87	63.9	58
EAIELK199R		0.99	<0.001	0.05	2.38	30.5	<0.02	<10	420	2.41	0.06	0.09	0.04	43.4	3.4	50
EAIELK201R		0.88	<0.001	0.12	1.12	63.0	<0.02	<10	230	3.20	0.78	0.03	0.03	10.45	4.8	28
EAIELK202R		0.52	0.001	0.01	1.57	2.6	<0.02	<10	40	3.00	0.07	0.01	0.02	15.60	7.2	100
EAIELK208R		0.61	<0.001	0.09	1.14	14.3	<0.02	10	1350	1.37	0.21	0.06	0.02	27.5	4.2	872
EAIELK209R		0.88	<0.001	0.02	1.17	30.3	<0.02	<10	800	2.60	0.09	0.05	0.05	15.50	11.3	97
EAIELK215R		0.82	<0.001	0.11	1.26	15.4	<0.02	<10	500	0.97	0.16	0.11	0.02	13.80	2.2	69
EAIELK220R		0.97	<0.001	0.05	0.63	2.5	<0.02	<10	650	0.21	1.62	0.04	<0.01	8.54	1.3	17
EAIELK225R		1.06	<0.001	0.03	1.26	6.9	<0.02	<10	500	0.59	0.08	0.06	0.01	5.00	2.2	30
EAIELK226R		0.76	0.001	0.06	0.74	10.9	<0.02	<10	1010	1.71	0.08	0.08	0.05	4.65	28.1	31
EAIELK229R		1.52	<0.001	0.01	0.93	12.2	<0.02	<10	70	0.98	0.05	0.01	0.01	2.42	2.8	65
EAIELK235R		0.82	<0.001	0.21	1.30	67.6	<0.02	10	180	1.10	0.13	0.06	0.13	29.5	2.6	78



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Finalized Date: 23-JUL-2018

Account: EARTOP

# CERTIFICATE OF ANALYSIS AD18159773

Sample Description	Method Analyte Units LOD	ME-MS41 Cs ppm 0.05	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01
EAIELK008R		<0.05	5.4	0.40	0.37	<0.05	0.14	<0.01	<0.005	0.02	3.9	0.4	0.03	83	0.13	<0.01
EAIELK010R		0.12	14.0	0.91	1.30	<0.05	0.25	<0.01	0.005	0.16	7.9	1.2	0.10	566	0.29	0.01
EAIELK017R		<0.05	2.7	0.84	0.96	<0.05	0.23	0.01	0.009	<0.01	0.8	0.2	0.02	80	0.19	<0.01
EAIELK020R		0.06	4.5	0.67	0.90	<0.05	0.24	<0.01	<0.005	0.11	7.5	0.3	0.02	486	0.29	0.01
EAIELK032R		0.10	4.6	1.01	0.76	<0.05	0.08	<0.01	<0.005	0.04	1.9	0.9	0.02	151	0.25	0.01
EAIELK041R		1.35	6.2	32.8	2.87	0.20	0.19	<0.01	0.016	0.10	6.3	0.5	0.04	72	0.20	0.01
EAIELK048F		0.06	322	17.90	1.63	0.25	0.02	0.02	0.031	0.01	2.6	0.4	0.11	673	6.66	0.01
EAIELK066F		0.06	246	20.6	1.48	0.44	<0.02	0.01	0.032	0.01	1.4	0.3	0.01	344	10.15	0.01
EAIELK097R		0.09	4.3	0.85	0.55	<0.05	0.27	<0.01	<0.005	0.07	3.6	0.4	0.01	102	0.21	<0.01
EAIELK101R		0.13	6.4	1.07	0.57	<0.05	0.13	<0.01	<0.005	0.11	1.0	0.3	0.02	175	0.37	0.01
EAIELK115R		<0.05	3.5	0.80	0.14	<0.05	0.02	<0.01	<0.005	<0.01	0.5	0.1	<0.01	110	0.27	<0.01
EAIELK116R		4.58	223	8.36	19.90	0.25	0.83	0.02	0.083	2.41	14.7	12.9	1.70	552	0.09	0.02
EAIELK116R_1		4.33	219	9.71	17.55	0.27	0.94	0.01	0.091	2.33	19.1	12.0	1.63	564	0.11	0.02
EAIELK119R		1.82	124.0	7.49	13.20	0.24	0.54	0.02	0.021	1.34	24.3	11.5	1.27	675	0.27	0.01
EAIELK121R		0.71	64.7	2.78	4.57	0.12	0.13	0.02	0.018	0.35	23.3	4.5	0.40	206	0.22	0.01
EAIELK126R		0.19	50.1	11.70	2.13	0.10	0.22	<0.01	0.007	0.17	10.0	1.9	0.05	91	0.67	0.01
EAIELK130R		0.22	13.0	2.80	2.57	<0.05	0.35	0.01	0.007	0.11	11.7	2.2	0.02	48	0.13	0.01
EAIELK138R		0.28	27.2	6.25	3.79	0.10	0.99	<0.01	0.011	0.20	22.2	1.5	0.05	66	0.19	0.01
EAIELK155R		5.82	178.5	5.72	3.28	0.18	0.23	0.02	0.020	0.18	18.2	1.8	0.15	84	0.20	0.01
EAIELK159R		0.13	9.3	0.74	0.73	<0.05	0.18	<0.01	0.008	0.02	5.4	0.5	0.01	162	0.51	0.01
EAIELK175R		0.38	344	20.8	3.93	0.08	0.11	0.02	0.154	0.22	4.6	1.5	0.06	226	1.39	0.01
EAIELK176R		0.18	597	22.4	5.03	0.09	0.12	0.02	0.228	0.08	2.8	0.7	0.02	266	1.47	0.01
EAIELK176R_1		0.17	537	24.1	3.91	0.09	0.12	0.01	0.190	0.08	2.6	0.6	0.03	263	1.41	0.01
EAIELK184R		0.32	262	30.7	5.40	0.12	0.08	0.01	0.105	0.15	11.4	3.0	0.07	389	1.90	0.01
EAIELK185R		0.06	64.6	0.27	1.14	<0.05	0.09	<0.01	0.009	0.65	4.7	0.4	0.02	64	<0.05	0.10
EAIELK185R_1		0.07	98.0	0.39	1.45	<0.05	0.10	<0.01	0.014	0.98	5.1	0.5	0.02	81	<0.05	0.15
EAIELK188R		0.23	322	34.6	2.77	0.11	0.06	0.01	0.041	0.07	1.9	1.0	0.04	611	3.87	0.01
EAIELK194R		<0.05	173.5	32.9	0.64	0.16	0.08	<0.01	0.033	0.02	1.3	0.2	0.01	600	6.66	0.01
EAIELK196R		<0.05	164.5	34.0	1.93	0.10	0.07	<0.01	0.061	0.05	2.2	0.5	0.05	913	4.37	0.03
EAIELK199R		0.46	46.8	18.50	10.35	0.15	0.23	0.01	0.067	0.20	21.9	2.8	0.04	253	0.90	0.02
EAIELK201R		0.18	408	15.95	2.30	0.08	0.07	0.01	0.064	0.10	4.1	1.0	0.02	194	4.79	0.01
EAIELK202R		0.08	51.0	38.5	4.31	0.25	0.33	0.04	0.107	0.02	10.1	2.8	0.01	99	0.57	0.01
EAIELK208R		0.76	33.5	26.1	14.80	0.20	1.51	0.03	0.137	0.20	16.2	2.2	0.04	192	0.69	0.02
EAIELK209R		0.33	224	26.2	3.44	0.14	0.10	0.01	0.103	0.08	10.6	1.3	0.02	244	0.68	0.01
EAIELK215R		0.38	47.5	16.95	6.83	0.10	0.51	0.02	0.047	0.08	7.4	1.2	0.02	259	0.75	<0.01
EAIELK220R		0.50	32.2	6.07	4.28	0.05	0.65	0.01	0.033	0.11	5.5	0.5	0.03	68	0.24	<0.01
EAIELK225R		0.34	48.8	14.35	3.82	0.10	0.33	0.01	0.030	0.04	3.5	2.0	0.03	89	0.32	<0.01
EAIELK226R		0.20	179.0	27.7	5.06	0.22	0.26	0.01	0.055	0.03	3.2	1.1	0.07	724	0.50	<0.01
EAIELK229R		<0.05	142.0	27.7	1.73	0.30	0.17	0.01	0.011	0.01	0.9	0.2	0.01	13	0.26	<0.01
EAIELK235R		0.16	98.2	18.95	9.15	0.11	0.31	0.01	0.131	0.12	13.5	2.2	0.14	1670	6.36	0.02



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Sample Description	Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01
EAIELK008R		<0.05	1.1	30	4.6	1.3	<0.001	0.03	0.05	0.3	<0.2	<0.2	5.8	<0.01	0.01
EAIELK010R		<0.05	2.4	40	5.0	7.3	0.001	0.26	0.23	1.0	0.3	0.2	9.5	<0.01	0.11
EAIELK017R		0.07	1.2	20	11.9	0.2	<0.001	0.02	0.16	0.5	<0.2	0.5	3.2	<0.01	<0.01
EAIELK020R		<0.05	2.0	120	3.1	5.0	<0.001	0.04	0.15	0.5	<0.2	0.2	23.6	<0.01	<0.01
EAIELK032R		<0.05	2.2	20	1.9	2.6	<0.001	0.03	0.15	0.5	<0.2	0.2	8.4	<0.01	0.01
EAIELK041R		0.36	9.9	1590	5.7	9.5	<0.001	0.08	0.41	11.0	<0.2	0.5	15.4	<0.01	<0.01
EAIELK048F		<0.05	8.6	130	36.3	0.6	0.001	0.06	12.80	1.1	1.8	1.5	16.3	<0.01	0.34
EAIELK066F		<0.05	10.0	160	12.6	0.4	0.001	0.07	10.20	0.8	0.9	0.8	11.5	<0.01	0.17
EAIELK097R		<0.05	1.3	40	1.5	4.1	<0.001	0.03	0.16	0.3	<0.2	0.2	5.0	<0.01	0.01
EAIELK101R		<0.05	2.2	10	0.8	7.3	<0.001	0.02	0.22	0.2	<0.2	0.2	5.8	<0.01	0.01
EAIELK115R		<0.05	1.4	10	0.4	0.3	<0.001	0.01	0.12	0.1	<0.2	<0.2	0.9	<0.01	<0.01
EAIELK116R		<0.05	86.2	210	3.9	236	<0.001	0.02	0.53	20.6	<0.2	2.8	17.9	<0.01	<0.01
EAIELK116R_1		<0.05	98.3	310	6.5	248	<0.001	0.02	0.81	21.7	<0.2	2.7	18.4	<0.01	<0.01
EAIELK119R		<0.05	47.6	130	2.3	154.0	<0.001	0.02	1.93	9.7	<0.2	1.6	30.1	<0.01	<0.01
EAIELK121R		<0.05	25.6	160	2.3	24.1	<0.001	0.03	0.52	5.7	<0.2	0.5	22.1	<0.01	<0.01
EAIELK126R		0.10	9.6	1020	4.3	10.2	<0.001	0.07	0.46	2.5	0.2	0.4	22.1	<0.01	<0.01
EAIELK130R		<0.05	2.9	230	7.3	8.0	<0.001	0.02	0.27	1.7	0.5	0.5	21.7	<0.01	<0.01
EAIELK138R		<0.05	5.8	410	10.1	16.2	<0.001	0.04	0.27	3.0	0.2	0.9	40.5	<0.01	<0.01
EAIELK155R		0.15	7.1	150	3.8	24.4	<0.001	0.05	0.40	2.6	0.5	0.5	27.2	<0.01	0.01
EAIELK159R		<0.05	2.3	80	7.7	1.7	<0.001	0.04	0.24	0.6	<0.2	0.3	20.2	<0.01	0.01
EAIELK175R		0.10	42.3	1670	3.4	12.1	<0.001	0.05	0.59	38.5	0.2	0.6	59.3	<0.01	<0.01
EAIELK176R		0.23	40.7	1700	2.2	4.3	<0.001	0.06	0.90	38.5	0.2	0.7	36.8	<0.01	0.01
EAIELK176R_1		0.17	44.0	1870	2.2	4.0	<0.001	0.07	0.83	44.8	<0.2	0.6	42.0	<0.01	0.01
EAIELK184R		0.28	56.4	4060	44.3	8.1	<0.001	0.05	1.22	29.8	0.2	0.8	96.8	<0.01	0.01
EAIELK185R		<0.05	1.6	7370	9.6	1.2	<0.001	1.32	0.05	17.6	0.3	0.2	831	<0.01	<0.01
EAIELK185R_1		0.06	2.3	8910	8.0	1.8	<0.001	1.98	0.05	25.5	<0.2	0.2	1050	<0.01	<0.01
EAIELK188R		0.20	138.0	5440	16.7	3.4	<0.001	0.06	1.08	42.6	<0.2	0.5	25.2	<0.01	0.01
EAIELK194R		<0.05	294	6730	3.7	0.4	<0.001	0.10	4.23	41.7	<0.2	<0.2	89.1	<0.01	0.01
EAIELK196R		0.26	189.0	4340	10.3	1.1	<0.001	0.12	1.05	35.9	<0.2	0.3	42.7	0.01	0.02
EAIELK199R		0.20	9.3	1360	66.6	11.4	<0.001	0.09	0.79	7.0	<0.2	1.8	128.5	<0.01	0.03
EAIELK201R		0.13	27.6	3110	7.2	5.1	<0.001	0.06	0.47	28.7	0.4	0.4	194.0	<0.01	<0.01
EAIELK202R		0.17	19.4	880	37.5	1.0	<0.001	0.04	0.39	8.9	<0.2	0.6	13.8	<0.01	0.01
EAIELK208R		0.21	6.5	230	265	12.8	0.001	0.10	4.47	3.7	0.4	1.8	73.0	<0.01	0.24
EAIELK209R		0.24	16.5	2330	247	4.4	<0.001	0.09	0.82	6.7	0.6	0.6	44.1	<0.01	0.01
EAIELK215R		0.17	4.6	230	396	4.6	0.001	0.11	0.65	2.9	1.3	0.8	52.3	<0.01	0.03
EAIELK220R		<0.05	1.3	130	63.5	7.1	<0.001	0.06	0.45	1.4	1.6	0.5	18.3	<0.01	0.03
EAIELK225R		0.06	4.5	120	33.3	3.0	<0.001	0.05	0.19	3.0	0.7	0.6	19.2	<0.01	0.01
EAIELK226R		0.11	17.7	1130	52.4	1.9	<0.001	0.06	0.38	10.0	0.4	0.8	37.6	<0.01	0.02
EAIELK229R		<0.05	4.4	1540	104.0	0.3	<0.001	0.05	0.56	13.1	0.2	<0.2	2.7	<0.01	<0.01
EAIELK235R		0.24	9.7	860	108.0	4.9	<0.001	0.04	0.62	19.2	1.1	1.0	42.1	<0.01	0.02



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**CERTIFICATE OF ANALYSIS AD18159773**

Sample Description	Method Analyte Units LOD	ME-MS41 Ti %	ME-MS41 Ti ppm	ME-MS41 U ppm	ME-MS41 V ppm	ME-MS41 W ppm	ME-MS41 Y ppm	ME-MS41 Zn ppm	ME-MS41 Zr ppm	PUL-QC Pass75um %
		0.005	0.02	0.05	1	0.05	0.05	2	0.5	0.01
EAIELK008R		<0.005	<0.02	0.07	3	0.44	0.64	<2	4.5	
EAIELK010R		<0.005	0.13	0.43	9	0.77	4.42	4	9.3	
EAIELK017R		0.011	<0.02	0.15	16	<0.05	0.52	<2	8.4	
EAIELK020R		<0.005	0.08	0.33	5	0.83	3.34	<2	8.8	
EAIELK032R		<0.005	<0.02	0.06	6	<0.05	0.95	<2	3.1	
EAIELK041R		0.023	0.04	5.34	22	0.05	13.30	20	9.2	
EAIELK048F		<0.005	0.02	7.45	121	26.8	1.75	<2	1.7	
EAIELK066F		<0.005	<0.02	14.05	111	23.2	1.10	<2	0.5	97.4
EAIELK097R		<0.005	<0.02	0.21	3	0.07	0.96	<2	9.6	
EAIELK101R		<0.005	0.02	0.08	3	2.30	0.52	<2	4.9	
EAIELK115R		<0.005	<0.02	0.06	2	0.18	0.09	<2	0.6	
EAIELK116R		0.228	0.56	0.97	171	<0.05	18.45	214	22.6	
EAIELK116R_1		0.240	0.57	1.43	212	0.09	20.9	213	27.7	
EAIELK119R		0.088	0.24	2.36	243	0.08	15.00	195	18.4	
EAIELK121R		0.016	0.06	1.21	62	0.06	8.81	53	6.5	
EAIELK126R		0.016	0.03	1.42	26	0.34	6.57	12	8.5	
EAIELK130R		0.021	0.04	0.36	14	0.06	2.33	2	12.5	
EAIELK138R		0.032	0.05	1.36	22	0.08	9.14	6	40.5	
EAIELK155R		0.044	0.09	0.94	62	0.11	6.60	31	7.7	
EAIELK159R		<0.005	<0.02	0.77	6	<0.05	6.71	<2	6.2	
EAIELK175R		0.015	0.10	9.71	209	0.08	8.05	251	4.2	
EAIELK176R		0.017	0.36	7.00	210	0.12	6.53	408	4.6	
EAIELK176R_1		0.012	0.16	9.04	224	0.06	8.20	334	3.7	
EAIELK184R		0.024	0.05	19.00	284	0.12	28.2	377	3.3	
EAIELK185R		<0.005	0.07	7.14	5	<0.05	79.7	42	2.4	
EAIELK185R_1		<0.005	0.09	8.60	6	<0.05	107.0	50	2.8	
EAIELK188R		0.010	0.04	39.5	304	<0.05	12.15	862	2.2	
EAIELK194R		<0.005	0.06	38.2	1880	<0.05	15.60	712	3.0	97.4
EAIELK196R		<0.005	0.02	18.80	373	<0.05	12.40	1080	3.0	
EAIELK199R		0.034	0.12	1.98	81	0.15	15.95	72	8.8	
EAIELK201R		0.008	0.04	12.80	258	0.14	10.20	75	2.5	
EAIELK202R		0.019	0.03	3.19	546	0.07	8.57	43	17.8	
EAIELK208R		0.055	0.08	1.47	3020	0.45	9.86	9	85.3	
EAIELK209R		0.030	0.04	1.76	273	0.18	8.09	73	4.5	
EAIELK215R		0.031	0.04	0.69	703	0.39	5.83	186	16.4	
EAIELK220R		0.013	0.05	0.64	50	0.28	1.76	2	25.4	
EAIELK225R		0.019	0.03	0.45	92	0.05	2.27	6	11.0	
EAIELK226R		0.023	0.03	2.26	134	0.06	3.11	60	8.7	
EAIELK229R		<0.005	<0.02	1.34	66	<0.05	1.55	6	7.4	
EAIELK235R		0.040	0.38	2.76	84	0.22	3.20	128	13.6	



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## CERTIFICATE OF ANALYSIS AD18159773

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.02	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1
EAIELK240R		0.82	<0.001	0.14	0.89	256	<0.02	<10	110	2.29	0.07	0.09	0.13	7.18	26.7	75
EAIELK244R		1.14	<0.001	0.04	0.04	4.0	<0.02	<10	140	0.05	0.02	0.02	0.01	2.24	0.5	6
EAIELK254R		0.85	<0.001	0.01	0.05	1.4	<0.02	<10	10	0.05	0.02	0.01	0.01	0.23	0.5	11
EAIELK255R		0.85	<0.001	0.01	0.10	1.2	<0.02	<10	60	<0.05	0.01	0.01	<0.01	1.54	0.3	9
EAIELK264R		1.27	<0.001	0.31	0.83	38.0	<0.02	<10	330	1.04	0.06	0.07	0.02	2.53	12.2	26
EAIELK266R		0.94	<0.001	0.16	0.25	62.5	<0.02	<10	130	1.13	0.01	0.02	0.03	6.08	92.9	6
EAIELK269R		1.30	<0.001	0.26	0.55	67.9	<0.02	<10	880	0.28	0.11	0.01	<0.01	3.64	1.5	89
EAIELK269R_1		0.65	0.001	0.16	0.61	59.7	<0.02	<10	150	0.43	0.09	0.01	0.01	5.95	1.5	86
EAIELK272R		0.76	<0.001	0.01	0.11	5.4	<0.02	20	70	0.10	0.02	0.01	0.01	3.88	3.5	21
EAIELK274R		0.56	<0.001	0.08	0.69	14.5	<0.02	<10	1380	0.42	0.09	0.02	<0.01	5.80	6.6	70
EAIELK276R		1.16	<0.001	0.06	0.12	3.3	<0.02	<10	40	0.15	0.05	0.06	<0.01	5.30	1.6	22
EAIELK279R		0.88	<0.001	0.05	0.54	45.3	<0.02	<10	590	0.33	0.05	0.01	0.01	3.34	1.2	74
EAIELK280R		1.61	<0.001	<0.01	1.01	5.8	<0.02	<10	60	14.05	0.94	0.03	0.07	68.0	26.8	5
EAIELK284R		1.17	<0.001	0.01	0.88	21.6	<0.02	<10	370	4.55	0.02	0.01	0.02	14.30	6.6	2
EAIELK285R		1.58	<0.001	0.01	0.24	1.2	<0.02	70	20	0.24	0.01	<0.01	<0.01	12.25	0.7	7
EAIELK288R		0.88	<0.001	0.05	0.80	79.3	<0.02	<10	40	1.68	0.05	0.01	0.01	8.34	34.9	54
EAIELK289R		1.85	<0.001	0.03	1.09	81.4	<0.02	<10	20	1.63	0.08	0.01	0.02	6.57	52.9	124
EAIELK295R		1.80	<0.001	0.17	0.50	40.0	<0.02	<10	40	0.79	0.03	0.02	0.01	3.65	8.3	26
EAIELK296R		1.19	<0.001	0.07	1.49	39.0	<0.02	<10	740	1.10	0.08	0.02	0.02	6.19	18.3	55
EAIELK300R		1.66	<0.001	0.02	0.75	3.8	<0.02	<10	160	0.97	0.17	0.01	<0.01	2.91	2.8	35
EAIELK301R		0.77	0.001	0.02	0.26	3.3	<0.02	<10	40	6.22	0.03	0.01	0.01	4.48	28.4	7
EAIELK301R_1		0.71	0.002	0.04	0.57	1.6	<0.02	<10	80	3.03	0.04	0.01	<0.01	5.16	19.6	22
EAIELK304R		0.89	0.001	0.04	0.32	12.5	<0.02	<10	90	4.65	0.10	0.02	0.01	3.06	23.2	28
EAIELK980R		0.64	0.001	0.03	0.75	10.1	<0.02	<10	30	4.89	0.10	0.01	0.01	19.70	29.9	19



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# CERTIFICATE OF ANALYSIS AD18159773

Sample Description	Method Analyte Units LOD	ME-MS41 Cs ppm 0.05	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01
EAIELK240R		0.21	85.5	26.1	4.29	0.13	0.09	0.02	0.095	0.04	2.9	0.7	0.05	1210	3.32	0.01
EAIELK244R		<0.05	2.7	0.70	0.29	<0.05	0.06	<0.01	0.006	0.01	1.0	0.1	0.01	73	0.32	<0.01
EAIELK254R		<0.05	3.9	1.22	0.20	<0.05	0.02	<0.01	<0.005	0.01	<0.2	0.5	<0.01	103	0.40	0.01
EAIELK255R		<0.05	2.7	0.83	0.37	<0.05	0.03	0.01	0.006	0.01	0.8	0.4	0.01	92	0.38	<0.01
EAIELK264R		0.20	209	21.6	1.97	0.16	0.15	0.02	0.035	0.01	1.3	0.6	0.02	379	0.84	<0.01
EAIELK266R		<0.05	68.6	30.0	0.64	0.21	0.04	0.01	0.020	<0.01	3.2	0.2	0.01	1670	0.68	<0.01
EAIELK269R		0.52	85.7	15.45	3.86	0.11	0.52	0.10	0.048	0.08	3.2	0.4	0.01	58	0.45	<0.01
EAIELK269R_1		0.47	74.1	12.80	3.55	0.11	0.37	0.04	0.045	0.07	5.4	0.6	0.01	65	0.54	<0.01
EAIELK272R		0.10	5.9	2.76	1.21	<0.05	0.33	<0.01	0.010	0.02	1.4	0.2	0.01	131	0.58	<0.01
EAIELK274R		0.14	126.5	23.7	3.11	0.27	0.40	0.02	0.152	0.02	3.5	0.6	0.01	196	1.21	<0.01
EAIELK276R		<0.05	23.8	7.50	1.51	0.13	0.32	<0.01	0.032	<0.01	2.9	0.1	<0.01	88	0.23	<0.01
EAIELK279R		0.33	31.0	15.15	4.38	0.08	0.49	0.01	0.081	0.10	2.7	0.6	0.01	39	0.36	<0.01
EAIELK280R		1.02	48.8	28.3	4.67	0.53	0.07	<0.01	0.040	0.03	26.4	0.8	0.03	83	1.06	<0.01
EAIELK284R		0.15	33.8	27.5	2.60	0.13	0.09	0.01	0.009	0.09	6.3	0.9	0.02	53	1.35	<0.01
EAIELK285R		0.08	2.4	0.74	0.88	<0.05	0.28	0.01	0.007	0.10	5.8	0.4	0.02	84	0.23	<0.01
EAIELK288R		0.07	743	31.8	2.21	0.21	0.22	0.01	0.098	0.01	2.9	0.2	0.01	442	16.90	<0.01
EAIELK289R		0.15	871	28.8	6.08	0.16	0.43	0.01	0.333	0.03	2.4	0.4	0.02	476	22.3	<0.01
EAIELK295R		<0.05	209	22.6	1.51	0.19	0.24	0.01	0.052	0.01	1.1	0.1	0.01	187	0.70	<0.01
EAIELK296R		0.16	346	26.6	4.45	0.12	0.62	0.01	0.090	0.08	2.5	1.0	0.03	339	1.47	<0.01
EAIELK300R		0.14	50.0	28.4	3.61	0.18	0.50	<0.01	0.031	0.03	1.6	0.5	0.01	253	0.30	<0.01
EAIELK301R		<0.05	37.0	29.4	0.67	0.14	0.10	<0.01	0.014	0.01	3.4	0.2	<0.01	80	0.15	0.01
EAIELK301R_1		0.07	24.2	31.6	1.70	0.15	0.21	<0.01	0.027	0.02	2.8	0.4	0.01	401	0.14	0.01
EAIELK304R		0.09	18.3	18.65	1.96	0.09	0.23	0.01	0.030	0.02	1.8	0.3	<0.01	146	0.32	0.01
EAIELK980R		0.15	97.4	31.2	2.35	0.13	0.30	<0.01	0.039	0.04	4.3	0.4	0.01	208	0.14	0.01



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Sample Description	Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
		Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
		ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01
EAIELK240R		0.19	32.2	2140	123.0	2.3	<0.001	0.14	0.79	19.2	0.3	0.5	20.9	<0.01	0.01
EAIELK244R		<0.05	0.9	150	25.8	0.3	<0.001	0.02	<0.05	0.4	0.2	<0.2	15.5	<0.01	<0.01
EAIELK254R		<0.05	0.9	40	2.7	0.4	<0.001	0.01	0.05	0.3	<0.2	<0.2	1.5	<0.01	<0.01
EAIELK255R		<0.05	0.7	20	8.6	0.7	<0.001	0.01	<0.05	0.3	0.2	<0.2	4.2	<0.01	<0.01
EAIELK264R		0.15	15.7	1220	174.5	1.2	<0.001	0.09	0.32	9.4	1.1	0.3	8.2	<0.01	<0.01
EAIELK266R		<0.05	109.0	1590	90.6	0.2	<0.001	0.02	0.15	3.5	0.6	<0.2	8.8	<0.01	<0.01
EAIELK269R		0.06	1.6	250	201	5.7	<0.001	0.07	1.36	5.1	4.2	0.4	6.8	<0.01	0.08
EAIELK269R_1		0.08	2.0	260	168.5	5.2	<0.001	0.03	1.35	4.2	3.9	0.3	5.1	<0.01	0.08
EAIELK272R		<0.05	4.2	90	7.8	1.1	<0.001	0.01	0.22	0.9	1.7	<0.2	4.1	<0.01	<0.01
EAIELK274R		0.13	5.2	160	47.3	1.5	<0.001	0.10	0.66	7.4	1.1	0.3	15.5	<0.01	0.02
EAIELK276R		0.12	2.8	710	14.1	0.3	<0.001	0.01	0.22	1.0	1.6	0.2	6.6	<0.01	<0.01
EAIELK279R		0.10	2.0	120	31.1	6.2	<0.001	0.05	0.52	1.4	4.5	0.4	8.8	<0.01	0.03
EAIELK280R		0.06	22.1	3990	2.6	3.1	<0.001	0.05	0.31	5.7	0.2	0.2	7.8	<0.01	0.01
EAIELK284R		0.06	6.1	3330	1.2	6.0	<0.001	0.04	0.70	4.8	0.2	0.6	9.4	<0.01	0.01
EAIELK285R		<0.05	0.9	80	1.3	6.4	<0.001	0.01	0.15	0.7	0.2	0.2	2.8	<0.01	<0.01
EAIELK288R		0.05	28.4	700	17.2	0.6	<0.001	0.07	1.83	17.4	0.4	0.3	2.3	<0.01	<0.01
EAIELK289R		0.10	55.4	380	26.6	2.0	<0.001	0.06	3.98	23.6	0.4	0.8	1.6	<0.01	0.01
EAIELK295R		0.18	8.7	140	22.5	0.4	<0.001	0.03	0.76	5.3	0.5	0.3	2.0	<0.01	0.01
EAIELK296R		0.22	9.4	160	13.2	4.4	<0.001	0.05	0.84	10.5	0.5	0.6	17.0	<0.01	0.01
EAIELK300R		0.23	5.8	270	13.3	2.1	<0.001	0.04	0.19	10.3	0.2	0.9	4.0	<0.01	0.01
EAIELK301R		0.05	189.5	420	5.0	0.4	<0.001	0.05	0.10	3.0	<0.2	<0.2	1.7	<0.01	0.01
EAIELK301R_1		0.14	21.2	330	5.5	1.3	<0.001	0.04	0.09	6.6	0.2	0.4	2.4	<0.01	0.02
EAIELK304R		0.12	109.5	510	9.4	1.2	<0.001	0.05	0.39	2.7	0.3	0.3	98.7	<0.01	0.02
EAIELK980R		0.14	84.8	410	15.3	2.4	<0.001	0.06	0.19	9.9	<0.2	0.6	1.8	<0.01	0.01





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**CERTIFICATE OF ANALYSIS AD18159773**

Sample Description	Method Analyte Units LOD	ME-MS41 Ti %	ME-MS41 Ti ppm	ME-MS41 U ppm	ME-MS41 V ppm	ME-MS41 W ppm	ME-MS41 Y ppm	ME-MS41 Zn ppm	ME-MS41 Zr ppm	PUL-QC Pass75um %
		0.005	0.02	0.05	1	0.05	0.05	2	0.5	0.01
EAIELK240R		0.015	0.09	3.80	88	0.15	3.14	208	4.6	
EAIELK244R		<0.005	<0.02	0.08	3	<0.05	0.41	3	1.2	
EAIELK254R		<0.005	<0.02	0.05	2	1.89	0.09	<2	0.8	
EAIELK255R		<0.005	<0.02	0.05	2	<0.05	0.17	2	1.0	
EAIELK264R		0.010	0.04	1.13	113	0.10	2.12	20	5.3	
EAIELK266R		<0.005	0.05	1.36	32	0.06	2.44	232	1.3	
EAIELK269R		0.011	0.05	0.70	1040	0.07	2.76	3	18.9	
EAIELK269R_1		0.010	0.04	0.72	843	0.06	2.58	2	13.8	98.2
EAIELK272R		0.009	0.02	0.21	43	0.56	1.22	9	11.4	
EAIELK274R		0.013	0.02	0.85	90	0.11	3.78	6	17.8	
EAIELK276R		0.008	<0.02	0.26	17	0.05	2.45	3	10.2	
EAIELK279R		0.012	0.04	0.44	487	0.29	2.33	<2	18.4	
EAIELK280R		<0.005	0.03	3.93	28	<0.05	13.20	122	3.0	
EAIELK284R		0.005	0.03	9.03	6	0.05	7.08	37	4.0	
EAIELK285R		<0.005	0.02	0.28	7	0.27	1.66	2	9.7	
EAIELK288R		<0.005	<0.02	3.00	129	<0.05	9.20	301	8.6	
EAIELK289R		0.019	0.02	1.81	398	0.11	8.38	169	16.8	
EAIELK295R		0.010	0.09	0.98	27	0.15	2.47	23	8.6	
EAIELK296R		0.017	0.05	1.68	56	0.14	3.19	23	22.2	
EAIELK300R		0.025	0.09	1.68	42	0.06	1.79	38	17.1	
EAIELK301R		<0.005	<0.02	1.03	17	<0.05	13.50	419	3.8	
EAIELK301R_1		0.011	<0.02	0.79	16	<0.05	6.35	84	7.5	
EAIELK304R		0.007	<0.02	1.07	98	<0.05	9.97	226	7.7	
EAIELK980R		0.012	0.02	4.51	41	0.05	21.0	545	10.2	



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**CERTIFICATE OF ANALYSIS AD18159773**

**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-MS41

**ACCREDITATION COMMENTS**

Applies to Method:

NATA Accreditation covers the performance of this service but does not cover the performance of ALS Perth Sample Preparation. Corporate Accreditation No: 825, Corporate Site No: 23001. The Technical Signatory is Wendy Wong, Senior QC Chemist  
Au-ICP21 ME-MS41

**LABORATORY ADDRESSES**

Applies to Method:

Processed at ALS Perth located at 31 Denninup Way, Malaga, Australia. Processed at ALS Perth Sample Preparation at 79 Distinction Road, Wangara, WA, Australia  
Au-ICP21 ME-MS41

Applies to Method:

Processed at ALS Adelaide located at Unit 1, 1 Burma Road, Pooraka, Adelaide, SA, Australia.  
BAG-01 CRU-21 LEV-01  
PUL-32 PUL-QC WEI-21

LOG-22