



Australian Laboratory Services Pty. Ltd.

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Accreditation No: 825, Corporate Site No: 818.

CERTIFICATE BU17049351

Project: P.O. 8016

P.O. No.: 8016

This report is for 49 Crushed Rock samples submitted to our lab in Burnie, TAS,
Australia on 17-MAR-2017.

The following have access to data associated with this certificate:

FRED BAIN

SEAN WESTBROOK

KENT WIGHTON

To: KINGFISHER EXPLORATION PTY LTD
ATTN: SEAN WESTBROOK
15 RICHARDS AVE
DODGES FERRY TAS 7173

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 *****

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Plus Appendix Pages

Finalized Date: 5-APR-2017

This copy reported on 6-APR-2017

Account: KINEXP

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LEV-01	Waste Disposal Levy
BAG-01	Bulk Master for Storage
CRU-21	Crush entire sample >70% -6 mm
PUL-32	Pulverize 1000g to 85% < 75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Ag-OG62	Ore Grade Ag - Four Acid	ICP-AES
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Pb-OG62	Ore Grade Pb - Four Acid	ICP-AES
Zn-OG62	Ore Grade Zn - Four Acid	ICP-AES
Au-AA26	Ore Grade Au 50g FA AA finish	AAS
ME-MS61	48 element four acid ICP-MS	

Signature:

Shaun Kenny, Brisbane Laboratory Manager



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CERTIFICATE OF ANALYSIS BU17049351

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA26 Au ppm	ME-MS61 Ag ppm	ME-MS61 Al %	ME-MS61 As ppm	ME-MS61 Ba ppm	ME-MS61 Be ppm	ME-MS61 Bi ppm	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm
		0.02	0.01	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
GR001		2.83	<0.01	0.10	6.94	2.5	30	4.21	3.14	0.14	<0.02	14.45	0.9	2	13.40	16.2
GR002		3.00	0.17	0.08	7.07	8.1	70	2.69	1.70	0.11	0.07	24.5	1.2	3	16.80	9.6
GR003		3.62	<0.01													
GR004		2.96	<0.01													
GR005		2.05	<0.01													
GR006		2.55	<0.01													
GR007		2.20	<0.01													
GR008		2.31	<0.01													
GR009		1.62	<0.01													
GR010		2.16	<0.01													
GR011		2.52	<0.01													
GR012		1.25	<0.01													
GR013		3.31	<0.01													
GR014		1.66	11.15	8.45	4.53	136.5	790	1.12	4.32	0.06	2.83	45.2	2.5	30	2.11	14.3
GR015		1.41	12.95	13.55	4.39	84.5	810	1.03	8.66	0.09	10.10	52.1	4.4	33	2.13	36.9
GR016		1.27	63.8	>100	0.24	62400	30	0.08	1.29	0.01	906	4.58	2.4	5	0.17	14.8
GR017		3.21	<0.01													
GR018		2.12	0.01													
GR019		2.14	0.04													
GR020		3.45	0.01													
GR021		2.70	<0.01													
GR022		2.79	0.15	0.11	0.22	41.7	20	0.14	0.09	0.01	0.60	4.77	1.9	7	0.18	5.7
GR023		2.89	<0.01	0.02	0.95	8.3	10	0.21	0.61	0.04	0.06	20.6	1.2	16	0.18	4.4
GR024		2.98	<0.01	0.01	0.67	4.2	<10	0.13	0.06	0.02	0.04	3.16	1.1	9	0.15	3.8
GR025		2.05	0.01	0.03	0.75	50.6	<10	0.17	1.80	0.02	0.12	15.45	0.5	9	0.05	3.9
GR026		3.39	0.01	0.02	2.86	9.8	<10	0.38	4.74	0.09	0.02	34.1	0.4	16	0.07	3.2
GR027		1.92	<0.01													
GR028		1.86	0.03													
GR029		2.53	0.05													
GR030		3.43	<0.01													
GR031		1.47	<0.01													
GR032		2.36	0.01													
GR033		2.37	<0.01													
GR034		2.30	<0.01													
GR035		3.05	<0.01													
GR036		2.82	<0.01													
GR037		2.69	1.86	8.14	2.89	75300	390	0.70	55.1	0.02	0.04	34.3	0.8	26	2.72	188.0
GR038		2.61	0.07													
GR039		2.36	0.34	2.35	1.71	31300	170	0.42	13.25	0.01	<0.02	21.2	0.4	17	1.42	54.4
GR040		1.37	0.02													



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CERTIFICATE OF ANALYSIS BU17049351

Sample Description	Method Analyte Units LOR	ME-MS61 Fe %	ME-MS61 Ga ppm	ME-MS61 Ge ppm	ME-MS61 Hf ppm	ME-MS61 In ppm	ME-MS61 K %	ME-MS61 La ppm	ME-MS61 Li ppm	ME-MS61 Mg %	ME-MS61 Mn ppm	ME-MS61 Mo ppm	ME-MS61 Na %	ME-MS61 Nb ppm	ME-MS61 Ni ppm	ME-MS61 P ppm
		0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
GR001		1.37	30.8	0.06	2.3	0.250	3.06	6.0	66.2	0.10	116	0.26	2.16	14.6	1.2	260
GR002		1.22	29.3	0.08	1.4	0.224	4.29	11.0	59.6	0.11	101	0.31	1.53	11.5	1.8	300
GR003																
GR004																
GR005																
GR006																
GR007																
GR008																
GR009																
GR010																
GR011																
GR012																
GR013																
GR014		2.41	12.45	0.12	2.2	0.029	2.80	21.4	29.0	0.69	473	0.74	0.07	7.9	8.3	270
GR015		2.37	12.15	0.13	2.6	0.055	2.71	24.9	24.9	0.58	441	0.91	0.08	9.4	13.9	430
GR016		5.99	0.99	0.07	0.2	0.478	0.11	2.3	3.8	0.05	193	1.93	0.02	0.5	2.5	40
GR017																
GR018																
GR019																
GR020																
GR021																
GR022		1.52	0.97	<0.05	0.5	<0.005	0.07	2.2	1.1	0.01	103	0.68	0.01	1.0	3.0	10
GR023		1.37	4.23	<0.05	2.3	<0.005	0.02	10.5	2.3	0.16	95	0.62	0.06	2.7	1.9	50
GR024		1.26	2.83	<0.05	0.6	<0.005	0.01	1.6	2.9	0.11	112	1.89	0.04	1.0	2.1	20
GR025		1.04	3.19	<0.05	1.3	<0.005	0.01	8.0	2.2	0.15	116	0.98	0.05	1.8	1.2	20
GR026		1.26	11.65	0.06	2.9	0.008	0.01	18.0	3.5	0.59	113	0.47	0.20	0.9	1.7	40
GR027																
GR028																
GR029																
GR030																
GR031																
GR032																
GR033																
GR034																
GR035																
GR036																
GR037		6.29	11.05	0.15	1.9	0.106	1.17	18.3	6.2	0.23	111	4.75	0.07	4.2	1.9	60
GR038																
GR039		3.07	6.86	0.08	1.8	0.050	0.76	11.2	4.4	0.12	107	1.81	0.03	3.5	1.2	40
GR040																



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Sample Description	Method Analyte Units LOR	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
		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
		0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
GR001		16.5	412	<0.002	0.01	0.15	5.1	1	18.5	14.3	4.48	<0.05	8.49	0.024	2.25	6.1
GR002		20.2	520	<0.002	0.01	0.13	5.8	1	15.3	23.4	2.07	<0.05	7.32	0.044	3.05	3.1
GR003																
GR004																
GR005																
GR006																
GR007																
GR008																
GR009																
GR010																
GR011																
GR012																
GR013																
GR014		583	109.0	<0.002	0.08	4.75	8.5	1	2.4	118.0	0.61	0.09	9.43	0.213	0.54	1.4
GR015		1330	109.0	<0.002	0.23	6.03	8.6	1	2.7	116.5	0.73	0.21	10.70	0.242	0.53	1.6
GR016		>10000	4.8	<0.002	3.72	272	0.4	2	0.8	5.0	<0.05	0.19	0.56	0.011	0.10	0.2
GR017																
GR018																
GR019																
GR020																
GR021																
GR022		20.0	3.7	<0.002	0.01	0.70	0.7	<1	0.3	1.9	0.07	<0.05	0.85	0.030	0.02	0.4
GR023		3.3	1.8	<0.002	<0.01	0.27	2.3	<1	0.9	14.0	0.27	<0.05	3.41	0.104	<0.02	0.6
GR024		1.7	1.0	<0.002	0.01	0.21	1.3	<1	0.5	8.0	0.10	<0.05	0.89	0.051	<0.02	0.3
GR025		4.4	0.8	<0.002	<0.01	0.39	1.2	<1	1.1	9.9	0.19	<0.05	1.85	0.058	<0.02	0.5
GR026		3.7	0.9	<0.002	<0.01	0.39	3.8	<1	3.4	36.6	0.11	0.05	5.40	0.096	<0.02	1.1
GR027																
GR028																
GR029																
GR030																
GR031																
GR032																
GR033																
GR034																
GR035																
GR036																
GR037		370	70.7	<0.002	0.33	84.5	8.1	5	19.6	29.7	0.32	11.40	11.25	0.110	0.48	1.1
GR038																
GR039		281	43.0	<0.002	0.03	23.2	3.5	2	12.2	15.1	0.27	2.50	5.60	0.091	0.21	0.7
GR040																



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Sample Description	Method Analyte Units LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Ag-OG62 Ag ppm 1	Pb-OG62 Pb % 0.001	Zn-OG62 Zn % 0.001
GR001		2	8.8	14.6	29	41.2			
GR002		6	5.5	9.7	34	30.1			
GR003									
GR004									
GR005									
GR006									
GR007									
GR008									
GR009									
GR010									
GR011									
GR012									
GR013									
GR014		44	4.2	13.8	87	74.9			
GR015		44	5.9	16.7	233	93.4			
GR016		3	0.6	4.7	>10000	5.0	147	1.765	1.030
GR017									
GR018									
GR019									
GR020									
GR021									
GR022		4	1.0	1.7	14	15.9			
GR023		18	1.1	3.8	7	77.7			
GR024		10	0.4	1.8	5	19.4			
GR025		7	2.8	4.2	6	45.6			
GR026		24	2.4	7.1	14	99.3			
GR027									
GR028									
GR029									
GR030									
GR031									
GR032									
GR033									
GR034									
GR035									
GR036									
GR037		28	4.4	4.8	12	61.7			
GR038									
GR039		16	3.1	3.5	6	60.1			
GR040									



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Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	Au-AA26 Au ppm	ME-MS61 Ag ppm	ME-MS61 Al %	ME-MS61 As ppm	ME-MS61 Ba ppm	ME-MS61 Be ppm	ME-MS61 Bi ppm	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm
		0.02	0.01	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
GR041		2.01	0.12	5.42	0.72	17100	150	0.25	5.63	0.01	<0.02	19.85	0.4	12	0.69	26.9
GR042		3.45	0.14	2.08	1.25	20900	110	0.37	4.01	0.01	<0.02	35.4	0.4	15	1.24	10.4
GR043		3.10	<0.01													
GR044		4.08	<0.01													
GR045		2.92	<0.01	0.20	6.52	44.1	70	8.61	1.72	0.08	<0.02	8.79	0.6	2	17.95	7.3
GR046		2.92	<0.01	0.43	6.27	5.6	50	3.84	5.00	0.09	<0.02	15.15	0.4	2	13.55	11.7
GR047		2.73	<0.01	0.02	6.43	5.6	250	4.57	0.42	0.43	0.02	79.0	2.1	3	18.40	2.0
GR048		2.38	<0.01													
GR049		2.52	<0.01	0.06	7.17	4.3	50	5.84	0.64	0.08	0.02	4.46	0.7	4	17.85	2.5



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Sample Description	Method Analyte Units LOR	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
		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	ppm
		0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
GR041		2.33	2.87	0.06	0.8	0.037	0.25	10.5	1.9	0.06	117	2.12	0.02	1.0	1.4	30
GR042		2.26	5.32	0.08	2.0	0.027	0.52	17.2	2.8	0.10	93	1.06	0.04	3.3	1.0	50
GR043																
GR044																
GR045		0.92	26.8	0.08	1.5	0.165	4.08	4.2	53.7	0.05	102	0.44	1.93	7.4	1.7	240
GR046		0.88	23.1	0.10	1.8	0.180	3.82	6.9	40.6	0.04	92	0.39	2.10	7.3	1.0	140
GR047		1.71	24.4	0.18	2.8	0.101	4.14	34.0	90.9	0.12	231	0.63	1.73	14.0	1.7	410
GR048																
GR049		0.95	33.4	0.10	1.5	0.249	2.99	2.4	61.8	0.05	121	0.81	2.80	13.4	3.5	110



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Sample Description	Method Analyte Units LOR	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
		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
		0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
GR041		324	19.1	<0.002	0.03	20.1	1.8	2	4.4	16.9	0.08	1.04	5.69	0.028	0.15	0.4
GR042		225	29.8	<0.002	0.02	23.4	2.3	1	11.8	14.7	0.27	1.58	4.42	0.088	0.14	0.7
GR043																
GR044																
GR045		20.1	420	<0.002	<0.01	0.17	2.5	<1	21.9	20.4	2.86	<0.05	3.85	0.017	2.54	2.7
GR046		22.4	394	<0.002	<0.01	0.16	2.4	1	22.5	22.4	1.67	<0.05	10.05	0.022	2.42	4.3
GR047		27.8	374	<0.002	<0.01	0.15	4.3	1	9.0	56.2	1.67	<0.05	23.1	0.118	2.18	4.1
GR048																
GR049		9.0	385	<0.002	<0.01	0.09	3.8	<1	24.5	14.0	6.83	<0.05	2.20	0.016	2.05	1.1



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Sample Description	Method Analyte Units LOR	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Ag-OG62	Pb-OG62	Zn-OG62
		V	W	Y	Zn	Zr	Ag	Pb	Zn
		ppm	ppm	ppm	ppm	ppm	ppm	%	%
		1	0.1	0.1	2	0.5	1	0.001	0.001
GR041		9	3.1	1.7	3	26.0			
GR042		12	3.8	3.7	5	61.9			
GR043									
GR044									
GR045		2	6.8	6.7	22	28.9			
GR046		1	7.9	19.3	29	35.8			
GR047		7	3.9	18.3	53	78.0			
GR048									
GR049		1	9.1	2.3	34	20.5			



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CERTIFICATE OF ANALYSIS BU17049351

	CERTIFICATE COMMENTS				
	ANALYTICAL COMMENTS				
	Applies to Method:	REE's may not be totally soluble in this method. ME-MS61			
	ACCREDITATION COMMENTS				
	Applies to Method:	NATA Accredited. Corporate Accreditation No: 825, Corporate Site No: 818. The Technical Signatory is David Jones, ICPMS Supervising Chemist. ME-MS61			
	Applies to Method:	NATA Accredited. Corporate Accreditation No: 825, Corporate Site No: 818. The Technical Signatory is Samantha Profke, ICPAES Supervising Chemist			
		Ag-OG62	ME-OG62	Pb-OG62	Zn-OG62
	LABORATORY ADDRESSES				
	Applies to Method:	Processed at ALS Townsville located at 14-15 Desma Court, Bohle, Townsville, QLD, Australia. Au-AA26			
	Applies to Method:	Processed at ALS Brisbane located at 32 Shand Street, Stafford, Brisbane, QLD, Australia. NATA Accreditation does not cover the performance of ALS Brisbane Sample Preparation which is processed at 116 Delta Street, Geebung, QLD 4034, Australia			
		Ag-OG62	ME-MS61	ME-OG62	Pb-OG62
	Zn-OG62				
Applies to Method:	Processed at ALS Burnie located at 39 River Road, Burnie, TAS, Australia.				
	BAG-01	CRU-21	LEV-01	PUL-32	
	WEI-21				