



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

ALS Perth is a NATA Accredited Testing Laboratory. Corporate Accreditation
No: 825, Corporate Site No: 23001.

QC CERTIFICATE AD17145913

Project: MH23

This report is for 9 Drill Core samples submitted to our lab in Adelaide, SA, Australia
on 17-JUL-2017.

The following have access to data associated with this certificate:

PAUL BURTON
CATH WETHERBY

KIM GREY

GAVIN OTTO

To: TODD RIVER METALS
ATTN: CATH WETHERBY
LEVEL 1
282 ROKEBY ROAD
SUBIACO WA 6008

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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Account: TODRIV

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
LOG-24	Pulp Login - Rcd w/o Barcode
PUL-QC	Pulverizing QC Test
CRU-21	Crush entire sample >70% -6 mm
LEV-01	Waste Disposal Levy
PUL-23	Pulv Sample - Split/Retain
BAG-01	Bulk Master for Storage
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP22	Au 50g FA ICP-AES finish	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

Signature:

Cameron Brosnan, Laboratory Manager, Perth



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QC CERTIFICATE OF ANALYSIS AD17145913

Method Analyte Units LOR	ME-ICP61 Ag ppm 0.5	ME-ICP61 Al % 0.01	ME-ICP61 As ppm 5	ME-ICP61 Ba ppm 10	ME-ICP61 Be ppm 0.5	ME-ICP61 Bi ppm 2	ME-ICP61 Ca % 0.01	ME-ICP61 Cd ppm 0.5	ME-ICP61 Co ppm 1	ME-ICP61 Cr ppm 1	ME-ICP61 Cu ppm 1	ME-ICP61 Fe % 0.01	ME-ICP61 Ga ppm 10	ME-ICP61 K % 0.01	ME-ICP61 La ppm 10
Sample Description															
AMIS0282															
Target Range - Lower Bound															
Upper Bound															
LEA-16															
Target Range - Lower Bound															
Upper Bound															
OGGeo08	20.6	7.20	127	640	3.1	10	2.35	19.3	101	84	8670	5.57	10	3.15	30
Target Range - Lower Bound	17.7	6.07	102	750	1.8	6	1.98	16.2	86	78	7800	4.81	<10	2.59	<10
Upper Bound	22.7	7.44	136	930	4.1	15	2.44	21.0	108	98	8980	5.91	40	3.19	60
OREAS 902	<0.5	4.26	531	170	2.2	9	3.98	<0.5	899	48	2800	2.90	10	3.17	30
Target Range - Lower Bound	<0.5	4.26	512	140	1.1	4	3.64	<0.5	832	45	2800	2.86	<10	2.88	<10
Upper Bound	1.4	5.22	636	200	3.3	13	4.47	1.0	1020	57	3220	3.52	30	3.54	60
OREAS-45e															
Target Range - Lower Bound															
Upper Bound															
BLANK															
Target Range - Lower Bound															
Upper Bound															
BLANK	<0.5	0.01	<5	<10	<0.5	2	<0.01	<0.5	<1	<1	<1	<0.01	<10	<0.01	<10
Target Range - Lower Bound	<0.5	<0.01	<5	<10	<0.5	<2	<0.01	<0.5	<1	<1	<1	<0.01	<10	<0.01	<10
Upper Bound	1.0	0.02	10	20	1.0	4	0.02	1.0	2	2	2	0.02	20	0.02	20
DUPLICATES															
MH22590	<0.5	5.84	<5	530	2.7	<2	0.24	<0.5	6	30	4	2.23	20	2.80	30
DUP	<0.5	5.79	<5	520	2.6	2	0.24	<0.5	6	30	5	2.19	20	2.79	30
Target Range - Lower Bound	<0.5	5.51	<5	490	2.0	<2	0.22	<0.5	5	28	3	2.09	<10	2.65	20
Upper Bound	1.0	6.12	10	560	3.3	4	0.26	1.0	7	33	6	2.33	30	2.94	40



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Method Analyte Units LOR	ME-ICP61 Mg %	ME-ICP61 Mn ppm	ME-ICP61 Mo ppm	ME-ICP61 Na %	ME-ICP61 Ni ppm	ME-ICP61 P ppm	ME-ICP61 Pb ppm	ME-ICP61 S %	ME-ICP61 Sb ppm	ME-ICP61 Sc ppm	ME-ICP61 Sr ppm	ME-ICP61 Th ppm	ME-ICP61 Ti %	ME-ICP61 Tl ppm	ME-ICP61 U ppm
Sample Description	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10	10
STANDARDS															
AMISO282															
Target Range - Lower Bound															
Upper Bound															
LEA-16															
Target Range - Lower Bound															
Upper Bound															
OGGeo08	1.36	523	921	1.92	9170	900	7610	2.94	24	11	274	20	0.42	<10	<10
Target Range - Lower Bound	1.11	447	841	1.62	8000	760	6510	2.51	16	8	223	<20	0.35	<10	<10
Upper Bound	1.38	557	1030	2.00	9770	950	7970	3.09	38	13	275	60	0.45	20	30
OREAS 902	2.40	428	11	0.04	159	680	11	1.63	<5	7	28	<20	0.19	<10	<10
Target Range - Lower Bound	2.22	409	10	0.02	147	610	9	1.57	<5	5	25	<20	0.16	<10	<10
Upper Bound	2.74	511	15	0.07	181	770	18	1.95	12	9	32	50	0.22	20	30
OREAS-45e															
Target Range - Lower Bound															
Upper Bound															
BLANKS															
BLANK	<0.01	<5	<1	<0.01	<1	<10	<2	<0.01	<5	<1	<1	<20	<0.01	<10	<10
Target Range - Lower Bound	<0.01	<5	<1	<0.01	<1	<10	<2	<0.01	<5	<1	<1	<20	<0.01	<10	<10
Upper Bound	0.02	10	2	0.02	2	20	4	0.02	10	2	2	40	0.02	20	20
DUPLICATES															
MH22590	0.73	323	1	0.97	14	450	19	0.01	<5	7	37	20	0.23	<10	<10
DUP	0.72	293	1	0.96	16	430	20	0.01	<5	7	37	20	0.23	<10	<10
Target Range - Lower Bound	0.68	288	<1	0.91	13	410	17	<0.01	<5	6	34	<20	0.21	<10	<10
Upper Bound	0.77	328	2	1.02	17	470	22	0.02	10	8	40	40	0.25	20	20



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Sample Description	Method Analyte Units LOR	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Au-ICP22 Au ppm 0.001
STANDARDS					
AMIS0282					0.192
Target Range - Lower Bound					0.178
Upper Bound					0.202
LEA-16					0.513
Target Range - Lower Bound					0.470
Upper Bound					0.532
OGGeo08		89	<10	7340	
Target Range - Lower Bound		77	<10	6500	
Upper Bound		97	20	7950	
OREAS 902		52	10	9	
Target Range - Lower Bound		48	<10	3	
Upper Bound		60	20	12	
OREAS-45e					0.053
Target Range - Lower Bound					0.049
Upper Bound					0.057
BLANKS					
BLANK					0.001
Target Range - Lower Bound					<0.001
Upper Bound					0.002
BLANK		<1	<10	<2	
Target Range - Lower Bound		<1	<10	<2	
Upper Bound		2	20	4	
DUPLICATES					
MH22590		34	<10	33	
DUP		33	<10	33	
Target Range - Lower Bound		31	<10	29	
Upper Bound		36	20	37	



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ORIGINAL DUP Target Range - Lower Bound Upper Bound		DUPLICATES														
ORIGINAL DUP Target Range - Lower Bound Upper Bound																



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		0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10	10
ORIGINAL DUP Target Range - Lower Bound Upper Bound	DUPLICATES															
ORIGINAL DUP Target Range - Lower Bound Upper Bound																



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Sample Description	Method Analyte Units LOR	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Au-ICP22 Au ppm 0.001
DUPLICATES					
ORIGINAL					0.003
DUP					0.002
Target Range - Lower Bound					<0.001
Upper Bound					0.004
ORIGINAL					0.020
DUP					0.015
Target Range - Lower Bound					0.016
Upper Bound					0.019



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QC CERTIFICATE OF ANALYSIS AD17145913

CERTIFICATE COMMENTS

ACCREDITATION COMMENTS

Applies to Method:

NATA Accredited. Corporate Accreditation No: 825, Corporate Site No: 23001. The Technical Signatory is Wendy Wong, Senior QC Chemist.
Au-ICP22 ME-ICP61

LABORATORY ADDRESSES

Applies to Method:

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
Au-ICP22 ME-ICP61

Applies to Method:

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

WEI-21