



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 AD17111718

Project: MH13

This report is for 66 Drill Core samples submitted to our lab in Adelaide, SA,
Australia on 7-JUN-2017.

The following have access to data associated with this certificate:

PAUL BURTON
CATH WETHERBY

KIM GREY

GAVIN OTTO

To: TODD RIVER METALS
ATTN: GAVIN OTTO
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 *****

Page: 1
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
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
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
Cu-OG62	Ore Grade Cu - Four Acid	ICP-AES
Pb-OG62	Ore Grade Pb - Four Acid	ICP-AES
Zn-OG62	Ore Grade Zn - Four Acid	ICP-AES
Au-ICP22	Au 50g FA ICP-AES finish	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES

Signature:

Cameron Brosnan, Laboratory Manager, Perth



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.

Project: MH13

Page: 2 - A
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	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
STANDARDS																
AMIS0282																
Target Range - Lower Bound																
Upper Bound																
GBM306-12																
Target Range - Lower Bound																
Upper Bound																
GBM306-12																
Target Range - Lower Bound																
Upper Bound																
GBM908-10		3.3	7.56	55	1140	1.5	<2	3.86	1.6	27	140	3680	5.68	20	2.13	50
Target Range - Lower Bound		1.9	6.40	44	980	<0.5	<2	3.36	0.6	22	125	3370	4.98	<10	1.87	20
Upper Bound		4.2	7.84	70	1220	2.5	5	4.12	2.8	30	155	3890	6.10	40	2.31	70
GLG912-5																
GLG912-5																
GLG912-5																
Target Range - Lower Bound																
Upper Bound																
LEA-16																
Target Range - Lower Bound																
Upper Bound																
MP-1b																
Target Range - Lower Bound																
Upper Bound																
MP-1b																
Target Range - Lower Bound																
Upper Bound																
MRGeo08		4.8	7.77	38	1110	3.3	<2	2.66	2.0	20	90	627	3.92	20	3.08	30
Target Range - Lower Bound		3.2	6.64	21	980	2.2	<2	2.35	1.1	17	81	586	3.55	<10	2.79	<10
Upper Bound		5.7	8.14	45	1210	4.5	5	2.90	3.4	23	102	676	4.37	40	3.43	60
OGGeo08		20.8	7.18	118	490	2.9	11	2.26	19.1	98	86	8550	5.39	20	2.89	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



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.

Project: MH13

Page: 2 - B
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	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
		0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10	10
STANDARDS																
AMIS0282																
Target Range - Lower Bound																
Upper Bound																
GBM306-12																
Target Range - Lower Bound																
Upper Bound																
GBM306-12																
Target Range - Lower Bound																
Upper Bound																
GBM908-10		1.87	820	58	2.23	2330	1020	2050	0.37	<5	18	301	20	0.66	<10	<10
Target Range - Lower Bound		1.61	715	57	1.93	2030	880	1860	0.33	<5	14	260	<20	0.59	<10	<10
Upper Bound		1.99	885	72	2.38	2480	1100	2280	0.43	12	20	320	60	0.74	20	20
GLG912-5																
GLG912-5																
GLG912-5																
Target Range - Lower Bound																
Upper Bound																
LEA-16																
Target Range - Lower Bound																
Upper Bound																
MP-1b																
Target Range - Lower Bound																
Upper Bound																
MP-1b																
Target Range - Lower Bound																
Upper Bound																
MRGeo08		1.33	559	14	2.00	687	1060	1050	0.29	<5	12	306	20	0.48	<10	<10
Target Range - Lower Bound		1.17	497	12	1.76	621	930	969	0.27	<5	10	276	<20	0.44	<10	<10
Upper Bound		1.45	619	18	2.18	761	1160	1190	0.35	15	15	340	60	0.56	20	30
OGGeo08		1.27	508	896	1.84	8710	880	7170	2.71	24	10	252	20	0.40	<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



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.

Project: MH13

Page: 2 - C
 Total # Pages: 5 (A - C)
 Plus Appendix Pages
 Finalized Date: 29-JUN-2017
 Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	Method Analyte Units LOR	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	Pb-OG62 Pb % 0.001	Zn-OG62 Zn % 0.001	Au-ICP22 Au ppm 0.001
STANDARDS								
AMIS0282								0.186
Target Range - Lower Bound								0.178
Upper Bound								0.202
GBM306-12				1.485				
Target Range - Lower Bound				1.430				
Upper Bound				1.535				
GBM306-12					2.70	2.07		
Target Range - Lower Bound					2.59	1.975		
Upper Bound					2.77	2.12		
GBM908-10		142	<10	1060				
Target Range - Lower Bound		123	<10	939				
Upper Bound		153	20	1155				
GLG912-5								0.228
GLG912-5								0.214
GLG912-5								0.220
Target Range - Lower Bound								0.210
Upper Bound								0.239
LEA-16								0.487
Target Range - Lower Bound								0.470
Upper Bound								0.532
MP-1b				3.15				
Target Range - Lower Bound				2.96				
Upper Bound				3.18				
MP-1b					2.11	16.95		
Target Range - Lower Bound					2.02	16.10		
Upper Bound					2.17	17.25		
MRGeo08		109	<10	774				
Target Range - Lower Bound		97	<10	722				
Upper Bound		121	30	886				
OGGeo08		88	<10	7160				
Target Range - Lower Bound		77	<10	6500				
Upper Bound		97	20	7950				



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.

Project: MH13

Page: 3 - A
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	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
STANDARDS																
OREAS 601		50.6	6.65	336	530	2.1	23	1.34	8.0	5	45	999	2.47	20	2.08	30
Target Range - Lower Bound		43.8	5.66	271	780	1.0	16	1.17	6.5	3	37	938	2.22	<10	1.88	<10
Upper Bound		54.6	6.94	343	980	3.2	26	1.45	9.3	7	47	1080	2.74	40	2.32	50
OREAS 621																
Target Range - Lower Bound																
Upper Bound																
OREAS 621																
Target Range - Lower Bound																
Upper Bound																
OREAS-45e																
OREAS-45e																
OREAS-45e																
OREAS-45e																
Target Range - Lower Bound																
Upper Bound																
PK2																
PK2																
PK2																
Target Range - Lower Bound																
Upper Bound																
BLANKS																
BLANK																
BLANK																
BLANK																
BLANK																
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	2	1	2	<0.01	<10	<0.01	<10
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
BLANK																
Target Range - Lower Bound																
Upper Bound																



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.

Project: MH13

Page: 3 - B
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	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
		0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10	10
STANDARDS																
OREAS 601		0.37	485	4	1.47	26	490	343	1.04	31	5	230	<20	0.18	<10	<10
Target Range - Lower Bound		0.34	427	2	1.30	21	410	294	0.95	19	3	206	<20	0.15	<10	<10
Upper Bound		0.44	533	6	1.61	28	530	364	1.19	42	7	254	50	0.21	20	20
OREAS 621																
Target Range - Lower Bound																
Upper Bound																
OREAS 621																
Target Range - Lower Bound																
Upper Bound																
OREAS-45e																
OREAS-45e																
OREAS-45e																
OREAS-45e																
Target Range - Lower Bound																
Upper Bound																
PK2																
PK2																
PK2																
Target Range - Lower Bound																
Upper Bound																
BLANKS																
BLANK																
BLANK																
BLANK																
BLANK																
Target Range - Lower Bound																
Upper Bound																
BLANK																
Target Range - Lower Bound																
Upper Bound																
BLANK		<0.01	<5	2	<0.01	<1	<10	<2	<0.01	<5	<1	<1	<20	<0.01	<10	<10
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
BLANK																
Target Range - Lower Bound																
Upper Bound																



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.

Project: MH13

Page: 3 - C
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	Method Analyte Units LOR	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	Pb-OG62 Pb % 0.001	Zn-OG62 Zn % 0.001	Au-ICP22 Au ppm 0.001
STANDARDS								
OREAS 601		26	<10	1340				
Target Range - Lower Bound		22	<10	1195				
Upper Bound		29	30	1465				
OREAS 621					0.363			
Target Range - Lower Bound								
Upper Bound								
OREAS 621						1.350	5.17	
Target Range - Lower Bound						1.310	5.04	
Upper Bound						1.410	5.40	
OREAS-45e								0.052
OREAS-45e								0.052
OREAS-45e								0.049
OREAS-45e								0.053
Target Range - Lower Bound								0.049
Upper Bound								0.057
PK2								4.50
PK2								4.83
PK2								4.76
Target Range - Lower Bound								4.50
Upper Bound								5.07
BLANKS								
BLANK								<0.001
BLANK								<0.001
BLANK								0.001
BLANK								0.003
Target Range - Lower Bound								<0.001
Upper Bound								0.002
BLANK					<0.001			
Target Range - Lower Bound					<0.001			
Upper Bound					0.002			
BLANK		<1	<10	3				
BLANK		<1	<10	<2				
Target Range - Lower Bound		<1	<10	<2				
Upper Bound		2	20	4				
BLANK						0.001	0.002	
Target Range - Lower Bound						<0.001	<0.001	
Upper Bound						0.002	0.002	



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.

Project: MH13

Page: 4 - A
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	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
DUPLICATES																
MH21730		<0.5	6.85	10	550	2.3	3	0.26	<0.5	6	34	3	2.48	20	2.46	40
DUP		<0.5	6.94	8	560	2.4	2	0.26	<0.5	7	34	3	2.50	20	2.50	40
Target Range - Lower Bound		<0.5	6.54	<5	520	1.7	<2	0.24	<0.5	5	31	2	2.36	<10	2.35	30
Upper Bound		1.0	7.25	10	590	3.0	4	0.28	1.0	8	37	4	2.62	30	2.61	50
MH21745																
DUP																
Target Range - Lower Bound																
Upper Bound																
MH21750		<0.5	5.25	46	270	1.4	<2	0.21	<0.5	92	28	103	2.67	20	1.17	30
DUP		<0.5	4.89	38	260	1.3	<2	0.19	<0.5	84	25	99	2.50	10	1.10	30
Target Range - Lower Bound		<0.5	4.81	35	240	0.8	<2	0.18	<0.5	83	24	96	2.45	<10	1.07	20
Upper Bound		1.0	5.33	49	290	1.9	4	0.22	1.0	93	29	106	2.72	20	1.20	40
MH21759																
DUP																
Target Range - Lower Bound																
Upper Bound																
MH21765		0.6	5.01	<5	10	1.1	2	0.13	0.5	<1	12	207	0.22	10	4.54	<10
DUP		0.7	4.87	5	10	1.1	<2	0.13	0.6	<1	13	194	0.21	10	4.42	<10
Target Range - Lower Bound		<0.5	4.68	<5	<10	<0.5	<2	0.11	<0.5	<1	11	192	0.19	<10	4.25	<10
Upper Bound		1.0	5.20	10	20	1.7	4	0.15	1.0	2	14	209	0.24	20	4.71	20
MH21785		<0.5	9.49	<5	740	3.6	2	0.21	<0.5	12	56	5	3.66	30	4.07	40
DUP		<0.5	10.20	<5	790	3.8	2	0.22	<0.5	15	60	6	3.94	30	4.36	40
Target Range - Lower Bound		<0.5	9.34	<5	720	3.0	<2	0.19	<0.5	12	54	4	3.60	20	3.99	30
Upper Bound		1.0	10.35	10	810	4.4	4	0.24	1.0	15	62	7	4.00	40	4.44	50
MH21797																
DUP																
Target Range - Lower Bound																
Upper Bound																
ORIGINAL																
DUP																
Target Range - Lower Bound																
Upper Bound																



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.

Project: MH13

Page: 4 - B
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	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
		0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10	10
DUPLICATES																
MH21730		0.61	418	<1	1.04	16	450	46	0.01	<5	7	41	20	0.21	<10	<10
DUP		0.62	419	<1	1.05	16	460	49	0.01	<5	7	42	20	0.22	10	<10
Target Range - Lower Bound		0.57	393	<1	0.98	14	420	43	<0.01	<5	6	38	<20	0.19	<10	<10
Upper Bound		0.66	444	2	1.11	18	490	52	0.02	10	8	45	40	0.24	20	20
MH21745																
DUP																
Target Range - Lower Bound																
Upper Bound																
MH21750		1.34	257	1	1.33	14	360	135	0.77	<5	6	34	20	0.11	<10	<10
DUP		1.24	230	1	1.24	14	350	120	0.72	<5	5	32	20	0.11	<10	<10
Target Range - Lower Bound		1.22	226	<1	1.21	12	330	119	0.70	<5	4	30	<20	0.09	<10	<10
Upper Bound		1.36	261	2	1.36	16	380	136	0.79	10	7	36	40	0.13	20	20
MH21759																
DUP																
Target Range - Lower Bound																
Upper Bound																
MH21765		0.04	46	1	1.23	11	480	25	0.06	<5	<1	21	<20	0.02	10	<10
DUP		0.04	44	<1	1.19	8	490	25	0.06	<5	<1	20	<20	0.02	10	<10
Target Range - Lower Bound		0.03	38	<1	1.14	8	450	22	0.05	<5	<1	18	<20	<0.01	<10	<10
Upper Bound		0.05	52	2	1.28	11	520	28	0.07	10	2	23	40	0.03	20	20
MH21785		1.07	540	<1	0.86	30	570	20	<0.01	<5	12	25	20	0.31	<10	<10
DUP		1.15	576	<1	0.93	32	600	15	<0.01	<5	13	27	20	0.33	10	<10
Target Range - Lower Bound		1.04	525	<1	0.84	28	550	15	<0.01	<5	11	24	<20	0.29	<10	<10
Upper Bound		1.18	591	2	0.95	34	620	20	0.02	10	14	28	40	0.35	20	20
MH21797																
DUP																
Target Range - Lower Bound																
Upper Bound																
ORIGINAL																
DUP																
Target Range - Lower Bound																
Upper Bound																



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.

Project: MH13

Page: 4 - C
 Total # Pages: 5 (A - C)
 Plus Appendix Pages
 Finalized Date: 29-JUN-2017
 Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	Method Analyte Units LOR	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	Pb-OG62 Pb % 0.001	Zn-OG62 Zn % 0.001	Au-ICP22 Au ppm 0.001
DUPLICATES								
MH21730		37	<10	85				
DUP		37	<10	88				
Target Range - Lower Bound		34	<10	80				
Upper Bound		40	20	93				
MH21745								0.004
DUP								0.004
Target Range - Lower Bound								0.003
Upper Bound								0.005
MH21750		30	<10	107				
DUP		28	<10	100				
Target Range - Lower Bound		27	<10	96				
Upper Bound		31	20	111				
MH21759					1.660			
DUP					1.670			
Target Range - Lower Bound					1.620			
Upper Bound					1.710			
MH21765		3	<10	314				
DUP		3	<10	303				
Target Range - Lower Bound		2	<10	291				
Upper Bound		4	20	326				
MH21785		59	<10	66				
DUP		65	<10	70				
Target Range - Lower Bound		58	<10	63				
Upper Bound		66	20	73				
MH21797								0.001
DUP								<0.001
Target Range - Lower Bound								<0.001
Upper Bound								0.002
ORIGINAL								0.004
DUP								0.002
Target Range - Lower Bound								0.002
Upper Bound								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

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

Project: MH13

Page: 5 - A
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

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



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.

Project: MH13

Page: 5 - B
Total # Pages: 5 (A - C)
Plus Appendix Pages
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

Sample Description	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
		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																
ORIGINAL DUP Target Range - Lower Bound Upper Bound																



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.

Project: MH13

Page: 5 - C
 Total # Pages: 5 (A - C)
 Plus Appendix Pages
 Finalized Date: 29-JUN-2017
 Account: TODRIV

QC CERTIFICATE OF ANALYSIS	AD17111718
----------------------------	------------

Sample Description	Method Analyte Units LOR	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	Pb-OG62 Pb % 0.001	Zn-OG62 Zn % 0.001	Au-ICP22 Au ppm 0.001
DUPLICATES								
ORIGINAL								0.001
DUP								<0.001
Target Range - Lower Bound								<0.001
Upper Bound								0.002
ORIGINAL								0.002
DUP								0.002
Target Range - Lower Bound								<0.001
Upper Bound								0.003
ORIGINAL								<0.001
DUP								<0.001
Target Range - Lower Bound								<0.001
Upper Bound								0.002



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.

Project: MH13

Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 29-JUN-2017
Account: TODRIV

QC CERTIFICATE OF ANALYSIS AD17111718

	CERTIFICATE COMMENTS
	<p style="text-align: center;">ACCREDITATION COMMENTS</p> <p>NATA Accredited. Corporate Accreditation No: 825, Corporate Site No: 23001. The Technical Signatory is Wendy Wong, Senior QC Chemist.</p> <p>Applies to Method: Au-ICP22 ME-ICP61 ME-OG62</p>
	<p style="text-align: center;">LABORATORY ADDRESSES</p> <p>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</p> <p>Applies to Method: Au-ICP22 Cu-OG62 ME-ICP61 ME-OG62 Pb-OG62 Zn-OG62</p>
	<p>Processed at ALS Adelaide located at Unit 1, 1 Burma Road, Pooraka, Adelaide, SA, Australia.</p> <p>Applies to Method: BAG-01 LEV-01 LOG-22 LOG-24 PUL-23 PUL-QC SPL-21 WEI-21</p>