



Australian Laboratory Services Pty. Ltd.

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No: 825, Corporate Site No: 23001.

CERTIFICATE AD17136526

Project: MH21

P.O. No.: 338173

This report is for 103 Drill Core samples submitted to our lab in Adelaide, SA,
Australia on 5-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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SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
LOG-24	Pulp Login - Rcd w/o Barcode
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
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



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CERTIFICATE OF ANALYSIS AD17136526

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	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
MH22591		2.97	6.6	0.19	422	10	<0.5	24	0.02	0.6	3	3	349	0.44	<10	0.07
MH22592		3.01	<0.5	0.16	17	10	<0.5	2	0.02	<0.5	2	5	108	0.47	<10	0.07
MH22593		2.03	1.3	0.13	48	30	<0.5	2	0.01	<0.5	1	2	229	0.54	<10	0.05
MH22594		1.83	7.5	0.31	65	10	<0.5	16	0.01	<0.5	4	8	1840	1.38	<10	0.07
MH22595		3.67	3.7	1.57	6	130	0.5	11	0.03	<0.5	5	8	854	1.88	10	0.60
MH22596		3.46	<0.5	2.12	<5	220	0.7	3	0.04	<0.5	3	13	154	1.53	10	0.84
MH22597		3.84	<0.5	3.08	<5	340	1.0	2	0.07	<0.5	5	15	22	1.61	10	1.30
MH22598		1.84	<0.5	2.50	<5	270	0.7	<2	0.06	<0.5	3	17	7	1.59	10	0.95
MH22599		2.11	18.8	1.03	10	100	<0.5	51	0.02	<0.5	3	7	477	0.93	<10	0.44
MH22600		0.05	<0.5	5.69	12	30	1.0	<2	1.67	<0.5	27	44	39	2.64	10	3.74
MH22601		2.07	0.6	3.15	6	260	1.0	2	0.06	<0.5	6	25	91	2.39	10	1.29
MH22602		3.92	3.7	4.93	<5	500	1.8	12	0.10	<0.5	7	32	187	2.88	20	2.19
MH22603		3.88	0.8	3.56	<5	280	1.2	7	0.05	<0.5	7	22	111	2.96	10	1.41
MH22604		3.68	<0.5	2.67	42	230	0.8	<2	0.05	<0.5	5	19	37	2.31	10	1.09
MH22605		3.71	<0.5	4.05	36	360	1.2	2	0.08	<0.5	6	24	50	2.22	10	1.77
MH22606		4.12	<0.5	2.93	29	320	0.9	<2	0.07	<0.5	4	14	16	1.53	10	1.17
MH22607		3.77	<0.5	4.59	<5	440	1.3	<2	0.12	<0.5	5	25	7	2.07	10	1.87
MH22608		4.23	<0.5	7.87	9	730	2.5	<2	0.13	<0.5	11	48	1	3.50	20	3.56
MH22609		2.94	<0.5	1.34	<5	140	0.5	<2	0.05	<0.5	1	9	2	0.89	<10	0.55
MH22610		2.55	2.0	2.43	<5	270	0.7	5	0.06	1.8	7	17	1110	1.79	10	0.97
MH22611		2.61	<0.5	4.57	6	470	1.6	<2	0.07	1.4	9	30	66	2.60	10	2.18
MH22612		1.65	<0.5	5.06	<5	620	1.6	2	0.12	<0.5	7	25	5	2.11	10	2.19
MH22613		2.60	<0.5	4.83	<5	620	1.5	<2	0.11	<0.5	6	27	5	2.08	10	2.10
MH22614		2.86	<0.5	3.80	<5	470	1.1	<2	0.09	<0.5	4	18	2	1.65	10	1.61
MH22615		2.91	<0.5	5.08	<5	680	1.6	<2	0.22	<0.5	6	26	19	2.45	10	2.16
MH22616		2.75	<0.5	4.28	<5	690	1.3	<2	0.14	<0.5	7	24	10	2.05	10	1.89
MH22617		2.73	<0.5	4.22	<5	480	1.5	<2	0.11	<0.5	7	27	23	2.62	10	2.08
MH22618		2.75	0.9	5.10	<5	710	1.8	<2	0.18	<0.5	6	27	93	2.39	10	2.31
MH22619		2.83	6.8	4.45	<5	640	1.4	18	0.17	<0.5	6	24	247	2.36	10	2.11
MH22620		2.00	9.1	4.32	12	550	1.4	31	0.19	18.7	23	26	1560	2.77	10	1.98
MH22621		2.70	<0.5	5.47	<5	700	1.8	<2	0.30	<0.5	8	31	9	2.74	10	2.45
MH22622		2.94	<0.5	4.69	6	650	1.4	<2	0.19	<0.5	6	25	5	2.23	10	2.17
MH22623		2.64	<0.5	5.42	<5	760	1.9	<2	0.24	<0.5	7	29	6	2.60	10	2.46
MH22624		2.87	<0.5	6.20	5	750	2.3	<2	0.22	<0.5	8	35	3	2.67	20	2.87
MH22625		0.05	0.5	4.65	<5	10	1.1	<2	0.12	0.7	1	12	192	0.20	10	4.41
MH22626		2.78	<0.5	4.86	6	560	1.4	<2	0.23	<0.5	6	23	4	2.06	10	1.85
MH22627		2.97	<0.5	6.18	7	620	2.0	<2	0.14	<0.5	8	33	2	2.67	20	2.97
MH22628		3.07	<0.5	8.56	9	800	3.5	<2	0.21	<0.5	10	49	2	3.66	20	4.10
MH22629		2.76	<0.5	7.24	6	760	2.8	<2	0.23	<0.5	8	40	2	3.11	20	3.35
MH22630		2.90	<0.5	5.59	<5	650	1.6	<2	0.28	<0.5	6	28	4	2.45	10	2.22



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CERTIFICATE OF ANALYSIS AD17136526

Sample Description	Method Analyte Units LOR	ME-ICP61 La ppm 10	ME-ICP61 Mg % 0.01	ME-ICP61 Mn ppm 5	ME-ICP61 Mo ppm 1	ME-ICP61 Na % 0.01	ME-ICP61 Ni ppm 1	ME-ICP61 P ppm 10	ME-ICP61 Pb ppm 2	ME-ICP61 S % 0.01	ME-ICP61 Sb ppm 5	ME-ICP61 Sc ppm 1	ME-ICP61 Sr ppm 1	ME-ICP61 Th ppm 20	ME-ICP61 Ti % 0.01	ME-ICP61 Tl ppm 10
MH22591		<10	0.03	77	24	0.01	<1	10	908	0.09	<5	<1	2	<20	0.01	<10
MH22592		<10	0.02	124	<1	0.01	<1	10	59	0.02	<5	<1	2	<20	<0.01	<10
MH22593		<10	0.02	157	<1	0.01	<1	10	140	0.04	<5	<1	1	<20	<0.01	<10
MH22594		<10	0.07	246	<1	0.01	2	10	706	0.32	<5	<1	1	<20	<0.01	<10
MH22595		10	0.21	336	1	0.13	4	120	553	0.15	<5	1	8	<20	0.06	<10
MH22596		10	0.20	299	<1	0.25	4	170	91	0.02	<5	2	15	<20	0.08	<10
MH22597		20	0.27	296	<1	0.44	6	280	38	0.01	<5	3	25	<20	0.12	<10
MH22598		20	0.24	292	1	0.38	5	230	20	<0.01	<5	3	20	<20	0.10	<10
MH22599		10	0.11	173	<1	0.10	1	90	2100	0.10	<5	1	6	<20	0.04	<10
MH22600		<10	0.78	356	9	1.51	33	600	38	0.02	<5	8	76	<20	0.30	10
MH22601		10	0.35	548	<1	0.31	9	220	133	0.02	<5	4	16	<20	0.13	<10
MH22602		20	0.49	583	1	0.29	16	330	555	0.03	<5	6	17	<20	0.17	10
MH22603		10	0.46	620	<1	0.19	10	190	170	0.02	<5	4	12	<20	0.12	<10
MH22604		10	0.34	625	<1	0.19	6	170	36	0.06	<5	3	12	<20	0.10	<10
MH22605		20	0.38	471	1	0.28	11	310	104	0.03	<5	5	17	<20	0.15	<10
MH22606		20	0.24	311	1	0.36	5	230	71	0.03	<5	3	19	<20	0.11	<10
MH22607		30	0.38	365	<1	0.62	9	370	38	<0.01	<5	5	36	20	0.18	<10
MH22608		30	0.71	570	<1	0.67	22	490	26	<0.01	<5	10	35	20	0.28	<10
MH22609		10	0.12	225	<1	0.19	1	100	57	<0.01	<5	1	11	<20	0.05	<10
MH22610		10	0.24	349	<1	0.32	7	180	310	0.25	<5	3	20	<20	0.09	<10
MH22611		20	0.49	415	<1	0.22	13	270	52	0.20	<5	6	16	<20	0.17	<10
MH22612		30	0.38	377	<1	0.80	12	410	18	0.01	<5	5	40	20	0.19	<10
MH22613		30	0.38	358	1	0.80	15	390	15	<0.01	<5	5	39	20	0.19	<10
MH22614		20	0.31	286	<1	0.60	9	300	24	<0.01	<5	4	32	<20	0.15	<10
MH22615		30	0.44	533	1	0.93	13	380	49	0.01	<5	6	52	20	0.20	<10
MH22616		30	0.35	491	1	0.60	11	340	34	<0.01	<5	5	40	20	0.17	<10
MH22617		20	0.46	524	<1	0.43	13	300	43	0.01	<5	5	23	<20	0.17	<10
MH22618		30	0.43	474	<1	0.67	11	400	193	0.01	<5	6	39	20	0.20	<10
MH22619		20	0.42	469	<1	0.55	8	330	664	0.04	<5	5	36	20	0.17	<10
MH22620		20	0.40	491	<1	0.59	12	320	1850	0.87	<5	5	40	<20	0.17	<10
MH22621		30	0.50	614	<1	0.90	13	420	32	0.01	<5	6	65	20	0.21	<10
MH22622		30	0.42	445	<1	0.69	13	350	35	<0.01	<5	5	45	20	0.18	<10
MH22623		30	0.49	513	<1	0.84	13	400	44	<0.01	<5	6	58	20	0.20	<10
MH22624		30	0.55	458	1	0.81	18	430	29	<0.01	<5	7	53	20	0.23	<10
MH22625		<10	0.03	43	1	1.16	9	470	29	0.06	<5	<1	20	<20	0.02	10
MH22626		30	0.43	360	<1	1.11	10	390	19	<0.01	<5	5	63	20	0.18	<10
MH22627		30	0.57	441	<1	0.41	16	400	8	<0.01	<5	7	26	20	0.22	10
MH22628		40	0.83	645	<1	0.68	26	520	15	<0.01	<5	11	43	20	0.30	<10
MH22629		30	0.68	534	<1	0.77	21	480	16	<0.01	<5	9	48	20	0.27	<10
MH22630		40	0.47	492	<1	0.98	14	430	19	<0.01	<5	6	61	20	0.23	<10



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CERTIFICATE OF ANALYSIS AD17136526

Sample Description	Method Analyte Units LOR	ME-ICP61 U ppm 10	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Pb-OG62 Pb % 0.001	Zn-OG62 Zn % 0.001	Au-ICP22 Au ppm 0.001	PUL-QC Pass75um % 0.01
MH22591		<10	1	<10	211			0.004	
MH22592		<10	1	<10	44			<0.001	
MH22593		<10	<1	<10	45			<0.001	
MH22594		<10	2	<10	178			<0.001	
MH22595		<10	9	<10	155			<0.001	86.0
MH22596		<10	12	<10	63			0.002	
MH22597		<10	16	<10	62			<0.001	
MH22598		<10	13	<10	44			<0.001	
MH22599		<10	5	<10	64			<0.001	
MH22600		<10	65	<10	58			0.014	
MH22601		<10	19	<10	103			<0.001	
MH22602		<10	33	<10	107			<0.001	
MH22603		<10	22	<10	105			<0.001	
MH22604		<10	16	<10	75			<0.001	
MH22605		<10	25	<10	139			<0.001	
MH22606		<10	16	<10	217			<0.001	
MH22607		<10	25	<10	45			<0.001	
MH22608		<10	51	<10	68			<0.001	
MH22609		<10	8	<10	17			<0.001	
MH22610		<10	14	<10	1355			<0.001	
MH22611		<10	30	<10	3270			<0.001	
MH22612		<10	27	<10	59			<0.001	
MH22613		<10	26	<10	44			<0.001	
MH22614		<10	21	<10	48			<0.001	
MH22615		<10	28	<10	144			<0.001	
MH22616		<10	24	<10	75			<0.001	
MH22617		<10	26	<10	83			<0.001	
MH22618		<10	28	<10	80			0.001	
MH22619		<10	25	<10	116			0.002	
MH22620		<10	25	<10	>10000		1.155	0.004	
MH22621		<10	31	<10	116			0.001	
MH22622		<10	26	<10	52			<0.001	
MH22623		<10	31	<10	48			0.001	
MH22624		<10	37	<10	81			0.001	
MH22625		<10	2	<10	306			0.356	
MH22626		<10	26	<10	48			<0.001	
MH22627		<10	38	<10	43			<0.001	
MH22628		<10	56	<10	57			0.001	
MH22629		<10	45	<10	63			0.001	
MH22630		<10	32	<10	72			0.001	



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Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	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
MH22631		2.65	<0.5	6.22	6	590	2.0	<2	0.18	<0.5	10	32	5	3.82	20	2.50
MH22632		2.65	<0.5	6.72	8	620	2.4	<2	0.20	<0.5	8	37	5	3.35	20	3.05
MH22633		2.87	<0.5	5.11	<5	500	1.5	<2	0.19	<0.5	6	27	8	2.51	10	2.21
MH22634		2.83	<0.5	3.33	<5	320	1.0	<2	0.09	<0.5	5	19	4	2.23	10	1.46
MH22635		2.84	<0.5	6.98	7	680	2.6	<2	0.15	<0.5	8	40	3	3.34	20	3.29
MH22636		2.24	0.8	0.19	8	10	<0.5	5	0.01	<0.5	1	2	101	0.65	<10	0.07
MH22637		2.71	<0.5	7.52	5	810	2.9	<2	0.30	<0.5	10	42	5	3.20	20	3.54
MH22638		2.87	<0.5	10.35	9	860	4.3	<2	0.17	<0.5	14	60	17	4.34	30	5.43
MH22639		2.86	<0.5	6.99	8	630	3.2	<2	0.27	<0.5	13	37	18	3.17	20	3.32
MH22640		2.85	<0.5	6.53	7	700	2.5	<2	0.34	<0.5	9	33	13	2.70	20	2.90
MH22641		1.48	<0.5	6.67	7	770	2.6	<2	0.34	<0.5	9	37	47	2.74	20	2.98
MH22642		1.43	<0.5	6.52	10	880	2.5	<2	0.37	<0.5	10	33	67	2.55	20	2.93
MH22643		1.34	<0.5	5.38	5	670	1.7	<2	0.34	<0.5	6	24	29	2.20	10	2.36
MH22644		3.08	<0.5	5.80	5	610	2.2	<2	0.50	<0.5	7	28	19	2.19	10	2.36
MH22645		2.79	<0.5	9.26	10	950	3.9	<2	0.27	<0.5	14	50	53	3.63	20	4.63
MH22646		2.92	<0.5	6.08	5	540	2.5	<2	0.48	<0.5	8	30	18	2.48	20	2.47
MH22647		2.75	0.6	6.96	7	680	2.9	7	0.54	0.5	10	36	195	2.75	20	2.88
MH22648		2.66	<0.5	7.29	6	640	3.1	<2	0.33	<0.5	10	39	10	2.91	20	3.29
MH22649		2.94	<0.5	7.85	9	750	3.0	<2	0.28	<0.5	9	45	8	3.19	20	3.63
MH22650		0.05	2.8	7.27	57	1120	1.4	<2	3.88	1.7	27	140	3630	5.67	20	2.17
MH22651		2.95	<0.5	6.39	<5	550	2.6	<2	0.35	<0.5	8	34	28	2.58	20	2.76
MH22652		2.92	<0.5	9.27	11	860	3.5	<2	0.21	<0.5	12	52	11	3.75	20	4.55
MH22653		1.44	<0.5	6.14	<5	500	2.8	<2	0.43	<0.5	9	33	51	2.99	20	2.49
MH22654		2.96	<0.5	7.10	7	620	3.1	<2	0.34	<0.5	10	38	11	2.94	20	3.09
MH22655		1.45	0.8	9.44	8	750	3.9	<2	0.26	<0.5	15	55	1055	4.37	20	4.54
MH22656		2.98	<0.5	8.96	15	760	4.1	<2	0.23	<0.5	13	49	34	3.38	20	4.26
MH22657		2.83	<0.5	7.98	10	690	3.2	<2	0.29	<0.5	10	42	38	3.12	20	3.67
MH22658		2.67	<0.5	9.09	12	790	3.6	<2	0.20	<0.5	12	53	8	3.60	20	4.47
MH22659		2.72	<0.5	6.99	10	620	3.0	<2	0.33	<0.5	8	35	8	2.88	20	3.02
MH22660		2.50	<0.5	7.08	8	780	2.5	<2	0.33	<0.5	10	43	17	3.16	20	3.12
MH22661		2.93	<0.5	5.57	10	520	2.1	<2	0.38	<0.5	7	29	13	2.35	10	2.02
MH22662		2.83	<0.5	8.02	<5	840	3.5	<2	0.21	<0.5	11	45	207	3.01	20	3.72
MH22663		2.95	<0.5	7.71	5	680	3.2	<2	0.20	<0.5	10	43	27	3.11	20	3.69
MH22664		2.95	<0.5	6.13	<5	520	2.7	<2	0.21	<0.5	8	32	43	2.48	20	2.82
MH22665		1.47	5.5	10.05	<5	980	4.3	<2	0.20	4.3	19	61	7350	5.34	30	4.70
MH22666		1.40	<0.5	6.94	<5	630	2.9	<2	0.20	<0.5	7	39	109	2.97	20	3.30
MH22667		2.89	2.2	9.62	<5	920	3.3	<2	0.17	6.2	10	54	2240	4.26	20	4.70
MH22668		2.83	<0.5	8.61	13	790	2.8	<2	0.16	<0.5	13	53	52	3.93	20	4.17
MH22669		1.48	18.2	3.72	<5	350	1.5	30	0.19	6.7	5	24	238	2.61	10	1.36
MH22670		2.57	1.8	5.22	<5	550	2.1	<2	0.20	5.7	11	33	395	3.62	10	2.23



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Sample Description	Method Analyte Units LOR	ME-ICP61 La ppm 10	ME-ICP61 Mg % 0.01	ME-ICP61 Mn ppm 5	ME-ICP61 Mo ppm 1	ME-ICP61 Na % 0.01	ME-ICP61 Ni ppm 1	ME-ICP61 P ppm 10	ME-ICP61 Pb ppm 2	ME-ICP61 S % 0.01	ME-ICP61 Sb ppm 5	ME-ICP61 Sc ppm 1	ME-ICP61 Sr ppm 1	ME-ICP61 Th ppm 20	ME-ICP61 Ti % 0.01	ME-ICP61 Tl ppm 10
MH22631		30	0.78	730	<1	0.77	18	360	36	<0.01	<5	7	37	<20	0.20	<10
MH22632		30	0.71	612	<1	0.72	19	430	48	<0.01	<5	8	40	20	0.25	<10
MH22633		30	0.47	481	<1	0.57	12	360	27	0.01	<5	6	35	20	0.19	<10
MH22634		20	0.35	404	<1	0.33	6	250	14	<0.01	<5	4	18	<20	0.13	<10
MH22635		40	0.68	622	<1	0.47	20	450	12	<0.01	<5	9	30	20	0.24	<10
MH22636		<10	0.02	84	<1	0.01	<1	10	41	0.01	<5	<1	1	<20	<0.01	<10
MH22637		40	0.75	548	1	0.86	24	470	12	<0.01	<5	9	61	20	0.27	<10
MH22638		30	1.04	502	<1	0.56	31	560	49	0.01	<5	13	25	20	0.32	<10
MH22639		40	0.66	452	1	0.74	21	490	207	0.15	<5	8	50	20	0.25	10
MH22640		40	0.59	451	<1	0.94	17	480	38	0.01	<5	8	64	20	0.25	<10
MH22641		50	0.61	491	<1	1.03	17	520	29	0.01	<5	8	66	30	0.27	<10
MH22642		40	0.56	472	<1	1.03	16	480	31	0.01	<5	7	74	20	0.25	<10
MH22643		40	0.44	445	<1	1.02	12	460	20	0.01	<5	6	66	20	0.21	<10
MH22644		40	0.48	469	<1	1.16	14	480	22	0.01	<5	6	82	20	0.23	<10
MH22645		40	0.90	539	<1	0.72	27	540	13	0.01	<5	12	41	20	0.30	<10
MH22646		40	0.55	440	<1	1.09	17	480	23	0.01	<5	7	72	20	0.24	<10
MH22647		40	0.62	453	<1	1.15	17	540	153	0.07	<5	8	80	20	0.24	<10
MH22648		40	0.68	428	<1	0.89	21	500	33	<0.01	<5	9	50	20	0.26	<10
MH22649		40	0.75	514	<1	0.87	22	510	26	0.01	<5	10	46	20	0.28	<10
MH22650		50	1.86	811	59	2.23	2240	1010	2040	0.40	<5	18	294	20	0.66	<10
MH22651		30	0.59	436	<1	0.91	20	470	56	0.01	<5	7	54	20	0.25	<10
MH22652		30	0.91	607	<1	0.69	28	530	43	<0.01	<5	12	33	20	0.31	10
MH22653		40	0.60	509	<1	1.06	17	480	57	0.02	<5	7	70	20	0.25	<10
MH22654		40	0.66	472	<1	0.86	19	500	46	0.01	<5	8	55	20	0.26	<10
MH22655		40	0.92	564	<1	0.90	28	530	383	0.45	<5	12	46	20	0.30	<10
MH22656		50	0.82	521	1	0.72	24	510	109	0.02	<5	11	40	20	0.30	<10
MH22657		40	0.75	534	<1	0.81	22	490	71	0.01	<5	10	45	20	0.27	10
MH22658		40	0.88	593	<1	0.64	27	510	33	0.01	<5	12	28	20	0.30	10
MH22659		40	0.67	487	<1	0.92	20	470	53	0.01	<5	8	50	20	0.24	10
MH22660		30	0.73	575	1	0.99	30	450	58	0.01	<5	9	51	20	0.29	<10
MH22661		30	0.49	442	<1	1.28	15	410	152	0.01	<5	6	70	20	0.21	<10
MH22662		40	0.59	446	<1	0.81	21	430	241	0.47	<5	10	34	20	0.24	10
MH22663		40	0.73	489	<1	0.66	22	470	44	0.09	<5	10	31	20	0.27	<10
MH22664		30	0.51	383	<1	0.60	16	450	85	0.13	<5	7	34	20	0.23	<10
MH22665		40	0.88	615	<1	0.98	25	470	1240	1.67	<5	13	38	20	0.30	<10
MH22666		40	0.59	459	<1	0.56	19	460	225	0.09	<5	8	33	20	0.25	<10
MH22667		40	0.78	602	<1	0.61	23	460	1050	0.59	<5	12	29	20	0.29	<10
MH22668		40	0.77	596	<1	0.60	28	500	179	0.13	<5	11	26	20	0.28	<10
MH22669		20	0.30	438	<1	0.66	8	260	>10000	0.94	13	4	35	<20	0.13	<10
MH22670		30	0.36	384	<1	0.59	15	380	3260	1.13	<5	6	31	<20	0.19	<10



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MH22631		<10	36	<10	136			0.001	
MH22632		<10	42	<10	136			0.001	
MH22633		<10	28	<10	235			0.001	
MH22634		<10	18	<10	50			<0.001	
MH22635		<10	43	<10	63			0.001	94.0
MH22636		<10	1	<10	40			0.002	
MH22637		<10	47	<10	88			0.001	
MH22638		<10	67	<10	116			0.001	
MH22639		<10	42	<10	133			0.001	
MH22640		<10	38	<10	96			0.001	
MH22641		<10	41	<10	82			<0.001	
MH22642		<10	37	<10	104			0.001	
MH22643		<10	29	<10	108			0.001	
MH22644		<10	31	<10	57			0.001	
MH22645		<10	58	<10	90			0.001	
MH22646		<10	35	<10	59			0.001	
MH22647		<10	40	<10	345			0.002	
MH22648		<10	44	<10	78			0.001	
MH22649		<10	49	<10	87			0.001	
MH22650		<10	139	<10	1075			0.482	
MH22651		<10	37	<10	77			0.001	
MH22652		<10	59	<10	102			0.001	
MH22653		<10	36	<10	70			0.001	
MH22654		<10	42	<10	98			0.001	
MH22655		<10	60	<10	376			0.002	
MH22656		<10	55	<10	138			0.001	
MH22657		<10	48	<10	83			0.001	
MH22658		<10	60	<10	94			0.001	
MH22659		<10	41	<10	80			0.001	
MH22660		<10	47	<10	105			0.001	
MH22661		<10	30	<10	123			0.001	
MH22662		<10	51	<10	185			0.001	
MH22663		<10	48	<10	98			<0.001	
MH22664		<10	37	<10	85			0.001	
MH22665		<10	66	<10	3270			0.001	
MH22666		<10	42	<10	157			0.001	
MH22667		<10	61	<10	4510			0.001	
MH22668		<10	57	<10	299			<0.001	
MH22669		<10	20	<10	4630	2.91		0.001	
MH22670		<10	30	<10	4190			0.001	



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MH22671		1.43	0.5	8.15	5	750	3.2	<2	0.30	1.4	13	48	432	4.56	20	3.58
MH22672		2.88	<0.5	7.76	9	690	3.2	<2	0.30	<0.5	10	43	44	3.08	20	3.50
MH22673		2.83	<0.5	6.12	<5	530	2.3	<2	0.46	<0.5	9	35	78	2.77	20	2.38
MH22674		3.08	<0.5	7.02	5	520	2.7	<2	0.74	<0.5	11	43	31	3.17	20	2.48
MH22675		0.06	<0.5	16.10	29	50	<0.5	<2	0.02	<0.5	2	155	7	15.05	50	0.14
MH22676		2.57	<0.5	8.30	8	690	3.4	<2	0.32	<0.5	11	46	16	3.24	20	3.70
MH22677		2.85	<0.5	8.17	5	630	3.5	<2	0.34	<0.5	11	47	18	3.22	20	3.73
MH22678		2.83	<0.5	8.56	14	560	3.6	<2	0.30	<0.5	14	49	42	3.59	20	3.87
MH22679		2.83	<0.5	7.33	<5	600	3.1	<2	0.24	<0.5	8	41	22	2.86	20	3.50
MH22680		2.80	<0.5	5.37	<5	530	1.9	<2	0.75	<0.5	6	26	16	1.94	10	2.39
MH22681		2.82	<0.5	7.78	<5	640	3.5	<2	0.80	<0.5	10	53	56	3.27	20	3.48
MH22682		2.85	<0.5	6.07	<5	440	2.6	<2	0.72	<0.5	7	30	23	2.35	20	2.14
MH22683		2.92	<0.5	7.08	<5	480	3.1	<2	0.43	<0.5	8	36	23	2.64	20	3.02
MH22684		2.74	<0.5	5.53	<5	290	1.9	<2	1.33	<0.5	6	23	65	1.85	10	1.38
MH22685		2.92	<0.5	10.75	6	700	4.6	<2	0.19	<0.5	13	63	43	4.25	30	5.13
MH22686		0.75	<0.5	3.00	<5	350	0.8	<2	0.07	<0.5	4	19	3	1.74	10	1.29
MH22687		2.67	<0.5	2.95	<5	310	0.9	<2	0.08	<0.5	3	15	13	1.45	10	1.31
MH22688		2.66	<0.5	5.16	5	560	1.7	<2	0.11	<0.5	7	27	14	2.56	10	2.50
MH22689		2.69	<0.5	4.67	<5	520	1.7	<2	0.15	<0.5	6	24	42	2.31	10	2.08
MH22690		2.50	<0.5	5.57	6	560	1.7	<2	0.10	<0.5	8	35	5	3.10	20	2.85
MH22691		2.87	<0.5	5.96	<5	650	2.2	<2	0.28	<0.5	7	32	6	2.72	20	2.66
MH22692		2.81	<0.5	5.65	<5	710	2.0	3	0.29	1.0	7	29	12	2.39	10	2.36
MH22693		2.90	<0.5	7.84	9	950	3.2	<2	0.22	<0.5	10	42	2	3.06	20	3.79



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MH22671		40	0.77	607	<1	1.06	23	450	1130	0.73	<5	10	49	20	0.26	10
MH22672		40	0.75	478	<1	0.91	23	480	128	0.03	<5	9	40	20	0.25	<10
MH22673		30	0.62	473	<1	1.12	16	440	41	0.01	<5	7	58	20	0.25	<10
MH22674		30	0.72	539	<1	1.51	22	420	50	0.01	<5	9	85	20	0.29	<10
MH22675		<10	0.02	336	19	0.01	7	100	12	0.05	<5	8	3	50	0.83	<10
MH22676		50	0.80	439	<1	0.86	24	520	24	<0.01	<5	10	41	20	0.26	<10
MH22677		40	0.78	385	1	0.80	24	500	24	<0.01	<5	10	45	20	0.27	<10
MH22678		40	0.85	389	2	0.73	30	530	89	0.06	<5	11	44	20	0.30	<10
MH22679		40	0.70	265	<1	0.57	19	490	21	0.01	<5	9	35	20	0.25	10
MH22680		40	0.43	347	<1	0.97	11	450	14	0.01	<5	5	62	20	0.20	<10
MH22681		40	0.72	971	1	0.89	26	520	100	0.04	<5	9	63	20	0.27	<10
MH22682		40	0.53	291	<1	1.36	17	460	27	<0.01	<5	7	84	20	0.23	<10
MH22683		40	0.60	278	<1	0.89	19	490	22	<0.01	<5	8	56	20	0.24	<10
MH22684		30	0.42	394	<1	1.24	11	470	43	0.05	<5	5	92	20	0.19	10
MH22685		30	1.04	333	<1	0.54	35	550	22	0.08	<5	14	27	20	0.33	<10
MH22686		20	0.29	283	<1	0.42	6	220	31	<0.01	<5	3	22	<20	0.11	<10
MH22687		20	0.25	276	<1	0.35	7	260	14	0.01	<5	3	22	<20	0.11	<10
MH22688		30	0.48	456	<1	0.41	13	370	28	0.01	<5	6	27	20	0.19	<10
MH22689		30	0.44	442	<1	0.72	11	350	52	0.01	<5	5	37	20	0.17	<10
MH22690		20	0.58	573	<1	0.24	15	350	17	<0.01	<5	7	17	<20	0.19	<10
MH22691		30	0.58	452	<1	0.86	17	430	28	<0.01	<5	7	61	20	0.24	<10
MH22692		40	0.51	400	<1	1.03	14	450	133	0.03	<5	6	61	20	0.23	<10
MH22693		40	0.76	461	<1	0.84	23	520	31	<0.01	<5	10	41	20	0.28	<10



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MH22671		<10	52	<10	1420			0.001	
MH22672		<10	47	<10	123			<0.001	
MH22673		<10	38	<10	67			0.001	
MH22674		<10	45	<10	122			0.001	
MH22675		<10	402	<10	4			0.001	
MH22676		<10	50	<10	87			0.001	
MH22677		<10	52	<10	85			0.001	
MH22678		<10	56	<10	134			0.001	
MH22679		<10	45	<10	70			0.001	
MH22680		<10	29	<10	44			0.001	89.0
MH22681		<10	48	<10	92			0.001	
MH22682		<10	34	<10	62			0.001	
MH22683		<10	41	<10	93			0.001	
MH22684		<10	26	<10	50			0.001	
MH22685		<10	73	<10	104			0.002	
MH22686		<10	16	<10	41			0.001	
MH22687		<10	15	<10	33			<0.001	
MH22688		<10	30	<10	68			0.001	
MH22689		<10	27	<10	78			0.001	
MH22690		<10	36	<10	89			0.001	
MH22691		<10	35	<10	88			0.001	
MH22692		<10	31	<10	541			0.001	
MH22693		<10	47	<10	86			0.001	



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 Finalized Date: 20-JUL-2017
 Account: TODRIV

CERTIFICATE OF ANALYSIS AD17136526

	CERTIFICATE COMMENTS
	<p>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>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 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 CRU-21 LEV-01 LOG-22 LOG-24 PUL-23 PUL-QC SPL-21 WEI-21</p>