

# MINERALS TEST REPORT

## CLIENT

### TODD RIVER METALS PTY LTD

PO Box 2019  
SUBIACO, W.A. 6904  
AUSTRALIA

## JOB INFORMATION

JOB CODE	: 2039.0/1807985
NO. SAMPLES	: 48
NO. ELEMENTS	: 34
CLIENT ORDER NO.	: 18MH08 (Job 1 of 1)
SAMPLE SUBMISSION NO.	: 18MH08
PROJECT	: MH
SAMPLE TYPE	: Drill core
DATE RECEIVED	: 06/06/2018
DATE REPORTED	: 30/06/2018
DATE PRINTED	: 30/06/2018

## REPORT NOTES

## TESTED BY

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## SIGNIFICANT FIGURES

It is common practice to report data derived from analytical instrumentation to a maximum of two or three significant figures. Some data reported herein may show more figures than this. The reporting of more than two or three figures in no way implies that figures beyond the least significant digit have significance.

For more information on the uncertainty on individual reported values, please contact the laboratory.

## SAMPLE STORAGE

All solid samples (assay pulps, bulk pulps and residues will be stored for 60 days without charge. Following this samples will be stored at a daily rate until clients written advice regarding return, collection or disposal is received. If storage information is not supplied on the submission, or arranged with the laboratory in writing the default will be to store the samples with the applicable charges. Storage is charged at \$4.00 per m3 per day, expenses related to the return or disposal of samples will be charged at cost. Current disposal cost is charged at \$150.00 per m3.

Samples received as liquids, waters or solutions will be held for 60 days free of charge then disposed of, unless written advice for return or collection is received.

<b>LEGEND</b>	X	= Less than Detection Limit	NA	= Not Analysed
	SNR	= Sample Not Received	UA	= Unable to Assay
	*	= Result Checked	>	= Value beyond Limit of Method
	DTF	= Result still to come	+	= Extra Sample Received Not Listed
	IS	= Insufficient Sample for Analysis		



ELEMENTS	Au	Au-Rp1	Ag	Al	As	Ba	Bi	Ca	Cd	Ce
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.005	0.005	0.5	50	10	2	5	50	0.5	20
DIGEST	FA25/	FA25/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE	OE	OE	OE	OE	OE
SAMPLE NUMBERS										
0001 MH181057	0.010		X	6.58%	X	421	X	2450	X	78
0002 MH181058	0.021		X	4.70%	X	377	X	2824	X	67
0003 MH181059	0.006		X	8.52%	X	682	X	1902	X	97
0004 MH181060	0.007		X	7.04%	X	223	X	3497	X	X
0005 MH181061	X		X	4.14%	X	319	X	2189	X	68
0006 MH181062	X		X	9.45%	X	931	X	3536	2.8	103
0007 MH181063	0.008		X	9.55%	X	810	X	3299	X	100
0008 MH181064	X		X	6.18%	X	593	X	2493	X	82
0009 MH181065	0.012		X	9.28%	X	801	X	2909	X	99
0010 MH181066	X		X	3.03%	X	572	X	1213	0.5	31
0011 MH181067	0.006		0.8	5.79%	X	212	X	3104	0.6	X
0012 MH181068	0.006		X	7.36%	X	123	X	4673	X	X
0013 MH181069	X		X	6.27%	X	47	X	2112	X	X
0014 MH181070	0.005		X	7.08%	X	59	X	2627	X	X
0015 MH181071	0.007		X	7.96%	X	146	X	4560	X	X
0016 MH181072	X		X	5.25%	X	201	X	2702	X	27
0017 MH181073	X		X	3.87%	X	451	X	1718	X	48
0018 MH181074	0.006		X	6.39%	X	564	X	2964	X	85
0019 MH181075	0.030		X	5.78%	13	30	X	1.69%	X	X
0020 MH181076	X		X	9.55%	X	737	X	1663	X	89
0021 MH181077	X		X	8.07%	X	626	X	1930	X	89
0022 MH181078	X		X	5.15%	X	336	X	1939	X	81
0023 MH181079	0.057	0.061	8.7	5.79%	56	299	168	1599	0.9	66
0024 MH181080	X		X	6.22%	X	473	X	2133	X	72
0025 MH181081	0.006		X	5.43%	X	519	X	2467	2.1	90
0026 MH181082	0.033	X	X	5.84%	X	109	X	2180	X	X
0027 MH181083	X		X	6.89%	X	647	X	2880	X	99
0028 MH181084	0.009		X	4.57%	X	704	X	2780	X	53
0029 MH181085	X		X	4.65%	X	696	X	2840	X	79
0030 MH181086	X		X	5.35%	X	692	X	2907	X	82
0031 MH181087	X		X	9.33%	X	914	X	2155	X	90
0032 MH181088	X		X	7.84%	X	702	X	2275	X	90
0033 MH181089	0.007		X	9.16%	X	926	X	2505	0.6	85
0034 MH181090	X		1.2	5.28%	X	746	X	2851	4.9	62
0035 MH181091	X		X	5.93%	X	1136	X	3149	X	77
0036 MH181092	X		X	3.76%	X	839	X	4009	24.6	50
0037 MH181093	X		X	3.93%	X	1350	X	2177	0.6	63
0038 MH181094	X		X	5.61%	X	1243	X	2879	X	74
0039 MH181095	0.008		X	9.53%	10	905	X	4025	X	89
0040 MH181096	0.006		X	7.70%	X	845	X	4637	1.2	63



ELEMENTS	Co	Cr	Cu	Fe	K	La	Li	Mg	Mn	Mo
UNITS	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	1	5	1	0.01	20	20	1	20	1	2
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE	OE	OE	OE	OE	OE
SAMPLE NUMBERS										
0001 MH181057	9	49	98	3.10	3.17%	28	19	7625	450	5
0002 MH181058	4	28	2	1.75	1.95%	29	14	5977	246	X
0003 MH181059	8	59	2	3.27	3.90%	36	25	1.11%	435	7
0004 MH181060	8	11	19	1.51	2.46%	X	16	6122	171	X
0005 MH181061	4	26	7	1.50	1.60%	31	11	4646	205	X
0006 MH181062	12	64	X	3.45	4.83%	42	34	8440	790	X
0007 MH181063	11	68	3	3.17	4.85%	39	35	8358	621	X
0008 MH181064	9	38	239	2.63	3.25%	39	28	6395	481	X
0009 MH181065	10	66	X	3.38	4.78%	32	35	8649	651	X
0010 MH181066	3	19	13	1.07	1.82%	X	6	1708	363	X
0011 MH181067	1	17	15	0.77	3.02%	X	6	988	697	X
0012 MH181068	X	6	3	0.52	4.03%	X	5	759	314	X
0013 MH181069	X	8	4	0.37	2.82%	X	2	253	191	X
0014 MH181070	X	7	14	0.36	3.77%	X	2	299	266	X
0015 MH181071	X	11	48	0.46	3.60%	X	3	577	300	X
0016 MH181072	X	14	135	1.14	1.87%	X	10	1782	454	X
0017 MH181073	2	19	25	1.19	1.93%	20	10	2047	518	X
0018 MH181074	5	41	12	2.28	2.55%	36	23	6012	534	X
0019 MH181075	27	58	37	2.89	3.95%	X	6	8078	368	9
0020 MH181076	12	67	10	3.98	5.11%	29	40	1.40%	493	X
0021 MH181077	7	57	16	2.86	3.84%	34	22	8708	357	X
0022 MH181078	10	33	67	2.06	1.88%	35	15	8076	244	X
0023 MH181079	54	40	3695	4.53	2.11%	33	24	1.68%	554	X
0024 MH181080	6	44	188	3.08	2.84%	23	20	9252	461	X
0025 MH181081	8	34	53	2.68	2.41%	32	16	4779	535	X
0026 MH181082	X	12	25	0.92	2.40%	X	9	1021	225	X
0027 MH181083	11	49	40	3.07	3.36%	39	29	5987	678	X
0028 MH181084	4	29	12	1.66	2.32%	X	11	3212	369	X
0029 MH181085	4	32	20	1.85	2.40%	38	13	3655	383	X
0030 MH181086	6	33	26	1.97	2.69%	36	14	3748	345	X
0031 MH181087	8	61	27	3.50	4.84%	32	27	8326	489	X
0032 MH181088	9	54	42	3.60	3.97%	42	27	8024	569	X
0033 MH181089	10	64	15	3.98	4.74%	43	30	8948	734	X
0034 MH181090	7	35	101	3.05	2.39%	30	15	4487	622	X
0035 MH181091	5	39	30	3.01	3.10%	23	15	5448	693	X
0036 MH181092	17	25	119	3.61	1.91%	24	16	4418	592	X
0037 MH181093	2	33	13	1.81	2.46%	26	8	3384	385	X
0038 MH181094	4	37	9	2.20	3.28%	23	12	4776	479	X
0039 MH181095	12	61	34	3.88	4.50%	30	25	9897	676	X
0040 MH181096	11	51	30	3.43	4.06%	31	18	7766	607	X



ELEMENTS	Na	Ni	P	Pb	S	Sb	Sc	Sn	Sr	Te
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	20	1	50	5	50	5	1	5	1	5
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE	OE	OE	OE	OE	OE
SAMPLE NUMBERS										
0001 MH181057	6077	27	496	35	236	X	8	7	34	X
0002 MH181058	8831	12	378	34	X	X	5	11	42	X
0003 MH181059	5302	33	490	16	99	X	11	9	20	X
0004 MH181060	1.91%	7	1306	50	582	X	3	35	23	X
0005 MH181061	8936	9	411	20	534	X	4	7	25	X
0006 MH181062	1.07%	27	640	219	803	X	12	30	47	X
0007 MH181063	1.07%	27	629	153	125	X	12	37	45	X
0008 MH181064	6831	21	698	52	1005	X	7	33	31	X
0009 MH181065	9003	26	824	85	135	X	12	39	38	X
0010 MH181066	9384	5	210	145	337	X	2	8	36	X
0011 MH181067	2.04%	2	1510	849	803	X	1	32	31	X
0012 MH181068	2.30%	X	1614	48	126	X	X	51	24	X
0013 MH181069	2.99%	X	1264	31	206	X	X	53	18	X
0014 MH181070	2.79%	X	1735	98	254	X	2	25	27	X
0015 MH181071	3.50%	X	2121	302	1130	X	X	31	38	X
0016 MH181072	2.11%	4	937	62	630	X	2	38	22	X
0017 MH181073	1.10%	5	582	94	177	X	2	22	31	X
0018 MH181074	1.82%	14	693	98	55	X	7	22	45	X
0019 MH181075	1.51%	34	629	33	171	X	8	X	74	X
0020 MH181076	3746	32	580	17	473	X	12	23	16	X
0021 MH181077	8044	23	594	20	577	X	10	10	26	X
0022 MH181078	9790	18	459	50	2772	X	5	6	26	X
0023 MH181079	7550	18	439	1491	9383	X	6	10	20	X
0024 MH181080	7073	14	480	177	1474	X	7	6	28	X
0025 MH181081	6917	14	528	1043	3450	X	6	6	28	X
0026 MH181082	2.65%	2	685	58	291	X	10	19	20	X
0027 MH181083	8820	18	653	139	1638	X	8	18	28	X
0028 MH181084	8232	8	358	142	489	X	4	X	45	X
0029 MH181085	7030	10	438	163	655	X	5	X	40	X
0030 MH181086	8308	13	476	102	1725	X	6	X	41	X
0031 MH181087	6944	24	566	177	2153	X	12	9	27	X
0032 MH181088	6524	21	516	144	2125	X	10	10	30	X
0033 MH181089	7700	27	591	284	1383	X	12	10	32	X
0034 MH181090	8964	13	390	2531	4761	X	6	7	41	X
0035 MH181091	7737	16	464	120	362	X	7	6	43	X
0036 MH181092	3985	18	434	231	1.34%	X	4	18	28	X
0037 MH181093	4606	7	350	331	444	X	4	7	43	X
0038 MH181094	6113	13	458	168	126	X	6	6	44	X
0039 MH181095	6907	26	589	93	1297	X	12	9	35	X
0040 MH181096	5876	25	511	232	3522	X	10	8	40	X



ELEMENTS	Ti	Tl	V	W	Zn
UNITS	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	5	5	1	5	1
DIGEST	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE
SAMPLE NUMBERS					
0001 MH181057	2700	X	46	6	114
0002 MH181058	1820	X	24	X	40
0003 MH181059	3072	X	66	7	84
0004 MH181060	558	X	8	8	49
0005 MH181061	1478	X	18	X	33
0006 MH181062	3668	X	64	X	1461
0007 MH181063	3444	X	64	8	113
0008 MH181064	2436	X	34	8	200
0009 MH181065	3537	X	62	12	156
0010 MH181066	640	X	8	X	276
0011 MH181067	414	X	3	X	226
0012 MH181068	66	X	X	8	37
0013 MH181069	64	X	X	7	14
0014 MH181070	53	X	X	10	13
0015 MH181071	37	X	X	6	125
0016 MH181072	630	X	8	7	59
0017 MH181073	1047	X	12	X	58
0018 MH181074	2473	X	34	5	88
0019 MH181075	3140	X	67	X	60
0020 MH181076	3376	X	63	6	79
0021 MH181077	2892	X	50	6	94
0022 MH181078	1750	X	26	X	47
0023 MH181079	1977	X	31	X	591
0024 MH181080	2385	X	35	X	217
0025 MH181081	2175	X	30	12	1697
0026 MH181082	493	X	2	X	41
0027 MH181083	2692	X	39	X	228
0028 MH181084	1366	X	18	X	101
0029 MH181085	1951	X	23	X	95
0030 MH181086	2158	X	29	X	70
0031 MH181087	3167	X	59	X	400
0032 MH181088	3047	X	49	7	448
0033 MH181089	3383	X	58	X	609
0034 MH181090	2146	X	28	X	3437
0035 MH181091	2449	X	35	X	78
0036 MH181092	1577	X	19	X	1.24%
0037 MH181093	1538	X	19	X	496
0038 MH181094	2324	X	31	X	93
0039 MH181095	2941	X	56	7	164
0040 MH181096	2821	X	48	5	743



ELEMENTS	Au	Au-Rp1	Ag	Al	As	Ba	Bi	Ca	Cd	Ce
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.005	0.005	0.5	50	10	2	5	50	0.5	20
DIGEST	FA25/	FA25/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE	OE	OE	OE	OE	OE
SAMPLE NUMBERS										
0041 MH181097	0.005		X	5.67%	X	803	X	7792	X	63
0042 MH181098	X		X	6.96%	X	903	X	3376	X	70
0043 MH181099	0.006		X	7.09%	X	550	X	2481	X	40
0044 MH181100	0.542		2.5	7.43%	55	1162	X	3.89%	2.0	118
0045 MH181101	0.005		X	6.53%	X	26	X	1868	X	X
0046 MH181102	X		X	6.03%	X	8	X	1972	X	X
0047 MH181103	X		X	6.13%	X	578	X	3690	X	86
0048 MH181104	0.005		X	3.44%	X	264	X	2795	X	38
CHECKS										
0001 MH181062	X		X	9.80%	X	962	X	3658	3.0	102
0002 MH181078	X		X	5.22%	X	340	X	1972	X	84
0003 MH181078	0.006		X	5.24%	X	341	X	1967	X	82
STANDARDS										
0001 OREAS 700			X	5.54%	X	158	11	5.51%	0.6	60
0002 ST638	5.553									
0003 OREAS 905			X	7.51%	33	2890	X	6025	X	95
0004 ST671	0.904									
BLANKS										
0001 Control Blank	0.005		X	X	X	X	X	X	X	X
0002 Control Blank	X		X	52	X	X	X	X	X	X



ELEMENTS	Co	Cr	Cu	Fe	K	La	Li	Mg	Mn	Mo
UNITS	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	1	5	1	0.01	20	20	1	20	1	2
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE	OE	OE	OE	OE	OE
SAMPLE NUMBERS										
0041 MH181097	3	39	11	2.36	3.08%	20	13	5429	542	X
0042 MH181098	6	49	7	3.12	3.58%	34	17	7437	660	X
0043 MH181099	8	36	55	2.47	4.13%	X	13	5040	525	X
0044 MH181100	25	166	3744	6.23	2.34%	52	12	1.88%	860	66
0045 MH181101	X	7	9	0.76	3.05%	X	5	241	1945	X
0046 MH181102	X	8	12	0.50	1.65%	X	7	297	282	X
0047 MH181103	8	40	11	2.56	2.52%	41	19	6008	429	X
0048 MH181104	4	23	27	1.41	1.03%	X	8	2437	210	X
CHECKS										
0001 MH181062	11	67	1	3.57	5.01%	34	34	8705	818	X
0002 MH181078	12	38	67	2.09	1.90%	36	15	8213	244	X
0003 MH181078	11	39	68	2.10	1.89%	36	16	8226	248	X
STANDARDS										
0001 OREAS 700	16	55	2017	17.12	1.68%	30	230	9606	3225	84
0002 ST638										
0003 OREAS 905	14	26	1600	4.38	3.08%	44	21	2795	404	3
0004 ST671										
BLANKS										
0001 Control Blank	X	X	X	X	X	X	X	X	X	X
0002 Control Blank	X	X	1	X	87	X	X	X	X	X





ELEMENTS	Na	Ni	P	Pb	S	Sb	Sc	Sn	Sr	Te
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	20	1	50	5	50	5	1	5	1	5
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE	OE	OE	OE	OE	OE
SAMPLE NUMBERS										
0041 MH181097	5374	15	480	145	786	X	7	7	42	X
0042 MH181098	6334	17	540	81	261	X	10	15	41	X
0043 MH181099	1.26%	12	630	83	421	X	11	17	40	X
0044 MH181100	2.24%	2295	1046	2149	4089	X	18	X	289	X
0045 MH181101	3.24%	1	867	78	269	X	10	21	11	X
0046 MH181102	3.83%	X	765	33	205	X	9	24	7	X
0047 MH181103	1.19%	16	494	30	455	X	7	X	50	X
0048 MH181104	1.15%	8	213	52	837	X	2	X	47	X
CHECKS										
0001 MH181062	1.08%	28	685	231	851	X	13	33	48	X
0002 MH181078	9986	19	460	48	3019	X	5	6	26	X
0003 MH181078	1.01%	18	456	49	2883	X	5	7	26	X
STANDARDS										
0001 OREAS 700	1.21%	25	3560	X	2863	105	16	131	123	27
0002 ST638										
0003 OREAS 905	2.41%	10	289	29	664	X	5	X	164	X
0004 ST671										
BLANKS										
0001 Control Blank	X	X	X	X	X	X	X	X	X	X
0002 Control Blank	X	X	X	X	X	X	X	X	X	X



ELEMENTS	Ti	Tl	V	W	Zn
UNITS	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	5	5	1	5	1
DIGEST	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	OE	OE	OE	OE	OE
SAMPLE NUMBERS					
0041 MH181097	2425	X	34	5	67
0042 MH181098	2893	X	44	5	99
0043 MH181099	1873	X	26	6	120
0044 MH181100	7227	X	144	X	1096
0045 MH181101	121	X	X	6	17
0046 MH181102	161	X	X	7	25
0047 MH181103	2557	X	34	X	64
0048 MH181104	782	X	11	X	109
CHECKS					
0001 MH181062	3816	X	66	X	1550
0002 MH181078	1845	X	27	X	47
0003 MH181078	1805	X	26	X	48
STANDARDS					
0001 OREAS 700	1816	X	66	>2000	233
0002 ST638					
0003 OREAS 905	1274	X	9	X	150
0004 ST671					
BLANKS					
0001 Control Blank	X	X	X	X	X
0002 Control Blank	X	X	X	X	X



## METHOD CODE DESCRIPTION

Method Code	Analysing Laboratory NATA Laboratory Accreditation	NATA Scope of Accreditation
4A/OE	Intertek Genalysis Perth <b>3244 3237</b> Multi-acid digest including Hydrofluoric, Nitric, Perchloric and Hydrochloric acids in Teflon Tubes. Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry.	<b>4A/ : MPL_W002, OE : ICP_W004</b>
FA25/OE	Intertek Genalysis Perth <b>3244 3237</b> 25g Lead collection fire assay. Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry.	<b>FA25/ : FA_W001, OE : ICP_W004</b>