

MINERALS TEST REPORT

CLIENT

TODD RIVER METALS PTY LTD

PO Box 2019
SUBIACO, W.A. 6904
AUSTRALIA

JOB INFORMATION

JOB CODE	: 2039.0/1808156
NO. SAMPLES	: 62
NO. ELEMENTS	: 63
CLIENT ORDER NO.	: Q180228 (Job 1 of 1)
SAMPLE SUBMISSION NO.	: 18MH09
PROJECT	: MH
SAMPLE TYPE	: Drill core
DATE RECEIVED	: 08/06/2018
DATE REPORTED	: 18/06/2018
DATE PRINTED	: 18/06/2018

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.

LEGEND	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	Al	As	Ba	Be	Bi	Ca
UNITS	ppb	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	1	1	0.05	50	0.05	0.5	0.1	0.05	0.01	50
DIGEST	FA25/	FA25/	4A/	4A/	4AH/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	OE	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0001 MH181105	X		0.07	5.68%		2.1	545.1	2.24	0.19	4948
0002 MH181106	X		0.28	5.17%		1.4	567.6	2.04	0.94	4974
0003 MH181107	X		0.29	5.30%		3.4	602.9	1.81	0.44	2985
0004 MH181108	X		0.36	7.39%		7.8	621.9	3.53	1.05	2600
0005 MH181109	1		6.29	6.46%		3.9	535.4	2.38	17.36	1908
0006 MH181110	X		0.88	6.23%		3.3	582.3	2.32	2.21	2528
0007 MH181111	X		0.16	5.92%		2.7	575.3	2.46	0.08	3409
0008 MH181112	X		0.55	5.82%		13.5	552.2	2.31	1.21	3408
0009 MH181113	2		6.86	5.32%		3.3	492.4	2.18	16.01	1595
0010 MH181114	1		11.29	5.36%		5.5	447.9	2.09	28.16	1457
0011 MH181115	X		0.11	7.02%		3.1	623.1	2.94	0.13	2999
0012 MH181116	X		0.08	6.45%		6.0	502.3	2.84	0.10	2800
0013 MH181117	X		0.07	5.08%		2.6	343.9	2.73	0.21	3012
0014 MH181118	X		0.07	9.02%		5.9	801.8	3.84	0.15	2910
0015 MH181119	X		0.16	5.54%		0.8	936.0	2.03	0.74	2842
0016 MH181120	X		0.06	5.36%		1.4	883.3	1.89	0.14	2270
0017 MH181121	X		X	4.55%		2.1	684.2	1.55	0.11	1579
0018 MH181122	9		31.10	3.42%		3.2	373.6	1.39	120.94	819
0019 MH181123	2		14.62	5.92%		16.4	525.3	2.14	42.55	1205
0020 MH181124	5		47.35	6.91%		1.7	508.6	2.58	144.64	1545
0021 MH181125	X		0.11	>15.00%	19.40	23.3	51.4	0.39	1.55	179
0022 MH181126	15		26.17	6.44%		0.6	186.8	10.13	13.40	3301
0023 MH181127	14		20.91	6.55%		0.7	101.2	30.44	7.14	3098
0024 MH181128	1		2.09	6.75%		0.9	105.3	9.57	2.11	2244
0025 MH181129	X		0.61	8.22%		1.5	92.6	5.61	0.80	3369
0026 MH181130	5		19.32	6.10%		2.0	147.1	4.23	27.65	2070
0027 MH181131	8		28.48	6.54%		88.0	118.8	1.85	34.14	2003
0028 MH181132	24		54.34	4.13%		1.4	149.7	1.64	97.38	2908
0029 MH181133	5		29.24	5.21%		10.5	303.8	2.04	98.35	1701
0030 MH181134	5		37.49	4.69%		629.0	331.6	1.73	111.00	1463
0031 MH181135	X		1.34	6.15%		89.1	582.5	2.01	2.74	1800
0032 MH181136	X		3.84	6.29%		50.1	571.1	1.87	0.69	1912
0033 MH181137	X		1.24	6.82%		12.2	447.7	2.28	0.50	1192
0034 MH181138	X		4.97	6.65%		15.4	337.8	2.27	0.59	1198
0035 MH181139	43		275.04	1.33%		10.7	45.4	0.52	853.83	190
0036 MH181140	62		412.69	4517		6.1	17.1	0.22	1167.70	56
0037 MH181141	72		409.33	3144		4.8	19.3	0.15	1253.00	X
0038 MH181142	8		84.53	6.30%		34.0	498.2	2.30	226.06	1373
0039 MH181143	83	105	201.66	4046		3182.9	51.8	0.20	412.79	72
0040 MH181144	2		10.95	4.89%		48.5	681.3	2.31	25.23	1490



ELEMENTS	Cd	Ce	Co	Cr	Cs	Cu	Cu	Dy	Er	Eu
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.02	0.01	0.1	1	0.05	0.5	10	0.01	0.01	0.01
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4AH/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	OE	MS	MS	MS
SAMPLE NUMBERS										
0001 MH181105	0.04	72.60	7.5	34	4.62	4.4		4.31	2.32	0.80
0002 MH181106	0.49	78.34	6.1	30	3.76	26.1		4.26	2.19	0.89
0003 MH181107	0.79	75.98	5.9	28	3.80	26.0		4.04	2.03	0.84
0004 MH181108	2.69	69.19	12.2	46	6.84	193.1		4.29	2.33	0.94
0005 MH181109	8.79	80.26	15.4	41	7.38	1683.0		4.46	2.36	1.02
0006 MH181110	3.56	81.45	9.5	37	4.91	243.3		4.13	2.14	0.95
0007 MH181111	0.11	82.47	6.5	33	4.71	50.8		4.23	2.11	0.96
0008 MH181112	0.51	79.55	7.3	32	4.67	159.4		4.09	2.15	0.91
0009 MH181113	18.85	64.12	22.7	30	4.24	2946.2		3.39	1.82	0.75
0010 MH181114	23.26	61.47	24.6	31	5.69	2431.1		3.05	1.58	0.67
0011 MH181115	0.07	85.29	7.3	41	5.92	13.1		4.81	2.48	0.98
0012 MH181116	0.09	82.58	7.2	35	6.85	12.1		4.26	2.09	1.03
0013 MH181117	0.04	79.60	5.4	27	5.74	14.5		3.93	1.96	1.11
0014 MH181118	X	88.96	10.5	53	11.54	33.7		5.06	2.71	1.12
0015 MH181119	0.27	81.25	5.4	29	6.30	20.6		3.97	1.92	0.94
0016 MH181120	0.05	80.93	4.9	29	6.04	3.7		3.44	1.50	0.82
0017 MH181121	0.04	74.62	4.7	25	5.88	10.7		3.19	1.32	0.73
0018 MH181122	56.09	43.57	48.7	23	5.61	7631.5		2.14	0.98	0.40
0019 MH181123	24.89	66.62	38.1	34	10.99	3413.6	3484	2.58	1.00	0.67
0020 MH181124	55.76	64.65	49.5	47	16.49	3706.0	3730	2.83	1.31	0.71
0021 MH181125	0.05	25.87	1.5	154	0.58	14.7	29	0.69	0.40	0.13
0022 MH181126	11.30	4.19	53.3	3	3.79	2.87%	2.90%	2.01	0.84	0.22
0023 MH181127	8.23	4.26	59.6	3	2.54	2.68%		1.59	0.60	0.19
0024 MH181128	1.20	2.43	14.0	4	9.79	2500.6		1.26	0.40	0.16
0025 MH181129	0.19	2.48	2.3	4	5.49	592.4		1.08	0.34	0.15
0026 MH181130	22.42	2.19	28.0	3	8.30	1.30%	1.27%	0.94	0.34	0.13
0027 MH181131	8.91	2.07	94.4	2	2.22	2.05%	2.04%	2.68	1.20	0.19
0028 MH181132	52.10	12.00	102.3	11	1.67	>5.00%	5.28%	1.84	0.89	0.34
0029 MH181133	52.13	57.95	41.3	36	1.47	2368.2	2377	3.12	1.67	0.70
0030 MH181134	27.94	57.91	146.9	25	2.74	6408.6		3.37	1.92	0.55
0031 MH181135	0.40	90.40	23.9	35	2.96	1146.6		4.17	2.03	0.77
0032 MH181136	0.29	122.57	12.2	34	3.71	5439.9		3.58	1.64	0.95
0033 MH181137	0.46	80.00	13.8	40	2.86	2439.1		3.28	1.63	0.74
0034 MH181138	0.74	35.00	19.5	39	2.61	6188.1		2.66	1.50	0.39
0035 MH181139	184.44	9.30	112.6	6	0.44	3.72%	3.95%	0.43	0.21	0.09
0036 MH181140	154.63	2.56	175.9	2	0.66	>5.00%	9.80%	0.13	0.05	0.03
0037 MH181141	175.44	1.11	198.6	1	0.25	>5.00%	7.52%	0.07	0.04	0.01
0038 MH181142	55.68	66.94	33.9	40	7.84	1.00%	1.03%	3.10	1.38	0.70
0039 MH181143	207.48	3.14	292.1	2	0.34	>5.00%	9.59%	0.15	0.09	0.03
0040 MH181144	13.90	85.62	9.2	30	2.82	1718.9	1715	3.73	1.81	0.74



ELEMENTS	Fe	Ga	Gd	Ge	Hf	Ho	In	K	La	Li
UNITS	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	0.05	0.01	0.1	0.05	0.01	0.01	20	0.01	0.1
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0001 MH181105	2.34	15.99	4.99	1.8	3.36	0.79	0.05	2.46%	35.73	15.2
0002 MH181106	2.07	13.83	5.27	1.8	3.17	0.76	0.08	1.95%	38.27	12.4
0003 MH181107	1.98	14.83	5.16	1.6	2.77	0.74	0.04	2.04%	37.30	13.9
0004 MH181108	3.29	21.37	4.92	2.1	2.63	0.82	0.10	3.55%	34.35	23.8
0005 MH181109	3.65	18.16	5.60	2.0	2.66	0.85	0.15	3.34%	40.28	22.8
0006 MH181110	3.00	16.92	5.11	2.0	2.34	0.76	0.05	2.84%	40.37	20.0
0007 MH181111	2.49	16.72	5.56	1.8	2.68	0.79	0.02	2.50%	40.76	17.6
0008 MH181112	2.44	15.77	5.19	1.8	2.90	0.78	0.03	2.42%	38.65	15.9
0009 MH181113	3.33	14.83	4.50	1.7	2.12	0.64	0.41	2.56%	31.73	15.1
0010 MH181114	3.49	16.37	4.00	1.7	2.06	0.57	0.35	2.52%	30.92	16.0
0011 MH181115	2.77	19.21	5.66	1.9	3.18	0.88	0.03	3.25%	42.09	20.2
0012 MH181116	2.46	18.31	5.46	1.9	3.61	0.78	0.05	2.99%	40.76	17.4
0013 MH181117	1.99	12.22	5.32	1.9	2.80	0.70	0.04	2.09%	39.14	13.6
0014 MH181118	3.54	25.54	6.35	2.0	3.17	0.94	0.08	4.49%	43.86	28.1
0015 MH181119	2.03	14.86	4.94	2.0	3.06	0.70	0.06	2.79%	39.62	15.6
0016 MH181120	2.12	14.60	5.05	1.9	2.79	0.57	0.03	2.33%	40.20	17.3
0017 MH181121	2.21	11.56	4.60	1.9	2.33	0.49	0.02	1.96%	36.68	16.5
0018 MH181122	4.00	9.87	2.87	1.8	1.83	0.36	2.41	1.67%	21.31	13.4
0019 MH181123	4.67	17.22	4.08	2.1	2.65	0.42	0.44	2.95%	32.95	23.0
0020 MH181124	6.52	19.86	4.18	2.0	2.34	0.50	1.08	3.39%	31.58	25.4
0021 MH181125	16.89	61.97	0.65	1.0	9.88	0.14	0.22	1636	4.47	11.1
0022 MH181126	6.81	17.87	1.91	2.4	1.65	0.31	0.62	1.43%	1.84	16.4
0023 MH181127	7.50	16.65	1.51	2.6	2.09	0.25	0.57	9009	1.85	14.5
0024 MH181128	3.18	23.67	1.30	3.5	1.19	0.17	0.09	2.03%	0.97	15.0
0025 MH181129	1.11	27.25	1.20	4.5	1.50	0.14	0.08	1.78%	0.87	9.8
0026 MH181130	3.92	20.83	1.01	3.4	1.60	0.13	0.85	1.93%	0.81	12.1
0027 MH181131	8.20	20.12	2.04	2.4	0.71	0.46	0.72	1.33%	0.89	15.3
0028 MH181132	15.57	19.28	2.05	1.3	0.51	0.33	1.85	1.09%	5.74	16.1
0029 MH181133	5.71	14.03	3.86	1.4	1.97	0.59	1.64	1.31%	29.04	12.2
0030 MH181134	8.54	14.28	3.59	1.4	1.66	0.65	1.05	1.43%	29.57	19.3
0031 MH181135	2.89	17.13	5.02	1.8	2.49	0.76	0.07	2.51%	45.10	21.7
0032 MH181136	2.88	17.53	5.87	2.2	2.38	0.63	0.11	2.68%	60.75	20.5
0033 MH181137	3.38	18.59	4.85	1.7	2.65	0.59	0.15	2.47%	39.56	23.3
0034 MH181138	4.12	18.42	2.92	1.8	2.97	0.51	0.23	2.25%	17.25	22.6
0035 MH181139	10.86	6.39	0.70	0.6	0.27	0.09	5.55	3242	4.64	5.8
0036 MH181140	20.18	3.23	0.15	X	0.11	0.03	5.68	1499	1.33	2.0
0037 MH181141	20.86	3.05	0.11	X	X	0.02	5.67	912	0.56	1.5
0038 MH181142	6.29	16.93	4.64	1.4	2.22	0.54	0.90	2.38%	32.44	13.0
0039 MH181143	19.83	3.40	0.22	X	0.13	0.03	1.13	1531	1.53	1.6
0040 MH181144	3.00	11.55	5.30	1.2	2.22	0.67	0.08	1.91%	42.19	12.0



ELEMENTS	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	20	1	0.1	20	0.05	0.01	0.5	50	0.5
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0001 MH181105	0.29	5877	448	0.6	1.30%	10.77	30.68	14.4	509	45.2
0002 MH181106	0.26	4667	400	0.2	1.42%	9.34	32.99	11.6	429	183.2
0003 MH181107	0.26	4518	372	0.1	1.28%	9.18	32.02	11.4	475	149.9
0004 MH181108	0.29	7436	545	0.1	7467	13.20	29.05	19.0	484	233.9
0005 MH181109	0.29	6872	480	0.1	4690	11.04	33.68	17.8	522	3194.5
0006 MH181110	0.28	6173	502	0.1	6878	9.98	33.21	16.2	452	776.0
0007 MH181111	0.25	5444	428	0.1	9707	10.78	34.70	14.1	440	313.9
0008 MH181112	0.26	5250	387	0.1	9404	10.15	33.04	13.9	454	349.0
0009 MH181113	0.22	5633	451	0.2	4923	9.29	27.05	13.8	453	2907.2
0010 MH181114	0.19	6162	410	0.1	6451	8.93	25.82	12.6	359	6059.0
0011 MH181115	0.30	6851	407	0.1	7815	11.03	35.37	16.8	524	131.2
0012 MH181116	0.25	5804	367	0.1	8262	10.58	33.96	15.6	543	108.1
0013 MH181117	0.24	5006	316	0.1	1.07%	8.25	33.26	10.9	416	54.0
0014 MH181118	0.32	9231	541	0.1	9455	12.92	38.33	22.8	610	31.7
0015 MH181119	0.23	5125	311	X	1.14%	9.74	33.63	11.9	451	121.6
0016 MH181120	0.17	4492	337	0.1	1.17%	9.11	34.27	10.7	466	93.9
0017 MH181121	0.16	5313	333	0.1	9696	7.87	31.55	9.7	403	37.9
0018 MH181122	0.13	5230	417	0.2	4479	6.11	18.58	7.2	317	9260.8
0019 MH181123	0.15	1.09%	581	X	8459	9.88	27.89	10.0	429	6073.3
0020 MH181124	0.18	1.26%	761	0.1	1.49%	14.45	27.20	8.5	443	>1.00%
0021 MH181125	0.09	270	366	19.1	109	23.34	2.87	7.7	105	35.0
0022 MH181126	0.12	6117	497	0.3	2.61%	24.63	2.60	4.7	1419	2106.1
0023 MH181127	0.10	7044	626	0.2	3.40%	20.51	2.49	6.8	1432	1173.8
0024 MH181128	0.08	5404	341	4.0	2.27%	30.66	1.72	2.6	1069	462.1
0025 MH181129	0.05	2141	192	0.9	3.98%	34.60	1.76	0.7	1607	228.3
0026 MH181130	0.05	3349	224	1.6	1.61%	35.72	1.62	4.0	939	3810.5
0027 MH181131	0.17	1.09%	602	0.9	2.44%	22.09	1.80	6.3	797	4107.4
0028 MH181132	0.12	1.07%	637	2.2	3747	17.87	5.86	17.1	1346	>1.00%
0029 MH181133	0.21	6361	471	0.2	1.53%	9.30	24.38	10.8	483	>1.00%
0030 MH181134	0.20	1.37%	433	0.9	2789	8.01	21.61	21.8	597	>1.00%
0031 MH181135	0.24	1.15%	345	0.5	2419	9.46	36.30	11.5	764	314.9
0032 MH181136	0.19	1.00%	264	0.6	2490	10.70	48.53	9.6	847	111.4
0033 MH181137	0.20	1.41%	337	0.2	6877	9.70	32.69	10.1	500	74.6
0034 MH181138	0.18	1.40%	426	0.2	8449	9.73	14.91	3.9	442	76.4
0035 MH181139	0.03	4292	370	0.5	1082	1.85	3.66	9.4	67	>1.00%
0036 MH181140	0.01	998	256	0.1	366	0.46	1.14	20.4	X	>1.00%
0037 MH181141	X	780	269	0.1	198	0.18	0.52	24.1	X	>1.00%
0038 MH181142	0.17	6232	512	0.2	1.42%	9.37	28.70	13.3	344	>1.00%
0039 MH181143	0.01	444	336	0.3	474	0.46	1.34	37.7	X	>1.00%
0040 MH181144	0.21	4233	303	0.2	6965	7.89	34.03	11.1	413	6730.6



ELEMENTS	Pb	Pd	Pr	Pt	Rb	Re	S	S	Sb	Sc
UNITS	ppm	ppb	ppm	ppb	ppm	ppm	%	%	ppm	ppm
DETECTION LIMIT	50	0.5	0.01	0.5	0.05	0.002	0.05	0.01	0.05	0.1
DIGEST	4AH/	FA25/	4A/	FA25/	4A/	4A/	4A/	4AH/	4A/	4A/
ANALYTICAL FINISH	OE	MS	MS	MS	MS	MS	MS	OE	MS	MS
SAMPLE NUMBERS										
0001 MH181105		X	8.69	X	157.64	X	0.27		0.15	6.6
0002 MH181106		X	9.16	X	126.67	X	0.22		0.12	6.1
0003 MH181107		X	8.90	X	134.40	X	0.15		0.42	6.4
0004 MH181108		X	8.21	X	242.29	X	0.35		0.19	10.4
0005 MH181109		X	9.56	X	234.36	X	1.02		0.21	9.0
0006 MH181110		X	9.59	X	182.07	X	0.39		0.28	8.4
0007 MH181111		X	9.89	X	172.15	X	0.13		0.25	7.4
0008 MH181112		X	9.41	X	163.27	X	0.19		0.17	7.1
0009 MH181113		X	7.60	X	156.94	X	2.05		0.32	6.7
0010 MH181114		X	7.36	X	173.31	X	2.29		0.29	7.3
0011 MH181115		X	10.03	X	207.72	X	0.09		0.12	9.4
0012 MH181116		X	9.62	X	209.73	X	0.16		0.09	8.2
0013 MH181117		X	9.46	X	159.77	X	0.14		0.08	5.4
0014 MH181118		X	10.60	X	327.49	X	0.15		0.09	12.2
0015 MH181119		X	9.60	0.5	195.84	X	0.17		0.07	6.3
0016 MH181120		X	9.57	X	182.31	X	0.14		0.23	5.9
0017 MH181121		X	8.80	X	170.90	X	0.14		0.10	5.2
0018 MH181122		X	5.24	X	164.70	X	5.08		0.71	3.9
0019 MH181123	6514	X	8.00	X	308.02	X	2.69		0.82	8.1
0020 MH181124	2.10%	X	7.52	0.6	411.42	X	4.47		1.88	9.9
0021 MH181125	X	X	0.90	0.8	12.09	X	0.13		2.81	12.4
0022 MH181126	2172	2.1	0.59	0.8	153.45	X	4.98		1.13	2.5
0023 MH181127		X	0.61	X	94.33	X	4.43		0.84	2.4
0024 MH181128		X	0.41	X	331.06	X	1.16		0.34	2.9
0025 MH181129		X	0.39	X	316.47	X	0.24		0.34	3.1
0026 MH181130	3908	X	0.37	X	328.69	X	4.21		0.60	1.4
0027 MH181131	4195	X	0.35	X	141.83	X	4.02		1.73	3.3
0028 MH181132	1.18%	2.4	1.54	1.0	84.40	X	>10.00	10.54	1.67	3.4
0029 MH181133	1.33%	X	6.81	0.5	89.42	0.002	3.74		0.80	7.5
0030 MH181134	1.40%	X	6.49	X	112.35	X	4.60		0.86	5.5
0031 MH181135		X	10.47	X	187.86	X	0.31		0.30	7.8
0032 MH181136		X	14.19	X	215.62	X	0.97		0.51	7.5
0033 MH181137		X	9.27	X	189.76	X	0.52		0.25	8.9
0034 MH181138		X	4.18	X	173.99	X	1.01		0.28	8.9
0035 MH181139	9.73%	2.2	1.09	0.7	24.57	X	>10.00	13.74	8.89	1.1
0036 MH181140	14.78%	6.0	0.33	1.4	16.98	X	>10.00	17.80	13.19	0.4
0037 MH181141	15.76%	5.9	0.13	2.5	7.35	X	>10.00	20.14	14.23	0.2
0038 MH181142	3.76%	0.6	7.90	X	215.00	X	4.25		5.97	8.2
0039 MH181143	11.43%	7.1	0.38	1.6	11.03	X	>10.00	19.02	30.95	0.4
0040 MH181144	7025	X	9.76	X	125.81	X	0.96		1.55	5.8



ELEMENTS	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.5	0.01	0.1	0.05	0.01	0.01	0.2	0.01	5	0.02
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0001 MH181105	0.5	5.69	6.4	58.63	1.21	0.71	X	22.05	2372	0.75
0002 MH181106	0.8	6.24	5.3	66.31	1.05	0.73	X	19.88	2139	0.61
0003 MH181107	0.6	6.01	5.2	52.02	1.06	0.72	X	20.56	2180	0.64
0004 MH181108	1.5	5.54	6.8	41.08	1.47	0.72	X	18.48	3011	1.12
0005 MH181109	16.6	6.39	8.1	22.17	1.19	0.82	X	19.34	2618	1.25
0006 MH181110	3.6	6.28	4.9	33.55	1.07	0.71	X	18.76	2381	0.83
0007 MH181111	0.6	6.76	3.8	52.47	1.17	0.82	X	20.65	2415	0.81
0008 MH181112	1.2	6.54	3.5	51.50	1.12	0.77	X	19.99	2389	0.79
0009 MH181113	18.5	5.22	9.7	21.24	1.03	0.60	X	17.79	2142	0.86
0010 MH181114	28.8	4.99	13.3	17.23	0.96	0.54	0.3	13.54	2031	1.02
0011 MH181115	0.6	6.50	6.2	38.23	1.23	0.81	X	20.72	2681	0.95
0012 MH181116	0.6	6.30	4.5	42.61	1.20	0.76	X	20.95	2514	0.94
0013 MH181117	0.7	6.07	3.6	45.78	0.96	0.71	X	19.56	1911	0.76
0014 MH181118	0.6	7.27	7.7	40.09	1.37	0.88	X	23.09	3105	1.50
0015 MH181119	0.6	6.26	5.3	52.69	1.13	0.69	X	20.65	2258	0.91
0016 MH181120	X	6.33	6.6	46.81	1.01	0.65	X	20.75	2175	0.81
0017 MH181121	X	6.02	7.2	30.59	0.89	0.58	X	19.71	1797	0.84
0018 MH181122	51.9	3.29	28.1	10.23	0.75	0.40	1.6	12.54	1353	0.98
0019 MH181123	30.0	5.14	30.5	15.72	1.13	0.49	0.5	17.71	2377	1.94
0020 MH181124	80.0	5.14	45.8	25.71	2.38	0.57	1.4	14.81	3028	2.94
0021 MH181125	2.9	0.64	5.2	4.88	2.39	0.10	X	88.78	9837	0.06
0022 MH181126	13.5	1.40	85.0	19.69	15.99	0.37	X	3.93	71	0.73
0023 MH181127	12.2	1.00	85.9	17.75	14.89	0.29	X	2.69	55	0.51
0024 MH181128	2.7	1.02	48.2	14.71	17.18	0.22	X	1.63	83	1.60
0025 MH181129	X	0.90	35.6	28.36	10.72	0.20	X	1.89	68	1.08
0026 MH181130	40.7	0.81	88.4	13.84	15.94	0.19	0.7	1.68	47	1.24
0027 MH181131	30.7	1.19	84.9	16.90	8.18	0.46	0.4	1.88	82	0.59
0028 MH181132	56.1	1.81	178.6	9.04	7.90	0.30	1.2	3.00	379	0.79
0029 MH181133	46.0	4.69	22.1	21.61	1.18	0.55	1.0	14.95	2086	0.80
0030 MH181134	41.6	4.09	47.6	6.59	4.27	0.56	0.9	11.14	1268	0.73
0031 MH181135	1.8	6.55	31.8	7.04	1.75	0.71	X	17.08	2131	0.70
0032 MH181136	1.7	8.27	41.7	7.63	4.70	0.70	X	15.41	1907	0.84
0033 MH181137	1.4	5.84	40.2	7.96	1.06	0.62	X	17.59	2244	0.70
0034 MH181138	2.1	3.10	37.4	8.69	1.07	0.43	X	18.49	2400	0.71
0035 MH181139	316.3	0.68	119.6	1.50	0.52	0.09	6.4	1.98	264	0.79
0036 MH181140	497.6	0.25	230.4	0.84	0.06	0.03	8.9	0.68	102	0.84
0037 MH181141	548.8	0.11	194.4	0.62	0.02	0.01	10.1	0.28	39	0.72
0038 MH181142	93.3	5.37	49.1	28.76	1.05	0.60	1.9	16.04	2227	1.77
0039 MH181143	199.2	0.28	120.5	1.45	0.09	0.03	2.8	0.78	95	0.40
0040 MH181144	15.5	6.19	13.9	26.48	0.91	0.69	X	16.87	1832	0.64



ELEMENTS	Tm	U	V	W	Y	Yb	Zn	Zn	Zr
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	0.01	1	0.1	0.05	0.01	1	10	0.1
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4AH/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	OE	MS
SAMPLE NUMBERS									
0001 MH181105	0.34	4.84	34	2.2	20.25	2.01	65		116.3
0002 MH181106	0.31	4.23	31	1.6	19.96	1.78	218		111.4
0003 MH181107	0.31	4.48	29	1.6	18.58	1.76	265		95.9
0004 MH181108	0.32	5.09	50	3.1	20.62	1.94	1955		92.4
0005 MH181109	0.32	4.59	42	3.6	21.03	1.86	5052		104.7
0006 MH181110	0.30	4.51	43	2.2	18.03	1.80	1998		84.7
0007 MH181111	0.30	4.41	36	2.6	19.31	1.73	133		91.5
0008 MH181112	0.29	4.32	35	2.7	19.13	1.71	443		100.8
0009 MH181113	0.47	4.15	33	2.8	16.32	1.42	1.17%		76.1
0010 MH181114	0.23	3.52	36	2.7	13.49	1.31	1.48%		70.6
0011 MH181115	0.34	5.09	44	3.5	21.33	1.98	123		116.2
0012 MH181116	0.29	4.63	39	3.7	18.32	1.62	90		123.4
0013 MH181117	0.27	4.07	28	2.0	16.84	1.52	69		100.6
0014 MH181118	0.38	5.97	59	4.2	23.34	2.31	64		113.0
0015 MH181119	0.27	4.30	32	2.6	17.32	1.56	227		105.8
0016 MH181120	0.21	4.40	29	2.2	13.95	1.11	84		100.3
0017 MH181121	0.18	3.84	25	2.3	12.61	1.03	94		79.6
0018 MH181122	0.14	2.64	19	2.7	8.85	0.84	3.40%		80.2
0019 MH181123	0.14	4.11	38	4.7	9.67	0.92	1.66%	1.84%	94.1
0020 MH181124	0.19	4.01	49	4.2	11.78	1.03	3.67%	3.71%	82.4
0021 MH181125	0.07	6.32	477	2.3	2.94	0.50	36	21	334.9
0022 MH181126	0.13	20.67	2	4.6	8.24	0.85	6883	7215	25.6
0023 MH181127	0.10	20.81	2	3.5	6.88	0.70	4754		29.5
0024 MH181128	0.09	9.16	2	7.2	5.95	0.51	842		17.4
0025 MH181129	0.06	15.22	2	5.9	4.65	0.39	157		22.7
0026 MH181130	0.05	13.19	2	6.8	4.74	0.31	1.42%	1.50%	22.3
0027 MH181131	0.19	15.73	1	2.6	12.10	1.21	5453	5703	10.6
0028 MH181132	0.13	3.18	7	2.4	8.58	0.73	3.31%	3.41%	13.5
0029 MH181133	0.24	3.85	35	2.6	14.22	1.34	3.49%	3.63%	65.2
0030 MH181134	0.27	3.60	26	5.1	17.37	1.43	1.83%		53.9
0031 MH181135	0.28	4.15	36	8.1	19.07	1.73	344		85.0
0032 MH181136	0.23	4.27	37	9.6	15.18	1.39	224		82.1
0033 MH181137	0.24	4.45	41	7.3	15.34	1.29	315		93.6
0034 MH181138	0.22	4.63	42	6.4	13.18	1.23	535		105.3
0035 MH181139	0.04	0.59	5	0.9	1.72	0.21	>5.00%	12.54%	9.0
0036 MH181140	0.01	0.18	2	0.4	0.40	0.04	>5.00%	11.29%	3.6
0037 MH181141	X	0.07	X	0.2	0.28	0.05	>5.00%	12.24%	1.4
0038 MH181142	0.20	4.35	42	4.1	12.54	1.16	3.49%	3.65%	76.3
0039 MH181143	0.01	0.20	X	0.4	0.58	0.08	>5.00%	15.61%	3.8
0040 MH181144	0.25	3.68	27	4.0	16.66	1.50	9095	9863	77.7



ELEMENTS	Au	Au-Rp1	Ag	Al	Al	As	Ba	Be	Bi	Ca
UNITS	ppb	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	1	1	0.05	50	0.05	0.5	0.1	0.05	0.01	50
DIGEST	FA25/	FA25/	4A/	4A/	4AH/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	OE	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0041 MH181145	3		5.02	4.99%		49.0	691.4	1.97	5.82	1331
0042 MH181146	86	78	189.14	1889		1186.0	52.9	0.08	360.66	X
0043 MH181147	86	78	142.34	4390		353.6	62.2	0.17	250.44	139
0044 MH181148	2		4.66	4.69%		10.6	694.0	2.31	0.57	1355
0045 MH181149	2		0.65	4.82%		4.3	621.3	2.47	1.08	1600
0046 MH181150	365		0.61	4.97%		3.5	9.7	1.09	0.56	1187
0047 MH181151	X		0.50	5.07%		5.1	615.1	2.83	0.91	1591
0048 MH181152	X		0.18	5.02%		1.4	517.5	3.15	0.25	2574
0049 MH181153	X		0.14	5.34%		3.4	439.4	2.98	0.28	1557
0050 MH181154	X		0.46	5.27%		3.9	494.4	4.45	0.26	1453
0051 MH181155	X		0.21	7.23%		0.9	67.2	25.05	0.25	1403
0052 MH181156	X		X	8.52%		0.7	15.1	10.01	0.09	1098
0053 MH181157	X		0.09	7.80%		0.5	15.0	23.96	0.20	1705
0054 MH181158	X		1.08	7.78%		0.6	13.7	18.86	2.85	1663
0055 MH181159	X		0.13	8.09%		1.0	173.2	3.68	0.15	3641
0056 MH181160	X		0.12	5.58%		1.2	678.0	1.87	0.61	2651
0057 MH181161	X		0.14	7.58%		0.6	8.5	12.18	0.70	1819
0058 MH181162	X		0.07	7.53%		X	17.4	1.84	0.73	1016
0059 MH181163	X		0.10	8.44%		1.4	36.9	2.34	0.48	3426
0060 MH181164	X		X	8.57%		0.7	20.5	4.56	1.37	2476
0061 MH181165	X		0.27	10.52%		4.5	616.3	6.91	0.69	2605
0062 MH181166	X		0.20	6.32%		1.0	368.9	3.37	0.88	3792
CHECKS										
0001 MH181123	2		14.78	5.97%		9.5	527.5	2.09	43.64	1102
0002 MH181139	51		276.17	1.35%		13.0	46.0	0.54	872.49	166
0003 MH181127	15		19.83	6.77%		1.1	98.1	28.70	6.83	3072
0004 MH181127	15		19.94	6.72%		2.0	99.5	29.69	7.27	2983
STANDARDS										
0001 OREAS 13b	204									
0002 OREAS 622			99.02	5.54%		110.8	304.7	0.95	5.41	2.14%
0003 OREAS 623			21.29	5.07%		78.7	232.7	1.42	18.56	1.35%
0004 OREAS 624					4.14					
0005 MEG-1	47									
0006 OREAS 45d			0.22	8.04%		13.7	180.9	0.76	0.56	1848
0007 OREAS 622					5.27					
0008 OREAS 901			0.42	7.36%		72.8	234.4	6.16	4.72	929
0009 OREAS 935					3.88					



ELEMENTS	Cd	Ce	Co	Cr	Cs	Cu	Cu	Dy	Er	Eu
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.02	0.01	0.1	1	0.05	0.5	10	0.01	0.01	0.01
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4AH/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	OE	MS	MS	MS
SAMPLE NUMBERS										
0041 MH181145	7.75	67.73	10.2	29	2.22	4569.0	4405	3.60	1.74	0.49
0042 MH181146	301.97	0.49	171.6	3	0.10	4.92%	5.47%	0.04	0.02	X
0043 MH181147	186.03	3.42	113.2	3	0.47	>5.00%	9.11%	0.19	0.08	0.03
0044 MH181148	2.19	66.16	10.4	26	4.34	1.09%	1.06%	3.45	1.81	0.56
0045 MH181149	0.47	68.78	3.8	26	3.18	264.2	253	3.58	1.79	0.65
0046 MH181150	0.81	0.77	0.9	14	32.48	212.8		0.10	0.07	0.03
0047 MH181151	0.32	76.93	4.6	28	3.39	125.2		3.71	1.96	0.74
0048 MH181152	0.10	78.91	3.8	28	3.04	41.7		4.11	2.16	0.91
0049 MH181153	0.13	69.85	4.7	27	2.23	43.4		3.69	1.83	0.71
0050 MH181154	0.12	82.77	5.6	28	2.73	550.6		3.97	2.13	0.77
0051 MH181155	0.03	6.03	0.7	5	7.97	38.3		0.62	0.27	0.08
0052 MH181156	0.09	0.65	0.4	3	7.07	10.8		0.15	0.05	X
0053 MH181157	X	0.85	0.2	2	8.22	16.5		0.21	0.07	0.02
0054 MH181158	0.67	0.86	0.7	6	8.18	143.5		0.37	0.10	X
0055 MH181159	0.13	3.01	1.0	20	11.43	43.1		1.06	0.44	0.13
0056 MH181160	X	80.59	4.7	30	10.68	35.2		3.14	1.62	0.79
0057 MH181161	0.07	0.69	0.4	5	6.58	68.6		0.11	0.03	0.01
0058 MH181162	0.03	0.63	0.3	10	5.58	3.9		0.19	0.07	X
0059 MH181163	0.03	2.89	1.2	11	5.34	26.4		0.51	0.17	0.05
0060 MH181164	X	3.79	0.8	7	4.33	28.1		0.87	0.35	0.01
0061 MH181165	0.18	87.53	11.3	60	15.79	117.5		4.31	2.46	0.92
0062 MH181166	0.07	86.34	7.2	36	8.27	56.9		4.06	2.23	1.02
CHECKS										
0001 MH181123	25.43	68.76	32.9	36	10.86	3477.5	3279	2.49	1.01	0.67
0002 MH181139	187.69	8.29	114.1	5	0.43	3.82%	3.83%	0.45	0.22	0.11
0003 MH181127	8.29	6.43	59.0	4	2.46	2.59%		1.60	0.61	0.19
0004 MH181127	8.08	4.24	59.3	4	2.28	2.56%		1.50	0.57	0.17
STANDARDS										
0001 OREAS 13b										
0002 OREAS 622	441.59	33.89	41.0	39	1.62	4894.2		2.27	1.24	1.01
0003 OREAS 623	54.81	49.37	227.5	26	2.91	1.73%		3.03	1.55	1.35
0004 OREAS 624							2.95%			
0005 MEG-1										
0006 OREAS 45d	0.10	37.04	29.4	553	3.88	375.3		2.22	1.25	0.58
0007 OREAS 622							4725			
0008 OREAS 901	0.04	99.66	75.7	68	5.14	1419.4		7.05	4.41	1.72
0009 OREAS 935							12.23%			



ELEMENTS	Fe	Ga	Gd	Ge	Hf	Ho	In	K	La	Li
UNITS	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	0.05	0.01	0.1	0.05	0.01	0.01	20	0.01	0.1
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0041 MH181145	3.86	13.05	4.37	1.2	2.25	0.67	0.03	2.19%	32.58	12.3
0042 MH181146	18.73	3.12	0.06	X	X	X	0.51	924	0.21	1.0
0043 MH181147	18.35	3.31	0.22	X	0.09	0.04	0.29	1708	1.72	1.8
0044 MH181148	3.88	12.86	4.55	1.5	2.21	0.64	0.03	1.95%	31.80	17.1
0045 MH181149	2.46	13.08	4.24	1.4	2.59	0.65	0.02	1.79%	33.44	14.9
0046 MH181150	0.22	14.35	0.11	2.0	0.43	0.02	0.02	4.69%	0.42	5.3
0047 MH181151	2.52	13.99	4.76	1.5	2.65	0.71	0.01	1.88%	36.89	15.6
0048 MH181152	2.48	14.15	5.29	1.5	2.83	0.77	0.03	1.50%	38.27	15.6
0049 MH181153	2.76	15.81	4.50	1.4	2.50	0.67	0.03	1.72%	33.97	15.6
0050 MH181154	2.96	16.52	4.96	1.4	3.21	0.76	0.06	2.12%	40.15	14.7
0051 MH181155	0.81	22.92	0.72	3.5	0.66	0.11	0.05	5.00%	3.19	6.9
0052 MH181156	0.40	22.63	0.18	4.4	0.33	0.02	0.11	6.09%	0.30	3.3
0053 MH181157	0.46	25.34	0.23	3.8	0.41	0.03	0.05	4.66%	0.36	3.7
0054 MH181158	0.73	23.34	0.28	4.2	0.89	0.05	0.09	4.46%	0.35	6.0
0055 MH181159	0.69	24.96	1.04	3.2	0.84	0.18	0.13	3.69%	1.17	12.9
0056 MH181160	1.75	12.66	4.55	1.3	3.32	0.61	0.05	2.39%	39.28	21.3
0057 MH181161	0.43	23.87	0.13	3.4	0.25	X	0.13	2.76%	0.34	5.5
0058 MH181162	0.70	30.12	0.14	2.6	0.20	0.02	0.17	4.66%	0.35	16.1
0059 MH181163	0.49	30.65	0.55	3.3	0.95	0.06	0.11	2.25%	1.28	8.5
0060 MH181164	0.85	24.93	0.85	3.9	2.10	0.12	0.07	3.32%	1.46	6.5
0061 MH181165	4.23	28.31	5.46	1.8	3.04	0.80	0.11	4.94%	44.18	50.1
0062 MH181166	2.50	16.05	5.18	1.2	3.35	0.75	0.04	2.75%	43.55	23.5
CHECKS										
0001 MH181123	4.69	16.37	4.11	1.8	2.60	0.44	0.47	2.95%	33.99	23.3
0002 MH181139	10.70	6.34	0.57	0.6	0.28	0.09	5.45	3184	4.17	5.9
0003 MH181127	7.42	16.43	1.59	2.2	1.41	0.23	0.53	8912	2.54	15.1
0004 MH181127	7.41	15.74	1.35	2.2	1.66	0.22	0.58	8666	1.75	14.8
STANDARDS										
0001 OREAS 13b										
0002 OREAS 622	4.57	25.44	2.70	5.8	3.29	0.45	4.45	1.70%	17.14	8.1
0003 OREAS 623	13.76	21.85	4.20	1.3	4.04	0.54	2.03	1.45%	24.05	15.9
0004 OREAS 624										
0005 MEG-1										
0006 OREAS 45d	14.49	21.02	2.41	1.6	3.74	0.44	0.09	4198	16.85	21.4
0007 OREAS 622										
0008 OREAS 901	4.14	18.79	8.27	1.6	5.24	1.42	0.26	3.91%	49.66	17.4
0009 OREAS 935										



ELEMENTS	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	20	1	0.1	20	0.05	0.01	0.5	50	0.5
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0041 MH181145	0.21	4142	314	0.2	4454	8.08	28.14	12.5	375	3203.3
0042 MH181146	X	183	415	0.4	56	0.10	0.22	31.6	X	>1.00%
0043 MH181147	0.02	447	309	0.2	471	0.60	1.45	25.0	X	>1.00%
0044 MH181148	0.21	3921	335	0.5	4685	8.06	27.85	9.6	498	300.2
0045 MH181149	0.22	5191	378	0.1	7931	8.23	28.30	9.9	431	497.3
0046 MH181150	0.02	392	45	0.5	1.30%	0.62	0.33	9.9	466	39.5
0047 MH181151	0.25	5267	463	0.1	7316	8.43	30.99	10.8	443	548.9
0048 MH181152	0.26	4699	472	X	1.28%	8.74	32.26	10.1	420	331.9
0049 MH181153	0.24	5536	510	0.1	1.37%	10.16	29.01	11.6	394	93.4
0050 MH181154	0.28	4926	540	0.2	8649	15.69	32.54	11.5	550	79.8
0051 MH181155	0.03	489	289	0.5	2.04%	43.94	2.51	1.1	1574	220.4
0052 MH181156	0.01	168	274	1.1	2.34%	21.38	0.31	X	2000	204.5
0053 MH181157	0.01	246	308	1.5	2.76%	38.67	0.44	X	1700	123.5
0054 MH181158	0.02	245	825	3.5	2.87%	65.01	0.40	X	1681	416.3
0055 MH181159	0.05	818	281	8.3	2.75%	39.20	1.72	5.9	1589	74.8
0056 MH181160	0.18	3822	312	0.2	1.25%	8.88	31.71	9.7	493	57.4
0057 MH181161	X	233	270	0.2	3.41%	28.79	0.21	X	1513	81.4
0058 MH181162	0.01	536	259	1.4	1.78%	34.13	0.22	X	800	86.0
0059 MH181163	0.03	541	212	0.1	4.10%	41.29	1.20	X	1496	35.4
0060 MH181164	0.06	426	898	0.2	3.94%	36.14	1.73	0.6	1743	41.4
0061 MH181165	0.32	1.01%	925	0.2	1.10%	18.86	34.75	30.3	793	108.1
0062 MH181166	0.26	5710	459	0.1	8083	10.73	33.86	16.1	443	63.6
CHECKS										
0001 MH181123	0.15	1.10%	581	0.1	8668	9.91	28.48	9.9	395	6144.3
0002 MH181139	0.03	4332	363	0.5	1080	1.96	3.18	9.5	69	>1.00%
0003 MH181127	0.08	6939	623	0.2	3.37%	24.03	3.39	7.0	1424	1160.4
0004 MH181127	0.08	6871	618	0.2	3.40%	22.31	2.23	7.4	1372	1158.6
STANDARDS										
0001 OREAS 13b										
0002 OREAS 622	0.19	5830	603	15.4	7052	4.15	15.29	27.2	309	>1.00%
0003 OREAS 623	0.23	1.26%	621	9.4	1.14%	8.72	22.40	15.7	420	2614.6
0004 OREAS 624										
0005 MEG-1										
0006 OREAS 45d	0.18	2395	489	2.4	1009	13.34	13.55	231.1	418	49.3
0007 OREAS 622										
0008 OREAS 901	0.53	6275	298	3.4	510	9.37	46.08	41.9	635	21.4
0009 OREAS 935										



ELEMENTS	Pb	Pd	Pr	Pt	Rb	Re	S	S	Sb	Sc
UNITS	ppm	ppb	ppm	ppb	ppm	ppm	%	%	ppm	ppm
DETECTION LIMIT	50	0.5	0.01	0.5	0.05	0.002	0.05	0.01	0.05	0.1
DIGEST	4AH/	FA25/	4A/	FA25/	4A/	4A/	4A/	4AH/	4A/	4A/
ANALYTICAL FINISH	OE	MS	MS	MS	MS	MS	MS	OE	MS	MS
SAMPLE NUMBERS										
0041 MH181145	3289	X	7.90	X	143.23	X	1.29		2.60	5.4
0042 MH181146	14.35%	6.7	0.06	1.9	4.48	X	>10.00	22.22	59.27	0.1
0043 MH181147	9.76%	6.7	0.42	2.2	15.96	X	>10.00	22.02	29.25	0.4
0044 MH181148	440	0.7	7.66	1.4	208.30	X	1.33		0.44	5.2
0045 MH181149	528	X	8.08	1.1	182.38	X	0.05		0.37	5.0
0046 MH181150		0.9	0.10	X	1285.82	X	0.07		0.25	0.4
0047 MH181151		X	8.95	X	195.99	X	X		0.24	5.8
0048 MH181152		X	9.13	X	159.73	X	X		0.18	5.8
0049 MH181153		X	8.17	0.5	184.88	X	X		0.15	5.8
0050 MH181154		X	9.61	X	220.04	X	0.06		0.16	6.6
0051 MH181155		X	0.70	X	862.42	X	X		0.24	2.0
0052 MH181156		X	0.09	X	952.01	X	X		0.12	1.9
0053 MH181157		X	0.11	X	839.09	X	X		0.13	2.4
0054 MH181158		X	0.11	X	800.14	X	X		0.16	2.0
0055 MH181159		X	0.43	X	547.99	X	X		0.11	2.6
0056 MH181160		X	8.92	X	335.58	X	X		0.10	4.9
0057 MH181161		X	0.09	X	602.09	X	X		0.10	1.8
0058 MH181162		X	0.08	X	771.46	X	X		0.12	13.8
0059 MH181163		X	0.35	X	475.29	X	X		0.10	7.7
0060 MH181164		X	0.52	X	557.38	X	X		0.08	4.1
0061 MH181165		0.6	9.96	X	616.86	X	X		0.16	12.6
0062 MH181166		X	9.60	X	276.37	X	X		0.08	7.1
CHECKS										
0001 MH181123	5978	X	8.10	X	305.98	X	1.82		0.91	8.1
0002 MH181139	9.51%	4.4	0.98	1.2	24.85	X	>10.00		9.38	0.9
0003 MH181127		0.9	0.85	X	95.88	X	4.16		1.14	2.1
0004 MH181127		0.7	0.57	X	90.71	X	4.09		0.92	2.0
STANDARDS										
0001 OREAS 13b		132.2		196.1						
0002 OREAS 622			4.09		56.14	0.002	>10.00		195.99	7.2
0003 OREAS 623			5.94		62.34	X	8.78		28.12	8.3
0004 OREAS 624	6285							12.39		
0005 MEG-1		20.0		19.1						
0006 OREAS 45d			3.78		41.76	X	0.07		0.81	50.5
0007 OREAS 622	2.22%							7.42		
0008 OREAS 901			12.27		171.06	X	X		2.45	14.3
0009 OREAS 935	248							10.91		



ELEMENTS	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.5	0.01	0.1	0.05	0.01	0.01	0.2	0.01	5	0.02
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
SAMPLE NUMBERS										
0041 MH181145	6.1	5.57	10.7	22.53	0.93	0.64	X	17.82	1898	0.65
0042 MH181146	244.7	0.04	22.8	0.97	0.01	X	2.2	0.18	27	0.37
0043 MH181147	147.7	0.23	162.6	2.08	0.13	0.03	0.7	0.95	115	0.46
0044 MH181148	1.6	5.04	31.4	21.49	1.19	0.61	X	17.97	1814	0.87
0045 MH181149	1.2	5.40	20.4	27.73	0.94	0.63	X	18.73	1882	0.71
0046 MH181150	X	0.11	1.0	7.61	0.11	0.02	X	0.33	213	10.39
0047 MH181151	0.8	5.75	25.6	24.62	0.99	0.64	X	19.32	1966	0.72
0048 MH181152	0.8	6.19	23.0	45.72	1.02	0.70	X	22.00	2009	0.57
0049 MH181153	X	5.47	28.3	26.35	1.09	0.64	X	19.57	2050	0.71
0050 MH181154	0.8	5.89	47.0	15.17	1.42	0.71	X	20.88	2099	0.87
0051 MH181155	X	0.65	41.1	23.39	12.06	0.10	X	1.60	146	3.41
0052 MH181156	X	0.13	31.6	18.58	5.09	0.03	X	0.44	50	4.14
0053 MH181157	X	0.24	38.4	19.25	9.84	0.05	X	0.57	82	3.03
0054 MH181158	1.1	0.27	36.3	21.64	18.20	0.07	X	0.85	58	2.91
0055 MH181159	X	0.91	54.1	17.63	20.15	0.21	X	2.25	99	1.98
0056 MH181160	X	5.74	15.1	39.20	0.98	0.60	X	19.50	1817	1.74
0057 MH181161	X	0.10	36.7	7.38	5.67	0.02	X	0.33	63	2.23
0058 MH181162	X	0.11	35.8	5.91	5.13	0.04	X	0.25	248	3.11
0059 MH181163	X	0.55	41.9	9.59	15.49	0.11	X	1.90	168	1.60
0060 MH181164	X	0.92	28.9	10.61	7.93	0.17	X	2.81	92	2.15
0061 MH181165	0.5	6.42	27.0	24.51	5.11	0.80	X	19.79	3067	2.94
0062 MH181166	X	6.28	10.4	31.76	1.14	0.72	X	22.43	2256	1.43
CHECKS										
0001 MH181123	23.6	5.45	30.3	15.42	1.11	0.51	0.4	18.19	2359	1.91
0002 MH181139	319.9	0.66	118.6	1.48	0.56	0.08	6.4	1.98	248	0.80
0003 MH181127	11.7	1.47	83.1	17.18	15.86	0.29	X	3.23	49	0.53
0004 MH181127	12.2	1.00	84.0	17.35	14.93	0.27	X	2.23	52	0.52
STANDARDS										
0001 OREAS 13b										
0002 OREAS 622	7.7	3.13	6.6	54.59	0.35	0.38	X	5.31	1293	3.77
0003 OREAS 623	20.7	4.88	6.3	81.20	0.68	0.53	0.6	6.75	1380	0.75
0004 OREAS 624										
0005 MEG-1										
0006 OREAS 45d	2.8	2.74	2.8	31.22	1.01	0.39	X	14.47	7450	0.26
0007 OREAS 622										
0008 OREAS 901	3.1	9.32	3.6	31.38	0.82	1.23	X	16.56	2631	0.82
0009 OREAS 935										



ELEMENTS	Tm	U	V	W	Y	Yb	Zn	Zn	Zr
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	0.01	1	0.1	0.05	0.01	1	10	0.1
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4AH/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	OE	MS
SAMPLE NUMBERS									
0041 MH181145	0.24	4.04	28	4.1	15.56	1.36	5601	6053	78.2
0042 MH181146	X	0.06	X	0.1	0.11	0.02	>5.00%	22.05%	0.6
0043 MH181147	0.02	0.25	1	0.3	0.72	0.10	>5.00%	13.68%	3.6
0044 MH181148	0.25	3.75	26	4.8	15.49	1.46	1279	1494	77.0
0045 MH181149	0.27	4.26	27	3.9	16.39	1.46	376	401	89.0
0046 MH181150	0.01	0.19	4	0.2	0.56	0.06	304		19.1
0047 MH181151	0.28	4.22	28	4.8	16.66	1.58	207		91.5
0048 MH181152	0.30	4.84	29	3.7	19.49	1.83	175		96.2
0049 MH181153	0.26	4.53	29	4.4	16.30	1.56	135		89.6
0050 MH181154	0.33	5.17	31	6.3	18.31	1.82	150		106.8
0051 MH181155	0.04	12.15	2	5.2	3.31	0.22	54		12.9
0052 MH181156	0.01	2.63	1	4.0	0.55	0.03	21		4.1
0053 MH181157	0.02	4.33	X	5.4	0.94	0.09	23		6.4
0054 MH181158	0.02	9.26	X	5.1	1.41	0.14	442		13.2
0055 MH181159	0.07	7.65	4	7.8	4.74	0.44	85		9.9
0056 MH181160	0.21	4.41	30	2.6	14.08	1.29	80		115.1
0057 MH181161	X	3.64	2	5.6	0.43	0.03	33		2.8
0058 MH181162	0.02	1.73	2	6.8	0.78	0.10	26		2.1
0059 MH181163	0.03	18.92	2	8.5	2.38	0.22	23		13.8
0060 MH181164	0.06	14.43	2	4.5	3.82	0.44	10		25.0
0061 MH181165	0.33	7.21	66	4.8	21.48	2.16	184		99.7
0062 MH181166	0.30	5.47	36	2.6	20.58	1.85	80		109.8
CHECKS									
0001 MH181123	0.15	4.26	38	4.8	9.60	0.91	1.67%	1.70%	88.3
0002 MH181139	0.03	0.97	5	1.0	1.66	0.21	>5.00%	12.28%	11.4
0003 MH181127	0.09	14.24	2	3.6	6.81	0.67	4685		20.6
0004 MH181127	0.09	15.38	2	3.4	6.87	0.65	4718		23.7
STANDARDS									
0001 OREAS 13b									
0002 OREAS 622	0.19	1.53	41	2.4	10.36	1.15	>5.00%		131.5
0003 OREAS 623	0.23	2.65	26	4.2	13.57	1.50	1.02%		157.1
0004 OREAS 624								2.32%	
0005 MEG-1									
0006 OREAS 45d	0.19	2.61	234	1.4	9.46	1.27	81		133.0
0007 OREAS 622								10.05%	
0008 OREAS 901	0.55	11.01	87	3.6	37.58	3.68	24		189.4
0009 OREAS 935								747	



ELEMENTS	Au	Au-Rp1	Ag	Al	Al	As	Ba	Be	Bi	Ca
UNITS	ppb	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	1	1	0.05	50	0.05	0.5	0.1	0.05	0.01	50
DIGEST	FA25/	FA25/	4A/	4A/	4AH/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	OE	MS	MS	MS	MS	MS
BLANKS										
0001 Control Blank	X		X	X		X	X	X	0.07	X
0002 Control Blank	X		X	131		X	X	X	X	X



ELEMENTS	Cd	Ce	Co	Cr	Cs	Cu	Cu	Dy	Er	Eu
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.02	0.01	0.1	1	0.05	0.5	10	0.01	0.01	0.01
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4AH/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	OE	MS	MS	MS
BLANKS										
0001 Control Blank	0.04	X	X	X	X	3.2	11	X	X	X
0002 Control Blank	X	X	X	X	X	X	21	X	X	X



ELEMENTS	Fe	Ga	Gd	Ge	Hf	Ho	In	K	La	Li
UNITS	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	0.05	0.01	0.1	0.05	0.01	0.01	20	0.01	0.1
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
BLANKS										
0001 Control Blank	X	X	X	X	X	X	X	X	0.01	X
0002 Control Blank	X	X	X	X	X	X	X	27	0.01	X



ELEMENTS	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	20	1	0.1	20	0.05	0.01	0.5	50	0.5
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
BLANKS										
0001 Control Blank	X	X	X	X	X	X	0.01	X	X	6.5
0002 Control Blank	X	X	X	X	X	X	X	X	X	X



ELEMENTS	Pb	Pd	Pr	Pt	Rb	Re	S	S	Sb	Sc
UNITS	ppm	ppb	ppm	ppb	ppm	ppm	%	%	ppm	ppm
DETECTION LIMIT	50	0.5	0.01	0.5	0.05	0.002	0.05	0.01	0.05	0.1
DIGEST	4AH/	FA25/	4A/	FA25/	4A/	4A/	4A/	4AH/	4A/	4A/
ANALYTICAL FINISH	OE	MS	MS	MS	MS	MS	MS	OE	MS	MS
BLANKS										
0001 Control Blank	X	X	X	X	0.10	X	0.12		X	X
0002 Control Blank	X	X	X	X	X	X	X		X	X



ELEMENTS	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.5	0.01	0.1	0.05	0.01	0.01	0.2	0.01	5	0.02
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
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	11	X



ELEMENTS	Tm	U	V	W	Y	Yb	Zn	Zn	Zr
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION LIMIT	0.01	0.01	1	0.1	0.05	0.01	1	10	0.1
DIGEST	4A/	4A/	4A/	4A/	4A/	4A/	4A/	4AH/	4A/
ANALYTICAL FINISH	MS	MS	MS	MS	MS	MS	MS	OE	MS
BLANKS									
0001 Control Blank	X	X	X	X	X	X	6	X	X
0002 Control Blank	X	X	X	X	X	X	X	18	X



METHOD CODE DESCRIPTION

Method Code	Analysing Laboratory NATA Laboratory Accreditation	NATA Scope of Accreditation
4A/MS	Intertek Genalysis Perth 3244 3237 Multi-acid digest including Hydrofluoric, Nitric, Perchloric and Hydrochloric acids in Teflon Tubes. Analysed by Inductively Coupled Plasma Mass Spectrometry.	4A/ : MPL_W002, MS : ICP_W003
4AH/OE	Intertek Genalysis Perth 3244 3237 Modified (for higher precision) multi-acid digest including Hydrofluoric, Nitric, Perchloric and Hydrochloric acids. Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry.	4AH/ : MPL_W003, OE : ICP_W004
FA25/MS	Intertek Genalysis Perth 3244 3237 25g Lead collection fire assay in new pots. Analysed by Inductively Coupled Plasma Mass Spectrometry.	FA25N/ : FA_W001, MS : ICP_W003