

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	North	East	To (m)	From (m)	Au	Au_R	Ag	Al2O3	As
UNITS							ppb	ppm	ppm	ppm	ppm
SCHEME							FA_GEN_SAAS	FA_GEN_SAAS	G4PULM	G4PULI	G4PULM
Ave. Crustal Abundance											
	P402616	MT01	8446655.175	682201.654	0	1	<1	N.A.	<0.05	158000	155
	P402617	MT01	8446655.984	682202.242	1	2	<1	N.A.	<0.05	168000	121
	P402618	MT01	8446656.793	682202.829	2	3	<1	N.A.	0.05	165000	163
	P402619	MT01	8446657.602	682203.417	3	4	<1	N.A.	<0.05	103000	143
	P402620	MT01	8446658.411	682204.005	4	5	1	N.A.	0.1	134000	200
	P402601	MT01	8446659.220	682204.593	5	6	3	N.A.	0.45	111000	241
	P402602	MT01	8446660.029	682205.181	6	7	3	N.A.	0.2	151000	192
	P402603	MT01	8446660.838	682205.768	7	8	1	N.A.	0.15	173000	120
	P402604	MT01	8446661.647	682206.356	8	9	<1	N.A.	0.15	167000	54.5
	P402605	MT01	8446662.456	682206.944	9	10	2	N.A.	0.1	184000	72.5
	P402621	MT01	8446663.265	682207.532	10	11	<1	N.A.	0.05	181000	43.5
	P402622	MT01	8446664.074	682208.120	11	12	<1	N.A.	<0.05	196000	49.5
	P402623	MT01	8446664.883	682208.707	12	13	<1	N.A.	0.05	171000	111
	P402624	MT01	8446665.692	682209.295	13	14	<1	N.A.	0.1	181000	78
	P402625	MT01	8446666.501	682209.883	14	15	<1	N.A.	<0.05	195000	46
	P402606	MT02	8446652.414	682210.874	0	1	<1	N.A.	0.15	175000	66.5
	P402607	MT02	8446653.121	682211.581	1	2	<1	N.A.	0.35	138000	93
	P402608	MT02	8446653.828	682212.288	2	3	<1	N.A.	0.2	149000	65.5
	P402609	MT02	8446654.535	682212.995	3	4	<1	N.A.	0.15	154000	54.5
	P402610	MT02	8446655.242	682213.702	4	5	<1	N.A.	0.15	159000	46
	P402626	MT03	8446661.875	682195.574	0	1	<1	N.A.	<0.05	182000	137
	P402627	MT03	8446662.684	682196.162	1	2	2	N.A.	<0.05	147000	141
	P402628	MT03	8446663.493	682196.749	2	3	2	N.A.	<0.05	133000	149
	P402629	MT03	8446664.302	682197.337	3	4	10	N.A.	<0.05	136000	169
	P402630	MT03	8446665.111	682197.925	4	5	<1	N.A.	0.1	136000	183
	P402611	MT03	8446665.920	682198.513	5	6	1	N.A.	0.05	167000	99.5
	P402612	MT03	8446666.729	682199.101	6	7	<1	N.A.	<0.05	180000	89
	P402613	MT03	8446667.538	682199.688	7	8	1	N.A.	0.15	170000	112
	P402614	MT03	8446668.347	682200.276	8	9	<1	N.A.	0.15	171000	80
	P402615	MT03	8446669.156	682200.864	9	10	<1	N.A.	0.2	155000	60.5
	P402631	MT04	8446893.177	681852.320	0	1	<1	N.A.	<0.05	80600	45.5

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UNITS							ppb	ppm	ppm	ppm	ppm
SCHEME							FA_GEN_SAAS	FA_GEN_SAAS	G4PULM	G4PULI	G4PULM
Ave. Crustal Abundance											
	P402632	MT04	8446893.212	681853.319	1	2	<1	N.A.	<0.05	174000	179
	P402633	MT04	8446893.247	681854.318	2	3	1	N.A.	<0.05	175000	199
	P402634	MT04	8446893.282	681855.318	3	4	<1	N.A.	<0.05	154000	101
	P402635	MT04	8446893.317	681856.317	4	5	2	N.A.	<0.05	188000	78.5
	P402636	MT05	8447662.514	681738.354	0	1	2	N.A.	<0.05	199000	11
	P402637	MT05	8447663.221	681739.061	1	2	<1	N.A.	<0.05	203000	9
	P402638	MT05	8447663.928	681739.768	2	3	<1	N.A.	<0.05	208000	11
	P402639	MT05	8447664.635	681740.475	3	4	1	N.A.	<0.05	193000	15
	P402640	MT05	8447665.342	681741.182	4	5	<1	N.A.	<0.05	187000	10
	P402641	MT06	8445639.477	683135.060	0	1	232	N.A.	0.2	83200	30.5
	P402642	MT06	8445640.172	683135.779	1	2	8	N.A.	<0.05	119000	39.5
	P402643	MT06	8445640.867	683136.498	2	3	6	N.A.	<0.05	126000	26
	P402644	MT06	8445641.561	683137.218	3	4	3	N.A.	<0.05	137000	50.5
	P402645	MT06	8445642.256	683137.937	4	5	43	N.A.	0.25	120000	140
	P402646	MT06	8445642.951	683138.656	5	6	898	767	3.7	22200	537
	P402647	MT06	8445643.645	683139.376	6	7	266	323	0.9	97500	242
	P402648	MT06	8445644.340	683140.095	7	8	20	N.A.	0.35	121000	124
	P402649	MT06	8445645.035	683140.814	8	9	14	N.A.	0.1	134000	88.5
	P402650	MT07	8445638.047	683150.780	0	1	2	N.A.	<0.05	135000	16.5
	P402651	MT07	8445638.742	683151.499	1	2	39	N.A.	0.15	84800	75.5
	P402652	MT07	8445639.437	683152.218	2	3	<1	N.A.	<0.05	137000	23
	P402653	MT07	8445640.131	683152.938	3	4	<1	N.A.	<0.05	141000	14
	P402654	MT07	8445640.826	683153.657	4	5	2	N.A.	<0.05	135000	12
	P402655	MT07	8445641.521	683154.376	5	6	8	N.A.	0.05	116000	61.5
	P402656	MT07	8445642.215	683155.096	6	7	4	N.A.	0.1	137000	20.5
	P402657	MT07	8445642.910	683155.815	7	8	12	N.A.	0.25	106000	53
	P402658	MT07	8445643.605	683156.534	8	9	2	N.A.	0.15	112000	22
	P402659	MT07	8445644.299	683157.254	9	10	1	N.A.	<0.05	108000	18.5
	P402660	MT07	8445644.994	683157.973	10	11	1	N.A.	<0.05	139000	18
	P402661	MT07	8445645.689	683158.692	11	12	16	N.A.	0.1	113000	72.5
	P402662	MT07	8445646.383	683159.412	12	13	254	382	2.9	59200	301

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IDENT	Sample No	Trench ID	Ba	Be	Bi	CaO	Ce	Co	Cr	Cu	Dy	Er	Eu
UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULI	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULI	G4PULM	G4PULM	G4PULM
Ave. Crustal Abundance													
	P402616	MT01	372	5.2	1.34	160	48.7	7.75	60	52	2.9	1.42	0.75
	P402617	MT01	416	4.3	2.02	220	83.1	5.75	60	39	3.82	1.81	1.01
	P402618	MT01	434	4.4	1.6	240	78.9	6.75	70	51	3.76	1.81	1.02
	P402619	MT01	220	4.3	1.56	320	53.4	5	55	75	2.74	1.33	0.73
	P402620	MT01	384	4.7	2.62	240	81.3	6.25	60	84	3.63	1.79	0.98
	P402601	MT01	406	5.4	8.28	440	70.5	3.9	55	60	2.89	1.37	0.97
	P402602	MT01	522	4.6	3.66	400	77.8	5.35	55	62	3.59	1.81	0.94
	P402603	MT01	584	4.8	2.66	360	57.1	6.1	90	97	3.19	1.64	0.9
	P402604	MT01	540	3.1	1.48	500	66.5	4.1	65	42	3.43	1.78	0.98
	P402605	MT01	610	3.1	1.62	240	67.3	8.2	75	57	3.78	2	1
	P402621	MT01	584	2.8	1.62	200	60.3	6.7	75	26	3.49	1.82	0.96
	P402622	MT01	582	3	1.26	160	73.4	5.55	85	43	3.84	1.97	1.11
	P402623	MT01	506	3.9	1.74	160	60.4	9.1	105	130	3.42	1.75	0.94
	P402624	MT01	550	3.4	1.82	400	75.1	7.35	95	68	3.48	1.8	1.07
	P402625	MT01	650	2.9	1.56	200	65	9	75	28	3.42	1.75	1.04
	P402606	MT02	532	4.3	3.5	360	68.3	6.75	75	50	3.34	1.67	0.92
	P402607	MT02	438	3.5	2.32	720	67.9	7.85	75	60	2.88	1.5	0.85
	P402608	MT02	496	2.3	1.88	780	62.4	4.95	75	33	3.32	1.73	0.91
	P402609	MT02	512	2.3	1.68	680	65.2	4.85	80	30	3.36	1.79	0.9
	P402610	MT02	542	1.9	1.32	720	60	4.3	70	31	3.43	1.9	0.91
	P402626	MT03	398	4.9	0.82	120	72.6	7.45	70	40	3.52	1.72	0.92
	P402627	MT03	292	4.2	1.54	180	67	7.3	60	43	3.31	1.61	0.85
	P402628	MT03	292	3.8	1.12	160	60	5.3	55	38	3.31	1.65	0.79
	P402629	MT03	290	4.2	1.34	180	60.2	5.85	60	43	3.41	1.68	0.82
	P402630	MT03	288	5.9	1.72	420	72	8	75	77	3.87	1.9	1.02
	P402611	MT03	378	4.5	1.82	180	72	5.45	65	52	3.63	1.8	0.98
	P402612	MT03	454	3.8	1.34	200	70.9	5.1	75	66	3.7	1.9	1.02
	P402613	MT03	470	5.2	1.32	240	94.2	14.2	80	150	3.82	1.99	0.97
	P402614	MT03	484	3.6	1.46	320	72.6	6.8	75	77	3.75	1.9	1.1
	P402615	MT03	534	2.7	2.26	800	81.6	5.3	65	53	3.95	2.02	1.17
	P402631	MT04	116	1.7	0.48	180	391	1.25	25	<1	16.7	8.87	5.54

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IDENT	Sample No	Trench ID	Ba	Be	Bi	CaO	Ce	Co	Cr	Cu	Dy	Er	Eu
UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULI	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULI	G4PULM	G4PULM	G4PULM
Ave. Crustal Abundance													
	P402632	MT04	214	4.5	0.52	280	1310	2.5	30	<1	94.7	53.5	18.4
	P402633	MT04	324	4.8	0.38	500	2500	2.65	35	<1	72.6	39.8	33.8
	P402634	MT04	238	3.8	0.5	360	1320	2.55	35	<1	70.7	38.6	18.4
	P402635	MT04	326	5.2	0.34	300	771	2.8	45	<1	42.4	21.2	12.9
	P402636	MT05	524	3.8	0.82	100	113	23.4	60	122	4.86	2.41	1.29
	P402637	MT05	516	3.2	0.8	120	94.6	8.05	65	108	4.47	2.25	1.17
	P402638	MT05	558	3.4	0.98	180	126	13.1	55	161	4.35	2.01	1.29
	P402639	MT05	468	4.6	1.02	160	73.2	23.4	65	98	3.31	1.68	0.9
	P402640	MT05	506	3.7	0.78	180	129	14.9	75	50	4.08	2.02	1.2
	P402641	MT06	100	2.7	6.14	240	32	1.6	10	43	1.66	0.68	0.25
	P402642	MT06	106	2.8	0.74	140	44.2	3.15	25	21	2.49	1.07	0.43
	P402643	MT06	94	2.9	0.78	180	53.7	1.8	20	11	2.47	0.9	0.45
	P402644	MT06	92	3.7	0.5	180	60.3	1.45	15	28	2.51	0.89	0.51
	P402645	MT06	138	3.6	6.4	280	64.1	1.95	10	39	2.73	0.92	0.77
	P402646	MT06	232	2.6	276	340	16.2	27.4	25	271	0.83	0.28	0.32
	P402647	MT06	150	4.2	115	260	32.3	7.25	20	96	1.59	0.64	0.29
	P402648	MT06	110	4.1	3.12	160	52	1.75	25	60	2.11	0.87	0.39
	P402649	MT06	112	4.2	1.08	140	62	2.1	20	56	2.46	1.04	0.5
	P402650	MT07	126	3.5	0.48	280	43	1.95	5	9	2.02	0.83	0.31
	P402651	MT07	154	3.2	4.78	300	34.8	1.55	20	19	1.63	0.6	0.34
	P402652	MT07	162	3.7	1.12	240	48	2.4	10	17	2.47	0.93	0.38
	P402653	MT07	174	3.9	0.72	240	41.4	2.65	5	28	3.09	1.1	0.51
	P402654	MT07	138	3.5	2.72	240	37.5	2.15	5	13	2.12	0.8	0.33
	P402655	MT07	114	4.1	14.4	280	40.3	2.2	20	34	2.06	0.83	0.31
	P402656	MT07	154	3.4	1.42	240	58.1	1.95	10	13	2.66	0.95	0.56
	P402657	MT07	160	3.6	6.02	320	41.5	1.75	25	30	1.92	0.79	0.35
	P402658	MT07	138	3.5	1.42	320	45.2	1.35	5	17	1.88	0.71	0.33
	P402659	MT07	140	3.4	1.2	340	52.3	1.55	10	16	1.98	0.75	0.36
	P402660	MT07	118	3.4	0.3	340	39.7	1.8	10	17	2.4	0.92	0.38
	P402661	MT07	124	3.6	1.96	340	46.4	1.7	20	73	1.9	0.75	0.33
	P402662	MT07	200	3.6	18.7	440	23.5	1.95	20	107	1.11	0.28	0.36

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UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULI	G4PULM	G4PULI	G4PULI	G4PULM
Ave. Crustal Abundance													
	P402616	MT01	111000	3.83	3.66	0.52	37000	22.7	25	0.2	3960	72	1.25
	P402617	MT01	81500	5.27	4.06	0.68	37500	42.7	22	0.24	4380	60	0.95
	P402618	MT01	103000	5.13	3.88	0.67	34100	39	24	0.24	4660	68	1.15
	P402619	MT01	86200	3.53	3.12	0.5	20800	27.4	13	0.17	3480	72	1.7
	P402620	MT01	98800	4.92	3.72	0.65	27700	38.4	17	0.24	3520	60	1.65
	P402601	MT01	75500	4.33	3.05	0.51	22800	36.9	15	0.19	3920	80	2.3
	P402602	MT01	81800	4.59	4.6	0.65	32400	34.9	20	0.25	4460	64	1.5
	P402603	MT01	92800	4.08	3.43	0.57	40000	24.4	20	0.24	4820	62	1.6
	P402604	MT01	54700	4.4	3.34	0.63	36700	30.3	19	0.24	5560	68	1.2
	P402605	MT01	66500	4.6	4.07	0.71	41000	30.9	18	0.28	4140	64	1.1
	P402621	MT01	63300	4.28	4.04	0.65	41200	28.3	18	0.27	3820	58	1.15
	P402622	MT01	74200	4.9	3.92	0.71	41500	34.2	18	0.29	3880	56	1.75
	P402623	MT01	122000	4.2	3.51	0.64	36500	27.7	19	0.24	3580	66	2.5
	P402624	MT01	82700	4.44	3.74	0.65	36500	38	18	0.25	5100	84	1.8
	P402625	MT01	61200	4.35	3.85	0.63	43200	29.9	15	0.25	4620	104	1.4
	P402606	MT02	77800	4.06	3.7	0.6	40600	32.7	20	0.23	5200	72	1.25
	P402607	MT02	83500	3.39	3.29	0.54	28000	34	20	0.22	6100	102	1.55
	P402608	MT02	65200	3.89	3.82	0.62	29900	30	15	0.25	7100	108	1.35
	P402609	MT02	57100	4.12	3.98	0.64	31300	29.7	15	0.27	6880	116	1.55
	P402610	MT02	52300	3.99	3.93	0.67	32000	27.4	15	0.28	7520	116	1.35
	P402626	MT03	106000	4.75	3.78	0.63	38600	34	28	0.23	3960	54	1.25
	P402627	MT03	110000	4.28	3.73	0.6	26300	34.3	28	0.21	3540	50	1.5
	P402628	MT03	96800	4.25	3.85	0.61	26300	30.3	22	0.22	3440	50	1.4
	P402629	MT03	106000	4.37	4.64	0.61	26400	30.8	23	0.23	3520	52	1.45
	P402630	MT03	128000	4.88	3.79	0.7	24300	37	19	0.25	5080	84	1.7
	P402611	MT03	108000	4.76	3.43	0.66	34000	35.6	19	0.24	3600	54	1.35
	P402612	MT03	96300	4.89	3.27	0.67	37200	35.3	19	0.26	3940	48	1.4
	P402613	MT03	109000	4.36	3.23	0.7	34600	35.5	23	0.27	4340	88	1.55
	P402614	MT03	88900	4.83	3.48	0.69	35700	35.5	21	0.26	4760	56	1.55
	P402615	MT03	60100	5.26	3.46	0.72	27400	42	17	0.28	7760	88	1.45
	P402631	MT04	35900	26.9	6.26	3.11	22000	159	7	1.06	3020	26	0.6

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UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULI	G4PULM	G4PULI	G4PULI	G4PULM
Ave. Crustal Abundance													
	P402632	MT04	73000	108	15.6	18.7	48400	532	13	6.58	7040	32	0.35
	P402633	MT04	44500	144	20.4	13.8	52500	1050	15	5.02	6980	36	0.45
	P402634	MT04	34700	93.4	15.4	13.6	41800	539	11	4.78	6360	34	0.4
	P402635	MT04	26200	66.9	11.4	7.77	54100	293	13	2.43	7100	38	0.4
	P402636	MT05	54400	6.48	4.18	0.89	40500	45.9	19	0.32	6160	100	0.35
	P402637	MT05	62500	5.62	4.05	0.81	41500	35.7	19	0.3	4940	48	0.6
	P402638	MT05	63700	6.11	3.92	0.77	43900	44.1	17	0.27	4600	80	0.4
	P402639	MT05	69800	4.21	3.72	0.61	43000	23.6	24	0.24	7260	134	0.5
	P402640	MT05	67300	5.69	4.43	0.74	39300	43.3	22	0.28	5840	98	0.5
	P402641	MT06	18500	2.14	1.59	0.27	19700	17.5	67	0.08	2160	48	0.85
	P402642	MT06	47200	3.23	2.88	0.4	25200	24.1	49	0.13	3020	62	0.75
	P402643	MT06	35000	3.66	2.46	0.38	29600	28.6	55	0.11	3400	60	0.65
	P402644	MT06	33100	3.83	2.09	0.36	35100	30.6	59	0.09	4140	52	0.5
	P402645	MT06	20200	4.63	2.01	0.4	32800	29	63	0.1	3520	58	1
	P402646	MT06	19800	1.44	0.24	0.12	4200	8.47	53	0.03	420	32	2.7
	P402647	MT06	28000	2	1.86	0.26	24800	17.6	63	0.08	3000	60	1.3
	P402648	MT06	52500	2.69	2.4	0.33	30800	26.7	59	0.11	3760	64	0.75
	P402649	MT06	52700	3.33	2.64	0.41	32300	30.1	55	0.12	3820	64	0.8
	P402650	MT07	16200	2.61	2.48	0.33	43200	21.1	58	0.1	3680	62	0.3
	P402651	MT07	12000	2.38	1.52	0.25	27400	17.7	73	0.07	2240	46	1.45
	P402652	MT07	19500	3.42	2.43	0.38	45100	23.8	62	0.11	5140	62	0.4
	P402653	MT07	16300	4.35	2.36	0.47	51900	19.8	68	0.12	6020	68	0.35
	P402654	MT07	12200	3.02	2.34	0.33	46700	17.7	63	0.1	5040	62	0.25
	P402655	MT07	36300	2.8	2.35	0.33	31800	20.8	69	0.1	3600	64	0.8
	P402656	MT07	13700	4.26	2.5	0.41	44100	27.1	61	0.11	5040	58	0.25
	P402657	MT07	23400	2.63	2.14	0.32	32700	21.8	68	0.1	3020	56	1.6
	P402658	MT07	13900	2.54	1.82	0.3	36000	23.2	64	0.08	2940	68	0.4
	P402659	MT07	14500	2.89	2.11	0.31	33300	25.8	61	0.09	3020	62	0.75
	P402660	MT07	16600	3.17	2.47	0.37	44600	19.1	58	0.11	3880	68	0.35
	P402661	MT07	44000	2.62	2.17	0.3	30600	23.6	60	0.09	3420	58	0.8
	P402662	MT07	13400	2.71	0.5	0.14	14600	12.1	50	0.03	1420	36	3.35

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Na2O	Nb	Nd	Ni	P2O5	Pb	Pr	Rb	S	Se	Sm
UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance													
	P402616	MT01	3100	12.6	22.6	19.8	1000	22.6	6.11	210	<20	2	4.63
	P402617	MT01	3400	13.7	33.6	14.6	800	21.6	9.35	215	20	2	6.7
	P402618	MT01	3200	12.5	31.4	17.6	950	23.2	8.74	205	40	2	6.27
	P402619	MT01	1600	7	21.9	11.8	950	17.6	6.09	142	<20	2	4.41
	P402620	MT01	2500	10.1	31.4	14.6	1250	63.6	8.6	168	20	4	6.41
	P402601	MT01	2000	7.75	28	9	1000	133	7.66	140	80	8	6.06
	P402602	MT01	3300	13.2	28.8	12.8	1150	56.2	7.94	183	40	4	5.88
	P402603	MT01	3900	13	24.1	15.2	1050	50.4	6.44	205	<20	2	5.24
	P402604	MT01	4000	12.9	26.9	10.8	550	24	7.28	184	20	<2	5.37
	P402605	MT01	3900	13.1	27.4	20.6	800	28.6	7.37	216	<20	<2	5.49
	P402621	MT01	3700	13.3	25.1	20.6	850	25.2	6.81	212	<20	<2	5.08
	P402622	MT01	3700	13.9	30.3	22	700	25.6	8.18	226	<20	2	6.1
	P402623	MT01	3400	11.9	25.6	27	1200	24.2	6.89	201	<20	4	5.19
	P402624	MT01	3800	13.2	29.1	20.6	800	23	8.2	203	20	2	5.51
	P402625	MT01	4000	14.2	27.2	26.8	700	23.8	7.32	252	<20	<2	5.48
	P402606	MT02	3700	13.1	26.4	14.6	1150	27	7.37	234	40	2	5.14
	P402607	MT02	3500	11	24.8	13.4	1000	19.6	7.04	159	80	2	4.55
	P402608	MT02	4300	12.2	23.7	9.8	650	19.6	6.64	150	40	2	4.7
	P402609	MT02	4200	12.7	25.3	11	650	19.8	6.93	158	40	<2	4.98
	P402610	MT02	4500	13.2	23.2	8.8	550	20.6	6.4	156	20	<2	4.65
	P402626	MT03	3000	12.8	29.6	21.6	700	22.6	8.15	224	<20	<2	5.99
	P402627	MT03	2000	10.7	27.9	20.2	650	19.6	7.73	178	20	2	5.47
	P402628	MT03	2000	9.55	25	14.2	600	17.6	6.91	173	20	2	5.02
	P402629	MT03	2000	10	25.4	16.4	650	18.6	7	173	20	2	5.1
	P402630	MT03	2500	9.8	30.8	20	1450	24	8.5	168	20	2	6.1
	P402611	MT03	2800	12.1	29.8	17.6	900	24.6	8.24	208	20	2	6
	P402612	MT03	3200	12.2	30.1	17.6	750	23.8	8.16	214	<20	<2	6.07
	P402613	MT03	3000	11	26.2	19.2	900	29.8	7.53	201	40	2	5.2
	P402614	MT03	3300	12.2	29.7	19.4	850	21.2	8.15	205	<20	<2	5.86
	P402615	MT03	4000	12	33.7	11.6	650	20.2	9.44	146	<20	<2	6.57
	P402631	MT04	500	6.35	332	7.2	1550	4.4	62.3	88.8	60	2	88.2

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Na2O	Nb	Nd	Ni	P2O5	Pb	Pr	Rb	S	Se	Sm
UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance													
	P402632	MT04	800	15.2	1120	14.8	4500	11.2	196	237	200	16	311
	P402633	MT04	800	17.6	2030	13.8	8650	13.8	371	200	420	12	593
	P402634	MT04	600	14.6	1140	13.4	4300	9.8	200	191	200	12	326
	P402635	MT04	900	17.8	718	14.6	3100	9.6	125	229	140	6	202
	P402636	MT05	2900	13	39.5	28.2	600	23	10.6	209	<20	<2	8.08
	P402637	MT05	3000	12.9	31.9	23.8	650	23.2	8.63	197	<20	<2	6.68
	P402638	MT05	3300	13.3	38.8	20.6	800	25.8	10.5	207	<20	<2	7.9
	P402639	MT05	2800	12.8	25.3	34.4	800	23.4	6.54	214	<20	<2	5.19
	P402640	MT05	2700	12.5	37.2	26.8	850	22.6	10.1	211	<20	<2	7.29
	P402641	MT06	500	9.7	12.6	4	300	11	3.63	193	40	<2	2.71
	P402642	MT06	700	14.1	17.5	7.6	650	15.6	5.08	243	<20	<2	3.81
	P402643	MT06	600	14.7	20.2	4.4	500	12.6	5.89	284	20	<2	4.58
	P402644	MT06	500	15.2	23.2	3.8	750	12	6.64	328	<20	<2	5.23
	P402645	MT06	500	15	26.3	2.8	700	13.4	7.19	292	40	<2	6.09
	P402646	MT06	300	0.35	6.95	6.8	800	94.4	1.91	26.5	580	6	1.77
	P402647	MT06	600	11.3	11.9	3.8	600	29.4	3.49	227	120	2	2.72
	P402648	MT06	700	14.8	18.4	3.4	650	14	5.37	266	20	<2	3.8
	P402649	MT06	700	16.2	23.9	5	750	14.8	6.73	290	<20	<2	5
	P402650	MT07	1100	16.7	17.1	5	400	18.6	4.74	373	<20	<2	3.62
	P402651	MT07	800	10.4	15.4	3.4	350	17	4.1	254	60	<2	3.52
	P402652	MT07	1100	16.7	18.4	5	550	21	5.23	402	<20	<2	4.09
	P402653	MT07	1400	17.7	18.2	6.2	600	23.6	4.94	451	<20	<2	4.69
	P402654	MT07	1100	17.7	15.1	5	400	21.2	4.25	404	<20	<2	3.63
	P402655	MT07	900	15	14.9	4.8	550	20	4.3	292	<20	<2	3.23
	P402656	MT07	1000	17.3	23.9	4.2	500	20.8	6.68	379	<20	<2	5.5
	P402657	MT07	1000	13.4	15.6	4.6	600	19.8	4.58	298	20	<2	3.25
	P402658	MT07	900	13.6	16.6	2.8	400	17.6	4.91	316	40	<2	3.3
	P402659	MT07	900	13.6	18.4	3.6	450	16.8	5.52	305	40	<2	3.7
	P402660	MT07	1000	18	16	4.2	450	16.6	4.51	377	<20	<2	3.76
	P402661	MT07	800	13.8	17.9	4	600	19	5.18	274	40	<2	3.54
	P402662	MT07	400	4.25	11.3	2.6	500	28.2	2.95	113	60	<2	3.43

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Sn	Sr	Ta	Tb	Th	TiO2	Tm	U	V	W
UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULM	G4PULM	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM
Ave. Crustal Abundance												
	P402616	MT01	22.4	30.4	1.4	0.56	17.9	4200	0.2	14.8	78	11.4
	P402617	MT01	27.6	35.9	1.62	0.74	22.6	4660	0.24	14.2	72	10.6
	P402618	MT01	27.8	34.9	1.46	0.73	21.6	4520	0.25	24.5	82	10.4
	P402619	MT01	12.6	23.3	0.84	0.52	15.8	2760	0.18	65.4	54	14.8
	P402620	MT01	22.8	32.9	1.18	0.68	20.9	3700	0.25	171	74	17.4
	P402601	MT01	14.8	41.6	0.9	0.56	15.8	3140	0.19	80.5	76	18
	P402602	MT01	36.2	47	1.54	0.66	20.5	4560	0.25	127	82	14.2
	P402603	MT01	45.4	49	1.34	0.6	17.6	4740	0.23	125	106	16.9
	P402604	MT01	44.6	48.5	1.4	0.64	16.4	4860	0.24	39.5	82	13.8
	P402605	MT01	34.2	45.7	1.32	0.68	19	5340	0.29	132	100	13.1
	P402621	MT01	29.4	41.3	1.34	0.62	18.7	5460	0.26	94.5	98	11.9
	P402622	MT01	25	41.9	1.46	0.7	20.5	5520	0.27	29	112	11.2
	P402623	MT01	18.2	38.3	1.24	0.62	19.3	4920	0.25	54.3	132	9.95
	P402624	MT01	22.6	50.2	1.38	0.63	22.3	5220	0.25	15.7	108	9.1
	P402625	MT01	27.4	43.4	1.48	0.64	23.6	5580	0.25	8.69	100	8.4
	P402606	MT02	43.4	52.2	1.42	0.61	18.3	4920	0.24	55	86	15.8
	P402607	MT02	30.8	52.4	1.16	0.52	17.3	4200	0.21	14.2	82	24.7
	P402608	MT02	28.8	50.5	1.34	0.61	17.2	5100	0.24	10	88	16
	P402609	MT02	26.4	48.4	1.38	0.61	17.1	5340	0.25	8.9	90	15.3
	P402610	MT02	26.6	50.2	1.46	0.61	16.8	5460	0.27	8.49	92	13.3
	P402626	MT03	16	29.1	1.5	0.69	22.3	4640	0.24	16.3	84	12.4
	P402627	MT03	15	26.3	1.26	0.62	21	4000	0.22	19.8	78	9.75
	P402628	MT03	18	23.9	1.1	0.62	19.4	3480	0.23	21	76	8.95
	P402629	MT03	18.8	24.9	1.16	0.63	20.5	3680	0.23	29	72	9.1
	P402630	MT03	17.8	34.2	1.16	0.72	19.8	3740	0.26	118	84	11.2
	P402611	MT03	25.8	33.3	1.42	0.68	20	4420	0.25	56.4	82	10.6
	P402612	MT03	30.8	39.5	1.34	0.7	20.3	4660	0.26	44.5	94	10.9
	P402613	MT03	29	47.5	1.16	0.67	19.3	4640	0.27	89.4	112	13.9
	P402614	MT03	34	44.4	1.28	0.7	19.4	4980	0.26	32	98	12.5
	P402615	MT03	29.2	53.7	1.3	0.71	20.2	4880	0.28	21.3	88	10.6
	P402631	MT04	9.4	165	0.74	3.16	20.2	2380	1.2	4.05	34	5.1

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Sn	Sr	Ta	Tb	Th	TiO2	Tm	U	V	W
UNITS			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SCHEME			G4PULM	G4PULM	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM
Ave. Crustal Abundance												
	P402632	MT04	20.6	522	1.86	15.9	48.8	4520	7.48	16.5	78	13.7
	P402633	MT04	29.2	1130	2.32	13.6	67.7	5500	5.63	12	74	15.7
	P402634	MT04	19.2	496	1.84	12.1	45	4760	5.4	11.9	62	11.5
	P402635	MT04	20.4	373	2.1	7.9	35.2	6000	2.87	7.41	62	9.9
	P402636	MT05	8	37.8	1.38	0.92	22.6	5440	0.33	10.2	82	4
	P402637	MT05	8.4	37.4	1.4	0.83	22.3	5460	0.31	11.2	88	4.3
	P402638	MT05	8.6	39.4	1.48	0.85	23.9	5080	0.28	9.22	70	4.45
	P402639	MT05	7.8	36.2	1.4	0.62	17.4	5080	0.24	8.14	76	3.9
	P402640	MT05	7.6	35.6	1.36	0.79	21.5	5640	0.29	9.1	90	4.5
	P402641	MT06	13.6	16.2	1.8	0.34	9.65	1060	0.09	6.69	16	6.95
	P402642	MT06	18	18.8	2.52	0.5	15.3	2120	0.14	13.4	46	7.9
	P402643	MT06	20	20.7	2.88	0.52	14.9	1540	0.12	9.04	28	9.55
	P402644	MT06	22.2	23.6	3	0.54	14.8	1100	0.11	14.8	20	9.3
	P402645	MT06	22.2	36.9	2.9	0.62	12.9	1040	0.12	20.6	10	8.65
	P402646	MT06	2.6	31.9	<0.02	0.19	1.94	200	0.04	56.4	8	0.7
	P402647	MT06	17	24.8	1.74	0.32	11	1200	0.09	17.1	16	8.8
	P402648	MT06	19.4	20.7	2.88	0.41	14.6	1400	0.12	12.6	32	9.5
	P402649	MT06	22	28.8	3.12	0.49	16.6	1580	0.14	15.8	36	10.3
	P402650	MT07	23.6	16.9	3.2	0.41	15	1460	0.11	10.5	14	7.35
	P402651	MT07	14	20.1	1.7	0.35	9.19	920	0.08	8.6	8	6.2
	P402652	MT07	23.2	20.2	3.18	0.51	15.1	1380	0.12	11.7	16	6.6
	P402653	MT07	25	21.3	3.4	0.66	14.7	1340	0.14	14.9	8	7.2
	P402654	MT07	24.2	18.2	3.48	0.44	14.4	1360	0.11	7.76	10	6.8
	P402655	MT07	19.2	15.7	2.88	0.41	14.6	1520	0.12	12.8	30	6
	P402656	MT07	23.4	21.1	3.36	0.58	15.1	1340	0.12	9.84	10	6.45
	P402657	MT07	16.6	22.1	2.58	0.39	12.7	1320	0.1	12.4	18	5.6
	P402658	MT07	18	20.9	2.6	0.39	11.8	1060	0.09	8.81	18	6.15
	P402659	MT07	18.2	23.5	2.66	0.42	12.4	1200	0.1	9.16	12	6.45
	P402660	MT07	23.8	17.5	3.46	0.49	15.5	1380	0.12	11.2	14	7.2
	P402661	MT07	18	22.2	2.84	0.4	13.2	1240	0.1	13	32	8.15
	P402662	MT07	6.4	35.6	0.62	0.3	3.6	340	0.04	188	10	5.95

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Y	Zn	Zr	Ag	Al ₂ O ₃	As	Ba	Be	Bi
UNITS			ppm	ppm	ppm	index	index	index	index	index	index
SCHEME			G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance						0.07	79600	1.7	584	2.4	0.085
	P402616	MT01	11.2	26	123	BDL	2.0	91.2	0.6	2.2	15.8
	P402617	MT01	17.6	28	137	BDL	2.1	71.2	0.7	1.8	23.8
	P402618	MT01	17.6	30	131	0.7	2.1	95.9	0.7	1.8	18.8
	P402619	MT01	12.7	22	103	BDL	1.3	84.1	0.4	1.8	18.4
	P402620	MT01	16.2	22	124	1.4	1.7	117.6	0.7	2.0	30.8
	P402601	MT01	12.6	20	97.3	6.4	1.4	141.8	0.7	2.3	97.4
	P402602	MT01	15.3	28	155	2.9	1.9	112.9	0.9	1.9	43.1
	P402603	MT01	12.3	30	115	2.1	2.2	70.6	1.0	2.0	31.3
	P402604	MT01	14.9	32	113	2.1	2.1	32.1	0.9	1.3	17.4
	P402605	MT01	17	26	138	1.4	2.3	42.6	1.0	1.3	19.1
	P402621	MT01	15.5	18	137	0.7	2.3	25.6	1.0	1.2	19.1
	P402622	MT01	17.9	18	133	BDL	2.5	29.1	1.0	1.3	14.8
	P402623	MT01	15	20	121	0.7	2.1	65.3	0.9	1.6	20.5
	P402624	MT01	16.4	26	129	1.4	2.3	45.9	0.9	1.4	21.4
	P402625	MT01	14.9	18	128	BDL	2.4	27.1	1.1	1.2	18.4
	P402606	MT02	13.9	28	125	2.1	2.2	39.1	0.9	1.8	41.2
	P402607	MT02	13.1	40	109	5.0	1.7	54.7	0.8	1.5	27.3
	P402608	MT02	15.4	44	127	2.9	1.9	38.5	0.8	1.0	22.1
	P402609	MT02	15.6	40	135	2.1	1.9	32.1	0.9	1.0	19.8
	P402610	MT02	16	44	134	2.1	2.0	27.1	0.9	0.8	15.5
	P402626	MT03	16	20	127	BDL	2.3	80.6	0.7	2.0	9.6
	P402627	MT03	16	16	127	BDL	1.8	82.9	0.5	1.8	18.1
	P402628	MT03	16.3	16	130	BDL	1.7	87.6	0.5	1.6	13.2
	P402629	MT03	16.3	16	156	BDL	1.7	99.4	0.5	1.8	15.8
	P402630	MT03	17.8	32	127	1.4	1.7	107.6	0.5	2.5	20.2
	P402611	MT03	16.7	16	116	0.7	2.1	58.5	0.6	1.9	21.4
	P402612	MT03	17.7	18	109	BDL	2.3	52.4	0.8	1.6	15.8
	P402613	MT03	18.5	18	115	2.1	2.1	65.9	0.8	2.2	15.5
	P402614	MT03	17.8	22	120	2.1	2.1	47.1	0.8	1.5	17.2
	P402615	MT03	18.6	44	119	2.9	1.9	35.6	0.9	1.1	26.6
	P402631	MT04	82.8	6	210	BDL	1.0	26.8	0.2	0.7	5.6

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Y	Zn	Zr	Ag	Al ₂ O ₃	As	Ba	Be	Bi
UNITS			ppm	ppm	ppm	index	index	index	index	index	index
SCHEME			G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance						0.07	79600	1.7	584	2.4	0.085
	P402632	MT04	479	10	513	BDL	2.2	105.3	0.4	1.9	6.1
	P402633	MT04	337	10	636	BDL	2.2	117.1	0.6	2.0	4.5
	P402634	MT04	345	10	495	BDL	1.9	59.4	0.4	1.6	5.9
	P402635	MT04	190	14	377	BDL	2.4	46.2	0.6	2.2	4.0
	P402636	MT05	22.4	24	144	BDL	2.5	6.5	0.9	1.6	9.6
	P402637	MT05	19.6	16	141	BDL	2.6	5.3	0.9	1.3	9.4
	P402638	MT05	18.4	20	134	BDL	2.6	6.5	1.0	1.4	11.5
	P402639	MT05	12.5	36	127	BDL	2.4	8.8	0.8	1.9	12.0
	P402640	MT05	19	24	154	BDL	2.3	5.9	0.9	1.5	9.2
	P402641	MT06	7.36	8	45.7	2.9	1.0	17.9	0.2	1.1	72.2
	P402642	MT06	10.8	14	84.8	BDL	1.5	23.2	0.2	1.2	8.7
	P402643	MT06	10.3	14	69.5	BDL	1.6	15.3	0.2	1.2	9.2
	P402644	MT06	10.1	14	56.8	BDL	1.7	29.7	0.2	1.5	5.9
	P402645	MT06	9.71	12	56	3.6	1.5	82.4	0.2	1.5	75.3
	P402646	MT06	2.61	4	7.1	52.9	0.3	315.9	0.4	1.1	3247.1
	P402647	MT06	6.85	16	54.2	12.9	1.2	142.4	0.3	1.8	1352.9
	P402648	MT06	9.42	18	71.9	5.0	1.5	72.9	0.2	1.7	36.7
	P402649	MT06	11.4	14	77.6	1.4	1.7	52.1	0.2	1.8	12.7
	P402650	MT07	9.31	14	70.3	BDL	1.7	9.7	0.2	1.5	5.6
	P402651	MT07	6.78	8	44.3	2.1	1.1	44.4	0.3	1.3	56.2
	P402652	MT07	10.8	16	68.7	BDL	1.7	13.5	0.3	1.5	13.2
	P402653	MT07	12.6	18	66.6	BDL	1.8	8.2	0.3	1.6	8.5
	P402654	MT07	8.55	16	65.2	BDL	1.7	7.1	0.2	1.5	32.0
	P402655	MT07	9.23	14	69.1	0.7	1.5	36.2	0.2	1.7	169.4
	P402656	MT07	10.4	16	70.7	1.4	1.7	12.1	0.3	1.4	16.7
	P402657	MT07	8.7	10	64.3	3.6	1.3	31.2	0.3	1.5	70.8
	P402658	MT07	8.27	10	52.5	2.1	1.4	12.9	0.2	1.5	16.7
	P402659	MT07	8.49	12	61.5	BDL	1.4	10.9	0.2	1.4	14.1
	P402660	MT07	10.3	14	72.3	BDL	1.7	10.6	0.2	1.4	3.5
	P402661	MT07	8.32	12	64.2	1.4	1.4	42.6	0.2	1.5	23.1
	P402662	MT07	3.09	6	14.6	41.4	0.7	177.1	0.3	1.5	220.0

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	CaO	Ce	Co	Cr	Cu	Dy	Er	Eu	Fe2O3	Gd	Hf
UNITS			index	index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULI	G4PULM	G4PULM	G4PULI	G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance			38500	60	24	126	25	3.8	2.1	1.3	43200	4	4.9
	P402616	MT01	0.0	0.8	0.3	0.5	2.1	0.8	0.7	0.6	2.6	1.0	0.7
	P402617	MT01	0.0	1.4	0.2	0.5	1.6	1.0	0.9	0.8	1.9	1.3	0.8
	P402618	MT01	0.0	1.3	0.3	0.6	2.0	1.0	0.9	0.8	2.4	1.3	0.8
	P402619	MT01	0.0	0.9	0.2	0.4	3.0	0.7	0.6	0.6	2.0	0.9	0.6
	P402620	MT01	0.0	1.4	0.3	0.5	3.4	1.0	0.9	0.8	2.3	1.2	0.8
	P402601	MT01	0.0	1.2	0.2	0.4	2.4	0.8	0.7	0.7	1.7	1.1	0.6
	P402602	MT01	0.0	1.3	0.2	0.4	2.5	0.9	0.9	0.7	1.9	1.1	0.9
	P402603	MT01	0.0	1.0	0.3	0.7	3.9	0.8	0.8	0.7	2.1	1.0	0.7
	P402604	MT01	0.0	1.1	0.2	0.5	1.7	0.9	0.8	0.8	1.3	1.1	0.7
	P402605	MT01	0.0	1.1	0.3	0.6	2.3	1.0	1.0	0.8	1.5	1.2	0.8
	P402621	MT01	0.0	1.0	0.3	0.6	1.0	0.9	0.9	0.7	1.5	1.1	0.8
	P402622	MT01	0.0	1.2	0.2	0.7	1.7	1.0	0.9	0.9	1.7	1.2	0.8
	P402623	MT01	0.0	1.0	0.4	0.8	5.2	0.9	0.8	0.7	2.8	1.1	0.7
	P402624	MT01	0.0	1.3	0.3	0.8	2.7	0.9	0.9	0.8	1.9	1.1	0.8
	P402625	MT01	0.0	1.1	0.4	0.6	1.1	0.9	0.8	0.8	1.4	1.1	0.8
	P402606	MT02	0.0	1.1	0.3	0.6	2.0	0.9	0.8	0.7	1.8	1.0	0.8
	P402607	MT02	0.0	1.1	0.3	0.6	2.4	0.8	0.7	0.7	1.9	0.8	0.7
	P402608	MT02	0.0	1.0	0.2	0.6	1.3	0.9	0.8	0.7	1.5	1.0	0.8
	P402609	MT02	0.0	1.1	0.2	0.6	1.2	0.9	0.9	0.7	1.3	1.0	0.8
	P402610	MT02	0.0	1.0	0.2	0.6	1.2	0.9	0.9	0.7	1.2	1.0	0.8
	P402626	MT03	0.0	1.2	0.3	0.6	1.6	0.9	0.8	0.7	2.5	1.2	0.8
	P402627	MT03	0.0	1.1	0.3	0.5	1.7	0.9	0.8	0.7	2.5	1.1	0.8
	P402628	MT03	0.0	1.0	0.2	0.4	1.5	0.9	0.8	0.6	2.2	1.1	0.8
	P402629	MT03	0.0	1.0	0.2	0.5	1.7	0.9	0.8	0.6	2.5	1.1	0.9
	P402630	MT03	0.0	1.2	0.3	0.6	3.1	1.0	0.9	0.8	3.0	1.2	0.8
	P402611	MT03	0.0	1.2	0.2	0.5	2.1	1.0	0.9	0.8	2.5	1.2	0.7
	P402612	MT03	0.0	1.2	0.2	0.6	2.6	1.0	0.9	0.8	2.2	1.2	0.7
	P402613	MT03	0.0	1.6	0.6	0.6	6.0	1.0	0.9	0.7	2.5	1.1	0.7
	P402614	MT03	0.0	1.2	0.3	0.6	3.1	1.0	0.9	0.8	2.1	1.2	0.7
	P402615	MT03	0.0	1.4	0.2	0.5	2.1	1.0	1.0	0.9	1.4	1.3	0.7
	P402631	MT04	0.0	6.5	0.1	0.2	BDL	4.4	4.2	4.3	0.8	6.7	1.3

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	CaO	Ce	Co	Cr	Cu	Dy	Er	Eu	Fe2O3	Gd	Hf
UNITS			index	index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULI	G4PULM	G4PULM	G4PULI	G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance			38500	60	24	126	25	3.8	2.1	1.3	43200	4	4.9
	P402632	MT04	0.0	21.8	0.1	0.2	BDL	24.9	25.5	14.2	1.7	27.0	3.2
	P402633	MT04	0.0	41.7	0.1	0.3	BDL	19.1	19.0	26.0	1.0	36.0	4.2
	P402634	MT04	0.0	22.0	0.1	0.3	BDL	18.6	18.4	14.2	0.8	23.4	3.1
	P402635	MT04	0.0	12.9	0.1	0.4	BDL	11.2	10.1	9.9	0.6	16.7	2.3
	P402636	MT05	0.0	1.9	1.0	0.5	4.9	1.3	1.1	1.0	1.3	1.6	0.9
	P402637	MT05	0.0	1.6	0.3	0.5	4.3	1.2	1.1	0.9	1.4	1.4	0.8
	P402638	MT05	0.0	2.1	0.5	0.4	6.4	1.1	1.0	1.0	1.5	1.5	0.8
	P402639	MT05	0.0	1.2	1.0	0.5	3.9	0.9	0.8	0.7	1.6	1.1	0.8
	P402640	MT05	0.0	2.2	0.6	0.6	2.0	1.1	1.0	0.9	1.6	1.4	0.9
	P402641	MT06	0.0	0.5	0.1	0.1	1.7	0.4	0.3	0.2	0.4	0.5	0.3
	P402642	MT06	0.0	0.7	0.1	0.2	0.8	0.7	0.5	0.3	1.1	0.8	0.6
	P402643	MT06	0.0	0.9	0.1	0.2	0.4	0.7	0.4	0.3	0.8	0.9	0.5
	P402644	MT06	0.0	1.0	0.1	0.1	1.1	0.7	0.4	0.4	0.8	1.0	0.4
	P402645	MT06	0.0	1.1	0.1	0.1	1.6	0.7	0.4	0.6	0.5	1.2	0.4
	P402646	MT06	0.0	0.3	1.1	0.2	10.8	0.2	0.1	0.2	0.5	0.4	0.0
	P402647	MT06	0.0	0.5	0.3	0.2	3.8	0.4	0.3	0.2	0.6	0.5	0.4
	P402648	MT06	0.0	0.9	0.1	0.2	2.4	0.6	0.4	0.3	1.2	0.7	0.5
	P402649	MT06	0.0	1.0	0.1	0.2	2.2	0.6	0.5	0.4	1.2	0.8	0.5
	P402650	MT07	0.0	0.7	0.1	0.0	0.4	0.5	0.4	0.2	0.4	0.7	0.5
	P402651	MT07	0.0	0.6	0.1	0.2	0.8	0.4	0.3	0.3	0.3	0.6	0.3
	P402652	MT07	0.0	0.8	0.1	0.1	0.7	0.7	0.4	0.3	0.5	0.9	0.5
	P402653	MT07	0.0	0.7	0.1	0.0	1.1	0.8	0.5	0.4	0.4	1.1	0.5
	P402654	MT07	0.0	0.6	0.1	0.0	0.5	0.6	0.4	0.3	0.3	0.8	0.5
	P402655	MT07	0.0	0.7	0.1	0.2	1.4	0.5	0.4	0.2	0.8	0.7	0.5
	P402656	MT07	0.0	1.0	0.1	0.1	0.5	0.7	0.5	0.4	0.3	1.1	0.5
	P402657	MT07	0.0	0.7	0.1	0.2	1.2	0.5	0.4	0.3	0.5	0.7	0.4
	P402658	MT07	0.0	0.8	0.1	0.0	0.7	0.5	0.3	0.3	0.3	0.6	0.4
	P402659	MT07	0.0	0.9	0.1	0.1	0.6	0.5	0.4	0.3	0.3	0.7	0.4
	P402660	MT07	0.0	0.7	0.1	0.1	0.7	0.6	0.4	0.3	0.4	0.8	0.5
	P402661	MT07	0.0	0.8	0.1	0.2	2.9	0.5	0.4	0.3	1.0	0.7	0.4
	P402662	MT07	0.0	0.4	0.1	0.2	4.3	0.3	0.1	0.3	0.3	0.7	0.1

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Ho	K2O	La	Li	Lu	MgO	MnO	Mo	Na2O	Nb	Nd
UNITS			index	index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULM	G4PULI	G4PULM	G4PULI	G4PULM	G4PULI	G4PULI	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance			0.8	21400	30	18	0.35	22000	716	1.1	23600	19	27
	P402616	MT01	0.7	1.7	0.8	1.4	0.6	0.2	0.1	1.1	0.1	0.7	0.8
	P402617	MT01	0.9	1.8	1.4	1.2	0.7	0.2	0.1	0.9	0.1	0.7	1.2
	P402618	MT01	0.8	1.6	1.3	1.3	0.7	0.2	0.1	1.0	0.1	0.7	1.2
	P402619	MT01	0.6	1.0	0.9	0.7	0.5	0.2	0.1	1.5	0.1	0.4	0.8
	P402620	MT01	0.8	1.3	1.3	0.9	0.7	0.2	0.1	1.5	0.1	0.5	1.2
	P402601	MT01	0.6	1.1	1.2	0.8	0.5	0.2	0.1	2.1	0.1	0.4	1.0
	P402602	MT01	0.8	1.5	1.2	1.1	0.7	0.2	0.1	1.4	0.1	0.7	1.1
	P402603	MT01	0.7	1.9	0.8	1.1	0.7	0.2	0.1	1.5	0.2	0.7	0.9
	P402604	MT01	0.8	1.7	1.0	1.1	0.7	0.3	0.1	1.1	0.2	0.7	1.0
	P402605	MT01	0.9	1.9	1.0	1.0	0.8	0.2	0.1	1.0	0.2	0.7	1.0
	P402621	MT01	0.8	1.9	0.9	1.0	0.8	0.2	0.1	1.0	0.2	0.7	0.9
	P402622	MT01	0.9	1.9	1.1	1.0	0.8	0.2	0.1	1.6	0.2	0.7	1.1
	P402623	MT01	0.8	1.7	0.9	1.1	0.7	0.2	0.1	2.3	0.1	0.6	0.9
	P402624	MT01	0.8	1.7	1.3	1.0	0.7	0.2	0.1	1.6	0.2	0.7	1.1
	P402625	MT01	0.8	2.0	1.0	0.8	0.7	0.2	0.1	1.3	0.2	0.7	1.0
	P402606	MT02	0.8	1.9	1.1	1.1	0.7	0.2	0.1	1.1	0.2	0.7	1.0
	P402607	MT02	0.7	1.3	1.1	1.1	0.6	0.3	0.1	1.4	0.1	0.6	0.9
	P402608	MT02	0.8	1.4	1.0	0.8	0.7	0.3	0.2	1.2	0.2	0.6	0.9
	P402609	MT02	0.8	1.5	1.0	0.8	0.8	0.3	0.2	1.4	0.2	0.7	0.9
	P402610	MT02	0.8	1.5	0.9	0.8	0.8	0.3	0.2	1.2	0.2	0.7	0.9
	P402626	MT03	0.8	1.8	1.1	1.6	0.7	0.2	0.1	1.1	0.1	0.7	1.1
	P402627	MT03	0.8	1.2	1.1	1.6	0.6	0.2	0.1	1.4	0.1	0.6	1.0
	P402628	MT03	0.8	1.2	1.0	1.2	0.6	0.2	0.1	1.3	0.1	0.5	0.9
	P402629	MT03	0.8	1.2	1.0	1.3	0.7	0.2	0.1	1.3	0.1	0.5	0.9
	P402630	MT03	0.9	1.1	1.2	1.1	0.7	0.2	0.1	1.5	0.1	0.5	1.1
	P402611	MT03	0.8	1.6	1.2	1.1	0.7	0.2	0.1	1.2	0.1	0.6	1.1
	P402612	MT03	0.8	1.7	1.2	1.1	0.7	0.2	0.1	1.3	0.1	0.6	1.1
	P402613	MT03	0.9	1.6	1.2	1.3	0.8	0.2	0.1	1.4	0.1	0.6	1.0
	P402614	MT03	0.9	1.7	1.2	1.2	0.7	0.2	0.1	1.4	0.1	0.6	1.1
	P402615	MT03	0.9	1.3	1.4	0.9	0.8	0.4	0.1	1.3	0.2	0.6	1.2
	P402631	MT04	3.9	1.0	5.3	0.4	3.0	0.1	0.0	0.5	0.0	0.3	12.3

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Ho	K2O	La	Li	Lu	MgO	MnO	Mo	Na2O	Nb	Nd
UNITS			index	index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULM	G4PULI	G4PULM	G4PULI	G4PULM	G4PULI	G4PULI	G4PULM	G4PULI	G4PULM	G4PULM
Ave. Crustal Abundance			0.8	21400	30	18	0.35	22000	716	1.1	23600	19	27
	P402632	MT04	23.4	2.3	17.7	0.7	18.8	0.3	0.0	0.3	0.0	0.8	41.5
	P402633	MT04	17.3	2.5	35.0	0.8	14.3	0.3	0.1	0.4	0.0	0.9	75.2
	P402634	MT04	17.0	2.0	18.0	0.6	13.7	0.3	0.0	0.4	0.0	0.8	42.2
	P402635	MT04	9.7	2.5	9.8	0.7	6.9	0.3	0.1	0.4	0.0	0.9	26.6
	P402636	MT05	1.1	1.9	1.5	1.1	0.9	0.3	0.1	0.3	0.1	0.7	1.5
	P402637	MT05	1.0	1.9	1.2	1.1	0.9	0.2	0.1	0.5	0.1	0.7	1.2
	P402638	MT05	1.0	2.1	1.5	0.9	0.8	0.2	0.1	0.4	0.1	0.7	1.4
	P402639	MT05	0.8	2.0	0.8	1.3	0.7	0.3	0.2	0.5	0.1	0.7	0.9
	P402640	MT05	0.9	1.8	1.4	1.2	0.8	0.3	0.1	0.5	0.1	0.7	1.4
	P402641	MT06	0.3	0.9	0.6	3.7	0.2	0.1	0.1	0.8	0.0	0.5	0.5
	P402642	MT06	0.5	1.2	0.8	2.7	0.4	0.1	0.1	0.7	0.0	0.7	0.6
	P402643	MT06	0.5	1.4	1.0	3.1	0.3	0.2	0.1	0.6	0.0	0.8	0.7
	P402644	MT06	0.5	1.6	1.0	3.3	0.3	0.2	0.1	0.5	0.0	0.8	0.9
	P402645	MT06	0.5	1.5	1.0	3.5	0.3	0.2	0.1	0.9	0.0	0.8	1.0
	P402646	MT06	0.2	0.2	0.3	2.9	0.1	0.0	0.0	2.5	0.0	0.0	0.3
	P402647	MT06	0.3	1.2	0.6	3.5	0.2	0.1	0.1	1.2	0.0	0.6	0.4
	P402648	MT06	0.4	1.4	0.9	3.3	0.3	0.2	0.1	0.7	0.0	0.8	0.7
	P402649	MT06	0.5	1.5	1.0	3.1	0.3	0.2	0.1	0.7	0.0	0.9	0.9
	P402650	MT07	0.4	2.0	0.7	3.2	0.3	0.2	0.1	0.3	0.0	0.9	0.6
	P402651	MT07	0.3	1.3	0.6	4.1	0.2	0.1	0.1	1.3	0.0	0.5	0.6
	P402652	MT07	0.5	2.1	0.8	3.4	0.3	0.2	0.1	0.4	0.0	0.9	0.7
	P402653	MT07	0.6	2.4	0.7	3.8	0.3	0.3	0.1	0.3	0.1	0.9	0.7
	P402654	MT07	0.4	2.2	0.6	3.5	0.3	0.2	0.1	0.2	0.0	0.9	0.6
	P402655	MT07	0.4	1.5	0.7	3.8	0.3	0.2	0.1	0.7	0.0	0.8	0.6
	P402656	MT07	0.5	2.1	0.9	3.4	0.3	0.2	0.1	0.2	0.0	0.9	0.9
	P402657	MT07	0.4	1.5	0.7	3.8	0.3	0.1	0.1	1.5	0.0	0.7	0.6
	P402658	MT07	0.4	1.7	0.8	3.6	0.2	0.1	0.1	0.4	0.0	0.7	0.6
	P402659	MT07	0.4	1.6	0.9	3.4	0.3	0.1	0.1	0.7	0.0	0.7	0.7
	P402660	MT07	0.5	2.1	0.6	3.2	0.3	0.2	0.1	0.3	0.0	0.9	0.6
	P402661	MT07	0.4	1.4	0.8	3.3	0.3	0.2	0.1	0.7	0.0	0.7	0.7
	P402662	MT07	0.2	0.7	0.4	2.8	0.1	0.1	0.1	3.0	0.0	0.2	0.4

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Ni	P2O5	Pb	Pr	Rb	S	Se	Sm	Sn	Sr
UNITS			index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULM	G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULM	G4PULM
Ave. Crustal Abundance			56	757	14.8	6.7	78	697	0.12	5.3	2.3	333
	P402616	MT01	0.4	1.3	1.5	0.9	2.7	BDL	16.7	0.9	9.7	0.1
	P402617	MT01	0.3	1.1	1.5	1.4	2.8	0.0	16.7	1.3	12.0	0.1
	P402618	MT01	0.3	1.3	1.6	1.3	2.6	0.1	16.7	1.2	12.1	0.1
	P402619	MT01	0.2	1.3	1.2	0.9	1.8	BDL	16.7	0.8	5.5	0.1
	P402620	MT01	0.3	1.7	4.3	1.3	2.2	0.0	33.3	1.2	9.9	0.1
	P402601	MT01	0.2	1.3	9.0	1.1	1.8	0.1	66.7	1.1	6.4	0.1
	P402602	MT01	0.2	1.5	3.8	1.2	2.3	0.1	33.3	1.1	15.7	0.1
	P402603	MT01	0.3	1.4	3.4	1.0	2.6	BDL	16.7	1.0	19.7	0.1
	P402604	MT01	0.2	0.7	1.6	1.1	2.4	0.0	BDL	1.0	19.4	0.1
	P402605	MT01	0.4	1.1	1.9	1.1	2.8	BDL	BDL	1.0	14.9	0.1
	P402621	MT01	0.4	1.1	1.7	1.0	2.7	BDL	BDL	1.0	12.8	0.1
	P402622	MT01	0.4	0.9	1.7	1.2	2.9	BDL	16.7	1.2	10.9	0.1
	P402623	MT01	0.5	1.6	1.6	1.0	2.6	BDL	33.3	1.0	7.9	0.1
	P402624	MT01	0.4	1.1	1.6	1.2	2.6	0.0	16.7	1.0	9.8	0.2
	P402625	MT01	0.5	0.9	1.6	1.1	3.2	BDL	BDL	1.0	11.9	0.1
	P402606	MT02	0.3	1.5	1.8	1.1	3.0	0.1	16.7	1.0	18.9	0.2
	P402607	MT02	0.2	1.3	1.3	1.1	2.0	0.1	16.7	0.9	13.4	0.2
	P402608	MT02	0.2	0.9	1.3	1.0	1.9	0.1	16.7	0.9	12.5	0.2
	P402609	MT02	0.2	0.9	1.3	1.0	2.0	0.1	BDL	0.9	11.5	0.1
	P402610	MT02	0.2	0.7	1.4	1.0	2.0	0.0	BDL	0.9	11.6	0.2
	P402626	MT03	0.4	0.9	1.5	1.2	2.9	BDL	BDL	1.1	7.0	0.1
	P402627	MT03	0.4	0.9	1.3	1.2	2.3	0.0	16.7	1.0	6.5	0.1
	P402628	MT03	0.3	0.8	1.2	1.0	2.2	0.0	16.7	0.9	7.8	0.1
	P402629	MT03	0.3	0.9	1.3	1.0	2.2	0.0	16.7	1.0	8.2	0.1
	P402630	MT03	0.4	1.9	1.6	1.3	2.2	0.0	16.7	1.2	7.7	0.1
	P402611	MT03	0.3	1.2	1.7	1.2	2.7	0.0	16.7	1.1	11.2	0.1
	P402612	MT03	0.3	1.0	1.6	1.2	2.7	BDL	BDL	1.1	13.4	0.1
	P402613	MT03	0.3	1.2	2.0	1.1	2.6	0.1	16.7	1.0	12.6	0.1
	P402614	MT03	0.3	1.1	1.4	1.2	2.6	BDL	BDL	1.1	14.8	0.1
	P402615	MT03	0.2	0.9	1.4	1.4	1.9	BDL	BDL	1.2	12.7	0.2
	P402631	MT04	0.1	2.0	0.3	9.3	1.1	0.1	16.7	16.6	4.1	0.5

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Ni	P2O5	Pb	Pr	Rb	S	Se	Sm	Sn	Sr
UNITS			index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULM	G4PULI	G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULM	G4PULM
Ave. Crustal Abundance			56	757	14.8	6.7	78	697	0.12	5.3	2.3	333
	P402632	MT04	0.3	5.9	0.8	29.3	3.0	0.3	133.3	58.7	9.0	1.6
	P402633	MT04	0.2	11.4	0.9	55.4	2.6	0.6	100.0	111.9	12.7	3.4
	P402634	MT04	0.2	5.7	0.7	29.9	2.4	0.3	100.0	61.5	8.3	1.5
	P402635	MT04	0.3	4.1	0.6	18.7	2.9	0.2	50.0	38.1	8.9	1.1
	P402636	MT05	0.5	0.8	1.6	1.6	2.7	BDL	BDL	1.5	3.5	0.1
	P402637	MT05	0.4	0.9	1.6	1.3	2.5	BDL	BDL	1.3	3.7	0.1
	P402638	MT05	0.4	1.1	1.7	1.6	2.7	BDL	BDL	1.5	3.7	0.1
	P402639	MT05	0.6	1.1	1.6	1.0	2.7	BDL	BDL	1.0	3.4	0.1
	P402640	MT05	0.5	1.1	1.5	1.5	2.7	BDL	BDL	1.4	3.3	0.1
	P402641	MT06	0.1	0.4	0.7	0.5	2.5	0.1	BDL	0.5	5.9	0.0
	P402642	MT06	0.1	0.9	1.1	0.8	3.1	BDL	BDL	0.7	7.8	0.1
	P402643	MT06	0.1	0.7	0.9	0.9	3.6	0.0	BDL	0.9	8.7	0.1
	P402644	MT06	0.1	1.0	0.8	1.0	4.2	BDL	BDL	1.0	9.7	0.1
	P402645	MT06	0.1	0.9	0.9	1.1	3.7	0.1	BDL	1.1	9.7	0.1
	P402646	MT06	0.1	1.1	6.4	0.3	0.3	0.8	50.0	0.3	1.1	0.1
	P402647	MT06	0.1	0.8	2.0	0.5	2.9	0.2	16.7	0.5	7.4	0.1
	P402648	MT06	0.1	0.9	0.9	0.8	3.4	0.0	BDL	0.7	8.4	0.1
	P402649	MT06	0.1	1.0	1.0	1.0	3.7	BDL	BDL	0.9	9.6	0.1
	P402650	MT07	0.1	0.5	1.3	0.7	4.8	BDL	BDL	0.7	10.3	0.1
	P402651	MT07	0.1	0.5	1.1	0.6	3.3	0.1	BDL	0.7	6.1	0.1
	P402652	MT07	0.1	0.7	1.4	0.8	5.2	BDL	BDL	0.8	10.1	0.1
	P402653	MT07	0.1	0.8	1.6	0.7	5.8	BDL	BDL	0.9	10.9	0.1
	P402654	MT07	0.1	0.5	1.4	0.6	5.2	BDL	BDL	0.7	10.5	0.1
	P402655	MT07	0.1	0.7	1.4	0.6	3.7	BDL	BDL	0.6	8.3	0.0
	P402656	MT07	0.1	0.7	1.4	1.0	4.9	BDL	BDL	1.0	10.2	0.1
	P402657	MT07	0.1	0.8	1.3	0.7	3.8	0.0	BDL	0.6	7.2	0.1
	P402658	MT07	0.1	0.5	1.2	0.7	4.1	0.1	BDL	0.6	7.8	0.1
	P402659	MT07	0.1	0.6	1.1	0.8	3.9	0.1	BDL	0.7	7.9	0.1
	P402660	MT07	0.1	0.6	1.1	0.7	4.8	BDL	BDL	0.7	10.3	0.1
	P402661	MT07	0.1	0.8	1.3	0.8	3.5	0.1	BDL	0.7	7.8	0.1
	P402662	MT07	0.0	0.7	1.9	0.4	1.4	0.1	BDL	0.6	2.8	0.1

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Ta	Tb	Th	TiO2	Tm	U	V	W	Y	Zn	Zr
UNITS			index	index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM
Ave. Crustal Abundance			1.1	0.65	8.5	4010	0.3	1.7	98	1	24	65	203
	P402616	MT01	1.3	0.9	2.1	1.0	0.7	8.7	0.8	11.4	0.5	0.4	0.6
	P402617	MT01	1.5	1.1	2.7	1.2	0.8	8.4	0.7	10.6	0.7	0.4	0.7
	P402618	MT01	1.3	1.1	2.5	1.1	0.8	14.4	0.8	10.4	0.7	0.5	0.6
	P402619	MT01	0.8	0.8	1.9	0.7	0.6	38.5	0.6	14.8	0.5	0.3	0.5
	P402620	MT01	1.1	1.0	2.5	0.9	0.8	100.6	0.8	17.4	0.7	0.3	0.6
	P402601	MT01	0.8	0.9	1.9	0.8	0.6	47.4	0.8	18.0	0.5	0.3	0.5
	P402602	MT01	1.4	1.0	2.4	1.1	0.8	74.7	0.8	14.2	0.6	0.4	0.8
	P402603	MT01	1.2	0.9	2.1	1.2	0.8	73.5	1.1	16.9	0.5	0.5	0.6
	P402604	MT01	1.3	1.0	1.9	1.2	0.8	23.2	0.8	13.8	0.6	0.5	0.6
	P402605	MT01	1.2	1.0	2.2	1.3	1.0	77.6	1.0	13.1	0.7	0.4	0.7
	P402621	MT01	1.2	1.0	2.2	1.4	0.9	55.6	1.0	11.9	0.6	0.3	0.7
	P402622	MT01	1.3	1.1	2.4	1.4	0.9	17.1	1.1	11.2	0.7	0.3	0.7
	P402623	MT01	1.1	1.0	2.3	1.2	0.8	31.9	1.3	10.0	0.6	0.3	0.6
	P402624	MT01	1.3	1.0	2.6	1.3	0.8	9.2	1.1	9.1	0.7	0.4	0.6
	P402625	MT01	1.3	1.0	2.8	1.4	0.8	5.1	1.0	8.4	0.6	0.3	0.6
	P402606	MT02	1.3	0.9	2.2	1.2	0.8	32.4	0.9	15.8	0.6	0.4	0.6
	P402607	MT02	1.1	0.8	2.0	1.0	0.7	8.4	0.8	24.7	0.5	0.6	0.5
	P402608	MT02	1.2	0.9	2.0	1.3	0.8	5.9	0.9	16.0	0.6	0.7	0.6
	P402609	MT02	1.3	0.9	2.0	1.3	0.8	5.2	0.9	15.3	0.7	0.6	0.7
	P402610	MT02	1.3	0.9	2.0	1.4	0.9	5.0	0.9	13.3	0.7	0.7	0.7
	P402626	MT03	1.4	1.1	2.6	1.2	0.8	9.6	0.9	12.4	0.7	0.3	0.6
	P402627	MT03	1.1	1.0	2.5	1.0	0.7	11.6	0.8	9.8	0.7	0.2	0.6
	P402628	MT03	1.0	1.0	2.3	0.9	0.8	12.4	0.8	9.0	0.7	0.2	0.6
	P402629	MT03	1.1	1.0	2.4	0.9	0.8	17.1	0.7	9.1	0.7	0.2	0.8
	P402630	MT03	1.1	1.1	2.3	0.9	0.9	69.4	0.9	11.2	0.7	0.5	0.6
	P402611	MT03	1.3	1.0	2.4	1.1	0.8	33.2	0.8	10.6	0.7	0.2	0.6
	P402612	MT03	1.2	1.1	2.4	1.2	0.9	26.2	1.0	10.9	0.7	0.3	0.5
	P402613	MT03	1.1	1.0	2.3	1.2	0.9	52.6	1.1	13.9	0.8	0.3	0.6
	P402614	MT03	1.2	1.1	2.3	1.2	0.9	18.8	1.0	12.5	0.7	0.3	0.6
	P402615	MT03	1.2	1.1	2.4	1.2	0.9	12.5	0.9	10.6	0.8	0.7	0.6
	P402631	MT04	0.7	4.9	2.4	0.6	4.0	2.4	0.3	5.1	3.5	0.1	1.0

Appendix 5 MEMA Rock Sample Geochemistry and Average Crustal Abundance Ratios.xls

IDENT	Sample No	Trench ID	Ta	Tb	Th	TiO2	Tm	U	V	W	Y	Zn	Zr
UNITS			index	index	index	index	index	index	index	index	index	index	index
SCHEME			G4PULM	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM	G4PULM	G4PULI	G4PULM
Ave. Crustal Abundance			1.1	0.65	8.5	4010	0.3	1.7	98	1	24	65	203
	P402632	MT04	1.7	24.5	5.7	1.1	24.9	9.7	0.8	13.7	20.0	0.2	2.5
	P402633	MT04	2.1	20.9	8.0	1.4	18.8	7.1	0.8	15.7	14.0	0.2	3.1
	P402634	MT04	1.7	18.6	5.3	1.2	18.0	7.0	0.6	11.5	14.4	0.2	2.4
	P402635	MT04	1.9	12.2	4.1	1.5	9.6	4.4	0.6	9.9	7.9	0.2	1.9
	P402636	MT05	1.3	1.4	2.7	1.4	1.1	6.0	0.8	4.0	0.9	0.4	0.7
	P402637	MT05	1.3	1.3	2.6	1.4	1.0	6.6	0.9	4.3	0.8	0.2	0.7
	P402638	MT05	1.3	1.3	2.8	1.3	0.9	5.4	0.7	4.5	0.8	0.3	0.7
	P402639	MT05	1.3	1.0	2.0	1.3	0.8	4.8	0.8	3.9	0.5	0.6	0.6
	P402640	MT05	1.2	1.2	2.5	1.4	1.0	5.4	0.9	4.5	0.8	0.4	0.8
	P402641	MT06	1.6	0.5	1.1	0.3	0.3	3.9	0.2	7.0	0.3	0.1	0.2
	P402642	MT06	2.3	0.8	1.8	0.5	0.5	7.9	0.5	7.9	0.5	0.2	0.4
	P402643	MT06	2.6	0.8	1.8	0.4	0.4	5.3	0.3	9.6	0.4	0.2	0.3
	P402644	MT06	2.7	0.8	1.7	0.3	0.4	8.7	0.2	9.3	0.4	0.2	0.3
	P402645	MT06	2.6	1.0	1.5	0.3	0.4	12.1	0.1	8.7	0.4	0.2	0.3
	P402646	MT06	BDL	0.3	0.2	0.0	0.1	33.2	0.1	0.7	0.1	0.1	0.0
	P402647	MT06	1.6	0.5	1.3	0.3	0.3	10.1	0.2	8.8	0.3	0.2	0.3
	P402648	MT06	2.6	0.6	1.7	0.3	0.4	7.4	0.3	9.5	0.4	0.3	0.4
	P402649	MT06	2.8	0.8	2.0	0.4	0.5	9.3	0.4	10.3	0.5	0.2	0.4
	P402650	MT07	2.9	0.6	1.8	0.4	0.4	6.2	0.1	7.4	0.4	0.2	0.3
	P402651	MT07	1.5	0.5	1.1	0.2	0.3	5.1	0.1	6.2	0.3	0.1	0.2
	P402652	MT07	2.9	0.8	1.8	0.3	0.4	6.9	0.2	6.6	0.5	0.2	0.3
	P402653	MT07	3.1	1.0	1.7	0.3	0.5	8.8	0.1	7.2	0.5	0.3	0.3
	P402654	MT07	3.2	0.7	1.7	0.3	0.4	4.6	0.1	6.8	0.4	0.2	0.3
	P402655	MT07	2.6	0.6	1.7	0.4	0.4	7.5	0.3	6.0	0.4	0.2	0.3
	P402656	MT07	3.1	0.9	1.8	0.3	0.4	5.8	0.1	6.5	0.4	0.2	0.3
	P402657	MT07	2.3	0.6	1.5	0.3	0.3	7.3	0.2	5.6	0.4	0.2	0.3
	P402658	MT07	2.4	0.6	1.4	0.3	0.3	5.2	0.2	6.2	0.3	0.2	0.3
	P402659	MT07	2.4	0.6	1.5	0.3	0.3	5.4	0.1	6.5	0.4	0.2	0.3
	P402660	MT07	3.1	0.8	1.8	0.3	0.4	6.6	0.1	7.2	0.4	0.2	0.4
	P402661	MT07	2.6	0.6	1.6	0.3	0.3	7.6	0.3	8.2	0.3	0.2	0.3
	P402662	MT07	0.6	0.5	0.4	0.1	0.1	110.6	0.1	6.0	0.1	0.1	0.1