

APPENDIX 3.

MARBLE MOUNTAIN CHEMICAL AND BRIGHTNESS ANALYSES

DDH MM-1

Sample Number	Sample Interval m	CaO %	LOI %	Al ₂ O ₃ %	MgO %	SiO ₂ %	Fe ₂ O ₃ %	Brightness (Photovolt) 577
MM-1-1	0 - 3.0	53.58	43.20	0.19	1.77	1.12	0.20	82.6
MM-1-2	3.0 - 5.9	54.09	43.31	0.19	0.96	0.59	0.15	95.5
MM-1-3	7.3 - 9.1	54.56	43.62	0.19	0.48	0.57	0.16	94.2
MM-1-4	9.1 - 12.2	52.51	43.49	0.19	0.93	0.59	0.17	92.2
MM-1-5	12.2 - 15.2	51.10	43.78	0.23	2.95	0.76	0.21	91.3
MM-1-6	15.2 - 18.3	53.19	43.43	0.19	1.57	0.65	0.25	92.0
MM-1-7	18.3 - 21.3	51.70	43.45	0.26	2.26	0.78	0.36	90.7
MM-1-8	21.3 - 24.4	53.05	43.75	0.21	2.02	0.50	0.18	94.7
MM-1-9	24.4 - 27.4	48.89	44.14	0.24	4.84	0.76	0.18	94.0
MM-1-10	27.4 - 30.5	42.38	45.10	0.19	10.56	0.76	0.45	90.4
MM-1-11	30.5 - 33.5	43.89	44.60	0.22	10.20	1.02	0.50	88.6
MM-1-12	33.5 - 36.6	51.22	43.67	0.20	3.23	0.71	0.22	87.1
MM-1-13	36.6 - 39.6	51.29	43.76	0.18	3.52	0.70	0.19	92.3
MM-1-14	39.6 - 42.7	54.35	43.05	0.18	0.62	1.21	0.15	95.8
MM-1-15	42.7 - 45.7	53.64	43.10	0.20	0.88	1.16	0.15	94.6
MM-1-16	45.7 - 48.8	52.43	43.22	0.21	1.22	0.73	0.15	95.1
MM-1-17	48.8 - 51.8	54.15	43.31	0.20	0.73	0.66	0.17	92.5
MM-1-18	51.8 - 54.9	54.22	43.38	0.21	0.67	0.55	0.18	91.2
MM-1-19	54.9 - 57.9	54.20	43.54	0.20	0.80	0.63	0.23	93.7
MM-1-20	57.9 - 61	54.15	43.57	0.20	1.23	0.65	0.17	96.5
MM-1-21	61 - 64.3	54.08	43.33	0.25	1.20	0.78	0.28	95.2
MM-1-22	64.3 - 67.1	54.34	43.56	0.22	0.87	0.85	0.25	96.3
MM-1-23	67.1 - 70.1	54.35	43.50	0.16	0.87	0.65	0.25	93.2
MM-1-24	70.1 - 73.2	54.04	43.25	0.29	1.20	0.93	0.29	93.5
MM-1-25	73.2 - 76.2	53.20	43.37	0.29	1.80	0.97	0.32	93.9
MM-1-26	76.2 - 79.2	45.45	44.12	0.30	8.16	1.16	0.43	92.1
MM-1-27	79.2 - 82.3	48.38	44.10	0.25	5.60	0.85	0.35	92.3

DDH MM-2

Sample Number	Sample Interval m	CaO %	LOI %	Al ₂ O ₃ %	MgO %	SiO ₂ %	Fe ₂ O ₃ %	Brightness (Photovolt) 577
MM-2-1	0 - 3.0	54.01	43.39	0.19	1.04	0.74	0.24	87.2
MM-2-2	3.0 - 6.1	55.02	42.51	0.21	1.23	0.67	0.19	93.2
MM-2-3	6.1 - 9.1	54.34	43.40	0.19	1.33	0.72	0.23	88.2
MM-2-4	9.1 - 12.2	52.66	43.41	0.21	2.16	0.69	0.25	89.6
MM-2-5	12.2 - 15.2	50.08	43.27	0.30	5.43	0.97	0.35	87.3
MM-2-6	27.4 - 30.5	46.10	43.30	0.21	7.61	0.69	0.42	88.7
MM-2-7	30.5 - 33.5	53.33	42.71	0.15	2.50	0.80	0.24	92.7
MM-2-8	33.5 - 36.6	54.17	42.03	0.16	1.40	0.75	0.23	92.3
MM-2-9	36.6 - 39.6	54.93	42.04	0.30	1.67	1.06	0.29	90.9
MM-2-10	39.6 - 42.1	53.33	42.44	0.26	1.53	1.36	0.50	81.9
MM-2-11	43.9 - 45.7	55.01	42.45	0.30	0.94	0.81	0.32	91.5
MM-2-12*	45.7 - 48.5	54.17	42.86	0.25	1.35	0.82	0.29	92.7

* MM-2-12 had some of sample MM-3-12 mixed with it.

DDH MM-3

Sample Number	Sample Interval m	CaO %	LOI %	Al ₂ O ₃ %	MgO %	SiO ₂ %	Fe ₂ O ₃ %	Brightness (Photovolt) 577
MM-3-1	0 - 3.0	50.39	43.71	0.19	5.14	0.61	0.35	89.1
MM-3-2	3.0 - 6.1	48.12	43.87	0.15	6.16	0.60	0.40	91.0
MM-3-3	6.1 - 9.1	51.48	43.27	0.13	3.60	0.52	0.28	91.6
MM-3-4	9.1 - 12.2	53.08	42.86	0.13	1.77	0.78	0.27	90.7
MM-3-5	12.2 - 15.2	53.75	43.23	0.14	1.31	0.59	0.28	91.9
MM-3-6	15.2 - 18.3	54.51	42.80	0.14	0.69	0.47	0.31	93.5
MM-3-7	18.3 - 21.3	54.51	42.39	0.14	0.75	0.80	0.28	92.9
MM-3-8	21.3 - 24.4	54.68	42.67	0.14	0.73	0.85	0.25	91.8
MM-3-9	24.4 - 27.4	52.66	43.15	0.16	3.06	0.67	0.23	92.4
MM-3-10	27.4 - 30.5	54.85	43.49	0.13	0.63	0.67	0.27	91.1
MM-3-11	30.5 - 33.5	54.51	42.51	0.16	0.93	0.87	0.40	91.1
MM-3-12	33.5 - 36.6	48.03	43.29	0.20	6.31	1.10	0.44	90.0
MM-3-13	36.6 - 39.6	50.64	43.18	0.18	5.52	0.78	0.42	88.8

DDH MM-4

Sample Number	Sample Interval m	CaO %	LOI %	Al ₂ O ₃ %	MgO %	SiO ₂ %	Fe ₂ O ₃ %	Brightness (Photovolt) 577
MM-4-1	28.7 - 31.7	55.27	42.70	0.15	0.65	0.80	0.31	90.7
MM-4-2	31.7 - 33.5	54.59	43.19	0.17	0.54	0.93	0.34	89.1
MM-4-3	33.5 - 35.4	54.59	42.97	0.21	1.11	0.70	0.17	92.4

DDH MM-5

Sample Number	Sample Interval m	CaO %	LOI %	Al ₂ O ₃ %	MgO %	SiO ₂ %	Fe ₂ O ₃ %	Brightness (Photovolt) 577
MM-5-1	12.2 - 15.2	54.51	42.80	0.33	1.19	1.28	0.18	85.0
MM-5-2	15.2 - 18.3	54.50	42.08	0.47	0.69	1.38	0.21	82.6
MM-5-3	18.3 - 21.3	53.00	42.71	0.41	0.50	1.48	0.20	83.4
MM-5-4	21.3 - 24.4	54.76	42.75	0.53	0.47	1.33	0.24	84.3
MM-5-5	24.4 - 27.4	54.59	42.52	0.53	0.47	1.50	0.32	86.6
MM-5-6	27.4 - 30.5	54.85	42.41	0.56	0.67	1.60	0.25	82.3
MM-5-7	30.5 - 32.3	54.09	42.17	0.59	0.57	1.96	0.23	88.4
MM-5-8	42.7 - 45.7	52.99	42.69	0.41	2.48	1.43	0.25	88.0
MM-5-9	45.7 - 48.8	54.59	42.19	0.52	1.01	2.11	0.23	86.9
MM-5-10	48.8 - 51.8	53.50	41.70	0.80	0.46	2.88	0.18	89.2
MM-5-11	51.8 - 54.9	52.07	41.38	1.06	2.17	2.91	0.33	83.5
MM-5-12	54.9 - 57.9	51.99	41.06	1.05	2.07	3.02	0.34	85.4
MM-5-13	57.9 - 61	52.07	41.85	0.64	3.16	2.42	0.33	85.8
MM-5-14	61 - 64.3	53.67	42.68	0.47	1.57	1.55	0.22	88.7
MM-5-15	66.8 - 69.5	54.68	42.07	0.56	0.83	1.84	0.18	91.1
MM-5-16	69.5 - 72.5	54.76	43.24	0.19	1.26	0.77	0.17	92.4
MM-5-17	72.5 - 75.6	54.26	42.68	0.26	1.54	0.82	0.19	91.5
MM-5-18	75.6 - 78.6	48.79	42.97	0.39	5.44	1.55	0.30	88.8
MM-5-19	79.2 - 82.3	47.78	43.92	0.15	7.23	0.78	0.28	91.4
MM-5-20	82.3 - 85.3	44.41	44.46	0.16	9.19	0.66	0.31	89.3
MM-5-21	85.3 - 88.4	39.17	44.92	0.20	12.07	0.90	0.46	83.2
MM-5-22	88.4 - 91.4	46.94	44.10	0.22	8.55	0.77	0.34	92.3
MM-5-23	91.4 - 94.5	49.63	43.71	0.24	5.91	0.87	0.29	91.6
MM-5-24	94.5 - 97.5	54.01	43.05	0.18	1.77	0.63	0.18	94.9
MM-5-25	97.5 - 100.6	54.17	43.07	0.15	1.62	0.47	0.17	92.8
MM-5-26	100.6 - 103.6	54.17	42.99	0.169	1.67	0.91	0.16	89.3
MM-5-27	103.6 - 105.5	54.01	42.65	0.19	1.29	1.24	0.19	93.0
MM-5-28	106.7 - 109.7	54.85	42.29	0.14	0.63	1.15	0.21	92.8
MM-5-29	109.7 - 112.8	54.93	42.71	0.17	0.81	0.62	0.13	93.3
MM-5-30	112.8 - 115.8	54.85	42.85	0.15	0.81	0.66	0.11	93.6
MM-5-31	115.8 - 118.8	54.76	42.80	0.18	0.91	0.73	0.12	94.2
MM-5-32	118.9 - 121.9	54.76	42.80	0.19	1.06	0.81	0.11	93.0

DDH 2/65

Sample Number	Sample Interval m	CaO %	LOI %	Al ₂ O ₃ %	MgO %	SiO ₂ %	Fe ₂ O ₃ %	Brightness (Photovolt) 577
DDH-2/65-1	0 - 3.0	49.29	44.18	0.22	5.24	0.80	0.22	88.4
DDH-2/65-2	3.0 - 6.1	46.43	44.58	0.25	7.39	0.87	0.24	93.1
DDH-2/65-3	6.1 - 9.1	45.93	44.29	0.27	7.68	0.87	0.29	90.4
DDH-2/65-4	9.1 - 12.2	48.12	44.04	0.27	5.62	0.73	0.20	89.7
DDH-2/65-5	12.2 - 15.2	50.81	43.78	0.36	3.65	0.75	0.19	90.5
DDH-2/65-6	15.2 - 17.1	52.15	43.59	0.27	2.45	0.87	0.19	92.7
DDH-2/65-7	21.3 - 24.4	54.85	43.04	0.27	0.58	0.84	0.11	93.8
DDH-2/65-8	24.4 - 27.4	55.01	43.23	0.24	0.70	1.02	0.10	93.0
DDH-2/65-9	27.4 - 30.5	54.01	43.26	0.42	1.00	0.95	0.10	93.2
DDH-2/65-10	30.5 - 33.5	54.01	43.83	0.33	1.09	0.71	0.14	93.3
DDH-2/65-11	33.5 - 36.6	50.14	43.81	0.60	3.83	1.46	0.22	87.4
DDH-2/65-12	36.6 - 39.6	52.32	43.71	0.42	2.44	1.13	0.16	92.5
DDH-2/65-13	39.6 - 44.2	53.84	43.50	0.36	1.49	0.88	0.13	93.8
DDH-2/65-14	44.2 - 45.7	55.01	43.77	0.23	0.61	0.74	0.09	96.1