TABLE 3. Individual Abundance Results for V11 in M2 Using the Model Atmospheres Listed in Table 1.

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log\epsilon$ 1992 Jun 17	1993 Dec 6
Mg I				
5528.42	4.34	−0.34	···	94, 5.61
Ca I				
5588.76	2.52	0.36	···	110, 4.83
6122.23	1.89	−0.32	133, 5.12	···
6162.18	1.90	−0.09	159, 5.16	···
6439.08	2.52	0.39	105, 4.78	···
Sc II				
5239.82	1.45	−0.94	···	124, 1.72
5640.99	1.50	−1.35	···	90, 1.84
6245.62	1.51	−0.93	54, 1.29	···
Ti II				
4874.01	3.09	−0.79	···	98, 3.54
Fe I				
4924.78	2.28	−2.20	···	58, 6.07
4946.39	3.37	−1.01	···	47, 5.89
5014.94	3.94	−0.27	···	51, 5.78
5022.24	3.98	−0.49	···	34, 5.81
5049.82	2.28	−1.35	···	108, 5.70
5083.34	0.96	−2.91	···	122, 5.97
5123.72	1.01	−3.07	···	83, 5.81
5125.12	4.22	−0.08	···	43, 5.77
5133.69	4.18	0.20	···	91, 5.98
5150.84	0.99	−3.00	···	95, 5.81
5151.91	1.01	−3.32	···	68, 5.90
5162.27	4.18	0.08	···	85, 6.04
5216.27	1.61	−2.12	···	114, 5.78
5339.93	3.27	−0.68	···	73, 5.71
5364.87	4.45	0.23	···	69, 5.99
5367.48	4.42	0.44	···	77, 5.83
5383.37	4.31	0.65	···	109, 5.84
5393.17	3.24	−0.72	···	59, 5.57
5410.91	4.47	0.40	···	66, 5.80
5445.04	4.39	0.04	···	47, 5.86
5506.78	0.99	−2.80	···	135, 5.94
5569.62	3.42	−0.49	···	78, 5.70
6065.48	2.61	−1.53	64, 5.88	···
6137.69	2.59	−1.40	82, 5.90	···
6191.56	2.43	−1.42	86, 5.78	···
6230.72	2.56	−1.28	85, 5.77	···
6252.56	2.40	−1.72	63, 5.83	···
6393.60	2.43	−1.43	64, 5.57	···
6411.65	3.65	−0.66	43, 5.82	···
6430.85	2.18	−2.01	65, 5.57	···
6592.91	2.73	−1.47	33, 5.53	···
6677.99	2.69	−1.44	67, 5.87	···
7445.74	4.26	−0.11	56, 6.00	···
7511.03	4.18	0.10	64, 5.79	···

TABLE 3. (continued)

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log \epsilon$ 1992 Jun 17	1993 Dec 6
8387.77	2.18	−1.49	140, 5.86	···
8688.63	2.18	−1.21	200, 6.09	···
Fe II				
5325.56	3.22	−3.17	···	88, 5.83
5414.05	3.22	−3.62	···	52, 5.90
5425.26	3.20	−3.21	···	86, 5.82
6149.25	3.89	−2.72	59, 5.88	···
6416.93	3.89	−2.68	49, 5.72	···
6432.28	2.89	−3.58	69, 5.80	···
Y II				
5087.42	1.08	−0.17	···	117, 0.36
5402.78	1.84	−0.57	···	36, 0.72

TABLE 4. Individual Abundance Results for V42 in M5 Using the Model Atmospheres in Table 1.

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log\epsilon$ 1994 Apr 29	1995 May 15
Na I				
6154.23	2.10	−1.57	···	12, 5.85
Ca I				
5857.46	2.93	0.24	···	77, 5.38
6162.18	1.90	−0.09	···	167, 5.85
6717.69	2.71	−0.52	55, 5.46	42, 5.51
Sc II				
6245.62	1.51	−0.93	···	66, 2.10
6604.60	1.36	−1.53	70, 2.06	···
Fe I				
5862.35	4.55	−0.39	···	26, 6.46
6024.06	4.55	−0.06	···	40, 6.36
6065.48	2.61	−1.53	76, 6.15	56, 6.28
6137.69	2.59	−1.40	92, 6.17	75, 6.35
6191.56	2.43	−1.42	89, 6.00	79, 6.26
6200.31	2.61	−2.44	18, 6.22	···
6230.72	2.56	−1.28	119, 6.30	85, 6.30
6232.63	3.65	−1.25	25, 6.21	···
6252.56	2.40	−1.72	91, 6.28	57, 6.28
6265.13	2.18	−2.55	38, 6.29	24, 6.42
6335.34	2.20	−2.32	55, 6.29	···
6336.84	3.69	−0.78	43, 6.07	33, 6.19
6411.65	3.65	−0.66	60, 6.12	50, 6.28
6430.85	2.18	−2.01	80, 6.23	55, 6.34
6592.91	2.73	−1.47	···	53, 6.28
6677.99	2.68	−1.44	77, 6.12	···
6750.15	2.42	−2.62	28, 6.38	···
7130.92	4.22	−0.70	42, 6.47	···
7411.12	4.28	−0.34	57, 6.36	···
7445.74	4.26	−0.11	64, 6.19	···
Fe II				
6084.10	3.20	−3.80	50, 6.26	31, 6.37
6149.25	3.89	−2.72	79, 6.18	67, 6.39
6247.55	3.89	−2.34	···	91, 6.27
6369.46	2.89	−4.19	48, 6.30	···
6416.93	3.89	−2.68	···	54, 6.20
6432.28	2.89	−3.58	90, 6.15	74, 6.49
Ni I				
6643.64	1.68	−2.30	24, 4.95	···
Ba II				
5853.69	0.60	−1.00	···	123, 1.42
Eu II				
6645.13	1.38	0.22	47, −0.04	···

TABLE 5. Individual Abundance Results for V84 in M5 Using the Model Atmospheres in Table 1.

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log\epsilon$ 1994 Jun 24&25	1994 Jun 26&27	1996 Apr 9&10
C I					
7113.17	8.64	−0.92	···	<7,<7.04	···
7115.19	8.64	−0.90	···	<7,<7.02	···
7116.99	8.65	−1.08	···	<7,<7.20	···
O I					
7771.95	9.14	0.33	···	76, 7.68	···
7775.40	9.14	−0.04	···	42, 7.56	···
Na I					
5682.65	2.10	−0.71	···	···	91, 5.82
6154.23	2.10	−1.57	15, 5.82	···	···
Mg I					
5711.08	4.34	−1.68	···	···	61, 6.51
Al I					
6696.03	3.14	−1.32	28, 5.96	28, 6.00	30, 5.89
Si I					
5690.43	4.93	−1.87	···	···	26, 6.77
5772.15	5.08	−1.75	···	···	29, 6.87
6237.33	5.61	−1.14	17, 6.60	···	···
Si II					
6347.09	8.12	0.26	···	108, 6.98	···
6371.35	8.12	−0.05	···	67, 6.78	31, 6.58
Ca I					
5857.46	2.93	0.24	99, 5.35	114, 5.56	122, 5.36
6717.69	2.71	−0.52	65, 5.46	56, 5.41	94, 5.58
Sc II					
5641.00	1.50	−1.35	···	···	127, 2.55
5667.15	1.50	−1.48	···	108, 2.53	···
6245.62	1.51	−0.93	86, 1.65	113, 1.99	···
6604.60	1.36	−1.53	···	···	81, 2.12
Ti I					
6258.11	1.44	−0.30	···	···	35, 4.00
6261.11	1.43	−0.42	···	···	40, 4.18
Cr I					
4652.16	1.00	−1.03	59, 4.13	···	···
Fe I					
4924.78	2.28	−2.20	74, 6.34	···	128, 6.59
4938.81	2.87	−1.08	105, 6.18	···	···
4946.39	3.37	−1.01	65, 6.18	···	98, 6.29
5002.79	3.40	−1.44	27, 6.11	···	61, 6.39
5014.94	3.94	−0.27	79, 6.18	···	109, 6.26
5022.24	3.98	−0.49	43, 6.01	···	81, 6.26
5074.75	4.22	−0.16	···	···	100, 6.37
5090.77	4.26	−0.36	···	···	71, 6.32
5121.64	4.28	−0.72	···	···	41, 6.35
5125.12	4.22	−0.08	···	···	108, 6.35
5141.75	2.42	−2.16	···	···	86, 6.29
5242.49	3.63	−0.97	···	37, 6.09	60, 6.14
5281.79	3.04	−0.83	···	···	133, 6.06

TABLE 5. (continued)

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log \epsilon$ 1994 Jun 24&25	1994 Jun 26&27	1996 Apr 9&10
5322.04	2.28	−2.84	···	28, 6.43	54, 6.50
5364.87	4.45	0.23	···	···	123, 6.41
5367.48	4.42	0.44	···	129, 6.58	129, 6.23
5445.04	4.39	0.04	···	87, 6.44	104, 6.35
5554.90	4.55	−0.38	···	···	59, 6.49
5563.60	4.19	−0.84	···	···	35, 6.27
5567.39	2.61	−2.56	···	···	28, 6.20
5569.62	3.42	−0.49	···	···	156, 6.33
5633.95	4.99	−0.12	···	···	24, 6.18
5686.53	4.55	−0.45	···	43, 6.56	···
5859.57	4.55	−0.67	···	26, 6.49	33, 6.43
5862.35	4.55	−0.39	37, 6.36	36, 6.38	42, 6.29
6020.17	4.61	−0.21	···	···	58, 6.35
6027.05	4.08	−1.09	15, 6.10	···	···
6056.01	4.73	−0.40	21, 6.23	···	···
6065.48	2.61	−1.53	87, 6.06	···	139, 6.26
6137.69	2.59	−1.40	107, 6.11	···	···
6200.31	2.61	−2.44	22, 6.11	···	···
6213.43	2.22	−2.48	52, 6.21	···	···
6230.72	2.56	−1.28	120, 6.08	135, 6.36	···
6232.63	3.65	−1.25	33, 6.21	···	···
6252.56	2.40	−1.72	103, 6.16	111, 6.35	···
6265.13	2.18	−2.55	48, 6.18	57, 6.39	104, 6.50
6335.34	2.20	−2.32	69, 6.21	79, 6.40	124, 6.46
6336.84	3.69	−0.78	49, 6.00	54, 6.13	68, 6.03
6411.65	3.65	−0.66	73, 6.11	73, 6.18	93, 6.10
6419.95	4.73	−0.09	29, 6.08	37, 6.26	···
6421.35	2.28	−2.01	91, 6.20	···	···
6430.85	2.18	−2.01	98, 6.15	···	···
6592.91	2.73	−1.47	74, 5.95	85, 6.16	122, 6.15
6593.87	2.44	−2.42	40, 6.20	39, 6.28	75, 6.37
6609.11	2.56	−2.69	···	···	34, 6.31
6750.15	2.42	−2.62	28, 6.18	40, 6.46	54, 6.34
7445.74	4.26	−0.11	···	79, 6.27	···
Fe II					
4620.52	2.83	−3.23	133, 6.33	···	···
5325.56	3.22	−3.17	···	···	93, 6.27
5414.05	3.22	−3.62	···	77, 6.46	53, 6.32
5425.26	3.20	−3.21	···	94, 6.21	91, 6.27
6084.10	3.20	−3.80	45, 6.13	···	44, 6.34
6149.25	3.89	−2.72	78, 6.14	···	66, 6.25
6247.55	3.89	−2.34	···	121, 6.29	···
6369.46	2.89	−4.19	44, 6.17	62, 6.47	45, 6.39
6416.93	3.89	−2.68	72, 6.03	···	···
6432.28	2.89	−3.58	88, 6.03	118, 6.43	91, 6.24
Ni I					
5754.68	1.94	−2.33	···	···	55, 5.29
6643.64	1.68	−2.30	40, 4.96	41, 5.07	75, 5.11

TABLE 5. (continued)

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log\epsilon$ 1994 Jun 24&25	1994 Jun 26&27	1996 Apr 9&10
6767.78	1.83	−2.17	37, 4.93	44, 5.13	···
Zn I					
4722.16	4.03	−0.39	68, 3.46	···	···
4810.54	4.08	−0.17	···	···	122, 3.62
Y II					
5087.42	1.08	−0.17	···	···	132, 0.86
5119.11	0.99	−1.36	···	···	34, 0.98
5402.78	1.84	−0.57	···	47, 1.21	51, 1.38
6613.73	1.74	−1.10	···	···	16, 1.07
Zr II					
5112.28	1.66	−0.59	···	···	45, 1.56
Ba II					
5853.69	0.60	−1.00	164, 0.93	196, 1.52	···
La II					
6390.49	0.32	−1.45	···	···	25, 0.35
Ce II					
4562.37	0.47	0.32	73, 0.20	···	···
5274.24	1.04	0.32	···	···	29, 0.31
Nd II					
5089.83	0.21	−1.17	···	···	38, 0.78
5092.80	0.38	−0.63	···	···	51, 0.59
5234.21	0.55	−0.33	···	···	47, 0.42
5319.82	0.55	−0.21	···	···	83, 0.64
5485.71	1.26	−0.12	···	···	22, 0.58
Eu II					
6645.13	1.38	0.22	46, −0.25	59, 0.02	75, 0.19

TABLE 6. Individual Abundance Results for the 1992 June 17 Spectrum of V2 in M10 Using the Model Atmospheres Listed in Table 1.

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log \epsilon$
Si I			
7405.79	5.61	−0.54	31, 6.02
8556.80	5.87	−0.19	31, 6.26
Ca I			
6122.23	1.89	−0.32	179, 5.11
6455.60	2.52	−1.29	22, 5.03
Sc II			
6245.62	1.51	−0.93	66, 1.02
Fe I			
6065.48	2.61	−1.53	118, 5.70
6137.69	2.59	−1.40	111, 5.47
6191.56	2.43	−1.42	121, 5.39
6200.31	2.61	−2.44	29, 5.64
6213.43	2.22	−2.48	45, 5.45
6230.72	2.56	−1.28	145, 5.62
6252.56	2.40	−1.72	99, 5.44
6265.13	2.18	−2.55	56, 5.60
6335.34	2.20	−2.32	72, 5.55
6336.84	3.69	−0.78	45, 5.47
6411.65	3.65	−0.66	51, 5.37
6430.85	2.18	−2.01	112, 5.56
6592.91	2.73	−1.47	89, 5.46
6677.99	2.69	−1.44	82, 5.31
6750.15	2.42	−2.62	38, 5.69
7411.14	4.28	−0.34	37, 5.53
7445.74	4.26	−0.11	51, 5.45
7511.03	4.18	0.10	95, 5.58
Fe II			
6247.55	3.89	−2.34	64, 5.52
6416.93	3.89	−2.68	33, 5.45
6432.28	2.89	−3.58	58, 5.50

TABLE 7. Individual Abundance Results for the 1995 June 10 & 12 Spectra of V17 in M28 Using the Model Atmospheres Listed in Table 1.

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log \epsilon$
Si I			
5772.15	5.08	−1.75	39, 6.76
6237.33	5.61	−1.14	28, 6.55
6721.84	5.86	−1.26	20, 6.76
Ca I			
5857.46	2.93	0.24	140, 5.19
6166.44	2.52	−1.14	45, 5.15
Sc II			
5239.82	1.45	−0.94	157, 1.93
5526.55	1.77	−0.13	200, 2.05
6245.62	1.51	−0.93	102, 1.55
6604.60	1.36	−1.53	76, 1.71
Ti II			
4874.01	3.09	−0.79	150, 4.32
5336.79	1.58	−1.63	208, 3.84
6606.97	2.06	−2.79	28, 3.61
Mn I			
6021.79	3.08	0.03	38, 3.55
Fe I			
4930.31	3.96	−1.20	54, 6.31
4946.39	3.37	−1.01	127, 6.12
4973.10	3.96	−0.85	98, 6.40
5044.22	2.85	−2.04	105, 6.31
5074.75	4.22	−0.16	138, 6.38
5090.78	4.26	−0.36	84, 6.12
5145.10	2.19	−3.15	84, 6.43
5242.49	3.63	−0.97	91, 6.02
5307.36	1.61	−2.97	156, 6.12
5322.04	2.28	−2.84	87, 6.22
5367.48	4.42	0.44	162, 6.22
5373.71	4.47	−0.71	43, 6.23
5398.29	4.44	−0.73	62, 6.44
5554.90	4.55	−0.38	57, 6.15
5567.39	2.61	−2.56	60, 6.07
5762.99	4.21	−0.41	91, 6.09
5859.80	4.55	−0.67	46, 6.28
5862.35	4.55	−0.39	50, 6.05
6027.05	4.08	−1.09	37, 6.02
6173.34	2.22	−2.88	96, 6.17
6187.99	3.94	−1.57	23, 6.08
6213.43	2.22	−2.48	124, 5.98
6232.63	3.65	−1.25	65, 5.98
6593.87	2.44	−2.42	119, 6.12
6703.55	2.76	−3.05	22, 6.10
6750.15	2.42	−2.62	104, 6.16
Fe II			
4993.35	2.80	−3.67	111, 6.34
5325.56	3.22	−3.17	107, 6.25

TABLE 7. (continued)

Species Wavelength(Å)	Low E.P. (eV)	$\log gf$	W_λ(mÅ), $\log \epsilon$
5414.05	3.22	−3.62	50, 6.10
6149.25	3.89	−2.72	76, 6.20
6369.46	2.89	−4.19	43, 6.13
6416.92	3.89	−2.68	78, 6.16
Ni I			
5435.87	1.99	−2.59	60, 5.08
6586.33	1.95	−2.81	65, 5.18
6767.78	1.83	−2.17	101, 4.68
Zn I			
4810.54	4.08	−0.17	116, 3.25
Y II			
5402.78	1.84	−0.57	50, 0.99
Ba II			
5853.69	0.60	−1.00	225, 0.92