

Table T4. Characteristic directions and polarity ratings and polarity chron assignments, Site 1052. (See table notes. Continued on next five pages.)

Position, age, facies/Core, section, interval (cm)	Run name	Depth (mbsf)	Characteristic magnetization and polarity					Polarity rating	Polarity column		Polarity chron assignment	Comments
			Interval (°C)	Characteristic direction			Schematic		Generalized			
				Declination	Inclination	MAD						
late Eocene												
171B-1052A-												
3H-2, 30-32	032-030	15.00	100-200	116.0	51.9	18.6	N??					
3H, 3, 30-32	033-030	16.50	140-210	152.6	24.0	11.2	NP			C16n		
3H-5, 31-33	035-031	19.51	180-240	191.5	26.2	25.2	NPP					
3H-6, 30-32	036-030	21.00	140-140	279.2	-19.5		RPP			C16n.1r?	Shipboard pass-through cryogenic magnetometer data also displayed this "R??" polarity zone.	
4H-2, 30-32	042-030	24.50	200-400	275.3	59.5	8.9	N					
4H-3, 30-32	043-030	26.00	180-400	294.4	47.8	9.8	N					
4H-5, 31-33	045-031	29.01	140-270	318.3	33.7	9.0	NP			C16n		
4H-7, 31-33	047-031	32.01	140-240	290.2	47.5	14.6	NPP					
5H-1, 30-32	051-030	32.50	140-240	299.8	57.4	36.6	NPP					
5H-3, 30-32	053-030	35.50	140-210	345.6	77.1	11.2	NPP					
5H-4, 30-32	054-030	37.00	140-240	73.1	-47.4	27.2	RPP					
5H-5, 30-32	055-030	38.50	140-270	197.6	-52.0	29.0	INT			C16r		
5H-6, 30-32	056-030	40.00	180-240	259.3	11.5	23.4	R??					
6H-2, 30-32	062-030	43.50	100-350	182.8	-31.7	34.7	INT					
6H-3, 30-32	063-030	45.00	140-350	72.4	75.7	31.6	N??					
6H-5, 30-32	065-030	48.00	140-300	178.2	71.0	47.4	N??					
7H-1, 30-33	071-030	51.50	140-270	237.4	56.5	33.3	NPP					
7H-3, 30-32	073-030	54.50	140-400	268.3	62.0	19.6	NP			C17n		
7H-5, 30-32	075-030	57.50	140-270	269.1	73.8	26.4	NP					
8H-1, 30-32	081-030	61.00	180-270	177.0	43.0	30.6	NPP					
8H-3, 44-46	083-044	64.14	140-350	174.5	18.4	29.3	INT					
8H-5, 30-32	085-030	67.00	180-300	185.8	43.7	17.3	NP					
9H-1, 35-37	091-035	70.55	140-270	67.9	72.0	15.1	NPP					
9H-2, 30-32	092-030	72.00	140-270	304.3	-48.7	33.0	RP			C17n.1r		
9H-3, 30-32	093-030	73.50	140-240	261.4	50.4	38.7	NPP					
9H-4, 30-32	094-030	75.00	140-270	255.0	47.4	40.4	RPP			C17n.1r?	Uncertain validity of this lower "C17n.1r" zone.	
9H-5, 30-32	095-030	76.50	140-180	49.4	41.6	14.7	NPP					
9H-6, 30-32	096-030	78.00	140-300	117.9	44.1	7.8	N					
middle Eocene												
10H-1, 62-64	101-062	80.32	140-240	214.8	30.3	11.2	NP			C17n		
10H-2, 31-33	102-031	81.51	180-350	201.4	41.3	22.0	NP					
10H-3, 30-32	103-030	83.00	140-240	161.8	-16.8	8.7	INT					
10H-4, 30-32	104-030	84.50	140-140	221.3	30.1	5.3	INT			C17n.2r?		
10H-5, 31-32	105-031	86.01	180-270	235.5	38.2	8.1	N					
11H-1, 30-32	111-030	89.50	140-300	37.6	51.4	10.2	NP			C17n		
11H-2, 31-33	112-031	91.01	140-240	170.6	-13.6	34.3	R??					
11H-3, 31-33	113-031	92.51	180-300	210.6	-31.2	8.4	R					
11H-4, 31-33	114-031	94.01	140-350	199.2	46.2	39.5	RP					
11H-5, 31-33	115-031	95.51	140-240	197.8	-36.7	11.8	RP			C17r		
11H-7, 30-32	117-030	98.50	180-400	203.6	-39.6	6.4	R					
12H-1, 45-47	121-045	99.15	180-350	351.7	-35.3	6.5	R					
12H-2, 31-33	122-033	100.51	180-300	311.9	-57.8	6.2	R					
12H-3, 31-33	123-031	102.01	140-140	244.7	83.1	3.4	INT					

Table T4 (continued).

Position, age, facies/Core, section, interval (cm)	Run name	Depth (mbsf)	Characteristic magnetization and polarity					Polarity rating	Polarity column		Polarity chron assignment	Comments
			Interval (°C)	Characteristic direction			Schematic		Generalized			
				Declination	Inclination	MAD						
12H-5, 30-32	125-030	105.00	180-400	194.5	45.9	6.8	NP		C18n			
13H-1, 32-34	131-032	108.52	140-350	49.0	41.0	7.0	N					
13H-3, 31-33	133-031	111.51	140-350	34.9	50.4	7.5	N					
13H-5, 32-34	135-032	114.52	140-300	37.4	49.9	3.6	N					
13H-6, 32-34	136-032	116.02	150-300	43.7	53.7	12.9	NP					
14H-1, 30-32	141-030	118.00	210-350	5.4	55.3	9.2	N					
14H-3, 30-32	143-030	121.00	140-270	6.5	60.5	7.2	N					
14H-5, 30-32	145-030	124.00	140-350	61.5	57.2	6.4	N					
15H-1, 69-71	151-069	127.89	210-300	348.7	65.8	6.4	N					
15H-2, 30-32	152-030	129.00	140-270	322.2	59.1	6.0	N					
16X-1, 72-74	161-072	130.42	140-350	331.0	54.1	5.9	N					
16X-3, 146-148	163-146	134.16	140-300	205.1	-46.3	10.2	R					
17X-2, 57-59	172-057	138.07	210-350	338.1	-32.9	7.1	R					
18X-1, 127-129	181-127	146.97	140-400	118.8	-51.3	3.1	R					
18X-CC, 14-16	189-014	154.74	000-400	22.6	-0.9	2.6	INT		C18r			
19X-1, 15-17	191-015	155.45	180-300	36.0	26.9	1.7	N					
19X-4, 25-27	194-025	160.05	180-300	10.8	23.3	2.7	N					
19X-6, 101-103	196-101	163.81	260-380	2.6	12.9	4.6	R					
19X-CC, 15-17	199-015	164.14	350-550	161.1	2.3	4.6	R??					
Paleocene										C26r	Shipboard pass-through cryogenic magnetometer indicates uppermost Core 171B-1052A-20X is a reversed-polarity zone, and biostratigraphy implies it is Chron C26r.	
20X-CC, 24-26	209-024	165.37	270-330	135.7	28.7	12.9	NP		C27n?	2 m added to avoid overlap with Core 171B-1052A-19X.		
late Paleocene												
171B-1052E-3R-CC, 6-8	039-006	159.40	150-290	310.4	-17.8	2.5	R		C26r	Core 171B-1052E-3R is paleontologically below Core 171B-1052A-19X, even though assigned meter levels overlap.		
15-m gap in recovery												
early Paleocene												
5R-1, 32-34	051-032	175.52	180-220	71.8	64.2	6.2	N		C27n	Calcareous nannofossils (mid-Zone CP3) imply that this normal-polarity zone is Chron C27n.		
10-m gap in recovery												
6R-CC, 3-5	063-003	185.33	170-230	269.3	-26.4	25.6	RPP		C27r			
20-m gap in recovery												
8R-1, 23-25	081-023	204.23	150-230	71.2	15.8	17.5	INT		?			
8R-2, 26-28	082-026	205.76	100-200	89.0	46.9	17.5	NPP					
8R-4, 27-29	084-027	208.77	180-180	271.7	1.4	4.6	INT					
8R-CC, 7-9	089-007	210.32	170-200	123.9	-22.7	21.4	RPP					
9R-1, 23-26	091-023	213.83	100-230	32.9	-44.9	21.7	RPP					
9R-CC, 12-14	099-012	215.92	150-230	355.4	50.4	20.2	INT					
10R-1, 116-118	101-116	224.36	100-170	225.4	-12.0	23.0	INT					
10R-2, 133-135	102-133	226.03	220-300	24.5	-29.0	19.5	RPP					
10R-3, 2-4	103-002	226.22	100-170	33.9	-23.0	3.9	RP					
10R-4, 121-123	104-121	228.91	150-260	73.0	-74.4	20.2	RPP					
									C27r			

Table T4 (continued).

Position, age, facies/Core, section, interval (cm)	Run name	Depth (mbsf)	Characteristic magnetization and polarity					Polarity rating	Polarity column		Polarity chron assignment	Comments
			Interval (°C)	Characteristic direction			Schematic		Generalized			
				Declination	Inclination	MAD						
10R-6, 47-49	106-047	230.67	140-230	221.9	-22.7	20.3	RP					
11R-1, 21-23	111-021	233.01	180-300	269.5	-26.3	19.8	RPP					
11R-2, 29-31	112-029	234.59	140-200	316.6	-45.7	16.2	RP					
12R-1, 50-52	121-050	242.90	100-200	292.9	6.4	20.6	INT					
12R-2, 106-108	122-106	244.96	150-290	326.5	-29.4	6.4	R					
12R-4, 108-110	124-108	247.77	150-400	279.3	-32.3	4.9	R					
13R-1, 40-42	131-040	252.40	140-420	207.4	-41.5	3.1	R					
13R-2, 57-59	132-057	254.07	180-260	356.5	21.4	14.4	NPP					
13R-3, 59-61	133-059	255.59	140-230	300.4	35.7	11.5	NP					
14R-1, 45-47	141-045	262.15	150-320	4.5	31.9	3.8	N					
15R-1, 61-63	151-061	271.91	180-380	195.4	48.1	6.7	N					
15R-CC, 19-21	159-019	274.11	100-170	328.9	41.3	12.4	NPP			C28n		
16R-1, 70-72	161-070	281.60	150-320	342.1	40.2	5.2	N					
16R-3, 34-36	163-034	284.24	200-400	168.5	45.5	14.5	N					
16R-4, 68-70	164-068	286.04	260-340	205.1	2.3	12.5	NPP					
16R-6, 45-47	166-045	288.81	140-350	204.0	64.4	10.2	NP					
17R-1, 79-81	171-079	291.29	290-320	235.9	43.7	10.3	NP				Apparently, reversed-polarity Chron C28r was not resolved or is absent in recovery.	
17R-2, 141-143	172-141	293.28	140-320	9.9	43.7	7.7	N			C29n		
17R-4, 65-67	174-065	295.52	260-340	1.1	35.9	9.3	NP					
17R-6, 139-141	176-137	299.24	100-230	68.3	36.3	24.4	NP					
20-m gap in sampling; polarity Zone C29r resolved in shipboard pass-through magnetometer.												
Maastrichtian												
20R-1, 64-66	201-064	319.94	140-210	345.6	34.2	40.8	NPP					
20R-2, 46-48	202-046	321.26	100-140	313.4	43.9	13.9	NPP					
20R-3, 60-62	203-060	322.90	140-210	321.9	37.3	23.0	NPP					
20R-5, 47-49	205-047	325.77	140-300	73.0	29.3	19.9	NPP					
20R-6, 48-50	206-048	327.28	230-260	302.4	-69.4	14.3	RPP					
20R-7, 59-61	207-059	328.89	180-270	336.8	38.7	19.2	NPP			C30n	?	
21R-1, 70-72	211-070	329.60	100-200	355.5	44.2	39.1	N??					
21R-2, 142-144	212-142	331.82	140-210	42.3	8.4	12.1	N??					
21R-3, 145-147	213-145	333.35	180-270	339.5	35.4	21.3	NPP					
21R-4, 86-88	214-086	334.26	140-210	306.5	50.1	24.4	NPP					
21R-5, 72-74	215-072	335.62	100-200	318.4	27.7	19.5	NPP					
22R-1, 11-13	221-011	338.71	260-290	213.5	-11.5	25.6	R??			C30r?		
22R-3, 23-25	223-023	341.83	140-210	15.6	63.3	19.0	INT					
22R-4, 58-60	224-058	343.68	140-200	306.8	12.3	22.8	R??					
23R-1, 100-102	231-100	349.30	260-290	136.4	25.7	28.3	NPP				Slump.	
23R-3, 61-63	233-061	351.91	140-180	342.1	61.0	8.2	NP			C31n		
23R-4, 69-71	234-069	353.49	140-240	179.3	-1.8	31.1	INT					
24R-1, 7-9	241-007	357.97	190-260	138.3	31.8	30.6	NPP					
24R-2, 4-7	242-004	359.44	200-400	66.9	26.1	17.4	NPP					
24R-3, 31-33	243-031	361.21	140-210	298.8	-32.1	26.7	RPP				?	
24R-4, 8-11	244-008	362.28	140-210	340.7	48.2	19.7	NPP					
25R-1, 27-29	251-027	367.77	100-170	255.3	29.0	22.1	INT					
25R-1, 99-102	251-049	368.49	140-210	169.8	50.1	35.5	NPP					
26R-1, 13-15	261-013	377.23	140-300	26.4	37.4	17.5	NP			C31n		

Table T4 (continued).

Position, age, facies/Core, section, interval (cm)	Run name	Depth (mbsf)	Characteristic magnetization and polarity					Polarity rating	Polarity column		Polarity chron assignment	Comments
			Interval (°C)	Characteristic direction			Schematic		Generalized			
				Declination	Inclination	MAD						
26R-2, 131-134	262-131	379.91	150-260	46.4	38.9	23.4	NPP			C31r		
26R-3, 45-47	263-045	380.55	170-200	172.1	55.2	8.6	NPP					
26R-4, 99-102	264-099	382.59	140-180	116.0	38.2	21.0	NPP					
26R-5, 44-46	265-044	383.54	100-200	97.6	62.3	16.0	NPP					
26R-6, 66-68	266-066	385.26	140-180	26.1	22.6	35.8	N??					
26R-7, 16-18	267-016	386.26	100-170	319.7	63.7	32.0	N??					
26R-CC, 7-9	269-007	386.73	150-260	100.2	-16.9	25.9	RPP					
27R-1, 87-89	271-087	387.57	210-240	116.2	-22.8	13.5	RPP					
27R-5, 85-87	275-085	393.55	180-210	189.8	-53.5	11.7	RPP					
27R-6, 4-6	276-004	394.24	170-200	222.3	-51.6	15.9	RPP					
27R-CC, 9-11	279-009	395.30	290-320	284.0	-59.7	27.5	RPP					
28R-1, 32-34	281-032	396.62	140-210	14.1	-38.9	26.8	RPP					
28R-2, 57-59	282-057	398.37	140-210	97.5	-24.9	26.4	RP					
28R-3, 59-61	283-059	399.89	140-210	85.5	-59.8	12.6	RPP					
29R-1, 27-29	291-027	406.17	210-240	7.0	-0.9	18.4	INT					
29R-3, 25-27	293-025	409.15	190-230	218.3	-25.6	16.4	RPP					
29R-5, 69-71	295-064	412.59	180-210	327.0	-10.2	7.6	RPP					
30R-1, 30-32	301-030	415.80	140-240	44.3	-9.4	18.5	RPP					
30R-3, 59-61	303-059	419.09	230-320	16.9	-42.8	20.6	RP					
30R-4, 25-27	304-025	420.25	170-200	246.2	-22.8	2.0	RPP					
30R-5, 47-49	305-047	421.97	210-240	17.8	-34.9	40.4	RPP					
30R-6, 31-33	306-031	423.31	180-240	51.5	-23.2	20.4	RP					
31R-1, 29-31	311-029	425.39	150-200	350.4	-32.7	14.1	RPP					
31R-2, 64-66	312-064	427.24	140-200	64.3	-21.7	8.6	RPP					
31R-3, 32-34	313-032	428.42	250-250	67.1	-20.9	14.3	RPP					
31R-4, 24-26	314-024	429.84	190-260	90.8	-11.4	14.4	RPP					
31R-5, 30-32	315-030	431.40	180-240	346.0	-34.1	20.2	RPP					
31R-6, 20-22	316-020	432.80	210-240	90.0	-37.8	27.1	RPP					
31R-7, 30-32	317-030	434.40	100-170	359.0	-11.7	23.0	RPP					
33R-1, 46-48	331-046	444.76	180-180	118.0	-45.8	15.3	RPP					
33R-CC, 4-6	339-004	445.84	170-170	48.6	-12.8	8.5	RPP					
34R-1, 31-33	341-031	454.21	190-320	222.8	-67.8	25.9	RPP					
34R-2, 30-32	342-030	455.70	100-100	10.7	-16.6	9.6	RPP					
35R-1, 47-49	351-047	464.07	140-210	79.9	-42.7	28.7	RP					
35R-2, 28-30	352-028	465.38	100-140	25.6	-8.4	26.4	RPP					
35R-3, 33-35	353-033	466.93	140-210	2.8	-413	38.9	RPP					
35R-4, 13-15	354-013	468.23	140-200	339.6	-68.5	39.5	RPP					
early Cenomanian												
36R-4, 64.5-66.5	364-064	478.35	180-260	0.3	45.1	12.2	NP			C34n		
36R-6, 127-129	366-127	481.97	200-300	175.5	46.7	12.2	NP					
37R-3, 51.5-54	373-051	485.83	200-300	39.3	41.0	10.1	N					
37R-6, 84-86	376-084	490.65	150-500	172.3	38.7	3.8	N					
38R-2, 26-28	382-026	494.16	180-260	36.6	21.2	7.6	NP					
38R-6, 19-21	386-019	500.09	140-380	311.1	51.8	5.7	N					
39R-1, 76-78	391-076	502.76	140-320	307.6	50.4	15.2	NP					
39R-6, 114-116	396-114	510.14	200-330	228.9	40.8	5.0	N					

Table T4 (continued).

Position, age, facies/Core, section, interval (cm)	Run name	Depth (mbsf)	Characteristic magnetization and polarity					Polarity chron assignment	Comments	
			Interval (°C)	Characteristic direction			Polarity column			
				Declination	Inclination	MAD	Polarity rating			Schematic
late Albian										
42R-1, 46-48	421-046	530.36	260-380	101.2	40.8	5.3	NP			
42R-5, 72.5-75	425-073	536.63	140-420	53.2	41.0	3.3	N			
43R-2, 58-60	432-058	541.52	220-300	175.9	45.8	7.8	N			
43R-4, 87-89	434-087	544.81	140-350	151.9	44.5	3.2	N			
44R-1, 26-28	441-026	549.36	270-360	48.9	35.6	12.8	NP			
44R-6, 23-25	446-023	556.83	170-230	18.4	46.8	8.8	NP			
46R-5, 146-148	465-146	575.22	180-300	140.0	33.0	4.1	NP			
47R-1, 30-32	471-030	578.30	200-360	355.4	44.6	5.8	N			
47R-3, 16-19	473-016	581.16	200-320	301.6	24.8	11.7	N			
47R-5, 29-31	475-029	584.29	260-300	182.4	65.7	18.3	NPP			
47R-7, 18-20	477-018	587.18	200-290	232.2	22.8	3.3	N			
48R-1, 37-39	481-037	587.97	240-360	118.3	33.5	8.2	N			
48R-3, 35-37	483-035	590.95	140-260	211.2	28.6	8.0	N			
48R-5, 27-29	485-027	593.87	220-300	247.3	33.5	8.7	NP			
48R-7, 30-32	487-030	596.90	200-290	165.0	33.2	8.1	N			
49R-1, 30-32	491-030	597.60	140-350	343.1	34.0	4.3	N			
49R-3, 72-74	493-072	601.02	180-300	278.3	39.0	11.8	N		C34n	
49R-5, 97-99	495-097	604.27	140-350	246.7	36.5	7.6	N			
50R-1, 144-146	501-144	608.34	140-250	110.3	38.7	3.7	NP			
50R-2, 94-96	502-094	609.34	240-330	351.9	39.1	6.6	NP			
50R-3, 14-16	503-014	610.04	200-380	195.8	40.1	8.9	N			
51R-1, 143-145	511-143	618.03	180-300	245.7	46.7	10.3	N			
51R-2, 40-42	512-040	618.50	140-300	282.0	67.7	5.6	NPP			
51R-2, 81-83	512-081	618.91	200-330	16.2	52.6	3.9	N			
52R-1, 20-22	521-020	621.90	180-260	300.6	38.4	5.9	NP			
52R-2, 106-108	522-106	624.26	170-290	227.5	44.4	5.6	N			
52R-3, 119-121	523-119	625.89	200-330	91.3	46.3	15.4	NPP			
52R-4, 119-121	524-119	627.39	230-320	257.7	66.2	15.1	NPP			
53R-1, 21-23	531-021	627.41	180-340	6.2	33.9	4.5	N			
53R-2, 141-143	532-141	630.11	140-320	214.5	32.0	17.7	NP			
53R-3, 32-34	533-032	630.52	180-300	342.3	45.8	6.2	N			
53R-5, 140-141	535-140	634.60	200-270	7.8	54.8	1.9	NP			
53R-6, 40-42	536-040	635.10	170-290	9.0	32.6	13.1	NP			
54R-1, 9-11	541-009	636.89	140-320	111.1	32.7	2.8	N			
54R-2, 3-5	542-003	638.33	220-300	115.6	43.9	8.1	NP			
54R-2, 138-140	542-138	639.68	170-350	127.8	29.7	10.3	NP			
55R-1, 56-58	551-056	646.96	180-300	298.4	42.0	9.9	N			
55R-2, 46-48	552-046	648.36	170-380	336.7	34.6	16.1	NP			
55R-3, 49-51	553-049	649.89	200-330	339.9	40.6	8.8	N			
55R-4, 66-68	554-066	651.56	100-320	329.7	28.6	8.8	N			
55R-5, 81-83	555-081	653.21	180-260	290.5	24.2	11.7	NPP			
55R-6, 8-10	556-008	653.98	140-290	339.0	29.3	3.3	N			
55R-7, 16-18	557-016	655.56	180-300	86.7	38.0	8.8	N			
57R-1, 50-52	571-050	666.10	100-290	238.1	51.8	16.1	NPP			
57R-2, 140-142	572-140	668.01	180-340	275.0	37.3	8.2	NP			
57R-3, 144-146	573-144	669.55	200-300	335.8	41.9	2.7	NP			

Table T4 (continued).

Position, age, facies/Core, section, interval (cm)	Run name	Depth (mbsf)	Characteristic magnetization and polarity					Polarity rating	Polarity column		Polarity chron assignment	Comments
			Interval (°C)	Characteristic direction			Schematic		Generalized			
				Declination	Inclination	MAD						
57R-4, 120-122	574-120	670.81	200-270	318.2	38.8	7.5	NP					
57R-5, 142-144	575-142	672.53	140-260	283.8	34.0	5.3	N					
57R-6, 132-135	576-132	673.93	180-300	269.5	42.8	6.8	N					
57R-CC, 6-8	579-006	675.31	200-320	56.7	38.3	10.9	N					
58R-1, 43.5-45.5	581-044	675.64	200-290	182.4	26.9	3.8	NP					
58R-2, 116-118	582-116	677.84	180-300	192.6	22.8	5.7	NP					
58R-3, 49-51	583-049	678.67	150-350	95.9	26.5	9.1	NP					
58R-4, 20.5-22.5	584-020	679.89	180-300	91.2	29.8	7.5	N					
58R-5, 20.5-23	585-021	681.39	140-350	9.1	28.4	4.0	N					

Notes: Sediment facies are generalized color-texture descriptions from shipboard observations, and the lithologic units for each hole are displayed on the associated magnetostratigraphic figure. The interval (°C) indicates the demagnetization range that was used to compute the characteristic direction and polarity of magnetization for each sample. Declination and inclination are in degrees. MAD (mean angular dispersion) values indicate the precision of the three-dimensional line fit of these paleomagnetic vectors to obtain the characteristic direction. The polarity rating system (R, RP, RPP, R??, INT, N??, NPP, NP, N) is explained in the text. Two polarity columns are shown with the shades of gray or hatchure fill in the schematic column reflecting the polarity rating of individual samples and the generalized column indicating the main polarity intervals. Polarity chron assignments are based on the polarity pattern and biostratigraphic constraints in correlating to the reference magnetic polarity time scale.