STRATIGRAPHY	TYPE REFERENCE SECTION	REFERENCE SECTIONS FOR LITHOFACIES CALCULATED AS SAND-SHALE-CARBONATE PERCENTAGES							BEST FACIES PROGRESSION	REMARKS
		SAND 75–100 PERCENT	SAND 50–75 PERCENT SHALE 25–50 PERCENT	SHALE 50–75 PERCENT SAND 25–50 PERCENT	SHALE 75–100 PERCENT	CARBONATE 25–50 PERCENT CLASTICS 50–75 PERCENT	CARBONATE 50–75 PERCENT CLASTICS 25–50 PERCENT	CARBONATE 75–100 PERCENT		
POST-MIOCENE ROCKS	Nonmarine: Plate 24 Section *B–B′* NC-SC-P-2 +208 to +138 Marginal marine: Plate 30 Section *G′–G″* NC-HY-OT-6 +2 to 180	Glacial: Plate 57 Section *EE–EE′* NY-SUF-T-16 +134 to 310 Nonmarine: Plate 31 Section *H–H′* VA-NOR-T-12 +15 to 72 Marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-13 +4 to 208	Nonmarine: Plate 38 Section *P–P′* MD-StM-P-22 +5 to 40 Marginal marine: Plate 40 Section *R–R′* NJ-CM-OT-1 +14 to 86	Nonmarine: Plate 53 Section *BB–BB′* MD-SOM-T-10 +5 to 49 Marginal marine: Plate 28 Section *F–F′* NC-DA-OT-14 +3 to 135	Nonmarine: Plate 52 Section *AA–AA′* VA-PG-P-1 +125 to +95 Marginal marine: Plate 45 Section *W–W′* NC-JON-T-3 +35 to +27	Not developed	Not developed	Not developed	Plate 27 Section *E–E′* and Plate 40 Section *R–R′*	Nonmarine except in extreme eastern North Carolina and near the mouth of Delaware Bay. Distribution of sands and shales indicates lagoonal (sound type) and beach-ridge patterns. Possible deltaic environmen: in local areas. Channels are poorly defined by this method of contouring.
ROCKS OF LATE MIOCENE AGE	Plate 51 Section *Z″–Z‴* NC-CUR-OT-12 100 to 561	Nonmarine: Plate 40 Section *R–R′* NJ-CU-OT-8 1 to 156 Marine: Plate 28 Section *F–F′* NC-DA-OT-14 135 to 522	Marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-9 109 to 699	Nonmarine: Plate 41 Section *S–S′* NJ-OC-T-1 81 to 133 Marine: Plate 51 Section *Z″–Z‴* NC-CUR-OT-12 100 to 561	Marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-11 160 to 396	Plate 29 Section *G–G′* NC-HY-OT-6 180 to 478	Plate 50 Section *Z′–Z″* NC-HY-T-3 136 to 384	Not developed	Plates 29 and 30 Section *G–G′–G″* and Plate 35 Section *M–M′*	Unit marine to marginal marine except locally in New Jersey and Maryland.
ROCKS OF MIDDLE MIOCENE AGE	Plate 31 Section *H–H′* VA-NOR-T-12 368 to 610	Marine: Plate 46 Section *X–X′* NC-CAR-OT-9 116 to 238	Nonmarine: Plate 41 Section *S–S′* NJ-OC-T-4 +51 to 190 Marine: Plate 40 Section *R–R′* MD-WOR-OT-11 451 to 1652	Nonmarine: Plate 40 Section *R–R′* NJ-CAM-T-2 +1 to 100 Marine: Plate 40 Section *R–R′* NJ-CM-OT-1 406 to 1046	Marine: Plate 28 Section *F–F′* NC-DA-OT-13 621 to 1076	Plate 30 Section *G′–G″* NC-HY-OT-6 478 to 743	Plate 50 Section *Z′–Z″* NC-HY-T-3 384 to 755	Plate 28 Section *F–F′* NC-WAS-T-11 266 to 292 (dolomite)	Plates 29 and 30 Section *G–G′–G″* and Plate 35 Section *M–M′*	Marine throughout its extent except locally in New Jersey.
ROCKS OF OLIGOCENE AGE	Plate 26 Section *D–D′* NC-CAR-OT-7 252 to 794	Plate 49 Section *Z–Z′* NC-PEN-OT-7 9 to 89	Plate 51 Section *Z″–Z‴* NC-DA-OT-9 1251 to 1409	Not developed	Not developed	Plate 50 Section *Z′–Z″* NC-DA-OT-10 1360 to 1715	Plate 46 Section *X–X′* NC-CAR-OT-6 178 to 447	Plate 50 Section *Z′–Z″* NC-CAR-OT-7 252 to 794	Plate 51 Section *Z″–Z‴* and Plate 25 Section *C–C′*	Unit confined to North Carolina. Marine throughout its extent.
ROCKS OF JACKSON AGE	Plate 39 Section *Q–Q′* DEL-SUS-OT-5 720 to 995	Plate 40 Section *R–R′* NJ-CM-OT-1 1046 to 1416	Plate 36 Section *N–N′* VA-MID-P-10 306 to 332	Plate 39 Section *Q–Q′* DEL-SUS-OT-5 720 to 995	Plate 39 Section *Q–Q′* MD-WOR-OT-10 1197 to 1300	Interpreted in the absence of well control	Interpreted in the absence of well control	Plate 33 Section *K–K′* VA-SUR-P-1 201 to 212	Plate 36 Section *N–N′* and Plate 40 Section *R–R′*	Marginal marine throughout its extent.
ROCKS OF CLAIBORNE AGE	Northern section: Plate 36 Section *N–N′* VA-WES-T-8 90 to 160 Southern section: Plate 50 Section *Z′–Z‴* NC-CAR-OT-7 794 to 1420	Plate 39 Section *Q–Q′* DEL-KT-P-3 311 to 555	Plate 39 Section *Q–Q′* DEL-KT-P-1 319 to 547	Plate 36 Section *N–N′* VA-WES-T-7 69 to 191	Plate 38 Section *P–P′* MD-CHA-P-30 +24 to 122	Plate 48 Section *Y′–Y″* NC-CAR-OT-6 447 to 1155	Plate 46 Section *X–X′* NC-BEA-T-28 142 to 442	Plate 50 Section *Z′–Z″* NC-CAR-OT-7 794 to 1420	Plate 46 Section *X–X′* and Plate 39 Section *Q–Q′*	Marine throughout its extent.
ROCKS OF SABINE AGE	Northern section: Plate 38 Section *P–P′* MD-CHA-P-30 122 to 182 Southern section: Plate 50 Section *Z′–Z″* NC-CAR-OT-5 1572 to 1745	Plate 49 Section *Z–Z′* NC-CAR-OT-8 947 to 1016	Plate 51 Section *Z″–Z‴* NC-DA-OT-9 1909 to 2079	Plate 38 Section *P–P′* MD-CHA-P-22 +5 to 61	Plate 58 Section *FF–FF′* MD-TAL-T-23 512 to 597	Plate 50 Section *Z′–Z″* NC-CAR-OT-7 1420 to 1587	Plate 50 Section *Z′–Z″* NC-CAR-OT-5 1572 to 1745	Plate 40 Section *R–R′* NJ-CM-OT-1 1516 to 1616 (chalk)	Plate 36 Section *N–N′* and Plates 50 and 51 Section *Z′–Z″–Z‴*	Marine to marginal marine throughout its extent.
ROCKS OF MIDWAY AGE	Plate 58 Section *FF–FF′* MD-TAL-T-4 263 to 595	Plate 46 Section *X–X′* NC-CAR-OT-9 892 to 1070	Plate 36 Section *N–N′* VA-WES-T-8 198 to 421	Plate 40 Section *R–R′* NJ-CAM-T-2 100 to 213	Plate 39 Section *Q–Q′* DEL-KT-P-3 621 to 957	Reefal: Plate 26 Section *D–D′* NC-CR-T-36 447 to 545 Chalk: Plate 35 Section *M–M′* MD-WIC-OT-11 1188 to 1280	Reefal: Plate 45 Section *W–W′* NC-CR-T-1 283 to 326 Chalk: Plate 39 Section *Q–Q′* DEL-SUS-OT-5 1105 to 1335	Reefal: Plate 45 Section *W–W′* NC-JON-P-2 193 to 233 Chalk: Plate 40 Section *R–R′* NJ-CM-OT-1 1616 to 1938	Plate 39 Section *Q–Q′* and Plates 29 and 30 Section *G–G′–G″*	Unit marine to marginal marine throughout its extent. More marine to the north of North Carolina.
CRETACEOUS–UNIT A	Plate 24 Section *B–B′* NC-NH-T-13 37 to 423	Plate 49 Section *Z–Z′* NC-NH-OT-15 211 to 581	Plate 27 Section *E–E′* NC-PAM-OT-9 908 to 1218	Plate 25 Section *C–C′* NC-ON-OT-24 170 to 386	Plate 46 Section *X–X′* NC-BEA-OT-13 494 to 604	Plate 39 Section *Q–Q′* DEL-KT-P-3 957 to 1049	Plate 40 Section *R–R′* NJ-CM-OT-1 1938 to 1962	Not developed	Plate 39 Section *Q–Q′* and Plate 46 Section *X–X′*	Unit marine to marginal marine throughout its extent. More marine to the north of North Carolina.
CRETACEOUS–UNIT B	Plate 48 Section *Y′–Y″* NC-CAR-OT-11 1354 to 1822	Plate 49 Section *Z–Z′* NC-NH-OT-15 581 to 799 (marine)	Nonmarine: Plate 42 Section *T–T′* NC-BL-P-2 +118 to +42 Marine: Plate 49 Section *Z–Z′* NC-PEN-OT-7 506 to 780	Nonmarine: Plate 42 Section *T–T′* NC-SA-P-6 +111 to +59 Marine: Plate 50 Section *Z′–Z‴* NC-CAR-OT-7 1885 to 2240	Nonmarine: Plate 26 Section *D–D′* NC-WAY-T-1 +175 to +100 Marine: Plate 27 Section *E–E′* NC-PAM-OT-3 1143 to 1598	Plate 39 Section *Q–Q′* DEL-SUS-OT-5 1375 to 1490	Not developed	Not developed	Plate 39 Section *Q–Q′* and Plates 47 and 48 Section *Y–Y′–Y″*	Unit predominantly marine to nonmarine. More marine to the north of North Carolina.
CRETACEOUS–UNIT C	Plate 25 Section *C–C′* NC-PEN-OT-6 406 to 816	Nonmarine: Plate 24 Section *B–B′* NC-RO-P-4 +110 to 81 Marginal marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-12 3161 to 3581	Nonmarine: Plate 57 Section *EE–EE′* NY-SUF-T-9 298 to 738 Marginal marine: Plate 26 Section *D–D′* NC-ON-OT-10 837 to 1168	Nonmarine: Plate 24 Section *B–B′* NC-BL-P-2 +42 to 190 Marginal marine: Plate 25 Section *C–C′* NC-ON-OT-24 610 to 960	Nonmarine: Plate 24 Section *B–B′* NC-RO-P-6 +88 to 124 Marginal marine: Plate 50 Section *Z′–Z″* NC-HY-OT-11 2876 to 3186	Not developed	Not developed	Not developed	Plate 24 Section *B–B′* and Plate 29 Section *G–G′*	Unit predominantly marginal marine. More marine to the north of North Carolina.
CRETACEOUS–UNIT D	Plate 48 Section *Y′–Y″* NC-WAS-OT-2 1041 to 1351	Nonmarine: Plate 27 Section *E–E′* NC-GR-P-2 121 to 211 Marginal marine: Plate 57 Section *EE–EE′* NY-SUF-T-16 650 to 866	Nonmarine: Plate 28 Section *F–F′* NC-PI-T-2 98 to 338 Marginal marine: Plate 30 Section *G′–G″* NC-HY-OT-11 3186 to 3516	Nonmarine: Plate 28 Section *F–F′* NC-WAS-OT-2 1040 to 1351 Marginal marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-13 2466 to 2847	Nonmarine: Plate 43 Section *U–U′* NC-PI-T-1 381 to 541 Marginal marine: Plate 27 Section *E–E′* NC-CAR-OT-5 2562 to 2950	Plate 30 Section *G′–G″* NC-HY-OT-6 2490 to 3125	Not developed	Not developed	Plates 29 and 30 Section *G–G′–G″* and Plate 57 Section *EE–EE′*	Unit predominantly nonmarine throughout its extent.
CRETACEOUS–UNIT E	Plate 51 Section *Z″–Z‴* NC-DA-OT-11 2216 to 2486	Plate 40 Section *R–R′* NJ-CAM-T-2 791 to 881	Plate 57 Section *EE–EE′* NJ-OC-T-1 2087 to 2362	Plate 47 Section *Y–Y′* NC-CHO-T-1 431 to 638	Nonmarine: Plate 40 Section *R–R′* MD-WOR-OT-11 2499 to 2725 Marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-9 3337 to 3859	Plate 51 Section *Z″–Z‴* NC-DA-OT-13 2847 to 3286	Plate 50 Section *Z′–Z‴* NC-CAR-OT-5 2950 to 3334	Not developed	Plate 46 Marine section *X–X′* and Plate 40 Nonmarine section *R–R′*	Unit predominantly marine in North Carolina. Nonmarine to marginal marine to the north of North Carolina.
CRETACEOUS–UNIT F	Plate 43 Section *U–U′* NC-HAL-T-2 161 to 244	Nonmarine: Plate 57 Section *EE–EE′* NY-SUF-T-9 1403 to 1994 Marine: Plate 49 Section *Z–Z′* NC-PEN-OT-8 1226–1368	Plate 31 Section *H–H′* VA-NOR-T-12 777 to 1523	Plate 51 Section *Z″–Z‴* NC-CUR-OT-12 1918 to 3023	Nonmarine: Plate 37 Section *O–O′* MD-CHA-P-21 235 to 380 Marginal marine: Plate 26 Section *D–D′* NC-ON-OT-11 1130 to 1368	Plate 49 Section *Z–Z′* NC-PEN-OT-7 1304 to 1445	Not developed	Not developed	Plate 26 Section *D–D′* and Plate 40 Section *R–R′*	Unit dominantly nonmarine throughout its extent. Reefal limestone in: NC-NH-OT-15 NC-PEN-OT-7 NC-DA-OT-10
CRETACEOUS–UNIT G	Plate 50 Section *Z′–Z″* NC-CAR-OT-5 4092 to 5034	Developed only in VA-SUS-OT-6 (non-section well) 184 to 424	Plate 41 Section *S–S′* NJ-BU-T-4 1729 to 2114	Nonmarine: Plate 35 Section *M–M′* MD-WIC-OT-11 2320 to 3430 Marginal marine: Plate 50 Section *Z′–Z‴* NC-HY-OT-11 4954 to 6116	Nonmarine: Plate 40 Section *R–R′* NJ-CU-OT-8 2413 to 3108 Marginal marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-9 4904 to 6249	Plate 50 Section *Z′–Z″* NC-CAR-OT-7 3670 to 4600	Not developed	Not developed	Plate 50 Marine section *Z′–Z″* and Plate 35 Nonmarine section *M–M′*	Unit marine to marginal marine in North Carolina. Nonmarine to the north of North Carolina. Reefal limestone present from Carteret County, North Carolina to Albemarle Sound.
CRETACEOUS AND LATE JURASSIC(?)–UNIT H	Plate 50 Section *Z′–Z″* NC-HY-OT-11 6116 to 7236	Plate 34 Section *L–L′* VA-KW-T-4 996 to 1255	Nonmarine: Plate 40 Section *R–R′* MD-WOR-OT-11 5099 to 7171 Marine: Plate 30 Section *G′–G″* NC-HY-OT-6 4910 to 5560+ (incomplete penetration)	Nonmarine: Plate 58 Section *FF–FF′* MD-WIC-OT-11 3430 to 5428 Marginal marine: Plate 51 Section *Z″–Z‴* NC-DA-OT-12 6966 to 8336	Plate 32 Section *J–J′* NC-CAM-OT-10 2602 to 2814	Plate 50 Section *Z′–Z″* NC-DA-OT-10 7735 to 9145	Not developed	Not developed	Plate 50 Marine section *Z′–Z″* and Plate 58 Nonmarine section *FF–FF′*	Unit marine to marginal marine in North Carolina. Nonmarine to the north of North Carolina. Limestone is oolitic in deeper wells, reefal in others. Minor evaporite occurs in NC-DA-OT-10
JURASSIC(?)–UNIT I	Plate 50 Section *Z′–Z″* NC-DA-OT-10 9145 to 9853	Not developed	Plate 50 Section *Z′–Z″* NC-DA-OT-10 9145 to 9853	Plate 40 Section *R–R′* MD-WOR-OT-11 7171 to 7697	Not developed	Not developed	Not developed	Not developed	Plate 40 Section *R–R′*	Unit is nonmarine throughout its extent.

All depths are in feet, and are negative unless preceded by a +.

GEOLOGIC-SECTION CHART SHOWING THE TYPE REFERENCE SECTIONS FOR CHRONOSTRATIGRAPHIC UNITS AND FOR LITHOFACIES WITHIN EACH CHRONOSTRATIGRAPHIC UNIT ATLANTIC COASTAL PLAIN, NORTH CAROLINA TO NEW YORK

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