P. PABLO

USO DE LA BIOSTRATIGRAFÍA DE NANOFÓSILES EN MEDIO-AMBIENTES DELTÁICOS

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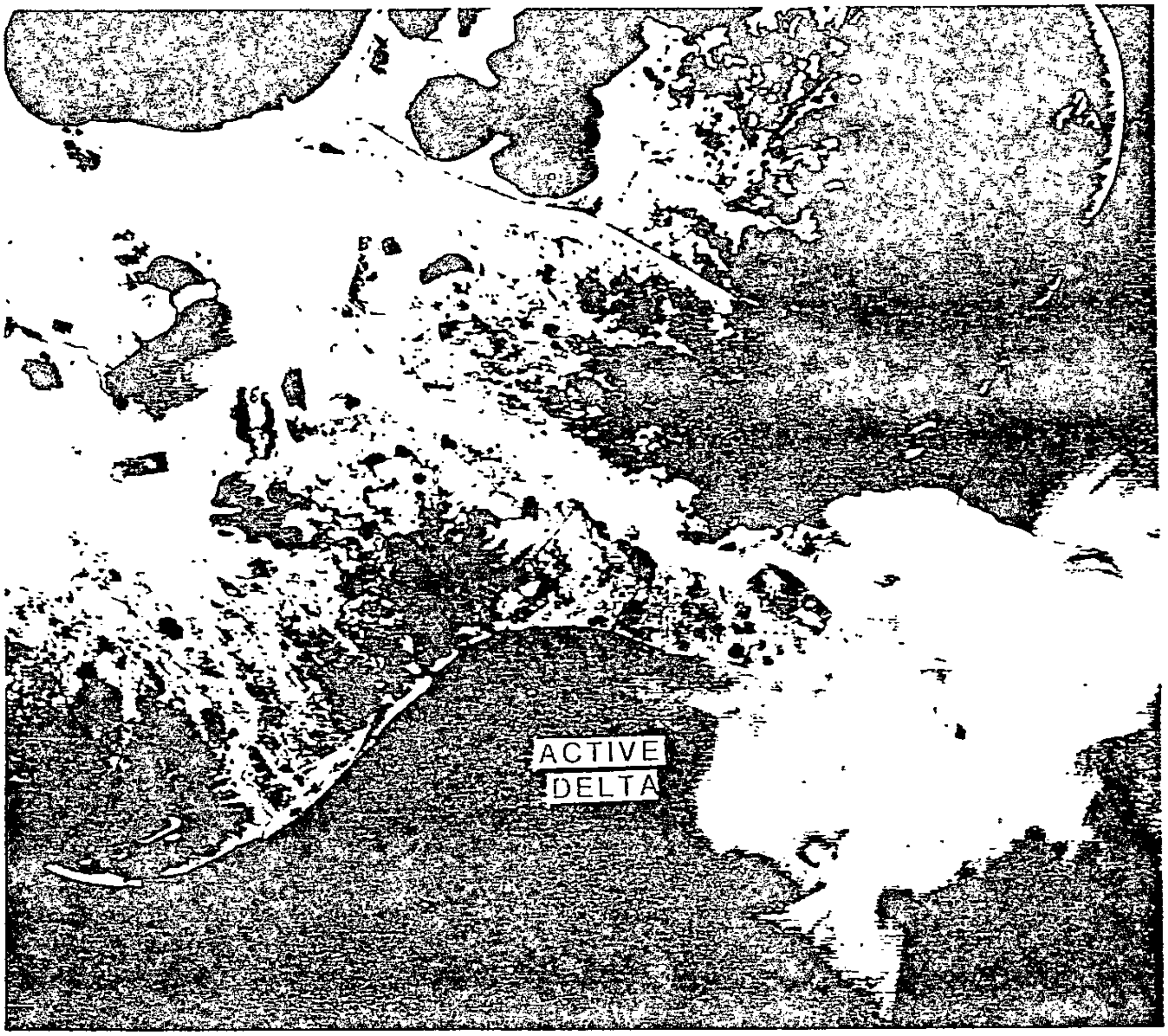


FIGURE 103 - Satellite photograph of modern Mississippi delta showing the depositional setting of distributary mouth bar sand bodies (heavy sediment plume at the confluence of distributary channels with Gulf of Mexico). Photo: NASA.

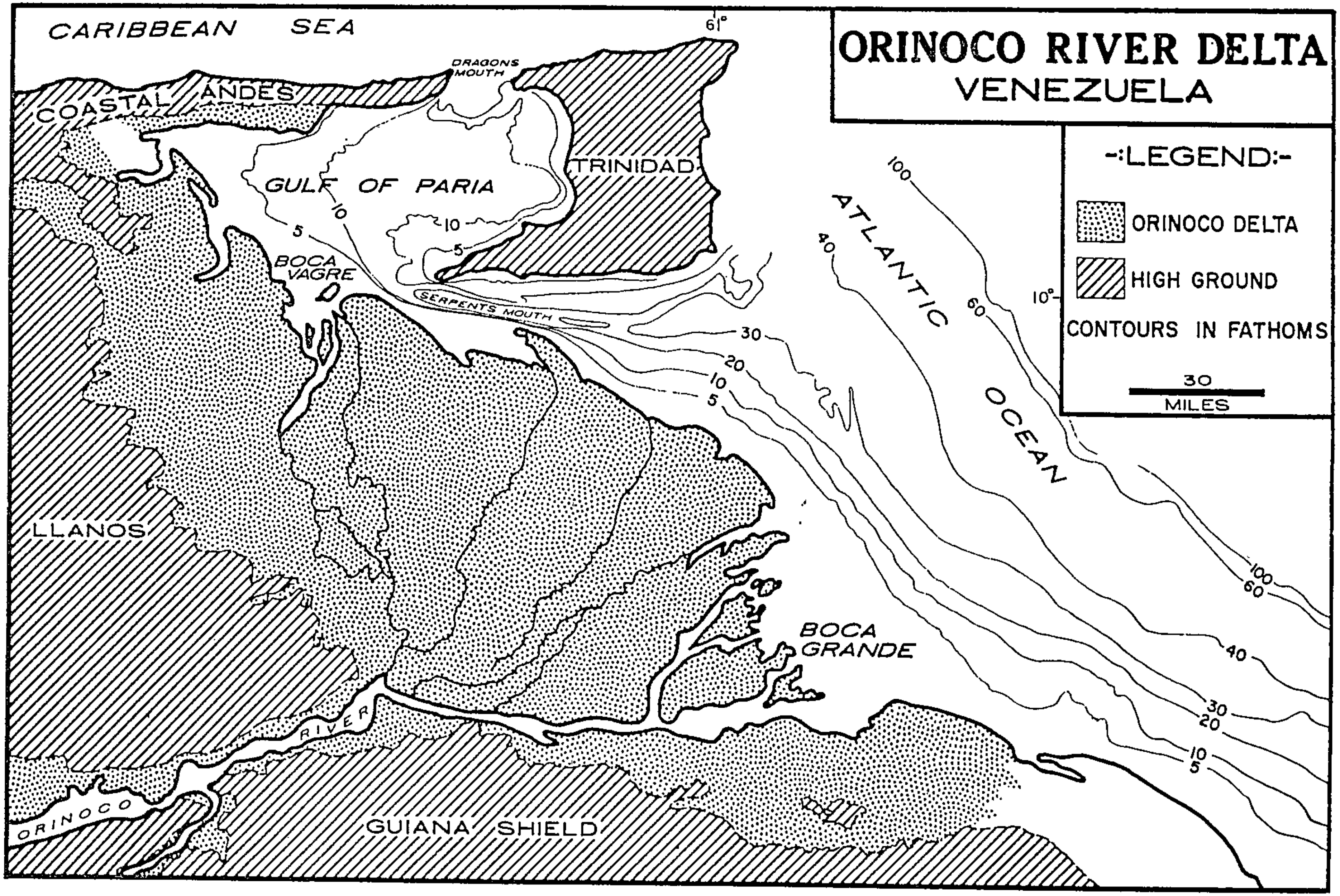


FIG. 10.—Prepared from van Andel and Postma, 1954; and Nota, 1958. The western part of the Orinoco Delta, bordering the Llanos, consists partly of the deltas of several smaller rivers. Strong currents flow from east to west through the Serpents Mouth.

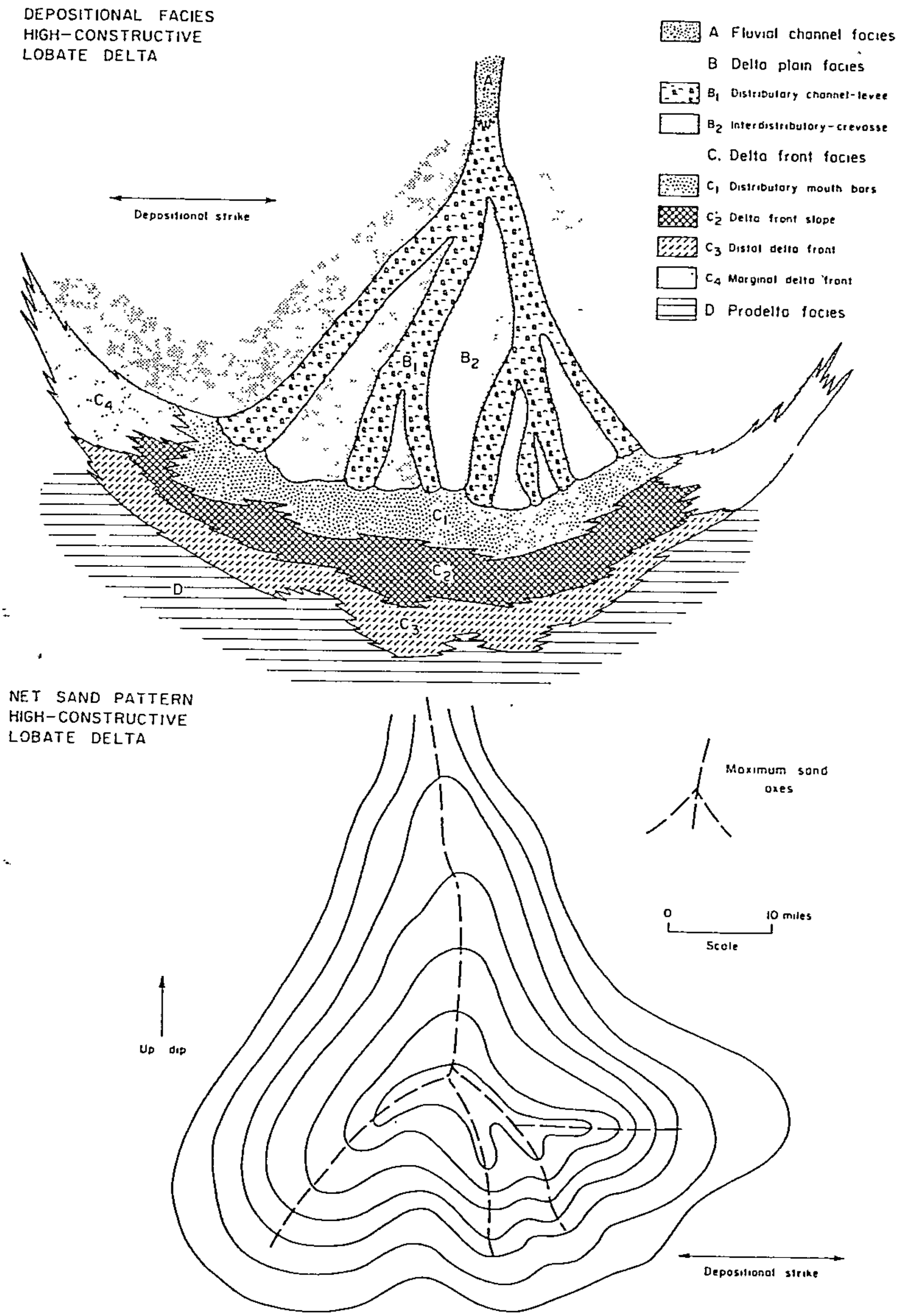
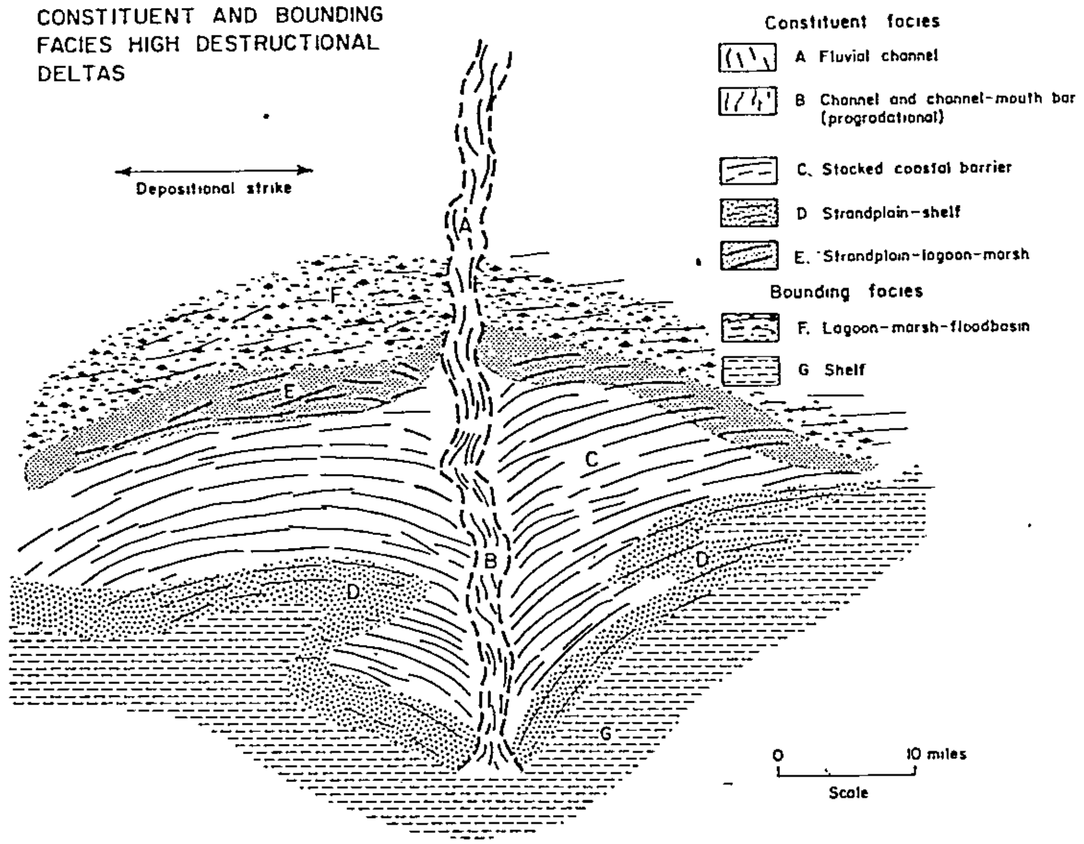


Fig. 59. Principal facies and sand pattern, high-constructive lobate delta systems, Gulf Coast Basin. From Fisher (1969, in press).



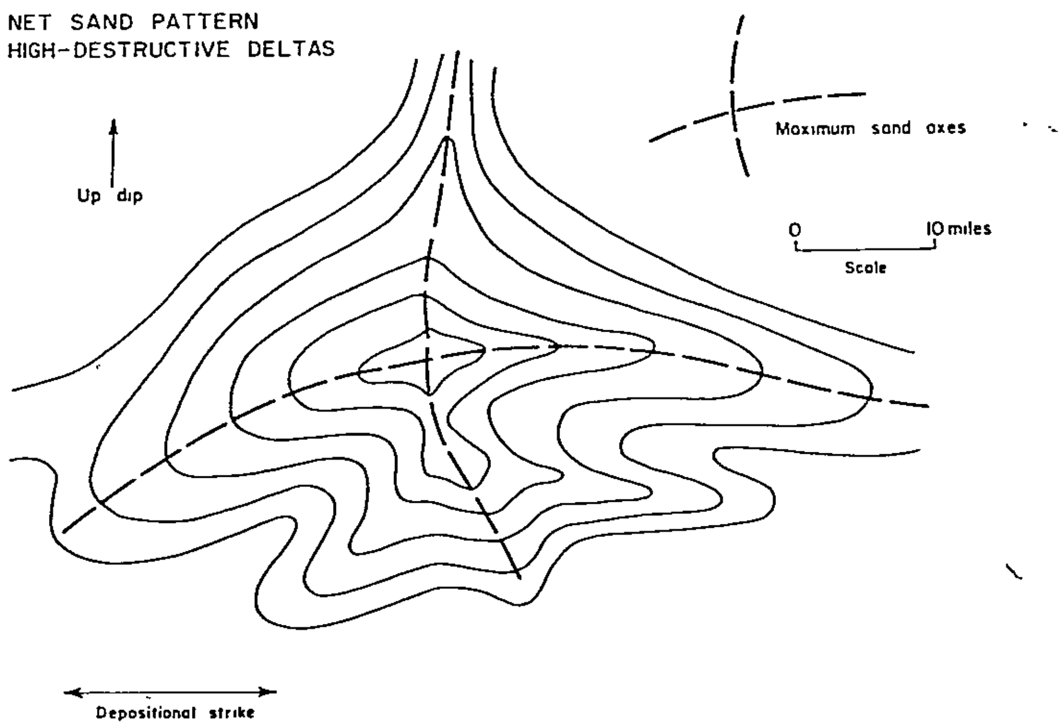


Fig. 67. Principal facies and sand pattern, high-destructive, wave-dominated delta systems, Gulf Coast Basin. From Fisher (1969, in press).

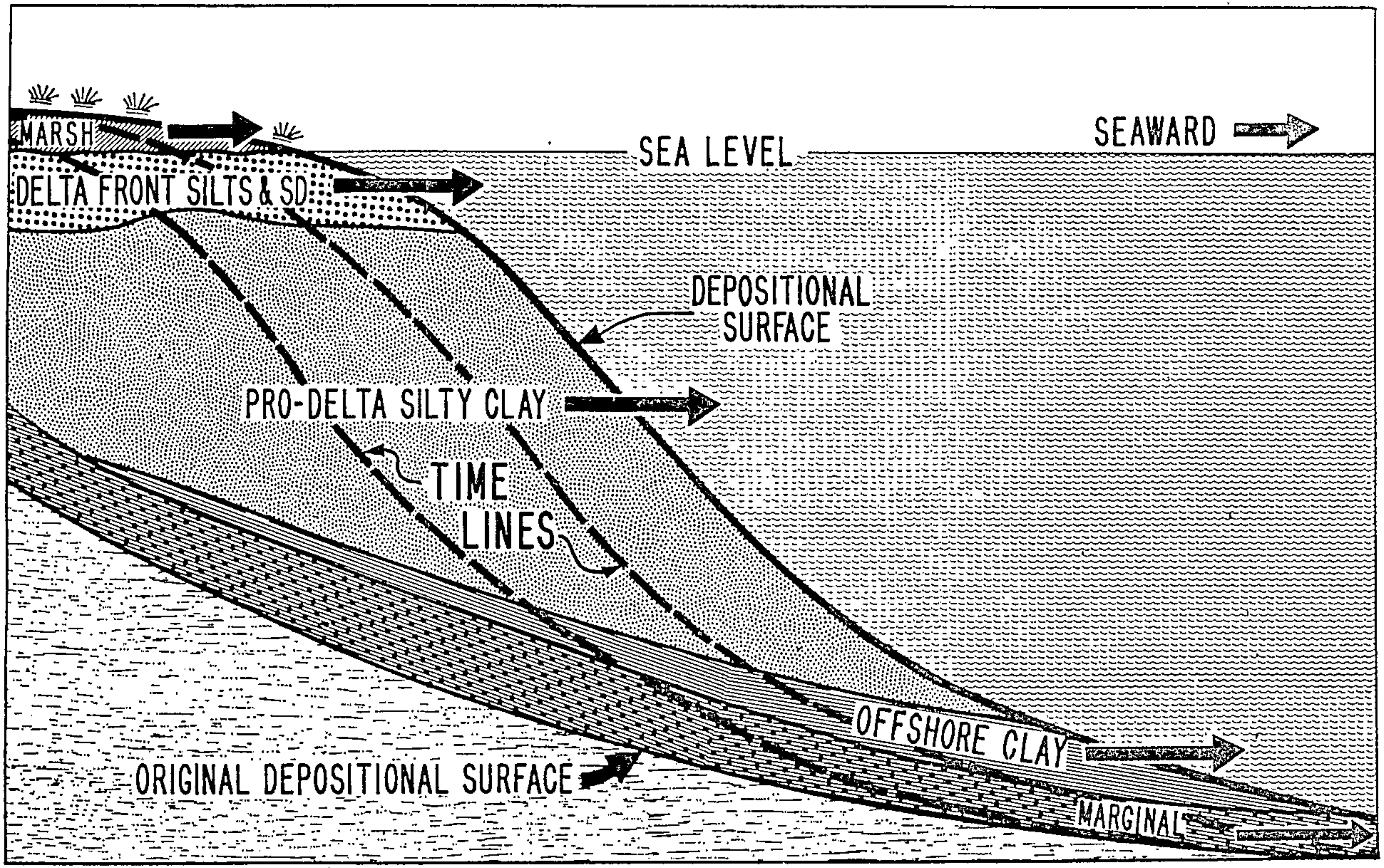


FIG. 9.—Seaward migration of depositional environments. With delta growth, the different depositional environments migrate seaward and extend the relatively homogeneous sediment units.

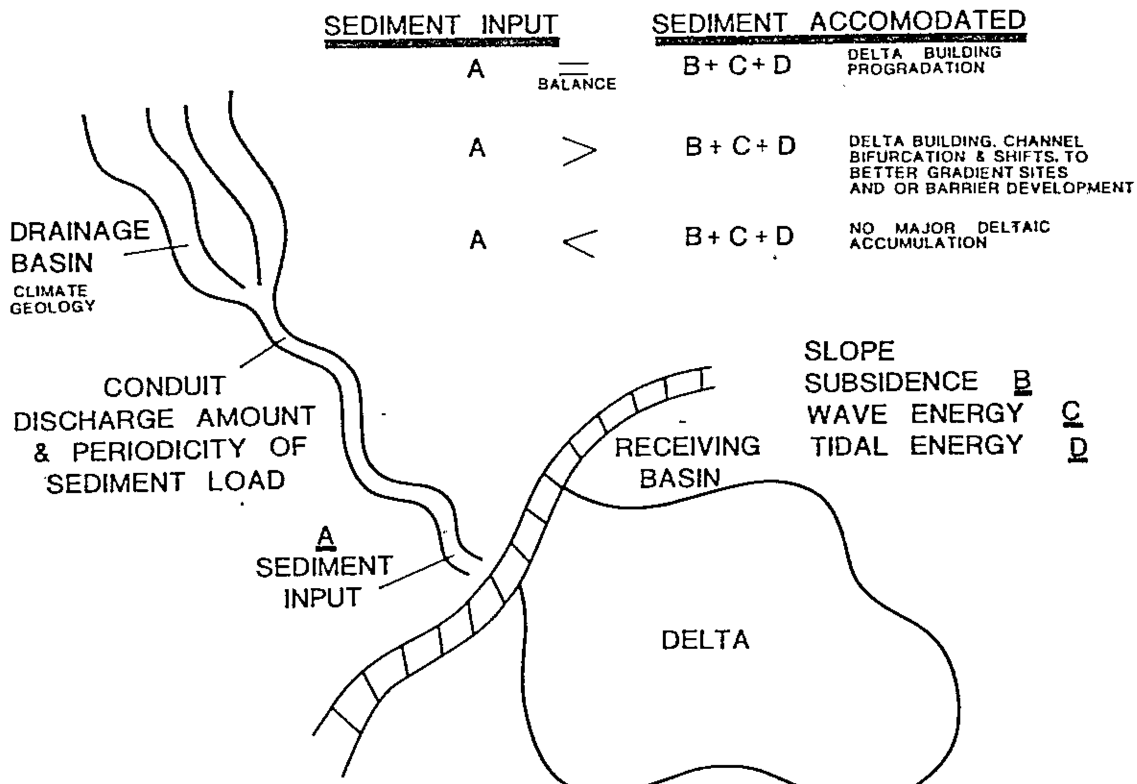


FIGURE 30 - Schematic diagram showing the relationship of sediment input, shelf slope and sediment removal processes in delta development.

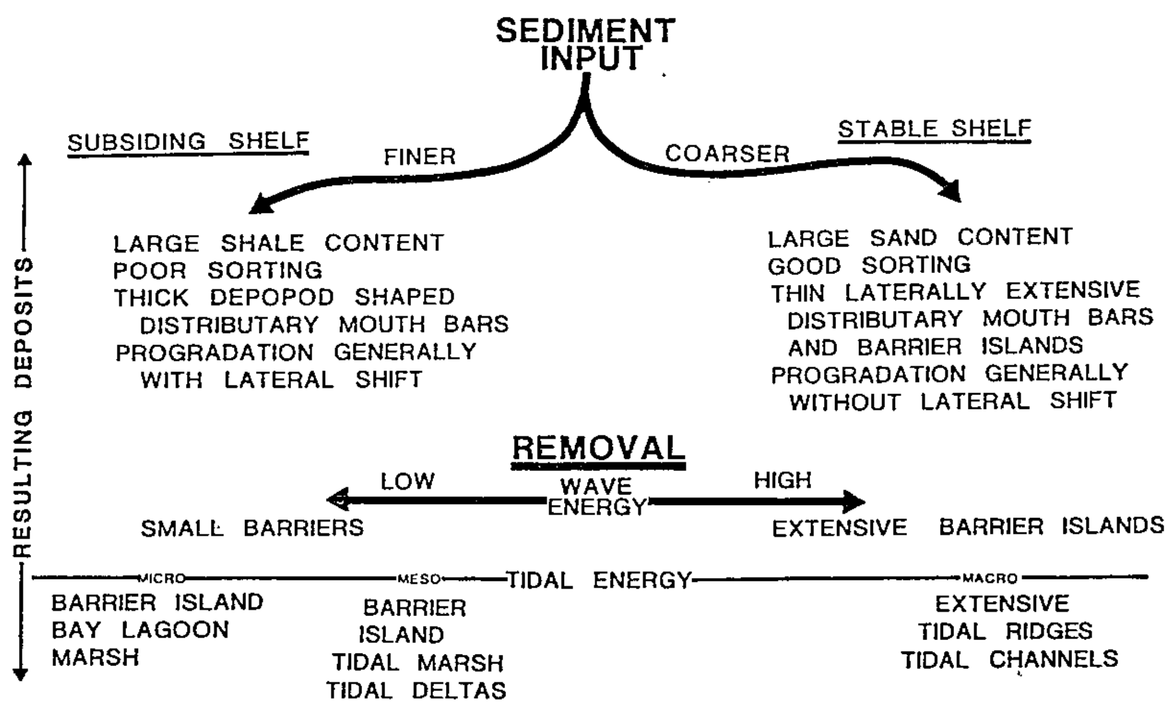


FIGURE 31 - Diagram showing interrelationship of sediment input, nature of shelf, and sediment removal processes and the resulting deltaic sequences (highly schematic).

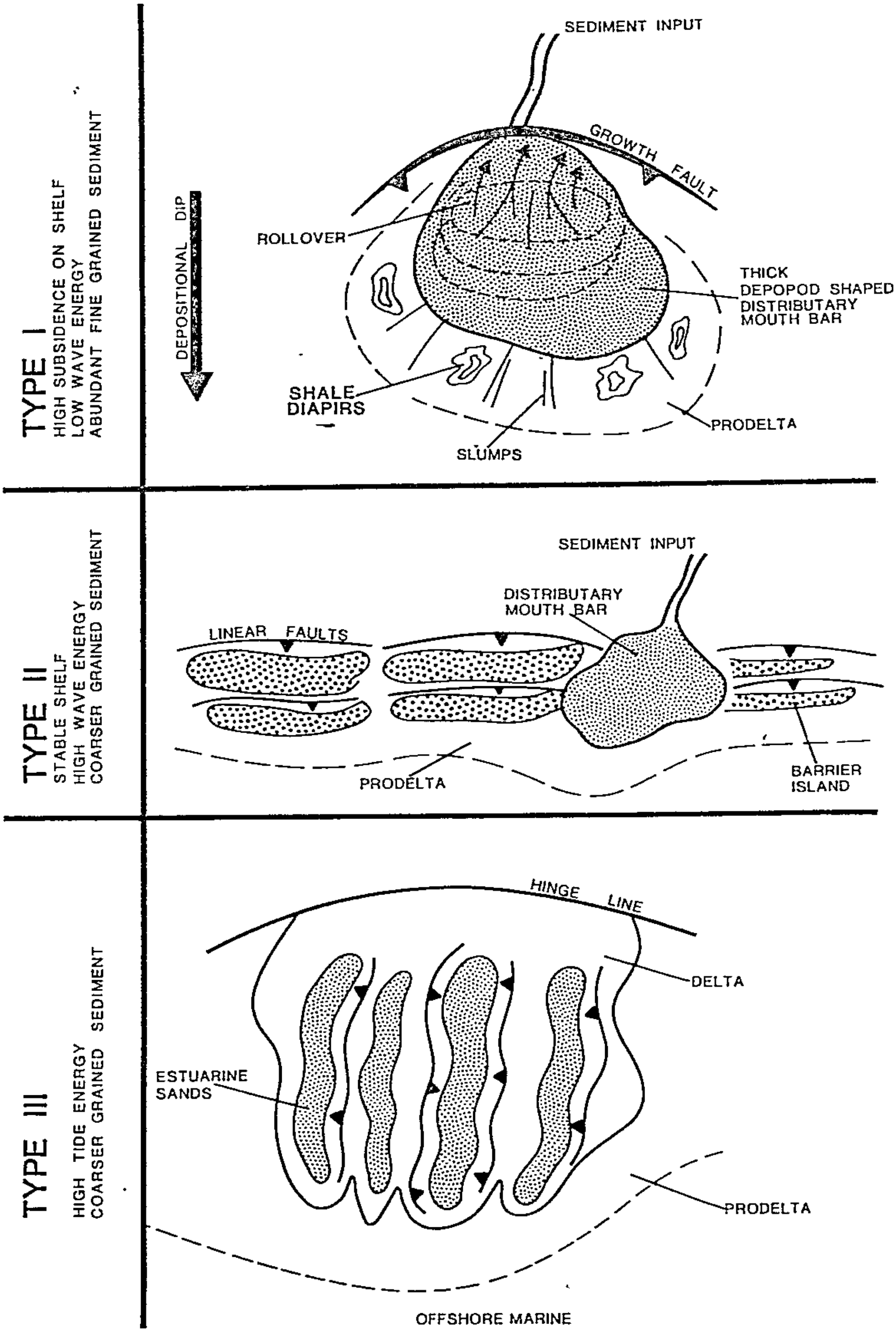


FIGURE 32 - Depositional setting and alignment of structures in three common types of distributary mouth bars produced with the interplay of degree of subsidence and magnitude of wave and tidal current energy on the coast. (Discussed in Figure 31. Highly schematic).

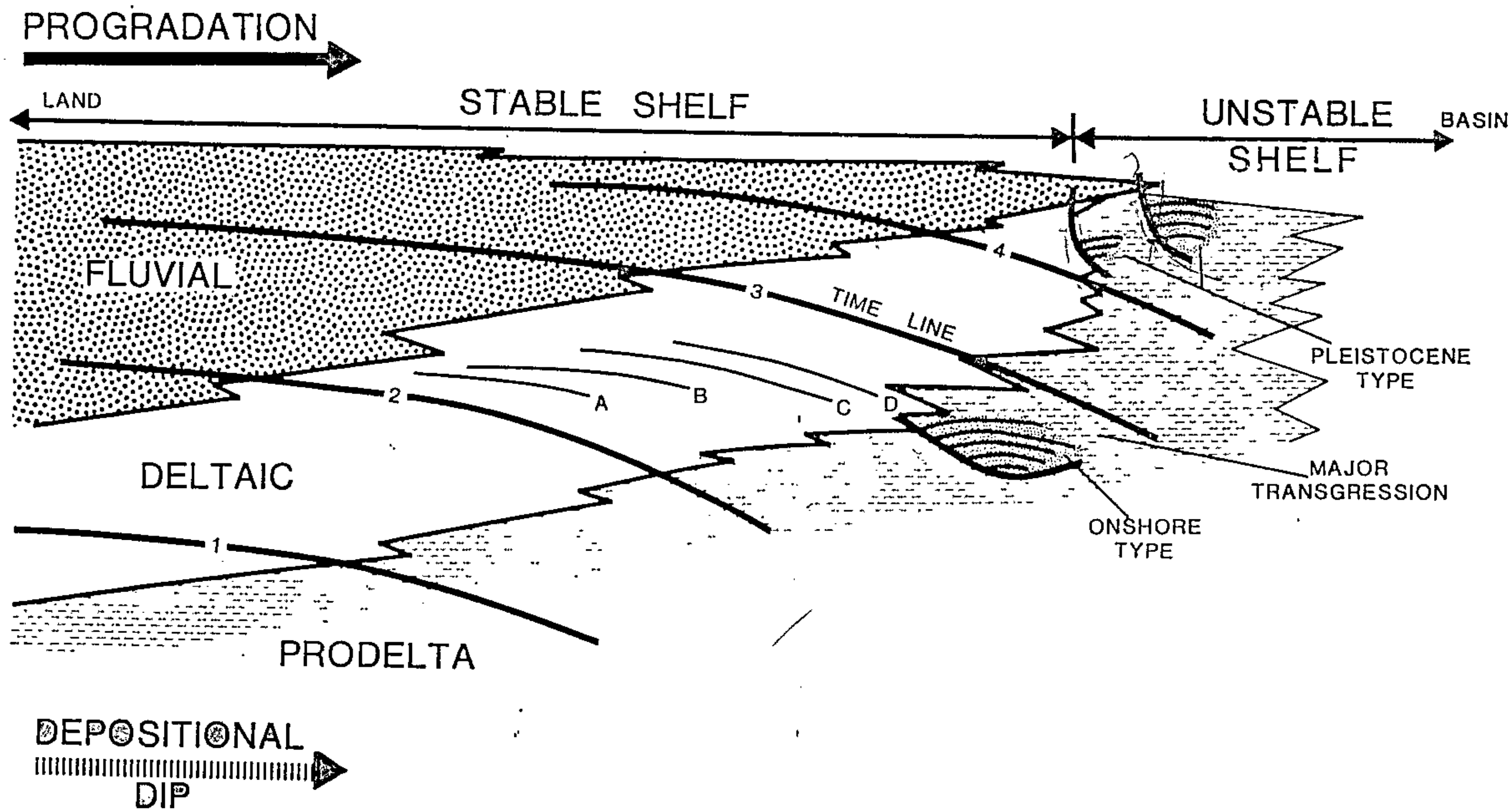


FIGURE 163 - Cross section along depositional dip showing the facies relationship and the setting of the two types of unstable shelf deltas. Lines labeled A, B, C, D represent prograding smaller onshore deltaic units. Approximate location of the cross section is shown by line B-B' in Figure 162.

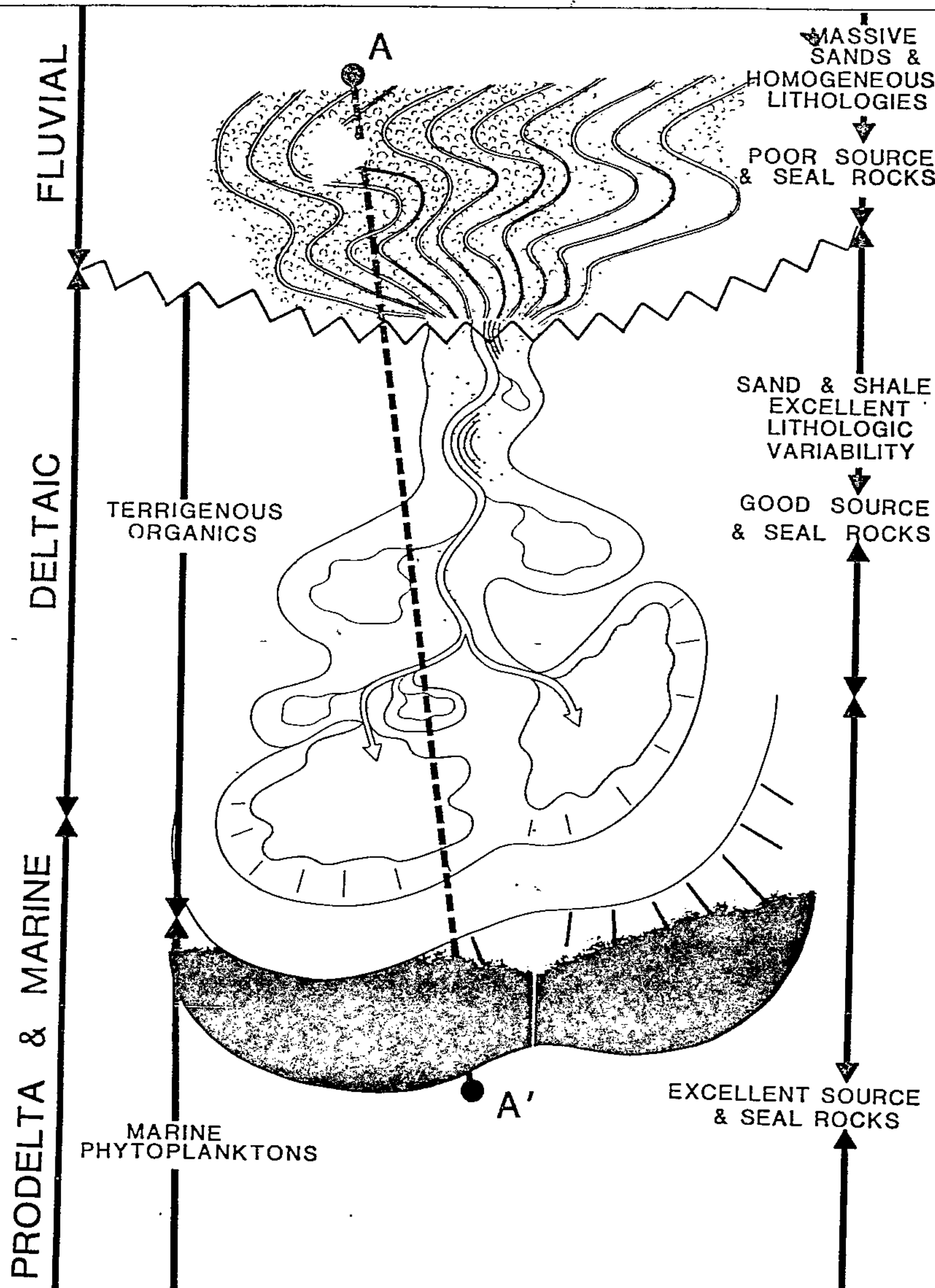


FIGURE 148 - Plan view model of a delta system showing the three broad depositional fairways (fluvial, deltaic, prodelta). AA' is the line of cross section presented in Figure 149.

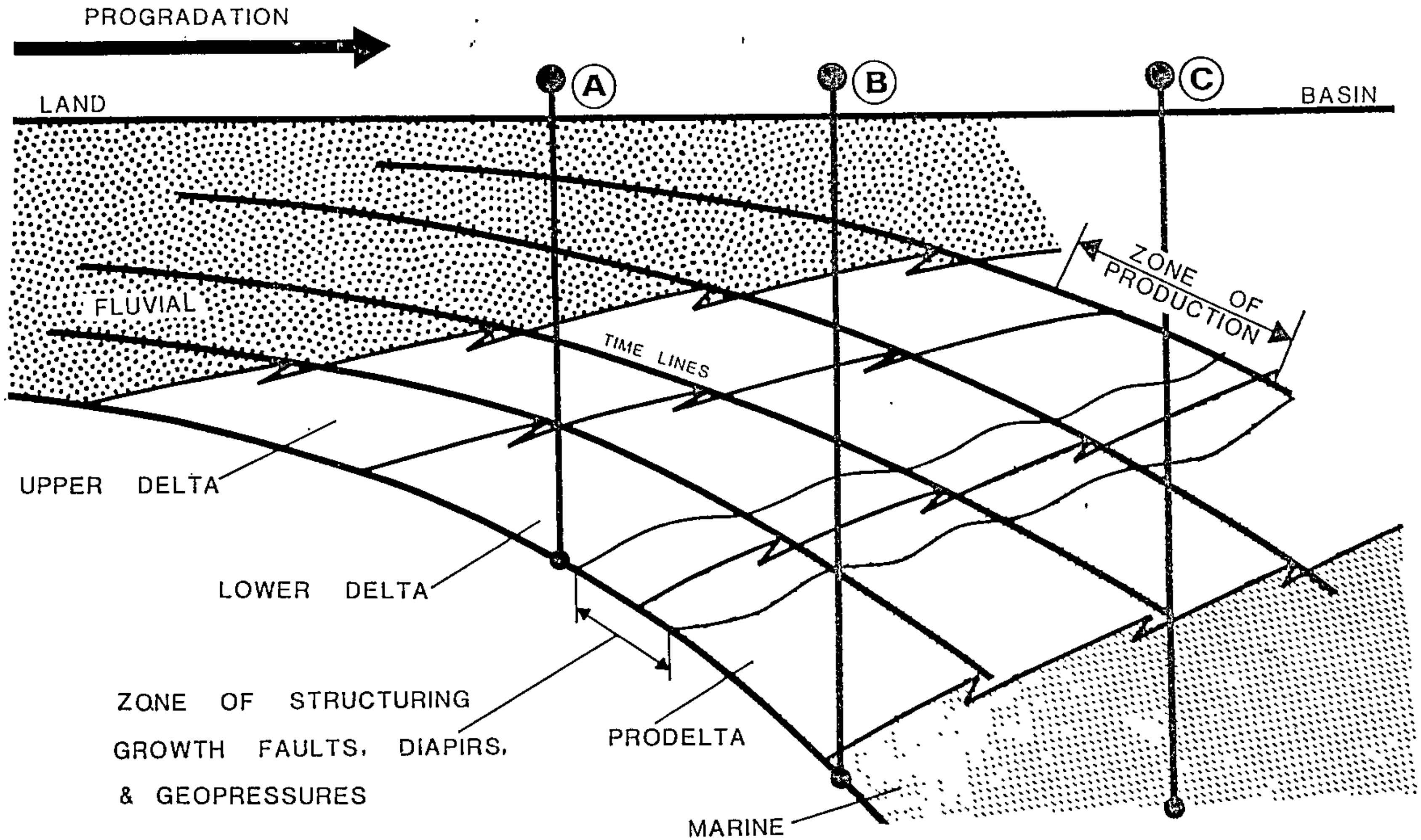


FIGURE 149 - Cross section along depositional dip through the active delta area showing the lateral and vertical sequence developed after progradation. Line of cross section is shown (AA') in Figure 148.

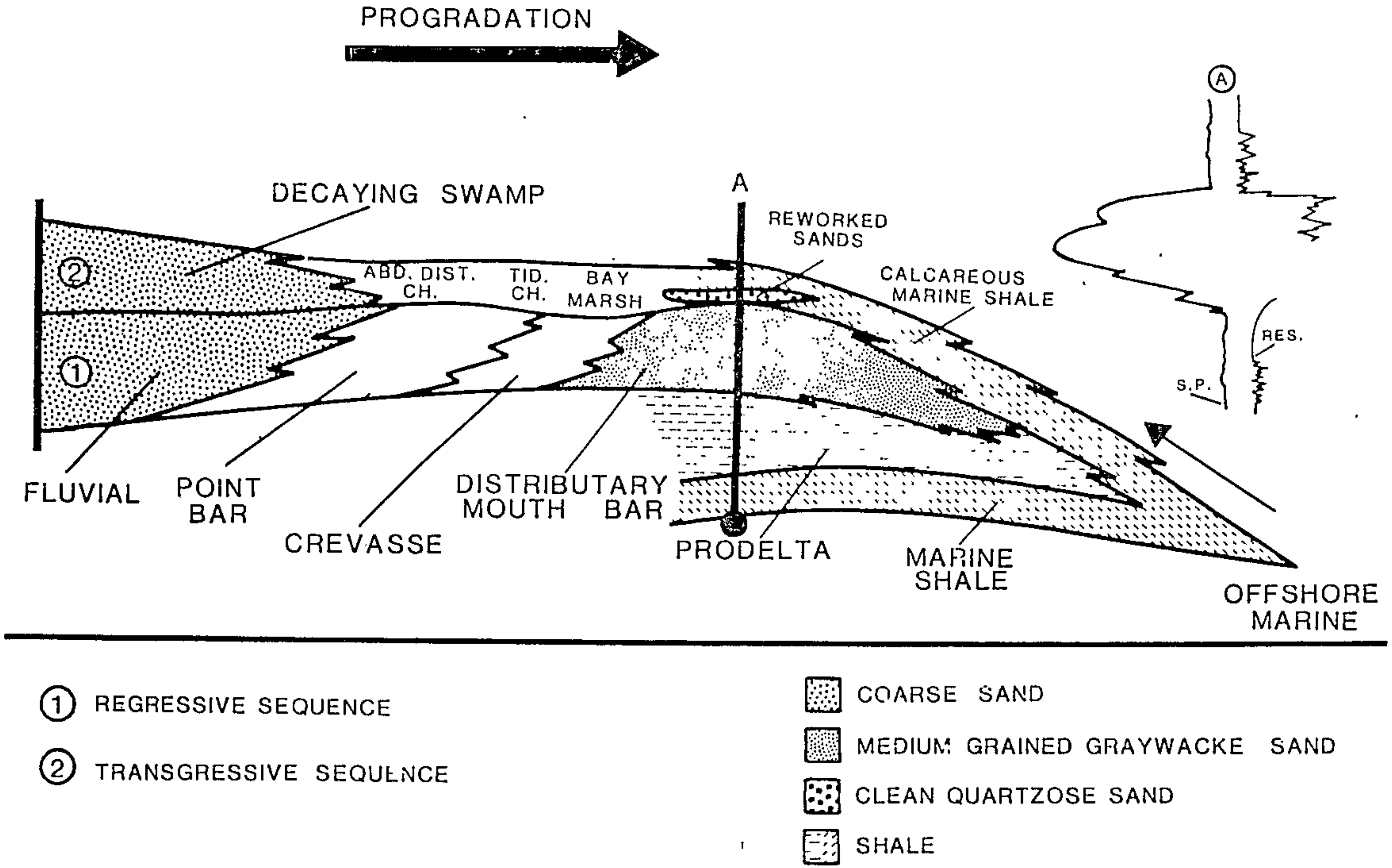


FIGURE 130A - Cross section along depositional dip, through the middle part of the mouth bar, showing lateral and vertical changes of depositional environments and lithologies in reworked deltaic sand setting. Note the mouth bar and the reworked sand are connected in this view and appear as one sand body on the log.

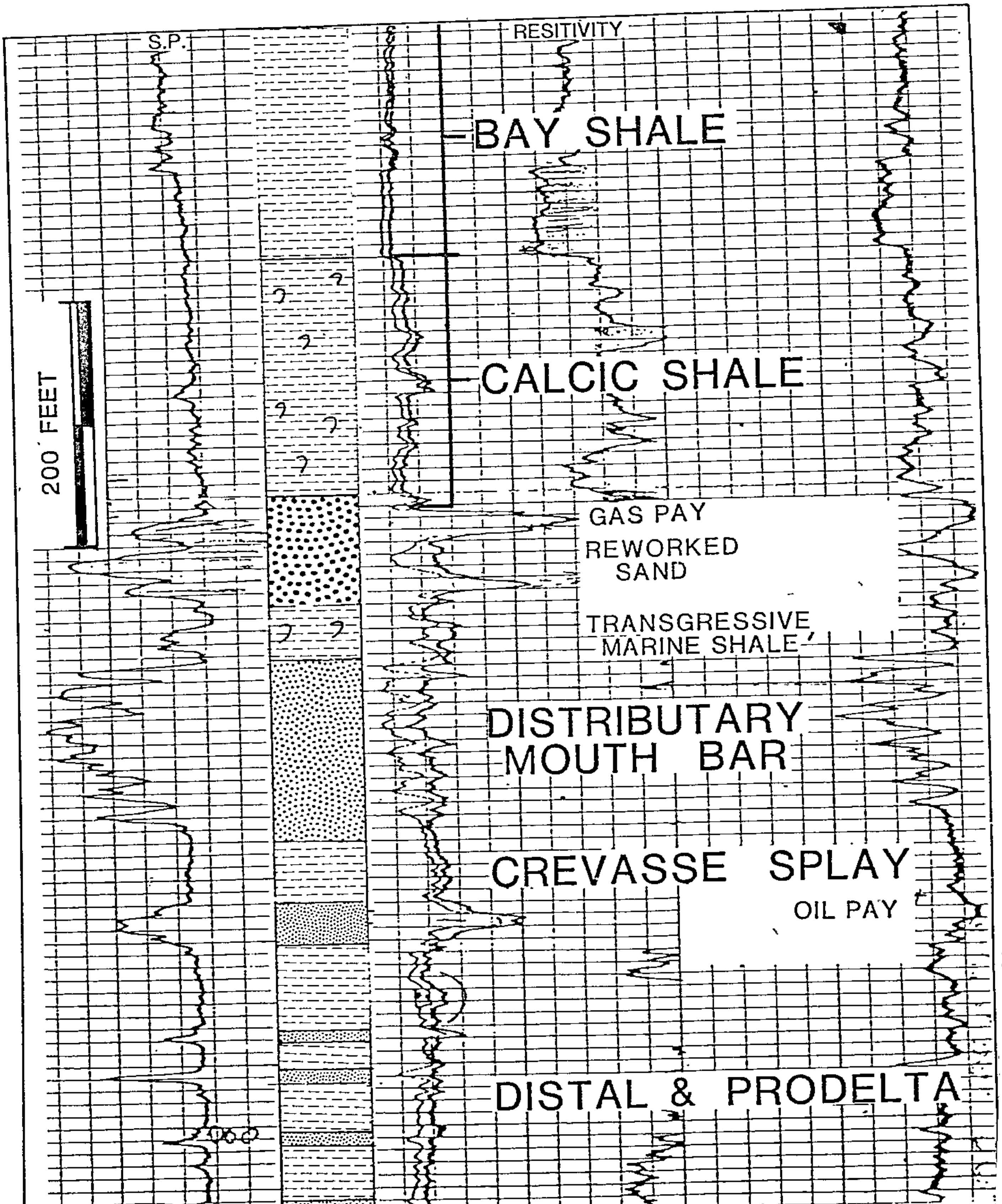


FIGURE 131 - A log from south Louisiana subsurface showing the reworked deltaic sand sequence. Note the coarsening upwards distributary mouth bar, the transgressive shale interval between the mouth bar and the reworked sands and the resistive shale overlying the reworked sands. Overlying bay shale is less resistive. Inverted hooks in shales represent oyster fragments.

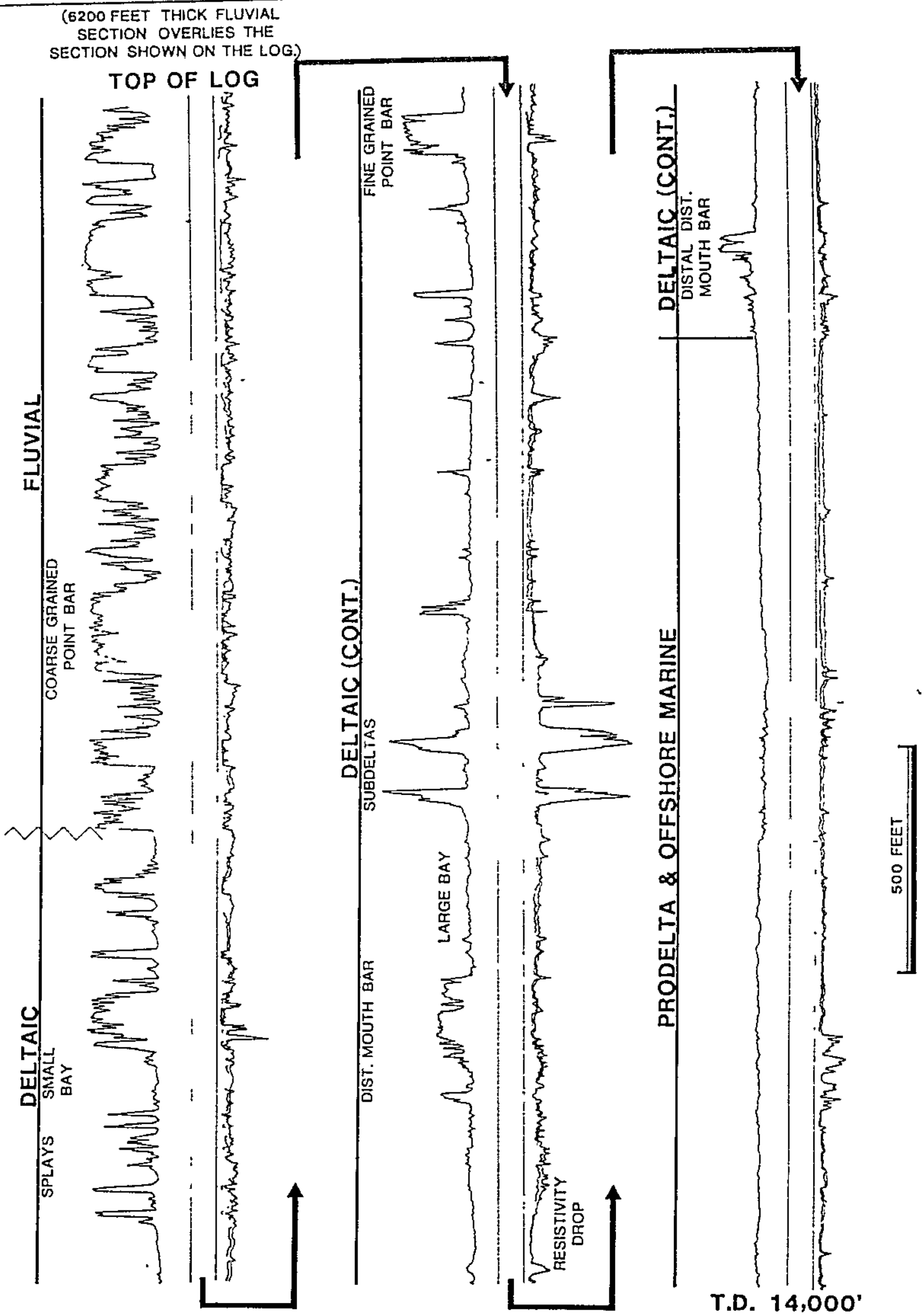


FIGURE 150 - Log showing the characteristics of the three broad fairways (Fluvial, deltaic and prodelta). Note the variety of sand body types in the deltaic plain and the gradual increase of shale thicknesses enclosing the sand bodies going vertically down in this zone.

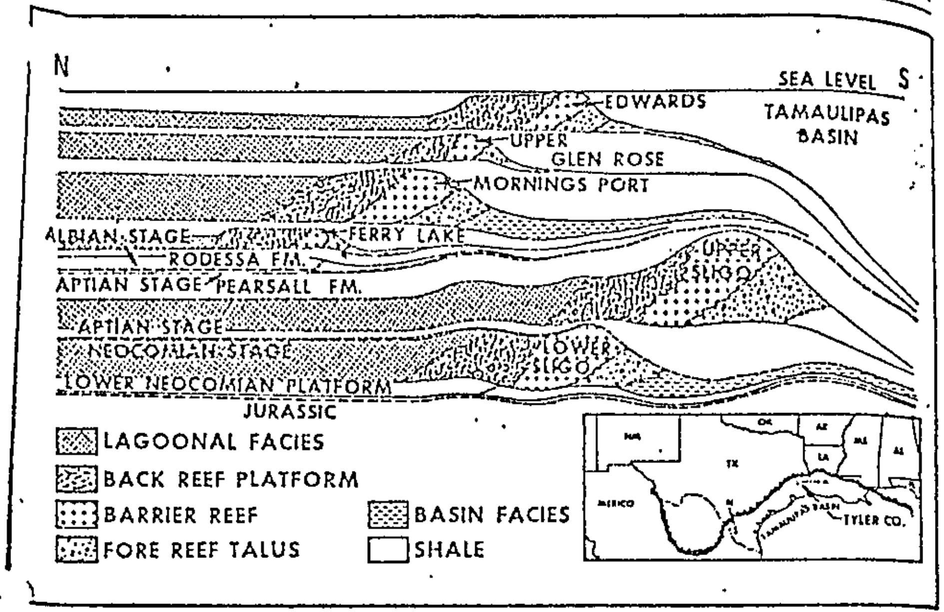


FIGURE 3 — Diagramatic cross-section of Lower Cretaceous strata in the Texas and Louisiana Gulf Coast showing geometric relationships of shelf-edge barrier reefs. Modified from W. Feather Wilson in Hendricks and Wilson (1967).

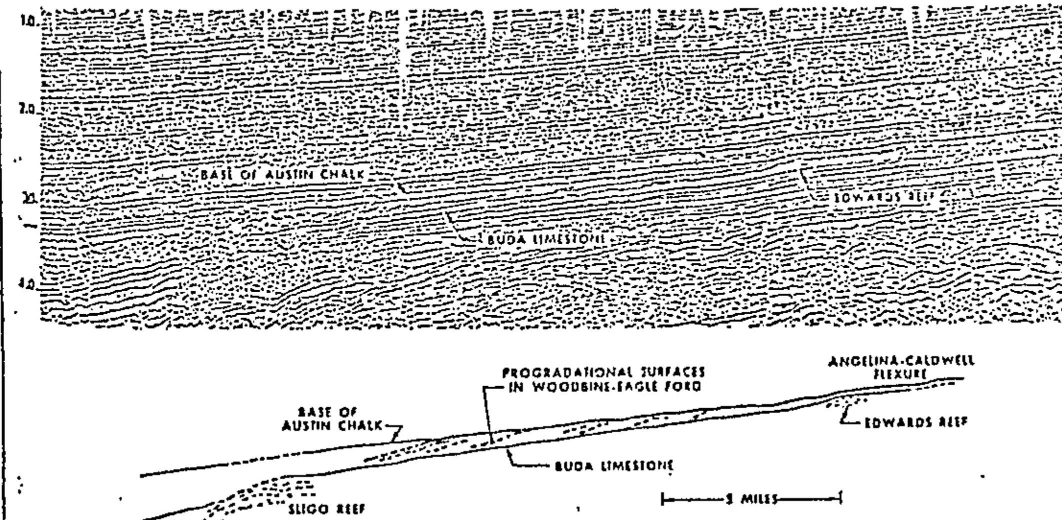
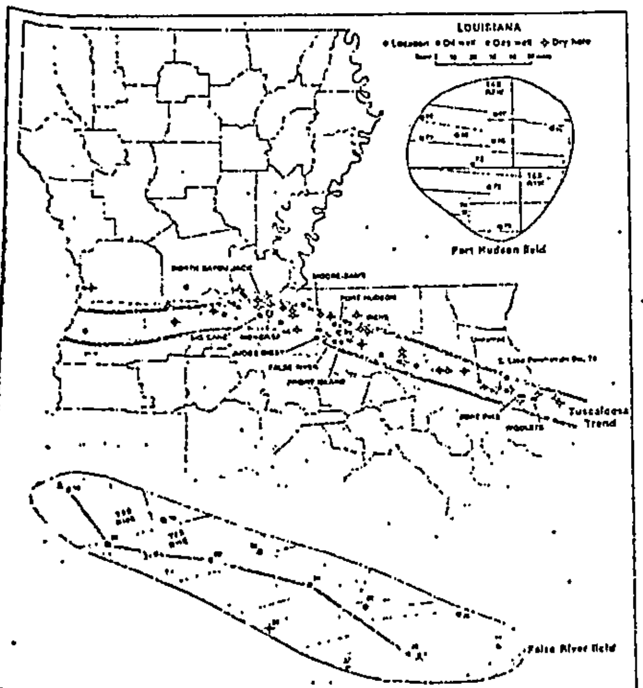


FIGURE 9 — Seismic section and sketch showing Woodbine-Eagle Ford down-dip clastic wedge in East Texas area. The positions of the Austin Chalk and Buda Limestone reflectors and the Edwards and Sligo reef build-ups are indicated. Also note the inclined reflectors within the mud-dominated Woodbine-Eagle Ford clastic wedge, indicating progradational surfaces. Modified from Sheriff (1976, fig. 10).



—The Tuscaloosa trend is a 30-mile by 200-mile band of gas-productive lower Upper Cretaceous sands extending across South Louisiana as indicated. Twelve fields have been officially designated in the play, with Chevron's False River field and Amoco's Port Hudson field being the two major producers to date (Cross section A to A' indicates the well logs included in Fig. 4.)

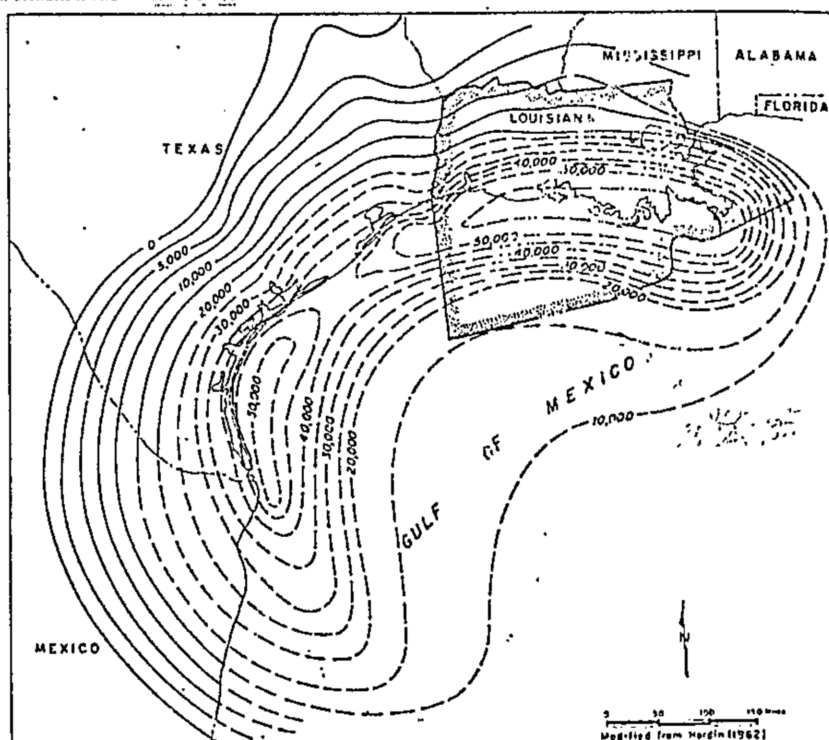
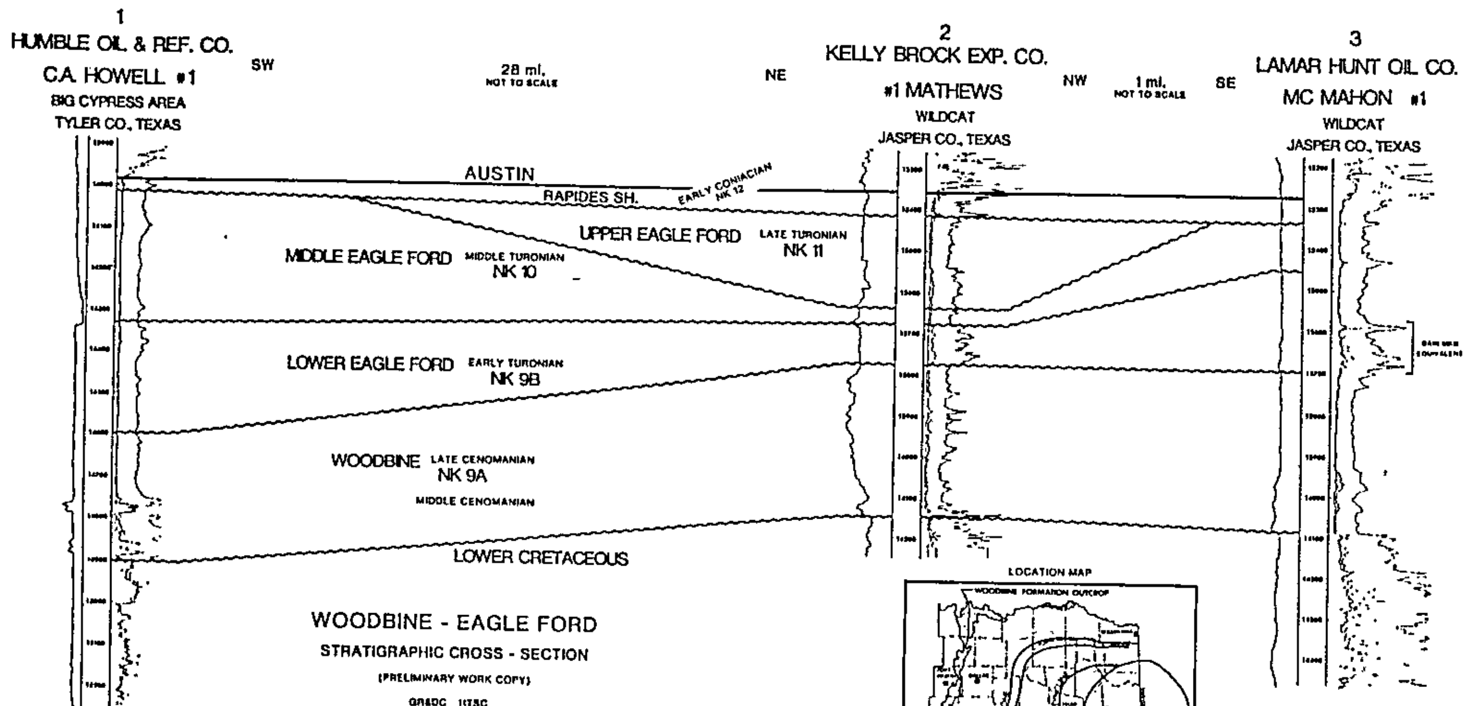


FIG. 8.—Generalized isopachous map of the Cenozoic strata of Gulf Coast geosyncline.

STRATIGRAPHIC CHART FOR			SOUTH ARKANSAS & NORTH LOUISIANA
SYSTEM	SERIES	GROUP	FORMATION
Tertiary	Pliocene		(Absent)
	Miocene		Fleming Catahoula
	Oligocene		Vicksburg
	Eocene	Jackson	Jackson
		Claiborne	Cockfield Cook Mt. Sparta Cane River
		Wilcox	Wilcox
	— ? — Paleocene	Midway	Midway Clayton
Cretaceous	Gulf	Navarro	Arkadelphia Nacatoch
		Taylor	Saratoga Annona Ozan (Buckrange Sand)
		Austin	Brownstown Tokio (Blossom)
		Eagleford	Eagleford
		Woodbine	U Tuscaloosa M Tuscaloosa L Tuscaloosa
	Comanchean	Washita	Georgetown
		Fredericksburg	Kiamichi Goodland
		Trinity	Paluxy Mooringsport Ferry Lake Anhydrite Rodessa James Pine Island
	Coahuilan	Nuevo Leon Durango	Sligo Hosston
Jurassic		Cotton Valley	Schuler Bossier
			Buckner-Haynesville Smackover Norphlet Louann Salt Werner
Triassic and Paleozoics			

Fig. 2—Those formations present throughout Louisiana are indicated in the stratigraphic column shown. The productive Tuscaloosa sands are a member of the lower Upper Cretaceous system.



WOODBINE - EAGLE FORD

STRATIGRAPHIC CROSS - SECTION

(PRELIMINARY WORK COPY)

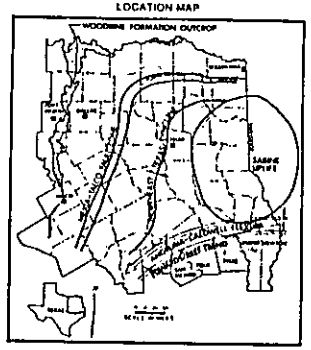
GR&DC 11TSC

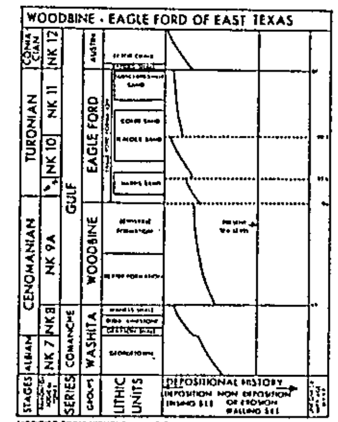
JULY 1980

W.W. COOPER

M.S. KEPPLER

LOCATION MAP





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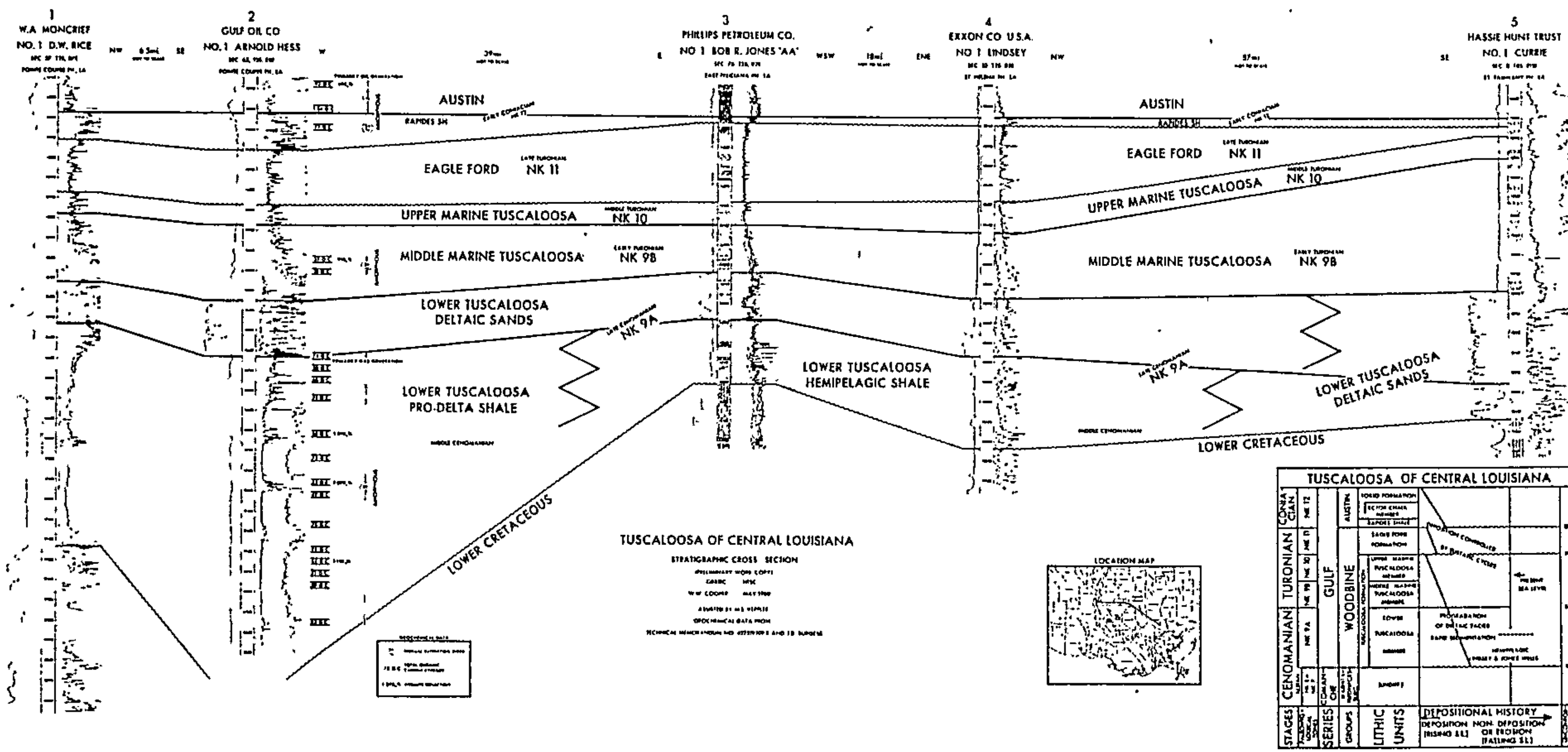

1
W.A MONCRIEF
NO. 1 D.W. RICE
2
GULF OIL CO
NO. 1 ARNOLD HESS
3
PHILLIPS PETROLEUM CO.
NO 1 BOB R. JONES "AA"
4
EXXON CO U.S.A.
NO 1 LINDSEY
5
HASSIE HUNT TRUST
NO. 1 CURRIE
AUSTIN
EAGLE FORD
NK 11
UPPER MARINE TUSCALOOSA
NK 10
MIDDLE MARINE TUSCALOOSA
NK 9B
LOWER TUSCALOOSA
DELTAIC SANDS
NK 9A
LOWER TUSCALOOSA
PRO-DELTA SHALE
LOWER TUSCALOOSA
HEMIPELAGIC SHALE
LOWER CRETACEOUS
TUSCALOOSA OF CENTRAL LOUISIANA
STRATIGRAPHIC CROSS SECTION
LOCATION MAP
TUSCALOOSA OF CENTRAL LOUISIANA
CENOMANIAN
TURONIAN
CONIACIAN
GULF
WOODBINE
STAGES
SERIES
LITHIC UNITS
DEPOSITIONAL HISTORY
DEPOSITION NON DEPOSITION
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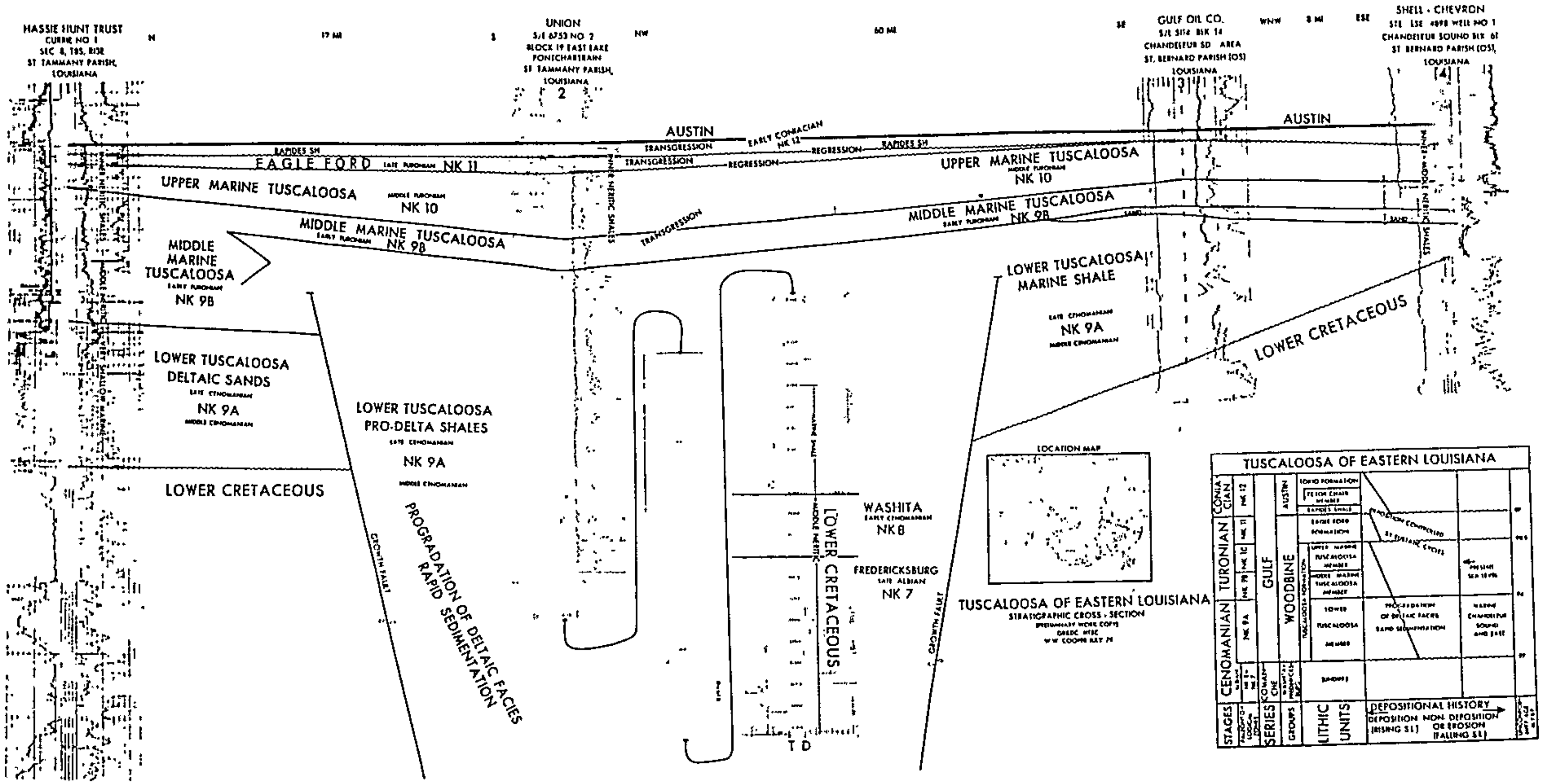

HASSIE HUNT TRUST
UNION
GULF OIL CO.
SHELL - CHEVRON
AUSTIN
EAGLE FORD NK 11
UPPER MARINE TUSCALOOSA
NK 10
MIDDLE MARINE TUSCALOOSA
NK 9B
TRANSGRESSION
REGRESSION
MIDDLE MARINE TUSCALOOSA
NK 9B
LOWER TUSCALOOSA DELTAIC SANDS
NK 9A
LOWER TUSCALOOSA PRO-DELTA SHALES
NK 9A
LOWER TUSCALOOSA MARINE SHALE
NK 9A
LOWER CRETACEOUS
PROGRADATION OF DELTAIC FACIES RAPID SEDIMENTATION
WASHITA
NK 8
FREDERICKSBURG
NK 7
LOWER CRETACEOUS
T D
LOCATION MAP
TUSCALOOSA OF EASTERN LOUISIANA
STRATIGRAPHIC CROSS - SECTION
TUSCALOOSA OF EASTERN LOUISIANA
STAGES
SERIES
GROUPS
LITHIC UNITS
DEPOSITIONAL HISTORY
CENOMANIAN
TURONIAN
GULF
WOODBINE

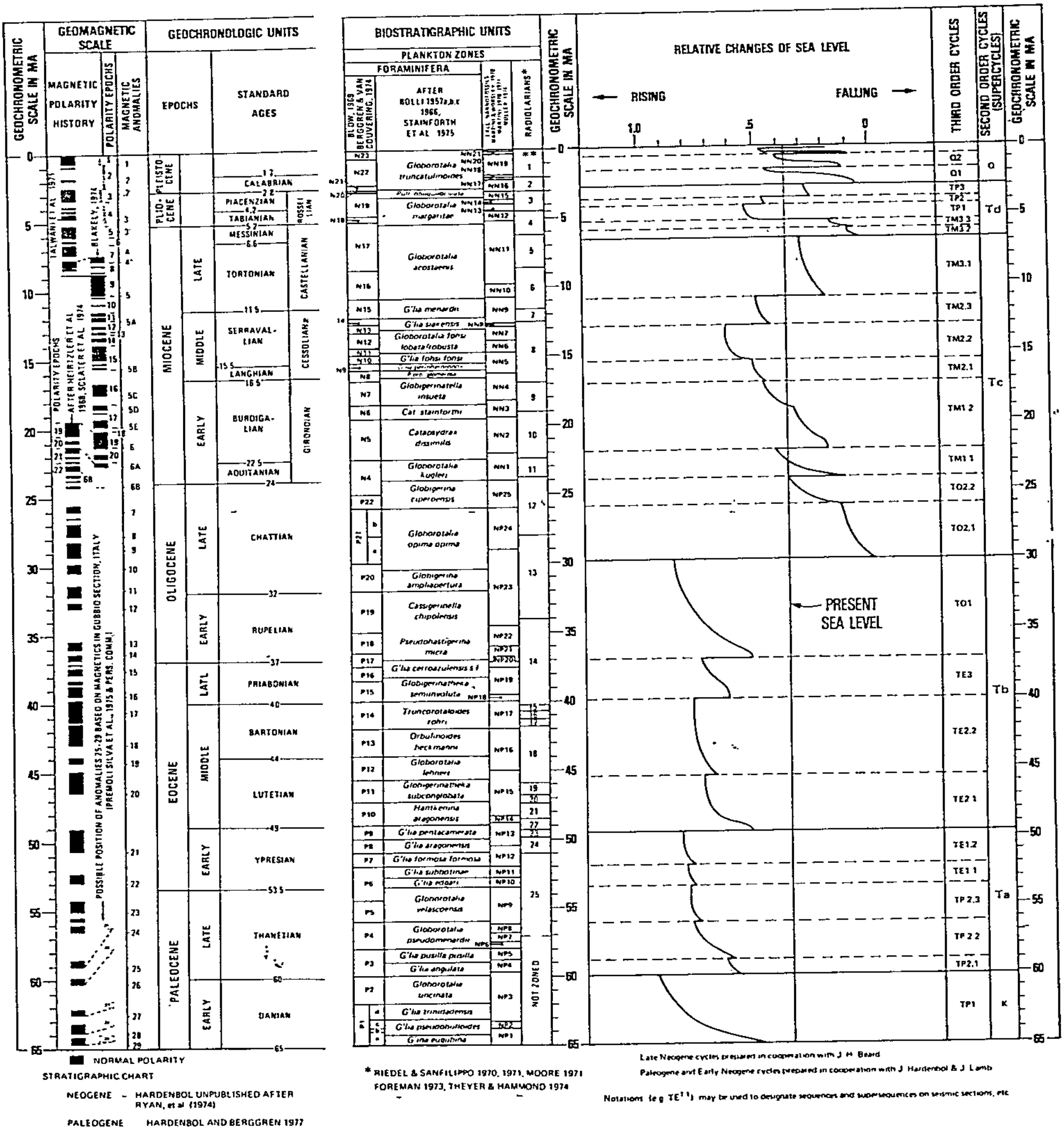
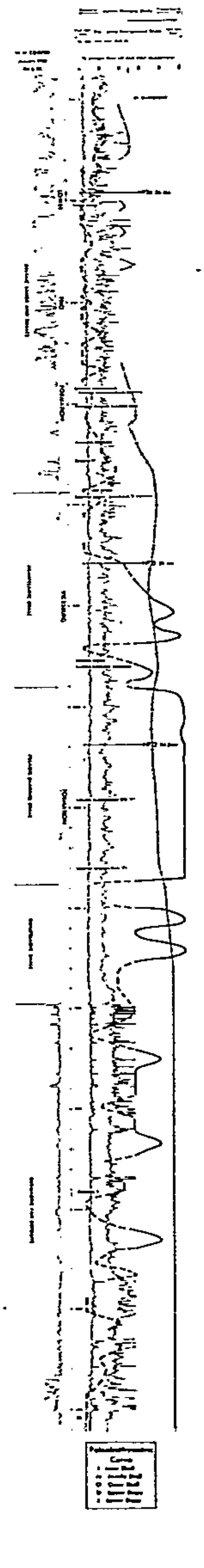


Fig. 1 (From AAPG Memoir 26 Seismic Stratigraphy p. 86-87)

H. T. S. C.
GULF OIL
ST TR 270-#1
WILDCAT
CHAMBERS COUNTY TEXAS



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