TYPE LOCALITY PROJECT

One of the main projects of our Section for this year is a compilation for publication of data on the type localities of all Mesozoic and Cenozoic stratigraphic units (surface and subsurface) in the Gulf Coast. The help of each one who is willing to make a contribution is needed. We believe that a publication which will give such information as is shown on the three examples, attached, will be useful to all geologists who work in the Gulf Coast and to many geologists in other parts of the world.

It is planned to publish this information in loose-leaf form so that additions can be inserted later. The cost of publishing a book of about 400 pages will be high; the photo-offset method is the cheapest and can be applied directly to the copies submitted if the authors observe the following rules:

- 1. Use only hard, white paper of 8 $1/2 \times 11$ inches.
- 2. Typewritten copy should have sharpest, blackest letters possible.
- 3. All maps and sketches should be in India ink; all lines, letters, or symbols should be clear.
- 4. Electrical logs should be traced onto the page; blue-line ozalids and poor photostats are not satisfactory.
- 5. Obtain written permission to publish any copyrighted material.
- 6. Leave sufficient margin for binding in loose-leaf binders.
- 7. Use lithologic and fossil symbols shown on chart, attached.
- 8. Submit copy with no mistakes. The book will be made from the sheets which the authors turn in.
- 9. Contact the Section's Business Representative in your area for assignment of stratigraphic units, and turn over to him the completed data sheets. A list of the Business Representatives is given in this Newsletter.
- 10. Note that the name of the geologist furnishing the data should be at the bottom of each sheet submitted; thus the publication will show who did the work.

Each member is urged to contribute to this project by actually submitting data on some of the units, pointing out names which have been omitted from the list of stratigraphic units which was sent to the membership in 1956, or by helping to interest state geological survey staffs, departments of geology staffs, and students to take an interest in the project. Any suggestions, which should be made to the Business Representative, for improvement of the presentation of data will be appreciated. It is recognized that many of the larger units, as Wilcox, Trinity, etc., cannot be treated in the same manner as the units which have a definite type locality or type section. However, it is planned to include in the book a discussion of the original and present usage of all such terms, together with a description of the type areas and typical sections.

E. H. Rainwater

MOODYS BRANCH FORMATION (UPPER ECCENE)

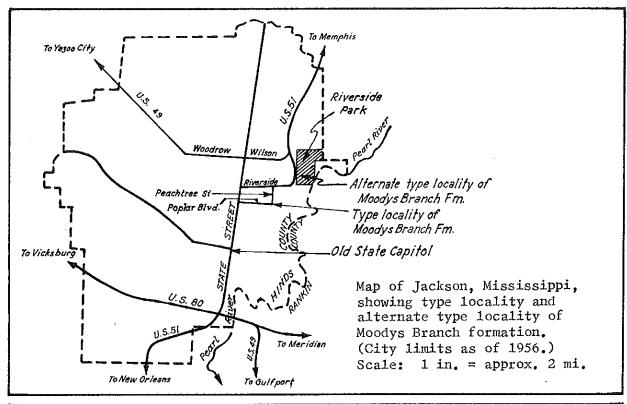
Location of type locality: In city of Jackson, Hinds County, Mississippi, at intersection of Peachtree St. and Poplar Blvd.

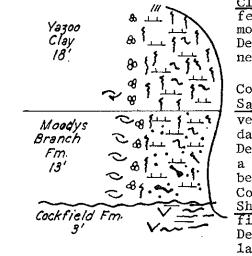
Named by: E. N. Lowe, 1915, "Mississippi: Its Geology, Geography, Soils, and Mineral Resources," Miss. Geol. Survey Bull. 12.

Age: Upper Eocene (Bartonian)

Correlated with: Lower part of Ocala limestone of Florida and Georgia, and lower part of Jackson of Louisiana and Texas.

Known distribution: Outcrop and subsurface of Alabama, Mississippi, and Louisiana.





Clay, gray to light yellow, calcareous; few silty and glauconitic streaks; common mollusks, mostly imprints; abundant Foram. Depositional environment: middle to outer neritic.

Contact gradational.

Sand and sandy marl, buff to greenish gray, very glauconitic and fossiliferous (abundant mollusks, single corals, Forams., etc.). Depositional environment: shallow marine, in a rapidly transgressing sea over nonmarine beds.

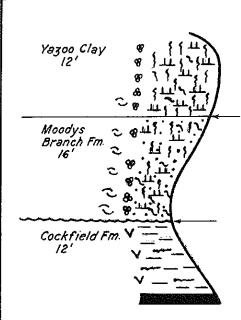
Contact unconformable

Contact unconformable.
Shale, gray, silty, lignitic, with abundant filled borings at top.
Depositional environment: nonmarine; mainly lagoonal.

MOODYS BRANCH FORMATION (UPPER EOCENE) ALTERNATE TYPE LOCALITY

Location of alternate type locality: In city of Jackson, Hinds County,
Mississippi, in Riverside Park, about 1 mile NE of type locality.

Alternate type locality suggested by: E. H. Rainwater, this publication.



Clay, gray to buff, calcareous, with glauconitic streaks, microfossiliferous (abundant Foraminifera). Depositional environment: middle to outer neritic.

Contact gradational.

Sand and sandy marl, gray and greenish-gray, very glauconitic and fossiliferous.

Depositional environment: shallow open sea marine, inner to middle neritic.

Contact unconformable.

Shale, gray, silty, carbonaceous, micaceous, with abundant borings at top and with a 2-foot bed of lignite at base of exposure.

Depositional environment: nonmarine, mainly lagoonal.

SECTION EXPOSED AT ALTERNATE TYPE LOCALITY OF MOODYS BRANCH FORMATION

Publications in which the Moodys Branch Fm. or its fossils are described:

- Monroe, Watson H., 1954, Geology of the Jackson Area, Mississippi, U. S. Geol. Survey Bull. 986.
- Cushman, J. A. and Todd, R., 1945, Foraminifera of the Type Locality of the Moodys Marl Member of the Jackson Formation in Mississippi, Contributions Cushman Lab. Foram. Research, Vol. 21, Pt. 4.
- Harris, G. D. and Palmer, K. V. W., 1945, The Mollusca of the Jackson of the Mississippi Embayment, Bull. Amer. Paleontology, Vol. 30, No. 117.
- Cooke, C. W., 1926, New Eocene Mollusks from Jackson, Mississippi, Jour. Washington Acad. Sci., Vol. 16, No. 5, pp. 132-138.
- Conrad, T. A., 1855, Observations on the Eocene Deposits of Mississippi with Description of 34 New Species of Shells and Corals, Phila. Acad. Nat. Sci., Vol. 7, pp. 257-263.
- Rainwater, E. H., 1955, Guides to Southeastern Geology, Geological Society of America, Special Publication, pp. 430-433.

This information furnished by: E. H. Rainwater Shell Oil Co. February, 1957

DANIZLER FORMATION (LOWER CRETACEOUS)

Location of type section: Wildcat well in Jackson County, Southeastern Mississippi.

Named by: R. T. Hazzard, B. W. Blanpied, W. C. Spooner, in Shreveport Geological Society "Reference Report on Certain Oil and Gas Fields of North Louisiana, South Arkansas, Mississippi, and Alabama," Vol. II, p. 472, 1945.

Age: Lower Cretaceous (Lower Cenomanian).

T.D. 11,378

Correlated with: South Tyler Formation of East Texas.

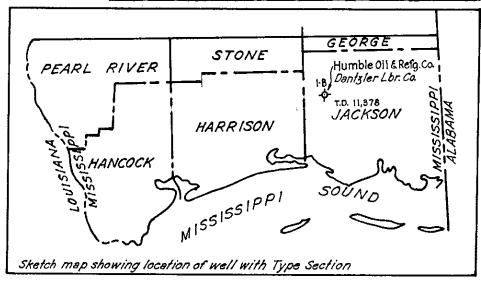
Depository of samples: Offices of some of the major oil companies in Jackson, Miss., Shreveport, La., and Houston, Texas.

Known distribution of formation: Subsurface of southern Miss. and southern Alabama.

Humble Oil & Refg. Co. Dantzler Lbr. Co. Sec. 20, Twp. 5-5 Rge. 9-W Jackson Co., Miss. El 108 🕹 1-8 8905 - Top of Dantzler Fm. (contact with overlying Tuscaloosa formation unconformable). Lithology: Sands are white, pale green to red; calcareous in part, fine to medium coarse, loose to indurated, with limy nodules and carbonaceous 9200 material in some sands. Shales are red, and 9300 mottled red and green, micaceous, silty, noncalcareous. Mudstones are red, green, light gray, and mottled, with common pink and white limy nodules. 9500 Rare chara (fresh water algae) and plant fragments. 9600 Depositional Environment: Nonmarine. Sands were deposited in stream channels; shales and mudstones were deposited 9700 mainly in backswamps where oxidation destroyed the organic matter. 9900 910 - Base of Dantzler Fm. (contact with underlying Lower

Blectrical Log and Lithologic Log of Type Section

Cretaceous transitional).



This information furnished by: E. H. Rainwater Shell Oil Co. February 1957

TABLE OF SYMBOLS FOR SEDIMENTARY ROCKS BASED ON LITHOLOGY ONLY AND DERIVED FROM

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			SYN	ABOLS FO			PARTICLES				****
	1	П	III	11	MODIFYING	CONSTITU	7.7	II	<u> </u>	II	11
	PARTICLES	CLAY	SILT	SAND	GRANULE	PEBBLE	COBBLE AND BOULDER	CALCITE AND / OR ARAGONITE	DOLOMITE	ANHYDRITE OR GYPSUM	CHERT
	BASIC SYMBOL	3		<u> </u>	•	0	<i>\\</i> 20	<u> </u>		1111	Δ
GGREGATES	O SEDIMENTS	2								CO M	
	CLAY	CLAY	SILTY CLAY	SANDY CLAY	GRANULE CLAY	RAVELLY CL. PEBBLY CLAY	AY COBBLY OR BOULDERY CLAY	LIMY CLAY	DOLOMITIC CLAY	GYPSIFEROUS CLAY	CHERTY CLAY
	SILT	l=;=l=	and and a			~~°~~				///= ///	Δ
		CLAYEY SILT	SILT	SANDY SILT	GRANULE SILT	AVELLY SIL PEBBLY SILT	T COBBLY OR BOULDERY SILT	LIMY SILT	OOLOMITIC SILT	GYPSIFEROUS SILT	CHERTY SILT
GRE		3				0.000	8 0	<u> </u>	11	1111 1111	Δ Δ
46	SAND	CLAYEY SAND	SILTY SAND	SAND	GRANULE SAND	DAVELLY SAI PEBBLY SAND	ND COBBLY OR BOULDERY SAND	LIMY SAND	DOLOMITIC SAND	GYPSIFEROUS SAND	CHERTY SAND
	GRAVEL			1.000		0.000	[:0:::,o::		· · · · · · · · · · · · · · · · · · ·	1111	ΔΔ
	GRAVEZ	CLAYEY GRAVEL	SILTY GRAVEL	SANDY GRAVEL	GRANULE GRAVEL	GRAVEL PEBBLY GRAVEL	COBBLY OR BOULDERY GRAVEL	LIMY GRAVEL	DOLOMITIC GRAVEL	GYPSIFEROUS GRAVEL	CHERTY GRAVEL
BEADER S	SEDIMENTS		·		1	00000	1			<i> </i>	Δ — — —
<i>Φευθευ</i> .	ALEMALIYI U	<u> </u>			2011212						Δ — — — — — — — — — — — — — — — — — — —
	SHALE	SHALE SH		SANDY SHALE	GRANULE SHALE	MERATIC S PEBBLY SHALE	SHALE COBBLY OR BOULDERY SHALE	LIMY SHALE	DOLOMITIC SHALE	ANHYDRITIC SHALE	CHERTY SHALE
	OCALIOTO ::-	11111		777-7	a 7 7 1 1	1 0 1 0 1 0 1 3	T10171	++	+1+-1=	111-111	<u>, </u>
	CLAYSTONE (OR	7	SILTY	SANDY	CONGLOME	RATIC CLAY	STONE	LIMY	DOLOMITIC	ANHYDRITIC	CHERTY
	CLAY SHALE)	CLAYSTONE	CLAYSTONE	CLAYSTONE	GRANULE CLAYSTONE	PEBBLY CLAYSTONE	COBBLY OR BOULDERY CLAYSTONE	CLAYSTONE	CLAYSTONE	CLAYSTONE	CLAYSTONE
	CH TATAL -			~~	- m . 0					7/1/	
	SILTSTONE (OR SILTY SHALE)	CLAYEY SILTSTONE	SILTSTONE	SANDY SILTSTONE	CONGLOMER GRANULE SILTSTONE	ATIC SILTS	ONE COBBLY OR BOULDERY	LIMY SILTSTONE	DOLOMITIC SILTSTONE	ANHYORITIC SILTSTONE	CHERTY SILTSTONE
		[]		[77.1.		L	SILTSTONE	[
	SANDSTONE	7:17:13				0	:P::::0:::			7111	
		CLAYEY SANDSTONE	SILTY SANDSTONE	SANDSTONE	CONGLOME GRANULE SANDSTONE	PEBBLY SANDSTONE	DSTONE COBBLY OR BOULDERY SANDSTONE	LIMY SANDSTONE	DOLOMITIC SANDSTONE	ANHYORITIC SANDSTONE	CHERTY SANDSTONE
KS	CONGLOMERATE	110111111		114 # 114 # 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.40.4.40.		0.00.0		<u>//</u>	1///	·Δ
ROCKS		CLAYEY CONGLOMERATE	SILTY CONGLOMERATE	SANDY CONGLOMERATE L	GRANULE CONGLOMERATE	PEBBLY CONGLOMERATE	COBBLY OR BOULBERY CONFLOMERATE	LIMY CONGLOMERATE	DOLOMITIC CONGLOMERATE	ANHYDRITIC CONGLOMERATE LL	CHERTY CONGLOMERATE
	LIMESTONE									111 111	
		CLAYEY LIMESTONE	SILTY LIMESTONE	SANDY LIMESTONE	CONGLOMER GRANULE LIMESTONE		STONE COBBLY OR BOULDERY LIMESTONE	LIMESTONE	DOLOMITIC LIMESTONE	ANHYDRITIC LIMESTONE	CHERTY LIMESTONE
	DOLOMITE	[] Z ₂ Z ₂ Z ₃ Z ₄ Z		·/;/;/;/	[17] 7,7,7, 7	797,797,2	77,7,0,71				V\$7,7,7\$7
		-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		<i>`````````</i>	7.777.79	1571697			444		\$1/2,19/
		CLAYEY DOLOMITE	SILTY DOLOMITE	SANOY DOLOMITE	CONGLOMER GRANULE DOLOMITE	RATIC DOLON PEBBLY DOLOMITE	COBBLY OR BOULDERY DOLOMITE	LIMY DOLOMITE	DOLOMITE	ANHYDRITIC DOLOMITE	CHERTY DOLOMITE
	ANHYDRITE										
	OR GYPSUM	CLAYEY ANHYDRITE	SILTY ANHYORITE	SANDY ANHYDRITE	CONGLOMERA GRANULE ANHYDRITE	TIC ANHYDR PEBBLY ANHYDRITE	COBBLY OR BOULDERY ANHYDRITE	LIMY ANHYDRITE	DOLOMITIC ANHYDRITE	ANHYORITE	CHERTY ANHYORITE
ŀ	CHERT										
		CLAYEY	SILTY	SANDY	CONGLOWI	RATIC CHE	RT .	LIMY	DOLOMITIC	ANHYDRITIC	CHERT
		CHERT	CHERT	CHERT	GRANULE CHERT	PEBBLY CHERT	COBBLY OR BOULDERY CHERT	CHERT	CHERT	CHERT [OR MOVACULITE

TABLES OF SYMBOLS FOR ROCK PARTICLES, BEDDING, FOSSILS, AND MISCELLANEOUS DATA

PARTICLE SYMBOL ALPHABET

	BASIC PARTICLES OF ROCKS		SPECIAL PARTICLES OF ROCKS	
1	Clay	5	i Glauconite	
2	Silt	~~	2 Pyrite (or sulfides in general)	
Э	Sand	-	3 Hematite (or oxides in general)	
4	Gravel	•	4 Phosphate	
5	Pebbles	-	5 Feldspor	
6	Cobbles	٥	6 Mica	
7	Boulders	0	7 Oolites •	
8	Calcite or aragonite	$\overline{\bot}$	8 Concretions*	
9	Dalamite		9 Fossils (macro)*	
10	Anhydrite or gypsum	1111	10 Fossils (micro)*	
11	Salt	#	11 Fossils (plant)* Z	

BEDDING SYMBOLS

		İ		T	
	SHALE L'	CLAYSTONE	SILTSTONE	SANOSTONE	LIMESTONE
I. Fissile and platy.		7-1-1-1-T			
2. Very thin, thin-, and medium-		 		· · · · · · · · · · · · · · · · · · ·	
3. Thick-bedded and massive.		7-1-7-1			
4. Cross-bedded					13
₫ Cross-bedding sandston	in limestone , e example.	probebly will r	equire sand sy	mbol similar to	,
sandston	e example.	•			
	Bedding ter	ms and definit	rions		
	C1 - 1/ - 1				
		han fin. thick.			
2.	Platy, it in to Very thin beck	±in. thick. Ked. ≠in. to 2	? in. thick,		
2. 1	Plety, fein te Very thin bed Thin-bedded, 2 Medium-bedded	tin. thick.	n. thick.		

PALEONTOLOGIC SYMBOLS

Δ

12 Chert

13 Coal

14 Volcanic ash

MISCELLANEOUS SYMBOLS

(All symbols to be placed outside lithologic column.)				STRUCTURE	FLUIDS		
I Fossils (macro)	٥	// Corais	0	1 Stylolites *	/	Oil stain, or production *	•
2 Fossils (micro)	48	12 Sponges	60	2 Stickensides *	//	2 Slight oil stain, or show *	•
3 Fossils (plant)	Z.	13 Spines	4	3 Cone-in-cone *	>	3 Gas *	†
4 Brachiopods	C	14 Foraminifera	~	IGNEOUS AND METAMORPHIC ROCKS		4 Ges show *	st
5 Pelecypods	^	15 Fusulinids	φ	I Acidic igneous rocks	1455	5 Fluorescence *	F
6 Втуогов	У	16 Fish	→	2 Basic igneous rocks	+++	6 Slight fluorescence *	SF
7 Crinoids	0	17 Fish plates	D	3 Metamorphic rocks	7777	7 Water *	W
8 Cephalopods	ž	18 Canadants	▽▽	SÁMPLES		8 Oil and water *	ow
9 Gastropods	8	19 Ostracods	0	I No samples, or interval covered	NS	9 Salt water *	SW
10 Trilobites	(an			2 Core *	CR-	10 Fresh water *	FW

*Symbol to be placed outside of lithologic column.

Note: Size of symbol can be varied to suit scale.