

EXPLORATION, INC.

Laurel, Mississippi

Core 24 - 8880 3/4" - Sand Red Brown - Uniform Grain - Slightly Silty and Micacious - Poor to Fair Perosity and Permability - No Shows.

Core 25 - 8986 3/4" \_ Sand Light Brown - Very Fime to Fine Grain - Slightly Silty and Micacious - Poor to Fair Perosity and Permability - No Shows.

Core 26 - 9058 12" - Sand Red Brown - Uniform Grain - Slightly Silty and Micacious - Slightly Glauconitic - Appears Wet - No Shows.

Core 27 - 9252 1 3/4" - Sand With Uniform Grain - Slightly Micacious With Red Brown Shale Laminations - No Shows.

Core 28 - 9263 1 3/4" - Sand Red Brown - Uniform Grain - Very Silty With Interbedded Mud Stones - Poor Perosity and Permability - No Shows.

Core 29 - 9510 1 3/4" - Sand Red Brown - Uniform Grain - Very Silty - Slightly Micacious - Poor Perosity and Permability - No Shows.

## DRILLER's LOG

USA #1 Liberty County, Florida, Section 4, Township 5 South, Range 7 West

DATE	BEGINNING	to	END	FORMATION	FOOTAGE DRILLED
3/15/59	0		651	Sand & Shale	651
3/16/59	65		382	Shale & Lime	338
3/17/59	382		1310	Lime & Shale	972
3/19/59	1310		2668	Sand & Shale	1340
3/20/59	2668		2970	Sand & Shale	302
3/21/59	2970		3834	Sand, Shale & Lime	846
3/22/59	3834		5035	Shale & Sand	1201
3/23/59	5035		5548	Shale & Sand	513
3/24/59	5548		6318	Sand & Shale	770
3/25/59	6318		6970	Sand & Shale	652
3/26/59	6970		7427	Sand & Shale	457
3/27/59	7427		7677	Shale & Sand	250
3/28/59	7677		8075	Shale	402
3/29/59	8075		8383	Shale & Sand	308
3/30/59	8383		8730	Shale	347
3/31/59	8730		9055	Sand & Shale	325
4/1/59	9055		9280	Sand & Shale	225
4/2/59	9280		9530	Sand & Shale	250
4/3/59	9530		9757	Shale	227
4/4/59	9757		9957	Shale	200
4/5/59	9957		10010	Shale	53

TOTAL DEPTH 10010 FEET



GULF COAST DRILLING AND EXPLORATION, INC. NO. 1 U.S.A. - FORESTRY SERVICE

Section 4 - 58 - 7W

Liberty County, Florida

T. E. 10010 Drilling Depth, 10011 Slumberger Depth

Attempted 30 Side Wall Cores 2874 - 9510 -- Recovered 29

Gore 1 -- 9162 %" - Sand Brown to Red Brown - Fine Grain - Silty - Slightly Micacious - Appears Wet - No Shows.

Core 2 -- 8988 1" - Sand as above - Very Silty - Subangular - Well Sorted - No Shows.

Core 3 -- 8898 1 - Sand Red Brown - Fine to Medium Grain - Slightly Silty and Micacious - Well Sorted - Fryable - No Shows.

Core 4 -- 8660 2" - Sand Red Brown - Very Fine Grain - Very Silty - Micacious - Poor Perosity and Permability - No Shows.

Core 5 -- 8324 2" - Sand Brown to Red Brown - Very Fine Grain - Silty - Slightly Micacious - Well Sorted - Tite - No Shows.

Core 6 -- 7606 1" - Shale Red Brown - Very Silty and Micacious.

Core 7 -- 7369 1" - Sand Red Brown - Very Find Grain - Silty - Slighty Micacious-Well Sorted - Tite - No Shows.

Core 8 -- 7268 3/4" - Shale Red Brown - Very Silty and Micacicus - No Shows. Core 9 -- 7288 1" - Shale " " " " " " "

Core 10 - 7145 1%" - Shale " " " " " " "

Core 11 - 7070 1" - Silty Streaks - Brown to Red Brown - Micacious - Tite - No Shows.

Core 12 - 6108 1" - Sand Red Brown - Very Fine Grain - Very Silty - Micacious-Well Sorted - Tite - No Shows.

Core 13 - 5813 1" - Silty Streaks - Red Brown - Micacious - Tite - No Shows.

Core 14 - 5509 1" - Sand Blue Grey - Uniform Grain - Micacious - With grey Shale Laminations - Poor Perosity and Permability - No Shows.

Core 15 - 5342 3/4" - Mud Stone - Brown to Red Brown.

Core 16 - 4512 12" - Sand Blue Grey - Uniform Grain - Well Rounded and Sorted - Slightly Glauconitic - Fair Perosity and Permability with Black Shale Caminations - No Shows.

Core 17 - 4041 12" - Shale Grey Green Limey and Fossiciferous.

Core 18 - 3982 1 3/4" - Shale Grey - Calcarious - Grey Shale With Lime Laminations.

Core 19 - 2874 12" - Shale Tan - Calcarious.

Core 20 - 4570 1" - Sand Light Grey - Uniform Grain - Well Sorted - Slightly Micacious - Slightly Silty - No Shows.

Core 21 - 4581 12" - Sand With Fine Grain - Well Sorted and Rounded - Good Perosity and Permability.

Gore 22 - 6192 1 3/4" - Sand Red Brown - Uniform Grain - Slightly Silty and Micacious - Well Sorted - Fair Perosity and Permability - No Shows.

Core 23 - 8486 1 - Sand Red Brown - Uniform Grain - Very Silty - Slightly Micacious - Appears Tite - No Shows.

GULF COASTAL DRILLING #1 U. S. A. SEC.4, T.5S - R.7W LIBERTY COUNTY FLORIDA

#277

## FAUNAL DETAIL SAMPLE ANALYSIS

2990	FIRST SAMPLE EXAMINED Caving and chalk. Reworked Cretaceous fauna (Maast. Campanian) includes Globotruncana linneiana; and flood Late Paleocene Tertiary planktonics.
3035	Electric log pick = Top Cretaceous
3020	Caving and chalk. Same as above, probably Late Campanian, with: Globotruncana ventricosa Globotruncana spp. Arenobulimina americana Dorothea sp.
3050	Similar with: Heterostomella americana Stensioina americana Bolivinoides miliaris
3080	Same
3110	Similar plus: Anomalinoides pinguis
3140	Caving and chalk continues, much caving. Similar plus: Globorotalites micheliana Buliminella cushmani No Bolivinoides
3170	Same
skip to	
3230	Same
3260	Similar plus: Marginulina inconstantia (2)
3290	Similar plus: Archaeoglobigerina cretacea

3320	Similar caving and chalk, with:  Marginotruncana marginata Planulina taylorensis Gaudryina stephensoni Veenia paratriplicata Brachycythere sp. Tritaxia sp.
3350	Similar Marginotruncana sigali (?reworked) Marginotruncana aff. renzi Gaudryina sp.
3380	Similar to 3320*
3410	Similar with: Marginotruncana cf. renzi
3440	Similar
3470	Similar
3500	Similar
3530	Similar with: Definite Late Middle Santonian Marginotruncana concavata carinata Phacorhabdotus sp.
3560	Similar plus: Nodosaria sp. Marginotruncana cf. schneegansi Marginotruncana sigali Marginotruncana concavata (2)
3590	Same Marginotruncana spp. Marginotruncana concavata (4)
3620	Chalk. Similar with: Heterohelik striata Heterohelik globulosa Globigerinelloides sp.
3650	Chalk, mostly caving.  Marginotruncana marginata rare Globotruncana linneiana Marginotruncana rensi (2) Marginotruncana coronata (1)

3680	Chalk and mostly caving. Similar with very rare planktonics. Probably shallow environment. Increase in clam prisms.
3710	Similar to 3650° with: Marginotruncana concavata concavata
3740	Similar With: Hedbergella sp.
3770	Similar Marginotruncana pseudolinneiana
3800	Similar with some very argillaceous gray chalk.
3830	Similar
3860	Similar Hedbergella portsdownensis
3890	Similar
3920	Similar with chalky shale. Similar
3950	Similar
3980	Similar
4010	Similar with: Hedbergella simplex
4040	Mostly gray chalky shale. Similar
4070	Similar plus sandstone. Similar
4100	Similar, mostly chalky shale
4130	Similar
4160	Mostly fine grained arg. sandstone.
4190	Similar with minor light grayish brown shale - only caving.
4220	Mostly fine grained sandstone. Similar
4250	Similar with light grayish brown shale. Same
4280	Same

4310	Similar
4340	Similar
4370	Sandstone and brown shale. Caving and: Hedbergella sp. Hedbergella portsdownensis
4400	Same. Barren - only caving
4430	Similar
4460	Similar
4490	Similar with: Hedbergella sp. (4) Marginotruncana imbricata - possible caving from higher
4520	Similar Hedbergella portsdownensis (2) Hedbergella sp. (3)
4550	Similar, mostly sandstone. Similar.
4580	Similar with: very rare Hedbergella
4610	Similar Marginotruncana helvetica - probably caving
4640	Similar with uncommon lignite fragments and: very rare Hedbergella
4670	Sandstone and brown shale. Same.
4700	Similar plus medium to coarse quartz. very rare Hedbergella
4730	Sandstone and shale
skip to	
4790	Same with: Hedbergella sp.
4820	Similar Hedbergella sp. (3)
4850	Similar rare Hedbergella sp.
4880	Gray shale and sandstone. Similar

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4920	Mostly red sandstone, minor red shale, trace crystalline dol. Barren
5000	Similar with some red shale. Barren
5050	Similar. Barren
5110	Similar with some clear sandstone and siltstone. Barren
5170	Similar, mostly clear sandstone - trace caving.
5230	Similar with trace coarse qtz. and brown shale. Trace caving.
5290	Similar with fine grained sandstone, red and clear. Some red shale and minor brown shale. Minor caving.
5350	Mostly gray shale, some Upper Cretaceous caving.
5410	Similar plus chalky limestone - probable caving. Caving - Cretaceous and Tertiary.
5470	Similar - much caving
5530	Similar with some clear fine grained sandstone, trace of red sandstone and shale. Some caving.
5590	Similar with fine to coarse clear qts. and fine grained red sandstone. Trace caving.
5650	Similar, more fine grained red sandstone. Some Tertiary and Cretaceous caving.
5710	Similar with less red sandstone. Some caving.
5770	Similar
5830	Similar
5890	Similar - caving mostly Tertiary.
5950	Similar
6020	Similar with: Hedbergella delricensis
6070	Similar with some Cretaceous and Tertiary caving.
6130	Similar - trace caving

6190	Mostly red and clear fine to mostly coarse grained sandstone. Minor red and gray shale.
6250	Similar
6310	Similar - more caving
6370	Similar, mostly clear very coarse qtz. sand.
6430	Similar
6490	Similar
6550	Similar, mostly gray shale - some caving
6610	Similar
6670	Similar to 6490° - trace caving
6730	Similar - trace caving with fragment agglutinated uniserial foram
6790	Fine to coarse clear and red sand, some brown. Minor red shale. Minor caving.
6850	Similar - some Tertiary caving and trace Cretaceous caving.
6910	Similar. Minor caving.
6970	Similar. Some caving.
7030	Much red micrite to micro-crystalline limestone. Red fine grained sandstone and shale. Some other lithology as above - trace caving.
7100	Similar, mostly fine grained red sandstone. Some fine to medium coarse red and clear sandstone.
7160	Similar
7220	Similar with trace of brown micrite. Minor caving.
7280	Similar
7330	Moatly brown shale and fine grained clear sandstone. Minor caving.
7390	Mostly fine grained red to clear sandstone. Trace red micrite and shale.

7450	Similar with increase in red micrite.
7510	Similar with small fragments red micrite or shale, in sandstone.
7570	Very small sample - much caving.
7600	Mostly red fine grained sandstone
7620	Similar with some red shale, trace red micrite and caving.
7640	Similar with minor tan micrite.
7650	Similar, in part arenaceous micrite, trace caving.
7670	Similar - some caving.
7680	Similar. Some red micrite. Minor caving. Lower Cretaceous "seed case" type charophyte
7700	Mostly fine grained red sandstone. Minor micrite, trace shale and caving.
7710	Similar
7730	Similar
7740	Similar
7760	Similar with slight increase in micrite.
7770	Similar
7790	Similar with trace micrite
7800	Similar, again slight increase in micrite.
7820	Mostly caving, gray chalky shale and clear sandstone. Very bad sample.
7830	Similar
7850	Similar
7860	Similar
7880	Similar
7890	Similar

7910	Similar
7920	Similar
7940	Similar
7950	Similar
7980	Similar with gray shale, some coarse clear qtz. Caving.
7990	Similar
8010	Similar - mostly caving.
8020	Similar
8040	Similar
8050	Similar with some red sandstone - much caving.
8070	Fine to comrse clear qts and gray chalky shale. Caving.
8140	Mostly clear fine grained sandstone (in part red) and some red shale.
8200	Gray shale, micaceous gray shale, fine grained clear sandstone.
8260	Similar plus red shale, sandstone and micrite.
8320	Similar
8380	Mostly fine grained red sandstone, minor red shale and a trace micrite.
8440	Similar - trace caving
8500	Fine to medium grained red sandstone. Minor red shale, trace micrite.
8570	Similar
8630	Similar
8690	Similar
8750	Mostly medium grained clear sandstone (in part red) (or slightly iron stained). Minor shale.