C O P Y

Permit # 95

COASTAL PETROLEUM COMPANY #1 E. P. LARSH

JEFFERSON COUNTY, FLORIDA

LITHOLOGY AND PALEONTOLOGY BY L. C. KIRBY AND H. A. MOORE

| | | |
|---|---|---|
| LOCATION | : | SE, NE, SW, Section 1 - 2S - 3E. |
| ELEVATION | : | 51' (DF) |
| COMMENCED | : | 11 - 6 - 48 |
| COMPLETED | : | 1 - 7 - 49 |
| TOTAL DEPTH | : | 7,913' in Paleozoic |

DEPTH

Rotary Cuttings

IN MIDWAY

| | | | |
|---|---|---|---|
| 2510-2520 | White to Lt. Gray, moderately hard, fossiliferous, chalky Ls. w/small specks glauconite. | | |
| | FORAMINIFERA: | Globigerina triloculinoides | (C) |
| | | Globorotalia wilcoxensis | (C) |
| | | Siphonina Sp. | (F) |
| | | Pseudoglandulina Sp. | (F) |
| | | Quinqueloculina Sp. | (C) |
| 2520-2530 | Lith. as above plus Gray chalky shale | | |
| | FORAMINIFERA: | Globigerina triloculinoides | (C) |
| | | Globorotalia velascoensis | (F) |
| | | G. wilcoxensis | (C) |
| | | G. Sp. | (F) |
| | | Textularia Sp. | (F) |
| | OSTRACODA: | Small, smooth specie w/one end rounded and other end sharply pointed. | (F) |
| 2530-2540 | Lith. as above, but chalky Ls. is subordinate. | | |
| | FORAMINIFERA: | Globigerina triloculinoides | (C) |
| | | G. pseudo-bulloides | (F) |
| | | Globorotalia velascoensis | (F) |
| | | G. wilcoxensis | (C) |
| | | Planulina waltonensis | (F) |
| | | Textularia Sp. | (F) |
| | | Pseudoglandulina Sp. | (F) |
| | | Robulus Sp. | (F) |
| 2540-2550 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina triloculinoides | (C) |
| | | Globorotalia wilcoxensis | (C) |
| | | G. Sp. | (F) |
| | | Anomalina rubiginosa | (F) |
| | | Bulimina Sp. | (F) |
| | | Lagena Sp. | (F) |
| | | Astacolus navicula | (F) |
| | | Pulvinulinella Sp. | (F) |
| 2550-2560 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina triloculinoides | (C) |
| | | G. pseudo-bulloides | (C) |
| | | Globorotalia wilcoxensis | (C) |
| | | Anomalina rubiginosa | (C) |
| | | Lagena Sp. | (F) |
| | | Glandulina Sp. | (F) |
| | | Pullenia quinqueloba | (F) |
| | | Quinqueloculina Sp. | (F) |
| | | Siphonina wilcoxensis | (F |

2550-2560 (cont'd)

| | | |
|---|---|---|
| | Robulus Sp. | (F) |

TOP UPPER CRETACEOUS (TAYLOR): 2560 (-2509)' --- From Schlumberger.

2560-2570 Lith. as above plus White, soft, fossiliferous chalk.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina triloculinoides | (C) |
| | Globorotalia wilcoxensis | (C) |
| | Anomalina harperi | (C) |
| | Globotruncana cretacea | (Ab) |
| | Guembelina Sp. | (F) |
| | Bolivina Sp. | (F) |
| | Nodosaria Sp. | (F) |
| | Lagena Sp. | (F) |

2570-2580 White, soft, fossiliferous chalk w/few Inoceramus prisms.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina triloculinoides | (F) |
| | Anomalina harperi | (F) |
| | A. Sp. #3 | (F) |
| | Globotruncana arca | (F) |
| | G. cretacea | (C) |
| | G. canaliculata | (C) |
| | Stensioina americana | (Ab) |
| | Bolivinoides decorata | (C) |
| | Bolivina Sp. | (C) |
| | Bulimina Sp. | (F) |
| | Lagena Sp. | (F) |
| | Guembelina Sp. | (F) |
| | Gyroidina micheliniana | (C) |
| | Pseudoglandulina Sp. | (F) |

2580-2640 Lith. as above, but Inoceramus prisms common.

2640-2660 Lith. as above, plus little Gray shaly chalk. Little Tan chert.

2660-2690 White soft chalk and Gray soft shaly chalk. Inoceramus prisms common.

2690-2740 Lith. as above, but White chalk is subordinate. Little pyrite.

2740-2750 Lith. as above.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina Sp. | (F) |
| | Globotruncana arca | (F) |
| | G. cretacea | (C) |
| | G. canaliculata | (F) |
| | G. canaliculata var. ventricosa | (F) |
| | Stensioina americana | (F) |
| | Planulina taylorensis | (C) |
| | P. texana | (C) |
| | Guembelina Sp. | (F) |
| | Lagena Sp. | (F) |
| | Robulus Sp. | (F) |
| | Hemicristellaria Sp. | (F) |
| | Globorotalia umbilicata | (C) |

2750-2760 Lith. as above.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina cretacea | (C) |
| | Anomalina Sp. #3 | (F) |
| | Globotruncana cretacea | (Ab) |
| | G. canaliculata | (F) |
| | G. canaliculata var. ventricosa | (C) |
| | Gyroidina girardana | (F) |
| | G. micheliniana | (F) |
| | Stensioina americana | (F) |
| | Planulina taylorensis | (C) |
| | P. texana | (C) |
| | Guembelina Sp. | (C) |
| | Lagena Sp. | (F) |
| | Ventilabrella Sp. | (F) |
| | Pulvinulinella Sp. | (F) |
| | Globorotalia umbilicata | (C) |

DEPTH

Rotary Cuttings

2760-2770 Lith. as above, but White soft chalk makes up 1/2 of sample.

| FORAMINIFERA: | | |
|---|---|---|
| | Globigerina cretacea | (C) |
| | G. Sp. | (C) |
| | Globotruncana cretacea | (F) |
| | G. canaliculata | (C) |
| | Stensioina americana | (F) |
| | Planulina taylorensis | (C) |
| | P. texana | (C) |
| | Guembelina Sp. | (F) |
| | Globorotalia umbilicata | (C) |

2770-2790 Lith. as above, but Gray shaly chalk is subordinate.

2790-2800 White soft chalk and Gray soft shaly chalk. Inoceramus prisms abundant. Little pyrite.

| FORAMINIFERA: | | |
|---|---|---|
| | Globigerina cretacea | (C) |
| | Globotruncana arca | (F) |
| | G. cretacea | (F) |
| | G. canaliculata | (C) |
| | Guembelina Sp. - - - Elongate. | (F) |
| | G. Sp. - - - Gradually tapered | (C) |
| | Ventilabrella Sp. | (F) |
| | Gyroidina girardana | (F) |
| | Valvulineria Sp. | (F) |

2800-2810 Lith. as above.

| FORAMINIFERA: | | |
|---|---|---|
| | Globotruncana cretacea | (C) |
| | G. canaliculata var. ventricosa | (C) |
| | Guembelina Sp. | (F) |
| | Planulina taylorensis | (F) |
| | P. cf. texana | (F) |
| | Cibicides subcarinatus | (F) |
| | Robulus cf. munsteri | (F) |

2810-2820 Lith. as above.

| FORAMINIFERA: | | |
|---|---|---|
| | Globigerina cretacea | (F) |
| | Globotruncana arca | (F) |
| | G. cretacea | (C) |
| | Planulina taylorensis | (F) |
| | Guembelina Sp. | (F) |
| | Kyphopyxa christneri | (F) |
| | Robulus munsteri | (F) |
| | Hemicristellaria Sp. | (F) |

2820-2830 Lith. as above.

| FORAMINIFERA: | | |
|---|---|---|
| | Globigerina cretacea | (F) |
| | Globotruncana arca | (F) |
| | G. cretacea | (C) |
| | G. canaliculata | (C) |
| | Kyphopyxa christneri | (F) |
| | Planulina Sp. | (C) |
| | Robulus Sp. | (F) |

2830-2840 Lith. as above.

| FORAMINIFERA: | | |
|---|---|---|
| | Globigerina cretacea | (F) |
| | Globotruncana cretacea | (C) |
| | G. canaliculata | (C) |
| | Guembelina Sp. | (F) |
| | Lagena Sp. | (F) |
| | Marginulina Sp. | (F) |
| | Robulus Sp. | (F) |
| | Planulina Sp. | (F) |

2840-2850 Lith. as above, but white chalk is subordinate.

| FORAMINIFERA: | | |
|---|---|---|
| | Globotruncana arca | (F) |
| | G. cretacea | (C) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 2840-2850 (Cont'd) | | Globotruncana canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| | | Planulina taylorensis | (C) |
| | | Bulimina Sp. | (F) |
| | | Lagena Sp. | (F) |
| | | Kyphopyxa christneri | (F) |
| | | Gyroidina micheliniana | (F) |
| | | G. girardana | (F) |
| | | Unidentifiable Sp. | (F) |
| 2850-2860 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | Globotruncana canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (C) |
| | | Guembelina Sp. | (C) |
| | | Planulina taylorensis | (F) |
| 2860-2870 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (C) |
| | | Guembelina Sp. | (F) |
| | | Stensioina americana | (F) |
| | | Planulina taylorensis | (C) |
| | | Anomalina harperi | (F) |
| | | Globorotalia umbilicata | (F) |
| 2870-2880 | Gray shaly chalk and Lt. Gray, hard, chalky, fossiliferous, pyritic, slightly glauconitic Ls. | | |
| | FORAMINIFERA: | Globigerina Sp. - - - Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | Bolivina Sp. | (F) |
| | | Bulimina Sp. | (C) |
| | | Nodosaria Sp. | (F) |
| | | Robulus cf. cultratus | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Valvulineria infrequens | (C) |
| 2880-2890 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. - - - Resembles G. cretacea of Moreman | (C) |
| | | G. Sp. | (F) |
| | | Globotruncana arca | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Bulimina Sp. | (C) |
| | | Planulina taylorensis | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Valvulineria infrequens | (C) |
| | | Marginulina Sp. | (F) |
| | FISH TEETH | | (F) |
| 2890-2900 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 2890-2900 (Cont'd) | | Guembelina Sp. | (C) |
| | | Kyphopyxa christneri | (F) |
| | | Globorotalia umbilicata | (C) |
| | | Gyroidina girardana | (F) |
| 2900-2910 | Lith. as above, but Ls. is subordinate. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Planulina taylorensis | (C) |
| | | P. texana | (C) |
| | | Globorotalia umbilicata | (C) |
| | | Gyroidina girardana | (C) |
| 2910-2920 | Gray shaly chalk w/abundant Inoceramus prisms and little pyrite. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. - - - Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. --- Abruptly tapered | (F) |
| | | G. Sp. --- Gradually tapered | (F) |
| | | Planulina taylorensis | (F) |
| | | Globorotalia umbilicata | (Ab) |
| | | Kyphopyxa christneri | (C) |
| | | Robulus Sp. | (F) |
| 2920-2930 | Lith. as above plus little Gray, calcareous, finely micaceous shale. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. --- Abruptly tapered | (C) |
| | | G. Sp. --- Gradually tapered | (F) |
| | | Globorotalia umbilicata | (Ab) |
| | | Kyphopyxa christneri | (F) |
| | | Textularia Sp. | (F) |
| | | Unidentifiable Sp. | (F) |
| 2930-2940 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata var. ventricosa | (C) |
| | | Planulina taylorensis | (C) |
| | | P. texana | (C) |
| | | Stensioina americana | (F) |
| | | Guembelina Sp. | (C) |
| | | Globorotalia umbilicata | (Ab) |
| | | Lagena Sp. | (F) |
| 2940-2950 | Lith. as above plus White soft chalk. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata | (F) |
| | | G. canaliculata var. ventricosa | (C) |
| | | Anomalina cf. Sp. #1 | (F) |
| | | Guembelina Sp. | (C) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 2940-2950 (Cont'd) | | Ventilabrella eggeri | (F) |
| | | Planulina taylorensis | (F) |
| | | Planulina texana | (C) |
| | | Lagena Sp. | (F) |
| | | Globorotalia umbilicata | (Ab) |
| | | Unidentifiable Sp. | (C) |
| 2950-2960 | Lith. as above, but Gray shale is more abundant. | | |
| | FORAMINIFERA: | Gobigerina cretacea | (C) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina texana | (F) |
| | | Globorotalia umbilicata | (C) |
| | | Valvulineria infrequens | (C) |
| | | Robulus Sp. | (F) |
| 2960-2970 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Stensioina americana | (F) |
| | | Guembelina Sp. --- Abruptly tapered | (F) |
| | | G. Sp. --- Gradually tapered | (F) |
| | | Planulina taylorensis | (F) |
| | | P. Sp. | (F) |
| | | Nodosaria Sp. | (F) |
| | | Gyroidina girardana | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Valvulineria infrequens | (F) |
| | | Robulus Sp. | (F) |
| 2970-2980 | Lith. as above, but Gray, calcareous shale is abundant. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina taylorensis | (F) |
| | | P. cf. austinana | (F) |
| | | Globorotalia umbilicata | (C) |
| | | Valvulineria Sp. | (F) |
| | | Nodosaria Sp. | (F) |
| | | Unidentifiable Sp. | (F) |
| 2980-2990 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Planulina Sp. | (F) |
| | | Kyphopyxa christneri | (F) |
| | | Bulimina Sp. | (F) |
| | | Valvulineria infrequens | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 2990-3000 | Lith. as above | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata | (F) |
| | | Anomalina Sp. #1 | (F) |
| | | Guembelina Sp. | (C) |
| | | Nodosaria Sp. | (F) |
| | | Bulimina Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Valvulineria cf. infrequens | (F) |
| | | Unidentifiable Sp. | (F) |
| 3000-3010 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| | | Bolivinella Sp. | (F) |
| | | Bulimina Sp. | (C) |
| | | Lagena Sp. | (C) |
| | | Planulina taylorensis | (F) |
| | | P. texana | (F) |
| | | Kyphopyxa christneri | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Discorbis Sp. #1 | (F) |
| 3010-3040 | Lt. Gray, shaly, chalk and Gray, hard, chalky shale. Little pyrite. | | |
| 3040-3050 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. | (F) |
| | | Nodosaria Sp. | (F) |
| | | Discorbis Sp. #1 | (F) |
| | | Valvulineria infrequens | (F) |
| | | Robulus cf. cultratus | (F) |
| 3050-3060 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. --Abruptly tapered | (F) |
| | | G. Sp. -- Gradually tapered | (F) |
| | | Nodosaria Sp. | (F) |
| | | Bulimina Sp. | (F) |
| | | Planulina austinana | (C) |
| | | P. Sp. | (F) |
| | | Kyphopyxa christneri | (F) |
| | | Valvulineria infrequens | (C) |
| | | Unidentifiable arenaceous Sp. | (F) |
| 3060-3070 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3060-3070 (cont'd) | | G. canaliculata | (F) |
| | | Guembelina Sp. --- Abruptly tapered | (C) |
| | | G. Sp. --- Gradually tapered | (F) |
| | | Nodosaria Sp. | (C) |
| | | Valvulineria infrequens | (F) |
| | | ? Ammobaculites Sp. | (F) |
| 3070-3080 | Lith. as above plus little Gray, often micaceous calcareous shale. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. - - - Abruptly tapered | (C) |
| | | G. Sp. - - - Gradually tapered | (C) |
| | | G. Sp. - - - Small, flat | (C) |
| | | G. Sp. - - - Large, flat | (F) |
| | | Planulina austinana | (C) |
| | | Robulus cf. cultratus | (F) |
| | | Gaudryina Sp. | (C) |
| | | Ammobaculites Sp. | (C) |
| | | Valvulineria infrequens | (C) |
| | | Discorbis Sp. #1 | (F) |
| 3080-3090 | Gray, often slightly micaceous, calcareous shale, w/little pyrite. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. ---Abruptly tapered | (F) |
| | | G. Sp. --- Gradually tapered | (F) |
| | | G. Sp. --- Small, flat (not typical Eagle Ford) | (F) |
| | | Planulina austinana | (F) |
| | | P. texana | (F) |
| | | Kyphopyxa christneri | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Ammobaculites Sp. | (C) |
| 3090-3100 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana canaliculata | (C) |
| | | Guembelina Sp. --- Gradually tapered | (C) |
| | | G. Sp. --- Large, flat(not typical Eagle Ford) | (C) |
| | | G. Sp. --- Small, flat | (F) |
| | | Bulimina Sp. | (F) |
| | | Planulina austinana | (F) |
| | | P. Sp. | (F) |
| | | Kyphopyxa christneri | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Valvulineria infrequens | (F) |
| | | Hastigerinella Sp. | (F) |
| | | Ammobaculites Sp. | (Ab) |
| | | A. Sp. | (F) |
| | | Haplophragmoides Sp. | (F) |
| | | Gaudryina Sp. | (F) |
| 3100-3110 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | G. canaliculata | (F) |
| | | Anomalina sholtzensis | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3100-3110 (Cont'd) | | Guembelina Sp. ---Abruptly tapered | (C) |
| | | G. Sp. --- Gradually tapered | (C) |
| | | ? Gaudryina Sp. | (F) |
| | | Planulina texana | (F) |
| | | P. cf. austinana | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Discorbis Sp. #1 | (F) |
| | | Kyphopyxa christneri | (F) |
| | | Valvulineria cf. infrequens | (F) |
| | | Robulus cultratus | (F) |
| 3110-3120 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. --- Abruptly tapered | (F) |
| | | G. Sp. --- Gradually tapered | (F) |
| | | Planulina cf. austinana | (F) |
| | | Bulimina Sp. | (F) |
| | | Discorbis Sp. | (F) |
| | | Globorotalia umbilicata | (F) |
| | | ? Ammobaculites Sp. | (F) |
| 3120-3130 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. --- Abruptly tapered | (F) |
| | | G. Sp. --- Gradually tapered | (F) |
| | | Planulina taylorensis | (F) |
| | | Bolivina Sp. | (F) |
| | | Valvulineria Sp. | (F) |
| 3130-3140 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (F) |
| | | G. canaliculata var. ventricosa | (C) |
| | | Guembelina Sp. ---Abruptly tapered | (F) |
| | | G. Sp. ---Gradually tapered | (F) |
| | | Planulina texana | (F) |
| | | Ammobaculites Sp. | (F) |
| 3140-3150 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. ---Abruptly tapered | (F) |
| | | G. Sp. ---Gradually tapered | (C) |
| | | Planulina Sp. | (F) |
| | | Palmula Sp. | (F) |
| 3150-3160 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata | (F) |
| | | G. canaliculata var. ventricosa | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3150-3160 (Cont'd) | | Guembelina Sp. ---Abruptly tapered | (C) |
| | | G. Sp. --- Gradually tapered | (C) |
| | | G. Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Globorotalia umbilicata | (F) |
| 3160-3170 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana canaliculata | (C) |
| | | Guembelina Sp. ---Abruptly tapered | (C) |
| | | Planulina texana | (F) |
| | | Discorbis Sp. #1 | (F) |
| | | Globorotalia umbilicata | (F) |
| 3170-3180 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. --Abruptly tapered | (F) |
| | | G. Sp. --Gradually tapered | (C) |
| | | G. Sp. ---Elongate | (F) |
| | | Planulina Sp. | (F) |
| | | Hastigerinella Sp. | (F) |
| 3180-3190 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | Guembelina Sp. ---Abruptly tapered | (C) |
| | | G. Sp. ---Gradually tapered | (C) |
| | | G. Sp. ---Slightly compressed | (F) |
| | | Bolivina Sp. | (F) |
| | | Planulina austinana | (F) |
| | | P. texana | (C) |
| | | Globorotalia umbilicata | (C) |
| | | Hastigerinella Sp. | (C) |
| | | Valvulineria Sp. | (F) |
| 3190-3200 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. ---Abruptly tapered | (F) |
| | | G. Sp. ---Gradually tapered | (F) |
| | | Globorotalia umbilicata | (C) |
| | | Planulina Sp. | (C) |
| | TOP AUSTIN: | 3190 (3139)' - - - From Schlumberger | |
| 3200-3210 | Lith. as above plus White to Lt. Gray medium hard chalk. Few Inoceramus prisms. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. ---abruptly tapered | (F) |
| | | G. Sp. ---Gradually tapered | (C) |
| | | Globorotalia umbilicata | (C) |
| | | Planulina Sp. | (C) |
| | | Kyphopyxa christneri | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3200-3210 (Cont'd) | | Nodosaria Sp. | (F) |
| | | Robulus cf. munsteri | (F) |
| | | R. Sp. | (F) |
| 3210-3220 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | G. canaliculata | (F) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Globorotalia umbilicata | (C) |
| | | Planulina Sp. | (C) |
| | | Robulus Sp. | (F) |
| 3220-3230 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (F) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Valvulineria cf. infrequens | (F) |
| 3230-3240 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | G. Sp. --- Compressed | (F) |
| | | Planulina cf. texana | (F) |
| | | Nodosaria Sp. | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Valvulineria infrequens | (F) |
| | | Robulus Sp. | (F) |
| 3240-3250 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Planulina texana | (F) |
| | | Globorotalia umbilicata | (F) |
| | | Valvulineria infrequens | (F) |
| | | Discorbis Sp. | (F) |
| | | Robulus Sp. | (F) |
| 3250-3260 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Planulina texana | (C) |
| | | Robulus Sp. | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3260-3270 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| | | Planulina texana | (F) |
| | | P. Sp. | (F) |
| | | Dentalina Sp. | (F) |
| | | Valvulineria infrequens | (F) |
| | | Robulus Sp. | (F) |
| 3270-3280 | Lith. as above, but chalk is subordinate. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina cf. texana | (C) |
| | | Nodosaria Sp. | (F) |
| | | Discorbis Sp. #1 | (F) |
| | | Valvulineria Sp. | (F) |
| | | Bulimina Sp. | (F) |
| 3280-3290 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Dorothia Sp. - - - Short | (F) |
| | | Planulina cf. texana | (C) |
| 3290-3300 | Gray, calcareous, often micaceous shale and Dark Grey, flaky, finely micaceous, calcareous shale. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | Guembelina Sp. | (F) |
| | | Dorothia Sp. ---Short | (F) |
| | | Planulina Sp. | (F) |
| | | Marginulina Sp. | (F) |
| | | Robulus Sp. | (F) |
| 3300-3310 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (C) |
| | | G. cretacea | (C) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (C) |
| | | Nodosaria Sp. | (F) |
| | | Planulina texana | (F) |
| | | P. Sp. | (F) |
| | | Robulus Sp. | (F) |
| | | Ammobaculites Sp. | (F) |
| | | Discorbis Sp. #1 | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3310-3320 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | ? Discorbis Sp. | (F) |
| 3320-3330 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. --- Compressed | (F) |
| | | Dorothia Sp. --- Short | (F) |
| | | Planulina texana | (F) |
| | | P. austinana | (F) |
| | | Nodosaria Sp. | (F) |
| | | Discorbis Sp. #1 | (F) |
| | | Valvulineria infrequens | (F) |
| 3330-3340 | Dark Gray, flaky, finely micaceous, calcareous shale. Few specks lignite. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Dorothia Sp. ---Short | (F) |
| | | Planulina Sp. | (F) |
| | | Robulus Sp. | (F) |
| 3340-3350 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | Dorothia Sp. ---Short | (F) |
| | | Planulina Sp. | (F) |
| | | Valvulineria infrequens | (F) |
| 3350-3360 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. ---Elongate | (F) |
| | | Dorothia Sp. ---Short | (C) |
| | | Planulina Sp. | (F) |
| | | P. Sp. | (F) |
| | | Discorbis Sp. | (F) |
| 3360-3370 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Dorothia Sp. ---Short | (F) |
| | | Planulina cf. austinana | (F) |

**DEPTH**

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3370-3380 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (C) |
| | | G. cretacea | (F) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. ---Elongate | (F) |
| | | G. Sp. | (C) |
| | | Dorothia Sp. ---Short | (C) |
| | | Planulina Sp. | (F) |
| 3380-3390 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana arca | (F) |
| | | G. cretacea | (C) |
| | | Guembelina Sp. ---Compressed | (F) |
| | | G. Sp. | (F) |
| | | Dorothia Sp. ---Short | (F) |
| | | Discorbis Sp. | (F) |
| 3390-3400 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Dorothia Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Robulus cf. munsteri | (F) |
| 3400-3410 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (F) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Nodosaria Sp. | (F) |
| | | Dorothia Sp. ---Short | (F) |
| | | Valvulineria Sp. | (F) |
| 3410-3420 | Lith. as above plus Gray, hard, tight, f. g. pyritic, quartz Ss. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| | | Planulina cf. austinana | (F) |
| Core #1 3420-3425 (Rec:5') | Greenish gray, (some Black Gray, possibly carbonaceous) finely micaceous, silty, calcareous shale, and Greenish Gray, shaly, micaceous, glauconitic siltstone. | | |
| | FORAMINIFERA: | Globigerina Sp. --Resembles G. cretacea of Moreman | (C) |
| | | Guembelina Sp. | (Ab) |
| | | Planulina Sp. | (C) |

DEPTH

Core #2
3425-3435
(Rec:8')

Top of Recovery: Lith. as above w/subordinate Gray, v.f.g., tight, micaceous, shaly, glauconitic quartz Ss.

Middle of Recovery: Greenish Gray, v.f.g., shaly, micaceous, glauconitic quartz Ss. (porosity poor) and Grn. Gray, shaly, micaceous, shaly siltstone.

Bottom of Recovery: Grn. Gray, micaceous, calcareous shale and Gray, shaly, lignitic siltstone.
FORAMINIFERA: Globotruncana canaliculata (F)

Core #3
3435-3445
(Rec:5')

Greenish Gray, often silty to finely sandy, finely micaceous, (often slightly laminated), calcareous shale w/thin partings Gray, silty shale and v.f.g., micaceous, glauconitic, quartz Ss.

Core #4
3445-3451
(Rec.:5½')

Top of Recovery: Greenish Gray, hard, silty, calcareous shale and Gray, hard, shaly, silty Ls. (Sh. is rather massive) Both lithologic units w/pelecypod fragments.

Middle of Recovery: Greenish Gray, finely micaceous, silty to finely sandy, calcareous shale.
TOP EAGLE FORD: 3450 (-3399)' --From Schlumberger
Bottom of Recovery: Grayish Green, flaky, finely laminated, slightly micaceous, calcareous shale.
FORAMINIFERA: Ammobaculites Sp. (C)
OSTRACODA: Finely pustulated specie w/one end rounded and other end slightly pointed (F)

Rotary Cuttings

3450-3460

Lith. as above plus little Lt. Gray, hard, tight, micaceous, ashy, v.f.g., calcareous, pyritic, glauconitic quartz Ss.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina cretacea | (F) |
| | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | Globotruncana cretacea | (C) |
| | Guembelina Sp. | (F) |
| | Planulina Sp. | (F) |
| | Valvulineria Sp. | (F) |

3460-3470

Lith. as above.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina cretacea | (C) |
| | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | Globotruncana canaliculata | (F) |
| | Guembelina Sp. | (F) |
| | Gyroidina Sp. | (F) |
| | Unidentifiable Sp. | (F) |

3470-3480

Lith. as above, but the Lt. Gray Ss. makes up 1/2 of sample.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina cretacea | (F) |
| | G. Sp. --Resembles G. cretacea of Moreman | (F) |
| | Globotruncana cretacea | (C) |
| | Guembelina Sp. | (F) |

3480-3490

Lith. as above.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina cretacea | (C) |
| | Globotruncana cretacea | (F) |
| | G. canaliculata | (C) |
| | Guembelina Sp. | (F) |
| | Planulina Sp. | (F) |
| | Ammobaculites Sp. ---Large, flat | (F) |

3490-3500

Lith. as above, but Lt. Gray Ss. is subordinate.

DEPTH

| | | | |
|---|---|---|---|
| Rotary Cuttings 3490-3500 (Contd.) | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Ammobaculites Sp. -- Small, round | (C) |
| 3500-3510 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | Globotruncana cretacea | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| 3510-3520 | Gray finely, micaceous, calcareous, flaky shale | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Globotruncana canaliculata | (F) |
| | | Guembelina Sp. ---Compressed | (F) |
| | | G. Sp. | (F) |
| | | Dorothia Sp. --- Short | (F) |
| | | Planulina Sp. | (F) |
| | | Ammobaculites Sp. | (F) |
| 3520-3530 | Lith. as above | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | Guembelina Sp. ---Small, flat | (F) |
| 3530-3540 | Lith. as above plus Lt. Gray, hard, tight, ashy, v.f.g., muscovitic, biotitic, glauconitic, lignitic quartz ss. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | Globotruncana cretacea | (C) |
| | | G. canaliculata | (F) |
| | | Guembelina Sp. | (F) |
| | | Robulus Sp. | (F) |
| 3540-3550 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. - - - Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| 3550-3560 | Lith. as above minus Lt. Gray ss. | | |
| | FORAMINIFERA: | Globigerina Sp. --- Large, compressed | (F) |
| | | Guembelina Sp. | (F) |
| | | ? Planulina Sp. | (F) |
| | | Ammobaculites Sp. | (F) |
| 3560-3570 | Lith. as above, plus Lt. Gray, hard, tight, v.f.g., micaceous glauconitic, quartz Ss. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --- Resembles G. cretacea of Moreman. | (F) |
| | | Globorotruncana cretacea | (F) |
| | | G. canaliculata | (C) |
| | | Guembelina Sp. | (F) |
| | | Anomalina Sp. | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3570-3580 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| 3580-3590 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (F) |
| | | Guembelina Sp. | (F) |
| | | Globotruncana canaliculata var. ventricosa | (F) |
| | | Ammobaculites Sp. | (F) |
| 3590-3600 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Planulina austinana | (F) |
| | | Discorbis Sp. | (F) |
| | OSTRACODA: | Small, long smooth specie w/one end rounded and other end sharply pointed | (F) |
| 3600-3610 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | Globotruncana canaliculata | (F) |
| | | Guembelina Sp. | (F) |
| 3610-3620 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. - - - Resembles G. cretacea of Moreman | (C) |
| | | Guembelina Sp. | (C) |
| | | Globotruncana cretacea | (F) |
| | | Planulina Sp. | (F) |
| 3620-3630 | Lith. as above | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. - - - Resembles G. cretacea of Moreman | (C) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| 3630-3640 | Lith. as above, but shale is subordinate. Few fragments of phosphatic fish remains | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. - - - Resembles G. cretacea of Moreman | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Ammobaculites Sp. | (C) |
| 3640-3650 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. - - - Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. --- Large flat | (F) |
| | | G. Sp. | (F) |
| | | Cibicides Sp. | (F) |
| 3650-3660 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | Guembelina Sp. | (F) |
| | | Cibicides Sp. | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3660-3670 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Large, flat | (F) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | Globotruncana cretacea | (F) |
| | | G. canaliculata | (F) |
| | | G. canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (C) |
| | | Ammobaculites gratus | (F) |
| | | Planulina Sp. | (F) |
| 3670-3680 | Lith. as above, | but shale makes up 1/2 of sample. | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Guembelina Sp. | (F) |
| | | Globotruncana cretacea | (F) |
| | | Planulina cf. austiana | (F) |
| | | P. sp. | (F) |
| | | Hastigerinella Sp. | (F) |
| | | Nodosaria Sp. | (F) |
| 3680-3690 | Lith. as above, | plus gray, soft, flaky, very micaceous, calcareous, lignitic, often silty shale | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. --- Resembles G. cretacea of Moreman | (C) |
| | | Guembelina Sp. | (F) |
| 3690-3700 | Lith. as above, | but the Ss. is subordinate | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | G. Sp. --- Large, flat | (F) |
| | | Dorothia Sp. ---Short | (F) |
| | | Planulina Sp. | (F) |
| | | Guembelina Sp. | (F) |
| | | G. Sp. | (F) |
| 3700-3710 | Lith. as above | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | Guembelina Sp. | (C) |
| | | G. Sp. ---Large, flat | (F) |
| | | Planulina cf. austinana | (F) |
| | | Hastigerinella cf. moremani | (C) |
| | | Ammobaculites cf. gratus | (F) |
| | | A. Sp. | (F) |
| | | Unidentifiable Sp. | (F) |
| 3710-3720 | Gray to dark gray, | micaceous, calcareous, very flaky shale. | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | G. Sp. ---Large, flat | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina cf. austinana | (C) |
| | | Globorotalia umbilicata | (F) |
| 3720-3730 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina austinana | (F) |

DEPTH

Rotary Cuttings

| | | | |
|---|---|---|---|
| 3730-3740 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | G. Sp. ---Large, flat | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| 3740-3750 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. sp. --Resembles G. cretacea of Moreman | (F)( |
| | | G. sp. ---Large, flat | (F) |
| | | Globotruncana canaliculata | (F) |
| | | Guembelina Sp. | (C) |
| | | Discorbis Sp. | (F) |
| | | Ammobaculites Sp. | (C) |
| | | ? Gaudryina Sp. | (F) |
| 3750-3760 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | G. Sp. ---Large, flat | (F) |
| | | Globotruncana cretacea | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Ammobaculites Sp. | (F) |
| | | ?Nodosaria Sp. | (F) |
| 3760-3770 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (C) |
| | | G. Sp. ---Large, flat | (F) |
| | | Globotruncana canaliculata var. ventricosa | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | P. cf. eaglefordensis | (F) |
| 3770-3780 | Lith. as above | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | G. Sp. ---large, flat | (F) |
| | | Guembelina Sp. | (F) |
| | | Planulina Sp. | (F) |
| | | Valvulineria infrequens | (F) |
| | | Ammobaculites Sp. | (F) |
| 3780-3790 | Lith. as above. | | |
| | FORAMINIFERA: | Globigerina cretacea | (F) |
| | | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | | Gumbelina Sp. | (F) |
| 3790-3800 | Lith. as above plus subordinate amount gray. f. g. to m. g., micaceous, glauconitic, quartz Ss. w/poor to medium porosity. Little pyrite. Few c. g. quartz sand. | | |
| | FORAMINIFERA: | Globigerina cretacea | (C) |
| | | G. Sp. ---Large, flat | (C) |
| | | Planulina Sp. | (F) |
| | | Discorbis Sp. | (F) |
| | | Ammobaculites Sp. | (F) |

DEPTH

Rotary Cuttings
3800-3805

Lith. as above, but few quartz grains in Ss. are pink and yellow.

| | | |
|---|---|---|
| FORAMINIFERA: | Globigerina cretacea | (C) |
| | G. Sp. ---Resembles G. cretacea of Moreman | (F) |
| | Guembelina Sp. | (F) |
| | Dorothia Sp. ---Short | (F) |
| | Ammobaculites Sp. | (F) |

Core #5
3805-3810
(Rec:4')

Gray green, v. f. g., very glauconitic, micaceous, quartz ss. (porosity poor) w/streaks grn. gray, often sandy, calcareous, slightly micaceous shale

Core #6
3810-3820
(Rec. 10')

Lith. as above and grn. gray, silty, calcareous shale

Core #7
(Rec.:7')
3820-3827

Lith. as above.

Core #8
3827-3837
(Rec: 10')

Top of Recovery: Gray, micaceous, calcareous, glauconitic, shaly, quartz ss. (porosity poor) w/streaks black to dark gray, very flaky, calcareous, often carbonaceous, micaceous shale. Few feldspar grains in ss.

FORAMINIFERA: Ammobaculites Sp. (C)

Middle of Recovery: Dark gray, micaceous, calcareous, flaky, laminated shale, often w/fine streaks of gray, micaceous glauconitic, siltstone and ss. Some sand grains are m. g. and frosted.

Bottom of Recovery: Grn. gray, f. g., shaly, micaceous, calcareous, glauconitic, tight, quartz ss. and dark gray to black, calcareous, carbonaceous shale, Few m. g. - c. g. quartz grains in ss.

TOP LOWER TUSCALOOSA 3836 (-3785')
From Schlumberger

Core #9
3837-3847
(Rec. 6')

Top of Recovery: Gray, rather massive, very micaceous (mostly muscovite, but some biotite (ashy, silty to finely sandy non-calcareous shale).

Middle of Recovery: Lith. as above, but shale is silty and not sandy.

Bottom of Recovery: Lith. as above, but shale is sandy and silty

Core #10
3847-3857
(Rec: 3')

Light gray to grn. gray, v. f. g , muscovitic, biotitic, tight, ashy, non-calcareous, quartz ss. Some grades into tight siltstone

Core #11
3857-3865
(Rec: 3')

Top of Recovery: White gray, very muscovitic, biotitic, quartz tuff. Moderately soft, porosity good.
Bottom of Recovery: White gray, muscovitic, tuffaceous, v. f. g., moderately soft, quartz ss. Porosity medium, few m. g. quartz grains.

| DEPTH | |
|---|---|
| Core #12<br>3865-3875<br>(Rec: 5') | Grayish grn., tuffaceous, tight, v. f. g., quartz ss. |
| Core #13<br>3875-3885<br>(Rec. 6') | Top of Recovery: Grayish green, rather massive, non-calcareous, tuffaceous, silty shale. Muscovite and biotite abundant, Some of shale has waxy luster.<br><br>Middle of Recovery: Greenish gray, v. f. g., shaly, tuffaceous, tight, quartz ss. w/small spots and stks. of reworked purple, silty shale.<br><br>Bottom of Recovery: Gray to gry. grn., v. f. g., slightly tuffaceous, tight, quartz ss. w/stks. grn. gray, tuffaceous shale. |
| Rotary Cuttings | |
| 3885-3910 | Gray to dark gray, micaceous, calcareous shale (?cavings) w/few pieces lt. gray, v. f. g., tuffaceous, quartz ss. |
| 3910-3920 | Lith. as above, plus few pieces maroon to purple, micaceous shale. |
| 3920-3940 | Lith. as above, plus abundant loose, m. g.-c. g., subangular,quartz sd. Few grains are pink and yellow. Little of sd. is feldspar. |
| 3940-3950 | Lith. as above, but gray and dark gray shale is subordinate. |
| 3950-3980 | Loose, m. g.-c. g., subangular quartz sd. Few grains are pink and yellow. Little of sd. is feldspar. |
| 3980-4030 | Lith. as above plus few pieces purple and mustard yellow, micaceous shale. |
| 4030-4070 | Loose, m. g.-c. g. subangular quartz and feldspar sand, (about 10% of sd. is feldspar). Few pieces purple and yellow silty shale. |
| 4070-4090 | Lith. as above, plus mottled, lt. green, yellow, brown and purple, micaceous, often sandy, ferruginous shale. |
| 4090-4120 | Lith. as above, but mottled shale is subordinate. |
| 4120-4130 | Lith. as above, but the mottled shale makes up 1/2 of sample. |
| 4130-4160 | Lith. as above, but the mottled shale makes up most of sample. |
| 4160-4180 | Lith. as above, but mottled shale is subordinate. |
| 4180-4190 | Loose, m. g. - c. g., subangular quartz and feldspar sd. (about 10% of sd. is feldspar) Abundant pink and yellow grains. |
| 4190-4220 | Lith. as above and mottled lt. green, mustard yellow, purple and dk. red brown, silty, often micaceous, ferruginous shale. |

DEPTH

Rotary Cuttings

| | |
|---|---|
| 4220-4240 | Lith. as above, but some of sd. is consolidated; having calcareous cement, and porosity appears to be poor to good. |
| 4240-4250 | Lith. as above, but sd. is all loose and is subordinate. |
| 4250-4270 | Lith. as above, but some of sd. is consolidated having calcareous cement and poor to good porosity. |
| 4270-4300 | Lith. as above, but sd. is subordinate plus little pink hard sdy. ls. |
| 4300-4310 | Lith. as above, but sd. is subordinate. |
| 4310-4380 | Lith. as above, but loose, m.g.-c.g., subangular quartz and feldspar sd. makes up 1/2 of sample. Minus ls. |
| 4380-4400 | Dk. reddish brown, mustard yellow and lt. grn. gray, micaceous ferruginous shale w/subangular loose, m.g.-c.g. quartz and feldspar sd. abundant pink and yellow sd. grains. (about 10% of sd. is feldspar) |
| 4400-4490 | Lith. as above, but shale is subordinate. |
| 4490-4510 | Lith. as above, but dk. brn. red, micaceous, often sandy ferruginous shale makes up 1/2 of sample. |
| 4510-4520 | Lith. as above, but shale is subordinate. |
| 4520-4530 | Lith. as above, minus shale. |
| 4530-4550 | Lith. as above, but dk. brown, red, micaceous, ferruginous shale makes up 1/2 of sample. |

TOP LOWER CRETACEOUS: 4480- (-4429)-- From Schlumberger

| | |
|---|---|
| 4550-4580 | Lith. as above, but shale is mottled dk. red, brown, mustard yellow and purple. |
| 4580-4590 | Lith. as above, but sd. is subordinate, plus little pink and red, hard, sdy. ls. |
| 4590-4610 | Lith. as above, but the loose sd. makes up 1/2 of sample |
| 4610-4740 | Lith. as above, but loose sd. is subordinate. |
| 4740-4770 | Loose, m.g.-c.g., subangular quartz and feldspar sd. (about 10% of sd. is feldspar ). Abundant pink and yellow grains. |

DEPTH

Rotary Cuttings

| | |
|---|---|
| 4770-4830 | Lith. as above plus few pieces Dk. Red ferruginous shale. |
| 4830-4850 | Lith. as above, but mottled Lt. Gray. Green, Mustard Yellow and Reddish Brown, micaceous, ferruginous shale makes up most of sample. |
| 4850-4870 | Lith. as above, but shale is subordinate. |
| 4870-4890 | Lith. as above, but mottled shale makes up 1/2 of sample. |
| 4890-4910 | Lith. as above, but sand is subordinate. |
| 4910-4930 | Lith. as above, but Sd. makes up most of sample. |
| 4930-4940 | Lith. as above, but mottled shale makes up 1/2 of sample. |
| 4940-4970 | Lith. as above, but shale is subordinate, plus little White and Pink, hard Ls. |
| 4970-4990 | Lith. as above, but the mottled shale makes up 1/2 of sample. |
| 4990-5010 | Lith. as above, but shale is subordinate. |
| 5010-5050 | Lith. as above, but the mottled shale makes up 1/2 of sample. |
| 5050-5070 | Lith. as above, but shale is subordinate. |
| 5070-5100 | Lith. as above, but mottled shale makes up 1/2 of sample. |
| 5100-5140 | Lith. as above, but shale is subordinate. |
| 5140-5160 | Lith. as above, but shale makes up 1/2 of sample. |
| 5160-5230 | Lith. as above, but shale is subordinate. |
| 5230-5290 | Lith.as above, but the mottled shale makes up 1/2 of sample. |
| 5290-5300 | Lith. as above plus Lt. Gray to Yellow and Tan hard, dense, sandy Ls. |
| 5300-5330 | Lith. as above, but Ls. is subordinate. |
| 5330-5360 | Lith. as above, but Lt. Gray, Red and Yellow, hard, sandy Ls. makes up 1/3 of sample. Some of Ls. is nearly a limy Ss. |
| 5360-5370 | Lith. as above, but Ls. is subordinate. |
| 5370-5380 | Lith. as above plus White to Pink, hard, f. g. -m. g., tight, calcareous, muscovitic, biotitic, quartz Ss. |

DEPTH
Rotary Cuttings

| | |
|---|---|
| 5380-5430 | Lith. as above plus White, Yellow and Red, hard, dense, Sdy. Ls. |
| 5430-5480 | Mottled Lt. Grayish Green, Mustard Yellow and Dk. Brn. Red, micaceous, ferruginous shale w/subordinate White, Buff and Red, hard, Sdy. Ls. and f. g.-m. g. calcareous, tight, quartz Ss. |
| 5480-5490 | Lith. as above, but Lt. Gray, Buff and Red, hard, Sdy. Ls. makes up 1/2 of sample. |
| 5490-5540 | Lith. as above, but Ls. is subordinate. |
| 5540-5560 | Lith. as above, but Lt. Gray to Pink, hard, tight, f. g.-m. g. calcareous, quartz and feldspar Ss. makes up 1/2 of sample. |
| 5560-5610 | Lith. as above, but Ss. is subordinate. |
| 5610-5630 | Lith. as above, but Lt. Gray and Pink, hard, tight, m. g.-c. g. calcareous quartz and feldspar Ss. makes up 1/2 of sample. |
| 5630-5650 | Lith. as above, but Ss. is subordinate. |
| 5650-5720 | Lith. as above, but the Ss. makes up 1/2 of sample. |
| 5720-5750 | Lith. as above, but Ss. is subordinate. |
| 5750-5780 | Lith. as above, but Lt. Gray, hard, tight, m. g.-c. g. quartz and feldspar Ss. makes up 1/2 of sample. |

TOP PRE-CRETACEOUS (?TRIASSIC): 5695 (-5644)' - - - From Schlumberger

| | |
|---|---|
| 5780-5810 | Dk. Red and Reddish Brn., micaceous, ferruginous shale and loose m. g.-c. g. quartz and feldspar Sd. |
| 5810-5830 | Lith. as above plus Lt. Gray, hard, tight, m. g.-c. g. calcareous quartz and feldspar Ss. Little Pink to Red, hard Ls. |
| 5830-5860 | Lith. as above, but Ss. is subordinate. |
| 5860-5900 | Lith. as above, but loose Sd. is subordinate. |
| 5900-5910 | Lith. as above, plus Red, m. g.-c. g., tight, quartz and feldspar Ss. |
| 5910-5930 | Lith. as above, but the Red Ss. is subordinate. |
| 5930-5940 | Pinkish Red, m. g.-c. g. quartz and feldspar Ss. w/tight to good porosity. |
| 5940-5970 | Lith. as above plus Dk. Red and Reddish Brn., micaceous ferruginous shale. |
| 5970-5980 | White to Pink, hard, tight, m. g.-c. g. quartz and feldspar Ss. |

DEPTH

Rotary Cuttings

| | |
|---|---|
| 5980-6000 | Lith. as above plus Dark Red and Reddish Brown, micaceous, ferruginous shale. |
| 6000-6040 | Lith. as above, but shale is subordinate. |
| 6040-6070 | Lith. as above, but Dk. Red and Reddish Brown, micaceous, ferruginous shale makes up 1/2 of sample. |
| 6070-6100 | Lith. as above, but Ss. is subordinate. |
| 6100-6110 | Lith. as above, but Ss. makes up 1/2 of sample. |
| 6110-6160 | Lith. as above, but shale is subordinate. |
| 6160-6260 | Mottled, Lt. Gray, Yellow and Red, hard, very sandy Ls. and mg.-c.g. limy, quartz and feldspar Ss. Little Red and Brn. ferruginous shale. |
| 6260-6280 | Lith. as above, but shale makes up 1/2 of sample. |
| 6280-6320 | Lt. Gray and Pink, hard, tight, m.g.-c.g. quartz and feldspar Ss. Little Dk. Red and Reddish Brown, micaceous, ferruginous shale. |
| 6320-6330 | Lith. as above, plus mottled, Lt. Gray, Red and Yellow, Sdy. Ls. |
| 6330-6340 | Lith. as above, but the shale makes up 1/3 of sample. |
| 6340-6370 | Lith. as above, but the shale and Ls. are subordinate. |
| 6370-6410 | Lith. as above, but the shale makes up 1/2 of sample. Few fragments of petrified wood. |
| 6410-6430 | Lt. Gray to Pink, hard, tight, m.g.-c.g. quartz and feldspar Ss. w/many small cavities filled w/Dk. Red ferruginous shale. |
| 6430-6450 | Lith. as above plus Red, hard, ferruginous Ls. |
| 6450-6490 | White to Pink, hard, tight, m.g.-c.g. quartz and feldspar Ss. and Dk. Red and Reddish Brown, ferruginous shale. |
| 6490-6500 | Lith. as above plus few boulder fragments of Olive Green quartzite. Ordovician? |
| 6500-6510 | Lith. as above, but boulder fragments are abundant plus abundant pebbles of quartzite. |
| 6510-6530 | Dark Red, Olive Green and Yellow quartzite pebbles and boulder fragments. |

DEPTH

Rotary Cuttings

| | |
|---|---|
| 6530-6580 | Lt. Gray to Pink, hard, tight, m. g. -c. g. quartz and feldspar Ss. w/few quartzite, boulder fragments. |
| 6580-6640 | Lith. as above minus boulder fragments plus Dk. Red and Reddish Brown, ferruginous shale. |
| 6640-6660 | Lith. as above, but Ss. is subordinate. |
| 6660-6690 | Lith. as above, but Lt. Gray, Pink and Red, hard, m. g. -c. g., tight, quartz and feldspar Ss. makes up 1/2 of sample. |
| 6690-6710 | Lith. as above, but shale is subordinate. |
| 6710-6730 | Rusty Red, hard, tight, f. g. -c. g. quartz and feldspar Ss. |
| 6730-6790 | Lith. as above, plus Dk. Red and Reddish Brn. ferruginous shale. |
| 6790-6800 | Lith. as above, but Ss. is Lt. Gray, Yellow and Pink m. g. -c. g. |
| 6800-6820 | Loose m. g. -c. g., subrounded and slightly frosted quartz and feldspar Sd. (About 10% of Sd. is feldspar). |
| 6820-6840 | Lith. as above plus Dk. Red and Reddish Brn., micaceous, ferruginous shale. |
| 6840-6850 | Dk. Red and Reddish Brown shale as above and White to Pink hard, m. g. -c. g. quartz Ss. |
| 6850-6870 | Lith. as above, but Ss. is subordinate. |
| 6870-6890 | Rusty Red, ferruginous shale and m. g. -c. g., quartz Ss. |
| 6890-6940 | Rusty Red, ferruginous shale often sandy. |
| 6940-6970 | Lith. as above plus Pink, hard, tight, m. g. -c. g. quartz and feldspar Ss. |
| 6970-6980 | Lith. as above, but Ss. is subordinate. |
| 6980-7000 | Lith. as above, but Ss. makes up 1/2 of sample. |
| 7000-7050 | Brn. Red, muscovitic, ferruginous shale w/subordinate, f. g. -m. g., subrounded, and frosted ferruginous, quartz Ss. |
| 7050-7080 | Rusty Red, ferruginous shale and loose, m. g. -c. g., subrounded and frosted quartz Ss. |

DEPTH

Rotary Cuttings

| | |
|---|---|
| 7080-7100 | Lith. as above, but shale is subordinate. |
| 7100-7140 | Lith. as above, plus Dk. Red ferruginous shale. |
| 7140-7150 | Lith. as above, but shale is subordinate. |
| 7150-7160 | Lith. as above, but Sd. is consolidated and is tight and Rusty Red colored. |
| 7160-7200 | Lith. as above, but shale makes up 1/2 of sample. |
| 7200-7220 | Lith. as above, but shale is subordinate. |
| 7220-7330 | Lith. as above, plus Dk. Red. Brown ferruginous shale. |
| 7330-7370 | Lith. as above plus little Red, hard Ls. |
| 7370-7410 | Lith. as above, but some of Sd. is f. g. |
| 7410-7430 | Lith. as above minus Ls. |
| 7430-7450 | Rusty Red, micaceous, ferruginous shale w/stks. Rust colored f. g. -m. g. quartz and feldspar, shaly ferruginous Ss. |
| 7450-7490 | Rusty Red, f. g. -m. g., tight, ferruginous, quartz Ss. and shale. |
| 7490-7510 | Lith. as above, but Ss. is subordinate. |
| 7510-7580 | Lith. as above, but the Ss. makes up 1/2 of sample. |

Sidewall Core

| | |
|---|---|
| 7580 | Dk. Brownish Red, micaceous, ferruginous shale. |
| 7585 | Pink, f. g. -m. g., quartz and feldspar Ss. Porosity good. Grains subrounded and frosted. |

Rotary Cuttings

| | |
|---|---|
| 7580-7610 | Rusty Red, micaceous, ferruginous shale. Little Lt. Gray, hard. sandy Ls. |

Sidewall Core

| | |
|---|---|
| 7609 | Rust colored, f. g. -m. g., subrounded and frosted, ferruginous, quartz Ss. w/medium porosity. |

DEPTH

Rotary Cuttings

7610-7630 Rusty Red, micaceous, ferruginous shale and f. g. -m. g. quartz Ss.

TOP PALEOZOIC (WEATHERED): 7609 (-7558)' - - - From Schlumberger

Sidewall Core
7630 Dark Rusty Red (w/Gray spots and streaks), nearly dense, hard hornfel w/abundant fractures that run in all directions. Few slickensides.

Rotary Cuttings

7630-7650 Rusty Red, micaceous, ferruginous shale.

7650-7660 Lith. as above plus few fragments of the hornfel described in sidewall core at 7630.

Sidewall Core
7651 Rusty Red, ferruginous mud (Probably wall cake).

Rotary Cuttings

7660-7670 Rusty Red, micaceous ferruginous shale and Dk. Rusty Red hornfel as in sidewall core at 7630.

TOP 1ST IGNEOUS SILL: 7654 (-7603)' --- From Schlumberger

Sidewall Core
7664 Dark Reddish Brown, moderately hard, highly weathered, nearly dense Latite w/microscopic phenocrysts of a Lt. Red mineral which is probably plagioclase. Few larger phenocrysts of a Lt. Green mineral.

7670-7789 SKIP

TOP 3RD IGNEOUS SILL: 7762 (-7711)'- - - From Schlumberger

Core #14
7789-7791
(Rec: 1') Black, hard, finely xln dolerite.

Core #15
7791-7795 Top of Recovery: Mottled, Purple and Gray, hard hornfel.

Bottom of Recovery: Mottled, Gray, Greenish Gray and Purple, hard hornfel.

7795-7909 SKIP.

Core #16
7909-7911
(Rec: 18 in.) Lt. Gray (w/slight Pinkish tinge) v. f. g. -f. g., hard, quartzitic Ss. w/metallic luster and w/gravel size grains of Lt. Gray plagioclase.

Core #17
7911-7913 Top 2 in. of Recovery: No true core recovered. Cuttings consist of above described dolerite and hornfel.

Bottom 22 in. of Recovery: Lt. Gray (sometimes w/Pinkish tinge), f. g., hard, tight, quartz Ss. Slightly quartzitic.

## REMARKS

T. D. 7913'

Ran Schlumberger to 7905'

Casing Record: 24" @ 35' w/40 sx.
13-3/8" @ 712' w/222 sx.

From a detailed study of the samples (cores & cuttings) and the Schlumberger log, the following tops are selected:

| | |
|---|---|
| Top Upper Cretaceous (Taylor) | 2560 (-2509)' |
| " Austin | 3190 (-3139)' |
| " Eagle Ford | 3450 (-3399)' |
| " Lower Tuscaloosa | 3836 (-3785)' |
| " Lower Cretaceous | 4480 (-4429)' |
| " Pre-Cretaceous (? Triassic) | 5695 (-5644)' |
| " Paleozoic (Weathered) | 7609 (-7558)' |
| " 1st Igneous Sill (Latite) | 7634 (-7583)' |
| " 2nd Igneous Sill (Undifferentiated - Not Cored) | 7712 (-7661)' |
| " 3rd Igneous Sill (Dolerite) | 7762 (-7711)' |
| " 4th Igneous Sill (Undifferentiated - Not Cored) | 7811 (-7760)' |

There were no shows of oil and/or gas.

There were no drill-stem tests.

The only porosity of consequence consists of three sand sections which are in the Lower Tuscaloosa, the Lower Cretaceous and in the Pre-Cretaceous (? Triassic). The Lower Tuscaloosa consists of fine-grained tuffaceous sand, fine-grained tuff and medium to fine-grained non-tuffaceous quartz sand; it shows about 120' of effective porosity. The Lower Cretaceous consists of red, brown and mustard colored shale, gray (often feldsphatic) sand, and a few fragments (in the cuttings) of pink to red sandy limestone. The Lower Cretaceous may be marine; if so, it is a very near shore type. There were no cores cut in the Lower Cretaceous section, so it is difficult to study the lithology from the cuttings. The Lower Cretaceous is credited with about 75' of effective porosity. The Pre-Cretaceous (? Triassic) consists mainly of sand (white, red, rust yellow, and pink) which is usually feldsphatic, variegated ferruginous shale, and subordinate pink to red limestone. The Pre-Cretaceous is thought to be marine. The upper portion of the Paleozoic consists of shale but contact metamorphism (due to the igneous intrusions) has resulted in the shales, adjacent to the sills, becoming hornfels. The presence of these igneous sills demonstrates that there was igneous activity during, or subsequent to, Paleozoic time.