GA-AP-1 (Miller)

G65148

26P003

Appling County

#1 W. E. Bradley

July 1982

James A. Miller

| Depth | Lithology |
|---|---|
| | **Post-Miocene** |
| 0-10 | Sand, white with cream cast, medium to coarse-grained, subangular to subrounded. |
| 10-60 | No sample. |
| | **Miocene** |
| 60-90 | Mostly sand as above. Add light-gray highly sandy waxy clay prominent. Trace of tan phosphate. Skip to - |
| 470-480 | Limestone, off-white, very highly sandy, sand enclosed in micritic matrix. Trace of very fine-grained black phosphate. Trace of gastropod and pelecypod casts and molds. Low porosity. Hawthorn formation. |
| 480-490 | Sandy limestone as above. |
| 490-500 | Sandy limestone as above. |
| 500-510 | Sandy limestone as above. |
| 510-520 | Sandy limestone as above. |
| 520-530 | Sandy limestone as above. Add trace of shallow marine microfossils of non-diagnostic age. |
| | **Oligocene** |
| 530-540 | Limestone, cream, pelletal, with pellets in micritic matrix that is commonly recrystallized. Contains Pararotalia mexicana. Skip to - |
| 630-640 | Cream pelletal limestone as above. |
| 640-650 | Limestone, cream, microcrystalline to very fine crystalline. Algal mats and balls prominent. Contains Dictyoconus sp., Lepidocyclina papula. |
| 650-660 | Limestone as above but mostly microcrystalline. Algal material accounts for about 25 percent of sample. |
| 660-700 | No sample. |
| | **Late Eocene (Ocala)** |
| 700-710 | Limestone, off-white, soft to well-indurated, micritic matrix binding large foraminifera, mostly Lepidocyclina and Camerina. Contains Heterostegina ocalana, Sphaerogypsina globula. Skip to - |
| 890-900 | Limestone, off-white, consists of a coquina of large foraminifera bound by off-white fine pelletal limestone. |
| 900-910 | Mostly limestone as above. Add dark-brown fine to medium crystalline saccharoidal dolomite prominent. Dolomite is probably middle Eocene. |
| | **Middle Eocene** |
| 910-920 | Limestone as above mixed with fine pelletal limestone, white, chalky, partly dolomitized to tan dolomite. Pelletal limestone accounts for 25 percent of sample. |

920-930 All white pelletal limestone as above. Skip to -

990-1000 Limestone as above but cuts up fine. Much Hawthorn as cavings here. Skip to -

1040-1050 Limestone as above. Skip to -

1160-1170 60 percent limestone as above. 40 percent medium-gray hard, dense, low-porosity limestone that is slightly pelletal. Skip to -

1290-1300 Limestone, light-gray, fine to medium pelletal, pellets enclosed in hard gray limestone matrix, low porosity. Dark-gray chert prominent.

1300-1310 Limestone as above.

1310-1320 Limestone as above.

1320-1330 Limestone as above. Add trace of dark-gray coarse crystalline dolomite that carries traces of light to dark-green glauconite.

1330-1340 Sand, light-gray, medium to coarse-grained, water-polished, subrounded to rounded. Trace of medium-grained dark-green glauconite. Sand is bound by a little medium-gray calcareous clay matrix. Skip to -

1390-1400 Sand, light-gray, fine (mostly) to medium-grained, coated with off-white calcareous clay. Trace of light to dark-green glauconite. Skip to -

1440-1450 Limestone, light-gray, very fine crystalline, hard, dense, with fine-grained sand and dark-green glauconite prominent. Skip to -

1490-1500 Fossiliferous limestone, light-gray with cream cast, very fine crystalline. Coarse broken cream-colored semi-translucent oyster shell material composes 50 percent of sample. Skip to -

Early Eocene (?)

1540-1550 Glauconitic sand, dark greenish-gray: 65 percent medium (mostly) to coarse-grained subangualr to subrounded sand. 35 percent medium to coarse-grained dark-green glauconite. Skip to -

1590-1600 Mostly glauconitic sand as above. Medium-gray very finely sandy and glauconitic hard dense limestone prominent. Skip to -

1640-1650 Highly mixed sample. Only new lithology is dark-gray medium-grained glauconitic sandstone. Skip to -

1690-1700 Sand, medium-gray, medium-grained, fairly well-sorted, in light-gray clay matrix. Medium-grained dark-green glauconite prominent. Skip to -

I agree with Herrick's Globorotalia wilcoxensis identification at 1715-1730 feet (an early Eocene form).

1745-1760 Glauconitic sand and clay, medium-gray: 55 percent fine (mostly) to medium-grained subangular to subrounded sand. 30 percent medium-gray calcareous clay matrix. 15 percent dark-green medium-grained glauconite.

1760-1790 No sample.

1790-1800 Limestone, Paleocene medium-gray, very fine crystalline, hard, dense, slightly glauconitic. Not a typical Clayton limestone.

1800-1810 No sample.

1810-1820 Limestone as above but appears slightly argillaceous. Two specimens of Dingmocythere russelli are probably caving (range of species is Paleocene to Oligocene).

1820-1835 Limestone as above with dark-gray sub-fissile calcareous clay prominent.

1835-1850 Limestone, dark-gray, very fine crystalline, hard, dense, massive. Does not show on log.
1850-1865 Limestone as above.
1865-1880 Limestone as above.

Paleocene (?)

1880-1895 Highly mixed sample. Only new lithology is medium to coarse-grained subrounded sand, with medium-grained glauconite prominent.
1895-1910 Sand, very poorly sorted, fine to very coarse-grained, subangular to subrounded. Trace of fine-grained light to dark-green glauconite.
1910-1925 Sand as 1880-1895 foot interval.
1925-1940 Sand, coarse to pea-gravel size, subrounded to rounded. Dark-brown pea-gravel sized phosphate prominent. Trace of coarse-grained dark-green glauconite. Much caving in interval. Bit change? or does the sample represent a lag gravel or an unconformity?
1940-1955 Sand as 1895-1910 interval but mostly fine to medium-grained.
1955-1970 No sample.
1970-1985 Sand, very fine to fine-grained, angular to subangular, commonly coated with white calcareous clay. Trace of fine-grained dark-green glauconite.
1985-2000 Sand as above with medium-gray calcareous clay binder prominent.
2000-2010 Clay and sand, light-gray: 60 percent light-gray clay matrix. 40 percent fine to medium-grained subangular to subrounded sand. Trace of fine-grained light to dark-green glauconite.
2010-2020 Clay and sand as above with 20 percent increase in sand, corresponding decrease in clay.
2020-2035 Sand, medium-gray, medium (mostly) to coarse-grained, subangular to subrounded. Medium-gray clay binder, medium-grained dark-green glauconite prominent.
2035-2050 Sand and clay as 2010-2020 foot interval with sand very poorly sorted. Clay is dark-gray.
2050-2065 Clay, dark-gray, calcareous, soft. Trace of fine to medium-grained angular to subangular sand, fine-grained glauconite.
2065-2080 Sand and clay as 2010-2020 foot interval. Add trace of pea gravel-sized quartz and phosphate.
2080-2095 Sand and clay as 2010-2020 foot interval with medium-gray very finely sandy and glauconitic argillaceous limestone prominent.

Cretaceous

2095-2110 Clay, light-gray, calcareous, soft. 15 percent very fine-grained angular well-sorted sand. Trace of fine-grained glauconite, muscovite. Some of the sand is semi-indurated by a calcareous matrix.
2110-2121 No sample.
2121-2140 Sand, very fine-grained, angular, well-sorted. Trace of very fine-grained dark-green glauconite.
2140-2155 Bit change? Very highly mixed sample, with some cement. Saw no new lithology.
2155-2170 Clay, dark-gray, highly sandy (fine angular sand). Trace of muscovite.

Herrick logged Anomalina pseudopapilosa here, but I saw none.

2170-2185 Clay as above.
2185-2200 Sandstone, light-gray, semi-indurated to indurated, with much muscovite and disseminated black organic material. Definite Cretaceous.

Remarks

Samples appear to match log well. This well is much down-basin, in the middle Eocene and older, from the other cross-section wells examined.

Tops (log depths)

| | |
|---|---|
| 0-30(?) | Post-Miocene |
| 30(?)-520 | Miocene |
| 520-640 | Oligocene |
| 640-915 | Late Eocene (top is a log pick) |
| 915-1545 | Middle Eocene |
| 1545-1800 | Early Eocene |
| 1800-2103 | Paleocene |
| 2103 | Cretaceous top (based on highest muscovite) |