

665120

Lot No.	Depth	Description
2008	111-142	Chiefly light gray fine quartz sand; some round lime pellets. No fossils seen except fragments of fish teeth.
9	142-174	Like 2008. No fossils seen.
10	174-205	Coquina of pelecypod fragments and clear white quartz; barnacle fragments also. A few whole shells.
11	205-236	Medium to coarse sand like 2008, with a few fragments of mollusk and barnacle shell.
12	236-267	Like 2001. A few small whole shells.
13	267-298	Like 2001, with perhaps a greater proportion of barnacle fragments.
14	298-329	Well-rounded quartz grit, average diameter 1-1/2 mm, some pieces up to 6 mm diameter. Fragments of barnacles and mollusks; one fish tooth.
15	329-360	Like 2014. Some fossils.
16	360-391	Like 2014, with some fragments of light-greenish shale. Some fossils.
17	391-422	Sample largely dove-gray shale, with some admixture of fine quartz sand and a few larger sand grains. No macrofossils seen.
18	422-453	Like 2017, with large proportion of coarser grains; many black phosphatic (?) grains. One fish tooth.
19	453-484	Like 2017, with still more coarse material and black grains. No macrofossils seen.
20	484-515	Like 2019. No fossils seen.
21	515-546	Sample is light brown sandy limestone (dolomite) and loose white quartz sand. No fossils seen.
22	546-577	Like 2021, with more sand. No fossils seen.
23	577-608	Like 2022, with much black phosphatic material, and some calcareous sandstone. No fossils seen.
24	608-639	Like 2022. No fossils seen.
25	639-670	Creamy-white granular limestone and quartz sand. Bryozoan and echinoid fragments. <u>Dictyoconus</u> , small foraminifera.
26	670-701	Like 2025. Fragments of mollusks, echinoids, bryozoans. <u>Dictyoconus</u> , small foraminifera.
27	701-732	Like 2025. Fragments of mollusks, echinoids, bryozoans; shark tooth. <u>Dictyoconus</u> , orbitoids, small foraminifera.
28	732-763	Like 2025. Fragments of mollusks, echinoids, bryozoans. Orbitoids, small foraminifera.
29	763-794	Creamy-white granular limestone. Fragments of mollusks, bryozoans, echinoids. Orbitoids.
30	794-825	Like 2029. Fragments of mollusks, bryozoans, crinoids. Orbitoids, small foraminifera.
31	825-856	Like 2029. Fragments of mollusks, bryozoans, crinoids. Orbitoids, small foraminifera.
32	856-887	Like 2029. Fragments of mollusks, bryozoans, crinoids, Orbitoids.
33	887-907	Light tan sugary crystalline porous limestone. No fossils seen.
34	907-928	Like 2033. No fossils seen, except those definitely from above.
35	928-959	Like 2033. No fossils seen except those definitely from above.
36	959-981	Like 2033. No fossils seen, except those definitely from above.
37	981-1012	Like 2033 but darker. No fossils seen, except those definitely from above.

Report on Adams-McCaskill (Donald Clark) No. 1 well,
Pierce County, Georgia

By Joseph A. Cushman

Much of the material is very unsatisfactory as regards Foraminifera, and in many samples either none were found or the specimens were in such condition as to be specifically unidentifiable. On the other hand, certain samples do contain fairly good faunas and probably are indicative of age. From the appearance of the residues the drilling mud carries down the faunas that were encountered higher up in the well, and therefore the highest occurrence of a species is probably much more valuable than its later occurrences in deeper samples. For example, some of the larger Foraminifera found in the Jackson part of the section occur as worn or broken specimens with the undoubted Cretaceous in the lower part of the well. The casing records, if any, might help to eliminate much of this uncertainty.

Notes are given on the occurrence of some of the Foraminifera.

111-639 feet. Practically no Foraminifera.

639-763 feet. Some poorly preserved larger Foraminifera.

From 639 to 701 feet are specimens of Valvulamina resembling V. affinis Cushman and Bermudez described from the upper Eocene of Cuba. These, with the other larger Foraminifera, should definitely fix this as upper Eocene.

In the following samples to 1810 feet the same general types occur, showing little if any change and indicating that they may have come originally from higher levels.

In samples 1810-1841 some change is evident and a few poorly preserved smaller Foraminifera appear and occur below. In sample 2061-2092 a number of smaller Foraminifera appear, among them Globoretalia wilcoxensis Cushman and Ponton, Anemalina umbonifera (Schwager), Uvigerina alabamensis Cushman and Garrett, and Angulogerina cf. wilcoxensis (Cushman and Ponton). This should give good evidence of the Wilcox Eocene age of this part of the section. Similar forms occur in sample 2092-2133.

To 2374 feet only larger tests, worn and broken, appear.

In sample 2374-2393 numerous very small Foraminifera appear, evidently of Midway Eocene age. These include Gumbelina midwayensis Cushman, Eouvigerina excavata Cushman, Bolivina midwayensis Cushman, and Globigerina triloculinoides Plummer.

Nothing further, except worn and broken forms evidently of upper Eocene source, was found until sample 2991-3022 feet, which contained two specimens of a poorly preserved Globotrucana, indicating Upper Cretaceous. In sample 3118-3140 is a specimen of Dorothia bulletta (Carsey), a species mostly of the Navarro but also occurring in the Taylor.

In sample 3314-3328 is a fair Cretaceous fauna containing Gumbelina plumerae Loetterle (Navarro to Austin), Ventilabrella eggeri Cushman (Taylor), and Glororotalia michelinianum (D'Orbigny) (Taylor and Austin). These would seem to indicate a Taylor age for this level.

In sample 3358-3384 is Clavulinoides appera (Cushman) (Navarro to Austin).

In sample 3414-3444 are Globotrucana fornicata (Plummer) (mostly Taylor), Stensioina americana (Cushman) (lower part of the Navarro and mostly Taylor), and Planulina taylorensis (Carsey) (lower part of the Navarro but mostly Taylor).

In sample 3444-3474 is Globotrucana canaliculata (Reuss) (Navarro to Austin).

Sample 3495-3507 has a rich fauna, including, among others, the following species: Kyphopyxa christneri (Carsey) (Taylor and Austin), Pseudogaudryinella capitosa (Cushman), var. serrulata (Cushman) (Taylor and Austin), Marginulina stephensoni Cushman (Navarro, rare, Taylor, and Austin), Dentalina alternata (Jones) (lower Navarro, Taylor, and Austin), Frondicularia linearis Franke (Taylor and Austin), Palumla suturalis (Cushman) (lower Navarro, Taylor, and Austin), Bolivinosia rosula (Ehrenberg) (Navarro to Austin), Eouvigerina americana Cushman (rare in lower Navarro, common in Taylor), Loxostoma clavatum (Cushman) (mostly in lower Taylor), Gyrogonina globosa, (Hagenow) (lower Navarro, Taylor, and Austin), and Ellipsonodosaria stephensoni Cushman (Navarro and Taylor). From the known ranges it would seem that this level is the equivalent of the Taylor of Texas.

Sample 3690-3720. Gumbelina planata Cushman (upper Taylor only).

Sample 4231-4261. Gumbelina cf. semicostata Cushman (basal Navarro and mostly Taylor).

After sample 3495-3507 there seems to be almost no change in the Foraminifera, and all might have come from that sample. There is no definite indication of any Cretaceous definitely older than Taylor so far as the Foraminifera show. In fact, with the very rich material of sample 3495-3507 the remainder could all be accounted for by contamination from that level so far as any new species occurring may show.

Lot No.	Depth	Description
2038	1012-1034	Sample largely medium to coarse colorless quartz sand. The few fossils seem all from above.
39	1034-1054	Sample half quartz sand, half brownish limestone like 2038. The few fossils seem all from above.
40	1071-1102	Like 2039. The few fossils seem all from above.
41	1102-1134	Like 2037. A few fragments of mollusks.
42	1102-1134	Like 2039. No fossils seen.
43	1134-1157	Like 2039. No fossils seen.
44	1157-1189	Like 2039. No fossils seen except those from above.
45	1189-1221	Like 2037. No fossils seen except those from above.
46	1221-1252	Like 2037. No fossils seen except those from above.
47	1252-1284	Light reddish-brown granular limestone. Fragments of bryozoans. Orbitoids.
48	1284-1315	Light reddish-brown granular limestone. Fragments of bryozoans. Orbitoids.
49	1315-1346	Light reddish-brown granular limestone. Fragments of bryozoans. Orbitoids. Small foraminifera ^a .
50	1346-1377	Light reddish-brown granular limestone. On e echinoid.
51	1377-1408	Creamy-white granular limestone. Fragments of bryozoans.
52	1408-1439	Like 2051. No fossils seen.
53	1439-1470	Like 2047. Orbitoids, small foraminifera ^a (?).
54	1470-1501	Like 2047. Orbitoids, small foraminifera ^a (?).
55	1501-1532	Light brown sugary, crystalline limestone. No fossils seen.
56	1532-1563	Like 2055. A few fragments of bryozoans.
57	1563-1594	Like 2055. No fossils seen.
58	1594-1625	Like 2055. A few fragments of bryozoans. Orbitoids. Fish tooth.
59	1625-1656	Half brownish crystalline limestone and half very light granular limestone. Fragments of bryozoans. Orbitoids.
60	1656-1687	Like 2059. Fragments of bryozoans.
61	1687-1717	Like 2059. A few fragments of mollusks and bryozoans. Small foraminifera ^a (?).
62	1717-1748	Like 2059. One orbitoid.
63	1748-1779	Like 2059. Orbitoids. Small foraminifera ^a (?).
64	1779-1810	Like 2059. A few orbitoids. Small foraminifera ^a .
65	1810-1841	Like 2059. Orbitoids. Small foraminifera ^a .
66	1841-1872	Like 2059. A few fragments of bryozoans; one brachiopod. Orbitoids.
67	1872-1904	Like 2059. A few fragments of bryozoans; Orbitoids.
68	1904-1935	Like 2059. A few fragments of bryozoans. Orbitoids, small foraminifera ^a (?).
69	1935-1966	Like 2059 but with considerable glauconite and quartz sand. Fragments of barnacle plates and bryozoans. Orbitoids. Small foraminifera ^a .
70	1966-1997	Like 2069. Very few fossils shown.
71	1997-2028	Like 2069. Very few fossils seen.
72	2028-2061	Like 2072. Fragments of mollusks, echinoids. Orbitoids. Dictyoconus, foraminifera ^a .
73	2061-2092	Like 2072. Fragments of mollusks, echinoids. Orbitoids, Dictyoconus foraminifera ^a .
74	2092-2123	Like 2072. Fragments of mollusks, echinoids. Orbitoids, Dictyoconus foraminifera ^a .
75	2123-2156	Like 2072. Fragments of mollusks. Small foraminifera ^a .
76	2156-2187	Light-colored dense limestone, very little glauconite. Fragments of echinoids, mollusks. Small foraminifera ^a .
77	2187-2218	Light-colored glauconitic limestone. Fragments of mollusks, echinoids. Orbitoid, small foraminifera ^a .
78	2218-2249	Like 2076. Very few fossils seen.

Lot No.	Depth	
2079	2249-2280	Like 2077. Orbitoids.
80	2280-2319	Like 2077. Fragments of bryozoans. Orbitoids, <u>Dietyoconus</u> , small foraminifera(?).
81	2319-2342	Like 2077, with one lump of medium greenish gray shal ^e . Fragments of mollusks. Orbitoids.
82	2342-2374	Like 2077. Orbitoids.
83	2374-2393	Light-gray, medium grained clear quartz sand, with a few black phosphatic grains. Fragments of a bryozoan only fossils seen.
84	2384-2393	Like 2083, but fine-grained. No fossils seen.
85	2374-2406	Light gray sandy limestone, with various other cutting fragments. Only fossils appear to be from above.
86	2406-2437	Like 2085. Only fossils appear to be from above.
87	2437-2468	Like 2085, with some chunks of medium gray fine silt. No fossils noted.
88	2468-2499	Medium gray fine silt, with minor sandy limestone. No fossils seen.
89	2499-2530	Like 2088. No fossils seen.
90	2530-2561	Like 2088. Orbitoids.
91	2561-2592	Like 2088. Few fossils seen.
92	2592-2623	Like 2088. Few fossils seen.
93	2623-2654	Like 2088. Few fossils seen.
94	2654-2685	Like 2088. Few fossils seen.
95	2685-2716	Like 2088. Few fossils seen.
96	2716-2747	Like 2088. Few fossils seen.
97	2747-2778	Like 2088. Few fossils seen.
98	2778-2809	Like 2088. Small foraminifera ^a .
99	2809-2840	Like 2088. No fossils seen.
2100	2840-2868	Like 2088. Small foraminifera
1	2868-2898	Medium gray silt, with admixture of limestone. Few fossils seen.
2	2898-2929	Like 2100, with more contamination. Fossils seem all from above.
3	2929-2960	Like 2102. Fossils seem all from above.
4	2960-2991	Like 2102. Fossils seem all from above.
5	2991-3022	Like 2102. Fossils seem all from above.
6	3022-3056	Like 2102. Fossils seem all from above.
7	3056-3087	Like 2102. Fossils seem all from above.
8	3087-3118.	Like 2102. Small foraminifera ^a .
9	3118-3140	Like 2102. Small foraminifera ^a .
10	3140-3178	Like 2102. Fossils seem all from above.
11	3166-3197	Like 2102. Fossils seem all from above.
12	3197-3228	Like 2102. Fossils seem all from above.
13	3228-3259	Like 2102. Fossils seem all from above.
14	3259-3290	Like 2102. Fossils seem all from above.
15	3290-3322	Like 2102. Fossils seem all from above.
16	3314-3328	Sample is clean hard medium gray silt. Small foraminifera ^a .
17	3328-3353	Like 2102. Fossils seem all from above.
18	3353-3384	Like 2102. Small foraminifera ^a .
19	3384-3414	Like 2102. No fossils seen.
20	3414-3444	Like 2102. Small foraminifera ^a .
21	3444-3474	Like 2102. Small foraminifera ^a .
22	3474-3505	Like 2102. Small foraminifera ^a .
23	3495-3507	Sample is nearly clean medium gray silt. Small foraminifera ^a .
24	3495-3507	Sample is nearly clean medium gray silt. Small foraminifera ^a .
25	3505-3536	Like 2102. Small foraminifera ^a .
26	3536-3567	Like 2102. Small foraminifera ^a .

Lot No.	Depth	
2127	3567-3598	Like 2102. Small foraminifera.
28	3598-3629	Like 2102. Small foraminifera.
29	3629-3690	Medium gray somewhat flaky shale with tinge of brown. Small foraminifera.
30	3659-3690	Like 2029. Small foraminifera.
31	3690-3720	Like 2029. Small foraminifera.
32	3720-3749	Like 2029. Small foraminifera.
33	3749-3779	Like 2029. Small foraminifera.
34	3779-3809	Like 2029. Small foraminifera.
35	3809-3839	Like 2029. Small foraminifera.
36	3839-3870	Like 2029. Small foraminifera.
37	3870-3901	Like 2029. Small foraminifera.
38	3901-3928	Like 2029. Fragments of mollusks, <u>Inoceramus</u> . Small foraminifera.
39	3928-3957	Like 2029. Fragments of mollusks, <u>Inoceramus</u> . Small foraminifera.
40	3957-3987	Like 2029. Fragments of mollusks, <u>Ostrea</u> . Small foraminifera.
41	3987-4017	Like 2029. Small foraminifera.
42	4017-4048	Sample is medium clear quartz sand, with a small unit of silt; could all be from drilling mud.
43	4048-4078	Like 2042. Very few fossils seen.
44	4078-4109	Sample largely shale like 2029. Small foraminifera.
45	4078-4109	Sample largely shale like 2029. Small foraminifera.
46	4109-4140	Sample largely shale like 2029. Small foraminifera.
47	4140-4170	Sample largely shale like 2029. Small foraminifera.
48	4170-4201	Sample largely shale like 2029. Small foraminifera.
49	4201-4291	Like 2044. Small foraminifera.
50	4231-4261	Sample mostly from clear quartz sand, with some chips of shale.
51	4261-4291	Like 2044. Small foraminifera.
52	4291-4320	Like 2044. Small foraminifera.
53	4339-4348	Granitic debris, white. No fossils seen.
54	4348-4355	Weathered granite.