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**LOGS OF SELECTED WELLS IN THE  
COASTAL PLAINS OF GEORGIA**

by

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ATLANTA  
1964



## Lithologic and paleontologic description of cores and cuttings.

Samples are cuttings unless otherwise stated.

Depth (feet)	Description
0-1510	Samples not studied.
<b>Cretaceous</b>	
Gulf Series	
Beds of Navarro age	
1200	Top of Cretaceous by Southeastern Geological Society Mesozoic Committee, 1949, Mesozoic cross section E-E, Bullock County, Alabama to Franklin County, Florida.
Beds of Taylor age	
1358	Top of beds of Taylor age on the basis of the highest occurrence of <i>Stensioina americana</i> .
1510-1525	Marl, dark gray; cream, hard, sandy limestone (fine-grained sand); fine to coarse-grained sand. Cuttings contain specimens of <i>Planulina dumblei</i> and other Taylor species.
1525-1540	Sample composed, mainly, of fragments of sandstone, sandy limestone, and gray marl; unconsolidated sand; a little glauconite. Specimens of several species of Foraminifera indicate the Taylor age of the beds; a few specimens from higher levels also occur.
1540-1591	Like sample at 1525-1540 ft.
1591-1606	Shale, gray, marly, highly microfossiliferous and fragments of light-gray, hard, sandy limestone. Specimens of several species of Foraminifera that indicate the Taylor age of the beds; fragments of <i>Inoceramus</i> and <i>Ostrea</i> sp.; specimens of Foraminifera from higher levels.
1606-1787	Like sample at 1591-1606 ft.
1787-1804	Like sample at 1591-1606 ft., but contains specimens of <i>Kyphopyxa christneri</i> and <i>Pseudogaudryinella capitosa</i> that are common in the lower part of the beds of Taylor age.
1804-1830	Like sample at 1787-1804 ft.
Beds of Austin age (electric log correlation)	
1830-1847	Like sample at 1787-1804 ft.
1847-1865	Like sample at 1787-1804 ft., but contains fragments of light greenish-gray marly shale. Coarse sand that composes part of the sample is probably caving.
1865-1905	Like sample at 1847-1865 ft.

Depth (feet)	Description
1905-1935	Sandstone, gray, hard, very fine grained, calcareous; fine to coarse-grained unconsolidated sand; many <i>Inoceramus</i> fragments; a little dark-gray marly shale. The microfauna is a mixture of specimens of species from various levels, but includes specimens of species that are common only in the lower part of the beds of Taylor age and the upper part of the beds of Austin age.
1935-1940	No sample.
1940-1955	Shale, gray, marly, slightly micaceous, and some sand and other materials like sample at 1905-1935. The microfauna contains specimens of <i>Darbyella brownstownensis</i> , <i>Kyphopyxa christneri</i> , and <i>Gaudryina ellisora</i> . <i>D. brownstownensis</i> is common in the upper part of the beds of Austin age, and the accompanying species are common only in the lower part of the beds of Taylor age and the upper part of the beds of Austin age.
1955-1961	Like sample at 1940-1955 ft.
1961-1977	This sample contains the highest occurrence of specimens of <i>Globorotalites umbilicatus</i> , a form typical of the beds of Austin age.
1997-2000	Like sample at 1940-1955 ft.
2000-2015	This sample contains the highest occurrence of specimens of <i>Citharina texana</i> .
2015-2153	Like sample at 1940-1955 ft.
2153-2168	Sand; fine-grained; small fragments of gray marly shale; abundant <i>Inoceramus</i> fragments. The foraminiferal fauna is a mixture from various levels, as in all the foregoing samples, but contains specimens of species typical of the beds of Austin age, <i>Hastigerinella watersi</i> , <i>Dorothia alexanderi</i> and others.
2168-2230	Like sample at 2153-2168 ft.
2230-2245	Shale, gray, calcareous, and fragments of dark brownish-gray, somewhat light-speckled, flaky, slightly carbonaceous shale. Abundant <i>Inoceramus</i> fragments and specimens of Foraminifera are seemingly caving from various depths.
2245-2260	No sample.
2260-2275	Shale, gray, slightly calcareous, somewhat micaceous. The fauna is composed of <i>Inoceramus</i> fragments and fairly numerous specimens of Foraminifera from higher levels. Small specimens of <i>Globigerina</i> sp. and <i>Gumbelina</i> sp. are the dominant forms; <i>Globotruncana</i> sp., <i>Planulina</i> cf. <i>P. eaglefordensis</i> , and <i>Globorotalites umbilicatus</i> are fairly common.
2275-2364	Like sample at 2260-2275 ft.
2364-2380	Similar to sample at 2260-2275 ft., but with the addition of many fragments of dark brownish-gray, light speckled, marly shale; no marked change in fauna.
2380-2395	Like sample at 2364-2380 ft.

Depth (feet)	Description
<b>Atkinson Formation. Upper Member.</b>	
2395-2411	The upper member of the Atkinson Formation in this well is a shallow-water marine facies. Like sample at 2364-2380 ft., but with the addition of a few fragments of very fine grained, calcareous, micaceous, slightly glauconitic and phosphatic sandstone.
2411-2439	Like sample at 2395-2411 ft.
2439-2454	Like sample at 2395-2411 ft. but contains many fragments of the very fine grained sandstone, and a few fragments of light-gray, hard, micaceous, sandy (very fine grained sand) limestone.
2454-2481	Like sample at 2439-2454 ft., with the addition of many fragments of light-gray, moderately fine-grained, glauconitic, somewhat phosphatic sandstone containing many fragments of <i>Ostrea</i> sp.
2481-2495	Like sample at 2454-2481 ft., but this sample shows an increase in the fragments of the light-gray, fossiliferous sandstone.
2495-2510	Sandstone, light-gray, moderately fine to moderately coarse grained, clear quartz, containing glauconite, phosphatic material, and abundant fragments of <i>Ostrea</i> -like bivalves and bryozoan fragments.
2510-2525	Like sample at 2495-2510 ft. This sample is the highest occurrence of fragments of thinly flaky grayish-green shale.
2525-2540	Sand, unconsolidated, fine to moderately coarse grained, angular to subangular, quartz; fragments of the fossiliferous sandstone first observed in the sample at 2495-2510 ft.; and a few fragments of flaky grayish-green shale.
2540-2555	Sand, unconsolidated, fine to coarse-grained, quartz; many fragments of white, glauconitic, phosphatic sandstone containing bryozoan and shell fragments; a little grayish-green, flaky, unctuous, slightly carbonaceous shale.
2555-2565	No sample.
2565-2590	Like sample at 2540-2555 ft.
2590-2605	Sand, unconsolidated, fine to very coarse grained, clear quartz; fragments of fossiliferous sandstone and shells ( <i>Ostrea</i> sp.) like sample at 2540-2555 ft., but much less abundant; increase in fragments of grayish-green shale.
2605-2628	Sand, unconsolidated, like sample at 2590-2605 ft.; fragments of <i>Ostrea</i> sp., phosphatic nodules, and fossiliferous sandstone; fragments of green shale slightly more common than in sample at 2590-2605 ft. Specimens of <i>Valvulineria infrequens</i> fairly common; <i>Planulina eaglefordensis</i> and <i>Gumbelina moremani</i> also present. This sample seems to indicate a brief change to a deeper-water marine environment.
2628-2658	Sand, unconsolidated, like sample at 2605-2628 ft.; fossiliferous sandstone; fragments of <i>Ostrea</i> sp., flaky green shale, and phosphatic nodules.

Depth (feet)	Description
2658-2668	Sample almost entirely unconsolidated, fine to moderately coarse-grained quartz sand.
2668-2688	Sand, unconsolidated, fine to very coarse grained; white, slightly glauconitic, phosphatic, calcareous sandstone, containing embedded fragments of <i>Ostrea</i> sp.; grayish-green, flaky, carbonaceous shale.
2688-2703	Sample, mainly, unconsolidated fine to moderately fine-grained sand; a few fragments of other material like sample at 2668-2688 ft.
2703-2730	Like sample at 2688-2703 ft.
2730-2748	Sand, like sample at 2688-2703 ft.; fragments of fossiliferous sandstone and <i>Ostrea</i> sp. common; a few fragments of flaky, grayish-green shale; much caved material from higher levels.
2748-2825	No change.
2825-2840	Sand, unconsolidated, fine to moderately fine grained, quartz; abundant fragments of an <i>Ostrea</i> -like bivalve. Fossils apparently wash from a fine-grained, somewhat glauconitic, phosphatic, calcareous sandstone. The well may have penetrated a shell reef at this depth.
2840-2855	Like sample at 2825-2840 ft., and in addition, a few fragments of yellowish-brown and light bluish-green mottled shale, and reddish-brown shale. A few of the fossiliferous sandstone fragments are carbonaceous.
2855-2870	Sand, unconsolidated; fine to moderately fine grained; many fragments of <i>Ostrea</i> sp., and a few fragments of white, fine-grained, fossiliferous sandstone; many cavings from higher levels.
2870-2915	Like sample at 2855-2870 ft.; fragments of grayish-green shale are more common.

#### Atkinson Formation. Lower Member.

2915-2934	Like sample at 2870-2915 ft., but fragments of hard, very fine grained, calcareous, somewhat glauconitic, phosphatic, micaceous sandstone are fairly common.
2934-2949	Like sample at 2915-2934 ft., but fragments of sandstone are more common, and some of them contain embedded shell debris. Sample contains many fragments of grayish-green shale, and a few fragments of grayish-green shale, and a few fragments of flaky, somewhat micaceous, carbonaceous shale.
2949-2962	Sand, unconsolidated, fine to coarse-grained, and abundant fragments of gray and grayish-green, flaky shale.
2962-2978	Like sample at 2947-2962 ft., and a few fragments of very highly micaceous, slightly carbonaceous, fine-grained sandstone.
2978-2993	Shale, dark brownish-gray, flaky, micaceous, slightly carbonaceous, and a little grayish-green shale; a little highly micaceous sandstone like the sample at 2962-2978 ft.; fragments of <i>Ostrea</i> sp.

Depth (feet)	Description
2993-3007	Like the sample at 2978-2993 ft.; contains a fragment of the highly micaceous sandstone that shows embedded fragments of grayish-green shale, and a fragment of a specimen of an arenaceous species of Foraminifera.
3007-3022	Shale, dark-gray, flaky, micaceous; grayish-green shale; a little sand and a few fragments of micaceous sandstone. The sample contains specimens of <i>Ammobaculites comprimatus</i> and <i>Trochammina rainwateri</i> . <sup>2</sup>
3022-3037	Like the sample at 3007-3022. The microfauna is composed of specimens of <i>Ammobaculites comprimatus</i> , <i>A. bergquisti</i> , <i>A. agrestis</i> , <sup>1</sup> <i>A. advenus</i> .
3037-3052	Like sample at 3007-3022 ft. The microfauna is composed of specimens of <i>Ammobaculites bergquisti</i> , <i>A. agrestis</i> , <i>A. cf. A. fragmentarius</i> , <i>Ammobaculoides plummerae</i> , <i>Ammotium braunsteini</i> , and fragments of <i>Polyphragma</i> sp.
3052-3067	Shale, gray and greenish-gray, flaky; a little fine-grained micaceous sandstone; a little unconsolidated sand. The microfauna is composed of specimens of <i>Ammobaculites bergquisti</i> , <i>A. junceus</i> , <i>A. agrestis</i> .
3067-3082	Like sample at 3052-3067 ft., and cavings of several kinds of material from higher levels; unconsolidated sand composes about 50 percent of the sample. Fragments of light-gray, silty, possibly nodular limestone are fairly common.
3082-3097	Shale, gray, soft, flaky, and many fragments of white to light-gray, fine-grained, calcareous, micaceous, sandstone and siltstone; a little silty, micaceous limestone. About 25 percent of the sample is unconsolidated fine to coarse-grained quartz sand.
3097-3112	Sand, unconsolidated, fine to moderately coarse grained, roughly angular, quartz; many nodules of dark-green glauconite and of pyrite.
3112-3127	Sand, unconsolidated, fine to coarse-grained, roughly angular quartz; fragments of several kinds of micaceous sandstone and siltstone.
3127-3142	Sand, like sample at 3112-3127 ft. Sample contains a few nodules of siderite, large flakes of colorless and pale-green mica, and a trace of glauconite.
3140	<b>Comanche Series undifferentiated (electric log correlation)</b>
3142-3157	Like sample at 3127-3142 ft., but contains no nodules of siderite.
3157-3172	Sand, unconsolidated, fine to coarse-grained, roughly angular quartz; a few green-tinted grains; a few large flakes of mica. Phosphate nodules and shell fragments are probably caving.

<sup>1</sup>Samples from 3007 to 3067 feet contain specimens of species of Foraminifera characteristic of the so-called "Barlow" fauna described by E. R. Applin, 1955, U.S. Geological Survey Prof. Paper 264-I, p. 187-197, pls. 48 and 49.

Depth (feet)	Description
3172-3182	No sample.
3182-3197	Like sample at 3157-3172 ft.
3197-3212	Sand, unconsolidated, fine to very coarse grained, roughly angular quartz; fragments of red and gray mottled shale and purplish-red, silty clay shale; a few siderite nodules.
3212-3227	Sand, unconsolidated, fine to very coarse grained, containing grains of feldspar; a little varicolored shale.
3227-3242	Like the sample at 3212-3227 ft. A few siderite nodules present.
3242-3298	No change.
3298-3314	Sand, unconsolidated, fine to very coarse grained, quartz; very coarse grains of quartz and grains of feldspar are common; a few small fragments of multi-colored clay shale are present.
3314-3329	No change.
3329-3408	Sand, like sample at 3298-3314 ft., but no shale present.
3408-3423	Sand, unconsolidated, coarse-grained, roughly angular. The color of the sand in the samples from 3329 to 3423 ft. changes progressively with depth from white to pink because of the steady increase of pink and yellow-tinted grains of feldspar and quartz.
3423-3438	Sand, like sample at 3408-3423 ft., but no shale; grains of pink feldspar very common.
3438-3453	Sand, like sample at 3408-3423 ft.; a few nodules of pink sandy limestone; feldspar grains abundant.
3453-3469	Sand, like sample at 3408-3423 ft., and a few fragments of dark brownish-red and bluish-gray mottled clay shale.
3469-3484	Sand, unconsolidated, fine to moderately fine, roughly angular quartz; a few coarse grains present; feldspar common.
3484-3499	Sand, like sample at 3469-3484 ft., and a few fragments of sandy, mustard-colored clay shale.
3499-3514	Sand, like sample at 3469-3484 ft., but coarse grains again common; many fragments of dark-brown and purplish-red and gray mottled, micaceous clay shale.
3514-3530	No samples.
3530-3545	Sand, unconsolidated, fine to coarse-grained, quartz; coarse grains rare; a little feldspar and a few fragments of multicolored shale.
3445-3639	No change.
3639-3747	Sand, unconsolidated, fine to coarse-grained; a little feldspar and a few fragments of dark-red and bluish-gray mottled, micaceous shale. No shale in sample at 3669-3685 ft.
3747-3762	Sand and a little mottled shale like the samples from 3639 to 3747 ft.; a few fragments of flaky, purplish-gray, slightly sandy, micaceous shale.
3762-3803	Sand, unconsolidated, fine to coarse-grained, quartz; a little feldspar; a few fragments of brownish-red and gray mottled shale; a little purplish-gray shale.



Depth (feet)	Description
3803-3807	No sample.
3807-3867	Sand like the samples from 3762-3803 ft.; fragments of red, gray and mustard-colored shale more common.
3867-3967	Sand and a little multicolored shale like the samples from 3807-3867 ft.
3967-3978	Sand like the samples from 3867-3967 ft., and many fragments of brownish-red and gray mottled micaceous shale; a few fragments of bluish-green shale; a few fragments of red, gray, and mustard-colored mottled shale.
3978-3994	Shale, dark brownish-red, grayish-green mottled, highly micaceous; a few nodules of pink sandy limestone.
3994-4009	Shale, like the sample at 3978-3994 ft., 50 percent; unconsolidated sand 50 percent.
4009-4024	Sand, unconsolidated, fine to coarse-grained, roughly angular, quartz, and a little feldspar about 75 percent; multicolored shale fragments about 25 percent.
4024-4083	Sand and multicolored shale like the sample at 4009-4024 ft.; the amount of shale in the samples ranges from about 25 to 50 percent.
4083-4098	Sand, unconsolidated, fine to coarse-grained, 50 percent; 50 percent small fragments of red and gray mottled shale, and many large nodules of dark-green glauconite(?) or chlorite(?) that seem to come in at about this level.
4098-4115	Like the sample at 4083-4093 ft.; some sand grains are stained green, possibly from the glauconite(?) or chlorite(?).
4115-4176	Sand, unconsolidated, fine to coarse-grained; glauconite(?) or chlorite(?), and many green-tinted grains of sand; phosphatized fish remains and other phosphatic fragments; a little multicolored shale.
4176-4207	Sand, unconsolidated, and nodules of glauconite(?) or chlorite(?) like samples at 4115-4176 ft., fragments of red and gray mottled shale fairly common; fragments of red, hard (nodular?), sandy (very fine grained sand) limestone.
4207-4237	Sand, unconsolidated, fine to coarse-grained, quartz, containing many green-tinted grains, is about 75 percent of sample. Large nodules of dark-green glauconite(?) or chlorite(?), a little red and gray mottled clay, and a few phosphatic nodules, compose about 25 percent of sample.
4237-4297	Sand and glauconite(?) or chlorite(?) like sample at 4207-4237 ft., shale fragments, and a few fragments of red nodular limestone.
4297-4327	Sand like sample at 4237-4297 ft.; glauconite(?) less common; shale fragments rare; no red nodular limestone.
4327-4342	Sand and glauconite(?) like sample at 4297-4327 ft.; a few fragments of red shale and a few of dull-red nodular limestone.

Depth (feet)	Description
4342-4357	Sand like the sample at 4327-4342 ft.; a little shale and no limestone; glauconite(?) and green-tinted sand grains less common.
4357-4372	Like sample at 4342-4357 ft.; a few small nodules of red limestone.
4372-4391	Sand, unconsolidated; glauconite(?); numerous fragments of red and gray mottled, micaceous, sandy clay shale; a few nodules of red limestone.
4391-4422	Sand, unconsolidated, fine to moderately coarse-grained, quartz; a little feldspar, but no green-tinted grains; a little glauconite(?), possibly caving, and a little red shale.
4422-4437	Sand, unconsolidated, fine to coarse grained, quartz; numerous fragments of red and gray mottled micaceous clay shale; a few nodules of red limestone.
4437-4452	Sand, fine to coarse-grained, quartz.
4452-4483	Sand, like sample at 4437-4452 ft.; many fragments of red and gray mottled micaceous shale.
4483-4498	Limestone, hard, cream, dense, containing a trace of glauconite and a few small specimens of Ostracodes; a few large fragments of chert; a little gray clay shale. (Note: This sample is definitely out of place.)
4498-4528	Sand, unconsolidated, fine to coarse-grained, quartz, and a little feldspar, about 80 percent of sample; small fragments of red shale, about 20 percent.
4528-4559	Sand, unconsolidated, fine to very coarse grained, containing many large deep-yellow-tinted grains; a little dull-red and gray mottled shale.
4559-4634	Sand, like sample at 4528-4559 ft.
4634-4669	Sand, unconsolidated, fine to coarse-grained; fragments of red and gray mottled micaceous shale common.
4669-4684	Like sample at 4634-4669 ft., a little glauconite(?) which may be caving.
4684-5088	No change.
5088-5106	Sand, unconsolidated, fine to coarse; green-tinted grains common; a little dark purplish-red clay shale.
5106-5135	No samples.
5135-5168	Sand, like sample at 5088-5106, a little red shale, and cavings from higher levels.
5168-5205	No change. The samples questionably show the material penetrated by the drill at this level.
5205-5309	Sand, unconsolidated, fine to coarse-grained quartz, containing green-tinted grains, a few pink and yellow-tinted grains, and a little feldspar; fragments of dark, dull-red and gray mottled, micaceous, somewhat sandy clay shale, and sparse nodules of red and gray silty limestone; cavings of gray marl and other material from much higher levels.
5309-5325	Sand like samples at 5205-5309 ft., but coarse grains are rare; a

Depth (feet)	Description
	little purplish-red, gray, green-mottled shale; many cavings.
5325-5340	No samples.
5340-5354	Sand, unconsolidated, fine to coarse-grained; a little red shale; purplish-red and purplish-gray, highly sandy, micaceous shale; a little very fine grained highly micaceous sandstone.
5354-5369	Sand like sample at 5340-5354 ft.; fragments of purplish-red and gray clay; green, highly sandy, micaceous clay fairly common; a few nodules of red and white limestone.
5369-5452	No change.
5452-5541	Sand, like sample 5340-5354 ft., and many fragments of dark purplish-red, and gray, highly micaceous, sandy shale; several fragments of bright-yellow, highly micaceous, sandy shale; a few nodules of limestone.
5541-5677	Mainly sand and a small amount of shale.
5672-5692	Sand, unconsolidated, fine to coarse-grained, quartz, containing many green-tinted grains; a little glauconite (caving?), a little red micaceous shale; a few nodules of red limestone
5692-5727	No change.
5727-5777	No samples.

### Triassic(?)

#### Upper Triassic(?) Series

##### Newark(?) Group

5777-5792	Sand, unconsolidated, fine to coarse-grained quartz; a few fragments of dark-red shale; a few fragments of light bluish-green shale, some of which are highly silty and micaceous.
5792-5807	Sand unconsolidated, fine to coarse-grained; red and light-green shale like the sample at 5777-5792 ft.; a few nodules of red and white sandy limestone.
5807-6007	No change.
6007-6023	No samples.
6023-6038	Core 1. Recovery 8 ft. Top. Sandstone, light greenish-gray and pink, thinly laminated, very fine to moderately fine grained, argillaceous, highly micaceous (black and green flakes). The sand grains are usually etched and roughly angular. Part of the sandstone has a white ashy(?) cement. Three feet from the top of the core, a streak of white soft sandstone is fine to very coarse grained and contains small pebbles, the cementing material is white and ashy(?). Middle. Sandstone, light green, very fine-grained, micaceous. Bottom. Sandstone, light-green, fine to moderately coarse grained, micaceous, bentonitic. The sand grains are usually etched and roughly angular.

Depth (feet)	Description
6024-6039	Sand, unconsolidated, fine to moderately coarse grained, and a few fragments of red shale.
6039-6190	Like the sample at 6024-6039 ft., with the addition of a few nodules of pink to red limestone.
6190-6222	Sand, unconsolidated, fine to moderately fine grained; a few coarse sand grains and a few fragments of red and gray mottled shale.
6222-6600	Sand, unconsolidated, fine to coarse-grained, quartz, and a little feldspar; many small fragments of dull, dark-red and gray mottled micaceous shale; a few nodules of red and pink limestone.

### Devonian(?)

#### Middle Devonian(?). Weathered(?) Shale.

6600-6607	<p>Core 2. Recovery 3 ft. Corrected depth 6630-6637 ft.</p> <p>Top. Shale, dull brick-red, sandy. The sand, which is fine to moderately fine grained quartz, constitutes about 10 percent of the fragment of core, and is rather evenly distributed. The shale contains a small amount of mica, a few small inclusions of greenish-yellow unctuous clay, and molds and impressions of small fossil bivalves.</p> <p>Middle. Shale, dark reddish-brown and bright greenish-blue-streaked, micaceous, somewhat silty, containing yellowish-brown inclusions.</p> <p>Bottom. Shale, greenish-blue and dull reddish-brown, silty, splintery.</p>
6600-6615	Sand, unconsolidated, fine to coarse-grained, and fragments of the shale like core 2 at 6600-6607 ft. The sample contains one large fragment of white quartzite, and one of red-stained quartzite.
6615-6631	Sand, unconsolidated, fine to coarse-grained (probably caving), and fragments of several types of shale, including fragments of smooth, splintery, flaky, reddish-brown and yellowish-green-streaked shale.
6631-6646	Like the sample at 6615-6631 ft. and a few fragments of multi-colored limestone nodules that seem to belong near this depth.
6646-6682	Sand, like sample at 6615-6631 ft., and fragments of several types of multicolored shale and a few nodules of multicolored limestone.
6682-6697	Sand and shale fragments like sample at 6646-6682 ft., and in addition, a few fragments of bright greenish-blue bentonitic(?) shale, and of red and greenish-gray, yellow-speckled, very fine grained sandstone.
6697-6707	Sand and fragments of several types of red, brown and blue shale.
6707-6722	Sand, unconsolidated, about 50 percent of sample, in contrast to 75-90 percent in samples about 100 feet higher in this well; the sand is probably caving from higher levels. The sample contains various types of multicolored shale and many fragments of

Depth (feet)	Description
	dark reddish-brown and greenish-blue-streaked shale which was not observed in samples from higher levels; the shale contains traces of impressions of small fossils.
6722-6737	Like sample at 6707-6722 ft., and in addition, a few fragments of bright bluish-green, micaceous siltstone.
6737-6766	Sand, shale, and siltstone like sample at 6722-6737 ft. Fragments of brownish-red and greenish-blue-streaked shale, green siltstone, and bright blue-green bentonitic(?) shale are common in the sample.
6766-6781	Sand, unconsolidated, about 75 percent of sample. About 25 percent of sample is composed of fragments of several types of multicolored shale, green siltstone, and a few nodules of limestone. A fragment of black shale, which was not observed in samples from higher levels, is probably from near this depth.

## Devonian

### Middle Devonian. Black Shale.

6781-6842	Like sample at 6766-6781 ft.; increase in fragments of black shale.
6842-6872	Like sample at 6781-6842. Fragments of dark reddish-brown, smooth, splintery shale, very common; a little black shale.
6863-6873	Core 3. Recovery 0. Corrected depth 6893-6903 ft.
6872-6888	Sand, unconsolidated, and multicolored shale like sample at 6766-6781 ft. Fragments of bluish-green shale abundant; dark brownish-red shale common; a few fragments of black, waxy shale.
6888-6948	Like sample at 6872-6888 ft. A few fragments of black shale: a) smooth, flaky, splintery shale; b) rough-textured, micaceous shale having a conchoidal fracture.
6948-6965	Shale, mainly brownish-red, reddish-brown and green, and a little black shale.
6965-6985	Core 4. Recovery 20 ft. Corrected depth 6995-7015 ft. Top. Shale, dark-gray, smooth, thinly laminated, somewhat silty; in part, highly micaceous and highly pyritic (small crystals); small particles of carbonaceous material. Another part of the core is dark-gray, hard, laminated, micaceous siltstone, containing minute particles of carbonaceous material. Middle. Shale, dark-gray, laminated, containing minute particles of carbonaceous material, and a few specimens of <i>Lingula</i> sp. Bottom. Like the middle part of the core.
6985-7006	Core 5. Recovery 20 ft. Corrected depth 7015-7036 ft. Black shale containing specimens of <i>Lingula</i> sp.
7006-7009	No sample.
7009-7024	Sand, unconsolidated; multicolored shale, and black shale like core 4 (6965-6985 ft.) and core 5 (6985-7006 ft.)
7024-7039	Like sample at 7009-7024 ft.; fragments of black shale more abundant.

