

GEORGIA

ECHOLS COUNTY

Operator: Hunt Oil Company

GGG No. 150

Landowner: Superior Pine Products Co.  
Well #3

Elevation: 144 ft.  
(derrick floor)

Location: Land District 13, Land Lot  
532, 218 ft. east and  
242 ft. north of south-  
west corner of Land Lot  
532.

Total depth: 4003 ft.  
Completed: July 29, 1947

Summary of Stratigraphy

	Depth to top (feet)	Thicknes (feet)
Tertiary		
Samples not studied		
Cretaceous		
Gulf		
Lawson Limestone, upper member (?)	2590 (?)	80 (?)
Beds of Taylor age	2670	280
Beds of Austin age	2950	370
Atkinson Formation, upper member	3320	145
do lower member (?)	3465	160
Comanche (?) undifferentiated	3625	32
Paleozoic		
Middle Ordovician <u>1</u> / black shale and sandstone	3657 to total depth	346

1/ Bridge, Josiah and Berdan, J.M. 1951, U.S.

Geological Survey open-file report, p. 5 and map.

Lithologic and paleontologic descriptions of cuttings and cores. Samples are cuttings unless otherwise stated.

Depth  
(feet)

Description

0-2750

Samples not studied

Cretaceous

Gulf

Lawson Limestone

Upper Member (?)

Top of the upper member(?) of the Lawson Limestone is placed at 2590 ft. on the basis of electric log correlation.

Beds of Taylor age

Top of the beds of Taylor age is placed at 2670 ft. on the basis of electric log correlation.

2750-2760

Chalk, white, containing abundant fragments of Inoceramus and other fossil bivalves and many specimens of Anomalina sholtzensis and Anomalina cosdeni.

2760-2770

Like sample at 2750-2760 ft. Pyrite and pyritized shell fragments are common.

2770-2820

No change.

2820-2830

Like preceding samples with the addition of a little light greenish-gray marl.

2830-2840

Sample shows an increase in the light greenish-gray marl.

Depth (feet)	Description
2840-2850	Like preceding samples and many cavings(?) of light-tan dolomite and moderately fine-grained sand. The sand is about 50 percent of the sample.
2850-2860	Like sample at 2840-2850 ft.
2860-2870	Chalk, white, tan dolomite, a little sand, and fragments of greenish-gray marl. The sample contains fragments of <u>Inoceramus</u> and other fossil bivalves, echinoid spines, and a few specimens of Foraminifera and Ostracoda. The microfossils seem to was from the chalk which is probably cavings.
2870-2880	Like sample at 2860-2870 ft.
2880-2890	The sample is composed of about 50 percent light-gray and greenish-gray marl; the remainder is white chalk and a little dolomite. The sample contains abundant fragments of <u>Inoceramus</u> and other fossil bivalves, Echinoid spindles, and a few specimens of Foraminifera and Ostracoda. The micro fauna seems to wash from the chalk which is probably cavings.
2890-2940	No change.

Depth  
(feet)

Description

2940-2950 Marl, light greenish-gray, chalky, is the largest part of the sample. In addition, the sample contains a little chalk and tan dolomite, fragments of Inoceramus and other fossil bivalves, and a few specimens of Foraminifera, all of which seem to have caved from higher levels.

Beds of Austin age

2950-2960 Like sample at 2940-2950 ft., with the addition of a few fragments of a somewhat darker greenish-gray laminated marl. The top of the beds of Austin age is based in part, on electric log correlation.

2960-2970 Like sample at 2950-2960 feet.

2970-2980 The sample is mainly chalk, and a few fragments of marl and dolomite; a few Inoceramus fragments.

2980-2990 Marl, light-gray, chalky, is again dominant. Fossils are, chiefly, fragments of Inoceramus and other macro fossils, and a few specimens of Foraminifera from higher levels.

2990-3000 No change.

Depth (feet)	Description
3000-3010	Like sample at 2980-2990 ft. The marl is somewhat softer, and microfossils are fairly well preserved. The microfauna contains specimens of <u>Globotruncana</u> sp. <u>Globotruncana marginata</u> , <u>Planulina austiniana</u> , <u>Citharina texana</u> , and <u>Marginulina</u> cf. <u>M. plummerae</u> .
3010-3060	No change.
3060-3070	Marl, gray, and a few fragments of brownish-gray, somewhat light-speckled marl; contains specimens of Foraminifera like sample at 3000-3010 ft., and a few specimens of Ostracodes.
3070-3100	No change.
3100-3110	Marl, darker gray, somewhat light-speckled; nodules of pyrite and pyritized fragments of <u>Inoceramus</u> are common. Microfossils are, chiefly, specimens of <u>Globigerina</u> sp., <u>Globotruncana marginata</u> , and a few specimens of <u>Globorotalites umbilicatus</u> , and a few specimens of Ostracodes.
3110-3180	No change.
3180-3190	Like the sample at 3100-3110 ft., and about 50 percent cavings(?) of fine to moderately coarse grained sand.

Depth (feet)	Description
3175-3185	<p>Core. Recovery 10 ft.</p> <p>Top. Chalk, gray, marly, somewhat light-speckled. The slightly speckled appearance is due to crushed fragments of fossil shells. The marl contains fragments and prisms of <u>Inoceramus</u> and a few fish scales.</p>
3185-3195	<p>Core. Recovery 10 ft.</p> <p>Top and bottom. Chalk, marly, as in core at 3175-3185 ft. A washed sample of the top part of the core contains specimens of <u>Globigerina</u> sp. and <u>Globotruncana Marginata</u> that are common in the lower part of the beds of Austin age.</p>
3195-3200	<p>Recovery 10 ft.</p> <p>Top, chalk, brownish-gray, marly, light-speckled. More highly speckled than the core at 3185-3195 ft. Bottom. Like top part of the core, but softer and more shaly.</p>
3200-3210	<p>Marl, gray, somewhat light-speckled, like the preceding cores. Nodules of pyrite and fragments of <u>Inoceramus</u> are fairly common.</p>
3210-3230	<p>No change.</p>

Depth (feet)	Description
3230-3240	Core. Recovery 2 ft.  Marl, light, brownish-gray, somewhat light-speckled, chalky, containing shreds of carbonaceous material. The sample of cuttings from the same depth as the core contains specimens of <u>Nonionella austiniana</u> .
3240-3250	Sample not described.
3250-3252	Core. Recovery 1½ ft.  Like core at 3230-3240 ft.
3252-3262	Core. Recovery 10 ft.  Top. Chalk, light brownish-gray, marly; contains a few shreds of carbonaceous material.  Middle. Like top part of the core; contains fragments of <u>Inoceramus</u> ; much fragmental, calcitized microfossiliferous material, and specimens of <u>Globigerina</u> sp. (common).  Bottom. Like middle part of the core, but more shaly and more highly speckled with crushed yellow, chalky fossil material.
3262-3268	Core. Recovery 6 ft.  Top. Marl, light tan-gray, chalky.  Bottom. Like top part of the core; contains fragments of <u>Inoceramus</u> and small fragments of calcitized microfossils. This kind of material commonly occurs in the lower part of the beds of Austin age.

Depth (feet)	Description
3268-3278	Core. Recovery 5 ft.  Top. Like core at 3262-3268 ft.,, but not as well consolidated.  Bottom. Marl, light tan-gray, soft, chalky.
3278-3288	Core. Recovery 10 ft.  Top. Marl, brownish-gray, yellow-speckled.  Bottom. Marl, like top part of core; chalky.
3288-3297	Core. Recovery 8 ft.  Top. Marl, tan-gray, containing darker bands or laminations of the same material; speckled with crushed, chalky, dark-stained, fragmental fossil shells.  Bottom. Like top part of core.
3297-3300	Core. Recovery 3 ft.  Top. Like core at 3288-3297 ft.,, but less highly speckled, and, in part, hard, white chalk. The marl is somewhat carbonaceous.  Bottom. Marl, brownish-gray, moderately hard, chalky, somewhat light-speckled.
3200-3310	Core. Recovery 10 ft.  Top. Not described or no sample.  Bottom. Like core 3297-3300 ft.



Depth (feet)	Description
3310-3320	<p>Core. Recovery 10 ft.</p> <p>Top. No sample?</p> <p>Middle. Chalk, white, hard, highly sandy. Sand is at least 50 percent and possibly 75 per cent of the sample.</p> <p>Bottom. Sandstone, light-tan, fine to moderately fine grained, highly pyritic, containing lenses of grayish-green shale.</p> <p>Atkinson Formation                      Upper Member</p>
3320-3328	<p>Core. Recovery 7 ft.</p> <p>Top. Shale, grayish-green, containing lenses and inclusions of light-gray, fine grained sandstone.</p> <p>Bottom. Like top part of core.</p>
3328-3338	<p>Core. Recovery 6 ft.</p> <p>Top. Clay, grayish-green, moderately soft, highly silty, irregularly sandy, micaceous.</p> <p>Bottom. Siltstone, light grayish-green, moderately soft, micaceous, and highly silty clay.</p>

Depth (feet)	Description
3320-3340	Like the cores at 3320-3328 ft. and 3328-3338 ft., and cavings from higher levels.
3340-3350	Shale, grayish-green, flaky, and fragments of sandstone that may occur as lenses in the shale. The sandstone contains fragments of <u>Ostrea</u> sp.
3350-3360	Not described.
3360-3410	Like sample at 3340-3350 ft.; mainly shale and a little sand.
3410-3430	Not described.
3430-3440	Shale, grayish-green, flaky, somewhat micaceous, and a little greenish-gray micaceous siltstone that may occur as lenses in the shale. The sample contains a few specimens of very small <u>Guembelina</u> sp. and <u>Globigerina</u> sp. (common in the Eagle Ford Shale in Texas), and a few fragments of fish bones and carbonaceous material.
3440-3450	No change.
3450-3460	Shale, 50 percent; siltstone 50 percent. Shale contains a few specimens of <u>Guembelina</u> sp., <u>Globigerina</u> sp., and <u>Planulina eaglefordensis</u> . Small, brown, irregular-shaped nodules of siderite are in the sample.

Depth (feet)	Description
3460-3470	Shale, grayish-green, flaky, and micaceous siltstone.  Atkinson Formation                      Lower Member (?)
	The top of the lower member (?) of the Atkinson Formation is questionably placed at 3465 ft. on the basis of electric log correlation
3470-3480	Like sample at 3460-3470 ft. The shale contains crushed fragments of chalky shells and specimens of Foraminifera; the species are not identifiable.
3480-3490	Shale, greenish-gray, flaky, and many fragments of cream, fine-grained sandstone.
3490-3500	Shale, green, flaky, and a little sandstone and siltstone.
3500-3510	Like the sample at 3490-3500 ft., and a few specimens of <u>Planulina eaglefordensis</u> , <u>Guembelina</u> sp., and <u>Globigerina</u> sp.
3510-3520	No change.
3520-3530	No sample?
3530-3540	Shale, green, flaky, and a few fragments of light greenish-gray, poorly-sorted, fine to moderately coarse grained sandstone.

Depth (feet)	Description
3540-3550	Like sample at 3530-3540, but showing an increase of sand; a few green-tinted moderately coarse grains.
3550-3560	Shale, green, flaky; a little siltstone. Shale contains small, crushed, white specimens of unidentifiable microfossils.
3560-3570	Like sample at 3550-3560 ft.
3570-3580	Shale and siltstone like the immediately preceding samples. A little fine to coarse-grained, soft, glauconitic sandstone.
3580-3590	Like sample at 3570-3580 ft.
3590-3600	Shale, green, flaky, somewhat silty; a little sand, and a little carbonaceous material; a few fragments of a thin-shelled <u>Inoceramus</u> .
3600-3610	Shale, and a few fragments of siltstone and sandstone.
3603-3623	Core. Recovery 13.3 ft.  4th 4 ft. Siltstone, light-gray, moderately hard, micaceous, argillaceous, containing thin lenses of white, fine-grained, glauconitic sandstone.  Glauconite occurs in very small nodules. The sample contains a little siderite.

Comanche(?) undifferentiated

- 3625-3635 Core. Recovery 4 ft.  
Top. Sandstone, brownish-red, argillaceous, micaceous, poorly sorted, fine to coarse grained.  
Bottom. Clay, red and mustard mottled, moderately hard; contains scattered, fine to coarse quartz grains.
- 3635-3645 Core. Recovery 1 ft.  
Sand, mottled red and mustard. Clay like the bottom of core at 3625-3635 ft.
- 3645-3655 Core. Recovery 2½ ft.  
Top 1 ft. Sandstone, red and gray, soft, fine to moderately fine grained, argillaceous, micaceous.  
Middle 1 ft. sand, red, soft, argillaceous.  
Bottom 1/2 ft. Sandstone, red, and red and greenish-yellow mottled clay.
- 3655-3665 Core. Recovery 1/2 ft.  
Top 3 in. sand, soft, fine to coarse-grained, quartz, in matrix of red clay.  
Bottom 3 in. Sandstone, light-red, pale-green and white mottled, fine-grained, highly argillaceous (possibly ashy); contains one large pebble of quartzite.

Depth  
(feet)

Description

Paleozoic

Middle Ordovician

The top of the Paleozoic is placed at 3657 ft. on the basis of electric log correlation. The samples from 3657 to 3735 ft. are possibly weathered Paleozoic rocks.

3665-3667

Core. Recovery 2 ft.

Top. Clay, brownish-red and yellowish green mottled, hard, irregularly sandy, highly micaceous; contains a fragment of a fossil bivalve.

Bottom. Like the top part of core. Red clay with light greenish-gray streaks.

3667-3672

Core. Recovery 4 ft.

Top. Clay, shaly, red, moderately hard, highly micaceous.

Bottom. Clay, shaly, red, gray and greenish-yellow streaked, highly micaceous.

3672-3680

Core. Recovery 6 ft.

Top. Clay, shaly, like the core at 3667-3672 ft. in lithology and color, but highly sandy (fine-grained sand); might be classified as an argillaceous sandstone; contains a mold of an unidentified macro-fossil.

Middle. Clay, shaly, red, highly micaceous.

Bottom. Shale, red, showing yellowish-green and light bluish-gray streaks, and irregular areas of sandy shale.

Depth (feet)	Description
3680-3685	Clay, shaly, red and sandy micaceous clay and red sandstone like preceding cores; about 50 percent of the sample is composed of cavings of different kinds of material from higher levels.
3680-3685	Like the preceding sample from the same depth. Also contains a few fragments of a white and pink, hard, dense, fine-grained, quartzitic sandstone.
3685-3690	Like the sample at 3680-3685 ft.; red shale, sandstone, and quartzitic sandstone.
3690-3695	Like the sample at 3685-3690 ft.; but containing little quartzite.
3695-3700	Like the sample at 3690-3695 ft., and many fragments of purplish-red, very fine grained, moderately hard sandstone.
3700-3720	No change.
3720-3725	Mainly cavings of light purplish-red, hard, fine-grained sandstone, and a little light-green sandstone.
3725-3735	Clay, red, micaceous, sandy and light purplish-red and light-green, hard, fine-grained sandstone; a few fragments of quartzite. About 50 percent of the sample is cavings from higher levels.
3735-3740	Like the sample at 3725-3735 ft., with the addition of a few fragments of black, unctuous, highly micaceous shale and hard black sandstone. This sample is probably the top of the unweathered Paleozoic rocks.

Depth (feet)	Description
3745-3795	No change.
3790-3795	Cuttings are a mixture of red shale and sandstone, and materials from the Atkinson Formation; also, cuttings of the black, micaceous shale and black shaly sandstone of the Paleozoic.
3795-3800	Like the sample at 3790-3795 ft., and many fragments of light greenish-gray, hard, micaceous sandstone that is possibly interbedded with the black shale and the black, shaly, highly micaceous sandstone of the Paleozoic.
3800-3895	No change.
3892-3895	Core. Recovery 2 ft.  Sandstone, light greenish-gray, very dense, very fine grained, quartzitic sandstone containing thin partings of black, highly micaceous, unctuous shale.
3900-3905	Sample is at least 75 percent cavings from much higher levels; also fragments of the black shale and sandstone like core at 3892-3895 ft.
3905-3950	No change.



Depth (feet)	Description
3950-3955	Cavings about 50 percent. The remainder of the sample is fragments of the black-shale-streaked sandstone described in core at 3792-3795 ft.
3955-3965	No change.
3965-3970	Similar to the immediately preceding samples, but with few fragments of the black shale, and many fragments of the light-green to white, highly micaceous, hard sandstone.
3970-3990	No change.
3990-3995	This sample shows an increase in the amount of black, micaceous shale and the gray micaceous sandstone.
3995-4003 T.D.	No change.