

12L008

Location: Dougherty County  
Owner: City of Albany (#13)  
Driller: Layne-Atlantic Company  
Drilled: December 1952

Well No.: 8405-3130-14  
OGS No.: 322  
Elevation: 200

Lithologic description by: Vaux Owen, Jr.  
Stratigraphic correlation by: Vaux Owen, Jr., and S. M. Herrick

	Thickness (feet)	Depth (feet)
<b>Undifferentiated residuum</b>		
Sand and gravel; light brown 5YR 5/6, fine grained sand to pebble gravel, sub-angular to sub-rounded, poorly sorted, clear, milky, and yellow quartz; silt and clay common.....	7	10
Sand and gravel; grayish orange 10YR 7/4, fine grained sand to pebble gravel, sub-angular to sub-rounded, poorly sorted, clear, milky, and yellow quartz; silt and clay common.....	5	15
Mudstone; moderate yellowish brown 10YR 5/4, mostly silt and clay; very fine to coarse grained quartz sand common.....	17	32
Similar to preceding; limestone fragments common.....	6	38
Total undifferentiated residuum.....	38	

**Upper Eocene series**

**Jackson group**

**Ocala limestone**

Limestone; very pale orange 10YR 8/2, oolitic and aphanitic, recrystallization abundant; very fine to fine grained quartz sand common; shell fragments common; weak to firm calcareous cement.....	16	54
Limestone; very pale orange 10YR 8/2, oolitic and aphanitic, recrystallization abundant; impurities rare; firm to weak calcareous cement.....	52	100
Arenaceous limestone; very pale orange 10YR 8/2, oolitic; sand abundant, very fine to fine grained, sub-angular to sub-rounded, well sorted, clear quartz; weak to firm calcareous cement.....	5	105
Arenaceous limestone; very pale orange 10YR 8/2, oolitic and aphanitic; sand abundant, very fine to fine grained, sub-angular to sub-rounded, clear quartz; weak to firm calcareous cement.....	21	126
Lisbon top.....		178
Total Ocala limestone.....	140	

**Middle Eocene series**

**Claiborne group**

**Lisbon formation**

Calcareous sandstone; yellowish gray 5Y 8/1 to light olive gray 5Y 6/1, very fine to fine grained, sub-rounded, well sorted, clear quartz; marl abundant; dark minerals common; weak to firm calcareous cement.....	56	182
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	Thickness (feet)	Depth (feet)
Calcareous sandstone: yellowish gray 5Y 8/1 to light olive gray 5Y 6/1, very fine to fine grained, sub-rounded, well sorted, clear quartz; marl abundant; glauconite common; shell fragments and bryozoa common; weak to firm calcareous cement.....	33	215
Calcareous sandstone: yellowish gray 5Y 6/1, very fine to medium grained, sub-rounded, well sorted, clear quartz; glauconite common; bryozoa common; weak to firm calcareous cement.....	45	260 256
Tallahatta top.....	78	
Total Lisbon formation.....		
<b>Tallahatta formation</b>		
Similar to preceding; shell fragments abundant.....	12	272
Do.....	30	302
Coquina: light olive gray 5Y 6/1, composed mostly of shell fragments; very fine to fine grained quartz sand common; glauconite abundant; weak to firm calcareous cement.....	17	319
No samples.....	5	324
Limestone and sand: yellowish gray 5Y 8/1 to light gray N7; mixture of very fine grained-sandy aphanitic limestone and sand and gravel, fine grained sand to pebble gravel, sub-angular, poorly sorted, clear, milky, and yellow quartz; shell fragments common; weak to firm calcareous cement.....	12	336
Coquina: yellowish gray 5Y 6/1, composed mostly of shell fragments; fine grained sand to pebble gravel abundant, clear quartz; fine grained-sandy aphanitic limestone common; glauconite common; weak to firm calcareous cement.....	6	342
Arenaceous coquina: light olive gray 5Y 6/1 composed mainly of shell fragments; sand and gravel abundant, fine grained sand to pebble gravel, angular to sub-rounded, fair-sorted, clear, milky, and yellow quartz, clean; glauconite abundant; garnet and phosphate common; weak to firm calcareous cement...	8	350
Sand: light gray N7, medium to coarse grained abundant, fine grained common, well rounded, well sorted, clear quartz, clean; phosphate abundant; glauconite common; shell fragments and fish teeth common.....	40	390
Sand: very light gray N8 to light gray N7, fine to medium grained abundant, coarse grained common, well rounded, fair-sorted, clear quartz, clean; phosphate, glauconite and garnet common; shell fragments common.....	13	403

Thickness  
(feet)                  Depth  
(feet)

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Paleocene series

Midway Group

Clayton formation (upper unit)

Arenaceous, calcareous silt; light gray N7 to medium light gray N6; sand abundant, very fine to medium grained, sub-angular to sub-rounded, fair-sorted, clear quartz abundant, green quartz common; glauconite and pyrite abundant; weak to firm calcareous cement.....	3	621
Arenaceous, calcareous silt; light olive gray 5Y 6/1; sand abundant, very fine to fine grained, sub-angular to sub-rounded, well sorted, clear quartz abundant; green quartz common; glauconite abundant; pyrite common; bryozoa common; weak to firm calcareous cement.....	39	660
Calcareous sand; light olive gray 5Y 6/1, very fine to fine grained, sub-angular to sub-rounded, well sorted, clear quartz abundant, green quartz common; glauconite and pyrite common; forams common; weak to firm calcareous cement.....	10	670 668
Clayton limestone top (from electric log).....	58	
Total upper unit.....		

Clayton formation (Clayton limestone)

Limestone; light gray N7 to medium light gray N6, sphanitic; gastropod molds and shell fragments common; firm calcareous cement; sample is contaminated by calcareous sand from above beds.....	5	680
Limestone; white N9 to very light gray N8, sphanitic; impurities rare; gastropod molds and shell fragments common; firm calcareous cement.....	10	690
Do.....	20	710
Similar to preceding; very light gray N8 to light gray N7.....	40	750 770
Lower unit (from electric log).....	102	
Total Clayton limestone.....		

Clayton formation (lower unit)

Arenaceous limestone; light gray N7, sphanitic; sand and gravel abundant, fine grained sand to pebble gravel, sub-angular to sub-rounded, poorly sorted, clear quartz; feldspar, glauconite, and pyrite common; weak to firm calcareous cement.....	6	787
Do.....	15	802
Similar to preceding; glauconite abundant.....	22	824 822
Upper Cretaceous top (from electric log).....	52	
Total lower unit.....	212	
Total Clayton formation.....		

	Thickness (feet)	Depth (feet)
Sandstone and sand: light gray N7, fine to medium grained abundant, coarse grained common, sub-rounded, fair-sorted, clear quartz; phosphate abundant; glauconite common; shell fragments common.....	7	432
Sand; very light gray N8 to light gray N7, fine to medium grained, well rounded, well sorted, clear quartz, clean; phosphate abundant; glauconite common; shell fragments and fish teeth common.....	17	449
Arenaceous limestone: yellowish gray 5Y 8/1 to light olive gray 5Y 6/1, aphanitic; sand abundant, fine to medium grained, sub-rounded, fair-sorted, clear and milky quartz; glauconite abundant; garnet, phosphate, and pebble gravel common; weak to fine calcareous cement.....	1	450
Siltstone: medium light gray N7; fine grained muscovite abundant; glauconite common.....	31	481
Siliceous limestone: light gray N7; fine grained quartz sand, dark chert, clear secondary silica, and glauconite abundant; firm calcareous and siliceous cement; sample is contaminated by cuttings of quartz sand from above beds.....	3	484 490
Wilcox top (from electric log).....	234	
Total Tallahatta formation.....		

**Lower Eocene series**

**Wilcox group**

**Tuscaloosa sand**

Calcareous, silty sand: light gray N7 to yellowish gray 5Y 8/1, very fine to fine grained abundant, medium to coarse grained common, sub-angular to sub-rounded, fair-sorted, clear quartz; glauconite and limestone fragments abundant; phosphate common..	9	493
Arenaceous, calcareous silt: medium light gray N6 to medium gray N5; sand abundant, very fine to fine grained, sub-angular to sub-rounded, well sorted, clear quartz; glauconite abundant; limestone fragments common.....	67	560
Calcareous, silty sand: medium light gray N6, very fine to fine grained, sub-angular to sub-rounded, well sorted, clear quartz abundant, green quartz common; silt and glauconite abundant; limestone fragments common.....	46	606
Glauconitic sand: greenish gray 5GY 6/1, very fine to fine grained abundant, medium grained common, sub-angular to sub-rounded, well sorted, clear quartz abundant, green quartz common; glauconite abundant; pyrite common; bryozoa common.....	12	618 610
Midway top (from electric log).....	120	
Total Tuscaloosa sand.....		

6  
187

	Thickness (feet)	Depth (feet)
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Upper Cretaceous series undifferentiated

Arenaceous marl; medium light gray N6 to light olive gray 5Y 6/1; sand abundant, very fine to fine grained, sub-angular to sub-rounded, well sorted, clear quartz; glauconite and pyrite abundant; forams abundant.....	24	848
Coquina; very light gray N8, composed mostly of shell fragments; fine to medium grained quartz sand common; firm to weak calcareous cement.....	30	878
Calcareous sand; light gray N7 to medium light gray N6, medium to coarse grained abundant, fine grained common; sub-rounded, fair-sorted, clear quartz; feldspar, garnet, and glauconite abundant; phosphate and pyrite common; marl common.....	7	885
Calcareous sand; light olive gray 5Y 6/1, very fine to fine grained, well rounded, well sorted, clear quartz; glauconite and phosphate abundant; garnet, muscovite and marl common; forams abundant.....	9	894
Calcareous sand; light gray N7 to medium light gray N6; very fine to fine grained abundant, medium to coarse grained common, sub-rounded, fair-sorted, clear quartz; feldspar, garnet, glauconite, phosphate, and muscovite common; marl common; weak to firm calcareous cement.....	14	908
Calcareous sand; light olive gray 5Y 6/1, very fine to fine grained, well sorted, clear quartz; glauconite and phosphate abundant; garnet and muscovite common; marl common; forams abundant.....	42	950
Marl; medium light gray N6; very fine to fine grained quartz sand common; clear quartz abundant, green quartz common; ostracods and forams common...	34	1052
Sand; light olive gray 5Y 6/1, very fine to fine grained, sub-angular to sub-rounded, well sorted, clear quartz, clean; glauconite and phosphate abundant; pyrite and garnet common.....	16	1068
Do.....	43	1111
Total Upper Cretaceous undiff....	289	

**SUMMARY:**  
Stratigraphy

Undifferentiated residuum.....	38	0
Upper Eocene series.....	140	38
Jackson group.....	140	38
Ocala limestone.....	140	38
Middle Eocene series.....	312	178
Claiborne group.....	312	178
Lisbon formation.....	78	178
Tallahatta formation.....	239	256
Lower Eocene series.....	120	490

	Thickness (feet)	Depth (feet)
Wilcox group.....	120	490
Tuscaloosa sand.....	120	490
Paleocene series.....	212	610
Midway group.....	212	610
Clayton formation.....	212	610
Upper unit.....	58	610
Clayton limestone.....	102	668
Lower unit.....	52	770
Upper Cretaceous series undifferentiated.....	<del>200</del>	822

Possible Water Bearing Zones

Limestone.....	38	178
Arenaceous coquina and sand.....	360	460
Siliceous limestone.....	480	490
Glauconitic sand.....	550	604
Limestone.....	668	770
Arenaceous limestone.....	770	822
Coquina.....	848	878
Calcareous sand.....	878	950
Sand.....	1052	1111

DOUGHERTY COUNTY, CITY OF ALBANY #13  
Elev.

**EOCENE**

**OCALA LIMESTONE**

	Thickness (feet)	Depth (feet)
Quartz, light brown 5YR 5/6. Fine to fine gravel, angular, poorly sorted. Contains some silt-----	10	10
Do. Grayish orange 10YR 7/4-----	5	15
Silt, moderate yellowish brown 10YR 5/4. Contains con- siderable fine to very coarse quartz-----	17	32
Do-----	6	38
Limestone, very pale orange 10YR 8/2. Largely recrystallized and containing bryozoa, shell fragments and medium to coarse angular clear quartz-----	16	54
Do. Very little quartz-----	12	66
Do-----	34	100
Do. Much fine to medium clear quartz-----	5	105
Do. Less quartz-----	11	116
Do-----	2	118
Do-----	8	126
Total Ocala limestones-----		180

**CLAIBORNE GROUP**

Limestone, yellowish gray 5Y 8/1 to light olive gray 5Y 6/1. No fossils noted. Contains finely disseminated dark minerals and a little sand-----	56	182
Do. Bryozoa common. Some glauconite and shells-----	33	215
Do except very sandy with abundant bryozoa-----	35	250
Limestone or silt, yellowish gray 5Y 8/1 to light olive gray 5Y 6/1. Sandy and glauconitic-----	10	260
Do-----	12	272
Sandstone, yellowish gray 5Y 8/1. Very fine grained and highly calcareous-----	8	280
Sand, yellowish gray 5Y 8/1. Very fine to medium, sub- angular, poorly sorted. Very calcareous and partially lime-indurated. Fossiliferous with bryozoa and shell fragments; glauconitic-----	22	302
Limestone, light olive gray 5Y 6/1. Composed mainly of shell fragments. Contains considerable glauconite and quartz-----	17	319
No samples-----	5	324
Limestone, yellowish gray 5Y 8/1 to light gray N7. Contains much coarse gravel size milky to yellow quartz and a few shell fragments-----	2	326
No samples-----	10	336
Limestone, yellowish gray 5Y 8/1 to light olive gray 5Y 6/1. Composed largely of shell fragments but con- taining much fine to very coarse quartz-----	6	342
Sand, light olive gray 5Y 6/1. Fine to coarse, sub- rounded, fairly well sorted. Highly glauconitic and containing numerous shell fragments. Fairly clean----	8	350

	Thickness (feet)	Depth (feet)
Sand, light gray N7. Fine to very coarse, well rounded, fairly well sorted. Clean and carrying shell fragments and some phosphate and glauconite. Contains a few fish teeth-----	40	390
Sand, very light gray N8 to light gray N7. Fine to medium with some coarse, well rounded, fairly well sorted. Clean, somewhat glauconitic, and containing a few shell fragments-----	13	403
Similar to preceding but more calcareous. Yellowish gray 5Y 8/1-----	22	425
Do. Partially lime-indurated-----	7	432
Sand, very light gray N8 to light gray N7. Fine to medium, sub-rounded, well sorted. Very clean, phosphatic, and containing shell fragments and fish teeth-----	17	449
Sandy limestone or limy sandstone, yellowish gray 5Y 8/1 to light olive gray 5Y 6/1. Contains shell fragments, phosphate, glauconite, and fish teeth----	1	450
Siltstone, medium light gray N6. Calcareous-----	31	481
Total Claiborne group-----	300	

#### WILCOX GROUP

Sand, light gray N7. Fine to coarse, sub-angular, poorly sorted. Highly glauconitic, containing shell fragments and partially lime-indurated-----	3	484
Similar to preceding. Yellowish gray 5Y 8/1. More calcareous, not quite as much glauconite-----	9	493
Silt, medium light gray N6 to medium gray N5. Contains fine to medium sand. Calcareous and containing shell fragments and much glauconite-----	67	560
Sand, medium light gray N6. Very fine to fine. Very silty and containing much glauconite-----	16	606
Sand, greenish gray 5GY 6/1. Very fine to medium. Very heavily glauconitic and containing pyrite-----	12	618
Silt, light gray N7 to medium light gray N6. Very sandy and containing much glauconite and considerable pyrite-----	3	621
Silt to very fine sand, light olive gray 5Y 6/1. Micaceous and partially lime-indurated. Somewhat glauconitic-----	39	660
Do. Some pyrite-----	10	670
Do. Light gray N7-----	5	675
Total Wilcox group-----	195	

#### PALEOCENE

##### CLAYTON LIMESTONE

Limestone, light gray N7 to medium light gray N6-----	5	680
Limestone, white N9 to very light gray N8-----	10	690
Do-----	20	710
Do-----	40	750
Do. Very light gray N8-----	31	781