LITHOLOGIC LOG
Sumter County, Ga.

Owner: City of Americus, Ga.
Location: 2.2 miles ESE of Americus, Ga.
Driller: Layne-Atlantic Company
Albany, Georgia
Drilled: September 1957

GGS No.: 692
USGS No.: 320325N0841210.1
Field No.: 8410-3200-25;ALB30
Land-surface alt: 409
Well depth: 1005 ft.
Water level: ft.
Casing: in. to ft.

Sample interval: irregular, about 10 feet
Samples described by: Vaux Owen, Jr.
Stratigraphic correlation by: Vaux Owen, Jr. and S. M. Herrick

	Thickness (feet)	Depth (feet)
EOCENE TO RECENT SERIES (undifferentiated)		
Arenaceous mudstone: light brown (5YR6/4); mostly silt and clay; quartz abundant, fine grained sand to granule gravel, subrounded, poorly sorted clear and milky.....	30	30
EOCENE SERIES		
TALLAHATTA FORMATION		
Sand: grayish orange (10YR7/4); very fine to fine grained, subrounded, fair sorted; clear quartz; clean; iron oxide common.....	40	70
Sand and gravel: yellowish gray (5Y7/2); fine grained sand to granule gravel, subangular to subrounded, poorly sorted; clear and milky quartz; clean.....	25	95
Sand: very pale orange (10YR8/2); very fine to fine grained, subrounded, well sorted; clear quartz; clean; garnet and dark minerals common.....	31	126
Sand: light brown (5YR5/6); very fine to coarse grained subrounded, poorly sorted; clear and milky quartz; fairly clean.....	3	129
Sand: yellowish gray (5Y7/2); medium grained, subrounded, well sorted; clear quartz; clean.....	9	138

	Thickness (feet)	Depth (feet)
EOCENE SERIES-Continued		
TUSCAHOMA SAND		
Sand: moderate reddish brown (10YR4/6); very fine to medium grained, subrounded, poorly sorted; clear quartz; glauconite, silt, and clay abundant.....	7	145
Glauconitec sand: light olive gray (5Y6/1) to dark greenish gray (5GY4/1); fine to coarse grained, subrounded, poorly sorted; clear quartz; clean; glauconite abundant, 40% of sample; pyrite rare...	11	156
Sand: light olive gray (5Y6/1) to olive gray (5Y4/1); fine to coarse grained, subrounded, poorly sorted; clear and green quartz; glauconite abundant; light gray clay abundant; lignite common.....	10	166
PALEOCENE SERIES (undifferentiated)		
Sand: yellowish gray (5Y8/1) to light olive gray (5Y6/1); fine to medium grained, subrounded, poorly sorted; clear quartz; glauconite and light gray clay abundant; lignite common.....	16	182
Sand: yellowish gray (5Y8/1) to light olive gray (5Y6/1); medium to coarse grained, subangular, poorly sorted; clear and milky quartz; light gray clay abundant; glauconite and lignite common.....	4	186
Sand: light gray (N7) to light olive gray (5Y6/1); medium to coarse grained, subrounded, well sorted; clear and milky quartz; clean; light gray clay common; pyrite and lignite rare.....	38	224

	Thickness (feet)	Depth (feet)
PALEOCENE SERIES (undifferentiated)-Continued		
Argillaceous sand and gravel: light olive gray (5Y6/1) to olive gray (5Y4/1); medium grained sand to granule gravel, subrounded, fair sorted; clear and milky quartz; dark gray lignitic clay abundant; light gray clay common.....	14	238
Lignitic sand: olive gray (5Y4/1); very fine to fine grained; lignite and lignitic clay abundant; muscovite abundant; glauconite common.....	5	243
Limestone, sand, gravel, and clay: light olive gray (5Y6/1); limestone, aphanitic and fragmental, glauconitic; sand and gravel, coarse grained sand to granule gravel, subangular, poorly sorted, clear and milky quartz; clay, dark gray, lignitic; fish teeth rare..	13	256
Arenaceous limestone: yellowish gray (5Y8/1); aphanitic and fragmental; glauconite and pyrite common; fine to coarse grained quartz sand abundant.....	9	265
Sand: pale yellowish brown (10YR6/2); vine to coarse grained, subangular, poorly sorted; clear and milky quartz; lignitic clay, glauconite, and limestone fragments common.....	8	273
UPPER CRETACEOUS SERIES		
Sand and gravel: light olive gray (5Y6/1); medium grained sand to granule gravel, subangular, fair sorted; clear and milky quartz; limestone fragments abundant; lignitic clay, glauconite, pyrite and feldspar common.....	13	286

	Thickness (feet)	Depth (feet)
UPPER CRETACEOUS SERIES		
Sand and gravel: light olive gray (5Y6/1) to olive gray (5Y4/1); medium grained sand to pebble gravel, subangular, poorly sorted; clear and milky quartz; feldspar abundant; fine grained lignitic quartz sand, lignitic clay, pyrite, and shell fragments common....	20	306
Lignitic sand: olive gray (5Y4/1); very fine to fine grained, subrounded, fair sorted; clear quartz; glauconite, lignite, and muscovite abundant; sample is contaminated by cuttings of coarse sand and gravel from above beds.....	8	314
Arenaceous marl: olive gray (5Y4/1); very fine to fine grained quartz sand abundant; glauconite, pyrite, muscovite, dark minerals and shell fragments common.....	4	318
Sand and gravel: medium light gray (N6) to light olive gray (5Y6/1); medium grained sand to granule gravel, subangular, poorly sorted; clear and milky quartz; clean; feldspar abundant.....	5	323
Arenaceous marl: olive gray (5Y4/1); very fine to fine grained quartz sand abundant; glauconite, muscovite, pyrite, and dark minerals common.....	24	347
Argillaceous sand: light olive gray (5Y6/1) to olive gray (5Y4/1); very fine to coarse grained, subangular, poorly sorted; silt and clay abundant; glauconite and pyrite common; shell fragments rare	1	348

	Thickness (feet)	Depth (feet)
UPPER CRETACEOUS SERIES-Continued		
Arenaceous marl: light olive gray (5Y6/1); very fine to fine grained quartz sand and muscovite abundant; quartz granules common; glauconite and pyrite common; ostracods common.....	16	364
Sand and gravel: light olive gray (5Y6/1) to medium light gray (N6); fine grained sand to granule gravel, subrounded, poorly sorted; clear quartz; fine grained sandy marl fragments abundant; glauconite and pyrite common.....	11	375
Sandstone: middium light gray (N6); fine to medium grained, subrounded, fair sorted; clear quartz; firm calcareous cement; quartz granules, glauconite, and pyrite common; shell fragments abundant.....	6	381
Marly sand: olive gray (5Y6/1); vine to medium grained subrounded, fair sorted; clear quartz; marl abundant; lignite, glauconite and muscovite common; shell fragments common.....	27	408
Calcareous sand and gravel: light olive gray (5Y6/1) to olive gray (5Y4/1); medium grained sand to granule gravel, subrounded, poorly sorted, clear quartz; fine grained sandy limestone and marl fragments common; glauconite and feldspar common; shell fragments abundant; fish teeth rare.....	20	428
Marly sand: light olive gray (5Y6/1) to medium light gray (N6); fine to coarse grained, subrounded, poorly sorted; clear quartz; quartz granules, dark gray clay and shell fragments common.....	9	437

	Thickness (feet)	Depth (feet)
UPPER CRETACEOUS SERIES-Continued		
Calcareous sand: light olive gray (5Y6/1); very fine to medium grained, subrounded, fair sorted; clear and green quartz; fairly clean; quartz granules and glauconite abundant; shell fragments abundant; forams common.....	9	446
Sand and sandstone: light olive gray (5Y6/1); fine to medium grained, subrounded, clear quartz; quartz granules and glauconite abundant; dark gray clay fragments common; shell fragments abundant; weak to firm calcareous cement.....	44	490
Arenaceous marl: light olive gray (5Y6/1) to olive gray (5Y4/1); very fine to fine grained quartz sand abundant; glauconite, muscovite, pyrite, and dark minerals common; shell fragments common.....	30	520
Marly sand: olive gray (5Y4/1) to light olive gray (5Y6/1); fine to coarse grained, subrounded, poorly sorted, clear quartz; marl abundant; quartz granules common.....	18	538
Arenaceous marl: olive gray (5Y6/1); very fine to fine grained quartz sand abundant; quartz granules common dark gray clay fragments abundant.....	12	550
Marly sand: olive gray (5Y4/1); very fine to fine grained, subrounded, well sorted; clear quartz; marl abundant; glauconite, pyrite, and dark minerals common.....	5	555

	Thickness (feet)	Depth (feet)
UPPER CRETACEOUS SERIES-Continued		
Arenaceous marl: olive gray (5Y4/1); very fine to medium grained quartz sand abundant; quartz granules common; glauconite and muscovite common.....	15	570
Marly sand: olive gray (5Y4/1); very fine to fine grained, subrounded, well sorted; clear quartz; marl glauconite, and dark minerals abundant.....	30	600
Arenaceous marl: olive gray (5Y4/1); very fine to fine grained quartz sand abundant; quartz granules common; muscovite and glauconite abundant.....	27	627
Marly sand: olive gray (5Y4/1); very fine to coarse grained, subrounded, poorly sorted; clear and green quartz; quartz granules common; marl, muscovite, glauconite, and dark minerals common; shell fragments common.....	25	652
Arenaceous marl: olive gray (5Y4/1); quartz abundant, very fine grained sand to granule gravel; muscovite abundant; fish teeth and shell fragments common.....	10	662
Marly sand: olive gray (5Y4/1); very fine to coarse grained, subrounded, poorly sorted; clear and green quartz; quartz granules common; marl, glauconite, and muscovite abundant.....	15	677
Calcareous sand and gravel: light olive gray (5Y6/1); fine grained sand to granule gravel, subrounded, poorly sorted; clear and green quartz; phosphate, feldspar, and glauconite common; shell fragments abundant.....	16	693

	Thickness (feet)	Depth (feet)
UPPER CRETACEOUS SERIES-Continued		
Sand and gravel: light olive gray (5Y6/1); fine grained sand to granule gravel, subrounded, poorly sorted; clear and green quartz; fairly clean; feldspar abundant; phosphate, and glauconite common; shell fragments common.....	10	703
Sand and gravel: light olive gray (5Y6/1) to medium light gray (N6); medium grained sand to granule gravel, subrounded, poorly sorted; clear and green quartz, clean; glauconite, phosphate, and lignite common; forams common.....	10	713
Sand: light olive gray (5Y6/1); fine to coarse grained, subrounded, poorly sorted; clear and green quartz, clean; quartz granules common; glauconite, feldspar, and dark gray clay fragments common.....	21	734
Sand: medium light gray (N6) to medium gray (N5); fine to medium grained, subrounded, fair sorted; clear and green quartz, clean; coarse grained quartz sand and quartz granules common; glauconite, phosphate, and dark gray clay fragments abundant; shell fragments common.....	15	749
Sand: light olive gray (5Y6/1) to olive gray (5Y6/1); fine to coarse grained, subrounded, poorly sorted; clear quartz; quartz and feldspar granules common; glauconite and dark gray clay abundant; shell fragments common.....	14	763
Similar to preceding; clay 40% of sample.....	22	785

	Thickness (feet)	Depth (feet)
UPPER CRETACEOUS SERIES-Continued		
Clay: olive gray (5Y4/1); contains abundant shell fragments; fine to coarse grained quartz sand abundant; quartz and feldspar granules common.....	10	795
Sand: light olive gray (5Y6/1); fine to medium grained, subrounded, well sorted; clear and green quartz; phosphate and glauconite abundant; dark gray clay and shell fragments common.....	10	805
Sand: light olive gray (5Y6/1) to olive gray (5Y4/1); fine to medium grained, subrounded, well sorted; clear and green quartz; phosphate and glauconite abundant; dark gray clay fragments abundant; shell fragments common.....	18	823
Sand: olive gray (5Y4/1); fine to coarse grained, subrounded, poorly sorted; clear quartz; quartz granules common; dark gray clay fragments abundant, 40% of sample; glauconite, pyrite and muscobite common; shell fragments common.....	14	837
Similar to preceding except clay 70% of sample.....	10	847
Sand: olive gray (5Y4/1); fine to medium grained, subrounded, well sorted; clear quartz; quartz granules common; glauconite, muscovite, and dark gray clay abundant.....	26	873
Sand: olive gray (5Y4/1); fine to coarse grained subrounded, poorly sorted; clear quartz; quartz granules common; glauconite, muscovite, and dark gray clay abundant	34	907

	Thickness (feet)	Depth (feet)
UPPER CRETACEOUS SERIES-Continued		
Sand: olive gray (5Y4/1); fine to medium grained, subrounded, well sorted; clear quartz; quartz granules common; glauconite, muscovite, and dark clay fragments abundant.....	17	924
Sand: olive gray (5Y4/1); fine to coarse grained, subrounded, poorly sorted; clear quartz; quartz granules common; dark gray clay fragments abundant, a 50% of sample; glauconite and muscovite abundant..	24	948
Clay: olive gray (5Y4/1); muscovite abundant; quartz common, fine grained sand to granule gravel.....	11	959
Sand: olive gray (5Y4/1); fine to coarse grained subrounded, poorly sorted; clear quartz; quartz granules common; glauconite, muscovite, and dark gray clay fragments abundant.....	20	979
Clay: olive gray (5Y4/1); muscovite abundant; quartz common, fine grained sand to granule gravel.....	10	989
Similar to preceding; shell fragments abundant.....	16	1005

Possible Water Bearing Zones

Sand.....	108	30
Glauconitic sand.....	11	145
Sand.....	38	156
Arenaceous limestone.....	11	256
Sand and gravel.....	10	286
Sand and gravel.....	9	318
Sand and gravel.....	11	364
Sandstone.....	16	375

	Thickness (feet)	Depth (feet)
Possible Water Bearing Zones-Continued		
Calcareous sand and gravel	10	408
Calcareous sand	9	437
Sand and sandstone	44	446
Sand and gravel	77	685
Sand	28	795
Sand	77	847
Sand	20	959