Georgia Geological Survey well no. 3105

Dodge County, Georgia

Atlanta Gas Light Co., B and L Farms no. 1

TD 4470 feet

Geophysical datum: 302 feet above sea level = ground level; Kelly bushing 310 feet.

logged by Steve Duncan, West Georgia College. note! This is the first well ever logged by Duncan. 1976

900-910 (or 1000-1010). 90% quartz sand, subangular to subround, equant coarse to very coarse
2% quartz sand, subround, equant, very coarse, moderate red 5R7/4
6% siltstone, medium gray N5
2% glauconite; 1% pyrite

910-920 (or 1010-1020) 90% quartz sand, subrounded, equant, coarse to very coarse grained
2% quart sand, moderate red, very coarse
5% medium gray N5 siltstone
2% glauconite; 1% pyrite; fossiliferous

920-930 (or 1020-1030) 90% quartz sand, subrounded, equant, coarse to very coarse
2% quartz sand, subrounded, equant, very coarse grained, moderate red
5% siltstone medium gray N5
2% glauconite; 1% pyrite; fossiliferous

930-940 (or 1030-1040) As above

940-950 (or 1040-1050) As above; pyrite in concretions

950-960 (or 1050-1060) 90% quartz sand, subrounded, equant, coarse to very coarse grained
2% moderate red, coarse grained sand
5% siltstone, medium gray N5 and yellowish brown 10YR6/2; small amount of quartz sand in the siltstone, fine to medium grained
2% glauconite; 1% pyrite

960-970 (or 1060-1070) 90% quartz sand, subrounded, equant, coarse to very coarse grained
1% quartz sand, moderate red, coarse grained
6% siltstone, 4% medium gray, 2% pale yellowish brown wth small amount of fine to medium grained quartz sand
2% glauconite; 1% pyrite; trace of biotite

970-980 (or 1080-1090) 90% quartz sand, subrounded, equant, coarse to very coarse grained
2% quartz sand, subrounded, equant, coarse grained and moderate red
5% siltstone, medium gray and pale yellowish brown with a small amount of fine to medium sand
2% glauconite; 1% pyrite; fossils

980-990 (or 1080-1090) 90% coarse to very coarse quartz sand
1% moderate red, coasre grained quartz sand
6% siltstone, medium gray and pale yellowish brown
1% phosphate; 1% pyrite; 1% glauconite

990-1000 (or 1090-1100) 92% coarse grained quartz sand;
1% moderate red coarse grained quartz sand
6% gray and brown siltstone
1% glauconite and pyrite; trace of mica; fossiliferous

1000-1010 85% quartz sand, subrounded, coarse to very coarse grained
3% moderate red, coarse grained quartz sand
10% siltstone, gray and brown
1% glauconote; 1% pyrite; trace of mica; fossiliferous

1010-1020 92% coarse to very coarse sand
2% coarse grained, moderate red quartz sand
4% siltstone, gray and brown
1% pyrite; 1% mica; fossiliferous

1020-1030 88% quartz sand as above
4% red coarse grained sand as above
6% siltstone as above
1% pyrite; 1% glauconite; fossiliferous

1030-1040 85% quartz sand, subrounded, equant, coarse to very coarse grained
6% quartz sand, moderate red, coarse and less than coarse grained, subrounded, equant
7% siltstone, midium gray and pale yellowish brown
1% glauconite; 1% pyrite; fossiliferous

1040-1050 65% quartz sand, coarse to very coarse grained
8%, moderate red coarse and less than coarse sand
35% siltstone, mostly medium gray
1% pyrite; 1% glauconite; trace of mica
note: rapid increase in the occurrence of siltstone
fossiliferous

1050-1060 65% coarse to very coarse grained quartz sand
8% coarse and less than coarse, moderate red quartz sand
35% siltstone, mostly medium gray
1% glauconite; 1% pyrite

1060-1070 75% coarse to very coarse grained quartz sand
4% moderate red, coarse and less than coarse sand
20% siltstone, mostly medium gray
1% glauconite
trace of mica and pyrite, fossiliferous

1070-1080 As above; shark tooth

1080-1090 As above

1090-1100 75% coarse to very coarse grained quartz sand
3% moderate red, coarse to less than coarse quartz sand
20% siltstone, mostly medium gray
2% phosphate pebbles, rounded, very coarse to medium grained
fossils; shark tooth

1100-1110	75% quartz sand, subrounded, equant, coarse to very coarse grained 3% quartz sand,, subrounded, equant, moderate red, coarse and less than coarse grained 20% siltstone, mostley medium gray 1% mica trace of phosphorite pebbles, increase in fossils
1110-1120	55% quartz sand, subround, equant, coarse to very carse 1% very coarse, moderate red quartz sand 44% siltstone, mostly medium gray trace of mica; fossiliferous
1120-1130	55% very coarse to coarse sand as above 45% siltstone, mostly medium gray trace of mica; fossiliferous (shark tooth)
1130-1140	55% quartz sand, coarse to very coarse 45% siltstone, mostly medium gray trace of stained quartz sand and mica fossiliferous
1140-1150	65% quartz sand, coarse to very coarse, subrounded 35% siltstone, mostly medium gray trace of pyrite fossiliferous
1150-1160	65% quartz sand, coarse to very coarse 34% siltstone, medium gray 1% mica fossiliferous
1160-1170	65% quartz sand, coarse to very coarse grained 34% medium gray siltstone 1% mica trace of glauconite. fossils
1170-1180	70% quartz sand, coarse to very coarse 26% siltstone, medium gray, trending toward smaller cementations 4% glauconite
1180-1190	75% quartz sand, coarse to very coarse 24% medium gray siltstone 1% glauconite fossiliferous
1190-1200	75% quartz sand, subrounded, equant, coarse to very coarse grained 25% medium gray siltstone trace of glauconite fossiliferous
1200-1210*	80% quartz sand, subrounded, equant, coarse to very coarse grained 15% siltstone (cave), medium gray 5% glauconite fossiliferous

1210-1220 80% quartz sand as above
5% glauconite
10% siltstone (cave), medium gray
5% siltstone, medium to coarse grained; some in quartz concretions
note! introduction of quartz and siltstone concretions
fossils are gastropods and forams

1220-1230 85% quartz sand as above
5% glauconite
5% siltstone cave
5% siltstone (in quartz sand concretions)
pelecypods

1230-1240 75% quartz sand , medium to coarse grained
15% siltstone, smaller than very coarse, medium gray concreted loosely with quartz and glauconite
5% siltstone
5% glauconite
fossils; calcareous shale (cave) and pelecypod fragments

1240-1250 85% quartz sand as above
5% siltstone, medium gray,(concretions)
5% siltstone, medium gray (cave)
5% glauconite
fossils--pelecypods and other fragments

1250-1260 93% quartz sand as above
3% siltstone, medium gray, some quartz/siltstone concretions
3% glauconite
1% mica
fossiliferous--unidentiable shell fragments

1260-1270 87% quartz sand, as above
4% siltstone, as above in concretions
5% siltstone, cave
3% glauconite
1% mica
fossils-pelecypod fragments and others

1270-1280 86% quartz sand as above
10% siltstone, some concretions, as above
1% siltstone, cave
2% glauconite
1% mica
pelecypods

1280-1290 87% quartz sand, as above
10% siltstone, medium gray, concretions
1% glauconite
2% mica
fossiliferous--shell fragments

1290-1300	87% quartz sand as above 10% siltstone, medium gray, concretions, coarse to very coarse, plus some cave 1% glauconite 2% mica fossils--pelecypod shells
1300-1400	samples missing
1400-1410	93% quartz pebbles, subangular to subround 2-5 mm, equant 7% siltstone, medium gray, some indurated trace of pyrite fossils--shark tooth, pelecypods, echinoids
1410-1420	93% quartz pebbles 7% siltstone, as above trace of mica fossils--shark teeth, shell fragments
1420-1430	94% quartz pebbles as aboe 4% siltstone, medium gray 1% pyrite trace of limonite fossils--shell fragments and shark teeth
1430-1440	75% quartz sand, coarse to very coarse grained, subrounded, equant 10% quartz pebbles as above 15% siltstone, medium gray fossils--shark teeth
1440-1450	60% coarse to very coarse quartz sand 30% quartz pebbles as above 10% siltstone, medium gray trace of pyrite fossils--bryozoa and other fragments
1450-1460	10% quartz sand, coarse and very coarse 80% quartz pebbles, as above 10% siltstone, medium gray trace of pyrite and mica fossil fragments
1460-1470	20% quartz sand as above 65% quartz pebbles, as above 14% siltstone, medium gray 1% pyrite fossil fragments
1470-1480	75% quartz sand as abcve 10% quartz pebbles, 2-3 mm 13% siltstone, medium gray 1% glauconite 1% pyrite
1480-1490	80% quartzsand as above 10% quartz pebbles, 2-4 mm 10% siltstone; trace of mica and glauconite

1490-1500	88% quartz sand, subrounded, equant, coarse to very coarse grained 5% quartz pebbles, 1-4 mm 5% medium gray siltstone 1% glauconite 1% pyrite pyritized worm burrows
1500-1510	90% quartz sand 2% pyrite 8% medium gray siltstone trace of glauconite and mica fossils--shell fragments and pyritized worm burrows
1510-1520	90% quartz sand, medium to very coarse grained 2% pyrite 8% medium gray siltstone pyritized worm burrows
1520-1530	90% quartz sand, medium to very coarse grained 2% pyrite 8% siltstone, medium gray pyritized worm burrows
1530-1540	92% medium to coarse grained quartz sand 2% pyrite 6% siltstone, medium gray trace of mica pyritized worm burrows
1540-1550	92% quartzsand, medium to coarse grained, subrounded 1% pyrite 7% medium gray siltstone trace of mica small shell fragments
1550-1560	91% quartz sand, coarse to very coarse, subround to subangular 2% pyrite 7% siltstone, medium gray trace of glauconite and mica pyritized worm borrows, shell fragments
1560-1570	94% quartz sand, as above 5% siltstone, medium gray 1% pyrite trace of glauconite and mica shell fragments
1570-1580	95% medium to coarse grained quartz sand 2% medium gray siltstone 3% pyrite trace of mica pyritized worm burrows and shell fragments

1580-1590	93% quartz sand as above cave--quartz pebbles 6% siltstone, medium gray 1% pyrite traee of mica shell fragments
1590-1600	93% quartz sand, medium to coarse grained, subrounded 5% siltstone, medium gray 1% pyrite 1% mica trace of glauconite pyritized worm burrows
1600-1620	no samples
1620-1630	93% quartz sand, coarse to very coarse grained 6% siltstone, medium gray 1% pyrite shell fragments
1630-1710	no samples
1710-1720	87% quartz sand, subrounded, medium to coarse grained 10% siltstone, medium gray, mostly fissile, some cave 2% pyrite 1% glauconite pyritized worm burrows
1720-1740	no samples
1740-1750 see below	98% quartz sand and pebbles 1-4mm, 1% siltstone, medium gray 1% pyrite trace of mica and glauconite shell fragments
1740-1750 see above	second sample 96% quartz sand, and pebbles, .5-3mm 2% siltstone, medium gray 1% pyrite 1% glauconite shell fragments
1750-1760 see below	87% quartz sand, coarse to very coarse 10% shaly siltstone, 1% glauconite; 1% mica; 1% pyrite
1750-1760 see above	second sample 92% quartz sand, medium grained 6% siltstone, medium gray 1%pyrite; 1% glauconite shell fragments

1760-1770	97% quartz sand, medium grained, subrounded 1% siltstone, medium gray 1% mica 1% pyrite trace of glauconite
1770-1780	90% quartz sand, coarse to very coarse grained 3% siltstone, medium gray, fissile 2% pyrite 1% mica 2% mudstone, moderate yellowish brown 10YR5/4 2% glauconite
1780-1800	no samples
1800-1810	92% quartz sand, very coarse and less than very coarse 4% medium gray siltstone 1% mudstone, moderate yellowish brown 2% glauconite 1% pyrite phosphate nodule 4x7 mm
1810-1820	no sample
1820-1830	95% quartz sand, coarse grained 2% medium gray siltstone 1% mica 1% glauconite 1% pyrite
1830-1900	no samples
1900-1910	85% quartz sand and pebbles, .5-2mm 1% glauconite 14% pyrite portions of the pyrite in form of pyritized worm burrows
1910-1920	90% quartz sand and pebbles, .25-2 mm, broken grains 10% pyrite, portions in the form of concretions with the quartz sand
1920-1930	90% quartz sand, coarse to very coarse 1% feldspar 5% mica 4% medium gray siltstone
1930-1940	85% quartz sand, coarse to very coarse 8% pyrite, replacement and pyritization 1% mica 1% feldspar-cave 5% pale yellow borwn siltstone

1940-1950	81% coarse to very coarse quartz sand 2% glauconite 5% siltstone, medium gray and pale yellowish brown 10% pyrite 1% mica 1% limonite
1950-1960	88% quartz sand as above 3% glauconite 5% pyrite 4% siltstone
1960-1970	90% quartz sand, coarse grained 2% glauconite 6% pyrite 2% siltstone, pale yellowish brown
1970-1980	92% quartz sand, coarse grained 4% pyrite 3% siltstone, medium gray 1% mica
1980-1990	60% quartz sand, coarse to very coarse, caved pebbles 8% pyrite 2% glauconite 30% siltstone, pale yellowish brown and medium gray, trace of mica and epidote? pyritized worm burrows
1900-2000	48% quartz sand, medium to coarse grained 2% pyrite 50% silty shale, calcareous, medium gray trace of mica
2000-2300	no samples
2300-2310	very small sample 97% quartz sand 2% mica 1% pyrite
2310-2320	82% quartz silt and sand, silt to medium grained 10% silty shale, medium gray 5% pyrite 2% glauconite 1% hematite
2320-2330	85% quartz silt and sand as above 10% silty shale as above 2% pyrite 2% glauconite 1% mica

2330-2340	82% quartz sand, medium to very coarse grained 2% pyrite 2% mica 10% silty shale, medium gray 3% hematite, predominantly as cement bonding the quartz grains 1% glauconite
2340-2350	cave-hematitic sandstone 87% medium to coarse grained quartz sand 2% hematite in sandstone 2% mica 6% silty shale, medium gray 2% glauconite 1% pyrite
2350-2360	cave--hematitic sandstone 86% medium grained quartz sand 2% hematite in sandstone 2% mica 6% silty shale, medium gray 2% glauconite 2% pyrite
2360-2370	88% fine to medium grained quartz sand 3% pyrite cave--hematitic sandstone and quartz 1% mica 2% glauconite 1% hematite (in sandstone) 5% silty shale, medium gray
2370-2380	87% quartz sand, fine to coarse grained 3% hematitic sandstone 4% glauconite 2% pyrite 4% silty shale, medium gray trace of mica
2380-2390	89% fine to very coarse grained quartz sand 2% glauconite 2% pyrite 2% mica 3% silty shale, medium gray 2% hematite sandstone
2390-2400	93% medium to very coarse grained quartz sand 4% hematitic sandstone 1% mica 1% pyrite 1% glauconite trace of silty shale, medium gray

2400-2800 no samples

2800-2810 99% granite chips

E log suggests contact with granite at 2760