Test well 9 (Bru 33)
Glynn County, Ga.
Elev. of 16" csg, southside 8.85 ft.

Returned to Bruns 11/7/66
3744337

Lithology	Color		Thickness	Depth
Sand	Reddish Brown	Fine to medium grained, angular silty; femags abundant	14	14
	do	-do-	10	24
Sand	Brownish Gray	Fine to coarse grained, poorly sorted, angular to sub-rounded	10	34
Do	do	-do-	8	42
Gravel	do	Granule (2-4mm) gravel with abundant poorly sorted fine to coarse grained sand. Phosphate rare	2	44
Do	do	Granule (2-4mm) gravel, with fine to coarse grained sand. Pelecypod fragments abundant	10	54
Calcareous Clay	Light Yellowish gray	Clay, or Calcareous clay with calcareous nodules	10	64
Calcareous Sand	do	Medium to coarse-grained, well rounded sand with slightly dolomitic recrystallized calcareous	9	74
Limestone	do	Dolomitic, recrystallized, limestone with coarse grained sand. Shell fragments common	6	80
		Missing	5	85
Gravel	-	Gravel (2-4mm) well rounded, well sorted	4	89
		-do-	5	94
Sand	-	Coarse grained, poorly sorted, well rounded. Gravel (2-4mm) abundant	4	98
		Cored 98-118' - No recovery gravelly sand in ditch.		
		Core - 118-128 recovery 4 feet or 40%		128-
Gravel		Granule (2-4mm) with coarse grained sand	6	134
		coarse grained black phosphate common	6	134
		-do-	10	144
		-do- plus fine-medium sand abundant	10	154

Test well 5 (Bru 33)
Glynn County, Ga.

Lithology	Color		Thickness	Depth
		Core 158-178 30% recovery		
		158-178 (from core catcher)		
Sand	Gray	Very fine to fine, sub-rounded, well sorted. Micaceous Granules common 178-188 (from core catcher)		158-178 178-188
Sand	Gray	Medium-grained, well sorted sub-angular quartz. Fine-grained phosphate, micaceous (188-200) From Core catcher		
		-do- plus granules		
Sand	Gray to Brown	Coarse grained to granule gravel poorly sorted, well rounded coarse grained phosphate common	13	200-213
		-do-	11	224
Sand	Light Yellow or Gray	Medium to coarse grained well sorted and rounded, weak calcareous cement	10	234
Gravel Hawthorn top?	do	Well rounded, well sorted	10	244
Silty Sand	Gray	Fine to medium grained sand, with silt matrix	10	254
Silty Clay	Greenish Gray	Fullers earth clay with sand, very fine to medium grained. Chert, brown	8	262
		Core 262-266		
		-do-	12	274
		-dO-	10	284
Sand	Brownish Gray	Medium to coarse grained sand silty matrix phosphatic	10	294
Core 319-337 11% recovery		-do- plus fragments of dolomitic limestone	5	314-319
		-do- plus black phosphate abundant	10	334-344
		-do-	10	354
		-do-	10	364
		-do-	10	374
		-do- Silt increasing	10	384
		-do-	10	394
		-do-	10	404

Lithology	Color		Thickness	Depth
Sand	Brownish Gray	Coarse-grained, rounded, well sorted; brown and black phosphate abundant. Limestone, white, crystalline, common	10	414
		-do-	20	434
		Core 434-448 no recovery		
Sandstone	Gray	Medium to coarse-grained rounded quartz. Calcareous cement Phosphate common	14	434-448
		-do-	10	454-464
Sand	Gray	Fine to coarse-grained, rounded to sub-angular. Granules (2-4mm) Common limestone fragments common	10	474
		-do- limestone abundant	10	484
		-do-	10	494
		-do- plus several forams	8	502
Limestone	Yellowish Gray	Hard, dense, recrystallized. Gypsum crystalls rare	10	512-522
Sand	Gray	Coarse grained, to granule (2-4mm) common, well sorted, rounded. Weak calcareous cement	8	530
Gravel	Yellowish Gray	Granule, well rounded, quartz & Feldspar poorly sorted medium to course grained sand abundant, weak calcareous cement	14	534-548
		-do-	1	546 547
		Core 547-607		
		Missing 547-607		
Limestone	Yellowish Gray to White	Hard, dense, recrystallized, fossiliferous. Bryozoa and coral common to abundant, forams common, gastropods rare Panarotolia byramensis oligo	7	607-614
Limestone	Yellowish Gray	Hard, dense, recrystallized, fossiliferous	10	624
		-do-	10	634
		-do-	10	644
		-do- forams abundant	10	654
		1st appearance O. Ocalana.	10	664
		-do-	10	674
		-do-	4	678
		Core 678-698 5% recovery		

Ypoint @ 596'

Test well 5 (Bru 33)
Glynn County, Ga.

Lithology	Color		Thickness	Depth
Limestone	Yellowish Gray	Hard, dense, recrystallized, fossiliferous. Bryozoa and forams abundant.	6	698 704
		-do-	10	714
		-do-	10	724
Limestone	do	Do- slightly dolomitic	10	734
		-do-	10	744
		-do-	10	754
		-do	10	764
		-do-	10	774
		-do-	5	779
		Core 779-799 28% recovery		
		-do-	10	814 824
		-do-	10	824
		-do-	10	834
		-do-	10	844
	Pinkish Gray	-do-	10	854
		-do-	10	864
Limestone	do	Hard, dense, recrystallized mostly foraminifera	10	874
		-do- (slide)	10	884
Dolomitic Limestone	Yellowish Gray 5/8/1	Core 935-955 28% recovery Recrystallized, porous, to dense; white weathered limestone foraminifera abundant. Quinqueloculina (M. Eocene?)	10	954 964
		-do-	10	974
		-do-	10	984
		-do-	10	994
Limestone	White to Pinkish Gray	Mostly foraminifera, soft	10	1004
	White to Brown	Soft foraminifera limestone to hard dense crystalline dolomitic	6	1010
Limestone	White to Pinkish Gray	Soft, foraminifera limestone. Milialidae and Lepidocyclina.	10	1020
		-do-	10	1030
		-do-	10	1040
		-do-	12	1052
Dolomitic Limestone	Honey Brown	Dolomitization of Matrix. Fossils of limestone Hard, crystalline secondary dolomite. Echinoids common (1st appearance)	10	1050 1060
		-do-	10	1070
		-do-		1080 1082

Test well 5 (Bru 33)
Glynn County, Ga.

Lithology	Color		Thickness	Depth
Dolomitic Limestone	Moderate Brown 5YR 4/4 to Dark Yellowish Brown 10YR 4/2	Recrystallized dolomitic limestone. Consists of firm to weakly cemented rhombs of dolomite	4	1082 1086
Do	do	Gray limestone to brown dolomite limestone Fossiliferous, fossil fragments not replaced, Coarse grained well rounded quartz sand common limestone fragments well rounded. Sample may be cemented corral & bryozoa abundant forams	10	1115 1125
Do	do	do plus Echinaids rare to common	5	1130 1135
Dolomitic Limestone	Pinkish Gray	Gray soft fossiliferous limestone. Fragments of rhombic dolomite abundant.	10	1125 1135
Dolomitic Limestone	Dark Yellowish Brown 10YR 4/2	Rhombic crystalline dolomite. White to gray limestone, well rounded particles as on a beach corral, bryozoa	10	1145
		-do-	10	1155
		-do-	10	1165
		do + large forams abundant	10	1175
		-do-	10	1185
Limestone	Gray to White	Soft, chalky; fossiliferous dolomitic limestone common	10	1195
Limestone	do	Soft, chalky, fossiliferous	10	1210 1220
Limestone	Pinkish White	Hard recrystallized to soft chalky, fossiliferous recrystallized	10	1220 1230
Do	do	Hard crystalline, recrystallized fossiliferous pyrite rare	10 10	1240 1250
		do- more crystalline than above	10	1260
Dolomitic Limestone	Light Brown	Rhombic crystalls, with weak calcareous cement	10	1270
		-do-	10	1280

Core

Sand	Gray	Medium to coarse grained well rounded; silt abundant. Phosphate (C.g.) common	118-128
Sand	Gray	Medium to coarse grained subrounded poorly sorted, granule gravel (2-4mm) Common (Middle of Core)	158 178
Sand	Brownish Gray	Fine to Coarse grained sub-rounded with granule gravel common large flakes of muscovite rare.	178 188

34 H 337

Well: USGS' Test Well 5 Well No.: GGS 1063

Location: Bay & Prince Sts., N. of City Garage, City of Brunswick, Glynn County, Ga. Elev.: +8.85'

Date Drl'd.: May, 1964

Logged by: S. M. Herrick, Dec./'66 - Jan./'67.

Description	Thickness (Feet)	Depth (Feet)
Rec to Pleistocene — Sand: fine-grained, subangular grains	24	24
Sand: coarse-grained, subangular grains, arkosic	19	43
Pliocene (?) — Indurated sand (or sandy limestone; coquina): coarse-grained, subrounded grains, limy, sparsely phosphatic at depth, fossiliferous, with fragments, casts and molds of macro-shells	101	144
Clay: dark-olive to brown, blocky, silty, sparsely phosphatic, clayey at certain levels; interbedded with scattered beds of dolomitic limestone; brown, saccharoidal, sandy, phosphatic, and sand; fine to coarse-grained, subangular to subrounded grains, phosphatic	292	436
Indurated sand (or sandy limestone; coquina); fossiliferous, with macro-shells	100	536
Miocene — Clay: brown to olive-green, silty, finely micaceous, phosphatic, sparingly fossiliferous, with some dwarfed macro-shells	31	567
Limestone: light-gray, rather dense, sandy, coarsely phosphatic, fossiliferous, with fragments, casts and molds of macro-shells and occasional fragmentary vertebrate remains (fish teeth)	9	576
Limestone: cream, chalky, fossiliferous, with byrozoan remains, Ostracoda, and Foraminifera	19	595
Oligocene — Textularia subhaueri, Karreriella sp., Spiroplectammina mississippiensis, Valvulineria paucilocula, Lingulina mesonensis, Siphonina advena, Eponides byramensis, Robulus alato-limbatus, Cuttulina problema, Cibicides mississippiensis, C. lobatulus at 567 - 587'.		
Limestone: light-gray, much calcitized and dense, somewhat saccharoidal, fossiliferous, with frequent molluscan shell fragments, abundant bryozoan remains and some Foraminifera	12	607
Nummulites floridensis at 607 - 614'.		
Limestone: light-brown, rather massive, much calcitized, somewhat saccharoidal, fossiliferous, with some Foraminifera	37	644
Nummulites floridensis at 624 - 634'.		
Gyroidina nassauensis at 634 - 644'.		
Upper Eocene — Limestone: white, calcitized, crystalline, fossiliferous, with frequent byrozoan remains and Foraminifera	56	700
Asterocyclina nassauensis at 644 - 654'.		
Arenorotheca sp., Gyroidina crystalriverensis, Pseudophragmina flintensis at 664 - 674'.		

Description:	Thickness (Feet)	Depth (Feet)
Planulina cocoaensis at 674 - 678'.		
Limestone: cream, nodular, somewhat porous, calcitized, crystalline sparingly fossiliferous, with molds and impressions of macro-shells	46	746
Limestone: white to light-gray, nodular, highly calcitized, massive, fossiliferous	86	832
Nummulites cf. N. vanderstoki at 814 - 824'.		
Limestone: cream, chalky, much calcitized and saccharoidal, fossiliferous, with common to abundant larger Foraminifera ("Oribitoid Zone")	72	904
Amphistegina pinarensis var. at 864 - 874'.		
Amphistegina alabamensis at 874 - 884'.		
Dolomitic rock (dolomitized limestone): brown, saccharoidal, with some limestone; as above	50	954
Limestone: cream, much calcitized, fossiliferous, with frequent Foraminifera	50	1004
Dictyoconus, Rotalia sp., frequent Miliolids (not)		
Limestone: white, chalky, calcitized, fossiliferous, with frequent Foraminifera and some Echinoids	46	1050
Lepidocyclina antillea at 1004 - 1010'.		
Discorbis inornatus, Echinoids (not identified) at 1010 - 1020'.		
Dolomitic rock (dolomitized limestone): brown, saccharoidal	145	1195
No Samples	15	1210
Limestone: cream, much calcitized, rather massive and crystalline	50	1260
Dolomitic rock: as above	20	1280
No Samples	20	1300
Interbedded limestone and dolomitic rock: as above	203	1503 (T.D.)
Helicostegina gyralis frequent to common at 1400 - 1410'.		

Summary:

Recent to Pleistocene	43	43
Pliocene?	101	144
Miocene, undifferentiated	432	576
Oligocene (Byram Equivalent)	19	595
Upper Eocene (Ocala limestone)	361	956
Middle Eocene (Avon Park F.)	48	1004
" " (Lake City F.)	396	1400
Lower Eocene (Oldsmar limestone)	103	1503+

Remarks:

Echinoid (fossils) remains first appear in the well samples(cuttings) at 1010-feet and are confined to the Lake City formation.

T. W5 Pl6

34H337
TW5 P1

MERREL GRAY COMPANY

WATER SUPPLY CONTRACTOR

MUNICIPAL INDUSTRIAL AGRICULTURAL U. S. GOVERNMENT

VIDALIA, GEORGIA
537-3137

UVALDA, GEORGIA
594-3501

MODERN EQUIPMENT
HYDRAULIC ROTARY
CEMENTED WELLS
GRAVEL WALL WELLS
CABLE TOOL METHODS

WATER GUARANTEED
41 YEARS EXPERIENCE
TURBINE PUMPS
CORE DRILLING
FREE ESTIMATES

Vidalia, Ga.
July 2, 1964

Log of Test well Drilled for U. S. G. S. Under Contract # 14-08-0001-9046 Purchase Order #27087 March 26, 1963 Completed June 30, 1964 Total Depth 1503 Ft., Cased 50Ft. 16" Surface Casing Cemented. 567 Ft of 10" Casing cemented. Due to caving formation was necessary to set 8" Liner 244Ft. From 938 Ft. To 1182 Ft.

FORMATION	FROM	TO
Fill dirt & wood	0	10
Sand & gravel	10	35
Sandy Clay	35	50
Rock	50	52
Stiff marl	52	57
Sandy clay	57	65
Rock	65	70
Marl	70	85
Sand, gravel	85	89
Rock	89	95
Sandgravel, rock	95	132
Marl	132	140
Rock	140	141
Sandy marl	141	151
Rock	151	158
Sand, rocky marl	158	203
Sand and rock	203	213
Stiff marl	213	223
Rock & sandy marl	223	230
Rocky marl	230	254
Marl	254	258
Shale & Marl	258	265
Green marl	265	292
Rock	292	293
Rock and marl	293	314
Rock & marl	314	321
Rock & sandy marl	321	364
Sandy marl	364	374
Sand and shell	374	434
Sand coarse gravel	434	464
Sand and shell	464	480
Rock	480	482
Shell and soft rock	482	497
Rock	497	528
Rock and sand	528	558
Lime medium hard	558	573
Soft lime	573	701
Medium hard lime	701	755
Soft lime	755	765
Hard & soft streaks L	765	779
Soft lime	779	861
Hard brown lime	861	961
Soft grey lime	961	975
Hard lime	975	1040
Soft lime	1040	1068
Hard & soft str, L	1068	1096
Soft rock, boulders	1096	1135
Hard rock, boulders	1135	1196
Soft lime	1196	1199
Hard lime	1199	1205
Soft lime	1205	1225
Hard lime	1225	1236
Soft lime	1236	1245
Hard lime	1245	1251
Soft Lime	1251	1256
Hard lime	1256	1259
Soft lime	1259	1265
Hard lime	1265	1333
Hard & soft Str. lime	1333	1345
Hard lime	1345	1353
Soft lime	1353	1362
Hard & soft Str. lime	1362	1370
Hard lime	1370	1405
Soft lime	1405	1420
Hard & soft Sre. lime	1420	1460
Hard lime	1460	1490
Hard & soft Str. lime	1490	1503

Respectfully submitted,

MERREL GRAY COMPANY

M. M. Gray owner