

**STATE OF SOUTH CAROLINA WATER RESOURCES COMMISSION**

3830 FOREST DRIVE, COLUMBIA, S. C. 29240

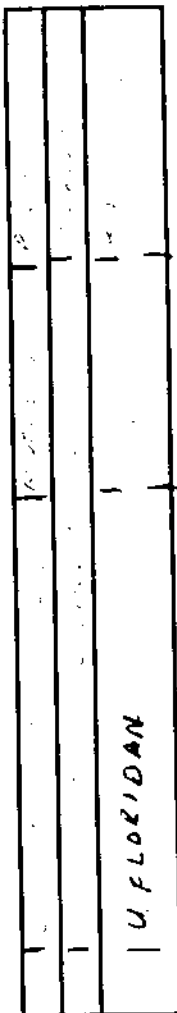
TELEPHONE (803) 758-2514



**GEOLOGIC LOG**

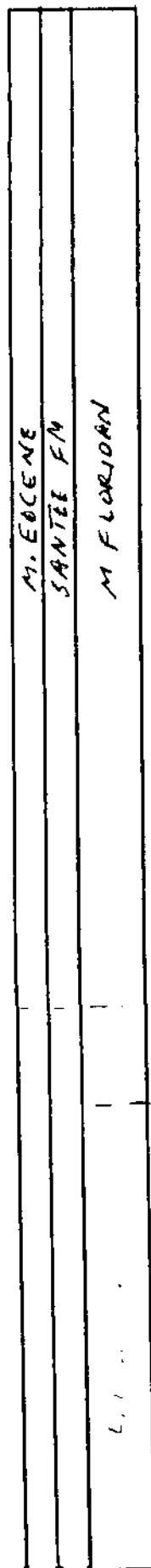
SCWRC NO. 28GG-d01 COUNTY NO. BFT-1871 LAT-LONG \_\_\_\_\_ ELEV (LSD) \_\_\_\_\_  
 OWNER: Brays Island Co. Inc.  
 CONTRACTOR: \_\_\_\_\_ PHONE: \_\_\_\_\_  
 ADDRESS: P.O. Box 30, Sheldon, SC 29941  
 DRILLER: D.M. Martin DATE DRILLED \_\_\_\_\_ DATE COMPLETED 6/23/87 HOLE DIA. 8"  
 COLLECTED BY: D.M. Martin TITLE: Driller  
 LOGGED BY: Constance E. Gawne TITLE: Hydrologist  
 METHOD EXAMINED FIELD ( ) MICRO (x) LAB ( ) OTHER \_\_\_\_\_  
 METHOD DRILLED "Deep well" MUD ROTARY (x) CABLE TOOL ( ) AUGERED ( ) OTHER \_\_\_\_\_  
 REMARKS or "Big Lake Well"

Geo. Age  
Formation

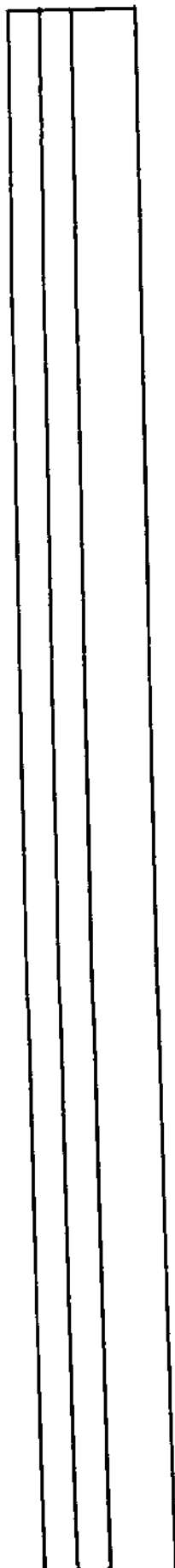


Generalized geologic log of well 28GG-d01, BFT-1871, Brays Island  
 "Big Lake Well" or "Deep Well"

Depth	Lithology	Color (dry)
0	Poorly sorted c. qtz sand, tr phosphate	10YR 7/2-4/2, 5YR 5/6
	Few chips clay	5Y 6/1
10	Poorly-sorted, v. well rounded c. qtz sand + granules;	5Y 7/1
	reworked petrefied wood, shark teeth, chert, 1-2% phosphate	
20	Poorly sorted well-rounded med.-c. sand, minor clay:	5Y 7/1
	1-2% chert or petrefied wood; Few masses clay	5Y 5/1
30	Clayey f.-m. sand to sandy clay, few% granules, pebbles	5Y 6/1
	Few chips gray chert; Few % chips sandy soft micrite	5Y 8/1
50	Clay, sandy clay, clayey sand	5Y 6/1
	Tr phosphate	5Y 5/1
	Few chips micrite	5Y 9/1
95	Corroded, partly recrystallized coarse biomicrite	5Y 9/1
100	70% soft calcarenite to biomicrite, bioclasts f.-m.-sand	5Y 8/1
	sized: 30% fine sandstone	5YR 4/1
110	90% bioclastic calc. sand + mud to biomicrite,	
	sm. forams common, 10% ss as above	
120	Half clay, calcareous, H <sub>2</sub> S odor w/acid; Half bio-	5Y 5/1
	clastic calc. sand to calcarenite, sm. forams common	5Y 8/1
130	40% sandy clay, 1-2% phosphate; 60% bioclastic calc. sand	5Y 5
	to calcarenite, bioclasts to sm. pebble size, sm. forams	5Y 9/1
140	Sample missing	
150	Bioclastic calc. sand, minor lime mud, tr qtz sand,	5Y 9/1
	bioclasts to sm. pebble size, sm. forams	
	+ 10% sandy clay	5Y 5/1
	1 lg discoidal foram, + 20% fine ss	5YR 4/1
	partly consolidated to calcarenite	
	+ 5-10% fine ss as above	
170	Mainly frags. or clasts of calcite-cemented qtz siltstone N9	
	+ frags. of calcarenite as above	5Y 9/1
200	40% calc. qtz siltstone, 60% calcarenite	
	+ calc. sand, w/10 % qtz sand, sm. forams	
210		



210	Half poorly consolidated sandy calcarenite as above	5Y 8/1
220	Half poorly sorted qtz ss and sand, granules Mainly sandy calcarenite as above; 5-10% sandstone	5YR 7/4-5/4
	+ minor biomicrite	N9-5Y 9/1
250	Sample missing	
260	2/3 calcarenite, 1/3 biomicrite as above	
270	Poorly consolidated biomicrite, tr phosphate or glaucinite, most bioclasts f.-m.-sand-sized	5Y 8/1
280	Half poorly consol. f.-m. calcarenite, w/sm. forams, minor qtz sand, silt; half ss like 210-220	5Y 8/1
290	90% calcarenite as above, sm. forams common; 10% ss	
300	F.-m. calc. sand to biomicrite, tr glauconite or phosphate, sm. forams	5Y 8/1
320	F.-m. calc. sand to pelletal lime mud, sm. forams, few % qtz sand; Chips hard calc. siltstone	5Y 9/1 N7
	Tr glauconite partly consolidated to biomicrite Few or no dark grains	
	Calc. sand-pelletal lime mud as above partly consolidated to biomicrite few larger bioclasts	
400	F.-m. bioclastic calc. sand, 10% qtz, few % larger bioclasts, minor micrite, sm. forams, tr f. qtz ss 2-4% qtz sand	5Y 8/1
420	Pelletal-bioclastic lime mud, partly consolidated to micrite; most bioclasts m. sand size or less Tr glauconite and/or phosphate; tr ss as above; flakes siltstone-f. ss Some hard micrite, few % qtz, v.few dark grains	5Y 9/1 N6 5Y 9/1
	Tr qtz sand	5Y 8/1
	Tr glauconite, phosphate? Flake partly recrystallized micrite	5Y 6/1
470	F.-c. calc. sand + lime mud, tr qtz sand, w/1-2% glauconite to c. sand size, partly consol. to biomicrite +flakes of otly recrystallized micrite	5Y 8/1 5Y 9/1
	little mud 5-10% qtz, sm. forams abundant	
	no qtz; few lumps pelletal lime mud without glauconite	5Y 9/1
540	Pelletal-bioclastic lime mud; 1-2% glauconite? as silt-size grains; 10-20% f. qtz sand	N8
550	Calc. sand + pelletal lime mud, 1-2% glauconite as sand-size nodules, sm. forams common, few % qtz sand	5Y 8/1
560		



560

only few% lime mud

no mud

with pelletal lime mud, tr-1% glauconite;  
some biomicrite, same composition  
1-2% glauconite

600

TD

Notes:

Grain size terms: mm  
 Small pebbles 4-8  
 Granules 2-4  
 Very coarse sand 1-2  
 Coarse sand .5-1  
 Medium sand .25-.5  
 Fine sand .125-.25  
 Very fine sand .062-.125  
 Silt .002-.062

Clay = clay minerals;  
"lime mud" used for silt-sized and finer unconsolidated carbonate particles

Color codes:

10YR 4/2 Dark yellowish brown  
 10YR 6/2 Pale yellowish brown  
 10YR 7/2 Pale orange  
 5YR 4/1 Brownish gray  
 5YR 5/6 Light brown  
 5YR 5/4 Light-moderate brown  
 5YR 7/4 Light brown-Moderate orange pink  
 5Y 4/1 Olive gray  
 5Y 5/1 Olive gray-Light olive gray  
 5Y 6/1 Light olive gray  
 5Y 7/1 Light olive gray-Yellowish gray  
 5Y 8/1 Yellowish gray  
 5Y 9/1 Light yellowish gray  
 N6 Med. light gray  
 N7 Light gray  
 N8 Very light gray  
 N9 White