

WELL RECORD

Map Location No. (P-19, N-17) 2  
NCDAWR # P-19, N-2  
NCPC # 186a  
TGS # \_\_\_\_\_

Source of Data: NC Phosphate Corp.

Location: Town West of Cox's X-Road County Beaufort

Topography: Flat

Owner NC Phosphate Corp Address \_\_\_\_\_

Driller Girdler Foundation Date Drilled March 1968 Method Rotary

Depth of Well 239'

Casing: Depth 136 feet; Dia. 4 inches; Type Black Iron

Cement: Depth bottom of casing to surface

Open Hole from 136 ft. to 239 ft.

| Screen: From (FT.) | TO (FT.) | Slot Size | Type  |
|--------------------|----------|-----------|-------|
| _____              | _____    | _____     | _____ |
| _____              | _____    | _____     | _____ |

Water Zone: Depth 136' - 239' Aquifer: Ech

Static Water Level: 18.95 ft. below measuring point which is base of recorder shelf, 1.88 ft. above land surface. Date 4-1-68

Elevation of Measuring Point 37.94 ft. above MSL

Yield \_\_\_\_\_ gpm. Flow, pump, bail, estimated. Date \_\_\_\_\_

Pumping water Level: \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping at \_\_\_\_\_ gpm

Pump: type \_\_\_\_\_, Intake depth \_\_\_\_\_

Quality: \_\_\_\_\_

Log: Gamma Log Attached

REMARKS: Well equipped with Stevens Type A35 Recorder 3-28-68

Cored from surface to 239'

Lithographic Log attached to #186

WELL RECORD

Map Location No. (P-19, N-17)1  
NCDAWR # P-19, N-1  
NCPC # 186  
TGS # \_\_\_\_\_

Source of Data: NC Phosphate Corp  
Location: Town West of Cox's X-Roads County Beaufort  
Topography: Flat  
Owner NC Phosphate Address \_\_\_\_\_  
Driller Girdler Foundation Date Drilled March 1968 Method Rotary  
Depth of Well 271.5  
Casing: Depth 73 feet; Dia. 4 inches; Type Black iron  
Cement: Depth bottom of casing to surface  
Open Hole from 73 ft. to 242 ft.

| Screen: From (FT.) | To (FT.) | Slot Size | Type  |
|--------------------|----------|-----------|-------|
| _____              | _____    | _____     | _____ |
| _____              | _____    | _____     | _____ |

Water Zone: Depth 73' to 242' Aquifer: Ech  
Static Water Level: 24.85 ft. below measuring point which is base of 4" casing recorder shaft, 35 ft. above land surface. Date 4-2-68  
Elevation of Measuring Point 35.90 ft. above MSL  
Yield \_\_\_\_\_ gpm. Flow, pump, bail, estimated. Date \_\_\_\_\_  
Pumping water Level: \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping at \_\_\_\_\_ gpm  
Pump: type \_\_\_\_\_, Intake depth \_\_\_\_\_  
Quality: \_\_\_\_\_

Log: Self Potential & Resistivity log attached  
REMARKS: Cored from top to 271.5

LITHOLOGIC LOG\*

DH#: NCPC 186-186A

Map Location: P-19, n-1 Collar Elevation: 186, 35.55  
186A, 36.06

Date Drilled: March 5, 1968

|               |   |
|---------------|---|
| 0.0'-6.0'     | Not Cored   |
| 6.0'-9.0'     | blue gray, very silty-very sandy, fine, quartz sand/silt  |
| 9.0'-13.0'    | Lost Core   |
| 13.0'-34.0'   | blue, sandy clay  |
| 34.0'-46.0'   | Lost Core   |
| 46.0'-50.0'   | olive drab, sandy clay  |
| 50.0'-50.5'   | olive drab, very sandy, fine-medium, sandy-quartz and phosphate, silt   |
| 50.5'-82.5'   | lost core, rock was encountered at approximately 70.0' and continued to 242.0'<br>N. B. core for well 186A adjacent to 186 contained the following:<br>at 70.0' brown-black dense phosphate replacing shell limestone |
| 82.5'-86.5'   | light gray green, sandy fine to medium, shell limestone, very abundant voids; some glauconite, very minor phosphate; at 83.0-83.5 very coarse shell   |
| 86.5'-88.5'   | light gray-green, medium, shell sand becoming clayey at 88.5  |
| 88.5'-91.5'   | Lost Core   |
| 91.5'-101.5'  | Lost Core, drilled easily   |
| 101.5'-103.5' | light gray green, coarse, shell limestone, very abundant voids  |
| 103.5'-105.5' | light gray green, very clayey, medium to coarse quartz and shell sand   |
| 105.5'-111.5' | Lost Core   |
| 111.5'-113.5' | light blue gray, fine grained, cast and mold sandstone  |
| 113.5'-115.0' | light gray green, slightly clayey to clayey, fine to medium, quartz and shell sand  |
| 115.0'-121.5' | Lost Core   |
| 121.5'-121.7' | light gray green, fine grained, cast and mold sandstone with some medium sand and shell   |
| 121.7'-123.0' | light gray green, slightly clayey, medium to coarse, quartz and shell sand with some fine phosphate or glauconite   |
| 123.0'-131.5' | Lost Core   |
| 131.5'-132.0' | light gray green, fine grained, cast and mold sandstone   |
| 132.0'-132.3' | brown-black, dense, massive, phosphate replaced limestone   |
| 132.3'-138.5' | light gray green, sandy, medium-coarse, cast and mold limestone   |

|               |  |
|---------------|--|
| 138.5'-141.5' | white, clayey, very coarse, shell sand   |
| 141.5'-141.8' | white-light gray, coarse, sandy, cast and mold limestone   |
| 141.8'-142.5' | white, slightly clayey, fine to coarse, quartz and shell sand  |
| 142.5'-146.5' | Lost Core  |
| 146.5'-148.5' | light gray green, coarse, cast and mold, sandy limestone   |
| 148.5'-156.5' | Lost Core  |
| 156.5'-160.5' | as from 146.5-148.5  |
| 160.5'-166.5' | Lost Core  |
| 166.5'-168.5' | as from 146.5-148.5  |
| 168.5'-176.5' | Lost Core  |
| 176.5'-177.5' | light gray green, dense, fine to medium sandstone  |
| 177.5'-186.5' | Lost Core  |
| 186.5'-188.0' | as from 176.5-177.5  |
| 188.0'-189.4' | as from 146.5-148.5  |
| 189.4-196.5'  | Lost Core  |
| 196.5'-204.6' | light gray green, cast and mold, medium to medium coarse,<br>cast and mold limestone with abundant medium quartz sand and<br>very abundant fine glauconite |
| 204.6'-205.5' | Lost Core  |
| 205.5'-208.7' | as from 196.5-204.5  |
| 208.7'-211.5' | Lost Core  |
| 211.5'-212.5' | as from 196.5-204.5  |
| 212.5'-231.5' | Lost Core  |
| 231.5'-232.3' | as from 196.5-204.5  |
| 232.3'-241.5' | Lost Core  |
| 241.5'-271.5' | Not Cored<br>varicolored, medium to medium coarse, shell sand with 10-14%<br>fine glauconite   |

\*field examination only

186-hole ends at 271.5'

casing set at 72.5'

186A-hole ends at 242.0'

casing set at 136.0'