

Fulton County
Clinton Township
Section 21

Pointer Oil Co. * #1 Nofziger, C.E.
Permit No. 32
Sample No. 1964
Elevation (KB) 777 feet

*Previous owner Russell Maquire Co.

Depth (ft)

- 340 - 360 * Shale, black- to dark-brown. Pyrite, trace
- 360 - 380 Dolomite, very light- to light-grayish-brown- to brown, very finely to medium crystalline. TENMILE CREEK DOLOMITE AT 363 FEET (GR-N)
- 380 - 440 Limestone, very light-brownish-gray- to medium-brown, fine- to coarse-grained, fossiliferous. SILICA FORMATION AT 397 FEET (GR-N)
- 440 - 460 Limestone, medium-brown and slightly grayish, fine- to medium-grained, argillaceous. Shale, medium-gray. DUNDEE FORMATION AT 426 FEET (GR-N)
- 460 - 480 Limestone, light-yellowish-gray- to very light-brownish-gray, lithographic
- 480 - 500 Dolomite, very light- to light-brown, microcrystalline; this is Detroit River dolomite; samples are not in place
- 500 - 550 Dolomite as above. Dolomite, very light- to light-gray; minor
- 550 - 560 Dolomite, light- to medium-brown, microcrystalline, fine- to medium-grained in part
- 560 - 590 As above. Dolomite, light- to medium-gray, slightly sandy in part (very fine-grained sand); minor
- 590 - 610 Dolomite, very light- to medium-brown, microcrystalline to very finely crystalline, laminated in part, some pinpoint porosity
- 610 - 630 Dolomite as above. Sand, fine- to medium-grained; trace. Dolomite, light- to medium-gray, microcrystalline, sandy to very sandy in part; trace to minor
- 630 - 640 As above. Sandstone, fine- to medium-grained; trace
- 640 - 650 Sand, medium-grained and rounded. Shale, dark-green; trace. Dolomite, very light- to light-gray and medium-brown, microcrystalline; trace. SYLVANIA SANDSTONE AT 640 FEET?
- 650 - 660 Dolomite, very light-brown, sublithographic. SILURIAN AT 654 FEET (GR-N) ?

* 360-540 feet in 20' intervals

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Fulton County
Clinton Township
Section 21 (NW¼)

POINSTER OIL Co.
(Maquire)
#1 Nofzinger
Permit No. 32
Sample No. 1964
Elevation (KB 777 feet)

| Depth (ft) | |
|-------------|--|
| 2150 - 2170 | Shale, black, silty |
| 2170 - 2180 | Shale as above. Dolomite, light-brown, medium to coarsely crystalline, scattered pyrite, 45 to 50%. TRENTON at 2154 feet (GR) |
| 2180 - 2190 | Dolomite as above. Black shale cavings composing over 50% of sample |
| 2190 - 2200 | Dolomite as above, abundant cavings |
| 2200 - 2210 | No samples |
| 2210 - 2220 | Limestone, light-brown, fine- to medium-grained, containing large white fragments of brachiopods and other fossils, dolomitic, clear crystalline calcite as cement or filling shell cavities. Dolomite, light-brown, medium to coarsely crystalline, 10 to 15%. Abundant black shale cavings composing 60 to 65% of sample |
| 2220 - 2230 | Limestone as above, primarily clear calcite cemented fossil material, abundant bryozoans and pelmatozoans. |
| 2230 - 2240 | Limestone as above, 15 to 20% brown containing soft brown organic appearing residue, pearly shelled brachiopods |
| 2240 - 2250 | Dolomite, light-brown- to brown, fine to coarsely crystalline. pelmatozoan fragments, less than 1 to 2% calcite and less than 5% limestone in total sample |
| 2250 - 2260 | Limestone as above; some brown microgranular matrix. Dolomite as above, 10 to 12%. Abundant apparently cavings of black |

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and gray shale

- 2260 - 2270 Limestone apparently as above but abundant cavings of black, gray, and greenish-gray shale, and several types of dolomite composing up to 60 to 65% of sample
- 2270 - 2280 Limestone, light-brown- to dark-brown, fine- to medium-grained, large fragments of brachiopods, dolomitic, large amount of soft argillaceous or organic residue, shale partings
- 2280 - 2290 Limestone as above
- 2290 - 2300 Limestone as above, abundant cavings
- 2300 - 2310 Limestone as above, predominantly light brown fossil pieces, bryozoans
- 2310 - 2320 Limestone as above, little dark-brown, abundant clear calcite, bryozoans
- 2320 - 2330 Limestone as above, abundant bryozoans
- 2330 - 2340 Limestone as above, very clean, bryozoans, primarily clear calcite cemented fossil material
- 2340 - 2350 Limestone as above, abundant bryozoans, minor amount fine-grained dark brown matrix
- 2350 - 2360 Limestone as above; part containing brown organic material, bryozoans
- 2360 - 2370 Limestone as above,
- 2370 - 2380 Limestone as above
- 2380 - 2390 Limestone as above, bryozoans. Chert, light-gray to brown, mottled or speckled brown, smooth, 2 - 3%. Chert, brown to reddish-brown, granular appearing, rough, calcareous inclusions, 1%. Shale, brown, silty, pyritic, black organic appearing flakes, 1 to 2%

- 2390 - 2400 Limestone as above, scattered pyrite cubes, bryozoans.
Chert, black, translucent along edges, calcareous inclusions,
4 - 5%. Shale, black, shiny, 2 to 3%. Chert as above,
light-gray and brown, 2 - 3%
- 2400 - 2410 Limestone as above, silicified fragments of bryozoans and brachiopods,
abundant clear calcite cement. Chert as above, black, 5 - 10%.
Chert as above, light gray to brown, 4 to 5%. Shale
as above, 1 to 2%.
- 2410 - 2420 Limestone as above. Chert as above, black, 5 to 10%. Shale as
above, partly silicified, 5 to 6%. Chert as above, light
gray to brown, 2 to 3%
- 2420 - 2430 Limestone as above, very clean, abundant clear calcite.
Chert as above, black, 5 to 6%. Chert as above, light gray
to brown, 3 to 4%. Limestone, light-brown to buff, micro-
granular to very fine-grained, dense, dolomitic, light
colored residue, 4 to 5%. BLACK RIVER at 2400 feet (GRN)
- 2430 - 2440 Limestone as above, light-brown to buff. Chert as above, light
gray to brown, 1 to 2%. Chert, brown to reddish-brown, trace
- 2440 - 2450 Limestone as above. Chert as above, light gray to brown,
8 to 10%
- 2450 - 2460 Limestone as above. Chert as above, light gray to brown, 5 to
10%
- 2460 - 2470 Limestone as above. Chert as above, 3 to 4%

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