

SPOT LOG

DRILL HOLE: Hiller #7
PROP. OWNER: J. Hiller
- DRILL CONTRACTOR: J-J Drilling Company
DRILL OPERATOR: Jim Jackson
DATE STARTED: 7/10/79
CASING LEFT IN HOLE:

LOC: Sec. 35, T30S, R21E
Crawford Co., Ks.

LOGGED BY: TM, MRR
ELEV: 851' *Surveyed*
DATE COMPLETED: 7/10/79
TOTAL DEPTH: 305'

T.M. - 6:30 a.m. MRR Arrived 6:45 a.m.

25 ft. - Limestone, tan
31 ft. - Limestone, tan; chert, medium brown to orange

Note: Jim Jackson expressed a concern about setting 47" surface pipe in this and other holes. Will set only one joint of pipe in this hole.

Note: Lost one joint of surface pipe (7") in hole. Rig moved 10 feet south and started new hole. Set 30 feet surface pipe; three feet into top Fort Scott.

0 - 2 - Soil
2 - 18 - Clay
18 - 25 - Sand
25 - 43 - Limestone, tan; trace river gravel; trace shale, black
43 - 51 - Shale, black
51 - 65 - Limestone, tan
65 - 79 - Shale, black
79 - 138 - Shale, gray, silty; trace clay
138 - 143 - Shale, black, very calcareous; trace shale, brown; non-calcareous
143 - 144 - Coal
144 - 150 - Shale, dark gray to brown, calcareous; pyritic
150 - 159 - Shale, gray, silty; trace limestone, tan to gray
159 - 160 - Coal, gassy
160 - 205 - Siltstone, gray green; trace clay, gray
205 - 208 - Sandstone, gray to light brown, fine grained, oil odor; trace shale, black; trace river gravel; trace limestone, tan
208 - 226 - Sandstone, gray, fine grained; trace shale, black; trace river gravel; trace limestone, tan
226 - 229 - Shale, medium gray; trace shale, black; trace limestone, tan; trace river gravel
TM
229 - 247 - Sandstone, fine grained, medium gray; trace shale, gray; trace river gravel
238 - 240 - Same with trace of coal
247 - 255 - Shale, medium gray
255 - 261 - Shale, medium gray; trace coal; limestone, tan; river gravel
261 - 268 - Shale, dark gray to black; trace limestone, tan; trace river gravel
268 - 270 - Same as above with coal - Geolograph - 265'
270 - 282 - Shale, gray; underclay, blue-gray; trace coal; trace limestone, tan; trace river gravel

CORE #2 - 189 - 209.3

- 189 - 190.7 - Shale, gray, with sandstone lenses and stringers; interval increasingly sandy toward bottom; thin carbonaceous laminae from 190.6 to 190.7; sandstone lenses oozing free oil
- 190.7 - 203.2 - Sandstone, medium grained to fine grained, brown; occasional thin carbonaceous laminae; shale breaks: $\frac{1}{4}$ " thick at 194.4, $\frac{1}{4}$ " thick at 194.9; elongated $\frac{1}{16}$ " to $\frac{3}{4}$ " shale pebbles scattered from 198.3 to 200; core oozing free oil
- 203.2 - 203.3 - Shale, gray
- 203.3 - 208.7 - Sandstone, medium grained to fine grained, brown to gray; occasional micaceous partings; core oozing less free oil than upper intervals
- 208.7 - 209.1 - Shale, gray, with numerous closely spaced carbonaceous laminae
- 209.1 - 209.3 - Sandstone, medium grained, gray to brown; oil odor

SAMPLES

- 183 - 184 - Sandstone, fine grained, brown, micaceous locally carbonaceous material being replaced by pyrite; U.V. - good show
- 184 - 185 - Shale, gray, silty, micaceous 95%; sandstone, fine grained, brown, micaceous 5%; U.V. - good show
- 185 - 188 - Shale, gray, silty, micaceous 99.9%; sandstone, brown, trace; U.V. - poor show
- 188 - 189 - Shale, gray, silty, micaceous, locally carbonaceous 95%; sandstone, fine grained, brown, micaceous, locally carbonaceous 5%; U.V. - good show
- 189 - Shale, gray, silty, micaceous, and carbonaceous 80%; sandstone, fine grained, brown, micaceous, locally carbonaceous 20%; U.V. - good show
- 209 - 215 - Sandstone, fine grained, brown, micaceous, locally carbonaceous, silty; U.V. - fair show
- 215 - 220 - Sandstone, fine grained, brown, micaceous, locally carbonaceous; U.V. - poor show
- 220 - 225 - Sandstone, fine grained, brown, micaceous, locally carbonaceous material being replaced by pyrite; U.V. - poor show
- 225 - 230 - Sandstone, fine grained, brown, micaceous, locally carbonaceous 99%; U.V. - poor show; coal fragments 1%
- 230 - 235 - Sandstone, fine grained, brown to gray, micaceous, locally carbonaceous 99%; U.V. - poor show; limestone, gray, trace of pyrite 1%
- 235 - 240 - Sandstone, fine grained, brown, micaceous and carbonaceous; U.V. - poor show
- 240 - 250 - Same as above
- 250 - 255 - Sandstone, fine grained, brown, micaceous and carbonaceous 95%; limestone, gray, silty 5%
- 255 - 260 - Shale, gray, silty 80%; sandstone, fine grained, gray to brown, micaceous and carbonaceous 20%
- 260 - 270 - Shale, dark gray to black, silty 90%; limestone gray to brown, trace of pyrite 10%
- 270 - 280 - Shale, gray, silty, locally carbonaceous 90%; shale, black, silty 5%; limestone, brown, trace of pyrite 5%
- 280 - 290 - Shale, gray to black, silty, micaceous 60%; siltstone, greenish, calcareous, local concentrations of well rounded, brown, quartz grains 30%; limestone, tan 10%
- 290 - 300 - Siltstone, greenish, local concentrations of well rounded, brown quartz grains (2-4 mm) 85%; shale, black, silty, some hematitic oxidation present 15%

T.D. @ 300'

- 282 - 283 - Shale, black; trace limestone and river gravel
283 - 285 - Same as above with underclay, blue-gray
285 - 289 - Shale, medium gray; underclay, blue-gray; trace limestone and river gravel - surface pipe sinks
289 - 293 - Shale, dark gray; shale, medium gray; underclay; trace limestone and river gravel
293 - 295 - Everything - river gravel mostly
295 - 297 - Shale, light gray; trace of coal; limestone and river gravel
297 - 299 - Underclay, blue-gray; shale, light gray; trace coal; limestone and river gravel
299 - 302 - Shale, light to medium gray; some underclay; river gravel and limestone
302 - 304 - Shale, dark gray; shale, light to medium gray; siltstone, medium gray; river gravel and limestone
304 - 305 - Shale, black; underclay, blue-gray; river gravel
305 - Shale, black; trace coal; river gravel and limestone
T.D. @ 305' - 8:25 p.m. - July 10, 1979