SAMPLE LOG

DRILL HOLE: Devlin # 50
PROP. OWNER: William Devlin
DRILL CONTRACTOR: V. W. B.
DRILL OPERATOR: Bill Billman
DATE STARTED: 3/7/80
CASING LEFT IN HOLE:

LOC:

LOGGED BY: MRG
ELEV: 837.53
DATE COMPLETED: 3/18/80
TOTAL DEPTH: 301'

30 - 40 Limestone brown and grey, crystaline and silty, locally fossiliferous 90%; shale, black, silty, calcareous 10%
40 - 50 Limestone grey and tan, crystaline locally fossiliferous 90%; shale, black, trace of pyrite 10%
50 - 60 Shale, black 70%; limestone tan, crystaline, locally fossiliferous 25%; shale grey silty 5%
60 - 70 Shale, light grey, silty locally micaceous, trace of pyrite crystals 85%; limestone tan, crystaline 10%; shale, black 5%
70 - 80 Shale, grey, silty, 75%; siltstone, grey, locally micaceous and carbonaceous 25%
80 - 90 Shale, grey, very silty, carbonaceous 100%
90 - 100 Shale, grey, silty, carbonaceous 85%; siltstone, light grey locally micaceous and carbonaceous 15%
100 - 140 Shale, grey silty 100%
140 - 150 Shale, grey silty 65%; shale, black, very calcareous 30%; coal 5%
150 - 160 Shale; grey, silty calcareous 75%; shale, grey silty 25%; coal trace
160 - 170 Shale grey 60%; shale, black, silty 30%; limestone, grey crystaline 10%
170 - 172 Shale, black, silty calcareous 70%; shale, grey, very silty, trace of pyrite crystals 30%
172 - 182 Sandstone, fine grained, very fine grained black, micaceous and carbonaceous 90%; U. V. - no show; shale, grey very silty 10%

CORE # 1, HCO #138 was lost thru core catcher; U. V. - of reamed samples indicates no oil in this zone, MRG

CORE # 2 (182.6-201.3)

182.6-189.5 Shale grey; carbonaceous streaks and whisps 187.7-188.1; horizontal cracks 187.5-189.0
189.5-201.3 Sandstone, fine grained, brown, shale break 198.9-199.5 grey top contact regular and horizontal bottom regular and gradational; shale pebbles 201.2-201.3 ½" by ½"; 197.9 ¼" by ¼" carbonaceous laminae 195.7-195.9 approximately 60° from core axis; 196.9 approximately 45° from core axis; core oozes oil 189.5-196.1; first presence of water 198.1; pit show, light cover over ½ pit; core loss 201.3-222.0

CORE # 3 202-222.1

202 - 222.1 Sandstone, fine grained, grey and brown micaceous; interlaminated shale sand and carbonaceous material approximately 80° from core axis; 203.1-203.4 and 203.9-204.0 very slight oil ooze here.

205.6-206.2, carbonaceous laminae approximately horizontal no oil ooze here; calcareous sand approximately (206.0-220.0); shale pebbles 206.8 3/4" by ¼"; 210.8 3" by 1½"; shale break 221.1, 221.5; top and bottom contacts regular and distinct 219.4 ¼" coal irregular followed by limestone grey, 219.5 bottom contact regular and horizontal; interlaminated shale and carbonaceous material; 220.7-220.9; shaley sand 1" 220.1, core oozes oil 219.4-220.8, and 221.5-222.1; core appears to be water saturated elsewhere; pit show unchanged

CORE # 4 222.1-242.0

222.1 - 223.7 Shale grey sand 222.1-221.6, top and bottom contacts regular distinct and horizontal

223.7 - 225.4 Sandstone fine grained, dark grey, shale pebbles 225.0-225.1; ½" by ½", carbonaceous fragments on broken surface 225.1; irregular shale pebbles and streamers, carbonaceous material and sand 225.1-225.4

225.4 - 227.3 Shale grey, top contact irregular, bottom contact regular and horizontal

227.3 - 228.4 Sandstone, fine grained, dark grey, carbonaceous pebbles 227.8-228.4

228.4 - 231.0 Shale, grey, sand break 229.9-230.1; top and bottom contact regular and horizontal

231.0- 239 Sandstone fine grained, grey and black; sand is calcareous and shaley; shale break 233.1-233.2; top contact regular bottom irregular, both approximatedly 80° from core axis; coal and shale pebbles 234.8-235.1 ½" by ¼"

239.0 - 242.0 Shale grey silty, top contact regular and horizontal whisps of silty white lenses and streamers throughout no oil ooze anywhere; core appears water saturated; pit show unchanged

242 - 245 Siltstone, grey, locally carbonaceous 100%
245 - 250 Shale, grey, very silty, carbonaceous 100%
250 - 260 Shale, grey, silty, carbonaceous 100%
260 - 270 Shale, grey, silty 60%; shale, black, silty, calcareous 40%;
270 - 280 Shale, grey silty 35%; shale, black silty, calcareous 35%; coal fragments 30%
280 - 290 Shale, black, 65%; shale, grey, silty 25%; coal 5%
290 - 300 Siltstone, light grey, locally hemititic, local inclusions of well rounded, light brown metal oxides, locally micaceous 95%; shale, black 5 %