

SAMPLE LOG

DRILL HOLE: Devlin # 49
PROP. OWNER: William Devlin
DRILL CONTRACTOR: VWB
DRILL OPERATOR: Bill Billman
DATE STARTED: 3/4/80
CASING LEFT IN HOLE:

LOC:
LOGGED BY: MRG
ELEV: 838.12
DATE COMPLETED: 3/6/80
TOTAL DEPTH: 301'

30 - 40 Limestone grey, silty, and crystalline locally fossiliferous 55%; shale, black, silty 45%
40 - 50 Limestone, tan, crystalline locally fossiliferous 90%; siltstone, grey carbonaceous, calcareous 10%
50 - 60 Siltstone, light grey trace of pyrite crystals 45%; limestone grey silty 35%; U. V. - poor show; shale black 20%
60 - 70 Sandstone, fine grained, grey and brown, micaceous and carbonaceous 100%; U. V. - poor show
70 - 80 Siltstone, grey carbonaceous 90%; sandstone, fine grained, grey and brown, micaceous and carbonaceous 10%
80 - 130 Shale, grey, silty carbonaceous 100%
130 - 140 Shale, grey, silty 90%; shale, black, silty very calcareous 10%
140 - 150 Shale, black, silty, trace of pyrite, very calcareous 75%; shale, grey silty 25%
150 - 160 Shale, black, silty limey, trace of pyrite 95%; shale grey 5%
160 - 170 Shale, black, silty very calcareous 80%; shale, grey, poorly indurated 20%
170 - 180 Siltstone black, trace of pyrite 75%; siltstone, light grey local concentrations of light brown well rounded metal oxides or quartz grains, poorly indurated calcareous 25%
180 - 182 Siltstone, dark grey, carbonaceous 50%; sandstone, fine grained grey micaceous and carbonaceous, trace of feldspar? 50%

CORE # 1 182 - 201.1

182 - 187.7 Sandstone, fine grained, brown, micaceous; shale grey (182-182.4); sandy lenses (182.3-182.4). (183-187.1) sand appears to have lost most oil during coring process. Vertical frac (186.2-186.5) Interval oozes little free oil. Sand is clean and uniform
187.7 - 200.3 Finely interlaminated sand shale and mica. Shale rip-up clasts 187.7-187.9 2½" by ¾". Shale break 187.9-188, ranging from nearly horizontal to 70° from core axis top and bottom contacts regular; shale, rip-up clasts 188.3-188.4 3" by 1". Clean sand 189.3-190.6, 195.4-195.8, Interval oozes free oil in streaks 187.7-198.5; first presence of water (198.1); pit show light cover

8" of core found after marked bagged and discribed fits 187.8-188.6; measurements below adjusted in discription.

CORE # 2 201.1 - 221.2

201.1 - 221.2 Sandstone, fine grained, grey, micaceous; vertical frac partically healed approximately 201.8-203.1; sand is calcareous throughout; limestone 204.2-204.8; top contact gradational approximately 70° from bottom contact irregular ranging over 2", limestone $\frac{1}{4}$ " buff and horizontal 211.9; limestone 212.0-212.1, horizontal; limestone pebble 212.1 3" by 1"; sand is clean and uniform below 212.1; core oozes no free oil. Core appears to be water saturated; pit show improved good cover, possible leakage from first core

CORE # 3 221.2-241.1

221.2 - 236.9 Sandstone, fine grained, grey, micaceous and carbonaceous; micaceous and carbonaceous laminations (221.2-221.3), (221.5-222.1)(226.5-226.9); all approximately horizontal; micaceous parting 227.1 and 227.9, approximately 85° from core axis; shale pebble 226.9-227.0 2" by 1", 231.9 2" by 1"; shale break 235.8-235.9, contacts irregular ranging from nearly horizontal to 45° from core axis; relic bedding planes 232.5-234.0 50° from core axis; sand is calcareous throughout; possible vertical frac 239.8-240.0; shale pebble 241.3 1" by $\frac{1}{2}$ "; sand becomes asphaltic approximately 235.5; core oozes no free oil; appears to be water saturated; pit show good cover from previous cores

CORE # 4 241.8-265.6

241.8 - 255.9 Sandstone, fine grained, black, micaceous asphaltic, very hard sand appears clean and tight very slight ooze of dark heavy oil approximately (242-246); sand calcareous 248.9-255.9; coal 251-251.3; $\frac{1}{2}$ " 252.9, 253.1 approximately 60° from core axis; $\frac{1}{2}$ " 254.1 approximately 65° from core axis, $\frac{1}{4}$ " 254.3 horizontal 254.9 $\frac{1}{2}$ " horizontal and 255.2 $\frac{1}{4}$ " and 253.3 1" both approximately 60° from core axis coal seam 254.1 with limestone band runing through-out it; coal pebbles and shale rip-up clasts 253.4-255.9; 255.9-265.6; shale, grey uniform with horizontal cracks throughout; coal 265.2-265.5

270 - 280 Shale, black silty 80%; sandstone, fine grained, brown micaceous and carbonaceous 10%; U. V. - fair show; limestone light grey, silty 10%

280 - 290 Shale, black, silty 45%; shale, grey, poorly indurated 40%; limestone, light grey-tan, silty and crystalline 15%

290 - 300 Siltstone, greenish, local concentrations of light brown well rounded 1-3mm metal oxides or quartz grains 85%; shale, black, trace of pyrite 10%; limestone brown 5%