SAMPLE LOG

DRILL HOLE: McGown # 9
PROP. OWNER: McGown
DRILL CONTRACTOR: VWB Drilling
DRILL OPERATOR: Jim Miller
DATE STARTED: April 23, 1980
CASING LEFT IN HOLE:

LOC:

LOGGED BY: MRG
ELEV: 836.17
DATE COMPLETED: April 25, 1980
TOTAL DEPTH: 301'

30 - 40 - Limestone, light-dark gray, crystaline, fossiliferous, locally carbonaceous 75%
Shale, black, silty 25%
40 - 50 - Limestone, tan, crystaline, fossilferous, 100%
U.V. Poor show without fluid, fair show with
50 - 60 - Limestone, tan, crystaline, fossiliferous 80%
Shale, black, silty 15%
Siltstone, light gray, poorly indurated 5%
U. V. poor show
60 - 70 - Siltstone, light gray poorly indurated, trace of pyrite crystals, local limey inclusions 50%
Shale, gray silty 50%
70 - 80 - Shale, gray silty 100%
80 - 90 - Shale, grading to siltstone gray, trace of pyrite crystals carbonaceous 100%
90 - 100 - Siltstone, light gray, carbonaceous 20%
Shale, gray, silty 80%
100 - 110 - Shale, gray, silty carbonaceous 90%
Siltstone, gray, Carbonaceous 10%
110 - 140 - Shale gray, silty 100%
140 - 150 - Shale, dark gray-black, silty very calcareous, trace of pyrite 80%
Shale, gray 20%
150 - 160 - Shale, black, limey, fossiliferous, trace of pyrite 85%
Shale, gray, silty carbonaceous 15%
160 - 170 - Shale, black, limey 80%
Shale, gray, silty 20%
170 - 176 - Siltstone to fine grained sandstone, light gray to brown 80%
Shale, black silty calcareous 10%
Limestone, tan , crystaline 5%
Shale, gray 5%
BOTTOMS 176 Sandstone, very fine grained - fine grained gray and tan, micaceous and carbonaceous 100%
U.V. good show

CORE # 1 176.5-196.5

176.5 -177.5 Sandy shale, sand irregularly oriented throughout slight oil ooze here

177.5 -180.6 Shale, sand, Shale occurs mostly as laminae, irregularly oriented 177.9-178.2, 178.9-179.1 fair oil ooze in interval
180.6 -181.8 Shale gray, sandy in lenses 179.9, 181.1, (181.5-181.7) lenses ooze oil
181.8 -186.8 Sandstone, fine grained, brown, shaley 182.8-183.2 slight oil ooze here
Shale break 183.1-183.9 sandy whisps, & laminae about 65 degree from core axis to 20 degree from core axis laminae folded 183.3-183.5. Pure sand 181.8-182.8, & (183.9-186.2) good oil ooze here.
186.8 - 191 Shale, gray, whisps of silt throughout top contact about 75 degree from core axis and regular bottom contact about 80 degree from core axis and regular.
191 -196.5 Interlaminated sand and shale. Pure sand 191-192 shale pebble 191.3 2" by ½". Shale break 192-192.2 Top contact

somewhat irregular about 75 degree from core axis bottom contact regular and horizontal. Mostly shale and micaceous laminations 192.9-193.7 (no oil ooze) carbonaceous plant fragments 196.5. Interval oozes oil and water (193.7-196.5) plenty of oil.

Pitshow rainbow to light cover

CORE # 2 197.2 - 216

197.2 -201.8 Shale, gray silty. Sandy shale brownish 197.2-198.0 slight oil ooze here, and 200.8 - 201.1 No oil ooze here.

201.8 - 210 - Interlaminated sand and shale. Irregular sand inclusion 203 - 203.2 3" by 2". Pure sand 207.2-208.7 no oil ooze here. 208.8-209.4 mostly shale sand occurs in whisps.

210 - 216 - Shale, gray, silty sandy shale. 214.4-214.5 no oil ooze here. Carbonaceous plant fragment in broken end at 216.0.

Core appears to be water saturated. No samples sent for testing. Pitshow no change.

216 - 220 - Sandstone, very fine grained to fine grained, gray-tan, very shaley, micaceous locally carbonaceous 100%
U.V. Fair show without fluid good with

220 - 225 - Sandstone fine grained, brown, micaceous and carbonaceous 100%
U.V. Fair show without fluid good with

225 - 230 - Sandstone, fine grained, brown micaceous 100%
U.V. fair show without fluid, good with

230 - 235 - Sandstone, fine grained, brown, micaceous, becomming asphaltic 100%
U.V. fair show without fluid good with

235 - 240 - Sandstone, fine grained, brown micaceous, becoming asphaltic 100%
U.V. fair show without fluid, good with

240 - 245 - Sandstone, fine grained, brown, micaceous asphaltic 80%
Coal fragments 20%
U.V. poor show withouth fluid, good with

245 - 250 - Siltstone, gray, carbonaceous 60%
Coal fragments 40%

250 - 260 - Siltstone, gray-brown, carbonaceous 75%
Shale, gray silty 25%

260 - 270 - Shale gray, silty 80%
Shale, black, silty 20%

270 - 280 - Shale, dark gray-black, limey trace of pyrite 85%
Shale, gray silty 14%
Limestone, tan, trace
Coal fragments, trace

280 - 290 - Siltstone, medium light-gray, trace of pyrite 80%
Shale, gray 15%
Shale, black, calcareous 5%

290 - 300 - Shale, gray, silty 55%
Shale, greenish, local inclusions of brown sub-rounded metal oxides 1-3mm, 20%
Shale black 10%
Shale, light gray, poorly indurated 15%