SAMPLE LOG

DRILL HOLE: D. Gray #17
PROP. OWNER: Don Gray
DRILL CONTRACTOR: J-J Drilling
DRILL OPERATOR: Guy
DATE STARTED: 9/26/79
CASING LEFT IN HOLE:

LOC: Sec. 34, T30S, R21E; 330' W of Gray 8

LOGGED BY: MRG, DRK
ELEV: 847'
DATE COMPLETED: 9/27/79
TOTAL DEPTH: 300'

20 - 30 - Limestone, gray, massive crystaline, Favosities corals, locally carbonaceous 75%; chert, orange brown 25%
30 - 40 - Limestone, gray to brown, massive crystaline, Favosities corals 35% shale, black, silty, trace of pyrite 35%; chert, orange brown to yellow 30%
40 - 50 - Limestone, gray, silty and massive crystaline fossiliferous 65%; shale, black, silty, trace of pyrite 35%
50 - 60 - Shale, black, silty, trace of pyrite, calcareous 75%; shale, gray, silty, locally carbonaceous 25%
60 - 70 - Limestone, dark gray, silty 50%; shale, gray, silty, locally carbonaceous, poorly indurated 50%
70 - 80 - Shale, medium gray, silty, slightly calcareous
80 - 90 - Shale, medium gray, silty, calcareous, locally carbonaceous
90 - 100 - Shale, medium gray, silty, slightly calcareous, micaceous and carbonaceous
100 - 130 - Shale, medium gray, silty, micaceous, locally carbonaceous
130 - 140 - Shale, medium gray, silty 50%; shale, black, silty, trace of pyrite, slightly calcareous 50%
140 - 150 - Limestone, black, silty, fossiliferous, trace of pyrite, Rugosa coral 70%; shale, gray, silty, locally carbonaceous, poorly indurated 30%
150 - 160 - Limestone, gray to black, massive crystaline 75%; shale, black, silty, trace of pyrite 25%
160 - 170 - Shale, gray, silty, trace of pyrite poorly indurated 80%; shale, black, silty 10%; siltstone, gray, local concentrations of well-rounded brown quartz grains 10%
170 - 178 - Shale, gray to black, silty, locally carbonaceous material being replaced by pyrite 80%; siltstone, gray, shaley, local concentrations of well-rounded, brown quartz grains (2-4 mm) 20%

CORE #1 - 178 - 184'

178 - 180 - Sandstone, fine grained, brown, micaceous partings; closely-spaced and nearly horizontal thin shale and carbonaceous laminae throughout section, shale laminae thicknesses from paper-thin to ¼" (avoid this zone when fracking); core oozing free oil
180 - 183.8 - Sandstone, medium grained, brown; thin carbonaceous laminae at 181.7 and 182.9 to 183.1; minor pyrite and carbonized plant fragments at 183.1; core oozing free oil
183.8 - 184 - Shale, gray; shale/sandstone contact 75° from core axis. (Shale/sandstone contact speciment removed from core box - 183.8 - 184.0 interval)