

SAMPLE LOG

DRILL HOLE: Sartin # 21
 PROP. OWNER: F. Sartin
 DRILL CONTRACTOR: Lamampco
 DRILL OPERATOR: Jim Miller
 DATE STARTED: 2/12/80
 CASING LEFT IN HOLE:

LOG:

LOGGED BY: MRG
 ELEV: 844.62
 DATE COMPLETED: 2/14/80
 TOTAL DEPTH: 301'

30	-	40	<u>Limestone</u> , brown and grey, crystalline and silty; locally fossiliferous 75%; shale, black, silty 25%
40	-	50	<u>Limestone</u> , brown, crystalline, favosities corals 100%; <u>U. V.</u> - poor show
50	-	60	<u>Limestone</u> , brown, crystalline, massive 80%; <u>U. V.</u> - poor show; siltstone, grey, trace of pyrite, poorly indurated 20%
60	-	70	Siltstone, very fine grained <u>sandstone</u> , grey and brown; trace of pyrite, 100%
70	-	80	<u>Limestone</u> , brown, crystalline, massive 35%; shale grey silty carbonaceous 35%; Siltstone grey, carbonaceous 30%
80	-	90	Shale, grey silty carbonaceous 80%; siltstone grey carbonaceous 20%
90	-	110	Shale, grey, silty carbonaceous 95%; <u>Limestone</u> brown 5%
110	-	130	Shale, grey, silty, carbonaceous
130	-	140	Shale, grey 80%; shale, black, trace of pyrite, calcareous 20%
140	-	150	Shale, grey 50%; shale, black, limey, very calcareous 40%; <u>coal</u> 10%
150	-	160	Shale, dark grey-black, silty, calcareous 80%; <u>Limestone</u> brown, massive crystalline 15%; shale, light grey, poorly indurated 5%
160	-	170	Shale, black, silty, trace of pyrite, locally calcareous 60%; shale, light grey, trace of pyrite crystals 30%; <u>sandstone</u> , very fine grained, brown and grey, trace of mica 10%
170	-	178	Shale, dark grey, silty carbonaceous 70%; siltstone grey, carbonaceous and micaceous 10%

CORE # 1 (178-192.2)

178	-	179.7	Shale grey; <u>pure sand</u> 178.3-179 interlaminated shale and sand (179.0-179.5)
180	-	191.1	<u>Sandstone</u> , fine grained, micaceous and carbonaceous; carbonaceous laminations 181.9-182.1; <u>slight oil ooze at 182.0</u> ; (186.0-187) <u>no oil ooze here</u> (187-190) very soft poorly indurated sand approximately 3" core loss (187-188), 6" core loss (188-189); 6" core loss (189-190); carbonaceous laminations $\frac{1}{2}$ " at 190 <u>very slight oil ooze here</u> , plant fragments on broken surface at 190.9
191.1	-	192.2	Shale grey finely laminated with carbonaceous material first water 182.8; pit show poor; <u>core oozes little to no free oil</u> .

CORE # 2 (192.2 - 211.6)

- 192.2 - 210.7 Sandstone, fine grained brown micaceous with
lims throughout. Carbonaceous laminations
(192.2-193.3) very slight oil ooze; (194.9-
195.7) no oil ooze here; (196.9-198.7) very
slight oil ooze here; (203-203.2) very slight
oil ooze here. Shale pebbles 193.3 $\frac{1}{2}$ " by $\frac{1}{2}$ "
nearly horizontal; 199.8 $\frac{1}{2}$ " by $\frac{1}{2}$ " oriented
nearly horizontal to 65° from core axis;
interlaminated shale sand and carbonaceous
material (195.8-196.9); sand becomes dark and
asphaltic below 201.8; relic bedding planes
203.5-204.1, oriented nearly horizontal to 70°
from core axis; vertical to horizontal frac 208.9-
209.0
- 210.7 - 211.4 Coal; some shaley laminations below 211.0; shale
pebble 211.2 $\frac{1}{2}$ " by $\frac{1}{2}$ "
- 211.4 - 211.6 Shale grey; sandy at 211.6
core oozes little free - no free oil; carbonaceous
laminations only. Water present on all freshly
broken surfaces; pit show rainbow only
- 210 - 215 Shale, light grey, trace of pyrite poorly in-
durated 80%; sandstone, fine grained, brown, micaceous
and carbonaceous 10%; shale, black, trace of pyrite
10%
- 215 - 220 Shale, light grey, local concentrations of light
brown well rounded (1-3mm) metal oxides, poorly
indurated; shale, black, pyrite 90%; limestone
brown, massive crystalline 10%
- 220 - 230 Sandstone, very fine grained grey, carbonaceous
70%; shale, grey, silty 20%; shale black 10%; U. V. -
poor show
- 230 - 240 Siltstone to very fine grained sandstone, micaceous,
locally carbonaceous trace of pyrite 100%; U. V. -
poor show
- 240 - 250 Shale, dark grey black, calcareous 50%; shale, grey,
silty 40%; coal 10%
- 250 - 260 Shale, black, trace of pyrite, calcareous 60%; shale
grey silty 40%
- 260 - 270 Shale, black, trace of pyrite, calcareous 60%;
limestone, brown crystalline 20%; shale, light grey
silty locally carbonaceous 20%
- 270 - 280 Shale, grey, silty poorly indurated 45 %; shale, black
calcareous 40%; limestone, tan, crystalline 15%
- 280 - 290 Shale, light grey, local concentrations of light
brown well rounded 1-3mm metal oxides 90%; shale,
black 10%
- 290 - 301 Shale, light grey - greenish local concentrations
of light brown sub rounded 1-3mm metal oxides 80%;
shale, black 20%