Howell 32" Com. # 1

11-29-70 - T.D. 8644'. DST # 1, 8571-8644', unable to get tool to bottom, hole tight, pulled test tool, prep to condition hole for DST # 2. Drlg. break of 11' in 15 mins. from 8589-8600'. Vis 36, MW 8.6, WL 7.6, FC 1/32.

11-30 - Mixed & conditioned mud, made short trip, built mud up to 8.8#, Vis 72, WL 4cc, FC 1/32, hole clean, reran DST # 1, 8571-8644', tool open w/strong blow, open 10 mins., cont. strong, now shut in for initial shut in.

DST # 1, 8571-8644' cont. Tool open 10 mins., strong blow, S.I. 60 mins., tool open 2 hrs., <sup>1</sup>/<sub>4</sub>" ck., GTS in 5 mins., 19#, 45 MCF/D. In 2 hrs. 70#, <sup>1</sup>/<sub>4</sub>" ck., 115 MCF/D. Rec. 5' drlg. mud, sampler 18.4 cu. ft. gas @ 1100#. Preflow 76, IHP 3957, ISIP 3315, IFP 76, FFP 115 (2 hrs.), FSIP 3159 (4 hrs.), FHP 3918. Drlg. ahead @ 8708' in lime, shale & chert. Vis 60, MW 8.7, WL 4.8, FC 1/32, Ph 10.5, Oil 8%.

T.D. 9398', going in hole for DST # 2 to test 9350-9398'.

12-7

12-10

12-6

12-1

DST # 2, 9350-9398', open 10 mins., weak blow, S.I.
1 hr., reopened tool 2 hrs., weak blow, GTS 50 mins., after reopened TSTM, S.I. 4 hrs., rec. 2' drlg. mud in drill collars & 3.8 cu. ft. gas in sampler, IHP 4406, Preflow 58, ISIP 2734, IFP & FFP 58, 4 hr. FSIP 3237 & still building, FHP 4367, BHT 158. Now drlg. @ 9453' in lime, shale & chert. Vis 70, MW 8.7, WL 4, FC 1/32, Ph 10, Oil 7%.

12-8 - Drlg. © 9556' in lime, shale & chert. Vis 72, MW 8.7, WL 4.8, FC 1/32, Ph 10, Oil 8%.

> Drld. to T.D. 9700', had 17' drlg. break 9585-9602', drld. 2 - 3 mins./ft., circ. to clean hole, MW 8.8,
> Vis 82, WL 5.8, Ph 11, FC 2/32, strapped drill pipe, no correction. DST # 3, 9580-9700', tool open initially 15 mins. w/good blow, S.I. 60 mins., GTS 30 mins.\* after closing tool, reopened for 2<sup>1</sup>/<sub>2</sub> hrs. on <sup>1</sup>/<sub>4</sub>" ck.

TIME	PSI	MCF
15 mins.	28	60
30 mins.	45	85
45 mins.	63	112
60 mins.	79	135
1 hr. 15 mins.	100	166
l hr. 30 mins.	120	195
lahr. 45 mins.	125	203
2 hrs.	135	220
2 hrs. 15 mins.	145	232
2 hrs. 30 mins.	155	247

Tool closed now on 5 hr. shut in.

12-11 - DST # 3 cont. S.I. 5 hrs. Recovered 90' drlg. mud, 9 cu. ft. gas in sampler. IHP 4543, Preflow 115, ISIP 3860, IFP 135, FFP 231, FSIP 3802, FHP 4406, BHT 160. Drld. to 9800' in shale & began circulating to come out of hole to run logs. Vis 80, MW 8.9, WL 4.4, FC 1/32, Ph 10, Oil 8%.

 12-12 - Ran Schlumberger open hole logs - BHC Sonic Gamma Ray, D.I.L.L., Proximity-Microlog and Dip Meter. HOSX & Sect 0
 12-13 - Set 40 sxs. Incor neat Cement @ 9625'. Set 40 sxs.

12-13 - Set 40 sxs. Incor neat cement @ 9625'. Set 40 sxs. Incor neat cement @ 8650', 40 sxs. Incor neat @ 6500', 50 sxs. Incor neat @ 3224' & 20 sxs. Incor neat @ 500'. Well D & A, 12-13-70.

12-14 - R.D.R.T.

12-15 - M.O.R.T. to Brown-Yates No. 1. Final Report.