Howell State Com. No. 1 D.S.T. Summary Page 2

## D.S.T. NO. 3, 9490'-9625'

Tool opened initially 15 mins. with no surface indications on teleflow. Cycled tool, reopened with very weak blow in bucket, increasing very slightly. Tool open 5 mins., SI 90 mins. Reopened tool with fair blow in bucket increasing in 5 mins. to good blow from bottom of bucket. In 10 mins. on 3/8" choke had 10# surface pressure, in 22 mins. after second opening had gas to surface.

Minutes	Surface Pressure	M.C.F./day
30	11	82
60	11	82
70	12	85
80	12	85
90	12	85

Shut in  $4\frac{1}{2}$  hrs. Recovered 730' gas cut drilling fluid, top 29,000 PPMC1, Res. 0.11 @ 95 deg., middle 29,000 PPMC1, res. 0.11 @ 91 deg., sampler 28,000 PPMC1, res. 0.11 @ 92 deg., pit sample 34,000 PPMC1, res. 0.09 @ 90 deg. BHT 177 deg., IHP 4590, 1st flow pressure 221# & 221# in 15 mins., 1st SIP 827# in 3 mins., 2nd flow pressure 221# & 221# in 5 mins., 2nd SIP 3623# in 90 mins., 3rd IFP 195, FFP 311 in 90 mins., 3rd SIP 3714 in  $4\frac{1}{2}$  hrs., FHP 4642. Sampler pressure 350 psig. Recovery in sampler 0.9 cu. ft. gas & 1300 cc drilling fluid.

## D.S.T. NO. 4, 9630'-9690'

Opened tool at 3:40 a.m. with very good blow from bottom of bucket. At 3:44 on ¼" choke, had 22# surface pressure and 52 MCF/day. In 15 mins. on ¼" choke had 270# surface pressure and 416 MCF/day. SI tool 60 mins. Reopened and fluid to surface in 15 mins., in 90 mins. 68# on ¼" choke & 199 MCF/day, heavy mist of water. Closed tool at 6:26 for 3 hrs. Pulled off bottom at 9:26 a.m. Recovered 2194' water. Top Chamber: 2300#, 15 cu. ft. gas, 710 cc water. Top Sample: Res. 0.11 @ 84 deg., 32,000 PPMC1. Middle Sample: Res. 0.11 @ 81 deg., 30,000 PPMC1. Bottom Sample: Res. 0.11 @ 82 deg., 31,000 PPMC1. BHT 173 deg. IHP 4672, Preflow 1345-2244 in 15 mins., ISIP 3934, IFP 2136, FFP 3599, FSIP 3934, FHP 4672.