

Devonian 12,395-12,480' w/2000' FWB. TO @ 5:45 AM 1/26/78 for 15 min IFP. Good blow in 5 mins. Tool closed @ 6:00 AM for 1 hr ISIP. TO @ 7:00 AM for 2-1/2 hr FFP. GTS @ 7:10 AM 1/4" ck. 7:05 AM 20 psi, 7:15 63 MCF, 7:30 56 MCF, 7:45 56 MCF, 8:00 49 MCF, 8:30 46 MCF, 8:45 chgd to 3/8" ck, 265 MCF, 9:00 299 MCF, 9:15 265 MCF, 9:30 248 MCF. 9:30 AM tool closed for 4 hr FSIP. Rel pkrs, POH w/test tools. Rec 5061' fluid, 2600' FWB, 2461' watered gas cut drlg mud w/odor of H₂S. Top chart 12,373', IH 6002#. 1st flow period, IF 1091, FF 1091, SI 4724. 2nd flow period IF 1091, FF 1222, SI 4945, FH 6002. Btm chart 12,475' IH 6103, 1st flow period IF 1186, FF 1186, SI 4768. 2nd flow period, IF 1101, FF 1271, SI 4982, FH 6103, GHT 172°F. DST #6 Devonian 12,400-12,525'. TO @ 6:15 AM 1/28/78 for 15 min IFP w/good blow. Max 150#, 1/4" ck. Tool closed @ 6:30 AM for 1 hr ISIP. GTS in 17 mins. TO @ 7:30 AM for 2 hr FFP, flwd well on 3/8" & 3/4" ck, DP 160-330#, sep 70-200#. Stabilized flow rate of 530 MCFPD on 3/4" ck. DP press 160# w/no fluid to surf. Closed tool @ 9:30 AM for 4 hr FSIP. Rel pkr & POH w/test tools. RO & rec 10 bbls cond & 26 bbls highly gas cut mud, no wtr blanket. Gvty 49.2 @ 60° F. BHT 172°F. IHP 6267#, IFP 720, ISIP 5077, FFP 830-1157, FSIP 4835, FHP 6091. Core #1 12,525-12,577' (52') Devonian. POH w/CB. Full rec. WIH w/bit & drld to 12,612'. POH w/bit. DST #7 Devonian 12,529-12,612'. TO @ 7:20 AM 1/31/78 for 15 mins IFP w/weak blow, incr to strong blow. At 7:35 AM closed tool for 1 hr ISIP, 8:05 AM gas to surf in 45 mins. TO @ 8:35 for 2 hr FFP. 9:00 AM, 1/4" ck, 10#, 35 MCFG. 9:05 AM 15#, 42 MCF. 9:10 AM, 18#, 46 MCF. 9:15 AM 21#, 50 MCF. 9:25 AM 24# 54 MCF. 9:30 AM open on 3/4" choke. 9:45 AM 6#.

10:00 AM on 1/8" orifice well tester. 10:20 AM 7 MCF. 10:35, 15 MCF. 10:35 AM closed tool for 2 hr FSI. Rel pkrs, no fluid to surf. Rec 279' slightly gas cut DM, 1678' hvy gas cut black DM w/strong odor of H₂S. Top chart IHP 6200#, IF 330, ISI 5221, FF 495, FSI 5156, FHP 6200. Btm chart IHP 6183#, IF 390, ISI 5218, FF 456, FSI 5154, FHP 6183. Cond gvty 50.5° @ 60°F. 90' of slightly gas cut mud between circ sub & top of tool. DST #8 Devonian 12,707-12,810'. TO for 15 min IF @ 8:30 AM 2/3/78 w/fair blow, incr to good blow. Closed tool for 1 hr ISI @ 8:45 AM. TO for 1 hr FF @ 9:45 AM w/good blow, incr to strong blow. Closed tool for 1 hr FSI @ 10:45 AM. Max press 1/2 psi on 1/4" ck, decr to 1/4 psi on 1/4" ck. Rec 6292' total fluid, 1496' drlg mud, 935' slightly gas & wtr cut drlg mud, 3644' black fm wtr slightly gas cut, 217' drlg mud. Top chart IHP 6311, IFP 1376, ISIP 5275, FFP 3013, FSIP 5275, FHP 6311. Cored 58' from 13,790-848', full rec. Drld to 14,900'. DST #9 14,764-14,900' McKee. Pkr seat failed. POH w/test tools. Ran GR-Caliper log, ran bit & reamed 30' to btm @ 14,900'. DST #10 McKee 14,820-14,900'. Pkr seat failed. POH w/test tools. Cored 14,900-904', rec 1' sandstone & shale. Cored 15,275-15,313' (38'). CB jammed rec 38'. Ran CNL-FDC, GR Sonic DLL, dipmeter 15,671-15225'. Fin drlg 8-3/4" hole to 15,671 @ 1:00 AM 3/17/78. RIH w/7" OD csg btm to top as follows: 45.82' 7" OD 32# S-95 LTC new csg, 1194.35' 7" OD 29# S-95 LTC new csg, 3366.35' 7" OD 29# SS-95 new csg, 2977.28' 7" OD 26# SS-95 new csg, 765.59' 7" OD 26# L-80 new csg, 2972.31' 7" OD 23# SS-95 new csg. 1885.00' 7" OD 26# SS-95 new csg, 1904.78' 29# SS-95 new csg, 532.22' 7" OD 32# SS-95 new csg. Set @ 15,670'. DV tool set @ 9886'. Cmtd 7" OD csg in 2 stages. 1st stage cmtd w/1000gals SAM-5 mud flush, followed by 1775 sx Cl H cmt cont'g .8% Halad-22, .4% CFR-2 & 5# KCL/sk. Plug not bumped. Opened DV tool & circ 6 hrs. Circ 150 sx cmt to surf. Cmtd 2nd stage w/500 gal SAM-5 mud flush followed by 350 sx Howco Light cmt cont'g .6% Halad-22, .3% CFR-2, 8# salt/sk, followed by 575 sx Cl H cmt cont'g .8% Halad-22, .4% CFR-2, 5# KCL/sk. PD @ 8:15 PM 3/20/78. WOC.