

HAPPY VALLEY '4' FED #22

12/20/97 Days- 122; TD- 11,856'; PBTD- 11,815'; WELL SHUT IN; Lower Morrow; Perfs- 11770'-11772' & 11774'-11776' 4' w/19 holes.; Csg- 4 1/2 13.5# 8933'-11856; Tbg- 2 3/8"; Pkr Dpth- 11,410'; BOPD- 0; MCF/D- 0; BWPD- 0; Dug holes & cement pipe stands for flowline. Ran line ot high/low valve. Remove flowline connections. Instalrled choke valve & line to burn pit. Continued to lay sales line. Will frac in the AM.
DWC-\$ 925. CWC-\$ 1,368,895 CMIC- GS

12/21/97 Days- 123; TD- 11,856'; PBTD- 11,815'; RU BJ FRAC SERVICES; Lower Morrow; Perfs- 11770'-11772' & 11774'-11776' 4' w/19 holes.; Csg- 4 1/2 13.5# 8933'-11856; Tbg- 2 3/8"; Pkr Dpth- 11,410'; BOPD- 0; MCF/D- 0; BWPD- 0; RU frac crew, but weathr prevented frac job. Postponed frac job.
DWC-\$ 0. CWC-\$ 1,368,895 CMIC- GS

12/22/97 Days- 124; TD- 11,856'; PBTD- 11,815'; FRAC MORROW ZONE; Lower Morrow; Perfs- 11770'-11772' & 11774'-11776' 4' w/19 holes.; Csg- 4 1/2 13.5# 8933'-11856; Tbg- 2 3/8"; Pkr Dpth- 11,410'; BOPD- 0; MCF/D- 0; BWPD- 0; Guardian Wellhed Protectio, Inc. installed tree saver on wellhead. RU BJ for frac well as follows: Test lines to 12,500 psi, load & leave csg w/2000 psi. SITP-3085 psi. Pumped stage #1-36,000 gals of pad @ 12 BPM @ 9164 TO 8759 psi. Stage #2-2,000 gals w/.5 ppg 20/40 sand @ 12 BPM @ 8759 to 8620 psi; Stage #3-4,000 gals w/1 ppg 20/40 sand @ 12 BPM @ 8620 to 8656 psi; Stage #4-6,000 gals w/2 ppg 20/40 sand @ 12 BPM @ 8956 to 8769 psi; Stage #5-6,000 gals w/3 ppg 20/40 sabd @ 12 BPM @ 8769 to 8769 psi; Stage #6-Flsuh to perfs w/2,000 gals @ 12 BPM 8769 psi. Min Press-8620 psi, Max Press-9164 psi, Avg Press-8853 psi. Rate-12 BPM; Rate on flush-12.4 BPM; ISDP-3150 psi; 15 Min SITP-2978 psi; Pumped a total of 415 bbls of CO2 (90 Tons). Water in frac was cut w/25% methanol (10,300 gals. TLTR-875 BW. RD BJ. Left well shut in 4 hrs. SITP-2200 psi. Open well to burn pit on 10/64's choke, flowed well overnight on a 10,12,14, & 16/64's choke. This AM well is flowing heavy water on a 1/4" choke w/FTP-100 psi. Recovered 50 BW. TLTR-825 BW.
DWC-\$ 105,431. CWC-\$ 1,474,326 CMIC- GS

12/23/97 Days- 125; TD- 11,856'; PBTD- 11,815'; FLOWING WELL TO FRAC TANK; Lower Morrow; Perfs- 11770'-11772' & 11774'-11776' 4' w/19 holes.; Csg- 4 1/2 13.5# 8933'-11856; Tbg- 2 3/8"; Pkr Dpth- 11,410'; BOPD- 0; MCF/D- 0; BWPD- 0; Flowing well back on 1/4" choke. FTP-280 psi. Diverted flow back to frac tank. Recovered 190 BW in 24 hrs. TLTR-635 BW. Continue installing gas line to sales point.
DWC-\$ 260. CWC-\$ 1,474,586 CMIC- GS