

Cities Service Oil Company's Cawley A #1

Swabbed 5 BLW/6 hrs. Gas rate 33.35 MCFD. Perforated Morrow w/1 - 0.21" hole each @ 11,429; 11,430; 11,431; 11,432 and 11,435'. 16 hr. SITP 1225#. Gas rate 31.36 MCFD. Acidized thru perfs. 11,333-11,365 and 11,429-11,435' w/500 gals. 15% HCl and 15% Isopropyl alcohol + 2000 gals. Super Mud acid (9% HCl + 6% HF) and 15% Isopropyl alcohol + 24 ball sealers. Initial inj. rate 3 B/M @ 4800#. Max. press. 6100#, min. press. 4700#, AIR 3.5 B/M @ 5400#. ISIP 2700#, 5 min. SIP 2675#, 15 min. SIP 2450#, 30 min. SIP 2100#, 60 min. SIP 1400#. Swabbed 68 BLW/13 hrs. Gas rate 31.4 MCFD. Reset packer @ 11,385'. No fluid entry from perfs. 11,429-11,435'. Reperf. w/2 - 0.21" holes each @ 11,429; 11,430; 11,431; 11,432 and 11,435'. Acidized thru perfs. 11,429-11,435' w/250 gals. HCl and 15% Isopropyl alcohol + 1000 gals. Super Mud acid + 15% Isopropyl alcohol. Formation broke @ 5500#. Max. press. 6000#, min. press. 3900#, AIR 4 B/M, ISIP 1600#, 10 min. SIP 600#, 18 min. SIP zero. Swabbed and flowed 15 BLW/6 hrs. Gas rate 525 MCFD, FTP 120#. Set CIBP @ 11,325'. Spotted 130 gals. acetic acid 11,126-11,306'. Swabbed dry. Perforated w/2 - 0.21" holes each @ 11,202; 11,203; 11,204; 11,209; 11,213; 11,216; 11,242; 11,244; 11,245; 11,246; 11,247; 11,282; 11,284; 11,286; 11,292; 11,293; 11,301; 11,302; 11,304 and 11,306'. 60 min. SITP 1200#. Flowed gas @ 582 MCFD, FTP 35# thru 1" choke. Acidized thru perfs. 11,202-11,306' w/500 gals. 15% HCl and 15% Isopropyl alcohol + 2500 gals. Super Mud acid and 15% Isopropyl alcohol + 60 ball sealers. Max. press. 6500#, min. press. 4800#, AIR 3 B/M @ 5000#, ISIP 1900#, 15 min. SIP 1300#, 25 min. SIP 1150#. Flowed gas @ 985 MCFD + 5 BLW/5 hrs., FTP 250# thru 1" choke, 7 hr. SITP 3200#. Reperforated w/2 - 0.41" holes each @ 11,202; 11,203; 11,204; 11,209; 11,213; 11,216; 11,242; 11,244; 11,245; 11,246; 11,247; 11,282; 11,284; 11,286; 11,292; 11,293; 11,301; 11,302; 11,304 and 11,306'. Flowed on potential of CAOP 1.59 MMCF/D + 12 B dist. (grav. 45.4 deg.) + 24 BW, Spec. grav. gas 1.150 thru 1" choke, FTP 315#.