

J. M. HUBER CORPORATION DAILY WELL REPORT
 District Denver

Deal No. 31-N-222-B

State New Mexico

#16-1 Jicarilla-Apache County Rio Arriba

SE NW Section 16-28N-2W (1830' ELL, 1570' RWT)

Owner Huber Contractor Loflin Brothers Co. Huber WI 3/8

Remarks 6500-foot Morrison test (NC)

Date	Depth	Report
6-25-74		Waiting on cement.
6-24-74		Ran cement bond log showing good bond at Pictured Cliffs sand. Swabbed fluid level casing flow, held 8044 psi. Perforated 3502 to 3512' on density log. One hole per foot casing ground run tubing. Swabbed fluid load back. Recovered shows oil/gas with each swab. SI over night to prepare to wash Pictured Cliffs perfs with mud acid.
6-25-74		Attempted to acidize the Pictured Cliffs formation. Pumped in 250 gallons of 15% HCL plus 500 gallons mud acid. Had circulation to the surface thru the Bradenhead. Squeeze cemented perfs 3502-3512 w/90 sx. Final cement squeeze pressure 1200 psi. SI overnite. Prep to drill out cement and test the squeeze job.
6-26-74		Waiting on cement.
6-27-74		Drld out 60' cement. Pressure tested cement squeeze @ 3500 psi. Held o.k. Perfs 3502-3512' @ 1 hole per ft. with cased jet gun.
6-29-74		Acidized Pictured Cliffs perfs 3502-3512' w/500 gals 15% HCL acid plus 12 ball sealers @ 2/lbs per min. Breakdown pressure 2350 psi. Treating pressure 1500 psi. Swabbed back 29 bbls load wtr to drop balls from perfs. Fractured PC w/25,000 gals 2½% acid in 2% gelled KCL wtr plus 600 cubic ft. per bbl carbon dioxide plus surfactant. Treated w/100 mesh sand @ 2 lbs per gal and 10-20 sand @ 1 lb and 2 lbs per gal. Max. frac pressure 3100 psi. Avg frac pressure 2200 psi. Instant SD pressure 800 psi. Avg injection rate 20 bbls per min. Flowed back 260 bbls frac fluid w/carbon dioxide in 5 hrs. FTP 150 psi, FCP 650 psi. 395 bbls frac fluid to recover.
6-30-74		Flowed well 24 hrs. Recovered 200 bbls frac fluid. FTP 0 lbs, FCP 110 lbs. Gas volume 110 mcf.
7-1-74		Swabbed well 3 times @ 1 hr intervals. Recovered 4 bbls 1st hr, 2 bbls 2nd hr, 3/4 bbls 3rd hr of frac fluid. Gas volume 90 mcf. Well still flowing. Have 195 bbls frac fluid to recover. SI overnite.
7-2-74		No Report.

