## ZINK STATE #1-Northeast North Gladiola Lea County, New Mexico

- Activities on 7/25/79, reported at 7:45 PM CST. Drilling on cement plug at top of Morrow. Drilled 5' to 10' of remainder of squeeze cement at Strawn perforations. Pushed balance of Strawn plug to top of abandonment plug at top of Morrow. Drilled 1' to 2' of Morrow abandonment plug. Shut down over night. Found discrepancy in tubing measurements that indicates that no casing failure in fact has taken place. Costs this date \$3,311.00. Cumulative costs to date \$38,772.00. Estimated costs through 8,000-9,000 gallons of acidization of Morrow Zone now projected to \$63,000.00. Estimated additional costs of acidizing Mississippian now estimated at \$29,000.00.
- Activities on 7/26/79, reported at 8:05 PM CST. Finished pulling out of hole with tubing and picked up scraper went back in hole and ran scraper to top of Morrow abandonment plug. Drilled approximately 30 minutes and broke through Morrow abandonment plug and pushed remainder to 11,995'. Cleaned hole and started out of hole with tubing. On 7/27/79, plan to run large test packer to test Morrow Sand zone, (through previously established perforations @11,636', 38', 40', 42', 44', and 51'). Will run base temperature log and then swab down fluid in hole and spot 500 gal. of acid and pressure the 500 gallons of acid through perforations. Will then run temperature decay survey in order to determine if this pilot 500 gallons of acid is entering into the zone adjacent to the perforations. Providing 500 gallons of pilot acid is found to be penetrating Morrow Sand zone, the zone will be treated by Halliburton with 6000 gallons of 10% Morrow Flo B.C. acid staged with 15 RCNs to insure entry into all perforations. A 10,000 SCF/N2 PAD will be run ahead of acid, acid and flush to contain 1000/SCF/N2/BBL. Job will be run at 4-6 BPM at 7000 lb. average PSI. The 6000 gallon acid treatment of Morrow is scheduled to commence on the morning of Saturday, July 28th, 1979. Cost this date \$3,224.00. Cumulative costs through this date \$41,996.00.

Note: Dean E. Wolf's new address: P. O. Box 8485 Midland, Texas 79703

- 7/27/79 Activities on 7/27/79, reported at 9:00 PM CST. Swabbing, shut down over night: Went in hole with packer and set pkr. at 11,523'. Ran Borehole Temperature and Gamma Ray logs. Swbd. well down, rigged up Halliburton and pumped 500 gallons 10% Morrow B. C. with Radioactive Tag, followed by 500 gal. 2% KcL water and over flushed acid with 10 bbls. KcL water, ISIP 3800# PSI. Ran Temperature and Gamma Ray logs and found majority of fluid going into Morrow zone of interest. Rigged down logger and started swabbing. Will start 6000 gallon acid treatment in the middle of morning on 7/28/79. Cost this date \$4,500.00, cumulative costs through this date \$46,595.00.
- Activities on 7/28/79, reported at 8:40 PM CST: Swabbing, shut down for Sunday. Results of this 6000 gal. treatment of Morrow zone look similar to results of previous 2500 gal. treatment of this zone: Rigged up Halliburton and treated with 6000 gal. Morrow Flow with 1000 SCF Nitrogen per bbl. and flushed with 42 bbls. 2% KcL water with 1000 SCF Nitrogen per bbl. Treating pressure 6200# PSI. Average treating rate 4.7 bbl. per min., Instantaneous Shut In Pressure 5700# PSI, 5 min. 5400# PSI, 10 min. 5200# PSI. Reached static point of essentially no pressure in 50 min. Flowed well back, recovered 25% load back. Swabbed for 7 hours, recovered no oil or formation gas. Will continue to swab when operations are resumed on Monday, July 30, 1979. Costs this date \$14,125.00, cumulative costs through this date \$60,720.00.
- Activities on 7/30/79, reported at 3:45 PM CST. Waiting on orders: After shut-in over Sunday, found shut-in tubing pressure to be 450 PSI, found fluid level at 3200', up from 8300' when shut-in on evening of 7/28/79. Blew down well, blow down gas had no hydrocarbon gas content. Swabbed to 7400' and fluid broke into from tubing-casing anulus at 2:00 PM, evidencing either packer failure or split in tubing. Total swabbing time of interval, 7 hrs. on 7/28/79 and 6 hrs. this date. Did not recover all of load and acid. Released work over crew for short day. At 5:05 PM, gave orders to commence abandonment procedures. Cost this date \$1,735.00, cumulative costs through this date \$62,455.00.