

DETAIL SHEET TO BE ATTACHED TO USOS SHEET FROM 9-331

No: Santa Fe 070200-S - Middle No. 2 - SW/4 Section 23 - 30-N - 10-W RMPM

Operator: La Plata Gathering System, Inc. - Box 717 - Farmington, New Mexico 87401 R

- 11/30/65 Rigged up completion rig. Drilled out stage collars and cleaned out to FSTD 7398'. Spotted 250 gal. 10% acetic acid on bottom. Pressure tested casing to 3800 psi. Ramperforating log and cement bond log.
- 12/1/65 Blew water in hole down to 6200' with gas. Perforated 7350-7353, 7328-7331, 7306-7314. Fraced with 20,000 lbs. 20-40 sand and tailed in with 500 lbs. glass beads. Water treated with 2¢ per 1,000 gal J-2, 20¢ per 1,000 gal adomite aqua and 1¢ Calcium Chloride. Sand concentration 1 ¢ per gal. Set top drillable magnesium bridge plug at 7288. Pressure tested and plug failed at 1100 psi. Set another plug at 7282 and pressure tested to 3600 psi. Perforated 7262-7266 and 7248-7252. All perforations 4 SDJFF.
- 12/2/65 Frac Stage 2: Pumped in at 27 bpm at 3500¢. Ran 250 gal. Spearhead acid. Pumped in at 3600¢ and 35 bpm. Ran 1/2¢ sand per gal. until it hit perforation. Increased sand to 1¢ per gal. and well sanded off when 1¢ hit perforation. Pumped 3000¢ sand into formation and 450 bbls. treated water. Went in hole with tubing and blew well down with gas. Attempted to reperforate and found sand on top of perforation. Attempted unsuccessfully to pump into hole.
- 12/3/65 Circulated sand out of hole and perforated 7256-7260, 7252-7256 with 4 SDJFF. Pressured up to 3800 psi and unable to pump into formation. Reperforated as follows: 7262-7266, 7248-7252 with 4 SDJFF. Attempted to pump into formation but unable to pump at 3800 psi. Ran tubing and packer and set packer at 7204 with one joint of tail pipe. Broke formation down with acids at 4500 psi and Acidized with 500 gals Western Spearhead acid at 2 to 7 bbls. per min. Final pressure 1500 psi. Pulled tubing and packer.
- Frac Stage 2: Fraced with 24,000¢ 20-40 sand at 1/2¢ per gal and 47,500 gals water treated with 2¢ per 1000 gals J-2 and 20¢ per 1000 gals adomite aqua and 1¢ CaCl2. Pumped in initially at 3600 psi at 24 bpm. Rate gradually increased to 40 bpm at 3300 psi. Average rate 30.5 bpm IEDP 1400 psi. Ran Baker ~~shut~~ top drillable magnesium plug on wire line under 400 psi. Set plug at 7224. Plug failed under pressure test at 3200 psi. Set 0-0 magnesium bridge plug at 7209 and pressure tested to 3800 psi.
- 12/4/65 Perforated 7162-7170 with 4 SDJFF.
- Frac Stage 3: Displaced 250 gals Spearhead acid with no break in pressure. Fraced with 18,000 ¢ 20-40 sand and 37,700 gals water treated the same as Stage 2. Max TP 3800, Min. SE TP 3700, IEDP 2300. Average rate 28.3 bpm. Ran tubing and bit and drilled out all 4 bridge plugs and cleaned out to FSTD.
- 12/5/65 Blew well down with gas with tubing at 1200'. Well began flowing on its own after 3 hours. Lay down 2" RUE tubing and ran 221 joints 1 1/2" RUE, JCW-55 tubing. Total length 7155.63'. Landed at 7166' NCB. Ramped out Plug.
- Shut well in at noon on December 5, 1965 to await tests and pipe line connection.

