

- 8) Drilled out cement retainer at 1910'. Circulated hole clean to 1988'. Pressure tested casing annulus, would not hold. RIH w/packer and set at 1900'. Pressured up to 1000 psi and pressure dropped to 850 psi in one minute. Perfs. 1942-1946' and 1968-1978' showed to be leaking. Pressured up on backside and was able to pump into top perforations 1854-1868' at 1/4 BPM, 1000 psi.
- 9) Unseated RTTS and RIH to 1978'. Spotted 17 sacks Class "C" cement across perfs. 1968-1978'. Pulled up hole and reset RTTS at 1878'. Squeezed perfs. 1968-1978' w/17 sacks Class "C" at 2000 psi. Unseated packer and reset at 1575'. Squeezed perfs. 1854-1868' w/68 sacks Class "C" cement at 2500 psi. Shut in well with 2500 psi on tubing.
- 10) SITP 0#. Unseated packer and POH. RIH w/bit, DC's and tubing. Tagged cement at 1672'. Drilled out cement down to CIBP at 1999'. Circulated hole clean. Pressure tested casing annulus to 1000 psi and held for 20 min., held okay.
- 11) Drilled out CIBP at 1999' and 2015'. POH w/bit, DC's and tubing. RIH w/RTTS packer and set at 1762'. Squeezed perfs. 2010-2018', 2032-2041', and 2046-2054' w/75 sacks Class "C" cement and 35 sacks Class "C" w/2% CaCl.
- 12) MI reverse unit. POH w/RTTS and tubing. RIH w/bit, DC's and tubing. Drilled out cement and circulated hole clean.
- 13) MI Wireline truck. Ran Gamma Ray Log for correlation. Perforater Lower Grayburg 2172-2176', 2183-2185', 2191-2196', 2212-2216' w/2 JSPF, .5" diameter holes, total 32 holes. TIH w/RBP and packer. Set RBP at 2260' and packer at 2097'. Acidized w/2000 gals. 15% NEA using ball sealers. AIR 3.9 BPM at 1685 psi. Flowed back 14 bbls. acid water and well balled out.
- 14) RU to swab. FL 1500' from surface. Made 1 run/hr., recovered 14 bbls. total fluid w/20% oil. Ending FL 1900' from surface.
- 15) SITP 270 psi. Bled pressure off and RU to swab. FL at 1900'. Made 1 run per 2 hrs., recovered 3 bbls. total fluid w/10-15% oil cut. Making lots of gas. Ending FL 1900'. Unseated packer and POH w/tubing and packer.
- 16) RU Wireline. Perforated Upper Grayburg 2122-2126', 2129-2131', 2141-2143', 2145-2149' w/2 JSPF, .5" diameter holes, total 29 holes. RIH w/packer and tubing. Reset RBP at 2160' and packer at 2075'. Acidized w/2000 gals. 15% NEA and 44 ball sealers. Total load to recover 59.5 bbls. RU to swab. Made 3 runs and recovered 8 bbls. total fluid, water and acid.
- 17) SITP 280 psi. Bled pressure off and RU to swab. FL 1600' from surface. Made 1 run/1/2 hr., recovered 20 bbls. total fluid w/15% oil.
- 18) SITP 250 psi. Bled pressure off and RU to swab. FL 1600' from surface. Made 1 run/hr., recovered 9 bbls. total fluid w/50% oil and lots of gas.
- 19) SITP 250 psi. Reset RBP at 2260' and packer at 2160'. RU Howco and fracture treated Lower Grayburg 2172-2176', 2183-2185', 2191-2195', 2212-2216' w/14,000 gals. gelled water and 30,000# 20/40 sand. Reset RBP at 2160' and packer at 2070'. Fracture treated Upper Grayburg 2122-2126', 2129-2131', 2141-2143', 2145-2149' w/14,000 gals. gelled water and 30,000# 20/40 sand. Total load to recover 650 bbls.
- 20) Bled pressure off well. Unseated packer and RIH to RBP. Reverse circulated sand off RBP and retrieved BP. POH w/tubing, packer and RBP. RIH w/tubing and SN. RU to swab. Swabbed 2 hrs., recovered 60 BLW. POH w/tubing. RIH w/MA, SN and tubing, bottom of tubing at 2234'.
- 21) RIH w/rods and pump. Hung well on. Well pumping 50 BO, 50 BW, 25 MCFGPD 12-7-81.