

MAR 07 1990
3-7-1990
FROM CONFIDENTIAL

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

| Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Formation Description <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample | | |
|--|---|--|----------------------|-------------------------|
| # | Interval | Name | Top | Bottom |
| #1 | 4193-4228; 30-30-10-0; Rec: 3'mud; 221-21; 21-21; 1022-n/a | Anhydrite | 2599 | +501 |
| #2 | 4226-4277; 30-45-45-60; Rec: 150'gip, 80'socm, 60'gmco, 60'gmo; 62-83, 103-134; 836-815 | B/Anhydrite Heebner Lansing | 2627 4127 4067 | +473 +926 -967 |
| #3 | 4279-4306; 30-45-45-60; Rec: 50'gip 15'co, 60'0cm, 135'socmw; 52-103, 165-186; 960-1074 | Stark Marmaton Cherokee | 4282 4379 4570 | -1182 -1279 -1470 |
| #4 | 4564-4628; 15-30-15-30; Rec: 2'mud; 41-41, 41-41; 898-784 | Johnson Miss | 4612 4674 | -1512 -1579 |

| CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used Report all strings set-conductor, surface, intermediate, production, etc. | | | | | | | |
|--|---|---|----------------|---|---|-------------|----------------------------|
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs/Ft. | Setting Depth | Type of Cement | #Sacks Used | Type and Percent Additives |
| surface production | 12 1/2 | 8-5/8 | 20# | 219 | pozmix | 140 | 52% gel, 3% ca |
| | 7 7/8 | 4 1/2 | 10 1/2 | 4378 | surfill | 175 | |
| PERFORATION RECORD | | | | Acid, Fracture, Shot, Cement Squeeze Record | | | |
| Shots Per Foot | Specify Footage of Each Interval Perforated | | | Amount and Kind of Material Used | | Depth | |
| 2 spf | 4294-94.3 | | | 250 15%INS | | | |
| 4 spf | 4266-69 | | | 250 gal 15%INS, 1500gal | | 15% NAE | |
| 4 spf | 4152-54 | | | 250gal 15%INS | | | |
| 2 spf | 4143-46 | | | 250 gal 15%INS | | | |
| TUBING RECORD | | Size | Set At | Packer at | Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| | | 2 7/8 | 4243 | | | | |
| Date of First Production | | Producing Method | | | | | |
| completion not | | finished <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (explain)..... | | | | | |
| Estimated Production Per 24 Hours | | Oil | Gas | Water | Gas-Oil Ratio | Gravity | |
| | | Bbls | MCF | Bbls | CFPB | | |

METHOD OF COMPLETION Production Interval

Disposition of gas: Vented Open Hole Perforation
 Sold Other (Specify)
 Used on Lease Dually Completed
 Commingled