

**Permit Information:**

Well Name: Magnolia 15 No. 702H

**Location:**

SL: 365' FNL &amp; 763' FWL, Section 15, T-26-S, R-33-E, Lea Co., N.M.

BHL: 230' FSL &amp; 992' FWL, Section 15, T-26-S, R-33-E, Lea Co., N.M.

**Casing Program:**

| Hole Size | Interval     | Csg OD | Weight | Grade   | Conn         | DF <sub>min</sub> Collapse | DF <sub>min</sub> Burst | DF <sub>min</sub> Tension |
|-----------|--------------|--------|--------|---------|--------------|----------------------------|-------------------------|---------------------------|
| 14.75"    | 0 - 855'     | 10.75" | 40.5#  | J55     | STC          | 1.125                      | 1.25                    | 1.60                      |
| 8.75"     | 0' - 11,200' | 7.625" | 29.7#  | HCP-110 | FlushMax III | 1.125                      | 1.25                    | 1.60                      |
| 6.75"     | 0'-17,191'   | 5.5"   | 17#    | HCP-110 | JFE Bear     | 1.125                      | 1.25                    | 1.60                      |

**Cement Program:**

| Depth   | No. Sacks | Wt. ppg | Yld Ft <sup>3</sup> /ft | Slurry Description                                                                                      |
|---------|-----------|---------|-------------------------|---------------------------------------------------------------------------------------------------------|
| 855'    | 400       | 13.5    | 1.73                    | Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl <sub>2</sub> + 0.25 lb/sk Cello-Flake (TOC @ Surface) |
|         | 300       | 14.8    | 1.34                    | Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate                                |
| 11,200' | 250       | 14.8    | 1.38                    | Class C + 5% Gypsum + 3% CaCl <sub>2</sub> (TOC @ Surface)                                              |
|         | 2000      | 14.8    | 1.38                    | Class C + 5% Gypsum + 3% CaCl <sub>2</sub>                                                              |
|         | 550       | 14.4    | 1.20                    | 50:50 Class H:Poz + 0.25% CPT20A + 0.40% CPT49 + 0.20% CPT35 + 0.80% CPT16A + 0.25% CPT503P             |
| 17,191' | 775       | 14.2    | 1.31                    | Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,700')                          |

**Mud Program:**

| Depth                        | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 - 855'                     | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 855' - 11,200'               | Brine       | 8.8-10.0     | 28-34     | N/c        |
| 11,200' - 11,902'            | Oil Base    | 10.0-11.5    | 58-68     | 3 - 6      |
| 11,902' - 17,191'<br>Lateral | Oil Base    | 10.0-11.5    | 58-68     | 3 - 6      |