

Cobalt 32 State Com #704H  
Lea County, New Mexico

200' FSL  
1885' FEL  
Section 32  
T-24-S, R-34-E

Proposed Wellbore  
Revised 10/5/18  
API: 30-025-45133

KB: 3,444'  
GL: 3,419'

Bit Size: 14-3/4"  
10-3/4", 40.5#, J-55, ST&C 0' - 1,165'

Bit Size: 9-7/8"  
7-5/8", 29.7#, HCP-110, LTC 0' - 7,900'

Bit Size: 8-3/4"  
7-5/8", 29.7#, HCP-110, FXL @ 7,900' - 11,350'

TOC: 10,850'

KOP: 11,904'

Bit Size: 6-3/4"  
5-1/2", 17#, HCP-110, LTC @ 0' - 17,306'

Bit Size: 6-3/4"

HOBBS OCD  
OCT 09 2018  
RECEIVED

Lateral: 17,306' MD, 12,350' TVD

BH Location: 100' FNL & 2618' FEL  
Section 32  
T-24-S, R-34-E

**Revised Permit Information 10/5/18:**

Well Name: Cobalt 32 State Com No. 704H

**Location:**

SHL: 200' FSL &amp; 1885' FEL, Section 32, T-24-S, R-34-E, Lea Co., N.M.

BHL: 100' FNL &amp; 2618' FEL, Section 32, T-24-S, R-34-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 – 1,165'        | 10.75" | 40.5#  | J55     | STC  | 1.125                      | 1.25                    | 1.60                      |
| 9.875"    | 0 – 7,900'        | 7.625" | 29.7#  | HCP-110 | LTC  | 1.125                      | 1.25                    | 1.60                      |
| 8.75"     | 7,900' – 11,350'  | 7.625" | 29.7#  | HCP-110 | FXL  | 1.125                      | 1.25                    | 1.60                      |
| 6.75"     | 11,350' - 17,306' | 5.5"   | 17#    | HCP-110 | LTC  | 1.125                      | 1.25                    | 1.60                      |

**Cement Program:**

| Depth   | No. Sacks | Wt. lb/gal | Yld Ft <sup>3</sup> /ft | Slurry Description                                                                                       |
|---------|-----------|------------|-------------------------|----------------------------------------------------------------------------------------------------------|
| 1,165'  | 697       | 13.5       | 1.74                    | Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl <sub>2</sub> (TOC @ Surface)                              |
|         | 333       | 14.8       | 1.35                    | Tail: Class 'C' + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk) |
| 11,350' | 600       | 10.8       | 3.67                    | Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ Surface)                        |
|         | 400       | 14.8       | 2.38                    | Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800                        |
| 17,306' | 800       | 14.8       | 1.31                    | Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,850')                           |

**Mud Program:**

| Depth                        | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 – 1,165'                   | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1,165' – 11,350'             | Brine       | 8.8-10.0     | 28-34     | N/c        |
| 11,350' – 17,306'<br>Lateral | Oil Base    | 10.0-14.0    | 58-68     | 3 - 6      |