

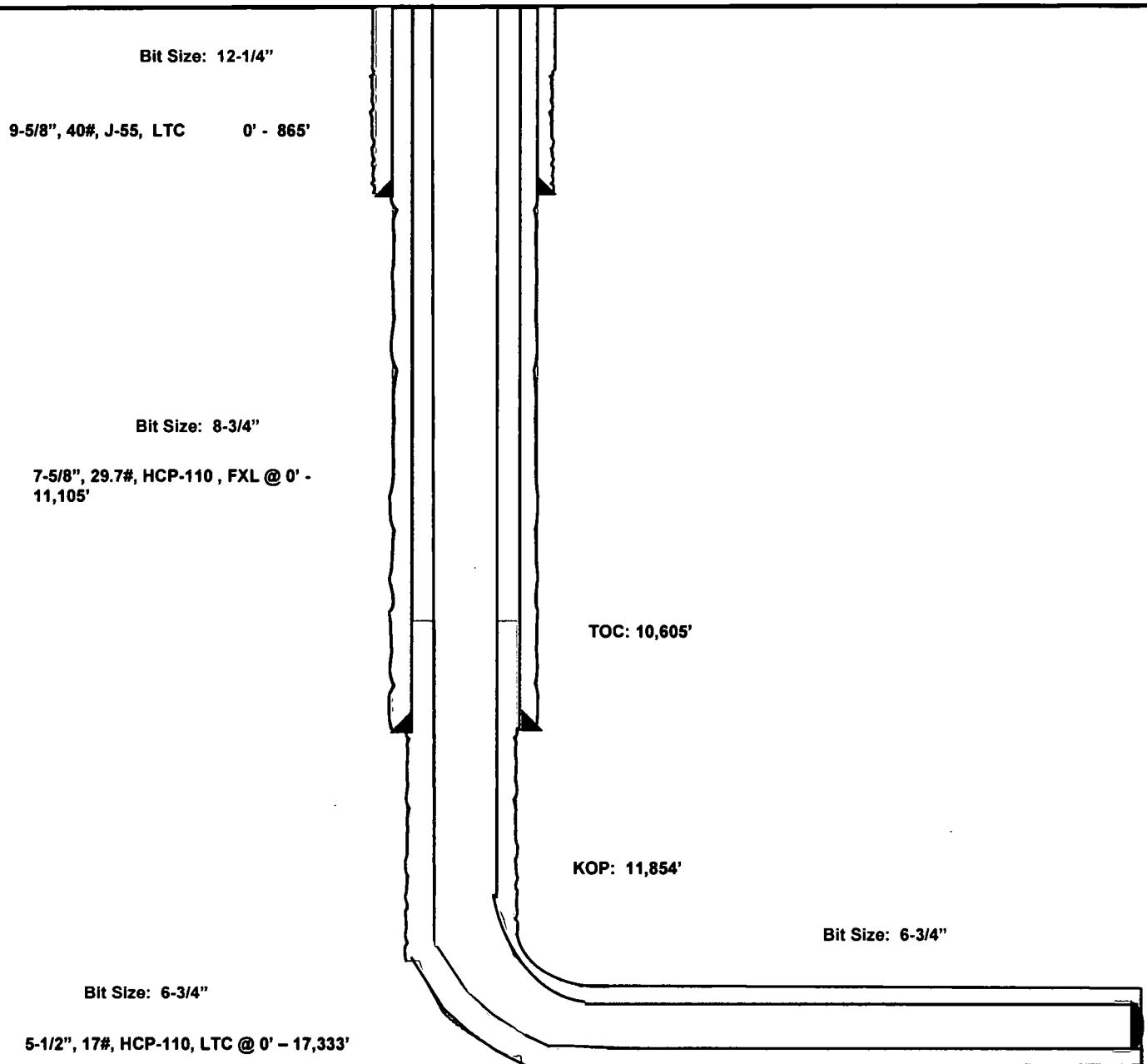
300' FNL  
697' FEL  
Section 2  
T-26-S, R-32-E

Quijote 2 State Com #713H  
Lea County, New Mexico

KB: 3,366'  
GL: 3,341'

Proposed Wellbore  
Design A

API: 30-025-\*\*\*\*\*



Lateral: 17,333' MD, 12,313' TVD  
BH Location: 100' FSL & 1120' FEL  
Section 2  
T-26-S, R-32-E

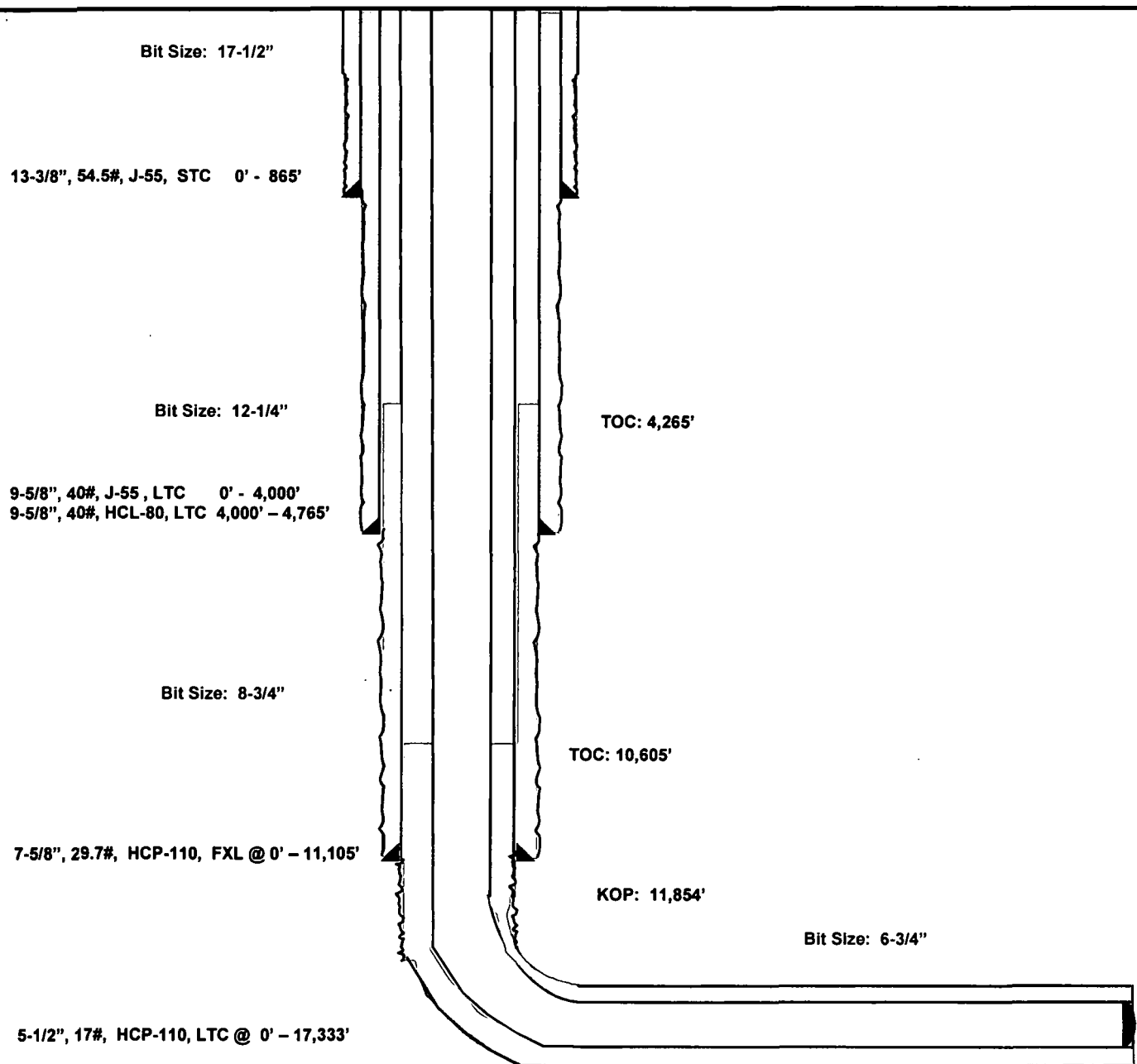
300' FNL  
697' FEL  
Section 2  
T-26-S, R-32-E

EOG RESOURCES, INC.  
QUIJOTE 2 STATE COM #713H

KB: 3,366'  
GL: 3,341'

Proposed Wellbore  
Design B

API: 30-025-\*\*\*\*\*



Lateral: 17,333' MD, 12,313' TVD  
BH Location: 100' FSL & 1120' FEL  
Section 2  
T-26-S, R-32-E

**EOG RESOURCES, INC.**  
**QUIJOTE 2 STATE COM #713H**

**Permit Information:**

Well Name: Quijote 2 State Com #713H

**Location:**

SHL: 300' FNL & 697' FEL, Section 2, T-26-S, R-32-E, Lea Co., N.M.

BHL: 100' FSL & 1120' FEL, Section 2, T-26-S, R-32-E, Lea Co., N.M.

**Design A**

**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 |
|-----------|--------------|--------|--------|---------|------|----------------------------|-------------------------|---------------------------|
| 12.25"    | 0 - 865'     | 9.625" | 40#    | J-55    | LTC  | 1.125                      | 1.25                    | 1.60                      |
| 8.75"     | 0' - 11,105' | 7.625" | 29.7#  | HCP-110 | FXL  | 1.125                      | 1.25                    | 1.60                      |
| 6.75"     | 0'-17,333'   | 5.5"   | 17#    | HCP-110 | LTC  | 1.125                      | 1.25                    | 1.60                      |

**Cement Program:**

| Depth   | No. Sacks | Wt. ppg | Yld Ft <sup>3</sup> /sk | Slurry Description                                                                                             |
|---------|-----------|---------|-------------------------|----------------------------------------------------------------------------------------------------------------|
| 865'    | 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                                       |
| 11,105' | 600       | 14.2    | 1.11                    | 1 <sup>st</sup> Stage (Tail): Class C + 5% Salt + (TOC @ 7,000')                                               |
|         | 1,000     | 12.7    | 2.30                    | 2 <sup>nd</sup> Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface) |
| 17,333' | 610       | 14.2    | 1.31                    | Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,605')                                 |

**Mud Program:**

| Depth                        | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 - 865'                     | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 865' - 11,105'               | Brine       | 8.8-10.0     | 28-34     | N/c        |
| 11,105' - 11,854'            | Oil Base    | 10.0-11.5    | 58-68     | 3 - 6      |
| 11,854' - 17,333'<br>Lateral | Oil Base    | 10.0-11.5    | 58-68     | 3 - 6      |

**EOG RESOURCES, INC.**  
**QUIJOTE 2 STATE COM #713H**

**Design B**

**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 |
|-----------|-----------------|---------|--------|---------|------|----------------------------|-------------------------|---------------------------|
| 17.5"     | 0 – 865'        | 13.375" | 54.5#  | J-55    | STC  | 1.125                      | 1.25                    | 1.60                      |
| 12.25"    | 0-4,000'        | 9.625"  | 40#    | J-55    | LTC  | 1.125                      | 1.25                    | 1.60                      |
| 12.25"    | 4,000' – 4,765' | 9.625"  | 40#    | HCL-80  | LTC  | 1.125                      | 1.25                    | 1.60                      |
| 8.75"     | 0 – 11,105'     | 7.625"  | 29.7#  | HCP-110 | FXL  | 1.125                      | 1.25                    | 1.60                      |
| 6.75"     | 0'-17,333'      | 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> /sk | Slurry Description                                                                                       |
|---------|-----------|------------|-------------------------|----------------------------------------------------------------------------------------------------------|
| 865'    | 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) |
| 4,765'  | 692       | 12.7       | 2.22                    | Lead: Class C + 0.15% C-20 + 11.63 pps Salt + 0.1% C-51 + 0.75% C-41P (TOC @ Surface)                    |
|         | 303       | 14.8       | 1.32                    | Tail: Class C + 0.13% C-20                                                                               |
| 11,105' | 375       | 10.8       | 3.67                    | Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 4,265')                         |
|         | 400       | 14.8       | 2.38                    | Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800                        |
| 17,333' | 540       | 14.8       | 1.31                    | Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,605')                           |

As a contingency, EOG requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (7,597') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed.

**Mud Program:**

| Depth                        | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 – 865'                     | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 865' – 4,765'                | Brine       | 10.0-10.2    | 28-34     | N/c        |
| 4,765' – 11,105'             | Oil Base    | 8.7-9.4      | 58-68     | N/c - 6    |
| 11,105' – 17,333'<br>Lateral | Oil Base    | 10.0-11.5    | 58-68     | 3 - 6      |

**EOG RESOURCES, INC.**  
**QUIJOTE 2 STATE COM #713H**

**Hydrogen Sulfide Plan Summary**

- A. All personnel shall receive proper H<sub>2</sub>S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:
- Well control equipment
    - a. Flare line 150' from wellhead to be ignited by flare gun.
    - b. Choke manifold with a remotely operated choke.
    - c. Mud/gas separator
  - Protective equipment for essential personnel.
- Breathing apparatus:
- a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
  - b. Work/Escapes packs — 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
  - c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.
- Auxiliary Rescue Equipment:
- a. Stretcher
  - b. Two OSHA full body harness
  - c. 100 ft 5/8 inch OSHA approved rope
  - d. 1-20# class ABC fire extinguisher
- H<sub>2</sub>S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.  
(Gas sample tubes will be stored in the safety trailer)
- Visual warning systems.
  - a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  - b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  - c. Two wind socks will be placed in strategic locations, visible from all angles.

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- **Mud program:**  
The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones.
- **Metallurgy:**  
All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.
- **Communication:**  
Communication will be via cell phones and land lines where available.

**EOG RESOURCES, INC.**  
**QUIJOTE 2 STATE COM #713H**

**Emergency Assistance Telephone List**

**PUBLIC SAFETY:** **911 or**

Lea County Sheriff's Department (575) 396-3611

Rod Coffman

**Fire Department:**

Carlsbad (575) 885-3125

Artesia (575) 746-5050

**Hospitals:**

Carlsbad (575) 887-4121

Artesia (575) 748-3333

Hobbs (575) 392-1979

Dept. of Public Safety/Carlsbad (575) 748-9718

Highway Department (575) 885-3281

New Mexico Oil Conservation (575) 476-3440

U.S. Dept. of Labor (575) 887-1174

**EOG Resources, Inc.**

EOG / Midland Office (432) 686-3600

**Company Drilling Consultants:**

David Dominique Cell (985) 518-5839

Mike Vann Cell (817) 980-5507

**Drilling Engineer**

Steve Munsell Office (432) 686-3609

Cell (432) 894-1256

**Drilling Manager**

Aj Dach Office (432) 686-3751

Cell (817) 480-1167

**Drilling Superintendent**

Domingo Lopez Office (432) 686-3702

Cell (432) 215-9452

**H&P Drilling**

H&P Drilling Office (432) 563-5757

H&P 651 Drilling Rig Rig (903) 509-7131

**Tool Pusher:**

Johnathan Craig Cell (817) 760-6374

Brad Garrett

**Safety**

Brian Chandler (HSE Manager) Office (432) 686-3695

Cell (817) 239-0251