

## DRILLING PROGRAM

EOG RESOURCES, INC.  
VACA "13" FEDERAL NO. 5  
1,980' FNL & 1,980' FWL  
SEC. 13, T25S, R33E  
LEA COUNTY, NM

### 1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

|                                |        |
|--------------------------------|--------|
| Delaware                       | 5050'  |
| Bone Spring                    | 9200'  |
| First Bone Spring Sd           | 9850'  |
| 3 <sup>rd</sup> Bone Spring Sd | 11900' |
| Wolfcamp Marker                | 12400' |
| Wolfcamp Pay                   | 13300' |
| Wolfcamp Pay Lower             | 13750' |
| Bell Lake Pay                  | 13950' |

### 3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

|                     |      |             |
|---------------------|------|-------------|
| Upper Permian Sands | 100' | Fresh Water |
| Upper Penn          |      | Gas         |

### 4. CASING PROGRAM

| Hole Size | Interval                | OD Casing | Weight Grade Jt. | Cond. Type |
|-----------|-------------------------|-----------|------------------|------------|
| 14 3/4"   | 0- <del>650</del> 1160' | 11 3/4"   | 42# H-40         | ST&C       |
| 11"       | 0-4000'                 | 8 5/8"    | 32# J-55         | LT&C       |
| 11"       | 4000-5000'              | 8-5/8"    | 32# HCK          | LT&C       |
| 7 7/8"    | 0-12800'                | 5 1/2"    | 17# S95/P110     | L&TC       |
| 4 3/4"    | 0-14200'                | 2 7/8"    | 6.5# N80         |            |

#### Cementing Program:

11 3/4" Surface Casing:

Cement to surface with 200 sx Prem Plus, 3% Econolite, 25 Calcium Chloride, 0.25#/sx Flocele, 150 sx Prem Plus, 2% Calcium Chloride

8 5/8" 1<sup>st</sup> Intermediate:

Cement to surface with 800 sx Interfill C, .25#/sx flocele, 250 sx Premium Plus, 2% Calcium Chloride

5 1/2" 2<sup>nd</sup> Intermediate:

Cement w/930 sx Premium, 3% Econolite, 5#/sx Salt (3%), 0.2% HR5, .25#/sk Flocele, 250 sx Prem 50/50 Poz mix 'A', 2% Halliburton-Gel First 2%, 0.5% Halad-322. This is designed to bring TOC to 4500'.

2 7/8" Casing:

135 sx Prem, 0.3% Halad-344, 0.3% Halad-413, 0.3% Super CBL, 0.2% SCR-100  
This designed to bring TOC to 12300 +/-.