



**Geologic Well Prognosis**  
**LOBO ROJO B3 STATE COM 2H**

Prepared By: Melissa Saurborn  
Date: 6/22/2017  
Geologist: Melissa Saurborn, (c ) 303-325-1233  
Engineer: Vladimir Roudakov, (c ) 720-933-9784

Proposed Well: LOBO ROJO B3 STATE COM 2H  
Legals: SWSW Sec 12 T22S R34E  
API: 30-025-XXXXX  
Lat/Long (NAD 27) N 32° 23' 59.58", W 103° 25' 46.06"  
County and State Lea Co., NM  
Ground Elev (FEET): 3580  
Kelly Bushing Elev (FEET): 3631

|            | Surface/Bottom Hole | FNL  | FSL  | FEL | FWL  |
|------------|---------------------|------|------|-----|------|
| Surface    | Sec 12 T22S R34E    |      | 380' |     | 685' |
| BHL        | Sec 2 T22S R34E     | 380' |      |     | 940' |
| Side-track |                     |      |      |     |      |
| Side-track |                     |      |      |     |      |

Vertical Correlation Well: GETTY 1 STATE  
Legals: SENW Sec 1 T22S R34E  
API: 30-025-26372  
Lat/Long (Nad 27) N 52° 42' 54.677", W -103° 42' 52.44"  
County and State Lea Co., NM  
Ground Elev: 3631  
Kelly Bushing Elev: 3631

| Formations               | Lithology                      | (calc)       |                 |                  | (calc)        |       | Sample<br><Lo   Hi> | Actual<br>Log | (calc)           |       | Adjusted<br>Prog Top | (calc)       |                 |                  |
|--------------------------|--------------------------------|--------------|-----------------|------------------|---------------|-------|---------------------|---------------|------------------|-------|----------------------|--------------|-----------------|------------------|
|                          |                                | TVD<br>(RKB) | TVD<br>(Subsea) | Iso to<br>Target | Sample<br>Top | Δft   |                     |               | Log<br><Lo   Hi> | Δft   |                      | TVD<br>(RKB) | TVD<br>(Subsea) | Iso to<br>Target |
| Rustler                  | Mixed lithologies              | 1669         | 1936            | 9503             |               | 1669  |                     |               |                  | 1669  |                      | 0            |                 |                  |
| Top of Salt              | Salt (Halite)                  | 2033         | 1572            | 9139             |               | 2033  |                     |               |                  | 2033  |                      | 0            |                 |                  |
| Base of Salt             | Limestone/Anhydrite            | 3131         | 474             | 8041             |               | 3131  |                     |               |                  | 3131  |                      | 0            |                 |                  |
| Delaware                 | Sand/Siltstone/Shale/Limestone | 3669         | -64             | 7503             |               | 3669  |                     |               |                  | 3669  |                      | 0            |                 |                  |
| Bone Spring              | Limestone                      | 8075         | -4470           | 3097             |               | 8075  |                     |               |                  | 8075  |                      | 0            |                 |                  |
| Avalon                   | Shale                          | 8104         | -4499           | 3068             |               | 8104  |                     |               |                  | 8104  |                      | 0            |                 |                  |
| 1st Bone Spring          | Sand/Siltstone/Shale/Limestone | 9058         | -5453           | 2114             |               | 9058  |                     |               |                  | 9058  |                      | 0            |                 |                  |
| 2nd Bone Spring          | Sand/Siltstone/Shale/Limestone | 9481         | -5876           | 1691             |               | 9481  |                     |               |                  | 9481  |                      | 0            |                 |                  |
| 3rd Bone Spring          | Siltstone                      | 10845        | -7240           | 327              |               | 10845 |                     |               |                  | 10845 |                      | 0            |                 |                  |
| Target (0 KBTVD @ 90.5°) | Limestone/Shale                | 11172        | -7567           | 0                |               | 11172 |                     |               |                  | 11172 |                      | 0            |                 |                  |
| Wolfcamp                 | Shale/Limestone                | 11229        | -7624           | -57              |               | 11229 |                     |               |                  | 11229 |                      | 0            |                 |                  |
| SURFACE CASING POINT     |                                |              |                 |                  |               |       |                     |               |                  |       |                      |              |                 |                  |
| INT. CASING POINT        |                                |              |                 |                  |               |       |                     |               |                  |       |                      |              |                 |                  |
| PROD. CASING POINT       |                                |              |                 |                  |               |       |                     |               |                  |       |                      |              |                 |                  |

**HOBBS OCD**  
**JAN 03 2018**  
**RECEIVED**

JAN 03 2018

RECEIVED

## One Energy Partners

WELL DETAILS: Lobo Rojo B3 State Com 2H

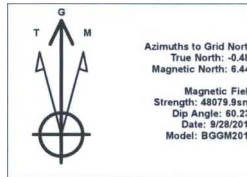
GL3580+25ft @ 3605 0usft  
Ground Level: 3580.0

| North | East | Lat       | Long                                         |
|-------|------|-----------|----------------------------------------------|
| 0.0   | 0.0  | 510371.40 | 778977.60 32° 23' 59.582 N 103° 25' 46.061 W |

## SECTION DETAILS Plan 1

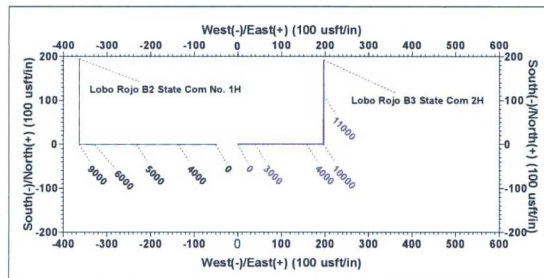
| Sec | MD      | Inc   | Azi   | TVD     | +N/-S  | +E/-W | Dleg  | Vsect  | Annotation     |
|-----|---------|-------|-------|---------|--------|-------|-------|--------|----------------|
| 1   | 0.0     | 0.00  | 0.00  | 0.0     | 0.0    | 0.0   | 0.00  | 0.0    |                |
| 2   | 2500.0  | 0.00  | 0.00  | 2500.0  | 0.0    | 0.0   | 0.00  | 0.0    | Start Nudge    |
| 3   | 2837.7  | 6.75  | 90.00 | 2836.9  | 0.0    | 19.9  | 2.00  | 0.4    | Hold 6.75° Inc |
| 4   | 4173.2  | 6.75  | 90.00 | 4163.1  | 0.0    | 176.9 | 0.00  | 3.5    | EOH            |
| 5   | 4510.8  | 0.00  | 0.00  | 4500.0  | 0.0    | 196.8 | 2.00  | 3.9    | Vertical       |
| 6   | 10705.4 | 0.00  | 0.00  | 10694.6 | 0.0    | 196.8 | 0.00  | 3.9    | KOP            |
| 7   | 11459.6 | 90.50 | 0.00  | 11172.0 | 481.6  | 196.8 | 12.00 | 485.5  | Landing Point  |
| 8   | 20860.6 | 90.50 | 0.00  | 11090.0 | 9882.3 | 196.8 | 0.00  | 9884.3 | BHL            |

Lea County, NM (NAD 27)  
Lobo Rojo B  
Lobo Rojo B3 State Com 2H  
380' FSL, 685' FWL of Sec12  
Wellbore #1  
Plan 1  
TL 11,172 KBTVD @ 90.50° Inc



## CASING DETAILS

| TVD   | MD    | Name    |
|-------|-------|---------|
| 900.0 | 900.0 | 13 3/8" |



HALLIBURTON | Sperry Drilling

