



OCD Case# 14630  
Lime Rock Resources A, L.  
May 26, 2011  
Ex# 5 E

Shrike 10 Com 2H  
Sec 10-25S-28E (N)  
SHL: 400' FNL, 2,590' FWL  
BHL: 400' FNL, 330' FWL  
Elevation: 2,922'  
Eddy County, NM

9-5/8", 36#, J-55, ST&C Casing @ 600'

**Surface Cement Information: (200% excess – TOC – Surface)**

**Lead** – 200 sacks of 35:65 (Poz:C) + 6% Bentonite + 2% CaCl<sub>2</sub> + 0.25 pps Poly-E-Flake  
(Density – 12.70 ppg, Yield – 1.88 cuft/sk, Mix Water – 10.07 gps)  
**Tail** – 140 sacks of Class C + 2% CaCl<sub>2</sub>  
(Density – 14.80 ppg, Yield – 1.34 cuft/sk, Mix Water – 6.36 gps)

Liner Top Packer	4,700'
Hydraulic Packer	4,850'
7" Shoe	4,950'
Frac Port - 1	5,034'
Hydraulic Packer	5,134'
Frac Port - 2	5,234'
Hydraulic Packer	5,334'
Frac Port - 3	5,434'
Hydraulic Packer	5,534'
Frac Port - 4	5,634'
Hydraulic Packer	5,734'
Frac Port - 5	5,834'
Hydraulic Packer	5,934'
Frac Port - 6	6,034'
Hydraulic Packer	6,134'
Frac Port - 7	6,234'
Hydraulic Packer	6,334'
Frac Port - 8	6,434'
Hydraulic Packer	6,534'
Frac Port - 9	6,634'
Hydraulic Packer	6,734'
Frac Port - 10	6,834'
TD	6,884'

TOC @ 2,000'

KOP @ 4,351'

Ball-Actuated  
Frac Port

6-1/8" Cherry Canyon Lateral

MTD @ 6,884'  
Est TVD @ 4,767'

Hydraulic Packers

4-1/2"; 11.6#, N-80, BTC Liner from 4,700' to  
6,880' w/ External Packers & Frac Ports

7"; 23# N-80, BTC Casing @ 4,950' MD  
(4,805' TVD) @ 71.9 deg inclination

**Intermediate Cement Information: (35% excess)**

**Lead** – 230 sacks of 35:65 (Poz:C) + 6% Bentonite + 5% (BWOW) NaCl<sub>2</sub> + 0.25 pps Poly-E-Flake  
(Density – 12.40 ppg, Yield – 2.09 cuft/sk, Mix Water – 11.64 gps) – Top of cement – 2,000'  
**Tail** – 130 sacks of Class C + adds.  
(Density – 14.80 ppg, Yield – 1.33 cuft/sk, Mix Water – 6.28 gps) – 800 linear ft of tail cement

#### Drilling Points:

- To maintain control in the vertical portion of the hole, we will survey every 200 – 500' using a TOTCO inclination device. We will calculate a maximum deviation from surface to kick-off point (KOP) to use as a decision point. If we get a survey that exceeds the maximum, we will pick up directional tools to correct the hole angle prior to crossing any lease boundaries.
- At KOP (or at the point we have to pick up directional tools) we will run a gyro survey tool in the hole to verify direction (azimuth) as well as inclination. The gyro tool has a higher degree of accuracy than the TOTCO survey.
- Once we pick up directional tools, we will have survey tools in the hole with data being transmitted back to surface. We will survey at every connection (+/- 30'). The curve for this well will be drilled at a build rate of 12 degrees / 100'.
- We will set our 7" Intermediate casing at approximately 4,900'. This depth will occur before we have completed our curve. The casing point will be at approximately 65 degrees inclination and a vertical section of at least 280'. This would make our first "take point" no less than 330' from the east lease line or no more than 2,310' from the west section line.
- We will drill our lateral to a measured depth of 6,883.92'. This depth has a vertical section of 2,259.5' and is 330.5' from the west line.
- We will run a production liner from 200' inside of the 7" intermediate casing to TD. The liner will be un-cemented and will contain external casing packers with frac sleeves between each packer. (The total number of packers / sleeves will be determined after we reach TD). Our initial plan is to have 10 individual frac sleeves across the +/- 1,900 ft of lateral.