



Southland Royalty Company

Carracas 32-5 24 #1 Rio Arriba County, NM

TD – 8,953 ft MD

17 1/2" hole to 620'.

Surface Csg: 17jts 13 3/8" 54.5# lb/ft J-55 ST&C
Setting Depth: 618 ft kb

Cement

475sx 13.5# 1.85yield surface cmt.
Circulate 85 bbls good cmt to surface

12 1/4" hole to 4,533'.

Int Csg: 102jts 8 5/8" 32# N-80 LT&C
Setting Depth, FS: 4,509 ft
Float Collar: 4,462 ft
Hyd DV Tool: 3400 ft

Cement

Stage 1: Lead-300sx 12.3# 1.97yield.
Tail-140sx 13.5# 1.3yield
Circ 50 bbls good cmt off DV tool
Stage 2: Lead-875sx 12.3# 1.95yield
Tail-145sx 13.5# 1.31yield.
Circ 70 bbls good cmt to surface.

7 7/8" hole to 8,953'.

Prod Csg: 201 jts 5.5" 17# P-110 LT&C
Setting depth, FS: 8,938 ft
PBTD, FC: 8,891 ft

Cement

715sx 13.3# 1.36 yield cmt.
Top of cmt: ~ 4700 ft (based on CBL)

FM Tops

Nacimiento – 1675 ft
Ojo Alamo – 3326 ft
Kirtland Shale – 3531 ft
Fruitland Coal – 3842 ft
Pictured Cliffs – 4056 ft
Lewis Shale – 4533 ft
Cliffhouse – 6152 ft
Menefee – 6430 ft
Point Lookout – 6567 ft
Mancos Shale – 7140 ft
Greenhorn – 8612 ft
Graneros – 8657 ft
Dakota – 8763 ft

Frac DK - 10/07/2017

15% HCl (50 bioballs) – 2500 gal
Water – 4,916 bbls

100 Mesh – 38,900 lbs
40/80 Hydroprop LWC – 73,125 lbs
30/50 CRC – 27,180 lbs
Total Prop – 139,205 lbs

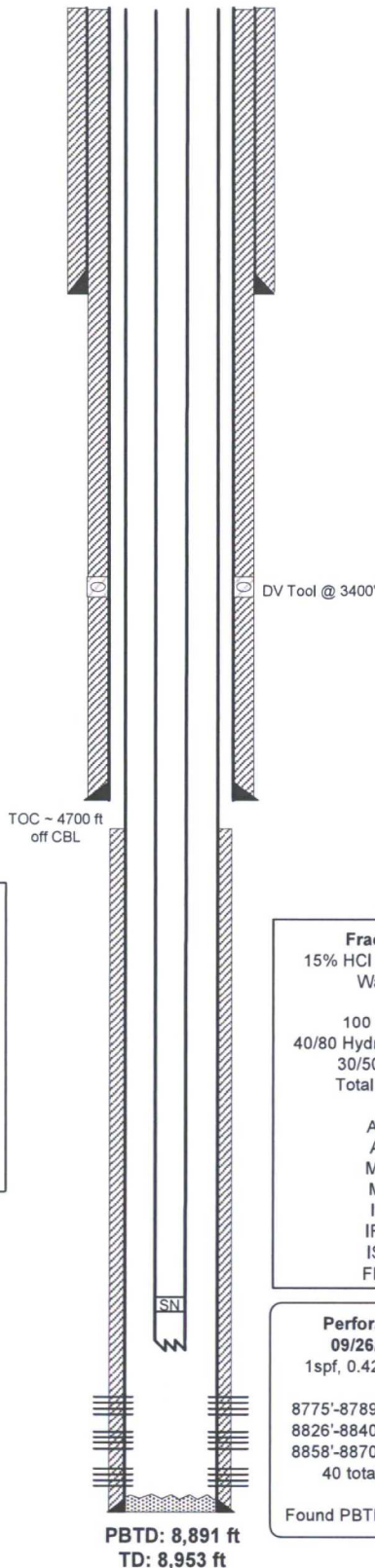
ATR - 69.5 BPM
ATP - 4,950 psi
MTR - 69.8 BPM
MTP - 5,472 psi
ISIP - 2,495 psi
IFG - 0.716 psi/ft
ISDP - 3,707 psi
FFG - 0.853 psi/ft

Perforations

09/26/2017
1spf, 0.42", 60deg

8775'-8789'; 14 holes
8826'-8840'; 14 holes
8858'-8870'; 12 holes
40 total holes

Found PBTD at 8873 ft



Prepared by: Savage
Date: 10/19/2017

KB = 16 ft
GL = 7,340 ft
KB = 7,356 ft
API# 30-039-31362

Spud Date: 08/31/2017
DK Frac Date: 10/07/2017

Prod Tbg 10/19/2017:

2.375" 4.7# L-80 tbg
268 jts, 1.78" ID SN, NC tail jt.
EOT= 8,735' ; SN= 8,701'

PBTD: 8,891 ft
TD: 8,953 ft