

NIGHTHAWK PRODUCTION LLC

Jolly Ranch 16-1
SE SE Sec 1, T13S, R56W
LINCOLN COUNTY, COLORADO
API No. 05-73-06310

Prepared By: Harold Mayland
Date: 7/28/2014

ELEVATION

R.B. 5201'
G.L. 5188'
KB 13'
BHT 165°
Spud date: 03/15/08
Completion 08/04/08

Lat: 38.9399
Long: 103.6129
625' FSL 1,308' FEL

Cmt 3,133' to 2,800'

Cut casing @ 3,133'

TOC 2nd Stage @ 3800'
(CBL)

Port Collar @ 4,098'

TOC 1st Stage @ 5,500' (CBL)

Marmaton
6658-6662'
6758-6762'

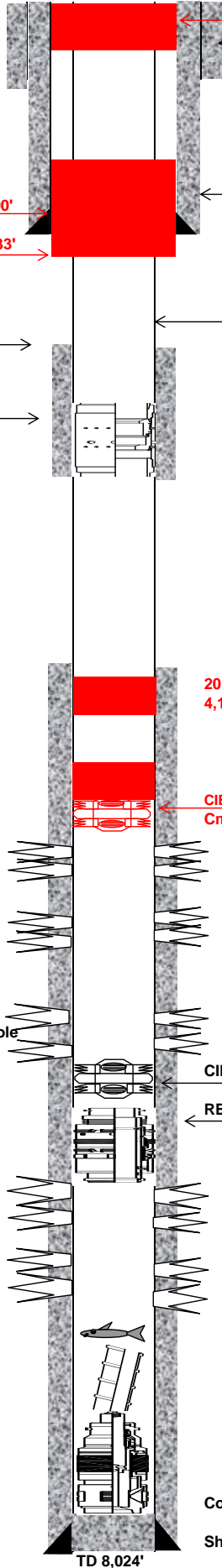
Excello/Cherokee
6816-6840'

Cherokee "C"
6934-6942' 3 SPF 0.47" dia hole
6988-6998'

Upper Atoka
7056-7066' 7206-7210'
7130-7136' 7230-7234'
7164-7168' 3 SPF

Lower Atoka
7288-7291' 7356-7359'
7307-7311' 7368-7370'
7323-7326' 7377-7380'
7341-7344' 3 SPF

Not to scale



40 sks cmt
100' to surface

Geological tops estimated:

Wolfcamp	5347'	Atoka	7030'
LKC	6143'	Morrow	7440'
Marmaton	6607'	St Louis	7794'
Cherokee	6837'	Spergen	7857'

Drilled hole 17 1/2"
SURFACE CSG: 13 3/8" 54.5# K55 ST&C @ 341'
Cmt: 350 sks, cmt to surface

Drilled hole 12 1/4"
INTERMEDIATE CSG: 8 5/8" 24# & 32# J55 ST&C @ 3,083'
Cmt: 325 sks did not circ to surface

Drilled hole 7 7/8"
Production Casing: 5 1/2" 17# J55 LT&C @ 7,626'
1st stage 300 sks
2nd stage 270 sks, did not Circulate

Proposed P&A

20 sks cmt
4,100' to 3,120'

CIBP @ 6,600' w/ 20 sks cmt
Cmt 6,600' to 6,500'

CIBP @ 7,025'
RBP @ 7,030'

NOTE:

08/27/08 Perf L Atoka 7,288-7,380'
09/15/08 Acidize 7,288-7,380' w/1000 gal 15% HCL
09/24/08 Frac L Atoka 7,288-7,380' w/52,510# 40/70 black resin sand, and 4592 bbls slick water.
08/13/09 Perf U Atoka 7,056-7,168'
08/15/09 Acidize 7,056-7,168' w/1500 gal 15% HCL
09/01/09 Set RBP @ 7,030', Perf 6,934-6,998'
09/03/09 Acidize 6,934-6,990' w/1000 gal 7 1/2% HCL, frac w/14,875# 20/40 sand, and 1032 bbls water.
05/01/12 Set CIBP @ 7,025', Perf 6,816-6,840'
05/02/12 Acidize 6816-40' w/ 2400 gal 15% MCA.
05/05/12 Perf 6758-62' and 6658-62'
05/07/12 Acidize 7658-62' w/400 gal 15% MCA
05/08/12 Acidize 6658-62' w/400 gal 15% MCA.

Fish:
Top of fish @ 7,570'
3 jts tbg, SN, Mud anchor, and retrievable bridge plug.
Make and 5/9/2011

Collar @ 7,578'

Shoe @ 7,626'

No description of what the make, model of the RBP.

TD 8,024'