



NIGHTHAWK PRODUCTION LLC

Big Sky 5-11
SW NW Sec 11, T6S, R54W
LINCOLN COUNTY, COLORADO
API No. 05-73-06552-00

Prepared By: Harold Mayland
Date: 2/3/2014

ELEVATION
R.B. 5,232
G.L. 5,217
KB 15'
BHT
BHP
Spud date: 01/14/14
TD date: 02/13/14
Completion

Lat: 39.545180
Long: -103.414600
1922' FNL 621' FWL

Production Tubing

Top of Cement @ ±3500'

Geological tops:

Niobrara	3680	Cherokee	7446
Dakota	4614	Atoka	7637
Stone Correl	5996	Morrow	7880
Wolfcamp	6200	Spergen	8063
LKC	6912	Simpson	8190
Marmaton	7244	TD	8284

Drilled hole 12 1/4"
SURFACE CSG: 8 5/8" 24# J55 ST&C @ 336'
Cmt: 122 sks class "G" , 14# 1.54 yield
8 bbls Cmt to surface.

Drilled hole 7 7/8"
Production Casing: 5 1/2" 17# N80 LT&C @
Cmt: Leed: 843 sks. TXI 12 PPG, 1.80 yield
Cmt: Tail: 266 sks. TXI 13 PPG 1.89 yield
Lost circulation after 120 bbls displacement

5 1/2" 17# J55		2 7/8" J55 EU 8RD		2 7/8" X 5 1/2"	
I.D.	4.892	I.D.	2.441		
Drift	4.767	Drift	2.347		
Burst		Burst	7,260		
Lin ft/bbl	43.01	Lin ft/bbl	172.7500	Lin ft/bbl	65.71
BBL/linft	0.0232	BBL/linft	0.00579	BBL/linft	0.0152

	Qty	Length	Depth in hole
Tubing			
Avg Jt length			
KB difference		12.00	12.00
Stretch		2.33	14.33
2 7/8" EU 8RD J55 tbg	244	7,936.01	7,950.34
TAC		3.17	7,953.51
2 7/8" EU 8RD J55 tbg	6	195.08	8,148.59
Seating Nipple		1.10	8,149.69
2 7/8" EU 8RD J55 tbg	1	32.45	8,182.14
2 7/8" X 6' Perforated pup jt		6.20	8,188.34
2 7/8" X 3' Perforated pup jt		3.30	8,191.64
2 7/8" X 2 3/8" X over		0.80	8,192.44
2 3/8" TXN nipple 1.875" 1.791 No go		1.00	8,193.44
2 3/8" X 6' pup jt		6.30	8,199.74
2 3/8" tap bull plug.		0.50	8,200.24
Total Jts	251		
Rods			
Polish rod 1 1/2" x 22'			
Pony rod 4' x 1"			
1" rods EL			
7/8" rods EL			
3/4" rods EL			
1 12/" wt bars			
1" X2' pony rod			
2 1/2" x 2" X 26" RWBC			

NOTE:

Spergen
8,090'-8,124'

PBTD @ 8,235'
Collar @ 8,235'

Shoe @ 8,282'

TD 8,284'