



NIGHTHAWK PRODUCTION LLC

Blackcomb 5-14
SW NW Sec 14, T6S, R54W
LINCOLN COUNTY, COLORADO
API No. 05-73-06601-00

Prepared By: Harold Mayland
Date: 9/19/2014

ELEVATION
R.B. 5,197'
G.L. 5,182'
KB 15'
BHT
BHP
Spud date: 08/21/14
TD date: 09/10/14
Completion

Surface location
Lat: 39.530340
Long: -103.412750
1996' FNL 1097' FWL

Not to scale

Geological tops:			
Niobrara	3735	Cherokee	7381
Dakota	4556	Atoka	7558
Stone Correl	5944	Morrow	7807
Wolfcamp	6168	M2	7954
LKC	6856	M1	7976
Marmaton	7187	Spergen	8024
		Simpson	8108

Drilled hole 12 1/4"
SURFACE CSG: 8 5/8" 24# J55 ST&C @ 353'
Cmt: 175 sks class "A" , 14.8# 1.54 yield
6 bbls cmt to surface

Drilled hole 7 7/8"
Production Casing: 5 1/2" 17# N80 LT&C @ 8,364'
Cmt: Lead: 858 sks 12 TXI. 12 PPG, 1.80 yield
Cmt: Tail: 306 sks 13TXI. 13 PPG 1.89 yield
55 bbls cmt to pit

5 1/2" 17# N80		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	7,740	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

Production Tubing
Top of Cement @ 600'

TUBING	Qty	Length	Depth in hole
Avg Jt length			
KB difference		13.00'	13.00'
Stretch		2.33'	15.33'
2 7/8" EU 8RD J55 tbg	253	7,905.57'	7,920.90'
TAC		2.67'	7,923.57'
2 7/8" EU 8RD J55 tbg	6	185.83'	8,109.40'
Seating Nipple		1.10'	8,110.50'
2 7/8" X 4' Perforated pup jt		4.00'	8,114.50'
2 7/8" EU 8RD J55 tbg			8,114.50'
2 7/8" X 6' Perforated pup jt		6.00'	8,120.50'
2 7/8" X 2 3/8" X over		0.50'	8,121.00'
2 3/8" TXN nipple 1.875" 1.791 No go		1.00'	8,122.00'
2 3/8" X 8' pup jt		8.00'	8,130.00'
2 3/8" tap bull plug.		0.60'	8,130.60'
Total Jts	259		
Rods			
Polish Rod	1 1/2" x 30' w/1 1/4" x 16' Liner		
Pony rod	1" X 8' MMS		
Pony rod	1" X 6' MMS		
Pony rod	1" X 4' MMS		
Pony rod	1" X 2' MMS		
1" Rods	MMS		
1" Rods	MMS Guided 4/per		
7/8" Rods	MMS Guided 4/per		
3/4" Rods	MMS Guided 4/per		
1 1/2" K-Bars			
Pony rod	1" x 2'		
Pump	2 1/2" x 2" x 26" RHWBC BNC 2 Stg		

NOTE:
09/22/14 Perf 8068-87'

Spergen
8,068'-8,087'

PBTD @ 8,257'
Collar @ 8,273'
Shoe @ 8,365'

TD 8,365'