



# NIGHTHAWK PRODUCTION LLC

Jolly Ranch 2-1  
 NW NE Sec 1, T13S, R56W  
 LINCOLN COUNTY, COLORADO  
 API No. 05-73-06311

Not to scale

ELEVATION  
 R.B. 5,104'  
 G.L. 5,092'  
 KB 12'  
 BHT  
 Spud date: 4/20/08  
 Completion: 7/23/08  
 Lat: 38.94975  
 Long: 103.61375  
 1,068' FNL 1,495' FEL

Prepared By: Harold Mayland  
 Date: 4/19/2012

Geological tops estimated:  
 LKC 6240' Morrow 7623'  
 Marmaton 6636' St Louis 7902'  
 Cherokee 6909' Spergen 7935'  
 Atoka 7135' Gmt Wash 8220'

Drilled hole 17 1/2"  
**SURFACE CSG: 13 3/8" 54.5# K55 ST&C @ 437'**  
 Cmt: 350 sks, cmt to surface

Production Tubing  
 TOC unknown  
 Port Collar @ 4,147'  
 Cmt 6/26/08

Drilled hole 7 7/8"  
**Production Casing: 4 1/2" 11.6# N80 LT&C @ 8,397'**  
 1st stage 485 sks  
 2nd stage 300 sks, did not come to surface.  
 2 3/8" J55 EU 8RD 2 3/8" X 4 1/2"  
 I.D. 1.995  
 Drift 1.901  
 Burst 7,700  
 Lin ft/bbl 258.65 Lin ft/bbl 99.37  
 BBL/linft 0.0039 BBL/linft 0.0101

Avg jt length 32.95

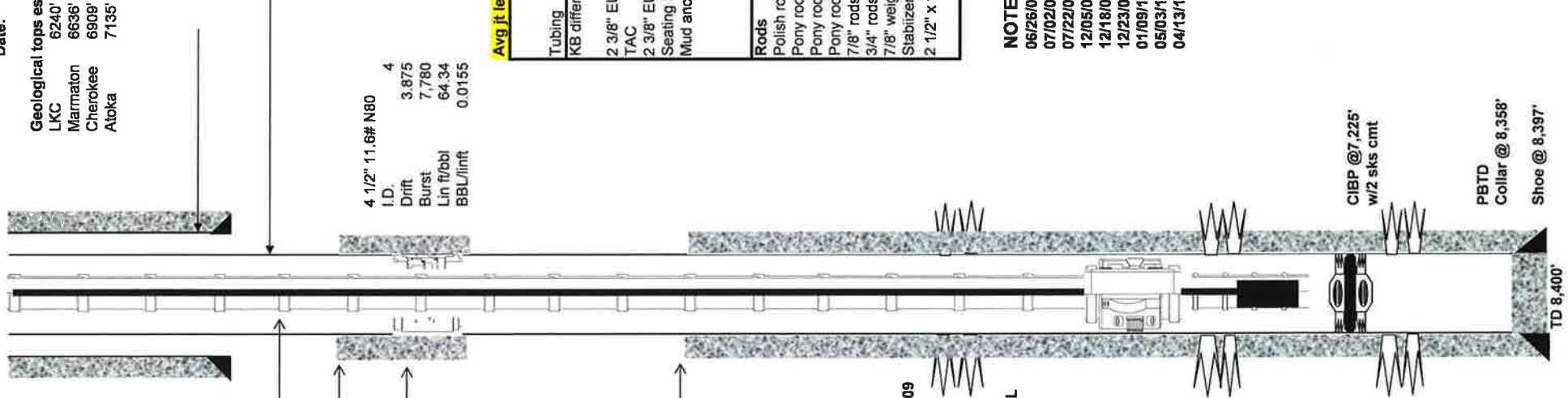
Tubing	Qty	Length	Depth in hole
KB difference		10.00	10.00
2 3/8" EU 8RD J55 tbg	202	6655.06	6,665.06
TAC		2.33	6,667.39
2 3/8" EU 8RD J55 tbg	9	296.82	6,964.21
Seating Nipple		1.10	6,965.31
Mud anchor		16.40	6,981.71
<b>Total Joints</b>	<b>211</b>		<b>6,981.71</b>
<b>Rods</b>			
Polish rod 1 1/2" x 22'	1	4.00	
Pony rod 4' x 7/8"	1	6.00	
Pony rod 6' x 7/8"	1	8.00	
7/8" rods	135	3,375.00	
3/4" rods	139	3,475.00	
7/8" weight bars	5	125.00	
Stabilizer pony rod 7/8" x 2'	1		
2 1/2" x 1 1/2" x 20' RWBC pump	1	20	0.00

TOC 5,780'  
 Squeezed w/150 sks 12/18/09  
**Marmaton "B"**  
 6841-6843' 4 SPF  
 Acidize w/500 gal 15% HCL  
 6843-6852'  
 Frac 6841-52 w/7000 gal 15% HCL  
 468 bbls fluid

Cheerokee ' 4 SPF  
 6,918-6,922'  
 6,918-6,922' reperf

Lower Atoka  
 7364-7369' 7416-7420'  
 7384-7389' 7431-7436'  
 7400-7402' 7451-7455'  
 7408-7410' 3 SPF  
 Frac w/22,077# 20/40 sand  
 917 bbls x-linked gelled fluid

**NOTE:**  
 06/26/08 Perf Marmaton "B" 6,841-43'  
 07/02/08 Acidize 6,841-43', w/500 gal 15% HCL.  
 07/22/08 Perf Marmaton "B" 6,843-52'. 5-15 BOPD  
 12/05/08 Acidize 6841-52' w/7,000 gal 15% HCL, 468 BBLs wtr.  
 12/18/09 Squeeze Marmaton perms 6,841-52' w/200 sks cmt  
 12/23/09 Perf Atoka 7,364-7,455'  
 01/09/10 Frac w/ 22,077# 20/40 sand, 917 BBLs x-linked gel wtr.  
 05/03/10 Set CIBP @ 7,225', Perf Cherokee 6,918-22'.  
 04/13/12 Reperf Cherokee 6918-22'.



CIBP @ 7,225'  
 w/2 sks cmt

PBTD  
 Collar @ 8,358'  
 Shoe @ 8,397'

TD 8,400'