

OPERATOR: K.P. Kauffman Company Inc.  
 WELL: Hepp 31-32  
 FIELD: WATTENBERG  
 API #: 05-123-25314  
 LEASE #: \_\_\_\_\_  
 UIC #: \_\_\_\_\_

CNTY: WELD FTG: \_\_\_\_\_  
 STATE: CO Q-Q: SWNW  
 SPUD: 3/11/2008 SEC.: 32  
 COMP: 3/20/2008 TWS: 4N  
 STATUS: TA RGE: 67W  
 WBD DATE: 1/9/2023 BY: \_\_\_\_\_

**WELLBORE DIAGRAM**

KBE: 5039 '  
 KB: 12 '  
 GLE: 5027 '

TD (ft): 8001 '  
 PBTD (ft): 7945 '

12.25" Hole  
 8.625" 24# Csg @ 728 '  
 Cmtd w/510 sxs

TOC @ 3855 '  
 CBL

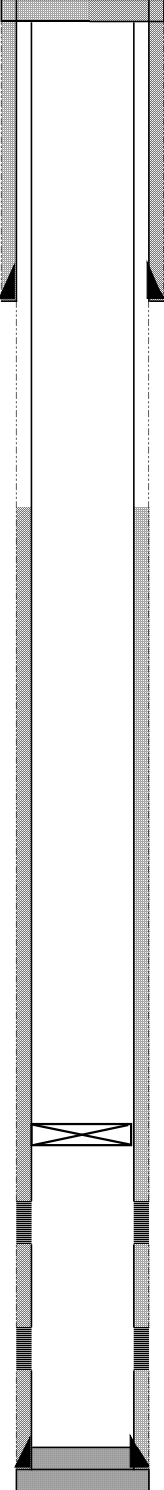
8.875" Hole  
 4.5" 11.6# Csg @ 7990 '  
 Cmtd w/710 sxs

Set RBP @ 7056 '

NIOBRARA Perfs  
 7156'-7252'

CODELL Perfs  
 7364'-7384'

PBTD (ft): 7945 '  
 TD (ft): 8001 '



**CASING RECORD**

HOLE (in)	SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)
12 1/4	8 5/8	24		0	728
8 7/8	4 1/2	11.6		0	7990

**TUBING RECORD**

SIZE (in)	WT (lb/ft)	GRADE	JOINTS	BTM (ft)

**PERFORATION RECORD**

ZONE	TOP (ft)	BTM (ft)	HOLES	STAGE	STATUS
NIOBRARA	7156	7252	88		
CODELL	7364	7384	80		

**WELLWORK HISTORY**

Treatment Summary:

4/10/2008:

Codell: Pumped 20,067 gal 7% KCl pre-pad, 95,786 gal silver stim w/ 242,580 # 30/50 mesh sand and 8,000 # 20/40 mesh SB, staged 1 ppg to 4 ppg, flushed at 3.5 ppg drop, 2873 BLWTR

Niobrara: Pumped 70,099 gal FDP & FR pre-pad, 89,796 gal silver stim w/ 238,600 # 30/50 mesh sand and 8,000 # 20/40 mesh SB, staged 1 ppg to 4.5 ppg, flushed at 4 ppg drop, 4064 BLWTR

Longstring Cement:

3/18/2008:

Ran 191 jts 4.5" OD 8rd 11.6# SEAH-80 new casing, LT&C, range 3. Placed 20 centralizers from 6410 to 7944. Tagged TD, circulated one hour to reduce mud viscosity to 42, MIRU Halliburton, preflush with 24 bbls mud-flush followed by 20 bbl Cla-Fix water. Mix and pump lead stage of 380 sks 50/50 Poz at 13.8 lb/gal, 1.34 cuft/sk, followed by 110 sks HLC Standard at 10.5 lb/gal, 4.06 cuft/sk as stage 2, followed by 220 sks 50/50 Poz at 14.2 lb/gal, 1.47 cuft/sk as tail stage. Displace cement with 123 bbls Cla-Fix water. Plugged-down at 4:45 p.m. 3/18/08, pressured to 2465 psi. Released pressure, plug held.

1/9/23:

RBP set @ 7056' for offset frac

Formation Tops:

Parkman 3736'  
 Sussex 4011'  
 Shannon 4725'  
 Niobrara 7069'  
 Fort Hays 7340'  
 Codell 7364'  
 J-Sand 7816'