

WELLBORE DIAGRAM

ACTUAL P&A WBD

SHL: 900' FNL & 850' FEL
Top Prod Int: 1552' FNL & 959' FEL
BHL: 2261' FNL & 958' FEL

Operator: Koch Exploration Company
Well Name: Federal A-31-2-96N
Lease Number: COC-9223
Location: NENE Sec. 31-T2N-R96W
Field: White River Dome
County, State: Rio Blanco, CO
API Number: 05-103-09471
Diagram Date: 9/17/2012

KB 5867'

GL 5853'

17 1/2" hole
13 3/8" 48# csg @ 330'
375sx Class G cmt

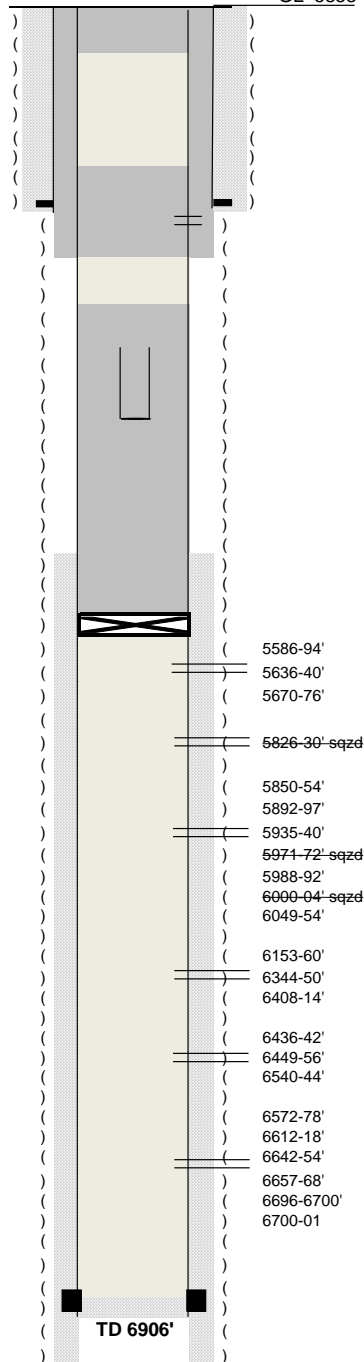
12 1/4" hole
9-5/8" 36# J55 csg set @ 1405'
480sx 50/50Pozmix
& 100sx Class G cmt

Fish from 2300' - 2480'
Cmt'd w/ 35sks

Williams Fork: 3432'

Iles: 6822'

8 3/4" hole
5-1/2" 17# csg landed @ 6900'
cmt'd w/200 sx Class G
& 350 sx Class G



Actual Plugging Procedure

- 1 Cleanout wellbore to 5593'; heavy losses, switched to air/foam
- 2 Set CIBP @ 5520'
- 3 Pump 1st plug: 80sks (15.6#, 1.16 yield, 92.8cuft)
- 4 WOC. Tag plug @ 4926'. Pump 2nd plug: 75sks (15.6#, 1.16 yield, 87cuft)
- 5 WOC. Tag plug @ 4100'. Pump 3rd plug: 65sks (15.6#, 1.16 yield, 75.4cuft)
- 6 WOC. Tag plug @ 3913'. Pump 4th plug: 85sks (15.6#, 1.16 yield, 98.6cuft)
- 7 WOC. Tbg stuck. RIH w/ sinker bars: tag hard @ 2633', find EOT @ 2480'.
- 8 Pump down tbg; pressure test to 1000# but dropped off as soon as stopped pumping.
- 9 Pressured up 5 1/2" x 2 3/8" annulus to 750#; no drop. No communication.
- 10 Ran free point: jnt @ 2449' 100% stuck, jnt @ 2422' 50% free.
- 11 Discuss with White River BLM office: they recommended to pump 20sks then cut @ 2422'; sting into cut tbg and squeeze.
- 13 Unable to pull from cut @ 2422'; tried again at 2300' and able to pull
- 14 Pump 25sks over cutoff at 2300'. WOC.
- 15 Tag cmt @ 2296', 4' above cut tbg. Pressure test csg to 500#, held for 15mins.
- 16 Shoot squeeze holes @ 1455'. Spot additional 15sks on TOC @ 2296'.
- 17 Pull up to 1515' and establish circ thru annulus to surf.
- 18 Pump squeeze: 88sks (15.6#, 1.16 yield, 102cuft)
- 19 WOC. Tag TOC @ 1140' - shoe @ 1405'. OK by BLM rep Justin Wilson.
- 20 Set surf plug; EOT @ 124', pump 24 sks (15.6#, 1.16 yield, 27.84cuft)
- 21 1" the 5 1/2" x 9 5/8" annulus with 21sks (15.6#, 1.16 yield, 24.36cuft) - no drop in cmt
- 22 Weld on cap, clean up location - well plugged 7-26-2012