

WELLBORE DIAGRAM

CURRENT 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: 6/29/2012

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

Williams Fork: 3432'

TOC @ 5350'

EOT 2-3/8" Tbg @ 6368'

lles: 6822'

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

KB 5867'

GL 5853'

5586-94'

5636-40'

5670-76'

5826-30' sqzd

5850-54'

5892-97'

5935-40'

5971-72' sqzd

5988-92'

6009-04' sqzd

6049-54'

6153-60'

6344-50'

6408-14'

6436-42'

6449-56'

6540-44'

6572-78'

6612-18'

6642-54'

6657-68'

6696-6700'

6700-01'

PBTD 6857'

TD 6906'

Well History

Spud Date: 10/1/1990
Rig Release Date: 11/15/1990
Completion Date: 1/30/1991

ORIGINAL COMPLETION 1/30/1991:

1/11/91: Perf 5829-30 w/ 4" csg gun, 20 holes, acid, fracd w/ 55,560 gal YF140 100,000# 16/30 sand

Perf 5826-30, 6000-04' w/ 4" csg gun, 4spf, 0.45", 32 holes, sqz'd w/ 75 sx Class G, 100 sx Class G

Perf 5971-72 w/ 4" csg gun, 29 holes, fracd w/ 51,600gal YF140, 95,000# 16/30 sand

Perf 6436-42', 6449-56', 6540-44' - trouble w/ frac

Perf 6572-78, 6612-18, 6642-54, 6657-68, 6696-6700 w/ 4" csg gun, 39 holes, fracd screen out w/ 60,000# sand in formation

RECOMPLETION 6/25/2001

6/29/2001: Set CIBP @ 6048', fill csg w/ wtr. 100sx squeeze cmt Class G w/ 2% CC, 20bbl. Wtr ahead 2bpm @ 1100#
Pump 19bbls. Perfs sqzd w/ 18.5bbls. Perfs sqzd: 5829-30, 5971-72'

6/29/2001: Drill out CIBP, push to 6743', btm perf @ 6700'

7/2/2001: Perf Stg 1: 6408-14, 6344-50, 6153-60 w. 3 3/8" exp guns, 2 spf, 38 holes, 23gm. Fracs w/ BJ Vistar 16LT fluid Avg rate 60bpm, avg psi 3300, ISIP 1050. Had to flush early due to pressure. Pumped 157,000# of 20/40sand out of 172,500#

7/2/2001: Perf Stg 2: 6049-54, 5988-92, 5935-40, 5892-97, 5850-54, w/ 3 3/8" exp guns, 23gm 2spf, 46 holes. Fracd w/ BJ Vistar 20LT fluid 275,000# 20/40sand, 82,000# flexsand ms 8/14 mes, avg rate 60, avg psi 2200, ISIP 2000

7/2/2001: Perf Stg 3: 5670-76, 5636-40, 5586-94 w/ 3 3/8" exp guns, 23gm, 2spf, 36 holes. Fracd w/ BJ Vistar 167LT fluid, 99,600# 20/40sand, 6000# flexsand ms 8/14 mesh, avg rate 60, avg psi 3300, ISIP 2000