

BLACK HILLS PLATEAU PRODUCTION LLC

Horseshoe Canyon 1-28
SWSE Sec 28, T9S, R 97W
API # 05-077-08327
Lease COC-013788
Mesa County, Colorado

Spud: 12/8/80 TD: 1/2/81 Cmpl: 2/12/81
GL: 5940', RKB: 5953', PBTD 3290', TD 4347'

Surface casing: 8 jts 10 3/4" 40.5# K-55 ST&C @ 372', hole size 13 3/4", 225 sx
(12/10/80) Class G w/2% CaCl. Cmt circulated. TOC Surface.

Production casing: 7" 20# @ 3600', hole size 8 3/4", 300 sx lite and 100 sx
(12/19/80) reg w/2% CaCl.
1/30/81 CBL TOC 2842' (mid-point in Rollins sand)

Production Tubing: 98 jts 2 3/8" tbg, SN, 1 jt RBG unloader, 32A pkr 2 3/8" x 7".
(8/17/06) EOT @ 3206'

Perforations: 2/10/81: **COZZ** 3024, 3026, 3028, 3030, 3032, 3034, 3040, 3045, 3050 (Jet 0.38" 1 spf, Total 9 holes)

- 2/12/81 Frac 3024-3050' w/ 500 gal 15% reg ac and w/ 429 bbls 5% KCl, 80,000# 20-40 sd & 1,093,000 SCF N2, 23-27 BPM, CP 1600 to 1900 psi, TP 1700 to 2250 psi
- 2/10/81 RBP @ 3100', pkr @ 3010', brk dn perfs w/ 5% KCl wtr & 15 BS, 4 1/2 BPM, 1600 to 3500 psi, balled off

1/31/81: **CRCRN** 3236, 3238, 3240, 3242, 3244, 3246, 3248, 3250 (Jet 0.38" 1 spf, Total 8 holes)

- 2/4/81 Frac 3236-3250' w/ 500 gal 15% ac, 17,970 gals 2% KCl wtr, 73,500# 20-40 sd & 1,000,000 SCF N2, 1400-1900 psi @ 22 BPM foam & 1/4# sd/gal, ISIP 1630 psi, opened to pit after 1 hr, TP 1500 psi, left flwg overnight.
- 2/3/81 Broke down perfs 3236-3250' w/ 5% KCl wtr, broke fm 3100 to 2400 psi @ 4 1/2 BPM, dropped 15 ball sealers, press incr to 3000 psi but did not ball off.

Production **CUM: 105 MMCF (as of 8/31/01)**
Status: SI
2/14/81 24 hr test: 3/4" choke, 897 mcf, 212 BWPD, TP 80, CP 90
2/3/81 DOFP

NOTE: HIC 2000'-2846' (8/12/06)

History:

Drlg

- Note: APD originally permitted to a TD of 7,680'
- 1/4/81 Drpd derrick-apprx 3 days to repair rig
- 1/3/81 Drl out cmt fr 3680-4000' & LC, 5 hrs mix LCM & pmp 600 bbls w/no rtns, 12 hrs LDDP
- 1/2/81 Drlg w/air. TD reached. 2 hrs work TI hole & stuck pipe. 9 hrs trips & spt 200 sx cmt @ 3900'.
- 1/1/81 Lost 500 BM @ 4265' w/ 35% LCM
- 12/31/80 Drlg w/ MW 9.4, Vis 41, WL 17.8, pH 10.5%, 4.5% Sol, LCM 12%, 6% KCl
- 12/30/80 Drlg w/ MW 9.2, Vis 44, WL 8, 11.0 pH, 4.5% Sol, 20% LCM, 4% KCl. 17 hrs jar fish loose. Circ to btm, full circ.
- 12/29/80 Drlg w/mud. 7 hrs work stuck pipe & spt 25 bbls dsl, 3 hrs freept & back off @ 3652'. Left 15 DCs IH, ran OS, BS & jars, jarring on fish, have full circ, bit @ 3992'. Got stuck while reprog pumps.
- 12/28/80 Drlg w/air
- 12/27/80 Drlg w/ MW 9.2, Vis 45, WL 36, pH 11.0, 4.5% Sol, 28,000 ppm, 3.8% KCl, 28% LCM. Drl hard cmt fr 3560-3840' and soft cmt fr 3840-3900'. Have 100% circ
- 12/24/80 Losing 10 BMP/min. 2 hrs spt cmt @ 3590' (100 sx ThixoTropic cmt). Sqzd up to 1100#.
- 12/23/80 9 hrs mix and circ LCM, lost apprx 600 BM
- 12/22/80 Drlg w/ MW 9, Vis 45, WL 10.8, pH 10.5, 4% Sol. Trip for plug'd bit, 13 ½ hrs mix mud & trying to get LC back
- 12/21/80 Drlg w/air
- 12/19/80 3 hrs try to regain circ & cmtg. Ran 89 jts 7" set @ 3600'. Cmtd w/ 300 sx lite and 100 sx reg w/ 2% CaCl. No circ while cmtg. Bumped plug w/ 1500#
- 12/18/80 Lost 400 BM @ 3423'
- 12/17/80 Drlg w/ MW 9, Vis 92, WL 15, pH 8, 4.1% Sol, LCM 30%, 6 hrs LC @ 3423'
- 12/16/80 Drlg w/ MW 9.1, Vis 49, WL 16.8
- 12/11/80 Drlg w/water
- 12/10/80 Ran Surface Csg: 8 jts 10 ¾". Cmt 225 sx Class G w/2% CaCl. Cmt circ. TOC Surface
- 12/8/80 Spud

Workover (8/10/06-8/18/06)

- 8/17/06 Swab 50 bbls fluid 1 hr after flow fluid level 2000'. Reset pkr land donut. ND BOP NU Wellhead. 98 jts 2 3/8" tbg, SN, 1 jt RBG unloader, 32A pkr 2 3/8" x 7". EOT @ 3206'. Pkr set w/ 20,000# tension under COZZ perfs, above CRCRN perfs. Swab 10 bbls fluid. Gas cut fluid level at 2000'.

- 8/16/06 Swab 85 bbls 35 runs. Some after flow. Fluid level start 1200' end 1600'.
- 8/15/06 Swab 141 bbls 40 runs. Some after flow. Fluid level start 1200'. End 1800'.
- 8/12/06 TIH w/ prk, test at 1500', 1900', 2110', 2300', 2500', 2700', 2800', 2875'. Csg good to 2000'. Good below 2846'. TOOH w/pkr. TIH retrieve RBP TOOH. TIH w/32A pkr set at 3200'. Csg good to 1916'. Holes @ 2070', 2352', 2552', 2748', 2812', 2846'. Good @ 2872'.
- 8/11/06 TIH Tag up at 15'. Tally out of hole. TD 3272'. TIH w/ 7", 32A pkr set at 2940'. Pressure test tbg and csg. Pump 55 bbls at 1.5 BPM pressure up to 50#. Held 20# for 30 min. Test tbg to 1400#. Pump 20 bbls down casing at 2.5 BPM 250# held 200# for 20 min. Pumped 15 bbls at 4 BPM 330# held for 15 min. TOOH w/pkr. TIH w/RBP set at 2940'. TOOH w/tbg

Workover (8/17/01-8/29/01)

- 8/29/01 Swab 15 runs, recovered 100 bbls
- 8/27/01 Swab 4 runs, recovered 30 bbls
- 8/25/01 Swab 10 runs, recovered 160 bbls
- 8/24/01 TOOH w/ 2 3/8" and 7" pkr, TIH w/ 1 jt tbg, F-nipple and 100 jts tbg. Land tbg @ 3255', land F-nipple @ 3223'
- 8/22/01 Flowed well for 4 days, recovered 125 bbls water. Made 6 runs, well flowed to tank.

Workover (2/7/98)

- 2/7/98 Swab 17 runs, recovered 68 bbls
- 2/6/98 Swab for 10 hours, recovered 60 bbls
- 2/5/98 TIH w/ 7" scraper and 101 jts 2 3/8" tbg. Tag fill @ 3250'. TOOH w/scraper and tbg. TIH w 2 jts tbg, 7" pkr ultra-loc F-nipple and 92 jts 2 3/8" tbg. Set pkr @ 3126'. Land NC @ 3190'. Swab 9 runs, recovered 25 bbls

Workover (1/1/97)

- W/H 0 psi. Csg 450 psi. make 1 swab run, flow to tank all day, made 150 bbls water.

Workover (12/27/96-12/31/96)

- 12/31/96 W/H 0 psi. Csg 420 psi. Swab well, recovered 180 bbls.
- 12/28/96 Blow well down 460 csg. 200 w/h. Make 34 swab runs, recovered 150 bbls.
- 12/27/96 Tag fluid at 1500'. Made 15 runs, recovered 55 bbls.

Workover (4/26/89-4/29/89)

- 4/29/89 Csg 480 tbg 420. Still won't unload.
- 4/28/89 Csg 480, tbg 420.
- 4/27/89 Csg 480 psi, tbg 180 psi. Blow tbg down. TIH w/swab. FL 1800' down. Pullig 1200' of fluid. 30 swab runs. Csg 500. Have recovered 50 bbls of water. Equalize well. Csg 480, tbg 420.
- 4/26/89 Csg 450 psi, tbg 200 psi. Blow tbg down. TIH w/swab to 1800'. Pull 1200' of fluid. 2nd trip ulled from SN @ 3000'. Swabbed 124 bbls water in 10 hrs. FL 1800-1900' down. Csg increased to 535 psi but made no attempt to flow.

Cmpl (2/10/81-2/12/81) Cozzette

- 2/12/81 Foam frac'd COZZ 3024-3050' (9 holes) w/ 429 bbls 5% KCl, 80,000# 20-40 sd & 1,093,000 SCF N₂, preceded frac w/ 500 gal 15% reg ac, rate 23-27 BPM w/ 1600 to 1900# on csg & 1700 to 2250# on tbg
- 2/10/81 Ran lok-set RBP @ 3100', tstd csg to 3000#, spt 3 sx sd on RBP, TO, Perf 7" csg @ 3024, 3026, 3028, 3030, 3032, 3034, 3040, 3045, 3050' w/ 9 holes. Ran pkr & set @ 3010', brk dn perfs w/ 5% KCl wtr & 15 BS, 4 ½ BPM, 1600 to 3500#, balled off, TO w/pkr, TI w/notched col, SN & 94 jts of 2 3/8" EUE tbg

Cmpl (1/27/81-2/5/81) Corcoran

- 2/5/81 CRCRN perfs 3236-3250' after flwg 16 hrs, 400 MCFPD & hvy mist of ld wtr.
- 2/4/81 Foam frac'd perfs 3236-3250' (8 holes) w/ 500 gal 15% ac, 17,970 gals 2% KCl wtr, 73,500# 20-40 sd & 1,000,000 SCF N₂, 1400-1900# @ 22 BPM foam & ¼# sd/gal, ISIP 1630#, opened to pit after 1 hr, TP 1500#, left flwg overnight.
- 2/3/81 Broke down perfs 3236-3250' w/ 5% KCl wtr, broke fm 3100 to 2400# @ 4 ½ BPM, dropped 15 ball sealers, press incr to 3000# but did not ball off. TO w/pkr Ran 101 jts 2 3/8" EUE tbg w/notched collar on btm, set tbg @ 3230', SN 1 jt up, swabbed well dry, tr of gas
- 1/31/81 Ran bond log, TOC 2842'. Ran tbg and displ hole w/5% KCl water, POH w/tbg, perf 7" csg 3236-3250' w/ 8 holes, ran pkr & tbg, pkr @ 3198'
- 1/30/81 Drld out cmt 3990'-3165' & circ clean to 3290'
- 1/29/81 Ran Bond log, TOC 3170'. Perf 4 holes @ 3160', ran tbg & pkr, cmt'd w/225 sx reg w/2% CaCl @ 2 BPM @ 500#
- 1/28/81 Ran tbg & stung into cmt ret @ 3290', Pumped 100 bw @ 6 BPM @ 1800#, Cmt'd w/200 sx reg w/2% CaCl
- 1/27/81 Ran bond log, TOC 3300', BP @ 3578'. Perf 4 holes @ 3298', Retainer @ 3290'

Objective: Plug and abandon well.

Notify BLM & COGCC 48 hrs prior to moving in.

1. Set and test deadman anchors as necessary. MIRU workover rig (Note: TP & CP). Blow down well. ND WH. NU BOP's.
2. RU for tbg. Release packer. Tally & TOH w/tbg.
3. If tubing shows to be in bad condition, TIH w/bit and scraper to +/-3024' (top of COZZ perfs). TOH.
4. TIH w/RBP & pkr. Set RBP @ 2975' & test casing plug. Release pkr. Attempt to pressure test csg to 400 PSI. Chart test. Previous HIC from 2000-2846'.
5. If well passes MIT, release RBP, TOH or SOH and LD tubing when appropriate.
6. If MIT fails, isolate holes and determine the interval of leaks. HIC 2000'-2846'. Contact BHEP office to discuss options. Contact BLM & COGCC before any formation is P&A'd.

P & A Procedure

1. MIRU WL. RIH and set 7" CIBP @ +/-2975' (w/in 100' of top Cozzette perf at 3024' and below TOC 2842'.) POH. RIH and dump bail 2 sx cmt on top of plug. POH.
2. If top of HIC's are approximately 2000-2400', with good injection rate, do not perforate. Otherwise, RIH and perforate 4 circulating holes @ 2400' (above top of Cameo at 2450'). POH
3. RIH or TIH and set cement retainer 50' above top HIC if top of holes are approximately 2000-2400'. Otherwise, set CR at 2350'. POH.
4. TIH w/stinger and tbg, if not already in hole. RU cementers. Sting in to retainer. Pump 50sx class III cmt below retainer. Sting out. Dump 10 sx G cmt on top of retainer. Reverse circulate clean, if possible.
5. TOH w/ tbg & stinger. SOH & LD and stand back tbg, as needed.
6. RIH and perforate 4 circulating holes @ 1125'. POH.
7. RIH or TIH and set cement retainer @ 1075'. POH.
8. TIH w/stinger and tbg, if not already in hole. RU cementers. Sting in to retainer. Pump 75 sx Class III cmt below retainer. Sting out. Dump 10sx cmt on top of retainer. SOH & LD tbg.
9. RIH and perforate 4 circulating holes @ 425'. POH. RD WL. ND BOP's.
10. RU cementers, circulate down 7" and up 10 3/4" surface pipe. Establish rate. Mix and pump 180 sx Class III. Circulate cmt to surface. Do not displace, leave 7" csg full of cmt. RD cementers.
11. WOC. Top off as needed. RDMOSU.
12. Dig out wellhead. Cut off 10 3/4" and 7" csg 6' below ground level. Install dry hole

marker as per BLM.

13. Reclaim location. File necessary sundries.

5/20/11 rjw