Black Hills Plateau Production, LLC
A Black Hills Corporation Enterprise

Federal 22-1
NENE 22 9S 97W 6PM
API # 05-077-08554 (C-14473)
Mesa County, Colorado
Spud 10/21/83   TD 11/6/83   Completion 12/18/83

GL: 5242'   RKB: 5254'   TD: 7625'   PBTD: 7571'

Surface casing:

(10/22/83)   9 5/8" (9jts) 36# set @ 354', (13 3/4"hole)
310sx Class H, 2% CaCl w/ ¼#/sk Flocele
TOC @ srf

Production casing:

(11/11/83)   4 1/2" (189jts) 11.6# J55 LT&C set @ 7625', DV @ 3226' (8 3/4" hole)
1st stage: 455sx 65/35 Poz , tail w/ 255sx Class H, 2% CaCl w/ ¼#/sk Flocele
2nd stage: 487sx 65/35 POZ, rec 6bbl
TOC @ ? (CBL was ran 12/22/83 – not in wellfile or on COGCC website – cannot calc as borehole on logs is not good)

Perforations:

(12/22/83)   **DKTA/CMT 7468, 7471, 7484, 7486, 7488, 7494, 7497, 7503, 7505, 7514, 7522, 7525, 7527, 7534, 7536, 7538, 7540, 7544, 7546, 7548**' (0.35"ehd, 1spf, 20 holes)
12/23/83 2 3/8" tbg w/pkr at 7430' - 1000 gals 7 ½% hcl acid, 40 balls, balled off, surge, inj rate: 7 bpm at 5200 psi
12/24/83 Frac – 903 bbls Polaris Gel, 600 scf CO_2/bbl, 541,800 scf CO_2, 36960 # 20/40, 1-2 ppg, tried to but could not screen out, ISIP: 3900 psi, 5 min 2000 psi, 30 min 1000 psi. Flow 3 days, CP: 60-100 ck: ¾" ATR: 25 bpm, ATP: 3500 psi, no blw recovery given.

Production tubing:

 ??? jts 2 3/8" 4.6# tbg, ?? SN, ?? NC
EOT @ 7534'??

Packer: None

Rods: None

Production: CUM: 74 mmcf, 1/13/84 IP: 1834 mcfd, TP: 150 psi, CP: 500 psi, CK: ¾", mist of water
DOFS: 2/86 300 mcf for 2 months. SI until 1990. Avg 230 mcfd when put back on line, SI 7/94 due to high CO_2 and high line pressure. Gathered directly to RMNG P/L w/o compression.
CO_2:   3.9 %
Water Analysis: None
BHP: None

History:

Drilling (10/20/83-11/11/83) Bridges at 3800-4500', could not get down with logs

Completion (12/18/83)
12/21/83 Cased hole CNL 7567-3055'

1/18/90 TP: 0. CP: 1025 psi. Equalize to unload and flow. No water. Tbg died.
1/30/90 Swab: IFL: 3400'. 3 runs – well flowing.
1/31/90 Flowing. TP: 290 psi. CP: 680 psi. 400 mcfd. 50 bw.
2/1-5/90 Flowing. TP: 290-300 psi. CP: 600-680 psi. MCF: 312, 400, 400, 354, 327.

OBJECTIVE: Determine HIC (if any). Plug and abandon well.
                        Notify landowner 7 days and COGCC and BLM 48 hrs prior to moving in.

1. Set and test deadman anchors as necessary. Blow down well ahead of time if possible. Note TP and CP.

2. MIRU workover rig. ND WH. NU BOP's.

3. RU for tbg. Tally & TOH w/tbg.

4. If tubing shows to be in bad condition, TIH w/bit and scraper to 7400'. TOH.

5. TIH w/RBP and pkr. Set RBP @ +/-7400'. Set pkr & test RBP. Release pkr. Pressure test csg to 400 PSI. Treat test as if it was for an MIT. Use digital recorder if available.

Note from COGCC:
Make sure your chart recordings for MITs are easy to interpret. The Colorado Oil and Gas Conservation Commission (COGCC) is rejecting MIT tests where the recorded pressure range and/or the rotation rate make interpretation difficult or the recordings do not support the values written on the Form 21.
For test pressures between (+/-) 350 and 450 psi on a chart recorder use a 0-1,000 psi range spring. The chart rotation rates for the MITs needs to be acceptable for interpretation.   The recording needs to cover ¼ to ½ a revolution, suggestion is 1 hour per revolution.
It is the COGCC's policy to fail any MITs where the pressure changes (either increases or decreases) more than 10%. We also look for evidence that the pressure stabilized during the test. If you don't have an appropriate chart for either the pressure range or rotation rate then write down the pressure range and rotation rate used on the chart itself and initial it.

6. If csg holds pressure, release RBP and TOH or SOH and LD tubing as needed.

7. If csg does not hold pressure, isolate holes and determine the interval of leaks. Release RBP and TOH w/tbg, pkr and rbp.

    NOTE: Isolate DV tool. Records show previous leak.

8. Contact BHPP office to discuss options. Contact COGCC and BLM before any formation is P&A'd.

P&A Procedure

    Water aquifer depth is at 1000'.

1. MIRU WL. RIH and set 4 ½" CIBP @ +/-7400' (within 100' of Dakota perf at 7468'.) POH. RIH and dump bail 2 sx cmt on top of plug. POH.

2. If no HIC, **Proceed to Step #6**. If HIC's, compare top HIC to top of water aquifer at 1000' and/or squeeze above DV and Cameo at 2500'. If close enough together, Proceed to step #6. Otherwise, RIH and perforate 4 circulating holes +/- 50' above HIC IF poor injection rate. Do not perforate if good injection rate.

3. RIH or TIH and set cement retainer 50' above top HIC. POH.

4. TIH w/stinger and tbg, if not already in hole. RU cementers. Sting in to retainer. Pump 45sx class III cmt below retainer. Sting out. Dump 5 sx G cmt on top of retainer. Reverse circulate clean as needed.

5. TOH w/tbg & stinger. SOH & LD and stand back tbg as needed.

6. RIH and perforate 4 circulating holes at 2490'. POH. Note CBL. Injection pressure may be high.

7. RIH or TIH and set cement retainer @ 2440'. POH.

8. TIH w/stinger and tbg, if not already in hole. RU cementers. Sting in to retainer. Pump 45 sx Class III cement below retainer. Sting out. Dump 5 sx cmt on top of retainer. SOH and LD tbg and TOH w/tbg.

9. RIH and perforate 4 circulating holes at 1000'. POH.

10. RIH or TIH and set cement retainer @ 950'. POH.

11. TIH w/stinger and tbg, if not already in hole. RU cementers. Sting in to retainer. Pump 45sx class III cmt below retainer. Sting out. Dump 5 sx G cmt on top of retainer. Reverse circulate clean as needed.

12. TOH w/tbg & stinger. SOH & LD tbg.

13. RIH and perforate 4 circulating holes at 404'. POH.

14. RU cementers, circulate down 4-1/2" and up 8-5/8" surface pipe. Establish rate and circulation. Mix and pump 100 sx Class III. Circulate cmt to surface. Do not displace, leave 4 ½" csg full of cmt. RD cementers.

15. WOC. Top off as needed. RDMOSU.

16. Dig out wellhead. Cut off 9 5/8" and 4 1/2" csg 6' below ground level. Install dry hole marker plate as per BLM and COGCC.

17. Reclaim location. File necessary sundries.