| Submit 3 Copies<br>to Appropriate<br>District Office  | State of New Mexico  | Form C-103<br>Revised 1-1-89  |  |
|---|--|---|--|
| DISTRICT I<br>P. O. P. X. 1980, Hobbs, NM 88240<br>DISTRICT II                              | OIL CONSERVATION DIVISION<br>2040 S. Pacheco   | WELL API NO.<br><b>30-025-34383</b>                                   |  |
| P. O. Drawer DD, Artesia, NM 88210-2834<br>DISTRICT III                                     | Santa Fe, New Mexico 87505   | 5. Indicate Type of Lease<br>State                                    |  |
| 1000 Rio Brazos Rd., Aztec, NM 87410  |  | 6. State Oil & Gas Lease No.  |  |
| (DO NOT USE THIS FORM FOR PRO<br>DIFFERENT RESER  | TICES AND REPORTS ON WELLS<br>DPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A<br>RVOIR. USE "APPLICATION FOR PERMIT"<br>-101) FOR SUCH PROPOSALS.) | 7. Lease Name or Unit Agreement Name                                  |  |
| 1. Type of Well:<br>OIL GAS<br>WELL X WELL OT   | THER   | — Bass  |  |
| 2. Name of Operator<br>HALLWOOD PETROLEUM, INC.   |  | 8. Well No.<br><b>4</b>   |  |
| 3. Address of Operator<br>P.O.Box 378111 Denver, CO 8                                       | 0237   | 9. Pool name or Wildcat<br>Hat Mesa - Delaware                        |  |
| 4. Well Location<br>Unit Letter G   | Feet From The North Line and 1815  | Feet From The East Line   |  |
| Section 30  | Township 20S Range 33E N   | MPM Lea County  |  |
|   | 10. Elevation (Show whether DF, RKB, RT, GR, etc.)<br>3584' GR 3600' KB  |   |  |
| NOTICE OF INTEN<br>PERFORM REMEDIAL WORK P<br>TEMPORARILY ABANDON C<br>PULL OR ALTER CASING | LUG AND ABANDON REMEDIAL WORK<br>HANGE PLANS COMMENCE DRILLING OPNS<br>CASING TEST AND CEMENT  | QUENT REPORT OF:         ALTERING CASING         PLUG AND ABANDONMENT |  |
| OTHER: Recomplete to Upper Del  | aware OTHER:   |   |  |

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.) SEE RULE 1103.

# Hallwood plans to temporarily abandon the three sets of perforation in the Lower Delaware (7670'-7676', 7914'-7924' & 8060'-8090') and recomplete this well to the Upper Delaware (6916'-6946' & 6965'-6969').

### Please see attached for procedures and further information on this recomplettion.

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| I hereby certify that the information above is true and complete-to the best of my knowledge and belief.<br>SIGNATURE   | Production Reporting<br>Supervisor | DATE                       | 10/1/98 |    |
|---|------------------------------------|----------------------------|---------|----|
| TYPE OR PRINT NAME NONYA K DURHAM   |                                    | TELEPHONE NO. 303-850-6257 |         |    |
| (This space for State Use)  |                                    |                            |         |    |
|   |                                    |                            | •       | •, |
| APPROVED BY Use a second secon | E                                  | DATE                       |         |    |
| CONDITIONS OF APPROVAL, IF ANY:   |                                    |                            |         |    |

## Hallwood Petroleum, Inc.

4582 South Ulster Street Parkway · Stanford Place III · Suite 1700 · Post Office Box 378111 Denver, Colorado 80237 · (303) 850-7373

#### BASS #4

#### <u>Completion Procedure</u> (Revised for Upper Delaware)

#### SW of NE Section 30-T20S-R33E Hat Mesa (Delaware) Field Lea County, New Mexico

#### Well Data

| Total Depth:       | 8300'   |  |  |  |
|--------------------|---|--|--|--|
| PBTD:              | 8264' (Float Collar)  |  |  |  |
| DV Tool:           | 5989'   |  |  |  |
| KB:                | 3600'   |  |  |  |
| GL:                | 3584'   |  |  |  |
| Difference:        | 16'   |  |  |  |
| Spud Date:         | 5/12/98   |  |  |  |
| Production Casing: | 1)       0-880'       5 1/2" 17# K-55 LTXC         2)       880-5895'       5 1/2" 15.5# K-55 LTXC         3)       5895-8300'       5 1/2" 17# N-80 LTXC |  |  |  |

Cement 1<sup>st</sup> Stage with 535 sxs Modified Super "H" with 5# Gilsonite, 1# salt, 0.5% Halad 344, 0.4% CFR-3. Top of cement at 5989' (DV tool).

Cement 2<sup>nd</sup> Stage with 405 sxs lead cement, Interfill "H" with ¼# Flocele, 0.4% Halad 322. Tail-in with 100 sxs Class "H" premium cement. Top of cement at 2615'.

#### **Discussion**

The Bass #4 well has been pump testing for two months now from Lower Delaware zones with somewhat disappointing results as shown below:

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|    | Dates           | Zone(s)                                | Production Average             | <u>Oil Cut %</u> |
|----|-----------------|--|--------------------------------|------------------|
| A) | 7/23 to 8/6/98  | 7670-7676'<br>7914-7924'<br>8060-8090' | 76 BOPD x 482 BWPD x 57 MCFD   | 13.6             |
| B) | 8/7 to 8/17/98  | 7670-7676'                             | 55.5 BOPD x 329 BWPD x 40 MCFD | 14.4             |
| C) | 8/20 to 9/21/98 | 7914-7924'<br>8060-8090'               | 32 BOPD x 269 BWPD x 54 MCFD   | 10.6             |

Sum of  $B + C = 87 BOPD \times 598 BWPD \times 94 MCFD$ 

Due to the high water production rates, the difficulty and cost of handling much more water on this lease <u>and</u> the continued low oil prices, Hallwood recommends temporarily abandoning the three (3) sets of perforations currently in the Bass #4 and proceeding with testing the Upper Delaware zones.

#### Upper Delaware Completion

- 1. MIRUSU, TOH with rods and pump.
- 2. ND tree and NU BOP. Release anchor and TOH with tubing.
- 3. PU Guiberson retrieving tool and TIH. Latch and release packer assembly at 7647-7721', which is isolating perfs at 7670-7676'. TOH with all of this set-up.
- 4. RU wireline and run a gauge ring to 7900'.
- 5. Set a Halliburton Fas-Drill plug at 7860'. Set a second plug at 7640' thus isolating the two zones.
- 6. Load casing with 2% KCl water and pressure test casing/plug to 2500 psi for 15 minutes.
- 7. Perforate the Upper Delaware zones at 6916-6946' (30') and 6965-6969' (4') with 4 spf, 90° or 120° phasing and maximum premium charges with 4" guns. Correlate to the Halliburton Open Hole Spectral Density log dated 6/3/98.
- Spearhead frac with 2000 gallons of 7½ % acid, then frac Upper Delaware per attached design. Design is a 25# Delta Frac System (Halliburton) with up to 150,000# of 16/30 sand including the last stages (approx. 50,000#) of resin coated sand pumped at 20 BPM (±) down casing.

- 9. Flow back frac until it dies. RIH with tubing and clean out sand. Swab test well 2-3 days.
  - NOTE: Attempt to swab/flow back 90% of the frac load fluid in order to get a valid pressure test in Step 10.

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- 10. RIH with pressure bombs and obtain a gradient survey and a 48-hour build up pressure on this zone prior to pump testing. Hang bombs at 6930'.
- 11. TOH with tubing.
- 12. Run production tubing set up, anchor and pump and rods. Put well on test.
  - NOTE: Land tubing around 7100' and anchor between 6800-6850' (above top perf).
- 13. Pump and rods design is as follows:

1 <sup>3</sup>/<sub>4</sub>" pump
20-1" new grade D rods (500')
4300' (approx. 172) - <sup>3</sup>/<sub>4</sub>" new high strength rods
remainder of rods - 7/8" new high strength rods

- 14. Put well on pump and pump test for 30-60 days.
  - NOTE: There are two prospective zones uphole at 6600-6620' and 6706-6730' that may also be tested to determine if they are commercially productive. Hallwood plans to production test the Bass #4 for 7-14 days prior to additional uphole testing.

X.E. O Correll 9/23/98

Attachments

cc: Well File John Genziano Doug Little Jim Bonaventura Working Interest Owners

KEO98.042