MEMORANDUM

TO: JEANIE MCMILLIAN (REGULATORY AFFAIRS)

FROM: ENOS FANGUE (PRODUCTION ENGINEERING)

RE: HOOD STATE #1 CROSSROADS FIELD RECOMPLETE FROM LOWER DEVONIAN TO UPPER DEVONIAN AFE 210044

DATE: SEPTEMBER 23, 2002

REQUEST

Production Engineering requests approval to perform a recompletion from the Lower Devonian perforations to the Upper Devonian. All operations will be performed with a workover rig, electric line, wireline and pump equipment.

PARAMETERS

ANTICIPATED PROJECT START DATE: CURRENT SURFACE PRESSURE:

SEPTEMBER 30, 2002 OR SOONER TEMPORARILY ABANDONDED

STATUS

The current Devonian completion (11986' - 12024') has watered out. The Hood State #1 has cumulative production of approximately 23 MBO since initial completion in February 1998.

PROCEDURE

- 1. Test anchors. Evaluate tree assembly.
- 2. MIRU workover rig. ND tree. NU BOPE. Pressure test BOPE to 3500 psig.
- 3. MIRU electric line. RIH with Gauge Ring/Junk Basket. RIH and set Cement Retainer at 11970' RKB.
- 4. RIH with 2-7/8" production tubing and stinger and squeeze Lower Devontian perforations with 50 sacks of 16.5 ppg Class "H" cement. Squeeze 500 psig over initial injection pressure. POOH.
- 5. MIRU electric line. Perforate Upper Devonian as follows: 11902 11902 11912' 11932'.
- 6. RIH with 2-7/8" production tubing and packer and set packer at 11850' RKB.
- 7. Swab test Upper Devonian. Acidize perforations with 2500 gallons of 15% NEFE "Anti-Sludge" HCI.
- 8. Swab test Upper Devonian.
- 9. POOH with 2-7/8" production tubing and packer.
- 10. RIH with 2-7/8" production tubing and set up for progressive cavity pump installation.
- 11. ND BOPE.
- 12. RD and release workover rig. Turn well over to production operations.



XC: PRODUCTION ENGINEERING FILE WELL RECORD FILE (CFR)