

DAE DEE STATE NO. 2

AFE JUSTIFICATION

(3)

Funds of \$725,000 gross (\$363,000 Conoco net) are requested to drill and equip the Dee State No. 2 to continue development in the Dagger Draw Upper Penn oil pool. The proposed well will be drilled to a depth of 8100' and will be completed in the Cisco Canyon formation.

The proposed Dee State No. 2 will offset Yates Petroleum's second best Dagger Draw producer, the Yates Foster AN No. 1 (see location map). This well, located 1380' southwest of the proposed location, was recompleted to the Cisco in June 1987 and had a first year producing average of 150 BOPD, 850 MCFGPD and is declining at 17% per year. The Foster No. 1 well has recovered 124 MBO, 712 MMCFG to date. This is the closest Cisco producer to the proposed No. 2 and is the basis for the No. 2 reserves. The only other Cisco Canyon producer in this area is the Yates State CO No. 3, located 3960' north of the No. 2 location. This well IP'd at 200 BOPD, 1500 MCFGPD in March of this year. Test rates have not been released at the time of this writing. Three other wells in this area penetrated the Cisco as they drilled through to the Morrow sand. None were completed in the Cisco; however, the Yates State CO No. 1 (now a Devonian disposal well) had promising Cisco log quality and is located on the same 160 acre spacing unit as the No. 2. The No. 1 is in a good structural position with several sections having porosity development in the dolomite. Yates is currently drilling the Roden No. 4, another Cisco location, 3900' northwest of the proposed No. 2 and activity appears to be increasing in this area of Dagger Draw.

The Dee State No. 2 will continue the highly successful 1989 Cisco drilling program at Dagger Draw. Conoco has been very successful at Dagger Draw by drilling new Cisco wells next to current or shut-in producers and completing these wells with modern technology. The new wells are producing with high volume electric submersible pumps (ESP's) resulting in very prolific production. The Conoco Lehman Federal No. 1, located on the Barbara Federal lease, was completed in January and was predicted to average 195 BOPD, 425 MCFGPD and decline at 30%/yr (risked case). The Lehman is currently producing 320-350 BOPD, 500 MCFGPD (maximum allowable) with no visible decline rate and has recovered 60 MBO in the first six months of production. The Conoco Barbara Federal No. 8, also located on the Barbara Federal lease, was predicted to average 190 BOPD, 450 MCFGPD and decline at 28%/yr (risked case). This well was completed in mid-June and finished on July 6, 1989 at 410 BOPD, 796 BWPD, 627 MCFGPD. It appears to be fully capable of producing 250-350 BOPD for the remainder of 1989. The proposed Dee State No. 2 will continue the 1989 Cisco program using the same successful strategy and techniques of the Lehman and the Barbara Federal No. 8.

The geology in this area of the reservoir is considered favorable both structurally and for porosity development. The east side of the field is structurally low and typically has high water cuts. The west side of the field is structurally high and typically lacks the dolomitization and porosity necessary for oil accumulation. The No. 2 location is positioned high enough structurally within the dolomite fairway to avoid high water cuts and to take advantage of favorable oil accumulation (see geology map).

Based upon the 150 BOPD first year average oil rate of the Yates Foster AN No. 1, the same 17% decline rate, and a more conservative first year average gas rate of 600 MCFGPD, the Dee State No. 2 is expected to recover 290 MBO, 1159 MMCFG. Initial production is expected to be 165 BOPD, 660 MCFGPD.

AFE NO. 40-61-5546

CPF:mjm
DEEST2.JUS

EXHIBIT 9B

BEFORE EXAMINER STOGNER OIL CONSERVATION DIVISION	
EXHIBIT NO. <u>9B</u>	
CASE NO. <u>9801</u>	
Submitted by <u>Conoco Inc</u>	
Hearing Date <u>11-29-89</u>	