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MR. NUTTER: Case No. 4589.

MR. HATCH: Case No. 4589, Application of Anadarko Production Company for a unit agreement, Eddy County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin of Kellahin and Fox, Santa Fe, appearing for the Applicant in association with Mr. R. J. Kepke, Fort Worth, Texas, a member of the Texas Bar. We have one witness I would like to have sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibits Nos. 1 and 2 were marked for identification.)

C. W. STUMHOFFER

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Will you state your name, please?

A My name is C. W. Stumhoffer.

Q By whom are you employed and in what position?

A I am employed by Anadarko Production Company, Fort Worth, Texas as Superintendent of Secondary Recovery Division.

Q Have you testified before the Oil Conservation Commission or one of its examiners and made your qualifications a matter of record?

A Yes, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: They are.

BY MR. KELLAHIN:

Q Mr. Stumhoffer, are you familiar with the Application of Anadarko Production Company in Case No. 4589?

A Yes, I am.

Q What is proposed by the Application in this case?

A Anadarko in this case seeks the approval of the Burnham Grayburg San Andres Unit Area covering the south 3/4 of Section 2, Township 17 South, Range 30 East, Eddy County, New Mexico, containing 480 acres more or less for the purpose of conducting secondary recovery operations in the Square Lake Field producing horizons which consists of the Nutex and Premier zones of the Grayburg formations and the Lovington zone of the San Andres.

Q Referring to what has been marked as the Applicant's Exhibit No. 1, can you identify that exhibit?

A Exhibit No. 1 is a copy of the unit agreement for the proposed Grayburg-San Andres unit.

Q What is the nature of the ownership of the lands which are included within this unit?

A The lands included in the unit area consist of three base leases, all of which are State of New Mexico mineral ownership. Anadarko owns 100 per cent of the working interest in all three leases, but under two of the leases, we have a separation of overriding royalty ownership within the lease itself, and the reason for this is to be able to develop secondary recovery to protect correlative rights of the overriding royalty owners under these two leases.

Q Have all of the other overriding royalty owners signed the unit agreement?

A Yes, they have.

Q And Anadarko is the owner of the entire working interest?

A Anadarko will be unit operator.

Q Is the unit in a form which has heretofore been approved by this Commission in the form used by the State Land Office?

A Yes, we have the approval of the State Land Office

by a letter dated October 6th, 1970, approving the formal content of the unit agreement for the Burnham-Grayburg-San Andres Unit and the unit agreement does have the usual provisions for subsequent joinder by other parties and the provisions normally found in a State Lease, yes, sir.

Q Now, referring to what has been marked as Exhibit No. 2, would you identify that exhibit?

A Exhibit No. 2 is a log of a Square Lake Field well located in the southeast of the southeast of Section 3, Township 17 South, Range 30 East that offsets the proposed Burnham-Grayburg-San Andres unit. We have no modern logs with the unit area itself. This is the nearest log we have of producing zones in this area. We have marked on this log the metex and premier zone of the Grayburg and the Lovington zones of the San Andres. Those are the unitized zones under the proposed unit agreement. These are the unitized zones.

Q And it is anticipated that a secondary recovery project will be instituted in the immediate area, is that correct?

A That is correct. We have not requested approval -- we are not in a position to submit a plan of development at this time because of difficulties in working out a

cooperative agreement with the offset operators, one of which has been in bankruptcy for three or four years. We are striving to obtain some cooperation and hope to have it shortly and at that time we will present a plan of waterflood to the Commission.

MR. KELLAHIN: At this time I would like to offer in evidence, Exhibits Nos. 1 and 2.

MR. NUTTER: Anadarko Exhibits 1 and 2 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1 and 2 were marked for identification.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Stumhoffer, this log which you presented is the log of the Federal K.K. No. 1 which is located in the SE-SE of Section 3, right?

A Right.

Q That is a direct offset location to a well in the unitized area, is this correct?

A Yes, it is, Mr. Nutter. It is an injection well in the proposed unitized formation.

Q And at such time as you have made arrangements with these offsetting operators, you will have your plan

of development for injection and come back to the Commission and get authority for the injection program itself?

A Yes, sir. The reason we haven't asked for it at this Hearing is the -- on the map, the acreage shown in the northeast of Section 3 -- NE/4 of Section 3 -- Stalworth Oil and Gas is the operator. This is a former waterflood associate property, and we have been in conversation with them and they are reluctant to convert the No. 4 Park well in the SE of the NE which it would be the normal well to convert in the established pattern for the waterflood operation in this area, and if they will not convert this for us, we will change our plan of development for the Burnham-Grayburg-San Andres unit. We hope to be able to make some arrangement whereby they will convert that well to injection.

Q Well, your floods as the Commission has previously authorized in Section 3 haven't been completed and put on injection yet, have they?

A That is correct.

Q Because of this Stalworth delay?

A Yes. Actually, I might point out that Stalworth is no longer the operator of this property. It is now

operated by Arwood Limited of Dallas.

MR. NUTTER: Does anyone have anything further to ask Mr. Stumhoffer?

You may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 4589?

We will take the case under advisement.

