

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

Transcript of Hearing
October 23, 1951
Case No. 310

MR. SPURRIER: We will proceed to the next case which is Case 310.

(Mr. Kellahin reads the Notice of Publication.)

MR. CAMPBELL: If it please the Commission, I am Jack M. Campbell of Atwood, Malone and Campbell, of Roswell, for the Gulf Oil Corporation. I would like to call Rule Boss to be sworn.

RULE S. BOSS,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. CAMPBELL:

Q State your name please.

A R. L. Boss.

Q By whom are you employed, Mr. Boss?

A Gulf Oil Corporation.

Q And where?

A At Roswell, New Mexico.

Q In what capacity?

A As Zone Geologist.

Q Have you testified previously as a geologist before this Commission?

A I have.

MR. CAMPBELL: Are the qualifications of the witness satisfactory to the Commission?

MR. SPURRIER: They are.

Q Mr. Boss, your company has made application in Case No. 310 for authority to use its Eunice King Well No. 2 in the northwest of the northwest quarter of Section 28, Township 21 south, Range 37 east, for salt water disposal. What is the reason for that application?

A The disposal of water produced from the deeper reservoirs on the Gulf Eunice King and Carson leases in the northwest of the northwest quarter of Section 28, Township 21 south, Range 37 east, Lea County New Mexico, is progressively becoming a more serious problem. And the construction of additional surface facilities will eventually prove inadequate. And it is therefore imperative that more adequate disposal system be utilized and the return of these waters to underground storage would be the most logical solution to the problem. And in the area in question, the San Andres formation, offers ideal conditions for such a project.

Q It has been the experience of your company in the San Andres zone in this area --

A The data supplied by the many wells drilled in your multiple pay fields, Penrose-Skelly, Blinbry, Drinkard-Hare, and the Brunson pools, have indicated a highly permeable zone some three to six hundred feet below the top of the San Andres formation, and most operators have experienced difficulties with circulation while attempting to penetrate

this. In our own operations in the Eunice King and Carson properties, four instances of complete loss of circulation between the depths of 4278 and 4528 and six instances of partial loss of circulation between the depths of 3970 and 4636 have occurred. And the well cuttings then added conviction as to the existence of porous dolomites in this section.

Q Is the San Andres productive of oil in this particular area?

A It isn't commercially productive of oil or gas in the field where our Eunice King lease is located. And this formation, particularly the upper portions thereof, has been adequately tested at widely scattered locations within this field. And with hardly an exception, sulphur water constituted the bulk of the fluids recovered.

Q I hand you what has been marked Exhibit A and ask you to state what that is.

A That is a plat of Township 21, Range 37 east, in which the proposed disposal well is located. And it shows the location of wells and the results of tests obtained in the San Andres formation in this township.

Q And what is the location shown for the proposed disposal unit?

A The location is in the center of the northwest of the northwest quarter of section 28, Township 21 south, Range

37 east.

MR. CAMPBELL: I offer that in evidence.

MR. SPURRIER: It will be accepted.

Q I now hand you what has been marked Exhibit B, and ask you to state to the Commission what that is.

A This is a copy of the log, the sample log, from the Eunice King No. 2. In addition, the log has been projected to the proposed depth to which this well will be drilled. The projected section is from the twin well, No. 6 well, located only 150 feet distance from the No. 2 well.

Q Was this log prepared originally by you or under your supervision?

A It was.

MR. CAMPBELL: We offer it in evidence as Exhibit B.

MR. SPURRIER: It will be accepted.

Q Mr. Boss, will you describe the manner in which you intend to complete this well, and the manner in which you intend to dispose of this salt water?

A This well, No. 2 Eunice King well, located in the center of the Northwest Northwest of Section 28, Township 21 south, Range 37 east, was completed originally at a total depth of 3800 feet in the Grayburg formation. From the Penrose-Skelly pay zone exposed in the open hole below seven inch casing, cemented at 3675 feet. The well has reached the economic limit of production from this pay and it is proposed

that the well be deepened to approximately 4600 feet in the San Andres formation and a 5½ inch liner be subsequently cemented in the San Andres formation at a depth of approximately 4200 feet.

Q By cementing that liner, is it your opinion you will therefore, adequately protect the upper pay zones in this area?

A That is true. That is the purpose of cementing the liner to protect the Penrose-Skelly pay zone.

Q And it is your opinion you can dispose of this salt water in this particular zone without any danger at all to any other pay zones in the area?

A That is true. The next underlying pay occurs in the Glorietta or Yeso formation at from 1,000 feet or more depth below the Penrose-Skelly pay.

MR. CAMPBELL: That's all the questions I have, if the Commission please.

MR. SPURRIER: Does anyone have a question of this witness?

MR. SELINGER: I would like to ask Mr. Boss one question. I represent Skelly Oil Company. Does the San Andres formation non-produce oil throughout the entire Penrose-Skelly area?

A That is correct.

MR. SELINGER: That's all.

MR. SPURRIER: Will you repeat the question please, George?

