

BEFORE THE
OIL CONSERVATION COMMISSION
State of New Mexico

PROCEEDINGS

The following matters came on for consideration before a hearing of the Oil Conservation Commission of the State of New Mexico pursuant to legal notice, at Santa Fe, New Mexico, on June 28, 1949, at 10: A. M.

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice, pursuant to law, of the following public hearing to be held June 28, 1949, beginning at 10:00 A.M. on that day in the City of Santa Fe, New Mexico, in the Senate Chambers.

STATE OF NEW MEXICO TO:

All named parties in the following case,
and notice to the public

Case 187

In the matter of the application of Carper Drilling Company, Incorporated, for an order granting permission to drill unorthodox location, designated as Well No. 9N, on that portion of its Simon "A" lease, described as the SW/4 of the SE/4 of Section 29, Township 17 South, Range 32 East, N.M.P.M. in the Maljamar Pool of Lea County, New Mexico.

Case 188

In the matter of the application of Gulf Oil Corporation for an order to dually complete and produce from the Queen formation and the Yates formation from a single well bore in the J. R. Holt "B" No. 1, located 660' from east time and 1980' from south line of Section 36, Township 23 South, Range 36 East, Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on June 13, 1949.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier
R. R. SPURRIER, Secretary

SEAL

BEFORE:

Guy Shephard, Presiding, Commissioner, (New Mexico)
R. R. Spurrier, Secretary, (New Mexico)

REGISTER:

Paul C. Evans
Hobbs, New Mexico
For the Gulf Oil Corporation

E. W. Brake
Tulsa, Oklahoma
For the Gulf Oil Corporation

L. O. Storm
Hobbs, New Mexico
For the Shell Oil Co., Inc.

Glenn Staley
Hobbs, New Mexico
For the Lea County Operators

Frank C. Barnes
Santa Fe, New Mexico
For the Oil Conservation Commission

William J. Wright
Artesia, New Mexico
For the M. C. R. A.

E. E. Kinney
Artesia, New Mexico
For the New Mexico Bureau of Mines

Marshall Rowley
Artesia, New Mexico
For the Carper Drilling Company, Inc.

John E. Cochran, Jr.
Artesia, New Mexico
For the Carper Drilling Co., Inc.

Elvis A. Utz
Santa Fe, New Mexico
For the Oil Conservation Commission

COMMISSIONER SHEPHARD: The first case to come before the meeting is: Case 187 "In the matter of the application of Carper Drilling Company, Incorporated, for an order granting permission to drill unorthodox location, designated as Well No. 9N, on that portion of its Simon "A" lease, described as the SW/4 of the SE/4 of Section 29, Township 17 South, Range 32 East, N.M.P.M. in the Maljamar Pool of Lea County, New Mexico."

MR. COCHRAN: If the Commission please, this is the application of Carper Drilling Company, Incorporated, to drill Well No. 9N on its Simon "A" lease. Its witness is Marshall Rowley.

(Witness sworn.)

EXAMINATION BY MR. JOHN COCHRAN:

Q. Will you state your name?

A. Marshall Rowley.

Q. By whom are you employed?

A. Carper Drilling Company.

Q. In what capacity?

A. I am employed as vice-president.

Q. As vice-president are you in charge of Carper Drilling Company's production?

A. Yes, sir.

Q. You are familiar with what is described as Simon "A" lease?

A. Yes, sir.

Q. Is that lease in the Maljamar Pool of Lea County, New Mexico?

A. It is.

Q. What is the legal description of that lease.

A. All of Section 29 except the west half of northeast quarter.

Q. How many wells have been drilled on Simon "A" lease?

A. Fifteen.

Q. How many of those wells are producing wells?

A. Thirteen.

Q. From what depth are they producing?

A. From the Maljamar Pay.

Q. What are the other two?

A. Gas injection wells.

Q. Where are those gas injection wells located?

A. On the Simon "A" lease. One of them is in about the center of the section; the other one is in the southwest quarter

of the southeast quarter.

Q. Is that the only well on that 40-acre subdivision?

A. It is.

Q. There are no producing wells on that tract?

A. No, sir.

Q. In your application you ask that you be permitted to drill on that 40-acre legal subdivision?

A. Yes, sir.

Q. Is it your opinion that the drilling of such a well would be in the interests of conservation?

A. Yes, sir.

Q. Do you feel that by drilling that well a substantial quantity of oil would be produced that would not otherwise be produced?

A. I do.

Q. The well which you propose to drill is designated as No. 9N, is that correct?

A. It is.

Q. What is the exact location of that well?

A. It is located 1345 feet from the East Line and 1295 feet from the South Line of Section 29, Township 17 South, Range 32 East.

Q. Is the Simon lease a federal lease?

A. It is.

Q. Is it committed to the Maljamar Cooperative Repressuring Agreement?

A. It is.

Q. Mr. Rowley, under the provisions of the Maljamar Cooperative Repressuring Agreement, as I understand it, you are not permitted to make up allowable from other wells for allowable that may be lost by reason of using of a well for a gas injection well, is that correct?

A. That is correct.

Q. If you are permitted to drill the proposed well No. 9N, located on the Simon lease, do you propose to produce the daily allowable for the forty acre unit upon which said well is located, in accordance with and as determined by the Allocation of Production Plan in use for proration units comprising leases within the boundaries of and committed to the Maljamar Cooperative Repressuring Agreement?

A. Yes, sir.

MR. COCHRAN: If the Commissioner, please, I have a letter I would like to offer, which is dated June 7, 1949, addressed to John E. Cochran, Jr., from Foster Morrell, oil and gas supervisor of the United States Geological Survey, in which he states that his office has no objection to the granting of permission to drill the proposed well at the location specified. The drilling of the well is encouraged.

(Letter received by Commission)

THE COMMISSIONER: If there are no further questions, we will take up the next case. (Reading)

Case 188. "In the matter of the application of Gulf Oil Corporation for an order to dually complete and produce from the Queen formation and the Yates formation from a single well bore in the J. R. Holt "B" No. 1, located 660' from east line and 1980' from south line of Section 36, Township 23 South, Range 36 East, Lea County, New Mexico."

Who is representing the Gulf Oil Corporation?

MR. PAUL C. EVANS: Present.

(Witness sworn)

MR. EVANS: I will read the Gulf Oil Corporation case.

(Handed copies to Commissioner and Reporter)

MR. EVANS: "The Gulf Oil Corporation will present evidence to show the Commission cause whereby they should be allowed to dually complete the Gulf Holt "B" No. 1, located 660 feet from

the east line and 1980 feet from the south line of Section 36-23S-36E, Lea County, New Mexico.

"The witness for the Gulf Oil Corporation is Mr. Paul C. Evans, District Engineer, Hobbs, New Mexico. Mr. Evans has previously qualified as a witness before the New Mexico Oil Conservation Commission. He graduated from Texas A. & M. College in 1937 with a B. S. degree in Petroleum Production Engineering. He obtained 3-1/2 years of engineering experience with the Gulf Oil Corporation as training engineer and production engineer in various phases in New Mexico, Oklahoma, Illinois, and Indiana. Then, he was transferred to Michigan as District Engineer for 1/2 year prior to entering military service where he served in the Field Artillery for 4 years. He has been employed as District Engineer for Gulf in New Mexico for the past 4 years. He is registered professional engineer and land surveyor in the State of New Mexico."

(Mr. Evans handed copies of "RadioActivit Log, Lane Wells Company" to the Commissioner; also copies of "Dual Completion Equipment to be Installed at Holt B No. 1)

"Stafford and McVay Drilling Company's rotary tools were rigged up and drilling operations commenced on April 23, 1949. The 9-5/8" OD, 36#, H-40, S.S. casing was set at 322 feet and cemented with 200 sacks of cement which circulated to the surface. The Yates sand was encountered at 2960 feet and extended to 3245 feet to the top of the Seven Rivers formation. The offset information and geological data indicated the commercial gas producing possibilities of this section. The 5-1/2" OD, 17#, S.S. casing was set at 3450 feet in the Seven Rivers formation and cemented with 750 sacks of cement. A temperature survey indicated the top of the cement behind the 5-1/2" casing to be at 1650 feet. Prior to running casing, this well was drilled to a total depth of 3610 feet in the Queen sand. A

A Lane Wells radio-activity survey was run from total depth to 2300 feet and three copies of this log are submitted to the Commission for their information. A drill stem test with a hookwall packer set at 3420 feet was taken with total depth of 3610 feet. The Halliburton tool was left open for 4 hours and we received 400 feet of oil and gas cut mud and 1200 feet of clean oil. The flowing pressure was 800 psi and the 15 minute build-up pressure was 930 psi. This information indicated that the exposed Seven Rivers and Queen formations needed to be shot with nitroglycerin to obtain maximum production. The rotary rig was dismantled and cable tools were rigged up.

"Two hundred quarts of special oil well explosive No. 1, solidified nitroglycerin, was placed from 3610 feet to 3501 feet. A proper solid stem was placed above the explosive and it was stemmed to the surface with oil. After cleaning out to total depth after the shot exploded, this well flowed 137 barrels of oil in 12 hours and is now producing its daily allowable to the lease stock tanks in a normal manner.

"After permission is obtained to dually complete this well, it is planned to "kill" the well with oil base mud on bottom and water to the surface and pull the 2-7/8" OD tubing. The Yates sand section from 2940 feet to 3120 feet will be perforated with 360 jet holes. Then, a permanent type 5-1/2" x 2-7/8" Baker model "L" retainer production packer will be set at 3420 feet. The tubing string will then be run from bottom up as follows:

1. Standard perforated anchor with 2-7/8" tubing from 3605 feet to 3420 feet.
2. Baker packing element to set in permanent type packer at 3420 feet.
3. 2-7/8" x 6' tubing nipple
4. 2-7/8" OD Otis type "L" side door choke with landing nipple at 3412 feet.
5. 2-7/8" OD tubing to the surface

The attached schematic drawing shows the intended producing equipment to be installed in Holt "B" No. 1.

The Otis side door choke will be run which will shut-off the lower oil producing Queen sand and expose the Yates gas sand to the tubing through perforations in the landing nipple. The Yates gas sand will be produced through the tubing until it cleans up. Then, the Otis side door choke will be pulled and re-run to allow the Yates gas sand to be segregated from the tubing and the oil producing Queen sand section to be produced through the tubing. This installation will now allow the Yates gas sand to be produced through the casing and the Queen oil section to be produced through the tubing without commingling of fluids.

"Segregation tests will then be obtained in the following manner:

1. Both zones will be shut-in until maximum tubing and casing pressures are observed. A dual pressure recorder will be installed so that both tubing and casing pressure can be recorded on the same chart and at the same time.

2. Prior to opening the casing, a bottom hole pressure recording instrument will be run in the tubing to record the static BHP of the oil producing zone. With the BHP gauge in the tubing, the Yates gas will be flowed through the casing at a reasonable rate. The dual recorder will still be installed to obtain casing and tubing pressures during this operation.

3. If there is no evidence of communication on the above test, the casing will be shut-in until maximum casing pressure is obtained.

4. Then, the oil zone will be flowed through the tubing with the casing shut-in, and the dual recorder will record the tubing and casing pressures. The oil and gas produced through the tubing will be measured.

5. The dual recording pressure charts, static BHP of the oil zone, and measured volumes of fluid from each zone will be reported to the Commission.

"The oil that will be produced from the Queen section will be stored in tanks on the lease. There will be a separate line from the tubing to the lease storage tanks through a low pressure separator. A commercial market will be obtained for the gas that will be produced through a separate line from the casing. The gas produced from the Yates section is classified as "sweet" gas and the oil produced from the Queen formation is slightly corrosive. There is no doubt that the two above described zones are each definite and distinct reservoirs.

To date, permission has been granted by the Commission to produce the two zones described above through a single well bore on three other wells in this immediate area. The attached plat shows the location of Gulf Holt "B" No. 1 with respect to the other dual completed wells in the immediate area."

(Plat submitted)

This covered all we have to offer.

THE COMMISSIONER: Any questions, Mr. Staley?

(Mr. Staley shook his head)

THE COMMISSIONER: Anybody have any questions. Well, if not, it will be granted. If there is nothing further before this meeting, it will stand adjourned.

C E R T I F I C A T E

Before me appeared Margaret Powell who swore that the foregoing transcript is a true and complete record of the proceedings before the Oil Conservation Commission of the State of New Mexico to the best of her knowledge, skill, and ability.

DATED this 12th day of July 1949.

Allen Romo
Notary Public

My Commission expires:
July 2, 1952