

BEFORE THE
Oil Conservation Commission
SANTA FE, NEW MEXICO
November 17, 1954

IN THE MATTER OF:

CASE NO. 783 - Regular Hearing

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES
COURT REPORTERS
ROOMS 105, 106, 107 EL CORTEZ BUILDING
TELEPHONE 7-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 17, 1954

IN THE MATTER OF:

The application of R. Olsen for approval
of a non-standard gas proration unit,
and an unorthodox well location.

Applicant, in the above-styled cause,
seeks approval of the creation of a 160-
acre non-standard gas proration unit
consisting of the NE/4 of Section 8,
Township 24 South, Range 37 East, Lea
County, New Mexico, in exception to Rule
5 of the Special Rules and Regulations
for the Jalmat Gas Pool as set forth in
Order R-520; and for approval of an un-
orthodox location for its Hodge No. 2
Well drilled thereon at a site 2310 feet
from the east line and 330 feet from the
north line of said Section 8.

Case No. 783

BEFORE:

Honorable Edwin L. Mechem
Mr. E. S. (Johnny) Walker
Mr. William B. Macey

TRANSCRIPT OF HEARING

MR. MACEY: The next case on the docket is Case 783.

MR. CAMPBELL: If the Commission please. Jack Campbell,
Roswell, New Mexico, appearing on behalf of R. Olsen. I would
like to make a brief preliminary statement. This is an application
by R. Olsen for approval of an unorthodox gas well location and
approval of a non-standard 160-acre gas proration unit in the
northeast quarter of Section 8 in Township 24 South, Range 37 East,
Jalmat Gas Pool, Lea County, New Mexico. In accordance with the
Rules of the Commission in Order No. R-520, waivers were requested

from operators with properties within 1500 feet of the well as to the unorthodox location of the well and waivers were obtained from all those operators with exception of the operator owning the northwest quarter of the section. With regard to the non-standard unit, waivers were requested from all operators within the section and within 1500 feet of the well to which the allowable was to be attributed, and waivers were received from all except the owner of the northwest quarter of Section 8, and the Texas Company which owns acreage to the north.

I have been advised by the Texas Company that if the gas that is now being produced from the Yates formation in the Jalmat Pool in the Hodge Well No. 1, which is located in the southeast quarter of the northeast quarter of Section 8, is not produced, in other words, if that well is re-worked so that the gas from the Jalmat Gas Pool is shut off they will have no objection to the non-standard gas unit, or allocation of a full 160-acre unit allowable. As the testimony will indicate, that is agreeable with R. Olsen. They are not seeking a duplication or over-lap of allowable between the Hodge Number 1 Well and Hodge Number 2.

J. I. FRENCH,

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

DIRECT EXAMINATION

By MR. CAMPBELL:

Q State your name, please.

A J. I. French.

Q Where do you live, Mr. French?

A Jal, New Mexico.

Q By whom are you employed?

A R. Olsen.

Q In what capacity?

A General Superintendent.

Q How long have you been employed by that company?

A Twenty years.

Q As General Superintendent of the company, were you responsible for the location of the drilling of wells for that company in the northeast quarter of Section 8 on the lease now owned by R. Olsen, which was formerly owned by Olsen Blunt Oil Company?

A That is right.

Q Will you please give the Commission the location of present wells in the northeast quarter of Section 8, and state whether or not those are oil wells or gas wells?

A Well, the Hodge No. 1 is located 1650 feet from the north and 330 from the east. The Hodge No. 2 is located 330 from the north and 2310 from the east. The Hodge No. 3 is located 660 from the north and 1980 from the east. The Hodge No. 4 is located 660 from the north and 660 from the east.

Q Which are the oil wells?

A The Number 3 and the Number 4.

Q Where are those with reference to the quarter sections, which quarter quarter section are those in?

A Well, the Hodge No. 3 is in the northeast of the northeast. The Hodge No. 4 is the southwest of the northeast.

Q Are you presently in the process of drilling any additional wells in that quarter section?

A Yes, sir.

Q Where is that well situated?

A 660 from the north and 660 from the east.

Q Of the northeast quarter of the northeast quarter of the Section?

A Yes.

Q Then, as I understand it when you have completed the drilling of that well you will have a gas well in the northwest of the northeast, an oil well in that same quarter quarter section and an oil well in the southwest of the northeast and an oil well in the northeast of the northeast?

A That is right.

Q Referring for the moment to the Hodge No. 2 Well, which is the well involved in this application for an unorthodox location, will you tell the Commission why that well is in an unorthodox gas well location?

A Well, we were going to drill a Queens oil well there and we set a pipe and we started to drill, we used oil as a drilling fluid instead of mud. We got down into the Yates gas section and the oil wouldn't hold the Yates down, it blew out on us. We had so much gas and we didn't want to go into the Queens section with mud as a drilling fluid. By the results of other operators, there hadn't been any successful doing that. We wanted to use oil and we moved the location to the center of the 40 to drill a Queens.

Q You have now completed a Queens Oil Well?

A Yes.

Q In that same quarter quarter section?

A That is right.

Q Was gas encountered in the Yates zone in your Hodge No. 1 well?

A Yes.

Q Referring to that Hodge No. 1 Well, which I understand is in the southeast quarter of the northeast quarter of Section 8, I believe the Commission records will show that that well pipe is set at some twenty-eight hundred --

A (Interrupting) 2,630.

Q It has open hole through the Yates, Seven Rivers and Queens formations?

A That is right.

Q What do you propose to do in connection with that Hodge Well No. 1?

A We are going to set a liner down to about 339 on top of the Queens.

Q That will shut off the Yates and Seven Rivers?

A That is right.

Q If 160-acre unit allowable is granted to your Hodge No. 2 Well, do you expect to produce any Yates or Upper Seven Rivers gas from your Hodge No. 1 Well?

A No.

(Marked R. Olsen Exhibit No. 1,
for identification.)

Q I hand you what has been marked Olsen Exhibit 1 and ask you to state what that is, please?

A That is an electric log on the Hodge No. 2.

Q That is the well for which you are seeking the unorthodox location?

A That is right.

MR. CAMPBELL: We would like to offer the log in evidence

of the Hodge No. 2 Well.

MR. MACEY: Is there objection to the introduction of this Exhibit in evidence? If not it will be received in evidence.

MR. CAMPBELL: That is all.

MR. KELLAHIN: Jason Kellahin, representing Howard Hogan.

CROSS EXAMINATION

By MR. KELLAHIN:

Q Mr. French, will you describe to the Commission your casing program on your Hodge No. 2, please?

A What?

Q Your casing program on your Hodge --

A We set pipe to 2,800.

Q What size pipe?

A Five and a half.

Q You said it was your intention to go on down to the Queens?

A Yes, sir.

Q Don't you consider that a rather small hole to drill to that depth, Mr. French?

A No, sir.

Q Have you drilled any other wells to the Queens?

A Yes, sir.

Q What wells?

A Hodge No. 1.

Q Is it drilled with five and a half inch casing to the Yates?

A Yes, sir.

Q Did you anticipate deepening the hole to the Queens with five and a half inch pipe?

A Yes.

Q What precautions did you take to protect against any possibility of the blow-out on the Yates when you were drilling the well?

A We had a Guyberson circulating head and a Guyberson block.

Q You used oil rather than mud, you stated?

A Yes.

Q Is that a normal practice in that area?

A It is for us.

Q Is it for the other operators?

A Some.

Q Do you know of any who have drilled through the Yates, going to the Queen in that area, that did not use mud?

A I know of some operators south of there in that particular area.

Q In your opinion, the weight of the oil used contained Yates gas in that section?

A It should.

Q It didn't in this case?

A That is right.

Q But you anticipated that it would?

A That is right.

Q Would you explain why you set your pipe at 2,600 feet when you had already drilled 3,080.

A We thought we might get a little bit of gas in there and have a chance to do completing, if we didn't get anymore in the Queen section than the other operators.

Q You anticipated a Yates gas well?

A We didn't anticipate turning it into a Yates gas well.

Q You said that is your reason for setting the pipe at that depth?

A That is right.

Q At that stage you didn't intend going to the Queens?

A We intended going to the Queens, yes, sir.

Q What date did you start drilling this well, Mr. French?
Was it about the middle of July?

A About the middle of July, yes, sir.

Q Are you familiar with the provisions of Order No. R-368A?

A Yes, sir.

Q Which was in effect at that date?

A Yes.

Q Under the provisions of that order, are you familiar with the location required for a gas well?

A Well, I wasn't. I thought I was at that time, but I was misinformed.

Q I will refresh your recollection on that -- "The Order provided that each well within what was then designated as the Jalco Pool shall not be drilled closer than 660 feet of the outer boundary of the tract and 330 feet to a quarter quarter section line, or inner boundary"?

A That is right.

Q What prompted you to select that particular location, Mr. French?

A Well, sir, I wanted a Queens oil well.

Q Did you take into consideration, at the time, the formation of the Yates sands in that particular area?

A We didn't think we would have anything in the Yates sand.

Q As a matter of fact, the location of the well is more favorable on the structure in the Yates than an orthodox location would have been?

A No, sir, I don't believe it is.

Q You don't believe it is?

A I know it isn't.

MR. MACEY: Any other questions of the witness?

By MR. MACEY:

Q Mr. French, I want to clear up one point. Your original intention to drill, that you filed on the well, was for a Langley-Mattix, which is Queen oil well, is that right?

A That is correct.

Q When you had reached your total depth, I don't remember the figure that Mr. Kellahin quoted, what was your total depth when you ran five and a half inch pipe?

A I believe it was 2,810.

Q Did you run your pipe to the bottom?

A Yes, sir.

Q You had not drilled into the top of the Yates at that stage?

A No, sir.

MR. MACEY: I thought from Mr. Kellahin's questions you had possibly drilled into the top of the Yates.

MR. KELLAHIN: I would like to call attention to the records on record with the Commission that it had been drilled after 3850 feet.

A I beg your pardon?

MR. MACEY: Maybe you didn't understand my question. When

you ran your five and a half inch pipe, which according to this is at, this record here in the Commission file shows that you ran 3,793 feet, which is probably the overall ground level measurement of the pipe, when you ran a total depth of 2,821?

A Yes.

MR. MACEY: Do you have any other information to the contrary?

MR. KELLAHIN: I am sorry, I was misinformed on that. I have one other question.

By MR. KELLAHIN:

Q Mr. French, it is your opinion, is it not, that one well, located in the Jalmat Pool in this particular location, completed in the Yates, will drain in excess of 160 acres?

A Is it my opinion?

Q Is it your opinion?

A Well, possibly.

Q There are no structural barriers, or anything of that nature, that you know of?

A No, sir, there isn't.

Q A well located in the spot which you have your present well would then, under normal circumstances, drain radially, would it not?

A Yes, sir, probably would.

A In other words, it would drain from the Hogan properties? Do you know of any way in which that drainage is counter-balanced by offset drainage?

A Well, there is a lot of wells in Lea County that way is all I know.

Q In this particular instance, do you know of any offset drainage that would compensate for the drainage coming from the open property?

A No, sir.

MR. KELLAHIN: That is all.

MR. MACEY: Any other questions of the witness? If not the witness may be excused.

(Witness excused.)

MR. CAMPBELL: That is all from me.

J. T. PADDLEFORD,

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

DIRECT EXAMINATION

By MR. KELLAHIN:

Q Would you state your name, please?

A J. T. Paddleford.

Q By whom are you employed, Mr. Paddleford?

A I represent Howard Hogan.

Q In what capacity?

A As Geological Engineer and Manager of his property.

Q Have you testified before this Commission in the past as a Geological Engineer and had your qualifications accepted by the Commission?

A I have.

Q Are you also qualified as a Petroleum Engineer?

A Yes, sir.

Q Have you testified before this Commission as a Petroleum Engineer?

A Yes.

Q Were your qualifications accepted?

A Yes, sir.

MR. KELLAHIN: Are the witness's qualifications accepted?

MR. MACEY: Yes.

Q As a normal operation in the Jalmat Pool in the area involved in this hearing, what is the practice of the operators in weighting their mud in drilling through the Yates?

A Well, drilling the Yates section, one knows that they have to overcome approximately 1,200 pounds bottom hole pressure, and you take care of your mud, or you have your wet mud weighted in order to take care of it so the wells won't blow out. Many wells have blown out in the area, lots of fires have been caused by that. As a result, the operator takes precaution to hold the Yates down.

Q Do you consider the methods which Mr. French described as being used by the petitioner in this case, as adequate precaution to prevent such a blow out?

A I don't know what the weight of his oil-based mud was, but I know that you would have to have at least 10 pound mud to adequately hold the Yates gas from blowing out. I don't think oil-based mud would be ten pounds.

Q Do you have any comments in regard to the size of the casing that was set in connection with this, in view of the statement of the witness, that they intended to drill to the Queen?

A Well, if they had intended going to the Queens, No. 1, they would have had their mud weighted right to avoid any blow out possibility in the Yates, No. 2, if they intended to go to the Queens section I don't believe they would have set five and a half inch pipe and then drilled inside of five and a half inch pipe

another 600 feet to the Queens.

Q Are you familiar with the Yates formation in this particular area?

A Yes.

Q In your opinion, will one well drain in excess of 160 acres?

A I would say one well would drain 160 acres very easily. It is a blanket sand, and of uniform porosity and permeability. I would say one well would drain 160 acres.

Q A well located in the spot occupied by the R. Olsen Well, would that have any effect on your adjoining acreage?

A I would say it would, very definitely. It would cause severe drainage on our acreage.

Q Is that drainage offset by any compensating drainage on your part?

A No.

Q What would you have to do in order to offset that drainage?

A We have one well which was drilled on an orthodox location which was dually completed, located in the center of the southwest of the northwest of Section 8, and we are taking our Yates gas from that well. If this well was allowed to produce and receive a 160-acre allowable, in order to protect ourselves, we would have to drill a well immediately offsetting the No. 2 Hodge, which would be expensive. We would only be able to take half the allowable allotted the 160-acre location, well, it would be unreasonable, that is all.

Q Referring to the Yates structure, Mr. Paddleford, have you prepared a contour map showing the top of the Yates?...Would you hand that to the reporter?

(Marked Exhibit No. 1, for identification.)

Q Referring to what has been marked as Exhibit 1, will you state what that shows?

A That is a contour map on top of the Yates sand.

Q Was it prepared by you?

A Prepared by me with information assembled from New Mexico bulletin, plus information of recent wells in the area. It shows the position of our acreage, structurally on the top of the Yates sand.

Q Referring to that exhibit, Mr. Paddleford, have you any comments to make as to the location of the applicant's well?

A Yes. I think from looking at the contour on top of the Yates here, that it was definitely advisable for R. Olsen to crowd the west line of their lease in order to get a more favorable position on top of the Yates sand.

Q In other words, that would be the more favored position in that acreage for a producer from the Yates formation?

A That is correct.

Q Do you have anything to add to that, Mr. Paddleford?

A That is all.

MR. KELLAHIN: That is all.

MR. MACEY: Any questions of the witness?

CROSS EXAMINATION

By MR. CAMPBELL:

Q It is true, is it not, that the method of drilling wells and completing wells differ between individuals and companies, does it not?

A Oh, probably, yes.

Q In other words, there is no fixed procedure, it is a matter of judgment on the part of the people drilling the well, isn't it?

A Well, within an area most people drill the wells in a uniform manner. They conform to practices.

Q Mr. Paddleford, you were formerly employed by R. Olsen, were you not?

A That is correct.

Q With reference to your well in the northwest quarter of this section, you say that is located 660 feet from the west and south lines of that section, is it not?

A That is correct.

Q You say that one well will drain at least 160 acres?

A I would say so, yes, sir.

Q Then you are draining your neighbors, too, aren't you?

A They are protected on the west by a well of their own.

Q Are you getting full 160-acre allowable for the Yates formation in the Jalmat Gas Pool?

A Yes.

Q Have you been getting that ever since gas prorationing went into affect?

A I believe so, yes, sir.

Q When was that well completed?

A It was completed in 1950. If you let me get my report -- The well was completed in the Queens sand November 2nd -- No, wait, it was completed January 9, 1951.

Q When was it dually completed?

A It was dually completed in 19 -- sometime in 1952, I believe.

I am not quite sure as to the date.

Q Do you know how much volume has been produced from the Yates sand in that well?

A Total cumulative.

Q Cumulative?

A Yes, as of July, 1954, it has produced 733,143 MCF.

Q You will have the same allowable for that well that would be allotted to this well if this application were granted, would you not?

A It would be an allowable for 160-acre tract, yes, sir.

Q You experienced some difficulty in the dual completion of that well, did you not?

A Yes, it blew out on me.

Q Has that well been tested with reference to the packer, recently?

A Yes, let's see, it was -- No, not recently, I would say about a year ago.

MR. CAMPBELL: That is all.

MR. MACEY: Any other questions of the witness? If not the witness may be excused.

(Witness excused.)

MR. MACEY: Does anyone have anything further in this case? Mr. Mankin?

MR. MANKIN: Warren Mankin of the Texas Company. As Mr. Campbell indicated, Texas Company granted a waiver for the non-standard, or rather for the unorthodox location of this well. However, in that particular waiver, we indicated that we would like to be in a position in the future, of asking similar waivers from

R. Olsen, as we are not protected on our offset acreage 330 feet from this particular well. Therefore, we feel that to protect our own interest, we might find ourselves in the position of drilling a similar well. Therefore, we gave a waiver with that stipulation for a non-standard location. Based upon what Mr. Campbell and Mr. French have indicated for the plaintiff, we would be agreeable to the 160-acre non-standard unit, providing the work that was contemplated for the shutting off of the gas in the Number 1 Well was taken care of so that gas could only be produced from the Jalmat Gas Pool in this 160 acres of the Olsen lease, through the Number 2, as indicated in this particular application.

MR. KELLAHIN: I would like to offer our Exhibit 1 in evidence. I overlooked doing so.

MR. MACEY: Is there objection to the introduction of this Exhibit in evidence.

MR. CAMPBELL: I would like to clarify one thing about it. What bulletin are you referring to?

MR. FRENCH: New Mexico State Geological Bulletin, 118 or --

MR. MACEY: Number 18?

MR. FRENCH: Number 18,

MR. MACEY: The exhibit will be received in evidence. Anyone have anything further in the case?

MR. KELLAHIN: We would like to make a statement in behalf of Howard Hogan. We, of course, have no objection to the location of the well as such. The point of our objection is that we do protest the granting of 160-acre allowable to the well so located, because of the fact that the Hogan properties would suffer drainage, as shown by the witness for the applicant and the protestant.

The standard rules of this Commission, as provided by law and by the rules and regulations of the Commission, is, as to the effect, that the orders will not be entered allowing drainage to occur, which is not compensated by offsetting drainage. I think that principle should certainly govern in this case.

It is a clear case of the location of the well having been made regardless of what the intentions were. As a gas well it was in violation of the existing orders of the Commission, and the orders that the Commission subsequently adopted in the Jalmat Pool. We do object to the 160-acre unit. We would not, however, object to granting them an allowable of 40 acres, which would be the normal allowable for a well so located.

MR. MACEY: Anyone else? If not we will take the case under advisement and take a short recess.

(Recess.)

STATE OF NEW MEXICO)
 : SS.
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 26th day of November, 1954.

Ada Dearnley
Notary Public, Court Reporter

My Commission Expires:
June 19, 1955