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BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:
CASE 1517

TRANSCRIPT OF HEARING

OCTOBER 2, 1958

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BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
OCTOBER 2, 1958

IN THE MATTER OF: :

CASE 1517 Application of Amerada Petroleum Corpora- :
tion for a dual completion. Applicant, in :
the above-styled cause, seeks an order :
authorizing the dual completion of its :
State BT "M" Well No. 2, located in the :
SE/4 NE/4 of Section 33, Township 11 South: :
Range 33 East, Lea County, New Mexico, in :
such a manner as to permit the production :
of gas from the upper Pennsylvanian forma- :
tion adjacent to the Bagley-Upper Pennsyl- :
vanian Gas Pool, and the production of oil: :
from the lower Pennsylvanian formation ad- :
jacent to the Bagley-Lower Pennsylvanian :
Gas Pool through the casing-tubing annulus: :
and the tubing respectively. :

BEFORE:

Mr. Elvis A. Utz, Examiner.

T R A N S C R I P T O F P R O C E E D I N G S

MR. UTZ: Case 1517.

MR. COOLEY: Case 1517. Application of Amerada Petrol-
eum Corporation for a dual completion.

MR. KELLAHIN: I am Jason Kellahin of Kellahin & Fox,
Santa Fe, New Mexico, representing the applicant, Amerada Petroleum
Corporation. We have one witness, Mr. McBryde.

MR. UTZ: Any other appearances in this case? If not,
you may proceed.

(Witness sworn)

O. C. McBRYDE,
called as a witness, having been first duly sworn on oath, testified
as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Will you state your name, please?

A I am O. C. McBryde, Jr.

Q By whom are you employed, Mr. McBryde?

A By Amerada Petroleum Corporation.

Q In what position?

A Petroleum engineer.

Q Have you previously testified before the Oil Conservation
Commission of New Mexico and had your qualifications as an expert
engineer accepted?

A Yes, sir, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. UTZ: They are.

Q Mr. McBryde, are you familiar with the application in
Case 1517?

A Yes.

Q Will you describe briefly what is proposed in this ap-
plication?

A We are seeking approval for a dual completion in our
State BT "M" No. 2 in the Bagley Pools.

Q That would be gas from the Bagley Upper Pennsylvanian

zone and oil from the Lower Pennsylvanian zone?

A Yes, sir, that's right.

Q Well, referring to what has been marked as Exhibit No. 1, will you state what that shows?

A Exhibit No. 1 is a map of the Bagley Field, and on that we have shown the location and ownership of all the wells in the field. We have circled the subject well, the State BT "M" No. 2 in red. We have shown on the map the zone from which other wells in this Pool are producing, that is, those zones that are producing -- excuse me -- those wells that are producing from zones that the subject well is producing from.

Q Does that show the well location?

A Yes, sir. The State BT "M" No. 2 is located in Section 33, Township 11 South, Range 33 East. It is 1980 feet from the North line and 660 feet from the West line of that Section.

Q Is that well location within the horizontal limits of the Bagley-Upper Pennsylvanian or the Bagley-Lower Pennsylvanian?

MR. UTZ: What is the location of that?

A 1980 from the North and 660 from the East line. Did I say West? I am sorry.

Q Is that location within the horizontal limits of the Bagley-Upper Pennsylvanian Gas Pool, or the Bagley-Lower Pennsylvanian Gas Pool?

A No, sir, it is not. It is outside the limits of any pool.

Q It is within one mile of the limits of those two pools,

is it not?

A Yes, it is.

Q Now, does the Exhibit show the other completions in the Bagley zones, including the dual completion in the two gas zones?

A Yes, sir. We have marked on the Exhibit those wells producing from zones that the State BT "M" No. 2 will produce from. Would you like for me to point those out?

Q No, I don't believe that is necessary. Now, referring to what has been marked as Exhibit No. 2, will you state what that is?

A Exhibit No. 2 is a marked electric log of the subject well. We have shown on this Exhibit the perforations opposite the two zones marked in red. You will note the Upper zone is perforated from 8,626 to 8,678. The Lower zone from 9,876 to 9,896. We have also shown the top of the Upper gas zone at 8,622 feet, and the top of the Lower gas zone at 9,825 feet.

Q Will you state what the perforations were in the Lower zone?

A From 9,886 to 9,896.

Q Are those perforations in the Upper zone within the vertical limits of what would be the Bagley-Upper Pennsylvanian Gas Pool?

A Yes, sir, they are.

Q Is that zone gas productive in this well?

A Yes, sir, it is.

Q Now, referring to the Lower zone, is that located within what would be the vertical limits of the Bagley-Lower Pennsylvanian Gas Pool?

A Yes, sir, it is.

Q And what is it productive of?

A It has oil production.

Q Now, referring to what has been marked as Exhibit No. 3, will you state what that is?

A Exhibit No. 3 is a diagrammatic sketch of the dual completion.

Q Will you state what that Exhibit shows, Mr. McBryde?

A Exhibit 3 shows the casing, cementing and completion program on the subject well. It shows the surface, 13 3/8 inch surface casing set at 362 feet; 9 5/8 inch intermittent set at 3,774 feet. Shows the 7 inch casing set at 9,919 feet. Shows the top of the cement behind the 7 inch casing at 6,178 feet. Shows the proposed producing interval in the Upper Pennsylvanian Gas zone from 8,626 to 8,678 feet. Shows the Baker Model "D" production packer set at 9,800 feet; the PSI nipple set immediately above the packer at 9,793 feet. Shows the proposed producing interval of the Lower Pennsylvanian zone from 9,886 to 9,896 feet, and the drilled out depth and the total depth of the well.

Q Now, what is the purpose of that PSI nipple?

A PSI nipple is placed in the single tubing string to enable us to use the single string of tubing to perform any type

of work that we desire on either zone by doing some wireline work without pulling the tubing.

Q Would that type of completion enable you to do any treating or testing or remedial work that might be required or reasonably anticipated in this well?

A We can acidize either the upper or lower zone, or kill the lower zone if we needed to.

Q What is the status of the Upper zone at the present time?

A We have that zone shut in at the present time.

Q And are you producing the Lower zone at the present time?

A Yes, sir. It has an oil allowable of 132 barrels right now, and we are producing it.

Q Is this type of dual completion a type which has heretofore been approved by this Commission?

A Yes, sir, it is.

Q In your opinion, will it prevent commingling of fluids or hydrocarbons from the two zones?

A Yes, sir, it will.

Q Is the type of completion such that you can adequately test to determine if there is communication between the two zones?

A Yes, sir.

Q Is this proposed completion, in your opinion, in the interest of the conservation and the prevention of waste?

A Yes, sir, it is.

Q And will correlative rights be protected by such a com-

pletion?

A Yes, sir.

MR. KELLAHIN: At this time we would like to offer in evidence Exhibits 1 through 3 inclusive.

MR. UTZ: Without objection, they will be received.

MR. KELLAHIN: That's all the questions I have.

MR. UTZ: Does anyone have a question of the witness?

CROSS EXAMINATION

BY MR. COOLEY:

Q Inasmuch as the Lower zone is completed in an interval which is designated as the Lower Pennsylvanian Gas Pool just a mile away or less than a mile away, in other words, this being productive of oil, does Amerada have any recommendations as to proper and logical designation of this oil productive zone as discovered in this State BT "M" No. 2 Well?

MR. KELLAHIN: I would like to make a statement in connection with that, if I may. The matter of Pool Rules as to this type situation will, of course, have to come before the Commission, but until some experience has been gained, Amerada is not in a position at the moment to make a recommendation. We realize, of course, it will have to come back.

MR. COOLEY: It would be Amerada's recommendation that this be left as an undesignated oil pool?

MR. KELLAHIN: That is correct, yes.

MR. COOLEY: The Rules and Regulations for the Bagley-

Lower Pennsylvanian Gas Pool prescribe that all wells completed in that vertical interval within a mile would be drilled, operated, produced and prorated in accordance with the provisions of that Order. However, it seems inappropriate inasmuch as this is not a gas well.

MR. KELLAHIN: That's correct. I would like to call the Commission's attention to this fact. The Pool Rules for the Upper Bagley Pennsylvanian zone make a provision for this type of situation. This is the first oil that has been discovered in the Lower Bagley Pennsylvanian Gas zone, and the Rules applicable to the Upper zone might not fit the Lower zone. Until such further --

Q (By Mr. Cooley) Mr. McBryde, what is the gas-oil ratio of this Lower Pennsylvanian completion?

A The last test that we had on that, it was 1,656 on a twenty-four hour test.

Q Do you have any explanation why two wells completed so close to each other in the same zone would have such different producing characteristics?

A Which other wells are you referring to?

Q Well, the nearest well producing from the Lower which should be your --

A Shell Amerada State "A" Unit No. 1 --

Q Yes.

A -- in the SE/4 of the SE/4 of Section 23. The State BT "M" No. 2 is lower on the structure than any other well productive

from this zone, and we have just encountered a small oil rim.

Other than that, I have no other explanation.

Q Do you think it is possible that what we have designated as the Lower Pennsylvanian Gas Pool is actually a gas cap?

A We think that this oil rim that we found will be of a very minor significance. I would hesitate to call it a gas cap. I would rather approach it from the other angle and call this an oil rim. I might add that we don't know for sure yet what we have here, but we do have some oil.

Q Would you be of the opinion there is communication across this half mile interval between the subject well and the Shell Amerada State "A" Unit No. 1?

A Yes, I think so.

MR. UTZ: Any other questions? Mr. Fischer.

MR. FISCHER: I have a few.

MR. UTZ: You may proceed.

QUESTIONS BY MR. FISCHER:

Q Mr. McBryde, on your schematic diagram, your tubing shows only the PSI nipple. It seems to me like you would need a circulating sleeve also on that tubing above the nipple and packer approximately opposite the Upper Pennsylvanian Gas zone in order to be able to - if you determine it necessary to work that well over or take bottom hole pressures through the tubing, don't you think you would need a circulating sleeve there?

A We can circulate through the PSI nipple.

Q Do you have perforation there?

A The nipple has ports in it, and we can run a tool on a wire line to close those ports off to the Upper zone and leave the Lower zone open, or we can run a blanketing plug below the PSI nipple which will blanket the Upper zone opened through the tubing through those ports.

Q So you wouldn't need your circulating sleeve?

A No, sir.

MR. FISCHER: Thank you.

QUESTIONS BY MR. UTZ:

Q Is this well receiving an allowable as an undesignated oil well at the present time?

A Yes, sir, I believe that's right. It has an allowable, I think, of 132 barrels a day.

Q And it is your suggestion that it continue to receive an undesignated oil well allowable until such time as you have more information?

A Yes, sir.

Q And that is true insofar as the Upper zone is concerned?

A No, sir. The Upper zone is a gas completion. It produces dry gas, and until we -- well, we are not ready to produce that yet. It is still shut in. We are trying to decide acreage that we might want to dedicate to it.

Q That was my next question. You don't know what acreage you would like to dedicate to the Upper zone?

A No, sir, we are still working on that. There is a possibility that we will drill another well up in that vicinity, and until we decide on this well, the location of it, we will not be able to offer a firm recommendation on the acreage for the Upper zone.

QUESTIONS BY MR. COOLEY:

Q Mr. McBryde, the Shell Amerada State "A" Unit No. 1 Well, didn't it show the SE/4 of Section 33 to be non-productive of gas from the Upper Pennsylvanian Gas Pool?

A There has been some controversy on that. I personally think it is productive, and I think that at the proper time we could show that it is productive. It is at the present time outside the limits of the Pool.

MR. UTZ: Did you drill the well?

A No. I think Shell drilled it.

Q (By Mr. Cooley) It would be rather difficult, in any event, whatever acreage you dedicated to your State BT "M" No. 2 Well, to make that acreage contiguous with the present delineation of the Bagley-Upper Pennsylvanian Gas Pool, wouldn't it?

A I don't think it would be very difficult.

Q Well, isn't the SE/4 of the SW/4 of Section 34 outside of it?

A The entire south half of Section 34 in the Upper zone is attributed to our BT "K" No. 1.

MR. COOLEY: That's all the questions I have.

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

(Witness excused)

MR. UTZ: Any statements to be made in this case? If not, the case will be taken under advisement.

The hearing will be recessed until one-thirty.

C E R T I F I C A T E

STATE OF NEW MEXICO)
 : ss
COUNTY OF BERNALILLO)

I, J. A. TRUJILLO, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me and/or under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal, this, the 9th day of October, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

J. G. Ingich
Notary Public

My Commission Expires:
October 5, 1960

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. LS17, heard by LS 10-2 1958.

Frank W., Examiner
New Mexico Oil Conservation Commission