

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 27, 1960

## EXAMINER HEARING

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IN THE MATTER OF: )

Application of Shell Oil Company for authority )  
to recomplete its State BUA Well No. 2 (for- )  
merly its Bluitt Unit Well No. 2) at an unor- )  
thodox oil well location in the Pennsylvanian )  
formation within one mile of the Bluitt Penn- )  
sylvanian Pool. Said well is located 1980 )  
feet from the North line and 660 feet from the )  
West line of Section 16, Township 8 South, )  
Range 37 East, Roosevelt County, New Mexico. )  
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Case 2021

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. PAYNE: Application of Shell Oil Company for  
authority to recomplete its State BUA Well No. 2 (formerly its  
Bluitt Unit Well No. 2) at an unorthodox oil well location in the  
Pennsylvanian formation within one mile of the Bluitt Pennsylvanian  
Pool.

(Shell Oil Company's Exhibits  
1 through 4 marked for  
identification.)

MR. FEDERICI: Are we ready to proceed?

MR. NUTTER: Yes, sir. At the outset we might ask if  
there are any appearances to be made.

MR. FEDERICI: William Federici of Seth, Montgomery,

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PHONE CH 3-6691

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Federici and Andrews for Shell Oil Company. I have one witness, Mr. Lowery.

(Witness sworn.)

R. E. LOWERY

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

DIRECT EXAMINATION

BY MR. FEDERICI:

Q Would you state your name, please?

A R. E. Lowery.

Q By whom are you employed? A Shell Oil Company.

Q In what capacity?

A As a District Exploitation Engineer in our Roswell office.

Q Have you testified before this Commission before?

A No, sir.

Q Will you state for the Commission your educational background and qualifications?

A I graduated from the Colorado School of Mines in 1952 with a degree of Mining Engineering. Since that time I have been employed by Shell Oil Company; for the last five years I have worked as an exploitation engineer in West Texas and Southeastern, New Mexico, and I'm currently District Exploitation Engineer for Shell in Roswell.

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MR. FEDERICI: Are the qualifications of the witness satisfactory?

MR. NUTTER: Yes, sir, please proceed.

Q Are you acquainted with the application in this case, No. 2021?

A Yes, sir.

Q What is the purpose of the application?

A It's the application by Shell Oil Company for an unorthodox well location in the Bluitt Pennsylvanian field.

Q I show you what has been marked Exhibit No. 1 and ask you if that was prepared under your supervision?

A Yes, sir.

Q Will you state to the Examiner what Exhibit No. 1 shows?

A This is a plat of the Bluitt Pennsylvanian field area, Roosevelt County, New Mexico. It shows the location of the Shell Bluitt No. 2, which in the future will be called the State BUA No. 2. With relation to the lease lines and existing production in the Bluitt Field, you will note that the location is 1980 feet from the North line and 660 feet from the West line of Section 16, which is in the Southwest Quarter of the Quarter section. Field rules established in 1959 state that any well completed in or recompleted in the Bluitt Pennsylvanian pay shall fall in the Northwest Quarter or the Southeast Quarter of the Quarter section. I would like to point out that Bluitt Unit No. 2 was plugged



and abandoned in January of 1956. The first Pennsylvanian production in the Bluitt Pennsylvanian field was established in 1959 and the field rules which called for 80-acre spacing were established also in 1959, so our well was drilled to the Ellenberger and plugged prior to the discovery of the Bluitt Pennsylvanian field.

Q Now, with reference to Exhibit No. 2, what does that show?

A Exhibit No. 2 shows the diagram of the well as it now exists, indicates where the surface pipe was set, the intermediate string with cement plugs were spotted. It also indicates the Pennsylvanian Bough C pay at 9400, which is where we propose to re-enter and test.

Q How do you propose to reenter and test this?

A That is indicated on Exhibit No. 3.

Q You don't have Exhibit No. 3.

A I stand corrected, we do have another diagram.

MR. NUTTER: We can label the second diagrammatic sketch No. 2-A.

(Whereupon, Shell's Exhibit No. 2-A, was marked for identification.)

Q Will you explain to the Examiner Exhibit 2-A?

A We propose to drill out the cement plug in the top of the intermediate pipe and also the one in the bottom of the intermediate feet which is at 4,420 and go on and clean out to 9700



and set an open hole bridge plug and spot a 50 sack cement plug on top of that and then run the 5½-inch production string.

Q Have you obtained any waivers or statements of no objection from surrounding interest owners?

A We contacted all of the offset operators, of which there are three, W. H. Walne to the North and Felmont to the Northwest and West and Ohio to the Southwest and South. We do have signed waivers from Felmont and from W. H. Walne, but we have not received any signed waiver from Ohio. However, they did indicate that they were not opposed to the application.

Q Will you explain to the Examiner the difference in cost of drilling a new well or going in and reworking this well?

A To drill a new well at a regular location we estimate it would cost \$140,000 for a completed well. The estimated cost for reentering the existing well and completing it would be \$60,000, or a savings of \$80,000.

Q Would you state in what zone you anticipate production?

A The Pennsylvanian formation Bough C pay.

Q In your opinion would approval of this application be in the interest of conservation?

A Yes, it would. There is considerable dry hole risk associated with this reentry, and we do not believe that we could justify drilling a new well in this portion of the field. We figure the chances of a completion are pretty poor, but because



of the nominal amount of money required to reenter the dry hole, we feel we are justified in treating a completion in this manner.

Q If the application is approved, would the rights of interest owners be protected, in your opinion?

A Yes, sir.

MR. FEDERICI: I think that's all.

MR. NUTTER: Any questions of Mr. Lowery?

MR. PAYNE: Yes, sir.

MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Lowery, as a general proposition, where you have oblong units, do you think you get more ultimate oil by having wells diagonally offsetting each other or do you think it makes any difference which 40 you drill on in an 80-acre pool?

A I would say that would vary with the pool, the drainage characteristics of the particular pay we're talking about, but the Pennsylvanian Bough C pay is an extremely permeable limestone pay and I don't think it would matter where the well was located.

Q Do you think the ultimate oil recovery would be approximately the same under a fixed pattern or under a flexible pattern?

A I do.

MR. NUTTER: In this particular pool you mean?

A In this particular pool, right, restricted to the



Pennsylvanian Pool in the Bluit Field.

Q (By Mr. Payne) If you get a dry hole at this proposed location, would you then drill a well on orthodox location on this 80?

A No. I'm quite convinced that we would not.

Q And you are proposing this not because this is better structurally, but because you have already got the hole here?

A That's right.

Q So far as Shell is concerned, if the application is denied, you probably wouldn't drill a well on this 80?

A That's our belief.

MR. PAYNE: I believe that's all. Thank you.

BY MR. NUTTER:

Q Has that No. 1 well been completed yet?

A No, sir. It's still drilling. It should be down in a couple of weeks.

MR. PAYNE: Does Ohio have any wells in the pool that are completed on unorthodox locations?

A Not to my knowledge. I take that back, there's one in Section 20.

MR. NUTTER: I believe that well was drilled and completed prior to the promulgation of the pool rules.

MR. FEDERICI: Right.

A Right.

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Q (By Mr. Nutter) When this well was originally plugged and abandoned, was any casing pulled in the well?

A No.

Q So it does have the string of 13-3/8 in the well and cemented and also a string of 9-5/8 to approximately 4140?

A That's right. Both strings were cemented to the circulation and circulated on each one.

Q In addition, you propose to run a string of 5-1/2 inch pipe?

A Yes, sir.

Q This Exhibit No. 4 is a waiver. What company is that waiver from?

A The lease is in the name of W. H. Walne who is the man that signed the waiver. It's a private individual.

Q This is the waiver representing the acreage to the North of your proposal, to the North of the Section 16. Now, he is also the Vice President for Felmont, and they have acreage to the West and Northwest in the name of Felmont and he signed their waiver in their name, and we have a waiver from all the offsetting operators except Ohio and Intex along the Southeast Quarter of Section 17?

A That's right.

MR. NUTTER: Any further questions of Mr. Lowery? He may be excused.

(Witness excused.)





MR. FEDERICI: We offer in evidence Exhibits No. 1, 2, 2-A, 3 and 4.

MR. NUTTER: Shell's Exhibits 1, 2, 2-A, 3 and 4 will be entered in evidence.

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

MR. FEDERICI: I have nothing further.

MR. NUTTER: Does anyone have anything further for Case 2021? We will take the case under advisement and take Case 2022.

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 1st day of August, 1960.

Ada Dearnley  
Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2021 heard by me on 1/27, 1960.

Examiner, Examiner  
New Mexico Oil Conservation Commission

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