

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 1747

TRANSCRIPT OF HEARING

AUGUST 19, 1959

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BEFORE THE
OIL CONSERVATION COMMISSION
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IN THE MATTER OF: :

CASE 1747 Application of George L. Buckles Company for :
a non-standard oil proration unit. Appli- :
cant, in the above-styled cause, seeks the :
establishment of a 49.82-acre non-standard :
oil proration unit in an undesignated Dela- :
ware pool consisting of lots 1 and 2 of Sec- :
tion 34, Township 26 South, Range 32 East, :
Lea County, New Mexico, said unit to be dedi- :
cated to the applicant's Elliott-Federal Well: :
No. 1, located 330 feet from the South and :
East lines of said Section 34. :

BEFORE:

Daniel S. Nutter, 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. NUTTER: Take Case 1747.

MR. PAYNE: Case 1747. Application of George L. Buckles
Company for a non-standard oil proration unit.

MR. BUCKLES: I am George L. Buckles, and I have been
qualified and testified at previous hearings before the Commission.
As sole owner of George L. Buckles Company, which is the consulting
engineering firm and oil producer, and is the operator of the
property involved, I request that I be allowed to testify without
benefit of counsel.

MR. PAYNE: The George L. Buckles is not a corporation, is it, Mr. Buckles?

MR. BUCKLES: No, it is solely owned individually.

MR. PAYNE: I will swear you in.

(Witness sworn)

GEORGE L. BUCKLES,

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

DIRECT EXAMINATION

BY MR. PAYNE:

Q Will the witness please state his name and position?

A My name is George L. Buckles. I am sole owner of George L. Buckles Company located at Monahans, Texas.

This Company is the operator of the acreage involved in this hearing. This is Case 1747, involving the application of George L. Buckles Company to establish a 49.82-acre non-standard oil proration unit by combining Lots No. 1 and No. 2 of Section 34, Township 26 South, Range 32 East, Lea County, New Mexico. The unit to be dedicated to Elliott-Federal Well No. 1, located 330 feet from the South and East lines of said Section 34.

I would like to present in evidence a photostatic copy of an original survey made in September and October 1883 showing the acreage involved in this application.

(Thereupon, Buckles' Exhibit No. 1 was marked for identification.)

Q We will mark this Buckles' Exhibit No. 1.

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A I would like to present a large scale plat showing the same acreage colored in yellow.

MR. NUTTER: This will be marked as Exhibit No. 2.

(Thereupon, Buckles' Exhibit No. 2 was marked for identification.)

A I would like to present another plat showing the acreage owned in this field by the George L. Buckles Company, and the relationship of this well to other wells in the field.

MR. NUTTER: Is this the EL Mar area, Mr. Buckles?

A In Texas it is called the EL Mar Delaware Field. As far as I know, the Commission has not designated a field name in New Mexico.

Lot No. 1 contains 24.93 acres. This is the lot on which the well is located. Lot No. 2 contains 24.89 acres. Now, the original lease was dedicated September the 1st, 1951 covering Lots 1 and 2, and other lands. It was taken from the United States Department of Interior by Frank O. Elliott of Roswell, New Mexico. The primary term of the lease had been extended to August the 31st, 1961, and the George L. Buckles Company obtained drilling rights to the land by a contract and operating agreement dated May 22nd, 1959. This agreement was approved by the United States Department of Interior July 19, 1959, and it was recorded in the record of Lea County, New Mexico in Lovington, New Mexico August the 7th, 1959.

Due to the fact that Mr. Elliott retained some overriding

royalty interests in this property, certain drilling commitments were outlined in the operating agreement, whereby the operator was obligated to test each 40-acre sub-division assigned. Total acreage assigned was approximately 170 acres. However, Lots 1 and 2 of Section 34 were deemed to be a single 40-acre legal sub-division for drilling obligation purposes.

Elliott-Federal Well No. 1 was spudded June 26, 1959. Total depth of 4,550 feet was reached July 9th, 1959. The well was cored from 4,450 to 4,550 feet. I would like to present in evidence a core analysis of the productive interval cored.

MR. NUTTER: This core analysis will be marked as Exhibit No. 4.

(Thereupon, Buckles' Exhibit No. 4 was marked for identification.)

A I would also like to present a final Exhibit of a gamma ray neutron log run on this same well.

MR. NUTTER: The log will be identified as Exhibit No. 5.

(Thereupon, Buckles' Exhibit No. 5 was marked for identification.)

A 4 1/2 inch OD casing was cemented on the bottom. This was perforated from 4,450 to 4,466 feet with four perforations per foot. These perforations were acidized with 350 gallons of acid. The well was potentialed on 12/64 inch choke through 2 inch EUE tubing on July 13th, 1959. The well produced 52.21 barrels of oil and no water in 24 hours. Gravity of the oil was approxi-

mately 41 4/10 API. Gas-oil ratio was 475 cubic feet per barrel. After the well showed no water production, it was hydraulically fractured on July 23rd, 1959 with 1,500 gallons of lease crude and 1,500 pounds of 20 - 40 sand. The well is now capable of producing 52 barrels of pipeline oil per day through a 6/64 inch choke. The flowing pressure is 1275 pounds on the casing, and 650 pounds on the tubing.

The accumulation of oil in this Field is caused, in my opinion, by a stratigraphic or lithological trap wherein the permeability of the Delaware sandstone pinches out on the western or up-dip side of this Field. The permeability pinchout is at some unknown distance west of Federal-Elliott Well No. 1. This well is at the present time the highest well structurally in the New Mexico portion of the Field.

The Texas Railroad Commission has already designated 40-acre proration units in the El Mar (Delaware) Field, which offsets this acreage to the South.

There are four lots in the southern extremity of Section 34. The acreage by lots is as follows: Lot No. 1, 24.93 acres; Lot No. 2, 24.89 acres; Lot 3, 24.85 acres; and Lot No. 4, 24.81 acres, for a total acreage in the four lots of 99.48 acres.

The balance of Section 34 consists of two 80-acre tracts for a total of 259.48 acres in the entire section. On 40-acre proration units, there would be room for only six 40-acre proration units with 19.48 acres left over.

We respectfully request that these two small tracts be unitized into one proration unit in the interest of protecting correlative rights of the owners of the 9.82 acres of Lot No. 2 in excess of the amount required to form an even 40-acre unit by combining with Lot No. 1. We also request that the unitization -- this unitization to prevent the drilling of an unnecessary well to the depth of approximately 4,550 feet.

There is no evidence available that the entire acreage under Lots 1 and 2 are not productive from the Delaware Sand.

That's all I have unless there are some questions.

MR. NUTTER: Anyone have any questions of Mr. Buckles?

QUESTIONS BY MR. PAYNE:

Q Mr. Buckles, your Well No. 1 is 4,550 feet deep, is that correct?

A Yes, sir.

Q Now, what is the allowable in this pool in Texas?

A The allowable is 93 barrels per well per operated day.

MR. NUTTER: Is this pool still on the Texas yardstick?

A That, incidentally, is the Texas yardstick for that depth, yes, sir, on 40-acre spacing.

MR. NUTTER: What did they establish the allowable at?

A They established the allowable as 93 barrels per well on 40-acre proration units.

Q (By Mr. Payne) What is the present operating -- how many days can you operate in Texas now?

A Nine.

Q Is it nine?

A This month.

Q This well is 330 feet from the Texas line, is it not?

A Yes, sir.

Q Is the ownership in Lots 1 and 2 common throughout?

A Yes.

Q Do you hold a lease in Lots 3 and 4?

A No, sir. Our acreage is shown in yellow, which is Lots 1 and 2, the northeast 40 acres out of Section 34 and the east half of the southeast quarter, being 80 acres in Section 27 to the north. That's the New Mexico side of the Field.

Q Has the Commission approved a similar application for Hill & Meeker?

A I understand they have. I have no actual knowledge of it, however.

MR. PAYNE: That's all. Thank you.

QUESTIONS BY MR. NUTTER:

Q Mr. Buckles, do you think it would be economic to drill a well on each of these Lots?

A No, sir. If the proration is set on a 100 percent acreage basis, I believe that any additional oil produced by drilling of Well No. 2 would not be enough to justify drilling of the well.

Q Now, do you own Lots 3 and 4 also?

A No, sir. They are under lease to Mr. Elliott.

Q Does the establishment of this 49.82-acre non-standard unit come closer to a 40-acre than it would be if you had each of these two Lots with a well on them?

A Yes.

Q Do you think that Lot No. 2 is productive of oil?

A Yes, sir.

Q Do you think that the well there in Lot No. 1 will adequately drain that oil?

A Well, I couldn't answer that without saying that I agree that one well would adequately drain 40 acres, but I will say that if the allowables are based on acreage alone, the two wells, one well drilled on Lot 1 and one well drilled on Lot 2, would not produce the total of the two wells -- would not be enough additional oil to pay for the drilling of Well No. 2.

MR. PAYNE: What you are relying on, Mr. Buckles, is drainage and counter-drainage in the event other wells are drilled in Section 34, isn't that right?

A Yes, and I also believe that this Field, since both wells would be allowed to produce the same amount of oil as one well, that by the time the bottom hole pressure in the Field reached the stage that it was a stripper production, that very little additional oil would be produced from the second well, and that, only during the stripper stages of the lease.

Q (By Mr. Payne) Mr. Buckles, are you of the opinion

that this is one common source of supply, the portion in Texas and in New Mexico?

A I believe it is, yes, sir.

Q Did you feel it would be better to prorate this on the basis -- prorated the same way in each state?

A I think it would be more equitable for the entire Field to prorate it the same, yes, sir.

MR. NUTTER: You feel that the area up here in Sections 25 and 36 where there is a cluster of wells, and also this area down in Sections 4 and 9 and 3 and 10, as well as your well up here in Section 34 are all producing from a common source of supply?

A I think so. I will admit that some geologists are of the opinion that there may be two reservoirs, but there is nothing to indicate that it is not of a common reservoir. The structure dip is about 100 feet per mile east and slightly northeast, and there is nothing I have seen to indicate that there isn't a continuity of this particular structure across the state line into New Mexico and Texas.

MR. NUTTER: Have there been any dry holes drilled in these intervening sections?

A No, there has been one dry hole at the extremity of the New Mexico portion of the Field. However, it was the furthest well to the north and west in New Mexico. There have been two dry holes drilled in the west portion of the Texas side of the Field.

MR. PAYNE: Where is that well drilled in New Mexico that was a dry hole, Mr. Buckles?

A It is in this Section offsetting Continental's lease, possibly off of this map, but it is in the Section north of Section 25.

MR. NUTTER: That was up there in Section 24?

A Yes, sir, that's Hill & Meeker's Well No. 2.

MR. PAYNE: I notice on Exhibit 3, Mr. Buckles, you have designated down here for a proposed injection, an injection well that has no significance for this case, does it?

A No, sir, that's for future water flooding.

MR. PAYNE: The El Mar Delaware Field in Texas is not being water flooded at present?

A No, sir, it is a flowing field.

MR. NUTTER: Does anyone have any further questions of Mr. Buckles? He may be excused.

MR. BUCKLES: Thank you.

(Witness excused)

MR. NUTTER: Does anyone have anything further in Case No. 1747? Take that case under advisement.

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 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 5th day of September 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

J. A. Trujillo
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. 1247, heard by me on 8-19, 1959.
[Signature], Examiner
New Mexico Oil Conservation Commission