NEW MEXICO OIL CONSERVATION COMMISSION

Examiner Hearing (Elvis A. Utz)

Santa Fe, NEW MEXICO

REGISTER

HEARING DATE January 25, 1961 TIME: 9 a.m.

NAME:	REPRESENTING:	LOCATION:
H. T. FROST JR.	ATLANTIC REFINING Co.	MIDLAND, TEX
G. W. EATON, JR.	PAN AMERICAN PETR. CORP.	FARMINGTON, N.M.
GUY BUELL	" " " "	FORT WORTH, TEX.
R. S. Christie	Amerada	Tulsa Okla
Jason Kellahin	Kellahin & Fox	Santa Fe, N.M.
Ray Allen	Atlantic	Roswell, N. Mex.
[illegible]	[illegible]	" "
A. L. Porter	O.C.C.	Santa Fe
[illegible]	[illegible]	"
J. E. ROBINSON, Jr.	TEXACO INC.	MIDLAND, TEXAS
Tom McKenna	Chambers & Kennedy	Midland, Texas
Leo S. Cichowicz	Continental Oil Co.	Roswell N.M.
M. R. McLENNAN	Continental Oil Co	Durango, Colo
William M. Griffith	" " "	Denver, Colo
Bill Kastler	Gulf Oil Corp	Roswell
Don Bilbrey	Gulf Oil Corp	Hobbs
Gerald J. Savage	Gulf Oil Corp	Roswell
William A. Heck	Chambers & Kennedy	Midland, Tex
[illegible] Losee	Yates Drlg Co	Artesia N.M.
Ken Reynolds	"	"

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HEARING DATE January 25, 1961 TIME: 9 a.m.

NAME:	REPRESENTING:	LOCATION:
Jim Bailey	Yates Drlg Co	Midland

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 25, 1961

EXAMINER HEARING

IN THE MATTER OF:

Application of Continental Oil Company for three non-standard gas proration units. Applicant, in the above-styled cause, seeks the establishment of the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico:

A 320-acre non-standard gas proration unit consisting of the W/2 E/2 and E/2 W/2 of Section 19, Township 25 South, Range 37 East, to be dedicated to the Sholes B-19 Well No. 1, located in the center of the SE/4 SW/4 of said Section 19. Case 2159

A 320-acre non-standard gas proration unit consisting of the E/2 and NE/4 NW/4 of Section 1, Township 25 South, Range 36 East, to be dedicated to the Wells B-1 Well No. 1, located in the center of the NE/4 NE/4 of said Section 1.

A 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, to be dedicated to the Meyer A-29 Well No. 3, located in the center of the SE/4 SW/4 of said Section 29.

BEFORE:

Elvin A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2159.

MR. PAYNE: Application of Continental Oil Company for three non-standard gas proration units.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe,

representing the applicant. We have one witness, Mr. Cichowicz.

(Witness sworn.)

MR. UTZ: Other appearances in this case?

LEO CICHOWICZ

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Mr. Leo S. Cichowicz.

Q By whom are you employed and in what position?

A Senior Production Engineer, Continental Oil Company.

Q Are you a petroleum engineer?

A Yes, sir.

Q Have you testified before this Commission as a petroleum engineer?

A Yes, sir.

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

MR. UTZ: Yes, sir.

Q (By Mr. Kellahin) Mr. Cichowicz, are you familiar with the application in Case 2159?

A Yes, sir, I am.

Q Would you state briefly what is proposed in this application?

A On its initial well, B-19 No. 1, this is the application

of Continental Oil Company for the enlargement of the presently approved 160-acre unit to a non-standard gas proration unit of 320 acres consisting of the W/2 E/2 and the E/2 W/2 of Section 19, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, in the Jalmat Gas Pool for its Sholes B-19 Well No. 1.

Q That is the first portion of the application; is that correct?

A Yes, sir.

Q Referring to Exhibit No. 1, will you discuss the information shown on the exhibit?

A Exhibit No. 1 is a location and ownership plat showing the Sholes B-19 Lease and surrounding area. The lease consists of the W/2 E/2, and E/2 W/2 and SW/4 SW/4 of Section 19, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

It is proposed to allocate the W/2 E/2 and the E/2 W/2 of Section 19, Township 25 South, Range 37 East for Jalmat gas proration purposes to the Sholes B-19 No. 1 which is shown circled in red, located 660 feet from the south line and 1980 feet from the west line of Section 19, Township 25 South, Range 37 East. Surrounding Jalmat gas wells are shown circled in green, and the acreage allocated to them is shown outlined in green, also.

Q You prepared a structure plat of the area involved?

A Exhibit No. 2 is the structure plat, contoured on the Yates Marker, showing the proposed unit and surrounding area. The No. 1 well, to which the unit is proposed to be allocated for gas

proration purposes is shown circled in red and the acreage proposed to be allocated to the No. 1 well is outlined in red. As can be seen, the Yates formation extends under the Sholes B-19 Lease at an elevation which is proven by other wells to be gas productive.

Q On the basis of this exhibit, in your opinion is all the area you propose to dedicate to the well productive of gas?

A Yes, sir.

Q Now, have you any deliverability test information on the Sholes B-19 No. 1 well?

A Exhibit No. 3 is a copy of the deliverability tests of the Sholes B-19 No. 1 well. It shows the well is capable of producing the allowable for the enlarged unit.

Q What does the test reflect as to its productivity?

A Deliverability is shown to be 306 MCF of gas per day as measured by a test taken March 7th to 11th, 1960.

Q Is the additional acreage you propose to dedicate to this well presently dedicated to Jalmat production?

A The acreage to be rededicated to the No. 1 well has been dedicated to the No. 2 well. However, to present additional testimony in regard to the production performance of the No. 2 well, we offer the following: The additional acreage proposed to be allocated to the Sholes B-19 No. 1 was originally allocated to the No. 2, which is now classified as a Jalmat oil well. The No. 2 well was completed on September 9th, 1948, for an initial daily potential of 4,220 MCF of gas. The interval open to production is from the

base of the 5 1/2-inch casing set at 2700 to 3000, with the pay being the Yates formation from 2800 to T.D.

During July of 1952 the Sholes B-19 No. 2 began producing oil and tested at the daily rate of 25 barrels of oil, no water, with 1,168 MCF of gas. The well was then reclassified as an oil well.

During 1957 gas production recurred, and the Sholes B-19 No. 2 was reclassified as a Jalmat gas well on April 1, 1957, and assigned 160 acres by Commission Order NMSP 363. Only marginal gas production was obtained, and on January 16th, 1958, the bottomhole pressure bomb was run into the well and found fill material at a depth of 2718 feet and liquid at 1925 feet.

On May 1st, 1958, the Sholes B-19 No. 2 was temporarily shut down. During August, 1958, this well was cleaned out to 3,000 feet and treated with 2,000 gallons of acid, 20,000 gallons of lease crude, 15,000 pounds of sand and 1,000 pounds of Adomite. After this workover the No. 2 well tested 12 barrels of oil per day, no water, with 577 MCF of gas, giving a GOR of 48,083, and was re-- classified as a Jalmat oil well on August 27th, 1958.

Q Is that well presently classified, then, as an oil well?

A Yes, sir, it is.

Q What is the status of your No. 3 well, which appears on the same unit?

A The No. 3 well is producing from the Seven Rivers formation at a depth of, through perforations of 3298 to 3318. I might add that these perforations are at a considerably low inter-

val in the Seven Rivers formation.

Q Is the same interval open in the No. 2 well as in the No. 1 well?

A Yes. However, in addition the No. 2 well has penetrated approximately 55 feet of the Yates formation which was not open into the No. 1 well. I might add, also, that the contour map shows the No. 1 well to exist approximately 39 feet higher on the structure.

Q In your opinion does that account for the difference in the characteristics of the two wells?

A Yes, sir.

Q Is the same interval open in the No. 1 well as in the No. 3 well?

A No, it is not.

Q What is the difference there?

A As previously mentioned, the No. 3 well was completed with casing set and perforated in the interval 3298 to 3318 which is considerably below the T.D. of either wells No. 1 or 2, which were completed in open hole.

Q At the present time is the E/2 of the NW/4 and the W/2 of the NE/4 allocated for Jalmat Production?

A No.

Q Is the Sholes B-19 No. 1 well capable of producing the allowable for a 320-acre unit?

A Yes, it is.

Q Does the proposed unit consist of contiguous quarter-

quarter sections?

A Yes, sir.

Q Within a single governmental section?

A Yes, it does.

Q Does the length and width comply with the present rules of the Commission?

A Yes, they do.

Q In your opinion, would the approval of this non-standard unit impair correlative rights?

A No.

Q Would it prevent waste?

A Yes, it would.

Q Now, what is proposed as to the Wells B-1 No. 1 unit?

A In regard to the Wells B-1 No. 1, this is Continental Oil Company's application for the enlargement of the presently approved 160-acre unit to a non-standard 360-acres, consisting of the E/2 and the NE/4, NW/4 of Section 1, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico, in the Jalmat Gas Pool for the Wells B-1 No. 1.

Q Have you prepared an ownership plat showing the lease and surrounding area?

A Exhibit No. 4 is the location and ownership plat showing the Wells B-1 lease and the surrounding area. As shown, outlined in red, the lease consists of the E/2 of the NE/4 of Section 1, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico. It

is proposed to allocate the entire lease for Jalmat gas proration purposes to the Wells B-1 No. 1 which is shown circled in red and is located 660 feet from the north and east lines of Section 1, Township 25 South, Range 36 East. Surrounding Jalmat gas wells are shown circled in green and the acreage allocated to them is outlined in green.

Q Have you prepared a structure plat showing the area?

A Exhibit No. 5 is a structure plat, contoured on the Yates Marker, showing the proposed unit and surrounding area. The No. 1 well to which this unit is proposed to be allocated for gas proration purposes is shown circled in red and the acreage proposed to be dedicated is outlined in red. As can be seen on this exhibit, the Yates formation extends under the entire Wells B-1 Lease at an elevation which is proven by other wells to be gas productive.

Q On the basis of this information would you consider all of the acreage you propose to dedicate to be productive of gas?

A Yes, sir, I do.

Q Do you have deliverability test data on the Wells B-1 No. 1 well?

A Exhibit No. 6 is a copy of the deliverability test of the Wells B-1 No. 1. As shown, the well is capable of producing the allowable for the enlarged unit.

Q Do you have any conclusions on the basis of this testimony?

A Yes. The SE/4 of the NE/4 NW/4 is not assigned to any

gas well and is available for allocation to a gas well. The Wells B-1 No. 1 is capable of producing the allowable for a 360-acre proration unit. The proposed unit is comprised of contiguous quarter-quarter sections and is contained within a single governmental section. The length and width of the said unit does not exceed 5,280 feet. The entire unit is reasonably presumed productive of gas from the Jalmat Pool. Approval of this application would be in the interests of preventing waste and protecting correlative rights. In consideration of the facts just mentioned it is recommended that this application be approved.

Q Now, in connection with your Meyer A-29 No. 3 well, what is proposed on that?

A In regards to the Meyer A-29 No. 3, this is Continental Oil Company's application for the enlargement of the presently approved 200-acre unit to a 360-acre non-standard gas proration unit consisting of the SE/4, E/2 W/2 and the SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, Lea County, New Mexico, in the Jalmat Gas Pool, for its Meyer A-29 No. 3.

Q Do you have a location and ownership plat on that well?

A Exhibit No. 7 is a location and ownership plat showing the Meyer A-29 Lease and surrounding area. The lease consists of Section 29, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico. It is proposed to allocate the SE/4 and the E/2, the W/2, and the SW/4 SW/4 of Section 29, Township 22 South, Range 36 East, for Jalmat gas proration purposes to the Meyer A-29 No. 3 which is

shown circled in red and is located 660 feet from the south line and 1980 feet from the west line of Section 29, Township 22 South, Range 36 East. Surrounding Jalmat gas wells are shown circled in green and the acreage allocated to them is shown outlined in green.

Q What is the situation as to the SE/4 of the lease?

A It may be noted that the SE/4 of the lease is presently allocated to the Meyer A-29 No. 1, which is not capable of commercial production. A recent workover of the Meyer A-29 No. 1 consisted of testing each producing interval and squeezing the lowermost interval 3360 to 3390 to shut off water production. After this workover the well swabbed dry. It is anticipated thatan expensive stimulation treatment of the Meyer A-29 No. 1 would recover the remaining gas reserves. However, the most economical and practical method of recovering the gas reserves from under the Meyer A-29 No. 1 is to allocate the acreage to the Meyer A-29 No. 3.

Q You state that the Meyer A-29 No. 1 is non-commercial. In your opinion, does that mean that there is no gas left under that area?

A No. It simply means that the squeezing operation between 3360 to 3390 had acted to shut off all pay intervals, and it would involve reperforation and retreatment to convert the well to a producer.

Q In your opinion is there gas under the acreage which is dedicated to that well?

A Yes, based on offset production, I do.

Q Do you have a structure plat of the area?

A Exhibit 8 is a structure plat, contoured on the Yates Marker, showing the proposed unit and surrounding area. The No. 3 well, to which the unit is proposed to be allocated for gas proration purposes is shown circled in red and the acreage proposed to be allocated to the No. 3 well is outlined in red. As can be seen, on this exhibit, the Yates formation extends under the entire Meyer A-29 Lease at an elevation which is proven by other wells to be gas productive.

Q On the basis of this exhibit, in your opinion is all of the acreage you propose to dedicate to the well productive of gas?

A Yes, sir.

Q Do you have deliverability test data on the A-29 No. 3?

A Exhibit 9 is a copy of the deliverability test of the Meyer A-29 No. 3. It shows that the Meyer A-29 No. 3 is capable of producing the allowable for the enlarged unit.

Q Do you have any conclusions on the basis of this information, Mr. Cichowicz?

A I conclude the Meyer A-29 No. 3 is capable of producing the allowable for a 360-acre unit. The proposed unit is comprised of contiguous quarter-quarter sections and is contained within a single governmental section. The length or width of the proposed unit does not exceed 5,280 feet. The entire unit is reasonably presumed to be productive of gas from the Jalmat Pool. Approval of this application would be in the interests of preventing waste and

protecting correlative rights. In considering the facts just mentioned, it is recommended that this application be approved.

Q Mr. Cichowicz, have you examined Exhibits 1 through 9, inclusive?

A I have.

Q In your opinion are they correct and reflect the information as depicted on them accurately?

A Yes, sir.

MR. KELLAHIN: At this time we would like to offer in evidence Exhibits 1 through 9 inclusive.

MR. UTZ: Exhibits 1 through 9 will be entered into the record.

MR. KELLAHIN: That is all the questions I have.

BY MR. UTZ:

Q In regard to your Sholes B-19 No. 2, I believe you said that you intended to continue producing that as an oil well?

A Yes, sir.

Q And the only difference between the vertical perforations of the No. 2 and the No. 1 is that the No. 2 is perforated a little lower?

A No. Both wells are completed in open hole. However, the No. 2 well had penetrated approximately 55 feet of Yates which is not open in the No. 1 well. Both wells are completed in open hole. I might add, the casing in the No. 1 well is set at 2662, T.D. at 2945. The casing in Sholes B-19 No. 2, set at 2700 feet, T.D.

3,000, and the completion data, which might help, the No. 1 well completed March 22nd, 1941; Sholes B-19 No. 2 completed September 9th, 1948.

Q Do you know where the oil is coming from in the No. 2?

A In studying the performance, the production performance of 1 and 2 I would say the oil is coming from the 55-foot interval not open in the No. 1 well. Otherwise the No. 1 well would probably be reacting in a similar manner, that is, producing oil.

Q You don't think there is any gas coming from the upper zone, the open hole above the 55-foot interval?

A Yes, I do. I believe there is gas coming from that interval.

Q What did you say the GOR was, 48 something, wasn't it?

A Yes, sir, 48,083 to one. We have a more recent test than that one I have mentioned. 12/19/60 the well produced two barrels of oil, zero water, with a GOR of 23,300 to one. That puts the well, I believe, in the realm of an oil producer with a GOR considerably below the 100,000 to one mark.

Q How long a test was that?

A Twenty-four hours.

Q Two barrels of oil?

A That's all, sir. Evidently the well had declined from the test run on the rework during August, 1958, at which time it produced 12 barrels. It is possible that the well may be subject to shut in within the near future when it reaches an economic limit,

which it is bordering now with the current production.

Q Have you any production figures over the past couple of months?

A For the No. 2, no.

Q It is not producing very much gas, and the same zone as the No. 1, so it would appear the gas is almost depleted in that quarter section too, wouldn't it?

A Well, no. I don't know exactly what production technique is being used. However, there is no doubt that we are suppressing production out there to maintain a low GOR. If the well was run with an open choke the gas production would be in considerable excess of that amount reflected by the most recent test.

Q Is the oil producing through tubing?

A That I would have to check. The No. 1 well, I am sure, yes, sir. I have that information, ran 2903 feet of 2-inch tubing, No. 1 well. No. 2 well, I do not have that information.

Q Referring to your Exhibit No. 5, which would be your Wells B-1 No. 1 well, to the west of this unit, what do we have in the way of oil and gas wells?

A The W/2, which is the Wells A Lease, by Commission letter dated October 28, 1960, a request was made to run a deliverability on No. 2, shown as a gas well. Test has been run, deliverability measured as 123 MCF per day. This test was taken November 28 to December 2, 1960. This was in compliance with the request by the Commission. Subsequently it is anticipated within the next month

or so an allowable will occur on the gas proration schedule. The No. 1 well located further south is currently in the process of being reworked.

Q Is that an oil well?

A It was an oil well. However, as I recall the reworking details it is possible there was a recompletion as a gas well. However, the tests now are being made for an attempt to reconvert the well to a producing status as oil.

Q Has that well been producing right along?

A It has been producing oil, but the amount has been low. Consequently, re recommended remedial work which is now being done. In regard to Three States lease, I am not familiar with the production. It looks like the well is shut in.

Q It shows it to be abandoned.

A No, I believe that symbol on the contour map is erroneous. I believe that well on Exhibit 4, I believe it shows it to be a producer, Three States producer, and I believe the well is still producing. It seems that I remember seeing a cross section in evaluating the remedial work for the No. 1, which shows the Three States to be an oil producer. However, I am not familiar with the intervals open in the well.

Q In regard to your A-29 Meyer No. 3, what explanation do you have for the abandonment of the No. 1 well?

A I brought the completion report, that is, the recompletion report given in outline for the work that was done during the re-

completion operation. I will give that verbatim: Pay in the well is Yates Seven Rivers, 3100 to 3190 feet. This pay entails selective perforations from 3100 to 3192; 3200 to 3226; 3261 to 3300 and 3360 to 3390. The remedial work and testing entailed the following: Ran tubing with a retrievable bridge plug and packer, straddled the interval 3360 to 3390; well swabbed 70 barrels of water in 13 and a half hours. We then straddled the interval from 3360 to 3300. The well flowed seven barrels of water in 16 hours with an estimated 200 MCF of gas per day. Then we straddled the uppermost interval. The well tested 12 barrels of water in 12 hours, estimated 200 MCF of gas per day. The casing was then tested from the surface to 3075, tested O.K. Set retainer at 3340 and tested the perforations from 3360 to 3390.

Q And how do you intend to produce that well now?

A We intend to keep the well shut in. We feel the squeeze job has been effective in shutting off water, but pay also, mud pay also. We feel it would be, as mentioned before, more economical to produce the allowable from the No. 3 well, and at the same time to maintain the well with the cement shut in to protect production from the No. 3, which is a direct west offset. The No. 3 is an excellent producer, as is reflected by the back pressure test offered as Exhibit No. 9, and we want to protect the production of gas from the 3 well.

Q What can you tell me about the gas wells to the east of this unit, in Section 28?

A I have not looked into the productivity or the zones of completion in any of the wells other than those that we have discussed up to now. I do not have any additional information.

Q In view of the fact that the No. 1 completely quit producing, why do you feel the SE/4 of Section 29 is productive of gas?

A The structure map given as Exhibit No. 8, I believe, shows the Meyer No. 1 to be located approximately, as I recall, I checked that, 50 feet higher than in the No. 3 well, and the productivity to date from the No. 1 well, gas production, fairly conclusively proves that the only reason the productivity of the No. 1 has been marred at all is water production. We had attempted remedial work to exclude water production which was, we feel, unsuccessful. We don't feel it wise to spend any additional money to attempt to revert the No. 1 well to a gas producer, and we request that the No. 3 well be rededicated the acreage assigned to the No. 1.

Q It looks as though the No. 1 well is flooded out, doesn't it?

A No. I believe the water was being produced from the lowest set of perforations, from 3360 to 3390. This interval is not open in the No. 3 well, and the No. 3 well is not producing water; it is located lower on the structure.

Q But on your tests above that all you got was water?

A I believe it is communication behind the pipe.

Q In other words, it is just a bum completion, then?

A I would say so.

MR. UTZ: Any other questions?

BY MR. PAYNE:

Q What is the status of the No. 2 well on the Meyer lease?

A The Meyer A-29 Lease?

Q Yes.

A It is shut in.

Q As an oil well?

A I believe the No. 2 well was an oil well that has, since completion, been shut in, but I do not have additional information on where it is completed or the productivity of oil to date. However, if you care to I would sure look up the information and send it to you for your use during the review of these applications.

Q What I am interested in is whether the subject well here, A-29 No. 3, is perforated in an interval productive of Jalmat gas only, or whether it is also perforated in an interval that somewhere on this unit is also productive of oil from the Jalmat Pool?

A The No. 3 well was recently reworked. The interval below the top of the Seven Rivers was tested and produced water, and was squeezed. That might give evidence that all these zones open in the No. 3 well are in the Yates, which is strictly within the Jalmat gas pool. There are no intervals open below the Yates in the No. 3 well.

MR. UTZ: Any other questions? Witness may be excused. Other statements in this case? Case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, JUNE PAIGE, 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 oorrect record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 6th day of February, 1961.

June Paige
Notary Public - Court Reporter

I N D E X

WITNESS	PAGE
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E X H I B I T S

NUMBER	EXHIBIT	IDENTIFIED	OFFERED	ADMITTED
	Sholes B-19			
Ex.#1	Location Plat	3	12	12
Ex.#2	Structure Plat	3	12	12
Ex.#3	Deliverability Test	4	12	12
	Wells B-1 No. 1			
Ex.#4	Location Plat	7	12	12
Ex.#5	Structure Plat	8	12	12
Ex.#6	Deliverability Test	8	12	12
	Meyer A-29 No. 3			
Ex.#7	Ownership Plat	9	12	12
Ex.#8	Structure Plat	11	12	12
Ex.#9	Deliverability Test	11	12	12

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2159, heard by me on Jan. 25, 1961.

....., Examiner
New Mexico Oil Conservation Commission