

CASE 5196: Application of KIMBELI
OIL CO. FOR DOWNHOLE COMMINGLING,
RIO ARriba COUNTY, NEW MEXICO.

CASE No.

5196

Application,
Transcripts,
Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 27, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Kimbell Oil Company
for downhole commingling, Rio Arriba
County, New Mexico.

Case No. 5196

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

William Carr, Esq.
Legal Counsel for the
Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:

William J. Cooley, Esq.
Farmington, New Mexico

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MR. NUTTER: The meeting will come to order, please. The next case will be Case 5196.

MR. CARR: Case 5196. Application of Kimbell Oil Company for downhole commingling, Rio Arriba County, New Mexico.

MR. COOLEY: William J. Cooley appearing on behalf of the Applicant, firm Cooley, Farmington, New Mexico. We have one witness we would like to have sworn.

(Witness sworn.)

JOHN CAROTHERS

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

MR. NUTTER: Are there any other appearances in this Case? Go ahead.

DIRECT EXAMINATION

BY MR. COOLEY:

Q State your full name for the record, please?

A John Carothers.

Q Where do you reside, Mr. Carothers?

A Farmington, New Mexico.

Q By whom are you employed?

A Kimbell Oil Company.

Q And in what capacity?

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A Production Superintendent.

Q How long have you been employed in that capacity by Kimbell?

A Since January 1st, 1961.

Q Prior to that time, by whom were you employed?

A Three States Natural Gas Company.

Q And what capacity?

A Production Superintendent.

Q For how many years did you work for that Company?

A Twenty-five.

Q Have you previously testified before this Commission as an expert witness?

A I have.

MR. COOLEY: Are the Witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

BY MR. COOLEY:

Q Mr. Carothers, are you familiar with the three wells which are the subject of the Application in this Case?

A I am.

Q Was it upon your recommendation that this Application was filed?

A It was.

Q Have you prepared an Exhibit which is a plat, showing the location of these wells?

A I have.

Q I hand you what has been marked Applicant's Exhibit 1 for identification and ask you if this is the plat to which you refer?

A It is.

Q Would you briefly explain, going from left to right, which are the three wells? They are shown immediately on the left in Section 27 and on to the right through Section 26?

A In Section 27 is a Salazar No. 3; it is located in Unit H of Section 27, 25 North, 6 West.

Q And going on to the west half of Section 26?

A That would be the Warren Salazar No. 2, located in Unit M of Section 26, 25 6.

Q And the well on the east half of Section 26?

A It would be Warren No. 3; it is in Unit P of 26, 25 North, 6 West.

Q All three of these wells are presently completed as Dakota Wells, is that correct?

A That is right.

Q In the Basin-Dakota Pool?

A Yes.

Q What's the proposal with respect to the well in the east half of Section 27?

A We propose to commingle the Mesaverde with the Dakota.

Q Do you anticipate gas production from the Mesaverde?

A We do.

Q And with respect to the Warren Federal No. 2 Well in the west half of Section 26?

A We propose to commingle the Gallup with the Dakota.

Q What is the reason for the Gallup completion there?

A It was based on the logs.

Q Is there Gallup development in that log?

A Yes, there definitely is.

Q Is there an off-setting well to the south in Section 35?

A We have an off-set Gallup in Section 35 that is presently producing.

Q Is that in the northwest quarter of 35?

A Yes.

Q And the --

A (Interrupting) No, it's in the northeast.

Q Okay. Now, with respect to the well on the east half of Section 26, what is the proposal?

A Proposed Mesaverda-Dakota commingled.

Q Does Applicant's Exhibit 1 also reflect the estimated bottomhole pressures of the three wells in question?

A It does.

Q Would you recite those, please?

A The estimated bottomhole pressure on the Warren Federal No. 3 is 1112, Salazar No. 3 is 1030, Warren Salazar No. 2 is 1115.

Q That's in the Dakota?

A Right.

Q Do you have any estimates or comparisons which you could reach with respect to what the pressures would be in the Mesaverde or Gallup formations?

A No, sir, I do not; there is no Mesaverde in that township so I don't have any.

Q Neither the Mesaverde or Gallup formations have been perforated in any of these holes at present, have they?

A No, sir.

Q Have you prepared production curves with respect to each of the three wells in question?

A I have.

Q I hand you what has been marked Applicant's Exhibits 2, 3 and 4 for purposes of identification and ask you if those are the curves to which you refer?

A Yes.

Q Commencing with Exhibit 2, would you state what is reflected there.

A The top curve reflects the oil production for the year 1973 and the bottom curve reflects the gas production for the year 1973, 12 months.

Q Do you have an average daily production for the entire twelve-month period?

A Yes. 64 mcf per day from that well.

Q Do you have an average oil production?

A 8 barrels.

Q Both the oil and gas production of these wells -- this well is obviously marginal, is that correct?

A Right.

Q Turning now to Exhibit 3, what is reflected there?

A That reflects the Salazar No. 3; it reflects the

gas production for the year, 12 months, 1973; average daily production is 27 mcf per day and no oil and no water.

Q Going back to the No. 2 Exhibit, is there any water production from that well? The Warren Federal No. 3?

A Approximately 1 barrel per day.

Q Turning now to Exhibit No. 4, what is reflected there?

A The Warren Salazar No. 2 reflects the gas production for the year 1973. Average daily production was 76 mcf per day, no oil, and approximately 2 or 3 barrels of water per day.

Q Do you have logs of these three wells in question?

A I do.

Q I hand you what's been marked Exhibits 5, 6 and 7 and ask you if those are the logs of the wells in question?

A Yes.

Q Would you state what intervals you propose to perforate in each of the three wells?

A All right. On the Warren Federal No. 3 I propose to perforate two shots per foot, 4640, 4647.

MR. NUTTER: Just a minute, please. Let's see, that was on which well?

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MR. CAROTHERS: Warren Salazar No. 3.

MR. NUTTER: Warren Salazar No. 3, Okay. Two shots per foot?

MR. CAROTHERS: Yes. 4640 to 4647.

MR. NUTTER: Go ahead.

BY MR. COOLEY:

A (Continuing) 4652 to 56, 4738 to 48, 4780 to 86, 4420 to --

MR. NUTTER: (Interrupting) Is that 3420?

MR. CAROTHERS: Yes, I think that's right, let me check that. Yes, that is correct. I intended from 4640 to 4786, I was going to test that first and then test the zone 4420 to 4438.

BY MR. COOLEY:

Q Is that all the perforations you anticipate in that well?

A Yes.

Q And are they all within the Mesaverde formation?

A Yes.

Q Going now to the Warren Federal No. 2 Well, what intervals do you propose to perforate? It's in the west half of Section 23.

A Warren Federal No. 2?

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Q Yes.

A Okay. I plan to perforate one shot per foot, 6226 to 6230, 6220 to 24, 6106 to 6109, 6091 to 6099, 6068 to 78. That's it.

Q Are all those perforations in the Gallup formation?

A Yes.

(Whereupon, a discussion was held off the record.)

Q Moving on to the remaining well, the No. 3 Well.

A Salazar No. 3? Okay. I plan to perforate two shots per foot, 4942 to 56, 4910 to 16, 4878 to 84, 4812 to 16, 4749 to 56, 4683 to 4690, 4517 to 4532, 4598 to 4506, 4232 to 4236 --

MR. NUTTER: (Interrupting) I missed that last one.

MR. CAROTHERS: 4132 to 36.

BY MR. COOLEY:

A (Continuing) 4218 to 22, 4208 to 4214. That's it.

Q All those perforations within the Mesaverde formation?

A Yes, sir.

Q Now, reviewing this for a moment, you anticipate gas production from both the Mesaverda completions, is

that correct?

A Yes, sir.

Q And oil production from the Gallup completion?

A Yes, sir.

Q How would you propose to produce the Gallup oil?

Will it, in your opinion, flow?

A I'm hoping to flow. In the event it doesn't flow I might try a piston; if that doesn't work then I'll have to put it on a pump and jack.

Q In any event, if necessary, would pumping the oil out of the Gallup and from the combined well more flow have any adverse effect on the Dakota completion?

A I would think it would help the Dakota to keep the flood from it; in fact it would increase the production.

Q Do you anticipate that ultimately you will ask that it be necessary to pump that well, as pressure declined in the Dakota?

A I do.

Q As soon as liquid production starts affecting the Dakota production you would put a pump on the well, is that correct?

A Yes, sir.

Q Mr. Carothers, are you familiar with the working

interest royalty and overriding royalty ownership in the three proration units involved in this matter?

A I am.

Q Can you tell the Examiner whether the ownership of the working interest royalty and overriding royalty is common with respect to each zone under each proration unit?

A They are all common under each proration unit.

MR. NUTTER: No variation in ownership with depth?

MR. CAROTHERS: No, sir.

BY MR. COOLEY:

Q Within the proration unit?

A Right.

Q Mr. Carothers, in your opinion would it be economically feasible to develop the Mesaverde formation and the two wells and the Gallup formation and the third well independently at this time and under present economic conditions?

A No, sir.

Q Would it be economically feasible to dually complete those formations in the standard fashions?

A No, sir. One of them you couldn't dual it anyway

because the casing, it only has a 4½-inch casing, and that's not large enough. The Warren Salazar No. 3 only has a 4½-inch casing so you wouldn't have enough in there to dual it.

Q Irrespective of the size of the casing, would it be economically feasible to perform a standard dual completion?

A No, it wouldn't be.

Q Then, is it fair to say that the only way the Gallup oil and the Mesaverde gas, under these particular proration units, can be recovered, saved and marketed, is through downhole commingling?

A Right.

Q Is there any secondary recovery operation being conducted presently in the area with respect to any zones that you propose to perforate?

A No, sir.

Q If one should be instituted in the future, would your operations in any way jeopardize the efficiency of such a secondary recovery operation?

A No, sir.

Q Do you anticipate that the combined production from all the zones which you propose to perforate still

fall well within the marginal range for both oil and gas?

A Yes.

Q Do you have any proposal with respect to the manner in which the production should be allocated on Commission records to the various formations and pools?

A We know what the Dakota is making, and after we commingle the Gallup or Mesaverde with the Dakota, check out the increase, which, if it's 60 40 or 40 60, just leave that like it is from now on and allocate it on whatever percentage we get the increases.

Q Then, do I understand you correctly, that you are suggesting that we take the present Dakota production and ascertain what percentage it is contributing to the total combined flow?

A Right.

Q And maintain that same relative percentage between the Dakota and Mesaverde with respect to gas production?

A Right

Q With respect to oil production, on the Warren Salazar No. 2, is there any oil production from the Dakota formation?

A There is no oil production from the Dakota, so

what oil it makes we'll know where it's coming from.

The same way on the Salazar No. 3.

Q The Salazar No. 3 would be a Mesaverde-Dakota commingling?

A Right. Whatever oil Mesaverde makes would be 100 percent Mesaverde.

Q And the same would be true of the Salazar No. 3?

A Well, no. The Salazar No. 3 is making an average of 8 barrels per day in 1973.

Q So you would propose the same percentage application of allocation?

A Right.

Q With respect to oil from the Salazar No. 3?

A Right.

Q Do you have any requests with respect to actual separate testing of the zones in question? Are you requesting to be exempt from testing requirements?

A I am.

Q Would it be impractical to test these zones separately, from an economic standpoint?

A It would from an economic standpoint.

MR. COOLEY: I have no further questions and we offer Applicant's Exhibits into evidence.

MR. NUTTER: Applicant's Exhibits 1 through 7 will be admitted into evidence.

(Whereupon, Applicant's Exhibits 1 through 7 were admitted into evidence.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Carothers, when you are completing these wells in the two zones, isn't it possible that you could run a blanking plug or a bridge plug or something and test the upper zones separately before you would commingle them so you could establish what the production actually is from the upper zones?

A Very easily.

Q And then we have something more reliable, actually, than just a difference, because the work that you do on the upper zone could in some manner affect the production from the lower zone too, and rather than just use a subtraction of the current production from the total production you might establish what the upper zone would be producing.

You mentioned that there was no other Mesaverde production within this township, is that correct?

A Yes.

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REDIRECT

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Q Where is the nearest Mesaverde production?

A I really don't know, off hand.

Q When these wells were drilled to the Dakota, were any tests made or was there any indication of the Mesaverde production in them at the time?

A No. Well, I wasn't with the Company when they were drilled, let's see, so there wasn't any drill-stem test or any test made on them.

Q They were just going right down to the Dakota and didn't pay any attention?

A Right.

Q How about Gallup, is there any Gallup production anywhere in this neighborhood?

A Yes.

Q You mentioned that you have a south off-set here at the Gallup?

A Right

MR. NUTTER: Are there any further questions of Mr. Carothers?

MR. COOLEY: I have some redirect.

REDIRECT EXAMINATION

BY MR. COOLEY:

Q Mr. Carothers, if the procedure of setting a

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blanking plug or any other method is adopted, or required by the Commission, what extra expense would be involved, in your opinion?

A Rig time.

Q Can you estimate the dollar expense, extra expense, that would be involved to ascertain the exact production from each of the zones in question?

MR. CAROTHERS: How long a test would you require, let me ask that?

MR. NUTTER: I don't know, Mr. Carothers.

BY MR. COOLEY:

Q Assume a 72-hour test.

A The rig time runs \$510 a day.

Q Assuming a 72-hour test then on each of the 3 zones, or each of the newly perforated zones and the 3 wells, you would have an additional cost of \$1500 to \$2000 with respect to each of the 3 wells?

A That is correct.

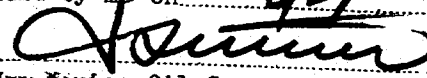
MR. COOLEY: No further questions.

MR. NUTTER: Does anyone have any questions of Mr. Carothers? He may be excused. Does anyone have anything further in Case 5196? If not we will take the Case under advisement.

STATE OF NEW MEXICO)
COUNTY OF SANTA FE) SS.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.


RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5196, heard by me on 3/27, 1974.

Examiner
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

I. R. TRUJILLO
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

June 25, 1974

Mr. William Cooley
Burr & Cooley
Attorneys at Law
152 Petroleum Center Building
Farmington, New Mexico 87401

Re: CASE NO. 5196
ORDER NO. R-4810
Applicant:
Kinbell Oil Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC	<u> x </u>
Artesia OCC	<u> </u>
Aztec OCC	<u> x </u>

Other _____

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5196
Order No. R-4810

APPLICATION OF KIMBELL OIL COMPANY
FOR DOWNHOLE COMMINGLING, RIO
ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 27, 1974, at Santa Fe, New Mexico, before Examiner, Daniel S. Nutter.

NOW, on this 25th day of June, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Kimbell Oil Company, is the owner and operator of the Warren Federal Well No. 3 located in Unit P of Section 26; the Salazar Federal Well No. 3 located in Unit H of Section 27, and the Warren-Salazar Well No. 2 located in Unit M of Section 26, all in Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority for the downhole commingling of Mesaverde and Basin-Dakota gas production within the wellbore of its Warren Federal Well No. 3 located in Unit P of said Section 26.

(4) That the applicant seeks authority for the downhole commingling of Mesaverde and Basin-Dakota gas production within the wellbore of its Salazar Federal Well No. 3 located in Unit H of said Section 27.

(5) That the applicant seeks authority for the downhole commingling of Otero-Gallup Oil and Basin-Dakota gas production within the wellbore of its Warren-Salazar Well No. 2 located in Unit M of said Section 26.

(6) That from the Basin-Dakota zone, all of the subject wells are capable of low marginal production only.

(7) That from the Mesaverde zone, the aforesaid Warren Federal Well No. 3 and the Salazar Federal Well No. 3 are expected to be capable of very low marginal production only.

(8) That from the Otero-Gallup zone, the aforesaid Warren-Salazar Federal Well No. 2 is expected to be capable of very low marginal production only.

(9) That the proposed commingling will not violate correlative rights and may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste.

(10) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the wells are not shut-in for an extended period.

(11) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Commission any time any of the subject wells are shut-in for 7 consecutive days.

(12) That upon completion of each of the subject wells, the applicant should discuss the prior rate of production and the new rate of production with the Supervisor of the District Office of the Commission at Aztec in order to allocate the commingled production to each of the commingled zones in the subject wells.

(13) That the authority for downhole commingling in the wellbore of any of the subject wells should be rescinded if other than low marginal production as described in Findings Nos. 7 and 8 above is obtained.

IT IS THEREFORE ORDERED:

(1) That the applicant, Kimbell Oil Company, is hereby authorized to commingle in the wellbore Mesaverde and Basin-Dakota gas production in its Warren Federal Well No. 3 located in Unit P of Section 26 and in its Salazar Federal Well No. 3 located in Unit H of Section 27, and Otero-Gallup Oil and Basin-Dakota gas production in its Warren-Salazar Well No. 2 located in Unit M of Section 26, all in Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(2) That upon completion of each of the subject wells in the manner described above, the operator thereof shall consult with the supervisor of the Commission District Office at Aztec to determine the formula for allocation of production to each of the zones open to the wellbore.

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Case No. 5196

Order No. R-4810

(3) That the operator of the subject wells shall immediately notify the Commission's Aztec district office any time any of said wells have been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



I. R. Trujillo
I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

A. L. Porter Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

9:06

45-266-10
225-
410-
405-
450-
433-
42-385-
378-
70-
42-
28-
91

Warren Salazar #3

2 shot/ft 4640-47
4652-56 first
4738-48
4780-86
4420-38 then test

Warren Fed #2

1 shot/ft 6226-30
6220-24
6106-09
6091-99
6068-78

Gallop

Salazar #3

2 shot/ft

4942-56

4132-36

4910-16

4218-22

4818-84

4208-14

4812-16

4749-56

4683-90

4517-32

4598-06

expect Gas in MV compl
and oil from the
top completion

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 27, 1974

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 5188: (Continued from the March 13, 1974, Examiner Hearing)

Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Drinkard and Blinbry production in the wellbore of its Lockhart B-1 Well No. 8 located in Unit H of Section 1, Township 22 South, Range 36 East, Lea County, New Mexico.

CASE 5194: Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen-Grayburg formation through one well on its Creek Lease in Section 23, Township 18 South, Range 30 East, Leo Pool, Eddy County, New Mexico.

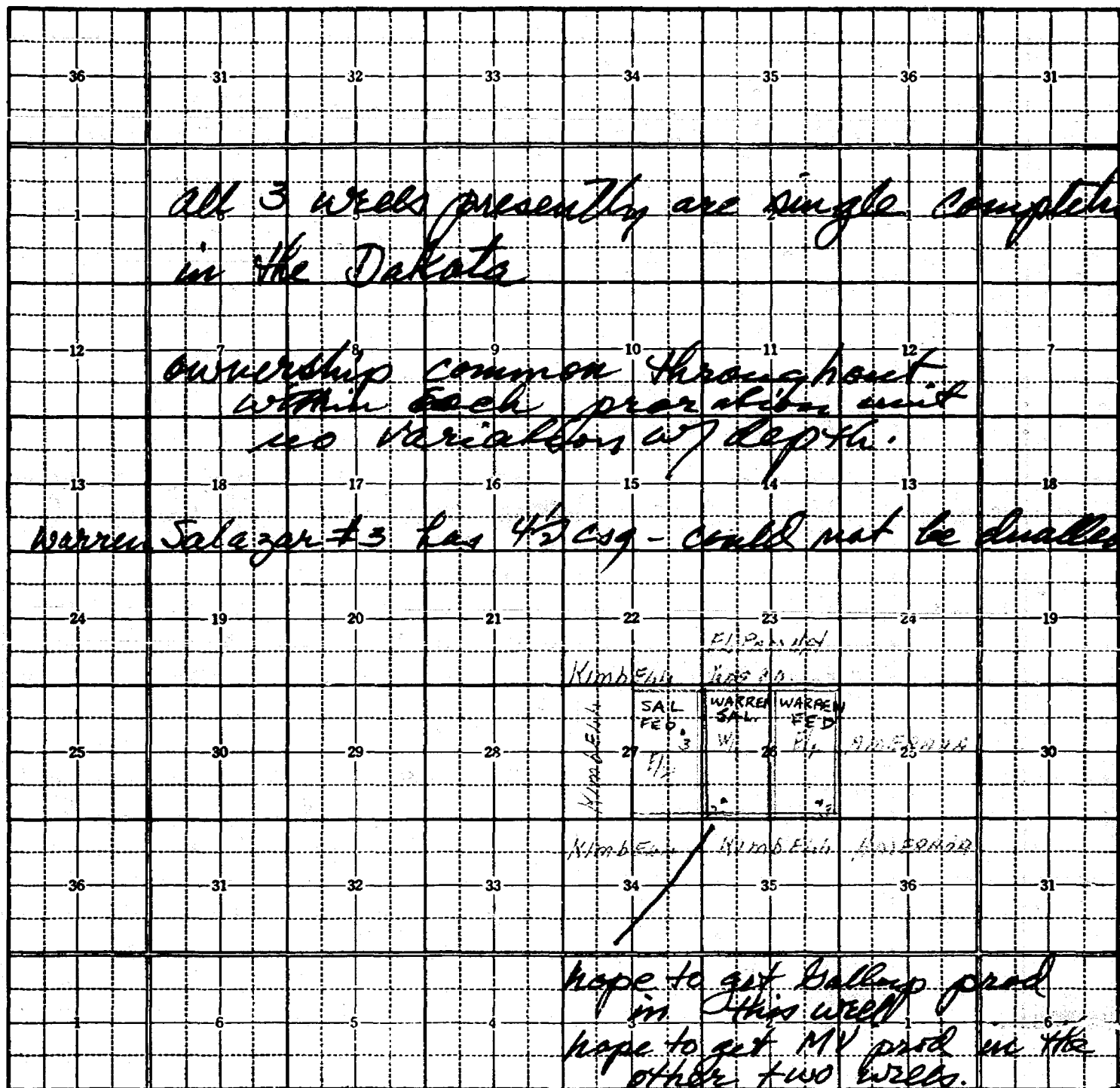
CASE 5195: Application of J. M. Huber Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests, including those of Harry V. Allen or his devisees, underlying the E/2 of the SE/4 of Section 21, Township 12 South, Range 37 East, Southwest Gladiola-Devonian Pool, Lea County, New Mexico. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5196: Application of Kimbell Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling in the wellbore of Blanco-Mesa-verde and Basin-Dakota gas production in its Warren Federal Well No. 3 located in Unit P of Section 26 and in its Salazar Federal Well No. 3 located in Unit H of Section 27, and Otero-Gallup Oil and Basin-Dakota gas production in its Warren-Salazar Well No. 2 located in Unit M of Section 26, all in Township 25 North, Range 6 West, Rio Arriba County, New Mexico.

CASE 5197: Application of Skelly Oil Company for a waterflood project and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Seven Rivers-Queen formation in its J. C. Johnson Well No. 4 located in Unit D of Section 20, Township 23 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico. Applicant further seeks authority to dually complete said well for water injection and for the production of gas from the Jalmat Gas Pool. Applicant also seeks an administrative procedure for said project for approval of additional injection wells without notice and hearing.

- CASE 5198: Application of Texaco Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Grayburg formation in the perforated interval from 3815 feet to 4068 feet in its V. M. Henderson Well No. 3 located in Unit H of Section 30, Township 21 South, Range 37 East, Penrose Skelly Pool, Lea County, New Mexico.
- CASE 5199: Application of Wm. G. Ross for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the Atoka-Pennsylvanian Gas Pool Rules, authority to drill a gas well 1650 feet from the South line and 660 feet from the East line of Section 10, Township 18 South, Range 26 East, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico, the E/2 of said Section 10 to be dedicated to the well.
- CASE 5200: Application of Monsanto Company for a triple completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the triple completion (conventional) of its Wilderspin Well No. 1 located in Unit F of Section 11, Township 21 South, Range 27 East, Burton Flats Field, Eddy County, New Mexico, in such a manner as to produce gas from the Wolfcamp, Strawn, and Morrow formations through three parallel strings of tubing.

Township 25N, Range 6W, County R.D. FERRIS, State N.M.

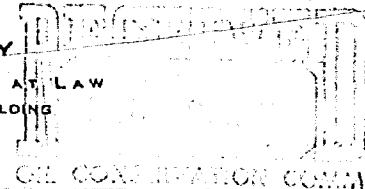


SALAZAR #3 - UNIT M - SEC 19 - T25N - R6W - PROD. IN JUL 300 BOPD BHP. 1630 PSI
 WARREN #3 - UNIT M - SEC 19 - T25N - R6W - PROD. IN JUL 300 BOPD BHP. 1112 PSI
 WARREN #3 - UNIT M - SEC 19 - T25N - R6W - PROD. IN JUL 300 BOPD BHP. 1112 PSI
 BOTTOM HOLE PRESS. 1112 PSI

these are WK pressures

BEFORE EXAMINER NUTTER
 OIL CONSERVATION COMMISSION
 Kimball FIELD NO. 1
 CASE NO. 5196

BURR & COOLEY
ATTORNEYS AND COUNSELORS AT LAW
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JOEL B. BURR, JR.
WM. J. COOLEY

February 21, 1974

TELEPHONE 325-1702
AREA CODE 505

Case 5796

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, N.M.

Gentlemen:

Re: Applications of Kimbell Oil Company for Down-Hole
Commingling, Basin Dakota Gas Pool, Mesa Verde
Gas Pool and Otero Gallup Oil Pool, Rio Arriba
County, New Mexico

Enclosed herewith are three applications for our client,
Kimbell Oil Company, which you are requested to set down
for hearing on the next examiner's hearing date.

Very truly yours,

BURR & COOLEY

By

William J. Cooley
William J. Cooley

WJC:msh

Enc. as stated

cc: Oil Conservation Commission
1000 Rio Brazos Road
Aztec, N.M. 87410

DOCKET MAILED
Date 3-14-74

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

3

In the Matter of the Application of)
)
KIMBELL OIL COMPANY for Down-Hole)
Commingling of Gas and Associated)
Liquid Hydrocarbons Produced from)
the Basin Dakota Gas Pool and Oil and)
Casinghead Gas Produced From the)
Otero Gallup Oil Pool in Rio Arriba)
County, New Mexico.)

Docket No. 5196

APPLICATION

COMES NOW the Applicant, Kimbell Oil Company, and makes application to the Commission for an exception to Rule 303 A of the Commission's Rules and Regulations to permit the commingling in the well-bore of gas and associated liquid hydrocarbons produced from the Basin Dakota Gas Pool and oil and casinghead gas produced from the Otero Gallup Oil Pool in the Warren Salazar No. 2 Well located in the West $\frac{1}{2}$ of Section 26, Township 25 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico.

BURR & COOLEY
152 Petroleum Center Bldg.
Farmington, New Mexico 87401

by William J. Cooley
William J. Cooley
Attorneys for Applicant

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

In the Matter of the Application of)
)
KIMBELL OIL COMPANY for Down-Hole)
Commingling of Gas and Associated)
Liquid Hydrocarbons Produced From)
the Basin Dakota Gas Pool and Blanco)
Mesa Verde Gas Pool in Rio Arriba)
County, New Mexico.)
)

Docket No. 5196

APPLICATION

COMES NOW the Applicant, Kimbell Oil Company, and
makes application to the Commission for an exception to
Rule 303 A of the Commission's Rules and Regulations to
permit the commingling in the well-bore of gas and associated
liquid hydrocarbons produced from the Basin Dakota Gas Pool
and the Blanco Mesa Verde Gas Pool in the Salazar Federal
No. 3 Well located in the East 1/2 of Section 27, Township
25 North, Range 6 West, N.M.P.M., Rio Arriba County, New
Mexico.

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Farmington, New Mexico 87401

by William J. Cooley
William J. Cooley
Attorneys for Applicant

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

In the Matter of the Application of)
)
KIMBELL OIL COMPANY for Down-Hole)
Commingling of Gas and Associated)
Liquid Hydrocarbons Produced From)
the Basin Dakota Gas Pool and Blanco)
Mesa Verde Gas Pool in Rio Arriba)
County, New Mexico.)

Docket No. 5196

APPLICATION

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makes application to the Commission for an exception to
Rule 303 A of the Commission's Rules and Regulations to
permit the commingling in the well-bore of gas and associated
liquid hydrocarbons produced from the Basin Dakota Gas Pool
and the Blanco Mesa Verde Gas Pool in the Warren Federal No. 3
Well located in the East $\frac{1}{2}$ of Section 26, Township 25 North,
Range 6 West, N.M.P.M., Rio Arriba County, New Mexico.

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152 Petroleum Center Bldg.
Farmington, New Mexico 87401

by William J. Cooley
William J. Cooley
Attorneys for Applicant

DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5196

APPLICATION OF KIMBELL OIL COMPANY
FOR DOWNHOLE COMMINGLING, RIO
ARRIBA COUNTY, NEW MEXICO.

Order No. R-4810

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 27, 1974,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this April day of April, 1974, the Commission,
a quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Kimbell Oil Company, is the owner
and operator of the Warren Federal Well No. 3 located in Unit P
of Section 26; the Salazar Federal Well No. 3 located in Unit H
of Section 27, and the Warren-Salazar Well No. 2 located in Unit M
of Section 26, all in Township 25 North, Range 6 West, NMPM, Rio
Arriba County, New Mexico.

(3) That the applicant seeks authority for the downhole commingling of ~~Blanco~~ Mesaverde and Basin-Dakota gas production located in Unit P of Section 26. ^{within the wellbore of} in its Warren Federal Well No. 3. ~~within the wellbore.~~ ^{of said}

(4) That the applicant seeks authority for the downhole commingling of ~~Blanco~~ Mesaverde and Basin-Dakota gas production ^{within the wellbore of} in its Salazar Federal Well No. 3 located in Unit H of Section 27. ~~within the wellbore.~~ ^{of said}

(5) That the applicant seeks authority for the downhole commingling of Otero-Gallup Oil and Basin-Dakota gas production ^{within the wellbore of} in its Warren-Salazar Well No. 2 located in Unit M. ^{of Section 26.} ~~within the wellbore.~~ ^{of said} ~~Blanco~~ Mesaverde zone, the subject wells and the Salazar Federal Well No. 3 are expected to be capable of very low marginal production only.

(6) That from the Basin-Dakota zone, ^{of} the subject wells are capable of low marginal production only.

(7) That from the Otero-Gallup zone, the subject well is ^{of} Well No. 2 is expected to be capable of very low marginal production only.

(8) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights. ^{and}

(9) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the wells are not shut-in for an extended period.

(10) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Commission any time the ^{any of} subject wells ^{are} ~~is~~ shut-in for 7 consecutive days.

(13) That the authority ~~shall~~ ^{be} ~~not~~ ^{be} ~~exercised~~ ^{exercised} ~~in the wellbore~~ ^{of the subject wells} ~~should be~~ ^{should be} ~~exercised~~ ^{exercised} ~~if other than low marginal production~~ ^{is obtained} ~~as described in findings Nos. 7 and 8 above~~ ^{is obtained}.

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(12) That upon completion of each of the subject wells, the applicant should discuss the prior rate of production and the new

(12) That in order to allocate the commingled production to each of the commingled zones in the subject wells, _____

percent of the commingled oil production should be allocated to the Blanco-Mesaverde zone, and _____ percent of the commingled gas production to the Basin-Dakota zone in applicant's Warren-Federal Well No. 3 located in Unit P of Section 26, and Salazar Federal Well No. 3 located in Unit H of Section 27.

(13) That in order to allocate the commingled production to the Warren-Salazar Well No. 2 located in Unit M of Section 26, _____ percent of the commingled oil production should be allocated to the Otero-Gallup zone, and _____ percent of the commingled gas production to the Basin-Dakota zone.

(13)

IT IS THEREFORE ORDERED:

(1) That the applicant, Kimbell Oil Company, is hereby authorized to commingle in the wellbore ~~of its Blanco-Mesaverde~~ and Basin-Dakota gas production in its Warren Federal Well No. 3 located in Unit P of Section 26 and in its Salazar Federal Well No. 3 located in Unit H of Section 27, and Otero-Gallup Oil and Basin-Dakota gas production in its Warren-Salazar Well No. 2 located in Unit M of Section 26, all in Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

~~(2) That _____ percent of the commingled oil production shall be allocated to the Blanco-Mesaverde zone and _____ percent of the commingled gas production shall be allocated to the Basin-Dakota zone in the Warren Federal Well No. 3 located in Unit P of Section 26 and the Salazar Federal Well No. 2 located in Unit H of Section 27.~~

~~(3) That _____ percent of the commingled oil production shall be allocated to the Otero-Gallup Oil zone and _____ percent of the commingled gas production shall be allocated to the Basin-Dakota zone in the Warren-Salazar Well No. 2 located in Unit M of Section 26.~~

(2) That upon completion of each of the subject wells in the manner described above, the operator thereof shall consult with the Supervisor of the Commission District office at ^{each of} ~~after~~ to determine the formula for allocation of production to each of the zones open to the well bore

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(4) That the operator of the subject wells shall immediately notify the Commission's Aztec district office any time ^{any of such} the wells have been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.