

OK
CASE 5263: Appli. of READING &
BATES FOR AN UNORTHODOX GAS WELL
LOCATION, EDDY COUNTY, N. MEX.

CASE No.

5263

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 19, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Reading & Bates Oil and
Gas Company for an unorthodox gas well
location, Eddy County, New Mexico.

Case No.
5263

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Commission:

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

For the Applicant:

Paul Cooter, Esq.
ATWOOD & MALONE
Roswell, New Mexico

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MR. STAMETS: Call the next case, Case 5263.

MR. DERRYBERRY: Case 5263. Application of Reading & Bates Oil and Gas Company for an unorthodox gas well location, Eddy County, New Mexico.

MR. STAMETS: Call for appearances in this Case.

MR. COOTER: Paul Cooter with the firm of Atwood & Malone in Roswell appearing for the Applicant Reading & Bates. We have three witnesses, Mr. Examiner, John Mahaffey, Gene Campbell and Dan Hensley.

MR. STAMETS: Are there any other appearances in this Case? Would all three Witnesses stand and be sworn?

(Witnesses sworn.)

JOHN T. MAHAFFEY

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

DIRECT EXAMINATION

BY MR. COOTER:

Q Would you state your name for the record, please?

A John T. Mahaffey.

Q And by whom are you employed?

A Reading & Bates Oil and Gas Company.

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Q In what capacity?

A Landman.

Q How long have you been so employed?

A Approximately 4 months.

Q By its Application in this Case Reading & Bates seeks an unorthodox location in the S/2 of Section 8. Together with your Application Reading & Bates filed the requisite Form C-102, did it not?

A Yes.

Q And on that Form C-102 have you set forth the ownership of the leasehold estates comprising the S/2 of Section 8?

A Yes, we have.

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

BY MR. COOTER:

Q Is Reading & Bates the owner of the full working-interest leasehold estates of all of the oil and gas leases comprising the S/2 of Section 8?

A Yes, that is correct.

Q And has your Company filed a declaration of unitization unitizing all of those leasehold estates for this proposed Unit?

A Yes we have.

Q And that is what I have marked as Exhibit 1?

A Yes, that is correct.

Q And that has been executed, filed and recorded
in Eddy County?

A Yes.

MR. COOTER: I did not propose to file as an
exhibit Form C-102.

MR. STAMETS: That's fine.

MR. COOTER: That's all that I have from this
Witness.

MR. STAMETS: Are there any questions of this
Witness? If not, he may be excused.

MR. COOTER: Next, Mr. Campbell.

(Witness previously sworn.)

D.G. CAMPBELL

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

DIRECT EXAMINATION

BY MR. COOTER:

Q Would you state your name for the record please
sir?

A Yes, Gene Campbell.

Q By whom are you employed, Mr. Campbell, and in what capacity?

A I'm employed by Reading & Bates Oil and Gas Company as their Manager of Exploration.

Q How long have you been associated with Reading & Bates?

A Over 12 years.

Q Have you previously testified before this Commission?

A No, I have not.

Q Would you briefly relate for the Examiner your college education, the degree you obtained and where you obtained it and then summarize the activities in which you have been engaged since that time?

A Yes, sir. I'm a January, 1959, graduate from the University of Texas with a BS Degree in Geology. I have done graduate work both at the University of Texas and the University of Tulsa. I have been employed as a Geologist or a Manager of Exploration from 1959. I worked approximately over three years for Lone Star Producing Company and the last 12 years, since 1962, have been employed by Reading & Bates in exploration work, geology, petroleum engineering, and general exploration --

exploitation development.

Q Has the area of your concern and interest included southeastern New Mexico?

A Yes, sir, it has.

Q You are familiar with the area which is the subject matter of this Application?

A Yes, sir, I am.

Q For this Hearing today have you prepared or were certain exhibits prepared under your direction and supervision?

A Yes, sir, they have been.

Q First may I direct your attention please to what has been marked as Exhibit No. 2. Would you please relate to the Examiner what that is, what it depicts?

A Yes. Exhibit 2 is an isopach map of the middle Morrow sand, which we call the Morrow "B" Zone, which is our objective in the well proposed in Section 8. This isopach shows that the proposed location that we have in the southwest southwest of Section 8 would have approximately 25 feet of sand. The regular location, which would be in the southeast of the southwest, which shows some what we figure is 12 feet of sand on our isopach. We think the Morrow is a channel sand and in this area is oriented

primarily east and west overall.

Q Is another well shown on that plat over in the southwest southwest of Section 7?

A Yes. Yates has drilled a well there and that well is on the edge of the bar; it has approximately 11 feet of tight sand. As you get out to the edge of the bar--and this is a channel sand, in our interpretation it is a channel sand -- it becomes tight, and that is one reason that we want to move back in toward the control, toward the center of the bar, to pick up better sand conditions.

Q Was that Yates well in Section 7 a producing well?

A No, it was not a producing well.

Q Is there anything else on that exhibit which you wanted to --

A (Interrupting) This map also will show in Section 18, in the, it would be the southwest to the northwest, the Yates well that is a prolific Morrow producer, and also in the southwest southwest of 18 the well there, the CK Well is a Morrow producer, so our nearest control to us is over a mile away in the Yates well and does show the Morrow sand and where it is productive. I believe

that covers it.

Q All right. Next may I direct your attention to Exhibit 3 and ask you to relate what is shown on that map?

A Exhibit 3 is a structural map showing the structure of the Morrow during this time period and actually our position in Section 8 shows us that a subsea datum of something estimated to be a minus 5340 -- this is downdip from the productive wells, although we do not feel like we are likely to encounter water if we would come further downdip to 5350. That is possible, although water levels have not been delineated in this bar. With the exception of that, this illustration simply depicts the structure of the Morrow and it is really the meat of our subject, Exhibit 2.

Q I might point out that on both Exhibit 2 and Exhibit 3 there is certain acreage that's color-coded in green. Is that the Reading & Bates acreage?

A Yes. That's the acreage that we control in this area.

Q Next, may I direct your attention to Exhibit 4. Please relate what that depicts.

A Yes. Exhibit 4 is a cross section B-B' that's oriented roughly east west that will illustrate coming

CAMPBELL-DIRECT
CROSS

CASE 5263

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from B the prolific Yates Vanderber Well with the section of sand that, under our calculations, has approximately 62 feet of net sand, and as you come eastward into Section 17 you come out of that channel sand and you encounter no sand as depicted in the middle section of the cross section B-B', Texas International Petroleum, and then as you come further east you see the Yates State Well in Section 16 and once again you pick up a vestige of that same middle Morrow or B sand where you have approximately 10 feet of it, and these show the channel conditions how you come off that bar and into a shale section.

Q Should the Commission grant your Application, is your Company ready to proceed with drilling operations in Section 8?

A Yes. We staked the location here for terrain purposes and if this is granted, depending on rig availability, we're ready to move in and drill the 9200 foot Morrow test.

MR. COOTER: I'll go into the reserves and economics with the third witness.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Campbell, I believe I have got a question

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or two.

A Okay.

Q Referring to your Exhibit No. 2, you have a zero contour line that goes through the south half of Section 8. Now, is this contour line designed to show that not all of the south half of Section 8 is productive of gas in the Morrow formation, or some other purpose?

A No. That's where we think the zero line is, and actually the next gentleman is going to testify as to how many acres we think can be productive under this. Zero lines are difficult to draw, but this is where we feel like the width of it is and we think the channel does come in and shale out, as you see, through the northeast of 17 through 16 and then it develops again with productive there in Section 15, so --

Q (Interrupting) There's not a great deal of control in here, though.

A No, no.

Q In fact, the center of the channel might go right through the center of Section 8?

A Well, this represents our interpretation of where we think that the Morrow channel goes.

Q This is your best interpretation?

A This is our best interpretation.

Q Could in fact the channel run right up through Section 8?

A Morrow channels are very difficult to delineate and your only best bet -- now we have been influenced certainly by the control in the area, control in Section 5 and 6 where the Morrow in fact is not present, so your surmise certainly could be an alternate interpretation.

Q At the present time there is nothing in Section 4 to indicate that it does run up through there and nothing in the northwest to 19 indicating that it doesn't run up through there?

A Well, in Section 3, of course, we have control in Section 3 in the northwest quarter. We believe frankly that this channel has come up and was oriented primarily to southwest northeast and has moved then to an eastward direction and linking up with this production over in 15.

Q The field you depict over here in Section 18, is that the West Atoka Morrow?

A I'm not sure of the name of it; I think that is right, but I certainly couldn't say that with any great feeling of certainty.

Q Do you know if the productive wells in that West

Atoka Morrow are more or less generally aligned north-south at the present time?

A You say are they?

Q Yes. Do you know if they are?

A No, I can't say that.

Q Is it possible there are other Morrow sands in here which might be productive besides the one you've depicted on your Exhibit?

A Well, now, if we break the Morrow down into sections, into three members let's say. Let me draw your attention to cross section B-B', for instance the Yates Vanderber, which is certainly a good illustration there, the uppermost under the Morrow rise, and if you'd call that as we do the A, the thick B Section and below that, right above the Barnett you could possibly have the C. You have all three of those zones, and they certainly could be productive. Now, the commercial producer in this area is the B zone, that's the one you have to shoot for. We can't be influenced by 3 feet of Morrow A sand because it hasn't been that commercial in the area, frankly, and that's not our objective, to shoot where we don't think it represents the type of reserves that you have to drill for.

Q But it is possible that it could be productive?

A Oh, yes.

Q I note too on Exhibit No. 2 that the two closest producing wells are located in the west half of Section 18.

A Yes.

Q And, I think our record probably would reflect that the well in the northwest quarter has the north half dedicated to it and the well in the southwest has the south half dedicated to it. So, the well that you have proposed will not be crowding any other current producing Morrow well, is that correct.

A No, sir, it obviously won't.

Q And so this would probably tend to create a little bit better drainage than currently exists in the area?

A Well, it is obvious to us -- we believe the interpretation, and those wells are draining what we think the channel is through there, frankly.

MR. STAMETS: Any other questions? The Witness may be excused.

MR. COOTER: Mr. Hensley.

(Witness previously sworn.)

DANIEL R. HENSLEY

called as a witness, having been first duly sworn, was

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examined and testified as follows:

DIRECT EXAMINATION

BY MR. COOTER:

Q Would you state your name for the record, please?

A Daniel R. Hensley.

Q And by whom are you employed and in what capacity?

A Reading & Bates Oil and Gas Company, Petroleum Engineer.

Q You have not testified before the New Mexico Oil Conservation Commission before?

A No, sir.

Q Would you briefly relate your education and your experience since your graduation?

A I graduated from Tulsa University with a BS in Petroleum Engineering in December of 1970. I worked with Texaco in Houma, Louisiana, for three years and I have worked for Reading & Bates for four months.

Q For the purpose of this Hearing did you calculate the reserves which would underlie the proposed unit of the south half of Section 8, and the recoverable reserves if a well were drilled at a standard location and if a well were drilled at the requested location?

A Yes, sir.

Q What are your calculations in this regard and what are your conclusions as to the recoverability?

A If you will refer to Exhibit No. 2, on the normal spacing I calculate recoverable reserves of 1.32 billion cubic feet of gas and 2600 barrels of condensate. Okay, on the unorthodox spacing that we request I calculate 2.75 billion cubic feet and 2200 barrels of condensate.

Q In your opinion, Mr. Hensley, would a well at the requested unorthodox location as opposed to the orthodox location, be in the best interests of conservation, prevention of waste?

A Yes.

Q What would the well cost be, approximately, for your proposed well?

A Our estimation is \$250,000.

Q And that's drilled and completed?

A Yes, sir.

MR. COOTER: I have no other questions.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Hensley, your calculations are based on the geology shown on Exhibit 2?

A Yes, sir.

Q So that if in the end we proved that the lines should be redrawn somewhere else your reserve figures would change a little bit?

A Yes.

Q But at the present time, with the information you have available, your study shows the best location with the greatest ultimate recovery is the proposed non-standard location?

A Yes.

MR. STAMETS: Are there any other questions of the Witness? He may be excused.

MR. COOTER: Mr. Examiner, we offer Exhibits 1 through 4.

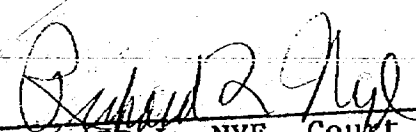
MR. STAMETS: Exhibits 1 through 4 will be admitted into the record.

(Whereupon, Applicant's Exhibits Nos. 1 through 4 were admitted into evidence.)

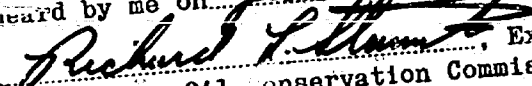
MR. STAMETS: Anything further in this Case?
We will take the case under advisement.

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. 5263 heard by me on June 19, 1973.


Richard L. Nye, Examiner
New Mexico Oil Conservation Commission

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OIL CONSERVATION COMMISSION

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

June 25, 1974

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Re: CASE NO. 5263

ORDER NO. R-4814

Applicant:

Reading & Bates Oil & Gas Co.

Mr. Paul Cooter
Atwood, Malone, Mann & Cooter
Attorneys at Law
Post Office Box 700
Roswell, New Mexico 88201

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>X</u>
Aztec OCC	<u> </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. 5263
Order No. R-4814

APPLICATION OF READING & BATES
OIL AND GAS COMPANY FOR AN
UNORTHODOX GAS WELL LOCATION,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 19, 1974,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

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, Reading & Bates Oil and Gas
Company, seeks approval of an unorthodox gas well location 660
feet from the South line and 660 feet from the West line of
Section 8, Township 18 South, Range 26 East, NMPM, to test the
Morrow formation, West Atoka-Morrow Gas Pool, Eddy County, New
Mexico.

(3) That the S/2 of said Section 8 is to be dedicated to
the well.

(4) That a well at said unorthodox location will better
enable applicant to produce the gas underlying the proration
unit.

(5) That no offset operator objected to the proposed un-
orthodox location.

(6) That approval of the subject application will afford
the applicant the opportunity to produce its just and equitable
share of the gas in the subject pool, will prevent the economic
loss caused by the drilling of unnecessary wells, avoid the
augmentation of risk arising from the drilling of an excessive
number of wells, and will otherwise prevent waste and protect
correlative rights.

-2-

CASE NO. 5263
Order No. R-4814

IT IS THEREFORE ORDERED:

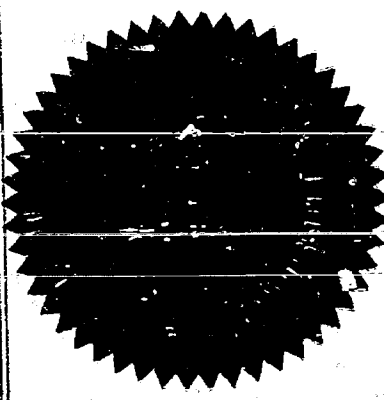
(1) That an unorthodox gas well location for the Morrow formation is hereby approved for a well to be located at a point 660 feet from the South line and 660 feet from the West line of Section 8, Township 18 South, Range 26 East, NMPN, West Atoka-Morrow Gas Pool, Eddy County, New Mexico.

(2) That the S/2 of said Section 8 shall be dedicated to the above-described well.

(3) 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



[Signature]
I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

[Signature]
A. L. PORTER, Jr., Member & Secretary

S E A L

jr/

Dockets Nos. 19-74 and 20-74 are tentatively set for hearing on July 16 and July 24. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 19, 1974

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

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

CASE 5256: Application of Monsanto Company for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to plug back its Arco Federal Well No. 2 located 990 feet from the North line and 2310 feet from the East line of Section 13, Township 21 South, Range 26 East, Burton Flats Field, Eddy County, New Mexico, to a depth of 9314 feet and to set a whipstock and directionally drill said well in such a manner as to bottom it in the Morrow formation within a 50-foot radius of a point 660 feet from the North line and 1980 feet from the East line of said Section 13.

CASE 5257: Application of Mobil Oil Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 12 Com Well No. 1 to be drilled to the Morrow formation at a point 1300 feet from the South line and 660 feet from the East line of Section 12, Township 21 South, Range 26 East, Eddy County, New Mexico, the E/2 of said Section 12 to be dedicated to the well.

CASE 5258: Application of Texas Pacific Oil Company for two waterflood projects and downhole commingling or dual completions, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State "A" Act, 1 Well No. 42 located in Unit A of Section 4, Township 23 South, Range 36 East, Lea County, New Mexico, for the purpose of injecting water into the Upper Seven-Rivers formation of the Jalmat Pool and the Lower Seven-Rivers formation of the Langlie-Mattix Pool for the purpose of secondary recovery. Applicant further seeks approval for the downhole commingling in the wellbore of Jalmat and Langlie-Mattix production in the off-setting wells Nos. 44, 45, and 87, located in Units B, H, and G, respectively, of said Section 4; in the alternative applicant seeks approval for the dual completion of the aforesaid three wells to produce oil from said pools through parallel strings of tubing.

CASE 3608: (Reopened)

In the matter of Case No. 3608 being reopened pursuant to the provisions of Order No. R-3282, which order established temporary rules for the Carlsbad Permo-Penn Gas Pool, Eddy County, New Mexico, including a provision for 640-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

CASE 5259: Application of Read & Stevens, Inc. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location for a well proposed to be drilled 660 feet from the South line and 990 feet from the East line of Section 30, Township 20 South, Range 25 East, Eddy County, New Mexico, in exception to the pool rules for the Indian Basin-Morrow Gas Pool or the Cemetary-Morrow Gas Pool, whichever is applicable.

CASE 5260: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit R & G Drilling Company and all other interested parties to appear and show cause why Order No. DC-1026, which authorized dual completion in the Blanco-Mesaverde and Basin-Dakota Pools, should not be rescinded and the Hammond Well No. 47 located in Unit K, Section 35, Township 27 North, Range 8 West, San Juan County, New Mexico, be recompleted as a single zone well.

CASE 5261: Application of Amerada Hess Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation through the openhole interval from 11,160 feet to 11,230 feet of its H. C. Posey "A" Well No. 1 located in Unit O of Section 11, Township 12 South, Range 32 East, East Caprock-Devonian Pool, Lea County, New Mexico.

CASE 5262: Application of Petro-Lewis Corporation for pool contraction, creation, and special pool rules, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Media-Entrada Oil Pool by the deletion of the NW/4 of Section 22, Township 19 North, Range 3 West, Sandoval County, New Mexico, and the creation of a new pool for Entrada production comprising said lands. Applicant further seeks the promulgation of special rules for said pool, including a provision for 160-acre proration units and the establishment of a special depth bracket allowable for said pool of up to 750 barrels per day.

CASE 5263: Application of Reading & Bates Oil and Gas Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location for a well proposed to be drilled at a point 660 feet from the South and West lines of Section 8, Township 18 South, Range 26 East, Eddy County, New Mexico, the S/2 of said Section 8 to be dedicated to the well.

CASE 5251: (Continued from the June 5, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for the Amendment of Order No. R-4560, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4560 to provide for an extension of time in which to comply with the schedule set forth in said order for the drilling and completion of the third well covered by said order, to be located in the NE/4 of Section 24, Township 9 South, Range 33 East, Vada-Pennsylvanian Pool, Lea County, New Mexico.

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. 1

CASE NO. 5263

Submitted by

Hearing Date 6/19/74

630

Recorded by
SUNNER Abstract Co.

DECLARATION OF CONSOLIDATION
AND
UNITIZATION

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, READING & BATES OIL AND GAS CO. is the legal owner of the following described Oil and Gas Leases covering the lands herein-after described:

- L-1763 Oil and Gas Lease dated April 1, 1971, executed by Ballard E. Spencer Trust, Inc., by J. A. Fairay, President, as Lessor, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 79, Page 447 of the records of Eddy County, New Mexico, and covering all of the West 32 acres of the S/2 of the SE/4 and all of the East 48 acres of the S/3 of the SE/4 of Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.
- L-1763-A Oil and Gas Lease dated April 12, 1971, executed by Margaret Lutz, her husband, as Lessors, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 79, Page 449 of the records of Eddy County, New Mexico, and covering the SE/4 of the SE/4 and the East 8 acres of the SW/4 of the SE/4 of Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.
- L-1763-B Oil and Gas Lease dated April 12, 1971, executed by Dorothy Chapman and Lloyd Chapman, her husband, as Lessors, in favor of Reading & Bates, Inc., Lessee, recorded in Book 79, Page 449 of the records of Eddy County, New Mexico, and covering the SE/4 of the SE/4 and the East 8 acres of the SW/4 of the SE/4 of Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.
- L-1763-C Oil and Gas Lease dated March 17, 1972, executed by Frances W. Collins, as Lessor, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 85, Page 313 of the records of Eddy County, New Mexico, and covering all of the NW/4 of the SE/4 and the NE/4 of the SE/4, Less and Except a ten acre tract described by metes and bounds as follows: Beginning at a point 40 feet West and 818 South of the NE/C of the SE/4 of Section 8 T18S-R26E, N.M.P.M.; Thence West 867.73 feet; Thence South 502.0 feet; Thence East 867.73 feet; Thence North 502.0 feet to the point of beginning, containing 10 acres, more or less, all in Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.
- L-1763-D Oil and Gas Lease dated March 16, 1972, executed by Sam Bejarano and Jane Bejarano, his wife, as Lessors, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 85, Page 354 of the records of Eddy County, New Mexico, and covering all that certain parcel of land, being 70 acres, more or less, in N/2 SE/4 Section 8, Township 18 South, Range 26 East, of said County and State, as conveyed to Sam Bejarano, et ux., by Warranty Deed dated September 15, 1967, recorded in Volume 199, Page 588, D.R., Eddy County, New Mexico, Less and Except a certain 33.90 acre tract conveyed by Sam Bejarano, et ux., to Jesus F. Martinez, et ux., by Warranty Deed dated February 20, 1969, recorded in Volume 203, Page 401, D. R. of said County and State.

Page 2.

- L-1763-E** Oil and Gas Lease dated March 29, 1972, executed by Pearl Collins, as Lessor, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 85, Page 723 of the records of Eddy County, New Mexico, and covering all of the NW/4 SE/4 and the NE/4 SE/4, Less and Except a ten acre tract described by metes and bounds as follows: Beginning at a point 40 feet West and 818 feet South of the SE/C of the SE/4 of Section 8-T18S-R26E, N.M.P.M.; Thence West 867.73 feet; Thence South 502.0 feet; Thence East 867.73 feet; Thence North 502.0 feet to the point of beginning, containing 70 acres more or less, all in Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.
- L-1763-F** Oil and Gas Lease dated March 22, 1972, executed by Jesus F. Martinez and Enedina B. Martinez, his wife, as Lessors, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 85, Page 716 of the records of Eddy County, New Mexico, and covering the following: Beginning at a point which is 100 feet West of the East Quarter Corner of Section 8, Township 18 South, Range 26 East, N.M.P.M., said point being on the West Right-of-Way Line of U.S. Highway 285; Thence South along said Right-of-Way Line a distance of 457.1 feet; Thence West to a point which is 806.7 feet; Thence South 161.32 feet; Thence West a distance of 1,734.25 feet to the West Line of said tract; Thence North along said West Line of tract a distance of 520.3 feet; said point being the Northwest Corner of said tract; Thence East 2,543.0 feet to the point of beginning and containing 33.90 acres, more or less, being the same land conveyed by Warranty Deed dated February 20, 1969, from San Bejarano et ux to Jesus F. Martinez, recorded in Book 203 at Page 401, D. R. of Eddy County, New Mexico.
- L-1763-G** Oil and Gas Lease dated April 27, 1974, executed by Agnes M. Dudley, A/K/A Nance M. Dudley, as Lessor, in favor of Reading & Bates Oil and Gas Co., as Lessee, recorded in Book Page of the records of Eddy County, New Mexico, and covering the NW/4 of the SE/4 and the West 32 acres of the SW/4 of the SE/4 of Section 8, Township 18 South, Range 26 East, Eddy County, New Mexico.
- L-1917** Oil and Gas Lease dated March 17, 1972, executed by Gertrude McGaw, as Lessor, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 85, Page 713 of the records of Eddy County, New Mexico, and covering the following: Beginning at a point on the subdivision line 40 feet West of the NE Corner of the SE/4 of Section 8-T18S-R26E, N.M.P.M., Thence South parallel to the East Line of said Section 8, 818 feet to the NE Corner of the tract herein described; Thence West parallel to the North Line of said SE/4 of Section 8, 867.73 feet; Thence South parallel to the East Line of said Section 8, 502 feet, more or less, to the South Line of the NE/4 SE/4 of Section 8; Thence East along the South Line of said NE/4 SE/4, 867.73 feet, more or less, to a point on the subdivision line 40 feet West of the SE Corner of said NE/4 SE/4; Thence North parallel to the East Line of said NE/4 SE/4, Section 8, 502.0 feet, more or less, to the point of beginning of the tract herein described, containing ten (10) acres, more or less.

Page 3.

L-1748 Oil and Gas Lease dated March 22, 1971, executed by William J. Torrington and Ruth Dorsey Torrington, his wife, Thadene Noel Moore and George W. Moore, her husband, James F. Noel and Jean S. Noel, his wife, as Lessors, in favor of Reading & Bates, Inc., as Lessee, recorded in Book 78, Page 899 of the records of Eddy County, New Mexico, insofar and only insofar as said lease cover all of the SW/4 of Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.

WHEREAS, each of the above leases grants Lessee the right and power of pooling the leased acreage with any other adjacent or contiguous lands, lease, or leases into a unit or units not to exceed a total of 640 acres for the production of gas.

NOW, THEREFORE, the undersigned owner of all right, title and interest in and to the above described leases, does hereby exercise the right granted under the terms of said leases and does hereby designate and describe the S/2 of Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico, covering an area of 320 acres, as a consolidated and unitized area for the purpose of exploration, development, and production of gas, and does hereby consolidate each of the above described oil and gas leases with the other so as to form a consolidated and unitized area for 320 acres in accordance with the terms, provisions and conditions of said oil and gas leases.

EXECUTED, this 14th day of May, 1974.



W. M. Sackett, Asst. Secretary

READING & BATES OIL AND GAS CO.

By D. L. Potter
D. L. Potter, Vice-President

STATE OF OKLAHOMA)

SS.

COUNTY OF TULSA)

Before me the undersigned, a Notary Public in and for said County and State, on this 14th day of May, 1974, personally appeared D. L. Potter to me known to be the identical person who subscribed the name of the maker thereof, READING & BATES OIL AND GAS CO., to the foregoing instrument as its Vice President acknowledged to me that he executed the same as his free and voluntary act and deed of such corporation for the uses and purposes therein set forth.



My Commission Expires:

1976

Betty J. Fudiner
Notary Public

STATE OF NEW MEXICO, County of Eddy, ss. I hereby certify that this instrument was filed for record on the 14th day of May, 1974, at 11:00 A.M., and duly recorded in Book 116 Page 620 of the Records of Eddy County, New Mexico.

LEONARD M. MARRAS, County Clerk
By Leonard M. Marras, Deputy

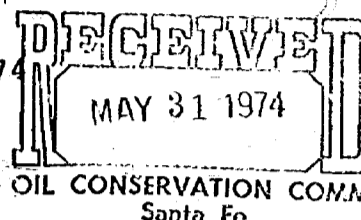
ATWOOD, MALONE, MANN & COOTER
LAWYERS

JEFF D. ATWOOD [1883-1960]

P. O. DRAWER 700
SECURITY NATIONAL BANK BUILDING
ROSWELL, NEW MEXICO 88201
[505] 522-6221

CHARLES F. MALONE
RUSSELL D. MANN
PAUL A. COOTER
BOB F. TURNER
ROBERT A. JOHNSON
JOHN W. BASSETT
ROBERT E. SABIN
RUFUS E. THOMPSON
RALPH D. SHAMAS

May 30, 1974



JSW
The Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Enclosed herewith are the following:

1. Original and two copies of the Application of Reading & Bates Oil and Gas Co., for approval of an unorthodox well location, Eddy County, New Mexico.
2. Five copies of your form C-101, being the Application for Permit to Drill, and
3. Three copies of your form C-102, being your Well Location and Acreage Dedication Plat.

From my telephone conversation with Dan Nutter, it is my understanding that this case has been set on the docket for June 19, and will come on for examiner hearing at that time.

Appreciating your attention to this, I am,

Very truly yours,

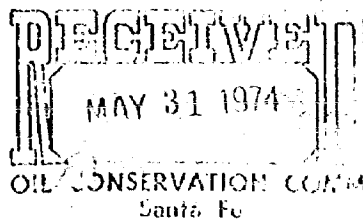
Paul Cooter
Paul Cooter

PC:sas

cc: Mr. Ray Wickett

DOCKET MAILED

Date 6-7-74



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION)
OF READING & BATES OIL AND GAS CO.)
FOR APPROVAL OF AN UNORTHODOX WELL)
LOCATION, EDDY COUNTY, NEW Mexico.)

Case No. 5-263

APPLICATION

COMES NOW READING & BATES OIL AND GAS CO. and applies to the Oil Conservation Commission of the State of New Mexico for approval of an unorthodox well location in Eddy County, New Mexico, and states:

1. Applicant is the owner of the oil and gas leasehold estate, and the oil and gas leases covering the $S\frac{1}{2}$ of Section 8, Township 18 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.

2. Applicant proposes to drill a well to a depth of 9200 feet, sufficient to test the Morrow Formation, 660 feet from the South line and 660 feet from the West line of such Section 8, and to dedicate the $S\frac{1}{2}$ of such Section 8 for production therefrom.

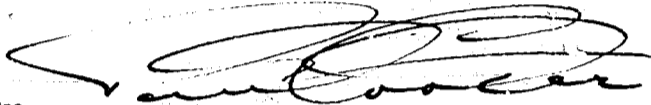
3. Approval of this unorthodox well location would be in the best interests of conservation and prevention of waste, for the reasons that a well at the proposed unorthodox location would recover more gas than a well at an orthodox location, allow the Applicant to produce its just and equitable share of gas from under its land and efficiently and economically drain the acreage dedicated to the well. The Morrow Formation Isopach utilizing existing well control indicates a channel running east-west along the south line of such Section 8, and

so the optimum location for this well is indicated to be in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of such Section 8.

WHEREFORE, Applicant prays that this matter be set for hearing before the Commission or its duly appointed examiner, that notice thereof be given as provided by law and that after hearing, the Commission enter its order approving the well location as herein requested.

Respectfully submitted,

READING & BATES OIL AND GAS CO.



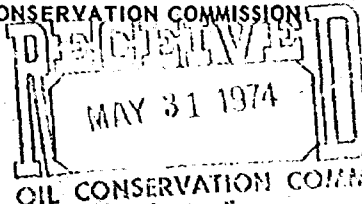
By

Atwood, Malone, Mann & Cooter
P. O. Drawer 700
Roswell, New Mexico 88201

Attorneys for Applicant

NO. OF COPIES RECEIVED	
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U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION



Form C-101
Revised 1-1-65

5A. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.
7. Unit Agreement Name
8. Farm or Lease Name Torrington
9. Well No. 1
10. Field and Pool, or Wildcat Wildcat
12. County Eddy
19. Proposed Depth 9200
19A. Formation Morrow
20. Rotary or C.T. Rotary
21. Elevations (Show whether DF, RT, etc.) 3408 GR
21A. Kind & Status Plug. Bond Statewide
21B. Drilling Contractor Unknown
22. Approx. Date Work will start Upon approval & Rotary availability

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK	
1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	7. Unit Agreement Name
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	8. Farm or Lease Name Torrington
2. Name of Operator Reading & Bates Oil and Gas Co.	9. Well No. 1
3. Address of Operator 810 N. Dixie Blvd., Rm. 202, Odessa, Texas 79761	10. Field and Pool, or Wildcat Wildcat
4. Location of Well UNIT LETTER M LOCATED 660 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE OF SEC. 8 TWP. 18S RGE. 26E NMPM	12. County Eddy
19. Proposed Depth 9200	19A. Formation Morrow
20. Rotary or C.T. Rotary	21. Elevations (Show whether DF, RT, etc.) 3408 GR
21A. Kind & Status Plug. Bond Statewide	21B. Drilling Contractor Unknown
22. Approx. Date Work will start Upon approval & Rotary availability	

23. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17"	13 3/8"	54.50#	530'	500	Circulate
12 3/4"	8 5/8"	24#	1230'	550	Circulate
7 7/8"	4 1/2"	11.60#	9200'	500	6000'

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Paul S. Zarrow Title Production Superintendent Date May 10, 1974
(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

5-263

Operator <i>Reading & Bates Oil & Gas Co.</i>		Lease <i>Fee Torrington</i>		Well No. <i>1</i>
Unit Letter <i>M</i>	Section <i>8</i>	Township <i>18 South</i>	Range <i>26 East</i>	County <i>Eddy</i>
Actual Footage Location of Well: <i>660</i> feet from the <i>South</i> line and <i>660</i> feet from the <i>West</i> line				
Ground Level Elev. <i>3408</i>	Producing Formation <i>Morrow</i>	Pool <i>Wildcat</i>	Dedicated Acreage: <i>320</i> Acres	

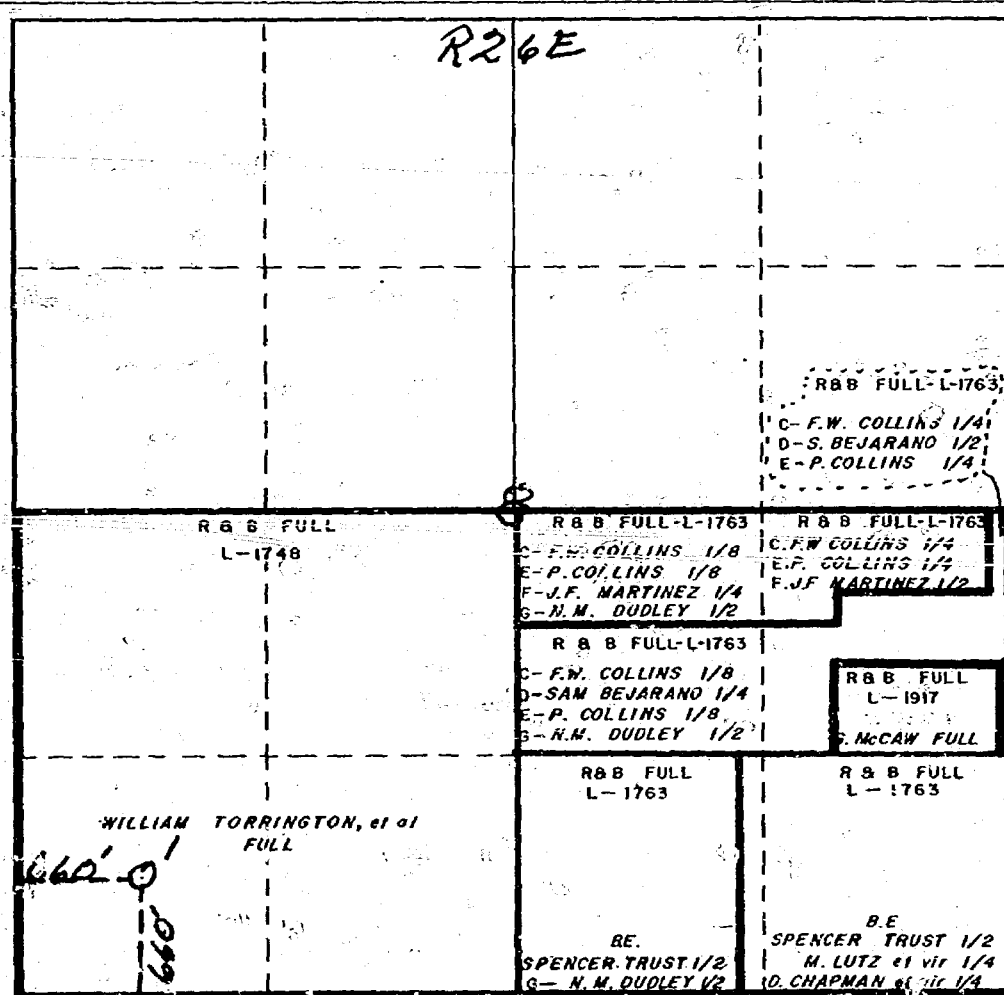
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Declaration of Consolidation
and Unitization

☒ Yes ☐ No If answer is "yes," type of consolidation

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Paul D. Harrow

Name

Production Superintendent

Position

Reading & Bates Oil and Gas Co.

Company

May 9, 1974

Date

I hereby certify that the well location shown on this plat was plotted by field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

May 9th 1974

Registered Professional Engineer and/or Land Surveyor

James H. Brown
Certificate No. *542*

DRAFT

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. 5263

Order No. R-4814

APPLICATION OF READING & BATES OIL
AND GAS COMPANY FOR AN UNORTHODOX
GAS WELL LOCATION, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 19, 1974,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 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, Reading & Bates Oil and Gas Company,
seeks approval of an unorthodox gas well location 660 feet from

the South line and 660 feet from the West line of Section 8,

Township 18 South, Range 26 East, NMPM, to test the Morrow
formation, West Pto Ka Morrow Gas Pool, Eddy County, New Mexico.

-2-

CASE NO. 5263
Order No. R-

(3) That the S/2 of said Section 8 is to be dedicated to the well.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(5) That no offset operator objected to the proposed unorthodox location.

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location for the Morrow formation is hereby approved for a well to be located at a point 660 feet from the South line and 660 feet from the West line of Section 8, Township 18 South, Range 26 East, NMPM, West Hoka - Morrow Gas Pool, Eddy County, New Mexico.

(2) That the S/2 of said Section 8 shall be dedicated to the above-described well.

(3) 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.

Reading & Baker O&G Co.
unorthodox gas well loc
Eddy

660 FSL 660 FWL

8-185-26E,

5/2 to be dedicated

Paul Coater

DOCKET MAILED

Date _____