

CASE NO.

6332

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,
ETC.

STATE OF NEW MEXICO
 ENERGY AND MINERALS DEPARTMENT
 OIL CONSERVATION DIVISION
 State Land Office Building
 Santa Fe, New Mexico
 27 September 1978

EXAMINER HEARING

 IN THE MATTER OF:)
)
)

Application of Reading & Bates Oil Com-)
 pany for an unorthodox gas well location,)
 and a dual completion, Lea County, New)
 Mexico.)
)

CASE
 6332

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
 Division:

Lynn Teschendorf, Esq.
 Legal Counsel for the Division
 State Land Office Bldg.
 Santa Fe, New Mexico 87501

for the Applicant:

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

I N D E X

GUY W. JOYCE

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HOWARD GRAY

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MR. NUTTER: Call next Case Number 6332.

MS. TESCHENDORF: Case 6332. Application of Reading and Bates Oil and Gas Company for an unorthodox gas well location and dual completion, Lea County, New Mexico.

MR. COOTER: Paul Cooter, with the law firm of Atwood and Malone in Roswell, appearing on behalf of the applicant. I have two witnesses, Guy Joyce and Howard Gray.

(Witnesses sworn.)

MR. COOTER: Before commencing, Mr. Examiner, I would like to point out certain errors in our application.

One, the -- in paragraph number one, the range of 26 East was in error. It should be 36 East, and that was caught by the counsel for the Commission and the advertisement was correct.

Next, the application was filed in the name of Reading and Bates Oil and Gas Company. There has been a name change. It is now Reading and Bates Petroleum Company. The corporation identity remains the same; it's just a change in name.

MS. TESCHENDORF: Mr. Cooter, I believe the reason we left it this way was because they haven't been

rebonded yet in the other name, so --

A. They're in the process, I've been advised. This has been going on for the last three or four weeks. They're in the process of taking care of those administrative things.

MR. NUTTER: What is the new name going to be?

MR. COOTER: Instead of Oil and Gas, it's Petroleum.

MR. NUTTER: Company?

MR. COOTER: Yes, sir, that remains the same. Reading and Bates Petroleum Company.

I did get the county right but the third change is down in paragraph number three. The location of the proposed well is correct as set forth in paragraph number two, but that obviously places it in the northeast quarter of the northwest quarter, if it's completed as a Seven Rivers well, rather than the southeast of the northwest.

I have these exhibits.

GUY W. JOYCE

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. COOTER:

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

A I'm Guy W. Joyce.

Q And by whom are you employed, Mr. Joyce?

A Reading and Bates.

Q In what capacity?

A Chief Geologist.

Q And where are you situated?

A Tulsa, Oklahoma.

Q This is the first time you've testified before the Oil Conservation Commission here in Santa Fe, or one of its examiners?

A That's right.

Q Would you please relate briefly your education?

A Yes. I went to the University of Oklahoma, graduated with a BS degree in 1949 and worked on a Master's until 1950.

Q And in what field did you obtain your degree?

A Geology.

Q And relate briefly, if you would, your experience since obtaining your degree.

A In 1950 I went to work for Union Texas in Louisiana and worked for them for seventeen years. When

I resigned, I was Regional Manager.

Since that time I worked for Whitestone Petroleum for a short period of time; Ashland Oil and Gas as their foreign exploration manager; Kerr McGee in Oklahoma City as their exploration manager; and am now with Reading and Bates.

Q Since graduation you have -- all of your work experience has been in your profession of geology?

A That's right.

Q Are you acquainted with the application of Reading and Bates in this case?

A Yes, I am.

Q Would you relate what the company seeks by its application?

A We are seeking by this application to drill a well as designated on Exhibit One at the location of the "X" in the green area.

This well will be -- it's primarily designed as a Seven Rivers test; however, we also anticipate penetrating the Yates formation and in this respect we're asking for permission to dually complete the well should it be possible from both the Seven Rivers and the Yates.

Q Reading and Bates has a present producing Yates well in this quarter section, does it not?

A That's right. It's the No. 1-Y Federal, shown

as a gas well. This well is barely paying expenses at the present moment.

Q Do you know what its present production is? Per day?

A About 21 Mcf per day.

Q Let me direct your attention to what has been marked as Exhibit Number One, and relate what that exhibit depicts, please, sir.

A Okay, this is a structure map on top of the Seven Rivers and what it depicts is that by drilling a location on the location marked "X" we will be up-dip from the No. 1 Danziger, which is an abandoned oil well out of the Seven Rivers, and we will be structurally high to that well. That well watered out before we bought the property back in the early '40s somewhere.

MR. NUTTER: Where is that well, Mr. Joyce?

A It's where the two wells are together, the 1-Y and No. 1.

MR. NUTTER: Okay, it's the old oil well that's shown there.

A It's an old oil well, that's right; been abandoned for about thirty years.

MR. NUTTER: And what was it completed in?

A Seven Rivers.

MR. NUTTER: Thank you.

A. All the wells in the area are Seven Rivers except three, and on subsequent exhibits you'll see that they are marked.

Q (Mr. Cooter continuing.) Next let's turn to Exhibit Number Two. Would you relate what is shown on that Exhibit, sir?

A. This is a structure map on top of the Yates formation. The contour interval is 25 feet. Once again we show that we will be up-dip from the No. 1-Y Federal, which is shown at a -- colored red on the exhibit you have, which is the marginal well that we mentioned previously.

Q Next would you turn to Exhibit Number Three? Explain that to the Commission.

A. Exhibit Number Three is an Isopach map of the Yates formation and the Isopach map is in some ways responsible for the contouring of the previous two maps, in that you'll notice in the north-northeast corner of Section 5, the wells 4 and 3 are essentially the same Isopach thickness that pulls the nose out to the west and that's the reason for the nose on the previous maps.

Q Turn next, if you would to Exhibits Four and Five and explain those to the Examiner.

A. Okay. On Exhibit Five there is a line of cross section designated as Aprime - A running from the

Conoco No. 6-A-32. This well, as you'll notice on the cross section, was structurally high to the No. 1-Y Federal; however, the well on DSTs failed to indicate any commercial production, whereas the well, No. 1-Y Federal, returned good results on the DSTs and has subsequently been completed and has produced a million and a half MCF of gas.

Based on the performance of the DSTs in these two wells, we interpret a permeability barrier lying between the two somewhat as designated on Exhibit Number Five.

Q Fundamentally, the proposed location was chosen for the Seven Rivers test that you propose to drill.

A That's exactly right.

Q If, however, commercial production is encountered in the Yates formation, you do seek a dual completion.

A That's right.

Q But at that time the presently producing well which -- unit for which is the northwest quarter of Section 5, would be plugged?

A Yes. However, we don't anticipate plugging that well immediately. We might leave it open for, say, a period of six months to be sure that the new well is capable of holding the lease and producing.

Q But only one well would be produced from that unit?

A That's right.

Q And that would be, then, an unorthodox location for that Yates well.

A That's correct.

Q But an orthodox location for the Seven Rivers well.

A That's correct.

Q Mr. Joyce, in your opinion if the Commission were to grant the application, would the proposed Yates well, assuming completion, recover more gas than -- than a well at an orthodox location?

A In this instance, yes, because it would be up-dip from the presently producing gas well.

Q And would it allow Reading and Bates to produce its just and equitable share of gas from under the land?

A That's right.

Q And in your opinion would it efficiently and economically drain the acreage dedicated to the well, being the northwest quarter?

A Yes.

Q Were Exhibits Number One through Five prepared by you?

A. They were.

MR. COOTER: That's all the questions I have for this witness.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. Joyce, you're talking about a possible dual completion here in the Yates and the Seven Rivers. Now, the completion in the Yates would be a Jalmat gas well, is that correct?

A. Yes.

Q. Now, where would you complete in the Seven Rivers formation?

A. Where would we complete in it?

Q. Yes.

A. In the top of the Seven Rivers formation.

Q. Well, now, you realize that the Yates, or the Jalmat Pool encompasses the Tancill, the Yates, and the Seven Rivers formation, except for the lowermost 100 feet of that formation, so what you're talking about here would be a dual completion in the same pool.

A. At a different reservoir.

Q. But it's in the same pool.

A. That may be.

Q. That might not be kosher. You wouldn't be

in the lowermost 100 feet of the Seven Rivers.

A. Definitely not; we'll be in the top 100 feet, probably.

Q. You'd better watch that when you're getting ready to do that.

I believe that's all. Are there any further --

A. Actually, Commissioner, I can tell you, if you'll look on the cross section, which is Exhibit Five, I believe, or Four, anyway on the cross section.

MR. COOTER: Four.

A. Four. We intend to drill no deeper into the Seven Rivers than what is shown on that cross section in the well with the yellow sand in it, which is the top about 130 feet, and we anticipate completing shallower in the formation than that.

Q. Well, is this the top of the Seven Rivers here at 3710?

A. That's right.

Q. And this well here went on down to about -- it was logged down to about 3840.

A. That's correct.

Q. So that would be 130 feet --

A. Right.

Q. -- Below the top of the Seven Rivers there.

A. Most of the wells in the Seven Rivers have

been completed in that bottom unit that you see there from 3790 to 3830, and that have produced water in the abandoned oil and gas wells to the south of the No. 1-Y Federal.

Q Well, they were completed as Seven Rivers oil wells but were they also completed as Yates gas wells with a dual completion?

A No, they were not dual.

Q Uh-huh.

A But we intend -- we believe that the upper part from 3790 up is an untested reservoir in this whole area, which has been lying dormant for the last thirty, forty years, and we would like to give that a good try.

Q Well, sounds like you're trying to get two straws in one wellbore.

MR. NUTTER: Are there any further questions of Mr. Joyce? He may be excused.

HOWARD GRAY

Being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. COOTER:

Q State your name for the record, please, sir.

A Howard Gray.

Q And by whom are you employed. Mr. Gray?

A Reading and Bates Petroleum Company.

Q In what capacity?

A I am drilling and production engineer, located in Tulsa.

Q Is this the first time you've testified before the New Mexico Oil Conservation Commission?

A Yes, it is.

Q Would you relate your education for the Examiner, please, sir?

A Yes. I received a Bachelor of Science degree from Central State University, Edmond, Oklahoma. The degree is in mathematics and physics.

Q And then your experience since obtaining that degree?

A Six years teacher of secondary mathematics, Oklahoma City Public Schools; eleven years with Texaco, Incorporated, in Oklahoma City and Tulsa, in various levels of responsibility, field engineer, reservoir engineer; the last three years at being Division Drilling Engineer; and the last eight months Drilling and Production Engineer with Reading and Bates.

MR. NUTTER: Do you like that better than teaching school?

A Certainly.

Q Let me direct your attention to what has been marked as Exhibit Number Six, and would you relate to the Examiner what that exhibit depicts?

A This is a schematic of a proposed dual completion in the event that both of these formations are productive. In the event one or the other of these formations are not productive, then it would be a typical single completion with the packer above the only producing zone.

As it is shown here, this was in the event that both zones are productive.

Q All right, would you please turn to Exhibit Number Seven. That's an AFE for your dual completion, is it not?

A Right. This is an AFE showing the actual cost to physically complete the well in the two reservoirs.

Q And if it is completed as a producer in both reservoirs, the total cost would be what?

A Approximately \$230,080 for a dual completion in the two reservoirs.

Q All right. Compare your Exhibit Number Seven with Exhibit Number Eight.

A Exhibit Number Seven is a cost to drill an additional Yates well, approximately 3600 feet and completing in the Yates. This is intended to show what the cost would be if an additional -- or second well had to be

drilled in order to produce the Yates formation, and it would be \$161,100.

Look at the two AFEs together, the additional cost from Exhibit Seven showing dual completion to actually test the two reservoirs, the additional cost is \$37,800, and by permitting this testing both reservoirs in the same well, it would result in a savings of \$123,000, making the proposition more economical.

Q The present Yates well that is in the northwest quarter, being the No. 1-Y Federal well, has just about reached economic limits of production?

A Yes. In our last production report for July, 1978, it averaged 21 Mcf a day and the total net income for the well for that month was \$385. I'm sorry, that's year to date through the first nine months of our fiscal year, \$385 net income from this one well.

Q Were the Commission to grant the application sought by Reading and Bates for the dual completion, would that prevent economic loss caused by the drilling of an unnecessary well?

A Yes, sir.

Q And prevent waste?

A Yes, sir.

Q Were Exhibits Numbers Six, Seven, and Eight prepared by you or under your direction?

A. Yes, they were.

MR. COOTER; Mr. Examiner, we offer Exhibits Numbers One through Eight.

MR. NUTTER: Applicant's Exhibits One through Eight will be admitted in evidence.

MR. COOTER: Just one minute, please, sir.

MR. NUTTER: Are there any questions of Mr. Gray? He may be excused.

MR. COOTER; That concludes our case, Mr. Examiner.

MR. NUTTER: Does anyone have anything to offer in Case Number 6332?

We'll take the case under advisement.

(Hearing concluded.)

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd CSR
Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is
a true and correct record of the proceedings in
the examiner hearing of Case No. 6383
heard by me on 9/27 19 78
[Signature] Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6332
Order No. R-5830

APPLICATION OF READING & BATES OIL
AND GAS COMPANY FOR AN UNORTHODOX
GAS WELL LOCATION AND A DUAL
COMPLETION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 27, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 6th day of October, 1978, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Reading & Bates Oil and Gas Company, seeks approval for the unorthodox location of a gas well to be drilled 330 feet from the North line and 1650 feet from the West line of Section 5, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico, and further seeks approval for the dual completion of said well to produce gas from the Yates formation and oil from the Upper Seven Rivers formation, all in the Jalmat Pool.
- (3) That the NW/4 of said Section 5 is currently dedicated to applicant's Federal Well No. 1-Y, located in Unit C of said Section 5, but said well has almost reached its economic limit of productivity and will soon be abandoned.
- (4) That the NW/4 of said Section 5 is to be dedicated to the well and to the aforesaid Federal Well No. 1-Y, at least until said Well No. 1-Y is plugged and abandoned.
- (5) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

-2-

Case No. 6332
Order No. R-5830

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

(7) That the dual completion of said well in the Yates formation and in the Upper Seven Rivers formation may enable the operator to recover more of the oil and gas underlying the NW/4 of said Section 5 than would otherwise be recovered, thereby preventing waste, and will not violate correlative rights of offsetting property owners provided that the well is limited to a single Jalmat well allowable.

(8) 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:

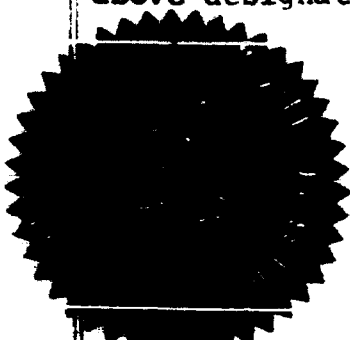
(1) That the application of Reading & Bates Oil and Gas Company for an unorthodox gas well location is hereby approved for a well to be drilled at a point 330 feet from the North line and 1650 feet from the West line of Section 5, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico.

(2) That the applicant is further authorized to dually complete said well in such a manner as to produce gas from the Yates formation and oil from the Upper Seven Rivers formation, provided however, that only a single allowable shall be assigned to said well.

(3) That the NW/4 of said Section 5 shall be simultaneously dedicated to the above-described well and to applicant's Federal Well No. 1-Y, located in Unit C of said Section 5, at least until said Well No. 1-Y is plugged and abandoned.

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

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

fd/

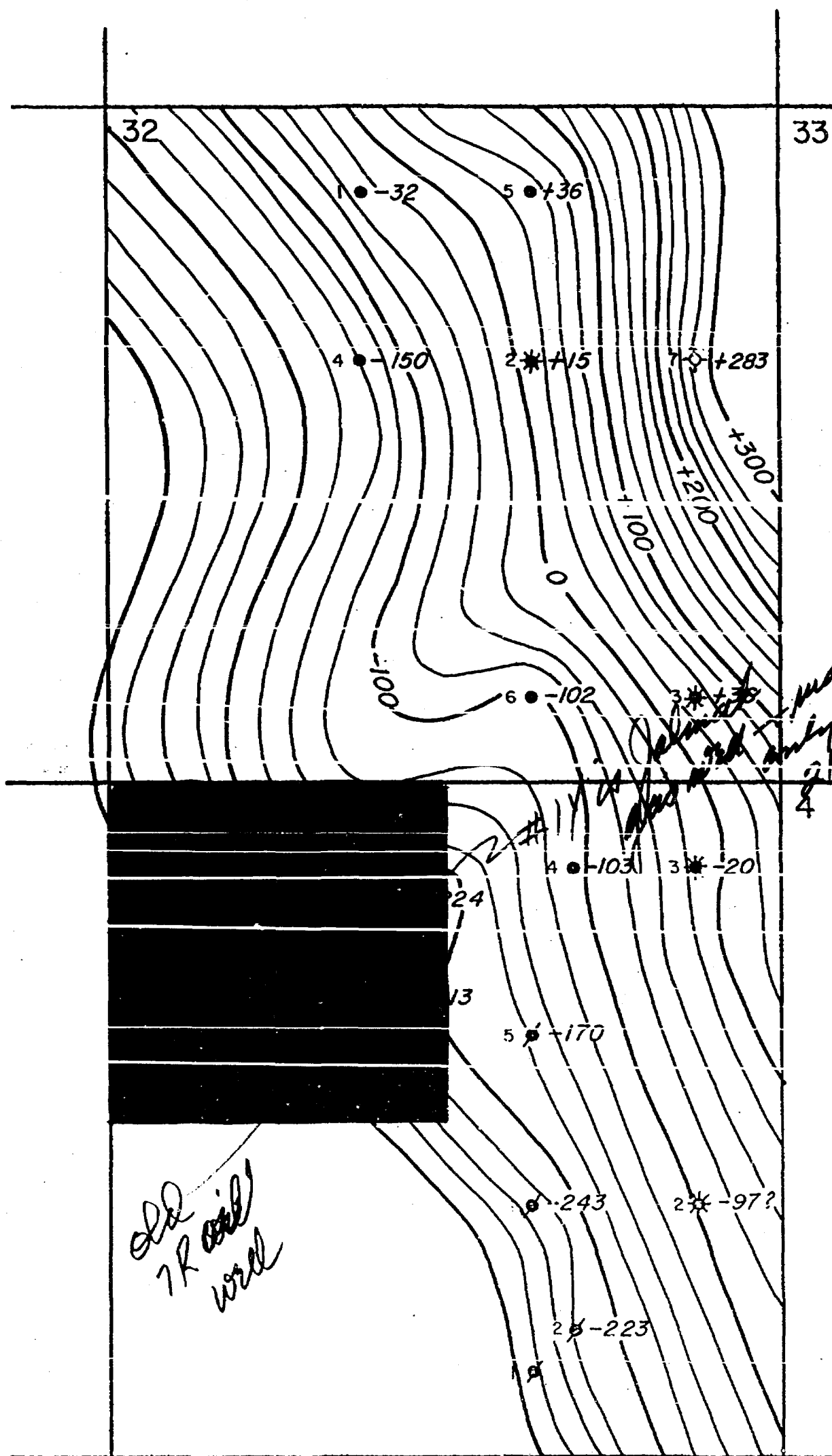
Dockets Nos. 32-78 and 33-78 are tentatively set for hearing on October 11 and October 25, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 27, 1978

9 A.M. - OIL CONSERVATION DIVISION 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:

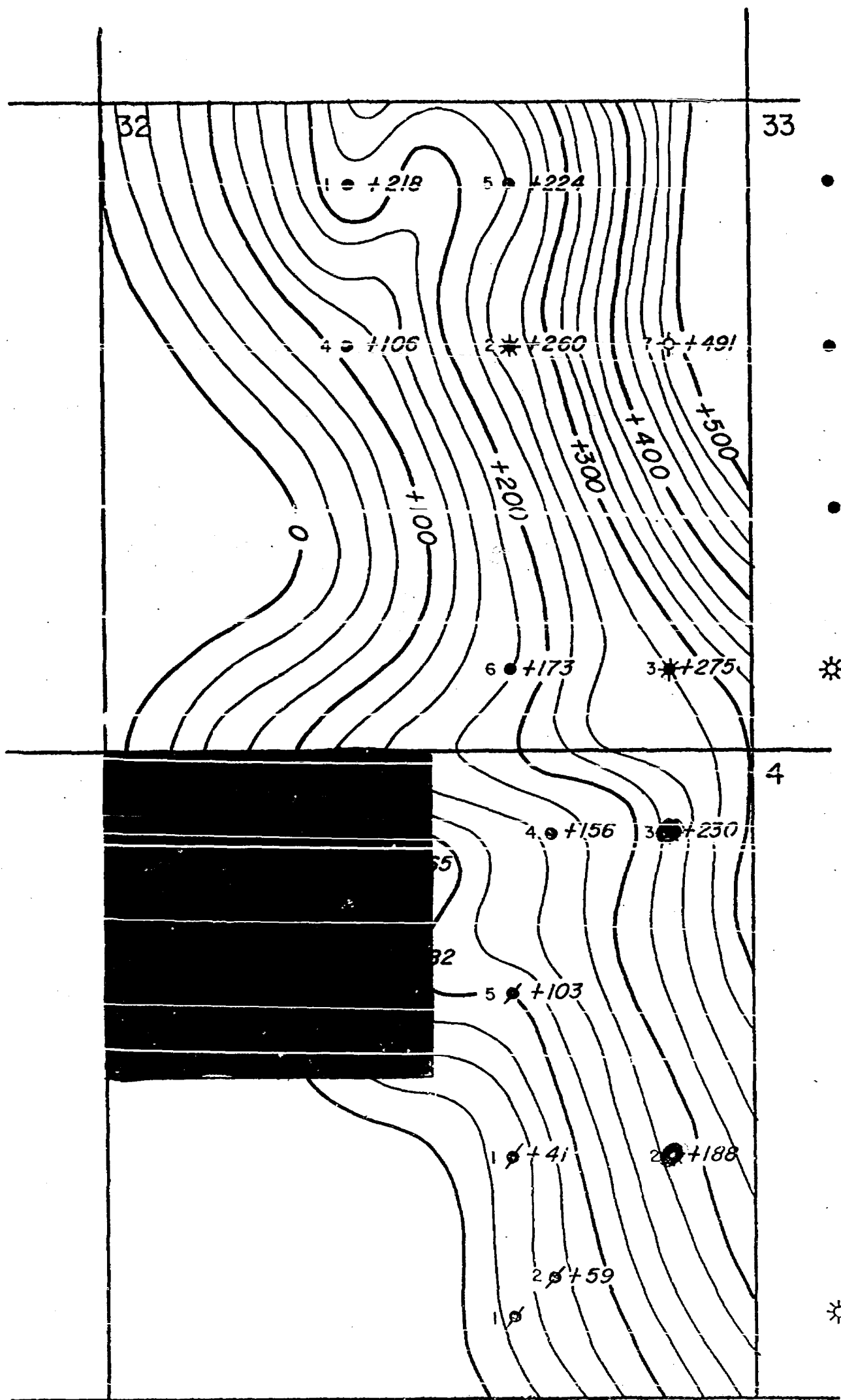
- CASE 6329:** Application of David Fasken for unorthodox gas well locations and a non-standard proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox locations of the following three wells located in Township 21 South, Range 24 East, Cemetery-Morrow Gas Pool, Eddy County, New Mexico:
- Ross Federal Com. Well No. 2 to be drilled 3300 feet from the South line and 660 feet from the West line of Section 4, Lots 9 through 16 of said section to be dedicated to the well; Ross Federal Com. Well No. 3 to be drilled 6040 feet from the South line and 460 feet from the West line of Section 4, to be dedicated to a 284.6-acre non-standard proration unit comprising Lots 1 through 8 of said section; and Shell Federal Com. Well No. 2 to be drilled 3300 feet from the South line and 660 feet from the West line of Section 5, Lots 9 through 16 of said section to be dedicated to the well.
- CASE 6330:** Application of Petroleum Corporation of Texas for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the NE/4 of Section 32, Township 24 North, Range 3 West, Chacon-Dakota Associated Pool, Rio Arriba County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6331:** Application of American Petrofina Company of Texas for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 990 feet from the South line and 990 feet from the East line of Section 29, Township 32 North, Range 9 West, Blanco-Mesaverde Pool, San Juan County, New Mexico, the E/2 of said Section 29 to be dedicated to the well.
- CASE 6332:** Application of Reading & Bates Oil and Gas Company for an unorthodox gas well location and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of a well to be drilled 330 feet from the North line and 1650 feet from the West line of Section 5, Township 23 South, Range 36 East, Lea County, New Mexico, to produce gas from the Jalmat Yates formation and oil from the Langlie Mattix Seven Rivers formation.
- CASE 6333:** Application of Maddox Energy Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the E/2 of Section 27, Township 23 South, Range 28 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. In the alternative, applicant seeks an order pooling only the NE/4 of said section for the production of gas from formations above the Wolfcamp. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6334:** Application of Grace Petroleum Corporation for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its New Mexico Federal "G" Well No. 1 to be drilled 4650 feet from the South line and 660 feet from the East line of Section 6, Township 21 South, Range 32 East, Lea County, New Mexico, Lots 9, 10, 15, and 16 and the SE/4 of said Section 6 to be dedicated to the well.
- CASE 6335:** Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat gas and Langlie Mattix oil production within the wellbore of its Jack B-30 Well No. 2 located in Unit B of Section 30, Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 6336:** Application of Burleson & Huff for a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas proration unit comprising the E/2 SE/4 of Section 11 and the W/2 SW/4 of Section 12, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to a well at a standard location in Unit P of said Section 11.
- CASE 6337:** Application of Mark D. Wilson to limit application of pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to limit the application of the McMillan-Morrow Gas Pool present rules to the horizontal limits of said pool only, Eddy County, New Mexico.



READING & BATES PETROLEUM CO.
 PART OF SOUTH EUNICE FIELD, T.22 & 23S, R.36E
 LEA COUNTY, NEW MEXICO
 STRUCTURE MAP ON TOP 7 RIVERS FORMATION
 CONTOUR INTERVAL = 25' SCALE 1" = 1000'
 DATE: 9-25-78

R&B

6332



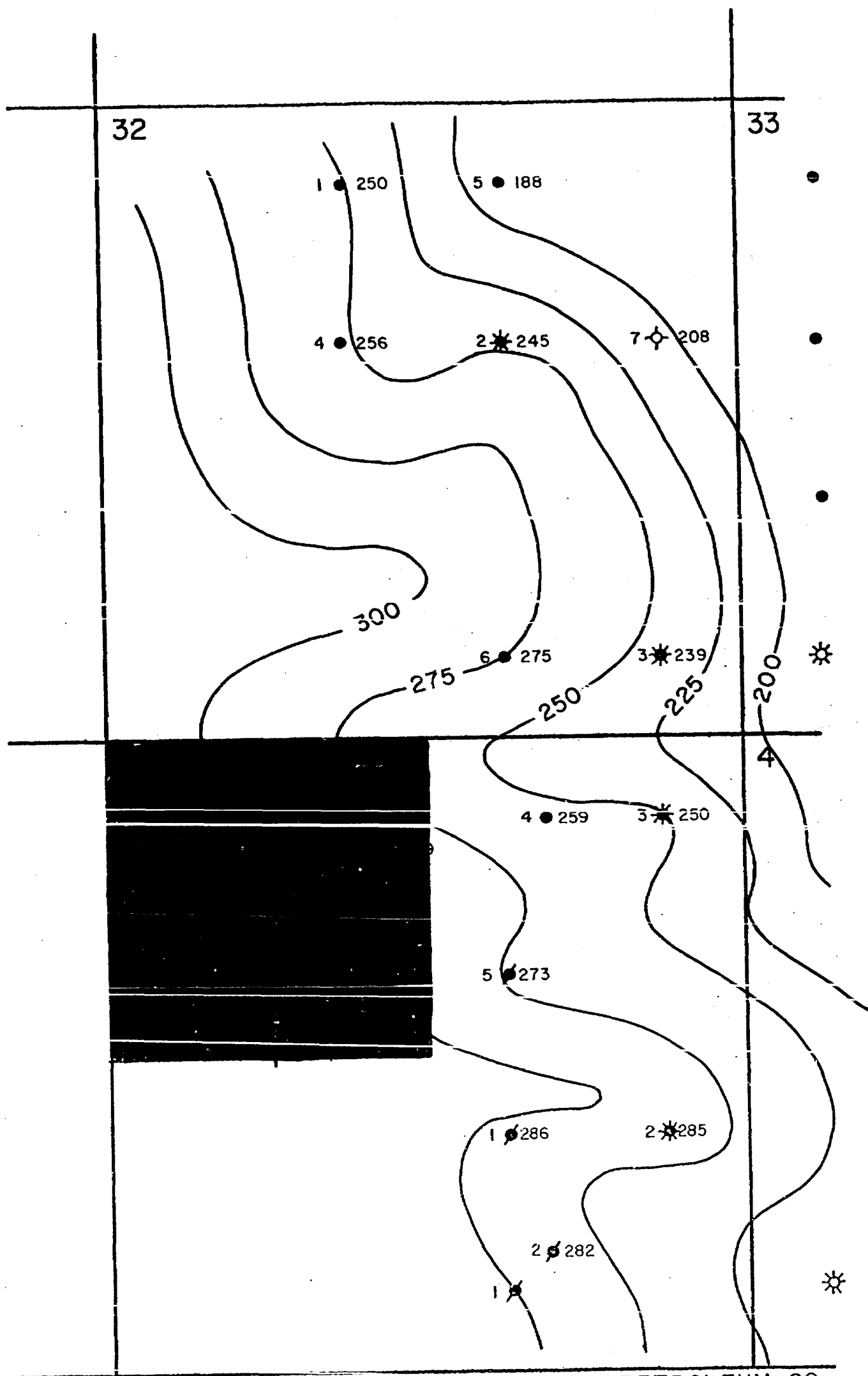
READING & BATES PETROLEUM CO.
 PART OF SOUTH EUNICE FIELD, T.22 & 23S, R.36E
 LEA COUNTY, NEW MEXICO
 STRUCTURE MAP ON TOP OF YATES FORMATION
 CONTOUR INTERVAL = 25' SCALE 1" = 1000'

DATE: 9-25-78

R&B

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READING & BATES PETROLEUM CO.
 PART OF SOUTH EUNICE FIELD, T. 22 & 23S, R. 36E
 LEA COUNTY, NEW MEXICO
 ISOPACH YATES FORMATION
 CONTOUR INTERVAL = 25' SCALE 1" = 1000'
 DATE: 9-25-78

RDB

6332

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REFERENCE No A 1204 -C

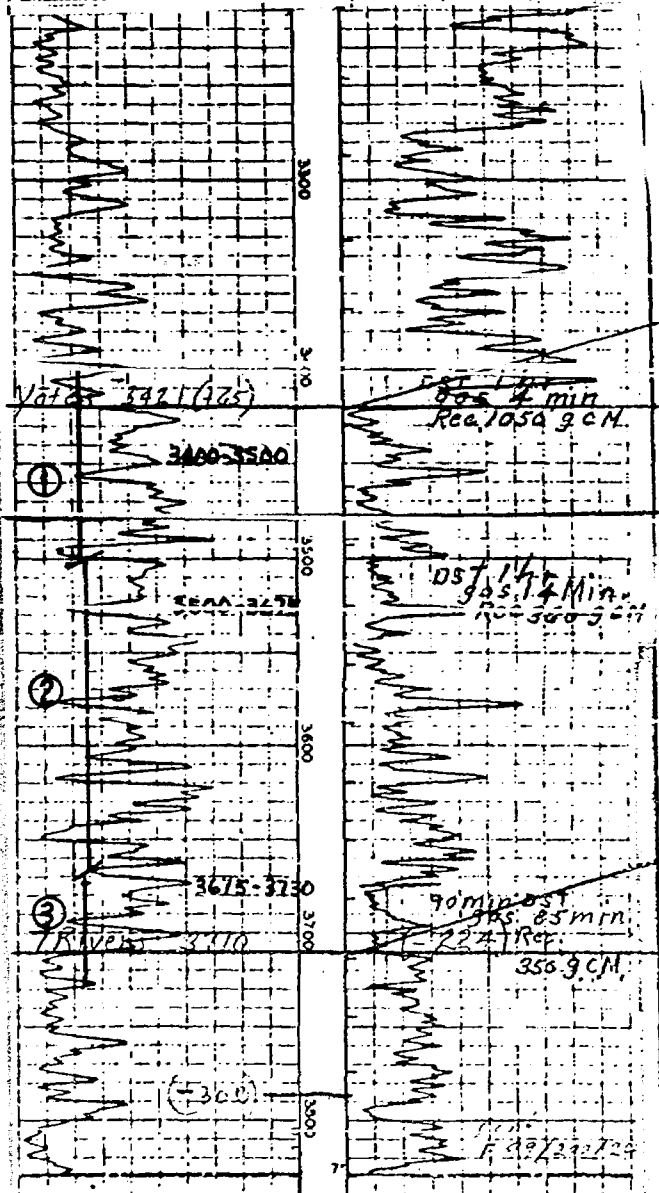


LANE RADIOACTIVITY LOG WELLS COMPANY

Location of Well
 COMPANY: THE LANE & RICHMAN OIL CO.
 WELL: FLUORAL No. 1
 FIELD: COUNTRY JAL
 COUNTY: LEA STATE N.M.
 LOCATION: 100' PSL 2510' PSL
 OF SEC. 8-223-36E

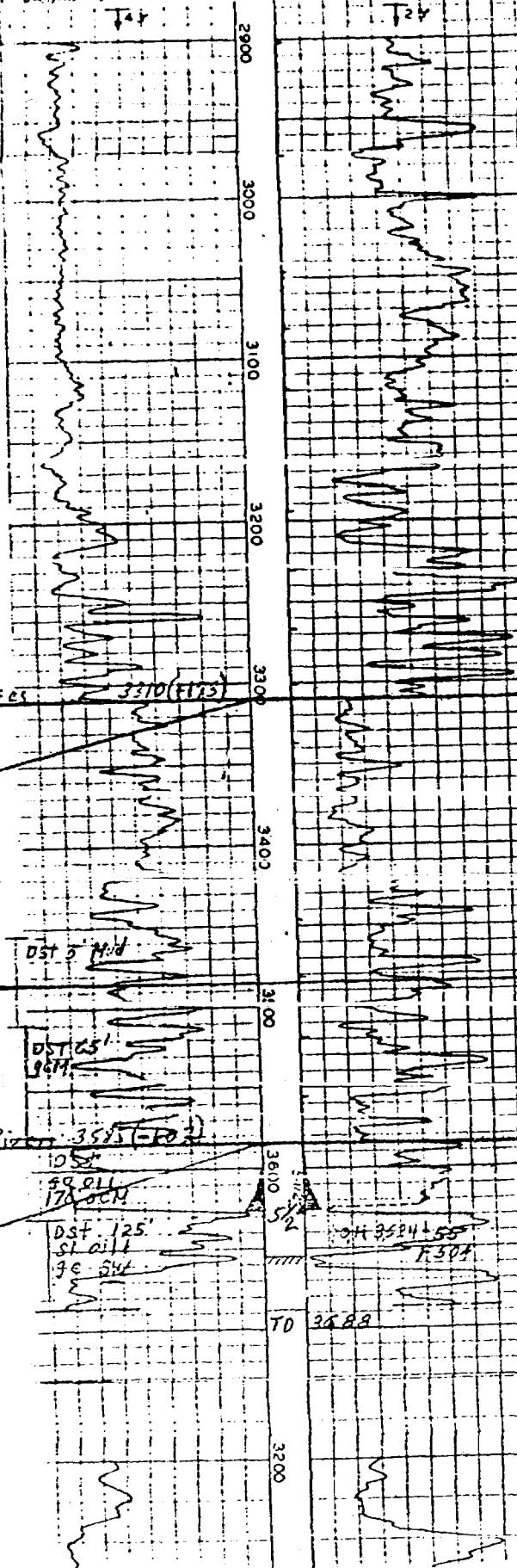
LOG MEAS FROM DRIVE BUSHING REV 34171
 ORIG. MEAS FROM DRIVE BUSHING REV 34171
 PERM DATUM 7" CASING PLANE REV 34171

TYPE OF LOG	U/L	R/L
RUN NO.	1	1
DATE	11-28-50	11-28-50
TOTAL DEPTH (HOLE) STAGN	3432'	3432'
EFFECTIVE DEPTH (HOLE)	3172'	3172'
TOP OF LOGGED INTERVAL	281	281
BOTTOM OF LOGGED INTERVAL	3432'	3432'
TYPE OF FLUID IN HOLE	WATER	WATER
FLUID LEVEL	281	281
MAXIMUM RECORDED TEMP	87.5	87.5
NEUTRON SOURCE STRENGTH & TYPE	0.25	0.25
SOURCE SPACING - IN	3 5/8	3 5/8
LENGTH OF MEASURING DEVICE	25	25
TIME CONSTANT - SECONDS	274	275
LOGGING SPEED FT. MIN.	10.17	10.17
SENSITIVITY VARIATION - IN	274	275
RECORDED BY	JOHN S. H.	JOHN S. H.



READING & BATES PETROLEUM CO. COMPANY

Location of Well
 COMPANY: CONTINENTAL OIL CO.
 WELL: STATE A-32 NO. 6 FILE
 FIELD: EUNICE
 COUNTY: LEA STATE N.M.
 LOCATION: 660' PSL 1000' PSL
 OF SEC. 32-223-36E

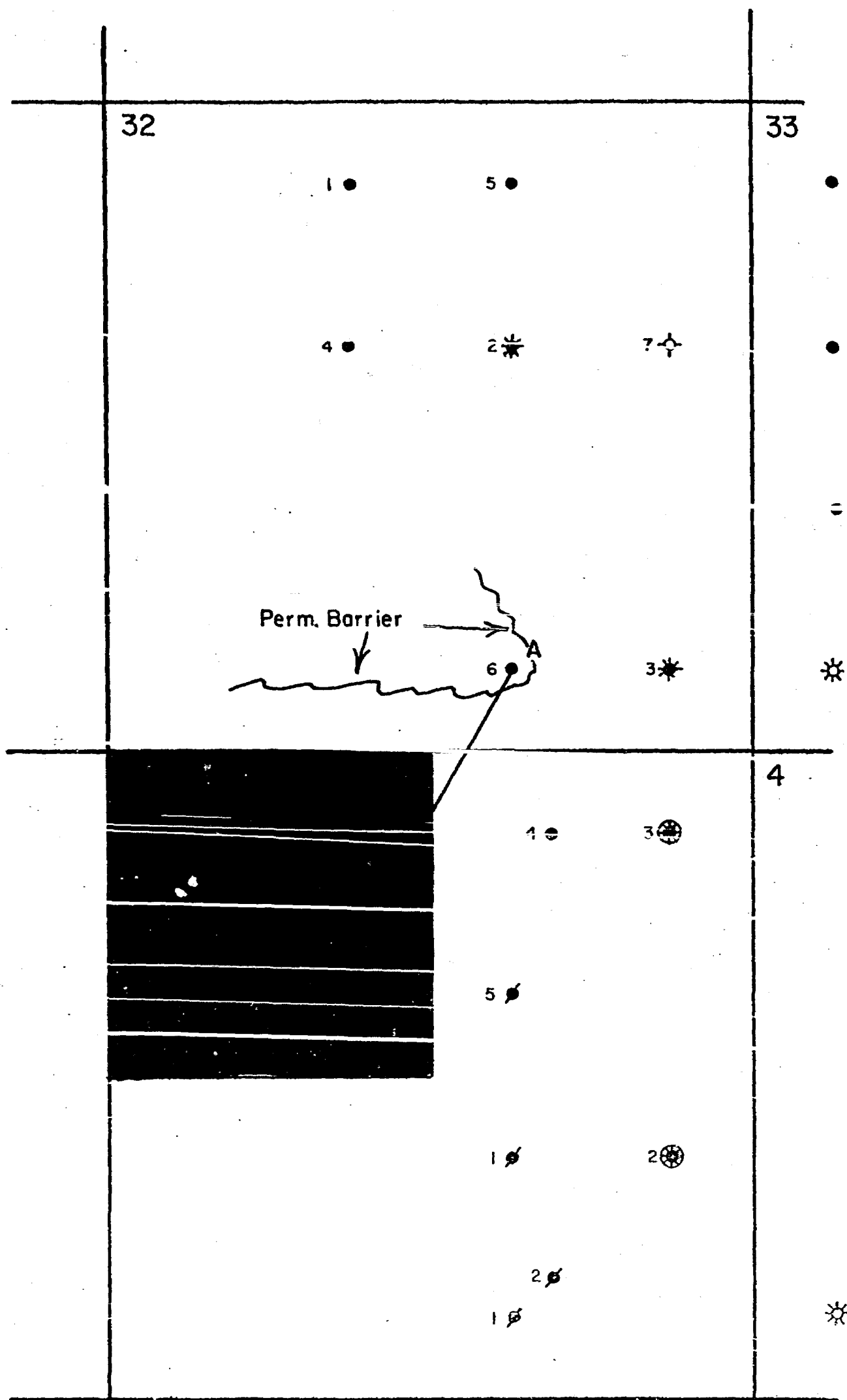


READING & BATES PETROLEUM CO.
 PART OF SOUTH EUNICE FIELD, T.22 & 23S, R.36E
 LEA COUNTY, NEW MEXICO

RPA

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6332



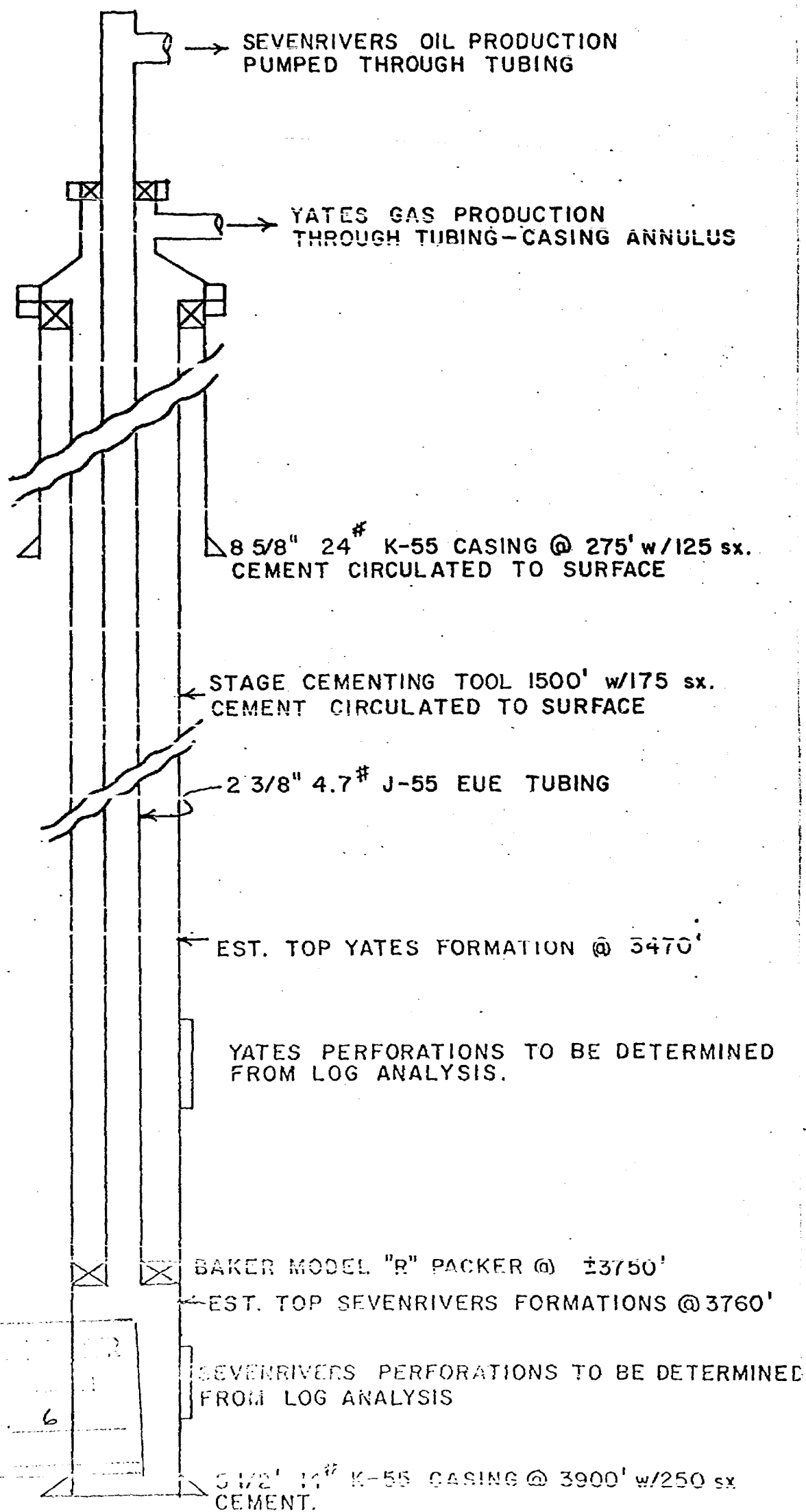
READING & BATES PETROLEUM CO.
 PART OF SOUTH EUNICE FIELD, T.22 & 23S, R.36E
 LEA COUNTY, NEW MEXICO

SCALE 1"=1000'
 DATE: 9-25-78

6332

DUAL YATES—SEVENRIVERS COMPLETION

READING & BATES PETROLEUM CO.
FEDERAL NO. 3
330' FNL & 1650' FWL
SEC. 5—T23S—R36E
LEA COUNTY, NEW MEXICO



6332

WELL COST ESTIMATE

COMPANY Reading & Bates Oil and Gas Co.

DATE May 15, 1978

WELL Federal No. 3

LOCATION 330' FNL & 1650' FWL Sec. 5-23S-36E

PROPOSED TD 3900' EST. DRILLING DAYS 11

Tangible Well Costs

Well Pipe

40 of 16" @ \$ 16.00 /ft.
275 of 8-5/8" @ \$ 8.96 /ft.
3900' of 5-1/2" @ \$ 5.39 /ft.
3900' of 2-3/8" @ \$ 2.39 /ft.

Wellhead Assembly

Subsurface Equip. - packer, rods, pumps, etc.
 Separation Facilities, Installed
 Tanks and Shipping Facilities, Installed
 Flow Lines, Pipe & Electric Lines, Installed
 Other Equipment - Pumping Unit, Misc.

Total Tangibles

Producer	Dry Hole
\$	\$
33,500	3,100
2,000	800
8,000	-0-
11,000	-0-
11,000	-0-
2,000	-0-
16,000	-0-
\$ 83,500	\$ 3,900

Intangible Well Costs

Permits, Surveys, Foundations

Location, Roads & Damages

Contract Drilling

3900 ft. @ \$ 11.70 /ft.
2 days @ \$ 3100 /day
 days @ \$ /day
 Compl. Unit 15 days @ \$ 1000 /day

Cement and Cement Service

Drilling Fluid Materials

Fuel, Water & Power

Supplies

Drill Stem Testing 1 @ 2000

Coring and Analysis

Wireline Service

Logging 5000

Perforating 2000

Other 2000

Formation Treating

Transportation and Hauling

Rentals, Contract Labor, Misc.

Engineering Supervision

Geological Supervision

Overhead

Contingencies

Total Intangibles

TOTAL

\$ 500	\$ 500
3,000	2,000
-0-	-0-
66,830	51,830
9,000	4,000
6,000	6,000
2,000	2,000
1,000	1,000
2,000	2,000
-0-	-0-
-0-	-0-
9,000	-0-
30,000	-0-
2,000	1,000
2,000	1,000
1,500	1,000
900	900
850	350
10,000	7,000
\$ 146,580	\$ 80,580
\$ 230,080	\$ 84,480

Prepared By:

How Howard E. Gray

6332	7
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WELL COST ESTIMATE

COMPANY Reading & Bates Petroleum Co.

DATE September 26, 1978

WELL Federal No. 3

LOCATION 330' FNL & 1650' FWL Sec. 5-23S-36E

PROPOSED TD 3600' EST. DRILLING DAYS 9

Tangible Well Costs

Well Pipe

40	of	16"	@ \$	16.00	/ft.
275	of	8-5/8"	@ \$	8.96	/ft.
3600	of	5-1/2"	@ \$	5.39	/ft.
3600	of	2-3/8"	@ \$	2.39	/ft.

Wellhead Assembly

Subsurface Equip. - packer, rods, pumps, etc.

Separation Facilities, Installed

Tanks and Shipping Facilities, Installed

Flow Lines, Pipe & Electric Lines, Installed

Other Equipment - Pumping Unit, Misc.

Total Tangibles

Producer	Dry Hole
\$	\$
31,100	3,100
2,000	800
2,000	-0-
5,000	-0-
-0-	-0-
2,000	-0-
2,000	-0-
\$ 44,100	\$ 3,900

Intangible Well Costs

Permits, Surveys, Foundations

Location, Roads & Damages

Contract Drilling

3600	ft. @ \$	11.70	/ft.
2	days @ \$	3100	/day
	days @ \$		/day

Compl. Unit 7 days @ \$ 1000 /day

Cement and Cement Service

Drilling Fluid Materials

Fuel, Water & Power

Supplies

Drill Stem Testing 1 @ 2000

Coring and Analysis

Wireline Service

Logging 4000

Perforating 1000

Other 2000

Formation Treating

Transportation and Hauling

Rentals, Contract Labor, Misc.

Engineering Supervision

Geological Supervision

Overhead

Contingencies

Total Intangibles

\$ 500	\$ 500
3,000	2,000
55,300	48,300
9,000	4,000
5,000	5,000
2,000	2,000
1,000	1,000
2,000	2,000
-0-	-0-
-0-	-0-
7,000	4,000
15,000	-0-
2,000	1,000
2,000	1,000
1,500	1,000
900	900
800	300
10,000	7,000
\$ 117,000	\$ 80,000

TOTAL

\$ 161,100	\$ 83,900
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Prepared By:

Howard E. Gray
Howard E. Gray
Drilling & Production Engineer

6332

ATWOOD, MALONE, MANN & COOTER
A PROFESSIONAL ASSOCIATION
LAWYERS

JEFF D. ATWOOD [1883-1960]
ROSS L. MALONE [1910-1974]

P. O. DRAWER 700
SECURITY NATIONAL BANK BUILDING
ROSWELL, NEW MEXICO 88201
[505] 622-6221

SEP 5 1978
CHARLES F. MALONE
RUSSELL D. MANN
PAUL A. COOTER
BOB F. TURNER
ROBERT A. JOHNSON
JOHN W. BASSETT
ROBERT E. SABIN
BRIAN W. COPPLE
RANDAL W. ROBERTS

August 31, 1978

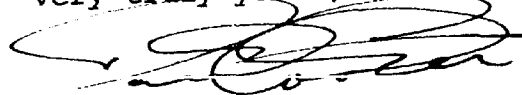
Mr. Joe D. Ramey, Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

Enclosed herewith is the Application of Reading & Bates Oil & Gas Company for an unorthodox well location and dual completion in Lea County, New Mexico. Would you please file the same and set the Application for examiner hearing at the earliest possible date.

Appreciating your courtesy, and with our kind regards,
we are

Very truly yours,



Paul Cooter

PC/le

Encls.

cc: Mr. Howard Gray

SEP 3 1966

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 AND DUAL COMPLETION,)
LEA COUNTY, NEW MEXICO.) Case No. 6332

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 and
dual completion in Lea County, New Mexico, and states:

1. Applicant is the owner of the oil and gas
leasehold estate, and Federal Lease LC-029864(b) covering
the NW $\frac{1}{4}$ Section 5, Township 23 South, Range ³26 East, N.M.P.M.,
Lea County, New Mexico.

2. Applicant proposes to drill a well to a depth
of 3,760 feet, sufficient to test the Yates formation ex-
pected to be encountered at a depth of 3,470 feet and the
Seven Rivers formation at total depth, 330 feet from the
north line and 1,650 feet from the west line of Section 5.

3. If both formations be productive, the NW $\frac{1}{4}$ of
Section 5 would be dedicated for gas produced from the Yates
formation and the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 5 would be dedicated for
oil produced from the Seven Rivers formation. The well
would be dually completed.

4. If the Yates formation be productive, the
proposed well would be an unorthodox well location, which
would be in the best interests of conservation and pre-
vention of waste, for the reasons that a well at the pro-
posed 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, efficiently and economically drain the acreage dedicated to the well and otherwise protect correlative rights. The present well producing from the Yates formation, Applicant's Federal Y Well, situated 1,650 feet from the north line and 2,310 feet from the west line of Section 5 would be plugged.

5. The owner of the oil and gas leasehold estate adjoining and offsetting Applicant's proposed well location is Continental Oil Company, whose address is P. O. Box 1959, Midland, Texas, 79702.

6. If both formations be productive, the dual completion would prevent economic loss caused by the drilling of an unnecessary well and otherwise prevent waste.

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 unorthodox well location as herein requested and the dual completion of the well by Applicant.

Respectfully submitted,

READING & BATES OIL AND GAS CO.

By 

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

ROUGH

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

3 JAR

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6332

Order No. R-5830

APPLICATION OF READING & BATES OIL
AND GAS COMPANY FOR AN UNORTHODOX GAS
WELL LOCATION AND A DUAL COMPLETION,
LEA COUNTY, NEW MEXICO.

Bef

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ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 27
19 78, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of _____, 19 78, the
Division Director, 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 Division has jurisdiction of this cause and the
subject matter thereof.

(3) That the NW 1/4 of said Section 5 is currently dedicated to applicant's Federal Well No. 1-Y, located in Unit C of said Section 5, and said well will produce its economic limit of productivity and will soon be abandoned.

(7) That the dual completion of said well in the Yates formation and in the Upper Seven Rivers formation may enable the operator to recover more of the oil and gas underlying the NW 1/4 of said Section 5, thereby preventing waste, and will not violate correlative rights of offsetting property owners provided that the well is limited to a single Jalmat well allowance.

(2) That the applicant, Reading & Bates Oil and Gas Company, seeks approval ~~for the dual completion (conventional)~~ for the location of a ~~of an~~ unorthodox gas well to be drilled 330 feet from the North line and 1650 feet from the West line of Section 5, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico, and further seeks approval for the dual completion of said well to produce gas from the ~~Jalmat~~ Yates formation and oil from the ~~Langlie~~ ^{upper} ~~Mattix~~ Seven Rivers formation, all in the Jalmat Pool.

(4) That the NW 1/4 of said Section 5 is to be dedicated to the well and to the aforesaid Federal Well No. 1-Y, located in Unit C of said Section 5, at least until said well No. 1-Y is plugged and abandoned.

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

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

(8) 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 ~~the application of Reading & Bates Oil and Gas Company~~ ^{the} ~~a dual completion (conventional) of an~~ unorthodox location ~~gas well~~ is hereby approved for a well to be drilled at a point 330 feet from the North line and 1650 feet from the West line

of Section 5, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico. (2) That the applicant is further authorized to ~~dual~~ ^{upper} complete said well in such a manner as to produce gas from the Yates formation and oil

from the ~~Langlie~~ ^{upper} ~~Mattix~~ Seven Rivers formation, provided however, that only a single allowance shall be assigned to said well.

(3) That the NW 1/4 of said Section 5 shall be ~~simultaneously~~ dedicated to the above-described well and to applicant's Federal Well No. 1-Y, located in Unit C of said Section 5, at least until said well No. 1-Y is plugged. (4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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