

CASE 5253: App. of THE PETROLEUM
CORP. for unorthodox gas well
location, Eddy County

CASE No.

5253

Application,
Transcripts,
Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 5, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of The Petroleum
Corporation for an unorthodox
gas well location, Eddy County,
New Mexico.

Case 5253

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:

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

For the Applicant:

Clarence Hinkle, Esq.
HINKLE, BONDURANT, COX & EATON
Hinkle Building
Roswell, New Mexico

For Texas Oil & Gas Corp.:

Jason Kellahin, Esq.
Kellahin, Kellahin & Fox
500 Don Gaspar
Santa Fe, New Mexico

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I N D E X

HAL DEAN

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E X H I B I T S

	<u>Marked</u>	<u>Admitted</u>
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MR. NUTTER: We will call Case 5253.

MR. DERRYBERRY: Case 5253. Application of The Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant, Cox and Eaton, appearing on behalf of The Petroleum Corporation. We have one witness and four exhibits.

(Whereupon, a short recess was taken.)

MR. NUTTER: The Hearing will come to order, please. We will continue now with Case 5253 which has been called.

(Whereupon, the Witness was sworn.)

MR. KELLAHIN: Mr. Examiner, please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing in behalf of Texas Oil and Gas Corporation

HAL DEAN

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name and residence.

A Hal Dean, Midland, Texas.

Q Are you a consulting geologist?

A Yes, sir.

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Q Have you been employed by The Petroleum Corporation in this Case?

A Yes, I have.

Q Have you previously testified before the Commission?

A Yes, I have.

Q Are your qualifications as a petroleum geologist a matter of record with the Commission?

A Yes, they are.

Q Have you made a study of the area that is involved in this Case?

A Yes, I have.

Q Are you familiar with the Application of The Petroleum Corporation in this Case?

A Yes.

Q What is The Petroleum Corporation seeking to accomplish?

A We request an unorthodox gas well location in Eddy County, New Mexico. We seek approval for this unorthodox gas well location for our Superior Federal Well No. 3, to be drilled to the Morrow formation at a point 660 feet from the south and west line of Section 4, Township 20 South, Range 29 East, Eddy County, New Mexico.

MR. KELLAHIN: Are the qualifications of the

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Witness acceptable ?

MR. NUTTER: Yes, they are.

BY MR. HINKLE:

Q Have you prepared, or has there been prepared under your direction, exhibits for introduction in this Case?

A Yes.

Q They are the ones that have been marked 1 through 4?

A Yes, those are the exhibits.

Q Refer to Exhibit No. 1 and explain what this is and what it shows.

A Exhibit No. 1 is a land map showing the ownership in the area adjacent to the unit, proposed unit, and it also shows the wells which are productive from the Pre-Pennsylvanian formations, Pre-Permian formations, adjacent to the proposed well site.

The proposed unit consists of the west half of Section 4. The ownership in that area, this 320 acres, is The Petroleum Corporation, Union-Texas Petroleum, Superior, Amoco, Dalton Cobb, J. C. Williamson, and Marathon.

Q And they have all agreed to communitize their interests?

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A They have all agreed to communitize their interest, however, Marathon has farmed out two of the units; they have refused to join in the drilling of the well from an economic standpoint, and they are farming out to the unit on a half-back-in basis. Their acreage is the Southeast of the Northwest.

Q Explain what the legend shows down here, as far as the colors are concerned.

A The legend shows that the various producing areas, producing zones in this area. The blue is the Strawn formation, which is producing in the Parkway Field, the West Parkway Field and one well in Section 8, south of the proposed location. The green is the Morrow formation, and that is producing in the well drilled by Texas Oil and Gas in Section 9, and also in Section 17 and Section 18. The orange is a lower, or what I termed a basal Morrow sand, and that is productive in the Texas Oil and Gas No. 1 Superior Federal in the northeast of Section 8.

Q Has The Petroleum Corporation already commenced a well on the west half of Section 4?

A Yes, sir. After we received a permit to drill, we spudded the well on June 1, 1974, and this was done because of the availability of a rig. We had been waiting

for some time, and this rig became available to us so we had to take advantage of it immediately.

Q If you had not taken advantage, how long would you have had to wait for a rig?

A Anywhere from 120 to 180 days.

Q What is the present status of the well?

A The well is drilling at approximately 1800 feet.

Q What is the location by footage of the well?

A The location is 660 feet from the south line and 660 feet from the west line of Section 4.

Q Now refer to Exhibit No. 2 and explain what this is and what it shows.

A Exhibit No. 2 is a structure contour map drawn on the top of a Strawn formation. The Strawn formation is a zone which is consistent limestone; it is well recognized as a marker in this particular area. The structure map indicates a dip to the southeast of approximately 100 feet per mile. From an examination of the map, it is apparent that the accumulation in this area is caused primarily by stratigraphic entrapment. The Strawn zone is productive when a algal bank or small wheat bank is found within this massive limestone. This Strawn, as you see, is producing in the Parkway Field which is drilled by The Petroleum Corporation in

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Section 26 in 1929. It is also productive in the Texas Oil & Gas No. 1 Yates Federal in Section 8 in 2029. There have been very few wells drilled between there, on strike with the Parkway discovery, and the porosity has been absence, therefore they resulted in dry holes. For example, in the Strawn formation you can see the west offset to the Petroleum Corporation No. 1. The No. 2 Well of The Petroleum Corporation, Petro-State, was a dry hole in the Strawn.

Q In what section?

A That is in Section 6. The Petroleum Corporation No. 1 Federal, Section 33, is a dry hole in the Strawn; the Texas Oil & Gas No. 1 Williamson Federal is a dry hole in the Strawn; and the Texas Oil & Gas No. 1 Superior Federal in Section 8 is a dry hole in the Strawn; The Texas Oil & Gas No. 1 Yates Federal is a well in the Strawn, and is producing from the month of April, 30 million cubic feet of gas per day, plus 1,310 barrels of liquid.

The location that we have staked in the southwest corner of Section 4 is to try to stay on strike with what we feel is the best potential porosity development in the Strawn formation.

Q Do you have any further comments with respect to this Exhibit?

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A No, sir.

Q Would you refer to Exhibit No. 3 and explain to us what that shows?

A Exhibit No. 3 is a cross section, stratigraphic cross section, located from the Petroleum Corporation's No. 1 Petro-State in the Parkway Field, labeled A Prime. In a southwesterly direction through the proposed location to the Texas Oil & Gas No. 1 Yates Federal.

Q Is that shown by the Index Plat?

A Yes, sir, that is shown by the Index Plat, A to A prime.

This map shows the continuity of the Strawn formation and the erratic development of the Strawn porosity. No production has been found in the Atoka zone in this particular area which consists of sands and shales and limes. Production has been found in the Morrow formations which also consist of sands and shales and limes. These Morrow sands in this particular area are erratic in development, lenticular in deposition, they are part of a strand-line-bar system which makes it extremely difficult to prospect or predict for production of this type. The basal Morrow section is shown to be productive in the Texas Oil & Gas No. 1 Superior Federal. This is the well immediately to the

right of Texas Oil & Gas No. 1 Yates Federal, and that is producing from the last sand present in the Morrow section above the Mississippian, the Chester of the Mississippian. So in this particular area where we are drilling, we have basically three objectives, the Strawn, the Morrow and the basal Morrow sand.

I would like to refer specifically to our next exhibit, Exhibit 4.

Q Exhibit 4, okay, go ahead.

A On this Exhibit No. 4 is shown three wells, plus the location of our drilling well. They are labeled A, B, and C. We previously discussed the Strawn production, and I would like to talk about the development of the Morrow section.

The Texas Oil & Gas No. 1 Superior Federal which is drilled 16,050 feet from the north line, and 1980 feet from the east line of Section 8, is labeled A. This well was drilled and was completed in what I call the basal Morrow formation from perforations 11,625 to 635. The two Morrow sands which are producing in the east offset, the Williamson Federal, are non-productive. These are labeled green. The one sand is at 11,300, the lower Morrow sand is at 11,400, while the basal Morrow sand, which is producing, is at

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11,625. It is noted that there is a definite separation in this Morrow section as shown by, one, the shale section immediately at the top of the basal Morrow, and a persistent water sand which is present in the Texas No. 1 Superior Federal at an approximate depth of 11,570 to 90.

MR. NUTTER: Did you have a blue line across there at the top of the basal Morrow?

MR. DEAN: No, sir. Oh, yes, yes, I was talking about my blue line; yes, that is what I call the top of the basal Morrow. It is a significant kick on the log there.

A (Continuing) The basal Morrow section is productive in this Superior Federal, but immediately above it, it tested water, and immediately above that there is a massive shale section. The Texas Oil and Gas No. 1 Wilson Federal B, which is a direct south offset to our location, is producing from two Morrow sands, one at 11,415 and one at 11,540. Those two sands are commingled to form a single reservoir. The basal Morrow sands, the remnant of it is present, however, it is tight and non-productive. You can see the same water zone is present at about an approximate depth of 11,650.

Q In all three wells?

A Yes, sir.

The zone is present; it has a little different structural relationship. Now No. C is The Petroleum Corporation No. 1 Sun Federal. As you can see, the two Morrow zones which are productive in the No. 1 Williamsco Federal, are absent. Their correlative intervals are present, but the porosity zone is absent. The water zone is present and it is correlative. The zone which is producing in the Texas No. 1 Superior Federal is entirely absent.

Our objectives then are to state at a location, which is on strike with the best Morrow sand development. As you can see, the No. 1 Sun Federal, our structure map is at a higher structural position, and these sands were totally absent, and for that reason we desire to move into the south half of our 320-acre unit, and we drilled in the southwest of the southwest there of the Section.

So there are two things: We want to stay as far away from that Petroleum Corporation well, and we want to stay in an area where we felt we were on strike with a maximum sand development in the Morrow, and of the potential of our Strawn development.

Q Do you have any further comments with respect to any of these exhibits?

A No, I don't.

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-CROSS

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Q In your opinion, if this Application is approved, will it be in the interest of conservation, prevention of waste and protect correlative rights?

A Yes, I do.

MR. HINKLE: We would like to offer Exhibits 1 through 4 into evidence.

MR. NUTTER: Applicant's Exhibits 1 through 4 will be admitted into evidence.

MR. HINKLE: That is all of the Direct.

MR. NUTTER: Are there any questions of the Witness? Mr. Kellahin?

CROSS EXAMINATION

BY MR. KELLAHIN:

Q Mr. Dean, maybe I misunderstood you, but did you say you had already received approval of your Notice of Intention to drill this well?

A Yes, we have.

Q The approval was subject, however, to this Hearing, I assume?

A Well, the allowable would be subject to this Hearing, but approval was not subject to this Hearing.

Q In other words you can drill the well, but not produce it; is that what you are stating?

A That is what I am saying.

Q Is this an undesignated pool?

A Yes, it is.

Q What would be the normal spacing?

A The normal spacing would be based upon the objectives in this area.

Q Well, I'm talking about the pools.

A If you are talking about Strawn oil, or Strawn gas or --

Q (Interrupting) Well, your objective is the Morrow, so I assume that is what we are talking about.

A We have four or five different objectives here.

Q What would be your spacing for the Strawn, then?

A If it was the Strawn it would be -- the Strawn gas would be 660, 1980; for the Strawn oil it would be 660.

Q If it was Morrow gas what would it be?

A It would be 660, 1980.

Q So you are asking to move some 1320 feet closer to Texas Oil & Gas?

A Yes, on our lease line.

Q Which is approximately again, or approximately one-third of the distance?

A Yes, our location is approximately one-half mile

from any Texas Oil & Gas well.

Q And if it was a normal location it would be three-quarters of a mile?

A It could be; it depends upon the way and the size of unit you form.

Q I'm assuming again that you are going to dedicate the west half of the section as you show?

A Well, one thing in there, we have asked Marathon to join in the south half and they were reluctant to go on any unit formation there.

Q Well, you are going to dedicate the west half, aren't you?

A That's right.

Q So your orthodox location would be 1980 feet from the south line of that unit?

A Yes, or from the north line.

Q Assuming you wanted to move, you wouldn't be moving from the north line, would you?

A No, because of the geologic conditions I tried to show there that it would be a poor location if we moved from the north.

Q The Oil Conservation Commission has made the finding that in the Morrow formation one well will drain

320 acres, do you agree with that?

A I might drill 320, or 640, or 80, or 40; I can't agree with that from a geological standpoint, but I think it is a very good compromise.

Q It is a good compromise?

A Yes.

Q So we have to accept it as being the normal spacing of 320?

A That's right.

Q In moving to the proposed location, how much advantage are you going to gain as opposed to the Texas Oil & Gas well?

A Are you talking about what?

Q The drainage.

A Drainage?

Q Yes, sir.

A I don't know if Texas Oil & Gas showed the erratic development of the sands in that area, I don't know whether we will gain anything from a realistic point of view. In other words, you can see Texas Oil & Gas is drilling and staying as close as they can to their well and it has missed the pay in three different wells they have drilled there, they have completed in three different

horizons; I think that is sort of a nebulous question.

Q That being so, you could well drill a dry hole where you are proposing?

A Yes, we sure could drill a dry hole there.

Q And, if you say they missed by drilling close to the location of their existing wells, what makes you think you couldn't drill a producer at an orthodox location?

A I think if you would refer to those structure maps, you can see that we have drilled a well in the north, and it was a dry hole, and for that reason we have moved to the south and trying to stay on structural strike and our geologic information that we have obtained from the drilling of the Texas Oil & Gas No. 1 William Federal, Texas Oil & Gas No. 2, Williamson Federal dry hole, and the No. 1 Superior Federal, and all those wells in there has given us a little better geologic data.

Q By staying on strike then you would anticipate encountering the same producing sands as were encountered by Texas Oil and Gas in their two?

A What do you mean by the same?

Q Well, the same porosity development the same --

A (Interrupting) We anticipate finding a Morrow sand in there, but I am not saying we are going to find the

same sand as Texas Oil & Gas, because they haven't found the same sands, Texas Oil & Gas, but we hopefully from our isopach mapping and from our structure mapping we have the best chance of finding the same zones, one of the same zones, or maybe two of the same zones, or maybe all of the same zones at this particular location. As far as me saying that we are sure, we are not sure, but we know we have a much better opportunity by staying in the south half of the west half of that section.

Q And, getting closer to production?

A Well, I don't think when you move a half-of-a-mile in the Morrow section that you are getting too close.

Q That would depend, would it not, whether you did actually encounter the same porosity development?

A Well, again, I would like to ask you, if you will tell me -- what I'm trying to say is that we have various sand developments in there.

Q Yes, sir.

A And we hope we will find --we feel this is our best risk to find one of the zones which are porous and would be productive in this particular area.

MR. KELLAHIN: I believe that is all the questions I have.

REDIRECT EXAMINATION

BY MR. HINKLE:

Q At this stage you cannot tell where you might complete this well, is that it?

A At this stage I cannot specifically say that we have one single reservoir as an objective; we have three objectives and we hope that we are at the best location to take advantage of the finest one of these three.

Q So it would be hypothetical to try to inject any penalty for this location on account of the Texas Oil & Gas well there?

A That is what I would say.

Q You are just not going to know what the situation is until you complete the well?

A That is correct.

MR. NUTTER: Well it may be hypothetical, Mr. Dean to inject a penalty on a well if you don't know where it is going to be completed, but it is not unreasonable, is it, to assume that the radius of drainage now, assuming a 320-acre drainage circle for the well, let's take this Texas Oil & Gas Company well, a radius of drainage of 320 acres would certainly extend throughout most of the northwest quarter of Section 9, would it not?

MR. DEAN: Yes, sir.

MR. NUTTER: If you were to complete a well in the green zone, being the Morrow formation, except the basal Morrow, a 320-acre radius of drainage would extend into the northwest quarter of Section 9, would it not, from your proposed location?

MR. DEAN: Yes.

MR. NUTTER: So is it unreasonable to consider a penalty when the radius of drainage would extend over into the other wells' radius of drainage, assuming that the well would be completed in the same zone that the Texas Oil & Gas well in Section 9 is in?

MR. DEAN: Yes.

MR. NUTTER: I can't agree, Mr. Hinkle, that it would just be purely hypothetical to consider a penalty in a case like this. Everything is hypothetical, we don't know if the well will even produce or not, but assuming that certain factors exist, and certain conditions are met, the hypothesis could become a reality.

MR. DEAN: Yes, in other words, we looked at the green zone, it is absent in the well in the southeast of Section 9.

MR. NUTTER: Right.

MR. DEAN: And the drainage in this well, as we use our strike hypothesis here, hopefully the sand development is along strike in a northeast-southwest diagonal. It might extend over into the southeast of 4; and we know it is gone -- it is not present in Section 8 as we see from the logs.

MR. NUTTER: But that is fairly well on strike, also the well in the northeast of Section 8 would fairly well be on strike with your location in Section 4?

MR. DEAN: That's right.

MR. NUTTER: And, it didn't have the Morrow, but it had the basal Morrow?

MR. DEAN: Yes, sir.

MR. NUTTER: Are there any further questions of the witness? He may be excused.

Do you have anything further, Mr. Hinkle?

MR. HINKLE: That's all that we have.

MR. NUTTER: Anything further, Mr. Kellahin?

MR. KELLAHIN: I would like to take a few minutes.

MR. NUTTER: All right. Go ahead.

MR. KELLAHIN: If the Examiner please, Texas Oil & Gas, of course, is not ardently opposed to the well location as such, but I think the Witness has already shown, in

response to questioning that they are moving approximately one-third closer to the existing well producing from the Morrow formation. I think we have to assume that one well will drain 320 acres as that is the spacing that is being set by the Commission and the advantage gained amounts to approximately one-third if we assume this. The area of drainage for a 320-acre unit is approximately 2100 feet, more or less. They are moving 1320 feet closer, so it makes a substantial difference if we assume, which I feel in this case we have to, that they are going to encounter the same zones and drainage will result. It may be hypothetical until the well is drilled, but we urge the Commission to adopt a penalty factor of one-third in the event this well location is proved in order to protect the correlative rights of the offsetting operator to the south.

MR. NUTTER: Thank you. Mr. Hinkle?

MR. HINKLE: We do not believe that you should adopt any penalty in this particular case. If you adopt one then the testimony here clearly shows that the upper Morrow and the basal Morrow are separated by water zones; they are two separate zones. If you adopt the penalty and you complete this well in a different zone from the one that the Texas well is completed in, then you are adopting a

penalty that is not fair and equal because you are not producing out of the same zone. So, I don't know how in the world you are going to adopt a penalty that is going to be fair until the well has been drilled.

MR. NUTTER: Thank you, Mr. Kinkle.

Does anyone else have anything they wish to offer in Case 5253? We will take the Case under advisement.

CASE 5253

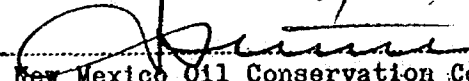
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STATE OF NEW MEXICO)
) SS.
COUNTY OF SANTA FE)

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. 5253
heard by me on 6/5, 1974.

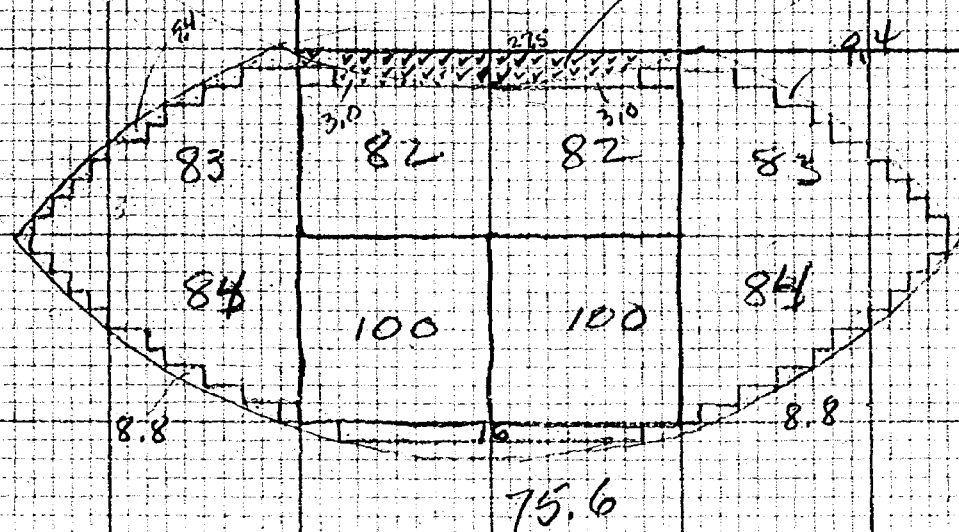
, Examiner
New Mexico Oil Conservation Commission

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3" = 1980

Penalty should be $\frac{100.0}{16.25} = 6.15$
 $\frac{23.75}{2}$

permissible
 overlap w/ std loc.



Total Area in Red = Overlap resulting from
 Non std loc. = 756 squares Each square = 1 acre
 Total overlap = 75.6 acres

$$244 / 320 \times 100 = 76.25\%$$

$$\begin{array}{r} 320 \text{ acres} \\ 75.6 \\ \hline 244.0 \text{ acres} \end{array}$$

$$1 \text{ ac} = 43560 \text{ sq ft}$$

$$320 \text{ ac} = 13,939,200 \text{ sq ft}$$

$$A = \pi r^2$$

$$13,939,200 = \pi r^2$$

$$\frac{13,939,200}{\pi} = r^2 = 4,436,985.17$$

$$\sqrt{4,436,985.17} = 2,106.42$$



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

Mr. Clarence Hinkle
Hinkle, Bondurant, Cox & Eaton
Attorneys at Law
Post Office Box 10
Roswell, New Mexico

Re: CASE NO. 5253
ORDER NO. R-4816
Applicant:
The Petroleum Corporation

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 x
Artesia OCC x
Aztec OCC

Other Mr. Jason Kellahin

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. 5253
Order No. R-4816

APPLICATION OF THE PETROLEUM
CORPORATION 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 5, 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, The Petroleum Corporation, seeks
approval of a gas well location for its Superior Federal Well
No. 3 to be drilled to the Morrow formation 660 feet from the
South line and 660 feet from the West line of Section 4, Town-
ship 20 South, Range 29 East, NMPM, Eddy County, New Mexico.
- (3) That the W/2 of said Section 4 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 due to the unorthodox location of the above-
described well, the correlative rights of some offset operators
will be impaired if unrestricted production by the subject well
is permitted.
- (6) That to offset the advantage to be gained over offset
operators, the subject well to be drilled in the W/2 of Section
4 should be assigned a ratable take factor of 76 percent.

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CASE NO. 5253
Order No. R-4816

(7) 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 The Petroleum Corporation's Superior Federal Well No. 3 to be located at a point 650 feet from the South line and 660 feet from the West line of Section 4, Township 20 South, Range 29 East, NMPM, Eddy County, New Mexico.

PROVIDED HOWEVER, that said well is assigned a ratable take factor of 76 percent.

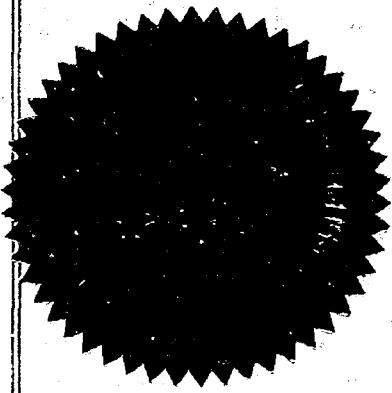
PROVIDED FURTHER, that in the event that said well shall be included in a pool which is prorated, the subject well shall be assigned an acreage factor for proration purposes of 0.76.

(2) That the W/2 of said Section 4 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



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

jr/

Dockets Nos. 17-74 and 18-74 are tentatively set for hearing on June 19 and July 10. Application for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 5, 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 5249: Application of Read & Stevens, Inc., for Pool Extension, Eddy County, New Mexico. Applicants, in the above-styled cause, seek the extension of the Cemetery-Morrow Gas Pool to include therein all of Sections 20, 29, and 30, Township 20 South, Range 25 East, Eddy County, New Mexico.

CASE 5250: Application of Penroc Oil Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Allied "A" Com Well No. 1 located in Unit N of Section 22, Township 20 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce oil from the Bone Spring formation through the tubing and gas from the Morrow formation through the casing-tubing annulus by means of a cross-over assembly.

CASE 5251: 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.

CASE 5252: Application of Roger C. Hanks for the Amendment of Order No. R-4158, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the Amendment of Order No. R-4158 which authorized use of applicant's Foster Well No. 1, located in Unit D of Section 5, Township 20 South, Range 25 East, Eddy County, New Mexico, as a salt water disposal well with injection through 2 3/8-inch plastic lined tubing set in a packer at 10,000 feet. Applicant seeks authority to dispose through 2 7/8-inch non-plastic lined tubing set in a packer at 10,000 feet.

CASE 5253: Application of The Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of its Superior Federal Well No. 3 to be drilled to the Morrow formation at a point 660 feet from the South and West lines of Section 4, Township 20 South, Range 29 East, Eddy County, New Mexico.

CASE 5254: Southeastern nomenclature case calling for the creation, abolishment, and extension of certain pools in Eddy and Lea Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Forty Niner Ridge-Morrow Gas Pool. The discovery well is the Skelly Oil Company Forty Niner Ridge Unit Well No. 1 located in Unit J of Section 16, Township 23 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM
Section 16: S/2

(b) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Kennedy Farms-Morrow Gas Pool. The discovery well is the Hanson Oil Corporation Kennedy Farms Com Well No. 1 located in Unit F of Section 34, Township 17 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 26 EAST, NMPM
Section 34: N/2

(c) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the Logan Draw-Wolfcamp Gas Pool. The discovery well is the Amoco Production Company Arco Federal Gas Com Well No. 1 located in Unit L of Section 26, Township 17 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM
Section 26: SW/4

(d) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Los Medanos-Morrow Gas Pool. The discovery well is the Belco Petroleum Corporation James Ranch Unit Well No. 3 located in Unit J of Section 1, Township 23 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM
Section 1: E/2

TOWNSHIP 23 SOUTH, RANGE 31 EAST, NMPM
Section 6: W/2

(e) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Los Medanos-Strawn Gas Pool. The discovery well is the Belco Petroleum Corporation James Ranch Unit Well No. 3 located in Unit J of Section 1, Township 23 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM
Section 1: E/2

(f) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Malaga-Morrow Gas Pool. The discovery well is the Phillips Petroleum Company Malaga A Well No. 1 located in Unit L of Section 2, Township 24 South, Range 28 East, NMPM. Said pool would comprise:

TOWNSHIP 24 SOUTH, RANGE 28 EAST, NMPM
Section 1: W/2

(g) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Quahada Ridge-Morrow Gas Pool. The discovery well is the Perry R. Bass Big Eddy Unit Well No. 38 located in Unit C of Section 34, Township 21 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM
Section 34: N/2

(h) Abolish the Chambers-Wolfcamp Pool in Lea County, New Mexico, described as:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM
Section 26: SW/4
Section 35: N/2 and SW/4

(i) Extend the Townsend-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM
Section 26: SW/4
Section 35: N/2 and SW/4

(j) Extend the Antelope Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM
Section 11: N/2

(k) Extend the Grayburg-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM
Section 15: SE/4
Section 22: E/2 NE/4, SW/4 NE/4 and
NE/4 SE/4

(l) Extend the Hare-San Andres Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
Section 27: W/2
Section 28: S/2

Examiner Hearing - Wednesday - June 5, 1974

Docket No. 15-74
-4-

(m) Extend the Humble City-Strawn Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM
Section 15: NE/4

(n) Extend the Sawyer-San Andres Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM
Section 24: SW/4

(o) Extend the North Shoebar-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM
Section 7: SE/4

(p) Extend the Townsend-Morrow Gas Pool in Lea County, New Mexico, to include therein:

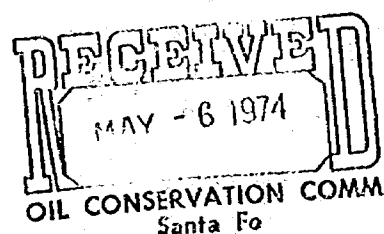
TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM
Section 14: All

A. J. LOSEE
JOEL M. CARSON

LAW OFFICES
LOSEE & CARSON, P.A.
300 AMERICAN HOME BUILDING
P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

AREA CODE 505
746-3508

3 May 1974



Mrs. Ida Rodriguez
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Ida:

It is my understanding that Petroleum Corporation, out of Dallas, Texas, has filed an application for an unorthodox gas well location in Section 4, Township 20 South, Range 29 East, N.M.P.M. If this understanding is correct, I should appreciate your advising me when the matter is set or hereafter is set for hearing before an examiner.

Thanks for your help in this matter.

Very truly yours,

LOSEE & CARSON, P.A.


A. J. Losee

AJL:jw

DOCKET MAILED

Date 5-23-74

Case 5253

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.

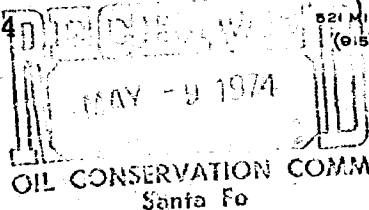
LAW OFFICES
HINKLE, BONDURANT, COX & EATON

600 HINKLE BUILDING
POST OFFICE BOX 10
ROSWELL, NEW MEXICO 88201

TELEPHONE (808) 622-6510

May 8, 1974

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) 683-4691



Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

We enclose in triplication application of
The Petroleum Corporation for approval of an unorthodox
well location in Section 4, Township 20 South, Range
29 East and dedication of the W $\frac{1}{2}$ of said section to the
well.

We would appreciate your placing this matter
on the docket for the first examiner's hearing in June.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

By Clarence E. Hinkle
cf

CEH:cs
Enc.
cc: Larry Shannon

DOCKET MAILED

Date 5/23/74

Case 5253

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF THE PETROLEUM CORPORATION
FOR APPROVAL OF AN UNORTHODOX WELL LOCA-
TION, EDDY COUNTY, NEW MEXICO. APPLICANT
SEEKS APPROVAL OF AN UNORTHODOX WELL
LOCATION FOR ITS SUPERIOR FEDERAL WELL
NO. 3 TO BE LOCATED 660 FEET FROM THE
SOUTH LINE AND 660 FEET FROM THE WEST
LINE OF SECTION 4, TOWNSHIP 20 SOUTH,
RANGE 29 EAST, N.M.P.M. SAID WELL WILL
BE DRILLED TO TEST THE MORROW FORMATION
AND IT IS PROPOSED TO DEDICATE THE W $\frac{1}{2}$
OF SAID SECTION 4 TO THE WELL.

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Comes The Petroleum Corporation, acting by and through the undersigned attorneys, and hereby makes application for approval of an unorthodox well location, Eddy County, New Mexico. Applicant seeks approval of an unorthodox well location for its Superior Federal Well No. 3 to be located 660 feet from the south line and 660 feet from the west line of Section 4, Township 20 South, Range 29 East, N.M.P.M. Said well will be drilled to test the Morrow formation and it is proposed to dedicate the W $\frac{1}{2}$ of said Section 4 to the well, and in support thereof respectfully shows:

1. That applicant proposes to commence its Superior Federal Well No. 3 660 feet from the south line and 660 feet from the west line of Section 4, Township 20 South, Range 29 East, N.M.P.M. and to drill said well to a depth sufficient to test the Morrow formation at a depth of approximately 11,800 feet and to dedicate the W $\frac{1}{2}$ of said section to the well in the event it proves productive of gas in paying quantities.

2. The unorthodox location is desired to locate the well at a more advantageous position so as to obtain the benefit of the thickening of the Morrow zone and to place the well at a position which applicant believes will be better located structurally and will lessen the chance of drilling a dry hole or a marginal well.

#. Applicant believes that the approval of the unorthodox location will be in the interest of conservation, the prevention of waste and will tend to protect correlative rights.

4. Applicant requests that this matter be included on the first examiner's docket in June, 1974.

Respectfully submitted,

THE PETROLEUM CORPORATION

By Clarence E. Hinkle *es*
HINKLE, BONDURANT, COX & EATON
Box 10
Roswell, New Mexico 88201
Attorneys for Applicant

DRAFT

dw/

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. 5253

Order No. R-4816

APPLICATION OF THE PETROLEUM CORPORATION
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 5, 1974,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

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, The Petroleum Corporation, seeks approval
of a gas well location for its Superior Federal Well No. 3 to be drilled to
the Morrow formation 660 feet from the South line and 660 feet from the West
line of Section 4, Township 20 South, Range 29 East, NMPM,
 Eddy County, New Mexico.

(3) That the W/2 of said Section 4 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.

~~That no offset operator objected to the proposed unorthodox location.~~

(1) 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 The Petroleum Corporation's Superior Federal Well No. 3 to be located at a point 660 feet from the South line and 660 feet from the West line of Section 4, Township 20 South, Range 29 East, NMPM
 Eddy County, New Mexico.

(2) That the W/2 of said Section 4 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.

PROVIDED HOWEVER, that said well is assigned a ratable take factor of 76 percent.

PROVIDED FURTHER, that in the event that said well shall be included in a pool which is prorated, the subject well shall be assigned an acreage factor for proration purposes of 0.76.

0.76

(5) That due to the unorthodox location of the above-described well, the correlative rights of some offset operators will be impaired if unrestricted production by the subject well is permitted.
(6) That to offset the advantage to be gained over offset operators, the subject well to be drilled in the W/2 of Section 4 should be assigned a ratable take factor of 76 percent.

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