CASE 170. 5057

Application,

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Application of Coquina Oil Corporation for an unorthodox gas well location in the West Atoka-Morrow Gas Pool, Eddy County, New Mexico. Proposed well to be drilled 660 feet from the South and East lines of Section 12, Township 18 South, Range 25 East. The S/2 of Section 12 will be dedicated to the well which will be drilled to the Pennsylvanian formation.

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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO October 16, 1973

dearnley, rneier & associates

209 SIMMS BLDG. P.O. BOX 1092 FMONE 243-66910-ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLCG. EASTOALBUQUERQUE, NEW MEXICO 87108

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45 BLDG.+P.O. BOX 1092+PHONE 243-6691+ALBUQUEROUE, NEW MEXICO 87103 First national bank bldg. East+Albugjeroue, New Mexico 67108 MR. PORTER: The hearing will come to order, please, and this record will also show that present for the hearing are Mr. I. R. Trujillo, Chairman, and Secretary Director, A. L. Porter, Jr. We will take up case 5057.

MR. CARR: Application of Coquina Oil Corporation for an unorthodox location, Eddy County, New Mexico.

MR. KELLAHIN: Pardon me, if the Commission please. Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for Applicant. We have one witness.

MR. HINKLE: If the Commission please, Clarence Hinkle, Hinkle, Bondurant, Cox and Eaton. I'd like to enter an appearance for the following protestors; American Trading & Production Corporation, David Fasken -- these are both of Midland -- Suburban Propane Gas Corporation of San Antonio, Texas, C & K Petroleum Company of Midland and Yates Petroleum Corporation.

These are all protestants to the application, but I want to point out at the outset that we're only protesting the 330 foot location. We are not opposing the 660 feet from the South and East lines of Section 12 which is the alternate in the application.

MR. PORTER: I see. You would agree to the 660, but not to the 330?

MR. HINKLE: That's right. We're approving the

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PORTER: Mr. Hinkle, are these all producers MR. in that pool? MR. HINKLE: All own acreage, working interest owners.

660.

MR.PORTER: Working interest owners in the pool and have an interest in the well?

MR. HINKLE: I will point out later just what interests they have in summing up.

MR. PORTER: All right, sir. And you just have the one witness?

MR. KELLAHIM: That's correct.

MR. HINKLE: We have two witnesses.

MR. PORTER: Would you like to swear them all? All right, Mr. Kellahin, you may proceed with your witness.

MR. KELLAHIN: If the Commission please, as Mr. Hinkle has indicated here, application here is in the alternative. Coquina Oil Corporation proposed an unorthodox well location 330 feet from the South and East lines of Section 12, 18 South, 25 East, in the West Atoka-Morrow Gas Pool, dedicating the South half of Section 12 to the well.

Or, in the alternative, applicant seeks approval of an unorthodox well location 660 feet from the South

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and East lines of Section 12. Now, by way of explanation, it's rather unusual to ask for an unorthodox location in the alternative. There have been a number of wells as our testimony will show located at 660 feet locations. As Mr. Hinkle has indicated there is apparently no opposition to such location. We are, and again we will will attempt to show this by testimony, seeking a 330 foot location to protect our correlative rights. However, we are doing this with the realization that on some occasions the Commission does impose a penalty factor and if the penalty factor is greater than in our opinion is economical, we would like to have the alternative, the 660 foot location. That's the reason for the alternative request.

MR. PORTER: In other words, Mr. Kellahin, you perhaps are hearing the evidence in this case. If the Commission should decide that they would allow a 330 location with some penalty attached, you would still like the other alternative of drilling on the 660 making a choice between accepting the penalty that would be imposed by the Commission?

MR. KELLAHIN: That is correct and that was the intent of our application.

acceptable?

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law, upon his oath tes				law, upon his oath testified as follows:
		4		DIRECT EXAMINATION
		5		BY MR. KELLAHIN:
လ		6	Q	Would you state your name, please?
dearnley, meier & associates		7	X	My name is Richard C. Norman.
) 	,	8	Q	What business are you engaged in, Mr. Norman?
8 8		9	A	I'm a consulting geologist.
96°C		íû	Q	Where are you located?
Ē,		11	A	Located in Artesia, New Mexico.
TI E	103	12	Q	How long have you been located in Artesia?
dear	NEW MEXICO 67103 MEXICO 87108	13	A	Well, over 11 years.
	a π Σ Σ Σ Σ Σ Σ	14	Q	Have you had any work in the West Atoka-Morrow Gas
_	OUE.	15		Pool?
	PEROUER.	16	A A	Yes, I have, over a period of probably ten years.
	• ALB. BUOUE	17	Q	Over a period of ten years?
	143-6691 45Toal	18	A	Not the West Atoka, but in the Atoka-Penn (West),
	HONE ,	19		Atoka West Morrow Field.
	1092 • P	20	Q	Yes, sir. Now, have you testified before the Oil
	D. BOX	21		Conservation Commission and made your qualifications
	0.0 • .0 0 2 × 4 Z	22		as a geologist a matter of record?
	SIMMS BLDG. P.O. BOX	23	A	Yes, I have, previously.
	209 SIN 121	24		MR. KELLAHIN: Are the witness's qualifications

RICHARD C. NORMAN,

a witness, having been first duly sworn according to

dearnley, mejel & 13SSOCIATES 1200 SIMMS BLDC. & DOX 1082. PHONE 243-6801. ALBUQUERQUE, NEW MEXICO 87108

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1		MR. PORTER: Yes, they are.
2	Q	(By Mr. Kellahin) Mr. Norman, are you familiar with
3		the application of Coquina Oil Corporation in Case
4		Number 5057?
5	A	Yes, I am.
6	Q	Briefly, what is the Applicant proposing in this
7		case? ·
8	Λ	Well, we're proposing to drill an unorthodox location
y		330 feet from the South and East lines of Section 12,
10		Township 18 South, Range 25 East, which is shown on
11		Exhibit 6. We propose to drill in the south half of
12		Section 12 and Coquina owns the leases in this Section
13		12, of course, most of them with others. And we're
14		here to get this unorthodox location in order that
15	.*	we can protect our acreage from drainage in Section 12.
16	Q	Now, referring to what has been marked as Applicant's
17		Exhibit 1, does that show the wells that would be drilled
18		and completed in the subject pool?
19	A	Yes, it does. I'd like to, if you don't mind, I'd like
20		to get up and point to some of these wells.
21	Ω	Yes, if you would, please.
22	A	We particularly want to call your attention to some
23	l	of the wells that are producing now that are very high
24		capacity wells.

MR. HINKLE: He is referring to what Exhibit?

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S PLDG.-P.O. BOX 1092-PRONE 243-6691-ALBUQUERQUE, NEW MEXICO 87103 FIRST NATIONAL BANK BLDG. EAST-FALBUQUEROUR NEW MEXICO 87103 on it, the high capacity wells that are in this channel system called the Hornbaker which runs along the line dividing Range 25 and 26 East, right here (indicating). The Fasken you'll notice just slightly east of the range line. This is the Fasken here down in Section 24 as a well that Fasken drilled, Brown Yates No. 1. That well has been producing at a rate of

Off the northeast here is the Mountain States

Petroleum well; it's called McCaw No. 1. It's in

Section 19, and it has been producing at a rate of
6 to 7 million cubic feet of gas per day. That, by
the way, was the original discovery in the West Atoka
reservoir system.

7 to 10 million cubic feet a day. These data were

taken from the production figures of May and June.

THE WITNESS: Referring to Exhibit 1 here.

This is Exhibit 1. Exhibit 1, I would like to show

MR. PORTER: Do you remember when that discovery was made?

THE WITNESS: It was about two years ago.

MR. PORTER: I believe it's shown on here as 1970.

THE WITNESS: 10-70, yes.

MR. PORTER: Three years ago.

This well has been producing at a rate of 6 to 7 million

45 GLDG. 8 D.O. BOX. 1022 8 PYONE 243-66918 ALBUQUERQUE. NEW MEXICC 87103 5 First national dank bldg. Eastsalbuquerque, new mexico 87108 cubic feet of gas per day.

North of the more recent completion is the C & K Vandiver No. 1 in Section 18. It has been producing at a rate of 8 million cubic feet of gas per day. And to the north of that is a more recent completion, Yates Petroleum Vandiver CN No. 1. That well is on production right now. I'd like to make a statement about that well, that's the very best well in the pool as it calculated open-flow potential of 235 million cubic feet of gas per day.

Probably one of the best wells in the State.

To my knowledge it is. It's probably the second heat well in the State that's been recorded. What I would like to point out is that they are producing now at a rate of ten million a day. They have run two and a half inch tubing in the well and have laid a ten-inch line to connect up to the Trans-Western Pipe Line and they're going to produce -- now this is according to reports -- for six days at this 10 million a day rate and then subsequently for 120 days they're going to produce it at 20 million. So you can see why we have cause for concern here because these high capacity wells, if we don't get one, we're in trouble. If we don't get a pretty good capacity well we may not get the drainage that are the high capacity wells to get adequate

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drainage for our Morrow production we	ll existing under
Section 12.	
Do you know what the pool production i	is at this point?
Yes, sir. The cumulative production a	s of July 1 was
6 hillion, 774 million cubic feet of g	jās.

MR. PORTER: 6 billion?

THE WITNESS: 6 billion, 774 million cubic feet of gas.

- (By Mr. Kellahin) Do you know what the monthly production is?
 - The last given in June was, these high capacity wells, approximately 900, including the Yates well. Excuse me, the dealy production now of these high capacity wells cumulative-wise would be 993 million cubic feet a month which is about a billion cubic feet per month.

 As you can pretty well tell, if there were reserve figures here of 40 billion which is what is commonly thought of in this system, based on pressure information already we produced at least a sixth of it. There's about 3.2 billion cubic feet of gas left to produce in this reservoir system. Therefore, it's very important that Coquina proceed with drilling operations very soon in order to get their share of this production. The fact that they're producing at the rate I stated previously, the field could be finished in six months.

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12	1.1	MR. PORTER:
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14		THE WITNESS
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16		MR. PORTER:
17		to drill a well in
18		THE WITNESS:
19		depending on the d
20	A	This is our case h
21		to get a well that
22		in this reservoir
23		fair share of prod
24	Q	(By Mr. Kellahin)

approximately. In other words, it would be practically depleted. This is why we are here today to try to get an unorthodox location so we can actually protect the acreage that Coquina has on Section 12 from drainage. Before you get into the drainage question are there any out of-state wells proposed adjacent to your lease? I'd like to call attention here, currently there's a well being drilled by Fasken's in the South half of 7 just immediately east of the proposed unorthodox locations. There's another one that's supposed to be proposed right here in the north half of Section 7.

MR. PORTER: You say the Fasken well is being drilled at the present time or just being proposed?

THE WITNESS: The one in the south is being drilled.

MR. PORTER: Ordinarily, how long does it take to drill a well in here?

THE WITNESS: A little less than a month, I believe, depending on the drilling contractor.

This is our case here: We want to show that we need to get a well that has high capacity and be competitive in this reservoir system and this way we'll get our fair share of production.

(By Mr. Kellahin) Now, would you describe the reservoir system you're talking about?

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UMS BLDG., P.O. BOX 1032 PHONE 243-6681 • ALBUQUERQUE, NEW MEX CO 87:03 10 First rational bark bldg. East • Albuquerque, new Kexico 87:08 I'd like to, if you don't mind, I'd like to have my notes with this, please. If you don't mind, I'd like to go ahead and explain the maps to you, symbols and so forth so we're more understandable. They will get into specifics of the job and tell you what we believe in.

These contours right here that are colored yellow in the northern part of the map, that is the total sand in what we're considering or calling the Beach zone.

This total sand is composed of four Beach sands which are on this figure 2, cross-section 1, 2, 3 and 4.

These north-south trending contours here represent contours of Growth sand of the channel which is hereby called the Hornbaker Channel.

After the well down here was drilled there originally by Fasken and then whipstocked to the west and they got this situation here, this very thick channel sand here which tested gas and oil. Notice this first well they drilled was over on the west side and it was short, had very little sand.

MR. PORTER: What exhibit are you referring to here?

THE WITNESS: This is Exhibit 3 here I'm referring to.

I'd like to point out also that regional depth is on

the southeast here. We didn't have enough room to get a lot of structure. It's not all that important in there. We're dealing with reservoir systems which is the most important thing here. That dip is about 150 feet southeast striking the structure contour right northeast southwest.

I would also like to point out the symbology here on these. These dark blue flags represent either previously drilled locations or unorthodox locations or ones like this one here, the B drill and one drilling here. These two here in Section 25 represent wells that were whipstocked, sidetracked and they are a little different inasmuch as they ended up less than 660 feet from the section lines at TD 1.

There is another thing that should be called attention to, down in the southern part of the map of Exhibit 1, we have outlined three Beach sands that have produced and are still producing in the Atoka-Penn field. You will notice here there's a line that cuts through here, that two lines that cut through these Beaches and this is what we're calling the Arnquist Channel. I'd like to mention the parallelism of this trend here, this Beach trend, as we say it is, with the one we've drawn on the north there in this area of interest (indicating) and also that these channels

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actually intersect and that pressure continuity exists with the Beaches.

Now, as far as southwest you have here a Beach system trend that has the same northeast-southwest trend across on the other side of the Hornbaker Channel from the Atoka-Penn pool. The other exhibits, other than Exhibit 1 here, which I've been stressing heavily to orient you, give you a point of reference, are Exhibits of cross-sections. These exhibits include Exhibit 3-- excuse me, let me start with Exhibit 2.

Exhibit 2 here goes from down through here and from this point, this is the north end and the crosssection here, that's Coquina Superior Federal that zigzags across this Hornbaker Channel system down to here, to the Yates Vandiver CN well. This is the high capacity well that's near us, near our proposed location.

Exhibits 3, 4 and 5 are additional data to show you stratigraphy in this area. Exhibit 3 is the southernmost cross-section. Exhibit 4 is the next one on the north and Exhibit 5 is the next one on the north beyond that one.

Now, you've been discussing the Beach sands, particularly the B Zone Beach sands on the north and the Hornbaker In your opinion are they through-connected? Channe 1.

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Yes, in my opinion they are. I would like to discuss this Hornbaker Channel in more detail right now. This Hornbaker Channel, I pretty well established the well data they have to date and as I said the maximum thickness lies just slightly east of the range line between Range 25 East and 26 East. And you see this is only about 2500 and 2700 feet across this channel. That presents a very difficult target for the oil company or the gas company to drill and get to the really productive sand and you must to the best of your ability pick the best location because of this fact. It appears that the thicker sand you have in this Hornbaker Channel the thicker the sand is, the higher capacity well you have. In other words, you get -- there seems to be a common situation here. I've noticed this in the Morrow and many places of Eddy County, that the more sand you have, thickness, the better chance you have of getting some permeability. This doesn't apply in all cases but in general it does. And certainly plays in this case here.

I'd like to show what happens when you do have a thin section. I refer you back to Exhibit 3 which is showing two wells, one the first hole drilled by Fasken Hornbaker No. 1 in Section 25. This is the straight hole and you notice here they had about 50 feet

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of channel sand here, there on the edge of it. they ran a dip meter and determined by moving over to the east, by running a dip meter they decided it told them that they ought to move east a little bit and they could get into the thickest part of the channel which they did. They whipstocked the hole and drilled over here from this point here to -- on Exhibit 1 I'll show the location on the map. Here is the first hole they drilled and they went over approximately 300 feet with their whipstocked hole and got this 160 foot of channel sand here which tested gas and water, had a pretty good porosity and permeability. Of course, that put a limit on our production to the south there, but this is how close you can be, within 300 something feet and go from tight rock here which tested in the Hornbaker first hole gas to a small measure. Going east you get into thick sand, 160 foot and good permeability.

- Q How far did they whipstock the well?
- Approximately 300 feet. A
- How far are they from the township line, roughly? Q
- 350 feet from the east line.
- 350 from the east line? Q 23
- Yes. Α 24
 - That is when you refer to an unorthodox location that

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PAGE 17 is closer than 660? 2 Yes. Does that indicate to you, Mr. Norman, that you could Q 3 drill on the east side of the line, say at a 660 location and probably hit the channel section, whereas if you drill on the west side of the line you can be б on the edge of it and miss it? 7 Yes. This is a problem we have. We've got to get 8 this location down to a point where it's just right 9 where we need it geologically speaking to get the 10 maximum porosity and permeability. 11 I'd like to go ahead further and establish the continuity of the reservoir between the Hornbaker Channel and the Beach system we've got up here. We 14 believe that the channel actually has cut into this Beach system here and has pressure continuity today. In your opinion, which is laid down first? Which was

laid down first geologically? We believe the Beaches were laid down first, then subsequently probably the regression of the sea moving outward caused the situation where it developed the channel cut through these beaches here that you have presently. We believe pressure continuity, reservoir continuity between this Hornbaker Channel and these Beach sands here that are shown by the Gross Isopach

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map in yellow.

Now, if you don't mind I'd like to go ahead and show some similar correlations here and establish the fact that why we believe these sands here are Beach sands. If you refer to Exhibit 2, we'll go through the correlation and try to show you how our interpretation came about. Let's start at the righthand side here which is Coquina Superior Federal No. 1 on Exhibit 2. That's this well right here (indicating); Now, to show these beaches we've kind of zigged and zagged across here to get enough in there to give you a pictoral idea why we call them beaches. Going from the Coquina Superior Federal No. 1 east to the Fasken Armstrong No. 1. Section 25 of 18 South, Range 26 East, you will note that we've been able to carry our correlations from that one well first well in the cross-section over to the Armstrong No. 1. I would like to mention that this Coquina Superior Federal well, it has 9 feet of Beach sand and tested at a stabilized rate, 9.5 million cubic feet of gas per day.

Now, going across east this Fasken Armstrong well it has a small amount of pay, 5 feet, and has been perforated making some kind of gas well along with some other perforations. That particular zone was tested and it makes approximately 45,000 cubic feet of

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gas per day.

I'd like to now carry this correlation back west across the channel, across the Hornbaker Channel to Coquina's No. 1, Section 11 of 18 South, 25 East. We find here beaches, beach sands shown in yellow and there is a little bay in what we call the B sand off this over-all B zone. This we're calling the B Beach Sand. It's a little confusing, but at any rate, this is our correlation. You can see that the continuity of these sands and the fact you can carry them across here in correlation with it and the fact these two wells, the Coquina No. 1 and the Fasken Armstrong No. 1 appear to be in a sedimentary tract turning northeast southwest.

Bringing a cross-section a little farther south to the Coquina 5 Mile Unit No. 1, that's this well right here (indicating), you have no sand, no beach sand. Therefore, you have shaled-out these beach sands as you have gone out. In other words, they have shaled-out.

Is that the basis of your zero line on your Exhibit 1? Yes, sir. This here is our zero line. There is zero sand at this point, Beach sand. I would like to demonstrate for you how the fact that the Hornbaker Channel is in the same stratigraphic position than if

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it came later in these beaches. As far as being deposited, it could very likely cut through these beaches and have pressure continuity just as it does down here in the Atoka-Penn pool on the south. This has been proven by pressure information in this Atoka-Penn pool.

I want to fold this map and let's just take these two wells here on a cross-section, Coquina Superior Federal No. 1 and the Fasken Armstrong No. 1. I'm going to insert this channel that is shown on a cross-section on the log copied from Yates Vandiver CN No. 1. Here I'm going to put that channel, hang it on the correlating manner of the Morrow series and you can see a junction at that position of this Hornbaker Channel with these four beach sands. As I said earlier, we believe that these are pressure continuity and reservoir continuity. One thing that does support us to some degree, where this interpretation is the Coquina Superior Federal No. 1, Section 1 of 18, 25, that well tested the C Beach sand as shown on the Exhibit 2 and it has a bottomhole pressure which is virtually static, was 310 pounds and this is really a subnormal pressure for this area. The original bottomhole pressure, for instance in the discovery well of this West Atoka field was this Mountain States McCaw was approximately 3600, just as

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	an example. But looking for a difference in depth
	here I was able to figure it that there was at least
	150 pounds lower pressure in this Coquina Superior
	Federal No. 1 and it should be normally.
Q	Does that indicate drainage?
A	To me it indicates some drainage.
Q	From what well, would you say?
A	I suspect from these high capacity wells down here
	further south from the Coquina Superior Federal. They
	have dropped the pressure. There is probably a
	pressure grading with pressure increasing away from
	these high capacity wells going northward and we're
	feeling the effect in that Coquina Superior Federal
	No. 1 of this vast withdrawal down here to the south
	where these wells are making 7 to 10 million cubic
	feet of gas per day. That is, on the date that this
	test was taken in the Coquina Superior Federal No. 1.
	I might also add that the pressure in a well very
	near this was on the first of August of this year, this
	Pennzoil-Vandiver well here in Section 13, 18, 25, it
	has a bottomhole pressure of 310 pounds. As you recall
	we had 310 up here in Coquina Superior Federal No. 1.
	We believe that by drilling into this, getting a high
	capacity well in this channel system, the Hornbaker

Channel system, we can drain the potentially productive

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Beach sands that exist in the south half of Section 12. The main thing for us right now is to get a very good well, very high capacity well and I'd like to go into the Morrow geology cementation because that is what we're really fighting, cementation. To a large degree the Morrow sandstone is a coarse-grain sandstone usually when it's productive out here and it's not too well sorted. It can get grain sizes up to pebble-size or very fine. The more uniform it is the better your permeability is. It also has a little clay every now and then but we're looking at a situation where we have a well immediately to the south of us, here, that's the Pennzoil-Vandiver No. 2 which was taken over and made tight after Pennzoil decided they just didn't want to risk running pipe in it. Brunson-McKnight took that well over. It had 48 feet of channel sandstone in it, gross sandstone. And that well potentialed for a million cubic feet per day; it was very tight. It didn't have what we'd call porosity in it that was above a cut-off of 8 percent. In fact, it was generally less. So therefore, here you get a well that's on the edge of the channel and it did not have any real good commercial porosity and permeability. You go 1315 feet to the east across the line to the Yates Vandiver well which is the second largest well in New Mexico on the

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basis of gas wells, and you have a tremendous situation in the way of capacity. Productive capacity is fabulous. Well, we naturally would like to have some of that productivity in our well so that we can adequately drain our reservoir in the south half of Section 12. So our main aim here is to get into this high capacity Hornbaker Channel system. We've seen where the well that, even with an unorthodox location, I think it was 660 from the line here, from the east line, the Pennzoil-Vandiver No. 2 which is now the Brunson-McKnight well, it didn't make it. It will probably be a sub-commercial well. So if we were to drill along the same isopach contour we anticipate around the same amount of sandstone thickness as this sub-commercial well, the Vandiver No. 2. We see a definite element of risk there in this proposed 660 location. Consequently, we're going for the 330 so that we can get into that high capacity part of the channel that is the thicker part over to the east. And this is why we're here today. It's to request an unorthodox location 330 from the south and east lines so that we can compete with these other people that do have the high capacity wells. Now, looking at your Exhibit 1, you have your zero

contour line somewhat north of both the Pennzoil-Vandiver

1		well and the Yates Vandiver and the Yates CN and the
2		C & K well. Does that indicate there's no beach sands
3		there, in your opinion?
4	A	In our opinion there is no beach sands south of it
5		that we can see.
6	Q	You have not found any evidence?
7	Ą	We haven't noticed any. There are some sands in the
8		area; some of them are channel sands but we don't
9		recognize any beach sands.
10	Q	Are those wells producing in your opinion from the
11		channel sands exclusively?
12	Ά	Yes, they are.
13	Q	Where had the gas been coming from in that event?
14	Ā	Well, it's coming from this main line here, this pipe
15		line of porosity and permeability, determining who
16		are in the Hornbaker Channel system.
17	Q	Would the Hornbaker Channel system contain enough
18		gas to produce the volumes that are being produced
19		from the Yates well on its own acreage?
20	A	Well, I think they're going to be eventually pulling
21		from other areas around there. To answer your question
22		I believe they'll be draining other people in the
23		final outcome.
24	Q	Well, you've already indicated you think there is
25		pressure differential?

: 1	A	As a matter of fact, they have already taken out, this
2		production is going out.
3	Q	So all you're trying to do is get in the same pipe
4		line; is that your purpose?
5	A	That's correct.
6	Q	For the 330 location, you are in effect crowding the
7		east line there by getting up to 330 foot location.
8		Is this going to damage the correlative rights of your
9		offset operators?
10	Λ	Well, no more than they're damaging our correlative
11		rights.
12	Q	In other words, you're asking for the same opportunity
13		to get into the same source of supply as this?
14	Λ	That's correct, so we can adequately drain our acreage
15		in Section 12.
16	Ω	Now, there has been some precedent for these unorthodox
17		locations; has there not, and you've already mentioned
18		some of them?
19	Α	Well, there's been may I step back here, please?
20		As I pointed out earlier, these flags, these dark blue
21	· 	flags, represent those wells that are at unorthodox
22		locations in the sense of statewide ruling. For the
23		Pennsylvanian gas well, the last three wells, have
24		come to the Commission, in this reservoir system, have
25		come to the Commission and gotten approval for an

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unorthodox location. MR. PORTER: Are they all 660? THE WITNESS: They're all 660, the end line, yes, sir. (By Mr. Kellahin) Are any of them penalized? None of them are penalized and there were no protests б 7 here at the hearing. These, as we discussed earlier, there were two 8 wells down there in Section 25 that their bottom was 9 or is less than 660 feet from the east line which we 10 believe is a situation that justifies our coming here 11 12 and asking for a special unorthodox location. Do you know what the bottomhole location of the Fasken 13 Hornbaker No. 1 well is? 14 The Hornbaker No. 1 here-- if you'd like, I would like 15 to go ahead and give this to you now. 16 Yes. 17 The situation in Section 25 of 18 South, Range 25 East, Α 18 deserves special attention here on Exhibit 1. We're 19 speaking of this well right here that I'm pointing to, 20 Fasken Hornbaker No. 1. The spacing unit in the east 21 half of the section for Morrow penetrations have been 22 made with side-tracked holes. The first well was 23

drilled by Fasken Hornbaker No. 1 in 1971, 80 feet

from the north line, 660 feet from the east line.

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which is on Exhibit 3 here. It was then sidetracked to a location 310 feet east and 83 feet south which, in effect, when it got down to TD it was, the bottom hole was 350 feet from the east and 2,063 feet from the north line. Of course, at that point it penetrated this Hornbaker channel very adequately but this was wet; it was non-commercial. This well was plugged on May 7, 1972. In early 1973 this well was reentered by Yates Petroleum in an attempt to sidctrack the well 1500 feet to the north. In other words, they entered this same old well and had old problems and they attempted to go north after approval for the special unorthodox location. That didn't work so they drilled an unorthodox location 660 feet from the north line, right here (indicating), and 620 feet from the east line, same section. They found 61 feet of minimum permeability channel sandstone. This hole was sidetracked 117 feet north, 48 degrees 21 minutes east to a location that was 520 feet from the north and 530 feet from the east line. This is kind of entering to the north and there could not have been much production left up here after this well had gas and water, make a special consideration here to drill unorthodox location and to the hest they could probably

well found 45 feet of impermeable channel sandstone

put a 40-acre tract there with adequate production in

You're saying that that well has about 40 productive

dearnley, meier & associates

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it.

acres dedicated to it? Well, that's all that you could even get out of it based on geology mostly. б 7 In other words, the well was a dry hole; wasn't it? A It was a dry hole and it was tight. 8 It was completed, 9 however, I believe. They did attempt to complete? Q 10 They attempted completion, as I recall; but it's non-11 12 commercial, a non-commercial well. Actually, both the Fasken and Yates have had their opportunity for 13 those unorthodox locations less than 660 and we believe 14 15 that since there were no penalties assessed and there was no one protesting them, we also should get the same 16 treatment up here in this proposed unorthodox location 17 18 in Section 12. Now, in summary, Mr. Norman, in your opinion, will the 19 20 approval of this application protect the correlative rights? 21 22 It will protect correlative rights, yes. And I'm not just talking about your correlative rights. 23 Will the correlative rights of the offsetting operators 24 be imperiled in any way? 25

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1	А	I don't believe they will be imperiled inasmuch as
2		we have a very large amount of the section we'll be
3		draining in our section.
4	Q	Now, you're talking about the section in the Hornbaker
5		Channel?
6	A	Section 12.
7	Q	Are you also talking about this section in the north
8		half of Section 12, South half of Section 12?
9	A	I'm talking about drainage off that whole south half
10		by the channel.
11	Q	In your opinion, is all of the acres you propose to
12		dedicate to the well productive from the pool is it
13		productive acreage?
14	А	I don't believe it will all be productive, most of it
15		will be productive.
16	Q	The major part of it?
17	A s	The major portion of it, a bigger percentage based
18		on the Isopach Data. We can virtually cover all of
19		that in the potential bay.
20	Q	You have present there the deep sands plus the channel
21		is that correct?
22	Α	Yes, sir, we have both.
23	Q	There are other wells in the pool which are not
24		penalized in any way and do not have both; is that
25		correct?

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		PAGE 30
1	A	The other wells to date, we cannot put Beach sands
2		there. We think they're draining acreage on the
3		north of the present high capacity wells.
4	Q Q	And that's an area you'd also drain to some extent
5		if this application were approved; is that correct?
6	A	Yes, we would in the same system.
7	Q	Now, unorthodox drill sites have been the rule rather
8		than the exception in this pool; have they not?
9	A	Yes.
10	Q	And no penalties have been assessed against anyone?
11	A	Not to my knowledge.
12	Q	Now, actually as you described the formations involved
13		here an unorthodox location is essential if you're
14		going to get into this channel; is it not?
15	A	I think so.
16	Q	And that's true whether you're on the east or the
17		west?
18	A	Works both sides of the fence.
19	Q	But a 660 location has much better chance on the east
20		side of the channel than it would on the west side?
21	A	Yes, because the channel is thickest just slightly
22		south of the range line.
23	Q	As I understand, you say that correlative rights will
24		not be impaired and you're not going to take any gas
25	·	from your offsetting operators other than what, other

	. 1	. [than the amount they're presently taking from you; is
	2			that right?
		3 P		This is the way I believe.
				On that basis, would you recommend any penalty be
)	imposed on account of your 330 foot location?
•	!	5		No, I don't believe we ought to have any penalty.
SS	ı	6	A	Were Exhibits 1 through 6 prepared by Coquina Oil
iate		7	Q	
))		8		Corporation?
as T		9	Ā	Yes, they were.
ور 8	1	10	Q	And they were furnished to you by Coquina; is that
mei.	•	11		correct?
ey,		12	A	Yes, sir.
dearnley, meier & associates	7 10		Q	Have you examined them and in your opinion do they
e	C 87	13	Q	correctly interpret and reflect the information
	2 X X X X X X X X X X X X X X X X X X X	14		available on this pool?
	Σ Σ Σ Σ Σ Σ	15		It's just the way I believe in it.
	300ER	16	A	ria like to offer
	• ALBU BUQUE	17		111.6
	:::49-6691 • AL	18		into evidence Exhibits 1 through 6, inclusive.
	ONE ::4	19		MR. PORTER: Without objection to exhibits they
	2. PH(20		will be admitted. I believe at this time we will
	OX 10(21		recess the hearing until 1:00 o'clock.
	0.0 4.0 4.0			MR. PORTER: The hearing will come to order,
	SIMMS BLDG. • P.O. BOX 1092 • PHONE. 1216 FIRST NATIONAL BANK BLDG. E	22		please. At this time the witness is available for
	SIMMS B	23		cross-examination. Mr. Hinkle, you look like you ha
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بي.		٥Ĕ	1	some questions.

some questions.

MR. HINKLE: Yes, I have quite a few.

Mr. Norman, I'm a bit confused as to your testimony

CROSS-EXAMINATION

as to who prepared your exhibits 1 through 5.

They were prepared by Coquina Oil Corporation.

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Well, you didn't prepare them yourself? No, I did not. Can you give us the name of the geologist who prepared 10 Yes, Mark D. Wilson. 11 Mark D. Wilson? 12 Q Α Yes. 13 Then your testimony concerning the exhibits is not of 14 your own knowledge? 15 I agree with this interpretation; it is an interpretation 16 17 I have. But how much research work have you done in order to 18 19 come to an agreement with them? The research work I've done goes back to starting two 20 or three years ago and even before that when I worked 21 for another company and when I did a lot of work in 22 this area in the Atoka-Penn pool and some in the West 23 Atoka pool area in its initial development. In fact, 24 from the discovery of this Mountain States well, I 25

BY MR. HINKLE:

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followed development since that time.

But have you verified so that you can say that your testimony is your own testimony, every line on those plats and maps so that you're satisfied that they're correct?

- A I'm satisfied with the interpretation.
- Q Very well. Have you verified them?

MR. KELLAHIN: If the Commission please. I don't know what Mr. Hinkle means by verifying them. He has testified that he's examined them and he agrees with the information shown. Now, does he want him to say he checked it against the logs or what does he want? I don't understand what he's after.

MR. HINKLE: I don't think that he's shown that he is competent to give his testimony because he didn't prepare the plats; it's not his work. It's hearsay as far as he's concerned.

MR. KELLAHIN: Not hearsay, no.

THE WITNESS: I agree with this interpretation wholeheartedly. As a matter of fact, it's the interpretation that I've had in the initial outset of the West Atoka-Morrow Pool development. In fact, it agrees with my predictions quite well, I might add.

(By Mr. Hinkle) Well, before we go into it any further

I'd like to ask you two or three questions here concerning

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		PAGE 34
1		it. I refer to your Exhibit 1. What control do you
2		have for the so-called Hornbaker Channel above the
3		lines between Sections 12 and 13 and Sections 7 and 187
4	A	This is based on projection.
5	Q	Just projection, there's no well in that channel above
6		that?
7	A	About 18 North, 13.
8	Q	Above Sections 13 and 18?
9	Ā	Yes, sir. I might add this is what geologists are
10		paid for, to project from the known.
11	Q	You have that in a perfectly straight line. Now, the
12		Hornbaker Channel geologically, I assume, it's probably
13		an old riverbed; is that right?
14	A	Our interpretation is that channel appears to be an
15		alluvial channel or riverbed, as you put it.
16	Q	In a straight line?
17	A	I've seen some straight alluvial channels, yes.
18	Q	Running for, that would be over two miles from the
19		bottom of Section 13 and 18 clear up there for two
20		miles. You might say you've got it about three miles.
21		Let's see, one, two, three and a half miles in a
22		perfectly straight line?
23	Α	Yes, that's right.
24	Q	Wouldn't it be unusual if you found a channel that
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was exactly straight?

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This is an unusual channel. As a matter of fact, you have a pretty unusual situation over in this Atoka-Penn pool. If you'll notice next the Arnquist channel which is extended two and a half miles, at least. Of course, it's been projected on this map and you can't really -you can say it's at least 3, two and a half miles long in this Atoka-Penn pool. We've projected this Hornbaker Channel farther than that as it's a thicker channel and that may be the reason that it is a little longer than the other. It's older and deeper and more set in the ways as it had a source and it kept it for a longer period of time and packed up a lot of sand in that channel.

Can you say definitely there is not going to be any wells above Sections 13 and 18, that that channel may not bend over toward, into Section 12 and you might have a sand thickness in 12 much greater than the way you've got it projected?

Sir, if you take a straight edge and line it up with this well control to the south which is pretty good, you can't bend it that way. I mean, you have to project it on to the north and I would not anticipate it bending. I'm not saying it won't, but I would not anticipate it making a big change in this direction.

So even though this is not your geology, in your opinion

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it could bend, it could be different from what is shown here because you have no control above those section lines as I mentioned; is that right? I would not expect it to be, in my opinion, because if it swung in either direction, either right or left, east or west, it could have gone into one of the wells up to the north like the Coquina Superior Federal which it didn't; in other words, if it's swinging that way why wasn't it in this Coquina Superior No. 1? If it swings to the right considerably it could have been in the Fasken Armstrong No. 1 and we established both of those wells, at least to my way I feel about it, we established that those sands in those wells and the B wone were Beaches. They are Beaches. We are interpreting them that way. So those two wells right there really give you a kind of -- you have to respect them and you're lined up pretty good until all of a sudden you shift. It takes a lot of imagination; I mean it's more imaginative to shift them than it would be to keep them straight like we have them. Still, you've got a quarter of a mile above the Yates Vandiver in a straight line and a lot of things can happen in a quarter mile, geologically. This is true. This is one reason we're asking for the special location, the 330 from the south and east.

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1		We are aware of what can happen sometimes to the
2	1.30	permeability, and we don't wish to take that risk to
3	<i>i</i>	drill the 660 location. We'd prefer to drill at the
4		330 location.
5	Q	Now, as a matter of fact, whenever you drill into the
6		Morrow formation aren't you assuming considerable
7		risk because of the very character of the formation,
8		because your testimony was to the effect that you find
9		areas that are demented, like down here in Section 25
10		where you have, you might say an impervious formation.
11	A	I established there was some permeability at 620.
12	Q	Well, but it was water and a little gas?
13	A	Water and gas, yes.
14	Q	But isn't it true that in the Morrow formation you
15		can have a good-size well with a relatively thin section
16		if you have the proper porosity and permeability; isn't
17	,	that true?
18	A	Yes, you can have thin sand; this is true.
19	Q	So the thinness of sand does not always control?
20	A	Not always, but in this particular case, in this
21		channel we think it does control based on our interpre-
22	£ .	tation.
23	Q	Isn't that true in connection with the Mountain States
24		Well in Section 19? It's making between 6 and 7 millip
25		feet of gas.

It's

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1	A	Yes, sir.
2	Q	And it had relatively thin sand?
3	A	That's correct. This is why we're interpreting this
4		particular well as hooked into the system of the
5		Hornbaker Channel but being a tributary to that channel
6		In other words, it's as a matter of fact, if you
7		don't mind I could show you on the exhibit here.
8	Q	Okay.
9	A	This interpretation here, on Exhibit 4, as we see
10		the amount states the McCaw No. 1 perforated the lower
11		sands equivalent to our Hornbaker Channel off to your
12		left there. And notice over here this channel on the
13		west side of it shows up in the Fasken Brown Yates
14		No. 1 well. We believe this tributary channel came
15		in there and is in pressure continuity with the major
16		Hornbaker Channel system. So in effect that well is
17		part of the system because it is hooked in.
18	Q	Now, I believe you testified that you are familiar
19		with the application filed by Coquina in this case;
20		is that right?
21	A	Yes, I did testify that.
22	Q	Isn't it true that Coquina originally filed their
23		application for the 660 location out of the south and
24		east corner of Section 12?

MR. KELLAHIN: If the Commission please.

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1		true that the application for a 660 location was filed.
2		It was then amended to include the unorthodox location.
3		MR. HINKLE: He says he is familiar with the
4	·	application; let him testify.
5		MR. KELLAHIN: It makes no difference; we're
б		nearing the application as it was filed.
7	Q	(By Mr. Hinkle) Isn't it true that Coquina requested
8		all of the offset operators, owners of working interests
9		there to waive their objections to an unorthodox location
10		on a 660 location?
11	A	There was a letter written to the operators.
12	,	MR. KELLAHIN: Do you know?
13		THE WITNESS: There was a letter written to
14		them asking them for a waiver as to the 660 location.
15	Q	(By Mr. Hinkle) Are you familiar with the letters
10		that were written?
17	A	No, sir. I did not read all the letters.
18	Q	Well, you have seen the letters that are written by
19		Mr. Clark of Coquina?
20	A	I have seen them but I have not read all of them.
21	Q	Are you familiar with the gentlemens' agreement that
22		you might say was entered into by and between Coquina
23		and all of the working interest owners in Sections
24		7 and 12 and 13 and 18 to the effect that they would
25		drill 660 locations?

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A	I can't
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Q	Now is
	18 or 7
	line?
A	I don't
	are none
Q	Isn't it
	which I
	apart; i
A	In those
Q	1320 or
A	I doubt
Q	The Penn
Α	Right,
	Q A Q A Q

		PAGE 40
1	A	I'm familiar with the letter that was some kind of
2		an agreement regarding the 660 locations, but I'm
3		not thoroughly familiar with the contents of the
4		letter.
5	Q	Do you know that such an agreement did exist?
б	A	Yes, sir. I knew there was some but it was
7	Q	And isn't it true that Coquina gave a waiver of the
8		660 location to the Fasken well in Section 7 for
9		approval and also to the Yates Well in Section 18
10	!	and also the Pennzoil well in Section 13?
11	A	I can't for myself, I cannot answer your question that
12		they gave it, but I'm assuming that they did.
13	Q	Now is there any producing well in Sections 19, 24, 13,
14		18 or 7 or 12 that is a 330 location to the section
15		line?
16	A	I don't see it. No, sir, there is not in there. There
17		are none so far.
18	Q	Isn't it true that all producing wells in those sections
19		which I mentioned are 1320 or more, a greater distance
20		apart; is that right?
21	A	In those sections they are 1330 feet apart.
22	Q	1320 or more?
23	A	I doubt it. I would have to I did not measure them.
24	Q	The Pennzoil-Vandiver in Section 13 is a 660 location?
1		

So is the Yates, so there's better than 1320 between

One of them is a little bit different position, north-

west than the others so it would be just a little more

than 320 between those two wells. True, they are both

660 locations from the east and west lines. But the

In Section 7. Well, I've been told -- I haven't been

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fact that they're shifted a little bit, that would be a little more. But for the most part those wells are 8 1320 or more apart in Sections 13 and 18 and 24 and 19. 9 Now, after all of the offset operators had given 10 waivers to Coquina to the drilling of unorthodox 11 locations at 660 locations in Section 12, why did they 12 change to a 330? 13 The belief then that 660 is just not close enough. A 14 Well, isn't it true that all you want to do is get 15 a little closer to the good well that Yates brought 16 in in Section 18? 17 It's true we want to get closer to that thick sand, 18 to the thick sand and get a high capacity well so that 19 20 we can be competitive with this big well. Now, what is the present status of the Fasken well 21 Q which is now drilling at a 660 location in Section 7? 22 660 from the south and west line? 23 That's right. 24

them?

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out to see the well or anything -- but I've been

Until that well is completed you won't know definitely

THE WITNESS: 800 or 900 feet, 8800 feet

told that it is drilling right now.

I could not answer that, sir.

Isn't it approximately 6,000 feet deep?

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6 whether or not the geology you have indicated here 7 on your Exhibit 1 is correct; is that right? 8 Even when it's completed, until we drill our well 9 I won't know whether our geology in this 330 location 10 is correct. Well, it might turn out that that well would have a 11 relatively thin section which would mean that you'd 12 13 have a thick section probably over in Section 12? Not necessarily. If that were a thin well that means 14 the channel is going in a slightly different direction. ió perhaps. It could veer over in that direction but I 17 think I'd like to ask a question myself. What will 18 Fasken's do if they get a well that's thin, is thin, 19 are they going to propose the same situation we are 20 proposing here, 330? No, they haven't yet. They're going to carry out 21 22 their agreement to drill at a 660 location. 23 MR. PORTER: What's the projected depth of the 24 well that you propose?

	,	
3		it would make your well within approximately 990
4		feet of the Fasken well; is that correct?
5	A	Approximately, a little bit more than that because
6		of the angle between the two wells.
7		MR. HINKLE: I believe that's all the cross.
8		RECROSS-EXAMINATION
9		BY MR. PORTER:
10	Ω	Mr. Norman, do you think the outcome of the drilling
11		of this well to the east offsetting your well would
12		influence your location?
13	A	It would have some influence on it, I can say this, yes
14		MR. PORTER: Anyone else have a question?
15		Mr. Nutter?
16		RECROSS-EXAMINATION
17		BY MR. NUTTER:
18	Q	Mr. Norman, I notice that you've got a couple of wells
19		that drilled into the channel but yet they didn't have
20		the permeability.
21	A	Yes.
22	Q	And were not productive?
23	A	Yes, sir.
24	Q	What, in your opinion, is the controlling factor if
25		you get into the channel? You're not necessarily

MR, PORTER: 9,000.

(By Mr. Hinkle) If the 330 location were approved

assured of getting a well. What is the controlling

factor here?

	- 1	' [Industrial Mexico
	3	A	The controlling factor being the porosity and
	4		permeability which we think improves with thicker
	5		sand development.
	6	Q	Well, you had some wells that had as much as 45 or 50
	7		or more feet of channel development but they were
	8		tight.
	9	A	That's correct.
	10	Q	So what causes tightness in the channel?
	11	A	Cement in filling in these. This is a Diagenesis
103	12		which is the cement base and is a very difficult thing
NEW MEXICO 87103 NEXICO 87108	13		to predict in the Morrow. This is one of the bugaboos
EW MED	14		in our profession. It's difficult to predict what
2 2 .¥ .₩ 	15		sands are going to be permeable.
3 D D D D D D D D D D D D D D D D D D D	16	Q	So even by moving to your 330 location here and
L BUQUI	17		getting over into the channel you're not assured you're
JONE ZASTONIO ALBUQUERQUE, DG. EASTONLBUQUERQUE NEW	18		going to get permeability and porosity?
-	19	A	No, we're not absolutely assured but all the indications
BANKB	20		are that we will because anything that had over 70 feet
0	21		of sand here had very good porosity and permeability.
FIRST NATIONAL	22	Q	Okay. Now moving east I think I understand your
1216 FIRS	23		thinking is that you would improve your position by
: # :	24		getting into the channel. I don't understand why you
	25		also moved 330 south.

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Well, it is closer to control to the south and

3700 pounds. In other words, approximately a sixth of

It's also moving closer to the big well.

production to the south.

Yes, it is. 5 So you're not only attempting to get into the channel but you're also moving towards the good well, big well? Α Yes. 8 Thank you. Q 9 RECROSS-EXAMINATION 10 BY MR. PORTER: 11 Mr. Nomman, you gave some testimony on estimated 12 reserves in the pool. I believe you gave a figure 13 of 40 billion. 14 Yes, sir. Whose calculations are those? 16 These are reported to me and the source of this data 17 has not been checked out completely by me. But this 18 is what has been banded around. 19 What is that based on? 20 This is based on pressure and production. In other 21 words, the drop in pressure -- as a matter of fact, 22 I mentioned earlier that one of the latest pressures 23 reported was 3,010 pounds and the original pressure 24 I said was 36, I believe that 's probably more like

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the pressure has been dropped and will be lost in this vicinity of these high producing wells. Your reserve estimates are at best a rough estimate? Yes. I think it's very difficult for anybody, any engineer, very qualified engineer. I'm not a qualified engineer on estimate reserves. I state that at the beginning, but the reserves cannot be truly calculated right now because this is still in the development stage of pressure gradients in here. In fact, when you shut-in your well you're feeling the results to calculate reserves based on pressures. You're feeling the results of wells around you and you can't come out with an accurate production. I mean, reserve data. And I think that really this isn't so much the problem. As far as the amount of reserves go it's the fact that we want to get our reserves our share of the reserves and the best way we can, we believe can do this is to get near the thick part of the channel. Mr. Nutter indicated here, I believe, that there is a great variation in porosity. I'd like on that question that Mr. Nutter had, Yes. there is a well down there in Section 24 that's interesting. It's the Fasken Brown Yates well which is the second well. That's the well that's been their productive life, during its productive life a little over 10 million a day.

25 A

a very good well. This well had out of 50 feet of gross
sand which is very near the thickness of this Pennzoil
area, had practically no sub-commercial making a million
a day. That Fasken Brown Yates had 16 feet of net pay
and, as I said, it had sustained production rate of
10 million a day. Which means you can be in this
relatively thin side of the reef, I mean the channel,
and you can come up with good wells. But so far the
odds have been that there are more good wells in the
thickest part of the sand.
·

- With extreme variation of porosity wouldn't you have a difficult time estimating reserves with any degree of accuracy?
- I rather defy anybody to estimate all the reserves in this pool here that we are dealing with because volumetrically it's difficult to figure. Pressure-wise it's difficult to figure.
 - I believe there was an indication of the results showing quite a variation of permeability.
- A Yes, sir.
 - Well, what indication do you have that the bigger wells are having much effect on some of the smaller wells as far as drainage is concerned? It's permeability between these wells pinches out completion in some instances?

 I rather doubt it but this system appears to be all one

The pressures are dropping in the field with

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time. Uniformly, would you say they were dropping uniformly? I can't say that because I'm not qualified. I haven't Α really gone into the data in that detail. I see. Q My guess is that this channel here, as you go up or down 7 | A it or north or south in it, these porosity zones are interconnected fairly well but they're going up and down in the vertical section and probably there's fracturing that is connecting it up to some degree in that channel. But what's really made it difficult for the scientists in here is this change in permeability and porosity that sometimes seems willy-nilly, but we have to go on experience we've seen in this channel. And experience is that the thicker the sand the better the porosity we

MR. PORTER: Anyone else have a question?

RECROSS-EXAMINATION

get and the better permeability we have.

BY MR. STAMETS:

system.

Mr. Norman, I notice on your Exhibit 1 in the northeast quarter of Section 25, 18, 25, where there is a considerable amount of control the contour lines swing rather rapidly between close wells and it could be if you had even more control you could swing these more.

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spot here on this map here because they were spaced by deviation survey and there is a variation sighted here with I'll have to assume changes to some degree the channel direction there. If you wished to, I assume that you could draw this same map and put some nice, smooth curves in there. This would not be impossible with the spacing that you have and the information that you have, Let me answer that with this: A geologist is depending on his imagination considerably. Now, I like to recognize myself sometimes as an engineering geologist on contouring. Even though I didn't put these contours here, but I'd rather go on the basis of what I can see here and use straight lines rather than crooked lines, not try to over-emphasize if there is any grookedness here. I'd rather leave that part of imagination out. I think we've shown a very fair presentation here for everyone, including ourselves, naturally, without putting these big wells in because, you know, you can look at this channel here and you can imagine that system however

high capacity wells are just on the very edge of a loop.

This would indicate at least in this area the channel

Mr. Stamets. We feel like they're placed in the right

Yes, sir. These holes that we're using as data,

is not absolutely straight.

is

Q

Yes.

NEW MEXICO 87103	MEXICO 87108
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PAGE 50
If this river does have loops as you seem to indicate
and the question was asked of me earlier whether I
believe it has any loops and I see the data right now.
It has very few. It's a fairly straight channel; this
merely is unusual, but it does occur.
If I interpret your answer properly you're saying yes,
you do but you don't choose to in this case?
That's pretty fair for all that.
MR. PORTER: Any further questions? Mr. Nutter?
RECROSS-EXAMINATION
BY MR. NUTTER:
Mr. Norman, immediately east of this area we have the
Atoka-Penn Pool. 1 assume there's a separation that
comes down between the Atoka-Penn Pool and this West
Atoka Pool; is that correct?
A separation in what sense, sir?
Some kind of permeable pinch-out and something that
separates the West Atoka from the Atoka-Penn.
It's a shale-out.
Which would run northeast and southwest?
In between those two systems.
Then how many wells do they have on this West Atoka
Pool which are presently producing from the Morrow?
In the West Atoka?

Transwestern

right now.

dearnley, meier & associates

2

4		here again. One, two, three, four, five, six, seven.
5	Q	Was the Pennzoil-Vandiver still producing after they
6		drilled their second well there?
7	A	I've been told that's been plugged.
8	Q ·	So you have about seven wells producing?
9	A	Yes and one of those is non-commercial.
10	Q	And are these all connected to the pipe line at the
11		present time?
12	A	No. Hooker is not connected, to my knowledge right now.
13	Q	Who runs that, Brunson & McKnight?
14	А	Yes, sir.
15	Q	Are all of these connected to the same pipe line?
16	A	We are saying this; we believe that these are.
17	Q	To the same pipe line?
18	A	Excuse me. I was thinking of the system there.
19	Q	No, I see you've got a pipe line that runs down the
20		section there. I didn't mean that pipe line.
21	A	To my knowledge, I really don't know. Most of them
22		connect up to Transwestern. This Coquina Superior
23		Federal, as I understand, that is connected to another
24		pipe line, natural gas pipe line. So it would be

eventually connected up outside of it.

You're talking about high capacity wells?

No, I'm just talking about gas wells that are producing.

Gas wells, let's see. Let me just count them for you

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would be another pipe line. In the event the Commission should approve your application to drill at a 330, 330 location would Coquina be willing 3 to take a directional survey to establish that the bottom of the hole is not closer than 330 feet from the south or east lines of the section? 7 Yes, sir. Thank you. 8 MR. PORTER: Further questions? 9 MR. KELLAHIN: I'd like to ask just one, if I may. 10 REDIRECT EXAMINATION 11 BY MR. KELLAHIN: 12 Mr. Norman, how far is your proposed location from the 13 Yates well? It's a little over 1800 feet. 15 Thank you. 16 MR. KELLAHIN: Thank you, that is all I have. 17 MR. PORTER: If there are no further questions 18 the witness may be excused. Mr. Hinkle? 19 MR. HINKLE: We have two witnesses, call Roy Beck 20 first. 21 MR. PORTER: The record will show that he was 22 sworn earlier. 23

	4		DIRECT EXAMINATION
	5		BY MR. HINKLE:
	6	Q	State your name and your residence and by whom you are
	7		employed.
	8	A	My name is Roy H. Beck. I live in Artesia, New Mexico,
	9		and I'm employed by Yates Petroleum Corporation.
	10	Q	In what capacity?
	11	A	Geologist.
103	12		MR. PORTER: B-e-c-k?
(ICO 87 87108	13	{	THE WITNESS: Yes.
NEW MEXICO 87103 MEXICO 87108	14	Q	(By Mr. Hinkle) Have you previously testified before
	15		the Commission?
PHONE 243-6691 ALBUQUERQUE. BLDG. EAST*ALBUQUERQUE. NEW	16	А	Yes, sir.
1 * A L B(17	Q	Your qualifications as a petroleum geologist are a matter
243-669 AST • A	18	į	of record with the Commission?
LDG. R	19	A	Yes, sir,
X 1002-65 BANK B	20	Q	Have you made a study of the area which is in question
O. BOX	21		here today?
0 0.0 N × 1:1 1:4 × 1:1	22	Α	Yes, sir.
SIMMS BLOG. + P.O. BO	23	Q	A geological study?
22	24	A	Yes, sir.
	25	Q	Have you prepared the exhibit which is marked Protestant'

ROY BECK,

to law, upon his oath testified as follows:

a witness, having been proviously duly sworn according

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Yes, those are indicated.

209 SIMMS BLDG.• P.O. EOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87108 1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW JEXICC. 87108

1		Exhibit 1?
2	A	Yes, sir.
3	Q	And in connection with the preparation of this Exhibit
4		did you make a detailed study of all of the logs of
5		wells and all of the information geologically that was
6		available for this area?
7	A	Yes, sir.
В	Q ·	Refer to this Exhibit and explain what it shows.
9	A	These solid lines are Isopach contours on the main
,		channel sand, referred to earlier as the Hornbaker
۱ ا		Channel. The dash-lines refer to stratigraphically
,		equivalent sands some of which may be more or less
,		connected to a limited extent with the channel sands.
,	9	The dotted-lines are the structural contours and 100
;	•	contour-foot contours shows the general structure. Also
;		indicated in red there are the wells that we believe are
.		in the Atoka West pool and they're ones that have the
		gas marked inside the circle producing in the Morrow
		from one pool or the other and the ones who have the
		gas spikes on the outside are producing from the
}		reservoirs other than the Morrow.
	Q	You have also shown on this plat the original 660 location
		of Coquina in Section 12 and their 330 location is
		approved by the Commission?

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		FAVE 55
1	Q	Also shown is the location of the Fasken Vandiver well,
2		660 from the west and south lines of Section 7?
3	A	Yes, sir.
4	Q	What is the present status of that well?
5	A	The Fasken Vandiver well is approximately, depth of
6		6,000 feet and they're only about 14 days away from
7		setting pipe and completion if they make a well here.
8	Q ·	Do you have any control for the lines which you have
9		drawn extending this channel to the north above the
10		section line, north section lines of 13 and 18?
11	A	No, sir, there is no control.
12	Q	This is simply a projection of those lines?
13	A	It's just a simple projection as indicated in the
14		southern end of the channel where it's been pointed out
15		there is no control. There is a certain mild sinuosity.
16	·	Now this same sinuosity may exist in Sections 12 or 7
17		but we do not know which way it will bend.
18	Q.	Is it quite possible that it could bend either to the
19		east or the west?
20	Α	Yes, sir.
21	Q	And that is often the case with channels of that nature;
22		is it not?
23	A	Yes, sir.
24	Q	It is indicated where we have control that can be seen
25		and would seem to be true so that it could go over or the

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	channel would be in 12 and 7	when you got up that
	high; could it not?	
A	That is not impossible.	

Q It has been brought out by the testimony here that the thickness of the Morrow sand does not always indicate the type of well which you would get. What is your opinion with respect to this?

A Well, the data indicates that thin Morrow sands can have good permeability and porosity, even more than thicker sections. Now, the way we correlate the wells is that we put the Mountain States McCaw --

Q Now that's in Section 19?

A 1650 from the north and west of Section 19. We correlate that in with the Hornbaker Channel as that has been tested and it has 16 feet.

Q That's 16 feet of pay sand?

Yes, sir. Now, it is a good well. The reported pay is 7 to 10 million cubic feet per day from that well.

Down in Section 25, of 18, 25, we have wells down there with 59 feet and 52 feet of channel sand, much more than the McCaw well. Yet these wells were cemented up very tightly. We made numerous drill tests on these wells and we are fully satisfied that they are cemented up very tightly. Also the Fasken well, 18, 25, 660 from the east and 1980 from the north had 45 feet and it was

NMMS BLDG. B P.O. BOX 1092-8 PHONE 243-6691-8 ALBUQUERQUE, NEW MEXICO 67103 216 First national bank blog. East-albuquerque, new Mexico 97108

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channel?

also tight, with 45 feet or more than 16 feet. MR. NUTTER: Which well was that? 2 THE WITNESS: This was the well in Section 25 of 3 18, 25. It's the well that's 660 from the east and 1980 from the north. It's the original straight hole, the Hornbaker sidetracked. MR. NUTTER: 1 see. (By Mr. Hinkle) That was a dry hole? 8 This was a dry hole. 9 Well, how does the Mountain States well in Section 19 10 compare with the Pennzoil well in Section 13? 11 Well, I correlate in 16 foot and the Mountain States îż McCaw was 28 feet, the Pennzoil-Vandiver -- I notice 13 that Mr Norman has, or whoever did the geology, has 14 50 feet for the Pennzoil-Vandiver, even more than I do. 15 So then the indication would be that they would have 16 approximately that same amount at the 660 location. 17 Other wells in the field with 50 feet or even 21 feet 18 have been shown to be very productive wells, very good 19 wells. 20 The Fasken well in Section 24 is a real good well; is 21 it not? 22 Yes, sir. 23

And that is, you'd say, on the west side of the so-called

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1	A	Yes, sir.
2	Q	Do you have any further comments with respect to this
3		plat?
4	A	No, I believe I do not, sir.
5	Q	What control did you have for the Mountain States well
ó		in Section 19? Refer to Applicant's Exhibit 1 and the
7		Mountain States well in Section 19.
8	Α .	Yes, sir.
9	Q	What does that show they had for control to apply it in
10		the channel?
11	А	Well, this work done by Coquina shows a separate channel
12	<u> </u>	which would, I believe Mr. Norman referred to it as
13		a tributary, and they only have one control point to
14		establish that. I will admit that in earlier days that
15		I also had a similar interpretation but since the
16		drilling of the C & K and the Yates Vandiver CN, it
17		changed my interpretation. I believe now that the
18	[]	Mountain States is part of the main channel.
19	Q	Do you have any further comments with respect to
20		Applicant's Exhibit 1?
21	A	No, sir, I do not.
22	Q	Do you have any comments with respect to their other
23		Exhibits, 2, 3, 4 and 5?
24	Ą	T would not necessarily agree with all their other
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calculations but then correlation is like scripture, you

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1		can interpret them either way you want.
2		MR. HINKLE: That's all the direct. I'd like
3	ľ	to offer Exhibit 1.
4		MR. PORTER: Without objection it will be admitted.
5	ĺ	Mr. Kellahin?
6		CROSS-EXAMINATION
7		BY MR. KELLAHIN:
8	Q ·	Mr. Beck, you work for Yates Petroleum Corporation?
9	A	Yes, sir.
10	Q	How long have you been working for them?
11	A	Almost two years.
12	, Q	Arc you familiar with this so-called gentlemens'
13		agreement with regard to the 660 foot locations
14		Mr. Hinkle was referring to?
15	A I believe that Mr. Peyton Yates might comment on this	
16		a little bit more later. But it is my understanding
17		that there was an agreement between all the operators
18		in these four sections which eluded that we would not
19		protest each other's 660 location.
20	Q	It only effected the four sections ?
21	A	I am not too clear on those details. Those are land
22		department details.
23	Q	When was this agreement reached?
24	A	I would rather have Mr. Yates answer.
25		MR. HINKLE: Mr. Yates will testify to that.

MR. KELLAHIN: I want to ask this witness if

(By Mr. Kellahin) Would you know when the agreement

he knows.

was reached?

3 Q

dearnley, meier & associates

	5	A	I do not know when the agreement was reached.
	6		MR. PORTER: I don't believe he testified on that
	7		either, Mr. Kellahin, on direct examination.
	8		MR. KELLAHIN: I have a right to cross-examination
	9		on the basis of his Exhibit and that's what I'm leading
	10		up to, Mr. Porter.
	11		MR. PORTER: On the basis of what?
E 0	12	}	MR. KELLAHIN: His Exhibit 1 and that's what
100 87 7108	13		I've been leading up to.
EX EX	14	Q	(By Mr. Kellahin) Now, in Section 25, your Fasken Yates
A.ST.ALBUQUERQUE, NEW MEXICO 87103	15		Hornbaker well was sidetracked; was it not?
	16	A	The Fasken Yates Hornbaker No. 1 was sidetracked, yes.
	17	Q	How far is it from the east and north?
	18	A	The original straight hole was located 660 from the
atoc.	19		east and 1980 from the north.
BYNY	20	Q	How was that deviated?
TIONAL BANK	21	À	To my knowledge it was deviated 321 feet almost due
	22		east.
1216 FIRST NA	23	Q	So that put it approximately 310 feet from the east
ž	24		line of the section?
	25	A	Something in that neighborhood.

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1	Q	When was it completed?
2	A	The original well was drilled in April completed in
3		April of '72; and the other would have been somewhat a
4		couple, maybe a month later or something, maybe May of
5		'72, somewhere in there.
6	Q	Now, your Kincaid well was also deviated; was it not?
7	A	The Kincaid BI well was deviated, yes.
8	Q ·	And it is not bottomed at a 660 location; is it?
9	A	No, sir.
10	Q	What is its location?
11	A	480 from the north and 400 from the east, I believe.
12	Q	Now, did you find any indication of Beach sands as
13		testified to by Mr. Norman?
14	A	Do I find indications?
15	Q	Of the Beach sands to which he testified.
16	A	There are Beach sands.
17	Q	How far south do they extend?
18	A	Well, I believe that in all these wells such as the
19		Coquina Hoffman, Coquina Clancy, the Pennzoil-Vandiver,
20		the Coquina 5 Mile, the Pennzoil-Vandiver, the Reading &
21		Bates, the Fasken Brown Yates and the Fundamental Thorpe
22		all contain Beach sands, quote, unquote. In the Hornbaker
23		Channel that may be or may not be connected or ones that
24	,	are connected would be connected to a limited extent. I
25		think the pressure data and the production bears this out.

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		PAGE 62
1	Q	But all of the good wells are completed in what is
2		referred to as the Channel?
3	A	Yes, sir.
4	Q	Isn't that correct?
5	A	Yes, sir.
6	Q	Do you find any really good completion in this pool
7		anywhere else but in the channel?
8	A ·	Well, it depends on how you define good, but I would
9		say that the better wells are in the channel.
10	Q	You placed the Fasken Brown Yates well well inside the
11		channel; have you not?
12	A	I give it 51 feet of thickness, yes, sir.
13	Q	And that is a good producing well?
14	A	Yes, sir.
15	ŭ	About 10 million a day?
16	A	Yes, sir.
17	Q	What about the Fasken Pennzoil Number 13 well?
18	A	The Fasken Pennzoil Number 13, the way I interpret it,
19		has a thin, choreline sand that is possibly in a limited
20		fashion connected in with the channel. I do not think
21	,	the Fasken Pennzoil is in the channel per se.
22	Q	If it's producing then you say it's producing through
23		stringers to the channel?
24	A	Some of the producing really may be from the stringers
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to the channel, yes.

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		PAGE 63
1	Q	How about the Pennzoil-Vandiver No. 2?
2	Δ	It's producing from the Channel.
3	Q	And it's right at the extreme edge of the channel?
4	A	Yes, sir. It's near the edge.
5	Q	Do you know what its production is?
6	A	I believe it had a calculated absolute open flow of
7		over a million, somewhat over a million.
8	Q	Is that commercial barrels?
9	A	I believe it's commercial.
10	Q	You give the Pennzoil-Vandiver No. 2 what, approximately
11		20 feet of gross thickness; is that correct?
12	А	I give it 21 feet, sir.
13	Q	Pardon?
14,	A	21 feet.
15	Q	21 feet. Looks like a 21-foot contour.
16	А	You can see that the notation to the right-hand side
17	V	there gives the 21. You draw a line there about as
18	; }	close as you can.
19	Q	I see. I was taking that as being the thickness of
20		that contour. What did you say that actually shows?
21	A S	Correlations with the Yates-Vandiver and the C & K
22		Vandiver No. 1.
23	Q ·	Based on examination of the logs?
24	Α	Plus pressure information.
25	Q	What has pressure information got to do with its thickness

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		PAGE 64
1	Λ	Where they have perforated in and where they have
2		taken measurements it shows that the measurements of the
3		pressure are about the same as the completed or brought
4		down pressure of the whole reservoir sand.
5	Q	And you say the brought-down pressure. What do you mean
6		by that?
7	· A	Well, the original well that really got into it, the
8		Mountain States McCaw had an original pressure of 3600
9		pounds. By the time Pennzoil-Vandiver was drilled and
10		complete the pressure was something in the neighborhood
11		of 3,010 which matched up with other bottom-hole pressure
12		that would be taken at a later date from wells already
iŝ		established in the pool such as the Fasken Brown Yates.
14	Q	Now, the Pennzoil-Vandiver No. 2 was drilled before the
15	•	Yates Vandiver CN?
16	Α	Yes, it was.
17	Q	So that well didn't drain the Pennzoil well; did it?
18		The Yates Vandiver CN did not cause the pressure to
19		drop?
8	A	No, sir, it did not.
21	Q	Which one did then?
22	Δ.	Well, the pressure drop down was caused originally by
23		the Mountain States and then the Fasken Brown Yates
4		was drilled not too much later and they had pressures
25		of 3509, I believe. And production continued and by the

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time the C & K Vandiver well was drilled the pressure
had been drawn down to, I think, 3,010 pounds, that's
where I got 3,010. And then the Pennzoil-Vandiver was
drilled and the pressure had been brought down even
lower than that by that time. The only point I'm
trying to make here is that geologically you can correlate
these things. You get a certain problem whenever you
put pressure of this kind in before.
You do have pressure communication throughout the whole
area shown in your exhibit here; do you not?
I would say I would not.
An extension of it?
I would not go along with that. I would say that the
Mountain States McCaw, C & K Vandiver, Yates-Vandiver,
and the Pennzoil-Vandiver have more uniform communication
than do the Fasken Pennzoil 13 and the Pennzoil-Vandiver.
Well, don't you agree that the Yates Vandiver CN, the
Pennzoil-Vandiver and the C & K Vandiver could be
draining areas in Section 7 and 12?
It's possible, yes, sir:
MR. KELLAHIN: That's all I have. Thank you,
Mr. Beck.
MR. PORTER: Further questions of Mr. Beck?

MR. STAMETS: Yes, sir.

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1		RECROSS-EXAMINATION
2		BY MR. STAMETS:
3	Q	If I ask you to, do you suppose that you can draw these
4		isopachs on here so as to leave the southwest part of
5		Section 12 so that the locations are completely out of
б		the channel and still do a credible job with the geology?
7	A	I think it would probably cause a sinuosity that might
8		not be there. It might be kind of away from what I
9		would suspect to be right.
10	Q	Could you go the other way and draw the channel running
11		right through the center of the southeast quarter of
12		Section 12?
13	A	That also would be difficult to do, in all fairness.
14	0	So you are also of the opinion that this is a relacively
15		straight Channel?
16	A	I would say that it is straight to having a mild
17		sinuosity.
18	Q	How about down in the northeast quarter of Section 25, is
19		that a mild sinuosity?
20	A	I think that's fairly mild, to my eye.
21	Q	Where we go an eighth of a mile and there it makes a
22	•	right-hand turn between the sidetracked hole and the
23		Kincaid BI No. 2?
24	A	
- 1	A	Yes. Well, I don't know. That looks fairly mild to me,
25		but maybe it isn't to you.

1	1	MR. STAMETS: No further questions.	
2		MR. PORTER: Any further questions? Clarence, do	
3		you have anymore?	
4		MR. HINKLE: I had one here awhile ago; I guess	
5		that's all.	
6		MR. PORTER: The witness may be excused. Call	
7		your next witness, please.	
8		MR. HINKLE: I call Mr. Yates.	
9		*****	
10		PEYTON YATES,	
11		a witness, having been previously duly sworn according	
12	to law, upon his oath testified as follows:		
13		DIRECT EXAMINATION	
14		BY MR. HINKLE:	
15	Q.	Q State your name and your address and by whom you are	
16		employed.	
17	A	My name is Peyton Yates; I live in Artesia, New Mexico,	
18		and I'm employed by Yates Petroleum.	
19	Q	In what position?	
20	A	Engineer.	
21	Q	How long have you been with Yates Petroleum?	
22	Α	Three years.	
23	Q.	Have you previously testified before the Commission?	
24	A	Yes, sir.	
25	Q	Your qualifications as a Petroleum Engineer are a matter	

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		PAGE 68
1		of record with the Commission?
2	A	Yes, sir.
3		MR. HINKLE: Are the qualifications acceptable?
4		MR. PORTER: Yes, sir.
5	Q	(By Mr. Hinkle) Have you made a study of this area
ó		which is in question involved in this application?
7	A	Yes, sir.
8	Q ·	Did you prepare Exhibit 2?
. 9	A	Yes, sir.
10	Q	Would you refer to it and explain what it shows?
11	A	Yes, sir. Basically this is a very simple exhibit. The
12		purpose of which is to show the distances between
13		existing wells in the Atoka field.
14		If we can start at the top of the map in Sections
15		12 and 7 we have tried to show the shortest distance
16		between one well and the nearest well of this particular

If we can start at the top of the map in Sections

12 and 7 we have tried to show the shortest distance

between one well and the nearest well of this particular

well in the pertinent area of the channel. In Sections

12 and 7 we see the two Coquina wells proposed in

Section 12. We also see in Section 7 the Faskens location

that is presently drilling and has been mentioned as

a depth of 6000 feet as of yesterday morning and will be

down in a couple of weeks. As can be seen, the proposed

660 location of the Coquina in Section 12 is 1320 feet

away from the presently drilling Fasken well. The

proposed 330 location would be 1,040 feet away from the

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Faskens well as presently drilling. As we come down into the area of the presently producing wells in Sections 13 and 18 we can see that there are two unorthodox locations in the north half of 13 and the north half of 18, respectively, which are 660 locations away from their nearest lease or the nearest section line. Because of the 1650 distance from the north section of the Yates well which is in the north half of Section 18 the distance between the two is slightly over 1320 feet; it works out about 1330 feet. If we come down to the south half of Section 18 and the south half of Section 13 we can see that the nearest well to the well in the south half of Section 18 which is the C & K Vandiver well is 2640 feet away from this well, the Vates Petroleum well which is in the north half of 18. Again, these are the nearest producing wells.

In the south half of 13 you can see the Fasken

Pennzoil 13 No. 1 and it is 2650 feet away from the

nearest producing well. We come down into Sections 24

and 19. Again, referring to wells that are in the

channel and as you can see in the well that's in the

west half of Section 19 which is the Mountain States

well is such an obvious distance, again around 2600 feet

from the adjacent wells, that we didn't even draw it

in there. When you go down into Section 24 there are

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MMS BLDG.P.O. BOX 1092-PHCNE 243-6691-ALBUQUERQUE, NEW MEXICO 87103 216 first national bank blos. East-Albuquerque, new mexico 87108 two wells that have been drilled in the south half of Section 24 -- the spacing by the way, is East half, West half -- one of which was dry, the Reading & Bates Linck well in the west half and then the producing well, the Fasken Brown Yates in the east half. Those two wells are 2320 feet apart. We come down now to Section 25 which may set a record in the State of New Mexico for the number of dry holes, Morrow dry holes in one half of the section and for money spent.

No production in 25 or 30?

Neither. There is no production in 25 or the west half of 30, sir. The production in the east half of 30 has been proven by previous testimony to be a part of the original Atoka-Penn pool and is not pressure-connected in any way to the Atoka Morrow West pool.

MR. NUTTER: Does that also hold true of the southeast of 19?

THE WITNESS: Yes, sir.

This was back when I believe it was Fasken's drilled and asked for a new pool designation which we failed to produce. This is the Fasken Brown Yates well. Now, the pertinent thing in Section 25 concerns the whipstocked and unorthodox locations in Section 25. Again, we can note that the Brown Yates was in existence and was producing at the time these wells were drilled in the

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north half of 25. The nearest distance to either of the approved locations or the bottom-hole locations which were not necessarily approved by the Commission is 2300 feet or 2150 feet. Again, a considerable distance to the nearest producing well.

Now, did the offset owner in Section 30 consent to or agree in any way to the drilling and whipstocking of those wells which are drilled in 25?

If I may cover briefly the history of the development of the wells or the drilling wells in Section 25. In doing so I will answer your question. The initial well was drilled in April of '71 which is in the northwest quarter. This was the Fasken Yates Federal 1, 25, I believe, and was a dry hole. Then Mr. Fasken came over and drilled his well which, if you will refer to our geological Exhibit 1, is the Fasken Yates Hornbaker. He drilled the westernmost location which was an unorthodox location at the time and at that time, as has been pointed out in previous testimony, he then, after receiving a sand thickness of over 50 feet, he then up and whipstocked on the east and attempted to establish production to the He failed in doing so. He tested and he got in the channel, of course, of over a 100 feet of channel but it proved to be a combination of water and gas and he did not complete the well, did not attempt to complete

MMS BLUG. • P.O. BOX 1092 • PHONE 243 • 6691 • ALBUQUERQUE, NEW MEXICO 87103 :16 First national bank Bi.DG. East • Albuquerque, new mexico 87108 the well. May I point out that this location, whipstocked location was never approved. It was a dry hole and it was never approved as an unorthodox location. Then unfortunately we got into the act and thought we could do better. We then went to the Commission and requested an unorthodox location to be drilled in the north half of 25. The target at the time we asked, we contacted Marathon which is the interest holder of the lease and has a lease in the northwest quarter.

Of Section 30?

Of Section 30, yes. And there was no objection from Marathon to our attempting to do this. In fact, when he went to the hearing and requested an unorthodox location in the north half of 25 there was no dissent whatsoever. There was no opposition to that location as the record will show. In fact, I think the order even lists this. I may, if it would be pertinent, I could give the order number, Order R-4391.

Now, the location approved was 500 feet from the north line and 600 feet from the east line. This location again was over 2,000 feet away from the nearest producing well. We first of all attempted to reenter the Fasken Hornbaker No. 1, this dry hole. We failed; it did not work. We then tried at a location of 600 feet from the north line and 620 from the east line. We had to avoid

IMMS BLDG. P.O. BOX 1092-PHONE 243-66-)1-ALBUQUERQUE, NEW MIXICO 37103 216 First national bank bldg. East-albuquerque, New Mexico 87108 the Penasco River Bed. We drilled a straight up top to bottom hole and hit 50 feet of channel and got the big idea that again, why don't we go and continue with the whipstocking towards our target which have been approved by the Commission. We failed to reach our target. As has been stated by Mr. Beck our whipstocking was 480 feet from the north line and 400 feet from the east line. It was a dry hole.

For some reason we were so much in love with the whole thing we felt we should run in and attempt to complete it but it was an absolutely worthless effort.

Subsequently, the well has been plugged and abandoned.

I would like to point out that the 480 from the north line and 400 feet from the east line was not within the target area set out by the Commission and that that location was never approved by the Commission and that if we had established production we would have had to come back and request a rehearing and possibly face some dissent with that particular location. Again, though we did not bottom that location we did bottom-up 2150 feet away from the nearest producing well. That explains this very complicated story, the history of what has happened in the north half of 25.

Do you know whether or not there had been any agreement entered into or understanding, a gentlemen's agreement

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13, and 18, as to the drilling of unorthodox locations?
Yes, sir, I do.
What was that agreement?
The agreement was that we would not oppose the Yates
Petroleum Corporation would not oppose, not only Yates
but all the other operators involved in Sections 7, 12,
13 and 18, would not oppose a 660 location in Section 12
660 location in Sections 7, and by that I mean 660 from
the south and 660 from the north and then 660 from each
respective section line. And in return Yates would not
and the other operators who were expected to go drill,
for example, Pennzoil-Vandiver No. 2 in the northeast
quarter of Section 13, would not receive opposition for
its 660 location and Yates would not receive opposition
for its 660 location on the west line.
Now, who were the other parties involved besides Yates
that are working interest owners in those sections?
Mr. Hinkle, the other parties involved were C & K
Petroleum, American Trading, Suburban Propane, Pennzoil,
United, I believe it's called, Waynco which also had
an interest in Section 13 and Coquina Corporation.
What about Fasken?
Mr. Fasken at the time had not obtained a format from
Yates in Section 7. Mr. Pasken then farmed-out and

between the working interest owners in Sections 7, 12,

assumed the obligation that Yates had.

I'd like to point out that this matter is not clear and straightforward, but that Coquina at the time --what happened is the historic perspective, is that Yates was about to propose its location and actually go to the Commission for a 660 -- or C & K Petroleum,

I beg your pardon -- in the south half of 18. Pennzoil wanted to go for a 660 and Yates, we felt at the time that we probably wanted to do so. We initiated the action and we talked this over with the representatives of Coquina in Artesia and explained to them what we wanted to do, get a 660 and everybody was going to agree that we would not oppose 660 locations.

letter specifying that idea, "and this was what was done.

All the parties, in order to receive no opposition to
a 660 location, all the parties in the other sections,
Sections 7, 18 and 13, then sent a waiver to Coquina,
waiving objection to its 660 location and this is what
we were sticking by. At the time there was no mention
whatsoever of a 330 location; there was no conception
that someone would try to better themselves by coming
so close to another party's section.

I hand you what has been marked Protestant's Exhibit 3. What is this Exhibit?

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Is it a copy of a letter which

dearnley, meier & associates

Yes, sir.

I hand you Exhibit 5.

was sent to Yates Petroleum?

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- And
Sir, this is a letter from Coquina dated March 20, 1973,
which advised Yates Petroleum Corporation "that we have
no objections to your proposed unorthodox location 1650
feet from the north line and 660 feet from the west line
Section 18, Township 18 South, Range 26 East, Eddy County
New Mexico." It is signed by Tracy P. Clark of Coquina.
I hand you what has been marked Exhibit 4 and ask you
what that is.
This is a return letter, well actually you will note
it's dated also March 20, which confirmed the fact that
all this was said on the telephone and just wrote those
letters the same day in which Yates Petroleum then waives
objection to locations in Section 12 of Coquina, both
of which are 660 from the west line. One is 660 from
the east line; one is 1650 from the north and another
is 660 from the south.
Was there an exchange of letters between the parties by
all of those companies which you have mentioned in
regard to the approval of the various 660 locations in
18 and 13 and also Mr. Fasken's location in Section 7?
Yes, sir,
And they all have drilled on 660 locations?

1	A	Yes, sir.
2	Q .	By one of these parties?
3	Λ	This was a letter to Yates Petroleum Corporation by
4		American Trading & Production, American Trading has
5		an interest in wells in the scuth half of 18, north half
6		of 18, and south half of 7. In this letter they waive
?		objection to the 660 location of Coquina.
8	Q ·	Is it Exhibit 5?
9	A	Yes, Exhibit 5.
10	Q	I refer you to what has been marked as Exhibit 6 and
11		ask you what that is.
12	A	This is a letter from another party to the wells in
13		the south half of 18, north half of 18, namely C & K
14		Petroleum, which they wrote a letter to Coquina dated
15		March 22, 1973, in which they waive objection to 660
16		locations in Section 12 and also any 660 location from
17		the east line.
18	Q	Now, these letters and the others with respect to the
19		locations in Section 12, were they written in response
20		to requests by Coquina that you waive objection to a
21	÷	660 location?
22	Ā	Yes, mir. As I have stated it was sort of all get
23		together saying at once; everybody all over will
24		telephone and they requested that we will waive an
25		objection to their unorthodox location.

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responsive to the question. I believe your question was, was there a letter and I don't think he has answered it. THE WITNESS: I'm sorry. There was a letter from --(By Mr. Hinkle) Well, there was a letter from Coquina to these various parties requesting that they waive a 660 location, waive objection to a 660 location in Section 12? No, sir. There was only a phone call requesting a letter that we waive objection to the unorthodox location and we did so waive that. But you realize that no letter originated these letters. If I may make myself clear, the phone call requested that we write these letters. They refer specifically to a waiver of objection to a 660 location in Section 12? That's correct. What is your objection really to the 330 location in 12 by Coquina? I'd like to refer back briefly to Exhibit 2 which shows the distances between wells. I think a very important thing to establish here is that the Fasken well is

drilling on the south half of /. Yates, Fasken, American

MR. KELLAHIN: I don't believe the answer is

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Trading, Suburban Propane, all will have a working interest in that well. Yates in particular has a working interest. The 330 location that is proposed will be on 1,040 feet away from the Fasken well that's presently drilling.

Now, there are a lot of ifs to apply to this thing because we don't know if the Fasken well will be productive and if the 330 location is approved, and if the purpose of the location of the 330 location we have been told is to get into the guts of the channel and get after the production. Then in effect you have a 20-acre spacing on gas wells between those two wells. We already have a 40-acre spacing because of the precedent set by the 1320. Because we're going down to 20 acres it's highly conceivable and very probable that the Fasken well No. 1 either may be of the same quality as the 330 location. We have found out, as Mr. Book pointed out, the permeability is not a function of thickness in this reservoir; it's not particularly any function of thickness. The 1,040 feet, as I say, Fasken well No. 1 could be the same quality or the 330 location could be the same quality as the Fasken well, if those are productive, if both wells then sell at the same rate. May I ask whose going to drain whom? Obviously, the 330 location is going to damage the

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correlative rights of the parties in the south half of 7 and, gentlemen, this is possible. This can happen. It may not happen but we don't eliminate the possibility of its happening by approving it at a 330 location. There is no proration in the field at the moment.

Approval of the 330 location would allow unfair advantage to the 330 location in its competition with the presently drilling well.

Well, by this agreement which you've referred to between the parties, they were in effect agreeing that the wells should not be closer than 1320 feet; is that right?

MR. KELLAHIN: Please, I think that material speculates. The only testimony offered here so far in connection with the so-called agreement is it was something done over the telephone which they have not established the truthfulness of that. They did not agree to deprive this Commission of jurisdiction to entertain an application for any unorthodox location, be it 6 feet out or 600 feet out of the corner.

(By Mr. Hinkle) Let me word it a little differently there. Why should, in your opinion, the well be spaced 1320 or more feet apart?

The main thing is that we have a precedent going for us at the time as to why it should be 1320 as opposed to 1550 or some number. There's no reason to really accurately

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say except that we all admitted the fact that there's a channel going up through there. This channel is highly productive and we felt, as I have been told, if we were in Russia we'd all drill the section line and we can't do that. We had to somehow work out an agreement so that we can protect correlative rights without getting too greedy about it and this is the reason that we were willing to accept a 660 waiver on us if someone would grant it. We were willing to grant a 660 waiver if someone else would give it to us, but to get any closer than 1320 is violating the precedent that was set. No proof has been established that the 660 location would not be a good well. There's been nothing established concerning the relative damage between the wells. There's been nothing established about the drainage effect of one well on the other and both those wells will be producing at the same time, roughly. So I feel that allowing this, to what point do we stop? If the Commission should see fit to grant to approve the application for the 330 location in Section 12, can you foresee what might happen as a result of that?

The immediate thing that would happen, I think, we would

those parties who are not making high-low rates or whore

have a rash of 330 locations in the field either from

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1		those parties that are about to drill additional wells
2		in undeveloped acreage.
, 3	Q	So do you think it would be a good or bad precedent?
4	A	I think it would be a bad precedent.
5	Q	What is the interest of Yates Petroleum in the well
6		being drilled by Fasken in Section 7 and in the well
7		in 18 that's in the northwest quarter of 18?
8	A	As I said, in the south half of 7 it's a walk-in interest
9		To give you an exact figure, I believe you have the
10		interest that American Trading and Suburban Propane
11		have and you can subtract that and then take half of
12		that as what Fasken has.
13	Q	Do you know of your own knowledge whether or not
14		American Trading & Production Corporation, David Fasken,
15		Suburban Propane Gas Corporation and C & K Petroleum
16		Company all have interests that are involved with wells
17		in Sections 7 and 18?
18	Α	Yes, sir.
19	Q	All of them are working interests?
20	A	Right.
21	Q	And, of course, Section 7?
22	A	I can give you the working interest of Yates Petroleum
23		at 58 percent in the north half of 18, I know that
24		figure.
25	Q	Do you have anything else that you would like to say to

I would like to reemphasize that permeability is not

consider the fact of relative effective drainage between

necessarily a function of thickness, that we must

the wells presently being drilled and the proposed

dearnley, meier a associates

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	The means produced and the second sec
	locations, that it's not only a function of how close
	you can get to the good well that Yates has in the
	north half of 18, that by trying to get closer to this
	well you can probably damage correlative rights in the
	south half of 7. At this time, that's all I have to
	say.
Ω	You have no objection to the Commission granting the
	application of the alternative or 660 location; do you?
A	No.
Ω	In your opinion, will the granting of the 660 location
	be in the interest of conservation, preservation of
	waste and tend to protect correlative rights?
A	Yes, sir.
Q	And would, in your opinion, it better protect correlative
	rights than the 330 location?
'A	Yes, sir.
	MR. HINKLE: That's all.
	MR. PORTER: Mr. Kellahin, do you have any questions
	of the witness?
The Property of the Control of the C	MR. KELLAHIN: Yes.
	Q A Q

the Commission?

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1		CROSS-EXAMINATION	
2	2	BY MR. KELLAHIN:	
. 5	Q Q	You've referred to permeability not being a function of	
4		thickness but you will agree that the better wells in	
5		this pool are completed in the channel?	
6	A	Yes, I would agree.	
7	Q	So the channel or thickness is a function of something	
8		bearing on the productivity of the wells?	
9	A	Well, there's one well that's in the channel and only	
10		has 16 feet of pay.	
11	Ω	But I'm talking about generally the good wells are in	
12		the channel; are they not?	
13	Λ	Yes, I don't deny that at all. The good wells are in	
14	the channel.		
15	Q	You've referred to this gentlemen's agreement that was,	
16		as I take it, a telephone conversation among the operators?	
17	A	Yes, sir. There was no other way to do it. Some people	
18		have to apply for application for hearings and it was	
19		confirmed by these letters that were sent out.	
20	Q	Nothing was in writing other than the latters waiving	
21,	•	the present 660 locations; is that correct?	
22	A I think there may have been some letters which I'm not		
23		familiar with well, I am. There's some letters that	
24		said we will waive an objection to your location if you	
25		will waive objection to ours and attached is a Letter	

2	Q	This is the attachment?
3	A	Yes, sir.
4	Q	So logically this is all that the agreement consists
5		of, these letters waiving objections?
6	A	Yes, sir.
7	Q	Now, when was this so-called agreement reached?
8	A	Well, you can see the letter changed hands March 20,
9		1973.
10	Q	'73. And it only affected, so far as you know, Sections
11		13, 18, 19 and 24?
12	Ä	No, sir. You've left out you started a row too low,
13		Sections 12, 7, 13 and 18.
14	Q	12, 7, 13 and 18?
15	A	Yes, sir.
16	Q	And you say it affected those sections?
17	A	Yes, sir.
18	Q	Now Coquina did grant Fasken a waiver on 7?
19	Α	Yes, granted Yates a waiver, sir. And they farmed it
20		out to Fasken and he assumed this.
21	Ω	So Yates got the waiver?
22	A	Yes, sir.
23	Q	I see. Now, there was nothing in your agreement that
24		prohibited a 330 location?
25	Α	There is nothing that prohibits that, yes, sir.

that does this and this is the attachment.

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A	There was no mention of a 330 location. Nobody ever
	dreamed that anybody would try that.
Q	You just never dreamed this would occur; but it did
	occur down on Section 25; didn't it?
A	No, sir.
	MR. HINKLE: What was the point of time there
	between the well in Section 25 and this agreement?
	THE WITNESS: That's exactly the point I want to
	make. The application was October 13, 1972, is when
	we failed to make our whipstock attempt. I believe the
	hearing date was in August of 1972. Now, what had
	transpired between the time of the whipstock attempt
	and then the subsequent wells was an immediate
	understanding of what was going on geologically in there
	We did not have that understanding until sometime after

the whipstock occurred.

There are no whipstocks.

When was it whipstocked then?

east quarter.

(By Mr. Kellahin) Which well are you talking about?

I'm talking about the Yates whipstock in the very north-

Well, as I said, it was -- it failed on October 13,1972.

12-16-72 we shut off the rig and plugged back to the

I'm talking about the whipstock that Yates did.

Is there anything anywhere?

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		PAGE 87
1	i	San Andres.
2	Q	Then you whipstocked?
. 3	A	Whipstocked the hole after December 16,1972, when we
4	,	finally came to our senses.
5	Ω	But did you test the well in '73 in the San Andres?
6	A	Yes, sir. I imagine it was in '73 because this was
7		so close to Christmas.
8	Q	So in 1972 somebody was interested in getting closer
9		than 660 to the line?
10	A	Yes, sir.
11	Q	And in 1972 the well to the south, Fasken's well got
12		closer than 330 feet, 310 feet, in fact?
13	A	Unapproved location.
14	Q	You didn't fill in an application for approval of your
15	<u> </u> 	well, nor did Fasken seek approval?
16	A	The finally bottomed location, no sir. They were dry
17		holes.
18	Q	Nobody asked for a waiver or anything else?
19	A	We did ask for a waiver on our initial whipstock.
20	Q	I'm talking about your bottom-hole.
21	A	Well, no sir. There was no need to do so; it was dry.
22		We would have had to, of course, appear here again and
23		do as we were told by the Commission if we were going
24		to complete it, file a Commission report. We did ask
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for a waiver on our first well which was 500 feet from

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the north and 600 from the east. We did ask for it and did not receive any objections to that proposed location. So a year later you had no conception anybody would do such a thing again? Well, at the time we made the agreement, no, sir, because we all felt that 660 was sufficient to drain that width of the channel and I still believe that would be the case. We've learned a lot since '72. You heard Mr. Beck's testimony to the effect that wells in Section 18 and 19 were probably draining Sections 7 and 12; did you not? Yes, sir. In fact, this is obvious, sir, because when we drilled our well in the north half of 18 and when C & K drilled their well in the south half of 18, drainage had already been established. The pressures were nondivergent pressures.

MR. KELLAHIN: That's all. Thank you, Mr. Yates.

MR. PORTER: Other questions?

MR. HINKLE: Just one or two more.

REDIRECT EXAMINATION

BY MR. HINKLE:

All of the wells you've referred to as whipstocked and so forth in 25, those all resulted in dry holes?

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And the agreement which you have referred to as the
gentlemen's understanding was long after that and after
you had gotten production in the sections to the north;
is that right?

Yes, it was. And particularly in terms of knowledge, it was long after.

These dry holes could have no bearing whatsoever on the present drainage of this channel; do they?

These locations were not approved. The final result,
we may have been penalized or may have been disapproved
completely if the request had been submitted before.

MR. HINKLE: I think that's all.

MR. PORTER: Is this all the questions?

MR. KELLAHIN: 1 think so.

MR. PORTER: The witness may be excused. Is this the conclusion of your testimony, Mr. Hinkle?

MR. HINKLE: That's all of ours.

MR. PURTER: At this time the Commission will ask for statements in the case.

MR. HINKLE: I would like to, due to the fact that I have entered an appearance here for the American Trading & Production Corporation, David Fasken, Suburban Propane Gas Corporation and C & K Petroleum Company, they have all authorized me to protest, enter a protest and make a statement in their behalf in connection with

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As I said initially, we are not this application. opposed to the approval of the alternative 660 location. I think that it's been clearly brought out by the testimony here from Mr. Bates that there was a definite understanding beginning in March, 1973, among all of these working interest owners, that one, there would be no protest to a 660 location and everybody understood that would be 660 locations. After that agreement Yates well which is a good well was located and obtained the waiver to it. Fasken's well was located and he obtained a waiver to it. Nobody objected; the hearings were held and they were approved.

When Coquina's application here was originally filed for a 660 location it was undoubtedly pursuant to that agreement which was entered into by all the parties. Then, as an afterthought, it was amended or supplemented to provide for a 330 location. So I think those in themselves and these letters which have been read and exchanged all corroborate the fact that there was a definite understanding to that effect.

Now, so that the record will show as to the interest of these parties, the American Trading & Production Corporation is the owner of 12% percent working interest in the David Fasken Vandiver No. 7 working interest unit composed of the south half of Section 7, Township

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18 South, Range 26 East, which David Fasken is in the process of drilling a well 660 feet from the south and west lines. American Trading & Production Company is also the owner of an undivided 6.15 percent working interest in the Yates Petroleum Vandiver CN No. 1 unit composed of the north half of Section 18, 18, 26. Upon this is the unit upon which the good well has been completed and that's in a 660 location. Now, Mr. Jim Wilson, the District Landman for American Trading & Production Corporation, in writing me and the Suburban Propane Gas Company, stated "As we discussed the working interest owners involved in the south half of Section 7 and the north half of 18, we were under the impression that we had an agreement with Coquina that the parties would not drill closer than 660 feet --

MR. KELLAHIN: I object to this portion of his statement.

MR. HINKLE: This is not evidence; it's a statement. MR. KELLAHIN: It's part of my objection that it should not be read into the record here without anything to support it. It will influence the minds of the Commission and it is not a proper closing statement.

MR. HINKLE: David Fasken is the owner --MR. KELLAHIN: I object. Wait and get a ruling on my objection, please.

45 GLDG.» P.O. BOX 1092 «PMOL.E 243-6691» ALBUQUERQUE, NEW MEXICO 87103 First national bank bldg. East®albuduerque, new mexico 87103 MR. HINKLE: I'll withdraw that portion of the statement there if it causes trouble.

Now, David Fasken is the operator of the unit which operates the south half of 7, 18, 26, on which the well which has been testified to is being drilled and this is projected test in the Morrow formation. As you know, this well is located at 660 feet and is drilling at approximately 6,000 feet. The Suburban Propane Gas Corporation has a working interest in the south half of Section 7, upon which the Fasken well is being drilled and is a non-operator under an operating agreement with Fasken and Yates.

The C & K Petroleum Company has an interest in the Yates wells in Section 18, both wells. Of course, Mr. Yates has already testified as to the interest of Yates Petroleum Company.

Now, all of these parties except C & K Petroleum

Company have an interest in the south half of Section 7

and the well being drilled 660 feet from the west and

south lines of said section. Of course, this is a

direct offset to the well which applicant proposes to

locate 330 feet. I just make that statement to show

that all of these parties could have substantial interest

involved, working interest involved. For the most

part their interests are involved in the direct offset

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to the Coquina proposed well or diagonal offset in Sections 7 and 18.

I respectfully submit that the application should be denied as to the 330 location and as previously stated there is no objection to the approval as to the 660 location.

MR. PORTER: Mr. Kellahin?

MR. KELLAHIN: If the Commission please. There's been some effort made to cloud the issue of this case by reference to the so-called gentlemen's agreement. The only actual evidence of such agreement consisting of waivers that have been received for the 660 location. Mr. Yates on cross-examination stated very definitely that there is no agreement that nobody would attempt to drill on a 330 foot location. He just expresses surprise that anybody would do such a thing although both Yates and Fasken had in previous years done exactly this, or attempted to.

Now, the main issue here really has nothing to do with any such agreement. In the first place, agreement or no agreement, the jurisdiction lies with the Commission to determine where well locations are, whether they be 660 or 330. We have a right to file an application before this Commission; we've violated no agreement and none has been proved here.

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in the pool here has developed on a 660 foot basis and the number of wells are so arranged that for all practical purposes the 660 foot well is a standard location. We are requesting for approval the 660 location as an alternative in the event there is a penalty impose \$\beta\$ on our 330 foot location which is not economic for us to drill. The witness here showed, I think rather clearly and I believe that the testimony offered by Yates Petroleum Company also shows exactly what our witness showed, that all of the principal production is coming out of this channel sand and in order to get a decent well in this pool you have to get into the channel sand. He shows the Mountain States McCaw well at being in the channel. We have somewhat different interpretation as to where it's producing in the channel and the Yates witness testified that well and the other two wells on the north are undoubtedly draining the acreage in Sections 7 and 12, so we do have a tremendous drainage area in this pool.

It is our contention it is through this channel sand which is draining the sandbar formation to the north which is even present at the site of the Yates Vandiver CN and the C & K Vandiver and the Mountain States McCaw. They're getting their gas there and they're closer to that pipe line which goes directly up

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to these channel sands, to the sands to the north, the sandbeds, which our location lies within. In order to get our fair share of the gas underlying this pool our witness has shown it is necessary for them to get their well located in the channel sands.

Now, the testimony has been that thickness is not a function of permeability and we certainly would agree with that. Permeability comes and goes but the experience here has very clearly shown that if you have a thick sand body you've got a much better chance of getting permeability within that sand body than if you're in a very thin sand body. Certainly, you can have a thin sand body and have high permeability but odds are against it. Your chances are much better if you're in a thick sand body and that's exactly what we're asking for. If you look at the Yates Exhibit ? they actually show our 660 foot location as being much worse a situation than we did. They show it as being approximately 20 feet of sand thickness as compared to some 30 or 40 that we interpreted. But at the same time we want the same strike as the Pennzoil Vandiver Well No. 2 on the south which is a fairly commercial well, a million cubic feet a day,

Now, we submit that we are not draining anything off the set acreage simply because in the effect what

IS BLOK. P.O. BOX 1092 PPHONE 248-6691 PALBUQUERQUE. NEW MEXICO 87103 First aational bank blog. East Falbuquerque. New Mexico 87108 we're doing is lying in the same pipe line as the wells to the south are completed in and capacity wells in Section 7, it is our interpretation, will be completed in. All we want is the same opportunity to get into that sand bed in our open acreage. We request that the application for the 330 foot location be approved.

We do have an addition to the waivers which Mr. Hinkle has furnished the Commission, copies of all of them here. We also have a waiver from Brunson & McKnight, Incorporated, saying they have no objection to any unorthodox location made in the section and the same from the Pennzoil Corporation. The others are the same ones that Mr. Hinkle has furnished the Commission.

MR. HINKLE: Mr. Porter, Mr. Yates has handed me a letter from T. E. Vandiver who is a royalty owner in Section 7. It's addressed to you and he says that one copy was mailed to you and one given to Mr. Yates.

MR. PORTER: Do you want this in the record?

MR. HINKLE: I want it in the record.

MR. PORTER: Mr. Hinkle, the letter will be included in the record. Is there anything else to come before the Commission in this case?

(No response.)

MR. PORTER: The Commission will take the case

under advisement and the hearing is adjourned.

REPORTER'S CERTIFICATE

I, CLAUDIA FAHRENTHOLD, a Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Claudia Johnshold

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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO September 19, 1973

EXAMINER HEARING

IN THE MATTER OF:

The Application of Coquina Oil Corporation for an unorthodox location, Eddy County, New

Case No. 5057

BEFORE: ELVIS A. UTZ, Examiner

TRANSCRIPT OF HEARING

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MR. UTZ: Case 5057.

MR. DERRYBERRY: Application of Coquina Oil Corporation for an unorthodox location, Eddy County, New Mexico.

MR. UTZ: It was requested that this case be set for the full Commission since it apparently is going to be controversial. The hearing date for that has not been set yet, but it will be continued to a full Commission hearing.

Case 4745 will be put at the end of the docket, as well as the nomenclature case.

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STATE OF NEW MEXICO)
) SS
COUNTY OF BERNALILLO)

I, CLAUDIA FAHRENTHOLD, a court reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Court REPORTER

i do hereby certify that the foregoing is a complete important of the proceedings in the huminor haselag of the Res. 50), heard by we on the control of the

New Mexico Oil Conservation Commission

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MR. UTZ: Call Case 5057.

MR. CARR: Case 5057, Application of Coquina Oil Corporation for an unorthodox location, Eddy County, New Mexico.

MR. UTZ: Do we have anyone here representing Coquina?

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin & Fox, appearing for the Applicant. We have filed a request that this case be continued and readvertised to include a location 330 feet from the South and East lines of Section 12, or, in the alternative, 660 feet.

MR. UTZ: South and East?

MR. KELLAHIN: From the South and East, yes, sir.

MR. UTZ: Case 5057 will be continued and readvertised as requested by Counsel for Coquina Oil Corporation.

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STATE OF NEW MEXICO

COUNTY OF BERNALILLO

I, JOHN DE LA ROSA, a Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

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SS

COURT REPORTER

I do Faraby correstly that the foregoing 18



OIL CONSERVATION COMMISSION

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

November 16, 1973

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.

SECRETARY - DIRECTOR

	Re:	CASE NO.	5057
ir. Jason Kellahin Kellahin & Fox		ORDER NO	R-4670
Attorneys at Law Post Office Box 1769		Applicant:	·
Santa Fe, New Mexico		Coquina C	il Corporation

Dear Sir:

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

A. L. PORTER, Jr.
Secretary-Director

Copy of order	also	sent to:	
Hobbs OCC	×		
Artesia OCC	х		
Aztec OCC _			
Other	Mr	. Clarence Hinkle	

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. 5057 Order No. R-4670

APPLICATION OF COQUINA OIL CORPORATION FOR AN UNORTHODOX LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 16, 1973, at Santa Fe, New Mexico, before the Oil Conservation Commission.

NOW, on this 16th day of November, 1973, 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, Coquina Oil Corporation, seeks authority to drill a proposed gas well at an unorthodox location 330 feet from the South line and 330 feet from the East line of Section 12, Township 18 South, Range 25 East, NMPM, West Atoka-Morrow Gas Pool, Eddy County, New Mexico.
- (3) That, in the alternative, the applicant seeks approval of an unorthodox location 660 feet from the South line and 660 feet from the East line of said Section 12.
- (4) That the South half of said Section 12 would be dedicated to the well.
- (5) That the offset operators have objected to the proposed 330-foot location.
- (6) That no offset operator has objected to the proposed 660-
- (7) That the applicant has failed to sustain its burden of proof to show that approval of the 330-foot location is necessary to protect its correlative rights.

- (8) That the application for authority to drill the proposed well at the aforesaid 330-foot location should be denied.
- (9) That approval of the proposed 660-foot unorthodox location will afford the applicant the opportunity to produce its just and equitable share of the gas from the West Atoka-Morrow Gas 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 Coquina Oil Corporation for approval of an unorthodox location 330 feet from the South line and 330 feet from the East line of Section 12, Township 18 South, Range 25 East, NMPM, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, is hereby denied.
- (2) That the applicant, Coquina Oil Corporation, is hereby granted authority to drill a gas well at an unorthodox location 660 feet from the South line and 660 feet from the East line of Section 12, Township 18 South, Range 25 East, NMPM, West Atoka-Morrow Gas Pool, Eddy County, New Mexico.
- (3) That the S/2 of said Section 12 shall be dedicated to the subject well.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

I/R. TRUJILLO, Chairman

ALEK J. ARMIJO, Member

. L. PORTER, Jr., Member & Secretary

SEAL

dr/

KELLAHIN AND FOX ATTORNEYS AT LAW SOO DON GASPAR AVENUE POST OFFICE BOX 1769 SANTA FE, NEW MEXICO 87501

JASON W. KELLAHIN W. THOMAS KELLAHIN

August 24, 1973

TELEPHONE 982-4315 AREA CODE 505

OIL CONSERVATION COME.

Santa Fo

Care 5057.

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

Attention: Mr. R. L. Stamets

Re: Application of Coquina Oil Corporation for an Unorthodox Well Location, Eddy

County, New Mexico

Gentlemen:

Under the above application, Coquina Oil Corporation has applied for an unorthodox well location, 660 feet from the South and 660 feet from the East boundaries of Section 12, Township 18 South, Range 25 East, N.M.P.M., to be dedicated to a unit composed of the S/2 of Section 12.

This case is presently set for hearing on September 5. This is to request that the case be continued and readvertised to provide for a well location 330 feet from the South boundary and 330 feet from the East boundary of Section 12, or in the alternative, 660 feet from the South and 660 feet from the east boundary.

It is requested that if possible, the case be advertised for the September 19th hearing of the Commission.

Your consideration of this request will be appreciated.

Yours very truly,

Jason W. Kellahin

JWK:ks

DOCKET MAILED

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 5, 1973

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

The following cases will be heard before Elvis A. Utz, Examiner, or Richard L. Stamets, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for October, 1973, from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;
 - (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for October, 1973.
- CASE 5055: Application of Merrion & Bayless for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Gallup and Dakota oil and gas production within the wellbore of the Canada Mesa Well No. 3 located in Unit A of Section 14, Township 24 North, Range 6 West, Basin-Dakota and Devils Fork-Gallup Pools, Rio Arriba County, New Mexico.
- CASE 5056: Application of Depco, Inc. for an unorthodox location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a proposed gas well at an unorthodox location 990 feet from the North line and 1980 feet from the East line of Section 24, Township 15 South, Range 27 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico.

CASE 5057:

CASE 5058:

County, New Mexico. Applicant, in the above-styled cause, seeks 330 authority to drill a proposed gas well at an unorthodox location 360 feet from the South and East lines of Section 12, Township 18 South, Range 25 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, the S/2 of Section 12 to be dedicated to the well. In the alternative application of Octione Grace for a dual completion and unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of her Gradonoco Well No. 1 located in Section 2, Township 23 South, Range 26 East, Eddy County, New Mexico, in such a manner as to produce gas from an undesignated Wolfcamp pool and from the South Carlsbad-Morrow Gas Pool through tubing and the tubing-casing annulus, respectively, by a means of a cross-over assembly. Applicant further seeks approval of the unorthodox location of said well in the Wolfcamp formation at a point 2500 feet from the North line and 330 feet from the East line of said Section 2, which location has previously been approved for the Morrow formation.

Application of Coquina Oil Corporation for an unorthodox location, Eddy

CASE 5059: Application of Cities Service 0il Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Devonian formation underlying the S/2 of Section 14, Township 20 South, Range 28 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard gas well location in Unit K of said Section 14. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5060: Application of Continental Oil Company for a unit agreement and for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the North El Mar Unit Area comprising 2361 acres, more or less, of State and Federal lands in Township 26 South, Ranges 32 and 33 East, Lea County, New Mexico. Applicant further seeks authority to expand its El Mar Payne waterflood project within said unit area previously authorized by Order No. R-3540.

CASE 5061: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg formation in its Elliott A-15 Well No. 1 located in Unit P of Section 15, Township 22 South, Range 37 East, Penrose-Skelly Pool, Lea County, New Mexico.

CASE 5062: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formation in its Mitchell Wells Nos. 2 and 6 located in Units P and J, respectively, of Section 5, Township 17 South, Range 32 East, Maljamar Pool, Lea County, New Mexico.

700 Hermosa Drive Artesía, New Mexico 88210

October 12, 1973

Mr. A. L. Porter, Jr.
Secretary-Director
State of New Mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Porter:

This letter is in reference to an application (Case 5057) of Coquina Oil Corporation to drill a proposed gas well at an unorthodox location 330 feet from the South and East lines of Section 12, Township 18 South, Range 25 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico.

I am a substantial royalty owner in the wells producing from the S/2 of Section 18 and N/2 of Section 18, Township 18
South, Range 25 East, both of which are no closer than 660 feet to the West edge of their lease lines. I am also a substantial royalty owner in the lands dedicated to the David Faskens Vandiver 7-#1, presently drilling 660 feet from South and East lines in Section 7, Township 18 South, Range 26 East. As a royalty owner, I object strongly to the proposed 330 feet location in said Section 12. Such a location would seriously damage my correlative rights, particulary if the David Faskens Vandiver 7-#1 proves to be a producer. No other well in the entire field has been drilled so close to another well.

I would not object to the alternative location proposed by Coquina, 660 feet from South and 660 feet from East line, as there are already other wells in the field with similar locations.

Respectively,

T. E. Vandivery

DOCKET: REGULAR HEARING - TUESDAY - OCTOBER 16, 1973

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

CASE 5074: In the matter of the hearing called by the Oil Conservation Commission of New Mexico upon its own motion to consider the application of Plateau, Inc., operator of a petroleum refinery located approximately 1 1/2 miles southeast of Bloomfield, New Mexico, for certification to the Commissioner of Public Lands as a small business enterprise within the state not having an adequate supply of charge stocks and eligible to be granted a preference, pursuant to Chapter 34, New Mexico Laws of 1967, for the purchase of state royalty oil. The Commission will consider the application and such pertinent evidence as may be submitted concerning the capacity of the refinery, the source and grade of all refinery charge stocks currently available to the applicant, the minimum amount and grade of additional refinery charge stocks needed to meet existing refinery commitments or existing refinery capacity, and the efforts made by applicant to purchase refinery charge stocks on the open market.

(Continued and readvertised) CASE 5057:

Application of Coquina Oil Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a proposed gas well at an unorthodox location 330 feet from the South and East lines of Section 12, Township 18 South, Range 25 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, the S/2 of Section 12 to be dedicated to the well. In the alternative, applicant seeks approval of an unorthodox location 660 feet from the South and East lines of said Section 12.

COQUINA OIL CORPORATION

BUILDING OF THE SOUTHWEST MIDLAND, TEXAS 79701

(AC) 915 693-4661

March 20, 1973

Re: Waiver of Objection to Unorthodox Locations

Yates Petroleum Corporation Yates Building Artesia, New Mexico 88210

Attn: Mr. Jack McCall

Gentlemen:

This letter is to advise that we have no objections to your proposed unorthodox location 1650' FNL and 660' FWL Section 18, T-18-S, R-26-E, Eddy County, New Mexico.

Sincerely,

COQUINA OIL CORPORATION, Operator

TPC:1j

cc: C & K Petroleum, Inc. American Trading & Production Corp. Suburban Propane Gas Corporation

> BEFORE THE OIL CONSERVATION COMMISSION Source For New Morres Submine W. Wash Jane Hearing Dalo (1) 1



YATES BUILDING - 207 SOUTH 4TH ST. ARTESIA, NEW MEXICO-83210

March 20, 1973

Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

> Waiver of Objection to Unorthodox Location

Gentlemen:

This letter is to advise that we have no objection to your proposed unorthodox locations 1650' FNL and 660' FEL; and 660' FSL and 660' FEL of Section 12, Township 18 South, Range 25 East, Eddy County, New Mexico.

Yours very truly,

YATES PETROLEUM CORPORATION

cc: C&K Petroleum, Inc.

Suburban Propane Gas Corporation

American Trading & Production Corporation

Protestante Ex 5057

S. P. YATES PRESIDENT MARTIN YATES, III VICE PRESIDENT JOHN A. YATES VICE PRESIDENT B. W. HARPER SEC. . TREAS.

AMERICAN TRADING AND PRODUCTION CORPORATION

WESTERN UNITED LIFE BUILDING POST OFFICE DRAWER 992 MIDLAND, TEXAS 79701

A. C. 915 684-4463

March 21, 1973

Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

> Re: Waiver of Objection to Unorthodox Location

Gentlemen:

This letter is to advise that we have no objection to your proposed unorthodox locations 1650' FNL and 660' FEL; and 660' FEL of Section 12, Township 18 South, Range 25 East, Eddy County, New Mexico.

Yours very truly,

Jim W. Wilson District Landman

JWW:rd

cc: C&K Petroleum, Inc.
Suburban Propane Gas Corporation Yates Petroleum Corporation

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Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

> Re: Waiver of Objection to Unorthodox location

Gentlemen:

This letter is to advise that we have no objection to your proposed unorthodox locations 1650' FNL and 660' FEL; and 660' FSL and 660' FEL of Section 12, Township 18 South, Range 25 East, Eddy County, New Mexico.

Yours very truly,

C & K PETROLEUM, INC.

(Mrs.) Danie Lebow Petroleum Landwoman-Prinsek

/dml

J cc:

cc:

American Trading & Production Corporation

P. O. Drawer 992 Midland, Texas 79701

Attn: Mr. Jim W. Wilson, District Landman

cc: Suburban Propane Gas Corporation 2120 Alamo Nat'l. Bank Bldg.

San Antonio, Texas

Attn: Mr. J. C. Eldred Yates Petroleum Corporation

207 South 4th Street

Artesia, New Mexico - 88210

Attn: Mr. Jack McCaw

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- 1) Man 320 acre circle with contest at beation 660FS and 660FE, Section 12, T-18-2, 12-25-E
- 2) Man 320 acre cuala with center at location 370 FS and 330 FE, Sucron 12
- 3) Calculate area anside of standard 320-sere spacing unit 1:0 5/2 Sec 12 by Planemeter
- " for both cuela.
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- 5) Compare the above difference to the area on the cutude of the Hadard spring unt exclued by cuels contain at the 660-660 location to find penalty.

find radiusy cucle containing 320 acus A= TT 72

> 1 Acre = 43,560 mg fr T = 3.1414 320 Acres = 13,939,200 19 ft

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Calculation of penalty

- 1) Area of circle outside 5/2 Sec 12 for circle with center et 660-660 location = 169.00 acres
- 2) Area of circle outside 5/2 See 12 for encle with center et 330-330 location = 205.66 acrae
- 3) Difference in acres between 1) and 2) = 36.66 acres

4) Ratio of difference 1 to aver of 600-660 civele outside of 51/2 See 12 110 169.00 acres = peralty 36.66 = .21692 = 21. 692% = Penatty

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NOTIFIED MR. HINKLE'S OFFICE OF OCT. 16 th com. hearing, also notified Mr. John Yates & Jason Kellahin

146-3550 S. P. YATES PRESIDENT MARTIN YATES, III VICE PAESIDENT JOHN A. YATES VICE PRESIDENT B. W. HARPER SEC.TREAS.

YATES BUILDING - 207 SOUTH 4TH ST.

ARTESIA, NEW MEXICO -88210

Set July 1973 CONSERVATION COMM Santa Fe

DUCKEL MALLEN

September 18, 1973

Oil Conservation Commission State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87501

ATTENTION: Mr. A. L. Porter

Dear Mr. Porter:

This is to confirm our telephone conversation of today concerning Case 5057, application of Coquina Oil Corporation for an unorthodox location, Eddy County, New Mexico. We wish to thank you for granting a continuance of this case.

We are enclosing a copy of a letter mailed Friday, September 14, 1973 to the attention of Mr. Bill Carr on this hearing.

Please let us know when the hearing will be conducted. Again, thank you for your telephone call of this morning.

Yours truly,

YATES PETROLEUM CORPORATION

SPY/jg Enclosure 9/20/73

I called Mr. Yates and advised him that you were ill and that as soon as a hearing date before the Commission was set for Coquina Mr. Yates would be advised. He said Mr. Hinkle will be representing them.

Ida



PRESIDENT
MARTIN YATES, HI
VICE PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SECTREAS.

S. P. YATES

September 14, 1973

Oil Conservation Commission State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87501

ATTENTION: Mr. Bill Carr

Gentlemen:

Pursuant to our phone conversation of today, we request that the New Mexico Oil Commission hearing of Case 5057, application of Coquina Oil Corporation for an unorthodox location, Eddy County, New Mexico, presently scheduled before an Examiner September 19, 1973, be granted a continuance.

Mr. Jason Kellahin, legal representative for Coquina Oil Corporation, has expressed his concurrence with our request.

Yours truly,

YATES PETROLEUM CORPORATION

Peyton Yates

Engineer

PY/jg

700 Hermosa Drive Artesia, New Mexico 88210

October 12, 1973

Mr. A. L. Porter, Jr.
Secretary-Director
State of New Mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Porter:

This letter is in reference to an application (Case 5057) of Coquina Oil Corporation to drill a proposed gas well at an unorthodox location 330 feet from the South and East lines of Section 12, Township 18 South, Range 25 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico.

I am a substantial royalty owner in the wells producing from the S/2 of Section 18 and N/2 of Section 18, Township 18
South, Range 25 East, both of which are no closer than 660 feet to the West edge of their lease lines. I am also a substantial royalty owner in the lands dedicated to the David Faskens Vandiver 7-#1, presently drilling 660 feet from South and East lines in Section 7, Township 18 South, Range 26 East. As a royalty owner, I object strongly to the proposed 330 feet location in said Section 12. Such a location would seriously damage my correlative rights, particulary if the David Faskens Vandiver 7-#1 proves to be a producer. No other well in the entire field has been drilled so close to another well.

I would not object to the alternative location proposed by Coquina, 660 feet from South and 660 feet from East line, as there are already other wells in the field with similar locations.

Respectively,

m & Vandivaron

T. E. Vandiver

Brunson & McKnight, Inc.

BYRON MCKNIGHT 505 393-7411 P. O. Box 297 HOBBS, NEW MEXICO 88240

NOLAN H. BRUNSON, JR. 505 393-6169

September 17, 1973

Coquina Oll Corporation Building of the Southwest Midland, TX 79701

Attention: Mr. T. P. Clark

Re: Waiver of Objection to

Unorthodox Location

Gentlemen:

This letter is to advise that we have no objection to any proposed unorthodox location to be made by you in the E/2 of Section 12, Township 18 South, Range 25 East.

Very truly yours,

BRUNSON & MCKNTGHT, INC.

Nolan H. Brunson, Jr.

j₩



WESTERN DIVISION OFFICE ● WALL TOWERS WEST-MIDLAND, TEXAS, ● PHONE (915) 682-7316

MAILING ADDRESS: P. O. DRAWER 1828 MIDLAND, TEXAS 79701

March 29, 1973

Coquina Oil Comporation Building of the Southwest Midland, Texas 79701

Attention: Mr. T. P. Clark

Re: WAIVER OF OBJECTION

TO UNORTHODOX LOCATION

Gentlemen:

This letter is to advise that we have no objection to any proposed unorthodox location to be made by you in the E/2 of Section 12, T-18-S, R-25-E.

Very truly yours,

PENNZOIL COMPANY

Division Landman

/ -- TOTOIL Handma

JAD/mlm

SUBURBAN PROPANE

Exploration and Production Division

2120 Alamo National Building San Antonio, Texas 78205



March 26, 1973

Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

> RE: Waiver of Objection to Unorthodox Location

Gentlemen:

We are delivering to you herewith a letter waiving any objection to unorthodox locations 1650' FNL and 660' FEL; and 660' FSL and 660' FEL of Section 12, Township 18 South, Range 25 East, Eddy County, New Mexico. This letter is addressed to all of the lease owners in these two areas that we know about.

We are delivering this letter subject to receiving a letter from Coquina Oil Corporation and other owners waiving any objection to Yates Petroleum Corporation's location 1650' FNL and 660' FWL of Section 18 and waiving any objection to unorthodox locations on the W/2 of Section 7, Township 18 South, Range 26 East, Eddy County, New Mexico.

Veryatruly yours,

V. C. Eldred Land Manager

JCE/ji

cc: C&K Petroleum, Inc.

Yates Petroleum Corporation

American Trading and Production Corporation



March 22, 1973

Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

> Re: Waiver of Objection to Unorthodox location

Gentlemen:

We are delivering to you herewith a letter waiving objection by C & K Petroleum, Inc. to unorthodox locations 1650' FNL and 660' FEI; and 660' FSL and 660' FEL of Section 12, T-18-S, R-25-E, Eddy County, New Mexico. This letter is addressed to all lease owners known to us in this area.

We are delivering this letter to you subject to receiving a letter from Coquina Oil Corporation and other owners waiving any objection to Yates Petroleum Corporation's location 1650' FNL and 660' FWL of Sec. 18 and waiving objection to unorthodox locations on the W/2 of Sec. 7, T-18-S, R-26-E, Eddy County, New Mexico.

Very truly yours,

C & K PETROLEUM, INC.

Dance Lebour

(Mrs.) Danie Lebow Petroleum Landwoman

/dml

cc: American Trading & Production Corporation
P. O. Drawer 992
Midland, Texas 79701

Attn: Mr. Jim W. Wilson, District Landman

cc: Suburban Propane Gas Corporation 2120 Alamo Nat'l. Bank Bldg. San Antonio, Texas Attn: Mr. J. C. Eldred

cc: Yates Petroleum Corporation 207 South 1th Street Artesia, New Mexico 88210 Attn: Mr. Jack McCaw

AMERICAN TRADING AND PRODUCTION CORPORATION

WESTERN UNITED LIFE BUILDING POST OFFICE DRAWER 992 MIDLAND, TEXAS 79701

A. C. 915 684-4462

March 21, 1973

Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

Re: Waiver of Objection to Unorthodox Location

Gentlemen:

We are delivering to you herewith a letter waiving any objection to unorthodox locations 1650' FNL and 660' FEL; and 660' FSL and 660' FEL of Section 12, Township 18 South, Range 25 East, Eddy County, New Mexico. This letter is addressed to all of the lease owners in these two areas that we know about.

We are delivering this letter subject to receiving a letter from Coquina Oil Corporation and other owners waiving any objection to Yates Petroleum Corporation's location 1650' FNL and 660' FWL of Section 18 and waiving any objection to unorthodox locations on the W 1/2 of Section 7, Township 18 South, Range 26 East, Eddy County, New Mexico.

Yours very truly,

Jim W. Wilson District Landman

JWW:rd

cc: C&K Petroleum, Inc.
Suburban Propane Gas Corporation
Yates Petroleum Corporation



YATES BUILDING - 207 SOUTH 4TH ST. ARTESIA, NEW MEXICO - 88210

March 20, 1973

Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

Re: Waiver of Objection to Unorthodox Location

Gentlemen:

This letter is to advise that we have no objection to your proposed unorthodox locations 1650' FNL and 660' FEL; and 660' FSL and 660' FEL of Section 12, Township 18 South, Range 25 East, Eddy County, New Mexico.

Yours very truly,

YATES PETROLEUM CORPORATION

cc: C&K Petroleum, Inc.

Suburban Propane Gas Corporation

American Trading & Production Corporation

S. P. YATES
PRESIDENT
MARTIN YATES, III
VICE PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC-TREAS.

MERICAN TRADING AND PRODUCTION CORPORATION

WESTERN UNITED LIFE BUILDING POST OFFICE DRAWER 992 MIDLAND, TEXAS 79701

A. C. 915 684-4463

March 21, 1973

Coquina Oil Corporation 200 Building of the Southwest Midland, Texas 79701

Re: Waiver of Objection to Unorthodox Location

Gentlemen:

This letter is to advise that we have no objection to your proposed unorthodox locations 1650' FNL and 660' FEL; and 660' FSL and 660' FEL of Section 12, Township 18 South, Range 25 East, Eddy County, New Mexico.

Yours very truly,

W. Wilson District Landman

JWW:rd

cc: C&K Petroleum, Inc.
Suburban Propane Gas Corporation

Yates Petroleum Corporation

LAW OFFICES

LOSEE & CARSON, P.A.

A, J, LOSEE JOEL M. CARSON 300 AMERICAN HOME BUILDING P. O. DRAWER 239 ARTESIA, NEW MEXICO BBRIO AREA CODE 505 746-3508

746-3508

10 August 1973

AUG 1 3 1973

OIL CONSERVATION COMM
Santa Fo

Case 5057

Mr. A. L. Porter, Jr. Secretary-Director Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Dear Mr. Porter:

Enclosed herewith, you will please find triplicate copies of the Application of Coquina Oil Corporation for an unorthodox gas well location, Eddy County, New Mexico.

Please set this matter for hearing before an examiner at the first regular schoduled hearing in September, 1973.

Very truly yours,

LOSEE & CARSON, P. A.

A. J. Losce

AJL/sff Enclosures

cc: Mr. Tracy Clark

Mr. Robert E. Boling

DOCKET MAILED

DOCKET MAILEU

Date 8-24-73



BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF COQUINA OIL CORPORATION FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO

Case No. 5057

APPLICATION

COMES COQUINA OIL CORPORATION, by its attorneys, and in support hereof, respectfully states:

- 1. That Applicant seeks approval of an unorthodox gas well location for a proposed well to be located 660 feet from the South and East lines of Section 12, Township 18 South, Range 25 East, N.M.P.M., West Atoka-Morrow gas pool, Eddy County, New Mexico.
- 2. The S/2 of said Section 12 is to be dedicated to the well.
- 3. That a well drilled at the proposed unorthodox location can efficiently and economically drain the S/2 of said Section 12.
- 4. That approval of the Application will afford Applicant the opportunity to produce its just and equitable share of gas in the West Atoka-Morrow gas pool.

WHEREFORE, Applicant prays:

- A. That this Application be set for hearing before an examiner and that notice of said hearing be given as required by law.
- B. That upon hearing, the Commission enter its order granting to Applicant approval of its unorthodox gas

well location at a point 660 feet from the South and East lines of Section 12, Township 18 South, Range 25 East, N.M.P.M., Eddy County, New Mexico.

C. And for such other relief as may be just in the premises.

COQUINA OIL CORPORATION

By: A. J. Losee for

LOSEE & CARSON, P.A. P. O. Drawer 239 Artesia, New Mexico 88210

Attorneys for Applicant

DRAFT jr

(pm)

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. 5057

Order No. R-4610

APPLICATION OF COQUINA OIL CORPORATION FOR AN UNORTHODOX LOCATION, EDDY COUNTY, NEW MEXICO.

Du

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 16 , 19 73 at Santa Fe, New Mexico, before **Branking** the Oil Conservation Commission

NOW, on this day of November, 1973, 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, Coquina Oil Corporation, seeks authority to drill a proposed gas well at an unorthodox location 330 feet from the South South, Range 25 East, NMPM, West Atoka-Morrow Gas Pool, Eddy County, New Mexico.
 - (3) That, in the alternative, the applicant seeks approval of Line and 660 feet from the an unorthodox location 660 feet from the South and East lines of said Section 12.

R.J.

8) That the application for much approved write as the approved write as the application should be levil.

12-CASE NO. 5057 Order No. R-

- (4) That the South half of said Section 12 ie to be dedicated to the well.
- (5) That the offset operators have objected to the proposed 330-foot location.
- (6) That no offset operator has objected to the proposed 660-foot location.

That approval of the proposed 660-foot unorthodox location will afford the applicant the opportunity to produce its just and equitable share of the gas from the West Atoka-Morrow Gas 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 rells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(2) That the applicant, Coquina Oil Corporation, is hereby given authority to drill a gas well at an unorthodox location 660 feet from the South and East lines of Section 12, Township 18 South, Range 25 East, NMPM, West Atoka Morrow Gas Pool, Eddy County, New Mexico.

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

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

1) That the application of Coming Cil Carperate for apprehal of our under thosox location of feet from the South line and 330 ket from the East line of South line and 330 ket from the East line of South normalis 18 South, Pauge 25 East, NM PM, West ataka-Marrow Gas Pool, Eddy County, New Mexico, to hereby County, New Mexico, to hereby Levied.

(3) That the 552 of 50 id Section 12

3 hall be dedicated to the subject

Mat the applicant has have to 505 tain its burden of professory that appropriate of the 320-took location is necessary to protect its correlative finite.

Corporation for an Unitalian der Location, Eddy County, How Mexico.

busine oco, Oct. 18, 1973

FIMPS:

- (1) Holes applient, Eddy County, Then Mexico
- (3) The in the alternative the applicant seeks appricant of an unother location 660 feet from the fouth and & and lines of South Section 12.
- (4) That the louth half of said Section to is to be be declicated to the well.
- (5) That the offset operators have objected to the proposed 330-gost location.
- (6) That no offset operator has objected to the presposed 660-foot basation.

- (9) That the applicant how failed to freetain the Country of proof to show that approved of the 336 foot have in the singles in protect its pay dative sulghts.
 - (8) It of special of the produce the police and the Copy stand to produce the police and controlle stance of the Gas from the west Aloka Mornow Car took will present the economic Cook wells, airoid the augmentation of risk circing from the drilling of an expessive number of wells, and well cornele otherwise greens waste and protect sometime tive tights.

IT IS THEREFORE GRDERED:

- (1) That the applicant, Copins Oil Corporation, is hereby given approval to drill a gas well at an unorthodor location 660 feet from the Louin and East lines of Settin 12, Township 18 South, range 25 East, MAPM, weel notation mornow can root, Eddy County, New Mexico.
- (2) Jurisdulion.

DOVE