STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

2 March 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of Metex Pipe and Supply for an unorthodox oil well location Lea County, New Mexico. CASE 9322

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

For the Applicant:

MR. STOGNER: Call next Case Number 9322, which is the application of Metex Pipe and Supply for an unorthodox oil well location in Lea County, New Mexico.

Upon the -- on the applicant's request, this case will be continued to the Examiner's Hearing scheduled for March 16th, 1988.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9312. heard by me on 2 March 1988.

, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

16 March 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of Metex Pipe and Supply for an unorthodox oil well location Lea County, New Mexico. CASE 9322

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

For the Applicant:

James E. Haas
Attorney at Law
LOSEE & CARSON P.A.
P. O. Drawer 239
Artesia, New Mexico 88211-0239

I N D E X

E X H I B I T S

MR. CATANACH: Call next Case 9322. Application of Metex Pipe and Supply for an unorthodox oil well location, Lea County, New Mexico.

Are there appearances in this case?

MR. HAAS: Yes. I"m Jim Haas, Losee & Carson, P.A., for Metex Pipe and Supply, Applicant, and we would present one witness today.

MR. CATANACH: Are there any other appearances?

Will the witness please stand to be sworn in?

(Witness sworn.)

MR. CATANACH: You may proceed, Mr. Haas.

MR. HAAS: Okay.

N. RAYMOND LAMB,

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

DIRECT EXAMINATION

BY MR. HAAS:

Q Would you state your name, please.

A N. Raymond Lamb, Artesia, New Mexico.

Q Mr. Lamb, have you appeared before this Commission before?

A Yes, I have.

Q And have your qualifications been accepted as an expert witness?

A Yes.

MR. HAAS: I tender Mr. Lamb as an expert witness.

MR. CATANACH: He is so qualified.

Q Mr. Lamb, would you explain the purpose of the exhibits you're going to present here to the Commission today?

A Well, there are four exhibits. The first one is an overall picture of the Wilson Pool and the yellow area is the area in which we have control and propose to drill, and I use this exhibit to give the overall picture of what the Wilson Pool is all about.

It is a compound, complex reservoir. The northeast end is basically Yates Sand production with a few wells reaching into the Seven Rivers Reef.

The middle lobe, which is obvious, is basically Seven Rivers Reef production, the Yates at this point is stratigraphic sands of -- filled with gas.

And the south end is the true front reef of the Seven Rivers and is the more prolific of the area. A little gas is found in the Yates Sand.

And the area that we are working on is a side area to the middle lobe and we feel that it is a separate structure and that's the purpose of the Exhibit Number One, is to give a general idea as to where our project is.

Q Okay, Mr. Lamb, will you explain Exhibit Number Two to the Commission, please?

A Exhibit Number Two is an Isopach map concentrating on the area that we propose to drill on.

The well that we propose to drill is 100 feet from the north line of Unit B and 200 feet east -- west of the east line, so it is an unorthodox location and it is with 100 feet of the property to the north, which we are now obtaining a waiver. As a matter of fact, we should be the owner of that property within a few days. We got involved with a bankruptcy of a bank and if you've ever dealt with the FDIC, you know what I'm talking about.

But we feel that a location at this point is the most favorable location. I will tell you that the

second -- No. 2 Well, which is the old, original, Stanoline 2-P Well, was drilled in the late forties and was plugged and abandoned somewhere around 1950 and produced 93,000 barrels of oil, at which time it went to water. And we want to move up-dip to secure additional oil and any recharge oil that might have been relocated in the area of the drainage of the 2-P.

This is an Isopach map giving the thickness of the Interval from the base of the salt to the top of the porosity of the Seven Rivers, and this has been a key that I've used for a number of years to determine separate structures. As a matter of fact, the south lobe was identified by this same type of Isopach map when I went to work for Wilsons in 1946.

So we did locate the lower lobe on this same type of information, which is the Isopach map, and we find that we have an Isopach and, obviously, a closure in this immediate area that covers the area that's identified by contour of -430 feet. Not minus. I'm sorry, I mentioned minus but it's not. It's an interval of 430 feet.

You'll notice that the thickness increases both to the east and to the west and, obviously, to the south, and ties in with the middle lobe of the Wilson basic pool.

Q Okay. Mr. Lamb, would you explain

Exhibit Number Three, please?

A Exhibit Number Three is a cross section through the State 2-P Well, the proposed location, and we also identify the section line between Section 13 and Section 24.

And it gives my interpretation as to the location of the 2 Well -- 2-P Well -- and the area in which it drained its 93,000 barrels of oil.

At this point I need to go into more detail about the Seven Rivers Reef production.

Our original idea was that we had a tremendous interval of reef porosity and that we would drill the upper part of it and deplete the entire section that contained oil.

The practice was perfect but the theory was wrong. Instead of being a massive thickness, we have layers of porosity separated by impervious zones and as we produce, in this case the 2-P drained only oil from the top zone, and only oil down dip from that location.

Your energy source is from the flank and it is a tremendous force supported by a water drive from the Seven Rivers formation. We produced 8-million barrels of oil and 24-million barrels of water from the Wilson Pool and never dropped the bottom hole pressure one pound.

So the possibility of drawing oil down

dip is impractical and impossible because your energy drive is from the flank of each one of the zones and the movement is then up and as you take the oil out, it's replaced with water from the lower level.

So it is our opinion that we did not drain any oil at a structural position higher than the 2-P Well in this particular case.

Now, further on the Sever Rivers reservoir, the rock is a vuggy dolomite with extremely high porosity. Viscosity would be almost unlimited, in that the No. 1 Well, which -- on this P Lease -- when it was drilled with cable tools, they had 1200 feet of 10-3/4 inch casing in the hole when they drilled into this first zone that's identified here, and it blew out and the calculated flow was 10,000 barrels a day, and I believe it, because I walked up on the rig floor, cable tool rig, and put my finger in the stream of oil, which was a solid 10-inch stream, and it flowed for three days.

So we're dealing with a tremendous porosity and permeability and water drive.

The other key to what we're doing is that in this particular case in the reef, this is a water wet reservoir. Most reservoirs are oil wet, but in this particular case that I know for sure, that this is a water wet reservoir, and the oil that is produced is not in contact with

the pore space walls. They are free droplets and they are in migration and thus instead of having 18 to 20 percent of recovery of the space of porosity, and the oil that's available, we recovered around 75 percent of the oil in place, which removes any need for waterflooding or CO2, or what have you, and I'm talking about 40-acre tracts not only in the Wilson Pool but in the Lynch Pool, that have produced 400,000 barrels of oil.

Now, my reason for knowing that these are separate porous zones, in the drilling of our No. 29 Well, the top pay zone was not up to normal standards. So we drilled to a second zone and completed the well with the two zones open.

After a producing period of No. 29, the well went to water and we separated the two zones by a packer with perforations below the packer, which isolated the second zone, and we produced water-free oil from it.

So there is no vertical communication between these zones. They are separated by the impervious zone that is shown here.

So at this particular time we started a deepening program to the second zone, isolating the second zone by producing under a packer.

And in the south lobe in Well No. 23, we found three additional zones other than the original pay

zones, and we've produced those, each individually and separately, until they had gone to water, and we went back to the top zone, which was original pay, and it had recharged to the point that we produced 40,000 barrels of water-free oil from the top zone.

And the only way that that could have been available is for the oil is in motion, is in movement, and recharges the zones as they go along.

Now those conclusions are a little different than what you find in an ordinary pool, and I have worked all of southeast New Mexico and a lot of west Texas, and I've never found or studied a field in detail like I have this one.

I started to work on this project in 1946, so it has given me some time to find out this information.

Now, we feel that a well drilled at the location we have identified here at a -75 feet subsea will not draw any water down dip -- I mean any oil down dip; that the water replacement will be from the flank; and that we will not be taking any oil from the area up structure. Actually, as I said in the beginning, and with the bankruptcy and the FDIC having it cleared, we should own tht in a few days.

So we have no qualms about being drained

by a well at this proposed location.

We feel that the oil that we produce on the property to the north will not be drained by the other well, will not draw any oil down dip.

Also, in this No. 2 Well, the well we propose to drill offsetting No. 2, we feel that we have at least two additional zones that have not been explored in this immediate area or on this particular structure.

I would stop here and ask if you had any questions, since this is the key and the meat.

MR. CATANACH: Does that conclude your testimony?

A No, I have one other exhibit.

MR. CATANACH: Geological or --

A Yes.

MR. CATANACH: Why don't you go ahead with that and then we'll --

A Okay.

Q Explain Exhibit Number Four.

A Exhibit Number Four is a contour map based on the top of the porosity of the Seven Rivers, so we're down with the actual reservoir top, and the A-A' that you see, is the location of the cross section which I presented under Item Number Three.

The two bell-shaped areas at the State 1-

P and at the State 2-P, the No. 1 producing 66,000 barrels of oil and the No. 2, 93,000 barrels of oil, is my interpretation of the drainage area from each of these wells drilled by Stanoline a number of years ago, and were depleted to the point of making 100 percent water.

So this sets out again my opinion that neither the 1 or 2-P, nor the location that we are proposing, will drain oil across from the property to the north or down dip from the structure.

Q That it?

A I think.

CROSS EXAMINATION

BY MR. CATANACH:

Q Okay, the FDIC currently owns that property to the north there?

A Well, it's more complicated than that. I briefly will tell you that Marks and Garner acquired the property and they obtained a loan from a bank that went into bankruptcy and that note was supposed to have been transferred to a new lender but there's a little problem that the FDIC did not make a clear distinction that the note was transferred.

So they have all agreed that they will make that transfer and when they do, then we will purchase

that property.

Q Okay, what property are you referring to exactly?

A That would be Units O and P of Section 13. It would be the south half of the southeast.

Q Is there a well in tht area?

A There is a well that has been a disposal well in the northwest corner of that property and Marks and Garner are considering attempting to produce it again, and we have agreed with them as to how we shall share the allowable if they do get production on it.

Q Are you referring to --

A It's No. 8. It has -- it will be in Unit O --

Q Okay.

A -- of Section 13, and it's the one that's produced 295,000 barrels of oil and was converted to a salt water disposal well, and Marks and Gqrner want to make an attempt to see if they can produce oil out of it.

Q Out of the same (unclear)?

A Uh-huh.

Q Where is it disposing water right now? What zone?

A Where are they putting their water?

Q Yes, sir.

A They're putting their -- all their water in a well up to the north, a little west. It will No. 9, is where they're putting all their water now. There've been any number of water disposal wells down there.

Q Right. Okay, the No. 8 is still producing.

A No, it -- they are attempting to put it on production, but we don't know whether -- they don't know and I don't know whether it will make any -- I don't know what the affect of the water disposal is going to be on the reservoir over the time that it's been there.

I might say one other problem which we have, which is for your information, we are required under our farmout agreement from BTA to commence this well by April the lst.

Q Did the No. 2 Well, the 2-P, what -- what zone did that produce from, just that upper -- upper (unclear) zone?

A Upper -- upper porous zone that -- they -- they never drilled into the lower zones, you see. These wells, one of them was abandoned in 1950 and the other one in '52.

So we're working on the theory that if there is migration, those zones will be recharged completely. We not only will get the amount of oil we produce from

the location -- I mean from the area between the two wells, but from the area that No. 2 drains its oil from.

Q Okay, it looks like the No. 2 Well drained a substantially large area, according to your bell curves here. Do you think your well will drain that large an area?

A Well, I think that it probably will drain a larger area because we'll be higher on structure. I think the area will be larger. There's no reason to believe that the water/oil contact will be any different than it was originally, approximately 195 feet.

Q So it may drain more than 40 acres, is what you're saying.

A Well, I'm -- I have some questions and the reason I have this question, our Well No. 32, due south of here, had 18 inches of pay and produced 101,000 barrels of oil, so you don't know about the porosity and permeability or the drainage area, either.

It's a very prolific reservoir.

Q What's the landowner or the lease ownership to the south there on the flank?

A BTA owns that and we have a farmout on the Unit's A and B of Section 24.

Q So they own G and H?

A They own all the rest of the half sec-

tion, and we have a waiver from them.

Q Okay, you have notified them?

A Yes. Yes.

Q I'm still a little bit confused about the ownership to the north there. You say it's still --

A Well, I think Mr. Haas can explain it --

MR. HAAS: Marks and Garner are the owners --

Q -- better than I can. He --

MR. HAAS: -- of the operating rights of record. They have a mortgage that was held by MONCOR Bank of Hobbs, who is no longer a viable entity. It was transferred to the FDIC when the bank went into receivership. The bank, the FDIC later sold a package of assets, including this mortgage, to United Bank of Lea County; however, in their transfer there was some question, a little bit of confusion as to whether or not they actually conveyed the note, promissory note, that represented the debt. So the bank is firmly convinced and it has given us assurances that they have the power to release the mortgage and the FDIC has agreed to provide further documentation to show that the note actually was transferred to United Bank of Lea County.

So it's really more of a cleaning up the record title. The title is actually in Marks and Garner

subject to this mortgage which the bank has agreed to release as to 80 acres.

Q So if Marks and Garner gets it all cleaned up, do you intend to get that farmout from them?

A No, we're buying it. We're buying all the rights under that 40, down to 5200 feet.

Q Okay, if Marks and Garner --

A And we have a contract to that effect and the only thing holding us is this MONCOR thing.

Q Okay. Marks and Garner is aware of your proposed location? You have notified them of that?

A Yes, and they will issue us, to help with your problem, a waiver or whatever it needs. We had in mind that we would bring a waiver from them and, of course, then we'll -- we'll own the rest of it.

Q Okay, that would be helpful if you could provide that.

A Well, we have no problem with that.

Q Okay.

A And, actually, this monetary situation was the cause of the not hearing the case on March the 2nd.

We were ready but California wasn't ready.

Q Okay, you're going to dedicate Unit B to that well, aren't you?

A Yes. Right.

Q Is there a chance that the bottom hole location could get a lot closer to that -- to that section line there?

A Well, we intend to drill a straight hole.

Q Yeah.

A That's part of your rules, that we drill a straight hole there.

Q Do the wells in this area have a tendency to drift?

A Most of the wells that I drill, I drill with cable tools, and we had no problems with it. We did drill one well, which is Amerada 3, with a rotary, and we had no problems. The only problem we had, nitrogen gas blew out in the salt section.

I have one other thing that -- that I could show you that might help you visualize what we're saying, and I cannot make additional copies. It's just something that I had in the field that I worked with, and I will tell you that it's probably 20 years old. I will bring it to you.

It is a log that I kept on No. 23, which is in the center of the south row, one of the key wells, and this is the way I handled my business. I'll get the right side up. This is the original pay zone in the well. Then

we started the deepening process on 2-foot samples, 1-foot drilling (unclear), and you realize this is 10 feet, which is instead of usually being 100, this is 10 feet, here was the second pay zone, right here, that we're talking about. This is the one that -- this zone is the one that the 2-P produced from. This is the one that we believe is there and we think these are here and possibly maybe this far down.

But this is just something that I had and I did this on all the wells that I drilled to help me visualize what I was into.

But this, you realize, that this -- as the water evaporates off of the samples, the oil then stains the rock. That's where it gets its (unclear), and that's been 20 years so you can imagine evaporation and so forth and so on.

Q Okay. Do you have any idea about how much additional oil you might recover from this --

A We're anticipating that a well at this location will get about 125,000 barrels of oil.

Q And you testified that you believe that it would all come from the south part of the quarter -- the quarter quarter section.

A Yes.

Q And not drain the north end of the --

A Well, I'm firmly convinces of that in

view of the fact that we're trying to buy the acreage to the north, and would have to share with BTA on anything that crossed the line and I prefer not to do that and I don't -- I'm positive it won't happen.

Q Okay.

MR. CATANACH: I think that's all I have of the witness.

MR. HAAS: Mr. Lamb, were these exhibits prepared by you or under your supervision?

A They were prepared by me.

MR. HAAS: Nothing further. We ask the introduction of Exhibits One through Four.

MR. CATANACH: Exhibits One through Four will be admitted as evidence.

Is there anything further in Case 9322?

If not, it will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9322, heard by me on March 16, 1988.

David R. Catanach, Examiner
Oil Conservation Division

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date MARCH 16, 1988 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Michael Cuba	Amoco	Denver
Richard Bottjer	Amoco	Denver
Chad Dickerson	YPC	Artesia
Leslie Beatty	YPC	"
Bill Muellen	Phillips Petr	Odessa
Richard D Campbell	ARCO	Midland, Tx
W. S. McCoy	Santa Fe Exploration	Santa Fe
Bill Hawkins	Amoco	Denver, CO
Kent Lund	Amoco	Denver, Co
Bill Baker	Bryan	Santa Fe
Paul W. Burchell	El Paso Natural Gas Co.	El Paso, TX
James Bruce	Hinkle Law Firm	SF
Charles Gray	Sun E & P	Dallas
Michael Morgenthaler	Sun E&P	Midland, TX
Patrick Dougherty	Sun E&P	Dallas TX
Bob Frank	Union Texas Pet	Farmington
Evelyn Gilbert		Santa Fe

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date MARCH 16, 1988 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Scott L. Padilla	Padilla & Snyder	SF
M.P. GADDIS, JR	TERRA RESOURCES	MIDLAND, TX
KEVIN PFISTER	" "	" "
ROD THOMPSON	" "	" "
JIM GRADY	MARSHALL Pipe & Supply	Denver, Co
W.T. Kellahin	Kellahin Kellahin Aubrey	Santa Fe
JOHN CURRIE	PHILLIPS PETROLEUM	ODESSA, TX
RICK HALLE	" "	"
RICHARD CORRAN	DUGAN PRODUCTION Corp	FARMINGTON, NM
JOHN ROE	" " "	" "
[illegible] Haw	Mueller Pipe Supply	Hobbs
Rayland		
C.C. KENNEDY	IND	ALBQ, N.M.