STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

12 September 1984

COMMISSION HEARING

IN THE MATTER OF:

Application of Caulkins Oil Company for exemption from the New Mexico Natural Gas Pricing Act. (NMPA) — CASE 8267

BEFORE: Commissioner Joe Ramey, Chairman
Commissioner Baca

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division:
Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:
Karen Aubrey
W. Thomas Kellahin
Attorneys at Law
KELLAHIN & KELLAHIN
P. O. Box 2265
Santa Fe, New Mexico 87501

A P P E A R A N C E S

For Public Service Company:
Richard L. Alvidrez
Attorney at Law
KELEHER & McLEOD
P. O. Drawer AA
Albuquerque, New Mexico 87103

For Public Service Comm:
Charles F. Noble
Staff Counsel
N. M. Public Service Comm.
Bataan Memorial Bldg.
Santa Fe, New Mexico 87503

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MR. RAMEY: We will call Case 8267.

MR. TAYLOR: This is the application of Caulkins Oil Company for exemption from the New Mexico Natural Gas Pricing Act.

MS. AUBREY: May it please the Commission, I'm Karen Aubrey with the firm of Kellahin and Kellahin, appearing with Tom Kellahin for the applicant.

I have one witness to be sworn.

(Witness sworn.)

May it please the Commission, I have a brief opening statement.

Caulkins Oil Company has filed applications for exemption from the New Mexico Pricing Act for five infill wells which are docketed under this case number.

All these wells about which testimony will be presented today were completed in 1983 and applications for administrative approval were timely filed with the Commission.

Caulkins is proceeding with these applications at hearing today solely as a protective measure. It is Caulkins position that the blanket infill order, Order R-1670-T, has justified the drilling of these

wells and that no further justification is required by statute.

In addition to the five applications for infill wells, there are three applications for replacement wells, about which we will put on testimony today.

For the convenience of the Commission and counsel, we have two exhibits. The first one, which is Exhibit One-A, that exhibits lists those cases, or those wells on which testimony was presented on March 7th and March 8th, 1984.

Exhibit One-B is a listing of those wells about which we propose to present testimony today.

In addition, we would ask to dismiss the application on one well, the Breech F 1E. That well sells -- gas from that well is sold in interstate commerce and not subject to the New Mexico Natural Gas Pricing Act.

MR. NOBLE: I'd like some verification, I would like to find out if the Caulkins wells on Exhibit Number One-A are being considered today or pending for approval. They're under Case 8106, I believe, which was not noticed for today.

MS. AUBREY: Mr. Chairman, Exhibit One-A is provided solely for the convenience of the Commission, so that the 38 wells for Caulkins can be kept

separate between the two cases.

As I understand it, the case under -- wells under Case 8106 have been taken under advisement by the Commission. There was no motion to reopen those cases made by the Public Service Commission.

MR. NOBLE: I think there was a motion to reopen which was granted by the Commission in Case 8106.

MS. AUBREY: Mr. Chairman, I don't have the case file with me today.

MR. NOBLE: The Motion to Reopen by the Public Service Commission was received by the Oil Conservation Division on April 25th, 1984.

There was also an Opposition to that Motion to Reopen filed by Caulkins in that case.

MS. AUBREY: In that event, Mr. Ramey, we will stand on the record in Case 8106. Mr. Verquer was our witness then, he is our witness today.

We can tender him for cross examination now in Case 8106 or we can incorporate cross on that case in the cross examination on the case we're presenting here today.

MR. NOBLE: Okay, that case was not noticed for today, that's my problem.

MR. RAMEY: Well, we evidently -- we evidently (inaudible). Case 8106 will have to be re-advertised at some future Commission docket.

So that's the wells -- the wells in your Exhibit One-A are those covered by Case 8106.

MS. AUBREY: That's correct, Mr. Commissioner.

MR. RAMEY: And 8267 will be those -- these five infill wells and three replacement wells.

MS. AUBREY: That's correct, sir.

CHARLES VERQUER,

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

DIRECT EXAMINATION

BY MS. AUBREY:

Q Would you state your name, please?

A My name is Charler Verquer.

Q Where are you employed, Mr. Verquer?

A I'm employed by Caulkins Oil Company in Farmington, New Mexico.

Q What's your position with Caulkins Oil Company?

A I'm Superintendent.

Q How long have you been with Caulkins Oil Company?

A Since 1954.

Q Mr. Verquer, have you previously testified before the Commission and had your qualifications made a matter of record?

A I have.

Q Have you made a review and study of the infill and replacement wells that are the subject matter of Caulkins' application today and are you familiar with those?

A I am.

Q Are you also familiar with the certifications that were filed with the applications for exemption from New Mexico Pricing Act by Caulkins?

A I am familiar with them. They were filed from Denver.

Q Who were those signed by?

A Arnold -- Mr. Arnold Raedher. R-A-E-D-H-E-R.

MS. AUBREY: Mr. Commissioner, I tender Mr. Verquer as an expert practical oilman and operator.

MR. RAMEY: He is so qualified, Ms. Aubrey.

MS. AUBREY: Thank you.

Q Verquer, I would like to refer you to the applications that are on for hearing today. I believe that the way they're marked, the first five applications are all wells which are completed in the Basin Dakota, is that correct?

A That is correct.

Q And the next five will be the same well numbers but completions in the Blanco Mesaverde.

A That is correct.

Q Beginning with what we've marked as Exhibit One, I'd like you to look at that and explain to the Commission what that document is and what the attachments to that document are.

A The first page is the application to drill filed with the BLM in Farmington.

The second page is the well completion log and the third page is an attachment to the second page, which is a cementing record.

The next page is the C-104, Authorization to Transport.

The next page would be the Gas Company of New Mexico's Notice of Gas Connection to that zone.

The next page is the C-102 plat that is filed with the Appliction to Drill, showing the well location of the new well. It also has the old well in that proration unit marked on that form.

The next page is a tabulation of the production of the old well and the new well, the old well and the infill well, if you will, from the time that the infill well was turned on the line through May of '84. I completed this set of exhibits early and I happened to miss the one in June or July so I didn't pick up the next two

months.

And the last page is the 9-section map identifying the proration unit with the dark outline in the center of the page and a circle around the old -- which identifies the old well, and the arrow pointing to the infill well in that 320-acre proration unit.

Q Mr. Verquer, let me refer you to the next to last page of Exhibit One. Did you prepare that production tabulation?

A I did.

Q Will you look at that, sir, and explain to the Commission whether or not that production tabulation indicates that the original well in the unit has not had its ability to produce into the pipeline restricted?

A It did not have its ability to produce into the pipeline restricted in any manner. In fact, the infill well has 150 days on and the original well, 176 for that period.

Q And those wells would be the 341 and the 341M Dakota.

A That is correct.

Q Mr. Verquer, from your examination of the Caulkins records and your knowledge of the drilling of these wells, can you testify whether or not these wells were drilled for reasons other than avoiding the Pricing Act?

A They were.

Q And what was that reason?

A To develop new reserves.

Q Mr. Verquer, were you involved in the decision to drill these wells?

A Yes, ma'am, I was.

Q Will you describe that, your involvement in that decision?

A We set this up, in fact we have a "head of state" meeting, if you will, in the next week or two setting up our 1985 program, and our general procedure is that the treasurer of the company comes down and tells -- with an idea of how much money we will spend in this next year development program, and then I make my recommendations of how many wells and where they should be drilled by picking out -- we're getting our acreage pretty well developed but we just develop it in an orderly manner, and drill so many wells a year, and that's the way we set that up.

Q Mr. Verquer, would that be applicable to all of the wells which we're considering today, all the infill wells?

A Yes, every well.

Q As we discussed earlier, Mr. Verquer, Caulkins has certified that it has done nothing to reduce the ability of the original well on the unit to produce into the pipeline. Do you agree with that certification?

A That is correct, I agree.

Q Let me refer you, sir, to Caulkins Exhibit Number Two. Would you describe the well which that ex-

hibit covers and tell the Commission what the documents are?

A This well covers the Dakota zone for our Well No. 307M.

The first page is the Application to Drill.

The second page is the completion report and log.

The third page is an attachment to the second page showing the complete cementing record.

C-104 is the next page, or Authorization to Transport.

C-102, the next page, the proration unit and the infill well footage from the lines and the original well on that 320.

The Notice of Connection from the Gas Company of New Mexico is the next page.

The next page is the tabulation of the production from the time the well was -- the infill was turned on until -- through May, 1984.

The next page is the 9-section map showing that proration unit and all offset wells and operators.

Q Did you prepare the production report which is attached to Exhibit Two?

A I did.

Q Does that exhibit show that the original well on the unit was on more days than the infill well?

A It was.

Q Can you conclude from that that Caulkins has done nothing to restrict the ability of the original well on the unit to produce into the pipeline?

A That is correct.

Q And, Mr. Verquer, can you state that the infill well was drilled for reasons other than avoiding the New Mexico Natural Gas Pricing Act?

A I can.

Q What was the reason the infill well was drilled?

A To develop new reserves.

Q Let me refer you to Exhibit Three, sir. Can you describe the wells that that exhibit covers and the documents that make up that exhibit?

A This is for the Dakota zone on our Well No. 229M.

The first page is the Application to Drill filed with BLM.

The second page is the completion report and the log.

Third page is an attachment to the second page with the complete cementing records.

The next page is the C-104, Authorization to Transport.

Next page is the Notice of Gas Connection from the Gas Company of New Mexico.

Next is the C-102 showing the location of

the new well and the original well on that proration unit.

The next page is a tabulation of production from the time the infill well was turned on through May, 1984.

Next page is the 9-section map showing that proration unit in the center, identifying both the infill and the old well and the mile offset wells and operators.

Q Mr. Verquer, referring you to the production data containd in this exhibit, what conclusions can you draw from that about the ability of the original well to produce into the pipeline?

A That the original well is on more time than the infill well and that we are not restricting the flow of the original well in any manner.

Q And what was the reason for drilling the original well? I'm sorry, the infill well?

A To develop new reserves.

Q Let me refer you now to Exhibit Four. Would you look at that and tell the Commission what well that exhibit deals with?

A This --

Q And what it contains.

A This is for our Well No. 140M Dakota zone.

The first page is the Application to Drill filed with the BLM.

Second page is the completion report and log.

Third page is a complete cementing record, which should be attached to the first -- second page.

This is the C-104, the next page, Authorization to Transport.

The next page is the Notice of Gas Connection.

The next page is the C-102 form showing both the infill well and the original well in that proration unit, the footages from the line.

The next page is the tabulation of production report -- of production.

And the next page is the 9-section map showing the proration unit, the original well and the infill well.

Q Mr. Verquer, let me refer you to the production data in that exhibit. I understand that there is a typographical error in days on of the original well for February of 1984, is that correct?

A When I went back and checked the records further, I found that both the original well and the infill well should have been off for the seven days in February for deliverability tests. They were shut in at the same time.

Q So that number should be 24 --

A Yes, that's --

Q -- instead of 31 in February of 1984?

A Yes, the infill well should show 24 days.

Q Will you look at that production tabulation, Mr. Verquer, and tell the Commission what conclusions you can draw about that -- about the ability of the original well on the unit to produce into the pipeline?

A It showed that they'll have the same amount of time. There is a discrepancy in May. In May the original well was shut in for 13 days. The pipeline company listed it as X-96 on their code, which is overproduction of the well. The unit had overproduction and their proration unit shut it in.

Q And can you tell us, Mr. Verquer, why the infill well on this proration unit was drilled?

A Was on?

Q Why it was drilled.

A Why it was drilled, okay. The well was drilled to develop additional reserves.

Q Referring you to Exhibit Five, will you look at Exhibit Five, Mr. Verquer?

A This is for our State A Well No. 62M, Dakota zone.

The first page is the Application to Drill as filed with the New Mexico Oil Conservation Division.

The second page is the well completion and log.

The third page attached to the second

page is the complete cementing record.

Next page is the C-104, Authorization to Transport.

Next page is the Gas Company of New Mexico's Notice of Gas Connection.

Next page is the C-102 plat showing both the infill well and the original well in the proration unit.

The next page is the tabulation of production from the time that the infill well was turned on until -- through May, 1984.

And the next page is the 9-section map showing the proration unit and a mile offset all wells and operators.

Q Referring you to the production tabulation, Mr. Verquer, I notice that in January of 1984 the original well on the unit was shut in. Can you explain that?

A Yes. In the -- the original well, we have trouble keeping this well unloaded. It loads up with fluid. It is a commingled Mesaverde/Dakota and the -- it has a tendency to load up and due to inclement weather and a few other things, we weren't able to get that well to get back on the line throughout the month of January, and in fact, it extended up into the month of February.

Q Have you proposed any remedial work to be accomplished on that well in the future?

A I have -- I didn't on this one specifically. An offset well, I have set up right now for some re-

medial work that I'm having the same problem with, and if it works on it, we'll move over and set a downhole check valve in it to keep the crossflow down and see if we can keep it from losing that pressure and maybe we can keep it unloaded; just try something.

Q With regard to the 62M -- I'm sorry, the 62, has Caulkins done anything to restrict the abiity of the well to produce into the pipeline?

A Negative. We've tried everything we can to keep it on the line but it's been one of those that we haven't been able to keep on the line.

Q Can you tell us why the infill well on that unit was drilled?

A That infill well was drilled to develop new reserves.

Q I think that does the Dakota wells, Mr. Verquer.

A That is correct.

Q The next five exhibits will deal with the same wells but in the Blanco Mesaverde, is that correct?

A That is correct.

Q Let me refer you to Exhibit Six.

A Exhibit Six is for our 341M Well in the Mesaverde zone.

The first page is the copy of the Application to Drill as filed with the BLM.

The second page is the well completion

report and log.

The third page is attached to the second page, which is a complete cementing record.

The next page is the C-104, the Authorization to Transport.

The next page is the Notice of Gas Connection from the Gas Company of New Mexico.

Next page is a C-102 showing both the original well location and the infill well location.

Next page is a tabulation of the production of the infill well and the original well from the time that the original -- excuse me, from the time that the infill well was drilled, was turned on through May, 1984.

The next page is the 9-section map showing the proration unit, the infill well and the original well, and offset operators.

Q Did you prepare that production tabulation?

A I did.

Q And this would be production for the Blanco Mesaverde only, is that correct?

A That is correct.

Q Can you draw conclusions about the ability -- any restriction of the ability of the original well on the unit to produce into the pipeline from that exhibit?

A This well has not had its ability to produce into the line in any way restricted.

Q Does that exhibit show that the original well in the unit, the original 341, produced more days than the infill well in the Blanco Mesaverde?

A It does.

Q Can you tell us why the infill well on that unit was drilled?

A To develop new reserves.

Q Will you look at Exhibit Seven, please, Mr. Verquer?

A Okay. The next exhibit is our Well No. 307M.

On the first page is the Application to Drill as filed with the BLM.

The next page is the well completion report and log.

The next page is the complete cementing record as attached to the second page.

The next page is the C-104, the Authorization to Transport.

The next page is the Notice of Gas Connection from the Gas Company of New Mexico.

The next page is the C-102 showing the proration unit, the infill well and the original well, their lcoations.

The next page is a tabulation of production from the time the infill well was turned on through May, 1984.

The next page is the 9-section map showing the proration unit, the infill well and the original well, and the -- all the offset operators.

Q With regard to the 307 and the 307M, Mr. Verquer, what conclusions can you draw from the production tabulation attached to Exhibit Seven?

A The 307 original well is on nearly constantly and it is on more days on than the infill well.

Q Has Caulkins done anything to affect the ability of the 307 Well to produce into the pipeline?

A It has not.

Q Can you tell me why the infill well on that unit was drilled?

A To develop new reserves.

Q Let me refer you to Exhibit Eight. Please review that for us.

A Okay. That's for our Well No. 229M, Mesaverde zone.

The first page is the Application to Drill as filed with the BLM.

Next page is a well completion report and log.

Third page is part of page two, which shows the complete cementing record.

Next page is the C-104, Authorization to Transport.

The next page is Notice of Gas Connection

from Gas Company of New Mexico.

And the next page is the C-102 showing the proration unit, the original well and the infill well.

Next page is a tabulation of production from the infill well and the original well from the time the infill well was turned on through May of 1984.

Next page is the 9-section map showing the proration unit, the original well, the infill well, and all the wells offsetting and also the operators.

Q Let me refer you to the production tabulation, specifically the month of December, 1983, and April of 1984.

Can you explain the lower production days for the original well?

A I searched the records over for the four days difference in December between the two wells and I -- I could not come up with an answer to that. Somehow or another our records and the Gas Company agree but we couldn't find out why that original well was turned off those four days.

Then in April the -- it is listed as X-91, which is Gas Company of New Mexico's gas load, as they call it on their code sheet.

Q And what does that mean, if you know?

A Well, I'm sure it's their market, that they have too much gas and they just shut it in, but they have a code sheet says X-91, and that's why I said their gas

load.

Q What conclusions can you draw from the production tabulation about any action taken by Caulkins to restrict the original well in its ability to produce into the pipeline?

A There is no --no action taken by Caulkins to restrict the original well in any manner.

Q Can you tell us why the infill well was drilled on that proration unit?

A To develop new gas reserves.

Q Let me refer you to Number Nine, Mr. Verquer. Which well does that apply to?

A This is for the Mesaverde zone in our Well No. 140M.

First page is the Application to Drill as filed with the BLM.

The second page is the completion report and log.

Third page is the continuance of page two and which is the complete cementing record.

The next page is C-104, Authorization to Transport.

Next page is Gas Company of New Mexico's Notice of Gas Connection.

Next page is C-102, which shows the proration unit and the location of the original well and the infill well.

Next page is a tabulation of production from the time the infill well was turned on until -- through May, 1984.

And the next page is the 9-section map showing the proration unit, original well and the infill well, all offset operators and all wells (not understood.)

Q Let me refer you to the production tabulation. Does this tabulation for the 130M in the Mesaverde contain the same typographical error we discussed with regard to the 140M in the Basin Dakota?

A That is correct.

Q So that would be February of '84 should read 24 days on on the infill well as opposed to 31 days.

A Yes, and 24 days for the infill well.

Q What conclusions can you draw from the production tabulation about Caulkins restriction of the ability of the original well on the unit to produce into the pipeline?

A That the original well was not restricted in any manner by Caulkins.

Q And what was the reason for drilling the infill well?

A To develop new gas reserves.

Q Let me finally refer you to Exhibit Number Ten, Mr. Verquer, and which well does that cover?

A This is for the Mesaverde zone of our 62M Well.

The first page is the Application to Drill as filed with the New Mexico Oil Conservation Division.

The second page is a well completion report and log.

Third page is attached to the second page as a complete cementing record.

The next page is a C-104, Authorization to Transport.

Next page is a Gas Company of New Mexico Notice of Gas Connection.

The next page is a C-102 showing the well location of the original and the infill well.

The next page is a tabulation of production for the infill well from the time it was turned on through May.

The next page is the 9-section map showing the offset operators, the location on that proration unit of the original and the infill well.

Q Mr. Verquer, referring to the production tabulation, Exhibit Ten, shows that the original well in the unit was shut in for the month of January, 1984.

A This has exactly the same days on and days off on the original well as the Dakota zone and that is because this well is commingled in the Mesaverde/Dakota zone in the original well, so therefore its days off are -- were for the same reason as the Dakota. The well was logged off

the full month of December -- excuse me, January, and part of February.

Q Mr. Verquer, do you conclude from that production tabulation that Caulkins has done nothing to restrict the ability of the original well on the unit to produce into the pipeline?

A We can, yes.

Q And can you tell us why the infill well on that unit was drilled?

A The infill well was drilled to develop new reserves.

Q Let me ask you a couple of general questions about the infill wells before we go on to the replacement wells.

The production tabulations on your exhibits go through May of '84. Can you testify before the Commission that since May of '84 Caulkins has done nothing to restrict the ability of the original wells on these proration units to produce into the pipeline?

A That is correct. In fact, we have a company policy, the Gas Company of New Mexico, as we heard in previous testimony, will call and want a well shut in, and our company policy is if they want the original well shut in and don't say anything about the other, we shut both wells in.

Q Now what do you do if they want you to shut the -- or turn the infill well on when the original

well is off?

A If they don't want the other well on, we don't turn either one of them on.

Q Mr. Verquer, were all the infill wells in the five proration units we've discussed today drilled pursuant to -- I'm sorry, the ten proration units we've discussed today, drilled pursuant to the blanket infill drilling order issued by the Commission?

A They were.

Q Order 1670-T and 1670-V.

A That is correct.

Q Let's go to the replacement wells now.

Let me refer you to Exhibit Eleven. Can you explain what that exhibit consists of?

A This is for our Well No. -- Replacement Well No. 235R, which replaced a Pictured Cliff -- the Pictured Cliff zone in our Well No. 235.

And the first page just gives the -- it gives the well location of the new well, which is 1070 from the north and 920 from the east, and the location of the original well, which was 990 from the north and 1800 from the east.

Q So the replacement well would be in the same 160 as the original well?

A That is correct; just in a different quarter, quarter quarter section.

Q When was the original well on the unit

spudded?

A I'm sorry.

Q When was the original well in the unit spudded?

A The original well, I don't have that with me.

Q Let me refer you back to page one of the exhibit.

A Oh, that's right. All right, the 235 well was spudded November 22nd, 1951, as an open hole completion; interval 3029 to 3105 was shot with 660 quarts of nitroglycerin January 9th, 1952, and I couldn't find the record of when it was turned on the line. It was turned on, I know, in the first group of wells the gas company turned on when they laid the line out there.

Q And what work was attempted on the well in 1961?

A In '61 the open hole interval was fractured with 50,000 pounds of sand and 29,540 gallons of water.

The test after the fracture treatment was 534,000 Mcf a day. Before the fracture it was producing 103 Mcf per day.

Q And in 1962?

A In '62 we had some remedial work to do. The tubing was plugged, so we needed to move in and pull that tubing to remove the obstruction, but the tubing was

dropped in the dry hole and we fished for that tubing but we could only get it cleaned to 2730, which left 21 joints of 1-inch tubing in the hole.

We reran the 1-inch tubing to 2726 at that time and turned it back on the line.

Q Will you look at your Exhibit Number Eleven, Mr. Verquer, and tell us when the original well stopped producing?

A When it stopped producing?

Q The original well on the unit.

A Well No. 235, I have a tabulation on the production. Cumulative production through 1973 was 719,479,000, and 1974 it produced 23,000,000. This is annual production, 23,481,000; in '75, 18,180,000; 1976, it produced 11,580,000; '77, 16,023,000; in 1978, it produced 3,927,000.

It actually -- in January of 1978 for the last year of production there it only produced 133,000. February it produced 1,175,000; March, 1,000,000; April, 603,000; May, 588,000; June, 276,000; and July would be the last production of 162,000 for the month of July.

Q Was the replacement Well 235R drilled because of mechanical problems with the original well?

A That is correct.

Q Let me refer you back to the exhibit, Mr. Verquer. Can you tell the Commission when the original well on the unit was plugged and abandoned and when the 235R was

connected to the pipeline?

A Okay. The 235 Well, a rig was moved in on August 11th of 1978 and pulled the tubing.

On the 12th we spotted the plug and on -- that's on August the 12th, and August the 15th the monument was installed.

Then the 235R Well was spudded on June the 21st of '78, but it was turned onto the line on January the 25th, 1979.

Q But the 235 Well was plugged and abandoned prior to the spudding of the --

A It was plugged and abandoned prior to turning the gas --

Q Prior to turning on the new well. Right?

A Right.

Q Okay. Can you tell us what the cost was of replacing the 235 Pictured Cliff with a new well?

A The cost of replacing 235 as allocated from the total cost of the new well was $46,856.90. That was done in our -- that figure came from our office in Denver in accounting.

We do, in other words, we drilled our Chacra Well and completed both the Chacra and the Pictured Cliffs in this well.

Q This is the cost attributable to the Pictured Cliff.

A The cost -- this cost was just for the

Pictured Cliff, $46,856.

Q Let me refer you now to Exhibit Twelve. Which well is that for, Mr. Verquer?

A That's for our Well No. 220R, and it's -- which is located 1750 from the east and 944 from the north of Section 14, 26, 7, Rio Arriba County, New Mexico.

The original Well 220 was located 990 from the north and 990 from the east of Section 14, 26 North, 7 West, Rio Arriba County, New Mexico.

Q Can you go through that exhibit and tell the Commission what the documents attached there are?

A Okay. I have the Application to Drill. The first thing I have is the Application to Plug and Abandon the 220 Well, which gives a well history and where the pipe is cemented and how.

A 9-section map showing the well location.

The next page is the Application to Drill the replacement well, the 220R.

The next page is the well completion report for the Pictured Cliff zone on the 220R.

The next is the -- when we spudded the 220R.

The next is the C-104 showing the Authorization to Transport.

The next one is Gas Company of New Mexico's Report of Gas Connection.

I also have -- I gave that, I'm sorry.

Q And you have production history for the 220?

A Yes, I also have -- it is attached, should be attached to that, is the plugging information on the 220 on a sundry notice as filed with the BLM and the producton report tabulation of the cumulative production and when the well --

Q Was the 220R drilled because the 220 suffered some downhole mechanical failure?

A 220R was drilled actually to the Dakota formation and since we did have mechanical problems with 220, we opened the Pictured Cliffs zone in the 220R Well to replace it, and plugged the original well.

Q Can you look at Exhibit Twelve and tell the Commission when that exhibit shows that the 220R went on line?

A The 220R was turned on the line December the 27th, 1979.

Q And does that exhibit show when the 220 was plugged and abandoned?

A I have an exhibit that shows that the 220 was plugged and abandoned on April the 2nd, 1980.

Q Mr. Verquer, can you explain to the Commission why that well was not plugged and abandoned within the sixty days required by Order R-5136 for replacement wells?

A At the time of the year the -- at that time of the year in this particular instance the roads were just practically impassable in that area and I had a standing order for a rig to come in just as quick as the roads were -- were to where we could get in and it was April the 2nd when I finally made the connection to get them in there.

Q Mr. Verquer, can you explain for the Commission the topographical location of the 220R -- I'm sorry, the 220 Well?

A All of our roads are considered primitive but the road to the El Paso Camp, which would be the closest all-weather road that you -- is about four miles from this location, and it is a gravel road, and from there on down this little valley to -- and this 220 is located at the end of the road, it's just a trail, if you will, and when it was -- it's on the north side of a canyon wall and above Largo Canyon, it's on a different -- up on a mesa above Largo Canyon and there's only one way to get into it other than flying in there with a helicopter, and that was the extent of it. It's just -- when it's muddy, the roads are just impassable.

Q In your opinion, Mr. Verquer, did Caulkins make a reasonable effort to comply with the 60-day requirement of Order R-5136?

A We feel we did, yes.

Q Let me talk to you for a minute about the connection of the 220R to the pipeline. Was there some

reason why you couldn't wait to connect that well to the pipeline until you could get in and plug and abandon the 220?

A Yes, there was. This Pictured Cliff in that zone is also commingled with the Chacra and Mesaverde. There's three zones commingled and the order for commingling so states they shouldn't be shut in over seven days and we did turn the well on. In fact, we walked in to turn it on.

Q And that's because of the requirements of Order R-5926.

A Yes. Also, in all fairness, we were anxious to turn the well on, too, but we did need to get it on.

Q Mr. Verquer, does your Exhibit Twelve show the cost of replacing the Pictured Cliffs in the 220R?

A It shows the cost of replacing the Pictured Cliff as $68,289.04.

Q Let me refer you to the production tabulation attached to Exhibit Number Twelve, which is a production tabulation for the 220 Well. I'd like to refer you to 1980 on that tabulation and have you explain to the Commission why that well shows production in 1980.

A First, on this exhibit there's another error. 1980 does have 2,297,000. Then I supposedly had a monthly production by month on there but we show it as 1979. That should be a 1980 down below there.

January of 1980 it produced 628,000.

February it produced 865,000. March it produced 731,000, and April it showed 173,000. The 173,000, Gas Company of New Mexico changes their charts on the 25th of the month, so the 173 would actually be from the 25th of March through April the 2nd when we got down there with the rig and turned -- and shut that well in and plugged it.

Q So Caulkins allowed the original well on the unit to produce even after the replacement well had gone on line, is that right?

A It was. Maybe inadvertently, but it was on.

Q Let me refer you to Exhibit Number Thirteen, Mr. Verquer.

A Okay.

Q Tell the Commission what well that refers to and go through the documents that are attached.

A This is for the Pictured Cliffs zone of our 307M, located 1120 from the south and 1520 from the east of Section 13, 26 North, 7 West, Rio Arriba County, New Mexico, and it's to replace Well No. 310, located 965 from the south and 1125 from the east of said Section 13, 26, 7.

Q This is the third time today we've heard about the 307, is that right?

A That's correct.

Q Can you describe what kind of problems you had on 310, Mr. Verquer, that required you to drill a replacement well?

A The 310 Well, I don't have a real good copy of that. On our well history the 310 was spudded in October of '58, October 16th, and it was drilled to 2475 and cemented with -- 5-1/2 casing was cemented with 200 sacks.

They did not run a temperature survey but the calculated top was 1395.

It was completed, ready to produce through perforations 2356 to 2390 in October 21st of 1953.

The initial potential run showed 1,541,000 Mcf a day.

There was a casing failure detected March the 19th, 1965 and in June of '65 a plug, bridge plug, was set in the 5-1/2 casing at 2287 and found the bad casing from 1160 to 1410. It was cemented, squeezed that, they ran a cement retainer at 1103 and squeezed with 200 sacks, drilled out to 1360, and then the 11th they ran a retainer to 1073 and squeezed with 100 sacks again, and the final pressure was -- after drilling out was 1100 pounds. They drilled out that other retainer set at -- and checked the casing 600 pounds for thirty minutes, and it held okay, so they drilled out the bridge plug at 2287 and cleaned out to 2390, and inch and a quarter tubing was run at 2376 and they started unloading it daily with gas. This is June the 17th of '65.

June the 18th of '65 through July 13th of '65 we just unloaded daily with gas but the formation was still loaded with water.

So July 13, '65 through October, '65, we flowed it intermittently and unloaded with gas.

It was October, '65 before we got it back on the line.

Then in 1980 we detected another leak in it and we ran 2-3/8ths tubing with a packer set at 2200 to shut off the leak in the casing again.

Then we ran 1-inch tubing inside the 2-3/8ths and attempted to flow this well each -- each month to unload the water but it was logged off.

Then I have an annual production from 1958 through 1982. 1983 there was no production on it and when we set up the 207M Well to be drilled to the Dakota zone, in that same 160, we proposed to plug and abandon the 310 Well, open up the Pictured Cliff in the 307 Well.

Q So the 307 is completed in the Mesaverde, the Basin Dakota, and Pictured Cliff.

A And one more, the Chacra.

Q Is it your testimony, Mr. Verquer, that the 310 suffered from both formation damage and mechanical failure prior to the plugging and abandoning that well?

A That is correct.

Q Let me refer you back to your Exhibit Number Thirteen. Can you look at that and tell the Commission when the 310 was plugged and abandoned?

A I've got it here somewhere. The 310 was plugged on August the 2nd, 1983.

Q And when was the 307M in the Pictured Cliffs connected to the pipeline?

A It was turned on the line November the 16th of '83.

Q Mr. Verquer, in connection with all three replacement wells about which you've testified today, can you state for the Commission that the replacement wells were drilled to replace wells which had been lost for effective or commercial production because of mechanical failure or formation failure?

A I can, yes.

Q And that they were drilled for reasons other than avoiding the provisions of the New Mexico Natural Gas Pricing Act?

A I can.

MS. AUBREY: I have no more questions of the witness.

MR. RAMEY: Any questions of Mr. Verquer?

MR. NOBLE: I have a few.

MR. RAMEY: Mr. Noble.

MS. AUBREY: Mr. Chairman, I forgot to move the introduction of my exhibits. I tender Exhibits One through Thirteen.

MR. RAMEY: Exhibits One through Thirteen will be admitted.

CROSS EXAMINATION

BY MR. NOBLE:

Q Mr. Verquer, who within Caulkins is in charge of filing and keeping track of what filings were necessary before the OCC?

A Pardon me, but on this Natural Gas Pricing Act, that has been done through Denver, Mr. Arnold Raedher.

Q Could you please define or explain what you think is meant by restricted or restriction of a well in the context of Order 5436?

A By placing a choke or shutting the well in arbitrarily just to cut its flow.

Q With respect to the wells which are being considered today, was an original well ever shut in by your field personnel for a purpose other than making required production tests?

A Yes.

Q And what were the reasons for those shut ins?

A If a well is logged off it's essentially shut in then, but they would go in and shut it in because it will seep off a little bit. They'll shut the thing in manually and let it pressure up and then unload the well to get the fluid out of it after that pressure builds up.

Q So it's essentially shut in by the pipeline.

A Supposedly, because of pressures.

Now, if you're asking whether we shut it in or they did, we have switchers that go out and check those wells every day. Well, they don't make every well every day, but when they find one logged off, they normally shut that well in and so code the charts the well was shut in by the operator, and we -- for being logged off, they have a code number for being logged off, and we shut that thing in and let it pressure up, sometimes as high as seven days before we open it up again and unload it to the atmosphere to get rid of the fluid.

Q Back in March you testified that Well No. 123 was shut in, which was an original well. It was shut in by field personnel for a couple months inadvertently.

Has that occurred with any of the wells you're applying for exemptions for today?

A I'm sorry, will you --

Q Back on March you testified that there was one well, it was Well No. 123, which was shut in inadvertently for a couple of months.

Could that have occurred with any of the wells you're seeking exemptions for today, any of the original wells that --

A I don't think so, no. That, I remember making that comment in that hearing in May. I'd have to go back and look at the exhibit, but I think that that well was shut in because the tank was full on 123, the original well.

Q Are you familiar with State B Com 233E?

A I am.

Q Can you tell me when that was drilled (inaudible)?

A In 1983.

Q And do you know who the buyer from that well is?

A Gas Company of New Mexico.

Q And can you tell me what the name of the original well on that proration unit is?

A 233.

Q State B Com 233?

A Yes.

Q Were you responsible for filing an exemption on that well?

A Negative. That was done out of our Denver office.

MR. NOBLE: Those are all the questions I have.

MR. RAMEY: Any other questons of Mr. Verquer?

MR. ALVIDREZ: I have a few questions, Mr. Chairman.

DIRECT EXAMINATION

BY MR. ALVIDREZ:

Q Are you familiar with, I believe the name

is Carol Keaton?

A Yes, I am.

Q And does she have any responsibility for filing these applications for exemption?

A She is Mr. Raedher's secretary and she may be the one that is responsible. I'm not sure, but he is -- he is the Treasurer of our company and he is the one that signs the applications.

Q Now to your knowledge have any applications for exemptions been filed previous to this time for any wells operated by Caulkins?

A The ones that were filed in this long case that we had in May were the first ones we ever filed.

Q Is that May of '84?

A We had the hearing in May. They were filed, I believe, earlier than that.

MS. AUBREY: I think he's referring to the March hearing. I think they were filed the end of 1983.

Q You're not aware of any applications having been filed previous to that time?

A Not previous to this group which was filed all in one group.

Q I'd like now to direct your attention to what is Caulkins Exhibit Eight, and basically the production schedule that's included in that exhibit.

Q Which -- which -- I'm sorry.

Q I'd like you to turn to the production schedule included in that exhibit, basically comparing the old well versus the infill well production.

Now on that sheet, if I'm not mistaken, for the old well the figures are reflected on my left.

A That is correct.

Q The infill wells are on the right. And I think you testified earlier that on the basis of the number of days that each of these wells has produced you drew the conclusion that production in the old well had been restricted in any manner, is that correct?

A That is correct, I believe.

Q I'd like for you to compare now, not the number of days which each well produced, but rather the volume of production each well produced.

Doesn't it indicate that the infill produced three to four times the amount the original well did for basically the same period of time?

A Which one are you looking at?

Q All right, I'm looking at the bottom figure.

A No, I meant which well number?

Q All right, it's 229 and 229M. That's in Exhibit Eight.

A Now your question.

Q My question -- my question is doesn't this tabulation indicate the production from the infill is

much greater than the production from the original well, notwithstanding the original well is producing for more days?

A That's correct.

Q What accounts for that difference?

A The new well is -- is some twenty years younger than the other one there. At the time -- if you compared production for the same time, or the original well in the first six or eight months, you would find that that well's production was that way, also.

Q All right. Now I direct your attention to, on the same exhibit, figures for the month of November 29, 1983.

As to the old well, I believe the production is reflected as being 1599 Mcf, is that correct?

A I'm not on the same sheet with you.

Q I'm using the same sheet that I've been referring to all along.

A Basin Dakota.

Q This is in the Mesaverde.

A All right.

Q And it's Exhibit Eight, Well 229.

A Okay. That is correct.

Q All right, and during that same time it indicates that the infill well was shut in, is that correct?

A That is correct.

Q And the first month that we had produc-

tion out of the infill well was December of '83, is that correct?

A Yes, sir.

Q And during that same month the old well production decreased by approximately one-half, is that correct?

A That is correct.

Q Why the decrease in production in the old well?

A That is probably due to higher line pressures.

Q Were the higher line pressures brought on by the addition of the infill well?

A Possibly but not especially because they're not even tied into the same line.

Q Could the higher line pressures have been due to drilling of other infill wells that had increased pressures?

A That -- that will restrict all wells and the new wells have more pressure, shut-in pressure than the old wells, so consequently, they would produce into the line at a higher pressure.

Q So consequently by drilling an infill well it has the effect of restricting production from the old well, is that correct?

A Very possibly you are correct because the Gas Company is only going to buy so much gas from us, any-

way, and when they -- they're not going to buy any more gas than they have market for.

We drill and develop new reserves, we are not going to sell any more gas, possibly, than we were if we didn't drill those wells.

Q But the price you get for the gas from the old well and the price you get for the gas from the new well is different, is that correct? Don't you get a better price for that gas from the new well?

A I cannot actually testify to that. I was under the impression we got the same price for both of them.

Q Is it your impression that the old wells are not subject to the Natural Gas Pricing Act?

A You know I never heard of the Natural Gas Pricing Act until last March.

Q Okay. But would you agree that there appears to be some correlation between the opening up of an infill well and a decrease in production in the old well?

A There are cases, yes, that you can see that, but it is not necessarily so.

Q All right. I'd like to refer you to Exhibit Three, I believe it is, which is that same well producing from the Dakota formation.

A Correct.

Q Have you got that exhibit before you?

A Yes, I have.

Q I think we see the same phenomena in

this, that as soon as the infill well was opened up, production in the old well dropped down almost 50 percent, is that correct?

A That is correct.

Q And production, total production through November of '83 to May of '84 was approximately three times as great from the infill well as it was from the original well, is that correct?

A That is correct.

Q Notwithstanding the fact that the original well was producing more, a greater amount of days, is that correct?

A That's right.

Q Do you have any explanation as to why this particular old well producing from the Dakota formation decreased almost by 50 percent as soon as the infill well was opened up?

A I have no answer to that. I do know that the original well is commingled with the Mesaverde and Dakota and that is the reason that the percentages are the same on the original well.

The same kind of a drop. They're exactly the same kind of a drop.

Q Both formations are commingled and not separate in this well.

A No, they're not.

Q All right. Just briefly I want to touch

on your policy, the policy you talked about.

I take it that all these wells, the gas from these wells is sold to Gas Company of New Mexico, is that correct?

A Every one of them, yes, sir.

Q And when Gas Company of New Mexico no longr has need for gas and they request that a well be shut in, is it correct that you shut in not only the original well but the infill well, also?

A That is correct. Now, just a second. We, if they only want the infill well shut in, we will shut it in, because we have commingled wells, such as this one we just touched on that shouldn't be shut in over seven days.

The infill well can be shut in because it is a dual completed well and it's only one formation.

But if they want the original well shut in and leave the infill well shut in -- I mean leave the infill well on, we arbitrarily go shut that infill well in, also, in that zone.

Q And this is Caulkins policy.

A That is Caulkins -- that is my policy.

Q That is your policy.

A That is correct. Due to -- due to this questioning that you're running right now.

Q How long has this policy been in effect?

A It has been in effect since the first day of July 1984.

Q So previous to July of 1984, which I guess is the period for which the Natural Gas Pricing Act was effective, this policy was not in effect.

A No, we never even give it a thought.

Q I see. Is this a written policy?

A Negative.

Q Simply a policy of --

A You know, you're looking at the company right now, so --

MR. ALVIDREZ: I have no further questions.

MR. RAMEY: Any other questions of Mr. Verquer?

The witness may be excused.

Do you have anything further?

MS. AUBREY: Nothing further, Mr. Ramey.

MR. NOBLE: Nothing further.

MR. RAMEY: We'll take Case 8267 under advisement and the hearing is adjourned.

MS. AUBREY: Mr. Commissioner, we do have a proposed order in Case 8267.

(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 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

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

17 July 1984

COMMISSION HEARING

IN THE MATTER OF

Application of Caulkins Oil Company for exemption from the New Mexico Natural Gas Pricing Act (NMPA). CASE 8267

BEFORE: Commissioner Joe Ramey, Chairman
Commissioner Ed Kelley

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: W. Perry Pearce
Attorney at Law
Oil Conservation Commission
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

MR. RAMEY: Call next Case 8267.

MR. PEARCE: That case is on the application of Caulkins Oil Company for exemption from New Mexico Natural Gas Pricing Act.

Mr. Commissioner, applicant has requested continuance of that matter until September the 12th, 1984.

MR. RAMEY: Case 8267 will be continued to September the 12th, 1984.

(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 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