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

17 October 1984

EXAMINER HEARING

IN THE MATTER OF:

Application of Schalk Development Company for hardship gas well classification, Rio Arriba County, New Mexico.	CASE 8337

BEFORE: Gilbert P. Quintana, Examiner

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:	W. Thomas Kellahin Attorney at Law KELLAHIN & KELLAHIN P. O. Box 2265 Santa Fe, New Mexico 87501

I N D E X

A. R. KENDRICK

E X H I B I T S

MR. QUINTANA: We'll call next Case 8337.

MR. TAYLOR: The application of Schalk Development Company for hardship gas well classification, Rio Arriba County, New Mexico.

MR. KELLAHIN: If the Examiner please, I'm Tom Kellahin of Santa Fe, New Mexico,appearing on behalf of the applicant and I have one witness to be sworn.

MR. QUINTANA: Are there other appearances in Case 8337? If not, will the witness please stand and be sworn in?

(Witness sworn.)

MR. KELLAHIN: Mr. Examiner, this is an application by Schalk Development Company for a hardship gas well classification for one of its wells in the Basin-Dakota Pool. The hardship gas well application was prepared by Miss Claudia Short, a representative of that company from Albuquerque. Miss Short is in attendance at the hearing today. Mr. Examiner, if there are additional questions to ask her she is available. Our principal witness is Mr. Al Kendrick, a petroleum engineer from Aztec, New Mexico.

A. R. KENDRICK,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Kendrick, for the record, would you please state your name and occupation?

A A. R. Kendrick, petroleum consultant.

Q Mr. Kendrick, have you previously testified before the New Mexico Oil Conservation Division and had your qualifications as a consulting petroleum engineer accepted and made a matter of record?

A Yes, sir.

Q Persuant to your employment by Schalk Development Company have you made a study of the facts surrounding this application for hardship gas well classification?

A Yes, sir.

MR. KELLAHIN: Mr. Examiner, we tender Mr. Kendrick as an expert petroleum engineer.

MR. QUINTANA: He is so considered as an expert witness.

Q Mr. Kendrick, would you please refer to the plat that's marked as Exhibit Number One and identify for us the two wells that are indicated on that plat, and

identify which of those two wells is the subject of this application?

A The subject well of this application is the Schalk 62 No. 1 well located in the southeast quarter, southeast quarter of Section 33, Township 32 North, Range 5 West. The other well shown on Exhibit One is the Schalk 62 No. 1 Well located in southwest quarter, southwest quarter of Section 33, Township 32 North, Range 5 West.

The other well shown on Exhibit One is the Schalk 63 No. 1 located in the southwest quarter southwest quarter of Section 34 of Township 32 North, Range 5 West.

Exhibit One was presented to show the extreme nearness of these two wells, and my testimony today is going to be about both of these wells to show that we have a situation in the Schalk 62 No. 1 which is very similar to the situation that existed in the Schalk 63 No. 1. And as the evidence develops I think you'll understand why we want to talk about two wells.

Q The Schalk 63 No. 1 well is currently an abandoned well in the Basin-Dakota Pool, is that not true?

A Yes, sir.

Q The Schalk 62 well is the well that is having difficulty maintaining a producing status in the Basin-Dakota gas pool?

A Yes, sir.

Q Are both these wells completed in correl-

ative portions of the Basin-Dakota Pool?

A Yes, sir.

Q Let's go then, Mr. Kendrick, to what has been marked as Exhibit Number Two, which is the narrative summary of the operator's difficulties with maintaining production on the Schalk No. 2--62 well. And rather than have you read the four pages of narrative, let me ask you first of all to describe for us the initial incident in May of 1982 that was the beginning of difficulty for this particular well.

A In May of 1982 the Northwest Pipeline people shut the well in so they could repair their dehydrator on this location. After about a week of remedial action on the production unit the shut-in pressure of 335 pounds was measured on the tubing of the Schalk 62 No. 1, and 736 pounds was measured on the casing.

An attempt was made to unload this liquid that had accumulated in the tubing and that was not successful. So the well was produced on the casing and gas bubbled up through the water in the wellbore from May of 1982 until August of 1982.

Q Because of the Northwest Pipeline's action in shutting off this well to repair their dehydrator, what--had the well loaded up in the tubing and the operator was not able to produce the well through the tubing?

A That's correct.

Q All right. What then did the operator do

in an effort to restore production in their well?

A In August of 1982 they circulated the water out of the well with nitrogen, or attempted to circulate it out. But the ciculation was not successsful. The well soon logged off on the tubing production and so they had to continue producing the well through the casing. And by producing the well through the casing, bubbling the gas up through a column of water in the anulus, the well did not produce at a high enough rate to clean the water out of the well bore.

Q All right. Then in September of '83 what action did the operator take in attempt to either control or rectify the fluid problem that was being experienced in this well?

A They moved a workover unit on the location and swabbed the well for three days in an attempt to remove the water and cause the well to produce better.

This was unsuccessful so they acidized the well and they swabbed one day and managed to cause the well to unload.

Q All right. Let's go back and talk about the first swabbing incidents that took place in September 13th, 14th, and 15th, then, in 1983. During that period of time how many different or total swabbing runs were attempted by the swabbing unit?

A Apparently about nine total swabbing runs on three consecutive days there.

Q All right, sir. And was the operator, with the swabbing runs, able to restore production through the tubing?

A For a short time. But the well only produced 2,114 Mcf during September through December of 1983, and logged off again.

Q All right. With the first swabbing effort in those three days in September of '83 being unsuccessful, what then did the operator attempt to do to restore production in that well?

A They ran a sinker bar in to see if the tubing had been plugged up with some kind of scale and found that it had not. And so they swabbed again and the well would come on and flow but then it would log off after a few minutes.

They swabbed again the next day and the well flowed for an hour, or they let it build up for an hour and then made six more swab runs then the well just did not come around. But it did make a little over 2,000,000 feet over the last four months of 1983.

Q All right. Then what happened with the well?

A They ran a packer and swabbed some more and acidized the well. And they just couldn't get the well to come back. It logged off in the latter part of 1983 and it's been shut-in from December of 1983 until September of 1984. In September of 1984 the well was swabbed in again.

Q All right, if we skip through the first four pages of Exhibit Number Two and turn to the last page of Exhibit Number Two, then there is a summary of the remedial action taken by the operator in 1984?

A Yes.

Q This then would be the second swab attempt by the operator over a period of time?

A Yes.

Q All right, sir. Describe what the operator did here.

A They swabbed the well and it seemed to unload. So they left the well open overnight. They got on the location late in the day and swabbed the well and it unloaded some, so they left it open overnight to the pit.

When they returned the next day the well was flowing to the pit. They shut the well in for a 6-hour pressure build-up and recorded 1165 pounds for a 6-hour pressure build-up.

They produced the well into the pipeline for two hours, and the well made 27 Mcf during those two hours, but the tubing pressure reduced to 350 pounds. They shut the well in while the tubing pressure was above the pipeline pressure so that the well would not be logged off again.

After leaving the well shut-in overnight, they found 1045 pounds on the tubing, turned the well into the line for three hours, and produced 57 Mcf during that three hour period.

Subsequent to that they have been producing the well about three or four hours a day. The lowest production was about 27 Mcf on September the 5th. The most production in one day has been 57 mcf per day on the 6th, but the subsequent days the well has produced around 35 to 45 Mcf per day, in three or four hours. But the well is shut in each day before the tubing pressure gets down to the pipeline pressure. And so far this has been working as a successful attempt to produce the well without it logging off.

Q Let me ask you some recommendations, Mr. Kendrick, with regards to how you would recommend a hardship application order be entered that would allow this well to produce at a rate that would continue its production at a point above that at which it will log off. Let me have you summarize generally how you would propose to produce the well to avoid the logging off problem.

A To avoid the logging off problem, I think the well needs to produce daily. It has to produce long enough to remove some of the liquid accumulation at the--in the reservoir at the base of the well.

Q All right, when we talk about produce daily, we're talking about seven days a week?

A Seven days a week.

Q And how many hours each day does the operator have to produce the well to avoid the logging off problem?

A Based on the experience on September the

5th, the well produced no liquids during the first two and a half hours, or two hours and twenty minutes. So the well should produce three or four hours so that it would unload a slug of the liquids it has accumulated at the base of the well and make room for the next day's liquid accumulation. And this would allow the well to produce up to 50 or 60 Mcf at this time. It may be that after some cleanup that the well might produce up to 100 Mcf a day.

Q All right, generally producing the well three or four hours a day, seven days a week is going to result in production at ranges between 50 and 60 Mcf a day?

A At this time that would be a maximum rate, not a minimum rate.

Q Okay. At some point later when the fluids are cleaned up, the operator may experience a maximum rate up to about 100 Mcf a day?

A Yes. If market conditions improve markedly and the pipeline pressure is reduced, there might be occasions that we would produce up to 100 Mcf per day, but I think this would be a top limit.

Q All right, sir, let's look at the bottom limit or the minimum producing rate that you would recommend for the well.

A I think the minimum rate should be established in the range of 35 Mcf.

On September the 5th the well only produced 27 Mcf but it produced only two hours. By producing

at three or four hours, the experience has been since then that the well would produce in the range of 35 to 45 Mcf, so I think in the range od 30 or 35 Mcf minimum would be a fair number.

Q Let me ask you this, sir. What is the Northwest Pipeline operating procedure that currently precludes this well for being operated and produced without a hardship gas well order entered for the well?

A The procedure that I've experienced Northwest's operation is that they issue position numbers for a month at a time and these numbers are issued, I think, around the 20th by Northwest Pipeline.

They select number ranges among the assigned numbers and turn those wells off for a month at a time, and we learned back in 1982 that seven days was too long to shut this well in.

So the well cannot experience a thirty-day shut-in without having to pay someone to do remedial action to get the well to unload again, even to the atmosphere.

Q Has Northwest Pipeline shown any willingness to accommodate the operator for production of this well to allow it to sustain some minimal producing rate in the absence of a hardship order being entered for the well?

A No, sir. Our experience with the Northwest Pipeline people is that they do not wish to cooperate with anyone in producing a well.

Q Let me ask you this, Mr. Kendrick. Is this simply one well of a great number of wells in the Basin Dakota in this particular area that is in a similar situation or is this a well that's unique and unusual unto itself?

A I think this well is one of two wells in this immediate area that have a problem.

Q What's happened to the other well?

A The other well is abandoned as far as producing from the Dakota formation is concerned.

Q All right, and why is that well abandoned?

That's the Schalk 63.

A That's the Schalk 63 No. 1.

Q We'll go in detail in a minute as to why.

A That well was not salvageable as a producing well.

Q Okay. It logged off because of fluids and the operator was unable to restore production by swabbing, treating the well dispite the significant expenditure of in access of $100,000?

A That is correct.

Q Before we leave the No. 62 Well, Mr. Kendrick, let me go back and have you summarize for us your opinions with regards to whether or not the operator can take a mechanical action on the well that will eliminate or reduce the liquid problem, and if you'll note on page three

of Exhibit Number Two, the operator has supplied an entry with regards to some of the kinds of things that might be done.

Let me first of all suggest to you whether or not you have an opinion that the operator could put a plunger lift in the well and thereby reduce or avoid the liquid problem.

A It does not solve a liquid problem. A plunger lift, or free piston is a mechanical means of getting greater hydraulic efficiency to lift liquids out of a well, but this well at the present time has a liquid ratio too high to lift efficiently even with the free piston if it's left in the well.

A free piston was in the well and it came apart and they had to trip the tubing to recover the pieces, but when they put the well back to producing without the free piston it produced as well without it as it did with it.

So it ws not a successful attempt.

Q All right. The operator tried the plunger lift or the piston lift. What is your opinion with regards to the reasonableness of trying to reduce the size of the tubing?

A Based on experience in the offset well where the tubing filled with a calcareous material or scale, that would hasten the process of the tubing scaling up to reduce the size.

Q In your opinion would reducing the size of the tubing be a method to control the fluid production?

A No, I don't think so. I think the well makes too much liquid for the tubing reduction, tubing diameter reduction to be effective.

Q All right. Let's go now to Exhibit Number Three, which is a tabulation of the expenditures the operator has made on the 62 Well and have you describe this.

A The entries shown as Chemical Consultants, Incorporated, or UniChem, Incorporated, are costs of soap applied to the well to foam the water and attempt to cause it to produce as a lighter column and remove that from the well.

Aside from the cost for soap, the expenditures in 1982 were $1709 for Hallilburton's trip to circulate the well with nitrogen to remove the liquid, which was unsuccessful.

In 1983 the costs other than soap was $9947.50 for the packer, the swabbing units, Bayless' workover unit, trucking charges, and the acid.

In June of 1984 -- well, the early part of 1984 some additional soap was bought.

The billing for the swabbing unit in September was not included on this price list. Apparently the invoice has not yet been processed but I would estimate that to be in the range of $2000 - $2500 for two days with a swabbing unit at that time.

So the total price for other than soap at this time is going to be in the range of $13,700 to $15,000 that has been expended on this well in the last two years in an attempt to cause the well to produce.

Q All right, sir, let's go to Exhibit Number Four and have you describe that for us.

A Exhibit Number Four is a schematic cross section of the current well completion. It shows the packer in the hole at 7,505 feet; our top perforation at 7,862; the bottom perforation at 8,075 feet; and the -- excuse me, the bottom perforation at 8,106 feet. The tubing is landed at 8,075 feet with a seating nipple in it so that the well can be swabbed, if necessary.

Q Sometimes an operator is able to reduce or eliminate a waterflow problem by squeezing off existing perforations or setting a packer and reperforating the well at a higher location.

In your opinion as an expert, Mr. Kendrick, is that a viable alternative for this well?

A No, sir.

Q Why not?

A When the Dakota formation is stimulated by fracture treating the producing intervals in the reservoir are interconnected with the fracture and setting a bridge plug or cement plug in the bottom portion of the wellbore to squeeze off part of the perforations still does not eliminate that part of the reservoir available to the

wellbore because of the fracture communication outside the wellbore, and it is not effective.

We'll show that in the 63 No. 1 Well.

Q The operator attempted that very technique in the offsetting 63 Well and was unsuccessful?

A That's correct.

Q All right, sir, let's go to Exhibit Number Five and have you identify that for us.

A Exhibit Number Five is a recap of the annual and cumulative production history of the two wells. Both were first -- or the 62 No. 1 Well was first delivered in 1974; the 63 No. 1 was delivered in early 1975; and these numbers were taken from the New Mexico Oil and Gas Engineering Committee report and show the annual and cumulative values of production for each of the wells up to 1984.

The 63 No. 1 Well did not produce in 1984. The 62 No. 1 Well did not produce until September of 1984, so the production values for this year are not shown on this exhibit.

Q All right, sir, and Exhibit Number Six is the graph. Would you describe that for us?

A Exhibit Number Six was prepared by Mr. Evans, who is the field man for Schalk Development.

The bottom line of dark shading is a graphic depiction of the monthyly production and this is for the 62 No. 1 Well.

The narrow, hard line above that is a

monthly pipeline pressure average for each month.

The horizontal line of four digits in there, the bottom two are the number of days during that month that the well was open to the pipeline to produce; the top two numbers are the number of days in the chart period for the month; for instance, the left end of it is 32 and 32, so the well produced 32 days of 32 possible days.

On the right end it shows a zero for the number of days produced and 30 days as the number of days in the measurement by the pipeline company for that month.

Q Were Exhibits Five and Six used by you in preparing a calculation of the reserves that were still to be recovered by the No. 62 Well?

A Exhibit Number Five was used. Number Six was not used by me.

Q All right, sir, let's go to Number Seven, then, which is the reserve calculations.

A Reserve calculations are a very simple approach to the reserves.

2012 pounds was the reported pressure measured May the 28th, 1974, before the well was first delivered into the line.

1165 was the pressure measured on September the 5th, 1984, after a six-hour shut-in.

The difference in those two is the amount of pressure depleted. Since that is a six-hour shut-in pressure I'm using a conservative number.

The Engineering Committee Report showed a cumulative production of 221,588 Mcf. Dividing the volume by the pressure I find the Mcf per pound of 261.6 Mcf per pound of pressure loss.

If we calculate 100 pounds abandonment pressure, using the 1165 pounds measured on September the 5th, minus 100 pounds, we would still have 1065 pounds remaining usable pressure.

If I multiply that times the 261.6 Mcf per pound, we wind up with 278.6-million feet remaining recoverable reserves.

If we calculate production at the rate of 50 Mcf per day, we'd divide the 50 Mcf per day into the volume and wind up with fifteen years production life left in the field, or in the well, at 50 Mcf per day, and at this month's stripper price of $4 and 6.6 cents per Mcf, the value of the remaining reserves is over $1.1 million.

Q Mr. Kendrick, when you compare the value of the remaining recoverable reserves to the cost to the operator of having to undergo the economic consequences of swabbing the well every month when they want to restore production, the well is still economic if the operator has to swab the well.

A That's true.

Q All right.

A That is, if you consider economics to receive more money than you pay out for services, but when you

reduce the gross receipts by taxes and royalty, it may be a break even situation. But it's possible he would make a small profit.

Q Let me ask you this. If the Commission does not allow this well a hardship order and the operator has to continue to swab the well back into production every month, do you have an opinion as to whether or not at some point in the life of the well you could not restore production by swabbing?

A Yes, sir, I'm confident that the point of no return would not be far away.

Q Do you base that upon an analysis of any of the other wells in the area?

A Yes, sir.

Q All right.

A Based on the 63 No. 1 Well, I think that this operator has experience to know that the situation may not be a profitable venture.

Q So let's turn then to the efforts the operator has made to keep the other well, the 63 Well, in production without the benefit of a hardship order.

A All right, sir.

Q If you'll turn to Exhibit Number Eight, then, and describe for us what the operator's done.

A Exhibit Number Eight is my recap of the field reports for remedial action performed on the Schalk 63 No. 1 Well.

In 1978 the well was circulated with nitrogen several times. They ran an impression block and found the tubing plugged. They tripped the tubing and removed the plugged tubing, acidized the well to get rid of the scale in the casing and in the perforations, put the well back on the pipeline. It failed to produce. They attempted to circulate the well again with nitrogen, which was not successful.

They set a tubing plug in the well and started to pull the well and the well started unloading so they unloaded the well with the reservoir energy, then tripped the tubing and ran it back on a packer; attempted to get the well kicked off and it failed to kick off.

They acidized it again and attempted to kick off, or they attempted to ball off by pumping acid and balls in the wellbore but the balls apparently did not seat on the perforations, meaning that the reservoir was interconnected outside of the casing.

They swabbed the well again and the well did produce a little bit and did not produce in 1978 after this, economically.

After the remedial action the total production had been 45 Mcf.

Q The operator continued with this cycle of having his production curtailed, the well logged off, and having to go back and swab and acidize and treat and try to restore his production in this well to some point when the

well would no longer produce despite the swabbing efforts.

A That's true.

Q When did that occur?

A Essentially in 1978, the well essentially quit producing.

Q At the time it stopped producing, in your opinion were there recoverable gas reserves underlying this tract that could have been produced had this well had the benefit of a hardship order, as we're seeking for the other well?

A Yes, I think it could have produced a substantial amount of those reserves.

Q Let's go to Exhibit Number Nine and have you tell us what the total the operator spent on the 63 Well in an effort to continue to produce that well.

A The total production -- or excuse me, the total remedial action spent in 1978 and 1981 and 1982 on the Schalk 63 No. 1 Well was $114,154.

Q The total expenditure on the 63 Well was $114-what?

A $114,154 to treat the well and wind up with a well that was logged off and would not produce.

Q Have you received, Mr. Kendrick, any objection from Northwest Pipeline to Schalk's application to have this well granted a hardship well application?

A No, sir.

Q Let me ask you to identify for us Exhibit

Number Ten and tell us what that is.

A Exhibit Number Ten is a location plat showing the wells in the area of these two wells; these two wells being the only two Dakota wells shown on the plat.

The drill tract for the 62 No. 1 Well is the south half of Section 33.

There is one Gallup well and four Mesa-verde wells shown on this plat in Township 32 North, Range 5, and in Township 31 North, Range 5, or portions of those townships on this plat.

Q Based upon your investigation, then, the current No. 62 Well appears to be the only Basin Dakota well in the area that could be subject to this kind of liquid problem.

A Yes, sir.

Q There are simply no other wells.

A Yes, sir, that's correct.

Q All right, sir. Would you refer to Exhibit Number Eleven, then, and identify that for us?

A Exhibit Number Eleven is a copy of the well location and an acreage dedication plat filed with the Intent to Drill on what is now the Schalk 62 No. 1 Well.

Q All right, sir. Were Exhibits One through Ten either compiled by you or obtained from the files of Schalk Development Company?

A Or from the New Mexico Engineering Committee Report, yes.

Q All right. Let me ask you this in conclusion, Mr. Kendrick.

Based upon your knowledge and extensive experience in the Basin Dakota and your study of how the operator has handled this particular well, do you have an opinion as to whether the operator has done everything reasonably possible to rectify or eliminate the fluid difficulties the operator's experiencing in the No. 62 Well?

A Based on experience they had in the Schalk 63 No. 1 Well, they have proved that some other types of remedial action will not work and that it would be sending good money after bad to attempt the same things in this wellbore.

We believe that the proper thing to do is continue to produce the well at a low rate daily and maintain the gas production from the well so long as we can and salvage as much of these reserves as we can without flooding the market, and probably still below the 60 Mcf per day limit for stripper gas, and recover what we can on that part of the reservoir.

Q Do you have an opinion as to whether or not gas reserves that would otherwise be recovered will be lost if this gas well is not granted a hardship gas well classification?

A In my opinion the reserves in the Dakota, if my calculation of reserves is not too conservative, the reserves are too small to warrent redrilling the well.

We're talking about a Million Dollar, or $1.1 million worth of reserves and the cost of drilling a well at this time is approximately Half a Million Dollars, maybe more than a Half Million Dollars.

The return for investment ratio is not great enough to warrant drilling -- redrilling this well.

Q In your opinion is this operator gaining any unfair advantage over anyone's correlative rights if a hardship gas well application is granted for this well?

A No, sir.

Q Do you have an opinion as an expert witness whether the operator can continue the practice of swabbing this well in order to restore production?

A No, sir, they cannot continue this because every time you run a swab in the hole you take a chance of sticking the swab and this would require paying for the swabbing unit for that day or two and releasing them and bringing in a workover unit to trip the tubing to recover the swab, and the gamble is too great.

MR. KELLAHIN: Mr. Examiner, that concludes my examination of Mr. Kendrick.

We move the introduction of Applicant's Exhibits One through Eleven.

MR. QUINTANA: Exhibits One through Eleven will be taken into evidence.

Mr. Taylor?

MR. TAYLOR: Yes.

CROSS EXAMINATION

BY MR. TAYLOR:

Q Could you tell me the difference between the number on Exhibit 7 where you show remaining recoverable reserves as 278,000 Mcf and on, I believe, Exhibit One you show that lost reserves will be 249,000 Mcf?

Is that just two different people coming up with those numbers?

A Well, that thing was calculated a couple of months earlier based on the latest information that they had and I used a pressure that was obtained three or four weeks afterwards, so it's two different sets of numbers.

Essentially they're about the same. When I took the field man's pressure of the 1165 pounds I assumed that was the highest pressure. I assumed that it was an absolute pressure, and added the base pressure to it to bring it up to that.

As an inquisitive approach, I calculated it using the other pressure and it would have changed the value of the gas about $30,000 to have used the lower number.

Q I was just curious.

A But we're using -- each of us used the the latest information available and we came up with different numbers because we used a different basis.

Q Did you personally notify Northwest of

this application or how were they notified?

A A copy of the application was mailed to Northwest at the time this application was filed.

That's a requirement of the filing.

MR. QUINTANA: Are there any further questions of the witness? If not, he may be excused.

If there is nothing further, Case Number 8337 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 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. 8337, heard by me on Oct. 17, 1984.

Gilbert P. Quintana, Examiner
Oil Conservation Division