STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

APPLICATION OF CHEVRON U.S.A. INC. FOR AN UNORTHODOX GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO	)	CASE NO. 10367

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: JIM MORROW, Hearing Examiner
August 22, 1991
11:50 a.m.

This matter came for hearing before the Oil Conservation Division on August 22, 1991, at 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Linda L. Bumkens, Certified Court Reporter No. 3008, for the State of New Mexico.

FOR: OCD (COPY)

BY: LINDA BUMKENS CCR
Certified Court Reporter
CCR No. 3008

I N D E X

August 22, 1991
Examiner Hearing
CASE NO. 10367

E X H I B I T S

A P P E A R A N C E S

FOR THE DIVISION:	ROBERT G. STOVALL, ESQ. General counsel Oil Conservation Commission 310 Old Santa Fe Trail Santa Fe, New Mexico 87501
FOR CHEVRON U.S.A. INC:	KELLAHIN, KELLAHIN & AUBREY BY MR. W. THOMAS KELLAHIN, ESQ. 117 North Guadalupe Santa Fe, New Mexico 87501
FOR TEXACO:	CAMPBELL, CARR, BERG & SHERIDAN P.A. BY: MR. WILLIAM F. CARR, ESQ. 110 North Guadalupe Santa Fe, New Mexico 87501

MR. MORROW: Call case 10367.

MR. STOVALL: This is the application of Chevron U.S.A. Inc., for an unorthodox gas well location and simultaneous dedication, Lea County, New Mexico.

MR. MORROW: Call for appearances.

MR. KELLAHIN: If the Examiner please, I'm Tom Kellahin with the Santa Fe law firm Kellahin, Kellahin & Aubrey, appearing on behalf of the applicant, and I have two witnesses to be sworn.

MR. CARR: If it please the Examiner, my name is William F. Carr with the law firm Campbell, Carr, Berg & Sheridan of Santa Fe. I represent Texaco in opposition to the application, and I have two witnesses.

MR. MORROW: Will all the witness please stand and be sworn at this time?

(At which time the witnesses were sworn.)

MR. KELLAHIN: Mr. Examiner, to give you a quick overview of what we seek to accomplish and what our evidence will demonstrate to you, it might be helpful if you'll turn to our proposed Exhibit Number 1.

Chevron is the operator of that Eumont spacing proration unit identified on Exhibit

Number 1 and shown as the outline in Section 19. Simply stated, it's a spacing unit of 477 acres. The southeast quarter is a standard 160. There are some short lots on the northern boundary of the section that make that less than 320. It's 317. That nonstandard proration unit currently has dedicated to it the Number 9 well in the southeast quarter. In the northeast quarter is the Number 10 well. So we have the two Eumont gas wells currently existing in that spacing unit.

What we're seeking your approval for is the drilling of the Number 11 well shown by the red dots. That proposed location is 660 from the northern boundary of that spacing unit. It was filed for administrative approval and notices were sent to all the offsetting operators, and Texaco opposed the administrative application.

Texaco's spacing unit is the spacing unit in the south half of 18 to the north. It's that spacing unit that has 240 acres in it. It excludes the west half of the southwest quarter. Their well -- Eumont gas well is that Saunders Number 2 well. It's current -- shown on that display -- is 742 MCF a day. It's location is 760 from the common line. Chevron's engineering witness, Mr. Dennis

Hendrix, will testify as to why his company desires to drill at that 660 location.

In addition, I have a landman, Mr. James Baca, who will testify that Chevron has a unique problem with regards to the 477 unit because of the multiple interest owners, particularly the royalty owners. We are precluded from dividing the 477 acres. The conventional solution under the Eumont pool rules for the well located at this 660 location is simply to reduce the size of your spacing unit. And had all the ownership been in common, we could dedicate the north half, 317 to this well, simultaneously dedicate it to the Number 10 well, and that location then becomes standard under the Eumont rules, and we would then be able to produce a top unit allowable of 1200 MCF a day.

Mr. Baca will tell you that it disrupts the equity if he's required to divide the spacing unit so that you have a southeast quarter 160 and a north half of 320. He will tell you the reason is that the owners in the Number 9 well have historically shared their production with different owners in the north half, and if that is split apart, then the north half owners with the new well will enjoy all the production from the Number 10 well and don't

have to share it with the royalty owners in the southeast quarter.

Chevron recognizes that equity solution to be unfair and what they propose to do to satisfy Texaco's objections and concerns is to ask you to treat the north half of this nonstandard proration unit as if it were, for allowable purposes, a 317-acre unit, and set a maximum allowable then for the Number 10 and Number 11 well to be produced in any combination up to a ceiling of 1200 today.

We believe that solution is the optimum solution. It answers Texaco's concerns about the well location, by reducing the allowable in that fashion, and it puts that well at a standard location, if you will, with a reduced allowable. That will be Mr. Hendrix's testimony and that of Mr. Baca's that we propose to submit to you, Mr. Examiner.

MR. MORROW: All right.

MR. CARR: May it please the Examiner, just briefly to explain the basis for Texaco's objections. If you look at the tract on either party's Exhibit Number 1, you can see that the Texaco Saunders Number 1 is located and offsets the Chevron unit directly to the north. We have a good

producing Eumont well. That well, as Mr. Kellahin pointed out, is 760 feet from the south line.

What is being proposed by Chevron is that well of that common boundary 660 feet away or 100 feet closer to the common line. The problem that Texaco has with it, as you will see, there is -- there was a Eumont well due south of the now proposed well in the northwest quarter of Section 19 that cumed over 9 BCF and the location that is proposed, although standard to 320-acre unit, is 330 feet too close to the outer boundary of the tract for a 400 -- or 477-acre unit, and when Texaco reviewed this, they also have royalty owners to watch out for.

They became concerned that with a new well closer to the common boundary, it has twice the acreage and therefore would have twice the allowable of their well that they could be placed in a situation where they could be drained and wouldn't be able to offset that drainage with counter drainage. We attempted to resolve this with Chevron, and I think it's fair to say that nobody is mad at anybody in this one, but the problem that we face is we believe some penalty has to be imposed and we will be here to explain to you why we are

concerned that just treating the north half of the 320-acre unit, at least from our perspective, becomes very difficult to administer when you have multiple wells, some of which are not on that acreage, and when you get into over produced status on a well, it's very hard for us to see how you can effectively monitor, and so we will be here to present brief testimony on that factor.

MR. MORROW: Number 3, is that the abandoned well?

MR. CARR: Yes, sir.

MR. MORROW: Thank you.

EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Hendrix, could you please state your name and occupation?

A. Yes. My name is Dennis Hendrix and I'm currently a reservoir engineer for Chevron U.S.A.

Q. Mr. Hendrix, where do you reside?

A. I reside in Midland, Texas.

Q. Would you summarize your educational background for us?

A. Yes, sir. I graduated from Oklahoma State University with a Bachelor of Science in petroleum engineering in 1981. I spent three years as drilling

engineer with Chevron, approximately four years as production engineer, and about a year and a half as production foreman, and about 8 to 9 months as reservoir engineer.

Q. Describe your current responsibilities for your company as petroleum engineer insofar as this particular property is concerned.

A. As petroleum engineer, reservoir engineer over this area, my duties are to help in selection of development wells in the Eumont area on our existing proration units, aide geology in selecting geological locations, and look for not only economic wells but also for the protection of our correlative rights within our proration unit.

Q. Pursuant to those duties, Mr. Hendrix, have you made a study of the BV culp nonstandard proration unit that's shown on Exhibit Number 1 as an outlined red area with a red dot in it?

A. Yes, I have.

Q. Pursuant to your employment and your review of this information, have you also made a study of the offsetting production around you?

A. Yes, sir.

Q. And you have also studied the production within this nonstandard proration unit?

A. Yes, sir, that's correct.

Q. And based upon that study, were you able to formulate any conclusions about the drilling of the Number 11 well in its location?

A. Yes, sir.

Q. Mr. Examiner, we tender Mr. Hendrix as an expert petroleum engineer.

MR. MORROW: We accept his qualifications.

Q. (By Mr. Kellahin) Mr. Hendrix, let's turn now to the nonstandard proration unit. Within that proration unit there is a number of pieces of information. In sequence, take us through what has been the Eumont production to which this 477-acre nonstandard unit has been dedicated.

A. By going back to the installation of the proration unit, we had the BV Culp A Number 3 as the original unit well. Com unit was formed in 1959. It communitized this area that was alluded to earlier, 477 acres. Subsequently, the Culp A Number 9 was drilled in the southeast quarter in 1980, and completed in the Queen and plugged back to the Yates, and has been producing since 1980.

In mid 1990 we noticed possible inequities on the north section of our proration unit, and that led to the drilling of the Culp Unit A Number 10.

Q. What was the inequity that you discovered?

A. The inequity that we noticed was Texaco's Saunders well located 760 from our north lease line there, had produced over 7 BCF of gas.

Q. At what time had that Texaco well cumed over 7 BCF of gas?

A. Around November 1990.

Q. Okay. Why did you characterize that as a possible inequity to your spacing unit?

A. Well, the relative distance from our Culp A Number 3, which was also a prolific producer, was just an imbalance with the 760 location from our line and our Culp 3 being located so far south being 1,980 from the the north line.

Q. In what way was that an imbalance?

A. Based on its relative distance in drainage that we see in the Eumont, 7 BCF. It's hard to argue. It wouldn't be draining at least part of the acreage in the north part of Chevron's lease, and the Number 10 was a way for us to try to protect correlative rights to prevent any further drainage.

Q. The Number 10 well was drilled then as a protection well from the Texaco well?

A. Yes, sir. There were two reasons for the Number 10 well. One reason was the significant

margin within the 477-acre unit with the Number 3 well being shut in.

Q. Margin for what?

A. Margin for allowable.

Q. For the 477-acre nonstandard unit. What kind of allowable are you dealing with in the Eumont?

A. Approximately 1,800 MCF per day.

Q. That would be the maximum daily gas allowable for prorated Eumont gas with a spacing unit of 477?

A. Yes, sir, that's correct.

Q. Okay. What's the well location for the Number 10 well?

A. The Number 10 well is located 840 from the north line and 990 from the east line.

Q. Would the 840 location be a standard location between your property and the Texaco property if you use a 477-acre spacing unit?

A. No, sir. The 477, we should be located approximately 990 feet. The reason for the nonstandard unit in that case was surface problems; pipeline running through, and that was -- we do have an order granting permission of that nonstandard location.

Q. Did Texaco object to the 840-foot location from the Number 10 well?

A. No, sir, they did not.

Q. Okay. You drilled, then completed the Number 10 well?

A. Yes, that's correct.

Q. With what results?

A. We drilled the well and completed in November 1990, and we didn't get it on line until approximately April of 1991 with an IP of approximately 468 BCF per day.

Q. What is the current status of the Number 9 well in the southeast quarter?

A. The Number 9 well, when the exhibit was made up, has a current gas production as of May of 1991. Since then the Number 9 has -- the bridge plug has been knocked out over the Queen, and it makes approximately 190 MCF a day from the Yates Queen 1.

MR. MORROW: What?

THE WITNESS: 190.

Q. (By Mr. Kellahin) And that production is attributable to the Eumont gas pool?

A. Yes, sir, that's correct.

Q. And the approximate range of production for

the Eumont gas in the Number 10 well is in the range of 400 MCF a day?

A. Yes, sir. 400 to 450 we believe to be a stable rate for that well.

Q. And the status then of the Number 3 well over in the northwest quarter?

A. Yes. The Number 3 well which we alluded to, which is our original unit well, has been shut in as uneconomic. It's dual with the Grayburg, so it's also going to be included in the proposed Amerada Hess North Monument and we do have an AFE out presently due to its uneconomic condition to complete the Eumont in that well.

Q. Let's talk that the Number 11 well then. It's proposed location is 660 from the the common boundary with the Texaco unit?

A. Yes, sir.

Q. Why have you recommended that location rather than a more standard location for a 477-acre unit?

A. The 660 location was arrived at, as we typically do in the Eumont, we try to look for locations that are fairly equal distances between existing wellbores to insure economic producers and lower our risk, and this was no exception.

The 990 location, which would be standard, would bring us dangerously close to the Culp A Number 3, and as a result, Chevron did not expect a economic producer out of that well if we drilled it that close to the Number 3, and to efficiently drain the remaining reserves on our com unit, and in addition to protect our correlative rights on the north, which we feel like we're playing catch up there anyway, the 660 location we felt was fair and equitable.

Q. If your -- one of the criteria is to locate the Number 11 well approximately equal distances between the Texaco Saunders 2 well and Chevron's Number 3 well, you would, in fact, be closer to the common boundary than you propose now; is that not true?

A. No. Actually if we located on a legal 990, we would be further away from the common lease line.

Q. All right. And if you're trying to split the difference between the Number 2 well and the Number 3 well, where would that place you within your spacing unit in terms of your distance to the north line?

A. Well, it's actually -- to get equal distance we might look at distance relative distance

with the 660 location as proposed. The 660 we're 361 feet from our Number 3 well and we're still 1,731 feet from the Saunders well. So it would be equal distance between those two wells. We would actually be able to go -- want to go further north.

Q. In your opinion as a reservoir engineer, are there Eumont gas reserves to be recovered within your 477-acre proration unit that will not otherwise be recovered if you don't drill the well -- the Number 11 well at its proposed unorthodox location?

A. Yes, sir. We believe that there still are recoverable reserves on the proration unit. One supporting fact is the premature decline of the well Number 3. That due to the dual with the Grayburg and subsequent tubing leaks that caused the watering out of the Eumont zone, we had a steeper than normal decline and we feel like those reserves are still left on the north part of the unit.

Q. Okay. If the Number 11 well is not drilled at the location you proposed, what is going to happen to that proration unit share of Eumont gas reserves that underlies its tract?

A. I believe without the Number 11 drilled we would either loose those reserves or there will be -- and\or they will be at least partially drained

by the Texaco Saunders well at the current rate of over 740 a day.

Q. Have you reviewed, Mr. Hendrix, the rules and regulations for the Eumont gas pool in terms of well locations and corresponding maximum proration acreage factors for those wells?

A. Yes, sir, I have.

Q. Let me show you what is a portion of the Eumont gas rules that has the well location information in it. When we look at this portion of the proration rules, and turn to the second page, 18, under Rule 2B 4, is this the rule that you are familiar with, Mr. Hendrix?

A. Yes, sir, that's correct.

Q. If Chevron was able to dedicate the north half of Section 19 to the Number 10 and to the proposed Number 11 well, approximately how many acres would that nonstandard proration unit contain?

A. It would contain approximately 317 acres.

Q. If you did that or were able to do that, with the Number 11 well located as you proposed, and should Texaco object, would you be able to produce and drill the Number 11 well at that location with a 317-acre dedication to it?

A. Yes, sir, we would.

Q. The Eumont gas rules provide for that flexibility?

A. Yes, sir. At 317 acres, that would make our 660 location perfectly legal within our pool rules.

Q. If you were able to accomplish that, what then would be the allowable that could be assigned? The maximum allowable that would be assigned to the 317-acre nonstandard unit?

A. We have approximately 1,200 MCF a day with the slight penalty due to the three acres short of the 320 that we are in the north half.

Q. Under the proration rules that apply to the Eumont gas pool, would you have -- how would you produce the allowable with two wells within the north half?

A. We would propose to produce the proration unit as a 477-acre unit if granted the 320 allowable to be shared between the 10 and 11, we would offer to internally monitor the wells, provide Texaco whatever production information they would need through C1- 15 et cetera, and maintain our equity on the north line with a standard allowable for a 320.

Q. Okay. Is Chevron willing to establish the internal controls necessary to treat the 477-acre nonstandard proration unit as if, in fact, it was a

317 north half proration unit for the Eumont and corresondingly 160-acre proration unit for the Number 9 well?

A. Yes, sir. We would be willing to monitor it internally. In fact, the three wells that currently are on on the Culp A 3 are all separately metered and it would not be a difficult task to provide separate gas rates monthly -- on a monthly basis.

Q. What's the current status of the nonstandard proration unit in terms of its classification as marginal or non marginal?

A. Yes, it is classified as a marginal proration unit.

Q. If we create this solution to fix a maximum allowable for the spacing unit as if the north half was treated as a 317 unit, would you propose that all of the other proration unit rules apply as if it were a 320-acre unit?

A. Yes, sir. If we were allowed to produce the north half as a 317 we would definitely abide by all the 320-acre rules and regulations in both the Number 10 and 11 wells.

Q. In terms of calculating an OP limit for the spacing unit, you'd use the 317?

A. Yes, sir, that's correct. We feel like that limiting to a 320-acre allowable is bringing us down to a standard location would be penalty enough, and in all rules applying to a 320 would be applied at that point.

Q. Looking at the Texaco nonstandard unit, that's 250 acres; is it?

A. Yes, sir.

Q. Under that nonstandard proration unit, what is its top allowable?

A. The 240 that the Texaco Saunders resides on would have what we call a one-and-a-half allowable for the Eumont, which is 900 MCF per day.

Q. If you're using 160 acres, that gives you an acreage factor of one in the Eumont; doesn't it?

A. Yes, sir, that's correct.

Q. And this would translate to a maximum allowable of 600 MCF a day for 160 acres?

A. That's correct.

Q. So if you take one and a half times that you get the 900 MCF a day?

A. Yes, sir.

Q. Okay. If we use the north half then as this spacing unit for allowable purposes, the maximum would be 1,200 a day?

A. Yes, sir, that's correct.

Q. And if the Number 10 is producing 400 of that, then that would give you the possibility of producing the remaining 800 from the Number 11 well?

A. Yes, sir.

Q. Okay. Let's turn now, sir, to Exhibit Number 2 and have you identify and describe that for us.

A. Exhibit Number 2 is the cumulative gas production map of the BDA com unit and surrounding proration units. The Eumont completions are shown in the astrix symbol common for a gas well, and those are currently active completions, the shut-in Eumont wells are shown with a circle with a vertical line through it. The dark numbers in the corners indicate, as of May 1991, cumulative gas production in BCF -- that's from OCD records. The dark shaded areas are Chevron proration units where the lighter shaded areas are non Chevron proration units, and the red dots indicates the proposed Number 11 well at 660 from the north and 2,310 from the west line of Section 19, 1,937.

Q. Do you have an opinion, Mr. Hendrix, as to whether your recommended penalized allowable for the Number 11 well is a fair and reasonable method by

which is to adjust equities between you and Texaco for the drilling of the well at the 660 location?

A. Yes, sir, I believe it's fair and equitable based upon the gas cumes as noted on the map here. You can see that the Saunders well has enjoyed a more than probably equitable position at 7 BCF 760 from the line, while Chevron wells, the Number 10, has just been completed and is only producing at 400 a day. We don't expect to at that current rate to produce more than around a BCF of gas, and that would leave the Number 11 as our second best choice for a location to try to solve the -- what we think is obvious in equity in the past, and to try to get our fair share of reserves in the north part of the unit.

MR. KELLAHIN: That completes my examination of Mr. Hendrix. Mr. Examiner, we move the introduction of his Exhibits 1 and 2.

MR. MORROW: Exhibits 1 and 2 are accepted.

(Chevron Exhibits 1 and 2 admitted.)

EXAMINATION

BY MR. CARR:

Q. Mr. Hendrix, if I understand your testimony, your or Chevron's concern that resulted within the proposed location was inequity which

existed between their proration unit in the south half of 18 and your nonstandard unit, and I believe this is Section 19; is that right?

A. Yes, sir, that's correct.

Q. In fact, what you were concerned about was that there was potentially production being drained to the Texaco tract from yours; isn't that what we're talking about here?

A. The actual proposal for the well, that was only a part of the solution for a location of this well. The original intent was replacement of the Number 3 well to recover the remaining reserves that we felt like the Number 3 and the Number 10 based on the VIPs that we received from that well would not have drained in that north part of the unit.

Q. Okay.

A. So actually we were saying we were either going to loose those reserves, and\or they could be partially drained, if not already, from the Saunders.

Q. You have studied and are familiar with the Eumont formation, are you not?

A. Yes, sir.

Q. You would anticipate that a well that is performing like the Saunders Number 1 would, in

fact, if there isn't an additional well in the half of 19, that that would well would drain some reserves from the Chevron tract, would it not?

A. Yes, sir, I believe it would.

Q. And conversely a well at the proposed Chevron location would be expected to drain some reserves from 18; is that not right?

A. Well based on the relative cumes, which is how you figure drainage, I would say that the Texaco Saunders well has more than fair advantage on the lease line even with the drilling of the Number 11.

Q. When we look at the relative cumes, we're talking about a cume on the Saunders well of 7.2 BCF; right?

A. Yes, sir.

Q. And we already have a cume on your Number 3 well of 9.3 BCF?

A. That's correct.

Q. So what we have, in fact, don't we, Mr. Hendrix, is a situation where the Number 3 well in the north half of your section has drained a substantial portion of that tract?

A. I believe it's drained a substantial portion of Section 19 based un the performance of the Saunders well. I don't believe that the

Number 3 has drained any part of the Texaco lease yet just based on relative performances.

Q. If we are concerned about recouping the remaining reserves in the north half of 19, wouldn't a well with a standard setback of 990 from the north line also produce those reserves?

A. No, sir, we don't believe that a location at 990 would give us the VIP needed to produce from any reserves at an economic rate.

Q. And that's because you've already drained those; isn't that right?

A. It would be partially drained. As you moved toward the Number 3 you've got higher and higher risks of catching drain reserves.

Q. Isn't really the reason for this well just trying to get away from a drained area?

A. That's one of the criteria, as I mentioned before, to center our new wells between existing Eumont wells that have already drained at least partially.

Q. And isn't the other criteria trying to get close to a well that is producing at a substantial rate on an offsetting tract?

A. Typically the second, beside centering the wells between existing Eumont completion, another

factor that we look for is current gas production which is true whether it's offsetting or Chevron.

Q. And what you're doing here, are you not, is locating a well 100 feet closer to the common lease line between the two tracts and the offsetting Texaco well?

A. Yes, we are locating it 100 feet closer.

Q. And you did consider the 990 foot setback location and you rejected that?

A. Correct.

Q. Now, when we look at this, have you reviewed the geology of the area?

A. I have not reviewed the geology in detail simply because we don't feel geology has a -- we haven't been able to use it as a strong factor to test the Eumont typically driven by production and so forth.

Q. Your location, to your knowledge, wasn't the basis of a geological consideration?

A. No, sir, it certainly wasn't.

Q. Now, your proposal to resolve this is to treat the north half as a 320-acre unit; is that correct?

A. Yes, sir.

Q. And the well location you've proposed would

be standard on a 320-acre unit?

A. Yes, sir, that's correct.

Q. In monitoring this, how would you account for the over production or the six-time over produced limit, how would that be accounted for? Would it be on just a two-well basis?

A. Yes. The over production would be accounted for as it would be on any other 320-acre unit with a multiple well. 320 would be accounted before between the Number 10 and the Number 11.

Q. And would the production from the Number 9 well in the southeast be factored into that in any way?

A. The Number 9 well would be probably looked upon in over production sense as a 160 and it would be monitored in that form.

Q. Now, when we talk about montoring it, would that be something just done by Chevron?

A. The 480-proration unit, or 477, would be monitored as a normal practice through the OCD. The monitoring program that we mentioned would actually be just through Chevron -- through Chevron and Texaco in their agreement.

Q. So we would have OCD records that would say one thing, and just separate records that would

account for production between the parties?

A. Yes, sir. The internal monitoring on the 320 added to the separate 160 would add back to the 480 that the OCD would show in proration.

Q. If it was ever determined to drill an additional well in the southeast, would that just be treated as a well on a 160-acre basis?

A. At this point we would probably be bound to treat that as a 160.

Q. If we got into a situation where Texaco felt you had passed the six-times overproduced limit, what would we do at that time?

A. Well, we feel like that approaching the solution as we have with the OCDs, to give Texaco the recourse to come back and work through the OCD to apply any penalties it deems necessary on Chevron as it would any other production case.

Q. So what you're basically recommending then is that the parties treat this one way and the Oil Conservation Division treat it another, and if we disagree then we have to come back?

A. No, sir. We feel like that we're treating the proration unit in the same manner that the OCD would as a 477. We're simply saying that the production can indeed be entirely monitored for

Texaco's benefit to allow them the opportunity to get individual status on these wells that won't show up in the proration schedule.

Q. And you're aware, though, that the allowable would be carried by the OCD as a -- a 477-acre unit?

A. Yes, sir.

Q. And that if we get to a point where we're not using just the minimum allowable -- or what is it -- 600 per MCF a day per one 160-acre unit, then we would also have to factor in what the allowable would actually be for that north half unit?

A. Yes, sir, that's correct.

Q. And how would Texaco receive that information from Chevron?

A. Well, we would hope that the OCD could provide in their order the solution of a 320 acre allowable to be monitored between Chevron and Texaco, and then from there it would be just internal control that we would provide Texaco any production figures they needed to insure that the overproduction and so forth was being handled by Chevron.

Q. And when you file a monthly production report with the OCD, would you also file a separate

and different one on the north half with Texaco?

A. The C1-15's are sent in on, as I mentioned early, on a separately metered basis and then combined and sent to the OCD, I believe, and so whatever we send Texaco would probably be a standard form such as the C1-15 or the gas purchasers form, which is public record, and those numbers combined would be what the OCD would get. So I believe we would be talking about the same numbers.

Q. That's all I have.

MR. KELLAHIN: No further questions.

EXAMINATION

BY MR. MORROW:

Q. So you'd proposed to produce no more than 1,200 MCF a day from those to the north wells; is that what you said?

A. Yes, sir, that's correct.

Q. And would you -- it kind of sounds like you were thinking about producing all of Number 10 could make and then the rest of it from the Number 11; is that sort of your intent, or is that your intent with regard to the split between the two?

A. Yes. At this point in time, if the Number 11 were allowed to be drilled, we would be obligated to produce it at its maximum rate up to

the 1,200 MCF per day.

Q. Have you made an estimate for our AFE on what payout calculation is as to what you think Number 11 will produce on a daily basis?

A. Yes, sir, we did. We estimate the well, just based on the Number 10 completion, to be approximately the same volume of around four to 450 MCF per day, but we contend to do the Saunders well in its performance that there's a possibility that we could make the 800 a day that we'd have the margin for.

Q. But if that's really right -- if your calculations right -- then all these would be marginal -- it would be a marginal gas proration unit anyway; wouldn't it?

A. Yes, sir, that's correct.

Q. Okay. That's all I have.

MR. STOVALL: You asked the question I was going to ask.

MR. MORROW: All right. You may be excused. Thank you.

MR. KELLAHIN: Mr. Examiner, at this time I'd like to call Mr. James Baca. Mr. Baca is a landman with Chevron.

EXAMINATION

BY MR. KELLAHIN:

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

A. My name is James Baca. I'm a land representative with Chevron U.S.A., Inc.

Q. And where do you reside, sir?

A. In Midland, Texas.

Q. Could you summarize for us your eduational background and your employment experience that has qualified you to be employed with Chevron as a petroleum landman?

A. Yes. In 1976 I graduated from the University of New Mexico with a Bachelor's University Study degree. In 1976 I started my land career with the State Land Office working various departments here from '76 to 1980. In 1980 I was hired by Del Corporation as a land representative landman, and I've been a landman for 11 years now, and most of that experience -- majority of it -- was spent in the Permian Basin west Texas, and now I've been exposed to the New Mexico aspect of it.

Q. Pursuant to your employment, have you reviewed the ownership within Section 19?

A. Yes, I have.

Q. In addition, have you made yourself aware

of what you believe to be a current list of the offsetting operators to this nonstandard proration unit?

A. Yes.

Q. In addition, within Section 19, we have discussed with Mr. Hendrix this nonstandard 477-acre unit. Are you familiar with the land title ownership component of that tract?

A. Yes, I am.

Q. We tender Mr. Baca as an expert petroleum landman.

MR. MORROW: We'll accept his qualifications.

Q. (By Mr. Kellahin) Mr. Baca, let me take a moment, sir, and have you first of all identify what is marked as Exhibit Number 3?

A. Exhibit Number 3 here. We have a plat depicting the subject 477-acre BD Culp NCTA com unit.

Q. Is this an exhibit that you prepared yourself based upon information available to you in the ownership records of Chevron?

A. Yes.

Q. When we look at the area that makes up the 477 acre nonstandard unit, how many separate tracts are contained within the nonstandard unit?

A. We have four separate tracts.

Q. And how have you designated those tracts on your display?

A. Tract 1 encompassing lot 1 or the northwest northwest. That tract was contributed to the unit initially by Phillips now it's Elwood. It's a successor to Phillips.

Q. Under the display that shows the section you've identified in the left column, Tract 1?

A. Yes.

Q. And underneath Tract 1 you have some information. What is the purpose of that?

A. The purpose of that is to depict who the working interest owner is, the royalty owners, the tract allocation of that particular tract, the way it shares -- when I say that -- how that tract shares in the total production from the the subject 477-acre proration unit, and that particular tract is allocated 8.08 percent of total unit production from said tract.

Q. When was the 477-acre nonstandard unit first formed?

A. It was formed effective pursuant to DO 1487-91459 effective date.

Q. This was the tracts -- the four separately

owned tracts that were consolidated by some agreement?

A. Yes.

Q. Do you have a copy of that agreement?

A. Yes.

Q. And how is that identified?

A. It's identified as our exhibit here, and it's entitled "Gas Pooling Agreement, BC Culp NCTA, Eumont Gas Unit Number 1."

Q. All right. And it's shown as Exhibit Number 4 to this hearing?

A. Yes.

Q. Without reading it, what is its intent and purpose?

A. Well, the intent and purpose of this legal document here is to pool all royalty and leasehold interest in that 477-acre tract. As to the Eumont gas zone -- vertical limits to the Eumont gas zone -- covering dry gas and associated hydrocarbons there with.

Q. In terms of landman's nomenclature, is this characterized as a communitization agreement?

A. Yes, it is.

Q. Was this communitization agreement put together for the drilling of the first of these

Eumont gas wells within this spacing unit?

A. It was initially formed for the Number 3 well there -- the Number 3 well -- which was completed in 1976 as a -- well, it was producing before that under a 240-acre proration unit and so it was to expand -- increase the allowable of the area there. That's one of the reasons it was formed.

Q. All right. When it was put together then initially as a 477-acre unit, how many different wells production has been shared based upon that configuration?

A. Based on that configuration the 3, the 10, and the 9, and they're located -- I can give you the locations if you want.

Q. They're obviously on the display. Those three wells then that Mr. Hendrix talked about have all had their production shared among the royalty and working interest owners based upon the 477-acre communitization agreement?

A. This is true.

Q. Okay. As a landman, do you have an opinion concerning whether or not it is fair and equitable to now substitute or terminate this existing proration unit agreement so that you could dedicate

317 acres in the north half to the Number 10 and 11 well and correspondingly create another document to dedicate the 9 well production to the southeast quarter? Do you have an opinion about that?

A. My opinion of this scenario, that which you've just mentioned, is that if we try to subdivide the north half and southeast quarter thereby forming separate proration units, the north half being the 320 and the southeast quarter being the 160, I, from a practical landman's standpoint, I can't see that being done because -- the main reason being that from the inception of this 477-acre proration unit, the royalty owners in the southeast quarter and the north half have been sharing from the total production of that unit, and to separate -- to make them two separate entities is just -- that's just not practical, and not fair and equitable, and I think it's violating the correlative rights of the interest owners in that proration unit, and to further complicate this matter, the north half, we have approximately 200 royalty owners it's a fee tract, and I don't think they would tolerate something like this to tell them -- go and tell them that we're going to terminate this column and take the matter -- their

production -- out of the southeast quarter and vice versa to tell the royalty owners in the southeast quarter of the state of -- being the State of New Mexico, that they can no longer share in production from the Number 10 and any subsequent Eumont gas wells that may be drilled later in the north half.

Q. Let me direct your attention, Mr. Baca, to what is marked as Exhibit 3A. Do you have that before you?

A. Yes, sir. I do. I believe I do. It is the royalty owner? Yes.

Q. What is this?

A. It's our division order pay system here and it lists -- tabulates all of the royalty owners encompassing tract two of the subject we're talking about, and I think I've got through and counted these things really quick and there's approximately 138 royalty owners -- separate royalty owners -- in that encompassing Tract 2 as you can see, of which Texaco is a royalty owner there.

Q. If the Examiner rejects Chevron's solution and requires then that in order to drill the Number 11 well you must reform the nonstandard unit and have a 317-acre north half?

A. Yes, sir.

Q. Can you accomplish that, in your opinion, with a voluntary communitization agreement of tracts 1 and 2?

A. No.

Q. Why not?

A. Because of the adverse royalty ownership first of all, and back in 1956, around that time there, when -- there was a time when -- then Gulf and Phillips and Shell were working interest owners, and we tried at that time to get all of the royalty owners to ratify the subject -- the caum agreement -- and we were unsuccessful. It's just --

Q. And therefore what did you have to do?

A. Well, we had to go before the OCD and have them force pool under said R-1487 division order.

Q. Do you have an opinion as to whether or not you would be looking at another force pooling proceeding if you're required then to divide the current nonstandard proration unit?

A. It's very very likely that would be the likely scenario.

Q. Is this current communitization agreement Exhibit 4 constructed in such a way that you could, in fact, have two nonstandard proration units, one being in the north half and the other being the

southeast quarter, and having them both controlled by this existing document? Does it permit that?

A. No, it does not. There's no provision in the document that addresses that issue at all.

Q. In your opinion, if the division requires that you divide your current unit as we've discussed, what is the impact on this document, Exhibit Number 4?

A. I would say -- well, if we're going to do that exhibit -- the existing caum agreement would be just null and void. You would have to make two separate communitization agreements. One for the north half and one for the southeast quarter.

Q. And even if you accomplish all of that, in your opinion, is there still an inequity among the royalty owners in the allocation of future production then from the Number 11 well?

A. Yes.

Q. That concludes my examination of Mr. Baca, Mr. Examiner. We tender his Exhibits 3, 3A and 4.

MR. MORROW: Exhibits 3, 3A, and 4 are admitted into the record.

EXAMINATION

BY MR. CARR:

Q. Mr. Baca, if I understood one of your

responses to one of Mr. Kellahin's questions, I believe the question was something to the fact if the OCD denied this application and required you to reform the unit, could that be done? Has the OCD to your knowledge, ever required parties to reform a unit?

A. Not -- well, not under these circumstances. Not to my knowledge.

Q. That's all I have.

EXAMINATION

MR. MORROW:

Q. What year did you say the forced pooling happened?

A. It occurred effective 9-14-59.

Q. And was that before the first Eumont well was drilled?

A. No. That was subsequent to the -- there was already an existing Eumont well on there that was owned 100 percent by Gulf now Chevron, and it was -- it was formed by administrative rule NSP 256, and we were producing under that.

Q. And how much acreage did you have assigned to that proration unit at the time?

A. It was approximately 280 acres, I believe. Our files do not reflect -- they just make reference

to that administrative order.

Q. Okay. So it was -- you didn't need -- you didn't need pooling at that time. You owned all of it -- had control of all of the 280 acres; is that correct?

A. Yes, sir. We just got permission for the nonstandard, I believe, dedicated.

Q. Okay. The north half is fee you said, and the south half is state acreage?

A. Yes.

Q. If for administrative purposes the OCD should decide to -- just for proration purposes -- decide we could in some way handle those within the existing com as two separate tracts, would that do damage to your agreement?

A. No, it wouldn't, it would stay intact.

Q. We could just say this southeast quarter has an acreage factor of one, and the north half has an acreage factor of two and set them up separately. You wouldn't have any problem with that as far as the land, would you?

A. No. Everybody would share.

Q. I don't know if we could do that or not. I would need to know what that would be to your --

A. It wouldn't have any legal implications to

my knowledge effecting the gas caum agreement

EXAMINATION

BY MR. STOVALL:

Q. Just a couple real quick questions. Essentially what Mr. Morrow would be saying, you would treat it like a unitized-type agreement in the agreement; is that correct?

A. Yes.

Q. Am I correct? When I look at the production map if, in fact, I don't think the division would necessarily say go split it into two units -- if you were denied the application and Chevron chose that course of action, it appears to me that the better production is in the north half; is it not? Am I reading the engineer's maps correctly?

A. Yes, I guess it is.

Q. And the southeast quarter is the state lease; correct?

A. Yes.

Q. So the state lease would share any -- would have the entirety of a much lower volume of production rather than a share of a higher volume of production?

A. If, in fact, if we were to break up these

two or this 477-acre tract, the State of New Mexico in the southeast quarter would only share in production from the Number 9 well -- any subsequent Eumont gas well that would be drilled in that tract. Am I answering your question correctly?

Q. And based upon current production trends and predictions, that would be definitely less than within one-third of the overall production for the current 477 acres; isn't it?

A. Okay, if we formed right now --

Q. In other words, the State would get hurt if this thing was broken in --

A. Oh, yes.

Q. So the commissioner of public lands probably wouldn't get real excited about that kind of thing?

A. I don't think so. Right now the State Land Office gets like 33 percent of the production allocated to the southeast quarter. They get like 33 percent of what the total production is.

Q. The southeast quarter doesn't produce 33 percent of the production. The southeast quarter produces substantially less than 33 percent of the total production?

A. Exactly.

MR. STOVALL: No further questions.

MR. MORROW: Do you have anything more?

MR. KELLAHIN: No, sir. Mr. Examiner, for your reference, I'll give you a copy of order number R-1487. It's the compulsory pooling order that consolidated the balance of the interest owners in the 477 acre current unit that we have before us.

MR. MORROWN: Thank you.

MR. KELLAHIN: In addition, Exhibit Number 5, Mr. Examiner, is Mr. Bohlings certificate of mailing of notification to the offsets after this was objected to from the administrative processing. It was then put on the OCD docket, and Mr. Bohling took the initiative on behalf of Chevron to notify the offsets, and this is his certificate that he did that.

MR. MORROW: Okay. Anything more?

MR. KELLAHIN: That concludes our presentation, Mr. Examiner.

MR. MORROW: Mr. Baca, you can be excused. Thank you, sir. I believe we should take a 15-minute recess at this time.

(15-minute recess taken at this time.)

MR. CARR: At this time we call Russel Pool

EXAMINATION

BY MR. CARR:

Q. Will you state your name for the record, please?

A. Russel S. Pool.

Q. Where do you reside?

A. Hobbs, New Mexico.

Q. Mr. Pool, by whom are you employed and in what capacity?

A. Texaco as a senior production engineer.

Q. Have you previously testified before this division and had your credentials as an engineer accepted and made a matter of record?

A. Yes, I have been.

Q. Are you familiar with the application filed in this case by Chevron?

A. Yes, I am.

Q. Have you made a study of the area?

A. Yes.

MR. CARR: Are the witness's qualifications acceptable?

MR. MORROW: Yes.

Q. (By Mr. Carr) Mr. Pool, what is the purpose of Texaco's appearing and presenting testimony in this case?

A. We are objecting to Chevron's application

to drill their BD Culp well Number 11 at an unorthodox location.

Q. Have you prepared exhibits for presentation here today?

A. Yes, I have.

Q. Lets go to what has been marked as Texaco Exhibit Number 1. Would you identify that and review it for Mr. Morrow?

A. Yes, I would. This is simply a plat showing the Eumont completions surrounding the proposed Chevron well. I think that particular notice is the fact which has already been discussed is the Chevron's Number 11 at 660 feet from our common boundary and Texaco's Saunders State Com Number 1 is 760 feet from the lease line.

I think it's also a particular notice Chevron's well Number 3 which is now shut in, which has produced over 9 BCF. The red numbers indicate the daily production and MCF per day as of June of '91. The green shows the cumulative production as of February of '91.

Q. Now, the proposed location is surrounded in three directions by wells that have been commercial in the Eumont?

A. Very commercial, yes, sir.

Q. The Saunders K Number 1, the Texaco well in the south half of 18, is that also on a state tract?

A. Yes, it does contain state acreage.

Q. Let's move to your Exhibit Number 2. Could you identify and review this for Mr. Morrow?

A. Shown on Exhibit 2 are two circles surrounding Chevron's proposed location. The inner circle drawn to scale is 320 acres. The outer circle is 480 acres. In order for Chevron's proposed location to be legal, the most that it can dedicate to it is 320 acres. If it depletes 320 acres, it would affect 81 acres, as indicated by the hashed blue lines underlying Texaco's Saunders State Com.

If 480 acres is dedicated to Chevron's proposed well, and subsequently it receives a high allowable, and it is allowed to deplete 480 acres, then it would affect an additional 55 acres shown at red which underlies our lease. This will result in Chevron's proposed well affecting 55 percent more of Texaco's acreage.

Q. Now, Mr. Pool, how many additional acreages would be drained if the well, in fact, drained 480 on your tract?

A. That would be 44 more acres.

Q. And that would result in 55 percent additional drainage area on your tract?

A. Yes, sir.

Q. Are there wells in the Eumont which, in fact, can drain a 480-acre tract?

A. Yes, sir.

Q. What is the Texaco allowable for the Saunders State Com Number 1 well?

A. The minimum allowable is 900 MCF per day.

Q. It has an acreage factor of what?

A. 1.5.

Q. All right. And the offsetting proposed Chevron well would have what allowable?

A. Number 11 could have an allowable of 1,800 MCF a day. I should say that's the minimal. It could be more than that.

Q. And what penalty would you recommend be imposed on this well if, in fact, a 477 tract remains dedicated to it?

A. I would suggest that they be penalized 55 percent and that that penalty be applied to the acreage factor, and therefore that acreage factor would be 1.35.

Q. And why are you recommending this particular approach for a penalty?

A. I think it's the only way that it can be monitored by the New Mexico Oil Conservation Division.

Q. You've heard Chevron's recommendation here today, have you not?

A. Yes, sir.

Q. Do you believe that it is appropriate to report the production for this unit in two ways, one way to the commission and another way to you, Texaco?

A. Yeah, we are very much against that. We do not want to be burdened with having to monitor Chevron's production. We think it presents a bad precedence.

Q. If, in fact, this became a way to handle locations in this area, what affect it would it have on your ability as a company to monitor and protect your interest?

A. Well, of course we would have to monitor -- if we made a mistake we could be subject to legal liabilities, and they're simply -- we don't want to be burdened with that task.

Q. And if the proposal that Chevron has adopted, what recourse do you understand would be available to you if, in fact, there was a problem?

A. I believe we have no recourse.

Q. You have to come back to the commission?

A. Probably.

Q. And do, in essence, what we're doing here today?

A. Yes, sir.

Q. What impact would approval of this location without a meaningful penalty, or some other method of regulating the production from that acreage, have on the correlative rights of Texaco?

A. We do not believe we would be able to affectively protect our correlative rights.

Q. If within the prorationing system the division was able to, from a State point of view, report and monitor the north half separate and independent from the remaining acreage in that spacing unit that is treated in the state regulations as a 320-acre unit, would Texaco have an objection to that?

A. No, we would not.

Q. Okay. If there isn't -- you believe that if that cannot be done the penalty that you have recommended is necessary to protect the correlative rights of Texaco?

A. Yes, I do.

Q. Were Exhibits 1 and 2 prepared by you?

A. Yes, sir.

MR. CARR: We move the admission of Texaco Exhibit 1 and 2.

MR. MORROW: 1 and 2 are admitted.

(Texaco Exhibits 1 and 2 admitted into evidence.)

MR. CARR: That concludes my direct.

EXAMINATION

bY MR. KELLAHIN:

Q. Mr. Pool, have you prepared a drainage circle for the Saunders Number 2 well to see what that drainage circle looks like?

A. No, I did not. The Number 2 is at a legal location.

Q. I understand, but to see where that 7.2 BCF of gas was drained from? I was curious to know if you, in fact, had prepared such a drainage display to see what that well was doing?

A. No, I did not.

Q. The assumptions that go into Exhibit Number 2, this circled drainage conclusion, assumes that there are no other wells within the area competing for gas from the the reservoir; isn't that true?

A. Sure.

Q. And that, in fact, is not what is occurring; is it?

A. It could happen.

Q. Well, we know that the Saunders Number 2 well is going to be in competition for the Eumont gas not only with Chevron's Number 10, but with the Number 11 if it's drilled; is that not true?

A. Yes, but, of course, if Number 11 was drilled and could produce the full allowable, Chevron could simply shut in the other two wells and produce that full allowable from there, or Chevron could lease both the other wells and produce a full allowable from the Number 11, and then, therefore, this drainage radius would probably hold true.

Q. All right. Let's make those assumptions then and assume that only the Number 11 Chevron wll and the Saunders Texaco Number 2 well are in direct competition with each other; right? If we drew a drainage map with those two wells competing with each other, would we not see a no-flow boundary between those two wells approximately equal distances between those two wells?

A. Of course there would been some interference between the two, but I suppose you

could do that.

Q. Sure. You're going to have to change the shape from circles to some kind of ellipses; aren't you?

A. Uh-huh.

Q. You're going to have an area that is shown on Exhibit Number 2 which is being protected by the Saunders Number 2 well?

A. Uh-huh.

Q. And we know that, in fact, is going to exist in the reservoir; don't we?

A. Uh-huh.

Q. The other assumptions made in this circle map is that you're assuming a homogeneous reservoir of the same thickness within the area of the circle; is that not right?

A. Uh-huh.

Q. Have you attempted to taylor a specific drainage map that meets the geology that Texaco has mapped for this particular area of the Eumont?

A. I'm not sure if I understand. We have a geology presentation which will come up next.

Q. Okay. Has Mr. Sadler prepared a net pay isopach for you?

A. No, he hasn't, but he will explain why he

hasn't.

Q. So you have not taken a net pay isopach and attempted to quantify the Eumont gas reserves that are underlying either the Texaco tract or the Chevron tract?

A. No, I haven't, and, again, we will explain why we have not done so.

Q. In addition, you have not attempted to adjust these drainage circles from the hypothetical to the real world situation where we have the Saunders Number 2 well competing with the Number 11 well?

A. No, I haven't.

Q. Okay. You suggested a 55 percent penalty be imposed against the Number 11 well?

A. Yes.

Q. Describe for me the mechanics of how that's to be put in place in the proration system.

A. It would just be in -- the proration schedule would simply have an acreage factor of 1.35 for that multiple well unit.

Q. Okay. And correspondingly if -- correspondingly if Mr. Hendrix's proposal is accepted by the Examiner, what we put in there instead of a acreage factor you've suggested, we

could put an acreage factor of two?

A. If that's what the OCD so desires, yes.

Q. So, regardless of which penalty the Examiner accepts, each one is predicated on an adjustment of the acreage factor?

A. Uh-huh.

Q. For the Number 11 well or the 10 and the 11 well?

A. Yes, of course. Ours can be monitored, and I'm not sure that your proposal can be monitored by the OCD.

Q. All right. If the acreage factor you're suggesting is 1.35 -- we put a 1.35 acreage factor on the Number 11 well?

A. Well, it's only multiple well units on the 477 acres.

Q. Oh, I'm sorry, I misunderstood. Okay. We're going to take the 477 and the whole 477, that whole proration spacing unit then --

A. Sure.

Q. -- only has an acreage factor of 1.35?

A. Yes.

Q. What's the total allowable then for that spacing unit?

A. I haven't finished -- 1.35 times 600 would

be the minimum amount. It could be higher than that.

MR. MORROW: I got 800.

A. Yeah. That's the minimum.

Q. (By Mr. Kellahin) Give or take?

A. Well, it could go higher. That is not the maximum, that's the minimum.

Q. Okay. We currently have two marginal wells on that proration unit?

A. At this time we do.

Q. Okay. And off the 810 then we need to subtract the -- 430 is it? Approximately 400 that the Number 10 is making.

A. If it continues producing at that rate.

Q. Okay. Mr. Hendrix said his Number 9 is in the 190 range. We got 220 MCF a day available left for the Number 11 well?

A. That's if the other two wells continue producing. I do not know if that will happen.

Q. Do you have any examples within the Eumont gas pool whereby the penalty that you have proposed has been adopted and utilized in this pool?

A. No, sir. I'm not -- no, I don't know. In the multiple well unit I do not.

Q. Okay. No further questions, thank you.

FURTHER EXAMINATION

BY MR. CARR:

Q. Mr. Pool, if you are doing what Mr. Kellahin said in trying to map a real world situation, you would take into account the drainage from your Saunders Number 1 well, would you not?

A. Yes.

Q. You would also take into account the 9.3 BCF produced from the Chevron Number 3 well, would you not?

A. Certainly.

Q. And in constructing your drainage circle then, you would have to factor both of those in; isn't that right?

A. Certainly.

Q. Now, your recommendation would result in an allowable of approximately -- minimal allowable of approximately 80 MCF per day for the Chevron unit in Section 19; isn't that right?

A. Yes.

Q. And that would allow 800 a day to be produced if they desired to, from two wells that offsets your Saunders Number 1; isn't that right?

A. They could produce that in any proportion they desire.

Q. So they would have 800 to produce offsetting your well which produces 700?

A. That would certainly be available to help.

MR. CARR: That's all I have.

EXAMINATION

BY MR. MORROW: I want to be sure I heard you right on saying that if the division could come up with a way to handle that north 320 as a GPU and a southeast 160. That that would be satisfactory with Texaco?

A. Yes, sir, it would.

Q. And -- well, actually, the allowable for that north 320 would be 900 under those circumstances, and that would be a little higher than what you're recommending it would be?

A. It would be 1,200.

Q. Yeah, 1,200.

A. Yes.

Q. So that would be higher than 800?

A. Yes, sir. Our concern is that we can't monitor it at its proposed -- of course, that would be a legal location also if that happens, so, of course, we couldn't object to it.

Q. That would be satisfactory with you?

A. Yes, sir.

Q. I just wanted to be sure that you realized that it result in higher --

A. Yes, sir, I do.

MR. MORROW: That's all the questions I have.

EXAMINATION

BY MR. STOVALL:

Q. I am real curious about that. Let me start out here with your -- whatever number -- what is it? Number 1.

MR. CARR: We started with one.

MR. STOVALL: That is so unusual for you, Mr. Carr.

Q. (By Mr. Stovall) First thing I did -- I just did a little arithmetic here, and it appears to me if I take those numbers in green of cumulative production for the wells?

A. Yes. Keep in mind that --

Q. I just asked you if the numbers agree with the cumulative production for the wells?

A. Yes, sir.

Q. Now, if I look at Chevron's BD Culp unit, and I add those numbers together -- and I did it by hand -- I didn't have a calculator. I did it by my head -- 9,991 cumulative production for that 400 and -- say 480-acre proration unit -- 477 acres?

A. That looks about right.

Q. And 7,163 for the 240-acre Texaco unit?

A. Yes, sir.

Q. What is your opinion with respect to the protection or impairment of Texaco's correlative rights under current conditions? It looks like Texaco's gotten their fair share of the oil under the combined area; doesn't it?

A. Yes, sir. Of course we've produced a lot of our gas legally.

Q. Are you suggesting that Chevron didn't?

A. No, sir.

Q. Okay. So you produced your gas legally, go on?

A. And I guess Chevron could have drilled Number 10 at an earlier date and made that look more equitable.

Q. Yeah, they could have and they didn't, but the point is, Texaco has not been harmed at point; have they?

A. Not severely, no.

Q. And then if they drill the Number 11, as you suggest, and then they proposed essentially putting in an acreage factor of two instead of three, and then go down and drill the Number 9,

you're suggesting that their acreage factor of two which would be legal for a 320 is not fair, but they should have an acreage factor of 1.35 roughly for an acreage?

A. Yes, sir.

Q. What would be a standard acreage factor of three?

A. Yes, sir. Of course, if it's 477 acres Number 9 cannot produce its allowable, so they could dedicate that under production to Number 11. If it's 320 that leaves out Number 9.

Q. Whatever gave you that whole proration unit acreage factor of two? Wouldn't that even be more equitable if they throw the Number 9's production into that?

A. Sure. The whole 477, sure.

Q. I think bottom line is I have a real problem with the engineering basis for the calculation and recommendations you've made, and do you have anything further to support the calculation you've made other than the hypothetical circles that you've drawn? Is that the entire basis for the calculations?

A. Well, it's very --

Q. As an engineer. I'm asking you as a

qualified engineer.

A. Sure, this could happen. The Number 11 could be a very good well, and it could produce the total allowable for the whole unit, and if they did that they might simply produce from Number 11 and not the other two wells, and therefore my drawing would be fairly accurate.

MR. STOVALL:' I have no further questions.

MR. MORROW: Anything else?

MR. KELLAHIN: No, sir.

MR. MORROW: Thank you, sir. You may be excused.

MR. CARR: At this time we will call Mr. Sadler.

EXAMINATION

BY MR. CARR:

Q. State your full name for the record.

A. Charles Edward Sadler.

Q. Where do you reside?

A. Hobbs, New Mexico.

Q. By whom are you employed?

A. Texaco.

Q. And in what capacity?

A. As an area geologist.

Q. Have you previously testified, Mr. Sadler,

before this division?

A. No, I have not.

Q. Would you briefly review for Mr. Morrow your educational background and your work experience?

A. I graduated in 1971 from Texas A&I University with a Bachelor of Science degree in geology. I went to work that year with Eddy Oil Company in Midland, Texas as a development geologist, and worked with Eddy until 1984 at which time I went to work for Texaco as a development geologist and also in Midland, Texas, and worked in that capacity until 1989, at which time I became a reservoir geologist Midland, Texas. And worked as a reservoir geologist until February of this year at which time I became the area geologist in Hobbs, New Mexico.

Q. And does your geographical area of responsibility include the Eumont gas pool in southeast New Mexico?

A. Yes, it does.

Q. Are you familiar with the application filed in this case by Chevron?

A. Yes, I am.

MR. CARR: We tender Mr. Sandler as an expert

witness in petroleum geology.

MR. MORROW: Okay. We accept your qualifications. What year did you graduate again?

A. 1981.

Q. (By Mr. Carr) Have you prepared exhibits for presentation here today?

A. Yes, I have.

Q. Let's go to Texaco Exhibit Number 3. Mr. Sadler I'd ask you to identify this and review it for Mr. Morrow.

A. Exhibit Number 3 is a structural contour map on the top of the Penn Sand which is the main producing interval within the Eumont pool which shows a structural closure located essentially over Section 19.

Q. And what was this structure map constructed from?

A. This map was constructed from well logs which exist on numerous wells within this area and make constructing the map irresolvable.

Q. Okay. What does this show you about the proposed Chevron location?

A. What it shows to me is the fact that the current proposed unorthodox location being 660 feet off the lease line versus a standard location being

located 990 feet off the lease line. There will be very insignificant difference from a structural standpoint between the two locations.

Q. From just a purely geologic point of view, in your opinion, is there any reason the well cannot be drilled in a standard location?

A. No.

Q. Let's go to what has been marked as Texaco Exhibit Number 4 and I'd ask you to identify and review that.

A. Exhibit Number 4 is a north south structural cross section. It runs from the Texaco Saunders State Gas Com Number 1, south to the Chevron BB Culp NTCA Gas Com Number 9. This is a cross section of the Pennro Sand within the Eumont pool.

Q. What does the green shaded area indicate?

A. The green areas are the Sand intervals which are the main producing horizons within the Pennro.

Q. And the yellow?

A. The yellow are carbonate intervals that act as vertical barriers within the reservoir and are typically nonproductive.

Q. And what does this exhibit tell you about

the Eumont in the subject area?

A. As we can see, this cross section extends about three quarters of a mile north and south, and the cross section demonstrates to me the correlativeness of the zones as well as the continuity of the zones.

Q. Did you attempt to prepare net pay isopach maps on this area?

A. I did. The problem that I encountered is that the majority of the wells in this area are neutron logs, which are the only logs that exist on the majority of the wells, and this being a gas reservoir, those logs are adversely effected by the gas, which makes constructing a quantifiable useable isopach map impossible.

Q. From your geological study, what conclusions have you reached?

A. That whether Chevron were to drill this well at the proposed unorthodox location or at a standard location geologically, it will not be influenced.

Q. Were Exhibits 3 and 4 prepared by you?

A. Yes, they were.

MR. CARR: Mr. Examiner, we would move the admission of Texaco's Exhibits 3 and 4.

MR. MORROW: 3 and 4 are admitted.

(Texaco Exhibits 3 and 4 admitted into evidence.)

MR. CARR: That concludes my direct examination of Mr. Sadler.

EXAMINATION

BY MR. KELLAHIN:

Q. Because it's impossible, Mr. Sadler, to prepare a net pay isopach, it's also impossible to geologically interpret the size and shape of the container in which this gas is being stored; is that not true?

A. In terms of fee H, yes, it is.

Q. Sure.

MR. MORROW: Fee what?

A. Fee H, porosity.

MR. KELLAHIN: Porosity thickness.

Q. (By Mr. Kellahin) And without that you cannot then quantify geologically the relative value between the standard location and the unorthodox location?

A. Not in terms of quantifyably determining that number.

Q. And all you can tell from the data available is that they are comparable structurally?

A. Structurally and gross thickness.

Q. In gross thickness. Can you explain geologically the relative difference between the Chevron Number 10 well and the northeast quarter of its section, and compare that geologically to your Saunders well in Section 18?

A. Geologically they are comparable as far as the gross thickness and sand thickness.

Q. Can you come to a geologic conclusion of why the Saunders well is such a superior well in performance to the Number 10 well?

A. Geologically, no.

MR. KELLAHIN: No further questions.

EXAMINATION

BY MR. MORROW:

Q. Okay. What's shown on the cross section, the Sands, is that gross sand?

A. It would be the grain or the sand intervals, the productive intervals.

Q. You could at least contour that?

A. You could have contoured gross thickness.

Q. Wouldn't tell you anything --

A. Not really.

Q. -- in your opinion?

A. No.

Q. I don't have any further questions.

MR. STOVALL: No, I don't think I have any questions.

MR. MORROW: Thank you, sir.

MR. CARR: That concludes our presentation.

MR. MORROW: Mr. Kellahin, do you having anything.

MR. KELLAHIN: We have no additional evidence, Mr. Examiner. I'm willing to summarize the obvious. I believe it's Mr. Carr's obligation to go first.

MR. CARR: Very briefly. Chevron is before you with an application for a well at an unorthodox location, and the concern that Texaco has is that the well is being proposed at a location away from an area on their acreage that they've already drained, and closer than permitted under the rules to a well that we are operating that's a good well, and that's the problem.

And the problem is, we're concerned that they might wind up with a well closer than it should be with substantially more allowable, and drainage can result, and Mr. Baca has pointed out correct concerns, and proper concerns, that Chevron has about their royalty owners, and we have similar concerns about ours, and so we're here pursuing this

matter before you.

The results proposed by Chevron really isn't acceptable to us. We believe that it's just going to be extraordinaly difficult to have operators start stepping outside the rules and monitoring production independent of the proration system, and that's basically what this is a first step toward.

And so we have come forward and we have imposed a penalty, and it's a heavy penalty, obviously it is with the kind of information that's available on the reservoir. You can pick at it from various perspectives, but it's a penalty that would be sufficient if the worse case should happen and they should have a very good well 660 feet from our lease line and decide to produce the entire allowable for that well, and we're not telling you that they would do that. We're saying we have to watch it from the perspective of what could happen.

If the OCD can set up in its system a 320-acre unit, at least for monitoring the wells in the north half, that's agreeable to us. As Mr. Pool said, if an acreage factor were imposed on the whole unit, that would be agreeable with us. And I think probably the difference with the parties is not as

much that there -- whether or not there should be a penalty or how it could be effectively done so that the parties aren't regulating production, but the question of regulating production from tracts in a pool like this where there are units of multiple wells, where that function remains with the OCD and isn't just something delegated back to the parties.

And so for that reason we stand before you telling you what options we might look at and feel would be appropriate. We believe that they have an option if they really want to produce what's left in the north half stepping back to a standard location, but if they need to go forward at this location, we think there must be some meaningful penalty set on it, and I think you understand where we stand on all the various proposals. That's all I have.

MR. MORROW: Thank you, sir.

MR. KELLAHIN: Mr. Examiner, this appears to be unusual circumstances in the Eumont. We have proposed a solution that I think Texaco misunderstands. It is simply not intended to be left to the parties to resolve among themselves. We very much want it to be done within the structures of regulatory framework before the division.

The solution we have suggested is certainly

not the easiest one to implement, but it's required out of necessity. Had the interest owners in the royalty been common, we would have done the conventional solution in the Eumont, and that is simply reduce the size and create two nonstandard spacing units. That's the typical way you handle unorthodox locations in the Eumont. It's not available to us here. Mr. Baca has given you the reasons for that.

One of the choices is to look at the acreage factor on the proration schedule assigned to the proration unit and adjust it accordingly. We think that the penalty proposed by Texaco is flawed; it's hypothetical. It has no meaning or application to the pool, but the intent to adjust the acreage factor is a choice for you.

We suggest 1.35 is not reasonable or appropriate, but if you're trying to establish a maximum allowable for the Number 11 well, and under 320 acres it would be 1,200 today, and so if you pegged the Number 11 well in some fashion with an acreage factor of two, then that complies with what would occur if it was a 320-acre unit.

The difficulty is that the OCD proration system is not set up to apply the acreage factors to

this specific well. It's easier done on the spacing unit. Mr. Carr's suggestion that you put it on the spacing unit puts a punitive penalty on Chevron because in order to put the two acreage factor on the spacing unit, you sacrifice the flexibility and the allowable left for the southeast quarter. So we have to give up something extra that no one has to give up in order to adjust the system.

I have searched for any precedent that the division has undertaken to address this question, and the only one I can find -- and I'll share it with you -- is one based upon application by Doyl Hartman.

It's order number R-9199. It has a bunch of stuff in it. That stuff of interest is how the division handled the simultaneous dedication and dealt with the fact that one of the wells for which there was to be simultaneous dedication was at an unorthodox well location. And if you thumb through and go to the very tailend on page 9 and look at 16 -- ordering paragraph 16 -- what they did is they adjusted and pegged an acreage factor directly against the well.

They set up an acreage factor of 1.75 for this 280-acre nonstandard proration unit. However,

on the encroaching well, this Bret Laughlin Com Number 5, it's only 330 from the common line, they gave it no more than a 160-acre allowable. I could not find in the proration schedule how this particular order was ever implemented, so I cannot tell you how this was accomplished, but there is at least an order that demonstrates that while the nonstandard proration unit -- in this instance the 477 -- continue to have and enjoy the flexibility of its appropriate allowable.

The offending well was given an allowable appropriate to the size of a spacing unit dedicated to a well at that location to make it standard. To translate it into our case you would put an acreage factor of two against the Number 11 well and leave the rest to the proration unit with its conventional acreage factor.

MR. MORROW: The Number 11 and Number 10 together?

MR. KELLAHIN: Our choice is to have the flexibility to do it in any combination as Mr. Hendrix testified, is to have this ghost allowable, if you will, assigned to the north half within the system.

MR. MORROW: So it would be two wells to draw

on?

MR. KELLAHIN: Two wells to draw on with the 320, which is the flexibility contained within the Eumont rules as it exists now. And this is the only case that I could find that began to address this kind of issue. And that's all I have. Thank you.

MR. MORROW: If I understand it correctly, that solution, if we could implement it, would be satisfactory to both sides.

MR. KELLAHIN: It is my understanding that is an alternative choice and Texaco has no objection to that.

MR. CARR: As long as the north half is monitored in the system as if it were a 320. We just don't want it outside the system left to us to tract and come back.

MR. MORROW: Okay.

MR. STOVALL: Mr. Kellahin, let me just ask you a legal question I have. If the commission were to adopt that solution, what it would effectively have to do is -- I'm guessing from the operation of the mechanics of the computer system that keeps this up -- is for all practical purposes is creating two separate proration units under the propration schedule which would be one legal proration unit --

the operators operations. I assume that's how they do it.

MR. KELLAHIN: And that raises one of our fears, is that when that usually occurs, it triggers the termination of these com agreements by operation of having it put in the schedule in that fashion, and so we need either findings or something in the the order or in the system, to not cause the police powers of the State of New Mexico to terminate this com agreement and disrupt the equities in the spacing unit, and I can't tell you how to make it work, but I suggest in the current system you would have, in effect, a display shown on the proration schedule where you have a 320 unit and a 160 unit, and our concern is that the State Land Office or someone else, not the State Land office. It would be some royalty owner in the north half, some fee owner says, "Ah ha, I have to no longer share my production and royalty when the State of New Mexico starts paying on the 320."

MR. STOVALL: Could you -- it will help to submit some proposed language to address that. That would help put in that option.

MR. KELLAHIN: I'm certainly willing to try. I'm not sure it helps, but I'll try.

MR. STOVALL: And I'm not suggesting that that's the option that the division would accomplish if it's considered. I think we have to at least see how it would be done.

MR. KELLAHIN: I'm willing to try, Mr. Stovall.

MR. MORROW: Okay. I believe that's a little bit contradictory to the testimony of your landman who said they he didn't think doing that would create a problem, but he may not be an attorney.

MR. KELLAHIN: And perhaps he and I are confusing each other. What we're asking for so long as the allowable assigned for the north half is done in such a way that it doesn't disrupt the com agreement it satisfys his concern. When I look at the proration schedule and see the proration schedule and look at the acreage, I'm looking at a 477.

MR. MORROW: And you assume that is a com agreement?

MR. KELLAHIN: I assume it is and now I see in the revised schedule a 160 and a 317. Someone can argue that you effectively terminated this agreement by that process.

MR. STOVALL: Policy well proration units,

then why not multi-proration unit wells?

MR. MORROW: All right. Anything more? This case number 10367 will be taken under advisement.

(Case adjourned at 10:50 a.m.)

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10367, heard by me on 22 August 1991.

Michael E. Stogner, Examiner
Oil Conservation Division

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

REPORTER'S CERTIFICATE

BE IT KNOWN that the foregoing transcript of the proceedings were taken by me, that I was then and there a Certified Shorthand Reporter and Notary Public in and for the County of Bernalillo, State of New Mexico, and by virtue thereof, authorized to administer an oath; that the witness before testifying was duly sworn to testify to the whole truth and nothing but the truth; that the questions propounded by counsel and the answers of the witness thereto were taken down by me, and that the foregoing pages of typewritten matter contain a true and accurate transcript as requested by counsel of the proceedings and testimony had and adduced upon the taking of said deposition, all to the best of my skill and ability.

I FURTHER CERTIFY that I am not related to nor employed by any of the parties hereto, and have no interest in the outcome hereof.

DATED at Bernalillo, New Mexico, this day October 1, 1991.

My commission expires
April 24, 1994

LINDA BUMKENS
CCR No. 3008
Notary Public