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A P P E A R A N C E S

For Gulf Oil: W. Thomas Kellahin
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MR. QUINTANA: The hearing will come to order for Docket Number 2-85.

The first case we'll call this morning is Case Number P454.

MR. TAYLOR: Application of TXO Production Company for compulsory pooling and an unorthodox gas well location, Eddy County, New Mexico.

MR. DICKERSON: Mr. Examiner, I'm Chad Dickerson of Artesia, New Mexico, on behalf of the applicant.

I have two witnesses to be sworn.

MR. QUINTANA: Are there any other appearances in this case?

MR. KELLAHIN: May it please the Examiner, I'm Tom Kellahin, Kellahin & Kellahin, Santa Fe, New Mexico, appearing on behalf of Gulf Oil Company.

MR. QUINTANA: Are there any other witnesses in this case?

Will the witnesses please stand and be sworn in at this time?

(Witnesses sworn.)

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DAVID M. HUNDLEY,

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

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Mr. Hundley, would you state your name, your occupation, and where you reside?

A David Hundley. I'm District Landman for TXO Production Corporation in Midland, Texas.

Q Mr. Hundley, you have previously testified before this Division and your qualifications as a petroleum landman are a matter of record, are they not?

A Yes.

MR. DICKERSON: Is the witness considered qualified?

MR. QUINTANA: The witness is considered qualified.

Q Mr. Hundley, would you briefly summarize the purpose of TXO's application in this matter?

A TXO Production Corp. seeks an order for compulsory pooling and an unorthodox gas well location, Eddy County, New Mexico.

We're asking for an order pooling all mineral interests from the top of the Wolfcamp to the base of the Morrow formation underlying the south half of Section 2, Township 22 South, Range 27 East.

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2 The well will be drilled on an unorthodox
3 location 660 feet from the south and east lines of Section 2
4 in the East Carlsbad Morrow Gas Pool.

5 We're also asking that the cost of drill-
6 ing and completing the well, allocation of cost thereof, as
7 well as actual operating cost and charges for supervision
8 and designation of applicant as operator of the well, and a
9 charge for risk be approved.

10 Q Directing your attention to what we have
11 submitted as Applicant's Exhibit Number One, would you refer
12 to that document and tell the Examiner what it shows?

13 A Exhibit Number One is a land plat of the
14 area. TXO's leasehold is shown in yellow and the proration
15 unit for the well is outlined in green and the proposed lo-
16 cation is also drawn on the land map.

17 Q Is there any party in addition to TXO who
18 has interest under the proration unit?

19 A Yes. Gulf Oil Corporation owns the bal-
20 ance of the interest in the proration unit.

21 Q The 5/8ths interest in the proration not
22 colored is Gulf?

23 A Right.

24 Q What is your understanding of the posi-
25 tion of Gulf's election of whether or not to participate in
the drilling of your proposed well is concerned?

A We have proposed the well to Gulf, sent
them an AFE and an operating agreement.

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2 They have initially indicated a willing-
3 ness to participate in the well subject to their manage-
4 ment's approval and a mutually acceptable operating agree-
5 ment.

6 We have spoken with them several times
7 and have verbal elections to participate.

8 Q Would you turn to what is submitted as
9 Exhibit Number Two and state what that is?

10 A Exhibit Two is copies of our correspond-
11 ence with Gulf, the first being a letter of December 19th in
12 which we proposed the well; the second being a letter of
13 January 11th with which a copy of the operating agreement
14 was hand delivered to their office.

15 Q Do you have any indication when Gulf made
16 oral response as far as whether or not it actually elects to
17 participate in the drilling of this well?

18 A Well, it is hoped that it will be within
19 a week to ten days.

20 Q Okay, refer, Mr. Hundley, to Exhibit Num-
21 ber Three and state what that is.

22 A Exhibit Number Three is an Authority for
23 Expenditure, or AFE, for the proposed well, showing the to-
24 tal drilling costs, as well as completion costs.

25 Q And this was prepared by the TXO Engin-
eering Department?

A Yes, it was prepared on our -- based on
our experience drilling wells in this area by our drilling

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engineers.

Q Does it reflect the total cost for drilling and completing the proposed well?

A Yes, reflecting a total estimated completion cost of approximately \$110,000.

Q Okay, refer to Exhibit Number Four, Mr. Hundley, and state what that is.

A Exhibit Number Four is AAPL Form Operating Agreement, identical to the one which we delivered to Gulf Oil last week.

Q What does TXO request, Mr. Hundley, be allocated as far as supervision and overhead costs in the event Gulf declines to participate and is force pooled in this proceeding?

A TXO requests a drilling well overhead rate of \$5233 per month and a producing well rate of \$524 per month.

Q In TXO's experience and to your knowledge are those figures in line with the industry for wells of this depth in this area of Eddy County?

A Yes, they are.

Q Refer, Mr. Hundley, please, to Exhibit Number Five and tell the Examiner what that is?

A Exhibit Number Five is an affidavit of mailing which shows the notice of this hearing and TXO's application was mailed to Gulf Oil Corporation.

MR. DICKERSON: Mr. Examiner,

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2 at this time I move admission of Applicant's Exhibits One
3 through Five and I have no further questions of this wit-
4 ness.

5 MR. QUINTANA: Exhibits One
6 through Five will be entered into evidence.

7 CROSS EXAMINATION

8 BY MR. QUINTANA:

9 Q Mr. Hundley, I have a question.

10 The \$5233 and \$524, respectively, you say
11 those are in line with costs in this general area.

12 Will you provide me with a sample of
13 costs that were agreed to somebody that wanted to get in on
14 the well?

15 A Well, I don't have it here with me.

16 Q No, you can submit that at a later date.

17 MR. DICKERSON: Yes, Mr. Exam-
18 iner, we can do that.

19 A We can maybe have an operating agreement
20 for a well of a similar depth.

21 Q That will be fine.

22 A All right.

23 MR. QUINTANA: Any other ques-
24 tions of the witness?

25 MR. KELLAHIN: If the Examiner
please.

CROSS EXAMINATION

BY MR. KELLAHIN:

Q Mr. Hundley, let me direct your attention to Exhibit Number Two, which is the correspondence from TXO to Gulf.

Is your letter of December 19th, 1983 -- that should be 1984, isn't it?

A Yes.

Q Is your letter of December 19th, 1984, the first contact you had with Gulf?

A Yes, sir.

Q And who at Gulf Oil Corporation have you been dealing with in this prospect?

A Both Mr. Messer and Charles Frisbee, Landman.

Upon receipt of this letter we were contacted by Charles Frisbee of Gulf.

Q All right, sir. The letter of December 19th indicates that you submitted to Gulf an AFE. Is that the same AFE that's Exhibit Number Three?

A Yes.

Q The second attachment to that letter is a January 11th letter also to Gulf in which you submitted the operating agreement.

Is that the same operating agreement that's marked as Exhibit Number Four at today's hearing?

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A Yes.

Q With regards to the AFE I noted in your testimony that TXO proposes to test potentially the Wolfcamp and the Morrow.

A Yes.

Q Is this to be a dual completion or a single completion?

A I think it's a single completio.

Q You will select the better of the possible productive zones and complete it as a single completion?

A Well, we'll probably complete the Morrow first if it's potentially productive.

Q All right, sir. I realize TXO prepared the AFE. Can you identify which of your engineers or individuals within TXO prepared the AFE?

A Mark Weideman.

Q And is Mr. Weideman an engineer?

A Yes, he's a drilling engineer.

Q On Exhibit Number Four, Mr. Hundley, the operating agreement, is this a standard form operating agreement that is used within the industry or is it a model form that's been specifically adapted to include language that TXO uses in its operating agreements?

A There have been other conditions added in Article XV by TXO's legal staff; however, we have used this operating agreement hundreds of times with our partners.

Q All right. So it's the model form as

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printed by the AAPL and then you've gone through and either lined out or added to the document to show how TXO's adapted it for use in this unit, in this spacing unit?

A That's correct; however no changes were made in the operating agreement specifically for this unit. It is our standard changes that are used throughout the company.

Q And with regards to Mr. Quintana's question about the overhead charges, would you also, sir, send to Gulf a copy of the document that you use as a comparison of well costs that Mr. Quintana's requested? If you'll also either send that directly to me or to the Gulf representative?

A Of course.

Q Thank you very much.

CROSS EXAMINATION

BY MR. TAYLOR:

Q I notice this is an unorthodox location. Did you notify the offset operators?

A Yes.

Q And have you included that in here or could you get us a copy of that?

MR. DICKERSON: We have copies of those, copies of the letters.

MR. TAYLOR: Okay, would you supply those to us?

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A Sure.

MR. QUINTANA: Are there any further questions of Mr. Hundley?

If not, Mr. Hundley, you may be excused.

A Thank you.

MR. DICKERSON: We'll call Mr. Bruce Insalaco, Mr. Examiner.

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

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Mr. Insalaco, would you please state your name and spell your last name?

A Bruce Insalaco, I-N-S-A-L-A-C-O. I'm a geologist with TXO Production Corporation in Midland, Texas.

Q Mr. Insalaco, have you previously testified before this Division as a geologist?

A Yes.

Q And had your credentials made a matter of record?

A Yes, they have.

MR. DICKERSON: We tender this witness as an expert, Mr. Examiner.

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

You may proceed.

Q Mr. Insalaco, would you refer to what we have marked as TXO Exhibit Number Six and state what it shows?

A Yes. This is a production plat of the East Carlsbad Field.

Three wells, or three production zones are noted, with the blue being Delaware, pink being Wolfcamp, and green being Morrow.

Cumulative production as of 7-1-84 is noted on the top of each of these and average daily production as of 6-84 and the wells on the plat are only the deeper producers in the area, Wolfcamp, wells that have been taken to the Wolfcamp on down.

Q Okay, would you refer to your Exhibit Number Seven and state what it shows?

A Exhibit Number Seven is a structure map on top of the Middle Morrow Sands. The wells in green are designated as either current or previous Morrow producers in the area and the proration unit of the well is outlined in yellow.

Q Okay, turn to your Exhibit Number Seven and tell the Examiner what it shows -- or Exhibit Number Eight, excuse me.

A Okay. Exhibit Number Eight is a cross

1 section which was noted on Exhibit Number Seven running
2 through the area.

3 I have correlated the sand intervals
4 through three wells that I feel help identify the location
5 of the sand bodies in that area.

6 Q Turn to your Exhibit Number Nine and
7 state what is shown in that document.

8 A From looking at the logs in the area and
9 again this cross section, Exhibit Number Eight, I've Iso-
10 pached the Middle Morrow Sands in the East Carlsbad area and
11 the proposed location lies -- lies towards the western edge
12 of the channel running diagonally through Section 2.

13 Q So it's the increased thickness of that
14 Morrow sand body that TXO is seeking by this unorthodox lo-
15 cation?

16 A Yes, sir. The Champlin Nix Yates Well
17 No. 1 in the north half of Section 2 had 21 feet of this --
18 encountered 21 feet of these Morrow Sands and that well had
19 a cumulative production of approximately 0.3 of a Bcf, while
20 the well in Section 11, the Western Oil Bass No. 1, encount-
21 ered 13 -- approximately 13 feet and was tested but was
22 never found productive in the Morrow.

23 Q Okay, Mr. Insalaco, turn to your Exhibit
24 Number Ten and tell us what you've depicted on that docu-
25 ment.

A This is a structure map on top of the
Wolfcamp in the East Carlsbad Field area.

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2 The Wolfcamp producers are annotated in
3 pink and again the proposed location is -- or the proration
4 unit for the proposed location is outlined in yellow and the
5 cross hatched -- cross section is noted with a dashed line
6 on the plat.

7 Q Okay. Refer to your Exhibit Number Ele-
8 ven and explain what that is.

9 A Exhibit Number Eleven is the cross sec-
10 tion of the Wolfcamp horizon for wells in the vicinity.
11 I've divided it up into three productive units.

12 The A zone, which seems to develop to-
13 wards the south off the plat; the B zone, which is pinching
14 out up toward the north and east; and the C zone, which
15 seems to be the most widespread zone of the Morrow.

16 And the Upper Wolfcamp producing zone is
17 open and producing in one well and that is a well in Section
18 1, the Pecos Federal No. 1, operated by Champlin Petroleum
19 Company.

20 Q Okay, Mr. Insalaco, refer to your Exhibit
21 Number Twelve and tell us what that is.

22 A After correlating these three porosity
23 zones in the area, this Exhibit Number Twelve is an Isopach
24 of the C zone. Again it seems to be very widespread. The
25 wells, most of the production from the Wolfcamp does seem to
occur in this zone.

Q Mr. Insalaco, would you refer to what is
marked as Exhibit Thirteen? What have you shown by that do-

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2 cument?

3 A Okay. Exhibit Number Thirteen is an Iso-
4 pach of the B porosity interval. It doesn't seem to be
5 quite as extensive. It is producing in the Union Forni Well
6 in Section 15; a very large interval is present in the West-
7 ern Oil Bass No. 1 in Section 11, but was never produced,
8 and it looks -- appears to be wet. And then as it goes fur-
9 ther north it seems to be pinching out in porosity.

10 The gray zone annotated on the plat sug-
11 gests an estimated gas/water contact and anything to the
12 east would be down dip and probably in the water-bearing
13 part of the porosity.

14 MR. QUINTANA: Would you repeat
15 that again?

16 A That, we feel that the gas/water contact
17 runs through this gray zone and that going down dip toward
18 the east that that porosity would be wet.

19 Q Based on these documents, Mr. Insalaco,
20 can you briefly summarize the principal factors which you
21 considered in making a judgment as to the risk involved in
22 drilling this well and recommend a penalty which should be
23 assessed against Gulf in the event it elects not to partici-
24 pate in the drilling of this well?

25 A I think there is quite a bit of risk in,
first of all, in the Morrow zone. It was found unproductive
in the well in Section 11. It made 0.3 of a Bcf in the well
in Section 2, and I think that we should find the edge a

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2 a little bit better amounts of sand in the Morrow, in the
3 Middle Morrow zones in the north half than in the well in
4 the south half of Section 2, but still I think there is --
5 there is quite a bit of risk in that area in the B and C
6 zones.

7 First of all, the C zone is widespread
8 but I think that if we stay down towards the southeastern
9 portion of that section we should encounter more of that
10 porosity in the B Wolfcamp zone. We should find more poro-
11 sity the further towards the southeast that we go, but we're
12 also approaching a water/oil or a gas, excuse me, a
13 gas/water contact.

14 So I think that the risk is -- should be
15 initial drilling costs and 200 percent beyond that.

16 Q Mr. Insalaco, in your opinion is the pro-
17 posed TXO location the best possible location in that prora-
18 tion unit for the maximization of your chances to find com-
19 mercially productive gas?

20 A Yes.

21 Q And you request that the maximum of 200
22 percent be imposed in the event Gulf elects not to partici-
23 pate?

24 A Yes.

25 Q In your opinion is the granting of this
application, or would the granting of this application be in
the interest of conservation, the prevention of waste, and
the protection of correlative rights?

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A Yes.

MR. DICKERSON: Mr. Examiner, move admission of Applicant's Exhibits Six through Thirteen at this time.

MR. QUINTANA: Without objections Exhibits Six through Thirteen will be entered into evidence.

CROSS EXAMINATION

BY MR. QUINTANA:

Q Mr. Insalaco, are you aware that the risk penalty factor is graded from zero to 200 percent and that zero represents the least -- least risk and 200 percent is the maximum risk?

A Yes, sir.

Q To dwell into that area a little bit more. Is it your professional opinion that there is maximum risk in this area, maximum risk would be encountered?

A I think we --

Q To justify 200 percent?

A I think with the Morrow zone, especially with that well to the south not encountering productive Morrow production, and that the well in the north half of Section 2 only making I guess it's 389-million cubic feet, that with that type of rates that we're approaching uneconomical limits to -- to drill for that zone.

Q Thank you.

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2 MR. QUINTANA: Any further
3 questions of the witness?

4 MR. KELLAHIN: Yes, Mr. Exam-
5 iner.

6 CROSS EXAMINATION

7 BY MR. KELLAHIN:

8 Q Mr. Insalaco --

9 A Yes, sir.

10 Q -- I asked Mr. Hundley awhile ago about
11 the AFE.

12 Do you, sir, know whether this is in-
13 tended by TXO to be a single attempt in either the Wolfcamp
14 or the Morrow or whether it's to be drilled initially as a
15 dual completion?

16 A My conversation with a Gulf Oil Corpora-
17 tion geologist about this matter, if the Morrow is found to
18 be present and not productive at a significant rate, we will
19 then consider dualing the well in the Wolfcamp and Morrow
20 together.

21 We have recently done this over just
22 north of Carlsbad on one well and I think we're preparing to
23 -- to submit an application to do it with another well over
24 in that area.

25 So it would depend on the amount of pro-
duction that we would see in the Morrow once we drill the
well.

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2 Q On Exhibit Number Eight, the cross sec-
3 tion, stratigraphic cross section showing the Morrow, two of
4 those three wells were dualled with the Wolfcamp, were they
5 not?

6 I'm looking at Exhibit Number Eight. Am
7 I on the same one with you?

8 A Yeah.

9 Q Okay. The legend at the bottom --

10 A Yes, sir.

11 Q -- shows that those were duals with the
12 Wolfcamp?

13 A Yes, sir. Many of the wells in the area
14 were either dually completed or originally Morrow, then
15 moved up to the Wolfcamp, so a combination of --

16 Q Okay. Do you know whether or not those
17 two Morrow wells indicated on Exhibit Eight, drilled by
18 Western and Champlin, have been economic for those operators
19 in terms of recovering adequate gas in order to cover the
20 cost of the well?

21 A I would estimate it as a comparison to
22 our -- our guidelines, that definitely the Western Oil well
23 in Section 35 would be economical.

24 I think that the Champlin Nix Yates did
25 achieve pay, initial payout of the well but I don't know if
it would meet their corporate guidelines of a well to be
drilled at this point.

Q When we look at Exhibit Number Nine, Mr.

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Insalaco, --

A Yes, sir.

Q -- the Western Oil Bass No. 1 Well in Section 11 encountered 13 feet of Middle Morrow Sands.

A It's a net porosity value of porosity greater than 5 percent.

Q All right.

A So there could be more sand encountered there.

Q All right, sir.

A Not productive.

Q The net porosity value for that well is at 13 feet. Did Western Oil test that zone?

A Yes, they did.

Q What is the basis for the 40-foot contour line that runs through the proposed location?

A It is an estimate that as one moves towards the center of a channel that, hopefully, one would encounter more sand and more porosity.

Q We don't have well control in the immediate area that shows a sand thickness to that extent.

A No, sir.

Q When we turn to the Wolfcamp wells in either the B or C zones, are there any of the Wolfcamp wells in the immediate area that are not economic?

A Yes. The -- the Nix Yates Champlin Well in the north half of Section 2 would probably -- or would

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not reach our economic guidelines to be drilled solely as a Wolfcamp producer.

The well, Champlin Wilson Gas Com No. 1 in the east half of Section 1 would not meet our guidelines but there are two wells on trend that would, and that is the Champlin Pecos Federal No. 1 in the northwest quarter of Section 1 and the Union Forni No. 1 in Section 15, and the Western Oil Bass No. 1 in Section 11 would be approaching our guidelines.

Q Does it diminish the risk that the operator is subject to to have the opportunity to test both the Wolfcamp in both zones and the Morrow in this area, as opposed to drilling either for singly a Morrow or singly for a Wolfcamp?

A I would guess that the risk might be diminished a little, but there is -- I think that the poor production in both the Wolfcamp and Morrow zones in the immediate offsets justify that both intervals are highly risky in the payout of the well of either zone.

Q May I conclude from your examination study that even with the potential for the two Wolfcamp zones in the area, as well as the potential for the Morrow, that with that combination of potential productive zones, in your opinion the risk still is the 200 percent number?

A Well, the well in Section 11 did encounter both zones.

The well in Section 2, the Champlin Nix

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2 Yates did encounter a small part of the other zone but did
3 encounter both zones.

4 And again, they have not met our guide-
5 lines for -- for drilling solely a Wolfcamp well.

6 I think the risk is there.

7 Q All right, sir. Thank you, Mr. Insalaco.

8 MR. QUINTANA: Any other ques-
9 tions of the witness?

10 If not, he may be excused.

11 Is there anything further in
12 Case 8454?

13 MR. DICKERSON: No, Mr. Exam-
14 iner.

15 MR. QUINTANA: Case 8454 will
16 be taken under advisement.

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(Hearing concluded.)

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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. 8454 heard by me on JAN. 16 1985.

Richard P. Quintero Examiner
Oil Conservation Division