# BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO November 20, 1957

IN THE MATTER OF CASES. NOS. 1344, 1345, & 1346.

TRANSCRIPT OF PROCEEDINGS

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE - SANTE FE
3-6691 2-2211

# BEFORE THE

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO November 20, 1957

#### IN THE MATTER OF:

Application of Pan American Petroleum Corporation for a non-standard gas proration unit and an unorthodox gas well location in the Blanco Mesaverde Gas Pool in San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order establishing a 331acre non-standard gas proration unit in the Blanco Mesaverde Gas Pool consisting of the S/2 S/2 N/2 and S/2 of Section 18, Township 29 North, Range 9 West, San Juan) County, New Mexico, and for an unorthodox gas well location for said unit well at a point 1820 feet from the South line and 1850 feet from the East line of said Section 18.

Application of Pan American Petroleum Corporation for a non-standard gas proration unit and an unorthodex gas well location in the Blanco Mesaverde Gas Pool in San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order establishing a 409-acre non-standard gas proration unit in the Blanco Mesaverde Gas Pool consisting of the N/2 and N/2 S/2 of Section 19, Township 29 North, Range 9 West, San Juan County, New Mexico, and for an unorthodox gas well location for said unit well at a point 1750 feet from the North ) line and 1750 feet from the East line of said Section 19.

Application of Pan American Petroleum Corporation for a non-standard gas proration unit and an unorthodox gas well location in the Blanco Mesaverde Gas Pool in San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order establishing a 408-acre CASE NO.

1344

CASE NO.

1345

CASE NO.

1346

non-standard gas proration unit in
the Blanco Mesaverde Gas Pool consisting of the S/2 S/2 of Section 19,
and the N/2 of Section 30, Township

29 North, Range 9 West, San Juan
County, New Mexico, and for an
unorthodox gas well location for
said unit well at a point 990 feet
from the North line and 1650 feet
from the East line of said Section 30.

BEFORE:

Elvis A. Utz. Examiner.

#### TRANSCRIPT OF HEARING

MR. BUELL: I would like to enter an appearance for Pan American, C. L. Kelley, <u>Dan Currens</u>, and Guy Buell.

May it please the Examiner, I would also like to point out that the subject case, along with Case 1345 and Case 1346, relate almost identically to the same subject matter. Also, they are in the same area of the Pool. In view of that, and to avoid duplication of testimony, which would be time-consuming. I move at this time that for the purpose of this hearing only, that those three cases be consolidated and that when orders are issued, that an order be issued for each case.

MR. UTZ: You have heard the motion. Is there objection to the consolidation for purposes of testimony only, Cases 1344, 1345 and 1346?

Without objection, it is so ordered.

MR. BUELL: We have one witness, Mr. Examiner, Mr. Currens.

<del>(Witness sworn)</del>

#### DANIEL R. CURRENS

called as a witness, having been first duly sworn, testified as follows:

#### DIRECT EXAMINATION

#### BY MR. BUELL:

Q Would you state your full name, by whom you are employed, and in what capacity and in what location, Mr. Currens?

A My name is Daniel R. Currens. I am employed by Pan American Petroleum Corporation as a petroleum engineer in the reservoir section, the Roswell District Office, Roswell, New Mexico.

- Q Does that office have supervision over Pan American's operations in the Blanco Mesaverde Gas Pool? A It does.
  - Q What is your educational background, Mr. Currens?

A I was graduated in May, 1954, from Texas A & M, with a Bachelor of Science degree in chemical engineering. I was employed by Pan American Petroleum Corporation after graduating and have been employed by Pan American Petroleum Corporation continuously since that time with the exception of two years in military service.

MR. BUELL: Mr. Examiner, are the witness' qualifications acceptable?

MR. UTZ: His qualifications are acceptable.

- Q (Mr. Buell) Mr. Currens, have you prepared a plat which reflects the three proposed units in question here today as well as the general area surrounding those three proposed units?
  - A Yes, I have prepared such a plat.

MR. UTZ: It will be so marked.

Q (Mr. Buell) At the outset, Mr. Currens, let me ask you, why is this hearing necessary?

A This hearing is necessary in that these proposed units are oversized, that is, being more than 320 acres, and associated with these oversized units are unorthodox well locations.

- Q Are the locations unorthodox simply because the units are non-standard?

  A Yes.
- Q What conditions exist, Mr. Currens, that cause the formation of these non-standard units that you propose here today?

A Well, in the western row of sections in Range 9 West, in this particular area, there is a variation in the legal United States Public Land Survey therein, that these sections are not full 650 acre sections in size.

- Q Is this a general condition alone that dividing line that you mentioned?

  A Yes, in this particular area.
- Q As a matter of fact, Mr. Currens, are not the three units that you propose here today offset to the south as well as to the north by non-standard units?

A Yes, this is true, the three proposed units here are intervening acreage between developed "BM" units, which are also non-standard.

Q All right, sir. Directing your attention to Exhibit 1 and particularly to units north of your three proposed units, what has

caused those units to be non-standard?

A Well, those units are non-standard in size for the same reason, the variation in land survey, the unit immediately north of our three proposed non-standard units, which are outlined in blue dashed line on Exhibit 1. The first unit immediately north of that is a non-standard unit, the Sammons Gas Unit "B", 338 acres, and the one which is partially shown there is the Hawk Gas Unit, being 342 acres in area.

Q All of these units to the north of our proposed units which you just mentioned are all non-standard because they are all oversized, is that correct?

A That is correct. They were approved as non-standard proration units by Order R 771 and Order 564.

Q All right, sir, now, with specific reference to the three proposed units in question, let me ask you to locate each of those units starting with the northern-most unit first, and in that connection, in order to expedite our references to them in the testimony -- although they are not recognized units as yet -- let's give them a proposed unit name to simplify our reference, so if you will give their locations and the proposed unit name.

A Well, the northern-most of these proposed units is located in its entirety in Section 18, Township 29 North, Range 9 West, being approximately 331 acres in size and we could determine that for purposes of this hearing, the proposed Valencio unit.

Q All right, sir, the next unit to the south of your northern-

#### most unit?

A The center of the three proposed units is entirely within Section 19, Township 29 North, Range 9 West, being comprised of approximately 409 acres, and for purposes of this testimony we could call that the proposed Snyder unit.

Q All right, sir. Now the southern-most proposed unit.

A The southern-most proposed unit -- all of these units are outlined in red on Exhibit 1 -- The southern-most unit of these proposed units lies within Section 19, and Section 30 of Township 29, Range 9 West, and it is approximately 408 acres in size. We could determine that, for purposes of this hearing, the proposed Gerk unit.

Q All right, sir. Now, I believe you gave the acreage on the first unit, the proposed Valencio unit, as approximately 330 acres. Let me ask you this, with respect not only to the location of that unit but the proposed location, or location of each of these three units: Are each of those locations more near the center of the proposed unit than it would be necessary if the units were standard?

A Yes, they are. They are more nearly the center of the proposed unit.

Q Certainly there is no question of including the lines of the proposed unit?

A No.

Q All right. Would you briefly state the amount of acreage that is in the proposed Snyder unit?

A The proposed Snyder unit is approximately 409 acres in area.

- Q Does the Snyder unit have a well on it at this time?
- A Yes, one well has been drilled in the Snyder unit. It's indicated on the Exhibit 1, and circled in red. You'll note that there is some data posted by this well indicating a test of 2,774 MCF per day, on November 12, 1957.
- Q Why was that well drilled prior to the Commission's approval of this proposed unit?
- A If you will note, that well is located on the Henry Snyder lease, and further note on this plat that the Henry Snyder lease bears an expiration day of November 17, 1957, you will see that it was necessary to drill this well in order to protect our lease.
- Q Was the Commission advised of all the facts concerning this proposed unit at the time Pan American filed its Notice of Intention to Drill this well on the Snyder lease?
- A Yes, they certainly were. We filed a Notice of Intention to Drill with the Commission, which was approved October 17, 1957, subject of course, to the unit being formed.
- Q All right, sir. Now, would you give the acreage that is assigned to the proposed Gerk unit?
  - A Approximately 408 acres.
- Q Looking at Exhibit 1, Mr. Currens, I notice that in each of the proposed units there are varying working interests. Are all of these working interests aware of the proposed units that Pan American is submitting to the Commission here today?
  - A Yes, all of the other working interests in these three pro-

posed units have been advised of our intention in this hearing, been contacted, and further, they have indicated that they favor the formation of such units.

- Q Do you have any more official explanation of --
- A Well yes.
- Q -- why we haven't actually completed any pooling instruments or communitization instruments?

A The various interests in the proposed Snyder unit have agreed to pay their proportional cost of the Snyder well that has now been drilled there subsequent, of course, to approval of this application by the Commission.

- Q In other words, they agree to pay their share of the cost based on their acreage included in that unit?
  - A Yes, they have.
- Q Is there any interest owner in the Valencio unit or the Gerk unit that is not in the Snyder unit?
  - A No, there is none to my knowledge.
- Q Looking at your Exhibit No. 1, Mr. Currens, in your opinion, is it possible to form standard units with the acreage in question?
- A No, sir, you couldn't form standard units in these nonstandard sections on this intervening acreage between development.
- Q Let me ask you this, we are proposing three non-standard units here today, how would the acreage breakdown be if an attempt were made to form four units in as realistic and practical manner as possible?

A Well, the most realistic outlook to form four units in this
to develop this acreage would be a case wherein we have one unit
331 acres in size, and we would then have two units approximately
273 acres in size and a fourth unit approximately 271 acres in size.

- Q Then in that event, Mr. Currens, you would actually have four non-standard units instead of three as proposed here today?
  - A Yes, we certainly would.
- Q Now, for the purpose of answering this question I want you to completely ignore the practicabilities of the situation and ignore being realistic and see if you could possibly form any series or groups of units with this acreage in question and have at least one of them a standard unit.

A We could form units in this acreage and have one standard unit. However, it would necessitate the formation of an additional three non-standard units to develop the remaining acreage.

- Q So even then you would still have three non-standard units?
- A Yes, we would.
- Q All right, sir. Since you propose only three units and three wells for the acreage in question here, let me ask you whether or not in your opinion, four wells in four units on this acreage in question would recover a significantly larger amount of gas than the three wells on the three units that you propose?

A It is my opinion there would be no significant difference in the recovery utilizing four wells rather than three. There would be no substantial difference in the ultimate recovery of gas from this acreage.

- Q In your opinion, do you believe this additional volume of gas that might be recovered from four wells will even begin to pay for the cost of drilling and completing the fourth well?
- A No, that additional volume couldn't begin to pay out the fourth well.
- Q Then, in view of that testimony, you are of the opinion that no waste will result if the Commission approves these three proposed units as outlined on Pan American's Exhibit No. 1?
  - A That is very definitely my opinion.
- Q On the contrary, Mr. Currens, do you feel that economics waste will occur if a fourth well is required on this acreage in question?
  - A I certainly believe that to be true.
- Q Do you feel that the three units as proposed, if approved by the Commission, will protect the correlative rights of all interested parties?

  A I do.
- Q Now, have you made a study and an evaluation of this portion of the Blanco Mesaverde Pool as to whether or not the acreage that you show as assigned to these three proposed units is or is not productive?
  - A Yes, sir, I have. I have made such a study.
- Q And in your opinion, is all of the acreage contained within the three proposed units productive?
  - A I definitely believe that it is.

Q Briefly state upon what data you base such conclusions?

A Let me draw your attention to Exhibit 1. You will note certain figures on Exhibit 1 in pencil, in red pencil and orange pencil. In all cases -- this light doesn't distinguish between red and orange too well -- the red number is the top, and the orange is the bottom. The red numbers represent September production from the Blanco Messyerde wells in this area: the orange represents deliverability of these wells. Both of these figures were taken from the Conservation Commission's October Proration Schedule. You will note that we are offset here to the northwest, the north, the northeast, the east, and the southeast, and south by producing Blanco Mesaverde wells in addition to this, in the more or less center of our three proposed unit. The Snyder well has had a very good test in the Mesaverde, recovering some 2,774 MCF's of gas per day on that test. Being practically surrounded by offset production and having a good test in the center of this unit very definitely makes me believe that the entire acreage is productive.

MR. BUELL: That's all we have at this time, Mr. Examiner.

CROSS EXAMINATION

## BY MR. UTZ:

Q Mr. Currens, the 2,774 MCF figure for the Snyder well, is that initial potential or deliverability?

A That was an initial potential test, sir, that was taken Pitot. We haven't completed the testing on this well, we don't have shut-in pressure on it as yet.

Q Would you care to hazard a guess what the deliverability might be on that well?

A As to a figure, I wouldn't. However, I would say that it would be comparable to the better deliverability shown on the plat here and far better than the deliverability shown on this plat for the offsetting wells.

- Q Do you have reason to believe it would be in the neighborhood of five or six hundred?

  A Yes, sir. Oh, yes, sir.
  - Q Which is not too big a well?
- A Well, it is much better than the deliverability on a number of these offsetting wells.
- Q I think you stated, I didn't catch the figures, that the size of the units to the north and south -- were any of these larger than 409?

  A No, sir, they were not.
  - Q They were somewhat smaller? A Yes, sir.
  - Q Were they larger than 320? A Yes, sir, they were.
  - Q Why don't we just state what they were?
- A I am sorry. The Sammons, immediately north of the northern-most proposed unit, is 331. Immediately north of that, the Nye is 337, and the one that is shown partially there at the very top is 342.
  - Q Is the unit to the south a non-standard unit?
  - A I believe it is, sir.
  - Q Do you happen to know what the acreage is?
  - A I don't know the acreage right off hand on that unit, sir.

- Q Do you have any idea what wells cost in this area?
- A Yes, sir, approximately seventy-five to eighty thousand dollars.

MR. UTZ: Does anyone have a question of Mr. Currens?

MR. COOLEY: Yes. please.

MR. UTZ: Mr. Cooley.

#### BY MR. COOLEY:

- Q Mr. Curren, would you pleasegive the locations of the three wells? I don't believe you gave any of them.
  - A I am sorry. They are shown on the plat.
  - Q The proposed well?
- A In the proposed Valencio unit, the proposed location for that well would be 1820 feet from the South line and 1850 feet from the East line of Section 18, Township 29 North, Range 9 West. The next one immediately south, the Snyder well, is located 1750 feet from the North and East lines of Section 29, Township 29 North, Range 9 West. The southern-most of these units, the proposed Gerk unit, is located 990 feet from the North line and 1650 feet from the East line of Section 30, Township 29, Range 9 West.
- Q Now, with respect to the boundaries of the proposed units, what is the location of the proposed Gerk well?
  - A From the southern boundary of that proposed unit?
  - Q Yes, please. East will remain the same.
  - A Yes, the east would remain the same. It will be approximately

one thousand feet. I don't have it surveyed or don't have any knowledge of a survey from that point, but it would be approximately that.

- Q Do you know the nearest distance which the rules in the Mesaverde Gas Pool would permit an operator to drill to the boundary line?
  - A As I recall. I might be in error on this, it is 790 feet.
- Q None of the proposed wells are drilled as near the boundary line as the rule will permit?
  - A No, none of the proposed locations of existing wells.
- Q You stated that no communitization agreement has been formed at the present time with respect to the three units?
  - A That's correct, sir.
- Q Is there any production from the Snyder well at the present time?
  - A No, sir, there isn't. We simply have that test on there.
- Q Will a formal communitization agreement be entered into in each of these three units?
- A A communitization agreement would be necessary, I believe, before we could produce these units.
- Q That's what I was getting at. This order would, of necessity, be written contingent upon approval of communitization?
  - A Right. I see no other way.
    - MR. COOLEY: That's all the questions I have. Thank you.
    - MR. UTZ: Are there any other questions of Mr. Currens?

MR. BUELL: I have one more if no one else has.

MR. UTZ: I have one or two.

#### BY MR. UTZ:

Q Mr. Currens, do you know of any non-standard units in the Blanco Mesaverde Gas Pool as large as 409 acres?

A I do not, sir.

MR. BUELL: In that connection, Mr. Examiner, I might point out that we analyzed the proration schedule for this. There are 46 oversized proration units carried on the proration schedule.

MR. UTZ: Can you state what the largest one was?

MR. BUELL: I believe the largest one was slightly over 350 acres. I found none that were 400.

Q (Mr. Utz) Mr. Currens, the location of these wells insofar as the southwest, northeast quarters of the section are concerned are standard locations, is that correct?

A Well, that would be the case, sir, with the Snyder well and the proposed Gerk well. However, in Section 18 on the proposed Valencio that would not be standard.

MR. UTZ: Are there any further questions of Mr. Currens?
MR. BUELL: I have some.

#### REDIRECT EXAMINATION

# BY MR. BUELL:

Q Mr. Currens, is there any question in your mind but what a well located at the proposed location, as reflected by Pan American's Exhibit 1, will not efficiently and effectively drain the acreage

### assigned that well?

- A Under these proposed assignments here?
- Q Yes.

A There is no question in my mind that they can't adequately drain that.

Q As a matter of fact, it is proper, under the rules, to drill a well in a standard unit, and the southern-most part of that unit would be further than it would be in case of these oversized unit, is that correct?

A Yes, sir, that's true.

MR. BUELL: That's all.

MR. UTZ: Are there any statements in this case? If not, the witness may be excused.

(Witness excused)

MR. UTZ: Did you offer your exhibits?

MR. BUELL: No.

MR. UTZ: Do you want to offer them?

MR. BUELL: We would like to formally offer that as Pan American's Exhibit 1 at this time.

MR. UTZ: Is there objection to the offering of Exhibit No. 1 for cases 1344, 1345 and 1346?

Do you have a statement, Mr. Cooley?

MR. COOLEY: I have a communication from Empire State

Drilling Corporation addressed to the New Mexico Oil Conservation

Commission. I will quote it:

"Gentlemen: We would like to enter our request for approval

of the above case requesting non-standard units necessitated by non-standard sections as a partial interest owner in the unit specified in each of these cases. We have studied the proposal as prepared by the operator, Pan American Petroleum, and believe them to be fair and equitable. Very truly, Empire State Drilling Company, signed John P. Wiedemer."

MR. UTZ: Does anyone have anything further in these three cases? If not, the cases will be taken under advisement and the hearing will be recessed until 1:30.

# CERTIFICATE

NEW MEXICO ) STATE OF COUNTY OF BERNALILLO )

I. J. A. TRUJILLO, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript by me and/or under my personal supervision; the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS, my Hand and Seal, this, the 28th day of December, 1957, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

My Commission Expires: October 5, 1960.

> I do hereby certify that the foregoing is a complete record to the proceedings in the the wor have of case 10/344/395,1396

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New Mexico dil Conservation Commission