SANTA FE, N. M. PHONE 983-3971

FARMINGTON, N. M. PHONE 325-1182

### BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico June 5, 1963

### EXAMINER HEARING

IN THE MATTER OF:

(Continued from the May 22, 1963 Examiner Hearing.)

Application of Texas Pacific Coal & Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks approval of a 320-acre nonstandard gas proration unit comprising the NE/4 of Section 20 and the NW/4 of Section 21, Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its State "A" A/c-1 Well No. 6, located 2310 feet from the North line and 1650 feet from the West line of said Section 21.

CASE 2820

Elvis A. Utz, Examiner BEFORE:

### TRANSCRIPT OF HEARING

MR. UTZ: Case 2820.

MR. DURRETT: Application of Texas Pacific Coal & Oil Company for a non-standard gas proration unit, Lea County, New Mexico.

MR. RUSSELL: John F. Russell of Roswell, New Mexico. appearing on behalf of the Applicant, Texas Pacific Coal and Oil I have one witness. Company.

(Witness sworn.)

(Whereupon, Applicant's Exhibits Nos. 1 through 9 marked for identification.)





### JOHN YURONKA

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

### DIRECT EXAMINATION

### BY MR. RUSSELL:

- Q Will you state your name, occupation, and name of your employer?
- John Yuronka, I am employed by Texas Pacific Coal and Α Oil Company as Petroleum Engineer.
- Have you previously qualified to testify before this Commission?
  - I have. Α
- Are you familiar with the application filed in Case 2820 and also the area covered by the application?
  - I am. Α
- What does the Applicant seek to obtain by this application?
- The Applicant requests a non-standard proration unit Α in the Jalmat Gas Pool, covering the Northeast Quarter of Section 20 and the Northwest Quarter of Section 21, Township 23 South, Range 36 East.
  - That is the area in yellow shown on Exhibit 1? Q
  - It is. Α
- Mr. Yuronka, at the present time are there proration units covering this entire 320 acres?



- A There are.
- Q Were they established by Order No. R-1364 entered in Case 1611?
  - A Yes.
  - Q What are those units?
- A Texas Pacific State "A" Account-1 Well No. 3 located in the Southwest Quarter of the Northwest Quarter of Section 21 now has dedicated to it the Northeast Quarter of Section 20 and the West Half of the Northwest Quarter of Section 21, a total of 240 acres. Well No. 4 on the same lease is located in the Northeast Quarter of the Northwest Quarter of Section 1 and presently has that 40-acre tract dedicated to it. Well No. 6 on the same lease is located in the Southeast Quarter of the Northwest Quarter of 21, and that 40-acre tract is presently dedicated to it.
- Q Mr. Yuronka, have you prepared an exhibit showing the well logs of the various wells shown on your red lines?
  - A Yes, I have.
- Q Referring to Exhibit No. 2, would you just point out to the Commission the significant facts or data contained there that you want to present?
  - A These cross sections shown on --
  - Q First, is this for A-A'?
- A Yes. The cross sections shown on this plat, I might add briefly, are essentially the same as the ones presented in



Case 1611, and I will point out the major changes that have occurred in the wells since that time. In Cross Section A-A'. Sinclair Federal 7-14 Well No. 3 located in the Northwest of the Southwest Quarter of Section 17, this well is noted on the cross section, perforation was originally completed in September of 1957 as a Jalmat gas well with an absolute open flow of 5.285 MCF per day. It was reclassified as a Jalmat gas well in February of 1960 with a test --

MR. UTZ: Was it originally gas or oil?

It was originally gas, yes, sir, with a test of 46 Α barrels of oil and nine barrels of water.

Was it reclassified as an oil well or a gas well?

It was reclassified as a Jalmat oil well. Production Α for that well for March of 1963 is 496 barrels of oil, 248 barrels of water, 1,012 MCF of gas, with an operating GOR of 2,040.

Texas Pacific Coal and Oil Company State "A" Account-1 Well No. 3 is the next well in which a major change has occurred. In November of 1962 this well was treated with 20,000 gallons of water and 45,000 pounds of sand, and an emulsion block occurred during the treatment. We ran various tests on it. It flowed approximately 370 MCF per day with a tubing pressure of 20 pounds. Within a week after the treatment, we treated the well with 1500 gallons of an emulsion breaker, 7-1/2 percent, and we could not break it down. We ran some more tests on it and we re-treated it on February the 13th,1963, with 10,000 gallons of an emulsion



SANTA FE, N. M. PHONE 983-3971 breaker. The highest test we have received on that well since that treatment in February has been 68 MCF per day flowing to the atmosphere, with a tubing pressure of 28 pounds.

Well No. 6, Texas Pacific Coal and Oil State "A"

Account Well No. 6 was fracked with oil in April of 1963, 20,000 gallons of oil and 60,000 pounds of sand, and an absolute open flow run in the first week of May showed the well, or was, pardon me, 3,590 MCF per day. During the month of April the well produced 17 days an average 677 MCF per day. During the month of March just prior to the frac treatment the well produced an average of 36 MCF per day for 27 days.

Q I refer you to Exhibit No. 3 and ask you what the significance of that exhibit is.

A Exhibit No. 3 is a shut-in pressure versus cumulative gas production for State "A" Account-1 Well No. 6.

Q Which is the proposed well to be attributed for the allowable?

A Correct.

Q I refer you to Exhibit No. 4 and ask you to point out the significance of that.

A This is a shut-in pressure versus cumulative gas for the State "A" Account-1 Well No. 3.

Q Which is the one that presently has the 240-acre allowable attributed to it?

A Yes.



Q I'll refer you to Exhibit No. 5 and ask you to point out the significant points you want to call to the Examiner's attention.

A This well, or this Cross Section B-B', is indicated on the plat and the major change in this has been --

MR. UTZ: Exhibit what?

MR. RUSSELL: That's Exhibit No. 5.

MR. UTZ: And C-C' was what?

MR. RUSSELL: That would be 7.

One major change shown on this cross section is in A Continental Oil Company Stevens B-20 Well No. 2 located in the Southeast Quarter of the Northwest Quarter of Section 20. In July of 1961 two additional zones were perforated, and each interval was fracked with 17,500 gallons of oil and 20,000 pounds of sand. A bridge plug was pulled, and all the perforations as shown are producing. Before the workover, as indicated on the cross section, the well was tested or had tested six barrels of oil per day and two barrels of water. After the workover, the well tested 21 barrels of oil and no water. March production for this well. March of 1963 production for this well is 203 barrels of oil, 31 barrels of water, produced gas, 1,435 MCF, with an operating GOR of 7,069. Cumulative production, oil production on this well at the first of 1963 is 18,231 barrels of oil.

I have previously explained the change that occurred in Well No. 3: that is also shown on the cross section.



Q Exhibit No. 6.

A Exhibit No. 6 is shut-in pressure versus cumulative gas for Texas Pacific State "A" Account-1 Well No. 4.

Q Exhibit No. 7.

Exhibit No. 7 is a Cross Section C-C', as indicated Α on the plat or Exhibit No. 1. The major change that has occurred in this cross section is, one of them is Texas Pacific Coal and Oil Company State "A" Account-1 Well No. 2 located in the Northwest Quarter of the Southwest Quarter of Section 21. In November of '62. just shortly after we treated No. 3, we treated this well or fracked this well with 20,000 gallons of oil, 60,000 pounds of sand. The deliverability before this frac treatment was 284 MCF The deliverability afterwards was 3,850 MCF per day. The absolute open flow was 4,696, which is greater than the absolute open flow obtained in a workover in July of 1946. well was under production at the time it was worked over, and during the month of April the well produced 42,673 MCF per day for 30 days, or an average of 1423 MCF per day. In March this well produced 47,155 MCF for 27 days, or an average of 1746 MCF Texas Pacific State "A" Account Well No. 6 is also shown on this cross section.

Q I refer you now to Exhibit 8 and ask you to identify it.

A Exhibit No. 8 is a shut-in pressure versus cumulative production on Texas Pacific State "A" Account-1 Well No. 2. I would like to point out the increase in shut-in pressure after



treatment of the well in November.

- Q of 1962?
- A Yes.
- Q I refer you to Exhibit No. 9.
- A Exhibit No. 9 is a rate versus time curve also on the Texas Pacific State "A" Account-1 Well No. 2. I would like to point out in this curve the fact that the production since the frac treatment on our Well No. 2 is the highest it has been since 1958 except for one month. Our State "A" Account 2 is now overproduced 24,137 MCF on a June gas proration schedule.
- Q For a little recapping of our evidence, you have testified that due to an emulsion block that for all practical purposes you have lost Well No. 3?
  - A Yes.
- Q It is no longer capable of producing the gas from the acreage allotted to it, is that correct?
  - A Yes, that is correct.
- And it has also been previously established by your production records that the Well No. 4 and Well No. 5 are producing gas as to the acreage allotted to them?
  - A No. 4 and No. 6.
- Q No. 4 and No. 6, correct. You are asking that Well No. 6 be designated as the well for the allowable, the 320-acre allowable you are requesting?
  - A Yes.



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Why do you think or do you feel that that well will drain the entire 320, and is capable of so doing?

Well, the primary sands as shown on the cross section Α is indicative throughout the entire tract and can be assumed to be productive.

- And based on your reworking of No. 6?
- Α Yes.
- Q Which is similar to the rework on Well No. 2?
- Yes. Α
- Now in addition to asking for a non-standard proration Q unit, this Well No. 6 is actually in a non-standard location, is it not?
  - Yes. Α
  - Why are you asking the Commission to approve it?
- Well, the well has already been drilled and we would Α like to use that well.
- If you were required to drill a new well at a standard location for this unit, would that create economic waste?
  - A Yes.
- Because in your opinion No. 6, which is a presently existing and producing well which has been reworked, will effectively drain it, is that right?
  - Yes. Α
- In your opinion do you think Well No. 6, located where it is, would actually be more productive of the gas from the entire



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unit if it was located in the Northeast Quarter of Section 20?

- A As indicated on Exhibit 1, it is higher structurally than any other well on the Texas Pacific acreage in that area.
- Q And since it has already been drilled and is the highest well on the structure, it will most effectively drain this proposed allowable unit, is that correct?

A Yes.

MR. UTZ: I think we had better recess until about 1:15.

MR. RUSSELL: I was going to ask the final question.

MR. UTZ: There will be cross examination, I'm sure. We will recess for lunch.

(Whereupon, the hearing was recessed.)

### AFTERNOON SESSION

(Whereupon, the hearing was resumed at 1:15 o'clock P.M.)

MR. UTZ: The hearing will come to order. Mr. Russell.

- Q (By Mr. Russell) Mr. Yuronka, referring to your Exhibit No. 1, Well No. 3, that is the well to which 240 acres is presently dedicated, is it not?
  - A Yes, sir.
- Q What is the status of the production from that well in connection with its allowable?
- A On the June proration schedule it is 105,000 some odd MCF underproduced.
  - Q In the event the Commission grants this application,



what relief are you requesting in connection with that underproduction?

- We would request that we be given until the end of this year to make up that underproduction.
- Were these exhibits prepared by you or under your supervision and direction?
  - Yes, sir. Α

MR. RUSSELL: I would like to move the introduction of Exhibits 1 through 9.

MR. UTZ: Without objection, Exhibits 1 through 9 will be entered into the record in this case.

> (Whereupon, Applicant's Exhibits Nos. 1 through 9 received in evidence.)

MR. RUSSELL: I have no further questions of this witness, Mr. Examiner.

### CROSS EXAMINATION

### BY MR. UTZ:

Q Mr. Yuronka, your request as to the make-up of the 105,000 MCF now accumulated on the No. 3, that was a recent accumulation?

Oh, I don't remember the exact amount. It was a very small amount that the well was underproduced at the time we worked it over, but most of the accumulation has been since the workover on the well.

There was 105 MCF underproduced sometime during this



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period?

- A In the June proration schedule it is so listed.
- Q I don't believe, then, it will be necessary to make any requests to make it up by the end of the year. That's going to be automatically true. Also if this application is granted, the status of all three units will go together.
  - A I see.
- Q It's the usual practice. Now, let's review the status of some of these wells again. Now the No. 4 Well now is dedicated to the Northeast of the Northwest of Section 21, is that true?
  - A That is right.
  - Q What is the status of that well?
  - A It is a marginal well.
  - Q Marginal well?
  - A Yes, sir.
  - Q What do you intend to do with that well?
  - A Shut it in.
  - Q And disconnect it?
  - A That's right.
- Q Now the No. 6 Well, which is the well currently dedicated to the Southeast of the Northwest of Section 21, what is the status of that well?
  - A It is also a marginal. It was before this workover.
  - Q You intend to shut that in?



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A No, that's the one we are requesting the acreage be dedicated to.

- Q That well now is capable of producing how much?
- A It had an absolute open flow of 3,590.
- Q Has it produced since the workover?
- A Yes, sir. We have a test on that particular well. The well was treated on April 10th of 1963 and on April the 18th the well tested 1122 MCF per day; tubing pressure, 340; casing pressure, 340.
- Q In your opinion then will the well make a 320-acre allowable in the Jalmat?
  - A Yes, sir.
- Q Now the Well No. 3, which is currently dedicated to the remaining 200 acres, isn't it?
  - A 240.
  - Q 240 acres. What is the status of that well?
- A Well, we have tried, after our sand-water treatment, we encountered this emulsion block and we tried two treatments to break it down and we were unsuccessful. The last test on the well that I have, March the 12th, was 68 MCF per day with a flowing pressure of 28 pounds. We have not been able to put it into the line since the workover because of the block.
  - Q What will you do with that well?
  - A We will shut it in and disconnect it.
  - Is the No. 5 Well in the Section 20 in the Northeast



Quarter, is that a dry hole?

- A It was plugged and abandoned, yes, sir.
- Q Is it now plugged and abandoned?

A Yes, sir. We attempted a completion on that well in 1952, it was when fracking was in its infancy, and the job was a very small one and we did not get any show. We feel it is a mechanical difficulty. We have encountered the same situation, most of these wells were drilled in this particular area round 1930; when they encountered the gas they used everything but the kitchen sink, really, to try and stop the gas flow, and they put large amounts of cement in there and we have run cement bomb logs on this flank and it shows that the cement has gone into the porous sand zones in the Yates, and consequently we have been unable to complete some of them. We feel it is a mechanical difficulty.

- Q You feel, then, if a new well was drilled in that Quarter Section it would be productive of gas?
  - A Yes, sir.
- Q Now in the Northwest Quarter of Section 20, the Sinclair B-20, or Continental B-20 No. 2 which is the end well in your Cross Section B-B'.
  - A Yes, sir.
  - Q Was that an oil well in the Jalmat?
  - A Yes, sir.
  - Q Do you recall what kind of a GOR that well had?



A During the month of March it had an operating GOR of 7,069.

Q Up in Section 17 in the Southeast Quarter, the Texas Pacific New Mexico 2 "A" Account-1 No. 39, what is the status of that well?

- A That is a Jalmat gas well right now.
- Q That is gas. Is that a pretty good producer?
- A No, sir.
- Q It's a marginal well?
- A Yes, sir.

Q Down in the Southwest Quarter of Section 20, the Sinclair 714 No. 4, what kind of a well is that?

A That is a Jalmat oil well. It was worked over in March of '62, they used an abrasive jet at three intervals as indicated, and sand-oil treated and potentialed the well at 15 barrels of oil and 15 barrels of water. During the month of March the well produced 26 barrels of oil for 31 days.

Q 36?

A 26. 6200 barrels of water, and had an operating GOR of 2,346. Cumulative oil production as of the first of this year was 10,445 barrels of oil.

- Q That is an oil well but not a very good one?
- A Yes, sir.
- Now back in Section 21 in the Southwest Quarter, your State No. 2, I believe that was a rework with pretty fair results



as a Jalmat gas well, was it not?

- A Yes, sir.
- Q What was the AOF or the productivity of the well?
- A The absolute open flow after the workover was 4,696 MCF per day.
  - Q Has that well produced since workover?
- A Yes, sir. I have a rate versus time curve there. I believe it's Exhibit No. 9. And Exhibit No. 8 shows the increase in shut-in pressure since that well has been treated.
- Q Would you have any opinion as to how far up-structure and into the Northeast Quarter of Section 20 the oil zone comes in the Jalmat pay?
- A Well, this Continental Stevens B-20 No. 2, if I may refer to that, that well --
  - Where is that well located?
- A That's the west well in Cross Section B-B'. If you'll notice in July of '61 when they performed this workover, the production before was six barrels of oil, and after it was 21. The March production, that indicates that is down to 6.5 barrels of oil per day. It was down to what it was before. The top of the perforations in that well is a minus 113. I feel that there is very little oil in the Northeast Quarter of Section 20, not enough to warrant an economical producer. It is also evidenced by the fact that that particular well was completed in 1958, and even with the workover in 1962, the cumulative production on that well



as of the first of this year was 18,231 barrels of oil.

- Q So it's your opinion, then, that the Jalmat oil column did not come up into the Northeast Quarter of Section 20 very far, if any at all?
  - A Correct.
- Now in regard to your non-standard location for your No. 6, what is the footage location of that well?
- A Well No. 6 is located 2310 feet from the North line and 1650 feet from the West line of Section 21.
  - ସ 1650?
  - A Yes, sir.
  - Q So it would be 330 from the South line of the unit?
  - A Yes.
- Q Which, according to rule something or other, Order 1670, is too close to the unit line to dedicate 320 acres to?
  - A Well, this well, as I say, was drilled back in --
  - Q Well, that was my next question, when was it drilled?
  - A The well was completed on October 3rd, 1938.
  - Q Which would bring you under the exception in Order 1670?
  - A Yes.
- Q It would be your recommendation to supersede Order R-1364?
- A Well, to the extent that it covers this 320 acres. There are other than S.P.'s involved in that order.
  - Q Oh, I didn't realize that. I guess I didn't read the



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order very close. But there are other units in that order except the three?

A The other that is involved is the 320 acres dedicated to Well No. 2.

- Q The South Half of 21?
- A Yes, sir, the Southwest Quarter of Section 21 and the Southeast Quarter of Section 20.
  - Q So those four units are covered under 1364?
  - A Yes, sir.

MR. UTZ: Are there any other questions of the witness?
MR. DURRETT: Yes,sir.

### BY MR. DURRETT:

- Q Mr. Yuronka, what type of block did you say the No. 3 Well was suffering from?
  - A An emulsion block.
  - Q Emulsion.
- We feel that the water used in the frac treatment was incompatible with whatever was in the well and created the block. We have found by fracking, we thought at one time that we could frac the Jalmat gas interval with water, for economic reasons, naturally be cheaper; and we could end up with the same type of well. Now we have fracked several wells with water, not only in this area but in other areas, and we have not come up with as good a well as surrounding wells, with pays being comparable.



Q And you said you tried to do this with the No. 3, or you decided against it, I missed you on that.

A No, we treated No. 3 with water, and this block resulted, and we tried to break the block down in two separate treatments and never could.

Q You don't think anything could be done to get around this emulsion block in the future by any method known to you?

A No, we have attempted to flow the well to atmosphere, oh, several times. We have tested every day for about ten days; during daylight hours we left it open, but we could never get more than 30 pounds flowing pressure or approximately 75 MCF per day, which, of course, we could never put into the line.

Q Do I understand correctly that this entire acreage involved is on a State lease?

A Yes, sir.

Q And are you familiar with the royalty as far as the beneficiary of the royalty?

A They're the same.

Q The same beneficiary?

A Yes.

MR. DURRETT: Thank you. That's all.

MR. UTZ: I would gather that you don't think enough of the oil pocket in the Northeast Quarter of 20 to drill a well for Jalmat oil?

A No. sir.





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MR. UTZ: Any other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements in this case? The case will be taken under advisement.

STATE OF NEW MEXICO SS COUNTY OF BERNALILLO

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me, and that the same is a true and correct record of the said proceedings before the New Mexico Oil Conservation Commission, to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal this 19th day of June, 1963.

My Commission Expires: June 19, 1963.

> I do hereby certiff that the foregoing is a complete record of the proceedings in the Examiner heaving of Care So. 2 820 heard by me ou,

...., Examiner New Mexico Oil Conservation Commission



BEFORE THE OIL CONSERVATION COMMISSION Santa Fe. New Mexico May 22, 1963

### EXAMINER HEARING

IN THE MATTER OF:

Application of Texas Pacific Coal & Oil Company) for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks approval of a 320-acre non-) standard gas proration unit comprising the NE/4 of Section 20 and the NW/4 of Section 21, Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its State "A" A/c-1 Well No. 6, located 2310) feet from the North line and 1650 feet from the) West line of said Section 21.

CASE 2820

BEFORE: Daniel S. Nutter, Examiner

### TRANSCRIPT OF HEARING

MR. NUTTER: We will call next Case 2820.

MR. DURRETT: Application of Texas Pacific Coal & Oil Company for a non-standard gas proration unit, Lea County, New Mexico.

If the Examiner please, we have also received a letter from John F. Russell, attorney for the Applicant, and this letter reads as follows:

"Pursuant to our telephone conversation, it is respectfully requested that Case 2820, originally set for an Examiner Hearing on May 22, 1963, be continued to the Examiner Hearing on June 5, 1963. All offset operators are being notified of this



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request for a continuance."

On the basis of this letter I would like to move that this case be continued to June 5.

MR. NUTTER: Case 2820 will be continued to 9:00 o'clock A.M. June 5th at the same place.

STATE OF NEW MEXICO SS COUNTY OF BERNALILLO

I, ADA DEARNLEY, 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; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal this 25th day of May, 1963.

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. Ze heard by me on

New Mexico Oil Conservation Commission Examiner



