

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 5, 1969

EXAMINER HEARING

-----  
IN THE MATTER OF: )

Application of Cities Service Oil )  
Company for the institution of gas )  
prorationing in the Buffalo Valley- )  
Pennsylvanian Gas Pool, Chaves County, )  
New Mexico. )

) Case No. 4040  
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BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

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MR. NUTTER: Call Case No. 4040.

MR. HATCH: Case 4040. Application of Cities Service Oil Company for the institution of gas prorationing in the Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, appearing for the applicant. I have two witnesses I would like to have sworn, please.

(Whereupon, Applicant's Exhibits 1 through 4 were marked for identification.)

(Witnesses sworn.)

VINCENT FOSTER

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Vincent Foster.

Q By whom are you employed and what position, Mr. Foster?

A City Service Oil Company, reservoir engineer.

Q You are located in Midland, Texas?

A Yes, sir.

Q Have you ever testified before the Oil Conservation Commission before?

A No, I have not.

Q For the benefit of the Examiner, would you briefly outline your education and experience as an engineer?

A I was graduated from the University of Southern California in 1951 with the Bachelor of Engineering and Petroleum Engineering and I have worked for various oil companies since that time in New Mexico primarily and West Texas as a petroleum engineer and I am now a reservoir -- classified reservoir engineer.

Q How long have you occupied your present position as reservoir engineer?

A The title, I believe, was since I went with City Service in 1965.

Q Since that time, have you had anything to do with the area involved in application in Case 4040?

A Yes, I have.

Q Is it under your supervision for the purposes of reservoir engineer?

A Yes.

Q Are the witnesses' qualifications acceptable?

MR. NUTTER: They are.

Q (By Mr. Kellahin) Mr. Foster, are you familiar with the application of City Service Oil Company in Case 4040?

A Yes.

Q Briefly, what is proposed by City Service in this application?

A To institute gas prorationing in the Buffalo Valley-Pennsylvanian Gas Pool.

Q And where is that located?

A In Chaves County. Let me see. It's in Townships 14 and 15, Ranges 27 and -- Range 27 East.

Q Now, referring to what has been marked as Exhibit No. 1 would you identify that Exhibit please?

A This is a plat showing the wells -- the completed wells in the Pennsylvanian Gas Pool.

Q How many wells have been completed in the Buffalo Valley-Pennsylvanian Gas Pool?

A Five wells have pipe line connections and there's presently another well that has been completed, but has no pipe line connection.

Q So, there are presently six wells in the pool capable of production, is that correct?

A Yes.

Q Approximately how old is this reservoir?

A The first well was completed in 1962.

Q It was shut in for a period of time?

A Until the pipe line connection was established,  
yes.

Q And has there been recent development in the  
pool?

A In 1968 the other five wells were completed.

Q Now, referring to what has been marked as Exhibit  
No. 2, would you identify that Exhibit?

A This is a tabulation of the gas and condensate  
production for 1968.

Q That's for the five producing wells?

A The five wells connected to pipe line.

Q How many pipe lines are there in this pool?

A Presently, there are two.

Q Then, there are only two purchases available  
to the producer, is that correct?

A Yes.

Q Who are those producers?

A Southern Union and Phillips Petroleum.

Q And are all of the wells connected equally or

Southern Union connected to --

A Southern Union is only connected to the one City Service Betts Well and Phillips Petroleum is connected to the other four wells.

Q And then the sixth well has no connection as yet?

A Has no connection.

Q Do you know what pipe line will connect to it?

A No, sir. They are -- I believe that's out of my --

Q That's not in your department?

A I don't know that much about that.

Q With reference to Exhibit No. 2, in your opinion, has there been ratable take from the various wells in the pool?

A No.

Q And this is reflected on Exhibit No. 2, is it not?

A Yes.

Q In order to protect correlative rights of the producer, do you feel that gas prorationing is essential?

A Yes, I do.

Q And do you request the Commission to institute a gas prorationing system for the Buffalo Valley-Pennsylvanian Gas Pool?

A Yes.

Q Have the limits of the pool been substantially defined, Mr. Foster?

A No, they have not. There are dry holes in various -- on the east and west edges, primarily, but it has not really been defined.

Q As a reservoir engineer, would it be possible on the basis of the information presently available for you to calculate the reserves underlying the pool as a whole?

A No.

Q Do you have sufficient information to calculate the reserves with any degree of accuracy as to the individual tracts under the pool?

A No, we do not.

Q Were Exhibits 1 and 2 prepared by you or under your supervision?

A Yes, they were.

MR. KELLAHIN: That completes the examination of the witness. I would like to offer Exhibits 1 and 2.

MR. NUTTER: City Service Exhibits 1 and 2 will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Foster, could you give us the completion



dates for each of the six wells in the pool?

A I am not sure I know the exact dates on -- the City Service Betts No. 1 was completed in December, 1962, but no connection was made until about March of '63, if my memory serves me. The Reed Buffalo Valley No. 1 was -- primarily, these will be connection dates and not completion dates, due to the availability --

Q At least no production from the wells until these connection dates you are going to be giving?

A Yes. The Reed Buffalo Valley No. 1, January, 1968; Reed Buffalo Valley No. 2, March, 1968; the Southwest Production Buffalo Valley No. 1, March, 1968; the Southwest Production Clements No. 1, March, 1968. Pan American has completed a well in Section 11, but they have no pipe line connection at this time; however, it is completed.

Q When was the well completed? Do you have any idea?

A I believe it was the latter part of November.

Q Late '68?

A '68, yes.

Q Mr. Foster, you indicated that your Exhibit No. 2 shows nonratable take among these wells. Will the other witness go into the capacity of the wells to produce?

A I don't believe so.

Q Well, can you give us what the capacity of the wells are, then?

A The absolute open flow range from 3 point 6 mmcf per day to over nine mmcf per day.

Q Can you give us those open flows on the individual wells and the dates those were taken, please?

A These were tests that were given me over the phone and they were not -- I don't know whether they were even reported. They said that's what it will produce as the absolute open and I have no dates, except they must be the first month, I would say, because this was when I called them after completion. The Reed Buffalo Valley No. 1 had an indicated absolute open flow of 6 point 4 mmcf per day; Southwest Clements No. 1 had an indicated absolute open flow, I have, 4 point 7 mmcf per day; Southwest Buffalo Valley No. 1 had an indicated absolute open flow of 9 point 2 mmcf per day; the City Service Betts No. 1 had an absolute open flow of 3 point 6 mmcf per day.

Q 3 point 6?

A Yes, sir. The Reed Buffalo Valley No. 2, I have never been able to get.

Q No potential on it? Do you know what the Pan

American Well is capable of producing?

A No, I do not. It's capable of producing about 8 mmcf per day. All these rates are in excess to the actual production that these wells have produced during 1968.

Q Well, Mr. Foster, according to these potentials that you gave us, the Betts Well has the smallest calculated absolute open flow of any well. Is this evidence of nonratable necessarily? It's the only well that's connected to Southern Union; the rest are connected to Phillips Petroleum, is that correct?

A Yes, sir. I am not sure I follow your question there. You are saying that because ours has a smaller capacity that it is reflected by its producing ability here; is that what you mean?

Q I was just wondering; if we take your Exhibit No. 2 and compare the production for 1968 between the Betts Well and the Reed Buffalo Valley No. 1, the Betts Well produced 3 hundred 3 thousand mcf and the Reed Well produced a million 2 hundred thousand. On the face of it, it appears like there is nonratable take there, but if we consider that the calculated absolute open flow of the Reed Well is 6 point 4 million and the Betts Well is 3 point 6 million, maybe there

is some reason for the difference in the production.

A I am not sure how to answer that. In your --

Q Is the Betts Well producing at its capacity?

A The Betts Well is not producing at its capacity. It has a capacity in excess to what it has been producing at.

Q Well, in December it made 57 thousand mcf, which would be something less than 2 million a day --

A Yes.

Q -- and it has a capacity to produce 3 point 6 million a day. When, incidentally, was this calculated absolute open flow made on your well?

A 1963.

Q Do you have a more recent test on the well?

A We have a more recent test that indicates it will produce just slightly less than 2 million a day.

Q Less than 2 million a day?

A Right.

Q Well, that's what it is producing in the pipe line?

A In November and December, yes.

Q So, it's producing at capacity, isn't it?

A That I don't know. I don't know what the flowing

tubing pressure was at that time, and I could tell you if I knew that. I would say it's close to capacity in November and December, yes.

Q When it was making this 57 thousand?

A Yes.

MR. NUTTER: Are there any other questions of Mr. Foster?

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q In regard to the Betts No. 1 Well, the average production for the year 1968, was that below the capacity of the well, the ability of the well to produce?

A Yes.

Q Is open flow a measure of the reserves underlying the tract dedicated to the well, Mr. Foster?

A I don't think it is. No.

Q Is it generally, in the industry, accepted as a measure of reserve?

A To my knowledge, it is not.

MR. KELLAHIN: That's all I have.

MR. NUTTER: Are there any other questions of Mr. Foster? He may be excused.

MR. KELLAHIN: Call Mr. Taylor, please.

E. E. TAYLOR

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A E. E. Taylor.

Q By whom are you employed and what position, Mr. Taylor?

A City Service Oil Company, District Development Geologist in Midland, Texas.

Q Have you ever testified before the Oil Conservation Commission?

A No, sir.

Q For the benefit of the Examiner, would you briefly outline your education and experience as a geologist?

A I graduated from the University of Oklahoma in 1950 with a BS in Geology. I have been employed by City Service for 18 years; worked in Kansas, Oklahoma, Texas, and foreign, Algiers, Italy. I have been in Midland in this job for 7 years.

Q In connection with your work in Midland, is the Buffalo Valley-Pennsylvanian Gas Pool under your jurisdiction?

A Yes, sir.

Q As a geologist? Are the witnesses' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q (By Mr. Kellahin) Mr. Taylor, have you made an examination of the available information in the Buffalo Valley-Pennsylvanian Pool?

A Yes, sir.

Q Referring to what has been marked as Exhibit No. 3, would you identify that Exhibit?

A This is a structure map, contoured on top of the Morrow and it indicates that the productive area of the Buffalo field hasn't been defined and east-west distance is approximately 2 miles wide; north-south is open ended.

Q Does the structure reflect that the producing formation is fairly uniform throughout the area known to be in the pool at this time?

A Yes, sir.

Q Briefly, would you describe the producing formation? What type of formation is this?

A It's a sand, and average pay thickness would be around 20 feet.

Q Would that be fairly uniform throughout the

producing area?

A Yes, sir. It wouldn't vary over five feet.

Q And you say that pool has not been defined as yet, north and south, is that correct?

A Yes, sir.

Q Now, referring to what has been marked as Exhibit No. 4, would you identify that Exhibit?

A This is a north-south cross-section, running from Southwest Production No. 1 Buffalo Valley Comp. down to the City Service Betts.

Q Is that the cross-section that's shown on Exhibit 3 by a red line?

A It's depicted by a red line on Exhibit 3.

Q What does this cross-section indicate, Mr. Taylor?

A It indicates that the wells depicted here produce from the same formation, primarily the Sand that I have called Sand B in the Morrow.

Q Does this show the perforated intervals in the wells?

A Yes, sir. The red intervals in Sand B are the perforated intervals likewise in Sand A and 1 well, the Buffalo Valley Comp. 2 is an open-hole completion interval is shown at the bottom of the electric log.



Q Again, does this reflect that the net pay in the wells shown on the Exhibit 4 is fairly uniform throughout the pool?

A Yes, sir.

Q As a geologist, would it be possible for you to make a calculation of the reserves underlying the Buffalo Valley Pool at this time?

A No, sir.

Q Could you make such a calculation as to individual tracts within the pool?

A No, sir.

Q Mr. Taylor, under the New Mexico Statutes, pro-rating gas, the Commission -- and I am quoting from Section 65-3-14 -- the Commission is required to make such orders as will afford the owner of each property in a pool the opportunity to produce his just and equitable share of the oil or gas or both in the pool, being an amount insofar as can be practically determined and so far as such can be practically obtained, without waste, substantially in the proportion that the quantity of the recoverable oil or gas or both under such property bears to the total recoverable oil or gas or both in the pool. Now, with that requirement in mind, what formula would you recommend to the Commission

in making an allocation of production in the Buffalo Valley Pool?

A I believe it should be 100 percent surface allocation.

Q Surface acreage?

A Surface acreage allocation, yes, sir.

Q Is this because you do not have sufficient information to make a more precise calculation about the reserves?

A Yes, sir.

Q Will any other information become available in the immediate future that would change this situation?

A I don't believe so; none that I know of.

Q And, as I understand, since the pool has not been completely defined as yet, you could not make a calculation of the reserves in the pool at all?

A That's right. It's my opinion that it couldn't be done.

Q Do you recommend that the pool be prorated?

A Yes, sir.

Q Now, you heard the testimony of Mr. Foster. Are you in agreement with his conclusion in regard to the necessity for prorating production?

A Yes, sir.

Q Were Exhibits 3 and 4 prepared by you or under your supervision?

A Yes, sir.

Q At this time, I would like to offer in evidence Exhibits 3 and 4.

MR. NUTTER: City Service Exhibits 3 and 4 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 3 and 4 were offered and admitted in evidence.)

MR. KELLAHIN: That's all I have, Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Taylor, referring here to your Exhibit No. 3, you mentioned that the pool had been defined on the east and west and was open ended north and south?

A Yes, sir.

Q Now, the well up here in the southeast corner of Section 27 tested a Morrow, is that correct?

A The Morrow -- the sand was present there.

Q But, it penetrated the Morrow?

A Yes, sir.

Q And the well in the southeast corner of Section 3 penetrated the Morrow?

A Yes, sir.

Q And the well up here in the northwest quarter of Section 36 penetrated the Morrow?

A Yes, sir.

Q And, over here in the northwest of 6 you've got a Morrow Well?

A Yes, sir.

Q What about this dry hole that's shown in the southeast quarter of 11? How deep is that well?

A This tested the Morrow. I haven't seen the log on it, but from depth I know it has.

Q That would possibly close the pool up on the south side?

A It would narrow it considerably.

Q At least, it's going to be narrowed a couple of contours. Now, could you tell me how the acreage is dedicated at the present time to these wells?

A Well, for instance, the Pan American 1C in the northwest quarter of Section 11, that unit is a -- consist of the west half of Section 11.

Q That's the west half? Okay.

A The two -- the Reed lease in Section 2 immediately above that, these are -- the No. 1 has the north half of Section 2 and the No. 2 has the south half of Section 2.

Q Okay.

A The Betts Well immediately north of those 2 consist of the south half of Section 35.

Q Okay.

A The southwest well in the No. 1 immediately northeast of the Betts Well is the north half of 35. This southwest production well in the northwest quarter of Section 1 --

Q Yes.

A -- I'm not positive which way that runs.

Q You are not sure if it is the north half or the west half?

A No, sir.

Q Are you acquainted with Mr. Foster's Exhibit No. 2, Mr. Taylor?

A Yes, sir.

Q I note there on that -- I possibly should have asked him when he was on the stand, but maybe you can explain it -- this Buffalo Valley No. 1 appears to have

quit producing. What's the score on that well?

A That southwest Buffalo Valley No. 1?

Q Yes, sir.

A I understand there was some -- in talking with -- oh, Reed and Reed's geologists while I was up on the Reed No. 1 Hondo State, this well wasn't completed properly; there was some mechanical difficulty; it has a good pay section, and I don't know what their problem is.

Q It's one of the wells on the cross-section, as a matter of fact?

A Yes. It has a good -- apparently good 23 foot net pay section in the Sand.

Q But, according to Mr. Foster, that well had the highest calculated absolute open flow of any well in the pool, being 9 point 2 million, and here the best month for production was less than 8 thousand mcf, and it declined down to 40 mcf in the month of October. Of course, it only produced one day. Have they lost the well; do you know?

A The last I knew, it wasn't producing, but they haven't plugged it or done anything like that with it as of 3 weeks ago or so.

Q It's not a matter of nonratable take by the purchaser from that well, is it?

A No.

Q That's one of the four wells that's connected to Phillips and the other three wells they are purchasing from during the month of December, the Reed No. 1 produced one hundred one thousand mcf, the Reed No. 2 produced one hundred one thousand, and the Clements No. 1 produced one hundred two thousand, so the takes were very ratable, except from that one well, among the Phillips wells?

A Yes, sir.

MR. NUTTER: Are there any other questions of Mr. Taylor?

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Taylor, you stated that you could not calculate reserve in this pool. Will you brief me why you don't have that information not to make such calculation?

A Well, the main reason you couldn't calculate them for the pool is we don't know the limits of the pool.

Q But, you do have the reservoir data?

A Not all of it that would be required, I wouldn't think.

Q Well, you have pressures, don't you, for the pool, reservoir pressure?

A I don't have the pressures. I suppose --

Q City Service has the pressure, don't they? You know what the pressures are in the pool, the reservoir pressure?

A I think it shows on our Exhibit what it is.

Q I don't care what it is. I would like to know what factors are going into the reserve calculation that City Service doesn't have, of the pool? Well, can you tell this?

A No. Did you ask -- are you asking why I can't calculate the reserves?

Q That's right.

MR. KELLAHIN: I think Mr. Foster can answer that question, if you would like for him to.

MR. NUTTER: You have some questions along the line of reservoir data, you probably would like to direct to Mr. Foster, I imagine, Mr. Utz. Are there any questions of Mr. Taylor? We will excuse him from the stand and recall Mr. Foster then.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Foster, you understood my question, I believe, I asked Mr. Taylor, did you not?



A     Primarily, in my opinion, there's no way you can pick a net equitable pay in these wells because there is no one that I know of that can interpret the E. A. Log, which is what Richfield originally used on this Betts Well when they originally drilled it. That is primarily the reason you could get no definite reserves per tract and since the field has not been defined, I think that we could come up with pseudo reserves if we knew what the limit of the field was, due to the pressures that we have. These pressures primarily are drill stem pressures that were put on this original plat here. They were to show that the field is in -- evidently in the same reservoir and the pressures are compatible and reasonably close.

Q     You take shut in pressures every year on the wells, don't you?

A     Not necessarily. These wells are not old enough. Now, the Betts is, and we have taken pressures occasionally in that, but the other wells are not old enough, as far as I know, to ever have been shut in. On this Exhibit 2 from the production that they have indicated, they haven't been shut in at all.

Q     Well, pressure could be taken, couldn't it?

A     I am sure they could.

Q And, do you have any problem as to build-up of the pressures, or do they stabilize pretty regular?

A Well, I can only answer for that one well, and I say it's pretty fast, 72 hours for sure.

Q The pressures that you are speaking of there, in your opinion, show communication between the wells?

A We have had no other pressures in these others and I don't know whether you can believe the baums that are running drill stem tests, due to the hard use they have. They are not quite as delicate. I don't know whether there is communication. I don't believe that there is enough pressure to indicate one way or the other.

Q Well, as I understand your answer then, you are summarizing it by saying you have a problem determining the net pay on the well basis?

A Right. On a well basis, yes.

Q You also mentioned surface acreage in that you don't know what the limits of the pool are?

A Right.

Q Of course, you would not be calculating the pool reserve; you would be calculating tract reserve, is that correct?

A You mean on a pressure basis?

Q This is a spacing of 320? If you are going to calculate 320 acre reserve, do you have enough information, as far as surface acreage is concerned, to calculate 320 acre reserve, aside from the net pay?

A I don't believe you can come up with any reserves on the tract basis. You can possibly on the newer wells, but I don't believe you can tell me how many feet of pay are in the Betts.

Q Do you know whether the entire 320 acre tract is productive or not?

A No. Do we ever?

Q Maybe the spacing ought to be 160.

A I think that at sometime when we have enough pressures to see about communication, then that can possibly be answered. I don't believe we have enough pressure indication or history to give us the answer to that.

Q For its own use, City Service does have some kind of reserve figure estimate, don't they?

A I don't know.

MR. UTZ: I think that answers my question.

MR. NUTTER: Are there any further questions of Mr. Foster? He may be excused. Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: I would only like to point out in line with Mr. Utz's questioning, that while it probably is possible that we could make the calculation of the reserves underlying the given tracts of the pool, that would not meet the requirements of the New Mexico Statute that also requires that you have to make a calculation of the reserves within the pool and correlate the two in arriving at a formula for the allocation of gas production, and under the circumstances, since the limits of the pool have not been defined, the best measure for allocation would, of course, be surface acreage because that can be measured.

MR. NUTTER: You can measure that?

MR. KELLAHIN: We can measure that. Yes, sir.

MR. RYAN: Gordon B. Ryan, Fort Worth, Texas, appearing on behalf of Pan American Petroleum Corporation. We were here mostly as an observer, but since the question has been raised regarding the well in the southeast quarter of Section 11, I think perhaps for the benefit of the Commission we have some data on that well that we can offer.

MR. NUTTER: Yes, sir, we would appreciate hearing data on that well.

MR. RYAN: I may state for the purpose of the record that I am appearing in association with Mr. Charles

Malone of the firm of Atwood and Malone.

MR. NUTTER: We have a written appearance on your behalf.

MR. RYAN: I have one witness and I'll ask that he be sworn.

(Witness sworn.)

WILLIAM C. WELLS, JR.

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

DIRECT EXAMINATION

BY MR. RYAN:

Q Would you state your name, by whom you are employed, and what capacity?

A My name is William C. Wells, Jr. I am employed by Pan American Petroleum Corporation as a petroleum engineer in our Fort Worth, Texas, office.

Q Have you previously testified before this Commission and had your qualifications as a petroleum engineer admitted?

A Yes, sir. I have.

Q You need to go any further on his qualifications?

MR. NUTTER: No, sir.

Q (By Mr. Ryan) Are you familiar with the application

presently pending before this Commission?

A Yes. I am.

Q Now, the past questioning, it was asked about the well located in the southeast quarter of Section 11. Do you have any data on that well?

A Yes. This well was drilled by Pan American Petroleum Corporation as a hundred percent working interest well. We are currently evaluating in upper horizon in the well bore. We did not set pipe to the Penn zone under question here. The zone was tested. We drill stem tested that zone and got gas to surface and I believe 14 minutes at a rate of 116 mcf per day, so we believe that at least a portion of the southeast quarter of Section 11 is productive of gas.

Q That was not completed as a commercial well, though, in the Penn zone?

A No. It wasn't.

Q But, some of that, in your estimation, is productive?

A Yes. By test data we can show that it is.

Q Do you have any other data on this well that would be of interest to the Commission?

A No, sir. I don't believe I do.

CROSS EXAMINATION

BY MR. NUTTER:

Q How about your well up there in the northwest quarter of Section 11?

A That's our Federal C Gas Comp. No. 1. We are currently negotiating on a contract for that well. I believe the absolute open flow on that was 8 point 8 million a day. I don't have that exact figure in front of me, but I believe that was it.

Q The City Service people said that the well was not connected, but you said that you are negotiating for a contract?

A Negotiating for a contract.

Q Would you mind telling us whether you are negotiating with Phillips or Southern Union or some third pipe line?

A Part of our negotiations right now are with Phillips.

Q I see. And the well in the southeast quarter tested 116 mcf a day from the Morrow?

A From the Morrow, comparable interval, yes.

Q And non-commercial, so you are working on the upper horizon?

A Yes.

MR. NUTTER: Are there any further questions of Mr. Wells? He may be excused. Do you have anything further, Mr. Ryan?

MR. RYAN: That's all.

MR. NUTTER: Does anyone have anything else they wish to offer in Case 4040?

MR. HATCH: The Commission has received a letter from Morris Antweil, a working interest owner with Cities Service Oil Company in the Baetz A 1-N-35-14-27 Gas Well in the Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, supports the application of Cities Service Oil Company for the institution of gas prorationing in the Buffalo Valley-Pennsylvanian Gas Pool. Gas production from the several wells in this common gas reservoir and gas purchases by the pipe line companies involved have not been equitable to the interests represented in the reservoir. The entry of our statement of support of the applicant in Case 4040 into the record and your favorable consideration would certainly be appreciated. Morris Antweil.

MR. NUTTER: Thank you, Mr. Hatch. Does anyone have anything else to offer in Case 4040? We will take the case under advisement.



I N D E X

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STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, GLENDA BURKS, Court Reporter 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.

Glenda Burks  
Court Reporter

I do hereby certify that the foregoing is  
a correct and true copy of the  
the transcript of the hearing held on  
8/5 1040 69  
[Signature]  
New Mexico Oil Conservation Commission

R-27-E

R-28-E

|                    |  |   |  |   |  |                        |  |
|--------------------|--|---|--|---|--|------------------------|--|
| Del-Lea            |  | Geo. W. Miller  |  | Geo. W. Miller  |  | J. J. Kelly            |  |
| Hondo              |  | U.S.<br>Cities Service 1/2<br>C.B. Read 1/2           |  | C.S.O. 1/2  |  | U.S.<br>Union          |  |
| State              |  | State   |  | State   |  | State                  |  |
| 27                 |  | 26  |  | 25  |  | 30                     |  |
| J.R. Shipley       |  | Geo. W. Miller  |  | Geo. W. Miller<br>Cities Service 1/2<br>C.B. Read 1/2 |  | Union                  |  |
| U.S.               |  | U.S.  |  | U.S.  |  | U.S.                   |  |
| Del-Lea            |  | R. Lowe   |  | Cities Service 1/2<br>C.B. Read 1/2                   |  | Union                  |  |
| R.A. Franklin      |  | Southwest Prod.                                       |  | Hondo   |  | C.S.O. 1/2<br>Read 1/2 |  |
| Geo. W. Miller     |  | Hondo   |  | Hondo   |  | C.S.O. 1/2<br>Read 1/2 |  |
| 34                 |  | 35  |  | 36  |  | 31                     |  |
| Cities Service 1/2 |  | Cities Service 3/8                                    |  | R.A. Franklin   |  | C.S.O. 1/2<br>Read 1/2 |  |
| C.S.O. 1/2         |  | C.S.O. 1/2  |  | C.S.O. 1/2  |  | C.S.O. 1/2<br>Read 1/2 |  |
| R.A. Franklin      |  | R.A. Franklin   |  | R.A. Franklin   |  | C.S.O. 1/2<br>Read 1/2 |  |
| U.S.               |  | U.S.  |  | State   |  | State                  |  |
| T. Derrick         |  | C.B. Read   |  | Southwest Prod.                                       |  | Sinclair               |  |
| W.B. Barnhill      |  | 3.6 MMCF  |  | Pan American  |  | A.K. Trobaugh          |  |
| Cities Service 1/2 |  | Comm. 1-68<br>CAOF<br>3282 6.4 MMCF<br>2              |  | 3100<br>Comm 3-68<br>CAOF 4.7 MMCF                    |  | A.K. Trobaugh          |  |
| R.A. Franklin      |  | Buffalo Valley "Comm" - State                         |  | Clemments - Buffalo                                   |  | A.K. Trobaugh          |  |
| U.S.               |  | Comm 11-68<br>no comm.<br>cen prod<br>about 8 million |  | R.A. Franklin   |  | A.K. Trobaugh          |  |
| A.T. Derrick       |  | Wright  |  | A.K. Trobaugh   |  | A.K. Trobaugh          |  |
| C.S.O.             |  | C.B. Read   |  | Read & Stevens  |  | Read & Stevens         |  |
| Shoreline Expl.    |  | Pan Amer.   |  | A.K. Trobaugh   |  | Read & Stevens         |  |
| 3                  |  | 11  |  | 12  |  | 7                      |  |
| U.S.               |  | U.S.  |  | U.S.  |  | State                  |  |
| Cities Service     |  | C.B. Read   |  | C.B. Read   |  | D. Smith               |  |
| C.B. Read          |  | C.B. Read   |  | C.B. Read   |  | Read & Stevens         |  |
| Cities Service     |  | C.B. Read   |  | C.B. Read   |  | Read & Stevens         |  |
| 10                 |  | 13  |  | 13  |  | 18                     |  |
| Cities Service     |  | Norma J. Rose   |  | Norma J. Rose   |  | Norma J. Rose          |  |
| U.S.               |  | U.S.  |  | U.S.  |  | U.S.                   |  |
| California Oil     |  | C.B. Read   |  | C.B. Read   |  | C.B. Read              |  |
| U.S.               |  | U.S.  |  | U.S.  |  | U.S.                   |  |

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION

App. 15 EXHIBIT NO. 1  
CASE NO. 4040

ORIGINAL BOTTOM HOLE PRESSURES

Ex. 1

BUFFALO VALLEY PENN. GAS POOL

*Joe*  
*Swadlow*  
*S.W. - (C.S. Baetz)*  
*Buffalo V. P. Co. (both*  
*Redwood & both SW*  
*prod. areas*

| CITIES SERVICE |         |        |           | READ       |         |             |        | SOUTHWEST PROD.   |         |          |       |
|----------------|---------|--------|-----------|------------|---------|-------------|--------|-------------------|---------|----------|-------|
|                |         |        |           |            |         |             |        |                   |         |          |       |
|                |         |        |           | #1 (Comm.) |         |             |        | Buffalo Valley #1 |         |          |       |
|                |         |        |           | #2         |         |             |        | Clements #1       |         |          |       |
|                |         |        |           | MCF        | Bbls.   | MCF         | Bbls.  | MCF               | Bbls.   | MCF      | Bbls. |
| 1968           | Jan.    | 36,616 | 419       | 102,836    | 2,865   | --          | --     | --                | --      | --       | --    |
|                | Feb.    | 2,282  | 71        | 101,557    | 2,947   | --          | --     | --                | --      | --       | --    |
|                | Mar.    | 44,191 | 326       | 115,638    | 3,367   | 59,413      | 2,306  | --                | 76      | --       | 1,635 |
|                | Apr.    | 8,761  | 24        | 96,446     | 2,755   | 87,137      | 3,061  | 6,410             | 29      | 78,365   | 2,873 |
|                | May     | 16,364 | 270       | 80,352     | 2,169   | 77,731      | 2,562  | 2,931             | 24      | 79,675   | 2,305 |
|                | June    | 17,951 | 97        | 68,723     | 2,255   | 78,046      | 2,030  | 7,888             | 78      | 45,055   | 1,971 |
|                | July    | 11,682 | 109       | 107,235    | 2,551   | 98,832      | 3,027  | 286*              | 12      | 97,398*  | 2,627 |
|                | Aug.    | 9,345  | 106       | 115,793    | 2,632   | 97,903      | 2,841  | 228               | 3       | 119,117  | 3,015 |
|                | Sept.   | 18,135 | 86        | 110,067    | 2,343   | 37,295 (11) | 948    | 84 (1)            | 2       | 114,142  | 2,770 |
|                | Oct.    | 23,264 | 215       | 113,811    | 1,966   | 19,562 (7)  | 541    | 40 (1)            | 1       | 116,602  | 2,662 |
|                | Nov.    | 57,718 | 360       | 106,029    | 1,894   | 103,662     | 2,888  | 0                 | 0       | 107,316* | 2,388 |
|                | Dec.    | 57,665 | 348       | 101,612    | 1,335   | 101,052     | 2,567  | 0                 | 0       | 102,039  | 1,978 |
| YEARLY TOTAL   | 303,974 | 2,431  | 1,220,099 | 29,079     | 760,633 | 22,771      | 17,867 | 255               | 859,709 | 24,224   |       |

\* Gas Corrected from New Mexico Engineering Report

( ) Days Produced

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

APP. EXHIBIT NO. 2

GAZ. NO. 4040

E 1.2