STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

11 July 1984

EXAMINER HEARING

IN THE MATTER OF

Application of Alpha Twenty-One Production Company for hardship gas well classification, Lea County, New Mexico.	CASE 8253

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division:

For the Applicant: Robert H. Strand
Attorney at Law
ATWOOD, MALONE, MANN & TURNER
P. O. Drawer 700
Roswell, New Mexico 88201

I N D E X

E X H I B I T S

MR. STAMETS: We'll call next Case 8253, application of Alpha Twenty-One Production Company for hardship gas well classification, Lea County, New Mexico.

MR. STRAND: Mr. Examiner, Robert H. Strand of the firm of Atwood, Malone, Mann, and Turner, appearing for the applicant.

MR. STAMETS: The record should show that the witness, Mr. Lansford, is sworn and qualified in this case as well.

ROBERT WAYNE LANSFORD,

being previously sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. STRAND:

Q Mr. Lansford, are you familiar with the application in Case Number 8253?

A Yes, sir.

Q And did you previously or did Alpha Twenty-One Production Company previously file an administrative application dated June 12th, 1984, relating to its Justis "BC" Federal Com No. 2 Well?

A Yes, sir, we have.

Q And was that application prepared by you

or under your supervision?

A Yes, it was.

Q Will you state for the record the purpose of the application in Case Number 8253?

A Alpha Twenty-One Production Company seeks an order designating its Justis "BC" Federal Com No. 2 Well as a hardship gas well pursuant to Commission Order No. R-7453.

Q Would you please state the location of this well?

A Unit H, Section 11, Township 25 South, Range 37 East, Lea County, New Mexico.

Q Would you also state from what formation the well produces and the pool from which it produces?

A It's producing from the Glorieta formation in the Justis-Glorieta Pool.

Q Who is the gas purchaser and transporter?

A El Paso Natural Gas.

Q Would you state in some detail for the record the problems that you foresee from shutting in the Justis "BC" Federal Com No. 2 Well or curtailing it below its ability to produce?

A Yes, sir. Due to the cutback on the wells in that area we put a pump jack on it to try to keep the well from logging off and causing formation damage.

Q What will cause the formation damage?

A Logging up of excessive water.

Q How much water, approximately, is the well producing per day?

A Hold on one second. The Justis "BC" Federal Com No. 2 is producing 815 barrels of water per month.

Q Mr. Lansford, the reason then you have the pump jack on the well is to remove that water.

A Yes, sir, it is.

Q And how much gas is it producing?

A Excuse me just one second. I've refiled it.

Q I believe it's stated in the administrative application.

A 250 Mcf per day.

Q And as a part of that administrative application do you have a tabulation of production?

A Yes, sir, we have, from 1981 through April of 1984.

Q Mr. Lansford, is it necessary to keep this well pumping in order to continually remove the water?

A Yes, sir, it is.

Q And what in your opinion would be the results of shutting in this well and thereby shutting in the pump which removes water?

A I feel like with the well shut-in the well would then log off. We would lose approximately 400-million cubic feet of gas reserves.

Q What is the problem with the water in the

formation in technical terms?

A The water causes swelling of the clays that are present in the Glorieta formation.

Q Has this particular well ever been shut in?

A Yes.

Q And did you lose some reserves or some gas production because of that shut-in?

A Yes, we have.

Q Do you have that information available?

A Yes. I believe it's in -- it's on the application.

Q Mr. Lansford, if you don't have that information immediately available as to that time of shut-in and the results, could that be provided at a later date?

A Yes, sir, it can.

Q Mr. Lansford, could any steps be taken chemically to prevent this problem with the water reacting with the formation which you've testified to?

A Again, it would have to be injected while the well is pumping fluid.

Q You could not treat the well when the pump was not operating.

A No, I couldn't, and I'd like to point out that also I did an inhibitor squeeze job in the formation and that does help but you can only go so far.

Q Mr. Lansford, you've provided as part of

your administrative application a wellbore sketch showing the mechanical status of the well at the present time. Are there any mechanical means of -- of preventing the problem you testified to upon shut-in?

A Not upon shut-in.

Q Is it again necessary that the well basically be kept pumping at all times in order to prevent this problem?

A Yes, sir, it is.

Q How long do you think it would take this problem to develop if the well was in fact shut-in and the water stayed on the formation?

A I think we would see a definite damage within two months.

Q Do you have any type of an estimate of the resulting decrease in production or could that be determined at this point in time?

A Yes, sir, it could.

Q No, I'm not talking about the ultimate reserves. I'm talking about is there any way at this point in time of predicting with any certainty how much of a loss of production would occur after an individual shut-in?

A No.

Q If the well was shut in for any length of time is there some possibility in your opinion that the well could be lost and a certain amount of reserves lost?

A Yes, sir, yes, sir, I do.

Q I refer you to what we've designated as Exhibit Number One. Will you please describe that?

A Okay. Exhibit Number One is the computer data showing the reserves and economics involved in the El Paso Smith No. 1.

Q Would you please state your conclusions that you've drawn from this reserve study relating to possible ultimate loss of gas reserves?

A Okay. Taking the total ultimate production, which is 671-million cubic foot, less the cumulative production through July the 1st of 1984, which is 272-million cubic feet, and subtracting that through the last estimated production from July the 1st, 1984 through December the 31st, 1984, of 44-million cubic foot, would give us a loss of 355-million cubic feet.

Q Mr. Lansford, with regard to a minimum sustainable producing rate from this well, would it be possible to run any type of logoff or minimum flow test to determine at what point the minimum or the ultimate producable rate might be without damaging the well?

A I can't say that it would not damage the well.

Q Would it be possible, however, to lessen the rate to a certain point where the water production tends to drop?

A Yes, sir.

Q And would you be able to do this without

damaging the well?

A I think I could.

Q Would you be willing to run that test and make such information available to the Division?

A Yes, sir.

Q As part of this application?

A Yes, sir.

Q Mr. Lansford, does this well produce from a prorated pool?

A Yes, sir, it does.

Q And from what -- you've already testified that it is from the Justis-Glorieta Pool.

A Yes.

Q Do you have any information as to the amount such well is currently over or under produced?

A Yes. El Paso Natural Gas has informed us that the well is overproduced by 23,674 Mcf.

Q Mr. Lansford, was notice of this application given to all offset operators and El Paso Natural Gas Company as transporter?

A Yes, sir, it was.

Q Is it your opinion that in the event this application is not approved and the well is shut in for any period of time that underground waste will occur?

A Yes, sir.

Q Is it further your opinion that granting of this application will promote conservation, prevent

waste, and protect correlative rights?

A Yes, sir.

Q Was Exhibit Number One prepared by you or does it reflect information in the records of Alpha Twenty-One Production Company?

A Yes, sir, it does.

MR. STRAND: Mr. Examiner, I would move admission of Exhibit Number One.

MR. STAMETS: Exhibit Number One will be admitted.

MR. STRAND: And I have no further questions at this time.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Lansford, do you recall when that well was shut in?

A It was after March.

Q This year?

A Yes, sir.

Q So you can show us, then, some production history, P/z plots before and after, indicating if there was a loss of reserves as a result of the shut-in.

A Yes, sir.

Q Okay. I've not heard any other evidence that the Glorieta was a fluid sensitive formation. Do you have any other evidence on that issue?

A No, sir, just the -- whether or not you call scale precipitation formation damage, which I do.

Q Okay, so that's the nature of the problem rather than swelling clays?

A (Not understood.)

Q You indicated that if the well were shut in your pump and tubular goods might be damaged within two months?

A Yes, sir.

Q How long was that other period of shut in?

A A little over a week, I believe.

Q And you would be able to run the same type of logoff test by simply restricting the gas sales until the well seemed to produce water.

A Yes, sir, we can.

Q And you will submit that evidence as well as the evidence relating to loss of reserves?

A Yes, sir.

Q Okay.

MR. STAMETS: Any other questions of the witness? He may be excused.

Anybody have anything further they wish to add in this case?

Note the inclusion of the El Paso statement.

The case will be taken under advisement.

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. 8253 heard by me on 3-14, 1984.

Richard L. Stamets, Examiner
Oil Conservation Division

El Paso
Natural Gas Company

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El Paso Natural Gas Company neither concurs with nor objects to this application. El Paso recognizes that some wells should definitely be recognized as "hardship" wells. El Paso believes it must express to the New Mexico Oil Conservation Division that anytime a well is declared a "hardship" well, then the extra production from that well must be taken from the total production from all other wells on our system. This increases the non-controllable gas taken into our system thereby reducing our flexibility of pipeline operations to take ratably and protect correlative rights.