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, Eddy County, New Mexico.

CASE 8215

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

REPORTER'S NOTE: El Paso Natural Gas Company statement included in original transcript.

MR. STAMETS: We will go back now and call Case Number 8215. Application of Alpha Twenty-One Production Company for hardship gas well classification, Eddy County, New Mexico.

MR. STRAND: Mr. Examiner, Robert H. Strand of the firm Atwood, Malone, Mann and Turner of Roswell, appearing for the applicant and I have one witness who can be sworn for these next four hearings, I believe.

MR. STAMETS: Okay.

(Witness sworn.)

ROBERT WAYNE LANSFORD,

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

DIRECT EXAMINATION

BY MR. STRAND:

Q For the record, please state your name, residence, and occupation and by whom you're employed.

A I'm Robert Wayne Lansford. I work for Alpha Twenty-One Production Company as an engineer. I live at 908 Cochiti in Hobbs, New Mexico.

Q Mr. Lansford, have you previously testified before the Division?

A Yes, sir, I have.

Q And are your qualifications as an engineer a matter of record?

A Yes, they are.

MR. STRAND: Mr. Examiner, is Mr. Lansford considered qualified?

MR. STAMETS: Yes, he is.

Q Mr. Lansford, are you familiar with the application filed in Case Number 8215?

A Yes, sir, I am.

Q Was there previously filed with the Division an application for administrative approval of a hardship well application for the BRC Madera No. 1 Well?

A Yes, sir.

Q And was that application dated April 18th, 1984?

A Yes, sir.

Q And was that application prepared under your supervision?

A Yes, sir, it was.

Q Would you briefly state for the record then the purpose of the application filed in Case Number 8215?

A Okay, the purpose of the application is for Alpha Twenty-One Production Company seeks an order designating its BRC Madera No. 1 as a hardship gas well pursuant to Commission Order No. R-7453.

Q Would you state for the record the location of that well?

A The location is in Unit B, Section 29, Township 22 South, Range 27 East, Eddy County, New Mexico.

Q Could you also state for the record from what formation that well produces and from what pool?

A It's producing from the Morrow formation in the South Carlsbad-Morrow Pool.

Q And who is the transporter or gas purchaser of the gas produced from that well?

A El Paso Natural Gas.

Q Mr. Lansford, would you state in some detail the problems that see as resulting from shutting in the Madera No. 1 Well or curtailing it below its ability to produce?

A Yes, sir. When the well is pinched back or shut in as one example that we're turning in, it loaded up and it took us seven days to get the well kicked back off again and we did lose part of our production from that accidental shut-in, and we were swabbing for about seven days constantly to bring that well back.

Q Could you state in a little more detail for the record what the exact problem technically is from shutting in the well?

A Okay. The problem is when the well is shut in it logs up and the water the formation is producing, we lose production and it causes downhole formation damage.

Q And is this a result of the water produced in the well interacting with the -- certain elements in the formation?

A Right, yes, sir, it is.

Q And could you state what portions of the formation the problem is --

A Well, the Morrow formation is very sensitive to water and it does contain a small amount of clays that when, in contact with water causes swelling and plugging of that formation.

Q Mr. Lansford, what kind of steps, if any, have you taken to alleviate this problem resulting from the shut-in and the water building up therefrom?

A Okay. I've just tried to maintain the minimal flow rate they require to keep the well producing.

One thing I've noticed, that when we pinch the well back, producing around 600,000 a day, that we're not bringing back as much water and it's causing the well, you know, pretty much stabilize that part, you know, but when we produce around 800 to 900,000 it will bring up the water.

Q Mr. Lansford, in your experience is there any type of chemical treatment that might be done to this water to prevent the formation damage?

A No, sir, there is not.

Q Again in your experience is there any type of mechanical procedures relating to the equipment in

the wellbore, or additional equipment that you might be able to utilize in order to prevent the problems upon shut-in?

A No, sir.

Q You referred earlier to a long shut-in period that took place, and I refer you to Exhibit Number One, and would you please describe that?

A Okay. Exhibit Number One shows what we had to do to get the well kicked back off again when it was accidentally shut in the day before.

We rigged up a unit on August the 20th and we started swabbing the well when fluid level was at 4000 foot. We made 11 runs and swabbed back 41 barrels.

The next day we swabbed back another 40 to 50 barrels.

On the 22nd of August we swabbed back 51 barrels. It did try to kick off for about 30 minutes but it went back down and we attempted dropping soap sticks and swabbing on the 23rd, swabbed back 41 barrels. It kept trying to kick off and did not.

The 24th we dropped soap sticks again. It made five runs. The well did not flow. We swabbed back 25 barrels.

We reset rig and dropped 4 more soap sticks and that afternoon we rigged up another unit from a different service company and dropped more soap sticks down the tubing and swabbed the well for three hours. We were able to get it kicked off and the well flowed one hour to

the air and we put the well back on the line. We had 560 pounds in the wellhead.

We swabbed back 44 barrels that day.

And on the 25th of August we did get the well able to kick itself off and we moved the rig off.

Q Mr. Lansford, how long had the well been shut in before you started swabbing?

A It was shut in approximately two days.

Q And was this an inadvertent shut-in?

A It was an accidental shut-in.

Q Mr. Lansford, as an engineer is it your opinion that if the well was shut-in again for this same period of time or longer that you might ultimately lose the well?

A Yes, sir. I was extremely worried over this shut-in here and I felt like we were very lucky to get it back that time.

Q Mr. Lansford, I refer you to what we've marked as Exhibit Number Two. Will you please describe that?

A Exhibit Number Two is our computer calculated reserves and economics involved on the BRC Madera No. 1.

Q What is the date of that reserve study?

A July the 1st, 1983.

Q What does that reserve study show as the possible ultimate production from the Madera No. 1 Well?

A Okay, our ultimate production should be 4063.936 million cubic feet.

Q And does that also show the cumulative production through July 1st, 1983?

A Yes, sir, it does.

Q And does it further show the estimated production through July -- from July 1st, 1983 through December 31st, 1983?

A Yes, sir.

Q What is -- what is that total production? What were those previous figures, I should say?

A Okay. Cumulative is -- total ultimate production, of course, was 4.0 billion cubic feet.

The cumulative production is 1,830 million cubic feet and last, the estimated production from July 1st, 1983 through December the 31st, 1983 is 130 million cubic feet.

Q Based on that reserve report, then, Mr. Lansford, would it indicate that the possible total loss of gas production from this well would be an approximate 2.1 million cubic feet?

A Yes, sir, that's correct.

Q Mr. Lansford, with regard to the minimum sustainable producing rate of this well, have you run any log off tests or minimum flow tests to determine what this minimum producable rate might be?

A Well, I feel like as the well is pro

ducing now that the minimum log off, since we aren't bringing back as much water as what we were before producing at a higher rate, and if I pinch it back any further that the well will go ahead and stop producing.

Q What rate are you currently producing the well at?

A The well is currently producing at 600 Mcf a day, I believe.

Q And you have been producing it a higher rate some months ago?

A Yes, sir, we were.

Q And at that higher rate you produced substantially more water than you are at the 600 Mcf per day rate?

A Yes, sir.

Q Have there been any shut-in periods other than the one you testified to as of August, 1982?

A No, sir, there have not.

Q Do you feel there would be a problem if at this time you shut in the well for any type of testing purposes?

A I feel reasonably sure that the well would be damaged to the point that we would not be able to further produce the well.

Q What would be your best estimate then of a minimum sustainable flow for this well?

A The minimum rate I would request would be

600,000.

Q Mr. Lansford, I refer you to Exhibit Number Three. Would you please describe that?

A Okay. Exhibit Number Three is our rate that the well was producing in the month of May.

Q Does that also include June and part of July's production?

A Yes, sir, May, June and July.

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

A Yes, sir.

Q And have you checked with El Paso Natural Gas Company, the transporter, to determine the current overrun or production status of the well?

A Yes, it has accumulated to be overproduced 37,218 Mcf.

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

A Yes, sir.

Q Mr. Lansford, is it your opinion that in the event the application in this case is not granted and if the Madera No. 1 Well is shut in, that underground waste could well occur?

A Yes, sir, it is.

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

waste, and protect correlative rights?

A Yes, sir.

MR. STRAND: Mr. Examiner, I would move admission of Exhibits One through Three.

MR. STAMETS: The exhibits will be admitted.

Q One further question. Were Exhibits One through Three prepared by you or under your supervision?

A Yes, sir, they were.

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

MR. STAMETS: Let's go off the record.

(Thereupon a discussion was had off the record.)

Q Mr. Lansford, referring to the original application that was made in this case, and again back to the shut-in that occurred in August of 1982, you have as part of that original application a summary of production figures on a monthly basis for the Madera No. 1 Well.

Do those give any indication of a permanent loss of production subsequent to the shut-in?

A Yes, sir, I feel like it does. After the well was shut in we never was able to get our production back up to where it was before it was shut in.

Q Can you give me some specific average production figures or specific figures on this exhibit that would indicate that?

A Yes, sir. Before the accidental shut-in, before August the 21st, 1982, we were able to maintain close to 30-million a month and now it's dropped close to 20-million a month.

Q Yet there's some possibility, however, that those production drops may also be due, at least in part, to pipeline pressures?

A Well, there's only been a few instances where the line pressure exceeded above normal.

Q Would you have information available that we could submit subsequent to this hearing relating to pipeline pressures and other types of information whereby we might be able to show a substantial average drop in production after that shut-in?

A Yes, sir, I have.

Q Okay. Also referring back to the original application, you submitted as a part of that a wellbore sketch, and you previously testified that you don't feel there's any additional mechanical steps that could be taken to prevent the adverse effects of a shut-in of this well.

Do you have any further testimony as to mechanical means of alleviating this problem?

A No, sir, I don't.

Q Would you have to shut the well in in order to perform any type of mechanical work on it?

A Yes, I would.

Q With regard to the log-off, a formal log-

off test or minimum flow test, do you feel in conducting such a test that there might well be a problem with the well dying and, as you testified previously, to the problems of bringing the well back and the possible ultimate loss of the well?

A Yes, I feel like if I tried to run a log-off test and the well did die, of course, if I am required to run this log-off test, I'll rig up a swabbing unit so I can immediately kick it back off, but there's always a chance you'll have adverse effects from it. It goes from one extreme to the other.

Q Do you feel there's a rather minimal chance of adverse effects or substantial chance of adverse effects?

A Substantial.

Q Would you also be able to provide subsequent to this hearing information relating to well pressure readings and that type of thing?

A Yes, sir.

MR. STRAND: I believe that's all I have.

CROSS EXAMINATION

BY MR. STAMETS:

Q Relative to the wellbore sketch, what types of remedial action could you take? What's available to you?

A As far as running log-off tests?

Q No, to change the well in some respect, can you put in a piston, can you put in a pump, can you change the tubing size? What -- what sorts of things can be done?

A Okay, well, you'll have to take the well -- I've got 2-inch tubing in it now and I do have a little salt build-up problem. If I go to a smaller tubing that's going to alleviate the salt build-up.

If I go to a pump I'm going to have to go in there and kill the well again, and I don't -- at that point I think I'd be risking losing the well, partial production of the well.

Q Do you have any information available on how many -- how much might have been lost in the way of gas reserves based on that original shut-in, or have you lost reserves or only increased the length of time it's going to take to get those reserves out?

A I feel like I've lost reserves. I'd have to bring up the calculations showing what we have lost.

Q You don't have ny P/z plots before and after the shut-in?

A I can get them, yes, sir.

Q Okay. We'd certainly need those and we're going to have to, I believe, have to have a log-off test on this well.

A Okay.

Q We could take the case under advisement and hold the record open for that test.

MR. STRAND: I think that would be appropriate, Mr. Examiner.

A I have one thing. I'm on a ninety day clause, you know, where I can produce it for emergency ninety days and it will be over shortly.

MR. STRAND: I believe it's ninety days from the date of the original application, which was April 18th.

MR. STAMETS: It's not very long.

MR. STRAND: Getting close.

MR. STAMETS: If necessary, we can give you an extension on that. Just send us a note and we'll contact the pipeline.

MR. STRAND: Okay.

MR. STAMETS: Are there any other questions of the witness? He may be excused.

Does anyone have anything further they wish to offer in this case?

MR. BIRCHELL: Mr. Examiner, I'm Paul Birchell of El Paso Natural Gas Company, the pipeliner that purchases the gas from this particular well.

I have a statement I wish to make for the record.

MR. STAMETS: Feel free.

MR. BIRCHELL: El Paso Natural Gas Company neither concurs nor objects to this application.

El Paso recognizes that some wells should definitely be recognized as hardship wells.

El Paso further believes it must express to the New Mexico Oil Conservation Division that any time 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 noncontrollable gas taken into our system, thereby reducing our flexibility as a pipeline in our operations and becomes -- makes it very difficult to take ratably and protect correlative rights along that system.

That's all the statement I have.

MR. STAMETS: Okay, anybody else have anything they wish to add in this case?

The case will be taken under advisement with the provisions for filing of supplemental data as noted.

(Hearing concluded.)

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. _____, heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

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

6 June 1984

EXAMINER HEARING

IN THE MATTER OF:

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

CASE 8215

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: W. Perry Pearce
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

MR. STAMETS: Call next Case 8215.

MR. PEARCE: That case is on the application of Alpha Twenty-One Production Company for a hardship gas well classification, Eddy County, New Mexico.

Mr. Examiner, applicant has requested continuance of that matter until July the 11th, 1984.

MR. STAMETS: The case will be so continued.

(Hearing concluded.)

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. 8215. heard by me on 6-6 19 84.

Richard L. Stamets, Examiner
Oil Conservation Division