STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:	)	
APPLICATION OF LATIGO PETROLEUM, INC., FOR AN EXCEPTION TO DIVISION RULE 104.D.(3), LEA COUNTY, NEW MEXICO	)	CASE NO. 13,408

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

May 19th, 2005

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, May 19th, 2005, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

May 19th, 2005
Examiner Hearing
CASE NO. 13,408

* * *

E X H I B I T S

Applicant's	Identified	Admitted
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* * *

A P P E A R A N C E S

FOR THE DIVISION:

GAIL MacQUESTEN
Deputy General Counsel
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

MILLER, STRATVERT P.A.
150 Washington
Suite 300
Santa Fe, New Mexico 87501
By: J. SCOTT HALL

* * *

WHEREUPON, the following proceedings were had at 9:39 a.m.:

EXAMINER JONES: At this time let's call Case 13,409 [*sic*], Application of Latigo Petroleum, Incorporated, for an exception to Division Rule 104.D.(3), Lea County, New Mexico.

Call for appearances.

MS. MacQUESTEN: Isn't that 13,408?

EXAMINER JONES: Did I say -- I'm sorry, Case 13,408.

MR. HALL: Mr. Examiner, Scott Hall, Miller Stratvert, P.A., Santa Fe, appearing on behalf of Latigo Petroleum, Incorporated. I have one witness this morning for this case, and I'm appearing at the request of Mr. Bruce who's unable to be present this morning.

EXAMINER JONES: Any other appearances?

Will the witness please stand to be sworn?

(Thereupon, the witness was sworn.)

ROBERT G. SETZLER,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HALL:

Q. For the record, please state your name, sir.

A. My name is Robert Setzler.

Q. Mr. Seltzer [*sic*], where do you live and how are you employed?

A. I live in Midland, Texas, at the current time, and I'm employed by Latigo Petroleum as a senior reservoir engineer.

Q. All right. Mr. Seltzer, are you familiar with the lands that are the subject of Latigo's Application today and what it is --

A. Yes.

Q. -- Latigo is requesting by its Application?

A. That's correct.

Q. And you've previously testified before the Division as a professional petroleum engineer and had your credentials established as a matter of record?

A. Yes, I have.

MR. HALL: Mr. Examiner, we would again offer Mr. Seltzer as a qualified petroleum engineer.

EXAMINER JONES: Mr. Seltzer, can you spell your last name?

THE WITNESS: S-e-t-z-l-e-r, it's Setzler.

EXAMINER JONES: -- -l-a-r?

THE WITNESS: -- -l-e-r?

EXAMINER JONES: -- -e-r? Okay, Mr. Seltzer [*sic*] is qualified as an expert petroleum reservoir engineer.

Q. (By Mr. Hall) Mr. Seltzler [*sic*], if you would turn to what's been marked as Latigo Exhibit Number 1, would you briefly explain to the Hearing Examiner what Latigo seeks today?

A. Latigo seeks a simultaneous dedication of the 160-acre proration unit that's shown in Exhibit 1, which we can look at in a moment, but we have two San Andres gas wells in the same 160-acre proration unit.

At my direction, we have gathered data from both wells which indicate that -- the two wells up here to be, even though they're in the San Andres, producing from different stratigraphic units. There's a significant difference in the composition of the gas, the composition of the water, and the bottomhole pressures are different.

So we feel that these two wells are producing hydrocarbons that they could not -- I mean, one well can't produce all the hydrocarbons, it takes the two wells.

This resulted from a -- we were requested and had already started to -- this -- the Number 5 well was a saltwater disposal well in the Devonian, and it was lost, and we were unable to return it to saltwater status, disposal status. So on the way out of the well that was being plugged, the San Andres was perforated and tested and found to produce 200, 230 MCF a day.

Q. And Mr. Seltzler, if you'd turn to Exhibit 2,

your C-102 acreage dedication plat, are those two wells indicated on there?

A. Yes, sir.

Q. And it's the "A" Number 5 well that's the reconditioned disposal well?

A. Right, that's correct.

Q. Now, you're showing --

EXAMINER JONES: Oh --

THE WITNESS: And the -- Oh, excuse me, I'm sorry.

EXAMINER JONES: Is it the Number 2 well or the Number 5 well?

THE WITNESS: Number 5 well.

EXAMINER JONES: Number 5, okay.

Q. (By Mr. Hall) Now, on Exhibit 2 it shows a 160-acre unit there in the southwest quarter. Is that the current unit dedicated, the "A" 13 Number 2 well?

A. Yes, sir.

Q. And there appears to be some indication -- the standup 80-acre unit there by indication of the black lines. Are we to disregard that?

A. Yes.

Q. We're not asking for 80-acre units here, are we?

A. No, we're not, we're asking for the 160.

Q. Let's turn to Exhibit 3. If you would explain

that to the Examiner, please, sir.

A. Exhibit 3 is a plat showing the wells in this area that have been completed as San Andres gas. And indicated by each plugged and abandoned well, which is shown by a cross, is a cum gas produced by each well. And the wells that have dates, the top date is when the well was completed in the San Andres, the next number is the cum, followed by the current rate, and the last date is the date that the production cum was taken to. So it just gives you a little snapshot of...

Q. Now, these wells have produced from the Bough-San Andres Gas Pool; is that correct?

A. That's correct.

Q. So if you look at Exhibit 3, there's not any other Bough-San Andres gas production currently in the immediate vicinity; is that right?

A. Not that I'm aware of.

Q. Okay. Let's look at Exhibit 4, your cross-section. I understand you had two different types of logs to construct this cross-section; is that correct?

A. Yes, that's correct. These wells are quite old, or reasonably old. And I had a resistivity or lateral log in one well and a porosity log in the other.

And rather than having to run an expensive set of cased-hole logs I used the data from both logs and combined

them, because they correlate well, to be able to have the numbers we need as water saturation and porosity to calculate drainage area.

Q. All right, let's refer to your Exhibit 5 now. What does that show?

A. Oh, Exhibit 5 shows the drainage areas that I calculated, and they are calculated to be the ultimate drainage areas. The production was limited by economic analysis that we did in the office, not the maximum ultimate that you might get if you had no economic, you know, limitation. But this is where we can produce to with the current economic limitation. And as you can see, neither well interferes and neither well goes off the lease.

Q. And so Exhibit 5, these radii don't presume to present the current drainage --

A. That's right --

Q. -- areas?

A. -- it's ultimate drainage.

Q. Explain to the Hearing Examiner basically how you went about calculating the drainage area.

A. I have -- well, let me flip over -- If you go to Exhibit 7, we used a little program where we digitized the lateral log and the porosity log and put it into this little working spreadsheet. That's Exhibit 7.

And from that we took the ultimate gas that we had calculated that we could produce, and we asked the program to back-calculate the area that it would be in with this porosity and water saturation for each zone.

So we calculated 73.8 acres for the Number 2 well and 11.4 acres for the Number 5 well.

Q. All right, and in the course of calculating your drainage radii, you obtained data from some independent consulting service; is that correct?

A. That's correct, we had outside parties to get pressure measurements, to get water measurements, to get gas analysis. None of that was done by Latigo.

Q. So if we look through the remaining exhibits, basically your backup data for your drainage calculations, Exhibit 8 is a compilation of your pressure survey reports for both wells?

A. Yes. Yes, that's correct.

Q. And Exhibit 9 is --

A. -- gas --

Q. -- a gas analysis for each of the wells.

And Exhibit 10, what is that?

A. That's water analysis, just showing the difference in water composition between the two wells.

Q. Based on this particular review, were you able to -- did that help you make a determination whether or not

the waters from the two wells were coming from the same zone?

A. As stated at the bottom of the Martin Water Lab report, they say, "Therefore it would be difficult to say that both of these waters are coming from the same zone." So that just tends to verify my hypothesis that the two zones are separated.

Q. And now what is Exhibit 11?

A. Exhibit 11 is the economic runs that we made for both the Federal "A" 13-2 and the Federal "A" 5, and we have attached that data. And the curves as shown in Exhibit 11 are the ones that were provided to us by Ryder and Scott, they're not ones that we generated. So we didn't manipulate that data at all, we just used it.

Q. Let's turn back to your Exhibit Number 6, it's your comparison of data --

A. Uh-huh.

Q. -- from the "A" 13 Number 2 and the Federal "A" Number 5 wells.

A. Yes, sir.

Q. Would you briefly summarize that for the Hearing Examiner?

A. Okay, we have -- on this page I try to summarize all the data that's in the exhibits behind Exhibit 6. And as you can see, there's -- I've given a percent difference,

and in the waters we see a significant difference, especially in the entrained H_2S, but we also -- of about 43 percent, we see a difference in sodium and potassium of 14 percent, and chlorides we see a difference of 17.9 percent.

Just -- Normally when you get water out of a field, it's very similar. You can go from well to well, and there's not much difference. This is fairly radical differences.

And the same is on the H_2S and the gas stream. There's a 485-percent difference there. One gatherer, the Number 2, had a 12,802 parts per million, while the Number 5 has 2188 parts per million.

And if you go on down through the gas analysis, in the heavier ends we see some fairly significant difference in the normal pentanes, 10.3, hexane almost 4 percent, and actually in the H_2S we see a big difference.

And then we drop down to bottomhole pressures. Both wells were shut in at the same time, same length of time. A bomb was put in each well at the same time, so everything would be the same. And the depths, subsea depths, were corrected so that the pressures are at the same datum. There should be no difference.

And in doing that, we found the Number 2 well has 448.49 pounds bottomhole pressure, while the Number 5 has 88.75, or a difference of 40 pounds. And when these wells

are only 1250 feet apart, that's a fairly significant difference too, if they were communicated. I mean, it doesn't appear to me that they are.

Q. Does the information shown on Exhibit 6 support your conclusion that these wells are producing from separate reservoirs?

A. Yes, sir, it does.

Q. Now, both San Andres Gas pools, not a prorated pool?

A. No, it is not.

Q. And the current producing rates are also shown on Exhibit Number 6, aren't they?

A. Yes, sir, they're -- Well, go ahead, I'm sorry.

Q. Go ahead.

A. It's showing right at 200 MCF a day for Number 2 and 230 MCF a day at the present time for Number 5.

Q. So at those producing rates, there's no concern that the combined production might exceed some sort of production limitation in the allowable?

A. Yes, it's my understanding there isn't a production limitation, we can sell all we can produce, as long as we have a buyer.

Q. So there is an adequate market for the gas from both the wells presently?

A. Yes, sir, no problem right now.

Q. Now, is ownership an issue here?
A. No, sir.
Q. Are those federal minerals?
A. Yes, they're federal minerals, and both wells are owned 100 percent by Latigo.
Q. And since you're not requesting separate 80-acre units --
A. No.
Q. Ownership is the same, so it's simply not an issue?
A. It's not an issue.
Q. Mr. Seltzler, is it your opinion that the reserves underlying the southwest quarter of the section cannot be adequately drained by a single well?
A. That's correct.
Q. And by seeking the requested relief from the Division, will that enable Latigo to recover reserves that would not otherwise be recoverable?
A. Yes, sir.
Q. And in your opinion is granting of the Application in the interest of conservation, the prevention of waste --
A. I feel it is.
Q. -- and protection of correlative rights?
A. Yes, sir, I surely do.

Q. In fact, are correlative rights, in your opinion, affected by what you're requesting in the Application?

A. No, not at all, because if you look at the drainage areas, we don't go off the lease, and we don't interfere with each well.

Q. Mr. Seltzler, were Exhibits 1 through 11 prepared by you or at your direction?

A. Yes, sir.

MR. HALL: At this time, Mr. Examiner, we'd move the Exhibits -- admission of Exhibits 1 through 11.

And that concludes our direct of this witness.

EXAMINER JONES: Exhibits 1 through 11 will be admitted to evidence.

EXAMINATION

BY EXAMINER JONES:

Q. It's a real treat to get an experienced reservoir in here.

What about the producing mechanism of these two wells?

A. They're just flowing.

Q. Flowing.

A. They make little or no water.

Q. Got the same drainage -- or the same compression hooked up to both of them?

A. Yes, they both -- They each have a gas sales

meter, but they both go to the same line that's buying the gas, so the pressure they're producing against is the same.

Q. But you've got a separate sales meter on each one?

A. Uh-huh.

Q. Even though the interests are exactly the same?

A. Uh-huh. That way we can allocate the production to each well like we were requested to do.

Q. Yeah, so you don't just have an allocation meter on each one and a sales meter later?

A. No, I can't tell you that, I don't know. I know there's a separate meter on each well.

Q. Okay, that's fine. So you're basically assuming around 2000, 2100 pounds initial pressure on both wells.

A. Uh-huh.

Q. Is that a true number?

A. Yes, sir, in my experience working with San Andres, that is a true number. I searched the files, could not find an original pressure, so I used a gradient of .433 times the depth. But most San Andres are in the range of, oh, 2000 to 2500, and I used the lower number because I was trying to be a little conservative on my estimate of reserves.

Q. What about your pressure test showing -- did it show -- did you analyze it to show current reservoir

pressure?

A. Yes, yes.

Q. Okay. And did you see interference on those tests --

A. No.

Q. -- like later on in the --

A. No, sir, this was just a shut-in, 72 hours, a dip-in test.

Q. Oh, okay. Okay.

A. I'm sorry.

Q. You didn't do a pressure transient analysis?

A. No, no. We looked at that and we looked at the time, and we talked to several people that do that, and we were looking at 45 to 60 days.

Q. Really?

A. Yeah, because of the low pressure.

Q. And the low permeability?

A. The low permeability. So we did not deem that an economical test to run.

Q. Yeah. Your abandonment, 250 pounds, is that a good abandonment for the --

A. Well, if we set a meter there -- a meter -- a pressure there, we could probably pull it down. But for purposes of this work I used 250.

We've seen little or no fluid -- I think I've

already said that -- and the pressure survey showed little or no fluid.

Q. What about perforations in each well?

A. They're correlative.

Q. They are the same?

A. More or less. If you look at the cross-section, Number 3, I think, or where is the cross-section?

MR. HALL: Yes, Number 3.

THE WITNESS: Is it Number --

MR. HALL: I'm sorry, Exhibit 4.

THE WITNESS: Exhibit 4, I'm sorry. They line up pretty good. So there has to be some sort of a stratigraphic barrier that exists between those two wells. But we see that all the time in San Andres, especially when you're trying to flood. There's many strange things happen until you figure out all the barriers and stuff like that.

Q. (By Examiner Jones) That's kind of typical for San Andres --

A. Uh-huh.

Q. -- and Clear Fork and some of the other --

A. Grayburg, that sort of thing.

Q. So basically, your conclusions from this is not only that the two wells are okay in this case, but it might be prudent in more cases than this?

A. Uh-huh.

Q. So is this going to lead you guys to go out and drill more -- come in for --

A. That's going to be a --

Q. -- maybe a change of rules or pool rules, or --

A. It was a topic of conversation just before I left, I brought it to everybody's attention that maybe we could ask for 40s.

Q. Can you pay out wells at current prices and current drilling costs at these -- these type of wells?

A. Yes, yes. We need, oh, half to three-quarters of a BCF and producing rates of from 200 to 400 MCF a day to do that, and we'll look at about a two-and-a-half-year payout, something of that nature.

Q. On a hyperbolic decline?

A. Uh-huh.

Q. Two-and-a-half to four-year payout?

A. No, two and a half to three years, something like that.

Q. That's pretty --

A. Yeah, it --

Q. -- for a drilling well.

A. Right. They're not big wells to start out with, but the thing these wells have had and demonstrated over the years is longevity. They just -- they go a long time.

Q. That's a key indicator that more infill drilling

might need to be done too?

A. That's correct.

Q. Well, these -- I could ask questions all day on the programs you used and everything. You basically -- this is economic -- I think you used an economic program in there too.

A. Yeah, it's in the --

Q. I thought I --

A. -- last exhibit.

Q. -- recognized that program. Do you remember where that came from?

A. We --

Q. Was that an internal program?

A. The -- Which one, the economic one?

Q. Yeah.

A. No, it's not. What's the name of our program?

MR. CHATHAM: It's Aries.

THE WITNESS: Aries, that's right, I'm sorry.

EXAMINER JONES: Oh, that's an Aries, okay.

THE WITNESS: You'll have to excuse me, I get moments of -- forget.

Now, the log-calculation one is the one I did, it's mine.

EXAMINER JONES: Okay, okay. Yeah, it looks like a good program.

Well --

THE WITNESS: And when I started this, I did not feel -- or did not even think there would be this kind of difference. But the more the data came in, the more I saw there was a difference, so...

EXAMINER JONES: So it was worthwhile getting this water analysis from two different wells like this --

THE WITNESS: Yes, sir.

EXAMINER JONES: -- for that.

THE WITNESS: And the gas and so on.

EXAMINER JONES: And the gas.

I think that's all I've got. Gail, do you have anything?

MS. MacQUESTEN: Mr. Hall, what notice was given in this case?

MR. HALL: Ms. MacQuesten, I'll hand Mr. Brenner the original copy of Mr. Bruce's notice affidavit. Because there were no offset operators or offset units in the San Andres what it appears that Latigo did was, had a landman run sheets of mineral interest owners in each and every 160-acre offsetting so-called proration unit, in corner units as well.

In my opinion, I think that's overnotification under the Rule, but that's what is shown in Exhibit 12. We have Latigo's landman available to testify about that if

you request.

MS. MacQUESTEN: I notice that they weren't able to obtain return receipts from some of the parties they tried to notify. Was notice by publication done?

MR. HALL: Oh, yes it was, in the Hobbs newspaper. We don't have the affidavit of publication back yet. As soon as that's received, we'll provide that to the Division and ask that the record be supplemented to include that, so we'll get that to you.

MS. MacQUESTEN: Thank you. One other thing. The specific exception that's being requested, is it the exception to the 160-acre requirement of 104.C.(3)?

MR. HALL: Yes.

MS. MacQUESTEN: Okay. I know you weren't responsible for putting the case together. Apparently it has long been the practice of attorneys in front of the Division when seeking an exception to any of the requirements of Rule 104 to cite to the exception provision itself, 104.D.(3) and say that they asking for an exception to 104.D.(3). That provision sets out what you need to do to get an exception to other things, and our chief engineer is making a very strong effort to encourage attorneys to change that practice and --

EXAMINER JONES: Yeah, thanks for saying that.

MS. MacQUESTEN: -- actually cite what rule

they're seeking an exception to and put that in the advertisements and the notices and the docket information and so forth, so that people who need that information can tell at a glance what the specific exception is that the party is seeking, and I just bring that up for future reference. I know it's been --

EXAMINER JONES: Thanks for doing that.

MS. MacQUESTEN: -- it's been the common practice to do it the way it is done in this case, but I'm just letting you know that it is a pet peeve of our Chief Examiner.

EXAMINER JONES: It is.

MR. HALL: Let's have a rulemaking.

(Laughter)

MR. HALL: Well, I looked at the Application, it refers to 104.D.(3), as does the proposed advertisement anyway.

MS. MacQUESTEN: And that's how it shows up in the docket also.

MR. HALL: Yeah.

EXAMINER JONES: And that is the exception itself, right?

MS. MacQUESTEN: Right.

EXAMINER JONES: Or method --

MS. MacQUESTEN: Method for seeking an exception.

EXAMINER JONES: But it's actually the -- This is not special pool rules, right?

MR. HALL: Correct.

EXAMINER JONES: Statewide rules, so it's just C.(3).

MR. HALL: Right. It is the designated pool, the Bough-San Andres, but --

EXAMINER JONES: Yeah.

MR. HALL: -- I haven't looked at the pool rules themselves. I don't believe they're special pool rules.

EXAMINER JONES: I always check anyway, so...

MR. HALL: Okay.

Q. (By Examiner Jones) Now, how did you get a -- How do you get permission to produce both wells?

A. Well, we were concerned by -- we set up this hearing date, and we really were hesitant to shut in the Number 5. We talked to the person in Hobbs about it because we were afraid at that low rate and the fact that it had just been perforated that we might not get it back.

Q. Oh.

A. And he said to go on and produce it.

Q. And you don't -- But they're flowing, and you don't -- you may have to start swabbing on them pretty soon.

A. Yeah, we were concerned about that.

Q. And no other analogous cases of two wells in the Bough C?

A. No, no, just --

Q. Okay.

A. When we were leaving the wellbore, we just tried to make final use of that wellbore before we plugged it.

EXAMINER JONES: Okay, thanks very much.

There's no other witnesses in this case?

MR. HALL: No, sir.

EXAMINER JONES: Okay.

MR. HALL: That concludes our case.

THE WITNESS: Thank you, sir.

EXAMINER JONES: Mr. Seltzer.

MR. HALL: We move the admission of Exhibit 12, by the way, the notice affidavit.

EXAMINER JONES: Exhibit 12 --

MR. HALL: Yes.

EXAMINER JONES: -- is admitted to evidence.

And let's call Case 13,464, which is -- First of all, we'll take Case 13,408 under advisement.

(Thereupon, these proceedings were concluded at 10:05 a.m.)

* * *

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 _____.

_____, Examiner
Oil Conservation Division

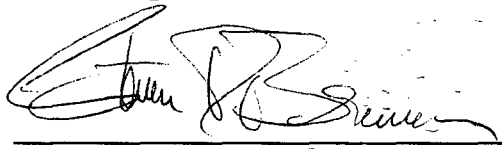
CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL May 20th, 2005.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 16th, 2006