BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 11, 1962

EXAMINER HEARING

IN THE MATTER OF: Application of La Plata Gathering System, Inc., for a dual completion at an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a Basin Dakota-Blanco Mesaverde dual completion at an unorthodox location 1680 feet from the South line and 734 feet from the East line of Section 19, Township 32 North, Range 5 West, Rio Arriba County, New Mexico.	Case 2626

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 2626.

MR. DURRETT: Application of La Plata Gathering System, Inc., for a dual completion at an unorthodox gas well location, Rio Arriba County, New Mexico.

MR. MORRIS: Mr. Examiner, I am Richard Morris of Seth, Montgomery, Federici and Andrews, Santa Fe, New Mexico, appearing on behalf of the applicant.

MR. UTZ: Are there other appearances in this case?

MR. MORRIS: We have one witness we would like to have sworn, please.

(Witness sworn.)

MR. MORRIS: Mr. Examiner, at the outset I would like to explain the background of this case. Case No. 2542 previously heard by the Commission resulted in Order No. R-2232, was a preceding case for an unorthodox location and for a dual completion in the same area with which Case 2626 is concerned. The unorthodox gas well location in that case was for the San Juan 32-5 Unit Well No. 1-19. The location for that well was 1980 feet from the south line, 734 feet from the west line of Section 19, Township 32 North, Range 5 West, Rio Arriba County. The well was to be dedicated to a 355.25-acre non-standard unit in both the Basin Dakota and Blanco Mesaverde Gas Pools. The 355.25-acre unit comprised all of partial Sections 18 and 19. Following the approval given La Plata Gathering System by Order No. R-2232, the well was commenced and in the process of drilling the well blew out at about 7200 feet. Some serious consequences followed from the blow-out and the well was plugged and abandoned. Hence, this application for a new location for the well some 300 feet to the south of the previously approved location and for the same type of a dual completion at that unorthodox location.

JAMES P. MORRIS

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

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Morris, will you state your full name for the record, please?

A James P. Morris.

Q What is your position, Mr. Morris?

A Geologist with La Plata Gathering System.

Q Have you previously testified before the Oil Commission or one of its Examiners and had your qualifications accepted?

A Yes, I have.

MR. MORRIS: Is the witness qualified to testify as an expert witness, Mr. Examiner?

MR. UTZ: He has previously been qualified before the Commission.

MR. MORRIS: Yes.

Q (By Mr. Morris) Mr. Morris, are you familiar with La Plata's application in this case?

A Yes, I am.

Q Briefly what is it that La Plata seeks?

A La Plata is requesting approval for an unorthodox gas well location in the Blanco Mesaverde and Basin Dakota Gas Pools.

The location of the unorthodox location is 1680 feet from the south line, 734 feet from the west line, Section 19, Township 32 North, Range 5 West, Rio Arriba County.

Q How is the subject well now designated?

A Designated as the 1-19 X.

Q Mr. Morris, do you have a plat of the subject area prepared and marked as Exhibit A in this case?

A Yes, I do.

MR. MORRIS: I ask the reporter to mark this as Exhibit A.

(Whereupon, Applicant's Exhibit A was marked for identification.)

Q Referring to what has been marked as Applicant's Exhibit A, would you describe what that exhibit shows, please?

A It shows location is 1680 feet from the south line, 734 feet from the west line of Section 19, Township 32 North, Range 5 West.

Q It shows Sections 18 and 19 as being partial sections and the subject well actually located equidistant between the east and west lines of Section 19?

A Correct. It also shows offset wells, offset operators.

Q Would you briefly point out the offsetting wells and mention in what formations, what horizons they're completed?

A In Section 24, Township 32 North, Range 6 West, we have

a well No. 1-24 San Juan 32-5 Unit, operator, El Paso Natural Gas.

Q That's a Dakota well in the Southwest Quarter of Section 24?

A Correct. In the Northeast Quarter of Section 24 is Mesaverde single completion, and that well is the 2-24 in Section 25; Southwest Quarter, Township 32 North, Range 6 West is the Mesaverde Well No. 1-25. In the Northeast Quarter is a dual completion in the Mesaverde and Dakota. That well is the No. 2-25.

Q Mr. Morris, the requirements of the rules in the Basin Dakota and Blanco Mesaverde Gas Pools make any orthodox location in these partial sections impossible, do they not?

A Correct.

Q In what other respect is the subject location unorthodox in the Blanco Mesaverde Pool?

A It's less than 724 feet from the section line due to the fact that they are short sections.

Q Now, this well is also off pattern in the Blanco Mesaverde Pool, is that correct?

A Correct.

Q The Blanco Mesaverde rules requiring the well to be located in the Northeast or the Southwest Quarter of the section

are relatively meaningless, would you say, with respect to the partial section with the configuration such as Section 19 here?

A Correct.

Q After the Well No. 1-19 was abandoned, why did La Plata decide to move their location to the south rather than to the north of the old location?

A Because of surface topography. Surface topography to the south was relatively flat to the north, we would have had to move it up on a bluff, on the side of a bluff.

Q What acreage does La Plata propose to dedicate to the subject well?

A Section 18, Township 32 North, Range 5 West in Section 19 of same township and range.

Q This is the same acreage that previously was to be dedicated to the Well No. 1-19 at the now abandoned location?

A Yes.

Q Comprising how many acres?

A Let's see, a total of 355.25.

Q Would you briefly point out to the Examiner the ownership of acreage as shown on this plat which is operated by La Plata Gathering System or by the J. Glenn Turner interests?

A In Township 32 North, Range 5 West, La Plata operates Sections17, 18, 19, 20 and 29.

Q Also is the operator of some acreage in Township 32 North, Range 6 West?

A Correct.

Q Is there anything else with respect to Exhibit A that you would like to point out to the Examiner?

A No.

Q Referring now to what we will ask the reporter to mark as Exhibit B --

(Whereupon, Applicant's Exhibit B was marked for identification.)

Q -- what does this Exhibit B show, Mr. Morris?

A It shows a schematic diagram of a dual completion for the La Plata Gathering System Well No. 1-19 X San Juan 32-5 Unit.

Q Would you point out to the Examiner the completion method of this well as shown on this exhibit?

A Casing program is as follows: drill a 20-inch hole to 105 feet, run 16-inch casing, circulate and cement to the surface. Drill a 15-inch hole from 105 feet to approximately 970 feet. Cement 10-3/4 inch casing and circulate and cement to the surface. Then drill a 9-5/8 inch hole to approximately 5900 feet through the Mesaverde, set 7-5/8 inch casing, 26.4 pound N-80 and cement with the top of the cement approximately 4500 feet. Then drill a 6-3/4 inch hole to total depth of 8,000 feet or approximately top of the Morrison, at which time we'll run a 5½ inch 17 pound

J-55 liner from 5900 feet to total depth, and cement back to 5900 feet.

Q That leaves your casing exposed from 977 down to 4500 feet, Mr. Morris. Are there any producing formations in this area in that interval?

A No, there isn't.

Q In what intervals do you anticipate perforating the Dakota?

A We plan to perforate the Dakota approximately between 7800 and 7900 and perforate the Mesaverde approximately 5300 to 5700.

Q Would you describe your tubing and packer arrangement, please?

A At sand-water frack in the Dakota we will set a Baker Model D packer at approximately 7700 feet, then perforate and sand-water frack the Mesaverde. Then we'll run two-inch EUE J-55 Dakota tubing to approximately 7700 feet, then run 1½ inch EUE J-55 Mesaverde tubing to approximately 5300 feet.

Q What pressures do you expect in the Dakota and in the Mesaverde in this well?

A Normal Dakota pressures in this area is 3500 pounds, Mesaverde is 1600 pounds.

Q The well is not yet completed, is that correct?

A That's right.

Q Where are you in your drilling program?

A We are approximately 4600 feet yesterday.

MR. UTZ: Be a little rough to skid now, wouldn't it?

A Yes.

Q In your opinion, Mr. Morris, is the completion technique being and to be used in the subject well in accord with good conservation practices?

A Yes.

Q And in your opinion will the unorthodox location of the subject well in any way impair correlative rights?

A No.

Q Were Exhibits A and B prepared by you or under your supervision?

A Yes.

MR. MORRIS: At this time we offer La Plata's Exhibits A and B, and that concludes the direct examination of Mr. Morris.

(Whereupon, Applicant's Exhibits A and B were offered into evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Morris, in answer to Mr. Morris's question, I believe you stated there were no producing formations between

977 and 4500 feet. Is there no Pictured Cliff in this area?

A No.

Q No Chacra in this area?

A No.

Q What formations are behind the 10-3/4 above 977?

A Surface sands.

Q How about the Ojo Alamo?

A The Ojo Alamo will be behind the 7-5/8ths.

Q About what depth would the Ojo Alamo be in this area?

A It's approximately twenty-two, twenty-three hundred.

Q So the Ojo Alamo will be open behind the casing?

A Yes.

Q That's a prolific water zone, is it not?

A I believe it is. I don't know if it's prolific or not.

Q Well, it is artesian in this area.

A Well, we drill stem tested it in this particular well to see if the 1-19 well had charged it and we get sulphur water, approximately 700 feet of sulphur water.

Q So you feel sure that there's no other formations that could be contaminated by the oil behind the 7-5/8ths?

A Yes, sir.

Q If there were any, they certainly would be contaminated, would they not?

A I suspect that they would, yes, sir. But we have never encountered any gas in any formation; as a matter of fact, in this particular well we've tested three zones. We have tested the Ojo Alamo and what they call the Fruitland and the Pictured Cliff. We did get a little gas in the Pictured Cliff with the drawdown, it was practically nothing, at the end of about thirty minutes it was making enough gas to measure.

Q You do intend to set your tubing closer to the top of the Mesaverde and Dakota than 250 feet, do you not?

A Yes, sir.

Q What caused the blowout on the first well?

A Well, just to briefly outline it for you, we were drilling at approximately 7100 feet and encountered a drilling break of about 17 feet, and at that time we had about nine pounds of mud at blowout. We were able to kill the well with mud and increase the mud weight to approximately 10.8 pounds; drilled 70 more feet, drilling contractor was coming out of the hole for a new bit and got approximately half-way out and it blew in again and we weren't able to get back to the bottom of the hole.

Q In other words, the 10.8 mud just didn't hold it?

A Didn't hold it. The engineers figure that 10.8 mud was around 4,000 pounds hydrostatic on the formation which is very abnormally high. We think it's coming out of the Gallup and we're

at the approximate depth that the Gallup comes in. But since we have drill stem tested the Ojo Alamo and Pictured Cliff, we're almost certain now that it either came out of the Mesaverde or the Gallup, and we feel like it's Gallup now.

Q Gallup would be behind your 5½ liner somewhere, wouldn't it?

A Yes, sir. The reason we have this casing program as it is, we are trying to get a little insurance so this won't happen again. We set that conductor string in case the whole well that charged the surface sand we would have some protection there, we would put a blowout preventer on it.

Q You didn't have a blowout preventer on this one?

A Yes, sir.

Q I mean on the one that blew out.

A Yes, but we didn't put it on until we ran the surface string, which was normal procedure. We ran 100 feet of conductor and put a blowout preventer on that and then drilled down to 977 feet of surface string.

Q How did you plug this well?

A Three thousand sacks of cement.

Q The second well will probably be less expensive than the first one?

A Probably. Even with all this pipe we are going to put

in the hole it probably will be.

MR. UTZ: Are there other questions of the witness?

MR. DURRETT: Yes, sir.

BY MR. DURRETT:

Q Mr. Morris, let me call your attention to the fact that the docket, as advertised on this case, described this well as 734 feet from the east line of Section 19. I noticed on the direct examination you referred to it as 734 feet from the west line. In fact, that is the same description because it's 734 feet?

A From west and/or east line.

Q West or east line. Thank you, that's all.

BY MR. UTZ:

Q The proper location on your 19-X is 680 from the south, right?

A 1680.

Q I mean 1680. A Yes.

MR. UTZ: Other questions? The witness may be excused.

(Witness excused.)

MR. MORRIS: That's all we have to offer in this case, Mr. Examiner.

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, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 27th day of September, 1962.

Ada Dearnley
Notary Public-Court Reporter

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. 2626, heard by me on Sept. 14, 1962

..., Examiner
New Mexico Oil Conservation Commission