## BEFORE THE OIL CONSERVATION COMMISSION Hobbs, New Mexico April 3, 1956

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IN THE MATTER OF:

CASE 1050

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TRANSCRIPT OF PROCEEDINGS

BEFORE THE OIL CONSERVATION COMMISSION Hobbs, New Mexico April 3, 1956

IN THE MATTER OF: The application of Tres Oil Company for an order granting a 160 acre nonstandard gas proration unit in the Eumont Gas Pool, Lea County, New Mexico, in exception to Rule 5 (a) of the Special Rules and Regulations of the Eumont Gas Pool, as set forth in Order R-520. Applicant, in the above-styled cause, seeks an order granting the establishment of a 160 acre non-standard gas proration unit in the Eumont Gas Pool, Lea County, New Mexico; said unit to consist of the E/2 SW/4 Section 17 and and the N/2 NW/4 Section 20, Township 22) South, Range 37 East, Lea County, New Mexico; said unit to be dedicated to applicant's Tres Oil Company State No. 1) located 660 feet from the North line and 660 feet from the West line of said ) Section 20.

CASE NO. 1050

BEFORE:

Warren W. Mankkn, Examiner

## TRANSCRIPT OF HEARING

EXAMINER MANKIN: The next case on the docket is Case No. 1050, the application of Tres Oil Company for an order granting 160 acre non-standard proration unit in the Eumont Pool.

JOHN QUINN: Mr. John Quinn representing the Tres Oil Company. This is Mr. John Adams and he is the man to be sworn.

## JOHN ADAMS

called as a witness, having first been duly sworn, testified as follows: BY MR. QUINN:

Q. Will you state your name?

A. My name is John Adams.

Q. Where do you live?

A. Hobbs, New Mexico.

Q. Who are you employed by, Mr. Adams?

A. Tres Oil Company.

Q. In what capacity?

A. As Petroleum Engineer.

Q. Have you testified before the Oil Conservation Commission before as an expert, on prior occasions?

A. Yes, I have.

Q. Are Mr. Adams' qualifications satisfactory?

MR. MANKIN: They are.

Q. Mr. Adams, are you familiar with the application for Tres Oil Company in Case 1050?

A. Yes, I am.

Q. By that application, what action does Tres seek?

A. Tres Oil Company asked that the Commission grant a non-standard proration unit in the Eumont Gas Pool being the N/2 of the NW/4 of Section 20, and E/2 of SW/4 of Section 17, Township 22 South, Range 37 East.

Q. I hand you what has been marked Exhibit 1. Mr. Adams, would you state what that Exhibit shows?

A. This Exhibit shows the non-standard proration unit, for which we applied, outlined in red. It also shows the producing wells, abandoned wells, and dry holes drilled in the immediate vicinity. Q. What well is the unit well of the proposed unit there, Mr. Adams?

A. The well located in the NW/4 NW/4 Section 20, being 660 feet from the North and West lines of the Section and shown as gas well No. 1.

Q. Is this the well on the plat here?

A. That is the well.

Q. Can you give a brief history of this well to date?

A. Yes, this well was commenced on February 10th of this year and completed on March 3rd. Surface pipe was set to 291 feet and the well commenced coring at 3450 feet and cored to the total depth of 3600 feet. All cores were recovered and drill stem tests were made at intervals of 50 feet each so that all of the core sections were drill stem tested. Then a casing was set to 3450 feet and the well was completed in the open hole a treatment of 5,000 gallons of duofrac. Natural production on this well was 4000,000 cubic feet of gas per day production, after trestment was to 2,000,000 cubic feet of gas per day.

Q. What is the -- where is the location of this well, Mr. Adams, in relation to your section line?

A. 660 feet from the North and West lines of the section.

Q. And have there been any other wells drilled on this particular unit?

A. Yes, there have. There was one well drilled, located in the NE/4 SW/4 of Section 17. It was drilled by Rowan and Penrose in 1935, to a total depth of k,077 feet, plugged and abandoned at that time.

Q. Is this the well on this Exhibit right here?

A. Yes, sir, it is.

Q. And that is abandoned and plugged at the present time?

A. Yes, it is.

Q. Do you have an electric log on this well here of the unit that you drilled?

A. Yes, I do.

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Q. Mr. Adams, do you have that electric log here?

A. Yes, sir. I have it around here somewhere and I will get it for you.

Q. Does this well produce any fluids at the present time?

A. Yes, it does.

Q. What is the --- do you have the information on that?

A. Yes, I do. Two tests have been made on this well. One when flowing on  $l\frac{1}{2}$ " choke. The well made 1,800,000 cu. ft. of gas per day with 16 barrels of associated liquids being 36 gravity at 60 degrees Fahrenheit, flowing tubing pressure was 100 lbs. Another test was made with the flowing tubing pressure of 600 lbs. which approximates the El Paso Natural Gas Company's high pressure transmission line pressure in which the well made 1,050,000 cu. ft. of gas per day with 9 barrels of 36 gravity. The Gas-oil ratio in this case was 116,700.

G. In view of this information, do you consider this essentially as a gas well?

A. Yes, I do consider it essentially as a gas well. There has been a contract executed between Tres Oil Company and El Paso Natural Gas Company for the purchase of high pressure gas.

Q. This well is not producing at the present time, is it?

A. It is awaiting a pipeline connection.

Q. Who owns the operating rights in this tract, Mr. Adams?

A. Tres Oil Company, C. H. Sweet, Rowan and Penrose.

MR. MANKIN: Has Tres Oil Company leased an agreement with all of the operators in this unit for the pooling of these tracts and the execution of the unit Operating Agreement subject to the approval of the Commission?

MR. ADAMS: Yes, it has.

Q. And such agreement will be entered into immediately upon approval of this application?

A. Yes, it will.

Q. Are you familiar with the rowalty owners in this tract?

A. Yes, I am. There are nine royalty owners that are fee owners, that is, as opposed to the state and the federal government. Then there are two overriding royalty owners, Humble and Warren.

Q. The overriding royalty owners, Humble and Warren, are agreeable to the unitization of this tract?

A. Humble and Warren have offered no objection to me on the formation of this unit.

Q. Mr. Adams, have you made a study of all the information available in an effort to determine whether the acreage included can be assumed to be productive of gas in this proposed unit?

A. Yes, I have.

Q. Would you lookat the Exhibit here, Mr. Adams, and give a hitory of some of the surrounding wells in this unit?

A. Yes, in section 18 the Humble State "M" No. 3, which is the well located in the SE/4 SE/4 has been plugged and abandoned. It produced from the Arrowhead Oil Pay and immediately north of that well is Humble State "N" No. 8 which is presently producing from the Arrowhead Oil Pool and immediately north of that well is Gulf's Christmas No. 7 bing in the SE/4 NE/4 which is producing from the Arrowhead Oil Pool. In addition to the well previously discussed, the Rowan and Penrose well located on this unit acreage, there was a well drilled by the Sunray, now Sunray-Midcontinent in the NW/4 SE/4 Section 17. It was drilled to approximately 6500 feet, and these are approximate depths, and then re-entered, drilled deeper and tested then plugged. No tests were made of the Penrose section in the Sunray Mid-Continent well, however.

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there is an electric log available which shows the section to the present and development.

Q. Is this unit within the horizontal limits of the Eumont Pool?

A. It is not at the present time. The horizontal limits of the Eumont Pool are 660 feet west of the well location.

Q. Are you asking at this hearing that the unit be included in horizontal limits of the Eumont Pool?

A. Yes, our Company has filed the form necessary with the Commission for an extension of a pool to include this well. We have asked that the Eumont Gas Pool be extended to include the SW/h section 17 and NW/h of Section 20 Township 22 South, Range 37 East.

Q. Is this unit within the vertical limits or the well within the vertical limits of the Eumont Pool?

A. Yes, it is.

Q. Is it your opinion that this well would be capable of producing the allowable which would be granted if this application is approved.

A. Yes.

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Q. Did you find that electric log?

A. Yes, I would like to introduce that as an Exhibit.

Q. All of these Exhibits were prepared by you or under your direction, Mr. Adams?

A. Yes, sir.

Q. Do you think that the granting of this unit would protect correlative rights and deminish waste?

A. Yes, I do.

Q. Is there anything further that you would like to add, Mr. Adams?

A. I have nothing further.

MR. MANKIN: Mr. Adams, you indicated this was within a mile of the Eumont Gas Pool, therefore, according to the Rules of the Commission under Order R-520, this would be considered under the Eumont Gas Pool?

A. Yes, sir.

MR. MANKIN: Let the record show that in conformace with your particular statement that you had applied for the pool to be extended, that Case No. 1055, Section 6 to be heard on April 18, 1956, would reflect this extension of the Eumont Gas Pool as herein requested by the applicant, Mr. Adams, you mentioned that the Rowan and Penrose Well #1, located in the NE/4 SW/4 of Section 17, was drilled and abandoned about 1985, is that correct?

MR. ADAMS: Yes, sir, the records of the Commission - I beg your pardon - records of the Geological Survey show that.

MR. MANKIN: Based upon present-day techniques, of fracturing and completion practices, is it your opinion that if that well had now been drilled under present practices that that would have been a commercial well, from Penrose or a Queen member and productive of gas.

MR. ADAMS: Mes, sir, that is my opinion.

MR. MANKIN: You mentioned also that the well directly east of the Sunray Mid-Continent No.  $1^{n}A^{n}$  in the NW/4 of SE/4 of Section 17 as being abandoned, when was that ---- approximately, when was that drilled?

MR. ADAMS: That was drilled in 1946, I believe, and re-entered in 1947 -way back there -- I have that.

MR. MANKIN: That is sufficient. And again, your opinion would be the same that, if that well were presently developed, it would have been productive by the present-day methods, productive of gas in the Penrose Member?

MR. ADAMS: Yes, sir, that is my opinion.

MR. MANKIN: It is true, is it not that wells in this area do make considerable amounts of liquids from the Penrose member gas wells?

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MR. ADAMS: Yes, sir, in general at certain levels on the structure. I believe that liquid is found associated with the structural position and across the development.

MR. MANKIN: Is it in connection with a gas-oil contact or is it different members of the Penrose?

MR. ADAMS: No, sir, in my opinion it is not associated directly as a contact in this particular well, the old cores were 100% recovered and analized, and examination of this core analysis does show liquid saturations in the upper part of the section, equally high as they are in total depths.

MR. MANKIN: Is there a separate and distinct gas zone in this area or is it associated very closely with the oil zone?

MR. ADAMS: I think that the entire section of the Penrose, from top to bottom, is primarily a gas zone and this condition is reflected by the pressure information and the manner in which the well is produced and that in certain positions, on the structure, there would be porosity development such that the effective permeability of the formation to oil would be sufficient for the oil to enter the bore-hole. Whereas perhaps higher on the structure where the formation is generally tighter this would not be the case.

MR. MANKIN: Then in this particular area, depending upon the rates of production, the wells would either be oil wells or gas wells. Is that true?

MR. ADAMS: That condition might exist, I am not --- I have not examined that sufficiently ---

MR. MANKIN: Are you familiar with the lease adjoining this, which is the Humble State "M" Lease in Section 19, the N/2 Section 19, where different flow rates did result in getting an oil well or gas well but in most normal flow rates as carried in the Eumont Gas Pool, it would be a gas well?

MR. ADAMS: Yes.

MR. MANKIN: Another question -- this particular 160 acres, it consists of both state and federal acreage, is that correct? MR. ADAMS: Yes, sir, that is correct.

MR. MANKIN: Have you any indication from the federal government, the U SGS in particular, that they would approve such a unitization, communitization rather?

MR. ADAMS: No, sir, I have not contacted the Geological Survey.

MR. MANKIN: 120 acres of the 160 acres is federal acreage?

MR. ADAMS: No, sir,  $\mu$ O acres of the 160 acres is federal acreage.

MR. MANKIN: In other words, the NE/ $\mu$  SW/ $\mu$  of Section 17 is the only federal acreage?

MR. ADAMS: Yes, sir, that is correct. The state acreage is the NW/4 NW/4 of Section 20 and then the fee lands are the NE/4 NW/4 of Section 20 and the SE/4 SW/4 of Section 17.

MR. MANKIN: Which is indicated as the Christmas Lease?

MR. ADAMS: Yes, sir

MR. MANKIN: Fee lease?

MR. ADAMS: Yes, Fee lease.

MR. MANKIN: Tres Oil Company is the only working -- has the primary portion of the working interest.

MR. ADAMS: Has the majority of the working interest, yes, sir.

MR. MANKIN: Is there question of the witness in this case?

MR. QUINN: Did you have anything further to add, Mr. Dupont?

MR. MANKIN: Would you like to enter Exhibits?

MR. ADAMS: Yes, we would like to enter Exhibits 1 and 2, and that they may be made part of the record.

MR. MANKIN: Is there objection in entering Exhibits 1 and 2 in this case? If not, they will be so entered. Is there further question of the witness in this case? If not, the witness may be excused. Is there any

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statements or anything further to be made in this case / Mr. Dupont?

MR. DUPONT: I just want to state that the U. S. Geological Survey had no objection to the proposed unit and that we will recommend to the Director of the Survey approval of the properly executed unit agreement covering that acreage, thank you.

MR. MANKIN: Any further statements in this case? If not, the witness may be excused and we will take the case under advisement.

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STATE OF NEW MEXICO ) ss County of Santa FE )

I, Dora Serna, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Commission Examiner at Hobbs, New Mexico, is a true and correct record, to the best of my knowledge, skill and ability.

Dated at Santa Fe, New Mexico this 7th day of August, 1956.

Mora Jenna