FARMINGTON, N. M.

BEFORE THE OIL CONSERVATION COMMISSION March 20, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Tenneco Oil Company for a unit agreement, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Central Totah Gallup Unit Area comprising 2,738 acres of Federal and Fee lands in Townships 28 and 29 North, Range 13 West, San Juan County, New Mexico.

Case No. 2778

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2778.

MR. DURRETT: Application of Tenneco Oil Company for a unit agreement, San Juan County, New Mexico.

MR. MORRIS: Mr. Examiner, I am Richard Morris of Seth, Montgomery, Federrici and Morris of Santa Fe, New Mexico. And, I am appearing on behalf of the Tenneco Oil Company.

We'll have one witness.

(Witness sworn.)

MR. UTZ: Are there any other appearances in this case? You may proceed.

RICHARD A. WILLIFORD



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

DIRECT EXAMINATION

BY MR. MORRIS:

- Q. State your name and position, please?
- Richard A. Williford, Petroleum Engineer for Tenneco Oil Company, Durango, Colorado.
- Mr. Williford, would you please state briefly for Q the examiner and the Commission, your education and your experience in the petroleum industry?
- Α I graduated from Texas A & M in 1946 with a degree in Petroleum Engineering and one in Geological Engineering. I worked five years for Gulf, at Kilgore, Texas, Cutoff, Louisiana, Shreveport, Louisiana, Protum Falls, Louisiana, as a petroleum engineer. For the past ten years, I have been with Tenneco in Durango.
- Q. Are you familiar with the application of Tenneco in Case 2773 before the examiner today?
 - Yes.
 - What is it Tenneco seeks by this application?
- Α Tenneco seeks in this application a unitization of the central Totah-Gallup unit.
- Have you prepared an exhibit showing the area to be taken in by the Central Totah Unit?
 - Yes, sir. It is, I believe, marked as Exhibit 1.



Q Would you refer to that exhibit and point out the pertinent data shown thereon?

A The Central Totah Unit as shown on Exhibit 1 covers part of Section 21, and 23 and all of Sections 27, 28 and 34, of Township 29, Range 13 West and also part of Section 11 North, Township 28 North, Range 13 West as shown on the exhibit. The Wells shown on Exhibit 1 are Gallup and Dakota. Gallup Oil Wells are indicated as oil wells by standard exhibits. The Dakota Gas Wells are shown as gas wells. Also, there are several dual Gallup-Dakota wells and they are indicated as gas and oil duals.

Q Does Exhibit 1 also show the position of the Central Totah Unit in relationship to the other units that have been approved in the Aztec's Totah and Chacha Units?

A Aztec's Totah is northwest and Chacha is northeast.

It does and it will also show the position of the Central Totah Unit to be adjacent to Pan American Gallegos Canyon unit which is on the southeast. The Aztec Totah Unit is to the southwest.

Q Who are the interest operators within your proposed Totah Unit area?

A Tenneco Oil Company, Aztec Oil Company, G. B. Falls and Big Chief Petroleum Company and Pioneer Oil Company, who own a section in Section 21, and Aspen.

How many of those interest operators have indicated to you that they are prepared to commit their property?



A All of these interest owners have indicated to us that they are prepared to commit their property.

Q Mr. Williford, in the area, the southwestern part of the Central Totah Unit and just outside the unit, in the south half of Section 33, I note that there is a Gallup Oil Well and a Gallup-Dakota Dual that shows to be on the property owned by South West Production Company and not otherwise included in any unit area. What is the situation with respect to that tract?

A That is correct. South West was offered an opportunity to join our unit under lease formula and they declined to do so. So, the two wells will not be included in this.

Q Who are the overriding royalty interests in this unit and have they joined the unit agreement?

A Well, there are numerous overriding royalty interests under the tract; and at the present time, the working interest owners are getting signatures now and an agreement, or ratification rather, from these overriding royalty interests. They haven't all ratified to date, however to my knowledge, there is no indication that all of them won't ratify.

Now, on Exhibit Number 1, I notice that most of the land included in this unit area is Federal land, is that correct?

A That is correct. All except for a small interest of Fee Land. which is in Section 21. The rest of it will be



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Federal.

- Has the USGS been approached by Tenneco to give their Q approval to the proposed unit as to form and content?
- Yes, the USGS has reviewed a preliminary copy of the agreement and they have indicated that they will agree to it with some minor changes in the form of the preliminary agreement.
- Now, have the changes that the USGS recommended been embodied in a unit agreement?
- Yes. I believe that is marked as Exhibit 2, our unit agreement, it embodies changes suggested by the USGS.
- Referring to that Exhibit Number 2, being a unit Q. agreement, just hitting some of the high points of it, what are the unitized substances under the agreement?
 - Α It would be the Gallup only.
 - What are the lands unitized under the agreement?
- They would be the lands shown in the exhibit under the agreement.
 - MR. UTZ: Do you have a description of those anywhere?
- Yes, I believe Exhibit B gives a full description of land. It also shows basic royalty records, the lease records and the overriding interests and the working interests of each tract.
- (By Mr. Morris) Who is the operator under the unit agreement?



- Does the unit agreement provide that operations will Q be governed by the orders, rules, and regulations of the Federal and State conservation authorities?
 - Α Yes.
- If approval of the unit agreement is obtained, will Tenneco furnish to the Commission executed copies of that agreement?
 - Yes, Tenneco will furnish these.
- Now, pressure maintenance project or projects for and in this area have previously been approved by the Commission, is that correct?
- Yes, Commission Orders Number R-1289 and R-2190 were obtained by Tenneco and Aztec respectively for their acreage in here and will include the acreage in which water injection will be inserted.
- Why do you feel, Mr. Williford, that a unitization is in order for this area?
- Α The proposed Central Totah Unit area is a logical area to achieve the maximum efficiency in secondary recovery in cooperation with the Aztec Totah and the Gallegos Canyon in Totah-Gallup field and also it will protect correlative rights of the working interests and the owning interests.
- The approval of Tenneco's operation in this area just rounds out the picture, in these two pools, does it not?
 - That is right, the completion of this unit will



enable the Totah-Gallup field as a hole to enter into secondary recovery.

MR. MORRIS: At this time, Mr. Examiner, we offer Exhibits 1 and 2, and that concludes the examination of Mr. Williford.

MR. UTZ: Without objection, Exhibits 1 and 2 will be made a part of the record in this case.

CROSS EXAMINATION

BY MR. UTZ:

- Q Mr. Williford, you are certain that Exhibit B will include all the acreage shown on Exhibit A, is that true and offers a description of the area?
 - A That is true to my knowledge.
- Again, you would suggest that we use the description shown on your application as part of the description of this acreage. I am sure you wouldn't because my map doesn't look a bit like yours, because I copied it.
 - A They don't agree?
 - Q. No.
- A I suspect this is because the unit agreement was just revised. In fact, I put it together Monday before I brought it up here. The revision was necessary, of course, because of certain changes recommended by the USGS in our original Exhibit B and also because South West Production has declined.
- Q You are sure it is the west half of 21 rather than the east half?
- A Yes, it is the west half. Now, there will be some acreage that will come out of the east half, forty acres, the



southwest quarter of the east half of 21.

- Q Southwest of southeast, that would be correct?
- A Yes.
- Q At any rate for all practical purposes, we can completely ignore your description in the application?
 - A Yes, sir.
 - Are you already flooding this area, did you say?
- A We have in cooperation with the Aztec Totah Unit, who has initiated water injection several months ago, we have put two wells on water injection on the west line of this unit. Those wells are Number 18 and 19 of the Tenneco called federalities and these, of course, were initiated when we obtained approval for these under the orders mentioned before.
 - Q Are those the only two wells you have approval for?
- We have approval for--we obtained approval for more wells than that under Tenneco's acreage. However, we also have permission by letter to either add wells which we'd like to put on or not. In this case, since we have unitized this acreage instead of Aztec and Tenneco in cooperation, we propose two lines of injection wells, which would be the west line of the Central Totah Unit which we are already injecting; and then injection on the line on the east border of the unit which would be in cooperation with the Gallegos Canyon Unit, and this will eliminate the injection wells which we have permission to inject in the center of the unit. And we propose not to put



those on injection unless we can not get sufficient water into the north wells.

Q And you already have approval for those injection wells on the west side of—on the east side of your unit?

A I believe that is correct. I believe that Aztec gained approval of those wells. However, if they don't have approval, then before we put the wells on, we will obtain approval from the Commission.

MR. UTZ: Any other questions of the witness? The witness may be excused.

Any other statements to be made in this case?

The Commission will take the case under advisement.



STATE OF NEW MEXICO SS COUNTY OF BERNALILLO

I. STEVEN McCRYSTAL, 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 day of seal this

NOTARY PUBLIC

My Commission Expires:

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. >>> F. heard by me on Olla.

New Mexico Oil Conservation Commission

