1 BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION 2 OIL CONSERVATION COMMISSION CONFERENCE ROOM STATE LAND OFFICE BUILDING 3 SANTA FE, NEW MEXICO Wednesday, July 11, 1973 4 **EXAMINER HEARING** 5 б 7 8 IN THE MATTER OF: 9 Application of Midwest Oil Corporation for a unit Case Number 5024 10 agreement, Eddy County, New Mexico. 11 12 **BEFORE:** Daniel S. Nutter Examiner 13 14 15 16 17 18 19 TRANSCRIPT OF HEARING 20 21 22 23 24

No, I haven't.

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MR. NUTTER: Case Case 5024. 1 2 MR. CARR: Case 5024, application of Midwest Oil 3 Corporation for a unit agreement, Eddy County, New Mexico. MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant, Cox, and Eaton, Roswell, appearing on behalf of Midwest 5 We have two witnesses I'd like to have Oil Corporation. б 7 sworn. (Whereupon, both witnesses were sworn.) 8 MR. HINKLE: This is the official set of exhibits and 9 here is an extra copy. 10 TOM COLEMAN, 11 was called as a witness, and after being duly sworn according 12 to law, testified as follows: 13 DIRECT EXAMINATION 14 BY MR. HINKLE: 15 State your name, your residence, and by whom you are Q 16 employed. 17 Α Tom Coleman, Midland, Texas, District Land Man with 18 Midwest Oil Corporation. 19 Have you been in charge of putting together the proposed Q 20 Cottonwood Spring Unit and getting it signed up? 21 Yes. A 22 Q For the Land Department. You have not previously testified 23 before the Commission? 24

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Q Are you familiar with the application in this ca	Q	Í	Are you	familiar	with	the	application	ın	this	cas
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Yes, I am. Α 2

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- What is Midwest seeking to accomplish? 3
- They propose a formation of a six-section unit to be Α located in Township 25 South, Range 26 East, Eddy County, 5 composed of Sections 17, 18, 19, 20, 29, and 30.
 - Have you prepared under your direction certain exhibits Q for introduction into this case?
 - Α Yes.
 - They are Exhibits 1 and 2? Q
 - Α Right.
 - Refer to Exhibit 1 and explain what this shows. Q
 - Exhibit 1 is a land plat scaled 1 inch to 4,000, which Α shows the outline in red of the proposed unit, and it shows in a radius of two miles of the unit the location of Federal, State, and fee acreage, the Federal acreage being shown in green, the State acreage in orange, and the fee acreage in blue.

And within the unit itself, which is composed of 3837.88 acres, there are only Federal and fee acreage. There is, let's see, 2918.28 acres of Federal leases which composed 76.04 percent of the unit, and 919.6 acres of fee land which is 23.96 percent of the unit.

MR. HINKLE: In this connection, Mr. Examiner, I might state that there is an error in the application in

that it refers to the approval of this unit by the Commissioner of Public Lands. I think in preparing the application they followed a form where State lands had been involved. In this case, there are no State lands so I'd like to move that that portion of the application with reference to approval by the Commissioner of Public Lands be stricken.

MR. NUTTER: We have amended the application to delete the reference to the Commissioner of Public Lands of New Mexico.

MR. HINKLE: Fine.

- Q (By Mr. Hinkle) Are you familiar with the proposed form of Unit Agreement?
- A Yes.
- Q And three copies of this have been filed with the application?
- 17 A Yes, they have.
 - Q Has this form been approved by the USGS?
 - A Yes, it has; and we have Exhibit 2 to present for that.
 - Q All right. What does Exhibit 2 show?
 - A It's a letter from the USGS dated June 19, 1973 which makes note of our application for the proposed unit and approves it as being logically suitable for a unit area which is --
 - Q The only condition is that if you do not get sufficient

1 acreage committed to give effective control, it will not 2 be approved? 3 Yes. Α Is this form substantially the same form as heretofore 4 5 used where Federal and fee lands are involved under that form, the same form heretofore approved by the Commission 7 in those cases? Yes, it is. 8 A Who is designated as the operator? 9 Midwest Oil Corporation. Α 10 Does it provide for the drilling of a test well? 11 Referring back to Exhibit 1, the proposal is for A 12 a unit test well to be located in the Northwest quarter 13 of Section 20 to be drilled at a depth of 12,000 feet for 14 a test of the Morrow formation. 15 And you think that is a depth that will test the Morrow 16 formation? 17 A Yes. 18 MR. HINKLE: We would like to offer into evidence 19 Exhibits 1 and 2. 20 MR. NUTTER: Exhibits 1 and 2 will be admitted into 21 evidence. 22 CROSS-EXAMINATION 23 BY MR. NUTTER: 24

With reference, Mr. Coleman, to the statement in the letter

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1	from the Department of Interior as to the commitment of
2	sufficient lands to have effective control of the Unit
3	Agreement, what percentage of the working interest at
4	the present time is committed?
5	A 100 percent committed.
6	Q 100 percent working interest?
7	A Yes.
8	Q How do you stand on your royalty commitments?
9	A I would estimate about 50 percent ratification thus far.
10	MR.HINKLE: And that's the fee land you are talking
11	about?
12	THE WITNESS: Yes.
13	Q (By Mr. Nutter) And tenative commitment of all of the
14	Federal royalty?
15	A Yes.
16	MR. NUTTER: Are there any further questions of Mr.
17	Coleman? He may be excused.
18	FRANK L. SCHATZ,
19	was called as a witness, and having been previously sworn
20	according to law, testified as follows:
21	DIRECT EXAMINATION
22	BY MR. HINKLE:
23	Q State your name, by whom you are employed, and your
24	residence.

My name is Frank L. Schatz. I am employed by Midwest Oil

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Corporation as Exploration Manager in the Midland, Texas 1 District Office with that company. 2 3 You are a geologist? 0 Yes, sir. A 4 Have you previously testified before the Commission? Q 5 Yes, sir. Α 6 And your qualifications as a Petroleum Engineer are a 7 matter of record with the Commission? 8 Α Yes, sir. 9 Have you made a study of the Cottonwood Spring Unit area? 10 Yes, sir. I have. Α 11 MR. HINKLE: Are the qualifications of the witness 12 sufficient? 13 Yes, sir. MR. NUTTER: They are. 14 (By Mr. Hinkle) Refer to Exhibit 3 and explain what Q 15 this is and what it shows. 16 Exhibit three is a sub-surface structure map in the area 17 of the Cottonwood Spring Unit contoured on the top of the 18 Morrow formation. This map is based principally on 19 sub-surface information and no seismic information was 20 used in the construction of the map. 21

There is a color coding of the production in the area, and that is shown in the legend at the bottom of the map.

The updip limit of what we consider to be the porous sand is shown by an orange line West of the Cottonwood

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end of the map.

Spring Unit. This also is West of the White City -Crawford producing areas in Township 24 South, Range 26 East. We consider the downdip limit of the Morrow sand producing trend to be represented by the orange line to the East of the Cottonwood Spring Unit.

Between these two orange lines we believe that the Morrow sands have cleaned up and stand an excellent chance of producing along this trend which extends from our proposed unit area Northward through the South Carlsbad area into the Burton Flat area which is off the North

The map shows a structural closure in the area of the Cottonwood Spring Unit. This is an interpretive effort in that we do not have any seismic or other substantiating evidence for this closure. It is, however, more or less on a straight-line trend with the South Carlsbad to White City structural trend running in a North-Northeast, South-Southwest direction.

The structural closure fairly well covers the area of the proposed Cottonwood Spring Unit.

- What is the other line? Does it indicate the next Q exhibit, the cross section?
- We have a line of cross section extending from a well in Section 10 of Township 25 South, 25 East, running in a Southeasterly direction to a well in Section 21, Township

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26 S	outh,	Range	27	East.	This	is	a	line	of	cross	section
whic	h is	represe	ent e	d by	Exhibit	: Nu	amb	er 4	•		

- Q All of the wells in the White City structure to the North, which is shown in orange, are all producing in the Morrow formation; are they not?
- A Yes, sir. The orange dots represent the Morrow formation.

 The yellow dot is the Atoka formation, and the green dots represent the Canyon production.
- Q Mr. Coleman testified that the test well is to be 12,000 feet deep. In your opinion, will that penetrate fully the Pennsylvanian formation?
- A Yes, sir. We believe that that will be sufficient to go through the Morrow formation into the Barnett shale which is the uppermost member of the Mississippian.
- Q So it will adequately test the Pennsylvanian formation?
- A In our opinion, it will.
- Q Now, refer to the next exhibit and explain what this shows.
- A Exhibit Number 4 is a Northwest-Southeast cross section, stratigraphic cross section set up on the top of the Morrow formation. As represented on this cross section approximately 400 feet below the top of the Morrow is the top of the clastic portion of the Morrow.

This is the sand-shale sequence which is producing to the North in the White City-Crawford producing areas and also in the South Carlsbad Field area.

1 One well is productive in the area and represented 2 on this cross section as the red interval on the most 3 Easterly well, El Paso Number 1-X Welch Unit. All of the other wells on this cross section are dry. 5 Our proposed location is represented to be between the second and third wells reading from left to right on б 7 the cross section. 8 In your opinion, if this unit is approved and you obtain Q production, will it be in the interest of conservation, 9 the prevention of waste, and tend to protect correlative 10 rights? 11 Yes, sir. We believe it would. 12 Q Did you prepare the two exhibits which you have referred 13 to, 3 and 4? 14 I prepared or had them prepared under my direction. 15 MR. HINKLE: We offer Exhibits 3 and 4. 16 MR. NUTTER: Midwest Exhibits 3 and 4 will be 17 admitted into evidence. 18 MR. HINKLE: That's all on Direct. 19 MR. NUTTER: Are there any questions of Mr. Schatz? 20 He may be excused. Do you have anything further, Mr. 21 Hinkle? 22 MR. HINKLE: That's all. 23 MR. NUTTER: Does anyone have anything they wish to 24

offer in Case 5024? We will take the case under advisement.

STATE OF NEW MEXICO)

Output

I,JANET RUSSELL, a Certified Shorthand Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of proceedings before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

CERTIFIED SHORTHAND REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2011.

New Mexico Oil Conservation Commission