NEW MEXICO OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING 2 SANTA FE, NEW MEXICO 3 August 9, 1972 EXAMINER HEARING 4 5 IN THE MATTER OF: 6 Application of David Fasken for Case No. 4792 7 a unit agreement, Eddy County, New Mexico. 8 9 **BEFORE:** Elvis A. Utz, 10 Examiner 11 12 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103 1216 first national bank bldg. East • Albuquerque, new Mexico 87108 13 14 209 SIMMS BLDG. + P.O. BOX 1092 + PHONE 243-6691 + ALBUQUERQUE, 15 16 17 18 TRANSCRIPT OF HEARING 19 20 21 22 23 24 25

BEFORE THE

216 FIRST NATIONAL BANK BLDG. EAST . ALBUQUERQUE, NEW MEXICO 87108 BOX 1092 . PHONE 243-6691 . ALBUQUERQUE. SIMMS BLDG. P.O.

MR. UTZ: Case 4792.

MR. HATCH: Case 4792: Applicatio of David Fasken for a unit agreement, Eddy County, New Mexico.

MR. RICHARDSON: Randolph Richardson, appearing on behalf of the Applicant.

A copy of the unit agreement has already been furnished to the Commission, and we would like to enter this bound volume of geological records as Exhibit Number One.

Under this binding, you will find a suface topographic map, a written report of the Morrow facies, a structure map of the lower Pennsylvanian, an east-west stratigraphic section of the lower Pennsylvanian, and a north-south stratigraphic section of the lower Pennsylvanian. We have marked this as Exhibit One, would you like to break it down or mark it as one exhibit?

MR. UTZ: Are you going to refer to different pages in it?

MR. RICHARDSON: We are going to refer to the different maps, but the written report will be just submitted as a detailed statement of what the witness is going to testify to.

MR. UTZ: We probably should identify the maps when you refer to them in your testimony.

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

You may proceed, Mr. Richardson. 1 MR. UTZ: 2 ROBERT LEONARD, 3 was called as a witness, and after being duly sworn, testified as follows: 5 DIRECT EXAMINATION 6 BY MR. RICHARDSON: 7 8 Mr. Leonard, will you state your name and your present 9 occupation? 10 Α Robert Leonard, I am a petroleum geologist. And do you reside in Midland, Texas? 11 Yes, sir. 12 Do I understand correctly that you have testified 13 several times before this Commission in the past in 14 connection with other geological cases? 15 I'm sorry, but this is my first time. A 16 Would you please state your educational background and 17 professional background which would enable you to 18 testify as an expert in this case? 19 I am a graduate of the University of Arizona, 20 Yes, sir. A and I hold a bachelor of science degree in geology. 21 I have been a practicing petroleum geologist since 1940, 22 and I have represented Mr. Fasken since 1957. 23 Are you familiar with the Walker Draw Unit Area and 24

the matters contained in this application to the

1	Commission for approval of a unit agreement?					
2	A	Yes, sir.				
3		MR. RICHARDSON: Are the witness's qualifications				
4	acce	acceptable?				
5		MR. UTZ: Yes, sir, they are.				
6	Q	(By Mr. Richardson) Is the form of this unit agreement				
7		the same as that prescribed by federal regulations and				
8		has it been previously approved by the Commissioner				
9		of Public Land?				
10	A	Yes, sir.				
11	Q Has the unit area been designated by the U.S.G.S.?					
12	A	A Yes, sir.				
13	Q	Q Would you please tell the Commission the total number				
14	of acres contained within the unit area and the percentage					
15		of federal, state, and patent land?				
16	A There are 7,040 acres in the proposed unit, and they					
17		are broken down as follows: 5,400 acres of federal land,				
18		or 67.7 percent; 640 acres of state land, which is				
19		9.09 percent of the total; and 1,000 acres of patent				
20		land, or 14.20 percent.				
21	Q	Would you please tell the Commission the township and				
22		range in which the unit is located and the approximate				
23		location with reference to the nearest town?				
24	A	The proposed unit is entirely contained within Township				
25		23 South, Range 23 East, and it is located about twenty				

miles west-southwest of Carlsbad.

- Q Section 9 of the unit agreement contains a special unusual provision whereby it is recognized that one or more wells capable of producing from the formation may have already been completed on land within the unit area. Would you please tell the Commission the name and location of any such wells that may have been drilled upon the unit area to test the Morrow formation?
- Yes, sir. The first of these was situated in Section 17, Township 23 South, Range 23 East. It was the Number 1 Wagontier Unit Well. The second such well in the unit area was the Number 1 Joyce, situated in Section 28, Township 23 South, Range 23 East.
- Q Could you please briefly review each such well both to initial drilling and any re-entry work which may have been done subsequent to the completion of the initial two wells?
- A Yes, the first well in Section 17, the Number 1
  Wagontier, when it was drilled, it was tested in the
  Morrow sand for a maximum flow of 1,550 MCF per day.

  This well has been re-entered by my client, Mr. Fasken,
  and we made a production test of the sand, and the
  net result of the production test was that we wound
  up with a very limited producer with a capacity estimated
  at somewhere between 100 and 150 MCF per day.

2

3

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Α

Q

A

Q

A

Q

Α

The second well that was drilled in the unit area down in Section 28, the Caroline Hunt Number 1 Joyce, Mr. Fasken also re-entered that, and we made a production test of similar sand in this well, and unfortunately, we wound up with a non-commercial well. The sand in question tested for a combination of gas and water, and that is the situation in the sand at the moment. Would you please tell the Commissioner if their records would not indicate the correct name for these wells, and if so, how these wells would now be characterized? The well in Section 17 would now be Yes, sir. characterized as the David Fasken Number 1 Mershon 17 The re-entry operation in Section 28 is now characterized as the David Fasken Number 1 Merlend 28. Would you please refer to the geological report which has been introduced in this case? Yes. Was that report prepared by you or by others directly under your control and supervision? Yes, it was. Would you please refer to Exhibit One, and the maps contained therein, and indicate the significance of each map? The first map I would like to call your attention

to is entitled a stratigraphic section of the Morrow

2

3

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

sand and it is an east-west cross section. There are two of them, one is east-west, and the other is north-The purpose of this cross section is to show the stratigraphic nature of the prospect and demonstrate Up above the log of the well on the left-hand side, it shows the upper Morrow sand, which is the principal sand in question, and this is absent in this well. The sand is present in wells three and four, and is recognizable in Well Number 7, but it passes into a fine-grain shaley facies out here (indicating).

Similarly, if you turn to the north-south cross section, this cross section essentially portrays the same thing in the opposite direction. In Well Number 1, there is no upper Morrow sandstone there, due to non-deposition, and there is a little bit in Well Number 2. It is well represented in Wells Three and Four, and to the south of the unit area, while the lithographic unit is barely recognizable on the logs where it is shaley and tight.

The third map in the jacket is a combination Morrow facies and structure map, and the contoured horizon is on the top of the Morrow limestone, and a new limestone bed forty feet thick that appears overlying In this instance, it immediately overlies the principal objective sand. The structure map shows

209 SIMMS BLDG. + P.O. BOX 1092 + PHONE 243-6691 + ALBUQUERQUE.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

the unit area to be to the south coming off of the Indian Basin structure to the north. The facies aspect of the map is represented by the two wavy lines, the one farther to the west is considered to be an upper Morrow shore line. The two wells in the cross section that were pointed out as being beyond this limit were wells in which there was no deposition of that particular sand body. The wavy line to the east is what we consider to be the downdip limits of the clean sandstone. Anything to the east-southeast of this line is fine grain, sandy, silty, dirty facies. So the prospect has two things principally, it is stratigraphic and it is also structural.

In hoping to find production within the unit area, we hope to get updip to both wells which we have re-entered, and to find hydrocarbons in commercial quantities in good clean sandstone.

- Q Would you please tell the Commission the projected depth and location for the initial test well to be drilled by the terms of the unit agreement?
- A Yes, sir. This well is to be situated 1,980 feet from the north line and 660 feet from the east line of Section 16, Township 23 South, Range 23 East. It is to be situated on New Mexico State Lease K-2856.
- A And the projected depth?

1	A	A The projected depth will be 10,000 feet.				
2	Q Would you please tell the Commission the percentage of					
3	commitment that you expect to obtain from both working					
4	interests and royalty interests?					
5	A Yes. Of the working interests, one hundred percent,					
6	and ninety-five percent of the royalty interests.					
7	Q In your opinion, will the operation of this area under					
8	the proposed unit agreement be in the interest of					
9	conservation and the prevention of waste?					
10	A	Yes, it will.				
11	Q Will the different institutions of the State of New					
12	Mexico receive their fair share of production if this					
13		is established?				
14	A	Yes, sir.				
15	Q	In the event of production, will the correlative rights				
16		of all parties be protected?				
17	A	Yes, sir.				
18		MR. RICHARDSON: That is all the direct examination				
19	we have. Are there any additional questions?					
20		MR. UTZ: Do you wish to offer your exhibits?				
21		MR. RICHARDSON: Yes, we will offer Exhibit One,				
22	the geological data.					
23		MR. UTZ: Without objection, Exhibit One will be				
24	ent <b>e</b>	red into the record of this case.				

(Whereupon Applicant's Exhibit One was admitted

```
209 SIMMS BLDG. # P.O. BOX 1092 # PHONE 243-6691 # ALBUQUERQUE, NEW MEXICO 87103
1216 First national bank bldg. East # Albuquerque, new mexico 87108
```

in evidence.) MR. UTZ: Does anyone have any questions of the witness? (No response) The witness may be excused. MR. UTZ: (Witness excused.) MR. UTZ: Case 4792 will be taken under advisement. 

STATE OF NEW MEXICO SS COUNTY OF BERNALILLO I, RICHARD E. McCORMICK, 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 Hearing 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. 

-	츳
•	×
	$\mathbf{\Xi}$
	$\equiv$
	$\aleph$
	$\sim$
	E
	⊏
	ૐ
	<u>—</u>
	뽔
	ഇ
	Ε
	_
	$\geq$
	<u> </u>
	़⊏
	≍
	മ്
•	ð
	_

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6691 PALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST PALBUQUERQUE, NEW MEXICO 87108

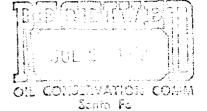
1		<u>I</u> <u>N</u> <u>D</u> <u>E</u> <u>X</u>						
2	WITNESS			PAGE				
3	ROBERT LEONARD							
4	Direct Exa	4						
5								
6								
7	EXHIBITS							
8	APPLICANT'S		ADMITTED	IDENTIFIED				
9	Exhibit #1	Geological records	10	3				
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

## BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
APPLICATION FOR APPROVAL OF
WALKER DRAW UNIT AGREEMENT
EDDY COUNTY, NEW MEXICO

New Mexico Oil Conservation Commission Santa Fe, New Mexico 87501

Care 4792



Comes the undersigned, David Fasken, with offices at Midland, Texas, and files herewith one copy of the proposed Unit Agreement for the development and operation of the Walker Draw Unit Area, Eddy County, New Mexico, and hereby makes application for approval of the said Unit Agreement as provided by law, and in support thereof states:

1. That the proposed Unit Area covered by said Agreement embraces 7,040.00 acres of land, more or less, more particularly described as follows:

Township 23 South, Range 23 East, NMPM

Sections 8, 9, 10: All

Sections 15, 16, 17: All

Sections 20, 21, 22: All

Sections 28, 29: All

Eddy County, New Mexico

- 2. That of the lands embraced within the proposed unit, 640.00 acres are State of New Mexico Lands, being 9.09% of the Area; 5,400.00 acres are lands of the United States, being 76.71% of the Area; and 1,000.00 acres are patented or fee land, being 14.20% of the Unit Area.
- 3. That application has been made for the designation of said area and for approval of the form of Unit Agreement by the Commissioner of Public Lands, State of New Mexico.

That Applicant is informed and believes, and upon such information and belief states, that the proposed unit area covers all or substantially all of the geological feature involved, and that in the event of a discovery of oil or gas thereon, that said Unit Agreement will permit the producing area to be developed and operated in the interest of conservation and the prevention of waste of the unitized substances.

- 4. That David Fasken is designated as the Unit Operator in said Unit Agreement, and as such, is given authority under the terms thereof to carry on all operations necessary for the development and operation of the unit area for oil and gas subject to all applicable laws and regulations. That said Unit Agreement provides for the drilling of an Initial Test Well to a depth sufficient to test the basal Morrow Formation unless unitized substances are discovered in paying quantities at a lesser depth, but in no event is operator required to drill to a depth greater than 10,000 feet.
- paying quantities on lands within the Unit Area, that the field or area can be developed more accommically and efficiently under the terms of said Unit Agreement, and that maximum recovery will be obtained or unitized substances and that cold Unit Agreement is in the interest of conservation of prevention of waste as contemplated by the New Mexico Oil Conservation rules and regulations.

- 6. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement, and after approval thereof by the Commissioner of Public Lands of the State of New Mexico and after approval by the United States Department of Interior, an approved copy will be filed with the New Mexico Oil Conservation Commission.
- 7. Wherefore, the undersigned applicant respectfully requests that a hearing be held before an examiner on the matter of the said Unit Agreement, and that upon said hearing, said Unit Agreement be approved by the New Mexico Oil Conservation Commission as being in the interest of conservation and the prevention of waste. Applicant respectfully requests that this matter be heard at the hearing scheduled for August 9, 1972.

Dated this 18th day of July, 1972.

Randolph M. Richardson, III

Attorney-at-Law P. O. Box 819

Roswell, New Mexico

on behalf of David Fasken, Applicant