Page ____ 1 STATE OF NEW MEXICO 1 ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION 2 State Land Office Building Santa Fe, New Mexico 3 14 February 1979 4 EXAMINER HEARING 5) 6 IN THE MATTER OF:) 7 Application of Yates Petroleum) CASE Corporation for a unit agree-) 6455 8 ment, Eddy County, New Mexico.) 9) 10 BEFORE: Daniel S. Nutter 11 12 TRANSCRIPT OF HEARING 13 14 APPEARANCES 15 16 For the Oil Conservation Lynn Teschendorf, Esq. Legal Counsel for the Division Division: 17 State Land Office Bldg. Santa Fe, New Mexico 87503 18 19 Joel Carson, Esq. For the Applicant: LOSEE, CARSON, AND DICKERSON 20 Artesia, New Mexico 21 22 23 24 25

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020 Plaza Blanca (505) 471-3462 Santa Fe, New Mexico 87501

	Page	2
1	INDEX	
2		
3	JERRY BOOK	
4	Direct Examination by Mr. Carson	3
5	Cross Examination by Mr. Nutter	10
6		
7		
8		
9		
10		
11		
12	EXHIBITS	
13		
14	Applicant Exhibit One, Unit Agreement	10
15	Applicant Exhibit Two, Letter	10
16	Applicant Exhibit Three, Application	10
17	Applicant Exhibit Four, Report	10
18	Applicant Exhibit Five, Areal Map	10
19	Applicant Exhibit Six, Cross Section	10
20	Applicant Exhibit Seven	10
21		
22 23		
23		
24 25		
]]		

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020 Plaza Blanca (605) 471-2462 Santa Fe, New Mexico 87501

Page 1 Call Case 6455. MR. NUTTER: 2 MS. TESCHENDORF: Case 6455. Application of 3 Yates Petroleum Corporation for a unit agreement, Eddy 4 County, New Mexico. 5 MR. CARSON: Mr. Examiner, my name is Joel 6 Carson, Losee, Carson, and Dickerson, P. A., Artesia, New 7 Mexico, appearing on behalf of the applicant. I have one 8 witness, Mr. Jerry Book. 9 (Witness sworn.) 10 11 JERRY BOOK 12 being called as a witness and having been duly sworn upon 13 his oath, testified as follows, to-wit: 14 15 DIRECT EXAMINATION 16 BY MR. CARSON: 17 Mr. Book, will you state your full name, 0. 18 please? 19 Jerry Wayne Book. Α. 20 By whom are you employed? Q. 21 Yates Petroleum Corporation in Artesia, New A. 22 Mexico. 23 Q. In what capacity? 24 As a geologist. A. 25 And, Mr. Book, have you previously testified 0.

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 8020 Plaza Blanca (505) 471-2462 Santa Fe, New Mexico 87601

4 Page before this commission? 1 A. Yes, I have. 2 Q. And have your qualifications been accepted? 3 Yes, they have. A. 4 MR. CARSON: Are his qualifications acceptable, 5 Mr. Examiner? 6 MR. NUTTER: Yes, they are. 7 Q. (Mr. Carson continuing.) Mr. Book, I'm going 8 to refer you to Applicant's Exhibit Number One, and ask 9 you to identify that. 10 A. Okay, Exhibit Number One is the unit agree-11 ment for the development and operation of the North Texas 12 13 Hills Unit. 14 Exhibit A of the unit agreement is a land plat showing the North Texas Hills Unit area in Sections 15 16, 17, 20, 21, 28, 29, 32, and 33 of Township 21 South, 16 17 Range 21 East, in Eddy County, New Mexico. It contains 18 5,120 acres, more or less. The plat shows Federal lands of 3,720 acres, being 72.66 percent of the total acreage; 19 State of New Mexico lands of 1,360 acres, being 26.56 of 20 21 the total acreage; patented or fee lands, 40 acres, being 22 .78 of the total acreage. 23 Individual lease boundaries are also shown. 24 Exhibit B of the unit agreement is a 25 schedule of lands and leases in the North Texas Hills unit,

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 1020 Plaza Blanca (606) 471-2462 Santa Fe, New Mexico 87501

Page 1 with the number of the lease corresponding to the tract 2 number on Exhibit A. 3 We expect to have 100 percent of the working 4 interests committed. 5 Q. Mr. Book, I refer you to Applicant's Exhibit 6 Number Two and ask you to identify that. 7 A. Exhibit Number Two is a letter from the 8 Office of the New Mexico Commissioner of Public Lands, Alex 9 J. Armijo, approving the unit agreement as to form and con-10 tent. 11 Q. And this, well, this letter is addressed to 12 Mr. Randolph M. Richardson. He was working for -- on behalf 13 of the Applicant, was he not? 14 Yes, he was. A. 15 All right. I refer you to Applicant's Ex-0. 16 hibit Number Three, and ask you to identify that. 17 Exhibit Number Three is a copy of the appli-A. 18 cation for designation of the North Texas Hills Unit area 19 and for approval of the depth of the initial test well to 20 be drilled thereupon. It was submitted to the USGS on 21 January 23rd, 1979. 22 I'll refer you to Applicant's Exhibit Number 0. 23 Four and ask you to identify that. 24 A. Exhibit Number Four is a written report, 25 which briefly summarizes the geologic reasons for forming

5

Blanca (505) 471-2462 e, New Mexico 87501 SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 8020 Plaza Blanca (606) 471-3457 Santa Fe, New Mexico 87501

6 Page. 1 the 8-section Federal unit. 2 Now, Mr. Book, was this Exhibit Number Four 0. prepared by you? 3 4 Yes, it was. А. 5 I refer you to Applicant's Exhibit Number Ο. 6 Five and ask you to identify that. 7 A. Exhibit Number Five is an areal map showing the well locations, indicating dry holes, and producing 8 9 wells, and the horizon of production. 10 It also shows the structural configuration 11 of the proposed North Texas Hills Unit. 12 It also displays Isolith contours of total 13 sand in the Upper Morrow. 14 Now, Mr. Book, I'll refer you to Applicant's 0. 15 Exhibit Number Six and ask if that was prepared by you or 16 under your supervision? 17 Yes, it was. A. 18 What does it purport to show? 0. 19 It is a stratigraphic cross section showing A. 20 the key wells with the last two wells, or the first two 21 wells on the west, being the two wells within the unit 22 area themselves. 23 Is that cross section marked off MR. NUTTER: 24 on Exhibit Number Five? 25 Yes, it is. It's A-A prime on Exhibit Number A.

SALLY WALTON BOYD DENTIFIED SHORTHAND REPORTER 020 Plaza Blanca (605) 471-2462 Santa Fe, New Mexico 87501

Five.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

24

25

Q. Now I refer you to Applicant's Exhibit Number Seven and ask if that was prepared by you or under your supervision?

Page

7

A. Yes, it was.

Q. Now, Mr. Book, could we go back to Applicant's Exhibit Number Four, which is the geologic report on the Texas Hills -- North Texas Hills Unit, and Exhibit Number Five, which you've previously identified, and ask if you would explain those two exhibits in more detail.

A. Okay. On Exhibit Number Five the structural configuration, the Apache fault zone cuts across the southwest corner of the North Texas Hills Unit. Structure contours are drawn on top of the Morrow Clastics on the downthrown block and they are drawn on top of the Abo Formation on the up-thrown block.

17 Lower Pennsylvanian rocks are not present18 on the up-thrown block.

Lower Pennsylvanian rocks are not present
on the up-thrown block this far north.

In the proposed North Texas Hills Unit a structural closure exists with the -2400 contour cutting into the sections included in the unit.

Q. Now, Mr. Book, what would be the ideal location in that unit for the drilling of a well?

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020 Plaza Blanca (505) 471-2462 Santa Fe, New Mexico 87501

8 Page 1 It would be in the center of the closure. A. 2 0. As shown on your Exhibit Five? 3 Right. A. 4 Yet you've chosen this Mallard-Campbell Well Q. 5 as being -- as the well that you're going to use, to re-enter, 6 is that correct? 7 Why is that? 8 The Mallard No. 1 Federal 21 in Section 21 A. 9 was drilled to a depth of 6200 feet. It was drilled down 10 into Canyon formation. It did not penetrate the Morrow 11 formation, and because of economic reasons we have chose 12 to re-enter that well and take the well approximately 2000 13 feet deeper, which would test 200 feet of the Upper Miss-14 issippian limestone. 15 It is in prime or optimum position as shown 16 on Exhibit Five by dotted -- or dashed contour lines, or 17 isolith contour lines, of total Upper Morrow sand. 18 0. Now would you correlate this Mallard Well 19 with the Pennzoil Federal Well? 20 I would like to -- on Exhibit Number A. Okay. 21 Six, the Mallard Well and the Pennzoil Well, the Pennzoil 22 Well is the first well on the left -- on the west or on 23 the left of the cross section. 24 Correlating it to the Mallard Well, you'll 25 see that the Mallard Well did not penetrate the Morrow.

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020Plaza Blanca (605) 471-3462 Santa Fe, New Mexico 87501

1 The next well on the cross section is the 2 Huber IA Federal No. 2. Yates drilled this well, completed 3 it in the Canyon formation in a thin Canyon carbonate. The 4 Morrow Sand in this well, the Upper Morrow Sand, which I've 5 been referring to, the same one that is Isolithed, was 6 tested and was water wet. It had good pressures and for 7 this -- this well right here is the reason that the Mallard 8 is set up, because we are getting up dip from that well. 9 To try to avoid the water? Q. 10 And try to avoid the water. We're up --A. 11 would be at least 300 or 400 feet up dip from that Morrow 12 level. 13 Also, in the Mallard well, on the cross 14 section the upper zone is a basal Abo-Wolfcamp section. 15 This zone was perforated in our Huber IA No. 1 Federal 16 Well. It was treated and after swab testing there was a 17 slight show of gas and condensate with the fluid level at 18 approximately 1500 feet. 19 In the Mallard Well this interval from the 20 mud log had drained gas kicks, sample porosity, and oil 21 flourescence. 22 There is a good to fair porosity on the 23 CNLFDC log on Exhibit Six through this interval. This 24 well was plugged and abandoned without the shows being 25

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020 Plaza Blanca (606) 471-2462 Santa Fe, New Mexico 87501

tested.

9

Page .

In the Pennzoil Well, the Federal -- No. 1 Federal 28 in Section 23, porosity also occurred in this zone. It was not tested, either. There wasn't a mud logger ran through the interval, so no shows were recorded, but both of these wells have very good potential in this basal Abo zone also to make wells. 6

Page

Mr. Book, is it your opinion that the -- in 0. 7 the event that oil and gas is discovered in paying quantities 8 on lands within the unit area that the field or area can 9 be developed more economically and efficiently under terms 10 of the unit agreement to the end that maximum recovery will 11 be obtained, and that the unit agreement is in the interest 12 13 of conservation, prevention of waste, and is otherwise in 14 accordance with good conservation practices?

> A. I do.

MR. CARSON: I would like to move the 16 17 Applicant's -- the introduction of Applicant's Exhibits, 18 Mr. Examiner.

What do you have, one through --MR. NUTTER: MR. CARSON: One through Seven. MR. NUTTER: Applicant's Exhibits One through

Seven will be admitted in evidence.

CROSS EXAMINATION

25 BY MR. NUTTER:

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020Plaza Blanca (505) 471-2462 Santa Fe, New Mexico 87501

1

2

3

4

5

15

19

20

21

22

23

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020 Plaza Blanca (505) 471-2462 Santa Fe, New Mexico 87501

0. Mr. Book, in the event that this Mallard 1 re-entry is unsuccessful, would your company then consider 2 drilling within that closure that you said would be the 3 ideal location in the unit? 4 Α. Again, it depends on how successful we are. 5 The next option is re-entering the Pennzoil 28 Well, and 6 there are several zones in that well that weren't tested. 7 I imagine that would be the next thing to do in the unit 8 area, would be --9 10 0. Slowly work your way up the structure. A. Right. For economic reasons. The wells 11 are already there. It's cost us -- the drilling in that 12 13 area, it's cost us a lot of money to set surface -- or 14 intermediate casing, so it's kind of hard to, you know --And do both those wells have their inter-15 0. 16 mediate strings? 17 A. Yes, they do. 18 Q. And this Mallard Well only has -- it's got a present TD of about 6200, and you'll only have to --19 6200 feet. 20 A. 21 -- take it down 2000 feet. 0. 22 Right, below 8000 feet. A. 23 MR. NUTTER: You're going to have someone 24 else testify as to the land operations in this unit? 25 MR. CARSON: No, sir, I did not intend to.

11

Page_

Page _____

1	0. (Mr. Nutter continuing.) Okay, well, what	
2	is the status of the sign-up on this unit, Mr. Book, are	
3	you acquainted with those?	
4	MR. CARSON: Maybe I can ask that question.	
5	You have 100 percent committment to the unit, do you not?	
6	A. Right. I asked our head land man, Jack	
7	McCaw, before I left, and he was sure we were going to have	
8	100 percent committment.	
9	Randy Richardson was out of town and we	
10	couldn't get hold of him.	
11	MR. CARSON: That's our understanding from	
12	Mr. Richardson, Mr. Examiner, that there had been 100 per-	
13	cent agreement to the unit.	
14	MR. NUTTER: Apparently the major working	
15	interest owners are Pennzoil and Wainoco and Huber, Hillin,	
16	and Depco, and they have committed their interests to it,	
17	or have indicated they're going to commit their interests?	
18	A. All but Section 17 was brought to Yates	
19	Petroleum by a farm-out by Hillin, and in Section 17 we've	
20	acquired a farm-out from Huber.	
21	Q. I see, so	
22	A. This is	
23	Q it won't be these companies that are	
24	listed as lessees of record that are members of the unit.	
25	They've farmed-out to Yates.	

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020 Plaza Blanca (505) 471-2462 Santa Fe, New Mexico 87501

13 Page _ 1 A. They have farmed-out to Yates. 2 I see, and you do have tentative approval A. 3 from the Commissioner of Public Lands and have you heard 4 yet from the United State GS? This thing was filed with 5 them on January 23rd. 6 I have not heard anything from them. A. 7 MR. MAHFOOD: I believe we have verbal ap-8 proval on that. 9 MR. NUTTER: See, I knew we had to keep 10 that guy sworn. 11 Are there any further questions of Mr. Book? 12 He may be excused. And Mr. Mahfood may be excused. 13 Did you have anything further, Mr. Carson? 14 MR. CARSON: No, nothing further. 15 MR. NUTTER: If there is nothing further 16 in Case Number --17 Does anyone have anything to offer in Case 18 Number 6455? 19 If there is nothing further we'll take the 20 case under advisement. 21 (Hearing concluded.) 22 23 24 25

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020Plaza Blanca (805) 471-2462 Santa Fe, New Mexico 87501 SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3020Plaza Blanca (605) 471-2462 Santa Fe, New Mexico 87501

1 2 REPORTER'S CERTIFICATES 3 4 I, SALLY W. BOYD, a Court Reporter, DO HEREBY 5 CERTIFY that the foregoing and attached Transcript of 6 Hearing before the Oil Conservation Division was reported 7 by me; that the said transcript is a full, true, and correct 8 record of the hearing, prepared by me to the best of my 9 ability, knowledge and skill, from my notes taken at the 10 time of the hearing. 11 Sally W. Boyd, C.S.R. 12 <u>C-5R</u> 13 14 15 16 I do hard a co. 17 100 18 Excamer 19 ervation Division 20 21 22 23 24 25

Page _