

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 26 July 1989

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Union Oil Company of CASE  
10 California for an unorthodox gas well 9704  
11 location, Lea County, New Mexico, and

12 Application of Union Oil Company of CASE  
13 California for an unorthodox gas well 9705  
14 location, Lea County, New Mexico.

15 BEFORE: David R. Catanach, Examiner  
16  
17  
18

19 TRANSCRIPT OF HEARING

20 A P P E A R A N C E S

21 For the Division: Robert G. Stovall  
22 Attorney at Law  
23 Legal Counsel to the Division  
24 State Land Office Building  
25 Santa Fe, New Mexico

For Union Oil Company of William F. Carr  
California: Attorney at Law  
CAMPBELL and BLACK, P. A.  
P. O. Box 2208  
Santa Fe, New Mexico 87501

## I N D E X

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ROBERT M. ALTANY

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## E X H I B I T S

Union Oil Exhibit One, Land Plat 6

Union Oil Exhibit Two, Archaeological Report 8

Union Oil Exhibit Three, Plat 9

Union Oil Exhibit Four, Type Log 9

Union Oil Exhibit Five, Porosity Map 10

1 MR. CATANACH: At this time  
2 we'll call Case 9704, the application of Union Oil Company  
3 of California for an unorthodox gas well location, Lea  
4 County, New Mexico.

5 MR. CARR: May it please the  
6 Examiner, my name is William F. Carr, with the law firm  
7 Campbell & Black, P.A., of Santa Fe, New Mexico.

8 We represent Union Oil Com-  
9 pany of California.

10 At this time, Mr. Examiner, I  
11 would request that you also call Case 9705. This is also  
12 an application of Union Oil Company for an unorthodox gas  
13 well location. These are in spacing or proration units  
14 which offset one another. The presentations will overlap.  
15 I have the same witness in both cases and I would therefore  
16 request they be consolidated for purposes of hearing.

17 MR. CATANACH: Okay, at this  
18 time we'll call Case 9705, the application of Union Oil  
19 Company of California for an unorthodox gas well location,  
20 Lea County, New Mexico.

21 Are there any other appear-  
22 ances in either one of these cases?

23 Will the witnesses please  
24 stand to be sworn in?

25

1 (Witness sworn.)

2

3

ROBERT M. ALTANY,

4

being called as a witness and being duly sworn upon his  
5 oath, testified as follows, to-wit:

6

7

DIRECT EXAMINATION

8

BY MR. CARR:

9

Q

Will you state your full name for the  
10 record, please?

11

A

Robert M. Altany.

12

Q

Mr. Altany, where do you reside?

13

A

Midland, Texas.

14

Q

By whom are you employed and in what  
15 capacity?

16

A

By Unocal as a geologist.

17

Q

Have you previously testified before  
18 this Division?

19

A

No, sir.

20

Q

Would you summarize for Mr. Catanach  
21 your educational background?

22

A

Bachelor of Science, Duke University,  
23 1977, and a Master of Science, Northern Arizona University,  
24 1983.

25

Q

Would you review your work experience

1 since graduation from college?

2 A For 9-1/2 years I've been employed by  
3 Unocal as a geologist in Midland, Texas.

4 Q Does your geographic area of responsi-  
5 bility with Unocal include that portion of southeastern New  
6 Mexico which is the subject of today's application?

7 A Yes, sir.

8 Q Are you familiar with the subject area?

9 A Yes, sir.

10 Q Are you familiar with the application  
11 filed on behalf of Union in this case?

12 A Yes.

13 MR. CARR: We tender Mr. Al-  
14 tany as an expert witness in petroleum geology.

15 MR. CATANACH: He is so  
16 qualified.

17 Q Mr. Altany, what does Union seek with  
18 this application?

19 A We seek two unorthodox locations in the  
20 Morrow formation.

21 Q And are these in the (unclear) Morrow  
22 Gas Pool?

23 A Yes, they are.

24 Q Would you refer to what has been marked  
25 for identification as Unocal Exhibit Number One, identify

1 that for Mr. Catanach and then review the information  
2 contained on this exhibit?

3 A This is a land plat of the subject area.  
4 It shows the outlines of two Union-operated units. The  
5 proposed locations are indicated by red dots and the  
6 standard proration units are shaded in yellow.

7 Q Now, Section 20 is a one section unit,  
8 the North Madero Unit?

9 A Yes.

10 Q And then the other is the Madero Unit to  
11 the south.

12 A Yes.

13 Q I'd like to direct your attention first  
14 to the well in Section Number 29, in the Madero Unit, and  
15 ask you just to state what the proposed unorthodox location  
16 is for this well.

17 A It's 460 from the north line and 1980  
18 feet from the east line of Section 29.

19 Q And what would be the nearest standard  
20 location that you could utilize for drilling this well?

21 A 660 from the north and 1980 from the  
22 east.

23 Q Was that the location originally consi-  
24 dered by Union when they started considering the develop-  
25 ment of this acreage?

1           A           Yes, it was.

2           Q           Toward whom are you actually moving this  
3 well location?

4           A           Toward Union-operated acreage.

5           Q           Are there any offsetting operators or  
6 owners of undrilled leases toward whom you're moving this  
7 well that would be entitled to notice under Division rules?

8           A           No.

9           Q           Would you explain to Mr. Catanach why  
10 Union is seeking an unorthodox location for this particu-  
11 lar well?

12          A           An archaeological report identified a  
13 cultural site on the proposed location and required that we  
14 move 200 feet to the north.

15          Q           Are there any locations in the spacing  
16 units that are available to Union because of this archaeo-  
17 logical report?

18          A           None that would justify drilling the  
19 well.

20          Q           And if you attempt to move the well to  
21 the west, would you also run into problems with this  
22 archaeological report?

23          A           Yes.

24          Q           Are there any standard locations avail-  
25 able to you in the north half of 29 in which you would not

1 also encounter these archaeological problems?

2 A No.

3 Q I'd like you to identify what has been  
4 marked as Union Exhibit Number Two.

5 A This is the archaeological report on  
6 which -- which the application is based.

7 Q And this is the only reason that you're  
8 seeking an unorthodox location for this well?

9 A Yes, it is.

10 Q In your opinion will a well at the pro-  
11 posed location effectively drain the reserves under the  
12 north half of Section 29?

13 A Yes, it will.

14 Q Now I'd like to direct your attention  
15 to the well located on the west half spacing unit in Sec-  
16 tion 20, and would you identify for Mr. Catanach the cur-  
17 rent proposed unorthodox location for that well?

18 A That one is 1800 feet from the south  
19 line and 2060 feet from the west line of Section 20.

20 Q And what was the original proposed  
21 location for that well?

22 A 1980 from the west and 1980 from the  
23 south.

24 Q And that would have been a standard  
25 location?

1           A           Yes, it would.

2           Q           Would you refer to Union Exhibit Number  
3 Three and identify that for the Examiner, please?

4           A           This is a plat showing surface features  
5 of the area. It shows a pipeline which passed through our  
6 original proposed location.

7           Q           And this pipeline requires moving from  
8 that location, is that correct?

9           A           Yes, it does.

10          Q           Are there other standard locations  
11 available to Union in the west half of Section 20 that you  
12 would recommend drilling a well?

13          A           No.

14          Q           What would preclude you from drilling a  
15 well at another location on that spacing or proration unit?

16          A           Geology indicates that a well drilled at  
17 other legal locations would be riskier than the proposed  
18 location and of lower economic potential.

19          Q           All right. Would you now refer to what  
20 has been marked Union -- Unocal Exhibit Number Four and  
21 identify that for the Examiner?

22          A           This is a type log of the Unocal North  
23 Madero Federal No. 1 in Section 20. It shows the primary  
24 objective zone in the Middle Morrow, shown as the isopach  
25 interval, and several other secondary objectives.

1           Q           Let's now move to Exhibit Number Five,  
2 the isopach map, and if you would now review the informa-  
3 tion on that exhibit for Mr. Catanach.

4           A           This is a porosity isopach map using a 5  
5 percent porosity cutoff, showing the thickness of -- show-  
6 ing the thickness of pay in the primary zone in the Middle  
7 Morrow formation.

8           Q           And what does this tell you about the  
9 ability of Union to move a well north of the proposed  
10 location?

11          A           To do so, the pay thickness would de-  
12 crease and our risk would be increased and the productivity  
13 of the well would decrease.

14          Q           Are you the individual who's actually  
15 picked this location for Union?

16          A           Yes.

17          Q           Could you recommend to your management  
18 the development of this acreage with a well farther north  
19 on the west half spacing or proration unit?

20          A           No, I could not.

21          Q           Toward -- this well shows both the ori-  
22 ginal standard location and the new proposed unorthodox  
23 location. Toward whom are you actually moving?

24          A           Toward Unocal-operated acreage.

25          Q           Are there any other offsetting operators

1 or owners to whom notice is required to be given under  
2 Division rules?

3 A No, sir.

4 Q In your opinion will granting these  
5 applications for unorthodox well locations be in the best  
6 interest of conservation, the prevention of waste and the  
7 protection of correlative rights?

8 A Yes.

9 Q Do you believe from each of these pro-  
10 posed unorthodox locations you can effectively drain the  
11 reserves under the acreage dedicated to each of those  
12 wells?

13 A Yes.

14 Q Were Exhibits One through Five either  
15 prepared by you or compiled under your direction and super-  
16 vision?

17 A Yes, they were.

18 MR. CARR: At this time, Mr.  
19 Catanach, we would move the admission of Unocal Exhibits  
20 One Through Five.

21 MR. CATANACH: Exhibits One  
22 through Five will be admitted as evidence.

23 MR. CARR: That concludes my  
24 direct examination of Mr. Altany.

25

1  
2 CROSS EXAMINATION

3 BY MR. CATANACH

4 Q Mr. Altany, in both cases your -- your  
5 new -- or your new location you're moving toward thicker  
6 sand in the Morrow, is that correct?

7 A Yes, sir.

8 Q Is that the only objective in these two  
9 wells, is the Morrow?10 A It is. There is other production in the  
11 area but we don't feel that in these particular locations  
12 it's -- we cannot demonstrate it's economic.13 MR. CATANACH: I have no fur-  
14 ther questions of the witness. He may be excused.15 MR. CARR: I have nothing fur-  
16 there in these consolidated cases.17 MR. CATANACH: There being  
18 nothing further in Case 9704 and 9705, they will be taken  
19 under advisement.20 (Hearing concluded.)  
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## C E R T I F I C A T E

I, SALLY W. BOYD, C. S. R. DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9704, 9705 heard by me on July 26 1988.

David R. Catanah, Examiner  
Oil Conservation Division