	STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION			
2	STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO			
3	26 July 1989			
<b>4</b> <b>5</b>	EXAMINER HEARING			
6	IN THE MATTER OF:			
7	Application of Union Oil Company of CASE California for an unorthodox gas well 9704			
8	location, Lea County, New Mexico, and			
9	Application of Union Oil Company of CASE California for an unorthodox gas well 9705			
10	location, Lea County, New Mexico.			
11				
12	BEFORE: David R. Catanach, Examiner			
14				
15				
16	TRANSCRIPT OF HEARING			
17				
18	APPEARANCES			
19				
20	For the Division:  Robert G. Stovall  Attorney at Law  Legal Counsel to the Division			
21	State Land Office Building Santa Fe, New Mexico			
22	For Union Oil Company of William F. Carr			
24	California: Attorney at Law CAMPBELL and BLACK, P. A.			
	Santa Fe, New Mexico 87501			
25				
	CAMPBELL and BLACK, P. A. P. O. Box 2208			

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County, New Mexico.

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

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

represent Union Oil Com-We pany of California.

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

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

Are there any other appearances in either one of these cases?

Will the witnesses please stand to be sworn in?

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1
                         (Witness sworn.)
2
 3
                         ROBERT M. ALTANY,
    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
                       Will you state your full name for the
             Q
10
    record, please?
11
                       Robert M. Altany.
             Α
12
                       Mr. Altany, where do you reside?
             Q
13
                       Midland, Texas.
             Α
14
                       By whom are you employed and in what
             Q
15
    capacity?
16
             A
                      By Unocal as a geologist.
17
                      Have you previously testified before
             Q
18
    this Division?
19
                       No, sir.
             Α
20
             Q
                       Would you summarize for Mr. Catanach
21
    your educational background?
22
                       Bachelor of Science, Duke University,
             Α
23
    1977, and a Master of Science, Northern Arizona University,
24
    1983.
25
                       Would you review your work experience
             Q
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١
    since graduation from college?
2
                       For 9-1/2 years I've been employed by
3
    Unocal as a geologist in Midland, Texas.
                       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
                       Yes, sir.
             Α
8
             Q
                       Are you familiar with the subject area?
9
                       Yes, sir.
             Α
10
                       Are you familiar with the application
             Q
11
    filed on behalf of Union in this case?
12
                       Yes.
13
                                 MR.
                                       CARR:
                                               We tender Mr. Al-
14
    tany as an expert witness in petroleum geology.
15
                                  MR.
                                        CATANACH:
                                                          is so
                                                     He
16
    qualified.
17
             0
                       Mr.
                            Altany, what does Union seek with
18
    this application?
19
             Α
                       We seek two unorthodox locations in the
20
    Morrow formation.
21
             Q
                       And are these in the (unclear) Morrow
22
    Gas Pool?
23
             Α
                       Yes, they are.
24
                       Would you refer to what has been marked
             Q
25
    for identification as Unocal Exhibit Number One, identify
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1 that for Mr. Catanach and then review the information 2 contained on this exhibit? 3 This is a land plat of the subject area. Α 4 It shows the outlines of two Union-operated units. 5 proposed locations are indicated by red dots and the 6 standard proration units are shaded in yellow. 7 Now, Section 20 is a one section unit, Q 8 the North Madero Unit? 9 Α Yes. 10 Q And then the other is the Madero Unit to 11 the south. 12 Yes. Α 13 I'd like to direct your attention first 0 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 It's 460 from the north line and 1980 Α 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 Α 660 from the north and 1980 from the 22 east. 23 Was that the location originally consi-Q 24 dered by Union when they started considering the develop-25 ment of this acreage?

1	А	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 undril	led 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 t	he proposed location and required that we
14	move 200 feet to t	he north.
15	Q	Are there any locations in the spacing
16	units that are av	ailable 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 rep	ort?
23	A	Yes.
24	Q	Are there any standard locations avail-
25	able to you in th	e north half of 29 in which you would not

8 1 also encounter these archaeological problems? 2 No. Α 3 I'd like you to identify what has been Q 4 marked as Union Exhibit Number Two. 5 This is the archaeological report on 6 which -- which the application is based. 7 And this is the only reason that you're Q 8 seeking an unorthodox location for this well? 9 Yes, it is. Α 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 Yes, it will. Α 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 That one is 1800 feet from the south 19 line and 2060 feet from the west line of Section 20. 20 And Q what was the original proposed 21 location for that well? 22 1980 from the west and 1980 from the Α 23 south. 24 And that would have been a standard Q 25 location?

1 Yes, it would. Α 2 Would you refer to Union Exhibit Number Q 3 Three and identify that for the Examiner, please? 4 Α This is a plat showing surface features 5 of the area. It shows a pipeline which passed through our original proposed location. 7 Q And this pipeline requires moving from 8 that location, is that correct? 9 Yes, it does. Α 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 Α No. 14 Q What would preclude you from drilling a 15 well at another location on that spacing or proration unit? 16 Α Geology indicates that a well drilled at 17 locations would be riskier than the proposed legal 18 location and of lower economic potential. 19 All right. Would you now refer to what Q 20 has been marked Union -- Unocal Exhibit Number Four and 21 identify that for the Examiner? 22 This is a type log of the Unocal North Α 23 Madero Federal No. 1 in Section 20. It shows the primary 24 objective zone in the Middle Morrow, shown as the isopach

interval, and several other secondary objectives.

25

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. 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 To do so, the pay thickness would decrease and our risk would be increased and the productivity 12 13 of the well would decrease. 14 Q Are you the individual who's actually 15 picked this location for Union? 16 Α 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 Α No, I could not. 21 Toward -- this well shows both the ori-Q 22 location and the new proposed unorthodox ginal standard 23 location. Toward whom are you actually moving? 24 Toward Unocal-operated acreage. Α 25 Q Are there any other offsetting operators

1 or owners to whom notice is required to be given under 2 Division rules? 3 No, sir. Α 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 Α Yes. 9 Do you believe from each of these pro-Q 10 unorthodox locations you can effectively drain the 11 reserves under the acreage dedicated to each of those 12 wells? 13 Α Yes. 14 Were Exhibits One through Five either Q 15 prepared by you or compiled under your direction and super-16 vision? 17 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

CROSS EXAMINATION			
BY MR. CATANACH			
Q Mr. Altany, in both cases your your			
new or your new location you're moving toward thicker			
sand in the Morrow, is that correct?			
A Yes, sir.			
Q Is that the only objective in these two			
wells, is the Morrow?			
A It is. There is other production in the			
area but we don't feel that in these particular locations			
it's we cannot demonstrate it's economic.			
MR. CATANACH: I have no fur-			
ther questions of the witness. He may be excused.			
MR. CARR: I have nothing fur-			
there in these consolidated cases.			
MR. CATANACH: There being			
nothing further in Case 9704 and 9705, they will be taken			
under advisement.			
(Hearing concluded.)			

CERTIFICATE

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 CSP

a complete record of the proceedings in the Examiner hearing of Case No. 9704, 9707 heard by me on 1989.

Land K-lutanah, Examiner

Oil Conservation Division