1 2 3 4 5	STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 23 August 1989 EXAMINER HEARING
6	IN THE MATTER OF:
7 8	Application of Union Oil Company of CASE California for compulsory pooling, Lea 9714 County, New Mexico.
9	-
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11	
12	BEFORE: David R. Catanach, Examiner
13	
14	
15 16	TRANSCRIPT OF HEARING
17	
18	APPEARANCES
19	For the Division: Robert G. Stovall
20	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 California: Attorney at Law
23	California: Attorney at Law CAMPBELL and BLACK, P. A. P. O. Box 2208
24	Santa Fe, New Mexico 87501
25	

1	MR. CATANACH: At this time
2	we'll call Case 9714, the application of Union Oil Com-
3	pany of Californía for compulsory pooling, Lea County, New
4	Mexico.
5	Are there appearances in this
6	case?
7	MR. CARR: May it please the
8	Examiner, my name is William F. Carr, with the law firm
9	Campbell & Black, P. A., of Santa Fe. We represent Union
10	Oil Company and I have two witnesses.
11	MR. CATANACH: Any other ap-
12	pearances?
13	Will the witnesses please
14	stand to be sworn.
15	
16	(Witnesses sworn.)
17	
18	LARRY MURPHY,
19	being called as a witness and being duly sworn upon his
20	oath, testified as follows, to-wit:
21	
22	DIRECT EXAMINATION
23	BY MR. CARR:
24	Q Will you state your full name and place
25	of residence?

		4
1	А	Larry Murphy, Midland, Texas.
2	Q	Mr. Murphy, by whom are you employed and
3	in what capacity?	
4	A	Union Oil Company of California as a
5	landman.	
6	Q	Have you previously testified before
7	this Division an	d had your credentials as a landman ac-
8	cepted and made a	matter of record?
9	A	Yes.
10	Q	Are you familiar with the application
11	filed in this case	on behalf of Union Oil Company?
12	A	Yes, I am.
13	Q	Are you familiar with the subject area?
14	А	Yes, I am.
15		MR. CARR: Are the witness'
16	qualifications acc	eptable?
17		MR. CATANACH: They are.
18	Q	Mr. Murphy, would you briefly state what
19	Union seeks in thi	s hearing?
20	A	Union Oil Company of California seeks
21	compulsory poolin	g for a standard proration unit for a
22	Morrow gas well in	Lea County, New Mexico.
23	Q	Have you prepared certain exhibits for
24	presentation here	today?
25	А	Yes, I have.

		J
1	Q Would	you refer to what has been marked
2	for identification as	Union Exhibit Number One, identify
3	that, and review it for	Mr. Catanach?
4	A Exhib	it One is a land plat of the imme-
5	diate area. The acre	age marked in yellow is Union's
6	partial has partial i	nterest in this acreage.
7	The a	rea outlined in blue is a proration
8	unit and the red dot is	the well location.
9	Q And	you indicated the primary objective
10	in this well is the Morr	ow formation?
11	A Yes,	it is.
12	Q And w	hat pool is this projected to?
13	A This	is the Quail Ridge Gas Pool.
14	Q Would	you identify now what has been
15	marked Union Exhibit Num	ber Two?
16	A This	is the working interest ownership
17	list. If you'll go to E	xhibit B
18	Q The f	irst pages on this are ownership
19	A Owner	ship.
20	Q br	oken out by tract, is that correct?
21	A Yes,	sir, it is.
22	Q And w	hat is Exhibit B?
23	A Exhib	it B is the ownership of the well,
24	of the proration unit.	
25	Q So t	his is a composite of the preceding

6 1 pages? 2 Yes, it is. Α 3 Would you, using -- referring to that 4 exhibit, review the ownership in the tract and advise the 5 Examiner as to the percent that has voluntarily committed 6 to the well? 7 We have, as of today, voluntary joinder Α 8 is Grace Petroleum, Edward R. Hudson Trust, William A. Hud-9 son, and Union Oil Company of California, which gives us 10 an 84.62 percent voluntary. 11 What is the status of the other interest 12 owners who are listed on Exhibit B? 13 We have made contact with them. We have 14 sent them letters. They are reviewing it. 15 Ω Okay. Would you refer now to what has 16 been marked as Unocal Exhibit Number Three and identify 17 that, please? 18 This is Union Oil Company of Califor-Α 19 nia's Authority for Expenditure. 20 Has it been provided to the other in-0 21 terest owners in the north half of the section? 22 Yes, it has. Λ 23 What are the totals as reflected on this () 24 AFE? 25 A completed well cost is \$1,248,000; dry A.

1 hole cost is \$755,000. 2 Are these costs in line with what is 3 charged by other operators in the area for similar wells? 4 Yes, they are. 5 Q Would you now identify what has been 6 marked as Exhibit Number Four? 7 Α This is my letter that I mailed to all 8 the working interest owners in the proration unit, accompanied with an AFE. 10 Since mailing this letter to them have 11 you been in communication by telephone with each of the 12 interest owners whom you're seeking to pool today? 13 Yes, I have. Α 14 Would you refer to what has been marked Q 15 for identification as Union Exhibit Number Five? 16 Α This is an affidavit prepared by Camp-17 bell & Black notifying all the owners in the pool of the --18 of this hearing today. 19 Marked as Exhibit Six and Seven are 20 letters. Could you just identify those for Mr. Catanach? 21 Α Exhibit Six is a letter from William A. 22 Hudson and Edward R. Hudson giving Union support for the 23 parallel application and the operator of the proposed well. 24 And Exhibit Number Seven? Q 25 Α Exhibit Number Seven is a letter from

1	Grace Petroleum Company with a signed AFE stipulating that
2	a mutual agreement on a joint operating agreement is the
3	only thing holding them up.
4	Q In your opinion have you made a good
5	faith effort to locate and obtain the voluntary joinder
6	form all the interest owners in the north half of Section
7	6?
8	A Yes, I have.
9	Q Were Exhibits One through Six, or One
10	through Seven, either prepared by you or compiled under
11	your direction and supervision?
12	A Yes, they were.
13	MR. CARR: At this time we'd
14	move the admission of Union Exhibits One through Seven.
15	MR. CATANACH: Exhibits One
16	through Seven will be admitted as evidence.
17	MR. CARR: That concludes my
18	direct examination of this witness.
19	
20	CROSS EXAMINATION
21	BY MR. CATANACH:
22	Q Mr. Murphy, have you been in contact
23	with the uncommitted parties?
24	A Yes, sir, I have.
25	Q And you you don't know at this point
	2 . 2

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what they're going to do?
2
                       No, sir, I don't.
3
                       Has Union Oil Company drilled a Morrow
             Q
4
    well in this area?
5
                       Yes, we have.
             Α
6
                       Recently?
             Q
7
                       I'd like to turn that over, that ques-
             Α
8
          to our geologist. He can give you more details on
9
    that.
10
                                      CATANACH:
                                                   That's all I
                                 MR.
11
    have of the witness. He may be excused.
12
13
                         ROBERT M. ALTANY,
14
    being called as a witness and being duly sworn upon his
15
    oath, testified as follows, to-wit:
16
17
                        DIRECT EXAMINATION
18
    BY MR. CARR:
19
                       Will you state your full name for the
             Q
20
    record, please?
21
                       Robert Altany.
             Α
22
                       Mr. Altany, where do you reside?
             Q
23
                       Midland, Texas.
             Α
24
                       By whom are you employed and in what
             Q
25
    capacity?
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1 By Unocal as a geologist. Α 2 Have you previously testified before Q 3 this Division and had your credentials as a geologist ac-4 cepted and made a matter of record? 5 Α Yes. 6 Q Are you familiar with the application of 7 Unocal in this case? 8 Α Yes. 9 Are you familiar with the subject area? Q 10 Α Yes. 11 MR. CARR: Are the witness' 12 qualifications acceptable? 13 MR. CATANACH: They are. 14 Altany, are you prepared to make a Q Mr. 15 recommendation to the Examiner as to the risk penalty that 16 should be assessed against any nonparticipating interest 17 owner? 18 Yes, we recommend 200 percent. Α 19 Would you refer to what has been marked Q 20 as Unocal Exhibit Number Eight, identify this, and then in 21 reviewing this exhibit explain your reasoning for this 22 recommended penalty? 23 Α This is a montage of three geologic maps 24 and a type log of the primary objective Middle Morrow sand-25 stone.

In the lower left, the type log shows colored in red the porosity in several of the projected sandstones in the area and indicated are two of them, the ones I'm calling M2T and M1T, which we expect to be the two principal objectives at the proposed location.

In the upper left is the structure map on the -- on the Middle Morrow horizon as it's marked on the type log. We don't expect structure to have too much influence in the Middle Morrow in the subject area.

In the upper right we have the porosity isopach of the M1T Zone. It produces in the -- immediately to the north of the proposed location in the Fasken Wayne Federal No. 2 Well.

What is of note here is that these channel sandstones and their associated beds are -- tend to be limited in cross sectional area, long and linear, a lenticular section. Sometimes they're difficult to predict, especially we have limited well control in the southeast quadrant of the map, which introduces some factor of risk.

Similarly the M2 to the lower right, the M2T porosity isopach, also shows a curving, more or less linear lenticular sand body. It also produces immediately to the north of the -- of the proposed location and there again, in some -- in some areas control, well control on

1 the geometry of this sand body is somewhat limited. 2 Also, I should point out that as you 3 proceed away from the center of these channel sandstones the porosity becomes more broken up into individual beds. 5 The degree of porosity is often lower, and sometimes 6 there's interstitial clays which reduce your permeability. 7 And a third risk factor, actually, is 8 that the Morrow is an extremely sensitive formation to 9 drilling fluids, to completion practices, and you can often 10 create formation damage during either drilling or comple-11 tion and that accounts for some variation in the producti-12 vity of the well. 13 In constructing the isopach maps did you 14 have any data to rely on other than well control informa-15 tion? 16 Α No, sir. 17 And there's no well control in the Mor-18 row south or east of the proposed location, is that cor-19 rect? 20 Α Not for several miles. 21 Do you believe there's a chance that Q 22 Union could drill a well at this location that would, in 23 fact, not be a commercial success? 24 That is always a risk with the Morrow. Α 25 Have you made an estimate of the over-Q

1	head and administrative costs to be incurred while drilling
2	a well and also while producing it, if in fact it is a
3	successful well?
4	A Unocal has.
5	Q And what are those figures?
6	A The overhead while I can't can't
7	recall the overhead while drilling.
8	The overhead during production is ap-
9	proximately \$1200 a year.
10	Q Have these figures been agreed to in an
11	operating agreement between Union and Grace?
12	A Yes, sir.
13	MR. CARR: Mr. Catanach, I can
14	either call an engineering witness to testify as to those
15	exact numbers or I can submit those to you after the
16	hearing in writing.
17	MR. CATANACH: Let's get a
18	witness.
19	MR. CARR: Okay.
20	Q Does Union Oil Company of California
21	seek to be designated operator of the proposed well?
22	A Yes, we do.
23	Q In your opinion will granting this ap-
24	plication be in the best interest of conservation, the
25	prevention of waste, and the protection of correlative

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rights?
2
             Α
                       Yes.
3
                       And how soon does Union plan to go for-
             Q
    ward and spud this well?
5
                       In the first week of September we plan
             Α
6
    to spud another well five miles to the west. When that
7
    well is completed, in approximately 30 to 40 days, we plan
8
    to proceed with this well.
9
                       And was Exhibit Eight prepared by you or
10
    compiled under your direction and supervision?
11
             Α
                       Yes.
12
                                      CARR: At this time we
                                 MR.
13
    would move the admission of Unocal Exhibit Number Eight.
14
                                 MR. CATANACH: Exhibit Number
15
    Eight will be admitted as evidence.
16
                                 MR.
                                     CARR: I have nothing
17
    further of this witness on direct.
18
19
                         CROSS EXAMINATION
20
    BY MR. CATANACH:
21
                       Mr. Altany, is the -- is this basically
             Q
22
    a step out from an existing Morrow gas well?
23
             Α
                       Yes.
24
             Q
                       It is.
                                 There is nothing to the south
25
    and east of this?
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		15
1	A	Not for three miles.
2	Q	Three miles?
3	А	Yes, sir.
4	Q	And then you get into another gas pool?
5	A	There are different producing zones that
6	are not continuous	with this.
7	Q	Has Union drilled other Morrow wells in
8	this area?	
9	А	Yes, sir. Last year, in 1988, in Sec-
10	tion 20 of 19 So	uth, 33 East, we drilled the North Madero
11	Federal Unit No. 1	•
12	Q	Where is that in relation to this
13	this proposed well	?
14	A	That is to the northwest.
15	Q	How far?
16	A	That would be four miles.
17	Q	So you've got a pretty good handle on
18	the drilling costs	, or you should have a pretty good handle
19	on the drilling co	sts, is that correct?
20	A	Yes.
21		MR. CATANACH: That's all I
22	have of the witnes	s. He may be excused.
23		MR. CARR: At this time we'd
24	call Steve Trujill	o, and Mr. Trujillo has not been sworn.
25		

Would you summarize for Mr. Catanach

25

Q

	17
1	your educational background and then briefly review your
2	work experience?
3	A Okay. I graduated with a BS in petro-
4	leum engineering from New Mexico Tech in 1983 and where I
5	began working with Unocal, five years as a drilling en-
6	gineer and currently one year as a reservoir engineer.
7	Q Does your area of responsibility for
8	Unocal include that portion of southeastern New Mexico
9	which is involved in this case?
10	A Yes, it does.
11	Q Are you familiar with the application
12	filed on behalf of Unocal in this matter?
13	A Yes, I am.
14	Q Are you familiar with the subject area?
15	A Yes.
16	MR. CARR: Are the witness'
17	qualifications acceptable?
18	MR. CATANACH: They are.
19	Q Has Unocal made an estimate of overhead
20	and administrative costs to be incurred while drilling this
21	well and also while producing the well if in fact it is
22	successful?
23	A Yes, we have.
24	Q And what are those figures?
25	A The figures for drilling overhead would

1 be \$5,680 per month; producing well rate, \$620 a month. 2 Are these figures in line with what's Q 3 being charged by other operators in the area? 4 Α Yes, they are. 5 And are these figures included in the 0 6 operating agreement which will govern the development of 7 this property between you and those interest owners like 8 Grace who are voluntarily participating? 9 Yes, they are. А 10 Q Do you recommend, if I didn't ask you, 11 that these figures be incorporated into the order which 12 results from this hearing? 13 Α Yes. 14 MR. CARR: I have nothing 15 further of Mr. Trujillo. 16 17 CROSS EXAMINATION 18 BY MR. CATANACH: 19 Q Mr. Trujillo, what's the approximate 20 depth of this well, do you know? 21 Α The proposed TD is around 13,700 feet. 22 MR. CATANACH: That's all I 23 have. 24 You may be excused. 25 We have nothing MR. CARR:

ì further. MR. CATANACH: Being nothing further in this case, Case 9714 will be taken under ad-visement. (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.

Sury W. Loyd CSR

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