

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
7 May 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Oil Company of)	CASE
California for a unit agreement, Lea)	6880
County, New Mexico.)	

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

James T. Jennings, Esq.
JENNINGS & CHRISTY
Roswell, New Mexico

*Hearing
Registered in
this transcript*

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1 MR. NUTTER: The hearing will come to
2 order, please.

3 The first case this morning will be Case
4 Number 6880.

5 MR. PADILLA: Application of Union Oil
6 Company of California for a unit agreement, Lea County, New
7 Mexico.

8 MR. JENNINGS: I'm James T. Jennings,
9 Jennings and Christy, of Roswell, appearing on behalf of
10 Union Oil Company, and I'll have two witnesses, Mr. Robert
11 Lockhart and Mr. John Moffitt.

12
13 (Witnesses sworn.)

14
15 ROBERT LOCKHART
16 being called as a witness and having been duly sworn upon
17 his oath, testified as follows, to-wit:

18
19 DIRECT EXAMINATION

20 BY MR. JENNINGS:

21 Q Would you state your name and occupation,
22 please, sir?

23 A My name is Robert Lockhart. I'm employed
24 by Union Oil Company of California in Midland, Texas, as the
25 Midland District Manager of Land.

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1 Q Mr. Lockhart, are you familiar with the
2 application that's been filed in Case 6880?

3 A Yes, sir, I am.

4 Q Generally explain the nature of this
5 application.

6 A We are seeking approval for our proposed
7 West Lynch Deep Unit agreement, covering 1280 acres of land
8 in Township 20 South, Range 34 East. The unit area is com-
9 posed of 1280 acres made up of all of Section 28, east half
10 of Section 29, and the north half of Section 33. Of the
11 total unit area 960 acres, or 75 percent, is composed of
12 Federal lands; the remaining 320 acres, or 25 percent of the
13 total unit area, is made up of fee lands. There are no
14 State lands in the proposed unit outline.

15 Q Mr. Lockhart, what percentage of the
16 lands do you have committed to the unit?

17 A 100 percent of the lands are committed
18 to the unit at the present time.

19 Q There are only three parties involved,
20 isn't that true?

21 A Yes, sir.

22 Q Would you name them, please?

23 A Union Oil Company of California, The
24 Superior Oil Company, and Kenneth G. Cohn.

25 Q I hand You what has been referred to as

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1 Union's Exhibit Number One and ask you to identify that.

2 A Yes, sir, this is our proposed unit agree-
3 ment, standard form 30.

4 Q Is Exhibit A attached to the unit re-
5 flecting the plat of your proposed unit area in respect to
6 leases?

7 A Exhibit A is the plat of the unit area,
8 and there is also an Exhibit B, which is a schedule of owner-
9 ship of lands within the unit area.

10 Q And I think you stated Union will be the
11 operator?

12 A Yes, sir.

13 Q Mr. Lockhart, is this acreage in the
14 potash area?

15 A Yes, sir, it is. It is in -- the location
16 does fall within the R-111 area.

17 Q And have you given notice to the potash
18 leaseholders?

19 A Yes, notice has been given.

20 Q And what were the results of this notice?

21 A Well, we've received back from the --
22 from the three parties involved we've received waivers from
23 two of the parties. There is one waiver that we have not
24 received as of Monday, or yesterday. Excuse me, Tuesday.

25 Q I hand you what has been marked Exhibit

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1 Two and ask you if you will identify that, please?

2 A. Yes, sir. This is a letter that's dated
3 April 22nd, 1980, from the USGS Albuquerque Office, giving
4 preliminary clearance to proceed with the formation of our
5 proposed unit area, subject to our submitting in a sufficient
6 amount of time an approved unit agreement.

7 Our unit is being formed for a 14,800
8 foot Siluro-Devonian test located in the southwest quarter
9 of the southeast quarter of Section 28.

10 Q. Do you have a secondary objective?

11 A. Yes, sir, the Morrow formation would be
12 our secondary objective.

13 Q. Without going into details to the bench-
14 mark, what is the depths covered by the unit?

15 A. The unit will basically cover all depths
16 below the Seven Rivers formation. It is a deep unit.

17 Q. Mr. Lockhart, in your opinion will the
18 approval of the unit be in the interest of conservation and
19 prevent waste?

20 A. Yes, sir.

21 MR. JENNINGS: I believe that's all the
22 questions I have.

23

24

CROSS EXAMINATION

25

BY MR. NUTTER:

1 Q Mr. Lockhart, when you stated you had
2 waivers from two out of three of the potash owners in the
3 area, --

4 A Yes, sir.

5 Q -- did you mean to the -- you notified
6 them you were forming the unit or you notified them of the --

7 A Of the location.

8 Q -- intended location of the well?

9 A Yes, sir. Yes, sir, the location of the
10 well.

11 Q I see.

12 A And we're expecting, you know, expecting
13 to hear from the third company. I think their time was up
14 Monday. They could have put a letter in the mail, you know,
15 Monday, and we haven't received it yet.

16 MR. NUTTER: Are there any further ques-
17 tions of Mr. Lockhart? He may be excused.

18 MR. JENNINGS: Mr. Moffitt.

19
20 JOHN MOFFITT

21 being called as a witness and having been duly sworn upon his
22 oath, testified as follows, to-wit:

23
24 DIRECT EXAMINATION

25 BY MR. JENNINGS:

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1 Q Mr. Moffitt, would you please state your
2 full name, occupation, and place of residence?

3 A My name is John Moffitt. I'm District
4 Exploration Manager for Union Oil Company of California in
5 Midland, Texas.

6 Q It's my understanding that you have not
7 heretofore testified before this Division.

8 A That's correct.

9 Q Have you testified on many occasions be-
10 fore other regulatory commissions?

11 A Yes, I have, in other states.

12 Q Have your qualifications been accepted
13 there?

14 A Yes, they were.

15 Q Just briefly cover your educational back-
16 ground and your degree.

17 A I graduated from Oklahoma University in
18 1948 with a BS degree in geology and upon leaving school I
19 worked as a gas engineer and drilling engineer for Republic
20 Natural Gas Company.

21 I joined Union Oil Company slightly over
22 twenty-eight years ago and have worked in a number of states,
23 the latest assignment being Midland, Texas, for the past
24 seventeen years.

25 Q And what is your position at this time in

1 the Midland office?

2 A. It's the District Exploration Manager
3 in the Midland office.

4 Q. In New Mexico and Texas?

5 A. Yes. Our district covers southern New
6 Mexico and west Texas.

7 MP. JENNINGS: Are the witness' qualifi-
8 cations accepted?

9 MR. NUTTER: Yes, they are.

10 Q. First, Mr. Moffitt, if you would just
11 outline to the Commission the formations which you propose
12 to unitize in this well.

13 A. We propose to unitize all formations
14 essentially below the Seven Rivers to the, and including, the
15 Siluro-Devonian at a depth of 14,800 feet.

16 I have an exhibit that will illustrate
17 better the limit, the upper limit of that unit.

18 Q. Mr. Moffitt, I hand you what has been
19 marked as Union's Exhibit Number Three and ask you to identify
20 that and to explain it.

21 A. Exhibit Number Three is a seismic struc-
22 ture map constructed by R. H. Adams of our Midland office
23 under my direction. This interpretation shows a closed
24 structural feature centering in Section 28 of Township 20
25 South, Range 34 East. The interpretation indicates approxi-

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1 mately or slightly over 200 feet of closure, and probably
2 less than 300 feet of closure, at the Siluro-Devonian level.

3 The red dot on the exhibit is the proposed
4 location for a 14,800 foot Siluro-Devonian test. Secondary
5 objectives are the Morrow Sands. Other formations that may
6 be productive in the area are the Delaware Sands, Bone Spring,
7 Wolfcamp, and Pennsylvanian limestones.

8 The lowest closing contour on this inter-
9 pretation is included within the proposed unit. It is a red
10 outline.

11 The orange line on here is a stratigraphic
12 cross section that will be shown as another exhibit of two
13 deep wells in the area. These are the only deep ones --
14 these are the nearest deep wells. There is one other deep
15 well to the north in Section 14.

16 Q I now hand you what has been marked as
17 Union's Exhibit Four and ask if you'd identify that and what
18 it reflects?

19 A Exhibit Number Four is a structure con-
20 tour map on the top of the Lower Morrow, constructed by C. E.
21 Singletary of our Midland District Office under my direction.

22 This map utilizes the seismic interpre-
23 tation and the top of the Lower Morrow as found in the three
24 previous mentioned wells.

25 The structural closure on the Morrow is

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1 generally somewhat less than that shown at the Silurian level,
2 Siluro-Devonian level, and this interpretation indicates we
3 anticipate about 100 feet, or slightly over 100 feet, of
4 closure.

5 Again, the lowest closest contour on the
6 Morrow interpretation is included within the proposed unit.

7 MR. NUTTER: These are 100 foot contours
8 on both these exhibits?

9 A. Yes, there are 100 foot on both.

10 Q. I now hand you what has been marked as
11 Exhibit Number Five and ask you to identify that, please.

12 A. Exhibit Number Five is a stratigraphic
13 cross section using the logs of the Morrow section and the
14 Siluro-Devonian section of the two previous mentioned wells,
15 the Cities Service No. 1-Y Government "N" Well in Section 19
16 and the Pennzoil No. 1 Federal "C" in Section 35. Both of
17 these wells penetrated thick Morrow Sands that have gas shows
18 but they were not productive. We anticipate that better
19 porosity and permeability will be encountered in the Morrow
20 Sands over this Siluro-Devonian structure.

21 The Siluro-Devonian horizon, we antici-
22 pate -- this is shown at the bottom of the cross section in
23 blue, and it shows the testing in the two wells prior to their
24 abandonment. Both wells recovered some water from the
25 Siluro-Devonian, and with our structural position we antici-

1 pated that the Siluro-Devonian will be oil productive similar
2 to the Lea Devonian Field 3-1/2 miles to the northeast.

3 Q I now hand you what has been marked as
4 Union Exhibit Number Six and ask you to identify that and
5 tell us what it reflects.

6 A Exhibit Number Six is a portion of the
7 up-hole log of the Cities Service Government "N" No. 1-Y
8 Well in Section 19. This was a nearby well in which we could
9 designate the unit outlined.

10 The producing interval in the shallow
11 Lynch Field is marked on this log, although this well was not
12 productive in the shallow. As you can see, it was drilled
13 to a total depth of 15,124 feet, but the field is productive
14 within the interval marked on the section from about 3440 on
15 down to 3560, and for our purposes the marker that we have
16 selected on this log is at 3998, 318 feet below the top of
17 the Seven Rivers. This marker is easily correlatable in the
18 area and this occurs also in the Pennzoil well in Section
19 35, and the unit will be limited to the depth below this
20 marker, as set out by this log.

21 Q There is shallow production on this Sec-
22 tion, is there not?

23 A There is shallow production on this sec-
24 tion, yes, sir.

25 Q Mr. Moffitt, in your opinion will the

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1 unit prevent waste and protect the correlative rights within
2 the unit area?

3 A Yes, it will.

4 Q Were Exhibits Three, Four, Five, and Six
5 prepared by you or under your supervision?

6 A Yes, sir, they were.

7 MR. JENNINGS: We have nothing further
8 to offer. We would offer Exhibits One through Six at this
9 time.

10 MR. NUTTER: Exhibits One through Six
11 will be admitted in evidence.

12 CROSS EXAMINATION

14 BY MR. NUTTER:

15 Q Mr. Moffitt, I presume that both this
16 l-Y Cities Service Well and the Pennzoil Well both recovered
17 water from the Siluro-Devonian, is that it?

18 A Yes, sir, they did.

19 Q And you're expecting that you may have a
20 little high in between these two wells to be above the water
21 table in the Devonian?

22 A Yes, sir. We think we do have a closed
23 structural feature that should be oil production.

24 MR. NUTTER: Are there any further ques-
25 tions of Mr. Moffitt? He may be excused.

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Do you have anything further, Mr. Jennings?

MR. JENNINGS: No, sir.

MR. NUTTER: Does anyone have anything
they wish to offer in Case Number 6880?

We'll take the case under advisement.

(Hearing concluded.)

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REPORTER'S CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division 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 C.S.R.

SALLY W. BOYD, C.S.R.

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NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, , NEW MEXICOHearing Date MAY 7, 1980 Time: 9:00 A.M.

NAME	REPRESENTING	LOCATION
GUY BUELL	Amoco	HOUSTON
HUGH ZARBAH	Conoco	HOBBS
Farris Nelson	Zia Energy	HOBBS
GEORGE MOORE	BRICO PETR.	MIDLAND
JAMES C. ALLEN	Amoco	Houston
MIKE W. BURKHART	Amoco	HOUSTON
Robert V. Lockhart	Union Oil Company of California	Midland
John V. McPherson	Union Oil Co of Calif	Midland
Richard R. Gail	Union Oil Co of Calif	Midland
Bob Haher	Byram	Santa Fe
James Dunning	Jennings & Christy	ROSWELL
W. I. Kellaborn	Kellaborn & Kellaborn	Santa Fe
Richard Tully	James B. Cooney, P.A.	Farmington
Tim Muhille	GENERAL CRODS PROCESSING	Farmington
Chad Nickerson	Yates; P-1	Artesia
Ray Beck	Yates	"
Randy Blanton	Yates	"

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date MAY 7, 1980 Time: 9:00 A.M.

NAME	REPRESENTING	LOCATION
Frankt. Chavez	OCD	C. J. C.
CHARLES GULSON	"	"
Richard Simmons	"	"
William J. J. J.	Tenneco.	Denver
Blair C. Stroff	"	"
Frank W. Fischer	"	"
Les Clement	OCD	Hobbs
Ken Steinnerd	USGS	Albuquerque
Mohammed Merchant	Carbon Energy	Hobbs