

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
March 22, 1978

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Oil Company of ) CASE  
California for a unit agreement, Lea ) 6182  
County, New Mexico. )

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

For the New Mexico Oil Lynn Teschendorf, Esq.  
Conservation Commission: Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

For the Applicant: Sumner G. Buell, Esq.  
JASPER & BUELL  
Attorneys at Law  
111 North Jefferson  
Santa Fe, New Mexico

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1 MR. STAMETS: Call the next case, Case 6182.

2 MS. TESCHENDORF: Case 6182, application of Union  
3 Oil Company of California for a unit agreement, Lea County,  
4 New Mexico.

5 MR. STAMETS: Call for appearances in this case?

6 MR. BUELL: Mr. Examiner, I am Sumner G. Buell of  
7 the firm of Jasper and Buell, Santa Fe, appearing on behalf  
8 of the applicant. We have two witnesses.

9 MR. STAMETS: Any other appearances? These witnesses  
10 will stand and be sworn, please.

11 (THEREUPON, the witnesses were sworn.)

12 MR. BUELL: Mr. Examiner, as a preliminary matter,  
13 I believe the application filed in this matter needs to be  
14 amended at this time to conform with the publication.

15 MR. STAMETS: What kind of a problem do we have, Mr.  
16 Buell?

17 MR. BUELL: It is timely referred to as human error.  
18 It says that it is in Township 19 and 20 North and it should  
19 be 19 and 20 South. The publication does reflect that.

20 MR. STAMETS: It appears that your application was  
21 corrected before the date of publication by our --

22 MR. BUELL: Astute counsel.

23 MR. STAMETS: I think our brilliant counsel claims  
24 credit for that.

25 MR. BUELL: Yes, thank you.

ROBERT V. LOCKHART

was called as a witness by the applicant, and having been first duly sworn, testified upon his oath as follows, to-wit:

DIRECT EXAMINATION

BY MR. BUELL:

Q Would you state your name, please?

A My name is Robert V. Lockhart.

Q Mr. Lockhart, by whom are you employed and in what capacity and where?

A Union Oil Company of California and I am the Midland District Landman, Midland, Texas.

Q Mr. Lockhart, are you familiar with what is sought in this application in Case 6182?

A Yes, sir.

Q Would you explain to the Commission or to the Examiner what that is?

A We are seeking approval for our unit agreement covering the proposed Luguna Deep Unit located in Townships 19 South and 20 South, Range 33 East. The unit area comprises a total of two thousand five hundred fifty-eight point oh four acres.

Of this total one thousand seven hundred and sixty acres are sixty-eight point eight oh two six eight percent and comprise federal lands. State lands total six hundred

1 thirty-eight point oh four acres for twenty-four point nine  
2 four two five three percent of the total area.

3 Fee lands comprise one hundred and sixty acres  
4 for the total area and is six point two five four seven  
5 nine percent.

6 Our proposed drill site is located in the southwest  
7 quarter of the northeast quarter of Section 35, 19 South,  
8 33 East. We are planning a Silurian test at approximately  
9 fourteen thousand six hundred feet.

10 Q Mr. Lockhart referring you to what has been marked  
11 for identification as Exhibit Number One, is that a copy of  
12 the proposed unit agreement?

13 A Yes, sir, it is. Exhibit B in that Applicant's  
14 Exhibit Number One does set out in detail the lands making  
15 up the unit area.

16 Q Referring you to what has been marked for identifica-  
17 tion as Exhibit Number Two, would you briefly explain what that  
18 is?

19 A Yes, sir. We have a letter dated January 31, 1978,  
20 from the United States Department of Interior Geological  
21 Survey, Denver Colorado, giving us preliminary approval to  
22 proceed with the formation of this unit subject to submitting  
23 it for final approval the unit agreement within a reasonable  
24 period of time.

25 There is a second letter dated December 16th from

1 the Commissioner of Public Lands, State of New Mexico, and  
2 the letter was signed by Ray D. Graham, Director of the Oil  
3 and Gas Division, also giving Union preliminary approval to  
4 proceed with the formation of this unit.

5 Q Mr. Lockhart, what formations do you propose to  
6 unitize under this agreement?

7 A All depths lying beneath the top of the Seven Rivers  
8 formation.

9 Q How will the working interests participate in this  
10 unit?

11 A We have approval from approximately ninety-six point  
12 eight seven two six one percent of the working interest  
13 owners. One working interest owner, Belco Petroleum Company,  
14 who owns an undivided eighty acre interest in tract eight,  
15 which is the northwest quarter of Section 25, 19 South, 33  
16 East, has declined to join our unit plan at this time or  
17 farm out under acceptable farm out terms.

18 Q Is this proposed unit agreement a fairly standard  
19 form used in the industry?

20 A Yes, sir, it is.

21 MR. BUELL: I have no other questions.

22 MR. STAMETS: Any questions of the witness?

23 MS. TESCHENDORF: I have a question.

24 MR. STAMETS: Ms. Teschendorf.  
25

CROSS EXAMINATION

2 BY MS. TESCHENDORF:

3 Q There are three parts of these unit agreements that  
4 the Commission is usually concerned with. One, is that  
5 expansions and contractions should be submitted to the  
6 Commission for approval in which you have included the  
7 Commission, and one, is the plans and development, further  
8 development, and the participating areas and would you have  
9 any objection to our order including that you submit those  
10 also to the Commission for approval?

11 A No, I would not.

12 MR. STAMETS: In other words as you read this unit  
13 agreement, Ms. Teschendorf, they do not provide for the  
14 Commission to approve further plans and development and  
15 expansion --

16 MS. TESCHENDORF: Expansion and contraction but  
17 not in the participating areas.

18 MR. STAMETS: Can those be included in the unit  
19 agreement?

20 THE WITNESS: Yes. We will see that that is done.

21 MR. STAMETS: Again, for those who might be putting  
22 one together, I would remind them that the Geological Survey  
23 does not watch that too much anymore and if it is state lands  
24 or private lands involved we definitely would be desirous of  
25 having the right to approve plans and development in

1 participating areas.

2 Any other questions of this witness? He may be  
3 excused and you may proceed with your next witness, Mr.  
4 Buell.

5 (THEREUPON, the witness was excused.)  
6

7 CHARLES CARY

8 was called as a witness by the applicant, and having been  
9 first duly sworn, testified upon his oath as follows, to-wit:  
10

11 DIRECT EXAMINATION

12 BY MR. BUELL:

13 Q Would you state your name, please?

14 A My name is Charles Cary.

15 Q Mr. Cary, by whom are you employed and in what  
16 capacity?

17 A Union Oil Company of California, District Exploration  
18 Manager.

19 Q Where are you headquartered?

20 A Midland, Texas.

21 Q Have you previously testified before the Commission  
22 or one of its Examiners?

23 A Yes, sir.

24 Q And your qualifications as an expert in geology  
25 were accepted?



1 A. They were accepted, yes.

2 Q. Are you familiar with what is sought in this  
3 application?

4 A. Yes, I am.

5 MR. BUELL: Are the witness' qualifications  
6 acceptable?

7 MR. STAMETS: They are.

8 Q. (Mr. Buell continuing.) From a geological stand-  
9 point, Mr. Cary, what is the basis for the formation of this  
10 unit?

11 A. Well, first of all we are seeking approval of the  
12 unit, the Laguna Deep Unit, to drill the proposed Laguna Deep  
13 Well which is in the northeast quarter of Section 35, Township  
14 19 South, Range 33 East, in Lea County, New Mexico.

15 I would like to refer to the first exhibit.

16 Q. That's marked for identification as Exhibit Number  
17 Three?

18 A. That's correct. Exhibit Number Three is a seismic  
19 structure map on the top of the Silurian.

20 The recommended Laguna Deep area was in west central  
21 Lea County, New Mexico, about thirty miles west of the City  
22 of Hobbs. The propsect is named for the ephemeral lake,  
23 Laguna Tonto, located one mile west of the unit.

24 The unit is just north of the Delaware basin in the  
25 southern edge or the northwestern shelf. The unit shown in

1 red on the map will not include formations above the base  
2 of the Yates.

3 As mentioned earlier, Union Oil Company of California  
4 proposes to drill a fourteen thousand six hundred foot well  
5 located in the northeast quarter of Section 35, 19 South,  
6 33 East, to penetrate the top of the Silurian but the depth  
7 of the well not to exceed fourteen thousand six hundred feet.

8 The Laguna prospect is expected to produce oil from  
9 the Silurian carbonate reservoir and possibly gas from Morrow  
10 sands. Other potential producing zones include the Seven  
11 Rivers, Bone Springs and the Wolfcamp.

12 The expected productive limit of the Silurian  
13 structural trap is shown on the seismic structure map by the  
14 dashed line. The proposed unit outline indicated in red is  
15 dictated by the configuration of the potential productive  
16 area and, of course, yellow indicates that Union has leased  
17 the acreage and the orange line traveling from a northwest to  
18 a southeast direction, EE Prime, indicates the structural  
19 cross section which will be Exhibit Four and the orange circle  
20 in Section 35, there, indicates the approximate location  
21 of the proposed well.

22 Q All right. Referring you to what has been marked  
23 for identification as Exhibit Number Four would you please  
24 explain what that is? What it shows?

25 A Yes, this is a northwest-southeast structural cross

1 section and the control wells which are on this cross section  
2 do not appear on the map, that is, the King Resources No. 1  
3 Kimo Sabe on the left; the Pure "C" Federal on the right; and  
4 the Ohio No. 9 Lea Unit. Not wells on the map have penetrated  
5 the Silurian.

6 Q When you refer to on the map you are referring to  
7 Exhibit Number Three?

8 A That's correct. The cross section shows the  
9 recommended location of the proposed test in the Laguna Deep  
10 Unit. It shows the configuration of the beds expected to  
11 encounter and depth. It also shows the potential producing  
12 zones that we hope to find; green circles indicating oil  
13 potential, and the red symbols, gas symbols, of course,  
14 indicating the potential gas.

15 Q Mr. Cary, in your opinion would the granting of  
16 this application prevent waste and protect correlative rights?

17 A Yes, it would.

18 Q Were Exhibits Three and Four prepared by you or  
19 under your supervision?

20 A They were prepared under my supervision.

21 MR. BUELL: At this time I would move the Exhibits,  
22 One through Four inclusive, be admitted.

23 MR. STAMETS: These exhibits will be admitted.

24 MR. BUELL: I have nothing further of this  
25 witness.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Cary, how did you determine your oil-water contact on your Exhibit Three?

A First, let me -- in order to answer that question -- point out that it is a seismic structure map. You can see the seismic control that was utilized in producing this structural configuration and the Silurian always is productive -- or is only productive under closed structural trap.

It's sometimes filed to the spill point, that is, the hydrocarbons are, and sometimes not.

We utilized the structural configuration essentially filling it optimistically to the spill point and if such is the case we believe that the oil-water interface, as indicated by the dashed lines, should exist essentially as drawn.

MR. STAMETS: Any other questions of the witness?  
He may be excused.

(THEREUPON, the witness was excused.)

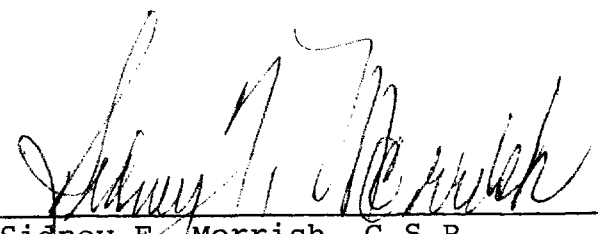
MR. BUELL: Nothing further.

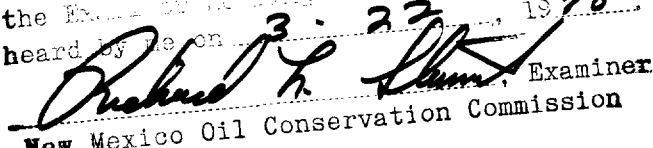
MR. STAMETS: If there is nothing further the case will be taken under advisement.

(THEREUPON, the case was concluded.)

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,  
do hereby certify that the foregoing and attached Transcript  
of Hearing before the New Mexico Oil Conservation Commission  
was reported by me, and the same is a true and correct record  
of the said proceedings to the best of my knowledge, skill and  
ability.

  
Sidney F. Morrish, C.S.R.

I do hereby certify that the foregoing is  
a correct and true copy of the proceedings in  
the Matter of the hearing on Case No. 6182,  
heard by me on 3:22, 1978.  
  
Examiner  
New Mexico Oil Conservation Commission