

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
September 24, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of C & K Petroleum, Inc. ) CASE  
for a unit agreement, Eddy County, ) 5557  
New Mexico. )

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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

For the Applicant: Randolph M. Richardson, Esq.  
Attorney at Law  
J. P. White Building  
Roswell, New Mexico.

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DONALD L. McCLURG

Direct Examination by Mr. Richardson

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Cross Examination by Mr. Nutter

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EXHIBIT INDEX

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Offered Admitted

Applicant's Exhibit No. 1, Report

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Applicant's Exhibit No. 2, Map

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Applicant's Exhibit No. 3, Cross Sec.

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Applicant's Exhibit No. 3, Log

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1 MR. NUTTER: We will call the next Case 5557.

2 MR. DERRYBERRY: Case 5557, application of C & K  
3 Petroleum, Inc., for a unit agreement, Eddy County, New Mexico.

4 MR. RICHARDSON: Randolph M. Richardson, Roswell,  
5 New Mexico, appearing on behalf of the applicant and I have  
6 one witness.

7 (THEREUPON, the witness was duly sworn.)

8 DONALD L. McCLURG

9 called as a witness, having been first duly sworn, was  
10 examined and testified as follows:

11 DIRECT EXAMINATION

12 BY MR. RICHARDSON:

13 Q Mr. McClurg, would you please state your name and  
14 your present occupation?

15 A My name is Donald L. McClurg and I'm a consultant  
16 for C & K.

17 Q Would you state briefly your educational background  
18 and experience that would enable you to testify before the  
19 Commission as an expert witness?

20 A I graduated from the University of Texas, El Paso,  
21 in 1960 with a Bachelor of Science degree in geology. I  
22 worked for six and a half years for Amoco Production Company  
23 and a year for Great Western and consulting since that  
24 time.

25 Q Have you ever testified before the Commission as

1 an expert witness?

2 A. Yes, sir.

3 Q. Are you familiar with Power Deep Unit area and  
4 matters contained in the application to the Commission for  
5 approval of the unit agreement?

6 A. Yes, sir.

7 MR. RICHARDSON: Are the qualifications acceptable?

8 MR. NUTTER: Yes, sir.

9 Q. (Mr. Richardson continuing.) Is the form of the  
10 unit agreement prescribed by Federal regulations?

11 A. Yes, sir.

12 Q. Has a unit area been designated by the United  
13 States Geological Survey as an area logically suitable for  
14 development under a unit plan of operation?

15 A. Yes, sir.

16 Q. Can you explain to the Commission, the unit is  
17 designated Power Deep, can you explain the connotation of  
18 the word "deep" in this particular case?

19 A. The unit is proposed from forty-five hundred and fifty  
20 feet down and will not be concerned with the shallow production.  
21 There is some San Andres production within the unit area  
22 and the unit will exclude the shallow production.

23 There is a typographical error on the application  
24 on the unit agreement that reads forty-five hundred feet and  
25 it should read forty-five hundred and fifty feet. We will

1 correct this.

2 Q Will you please tell the Commission the number  
3 of acres within the unit area and the number and percentage  
4 of acreage of Federal and State land?

5 A The total number of acreage is five thousand,  
6 six hundred and eighty-six, point twenty-two. The Federal  
7 acreage is seventy-four point seventy-eight percent and  
8 twenty-five point twenty-one State land.

9 Q And the number of acres of State land within the  
10 unit?

11 A The number of acres of State land is one thousand,  
12 four hundred and forty acres.

13 Q And the number of acres of Federal land?

14 A Four thousand, two hundred and forty-six, point  
15 twenty-two.

16 Q Could you tell the Commission the Township and  
17 Range in which the Unit is located and with reference to, say,  
18 the nearest town?

19 A All right. The Unit covers, it is in the inter-  
20 section of several ranges and townships here, but it covers  
21 Section 31 and 32 in Township 17 South, Range 31 East;  
22 Section 36 in Township 17 South, 30 East; Sections 1 and  
23 12 in 18 South, 30 East; and Sections 5, 6, 7 and 8 in 18  
24 South, 31 East.

25 The location to the nearest town is twenty-eight miles

1 northeast of Carlsbad.

2 Q Would you please refer to the geological report  
3 which has been introduced in this Case and marked Exhibits One  
4 through Four?

5 Was this report prepared by you or others directly  
6 under your control and supervision?

7 A Yes, sir. The report was prepared by me and we  
8 have four parts.

9 The Exhibit One is the written report which  
10 includes the land plat illustrating the area.

11 Exhibit Two is a structure map which is contoured  
12 on the top of the Mississippian unconformity, or the base  
13 of the Morrow section. The map indicates a structural trend  
14 running northwest-southeast across the area with a structure  
15 under the unit area. And the structural trend is thought to  
16 cross at approximately right angles with the stratigraphic  
17 and depositional trends of Morrow sands. And that is the  
18 basis of the prospect, the intersection of the depositional  
19 sand trend with the structural trend indicated.

20 The cross section which is Exhibit Three,  
21 illustrates three BB prime, illustrates three wells in the  
22 general area of the unit. The map also indicates there is  
23 Morrow production north of the unit area, but as indicated  
24 by the brown line, this production is thought to be separated  
25 from potential Morrow production in the unit area because of

1 one dry hole in the Morrow and one well that tested a small  
2 amount of gas, one hundred and fifty thousand cubic feet  
3 in the Morrow.

4 Other potentials in the area are indicated by the  
5 fact that the well in Section 30 of 17, 31, Sinclair 77 B  
6 Turner, produced oil from the Atoka with an accumulative of  
7 twelve thousand three hundred and forty-two barrels of oil  
8 and it is now abandoned.

9 And in Section 3 of 18 South, 31 East, the Pennzoil  
10 Federal well potentialed from the Strawn and produced an  
11 accumulative of thirteen thousand, nine hundred and ninety-  
12 nine barrels of oil.

13 So this is an indication of other potential  
14 pays in the area.

15 Also one other well to point out within the unit  
16 area in Section 36 of 17, 30 in the northeast corner. El Paso  
17 drilled a well which was completed from the Morrow. It is  
18 now abandoned and had an accumulative of one hundred and  
19 three thousand, six hundred and forty-seven MCF, plus  
20 twenty-four, seventy-four barrels of condensate.

21 So we have shows in several zones in the nearby  
22 proximity to the unit area.

23 The final exhibit is a Xerox of two logs which  
24 are the two deepest wells within the unit area. It includes  
25 the Odessa Natural Gasoline El Paso State well and the

1 Union Texas Atlantic Federal, and the purpose of this log  
2 is to illustrate the marker that is being used to indicate  
3 the base of the San Andres or the upper limit of the unit.

4 Q Would you please tell the Commission your conclusions  
5 as to formations likely to be encountered and considered  
6 prospective production?

7 A As I previously pointed out the Strawn and the  
8 Atoka have produced either in nearby proximity to the unit,  
9 the Morrow has produced on the unit and then the Wolfcamp  
10 was tested. And as shown on the cross section BB prime in  
11 the Pennzoil 1-A Federal well, there were three tests in the  
12 Wolfcamp, all of which indicated shows of oil.

13 Q Could you please tell the Commission the projected  
14 depth and the proposed location of the initial test well?

15 A The proposed depth is twelve thousand feet and  
16 the proposed initial location is the northwest quarter of  
17 Section 6, 18 South, 31 East.

18 Q Have other working interest owners within the  
19 area been contacted?

20 A Yes, sir.

21 Q In your opinion, what percentage of the working  
22 interest will be committed and what percentage of the royalty  
23 will be committed?

24 A Ninety-five percent of the working interest and  
25 eighty-five percent of the royalty interest.



1 Q In your opinion, will the operation of this area  
2 under the proposed unit plan of operation be in the interest  
3 of conservation and the prevention of waste?

4 A Yes, sir.

5 Q In the event of production will the correlative  
6 rights of all parties to the unit agreement be protected?

7 A Yes, sir.

8 MR. RICHARDSON: We would like to enter the  
9 geological report marked Exhibits One through Four into  
10 evidence.

11 MR. NUTTER: The geological report is one exhibit,  
12 including Exhibits One through Four, is that it?

13 MR. RICHARDSON: Right.

14 MR. NUTTER: The geological report, including  
15 Exhibits One through Four will be admitted into evidence.

16 CROSS EXAMINATION

17 BY MR. NUTTER:

18 Q Mr. McClurg, an inspection of your Exhibit Number  
19 Two, which is the structure on the top of the Mississippian,  
20 I presume here we have got a nose that would be reflected  
21 back up into the Pennsylvanian formation also, is that it?

22 A Yes, sir, the top of the Mississippian unconformity  
23 is essentially the base of the Morrow section.

24 Q And then this nose would be backed up by a line  
25 of non-porous formations?

1 A. Yes, sir.

2 Q. Which would isolate the nose?

3 A. That's right. The nose would be cut off by the  
4 brown line indicated where the two wells show very tight --

5 Q. And then it has been your intent here to unitize  
6 nine sections of land which more or less cover this nose and  
7 give you control of the structure in the event production is  
8 found?

9 A. Right.

10 Q. Now, do you think you have sufficient acreage there  
11 to gain control of the structure?

12 A. I think so, we seem to have the structure pretty  
13 well delineated.

14 Q. You say ninety-five percent of the working interest  
15 and eighty-five percent of the royalty is committed to the  
16 unit, is this lack of five percent working interest and  
17 fifteen percent royalty, will this lack cause any in-  
18 efficient operation in the unit?

19 A. No, sir, I don't think so, and as I understand it  
20 we are still pursuing these other interests.

21 MR. RICHARDSON: I might add there, this is an  
22 old producing area and we have twenty-six working interest  
23 owners, and some of them, well, I think approximately eight  
24 or ten of them, have got less than a one percent interest.  
25 One of these real old, old leases that is just cut all to

1 hell and that is the reason we just made a guess, because  
2 there are so many working interest owners and some of the  
3 royalty. We guessed the royalty fairly low because we also  
4 have numerous estates and due to these old producing leases  
5 we have these dead people and, gosh, I don't know what else.  
6 Some of them we literally can't find.

7 MR. NUTTER: But you do have those figures that  
8 were put in the record as committed?

9 MR. RICHARDSON: As verbally committed.

10 MR. NUTTER: And there is a possibility that some  
11 of these others may be located and you may increase this  
12 amount?

13 MR. RICHARDSON: We hope to increase the working  
14 interest percentage to one hundred percent, but it will  
15 not be one hundred percent because we have already had two  
16 definite turn-downs. Oh, from Texaco, for instance it only  
17 has forty acres out of the entire nine sections, and also one  
18 other company that had only forty acres. It was El Paso and  
19 they said their percentage was just too darn small to fool  
20 with, that it would cost them more money to process the  
21 papers than it would be to join in. But those percentages  
22 probably will increase.

23 MR. NUTTER: Then it is the provision in the  
24 unit agreement that a well would be drilled that would test  
25 all of the Pennsylvanian formation to a maximum depth of

1 twelve thousand feet, and that you feel you have possibilities  
2 in the Atoka, Strawn, and what other formations in the  
3 Penn that there might be?

4 THE WITNESS: Uh-huh.

5 MR. NUTTER: Are there any further questions of  
6 Mr. McClurg? He may be excused.

7 Do you have anything further, Mr. Richardson?

8 MR. RICHARDSON: No, sir, except that we will  
9 correct the unit agreement and prepare you a formal Exhibit  
10 B and give you corrected pages or a complete new corrected  
11 agreement, if you like.

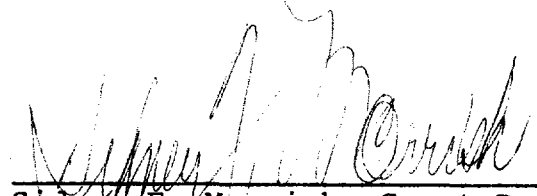
12 MR. NUTTER: I think just the amended pages will  
13 be sufficient.

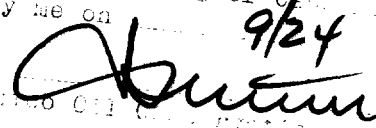
14 MR. RICHARDSON: That depth deal in there between,  
15 well, we started off with the ownership in the unit as forty-  
16 five hundred feet. That is where most of the shallow farmout  
17 agreements have gone to and that is what we were talking about  
18 with the USGS as to where to cut it off and they say, well,  
19 pick a definite marker and tie it back into a well, so we  
20 picked a marker and just kept on talking about forty-five  
21 hundred feet when the marker was fifty, forty-five, fifty, but  
22 that will be changed to forty-five fifty as a marker.

23 MR. NUTTER: Does anyone else have anything they  
24 wish to offer in Case 5557? We will take the case under  
25 advisement.

State of New Mexico )  
 ) ss.  
 County of Santa Fe )

I, SIDNEY F. MORRISH, a court 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, Court Reporter

I hereby certify that the foregoing is  
 a true and correct record of the proceedings  
 the examiner hearing of 9/24/75 5557  
 heard by me on  
 Examiner  
 New Mexico Oil Conservation Commission