STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 1 OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING 2 SANTA FE, NEW MEXICO 3 26 April 1989 4 5 EXAMINER HEARING 6 7 IN THE MATTER OF: 8 Application of McClellan Oil Corpora-CASE tion for a unit agreement, Chaves 9656 9 County, New Mexico. 10 11 12 BEFORE: David R. Catanach, Examiner 13 14 TRANSCRIPT OF HEARING 15 16 APPEARANCES 17 For the Division: Robert G. Stovall 18 Attorney at Law Legal Counsel to the Division 19 State Land Office Building Santa Fe, New Mexico 20 For McClellan Oil W. Thomas Kellahin 21 Corporation: Attorney at Law KELLAHIN, KELLAHIN & AUBREY 22 P. O. Box 2265 Santa Fe, New Mexico 87504 23 24 25

INDEX RAY D. GRAHAM Direct Examination by Mr. Kellahin MARK McCLELLAN Direct Examination by Mr. Kellahin Cross Examination by Mr. Catanach RAY D. GRAHAM RECALLED Redirect Examination by Mr. Kellahin EXHIBITS McClellan Exhibit One, Unit Agreement McClellan Exhibit Two, Letter McClellan Exhibit Three, Explanation McClellan Exhibit Four, Structural Map McClellan Exhibit Five, Isopach McClellan Exhibit Six, Certificate

3 1 CATANACH: We're going to MR. 2 do some rearranging with the regular cases here. 3 We're going to start off with 4 Case 9656. 5 MR. STOVALL: Application of 6 McClellan Oil Corporation for a unit agreement, Chaves 7 County, New Mexico. 8 MR. CATANACH: Are there ap-9 pearances in this case? 10 MR. KELLAHIN: Mr. Examiner, 11 I'm Tom Kellahin of the Santa Fe law firm of Kellahin, 12 Kellahin & Aubrey, appearing on behalf of the applicant and 13 I have two witnesses to be sworn. 14 MR. CATANACH: Any other ap-15 pearances? 16 Will the two witnesses please 17 stand and be sworn in? 18 19 (Witnesses sworn.) 20 21 RAY D. GRAHAM, 22 being called as a witness and being duly sworn upon his 23 oath, testified as follows, to-wit: 24 25

4 1 DIRECT EXAMINATION 2 BY MR. KELLAHIN: 3 Mr. Graham, for the record would you Q 4 please state your name and occupation? 5 А I'm Ray D. Graham. I'm a petroleum 6 landman employed by McClellan Oil Corporation. 7 Q Mr. Graham, on prior occasions have you 8 testified as a petroleum landman before the Oil Conserva-9 tion Division? 10 А Yes, I have. 11 Q And pursuant to your employment as a 12 consulting landman for McClellan Oil Company, have you 13 prepared and submitted to the Commissioner of Public Lands 14 a proposed exploratory unit agreement for the North Roswell 15 State Unit Area in Chaves County, New Mexico? 16 Yes, we have. А 17 MR. KELLAHIN: At this time, 18 Mr. Examiner, we tender Mr. Graham as an expert petroleum 19 landman. 20 MR. CATANACH: He is so gual-21 ified. 22 Q Mr. Graham, let me direct your 23 attention, sir, to what is marked as McClellan Exhibit 24 Number One and ask you to identify that exhibit. 25 А That is a copy of the North Roswell

5 1 State Unit Agreement in Chaves County. 2 Let's turn, sir, to Exhibit A to the Q 3 unit agreement and have you identify that for us. 4 А That is an outline of the 17 sections 5 included within this unit. It's 17 sections in Township 9 6 South, Range 24 East, in Chaves County. 7 On page 2 of Exhibit One, is that a Q 8 specific description of the acreage that is to be commit-9 ted to the unit? 10 А Yes, that is correct, 11,653.01 acres. 11 0 Can you describe for us what is the 12 purpose that the applicant seeks in forming this explora-13 tory unit, Mr. Graham? 14 А Well, the -- it's -- due to the term of 15 the leases it's almost impossible to develop each lease on 16 an individual basis, and by forming this unit it will tend 17 to promote the conservation of oil and gas and better util-18 ization of the reservoir energy and that the state will 19 receive its fair share of the oil and gas produced from the 20 unit area. 21 What is the composition of the ownership Q 22 for this unit? Who owns the minerals? 23 The State of New Mexico owns the -- is А 24 the 100 percent mineral interest owner. 25 The working interest ownership, who owns 0

6 1 the working interest ownership and to what extent has it 2 been committed to the unit? 3 McClellan Oil Corporation is 100 per-Α 4 cent working interest owner of 15 sections or 10,231 acres, 5 which is 87.6 percent of the unit area. There are two 6 sections, Section 16 and Section 30 owned by Mesa Petroleum 7 Corporation and MTS Partnership. They have not committed 8 their acreage. They have been invited to join but at this 9 point in time they have not committed. 10 Have you submitted to and obtained pre-Q 11 liminary approval from the Commissioner of Public Lands for 12 the exploratory unit? 13 А Yes, we have, by their letter of April 14 the 18th, 1989, they have given their preliminary approval 15 for this unit. 16 And that's marked as McClellan Exhibit Q 17 Number Two? 18 А Yes, sir. 19 Do you have an opinion, Mr. Graham, as a Q 20 petroleum landman as to whether or not at this point there 21 is sufficient ratification and execution of the various 22 agreements to give McClellan Oil the effective and effi-23 cient control over unit operation and development of this 24 area? 25 А Yes. McClellan Oil does have the 82. --

7 1 87.6 percent of the acreage committed and is 100 percent 2 working interest owner. He has sufficient interest to 3 control operations of the unit. 4 MR. KELLAHIN: That concludes 5 my examination of Mr. Graham, Mr. Catanach. 6 We move the introduction of 7 Exhibits One and Two. 8 MR. CATANACH: Exhibits One 9 and Two will be admitted as evidence. 10 I have no questions of the 11 witness. He may be excused. 12 13 MARK McCLELLAN, 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. KELLAHIN: 19 Q Mr. McClellan, for the record would you 20 please state your name and occupation? 21 А I am Mark McClellan, McClellan Oil Cor-22 poration and I'm a geologist. 23 Mr. McClellan, on prior occasions have Q 24 you testified before the Oil Conservation Division as a 25 petroleum geologist?

8 1 McClellan, on prior occasions have Q Mr. 2 you testified before the Oil Conservation Division as a 3 petroleum geologist? 4 Yes, sir, back in November of 1983. А 5 Have you caused geologic interpretations Q 6 and conclusions to be reached with regards to the formation 7 of the proposed North Roswell State Unit in Chaves County, 8 New Mexico? 9 А Yes, I have. 10 MR. KELLAHIN: At this time, 11 Mr. Examiner, we tender Mr. McClellan as an expert petro-12 leum geologist. 13 MR. CATANACH: He is so qual-14 ified. 15 McClellan, let me ask you, sir, to Q Mr. 16 refer to your Exhibits Three, Four, and Five and let's 17 spread them out so that we can look at them at the same 18 time. 19 Let me have you start with Exhibit Num-20 ber Four, which is the structure map. In preparing the 21 structural interpretation for this specific area to you 22 find any structural features of significance in determining 23 the size and shape and the orientation of the acreage to be 24 committed to this unit? 25 А Yes, I do. I find a anomalous high

9 1 basically on the western edge of the North Roswell State 2 Unit. 3 Q Describe for us where that anomalous 4 high is in relationship to the unit as shown on Exhibit 5 Number Four. 6 А Okay. It basically runs on the western 7 edge of the unit in Sections 5 and 6, 7, 8, 17, 18, 19, 20 8 and 29 and 30. 9 Q Interpret for us your opinions and con-10 clusions from examining the structure map, Exhibit Number 11 Four. 12 А Structure has basically not been found 13 to play much of a geologic role in the Abo. It probably is 14 not the trapping mechanism but it is interesting to note 15 that there is an anomalous high over the western edge of 16 our unit. 17 Q What is the primary objective formation 18 for the unit well? 19 Α The Abo formation. 20 Q And what is your proposed initial well 21 location for the first unit well? 22 А It is in Section 17 660 from the north 23 and 660 from the west line, Section 17, 9 South, 24 East. 24 Q Turn now to Exhibit Number Five, Mr. 25 McClellan. Would you identify that exhibit for us?

10 1 А This is a gross Abo Sand isopach map. 2 In examining the isopach is there a Q 3 relationship between the surface configuration of acreage 4 to be dedicated to the unit and the isopach defined on the 5 gross Abo Sand? 6 А Yes, there is. We would expect to en-7 counter 10 to approximately 30 feet of gross sand within 8 the Abo formation overlying most of our North Roswell State 9 Unit acreage. 10 What is the geologic basis for the west-0 11 ern and eastern boundaries of the proposed unit? 12 The yellow indicates sand development of Α 13 10 feet or more. 14 The orange indicates where you'd expect 15 to find 10 feet or less of sand and the Abo alluvial chan-16 nel system tends to basically run north to south or north-17 west to southeast with areas with poor sand development and 18 our North Abo State Unit is, as I said earlier, you would 19 anticipate between 10 and probably 30 feet of sand; the 20 flanks of the unit being on the east and west, you would 21 expect less than 10 feet of sand development. 22 there, then, a reasonable geologic Q Is 23 basis for the configuration of the acreage to be committed 24 to this unit? 25 А Yes, there is.

Q Do you have an opinion as to whether or
not this acreage could be developed on an individual lease
basis as opposed to a unit basis?

4 think that that would difficult in А Ι 5 that you've got 17 separate State leases all expiring 6 7-1-89. This -- this acreage is within the Abo play. It's 7 not actually within a field. It's on the western edge of 8 the South Pecos Slope Abo and on the southern edge of the 9 West Pecos Slope Abo, so it's not actually within a known 10 It's within 3 or 4 miles and obviously we feel like field. 11 that there is gas production present here but it's a defi-12 step out or even a wildcat type of an area and in nite 13 order to justify drilling, I think it would be difficult to 14 do it if you're only hope was that you could -- could only 15 save one lease; therefore it's necessary that we form this 16 State unit in order to justify drilling a step out well or 17 a wildcat well.

18 Q Exhibit Number Three is your written 19 geologic explanation of the two exhibits and your proposed 20 unit?

A Yes.

22 MR. KELLAHIN: Mr. Examiner,
23 that concludes my examination of Mr. McClellan.

24 We move the introduction of25 his exhibits Three, Four and Five.

12 1 MR. CATANACH: Exhibits Three, 2 Four and Five will be admitted as evidence. 3 4 CROSS EXAMINATION 5 BY MR. CATANACH: 6 Q Mr. McClellan, what's -- what's the 7 closest Abo production to your unit? 8 А There is a well in Section 15 that was 9 drilled by Mesa and it's about 2 miles to the east, due 10 east. 11 Q That's currently a producing well? 12 А It -- no, it is a shut-in --13 Shut-in. Q 14 -- gas well, yes. А 15 Q How much sand do you think is needed to 16 make a good well in the Abo? 17 We have drilled about 75 wells in the А 18 Abo ourselves. I think that you could probably make a well 19 out of -- I've seen us make a well, for instance, out of 5 20 feet of sand. 21 MR. CATANACH: I have no fur-22 ther questions of this witness. He may be excused. 23 MR. KELLAHIN: Mr. Examiner, 24 Exhibit Six is our certificate of mailing of notices to 25 other interested parties within the unit area and we would

13 1 ask that you introduce that into the record at this time. 2 MR. CATANACH: Exhibit Six 3 will be admitted into the record. 4 MR. KELLAHIN: That concludes 5 our presentation, Mr. Examiner. 6 MR. CATANACH; What interest 7 does Koch Industries have in this (not clearly audible)? 8 MR. KELLAHIN: We'll let Mr. 9 Graham answer those questions about the interests. 10 11 RAY D. GRAHAM, 12 being recalled to testify and remaining under oath, testi-13 fied as follows, to-wit: 14 15 REDIRECT EXAMINATION 16 BY MR. KELLAHIN: 17 0 The issue, Mr. Graham, is the certifi-18 cate of mailing was sent to various parties and approxi-19 mately what interest does Koch Industries have within the 20 unit area? 21 А Koch Industries is the record title 22 owner of 15 of these 17 oil and gas leases. They have de-23 signated McClellan Oil Corporation as the operator of this 24 unit area and of these leases. 25 CATANACH: I have nothing MR.

further. Anything further in this case? MR. KELLAHIN: No, sir, we have nothing else. MR. CATANACH: Case 9656 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 CSR I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1656 . heard by me on How 26 19 89 atanal , Examiner **Oil Conservation Division**