STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 1 OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING 2 SANTA FE, NEW MEXICO 3 9 November 1988 4 5 EXAMINER HEARING 6 7 IN THE MATTER OF: 8 Application of Exxon Corporation for CASE 9 Compulsory pooling, Lea County, New 9520 pooling, Eddy County, New Mexico. 10 11 12 BEFORE: David R. Catanach, Examiner 13 14 15 TRANSCRIPT OF HEARING 16 17 APPEARANCES 18 19 For the Division: Robert G. Stovall Attorney at Law 20 Legal Counsel to the Division State Land Office Bldg. 21 Santa Fe, New Mexico 22 James Bruce For the Applicant: Attorney at Law 23 HINKLE LAW FIRM 500 Marguette, N. W. 24 Suite 740 Albuquerque, New Mexico 25 87102-2121

INDEX BEN GREGSON Direct Examination by Mr. Bruce Cross Examination by Mr. Catanach JOE B. THOMAS Direct Examination by Mr. Dickerson Cross Examination by Mr. Catanach EXHIBITS Exxon Exhibit One, Map Exxon Exhibit Two, Plat Exxon Exhibit Three, Type Log Exxon Exhibit Four, Structural Map Exxon Exhibit Five, Isopach Exxon Exhibit Six, Data

3 1 MR. CATANACH: Call this 2 hearing back to order and call Case 9520. 3 MR. STOVALL: Application of 4 Exxon Corporation for compulsory pooling, Lea County, New 5 Mexico. 6 MR. CATANACH: Are there ap-7 pearances in this case? 8 MR. BRUCE: Mr. Examiner, my 9 name is Jim Bruce from the Hinkle Law Firm, representing 10 Exxon Corporation. I have two witnesses to be sworn. 11 Any other ap-MR. CATANACH: 12 pearances? 13 Will the witnesses please 14 stand and be sworn in at this time? 15 16 (Witnesses sworn.) 17 18 BEN GREGSON, 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. BRUCE: 24 Q Would you please state your name and 25 city of residence?

4 1 А My name is Benjamin P. Gregson. I live 2 in Midland, Texas. 3 And who are you employed by and in what Q 4 capacity? 5 I'm a geologist for Exxon Corporation in А 6 Midland. 7 Q Have you previously testified before the 8 OCD as a geologist. 9 А No, I have not. 10 Q Would you briefly describe your work and 11 educational background? 12 I have a Bachelor of Science de-А Okay. 13 gree in geology from the University of Lowell in Massachu-14 setts. 15 also have a Master of Science degree I 16 in geology from the University of Massachusetts at Amherst. 17 I began work as a geologist with Exxon 18 in 1984. For three years after that date I worked various 19 production assignments in southeast New Mexico and in west 20 Texas. 21 the last year I've been prospecting For 22 for the Morrow formation in southeast New Mexico. 23 And have you previously testified before Q 24 the Texas Railroad Commission? 25 А Yes, I have.

5 1 Q And are you familiar with the geologi-2 cal matters involved in Case 9520? 3 Yes, I am. А 4 MR. BRUCE: Mr. Examiner, are 5 the witness' credentials acceptable? 6 MR. CATANACH: They are. 7 Gregson, would you please refer to Q Mr. 8 Exhibit Number One and briefly describe it? 9 Exhibit Number One is a location map for А 10 Exxon's acreage in this hearing. 11 On the lefthand side of the exhibit a 12 map of the State of New Mexico. On the right edge of the 13 exhibit is an enlargement of the south portion of Lea 14 County. 15 Towards the left -- left edge of this 16 map I've indicated the boundary of the Little Eddy Unit and 17 Exxon's adjacent acreage to this unit. 18 Q Moving on to the land plat marked 19 Exhibit Two, would you describe in more detail Exxon's 20 acreage? 21 А Exhibit Number Two is a land plat for 22 the proposed location. Exxon's proposed location is indi-23 cated by the red dot in the northwest quarter of Section 24 32, Township 20 South, Range 33 East. 25 The 320-acre Morrow proration unit gas

1 boundary surrounding this location is indicated by the 2 light dashed line in the west half of Section 32. 3 The Little Eddy Unit boundary west of 4 this acreage is indicated by the heavy dashed line predom-5 inantly surrounding Section 31 and the north part of 6 Section 5 and the west half of the southwest and the 7 southwest of the northwest of Section 32. 8 The green dot in the southeast guarter 9 of Section 30 is the location of the type log for the 10 prospect. 11 Would you please now move on to that Q 12 type log marked Exhibit Three and discuss it? 13 Exhibit Number Three is a type log for А 14 the proposed location. The log is from the Belco Petroleum 15 Corporation Bass Federal No. 2. The well is located in 16 Section 30 of 20 South, 33 East. The log is an acoustic 17 velocity neutron and gamma ray log. The vertical scale is 18 2-1/2 inches per 100 feet. 19 On the lefthand track is the gamma ray 20 curve in the solid line. Over on the righthand track we 21 have the acoustic log in the solid line and the neutron 22 reading is in the dashed line. 23 The horizons that I've marked on this 24 loq from -- going from top to bottom, are the top of the 25 Atoka formation; moving down is the top of the Morrow lime-

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7 1 stone; below that is the top of the Morrow clastics; and 2 finally at the base of the log is the base of the Middle 3 Morrow Shale. 4 Between the top of the Morrow Clastics 5 and the Middle Morrow Shale marker are what we call the 6 Morrow B Sandstones. These have been highlighted in yellow 7 below a 40 percent gamma ray cutoff. 8 Over on the acoustic velocity track I've 9 highlighted in red porosity above an 8 percent cutoff. 10 Please move on to Exhibit Four. Q 11 А Exhibit Number Four is a structure map 12 on top of the Morrow Clastics horizon. The scale for this 13 map is one inch equals 2000 feet. The contour interval is 14 100 feet for this map. The 320-acre Morrow proration unit 15 boundary is again highlighted by the light dashed line and 16 the Little Eddy Unit boundary is highlighted by the dark 17 dashed line. Exxon's proposed location again is in the red 18 dot. Productive Morrow gas wells are indicated by the gas 19 symbols and Morrow dry holes are indicated by the dry hole 20 symbols. 21 The predominant structural feature con-22 trolling production in this field is an up-thrown block 23 trending northwest/southeast. Morrow gas production is 24 present both up dip on this block from our proposed loca-25 tion and in a down dip direction from our proposed loca1 tion; however, as you move to the east, for instance, the 2 in the west half of Section 33 on the downthrown side well 3 fault had Morrow sandstone present but because it of the 4 the downthrown side of the fault it was nonproducwas on 5 tive. 6 Please move on to Exhibit Five and dis-Q 7 cuss the porosity. 8 Exhibit Five is a net porosity isopach А

9 map for the Morrow "B" interval. Again the Little Eddy 10 Unit and proration unit boundaries have been indicated, as 11 have the Exxon proposed location and Morrow gas producers 12 and dry holes in the area.

The contour interval for this map is 10
feet and I used a 40 percent gamma ray and 8 percent porosity cutoff to make this map.

16 Looking at the control in the map area, 17 I've identified two distinct northwest/southeast trending 18 porosity trends roughly paralleling the faults in the 19 If we look around the Exxon proposed location, to region. 20 the south we have a well, the No. 1 SL, which encountered 8 21 feet of porosity; however, as you move to the east to the 22 well in the west half of Section 33, that well encountered 23 30 feet of porosity, but as I mentioned before, because it 24 was on the downthrown side of the fault, this porosity was 25 nonproductive.

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9 1 We are expecting to get on the upthrown 2 side of the fault and to encounter roughly 35 feet of 3 porosity in our proposed location. 4 Q Based on your exhibits, in your opinion 5 what penalty should be assessed against nonconsenting 6 interest owners in this well? 7 А The penalty should be cost plus 200 per-8 cent. 9 Q And were Exhibits One through Five pre-10 pared by you or under your direction? 11 Yes, they were. А 12 And in your opinion is the granting of Q 13 this application in the interest of conservation, the pre-14 vention of waste, and the protection of correlative rights? 15 А Yes, it is. 16 MR. BRUCE: Mr. Examiner, I 17 move the admission of Exhibits One through Five. 18 MR. CATANACH: Exhibits One 19 through Five will be admitted as evidence. 20 21 CROSS EXAMINATION 22 BY MR. CATANACH: 23 Q Mr. Gregson, what's the closest well 24 producing from the Morrow? 25 Α The closest well would be the well which

10 1 the type log is taken from. It encountered 16 feet of por-2 osity. That well has produced 1.2 GCF of gas -- or excuse 3 me, BCF of gas. 4 Mr. Gregson, what -- what is the propos-Q 5 ed location? Do you know the actual footage for that well? 6 А The footage we're proposing is 1980 from 7 the north line and 1420 from the west line. 8 Q Did you know that was a nonstandard lo-9 cation? 10 А Yes. 11 MR. CATANACH: I have no fur-12 ther questions at this time. 13 14 JOE B. THOMAS, 15 being called as a witness and being duly sworn upon his 16 oath, testified as follows, to-wit: 17 18 DIRECT EXAMINATION 19 BY MR. BRUCE: 20 Will you please state your name and city Q 21 of residence? 22 It's Joe B. Thomas, Midland, Texas. А 23 And what is your occupation and who are Q 24 you employed by? 25 А I'm a landman employed by Exxon Corpora-

11 ۱ tion. 2 And have you previously testified before Q 3 the New Mexico OCD? 4 А No, sir. 5 Would you please describe your educa-Q 6 tional and work background? 7 А I have a BBA in petroleum land manage-8 ment from Oklahoma University. 9 I have a Master's of business adminis-10 tration from Oklahoma University. 11 I was employed by Humble Oil and Refin-12 ing Company in 1964, which has been merged into Exxon 13 Corporation in '71. 14 From 64 to '77 I worked in various 15 offices as a landman with Exxon. 16 In 1977 I moved to Midland and I've 17 worked since '77 to the present in west Texas, Permian 18 Basin, and New Mexico areas in all matters of land work. 19 Q And are you familiar with the land 20 matters involved in this case? 21 А Yes, sir. 22 Mr. Examiner, is MR. BRUCE: 23 the witness acceptable? 24 MR. CATANACH: He is. 25 Q Mr. Thomas, would you please state

12 1 briefly what Exxon seeks in this application? 2 Exxon Corporation seeks an order pooling A 3 all mineral interests from the surface to the base of the 4 Morrow formation underlying the west half of Section 32, 5 Township 20 South, Range 33 East, in Lea County, New 6 Mexico, to form a standard 320-acre gas spacing and prora-7 tion unit. 8 The unit will be dedicated to the Salt 9 Lake Com No. 1 Well, which well will be drilled at a stand-10 ard location. 11 Exxon also requests consideration of the 12 cost of drilling and completing the well and allocation of 13 costs thereof, as well as actual operating costs and 14 charges for supervision. 15 Exxon asks that it be designated as 16 operator of the well and that a charge for the risk invol-17 ved in drilling the well will be assessed. 18 Referring back to Exhibit Two, who are Q 19 the interest owners Exxon seeks to force pool? 20 А Exxon seeks to force pool Texaco, who's 21 the owner of record of the southwest northwest and the west 22 half southwest of Section 32. Texaco's tract is part of 23 the Little Eddy Unit. The unit agreement grants certain 24 privileges regarding drilling and OCD appearances to Bass, 25 the unit operator, and as a result we also seek to force

13 1 pool Bass. 2 Exxon owns 62.5 percent of the working 3 interest in this unit. 4 Referring to Exhibit Six, would you Q 5 please describe your efforts to get the interest owners to 6 commit to this well? 7 А Okay. On the first page is a chronology 8 from August to October of our attempts to get this matter 9 resolved. 10 On August the 30th I wrote a letter to 11 Texaco asking for a farmout or joinder. I also included an 12 AFE with this letter. 13 September 7th Curtis Smith with On 14 Texaco called and said Texaco had sent a bid package out on 15 the Little Eddy. I asked for a copy of their bid package. 16 September 16th I called Smith with On 17 Texaco again and asked for Texaco to either join or farm-18 out. I also reminded Smith that Exxon would have to force 19 pool their interest if no decision was reached in a timely 20 manner. 21 Smith said he found out the bid package 22 had not gone out to industry yet. Smith also said it would 23 be inappropriate to force pool at the present, which was 24 September 16th. 25 On September 20th I asked Doug Shutes

14 ۱ (sic) of Santa Fe to send me a copy of the Little Eddy unit 2 agreement, which he did the next day. That allowed me to 3 find out who the unit operator was. 4 September 21st I called Jens Hanson On 5 of Bass, and that is Bass Enterprises Production Company, 6 and confirmed that Bass was the unit operator. 7 Hanson said that Texaco should handle 8 negotiations for this interest. 9 September 23rd I sent Bass a letter On 10 similar to the August 30 correspondence with Texaco asking 11 Bass to either join or farmout with a proposed joint oper-12 ating agreement attached; also a copy of that letter and 13 the JOA was sent to Texaco. 14 26th Hanson with Bass On September 15 called and we discussed the proposal. Bass would not want 16 to join in the well for just the Morrow formation but con-17 cluded it would be easier for them to be force pooled, that 18 a force pooling would be better for Bass than a farmout. 19 On October 3rd I met with Hanson with 20 Santa Fe at the New Mexico Oil & Gas Association Bass at 21 meeting. Bass still believed it would be easier for Bass 22 to be force pooled. 23 On October 10th I called Smith with 24 Texaco and told him we were proceeding with the forced 25 pooling hearing.

15 1 October 11th I sent an informal letter 2 both Texaco and Bass notifying them that we were going to 3 to apply for forced pooling. 4 On the 17th of October Hanson called and 5 asked if Exxon would be interested in a farmout. I replied 6 yes, we would be very interested in a farmout. 7 On October 18th I sent the formal notice 8 of the forced pooling hearing to be held in Santa Fe, New 9 Mexico on Wednesday, November 9th at 8:15, certified, re-10 turn receipt requested, to both Texaco and Bass. 11 On November 7th I called Hanson with 12 Bass and he said Bass would farmout. As of now Bass has 13 not yet signed a farmout agreement so we ask that they be 14 force pooled. If and when they do farmout, we would like 15 -- we will notify the OCD of their decision and release 16 them from the forced pooling order. 17 On November 8th I called Smith with Tex-18 aco and he said Texaco would not farmout or join but would 19 not object to being force pooled. 20 Thank you. What is the cost of the pro-0 21 posed well? 22 А Our AFE cost is \$839,500 dry and 23 \$1,032,000 completed. 24 And is this proposed cost in line with Q 25 those normally encountered by Exxon in drilling wells of

16 1 this type in this area? 2 А Yes, sir. 3 And do you have a recommendation as to Q 4 the amount Exxon should be paid for supervision and admin-5 istrative expenses? 6 А Exxon's give or take rates are \$6068 per 7 month allowed for a drilling well and \$606 a month for a 8 producing well. 9 And are these amounts you've just recom-Q 10 mended similar to those normally charged by Exxon for wells 11 of this type in Lea County? 12 А That is correct. 13 And do you have an opinion as to the Q 14 penalty which should be assessed again nonconsenting inter-15 est owners? 16 А Yes, cost plus 200 percent. This is in 17 line with Exxon's operating agreements used in this area of 18 New Mexico. 19 Q And were all interested parties notified 20 of this hearing? 21 Yes, sir, and a copy of the notice А 22 letter and certified return receipts were submitted 23 attached as the last pages of Exhibit Number Six. 24 Q And was Exhibit Number Six prepared by 25 you?

17 1 А Yes, sir. 2 Q And in your opinion will the granting of 3 this application be in the interest of conservation and the 4 prevention of waste? 5 А Yes, sir. 6 MR. BRUCE: Mr. Catanach, I 7 move the admission of Exhibit Number Six. 8 MR. CATANACH: Exhibit Number 9 Six will be admitted as evidence. 10 MR. BRUCE: And I have nothing 11 further at this time. 12 13 CROSS EXAMINATION 14 BY MR. CATANACH: 15 Mr. Thomas, as I understand it, Texaco Q 16 holds the -- holds the lease but it's included in the unit? 17 А Yes, sir. 18 Q Well, who actually would speak for that 19 acreage? 20 It's a divided type unit so basically Α 21 the operator said that Texaco should make the decision as 22 to what should be done on that. It's their interest, or 23 that tract. 24 So why would you have to force pool 0 25 Bass?

18 1 А Because they have an interest in it due 2 to the operating agreement. 3 And at this point it doesn't look like Q 4 Texaco's going to voluntarily join the unit? 5 That is correct. А 6 Do you know what formations are covered Q 7 within the operating agreement? 8 It's the Morrow formation. А 9 It is the Morrow formation? Q 10 А Right. 11 Q What did -- how did you arrive at the 12 proposed overhead rates that you --13 These are -- overhead rates are both А 14 give or take that the company uses for standard operating 15 agreements in areas in this part of New Mexico and Texas. 16 Q And these are rates that you are cur-17 rently charging for similar wells in the area? 18 А That is correct. We both give them or 19 take them. 20 MR. CATANACH: Ι believe 21 that's all the questions that I have of the witness. The 22 witness may be excused. 23 Bruce, how do you propose Mr. 24 to handle the nonstandard well location? 25 MR. BRUCE: Mr. Duncan

informs me it was previously approved administratively. Let me check on that right now and I'll get back to you later. MR. CATANACH; Okay. Is there anything further in this case? If not, it will be taken under advisement. (Hearing concluded.)

20 1 2 3 4 5 6 CERTIFICATE 7 8 SALLY W. BOYD, C. S. R. DO HEREBY I, 9 CERTIFY that the foregoing Transcript of Hearing before the 10 Oil Conservation Division (Commission) was reported by me; 11 that the said transcript is a full, true and correct record 12 of the hearing, prepared by me to the best of my ability. 13 14 15 Sally W. Boyd C52 16 17 18 I do hereby certify that the foregoing is 19 a complete record of the proceedings in the Examiner hearing of Case No. 23220 heard by me on Nava-bar S. 1938 21 Catanach rud 1 , Examiner 22 **Oll Conservation Division** 23 24 25