	STATE OF NEW MEXICO		
1	ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION		
2	STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO		
2	7 Tanuary 1096		
2	/ January 1980		
4	COMMISSION HEARING		
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8	IN THE MATTER OF.	0	
9	and void Division Order No. R-7983, Lea County, New Mexico;	8678	
10	and Application of Union Texas Petroleum	CASE	
11	Corporation for a nonstandard spacing 8793 and proration unit Lea County New		
12	Mexico;		
13	Application of Wilton Scott for a non-	CASE	
14	standard oil proration unit and unor- thodox oil well location, Lea County,	8794	
15	New Mexico; and		
16	Application of Wilton Scott for an un-	CASE 8795	
	New Mexico.		
17	BEFORE: Richard L. Stamets, Chairman Ed Kelley, Commissioner		
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20	TRANSCRIPT OF HEARING		
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22	APPEARANCES		
23	For the Division: Jeff Taylor		
24	Attorney at Law		
 75	Energy and Minerals	Dept.	
- 1	Santa Fe, New Mexico	0/501	

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INDEX STATEMENT BY MR. LOPEZ STATEMENT BY MR. CARR BILLY M. PRIBBE Direct Examination by Mr. Carr Cross Examination by Mr. Kellahin Cross Examination by Mr. Stamets Cross Examination by Mr. Lopez Cross Examination by Mr. Taylor PHIL R. PERON Direct Examination by Mr. Carr Cross Examination by Mr. Lopez Cross Examination by Mr. Kellahin Recross Examination by Mr. Lopez VAN RICHARD TEMPLE Direct Examination by Mr. Carr Cross Examination by Mr. Lopez Cross Examination by Mr. Kellahin Recross Examination by Mr. Lopez Cross Examination by Hr. Stamets

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INDEX RICEARD L. BRUNNER Direct Examination by Mr. Kellahin Cross Examination by Mr. Lopez WILTON E. SCOTT Direct Examination by Mr. Lopez Cross Examination by Mr. Carr Cross Examination by Mr. Stamets DANIEL S. NUTTER Direct Examination by Mr. Lopez Cross Examination by Mr. Carr Cross Examination by Mr. Stamets Recross Examination by Mr. Carr STATEMENT BY MR. LOPEZ STATEMENT BY MR. CARR STATEMENT BY MR. STAMETS STATEMENT BY MR. CARR STATEMENT BY MR. GENTRY

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EXHIBITS Union Texas Exhibit One, Map Union Texas Exhibit Two, Order Union Texas Exhibit Three, Order Union Texas Exhibit Four, Cross Section A-A* Union Texas Exhibit Five, Phi-H Map Union Texas Exhibit Six, Calculations Union Texas Exhibit Seven, Data Union Texas Exhibit Eight, Calculations APC Exhibit One, Structure Map APC Exhibit Two, Cross Section B-B' Scott Exhibit One, Farmout Agreement Scott Exhibit Two, Letters Scott Exhibit Three, List of Orders Scott Exhibit Four, List of Orders

6 1 2 MR. STAMETS: We will call I believe, Case 8678, 8793, 8794, 8795, which, if I'm 3 next, 4 not mistaken, should all be consolidated for purposes of 5 testimony. 6 Hearing no objection, let's 7 call those. MR. TAYLOR: Case 8678, the ap-8 plication of Wilton Scott to vacate and void Division Order 9 No. R-7983, Lea County, New Mexico. 10 Case 8793, the application of 11 Union Texas Petroleum Corporation for a nonstandard spacing 12 13 and proration unit, Lea County, New Mexico. 14 Case 8794, the application of Wilton Scott for a nonstandard oil proration unit and unor-15 16 thodox oil well location, Lea County, New Mexico. 17 Case 8795, the application of 18 Wilton Scott for an unorthodox oil well location, Lea Coun-19 ty, New Mexico. 20 MR. CARR: May it please the 21 Commission, my name is William P. Carr with the law firm 22 Campbell and Black, P. A., of Santa Fe, appearing on behalf 23 of Union Texas Petroleum Corporation. 24 We have three witnesses. 25 MR. STAMETS: Other appear-

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7 1 ances? 2 it please the NR. LOPEZ: If 3 Commission, my name is Owen Lopez with the Hinkle Law Firm, 4 Santa Fe, New Mexico, appearing on behalf of Wilton Scott 5 and we have two witnesses. 6 Mr. Chairman, if the Commission 7 please at this time, I would like to move to dismiss Case 8 Number 8795, which is the application of Wilton Scott for an 9 unorthodox oil well location, Lea County, New Mexico. 10 In this case Wilton Scott seeks 11 approval of an unorthodox oil well location 330 from the north and west lines of Section 12, Township 15 South, Range 12 13 36 East, North Caudill-Wolfcamp Pool. 14 MR. STAMETS: If there is no 15 objection, Case 8795 will be dismissed. 16 Other appearances? 17 MR. **KELLAHIN:** If the Commis-18 sion please, I am Tom Kellahin appearing with Karen Aubrey, 19 Kellahin and Kellahin of Santa Fe, New Mexico. 20 We're appearing on behalf of 21 APC Operating Partnership. 22 MR. STAMETS: Do you have any 23 witnesses, Mr. Kellahin? 24 MR. KELLAHIN: Mr. Chairman, I 25 potentially have two witnesses.

8 1 MR. STAKETS: Are there other 2 appearances? 3 GENTRY: Mr. Chairman, I'm MR. 4 Charles Gentry from the law firm of Shank, Irwin & Conant of 5 Dallas, Texas, representing for purpose of appearance here 6 Robert and James Edsel of Dallas, Texas. 7 I'm associated for this purpose 8 with the law firm of Maddox, Renfrow and Saunders, of Hobbs, New Mexico. 9 10 I have no witnesses and I only 11 have an oral statement to make. 12 MR. STAMETS: Any other appear-13 ances? 14 I presume that counsel has all 15 sat down and negotiated and determined how they wish to pro-16 ceed in this case? 17 All right. They have not. In 18 that event, I think we probably should proceed with the de 19 novo case, 8678. 20 MR. LOPEZ: Mr. Chairman, it's 21 the position of Mr. Scott that in order -- the orderly pro-22 cedure in this case would be for Union Texas to go forward 23 with its 80 acre case. The reason -- for reasons of funda-24 mental fair play, Union Texas should be required to be the 25 first to go forward with the burden of establishing a case

9 for the 80-acre spacing as opposed to the presumptively 1 correct statewide 40-acre spacing for Wolfcamp wells. 2 3 You will recall that APC brought the original case, No. 4 8598, but failed to notify Scott, whose substantial mineral interests would be adverse-5 ly affected. 6 The second case, No. 8678, was 7 8 brought by Scott to undo what was done without his knowledge. 9 Both APC and Union Texas supported 80-acre spacing in the second case but relied only on the record in the pre-10 11 vious hearings, Case No. 8595, and the Division took administrative notice of that record. 12 The result is that an order 13 changing the spacing requirements for Scott was solely on 14 15 the basis of the record where Scott was not present to cross examine the witnesses. 16 17 Fundamental due process reguires that the burden of making an 80-acre spacing case 18 19 falls on Union Texas. 20 This a de novo hearing, is 21 which means we are starting all over at the beginning. The 22 first and second cases are inextricably connected or the re-23 sulting orders cannot be explained. The parties wanting 80-24 acre spacing at the outset have the burden of persuading the OCD that the presumptively correct statewide spacing rules 25 of 40 acres should be changed.

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10 1 To require Scott to uphold 40spacing at this de novo hearing would be to improperly 2 acre shift the burden of persuasion from Union Texas to Scott and 3 4 would violate fundamental due process. 5 In addition, Mr. Chairman, 1 6 believe it's the practice of the Commission, and I think Mr. 7 Carr in a recent case so much as stated that it is the 8 movant that goes first in a de novo case. In the case 9 before you it was Union Texas that first brought the de novo 10 after applications to have a de novo hearing on Case Number 11 8678. It was in response to their applicatio that Wilton Scott filed his de novo application and applications for 12 13 nonstandard units. 14 Therefore, I would like to move 15 and I believe it would be proper for Union Texas to go 16 forward. 17 MR. CARR: Mr. Stamets, had Mr. 18 Lopez contacted us, we would have been happy to say, yes, 19 Union Texas would be happy to go forward. 20 Mr. Lopez has stated that in a 21 recent case I made the statement that the movant goes foward 22 and has the burden of proof. I think that's a correct 23 statement. It was correct when I made it, it's correct 24 today, but just so we don't confuse things at the outset, 25 this case is not a case that is sought to create pools.

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1 It's a case to vacate the 2 existing pool rules and the applicant in that case is Mr. 3 Scott. If he doesn't want to carry the burden to go forward, we'll be happy to go forward first. 5 What we have before you, Mr. 6 Stamets, is a situation where on July 12, 1985, the Division 7 entered an order creating the Northeast Caudill-Wolfcamp That order was entered after a hearing and that was Pool. 8 9 heard May 8th, 1985. Notice was given of that hearing in accordance with the rules of the Oil Conservation Division 10 11 and some people apparently contend now they didn't get 12 notice, but it was done in accordance with the rules and an 13 order was entered. 14 And the order was entered and 15 provided for 80-acre oil well spacing, well locations within 16 150 feet of the center of any guarter section, and it pro-17 vided that the rules be effective June 1, 1985. Nothing in 18 the record shows why the June 1, 1985, date was set. It 19 was, however, the first day of the first month following the

19 was, however, the first day of the first month following the 19 was, however, the first day of the first month following the 20 hearing in which those rules were sought and at the time the 21 order had been entered it would have been the effective date 22 of the pool rules for the Northeast Caudill-Wolfcamp Pool. 23 Mr. Scott filed an application. 24 That's Case 8678. In that case he sought an order rescind-25 ing these rules. Union Texas Petroleum Corporation is an

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12 interest owner in the pool. They're the operator 1 of the Scott No. 1 Well; they own 50 percent of the interest in the 2 Gilliam Well; and they appeared at that case in support of 3 APC's position, which was the defense of their original or-4 5 der for 80-acre spacing. As a result of that hearing 6 Division Order R-7982-B was entered. 7 That order maintained 30-acre spacing, maintained the well location requirements 8 9 but changed the effective date to July 12th, the date of the original order. That's the only change. 10 11 In response to this order Union Texas Petroleum Corporation filed for hearing de novo. 12 We're here today to present a case to show you that 80-acre 13 spacing is in fact the appropriate spacing for this pool and 14 that the effective date should be June 1, 1985. 15 16 We're going to show you that if this effective date is not reinstated that there's going to 17 18 be an adjustment of interest, that the people who paid for the drilling of the well, the Scott No. 19 1, and the people who have shared in production from that well, are now going 20 to have their interest reduced substantially and Mr. 21 Scott will be the beneficiary of that production because under a 22 farmout there will be assignments of interest back to 23 him. 24 We're going to show you that 25 correlative rights are going to be impaired if the effective

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13 1 date of the order remains on the 12th of July. 2 Then we're going to request a nonstandard spacing or proration unit consisting of the 40-3 acres on which the Scott well is located, only, only in the 4 alternative, only if you insist on staying with the July 12 5 effective date. 6 7 purpose of this The 40-acre unit would be to hold the interest owners' position constant 8 in that well and we would ask that we be permitted to pro-9 10 duce from a smaller unit one-half of an 80-acre allowable. 11 One of the cases that was filed by Mr. Scott was just dismissed, but he is still seeking an 12 unorthodox well location in the 40 acres, south 40, that 13 14 currently are dedicated to the Scott well, and he's seeking 15 a nonstandard unit. What that would do would be effectively 16 break that 80-acre unit into two nonstandard 40-acre units. 17 with the Union Texas operated Scott No. 1 in the northern-18 most of those units, and a location available to Mr. Scott 19 in the southern 40, and yet he wants that well in the ex-20 treme northwest quarter, which encroaches upon the acreage 21 that is operated by Union Texas, and because of the advan-22 tage he would gain by that location, we would request that 23 you impose a penalty on the production from that well. 24 We're prepared to go forward. 25 HR. STAMETS: I think we'll

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14 take about a fifteen minute recess and then when we 1 CORe back we'll -- we'll let you begin, Mr. Carr. 2 3 Before we take the recess, I'd 4 like to have all of those people who will be or may be witnesses in this case to stand and be sworn at this time. 5 6 7 (Witnesses sworn.) 8 MR. STAHETS: We'll take a fif-9 10 teen minute recess. 11 (Thereupon a recess was taken.) 12 13 14 MR. STAMETS: Mr. Carr, are you 15 ready to proceed? 16 MR. CARR: At this time, Mr. 17 Stamets, we will call Bill Priebe. 18 Mr. Stamets, since Union Texas is going first, I'm going to first call Hr. Priebe. 19 Mr. 20 Priebe is a petroleum engineer, but I'm not going to use him 21 to present engineering testimony and will not qualify him as 22 an expert, but will use him simply to give some background 23 information and following his testimony with a petroleum en-24 gineering witness and a petroleum geologist. 25 MR. STANETS: Okay.

15 1 BILLY M. PRIEBE, being called as a witness and being duly sworn upon 2 his 3 oath, testified as follows, to-wit: 4 5 DIRECT EXAMINATION 6 BY MR. CARR: 7 Q Will you state your full name for the record? 8 9 λ Billy Martin Priebe. 10 Mr. Priebe, where do you reside? Q 11 λ Midland, Texas. By whom are you employed and in what ca-12 Q 13 pacity? 14 λ Union Texas Petroleum as an Area Produc-15 tion Superintendent. 16 Mr. Priebe, have you previously testified 0 17 before this Commission and had your credentials accepted and 18 made a matter of record? 19 A No, I have not. 20 Q Would you briefly review for the Commis-21 sion your educational background and your work 22 experience? 23 I got a Bachelor's in mechanical engin-A 24 eering from Texas A & M University in May of '76 and started 25 to work for Exxon in June of '76; worked for Exxon for about

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four and a half years in various production, reservoir, and
 drilling engineering assignments in Midland and Andrews,
 Texas.

I went to work for Coguina Oil Corpora-4 tion in January of '81 as a drilling engineer; worked for 5 them a little over two years as a drilling engineer in West 6 Texas and southeast New Mexico and the Rocky Mountains, and 7 have worked for -- went to work for Enstar Petroleum Company 8 in March of *83 and have worked for them and for Union Texas 9 in drilling and production operations since that date to the 10 present time. 11

12 Q Now, Mr. Priebe, during the course of 13 your employment you've been employed either with Enstar or 14 with Union Texas during the period in which the Northeast 15 Caudill-Wolfcamp Pool was developed, is that correct?

16 A That's correct.
17 Q Are you familiar with that particular
18 area? Has that been part of your -- your duties as an em19 ployee of Enstar and Union Texas?

20 A Yes, it has.

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21 Q And are you familiar with the applica22 tions filed in these consolidated cases?

23 A Yes, I am.

24 Q Would you identify what we have put up on
25 the wall and marked as Union Texas Petroleum Corporation Ex-

17 ۱ hibit Number One, please? 2 λ This is a structure map of the area of 3 interest around the Northeast Caudill-Wolfcamp Field. 4 Now, are you going to be testifying as to 0 5 structure? 6 No. A 7 Would you use this map and by way of Q 8 background provide the Commission with some -- with general information as to development of the Wolfcamp formation in 9 10 this area? The first well in the area that encoun-11 A tered -- produced oil from the Wolfcamp in this immediate 12 area was the Tipperary No. 1 Allen, located here. 13 It was 14 completed in approximately July of -- no, that's not right 15 -- in October of '70, and produced a total of 948 barrels of oil. It is now plugged and abandoned. 16 17 The next well that was completed as 8 18 producer in the area, there were a couple of dry holes 19 drilled in between, was the Enstar Scott No. 1, right here. 20 It was completed in July of '83 and is currently a producing 21 well. 22 The next well drilled in recent times was 23 the Scott No. 2, also drilled by Enstar, located at this lo-24 cation. It -- the original wellbore was drilled and was dry 25 in the Wolfcamp, was plugged back, and two sidetrack at-

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18 1 tempts were made to establish commercial production in the 2 Wolfcamp and the bottom hole locations of those two wells 3 are also marked on the map. It is now, all three, the original hole 5 and the two sidetracks are all plugged at this time. 6 MR. STAMETS: Mr. Priebe, just 7 to be sure that I understand which well we're looking at, I see Enstar 2 Scott, TD 10-9-60, is that the well? 8 9 A That's correct. 10 MR. STAMETS: And then do the 11 dashed lines that lead off of that show ---12 A Bottom hole locations of the Scott No. 2 13 Redrill No. 1 and the Scott No. 2 Redrill No. 2. 14 MR. STAMETS: Okay, What was 15 the date of that -- of those two wells? 16 A They were mid-'84. I'm not sure that --17 of course they took place over a considerable period of time 18 in the middle -- mid-'84. 19 MR. STAMETS: Thank you. 20 A The next well drilled was by Florida Ex-21 ploration. It is now operated by APC Operating Partnership. 22 It is the No. 1 Gilliam in Section 2. It also was completed 23 as a producer in August of '84 and is still an active pro-24 ducer in the field. 25 The two other recent wells are the Brit

19 tany No. 1 Alexander, at this location pointed here. 1 It was completed as a producer, produced for a short period of 2 3 time, and the cumulative production was 503 barrels of oil. It is now a shut-in well being held for 5 possible use as a salt water disposal well. 6 Also drilled ---7 MR. STAMETS: It does have a dry hole symbol on it on this map, is that correct? 8 9 λ That is correct. 10 MR. STAMETS: But in fact it's 11 It's produced, according to the New Mexi-12 A Engineering Committee records, produced 503 barrels of 13 CO oil, and those barrels are reported in December of '84. 14 15 Also drilled in the latter part of '84, 16 the Edsel Scott 3-Y, located at this location. It was a dry 17 hole and was plugged in mid-February of '85. 18 Q Mr. Priebe, what is the interest of Union 19 Texas Petroleum Corporation in this general area? 20 A Union Texas Petroleum operates the No. 1 Scott and has a 50 percent working interest in the Gilliam 21 22 No. 1. 23 Would you refer to what has been marked 0 24 as Oil Conservation -- or I'm sorry, as Union Texas Petro-25 leum Corporation Exhibit Number Two and identify this,

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20 please? 1 2 This is Commission Order R-7983. A 3 0 And in that case who was the applicant? A APC Operating Partnership. 5 Is this the original case seeking the 0 6 creation of the Northeast Caudill-Wolfcamp Pool? 7 Yes. A 8 When did that case come on for hearing? 0 9 λ The hearing date was May 8th of '85. 10 What is the date of this order? 0 11 The date was July 12th, '85. λ 12 And what was the effective date of 0 the 13 rules promulgated by that order? 14 June 1st of '85. A 15 Would you now refer to Exhibit Number 0 16 Three, Union Texas Exhibit Number Three, and identify that? 17 A That is rule -- Commission Order R-7983-B. 18 Q And in that case who was the applicant? 19 λ Wilton Scott. 20 0 What changes were made in that order as 21 compared to the previous order that established the pool and 22 promulgated the pool rules? 23 The effective date of the pool rules A Was 24 changed to July 12th, the date of the order. 25 Q The date of the original order?

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21 Original order, right. 1 A Priebe, what does Union Texas Petro-2 0 Mr. leum Corporation seek in this proceeding here today? 3 We seek that the 8 pacre spacing set out A by the original order be upheld for the Northeast Caudill-5 Wolfcamp Field. 6 We support APC's application for 80-acres 7 and believe that 80-acres is the proper spacing for the 8 field. Later witnesses will present expert testimony to 9 this effect. 10 11 We also seek that the original effective date of June 1st, '85, be reinstated. 12 Mr. Priebe, why is that important? 13 0 That is important because under a farmout 14 A agreement covering the Scott No. 1 all acreage that was not 15 16 dedicated to a producing well on June 15th, '85, has to be 17 reassigned. 18 And what would the effect of this reas-0 19 signment be? 20 If the July 12th date is maintained, Α it would potentially result in up to 50 percent decrease in the 21 22 interest of the current working interest owners in the Scott 23 1, and we do not think that it's fair that the people No. 24 who hore the risk of drilling a well should now be forced to 25 take a decreased interest in the well.

22 1 0 Does Wilton Scott have an interesst in that well? 2 3 A Yes, he does --4 0 Would that interest be reduced by virtue of the reassignment? 5 6 λ The interest in the 40-acre tract on 7 which the wellsite sets would be reduced but the fact that he owns the other 40 that would be combined with that to 8 form an 80-acre unit would result in an increased working 9 interest in the well. 10 11 Were Exhibits Two and Three the copies of 0 Oil Conservation Division Orders taken from your files on 12 13 the Northeast Caudill Pool? 14 A Yes. 15 MR. CARR: At this time, Mr. 16 Stamets, we would offer Union Texas Exhibits Two and Three. 17 MR. STAKETS: Without -- with-18 out objection these Exhibits Two and Three will be admitted. 19 MR. CARR: That concludes my 20 examination of Mr. Priebe. 21 MR. STAMETS: Are there any questions of Mr. Priebe on the information that he has pre-22 23 sented? 24 Mr. Priebe may be excused. 25 MR. MELLASIN: Excuse me, I'm

23 sorry, I was waiting for Mr. Lopez to have some questions. 1 I have some guestions. 2 3 NR. LOPEZ: No questions. 4 MR. KELLAHIN: Mr. Chairman, if 5 I have your permission, I have some questions for Mr. 6 Priebe. 7 8 CROSS EXAMINATION BY MR. KELLAHIN: 9 10 Q Mr. Priebe, I was not clear with regards to your understanding of the changes in the interest depen-11 12 ding upon what happens to the farmout versus the effective date of the spacing. 13 14 What is the acreage dedicated currently 15 to the Scott No. 1 Well operated by UTP? Is that an 80-acre dedication? 16 17 Α I believe that that's dedicated 80 acres 18 to that, right. 19 0 All right. Assuming the spacing rules 20 are effective prior to the termination of the farmout with 21 Mr. Edsel, what would be the 30-acres that UTP would dedi-22 cate to the Scott well? 23 If the effective date was -- was A after 24 the June 15th farmout date --25 0 No, sir, before.

24 1 A Before? We would dedicate the -- the 2 northwest of the southwest and the southwest of the south-3 west. 4 It would be a stand-up 80, then --Q 5 A Right. 6 -- in the west half of the southwest. Q Am 7 I correct in understanding that there is a difference in 8 ownership between the northwest and the southwest of that quarter section? 9 10 A There is not a difference in ownership of the effective date is prior to the June 15th date. 11 12 0 So if the effective date is prior to the 13 farmout determination ---14 Α Right. 15 Q -- then was it your testimony that work-16 ing interest owners who paid for the Scott well, as well as 17 the royalty and overriding royalty owners that are partici-18 pating in the production and revenue on that Scott well 19 would be the same? 20 A That's right. 21 All right. Let's see if I understand Q 22 what happens if the effective date of the spacing orders is 23 after the June 15th date. I'm correct in understanding that 24 the June 15th date is the date that triggers the Edsel/UTP 25 farmout? That's --

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25 Right. 1 A 2 Q -- the date we're looking at? 3 A Right. Q All right. If the Commission's spacing order is effective after June 15th, what then was your tes-5 6 timony about what happens? 7 A The -- the original owners, original working interest owners in the Scott No. 1 would be 8 forced to release all but the 40 acres held by the Scott No. 9 l on June 15th of '85 and if the spacing, an 80-acre spacing or-10 11 der is effective after that date, well then we would be faced with a situation of needing 80 acres to dedicate 12 to make standard proration unit but yet would not -- would 13 a released the right to 40 of those 80 acres and would 14 have 15 hold only the original 40 acres the Scott No. 1 sets on. 16 0 If that occurs, what is your understand-17 ing of the options that you would have on behalf of your 18 company in order to form an 80-acre standard unit, notwithstanding the fact that you have now lost 40 of the acres un-19 20 der the farmout? 21 What are your choices? 22 Two choices would be to either reach some À 23 sort of an agreement with the present owner, the new owners 24 of that south 40 acres or to form an 80-acre pool, which 25 would result in the dilution of the -- the original inter-

1 ests, working interest owners in the well, or to get approval for a nonstandard 40-acre tract for the Scott No. 1. 2 3 Have you considered the possibility of 0 force pooling in the absence of a voluntary agreement to 4 then have an 80-acre tract around the Scott well? 5 6 A I personally have not, no. 7 Q All right. The choice, then, your company has made, if I understand you correctly, is to seek 8 9 40-acre nonstandard proration unit for the Scott Well the Commission makes the effective date of the spacing case 10 11 after the June 15th date. That's correct. 12 ٨ 13 0 All right. Let me understand the differ-14 ence, then, in the interest, working interest ownership, be-15 tween the 80 acres and what would happen if the 40 acres 16 that's released under the farmout, if you're required or 17 compelled to put that 40 acres back into your unit. Do you 18 have, have you calculated or prepared an exhibit that shows 19 the actual percentage interest to change between the two 20 fact situations? 21 A No, we haven't prepared that yet. 22 Can you approximate for me, you said Mr. Q 23 and I'm not sure exactly what happens to his inter-Scott, 24 est, could you state again, sir, what happens in the event 25 that the spacing case is spaced on eighties but is effective

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27 after the June 15th date? 1 A The interest of all of the working inter-2 3 est owners in the 40-acre tract, the northwest of the south-4 west, their working interest would be cut in half or diluted as -- when we bring the other 40 acres into that proration 5 unit. 6 7 The owners of the southwest 40 acres, which is Wilton Scott and Frank Late, their new working in-8 terest would be one-half times their interest currently in 9 the well plus one-half times their interest in that south-10 west 40-acre tract. 11 Am I correct in understanding then that 0 12 under that fact situation they would have an additional 50 13 percent interest? 14 15 Α Between the two of them, that's correct. For no other reason than the effective 16 Q date of the spacing case. 17 18 A That's correct. 19 Q Thank you. 20 NR. LOPEZ: Nr. Chairman, based 21 on Mr. --22 THE REPORTER: Mr. Lopez, I'm 23 not able to hear you clearly down here. 24 MR. STAMETS: And, Mr. Lopez, 25 I'm going to give you a chance in just a minute. Mr. Kella-

28 hin's questioning stimulated some for me and maybe I'm going 1 to ask the same ones you are, so let's see. 2 3 CROSS EXAMINATION BY MR. STAMETS: 5 6 0 Mr. Priebe, you were qualified as a petroleum engineer and if you don't feel qualified to answer 7 these questions, just tell me. 8 A 9 All right. I'm not going to talk about a date. Let's 10 0 11 just forget about dates. Right now I presume the No. 1 Scott Well, 12 the producing well, has 80 acres dedicated to it. 13 14 Α That's right. 15 Q All right, and at the time that the ori-16 ginal application for 80-acre spacing was filed, the owner-17 ship in this 80 acres, being the west half of the southwest 18 quarter, would be identical throughout as to working inter-19 est and royalty interest, is that --20 A That's right. 21 Q -- correct? All right. So that if now 22 by any action this Commission takes, if the spacing in this 23 pool goes back to 40 acres, the interest, then, in the 24 southwest quarter southwest quarter would be different from 25 the interest in the northwest quarter southwest quarter.

29 That's right. ۱ λ 2 0 And is it your testimony that the correl-3 ative rights of the owners in the southwest guarter southwest quarter at the time of the original application, 4 their correlative rights would be violated by changing the spacing 5 back to 40 acres because they would lose their 6 now working 7 interest in the southwest of the southwest? A Could you repeat that, please? 8 Q I don't know. I'm trying to 9 figure out how correlative rights would be violated if the Commission 10 now changed the spacing back from 80 acres to 40 acres or 11 if we did not allow for 80-acre spacing in there. 12 The impact would be that there would be a 13 change in working interest in the southwest guarter south-14 15 west guarter, is that correct? That's correct. 16 A 17 0 And that's the whole basis for your say-18 ing the correlative rights will be violated. Your working interest would be reduced. 19 20 Å The working interest owners of the -- the current working interest owners in the Scott No. 1 would 21 22 have their interest reduced by that action, correct. 23 Q Okay. Now, if in fact the well were able 24 to drain 80 acres, then we would be violating your correla-25 tive rights because we'd be allowing someone else to be able

30 1 to produce oil and gas which the well could produce. 2 A If we went back to forties? 3 Q Yes. That's correct. 4 A 5 Okay. But, Mr. Priebe, if the well in 0 6 fact is only able to drain 40 acres, would there then be any 7 impact on the correlative rights of the owners of the southwest guarter southwest guarter, the owners that existed at 8 9 the time the original application was filed? 10 A I'm not sure I understood the question. 11 Q Okay. If in fact the Scott No. 1 Well 12 13 14 15 REPORTER'S NOTE: The remainder of this page is 16 blank due to a reporter error in programming. The 17 text continuity is correct and complete. 18 19 20 21 22 23 24 25

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1 can only drain 40 acres --

Uh-huh. A 2 3 0 -- it would seem as though the owners in that 40 acres would be the ones that would derive all fo the 4 production therefrom. 5 All the production under the northwest of 6 A the southwest. 7 That's correct, and if it can only drain 0 8 40 acres, it would not seem as though that those same owners 9 would be entitled to any production from the southwest guar-10 11 ter of the southwest quarter from the Scott No. 1 Well. A But -- that's correct, but if it was only 12 draining 40 acres then it wouldn't derive any production 13 from that southwest southwest from the Scott No. 1 because 14 it would be unable to drain that if we assume that it just 15 16 drained 40 acres. 17 0 Okay, so under those conditions they 18 wouldn't be losing any of their production rights from the Scott well but what they would in fact lose would be their 19 20 farmout on the southwest southwest. 21 I believe that's correct. λ 22 MR. STAMETS: I'm not sure that clarified anything for anybody besides me. 23 24 Mr. Lopez, do you have some ad-25 ditional questions?

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32 1 MR. LOPEZ: Yes, Mr. Examiner, 2 I appreciate your questions but I just have a few. 3 4 CROSS EXAMINATION BY MR. LOPEZ: 5 6 Mr. Priebe, isn't it the position of 0 7 Union Texas in the hearing today that the Scott No. 1 Well 8 can in fact carry 80 acres because you are putting on a case for 80-acre spacing? 9 10 λ That's correct. Isn't it also true, Mr. Priebe, that any 11 0 12 time the Commission enters an order adopting or changing 13 pool rules to increase spacing and proration units, that of-14 ten there is a readjustment of mineral interest in the pro-15 ducing well? 16 A I don't know. 17 0 You've had no experience in that regard 18 with any production of Union Texas Petroleum with wells that 19 are producing in existing proration units that are expanded 20 to a larger size? 21 Personally, no. A 22 Q Have you attempted to reach agreement 23 with Mr. Scott with respect to the entitlement to production 24 that is in the Scott No. 1 Well as a result of the 80-acre 25 spacing order that was entered July 12th?

33 λ I do not know what negotiation has taken 1 place personally. 2 MR. STAMETS: 3 Any further questions of the witness? 4 Mr. Taylor. 5 6 7 CROSS EXAMINATION BY MR. TAYLOR: 8 0 Mr. Priebe, you said that if 80 -- or 40-9 spacing is adopted that some of the working interest 10 acre owners in the Scott No. 1 would have their interest diluted. 11 Could you name for us the working interest owners whose in-12 terest would be diluted? 13 A 14 You say at 40-acre spacing? 15 Q Or they would lose -- they would have to give up acreage, right? 16 17 A No, I didn't. If 40-acre is kept as the 18 spacing there wouldn't be no dilution of interest. 19 If 80-acre spacing is, then? Q 20 A If -- depending upon the effective date, 21 yes. Well, who, regardless of what happens, 22 0 who would lose -- who would have an interest diluted? I as-23 24 sume Union Texas would be one of them. 25 Enstar Petroleum Company, Robert H. A No.

34 1 Edsel, James Edsel, William Bahlburg, Olympic Exploration, 2 and Inderex, Incorporated, I-N-D-E-R-E-X. 3 And I believe that's all of them. 4 0 Okay. As to the Scott No. 1 Well, when 5 did you say that it was drilled? 6 It was completed in July of '83. λ 7 And has that well paid out yet? 0 8 A Yes. 9 And how long did that take? 0 10 λ As best I can recollect, it was in the 11 range of four to five months. 12 0 So actually the interest owners in that 13 well have already been paid back their original investment. 14 That's correct. A 15 That's all the questions I have. Q Thank 16 you. 17 STAMETS: I think it would MR. 18 be very useful if somebody would volunteer to supply the 19 Commission with a plat which would show how the ownership in 20 the 80-acres would change depending upon the spacing and de-21 pending upon the effective date. 22 MR. CARR: Mr. Stamets, we'll 23 supply that kind of data. 24 Thank you, MR. STAMETS: Mr. 25 Carr.

35 1 Any other questions of Mr. 2 Priebe? 3 He may be excused. 4 MR. CARR: At this time, Mr. Stamets, we would call Phil Peron. 5 6 Mr. Stamets, if we could have 7 just a minute, we have a large cross section to put up. 8 9 PHILIPPE R. PERON, 10 being called as a witness and being duly sworn upon his oath, testified as follows, to-wit: 11 12 13 DIRECT EXAMINATION 14 BY MR. CARR: 15 Q Would you state your full name and place 16 of residence? 17 I'm Philippe Raymond Peron, Midland, A 18 Texas. 19 Q By whom are you employed and in what 20 capacity? 21 A Union Texas Petroleum Company. I'm an 22 exploration geologist. 23 0 Mr. Peron, have you previously testified 24 before this Division and had your credentials accepted and 25 made a matter of record?

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36 1 No, I have not. A 2 Would you summarize for the Commission 0 3 your educational background and your work experience? 4 I've a Bachelor's degree from Hartwick Α 5 College in Oneonta, New York, in geology. Graduated in 6 1974. 7 I have a Master's degree from the Univer-8 sity of Texas A & M, College Station, graduated in '78. 9 I was employed by Houston Oil and Miner-10 als Corporation from October, 1976, to April of 1981, work-11 ing in the Houston Area and the Rocky Mountains. In April of 1981 to April of 12 1984 I 13 worked for High Plains Exploration Company. I worked both 14 the Rocky Hountains and Midland. 15 And since April of 1984 I've worked for 16 Union Texas Petroleum Company, working the Permian Basin. 17 Are you familiar with the area which is 0 18 the subject of today's consolidated cases in this matter? 19 Α Yes, I am. I've been working the area for 20 Union Texas Petroleum. 21 Q Are you the exploration geologist 25-22 signed to the project by Union Texas? 23 A Yes, I am. 24 And are you familiar generally with what Q 25 is being sought here today?

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37 1 A Yes. 2 MR. CARR: We tender Mr. Peron as an expert in petroleum geology. 3 MR. STAMETS: 4 And your exper-5 ience, has that been primarily as an exploration geologist? 6 A Yes, it has. 7 MR. STAMETS Any questions of 8 the witness' qualifications? 9 He is considered qualified. 10 Q Hr. Peron, I'd now direct your attention to what's been marked as Union Texas Exhibit Number One. 11 Was this exhibit prepared by you? 12 A Yes, it was. 13 14 And how was this exhibit con-Q structed? What did you do? 15 16 A This exhibit was mainly constructed using 17 well control within the area. 18 Now, there are a number of wells on this 0 exhibit. All of those wells, in fact, penetrated the Wolf-19 20 camp formation. 21 A Yes, they did. 22 Q In your work as a geologist, how would 23 24 25

38 you characterize the control that is available to ۱ you in this area in constructing this map? 2 A The control in this particular area 3 is good. 4 Q Would you go to the map and identify the 5 two producing wells in the pool? 6 A The two producing wells would be the En-7 star Scott No. 1, which is in the northwest of the southwest 8 of Section 1, and the Apache Gilliam No. 1 Well, which is 9 in the northeast of the southeast of Section 2. 10 0 Now, Mr. Peron, what does this exhibit 11 actually show? 12 A This exhibit shows the structure mapped 13 within the producing horizon itself. Also marked or indi-14 cated on the map, the porosity pinchout and the oil/water 15 16 contact has also been clearly labeled. 17 Also, I might add, that the area between the porcesity pinchout and the oil/water contact would be the 18 19 area of hydrocarbon accumulation. 20 Q And does this show the location of the commercial hydrocarbons? 21 22 Yes, it does. A 23 0 So would you conclude that there are commercial hydrocarbons within that entire area? 24 25 A No, not within the entire area.

39 1 Does this then show just the area Q in which the hydrocarbons would be located without any refer-2 3 ence to whether or not they're commercial? A Yes, that's correct. 5 You stated you had good control in the 0 6 area. How much control did you have in actually locating 7 the oil/water contact on the structure map? 8 A We had a well, the Enstar Scott No. 1, 9 which had a porosity zone that calculated wet, and it was 10 separated by a 10-foot shale break, and above that there was 11 a producing -- a zone that was actually perforated and produced oil from that Scott Well. 12 13 So, therefore, we were able to pinpoint 14 the oil/water contact within a ten foot interval and we 15 chose to use the average of the interval. 16 And it would be within that ten foot in-0 17 terval if you -- on the data forms that you have. 18 That's correct. A 19 Now you've also placed a porosity pinch-0 20 out on this map. How did you do that? 21 А By -- by correlating the wells and 22 actually looking at the porosity within the wells, we came 23 up with a porosity pinchout. 24 The wells to the left of this porosity 25 pinchout line indicate wells that have no porosity. The

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40 1 wells to the -- to the west of this line do have some poro-2 sity. 3 Now, do you have an opinion as a geolo-Q 4 gist as to whether or not the reservoir limits of the North-5 west Caudill-Wolfcamp Pool are at this time reasonably well 6 defined? 7 In my opinion they are reasonably well A 8 defined, yes. 9 And are they the limits that are depicted Q 10 on Exhibit One? 11 Yes, they are. Α 12 In your opinion is this a separate, Q dis-13 tinct source of supply from other Wolfcamp fields in the 14 area? 15 Yes. it is. A 16 Now I'd like you to go to the cross. 0 sec-17 tion A-A', which is Union Texas Exhibit Number Two, and ask 18 you to first refer to the index map and indicate what the 19 general line of cross section is. 20 A The general line of cross section on the 21 -- on the index map shows that we (not clearly understood) 22 southwest, went towards the north, the northeast and the 23 east, and picked up wells in the (not clearly understood). 24 Was this exhibit prepared by you? 0 25 Yes, it was. A

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41 1 Q Would you now for the Commission identify 2 the wells that are depicted on this cross section? 3 A The first well, starting in the south-4 is the PanAm Sinclair State No. 1. (Not clearly unwest, derstood because of paper noise.) 5 6 The Apache Exploration Gilliam No. 1 Well 7 8 MR. STAMETS: I've having quite 9 a time getting this open. 10 Q Do you want to start over, please? A 11 Let me start over and correct myself on 12 these. The first well on the cross section to 13 the southwest is the PanAm Sinclair State No. 1 in Section 14 15 11. 16 Then we picked up the Apache Exploration 17 Gilliam No. 1 which is in Section 2. 18 We came across and picked up the Enstar 19 Petroleum Scott No. 1 in Section 1. 20 Farther to the east we picked up the Enstar Petroleum Scott No. 2, also in Section 1, and we came 21 22 down through the Late Oil Allen State No. 1, which is the 23 farthest (not clearly understood.) 24 Now is this a stratigraphic or a struc-C 25 tural cross section?

42 The cross section was hung on a structur-A 1 al datum but it does also depict stratigraphy. 2 Mr. Peron, you've indicated certain mar-3 0 4 kers on that. Would you point them out and indicate what they are? 5 Å All right. The marker that's marked in 6 the middle of the cross section map as a map horizon is what 7 I used for the structural map on the wall. 8 Several of the others are just simply 9 markers within the Wolfcamp where I could reasonable pick 10 the -- the markers across and correlate them. 11 I have a marker above and then there's a marker below, which I was not 12 able to correlate to these two wells. 13 Q So the marker that's immediately above 14 the area that you shaded on this cross section is the marker 15 16 that you used for mapping the formation on Exhibit One. 17 A Yes, this marker right here. Okay, would you now to go this exhibit 18 0 19 and explain to the Commission what it shows? 20 A Okay. The exhibit shows the general structural trend of the -- of the structure; also, the poro-21 22 sity is depicted on the cross section. The porosity pinchout is indicated between the Enstar Scott No. 1 and the 23 24 Scott No. 2. 25 The oil/water contact is also placed on

1 the cross section. The area that's shaded green indicates the oil accumule ion. The area that's shaded blue indicates 2 3 porosity that's not hydrocarbon bearing. Also on the map is depicted the perforations that are in both the Scott No. 1 Well and the Apache 5 Gilliam No. 1 Well. 6 7 I might point out at this time that there are three sets of perforations which are not colored. 8 The perforation is a -- is a porosity zone that has 9 top -- is very limited; does not appear to have very much production 10 associated with it. I do not feel that it's part of the 11 main producing horizon within these two wells. 12 13 The two other perforations that are with-14 in, both within the shaded area and just above it, I did not feel were -- were -- actually depict porosity from the 15 16 zones. 17 The first (not clearly understood) looks 18 like it may have been perforated in the oil zone. The lit-19 tle (not clearly understood) exhibit a shale there but did not believe that was porosity, but at the lower perforation 20 that was not colored in. 21 Also it looks like it may be in 22 the washout zone. The density made it look like it may have 23 been washed out is the reason I show zero porosity; there-24 fore in my opinion, this does not reflect porosity. 25 Q Mr. Peron, how would you characterize the

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44 pay continuity in the area? 1 The pay continuity from the Enstar Scott 2 Α No. 1 down to the southwest is very good. 3 And this exhibit also shows porosity, 4 0 does it not? 5 λ Yes, it does, indicated by both the green 6 and the blue markers. 7 Q Now, the green and the blue on this 8 exhibit are -- is that a picture or a characterization of 9 the reservoir as it stands today? 10 Α No, both the exhibits were produced to 11 show original conditions. 12 In your opinion are the wells that are Q 13 producing from the Northeast Caudill Pool producing from a 14 common source of supply in the Wolfcamp formation? 15 16 А Yes, they are. What conclusions can you draw from your 17 0 structure map and your cross section generally about the 18 continuity in this area? 19 20 A From the cross section, just using the three, the three wells that show the good porosity, it defi-21 22 nitely shows that we do have some good continuity between 23 the producing horizons to the southwest. 24 Also, on the map we're showing a similar 25 situation, that we have continuity within the reservoir to

45 1 the west and to the south. 2 Do you see anything from a geological Q 3 point of view that would preclude the development of this 4 acreage on 80-acre spacing, and what I'm talking about is 5 things such as discontinuity, faulting, or other geologic 6 features? 7 X I see no reason why -- why there should 8 be some -- no, I don't. 9 Q Were Exhibits One and Pour prepared by 10 you? 11 A Yes. 12 MR. CARR: At this time, Mr. 13 Stamets, we would offer into evidence Union Texas Exhibits 14 One and Four. 15 MR. STAMETS: Any objections to 16 the admission of these exhibits? 17 They will be admitted. 18 MR. CARR: That concludes my 19 direct examination of Mr. Peron. 20 MR. STAMETS: Are there ques-21 tions of this witness? 22 Mr. Lopez? 23 MR. LOPEZ: Yes, Mr. Examiner. 24 25

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46 1 CROSS EXAMINATION BY MR. LOPEZ: 2 3 Q Mr. Peron, have you estimated in your 4 opinion the number of productive acres that underlie the 5 Northeast Caudill-Wolfcamp Pool? 6 A The number of productive acres should be 7 roughly 262. 8 Q Is this a water drive reservoir? 9 A As a geologist I may not be able to to answer that in engineering terms, but in my opinion, yes, it 10 11 is. 12 0 I assume that you carefully examined the electric log for the BF Petroleum No. 1 Allen located in the 13 southeast of the southwest quarter of Section 1. Is it your 14 15 testimony today that you did not discover any porosity in 16 that -- in your examination of that well? 17 Did not discover any porosity within our A 18 cutoff limits. 19 Are you familiar with Mr. Scott's testi-0 20 mony in the original hearing of this case where he testified 21 that there was -- that it was -- he was advised that there 22 was good porosity in the top part of the Wolfcamp reef in 23 that well and that he recommended that they re-open the well 24 and try to complete it in that reef? 25 Α I'm not familiar with that cestimony.

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47 1 Q If there were porosity in the well, that would change your structure map to some extent, wouldn't it, 2 3 and indicate more productive acreage in the southwest of the 4 southwest? 5 A Yes, if there was porosity within that 6 well. 7 Q Did you ever discuss with Apache before Apache brought the initial application in Case Number 8595 8 the fact that Union Texas intended to file an application 9 10 for 80-acre spacing over this same 160-acre area? 11 Α I never talked to them specifically about 12 filing an application. 13 Q What did you talk about? 14 λ I had a phone call from a geologist, Mr. 15 Dick Brunner, asking me several questions about the reser-16 voir. 17 Q Did you support his application for 80-18 acre spacing at that time? 19 A Yes, I did. 20 MR. STAMETS: Are there other 21 questions of this witness? 22 MR. KELLAHIN: Yes, Mr. Chair-23 man. 24 25

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48 1 CROSS EXAMINATION 2 BY MR. KELLAHIN: 3 0 Mr. Peron, I wonder if we can impose upon 4 you to take a moment, remove Exhibit Number One from the wall, and block it out for me using a ruler so that we know 5 6 the 40-acres. 7 Let me show you what I've done in my 8 exhibit and then I'll ask you to do it on the Commission 9 copy. 10 KELLAHIN: MR. I'm asking the witness, Mr. Chairman, to simply scale off in Section number 11 1, first of all, a line that marks the east half from the 12 13 west half and then divides the southwest guarter into 40-14 acre tracts. 15 Let's return the exhibit to the 16 wall, if you please. 17 Mr. Peron, in doing your geologic reviews 0 18 for this case and for the wells involved, did you do your 19 work independently of any other geologic work done by either 20 Apache or APC Partnership? 21 Yes, I did. A 22 Q Did you review any of the geologic 23 testimony or exhibits from any of the prior hearings in the 24 spacing case, either the one in May of '85 or the two 25 hearings in August of '857

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49 1 Α No, I did not. 2 0 There are some questions about the struc-3 ture map that I'd like to ask you, sir. First of all, I'd like to focus in on the 4 5 porosity pinchout line that you've constructed on Exhibit 6 Number One and ask you, sir, what it means to be on either 7 side of that line in terms of Wolfcamp production in this 8 pool? 9 A In my opinion being on the east half of 10 this line means that you will not have any commercial pro-11 duction from this area -- that portion -- that area. 12 Being on the west half, there's a possibility of being commercially productive. 13 14 Q The location of the porosity pinchout, 15 then, for a geologist would have significance in determining where to locate additional wells for the pool? 16 17 In this case it is very important, yes. A 18 0 All right, sir, and what have you used, 19 then, to control the construction of the line that repre-20 sents your opinion of the porosity pinchout? 21 A I've used the data that we looked at that 22 is contained within the well logs in this hearing. 23 Do you have a recommendation as a geolo-Q 24 gist as to whether an additional well ought to be placed in 25 the southwest quarter of the southwest quarter east of the

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50 1 pinchout line? I would not drill a well east 2 A of the 3 pinchout line in that guarter section, no. 4 And why not? Q 5 A It is my opinion that there would be no 6 porosity found and therefore the well would not be able to 7 produce any hydrocarbons. G Prior to the time the Gilliam well was 8 drilled when we had the -- what I will call the primary pro-9 10 ducing well, which is the Scott No. 1, there was a period of how long that the Scott No. 1 Well was producing before the 11 Gilliam Well started producing? 12 Do you recall, sir? 13 14 À I'm not sure of that, that figure. 15 0 Do you see any geologic evidence that 16 would preclude the Scott No. 1 Well from draining acreage in 17 Section 2 in the absence of the Gilliam Well? 18 No, I do not. A 19 0 Looking at the oil/water contact line 20 that you've got on Exhibit Number One, is that your opinion 21 of the location at that line originally or is that its location today? 22 23 A This is the original oil/water contact 24 before production within this field. 25 Q Before any pool production.

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51 ۱ A Before any pool production. 2 How did you determine and control the lo-0 3 cation of that line? 4 That line was controlled by the Enstar 5 Scott No. 1 Well. I'll move to the cross section. 6 We had a zone that was not perforated 7 in the Scott No. 1 from 10,894 to 10,900. We calculate water saturation. Leading up into the pay itself we had a 8 9 zone from 10,874 ---10 I'm sorry, sir, could you turn to the Q 11 other side of the exhibit so you're speaking towards the re-12 porter? 13 λ The zone from 10,874 to what I believe is 10,882, calculated oil saturated, was actually perforated 14 15 but it didn't produce hydrocarbons. 16 There is a shale or a zone of no porosity 17 that is approximately 10 to 12 feet thick. We placed the 18 oil/water contact based on the log calculations and in part 19 on the perforations in other wells, within the zone approxi-20 mately half way. 21 0 Did you utilize the log from the Gilliam 22 No. 1 to help you locate the oil/water contact? 23 A Yes, We do have a similar situation but 24 the main well that we had used was the Enstar Scott. 25 Q Can you approximate for us or have you

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52 1 done additional work to determine where the oil/water contact is now with production having taken place in the pool? 2 3 A I have not done any such calculation. 0 Let me ask you, sir, about the continuity 5 of the reservoir. Mr. Carr asked you your opinions concerning the pool being a common source of supply for this 6 7 Wolfcamp, and I assume I'm recalling correctly that you 8 concluded that this was a common source of supply. 9 A Yes, I did. 10 0 You also told Mr. Carr that you hađ 11 estimated productive acreage at about 262 acress? 12 A That -- we had -- the original oil in place lies within a 262-acre area. We did not say that 13 it 14 was commercial. 15 I understand. Q What -- where is the 262 16 acres and how did you locate that acreage? 17 The acreage that we're talking about is A 18 bounded by the pinchout line to the east and the oil/water 19 contact on the west side of that line. 20 Did you attempt to construct a net 0 pay 21 Isopach of the Wolfcamp sand to determine what the acreage 22 would be using an Isopach? 23 We had looked at that. We did not do it A 24 for this hearing. 25 Ne do have another exhibit that does

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53 that it does reflect that. 1 2 If we were looking at the net productive Q 3 acreage would it not be reasonable to also include an Isopach so we could determine the relative thickness and thin-4 ness within the 262-acre area you've identified? 5 6 A It would be helpful and I think a later 7 exhibit will show -- will incorporate that data into that other map. 8 9 0 Are you -- let's look, return to the 10 cross section and the Allen State No. 1 Well, which is the Late Oil Company well to the east of the pinchout. 11 Would you go beyond the exhibit and turn back towards us, sir? 12 13 Have you carefully examined that log to 14 determine whether or not you believe the reservoir to extend to that wellbore? 15 16 A Yes, I have. 17 0 All right, and what is your conclusion? 18 A My conclusion is that it does not extend 19 to that wellbore. 20 0 Do you see any indications of what's the 21 porosity cut off that you would use in this area? 22 A We've used 4 percent. 23 You've indicated on the Gilliam No. 0 1 24 Well to us that there was a small interval in the top of the 25 Wolfcamp Reef and you have generally concluded that that

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54 contributed very little, if any, production from the Wolf-1 2 camp Pool for that well. 3 Was that your conclusion? X Yes. 5 Q Okay. Do you see that that top interval 6 has extended into the Scott Well on the cross section? 7 λ It does not appear that it does show up 8 in the Enstar Scott No. 1 Well. 9 Q All right. Was that interval perforated in the Scott No. 1 Well? 10 11 No, it was not. A 12 Are there any indications on the log that Q 13 would cause you to recommend to the engineering people that 14 they perforate that upper zone? 15 A Not, not for me. 16 0 Do you see if that zone extends over into 17 the Allen State Wel17 18 It did not appear that it did. A 19 Q All right, sir. 20 Based upon your studies, Mr. Peron, are 21 you aware of any geologic reason why this pool ought not to 22 be spaced for a temporary period on 80-acre spacing? 23 Α I do not see any geologic reason, no. 24 MR. KELLAHIN: May I have a mo-25 ment, sir?

55 1 MR. STAMETS: While Mr. Kellahin is taking a moment, Mr. Peron, let me ask, you discussed 2 a cutoff limit on the porosity. I don't recall if you pre-3 sented that in your direct testimony. What cutoff did you 4 use? 5 6 Α We used 4 percent. 7 MR. STANETS: Whenever you're ready, Mr. Kellahin. 3 MR. KELLAHIN: All right. 9 Q I have a couple of further questions, Mr. 10 Peron. 11 Can you tell me, using the 4 percent por-12 sity cutoff, which I think was on the Scott No. 1 Well, how 13 many net feet of pay did you get in the Scott Well? 14 15 Have you done that? A 16 I had done it awhile back but when we 17 constructed one of the other exhibits we did not do our calculations that way. We did count up the feet on the zone by 18 19 zone but I did not add the feet per se. 20 All right. Can you tell me what the net 0 21 pay footage is on the Gilliam No. 1 Well using some porosity 22 cutoff? Do you have that number? I do -- I do not have that number. 23 A 24 Û. All right, sir. Thank you. 25 MR. STAMETS: Any other ques

56 tions of this witness? 1 2 Mr. Lopez. 3 MR. LOPE2: Yes, Mr. Chairman, 4 just briefly. 5 RECROSS EXAMINATION 6 7 BY MR. LOPEZ: 8 Q Mr. Peron, I notice when you drew your 9 porosity pinchout, recognizing that we have already discus-10 sed a difference of opinion with respect to the B-F Allen 11 No. 1, I notice that you draw the pinchout relatively close, or just a little to the west of the Enstar Scott No. 12 2. What prevents you from drawing that same pinchout line just 13 14 a little to the west of the B-F Allen No. 1? I mean my 15 question then is couldn't this pinchout line go in a more 16 vertical angle from the Enstar Scott No. 2 rather than in a 17 diagonal direction that you've drawn it? 18 A To answer your -- to answer the first 19 part of the question correctly, I tried to draw the porosity 20 between these two wells which had good porcsity in the second well drilled and no porosity in the first one. 21 22 MR. CARR: Mr. Peron, would you 23 identify the wells, please? 24 Yes, the wells that Hr. Lopez is refer-A 25 ring to is the -- is the Enster Scott No. 2, the original

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57 1 hole, and the Enstar Scott No. 2 redrill. I simply drew the porosity pinchout 2 3 approximately half way between those wells. We have good 4 porosity in the Scott No. 2 Redrill No. 1 and no porosity in 5 the Enstar Scott Redrill No. 2. 6 Moving down to the Enstar Scott No. 1 and 7 the B-F Petroleum Allen No. 1, I simply approximated halfway 8 between those two wells, which is a reasonable assumption. 9 The same consideration was taken between the B-P Petroleum No. 2 and the Apache Gilliam No. 1. 10 Otherwise you had no other control guide 11 Q from which to draw that pinchout line, is that correct? 12 13 λ No, I did not. 14 If a well is not drilled in the southwest 0 15 southwest of 1, and I notice on your map that you've con-16 cluded there exists at least in part productive hydrocarbons 17 underlying the tract, how will those hydrocarbons be pro-18 duced? 19 A Those hydrocarbons will be produced by 20 the Enstar Scott No. 1 Well. 21 Q Then the oil will migrate up-dip to that 22 well through the water drive, is that your opinion? 23 Α Yes. 24 I also notice that in your testimony that 0 25 you've identified 262 productive areas in the pool and you

58 have included the area between the oil/water contact and the 1 porosity pinchout. 2 3 notice that in that area there are ap-I proximately at least four dry holes. 4 How can you account 5 for including acreage underlying these dry holes as part of 6 the productive field? 7 λ The limits that I have outlined, as I 8 said, was an area of hydrocarbon entrapment and not neces-9 sarily productive or commercial. 10 The north part of this reef is not com-11 mercial, in our opinion, and therefore, and which we will demonstrate later, we did not use this portion of the pool 12 to calculate our --13 14 All right, and so that acreage should be Q 15 subtracted from your 262 acres if we're talking about productive acreage. 16 17 That's correct. A 18 Do you know how many acres that might add Q 19 up to? 20 A We -- we have calculated that we have 207 21 productive or commercial acres; therefore the subtraction of 22 207 from 262 will be nonproductive. 23 Q Thank you. 24 MR. STAMETS: Any other gues-25 tions of this witness?

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59 ۱ MR. KELLAHIN: Nothing further, Mr. Stamets. 2 MR. STAMETS: Hr. Peron may be 3 excused. 4 5 Mr. Carr, you may continue. 6 MR. CARR: Mr. Stamets, based on the length of the testimony, I'm becoming extremely sus-7 picious that my last witness is going to be fairly lengthy; 8 he's going to take some time. 9 I would suggest if you are 10 going to break for lunch that you do it early so we could 11 get back and --12 13 MR. STAMETS: Let's go ahead 14 and qualify the next witness before we take a break. MR. CARR: All right. 15 16 VAN RICHARD TEMPLE, 17 a witness and being duly sworn upon his 18 being called as oath, testified as follows, to-wit: 19 20 DIRECT EXAMINATION 21 BY MR. CARR: 22 Will you state your full name for the re-23 0 cord, please? 24 25 A Yes. Ky name is Van Richard Temple.

69 1 0 Mr. Temple, where do you reside? 2 A I live in Midland, Texas. 3 Mr. Temple, by whom are you employed and Q 4 in what capacity? 5 A I'm employed by Union Texas Petroleum and 6 I'm the Permian Basin District Operations Manager. 7 Q Have you previously testified before the Oil Conservation Divison or this Commission and had your 8 9 credentials accepted and made a matter of record? 10 A No, I have not. 11 Would you summarize for Mr. Stamets your Q educational background and your work experience? 12 13 A Okay. I graduated from the University of 14 Oklahoma in December of '73 with a Bachelor of Science in 15 mechanical engineering. 16 to work for Exxon I went in Andrews, 17 in January of '74. I worked for Exxon in Andrews Texas, 18 and in Midland in various capacities as a production engin-19 eer, as a reservoir engineer, and as a drilling engineer. 20 During my tenure there I attended num-21 erous industry and Exxon schools to provide me with the 22 technical data required to perform petroleum engineering 23 jobs. 24 In December of '77 I went to work for 25 Union Texas Petroleum in Midland, Texas. For the following

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two and a half years I worked as a Petroleum and Senior Petroleum Engineer in Midland and under that time I was responsible for reservoir engineering and drilling engineering on
various properties in the Permian Basin.

Following that, for the following two and a half years I was assigned as a District Engineer, which was a supervisor over the engineers or over the petroleum engineers in Midland, Texas. I served in that capacity for approximately two and a half years.

I was then assigned as an Area Operations
Manager, which was a supervisor of our field operations for
the western half of our district in Midland. I serves as an
Area Operations Manager for approximately one year.

I was then moved to Houston and served in the Houston Office as Manager of Petroleum Engineering. In that position I was somewhat more specialized than previously and worked in the -- at a reservoir engineering capacity as opposed to drilling or production services.

In that group I was responsible for working various areas that the company had operations in. This included, in addition to the West Texas operation, Rocky Hountain, southern Louisiana, Gulf Coast, Alaska, some international operations and it kind of gave me a broad base of experience while I was there.

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I was then moved back to Midland as a

62 Manager of Engineering and served in that position for 1 six months at which time we had a reorganization and moved me 2 into my current job. 3 My total work experience is approximately 5 twelve years. 6 C Mr. Temple, in this work experience have 7 you been employed at all times as a petroleum engineer? 8 Α Either been as a petroleum engineer or an 9 engineering manager or an operations manager. 10 0 Does your area of responsibility with Union Texas Petroleum Corporation include that portion of 11 southeastern New Mexico which includes the acreage which is 12 the subject of today's hearing? 13 14 A Yes, sir. 15 Q Are you familiar with the area which is the subject of today's hearing? 16 17 A Yes, sir. 18 And are you familiar with the applica-Q 19 tions that have been filed in each fo the cases which are consolidated in this matter? 20 21 A Yes, sir. 22 MR. CARR: Mr. Stamets, at this 23 time we would tender Mr. Temple as an expert witness in pet-24 roleum engineering. 25 NR. STANDTS: Are there any

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63 1 questions as to his gualifications? The witness is considered qual-2 ified. 3 At this point we will recess the hearing until 1:00 o'clock. 5 6 7 (Thereupon the noon recess was taken.) 8 9 The hearing will MR. STAMETS: please come to order. 10 11 Mr. Carr, you may begin your examination of this witness. 12 13 14 DIRECT EXAMINATION CONT'D EY MR. CARR: 15 16 0 Mr. Temple, would you please identify what has been marked as Union Texas Petroleum Corporation 17 18 Ezhibit Number Five? 19 Exhibit Number Five is a net Phi H map A over the Northeast Caudill Reservoir. This map was con-20 21 structed by calculating the Phi H interval for each one of 22 the wells shown on the map and these calculations are shown 23 at the particular well location. 24 Phi H is simply the porosity in the well 25 times the height of the particular interval and in these

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64 1 wells were we have multiple intervals we calculated a Phi H for each of the intervals and summed them up. 2 The fact that this is a net Phi H 3 map means that we honored the oil/water contact as we're coming 4 down dip and where we see the Phi becoming less and less and 5 6 in fact going to zero down here in the southwest does not 7 mean our pay is pinching out. It simply means that our pay is being submerged below the oil/water contact. 8 We've also drawn in here what we've cal-9 led a permeability barrier and this honors the dry holes 10 that did have some Phi H development in the northern part of 11 the reservoir and we've drawn this through the .75 Phi 12 E line and carried our contour around next to the permeability 13 pinchout. 14 We have contoured this as best we can to 15 16 honor both our data points and the structure map. 17 0 Now, Mr. Temple, if I understand this ex-18 hibit, the portion of the reservoir that can produced oil is between the oil/water contact and the -- the line, what did 19 20 you call that line? 21 Α We called that the permeability barrier line. 22 23 And the permeability barrier line. 0 How many acres do you have in that area between the permeability 24 25 barrier line and the oil water contact?

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65 1 A There are 207 productive acres. 2 Q Now was this exhibit prepared --3 MR. RELLAHIN: Sorry, sir, 207? 4 Yes, sir. A 5 Q Now was this exhibit prepared under your 6 direction and supervision? 7 Yes, it was. A 8 0 Have you checked the data that was used 9 in preparing the exhibit? 10 The -- the actual calculations, log cal-A 11 culations and the drawing of the contour map was performed 12 by Mr. Peron and one or the engineers, reservoir engineers 13 back in our Midland Office, but I have reviewed the method 14 in which they've made those calculations and agree with it 15 completely. 16 Now as part of your study on the area, 0 17 did you prepare calculations to determine original oil in 18 place in this reservoir? 19 A Yes, sir, I have. 20 Ω And are those calculations set forth on 21 what has been marked Union Texas Exhibit Number Six? 22 Yes, sir. A 23 And what conclusion did you reach? 0 What 24 figure did you reach in determining the volume of original 25 oil in place in the Northeast Caudill-Wolfcamp Pool?

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Α We calculated there were 793,900 1 stock tank barrels of oil in place originally in this 207 acres. 2 Now, I'd like you to go to Exhibit Number Q 3 Six and I'd like you to review the factors you used in mak-4 ing the calculation and know what the value is that you set 5 for each of the factors, and how you got that value. 6 A 7 Okay. On the first page of the exhibit we show the equation that we used to make the calculation 8 and this is a standard volumetric equation where we have the 9

7758, which is the unit's conversion factor, the "A" repre-10 sents the area of the particular interval. The Phi H repre-11 sents the pore volume of the particular interval, and then 12 the one minus SW is the hydrocarbon percent in that particu-13 lar interval and where the SW represents the water satura-14 tion, initial water saturation, and the VO is the formation 15 volume factor, which gets us from reservoir barrels back to 16 stock tank barrels. 17

We've drawn a summation sign there bely cause we've calculated oil in place in eight of the -- in eight individual areas, depending on what our Phi H was in each one of those areas.

22 For water saturation we used 33 percent.
23 This was based on a resistivity log analysis on the Scott
24 and the Gilliam.

Our formation volume factor we used is

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1 1.451 and we got this from standings correlations which can be found in various in places in oilfield industry literature. The particular numbers we used here were obtained from (not understood) correlation and impirical charts that we had in one of my Exxon manuals, but these -- these correlations appear throughout various literatures in the industry.

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8 Q And are these standings correlations cor9 relations that are generally relied on by petroleum engin10 eers in making calculations of this nature?

11 A Yes, sir. Where you do not have actually 12 PVP data from oil from that reservoir, these calculations 13 are used and are found to be fairly reliable, particularly 14 when we have a black oil reservoir like this.

15 Q Is it possible for you to go out and test
16 the reservoir and get figures that would be better figures
17 now than standings correlations that you've used?

18 A They would be probably more questionable
19 than the standings correlations because we believe that
20 we're producing below the bubble point of the reservoir, so
21 an oil sample that we would get would not be at original
22 conditions.

23 Q Now, Mr. Temple, you stated that you cal24 culated original oil in place of 794,000 barrels. Did you
25 calculate what the ultimate recovery from this pool would

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68 1 be? 2 A Yes. Before that, I'd like to address 3 the second page of this exhibit. 0 All right. And then I'll go on to that. 5 A 6 On the second page of the exhibit we show 7 the specific intervals along with the Phi H and the area and 8 the oil in place we attributed to each interval. 9 By example, Interval 1 would be this in-10 terval in here, and since we were between zero and .5 Phi H 11 -- that should be .5 or .05 -- we used an average Phi H in 12 this interval of .25. 13 Now when you say "this interval" you're 0 14 going to the Exhibit Number Five. 15 Right. A 16 0 And you are talking about the interval 17 between the contour that has the zero on it on the lefthand 18 side of the contoured area, and the next contour, which has 19 the number on the exhibit .05 but it should be --20 .5. A 21 -- .5. 0 22 Right. A 23 All right. 0 24 And then we calculated what the area λ was 25 in this interval and then used the .25 for Phi II because

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69 it's an average between zero and .5, and we used that manner 1 of calculating various areas in this reservoir. 2 Now are you ready to go to your deter-3 0 4 mination of the recovery? А Yes sir. 5 Did you calculate that figure? 6 0 7 A Yes, sir, we did. 8 2 And would you explain what figure you got and how you obtained that figure? 9 10 Α Okay. We've calculated an estimated ultimate recovery for this reservoir to be 233,000 barrels of 11 oil, and this corresponds to 29 percent recovery of the ori-12 ginal oil in place. 13 Now the manner in which we got to this 14 number is we used production data from the Scott and from 15 16 the Gilliam plotted on semilog graph paper and we use an ex-17 ponential decline to continue the forecasted production from 18 the current date into the future. 19 We decline the wells in this exponential 20 manner/dt/an economic limit and then we took those remaining reserves from, I believe we used December 1st as our date, 21 22 and we took the remaining reserves from December 1st to the economic limit and added that to the cumulative production 23 24 to those -- of those wells. 25 Now you got a recovery factor of 29 0 per-

70 How does this recovery factor compare for wells 1 cent. in similar reservoirs? 2 We believe this is a very reasonable 3 A re-4 covery for a reservoir with a moderate water drive, which we feel this reservoir has. 5 6 0 Now where in all these calculations do 7 the economics actually come into play? For the ultimate recovery it only came in 8 A 9 in determining the economic limit and that is, we, honoring 10 the operating expenses and the producing rate, we carried the well down to a point at which it made no money and then 11 we said from that point on we discontinued production. 12 Temple, you've stated that 13 0 Now, Mr. 14 you've estimated there are 233,000 barrels of recoverable 15 reserves. What is the total production to date from the re-16 servoir? 17 Current production, the cumulative pro-A 18 duction as of 12-1-85 was 202,000 barrels of oil. 19 Now, Mr. Temple, are you prepared to make 0 20 recommendation to this Commission as to what the spacing a 21 pattern should be for the oil wells producing in the North-22 east Caudill Pool? 23 A Yes, sir, I believe the most proper spac-24 ing for the reservoir is 80-acre spacing. 25 0 And upon what do you base that recommendation?

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71 ation? 1 A There are several factors. One is 2 we have a reservoir that by Permian Basins or West Texas con-3 4 siderations we believe a very permeable reservoir in that we have two wells producing a significant amount of fluid and 5 producing with relatively high pumping fluid levels. 6 7 The Scott No. 1 is producing in excess of 8 400 barrels a day fluid with the pump set at 8000 foot and with the fluid level well above that. 9 10 And we have the Gilliam No. 1 producing on the order of 175 to 200 barrels of fluid a day and again 11 I believe their pump is set fairly high or above the perfor-12 ations and they are carrying a high fluid level. 13 14 That gives rise to the indication that we 15 do have a relatively or a very permeable reservoir here. 16 The second thing we have is we have some 17 pressure data that indicates that the Gilliam is in pres-18 sure communication with the Scott. 19 When the Scott was originally drilled, 20 pressure information was obtained that showed that the ori-21 ginal pressure in the Scott, and this measurement was made 22 in August of '83, and the pressure was found to be 3358 or 23 3360 pounds. 24 That well was produced for approximately 25 a year and about 100,000 barrels of oil was taken out of the 1 reservoir by this well.

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2	Then the Gilliam No. 1 was drilled and
3	completed and when that happened another bottom hole pres-
4	sure was run 9-84, or September of '84, and this pressure
5	showed an original pressure in the Gilliam of 2956 pounds,
6	and we show here a 400 pound drop in the pressure from what
7	was found in the Scott to what was found in the Gilliam, and
8	I attribute this pressure drop to the drainage or the pro-
9	duction from the Scott well over to the Gilliam well.
10	Q How far apart are these wells?
11	A Approximately 1100 feet apart, and in my
12	mind that 11 400 pound drawdown over one year period, for
13	two wells that are 1100 foot apart is fairly significant.
14	The second thing is that if you strike an
15	arc between the Scott to the Gilliam, using the 1100 foot as
16	a radius, that corresponds to an 80-acre drainage radius, so
17	that shows that in these two wells that we have seen drain-
18	age over a typical 80-acre pattern, and I believe actually
19	we've probably drained well beyond that.
20	If you carry the drainage from 400 down
21	to 300 you carry that on out into the reservoir, we well.
22	have may well have drained in excess of 80 acres, are
23	capable of draining it in this well.
24	Q Is this a water drive reservoir?
25	A Yes, sir, I believe it is. We have seen

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water encroachment in both the Scott and the Gilliam. 1 The Scott is producing on the order of 90 percent water cut, in-2 3 itially produced no water. The Gilliam is producing on the order of 4 5 70 percent water cut, and it initially produced water free. So we've had water influx into both of 6 these wells. 7 Additionally, using our geologic descrip-8 tion and the oil in place that we calculated, we made mater-9 ial balance calculations to determine that with the 793,000 10 barrels oil in place and the pressure drawdown that we saw 11 prior to production from the Gilliam, that the oil in place 12 13 was capable of only supporting 10,000 barrels of production. 14 These were on material balance calculations and basically it says that if there was external drive for this 400 pound 15 16 pressure drop, we would have only seen 10,000 barrels of 17 production, but we saw 100,000 barrels of production, which 18 indicates that we had an external source supplying pressure 19 support for this reservoir, and that's we've calculated be-20 tween 80 to 90 percent of the pressure support was being 21 provided by what we feel is the aquifer down to the south-22 west.

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23 Q Now, Mr. Temple, have you calculated what
24 the two existing producing wells in this pool, what they
25 have actually drained to date?

74 A Yes, I have. 1 0 And is this information contained on what 2 is marked Union Texas Exhibit Number Seven? 3 A Yes, it is. 4 Would you refer to that exhibit, please, 0 5 and review the information contained thereon with the Com-6 mission? 7 λ What we've done is we wanted Yes, sir. 8 to calculate the drainage area based on the production to 9 12-1-85, and what we're doing is we're saying that at 12-1-10 85 production ceases, so now let's calculate what area that 11 we've drained. 12 To do that we've used a typical volumet-13 ric equation where a similar -- exactly like the one we've 14 used before with oil in place and V sub 0, the Eunice con-15 version factor, Phi H, and the 1 minus SW that we've talked 16 about earlier, except we've rearranged the equation to re-17 flect the area to be drained as the calculated number. 18 19 Also here the original oil in place, WØ are saying is represented by the production to date, and so 20 we've taken actual production for the well as of 12-1, div-21 ided it by the recovery factor to turn it back into an oil 22 in place number, and then we've taken that oil in place and 23 fitted it into the Phi H directly around the well. 24 25 Now, for the Scott No. 1 we have an oil

1 production of 131,000 and the Phi H we used was 2.3. Even 2 though the Scott has a Phi H of 3.02, this is the highest 3 Phi H of any well in the reservoir and we felt since we were 4 calculating a drainage area around this well that we'd be 5 more typical what the Phi H would be in that area around the Scott well, we averaged the Phi H with the Gilliam Well, 6 7 which is 1.57, and you come up with an average of the two 8 would be 2.3.

9 Using these numbers we calculate that as 10 of 12-1-85 the Scott No. 1 has already drained 54 acres and 11 at that time the well is currently or it was producing and 12 is still producing 40 barrels of oil a day.

The Gilliam No. 1 we did in the same manner except the oil production was 70,000 and the Phi H we used on it is the 1.57 value because that well is draining reserves in areas of better Phi H and draining reserves in areas of lower Phi H, so we felt in that well that the 1.57 would be representative of the area directly around the well.

20 Using this we calculate that as of 12-1
21 this well has already drained 43 acres and is still produc22 ing 60 barrels of oil a day.

Q Now, Mr. Temple, if I understand your
prior testimony, you've indicated that there are probably
only something in the neighborhood of 30,000 barrels of oil

left to be produced in this pool based on your calculations
 of recoverable reserves.

A Uh-huh.

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4 Q And yet when I look at this exhibit you
5 indicate that only 97 acres have been drained. How do you
6 reconcile these figures?

7 A Okay. The production and area that we're talking about on the Scott 1 and the Gilliam 1 is in the 8 sweet spot of this reservoir and has the high Phi H values. 9 10 It's right around this area here, and we have to remember when we're talking about acreage drained, that with this 11 particular reservoir we have a three dimensional reservoir. 12 and 40 acres drained out here where you have a low Phi H. 13 14 would result in a much lower oil production number than a 40 15 acres where you have a high Phi H, because you simply have a 16 thicker column in the center part of the unit than you do 17 here.

To illustrate what I'm talking about, if you'll go back to Exhibit Number Six and look at the data sheet, you can see Interval 1 has only -- has 39.5 acres and has 35,000 barrels of oil in place.

Where you go down to Exhibit Six -- or I mean Interval 6, and we have 10.8 acres, which is approximately a quarter of the acreage in Interval 1, yet we have over twice the oil in place, and that again reflects the

77 three-dimensionality (sic) of the reservoir. 1 In fact, when we talk acres drained, 2 W8 have to be cognizant of where that acreage is located. 3 and we believe the remaining production to be recovered in these 4 wells is oil that has been pushed or moved through this out-5 er perimeter in this low Phi H and even though it's only 6 30 - 33,000 barrels of oil, it still represents a large acreage 7 drainage because of the low Phi H of where it came from . 8 0 And do you believe that the wells that 9 are currently producing in this reservoir will produce 10 that 33,000 barrels? 11 A Yes, sir. 12 0 Do you have an opinion as to whether 13 or not development of this area on 40-acre spacing would result 14 in the drilling of unnecessary wells? 15 λ I believe it would. 16 0 In your opinion would going to 17 40-acre spacing result in waste? 18 A I believe it would result in waste. 19 0 Would granting this application with 20 80acre spacing impair correlative rights? 21 А 22 No. Now, what well locations do you recommend 0 23 be included in any rules which result from this hearing? 24 25 λ Wells located within 150 foot of the cen-

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ter of a quarter guarter section. 1 0 And upon what do you base that? 2 A The Scott well is so located. 3 And what effective date do you request be 0 4 set in these rules? 5 λ June 1st. 6 0 Why is that? 7 A This is the first day of the month fol-8 lowing when the -- the hearing was held. 9 That's the original APC hearing? 0 10 A That's right, and it will prevent reas-11 signment of acreage, thereby altering any ownership of the 12 Scott No. 1 Well. 13 Q If July 12th, 1985, remains the date in 14 these rules, what does Union Texas Petroleum Corporation 15 seek? 16 We'll seek a nonstandard spacing or pro-A 17 ration unit to be comprised of the northwest of the 18 southwest of Section 1. This will prevent a readjustment of the 19 equities in this area. 20 0 And on what date would you like -- what 21 date would you propose as the effective date for the crea-22 tion of that nonstandard unit? 23 The effective date of the 80-acre spac-A 24 ing. 25

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79 0 Does Union Texas Petroleum Corporation 1 object to the well location proposed by Wilton Scott in the 2 one remaining case? 3 Yes, we do, due to the fact that they are A gaining an advantage due to the location to the offset pro-5 perty, particularly the Scott No. 1. 6 7 Now, Mr. Temple, are you prepared to make Q a recommendation to the Commission as to how a penalty 8 should be calculated for a well drilled at the proposed un-9 orthodox location? 10 Yes, sir. A 11 Q And are those calculations set forth in 12 what has been marked Union Texas Exhibit Number Eight? 13 Yes, sir. 14 A Would you briefly review those for 15 Q the Commission and state your recommendation? 16 17 What we did is we took the center А Okay. 18 part of the quarter quarter section and we moved -- we lo-19 cated a well 150 foot from that center point directly to-20 wards the proposed location of the Scott Well, and when we 21 do this it puts this well 554 feet off the north and south lines, excuse me, off the north and the west lines. 22 23 The proposed Scott location is 330 feet 24 off of these lines, which gives us a 224-foot difference between the two wells, and this is -- this 224-foot difference 25

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80 1 represents 40 percent of the distance a legal location would 2 be. We also then calculated the net area en-3 croachment a well would provide being drilled 330 versus 554 4 and this area encroachment calculates to be 16.6 acres and 5 6 18 represented by the cross hatched exhibit on the attached 7 map. The recommended penalty that we offer 8 18 take the average of these three deviations from a stand-9 to ard unit and use this to calculate the 66 percent production 10 limitation factor to be applied against a well's prorated 11 allowable, or against the well's allowable. 12 13 0 If this kind of a penalty is place on the 14 well's allowable, do you believe that will protect the offsetting operators against the advantage gained by Mr. Scott 15 from the unorthodox location? 16 17 A Yes, sir. 18 Q Now you have stated you -- this should be 19 applied against the well's prorated allowable. If we have a 20 40-acre nonstandard proration unit, being the southwest of the southwest of Section 1, if that's approved by the Divi-21 22 sion, now what would you recommend the allowable be for that 23 wa11? 24 λ I recommend that with half the acreage 25 that the allowable be half of the standard allowable, which

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81 1 I believe is, I'm not sure exactly, 400 to 480 barrels, in that range, but be half of that and then that number reduced 2 by this production limitation factor. 3 Would you likewise recommend that the 4 0 Union Texas Well on a nonstandard be authorized to produce 5 half of an allowable? 6 7 λ Yes, sir. kr. Temple, were Exhibits Five through 8 Q 9 Eight prepared by you or compiled under your direction and 10 supervision? Yes, sir. 11 A Q Can you testify as to their accuracy? 12 13 Ä Yes, sir. 14 MR. CARR: At this time I would offer into evidence Union Texas Exhibits Five through Eight. 15 16 HR. STAMETS: Without objection 17 these exhibits will be admitted. 18 MR. CARR: That concludes my 19 direct examination of Mr. Temple. 20 MR. STAMETS: Are there ques-21 tions of this witness? 22 LOPEZ: Yes, sir, Mr. Sta-MR. 23 mets. 24 KR. STAMETS: Mr. Lopez. 25

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1	CROSS EXAMINATION
2	BY MR. LOPEZ:
3	Q Mr. Temple, I believe you were here when
4	Nr. Peron testified and I would ask you exactly the same
5	question I asked him as to well, let me ask the question
6	this way: Did you adopt his porosity pinchout line for pur-
7	poses of your Exhibit Number Five?
8	A Yes, sir.
9	Q And isn't it conceivable based on the
10	discussion I had with Mr. Peron that the porosity pinchout
11	line could have been indicated in the direction or vertical
12	from the Enstar Scott No. 2 Well than in the diagonal direc-
13	tion drawn on that map?
14	A That certainly is possible but on the
15	other hand the line could be moved in the other direction
16	also.
17	Q I believe that if I understood your tes-
8	timony that you have indicated that this is a water drive
19	reservoir and the water drive is essentially from the south-
20	west to the northeast, is that correct?
21	A Yes, sir, it's from the southwest moving
22	from this interval out here.
23	Q Based on the based on your information
24	and as laid out on this Exhibit Number Five, is the remain-
25	ing productive acreage underlying the southwest quarter of

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the southwest quarter of Section 1 located in the zones 1 of higher permeability on the map? 2 A Well, these -- these zones down here 3 we do not expect to have as good a permeability development as 4 these in the middle of the reservoir because of their proxi-5 mity to the pinchout. 6 7 Q I believe your testimony showed that both the Scott No. 1 Well and the Gilliam Well are draining areas 8 greater than 40 acres. Can you identify what areas, in your 9 opinion, you believe the Scott No. 1 Well is draining out-10 side this 40 acres or what 54 acres you believe it to 11 be draining? 12 13 λ No, sir, I cannot, but what I can say is that based on our calculations that we've recovered or we 14 have recovered 203,000 barrels of oil of the total 15 233,000 16 estimated ultimate recovery, which is approximately 87 per-17 cent of the oil to be recovered out of this reservoir, which 18 in our estimation would be between 30 and 90 percent of the 19 total area of the reservoir, productive area of the reser-20 voir, has already been drained. 21 So we see a very small amount of produc-22 tive acreage out there that has yet to be drained. 23 Would it be fair to say that the reserves 0 24 that underlie, or did underlie, the southwest quarter of the 25 southwest guarter have been effectively drained or will be

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84 1 drained by either the Scott No. 1 Well or the Gilliam Well. 2 or both? 3 Yes sir. A Q Okay. I notice that the Gilliam Well has 5 a 330/330 location. I would like to ask you how you could 6 justify a location other than 330/330 since that is crowding 7 the southwest guarter of the southwest guarter for Mr. 8 Scott? 9 A We do not have strong objections to a well location 330 off the west line and we would prefer to 10 11 see something on a standard location but we understand the situation trying to protect that leaseline from the Gilliam 12 13 Well, as it's also 330; however, we do feel very strongly 14 about the 330 distance from our southern border, from our 15 southern part of the proration unit because we are 660 off 16 that line. 17 NOW, if the Commission deems that they 18 should adjust that formula or disregard the penalty off of 19 -- off of the west line, we wouldn't have strong objections 20 to that, but we would like to see the factors put in there, 21 or the penalty we put in there because of the proximity to 22 our Scott No. 1 Well, which is 660 off that line, we would 23 like to see that remain. 24 0 Then if I understand your answer, you 25 have no objection to it being 330 from the west line but you

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1 have objection to it being 330 from the north line.

2 A Yes, sir. We do not have strong objection to it being 330 off the west line.

Q So if that's the case, then your calculation with respect to penalty would have to be amended, is
that correct?

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Correct.

8 Q Based on the testimony, don't you --9 isn't it your opinion that a 66 percent penalty on top of a 10 50 percent penalty is an awfully strong penalty for a well 11 to be drilled at a 330/330 location?

A Well, it would also be drilled in a non-12 standard proration unit. You have two things working on you 13 and I think each one of these things needs to be addressed. 14 15 A nonstandard proration unit if it were dedicated half of 16 the acreage to the well than what standardly is dedicated in 17 a reservoir, so we feel that should be considered. And then 18 the fact that we're 330 off a line we are 660 off of, where 19 the regulations speak to the 660 being more standard, I 20 think that that penalty is justified also.

Now, this would still give you allowable,
I believe, of over 150 barrels a day and that still is -will make you a very economic well.

So a penalty like this, assuming an allowable well would be drilled, would not prevent you from

1 drilling that well land recovering a fair gain on that -- on 2 that project.

3 Isn't it correct to say that the net re-0 4 sult of your recommendation with respect to Mr. Scott is that he will either be prevented or severely penalized from 5 6 drilling the well at 330/330 location off the north and west 7 lines of the southwest southwest of Section 1; meanwhile, 8 the Gilliam Well will be grandfathered in at a nonstandard location with no penalty under your proposed plan? 9 10 A I believe that the penalties that we've offered are similar to what's been offered in the past 11 for -- for wells that are located closer to -- closer 12 to the 13 leaseline than what the field rules specify, and I believe that we're within our rights to recommend that sort of pen-14 alty be continued forward in this case. 15 16 0 What is your justification, then, for al-17 lowing the Gilliam Well to stand at what would be an unor-18 thodox location and not suffer any penalties? 19 A I have not addressed that and I have not 20 recommended that and I'm really not prepared to address a 21 penalty imposition on that well or lack of penalty on that 22 well.

As operator of the Scott Well, that'swhere we have really directed our testimony.

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You don't think the equities call for

87 some sort of adjustment? 1 That's really not for me to say. 2 A 3 MR. LOPEZ: No further gues-4 tions. 5 MR. STAMETS: Other guestions of this witness? 6 7 Mr. Kellahin. 8 MR. KELLAHIN: Thank you, Mr. Chairman. 9 10 11 CROSS EXAMINATION BY MR. KELLAHIN: 12 Let me ask you some questions, Mr. 13 0 Temple, with regard to the calculation of the original oil in 14 15 place that you have made that shows 794,000 barrels of oil 16 in place. 17 I assume that material balance calcula-18 tion is a standard, acceptable calculation from which to 19 make an evaluation of the original oil in place, is it not, 20 sir? 21 A In certain applications it certainly is. 22 All right. In this pool in this applica-Q tion do you have an opinion as to whether that's an appro-23 24 priate method to calculate the original oil in place? 25 A I think it would be very difficult to

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1 calculate your original cil in place through material balance in this reservoir because it would be very difficult ot describe the size and the properties of the aquifer supporting -- supporting the oil production in that essentially we only have one well and that's this PanAm Sinclair No. 1 that is down dip penetrating where we believe the aquifer is.

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So getting a good aquifer description in
a material balance calculation is very important if you're
going to determine oil in place with that.

10 Q Can you describe for us whether or not 11 using a material balance calculation there are different 12 programs or calculations that are adjusted to take into con-13 sideration water drive or a partial water drive effect on a 14 reservoir?

A Those programs are available.
Q Do you know what would be estimated to e
the original oil in place using a material balance calculation for this reservoir without the consideration of water
drive?

A We made a calculation as such and if you assumed no water influx, you would have to have an oil -criginal oil in place on the order of 6-1/2 million barrels, which would require a minimum of 800 productive acres, and that would be using an average Phi H of -- well, a Phi H of 2.3, I believe it was that I calculated which is the average

between the Scott and the Gilliam, so that 800 acres would
 be very conservative assuming the entire reservoir averaged
 that Phi H.

4 Q Let's assume we have such a calculation 5 using material balance without it being adjusted for the 6 water drive. What can you tell by looking at that calcula-7 tion that tells you you've got an erroneous result from that 8 calculation?

I can't find 800 acres above an oil/water A 9 10 contact that I could put that oil in. We have control to the north, water from down dip control to the south. 11 We have control to the east. I don't see how you could come 12 anywhere -- come anywhere near of increasing your productive 13 acreage from 207 to 800, a fourfold increase. I just can't 14 see that happening. I mean I don't believe that's the sit-15 uation. 16

17 Q Even if we could take the porosity pinch18 out and move it farther to the east and I don't care how far
19 out you move it, move it several thousand feet, I assume.

20 A NO, I don't believe you -- okay, we made
21 a calculation of the acreage in a wedge in this southwest of
22 the southwest, right here. All right, and that calculation
23 showed us that that area had on the order of 11 acres.

So if you move this thing back, you're
going to have to move it back an awful long ways if that

90 already is 11 acres, you're going to have to move it a long 1 ways to get that up to 600. 2 You'd have to move it farther beyond the 3 0 4 B-F Petroleum Allen No. 1? 5 À I believe that would be correct. 6 0 So you're satisfied that if a material 7 balance calculation is done in the way we've described, it doesn't fit the facts. 8 9 A Yes, sir, that's right. 10 0 Why don't we do the same material balance 11 calculation but this time we adjust that calculation to take into consideration the water drive in the reservoir? 12 Can that be done? 13 14 Yes, sir. A 15 Q All right. For the sake of curiosity, 16 have you run such a calculation? 17 No, sir, we have not. A 18 All right. Can you describe generally, Q 19 based upon your knowledge of that calculation, what you 20 would expect it to do in terms of the total calculated bar-21 rels of cil in place versus a calculation that doesn't take 22 water drive into consideration? 23 Okay. What the material balance calcula-A 24 tion would do is if you assume that there is no influx 25 you'll calculate an oil in place larger than what's actually

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91 there, and the water influx will look like additional oil in 1 place because the water influx is providing pressure support 2 just as expansion of additional oil out there would provide. 3 So if you have an active water drive 4 present, it will greatly reduce your oil in place number 5 over what would be calculated assuming no influx into the 6 reservoir. 7 Based upon your expertise, Mr. Temple, as Q 8 a reservoir engineer and your study of this area, do you 9 have any reservations about the presence of water drive as 10 one of the drive components in this reservoir? 11 I'm very confident that we have a water A 12 drive in this reservoir. 13 What is the gas/oil ratio on the reser-0 14 voir, do you know, approximately? 15 A I don't know what the average gas/oil 16 ratio is in considering total production from the reservoir. 17 On our Scott No. 1, the Enstar Scott No. 1, we have a 18 gas/oil ratio of about 1100 with an original gas/oil ratio 19 around 850. 20 0 Can you give us any opinion with regards 21 to what would happen to the gas/oil ratio in this reservoir 22 in the absence of a water drive? 23 Α Okay. you would see a strong increase in 24 the gas/oil ratio as the pressure depleted in this reser-25

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92 1 voir. 2 Give us a little lesson, Mr. Temple, tell 0 3 us what it is in the absence of water drive that will happen 4 to the gas/oil ratio as the oil is produced out of the Wolf-5 camp. 6 A Let me -- let me clarify myself. 7 Let's talk about right now our 207-acre 8 reservoir. All right. If we did not have a water influx 9 and we produced the kind of production that we've seen out of this reservoir, the pressure would have fallen consider-10 11 ably further than what it's fallen so far and that pressure drop gives rise to an increase in gas/oil ratio as gas is 12 13 being evolved down in the reservoir and is produced through 14 the well. 15 Q In looking at the material balance calcu-16 lations, does the engineer take the reservoir parameters 17 that he finds in the log of a particular well, assign some 18 values to that and run through the calculation? 19 A The material balance? 20 С Yes, sir. 21 k No, sir. Material balance calculations 22 are made utilizing pressure, volume, and temperature char-23 acteristics of the oil, compressibility characteristics of 24 the rock and water. 25 Q What if the engineer is running a volu-

93 metric calculation to determine and estimate of the original 1 2 oil in place producable? 3 In the volumetric calculations you do λ utilize log contrived values and also a P sub O, which is a 4 5 formation volume factor. 6 You have selected to make the calculation 0 7 of the original oil in place using the Phi H map. 8 A Yes, sir. 9 0 Can you describe as an engineer what tha 10 degree of accuracy and reliability is for this reservoir of 11 the volumetric method versus the material balance method. 12 versus the method you've selected, so we have a feel for 13 what it is that you've done? 14 Α Well, the method that we have selected is 15 a volumetric method. We took our geologic description. We 16 used our log data to calculate Phi H values honoring the 17 pinchouts and our oil/water contacts, and we calculated vol-18 unetrically what we felt, what we believe was present in the 19 reservoir under original conditions. 20 We feel this data is fairly accurate. I 21 can't give you a guarantee as to, you know, a degree of ac-22 curacy, but with my experience, I would say that this data 23 is plus or minus 15 percent. 24 Now a material balance calculation הס 25 this reservoir, we haven't made. The primary reason WG.

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haven't made it is because of our lack of reservoir data on the aquifer. Exactly how much fluid that aquifer can put into the reservoir is a function of the aquifer size, is a function of the aquifer permeability, and a function of the areal extent of the aquifer.

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We didn't -- we felt like that with that 6 lack of data, that we could make a much more accurate esti-7 mate of the oil in place using the volumetric method; how-8 ever, if somebody pursued the material balance method, that 9 certainly would be an approach to take, and I'd be inter-10 ested in seeing what the results would be, although I feel 11 like that the volumetric data, because of the lack of aqui-12 fer reservoir information, volumetric data would be a better 13 way to go. 14

Q Can you express an opinion with 15 regards to what happens if no further drilling takes place 16 in the reservoir as you've defined it in terms of the two existing 17 being the Gilliam and the Scott Well, being able to wells, 18 reasonably and efficiently produce the reserves 19 in that reservoir? 20 A I think the two wells will reasonably and 21 efficiently produce all remaining reserves in that reser-22 voir. 23 Q What happens if the Scott Well is drilled 24 out of the southwest of the southwest of Section No. 1 and 25

95 1 we now have a third well in the same pool competing for the same reserves? 2 3 I feel the reserves recovered out of Α the 4 Scott No. 1, if any, would be acceleration reserves, and would not increase the total recovery from this reservoir. 5 6 Q You said Scott No. 1. 7 A Excuse me, excuse me, the well in the 8 southwest of the southwest. 9 0 Simply accelerate the recovery of reser-10 ves and not contribute additional reserve development? 11 A That's my opinion. 12 0 What happens in terms of effectively pro-13 ducing the reservoir if on the east side of Section 1 line 14 separating from Section 2, the line that separates the pool 15 vertically, all right, sir -- yes, sir, the line that separ-16 ates the Gilliam acreage from the Scott acreage, what hap-17 pens in terms of production in the reservoir if now we have two Scott wells in Section 1 versus the one Gilliam Well in 18 19 Section 2 competing for the reservoir? 20 A Would you restate the question, please? 21 Q Yes, sir. My question is, I'm looking to 22 determine whether or not you have an opinion as to whether 23 the Gilliam Well can fairly compete against the two Scott 24 wells if the second Scott well is drilled? 25 A I think if a second Scott well was dril-

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led that this well would have difficulty in competing with
 these two wells, as this well, I think, has already had dif ficulty in competing with the Scott No. 1 because of the
 differences in its Phi H.

And if you look at adding another well down there, you're going to increase the straws in the reservoirs and so it would, obviously, I think you would get more production out of these two wells than you would that one well.

10 0 To go back to part of your answer, you saying that already under current situations the Scott 11 are Well has an advantage over the Gilliam Well, notwithstanding 12 the fact that the Gilliam Well is 330 from the section line? 13 14 A From a productivity standpoint it definitely has an advantage over the Gilliam Well based on Phi H. 15 16 0 Does the Gilliam Well have any advantage 17 because of its proximity to the section line versus the 18 Scott Well's distance from that same line?

19 A Yes, sir, it does have an advantage in
20 that it is -- I think I'll go over and refer to this contour
21 map. We see that the well, by being 330 off a lease line,
22 brings it up dip in this particular structure, and where you
23 have some water encroachment from a water drive, the up dip
24 well has advantage and will recover more reserves.

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Which of the two wells is up dip?

97 1 A The Gilliam, excuse me, the Scott Well is the highest well in the field. 2 Which of the two wells in your opinion is 3 Ω 4 the first well to be watered out? The first well to be watered out in a 5 A 6 particular producing zone should be the Gilliam No. 1. 7 Can you reach an opinion for us with re-Q gards to the direction of flow of production? 8 9 A I believe the direction of the water influx and consequently the flow of the production would be 10 from the southwest to the northeast. 11 In the event the second Scott well 12 0 is drilled in the southwest quarter of Section 1, do you have 13 an opinion as to whether it would be prudent for the owners 14 15 in Section 2 to drill a second well in order to offset the 16 drainage advantage gained by the second Scott well, dril-17 ling a second Gilliam well in Section 2? 18 A Assuming that the Scott well made a well, 19 and made a commercial well, that would justify the expendi-20 ture of drilling another well, I could see where obligations 21 or demands could be made by parties to drill a second well in Section 2. 22 23 If that occurs, then we have four wells 0 24 in the little pool, don't we? 25 A Yes, sir.

98 1 All right, how many of those are unneces-Q 2 sary? 3 A I believe two of them. 0 All right, sir. Let me talk about the what if with you, Mr. Temple, what if the Commission stays 5 6 with 80-acre spacing and yet approves the formation of the 7 two nonstandard 40-acre units, one for the Scott 1 and one for the Scott well out of the southwest quarter. 8 9 It was your testimony, I believe, that in order to balance the equities you would suggest that the 80-10 acre allowable be divided in half and then you would assign 11 a penalty to the Scott because of location. We just went 12 13 through that. 14 Let me show you Commission Rule 505, Mr. 15 Temple, with regards to the depth bracket allowable, and 16 have you find for me, sir, what would be top allowable for a 17 well at this depth on 80-acre spacing? 18 À 400 barrels a day. 19 Do you recall, sir, what the original 0 daily rate of production was on the Scott Well when it was 20 21 completed? 22 A I believe it was top allowable or very 23 close to it. 24 And do you recall what the original pro-0 25 ducing rate was on the Gilliam Well when it was --

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99 A I also believe ---1 -- completed? 0 2 A -- it was top allowable. 3 What is the current producing rate 0 on 4 each of the wells, approximately? 5 λ The production from the Scott No. 1 15 6 approximately 40 barrels of oil a day and Gilliam No. 1 is 7 approximately 60 barrels of oil a day. 8 0 If we use the calculation you've sugges-9 ted of taking the 400 barrels on 80 acres, dividing it in 10 two, we have 200 barrels, and then you've assigned a penalty 11 on location of 66 percent, giving you, I believe, 132 bar-12 rels a day, that would be the initial producing rate for the 13 Scott well in the southwest quarter? 14 Yes, sir. A 15 Q All right, it would be that rate that 16 would compete against the current rates of 60 and 40 on the 17 other two producing wells. 18 A Yes. sir. 19 0 Do you see any advantage or disadvantage 20 gained by the second Scott well with the allowable restric-21 tion as you've recommended? 22 Did I lose you? 23 A that -- that's a tough question No, to 24 answer, because considering current rates and current reser-25

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100 voir status, you know, I see no advantage, or see no disad-1 vantage to being able to produce twice what the maximum pro-2 duction from the field is in a single well. 3 But -- and I guess that, that would have 5 to be my answer. Would you consider a penalty based upon 6 0 some percentage of the current producing rates of those 7 wells versus one that gives the penalized well still the op-8 portunity to produce three times what the Gilliam Well is 9 10 currently producing? I would not recommend that. 11 A Q Let me see if I understand. 12 We've got the Scott Well that's now been producing for 13 two years, whatever. It's produced 100,000 barrels of oil, 130 -- I've 14 15 forgotten now? 16 λ About 130. 17 About 130,000 barrels of oil. 0 It's now 18 down to 60 barrels a day. 19 We've got the Gilliam Well down to 40 20 barrels a day and it --21 Α No, it's 60 on the Gilliam and --22 0 Got them reversed, all right, Gilliam's 23 got 60, Scott's got 40. The new Scott well then has a top 24 allowable of 132. It now competes for the reserves in the 25 pool. How is that not an imbalance in favor of the second

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1 Scott well?

A Well, the two wells that were -- produc-2 that were drilled in the field were allowed to 3 tive wells produce at top allowable and their production was based on 4 5 this top allowable number that we've just mentioned earlier, based on the allowable schedule, and they were allowed 6 400 barrels a day to recoup their -- to make a fair price for 7 the risk that was involved in the well. 8

9 I believe that any penalties imposed 10 should be imposed based on that 400-barrel a day rate since 11 that is what the other two wells were allowed to produce or-12 iginally, rather than the current producing rate, which is 13 what the wells are producing now.

So any penalties on the second well out there, I feel like would be more fairly imposed on a 400barrel a day top allowable rate rather than the current producing rate.

18 Q Does that answer take into consideration 19 your testimony awhile ago that you thought the second Scott 20 well is going to set up the situation where there is drain-21 age across the common section line in the absence of the 22 fourth well?

Have we restricted the second Scott under
this penalty to such a level that you're comfortable that
the fourth well is not now going to have to be drilled in

102 order to maintain a balance between the two ownerships 1 in 2 the two sections? 3 A Since we're "what ifing" here --4 Q Yes, sir. First of all, I don't think that you can 5 A 6 drill a well in that southwest southwest that's going to 7 make 2-300-400 barrels a day. 8 Now. let's say that a well is drilled, 9 "what ifing", let's say a well is drilled there capable of 10 making 2-300 barrels a day, in my mind if that happens, it's going to show that there may be some errors in our structure 11 map or in our interpretation. 12 13 If that's the situation, you have an introduction of new data into the reservoir. 14 The reservoir 15 description may change and it may be justified to drill an-16 other well down there. 17 Now. I don't believe that's the case. I 18 beleive our interpretation is correct, but if we're going to 19 "what if", you know, I think we'd have to think about that 20 also. 21 0 With the development of new data derived 22 from the second Scott well, if it's drilled --23 A Okay. 24 -- is it possible, or is it reasonably 0 25 probable under the discipline of your profession, to take

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103 that information, come back in and determine the actual net 1 productive acreage in the pool for each well and assign al-2 lowables or adjust allowables after that well's been dril-3 led? 4 You mean have something like a productive A 5 acreage hearing? Something on that order? 6 Sure, or like a prorationing hearing or 7 Q productive acreage hearing like you'd see in Texas? 8 λ Sure, that would be an option. 9 Ø Do you have production data available to 10 you, Mr. Temple, from which you could determine for us how 11 long either one or both of the other wells were top allow-12 able wells? 13 Yes, sir, I can give you a pretty close A 14 estimate. That information is in my briefcase. 15 Q All right, I wonder if we might have that 16 17 information for the record, Mr. Chairman? Okay, the Gilliam Well was top allowable 18 for approximately four months. 19 20 Q All right, sir, and how about the Scott Well? 21 22 λ The Scott Well was top allowable for approximately nine months. 23 24 One final question, Mr. 0 Temple. You've 25 indicated to us that you believe the third well will simply

104 ١ be competing for the same reserves that the other two wells could currently produce. 2 In relation to the third well, what hap-3 4 to the oil/water contact? Can you draw any opinion pens 5 with regards to the production of the third well as Mr. 6 Scott proposes in terms of its effect on the oil/water con-7 tact? 8 No, sir. A 9 Q Not yet; we'd have to drill the well 10 first. 11 Yes, sir. A 12 Q Thank you. 13 MR. LOPEZ: Mr. Chairman? 14 MR. STAMETS: Mr. Lopez. 15 MR. LOPEZ: Just a couple of 16 questions based upon Mr. Kellahin's cross. 17 18 RECROSS EXAMINATION 19 BY MR. LOPEZ: 20 Temple, on this "what if" scenario, Q Mr. 21 and assuming two 40 nonstandard acre units in the west half 22 of the southwest quarter of Section 1, and assuming the 23 Scott No. 2 Well, or the second well, or a well drilled in 24 the southwest of the southwest, wouldn't it be logically 25 consistent to allow Apache to have a nonstandard unit in the

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105 1 southeast of the southeast of Section 2, and wouldn't the 2 net result be four nonstandard 40-acre units in the area in 3 question? What's your question again? A The last 5 part of your question? 6 0 I mean if a well, a commercial well, were 7 drilled in the southwest southwest on a nonstandard 40-acre 8 unit, essuming you've got a nonstandard 40-acre unit to the 9 northwest of the southwest, wouldn't the logical, consistent course of action be to form a nonstandard 40-acre comprised 10 11 of the southeast southeast of Section 2, and allow that well to be drilled? 12 That could be done. 13 A 14 The net effect would be 40 nonstandard 40 Q acres in an area you've applied for two 80-acre spacing 15 16 units, and that's not what you want, is it? 17 That's what I want, is 80-acre spacing. A 18 0 You want 80-acre spacing for both the 19 half of Section 2 for the southeast quarter and east the 20 west half of the southwest quarter (not clearly understood.) 21 A Yes, sir. 22 So the only issue, really, is the effec-Q 23 tive date of the 80-acre spacing for this, isn't that true? 24 I believe the, you know, the issue here A 25 is -- is if the 80-acre spacing, and we believe that the

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106 proper development of this reservoir is on 80-acre spacing, 1 and that we would like an effective date of June 1st so that 2 we can -- or so that the interest in the Scott Well, 3 those interests who drilled the well, can share in their entire 80-acre proration unit. 5 0 Well, let me ask the question this way. 6 Assuming 80-acre spacing is the proper 7 way to go, and the Commission order stated with respect to 8 the fact that one well can drill 80 acres, then the only re-9 maining issue, is it not, is whether the date of June 1st or 10 July 12th? 11 That's -- that's the remaining issue. λ 12 0 That is the remaining issue. 13 And isn't the only remaining, or the only issue that remains in 14 connection with Union Texas' request for a nonstandard 40 com-15 prised of the northwest of the southwest of Section 16 1 the namely, the effective date of the 80-acre spacsame issue, 17 ing rule, because if the 80-acre spacing order stood with 18 the June 1st effective date, would not Union Texas withdraw 19 20 its nonstandard application for a 40-acre spacing unit? A 21 If the June 1st 30-acre rule stood, we would withdraw our 40-acre nonstandard proration unit appli-22 cation. 23 24 0 the only issue with respect to the So nonstandard 40-acre spacing unit is the issue of the effec-25

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107 tive date of the 80-acre spacing order, isn't that correct? 1 λ Repeat that, please? 2 3 Q The only issue that is involved with your application for a nonstandard 40-acre spacing unit 4 is the issue of whether the effective date of the 80-acre 5 spacing order is June 1st or July 12th. 6 λ 7 Yes, sir. 8 MR. LOPEZ: No further questions. 9 MR. CARR: Mr. Stamets. 10 11 MR. STAMETS: Let me take a turn, Mr. Carr, before we let you do some redirect. 12 13 14 CROSS EXAMINATION 15 BY MR. STAMETS: 16 0 Mr. Temple, I believe you indicated that you thought the Gilliam Well would water out first. 17 18 A Right. 19 Q And yet the testimony seems to be that the Scott Well has the highest water cut. Do you have an 20 21 idea of why that is? 22 A I believe so, sir. In the Scott Well, because of its structural position, we were able to perfor-23 ate a zone structurally lower in this well than was in the 24 25 Gilliam Well. We could see it right here. The Gilliam

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108 Well, when this well was drilled, that zone was wet so they 1 2 didn't perforate it; however, the Scott Well, when we dril-3 led it, was productive, so it was perforated, and we believe 4 that we've seen water encroachment in this lower zone that hit the Scott Well without that zone being open in the Gil-5 liam Well. 6 7 And that explains why the water production hit the Scott Well and it's producing at a higher water 8 level. 9 In a reservoir such as we have 10 Q here, would it be possible to calculate production penalty on a 11 in the southwest quarter of the southwest quarter of wall 12 Section 1 based on the net, relative net acre feet under 13 that tract as compared to the other tracts in the pool? 14 15 A Yes, sir, it certainly would be possible. 16 Q You don't happen to know offhand the 17 those figures, the relative not acre feet under the 18 southwest guarter southwest guarter and the rest of the 19 p001? 20 No. I sure don't. A We -- I don't have an 21 acre feet calculation for that. 22 Q I don't know that I'd want that, but it's 23 possible I might ask for it later. 24 We could certainly get it for you pretty A 25 quickly.

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109 1 MR. STAMETS: Mr. Carr, do you have any questions? 2 3 MR. CARR: I have no guestions. 4 MR. STAMETS: Are there any 5 other questions of this witness? 6 You may be excused. 7 MR. CARRI Mr. Stamets, that concludes the direct case of Union Texas Petroleum. 8 9 MR. STAMETS: Now, does anyone else have a desire to put their testimony on at this time or 10 a preference? 11 12 MR. LOPEZ: Mr. Chairman, I defer to Mr. Kellahin (not understood) position of Apache. 13 I assume it continues to be in support of 80-acre spacing. 14 If 15 that's the case before the Commission I think it would be 16 (not clearly understood). 17 MR. STAMETS: Fine. Once we've 18 embarked on 80-acres I think we should stick with it. 19 MR. KELLAHIN: I hadn't expec-20 ted to be next, Mr. Chairman. I wonder if we might take 21 five minutes so that we can get our witness and his exhibits 22 before the Commission? 23 MR. STAMETS: Fine. We'll take 24 five. 25 (Thereupon a recess was taken.)

110 1 MR. STAMETS: Mr. Kellahin, you 2 may proceed. 3 MR. **KELLAHIN:** Thank you, Mr. 4 Chairman. 5 Mr. Chairman, at this time we 6 would call as our witness Mr. Richard L. Brunner. 7 Brunner has already been Mr. 8 placed under oath, Mr. Chairman. 9 MR. STAMETS: Thank you. 10 11 RICHARD L. BRUNNER, being called as a witness and being duly sworn upon his 12 13 oath, testified as follows, to-wit: 14 15 DIRECT EXAMINATION 16 BY MR. KELLAHIN: 17 Mr. Brunner, for the record would you Q 18 state your name and occupation, sir? 19 λ Yes. My name is Richard L. Brunner. I'm 20 an exploration geologist for Apache Corporation. 21 Q Have you previously testified as an ex-22 ploration geologist before the Division? 23 A Yes, I have. 24 Would you describe for the Commission 0 25 when and where you obtained your degree in geology?

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111 1 λ I obtained a Bachelor's degree from the 2 University of Colorado in 1975. 3 I've worked as an exploration geologist 4 since then. 5 0 What is your current duties and responsibilities for your company? 6 7 A Currently I am responsible for generating 8 new prospects, evaluating farm-ins, evaluating producing 9 properties for possible offset locations; and in general, 10 keeping track in a geologic sense of any properties that 11 Apache owns in the West Texas and southeast New Mexico Permian Basin area. 12 13 When you say Apache, Mr. Brunner, would 0 14 you define for us your understanding of the relationship be-15 tween Apache Corporation and APC Operating Partnership? 16 APC is a limited partnership of A Yes. 17 which Apache Corporation is the sole general managing part-18 ner of that partnership. 19 What interest does Apache have in the ac-0 20 reage involved in this Wolfcamp reservoir? 21 A The APC Limited Partnership is the owner, 22 50 percent interest owner in the No. 1 Gilliam Well and ad-23 joining acreage. I don't recall exactly the number of ac-24 res. 25 Q For purposes of this hearing, then, if we

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112 1 look at the east half of the southeast guarter of Section 2, 2 is that the acreage that's under lease to APC? 3 Yes, that plus some. Ä 4 0 And that includes the Gilliam No. 1? 5 A That's true. 6 Q All right, would you describe for us your 7 understanding of how your company came into ownership and 8 operations of the Gilliam No. 1 Well? 9 λ Yes. Apache Corporation, through the APC 10 Limited Partnership, purchased certain properties from Flo-11 rida Exploration Company, the No. 1 Gilliam Well and adjoin-12 ing acreage being part of that acquisition. 13 Have you reviewed the data, 0 the docu-14 in your companies files and those that you've acments, 15 guired from Florida Exploration concerning this well and 16 other geologic data for this particular pool? 17 A Yes, I have. 18 Q Let me show you what is marked as Exhibit 19 Number One and ask you to identify that exhibit. 20 A This exhibit is a structure map of the 21 Upper Wolfcamp marker and overlaid on that, a Wolfcamp poro-22 sity Isopach. 23 Would you describe the data that was used 0 24 or reviewed in the preparation of this exhibit? 25 Yes. I reviewed from the Florida Explor-A

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113 1 ation prospect file certain structure maps generated from 2 seismic data, well data from the -- all the wells within 3 this area, and pretty much all the well information, tests, 4 completion information, that I could find. 5 0 Are you satisfied as a geologist that the 6 information depicted on this exhibit is true and accurate? 7 A Yes. 8 C And have you reviewed this data and 9 certain conclusions with reached regards to this 10 information? 11 Yes, I have. X 12 MR. **KELLAHIN:** Br. Chairman, 13 we'd move the introduction of APC or Apache's Exhibit Number 14 One. 15 MR. STAHETS: I'm sorry, Mr. 16 Kellahin. 17 MR. KELLAHIN: We move the in-18 troduction of Apache's Exhibit Number One. 19 MR. STAMETS: Without objection 20 this exhibit will be admitted. 21 Hr. Kellahin, did you intend to 22 qualify this witness as an expert geologist? 23 KELLAHIN: I believe I did MR. 24 and I have not and we would submit Mr. Brunner as an expert 25 exploration geologist. Thank you.

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114 1 MR. STAMETS: Without objection 2 Mr. Brunner will be considered qualified. 3 Q Mr. Brunner, would you give us the gen-4 eral information, trying not to repeat what Mr. Peron has 5 told us in terms of his work, but if you'll give us the in-6 formation on this exhibit that is similar to what Mr. Peron 7 has done on his structure maps so the Commission has an un-8 derstanding of wherein the two geologists are in agreement 9 and then I'll ask you where you disagree. 10 All right, sir. 11 A Mr. Peron's map and mine agree in that 12 there is a structural closure involved in the trapping of 13 hydrocarbons in this field and that it's also bounded by a 14 porosity and/or permeability barrier; also that there is an 15 oil/water contact that limits the reservoir particularly to 16 the south and southwest directions. 17 Let's look first of all, sir, on the por-0 18 osity pinchout, Mr. Peron has identified one on the east 19 side of the Gilliam and Scott wells. 20 Where have you shown that porosity 21 pinchout on your structure map? How is that identified? 22 It's identified in the dashed lines; Ά to 23 the east side a porosity pinchout very similar to Mr. 24 Peron's map between the Scott No. 2 Well and the Scott No. 1 25 Well, following in a northeast/southwest direction.

115 1 And again I have put a porosity pinchout 2 to the west side. It's in disagreement to Mr. Peron's map. 3 Q All right, let's look at the east side 4 pinchout first. What are the data, or the factors which 5 you've used to locate that line, particularly as it crosses 6 the southwest quarter of Section 1? 7 λ I examined the porosity logs for all the 8 wells within Section 1 and interpreted a porosity pinchout 9 based on zero porosity of the Scott No. 2 Enstar Well, the 10 V-P Pet Allen No. 1 Well, and the presence of porosity in 11 the Scott No. 1 Enstar Well, and again the presence of poro-12 sity, although of less permeability, to the north in the 13 Alexander and the Allen Wells. 14 0 As we look at the porosity pinchout and 15 its relationship to the V-F Petroleum Allen Well and the 16 Late Allen Well in Section 1, do you have an opinion as to 17 whether it's reasonable to move that pinchout farther to the 18 east than you've located it? 19 A I believe it could be moved farther to 20 the east and still honor the data, but it's my interpreta-21 tion that the line should be drawn as it is on my map. 22 And what do you base that on? Q 23 A I base that on a trend direction set up 24 by honoring all the data within Section 1. 25 Q All right, let's look at the pinchout on

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116 1 the east -- on the west side now. You say you and Mr. Peron 2 are in a disagreement about that line. 3 Would you show us where the difference is 4 between the two of you? 5 A Yes. I've shown that the -- I interpret 6 the Sohio No. 1 Huber Well is of much less porosity that 7 than what we find in the field and from there I interpret 8 there would be a zero edge farther to the west, And I also 9 draw that conclusion from similar Wolfcamp fields, that por-10 osity is somewhat limited in a fairway of close to a mile or 11 plus or minus that range of width. 12 0 Would you describe for us where and how 13 you have determined the extent of the red shaded area, which 14 is identified as the reservoir limit? 15 I determined a reservoir limit bound on A 16 the east and on the west side by the porosity Isopach just 17 described, and to the north side by the permeability barrier 18 justified by the poor performance of the No. 1 Huber Well, 19 No. 1 Alexander, and the No. 1 Allen Well. 20 then also bounded the reservoir to the 1 21 south by an oil/water contact, knowing that the No. 1 Sin-22 clair Well in Section 1 does have porosity and is within a 23 permeable, porous fairway for the Wolfcamp but is nonproduc-24 tive because of water-filled porosities (not understood.) 25 Q Do you have an opinion, Mr. Brunner, with

117 1 regards to whether or not the reservoir, as you've defined 2 it, constitutes a common source of supply within this Wolf-3 camp porosity? 4 Yes. I believe the reservoir is a common A 5 source of supply. 6 0 Let me turn you now, sir, to Exhibit Num-7 ber Two, which is your cross section. 8 Brunner, would you identify for us Xr. 9 Exhibit Number Two? 10 A Exhibit Number Two is a wall log cross 11 section as drawn from west to east, from left to right, 12 from the Sohio No. 1 Huber Well to the No. 1 Gilliam Well, 13 this was drilled by Plorida, to the Scott No. 1 Well, dril-14 led by Enstar, and to the Scott No. 2 Enstar. 15 Q What's the purpose of this Exhibit, Mr. 16 Brunner? 17 This exhibit is in support of the Ispach λ 18 map, also helping to explain the limits of the reservoir. 19 Have you examined the log information on 0 20 each of the wells depicted on the cross section and satis-21 fied yourself that they are true and accurate to the best of 22 your knowledge? 23 Yes, I have. A 24 Q Have you drawn certain opinions and con-25 clusions based upon your interpretation of this data?

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118 1 λ Yes, I have. 2 Q All right. 3 MR. KELLAHIN: We move the in-4 troduction of Exhibit Number Two. 5 MR. STAMETS: Without objection б this exhibit will be admitted. 7 Q What conclusions do you draw with regards 8 to the cross section, Mr. Brunner? 9 A I conclude that the porosity zones that 10 are productive in both the Enstar No. 1 Scott Well and the 11 Plorida No. 1 Gilliam Well are correlatable and that they 12 are occupying the stratigraphic level. My geologic inter-13 pretation would put them in communication. And that the 14 field is bounded to the east and west by the dry holes on 15 either end of the cross section. 16 0 Do you see any geologic evidence in your 17 study, Mr. Brunner, that would cause you to believe that the 18 pool ought to be developed on less than 80-acre spacing? 19 A No, I do not. 20 In what ways do you differ in interpreta-0 21 tion or agree in interpretation of the cross section between 22 you and Mr. Peron? 23 First of all, in what ways have you 24 agreed? 25 A I agree with Mr. Peron's cross section in

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119 1 that we have certain porosity zones in both producing wells 2 that can be correlated and appear to be in communication. 3 Q Do you and Mr. Peron agree on the 4 location of the oil/water contact, for example? 5 I've not drawn an oil/water contact nor λ 6 I calculated on my cross section an oil/water contact, have 7 but I certainly agree with what Mr. Peron's presented today 8 on his cross section. 9 0 Have you had an opportunity over the 10 lunch hour to look at his cross section? 11 A Yes, I have. 12 When we look at the Gilliam No. 1 Well on Q 13 his cross section versus the one on your cross section, 18 14 there a difference between you in terms of calculating the 15 net feet of porosity in the two wells? 16 A On Mr. Peron's cross section he's Yes. 17 colored in green where there are productive perforations and 18 I believe that is more a gross feet of pay. 19 On my cross sediton I've used a 6 percent 20 porosity cutoff, colored that in yellow, and have looked at 21 more carefully a net feet of pay, and it's that net feet of 22 pay on my cross section that I transformed those numbers 23 onto the Isopach map overlaid on the structure. 24 Have you done a similar thing with 0 the 25 Scott No. 1 Well that's depicted on the cross sections?

120 1 Yes, I have. I've used the same porosity A 2 cutoff and used that number in Isopaching the net feet of 3 pay where again Mr. Peron's cross section has simply colored 4 green the productive perforations and looked at more of a 5 gross feet of pay. 6 Looking at the cross Q section, the 7 correlation between the two producing wells, what do they 8 tell you about whether or not these wells are producing from 9 the same common source of supply? 10 A I believe that they are in communication 11 and producing from the same common source of supply, yes. 12 Is there any structural relationship of 0 13 significance between the two wells? 14 A Yes, I agree with Mr. Peron's structural 15 cross section that the No. l Gilliam Well is lower 16 structurally than the No. 1 Scott Well. 17 What is your position on behalf of your 0 18 company, Hr. Brunner, with regards to the continuation of 19 80-acre spacing for this pool? 20 It's Apache's position that we support A 21 80-acre spacing for this pool, yes. 22 Q Do you have a position or an opinion with 23 regards to the approval by the Commission of two nonstandard 24 proration units, one for the Scott No. 1 Well and the other 25 for the 40 acres out of the southwest quarter of Section 1?

121 1 A Yes. Apache is opposed for proration 2 units of 40 acres in Section 1. 3 What's the reason for your opposition to Q 4 that -- those two applications before the Commission, Mr. 5 Brunner? 6 believe that those proration units λ 1 7 would cause unnecessary wells to be drilled within a reser-8 voir that can adequately be drained by the two existing 9 wells and may also precipitate demand in Section 2 for a 10 well to be drilled by Apache. 11 In comparing your study of the geology to 0 12 Mr. Peron's, are there any other factors that you would draw 13 the Commission's attention to in terms of significant dif-14 ferences or comparisons between the two? 15 A The structure map that I have drawn is 16 obviously different shaped than Mr. Peron's and although I 17 have not asked Mr. Peron, I believe his structure map was 18 drawn solely on well data, that being those subsea depths 19 calculated off of logs. 20 My structure map is somewhat different 21 because I incorporated seismic data and have a, I believe, a 22 more detailed structure. 23 The oil/water contact, therefore, that 24 follows a structural contour, on his map is brought further 25 to the south whereas I believe I would put my oil/water con-

122 1 tact not so far into Section 11, not so far to the south-2 west, having a more tightly closed structure on my map than 3 -- than what Mr. Peron has. 4 0 Can you express any opinion as a geolo-5 gist, Mr. Brunner, with regards to whether or not this is a 6 partial water drive reservoir? 7 A Yes, I believe it is a partial water 8 drive reservoir. 9 And what demonstrates that to you, sir? Q 10 λ I believe that the No. 1 Sinclair Well is 11 water wet and has porosity and permeability connected to the 12 producing reservoir and also supported by engineering data 13 that the pressure has been maintained although not to its 14 original reservoir pressure, but to a certain extent. 15 MR. KELLAHIN: That concludes 16 my examination of Mr. Brunner, Mr. Chairman. 17 MR. STAMETS: Are there ques-18 tions of the witness? 19 Mr. Lopez. 20 MR. LOPEZ: If the Commission 21 please. 22 23 CROSS EXAMINATION 24 BY MR. LOPEZ: 25 Q Mr. Brunner, isn't it true that Apache

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123 1 Corporation was contacted some time in March, 1985, by an 2 employee of Union Texas Petroleum who advised Apache that 3 Union Texas was going to file an 80-acre spacing case and 4 had retained an attorney for that purpose? 5 λ Yes, that's true. 6 Q And when your company again talked to 7 Union Texas Petroleum did they not suggest to you that 8 Apache file the original application in Case 8595 because 9 Union Texas had problems with other interest owners in the 10 northwest quarter of the southwest gwarter of Section 1? 11 A Yes, I believe that is true. 12 MR. LOPEZ: That's all. 13 MR. STAMETS: Are there other 14 questions of this witness? 15 He may be excused. 16 Do you have any other witnes-17 S83? 18 MR. **KELLAHIN:** No, sir, we'll 19 rest our direct case at this time. 20 MR. STAMETS: Then it's your 21 turn, Mr. Lopez. 22 MR. LOPEZ: Mr. Chairman, at 23 this time on behalf of Mr. Scott, we hereby dismiss our ap-24 peal de novo in Case 8678 but continue our appearance and 25 are prepared to present testimony in that case in opposition

124 1 to the establishment of a retroactive date. 2 In addition, we continue our 3 appearance in opposition in Case Number 8793, which is the 4 application of Union Texas for a nonstandard 40-acre spacing 5 and proration unit. 6 We also -- well, I'll stop. 7 MR. STAMETS: Okay, let me un-8 derstand what you've done, Mr. Lopez. 9 If I understand you correctly, 10 your -- Mr. Scott now accepts 80-acre spacing as the proper 11 spacing for this pool. 12 MR. LOPE2: We do not object to 13 it, that is correct. 14 MR. STAMETS: Okay. You do, 15 though, wish to keep the de novo Case 8678 open from the 16 standpoint of determining what the effective date of that 17 80-acre spacing will be, whether it should be June 1, as in 18 the original order, or July the 12th as in the last order. 19 MR. LOPEZ: Correct. We are in 20 opposition to the de novo taken taken by Union Texas to re-21 establish an upright spacing. 22 HR. STAMETS: All right, now 23 was there another case? 24 MR. LOPEZ: The other case con-25 solidated with this was Union Texas' Case 8793 and we con-

125 1 tinue our opposition to that case for the establishment of a 2 nonstandard unit, and in that connection, we move to dismiss 3 our Case No. 8794, which is our application for a nonstand-4 ard unit to apply to the southwest of the southwest of Sec-5 tion 1. 6 MR. STAMETS: Mr. Carr, as I 7 think I understand this situation, I would think that Union 8 Texas would wish to keep their -- their options open in Case 9 8793 for the 40-acre nonstandard unit -- based upon what 10 the final date is. 11 MR. CARR: That's correct. 12 MR. STAMETS: If the Commission 13 should decide that the effective date for the 80-acre pool 14 rules should be June 1 in the written order, then you would 15 wish this case dismissed? 16 MR. CARR: yes, if it's June 1. 17 If it's July 12th, we'll ask for a nonstandard unit 18 effective as of that date. 19 still We have a de novo 20 application in the prior case and we believe that entire 21 case is still before you. 22 MR. STAMETS: And if the 23 effective date should be July the 12th, Mr. Scott would 24 still seek his nonstandard proration unit and unorthodox 25 oil well location?

126 1 MR. LOPE2: No, Mr. Chairman, 2 at this time we are requesting that that case be dismissed. 3 HR. STAMETS: Okay, so the only 4 issue that's before us now is what the effective date is 5 going to be insofar as Case 8678. 6 MR. LOPEZ: Not really as far 7 as Case 8793 is concerned because the Union Texas witness by 8 his own admission says the only issue is the effective date 9 in either case. 10 MR. STAMETS: I have a little 11 bit of a problem on that, Mr. Lopez, just from the stand-12 point of, let's say, for example, the Commission did approve 13 the July 12th date and did approve the 40-acre nonstandard 14 proration for Union Texas, then that would leave Mr. Scott's 15 acreage in the southwest quarter southwest quarter undrilled 16 and with no well authorized. 17 MR. LOPEZ: That's correct. 18 MR. STAMETS: And that's what 19 you would ---20 LOPEZ: And we're prepared MR. 21 to face that. 22 MR. STAMETS: Okay, so at this 23 point we can dismiss Case 8794. 24 MR. LOPEZ: Yes. 25 HR. STAMETS: Thank you.

127 1 MR. CARR: Mr. Stamets, just so 2 we understand, we are still seeking a 40-acre unit, a non-3 standard unit, if the date is changed. 4 If the effective date stays 5 July 12th, we're still seeking a 40-acre nonstandard unit, 6 which would leave their 40 to do with it as they please. 7 MR. STAMETS: Right. I believe 8 I understand all that. Thank you. 9 MR. KELLAHIN: Mr. Chairman, 10 the case is going to go forward on the question of the ef-11 fective date of the spacing for the pool, my client takes no 12 position in that matter. We won't proceed beyond our parti-13 cipation at this point. 14 MR. STAMETS: Thank you, Hr. 15 Kellahin. 16 MR. LOPEZ: We're prepared to 17 call our first witness, Mr. Scott. 18 19 WILTON E. SCOTT, 20 being called as a witness and being duly sworn upon his 21 oath, testified as follows, to-wit: 22 23 DIRECT EXAMINATION 24 BY MR. LOPEZ: 25 Would you please state your Q nane and

128 1 where your reside? 2 A My name is Wilton E. Scott, and my resi-3 dence is Houston, Texas. 4 0 Are you employed? 5 A No. 6 Q Would you for the Commission, for the 7 benefit of the Commission briefly describe your educational 8 background and work experience? 9 Yes, and this has to be somewhat lengthy. A 10 I was graduated from the University of 11 Texas with a degree in geology in the year 1936. 12 I immediately went to work for what is 13 now Exxon in some overseas assignments as a geologist. 14 I moved to Hobbs, New Mexico, in Decem-15 ber, 1938, where I was employed as a geologist for Cities 16 Service Oil Company. 17 I remained in that position or in that 18 employment through the war with a stint out to go to the 19 Army and efter the war I took a job with Buffalo Oil Company 20 as Vice President in charge of their exploration program. 21 I resided in Artesia. 22 In 1950 I moved to Midland in that same 23 capacity. 24 In 1955 I moved to Houston in the capa-25 city of Exploration Vice President for the then Tennessee

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129 1 Gas Transmission Company, which is now Tenneco, Incorpor-2 ated. 3 I remained with that company until my re-4 tirement in -- seven and a half years ago, which would be 5 1978, I guess. 6 I remained on the Board five years after 7 that until 1983 at which time I resigned from the Board and 8 from that time forward I am unemployed. 9 Did you hold any other positions with 0 10 Tenneco other than Vice President of Exploration? 11 Well, I don't think I can tell you all A 12 the titles I held in that company the thirty years I was as-13 sociated with them, but I joined them as Vice President of 14 Exploration. I became President of the oil company, Execu-15 tive Vice President of the company, Vice Chairman of the 16 Board, Chairman of the Board, President of the company, and 17 was Chairman of the Board at the time I retired. 18 0 Are you --19 A There may have been some other titles in 20 there, I'm not sure. 21 Are you familiar with the applications 0 22 that are in dispute before the Commission today? 23 A Yes, I am. 24 And what interest do you represent with 0 25 respect to this dispute?

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1	A I represent my own interest and that of
2	my partner, Frank M. Late, who has a one-third interest in
3	the all of the leases that I own, and also my wife and her
4	two sisters, who own the minerals in Section 1 with the ex-
5	ception of one 80-acre tract.
6	HR. LOPEZ: I tender Mr. Scott
7	as an expert manager in the oil and gas industry.
8	MR. STAMETS: The Commission is
9	certainly distressed to hear that things are not going well
10	for Mr. Scott but we do consider him gualified.
11	Q How did you get your interest in Section
12	1?
13	A My interest in Section 1 really goes far
14	back because of my wife and her two sisters ownership of the
15	minerals but more recently my interest as to this case par-
16	ticularly dates back to 1980 when I took commercial oil and
17	gas leases from my wife and her family covering all of the
18	minerals in Section 1 and covering 560 acres in that section
19	and I also acquired at that time leases covering the north-
20	west quarter and the north half of the southwest quarter of
21	Section 2 12, and the northeast guarter of Section 12,
22	which adjoins those minerals to the south.
23	Q I believe you've already stated that Mr.
24	Late is your partner in these leases. What did you two do
25	with the leases after you acquired them?

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131 1 Soon after I acquired those leases I sold λ 2 Late a one-third interest in them and the we Mr. jointly 3 drilled the -- a Wolfcamp dry hole that was located in the 4 northwest of the southwest of the southeast of Section 1. 5 0 What happened next? 6 λ In December of 1982 we farmed out most of 7 the acreage I've just described to Robert Edsel and his com-8 pany in Dallas, Texas. That farmout requried the Edsels to 9 drill a well at a location of their choice to a depth suffi-10 cient to test the Wolfcamp formation within ninety days of 11 the date of that agreement. 12 It further required that they conduct a 13 continuous drilling program on the leases with an anniversay 14 of 120 days between the completion as a producer or the 15 plugging as a dry hole and the starting of actual drilling 16 operations on another well. 17 Late and I retained a one-sixteenth over-18 riding royalty convertible to a one-eighth overriding royal-19 ty or a one-quarter working interest in each producer at the 20 time of payout at our election. 21 Each well would provide its own payout 22 time and anytime within the 120-day drilling commitment was 23 not met all of the acreage not then included in a producing 24 unit or proration unit would be reassigned to us. 25 0 I hand you what has been marked Scott's

132 1 Exhibit Number One and ask you if this is the farmout agree-2 ment you've just described? 3 A Yes, it is. What did Edsel do with the farmout? Q 5 λ Edsel sold interest in these leases to 6 various companies and individuals including, among others, 7 Enstar Petroleum Company of Midland, Texas, and in the -- in 8 that amount of about 25 percent. 9 Enstar was elected operator for the group 10 in 1983 drilled a well near the center of the northwest and 11 of the southwest of Section 1. 12 The well was completed as a producer from 13 the Wolfcamp formation at approximately 10,800 feet in July, 14 1983, and was placed on steady production September the 15 29th, 1983. 16 Reports were filed with the state 17 requesting a 40-acre allowable and designating the northwest 18 of the southwest as a proration unit. 19 0 Did the well pay out? 20 A It paid out in January, 1984, and Late 21 and I both converted our overriding royalty interest to 22 working interest. 23 0 Were any other wells drilled? 24 A Within the next few months an east 25 offsets, a northeast offset, and north offset were drilled, all being plugged and abandoned as dry holes.

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133 1 Q Did anything out of the ordinary occur 2 with respect to the drilling of any of these wells? 3 The No. 2 Scott was a dry hole and off-A 4 setting the discovery well to the east. Edsel and others 5 took over the well and sidetracked it to the northwest where 6 it was still a dry hole. 7 They then further sidetracked into the 8 40-acre unit north or into the southeast guarter of the 9 northwest guarter of Section 1. 10 When they made this second sidetrack, 11 they applied to the Commission for a nonstandard 80-acre 12 proration unit and a compulsory pooling order. They noti-13 fied me of these actions and I hired Ernest Padilla to rep-14 resent me and prepared to appear at a hearing in Santa Fede 15 to cppose both of those actions. 16 When was the last well under the farmout 0 17 abandoned and what did you do as a result? 18 A The last well was --19 Q Well, let me back up before we get to 20 that. 21 Then you did object and your objection 22 was known with respect to the application for a nonstandard 23 unit and compulsory pooling of the 80 acres you just de-24 scribed. 25 What happened to the case?

A That's correct. I did make known my objection. The case was dismissed when the well was plugged
as a dry hole.

4QOkay. Now would you tell me when the5last well under the farmout was abandoned and what you did6as a result?

7 A The last well under the farmout agreement 8 was plugged in February, 1985, and I notified Jim Edsel, 9 with whom I had negotiated the contract with originally, 10 that unless another well was spudded by June 15th, 1985, we 11 would be requesting reassignment of all leases not then in-12 cluded in a producing proration unit. All working interest 13 owners were in agreement with this timetable. Accordingly, 14 on June 19th -- and at that time Jim Edsel advised me that 15 it was not their intent to do any further drilling under 16 that agreement.

Accordingly, on June the 19th I requested
of Jim Edsel that all of the farmout acreage with the exception of the northwest of the southwest of Section 1 be reassigned to Late and me.

He prepared the reassignment papers and
sent them to all working interest owners requesting that
they be signed and returned for delivery.

24 William Bahlberg, a working interest
25 owner returned his signed reassignment directly to me in the

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1 -- in July of 1985.

2 How did you find out that an order 0 3 granting 80-acre spacing covering the west half of the 4 southwest guarter of Section 1 had been issued? 5 λ On approximately the 1st of August this 6 Mr. William Bahlberg, who had returned his assignment to me, 7 called my office in Houston and requested that I return his 8 copy of the assignment. He explained that Jim Edsel had ad-9 vised him that attorneys working for Edsel in discovery pro-10 ceeding in the Union Texas offices in Midland had found a 11 copy of an order of the OCD granting 80-acre spacing in the 12 East Caudill Wolfcamp Field. 13 A few days later Jim Edsel confirmed 14 their findings and advised all working interest owners to 15 delay their reassignments until further information was 16 available. 17 I contacted Ernest Padilla again, secured 18 a copy of the order, and immediately requested to vacate the 19 order, a hearing to vacate the order. 20 0 I hand you what has been marked Exhibit 21 Number Two and ask you to identify that? 22 That's the certified letter that I mailed A 23 Jim Edsel or Robert Edsel in which I requested the reasto 24 signment of the acreage in question. 25 Q And although this letter is dated June

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136 ۱ 31st. I note the second page is dated June 19th, and this 2 letter is actually the June 19th letter you sent --3 That is correct, yes. A 4 0 Okay. 5 λ Also, there's included a Mail-o-gram from 6 William Bahlberg in which he requested that I return the re-7 assignment of interest that he had signed and mailed to me, 8 which of course I did, and then there's also a letter from 9 Jim Edsel to the working interest owners that states that by 10 telegram dated July 17th we advised each of you that we were 11 reviewing the issue of reassignment of the Scott-Late of 12 certain acreage within the captioned prospect in light of 13 learning about the recent establishment of 80-acre proour 14 ration units and then he suggests that they hold up their 15 reassignment until further information is available. 16 0 What --17 A And the rest of it is just a list of 18 those working interest owners. 19 0 What was your hurry in trying to vacate 20 the order that was entered? 21 λ Well, my urgency was prompted by several 22 things. 23 Number one, I had anticipated getting 24 reassignment on the southwest of the southwest of Section 1 25 by July of 1985, and I made preliminary arrangements to

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drill a well, with others, to be located in the northwest of the southwest of the southwest of Section 1.

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3 Secondly, Late and I had a lease covering 4 the northwest guarter and the north half of the southwest 5 quarter of Section 12, 15 South, 36 East, that had expired 6 March the 11th, 1984. In February, when the last well was 7 plugged and Edsel advised me that they did not anticipate 8 further drilling under their contract, we bought a one year 9 extension to those leases in Section 12. We represented to 10 the mineral owners, some sixteen of them, that we planned to 11 drill a well in the unit north of them and if successful, we 12 planned to drill a well on their acreage in the northwest of 13 the northwest northwest of Section 12.

Number three, we knew that the No. 1 Scott and the No. 1 Gilliam Wells were already producing -had already produced a lot of oil and we were naturally concerned about drainage.

18 Q Did you personally testify at the hearing
19 on your application and if so, what was your testimony?

A A hearing was held in Santa Pe on August
the 14th, at which time William McCoy and I both testified
to the facts that I've just related.

I urged the Commission to rescind the order establishing 80-acre spacing because it was based on very poor and inaccurate information, that 40-acre spacing

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138 1 had to that date given operators a good rate of return and 2 that the field needed orderly development to the south where 3 it did not have any limits on the productive acreage. 4 I stated that I was prepared to drill a 5 well to the south on 40-acre spacing but to do so on 80's. 6 which meant to jump over a half a mile, was far too risky 7 and therefore I thought the south side of the field would 8 never be explored under the outstanding order. 9 I also requested that the retroactive 10 date of June 1 be deleted because no reason had been given 11 for it and it had no bearing on contents of the order. 12 0 Did anyone else testify at the hearing? 13 No one else testified. A Union of Texas 14 and Apache cross examined both McCoy and me but offered no 15 evidence for the record in the July 14th hearing. 16 Q August 14. 17 A August 14, I beg your pardon. The OCD 18 continued the hearing for two weeks to allow rebuttal. 19 Again McCoy and I appeared and pleaded our case. Union of 20 Texas and Apache both were represented but offered no evi-21 dence; however, they both made statements to support the 80-22 acre spacing on behalf of their clients. 23 What happened next? Q 24 λ Order R-7983-B was issued on October 25 15th. 1985, rejecting my request for 40-acre spacing, af-

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1	firming 80-acre spacing, and making the effective data of
2	the order July 12th, 1985, which was the date of the the
3	first order had been issued.
4	What happened next is why we're here to-
5	day, I guess.
6	Q Why have you changed your position?
7	A I decided to support or at least comply
8	with 80-acre spacing for the following reasons:
9	The two wells in this pool have continued
10	to decline in oil production and increase in water produc-
11	tion, with every increasing water production the likelihood
12	of the southwest of the southwest of Section 1 being watered
13	out by the time after appeals that I would be able to drill
14	this 40-acre location; that that location would be badly
15	damaged by the existing wells; and also, we cannot get more
16	time on our lease covering the northwest quarter of Section
17	12, and it will expire before this case will be settled, and
18	I could start drilling.
19	And also, we cannot get more time on our
20	lease covering the northwest guarter of Section 12, and it
21	will expire before this case will be settled and I could
22	start drilling.
23	Q Do you have anything further to add in
24	this case?
25	A I don't think so.

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140 Were Exhibits One and Two copies of 1 0 2 agreements and letters taken from your files? 3 A Yes, they were. 4 MR. LOPEZ: At this time I 5 would offer Wilton Scott's Exhibits Numbers One and Two. 6 MR. STAMETS: Without objection 7 these exhibits will be admitted. 8 I've one question. I'm not 9 certain this whole --10 MR. LOPEZ: That's Exhibit 11 Three and we haven't gotten to that. We have a witness to 12 testify to that. 13 MR. STANETS: Okay. Are there 14 questions of Mr. Scott? 15 MR. CARR: I've got just a 16 couple of short questions. 17 18 CROSS EXAMINATION 19 BY MR. CARR: 20 0 Mr. Scott, if I understood your testi-21 mony, you said that you did not receive notice of the Com-22 mission Hearing when APC came forward and proposed the 80-23 acre spacing initially. 24 A That is correct. 25 Are you on the Division's mailing list 0 for these dockets? A No, I am not.

141 1 Q Are you aware that notice of these 2 hearings is given in the newspaper? 3 I'm really not familiar with that, no. λ As to the farmout, Union Texas is not a Q 5 party to that farmout agreement, is it? 6 λ No. Edsel signed that contract and 15 7 the only other party with me. , 2 8 0 So ---9 A They in turn sold interest in their 10 farmout to various people, including --11 Do you know who? Q 12 A Well, they're the non-operating -- the 13 operating and the non-operating partners in the Scott No. 1 14 in various degrees and then when they drilled the second 15 well I think Enstar dropped out and those partnerships chan-16 ges somehow and I'm not really familiar with exactly who 17 they are. 18 Do you know who the other interest owners 0 19 are that took an interest to the Edsels in this --20 A Yes, they're on one of these exhibits. 21 Would you like for me to read them to you? 22 Q Would you, please? 23 A Robert M. Edsel, and I don't have the 24 percentages that each of these owns; Robert M. Edsel; In-25 arex, Incorporated, of Tulsa, Oklahoma; Mr. Burr A. Silver,

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142 1 Olympic Exploration and Production Company of Norman, Okla-2 homa; the Hughes Estate of Dallas, Texas; Union Texas Petro-3 leum, or Entex; Hr. William C. Bahlberg of Dallas; Mr. Late, 4 and myself. 5 0 Now, so I can understand what you're 6 seeking here today, you're seeking 80-acre spacing with an 7 effective date of July 12th, is that correct? 8 A That's correct. 9 0 And as a result of that, if that applica-10 tion is granted, your interest in the Scott No. 1 Well would 11 be increased. 12 A That's correct, if the 80 acres dedicated 13 would be the west half of the southwest quarter of Section 14 1. 15 Q And there would be a corresponding reduc-16 tion in the interest of all those individuals whose names 17 you've read. 18 A That is correct. 19 HR. CARR: I have nothing fur-20 ther. 21 22 CROSS EXAMINATION 23 BY MR. STAMETS: 24 0 Br. Scott, I presume that you would be 25 opposed to an order which affirmed the July 12 effective

143 1 date but which also granted Union Texas a 40-acre nonstand-2 ard proration unit. 3 That is correct. A 4 Such an order would have the same impact 0 5 on your income from the Scott No. 1 Well as an order which 6 would affirm a June 1 effective date for the 80-acre pool 7 rules, is that correct? 8 Yes, I think so. A 9 NR. STAMETS: Are there other 10 questions of this witness? 11 He may be excused. 12 MR. LOPEZ: We would now call 13 Mr. Nutter. 14 15 DANIEL S. NUTTER, 16 being called as a witness and being duly sowrn upon his 17 oath, testified as follows, to-wit: 18 19 DIRECT EXAMINATION 20 BY MR. LOPEZ: 21 Q Will you state your name and place of 22 residence? 23 A My name is Dan Nutter and I live in Santa 24 Fe, New Mexico. 25 Q What is your occupation?

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144 1 λ I'm a consulting petroleum engineer. 2 Have you been retained by Mr. Q Scott for 3 the purpose of this hearing today? 4 λ Yes, I have. 5 0 Are you familiar with the cases on the 6 docket today as they relate to the Northeat Caudill-Wolfcamp 7 Pool? 8 I am. λ 9 Would you describe your educational back-Q 10 ground? 11 X I have a Bachelor of Science degree in 12 petroleum engineering from New Mexico Institute of Technol-13 ogy in Socorro, which obtained in 1952. 14 Q And what is your professional experience? 15 A After graduation I was employed by the 16 Phillips Petroleum Company as a Staff Petroleum Engineer and 17 I came to the New Mexico Oil Conservation Commission on Sep-18 tember the 1st of 1954. 19 So you've worked for the New Mexico Oil Q 20 Conservation Commission and the Oil Conservation Division 21 for a period of how many years, approximately? 22 A I worked for them for approximately twen-23 ty-eight years and retired on December the 31st of 1982. 24 0 And what -- during that period of time 25 what position did you hold on the Commission staff?
145 1 A I was employed originally as a Staff Pet-2 roleum Engineer in 1954, as I said. 3 In 1957 I became the Chief Petroleum En-4 gineer for the Commission and I was also an Examiner for the 5 Commission. I held those until my retirement. 6 Q And in the course of your duties did you 7 have occasion to write proposed orders for the Commission? 8 Å I did. 9 0 And were you ever called on to interpret 10 those orders and directives of the Commission for members of 11 the industry? 12 λ Yes, sir, I was. 13 0 How about the Oil and Gas Conservation 14 statutes? Were you ever called upon to interpret these, al-15 so? 16 A Yes, I was. 17 Q Are you licensed by the State of New Mex-18 ico to practice as a professional engineer? 19 A I am. 20 Now, since you've retired from this 0 ea-21 ployment of the State of New Mexico some three years ago, 22 you have been practicing as a petroluem engineer and petro-23 leum consultant, is that right? 24 A That is correct. 25 Q And you're still interpreting the rules

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146 1 and orders and directives and maybe the -- for your clients, 2 and advising them? 3 λ Yes, I am. 4 Do you also interpret statutes? 0 5 λ If there's no lawyers around, I do. 6 MR. LOPEZ: Mr. Chairman, I 7 would like to tender Mr. Nutter as an expert in the field of 8 oil and gas conservation and regulations and petroleum en-9 gineering. 10 MR. STAMETS: Certainly the 11 witness is considered qualified in that area. 12 I might point out that perhaps 13 Mr. Nutter's interpretation of the rules may not carry quite 14 the weight it used to. 15 0 Were you present today and did you hear 16 testimony and see the exhibits presented by the Union the 17 Texas Perroleum witnesses? 18 λ Yes, I was present and I did hear the 19 testimony and see the exhibits. 20 Q What is your opinion of their case? 21 A I think they put on a pretty fair 80-acre 22 spacing case, particularly for temporary rules. 23 You also heard Mr. Scott's testimony, did 0 24 you not? 25 A Yes, I did.

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147 1 Q In your opinion as a petroleum engineer 2 and as an expert in oil and gas conservation regulations, 3 Scott's correlative rights in the Northeast have Mr. 4 Caudell-Wolfcamp Pool been impaired? 5 λ I believe that his rights have been 18-6 paired. 7 Q Why do you believe that and how do you 8 arrive at this conclusion? 9 A First, let's look at the Commission's de-10 finition of correlative rights. It's taken directly from 11 the statute. 12 Correlative rights shall mean the oppor-13 tunity afforded as far as it is practical to do so to the 14 owner of each property in a pool to produce without waste 15 his fair share of the oil or gas, or both, in the pool and 16 to use his fair share of the reservoir energy. 17 Now, Hr. Scott owns a share of the north-18 west guarter of the southwest guarter of Section 1, where 19 the Scott No. 1 Well is. He's getting his share there. 20 However, Mr. Scott owned the southwest 21 quarter of the southwest quarter of Section 1 after June the 22 15th of 1985 if no well was on it or if it was not dedicated 23 to a well. Neither of these requirements was met on June 24 the 15th, however, so the farmout expired and the lease had 25

1 to revert to Mr. Scott under its own terms. 2 Hr. Scott had proposed to drill a well in 3 the southwest quarter southwest quarter of Section 1, but 4 this series of hearings and the accompanying delays have 5 made that prospect less attractive at this point in time. 6 Meanwhile, as Union Texas has testified, 7 wells are draining 80 acres and a large part of that oil is 8 coming from the southwest quarter of the southwest quarter 9 and since Union Texas, the operator of the well persists in 10 denying that Mr. Scott is or has been since June the 15th 11 the owner of the southwest guarter southwest guarter, 12 they're denying his his right to the oil under the tract or 13 coming from under the tract. 14 That, in my mind, has impaired Mr. 15 Scott's correlative rights. 16 Is it not also true that often it is Q the 17 case that when a spacing and proration unit is made larger 18

19 in a producing well?

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A Oh, sure, any time that you have spacing units that are expanded into larger than the incremental 40acre tracts that normally are dedicated, there's an opportunity to go into leases that were not originally under dedication, and you will have a change in ownership or a change in the dedicated royalty or working interest, or over-

there is often required a readjustment of mineral ownership

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1	rides, even, when you change spacing in wells. That's a
2	common thing.
3	Q Now, Mr. Nutter, you mentioned that the
4	farmout expired on June 15th unless the southwest quarter of
5	the southwest guarter had a well on it or unless it was de-
6	dicated to a well, but these requirements were not met;
7	therefore the farmout expired and the land reverted to Mr.
8	Scott.
9	Why do you think those requriements were
10	not met?
11	A Okay. In the first place, it's obvious
12	that no well was on the southwest quarter southwest quarter
13	of Section 1 on June 15th.
14	That leaves only the question of whether
15	the land is dedicated to a well. The only producing well in
16	Section 1, the Scott No. 1 in the northwest quarter of the
17	southwest quarter, when the Division entered its order on
18	July the 12th, 1985, approving 80-acre spacing for the
19	Northeast Caudill-Wolfcamp Pool, they made the order retro-
20	active to June the 1st of 1985. Let's leave that point
21	aside for a moment.
22	The order in declaratory paragraph No. 4
23	states that existing wells in a pool shall have dedicated
24	thereto 80 acres in accordance with Paragraph (a) of Section
25	70-2-18 NMSA 1978; or in accordance with Paragraph (d) of

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1	Section 170-2-18, may have nonstandard spacing or proration
2	units established by the Division and dedicated thereto.
3	It goes on to say, and I'm quoting word
4	for word directly from the second paragraph of declaratory
5	paragraph No. 4, quote:
6	Failure to file new Forms C-102 with the
7	Division dedicating 80 acres to a well, or to obtain a non-
8	standard unit approved by the Division within sixty days
9	from the date of this order, shall subject the well to can-
10	cellation of allowable until said Form C-102 has been filed
11	or until a nonstandard unit has been approved and subject to
12	said sixty day limitation, each well presently drilling to
13	or completed in the Northeast Caudill-Wolfcamp Pool or in
14	the Wolfcamp formation within one mile thereof, shall re-
15	ceive no more than one-half of a standard allowable for the
16	pool. Unquote.
17	When the Division or the Commission enter
18	an order increasing the size of the proration unit in a pool
19	that order in itself does not increase any acreage dedica-
20	tion. It only makes it possible for the operator to do
21	that.
22	The Division is saying, all right, this
23	pool has been 40-acre spacing but now you have two options.
24	You can either file a new plat dedicating 80 acres and we'll
25	accept it, or you can apply for a nonstandard proration unit

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151 1 and get it approved. Then we'll give you an allowable in 2 the same proportion to the allowable for an 80-acre unit 3 that the acreage in your unit bears to the acreage in a 4 standard sized unit of 80 acres. 5 But then they include the caveat that if 6 you don't do one or the other ot these two things within 7 sixty days, you get no allowable at all. 8 The presumption has got to be that your 9 original 40 acres was dedicated and continues to be dedi-10 cated and no other lands are dedicated to the well until the 11 plat is filed. 12 The privilege of dedicating 80 acres is 13 there immediately when the order becomes effective but the 14 Division has no means of even knowing what is going to be 15 dedicated until the plat is filed. 16 When was an 80-acre plat filed for 0 the 17 Scott No. 1 Well? 18 A The new Forms C-102 were filed with the 19 Hobbs Office of the Division on (September 11th, 1985. That 20 means that the northwest quarter of the southwest quarter of 21 Section 1, and only the northwest guarter of the southwest 22 quarter, was dedidated to the well from the effective date 23 of the order on June the 1st until September the 11th. 24 But you contend that there was only 40 0 25 acres dedicated to the well on June 15th.

152 1 λ I contend there was only 40 acres dedi-2 cated to the well on June 15th, because no plat had been 3 filed. 4 I do -- I do not believe any rule of the 5 Division could be clearer than the rule that says the well 6 will continue to receive only a 40-acre allowable until a 7 new plat is filed. 8 As I said before, it's up to the operator 9 to file his new 80+acre plat. The Division can't do it for 10 him, and no 80-acre plats were filed on June the 15th. 11 What about orders being made retroactive-0 12 ly when you were with the Division? Did you ever recommend 13 retroactive orders? 14 A Oh, sure. There are times when retroac-15 tive orders are justified and should be issued. 16 I'll hand you now what has been marked as Q 17 Exhibit Number Three and ask you to explain what it Scott 18 is. 19 A I wanted to see what the frequency of re-20 troactive orders has been over the last several years, par-21 ticularly on a poolwide basis. 22 So I took the R. W. Byrum book, Section 23 2, what he calls Field Rules, and looked for orders issued 24 over the last twelve years from 19 -- through 19-- from 1974 25 through October of 1985.

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153 1 Knowing that special allowables and 2 special GOR's always seem to have a sense of urgency 3 connected with them, I found 29 special allowable or special 4 GOR orders in that time span. They are listed on Exhibit 5 Three. Those orders which express the urgency of the situa-6 tion and are backdated, I'm going to use the word "backdate" 7 for retroactive, the order wasn't actually backdated, but 8 the ones that express the urgency of the situation and were 9 backdated are indicated by an asterisk next to the effective 10 date column. 11 'Now the last thing in the world that I'd 12 want to swear to is that this list is complete, but I tried. 13 I found, as I said, 29 orders of this type and 15, or 52 14 percent, effective retroactively. 15 What about spacing orders? Did you re-Q 16 search these also? 17 I did. A 18 Q 1 hand you now what's been marked Exhibit 19 Number Four and ask you to explain it. 20 A All right. Exhibit Number Four is a list 21 of the orders I came across in the same source for the same 22 time period for the orders relating to spacing and pool 23 boundary effects on spacing. 24 There are 80 orders listed on Exhibit 25 Number Four.

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1	Q And how many of those are retroactive to
2	a date prior to signing?
3	A Of the 80 orders which I found and listed
4	only 8 only 7, or 8-3/4 percent were retroactive. Of
5	these one was retroactive by one day. It was entered on
6	March the 2nd and affective Harch the 1st.
7	The range of retroactivity was from one
8	day to 5 months and 9 days. The actual retroactivity of
9	those seven orders is one day, 13, 14, 16, 42, 45 days and 5
10	months and 9 days.
11	The order which was entered in the in
12	Case Number 8595 for the Norheast Caudill-Wolfcamp spacing
13	case, entered on July the 12th and made retroactive to June
14	the 1st. This meant backing up 42 days.
15	I have not had a chance to research the
16	records to find out if specific requests were made for these
17	orders to be made retroactive or not, but I would imagin
18	that some of them were probably requested at the hearing,
19	and I am certain that there must have been a certain amount
20	of justification in backdating some of these orders.
21	Q What would the main reasons be for the
22	backdating of orders?
23	A I think there are probably three circum-
24	stances that would probably be the cause for 99 percent of
25	retroactive orders.

155 1 One, the operator doesn't notice until 2 the last minute that some situation is building up to his 3 detriment on his leases, has to hurry in with a case as 4 quickly as possible, wants an order expedited or even made 5 retroactive. 6 Examples of this are gas/oil ratios sud-7 denly shooting up and wells subject to shut-in because of 8 excessive gas production; or lease expiring which can be 9 saved if he can show a wider spacing pattern and dedicate 10 some more acreage. 11 In these types of cases the request for a 12 retroactive order should always be made at the hearing and 13 be made part of the record. 14 Two, the operator needs to submit addi-15 tional information to the Examiner after the hearing, and 16 this throws the hearing, decision, and order schedule off 17 track. So to try to smooth the case schedule out and put it 18 back on schedule, so to speak, the order might be made ef-19 fective approximately at the time it would have been made 20 effective had there not been any delay. 21 Three, because allowables are calculated 22 daily but records are kept on a monthly basis, it's always 23 more convenient to have orders that are going to change al-24 lowables, have those orders effective on the first day of 25 the month. The normal procedure, of course, is to make such 1 orders effective the first day of the month following the 2 month in which the order is entered, but sometimes it 3 streamlines things and avoids delays by backing up to the 4 first day of the month in which the order is entered.

How about the situation where a lease is 0 6 expiring and an order increasing the dedication to hold the 7 lease would be considered? What kind of time frame should 8 the operator look at in that case?

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9 A Well, he would have to have his applica-10 tion for hearing in the Division's hands a minimum of 23 11 days and if the Division had just advertised the hearing and 12 he had to wait for the next one, a minimum of approximately 13 37 days before the case could even come on for hearing.

14 Sometimes the transcripts take as long as 15 three to four weeks, depending on the reporter's case load. 16 Then, if there are any complications which must be mulled 17 oer and discussed among the staff, another indeterminate 18 period could result.

19 I would imagine that if someone were 20 going to try to hold a valuable property by that means, he 21 would be most prudent if he made the application timely 22 enough so that he dould allow at least six weeks or more af-23 ter the hearing to get an order. That's a minimum for any 24 kind of complicated case that requires the examiner to wait 25 for the transcript and do a good job after he gets it, in my

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157 1 opinion. 2 Sometimes it even takes longer than that. 3 Have you calculated the date according to Q 4 your timetable that an order would have issued in Case Num-5 ber 8595 when the hearing date was held on May 8th? 6 Yeah, according to that timetable the A 7 earliest that an order could have come out would have been 8 the third week in June. 9 Which would have been after the June 15th Q 10 anniversary date. 11 λ I believe it would. 12 0 Is it -- in your opinion will the appro-13 val of the case as it now stands in Case Number 8678 and the 14 denial of Union Texas' application in Case Number 8793 for a 15 nonstandard 40-acte spacing unit be in the interest of pre-16 vention of waste and protection of correlative rights? 17 It certainly won't cause waste and I λ 18 think it will protect correlative rights. 19 0 Were Exhibits Three and Four prepared by 20 you? 21 λ They were. 22 MR. LOPEZ: At this time I 23 would like to offer Scott's Exhibits Three and Four. 24 MR. STAMETS: Without objection 25 these exhibits will be admitted.

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158 1 Are there questions of the wit-2 ness? 3 MR. CARR: I have just one 4 question; maybe two. 5 6 CROSS EXAMINATION 7 BY MR. CARR: 8 0 Mr. Nutter, you testified that you're an 9 on the rules covering the Oil Conservation Division expert 10 and interpret those for your clients from time to time. 11 Yes, sir. A 12 It's my understanding that you also in-0 13 terpreted those for us here today stating that often units 14 are enlarged and that affects a change in ownership. 15 λ Yes. 16 0 Have you been called upon to give an 17 opinion as to whether or not any of those ownerships affect 18 a retroactive adjustment for the proceeds for the prior pro-19 duction from that unit? 20 A I don't know how that works but sometimes 21 -- you may get into forced pooling cases or you may have any 22 kind of a negotiated thing if it's voluntary. I don't know 23 now it would even handle on a compulsory pooling case. 24 If there's an order changing a spacing 0 25 and proration unit and enlarging it, thereby bringing in ad-

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59 1 ditional interests, are you aware of any provision in our 2 statutes which prescribe whether or not there are retroac-3 tive adjustments? 4 A I don't think of any right offhand. 5 Are you familiar with Section 70-2-18 0 6 which is part of the Oil and Gas Act, which reads, I'm going 7 to just read it to you. 8 Α Okay. 9 Any Division order that increases 0 the 10 size of a standard spacing and proration unit for a pool or 11 extends the boundaries of such a pool, shall require dedica-12 tion of acreage to existing wells in the pool in accordance 13 with the acreage dedication requirements for said pool, and 14 all interests in the spacing and proration units that are 15 dedicated to the affected wells shall share in production 16 from the effective date of said order. 17 Are you aware of that rule? 18 A Not specifically in terms that you'v 19 couched it in there. 20 MR. CARR: That's all. 21 22 CROSS EXAMINATION 23 BY MR. STAMETS: 24 0 Mr. Nutter, looking at the date that an 25 applicant might consider having an order, I just looked here

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160 t at your Exhibit Number Four at 1983, 1984, well, for exam-2 ple, 1983, it looks like we had one, two, three, four, five, 3 six orders for special pool rules and of the six, five were 4 entered within a month or less of the date of the hearing. 5 Okay. You're talking about 1983? λ 6 Q Yes. 7 Okay. You'll notice that one of those is A 8 to rescind 80-acte spacing, so that would be relatively 9 If no one appeared, that would be an order where simple. 10 they would show cause why the pool rules should remain in 11 effect, and if no one shows up it's an automatic thing, just 12 issued the order and rescind the pool rules. 13 All right, then there are two reclassi-14 fied as an associated pool and oftentimes those result from 15 high GOR's building up and you suddenly become aware that 16 there are gas wells in that pool, and those might more pro-17 perly have been on Exhibit Number Three rather than on Exhi-18 bit Number Four, but cases like that often are fairly well 19 cut and dried and the issuance of an order is easy in a case 20 like that, where you wouldn't even have to wait for a tran-21 script if that would be legal to do. 22 Looking at 1984 I see about 7 cases, 3 of Q 23 which it appears as though an order has come out within 30 24 days. 25 A Yeah, some of those were pretty timely.

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161 1 I think most of the time the Division is rather timely in 2 getting its orders out. 3 Sometimes we've seen orders that have 4 even backed up to -- I think if you'll look on the -- on the 5 one for the gas/oil ratios you'll see orders that are 6 backed up way prior to the date of the hearing on those. 7 So there's no, certainly no delay 8 resulting from -- the order being made retroactive is cer-9 tainly not any delay on the part of the Commission or Divi-10 sion in entering an order. 11 NR. STAMETS: Mr. Carr, how did 12 you pronounce your first witness' name? 13 MR. CARR: Priebe, not Prevy. 14 (sic) 15 MR. STAMETS: Priebe, all 16 right. 17 Were you hear when Mr. Priebe testified? Q 18 λ He was your explanatory witness at the 19 very beginning? Yes. 20 Q Mr. Priebe said that he thought that the 21 owners, the original owners, the people that filed the ap-22 plication, that their correlative rights would be violated 23 if we did not make this -- the pool rules retroactive at 24 least to before June the 15th, because they -- they paid for 25 the drilling of the well. The well was draining acreage

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162 1 that they owned or had authority over at the time of the 2 filing of the application. 3 Now, just not for a moment considering 4 whether or not they asked for a date before June the 15th of 5 the original hearing, just dealing with that in a vacuum, is 6 that a reasonable argument? 7 λ I don't know. Spacing cases shouldn't be 8 called to protect correlative rights, I don't think, and 9 that about sounds like what they would be doing there, and 10 then they called the spacing case and then they claim that 11 if the order is entered in the manner that they would have 12 gotten the order by the timely processing of the order, I 13 think they filed their application too late is what really 14 happened and they tan into the problem themselves. I think 15 they're trying to hail themselves out of a bad situation --16 0 Well, I understand your view. 17 Uh-huh. A 18 But dealing with Mr. Priebe's concept, Q 19 just, you know, without any expiration dates, without this 20 argument we've been through here today, is that a reasonable 21 argument? 22 A Mhat? 23 That --0 24 A It has to -- that they have to have the 25 order to protect their own correlative rights --

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163 1 Q Yes. 2 A -- and to keep Mr. Scott from having his 3 rights protected? 4 0 If you consider that at the time they 5 filed the application all of the acreage in question on the 6 80 acres that they would propose to dedicate to the well, 7 that they were in control of all that acreage and all of 8 that acreage was being drained, is his argument that that 9 80-acre spacing is necessary to protect his correlative 10 rights, is that a reasonable argument? 11 It's -- it's not reasonable for him to A 12 say that the date of the order is preventing him from pro-13 tecting his correlative rights because the protection of the 14 correlative rights is -- is a matter for the Commission to 15 give these people the opportunity. 16 Now they had the opportunity to bring 17 their spacing case in. The well had produced 85 percent of 18 the oil that it's going to ever produce --19 I appreciate --0 20 Α -- before they ever brought the spacing 21 case in. 22 I appreciate your elaboration, but you're Q 23 still not answering the base question which I asked. 24 Well, I think it's reasonable for them to A 25 want to protect their correlative rights, but I think it's

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164 1 reasonable for Mr. Scott to want to protect his, too. 2 Q So the argument that they've made is a 3 reasonable argument in -- in the abstract. 4 A It is from their point of view, certain-5 ly. 6 Q That may be the best answer I'm going to 7 get for this question at this time. 8 But your argument then goes on to say 9 the course of events took over and this did not come that 10 about and because of the agreement, the farmout, that in 11 fact the time in which this could have happened expired, and 12 therefore the acreage did go back to Mr. Scott, and now to 13 go back and change the date retroactive -- make a date ret-14 roactive into June, into the first fifteen days of June, 15 would now violate #r. Scott's correlative rights. 16 A Yes, because he's been -- he's been pre-17 vented by circumstances from developing the 40-acre tract to 18 the south. He -- he wants to be precluded from sharing in 19 the production from the well to the north and there's just 20 no provision for protecting Mr. Scott's correlative rights 21 anywhere that I can see. 22 Q Mr. Nutter, did you read the transcripts 23 in the first cases? 24 A Oh, yes. 25 To your knowledge did anybody in there Q

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165 1 testify as to need for an effective date for that order 2 prior to June 15th? 3 No, there was no mention whatsoever of A 4 any need for a retroactive order or anything. 5 The only thing that I can recall right 6 off the top of the my head is that one fo the witnesses that 7 was here today testifying for APC was asked if this would 8 violate anybody's correlative rights and he said no, it 9 wouldn't. 10 MR. STAMETS: Are there other 11 questions of Mr. Nutter? 12 MR. CARR: Just one. 13 14 RECROSS EXAMINATION 15 BY MR. CARR: 16 0 Mr. Nutter, I understand from your testi-17 nony about effective dates of Commission orders that there 18 were some types of cases that seem to get a faster track in 19 terms of getting an order out and also the simpler cases 20 seem to get --21 A Oh, sure, yeah. 22 Q -- often faster treatment. 23 This was an unopposed case for 80-acre 24 spacing that APC brought, was it not? 25 A Yes, sir, because Hr. Scott wasn't aware

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166 1 of the case and wasn't here to oppose it. 2 But you don't say that notice wasn't Q 3 given in accordance with Division rules, do you? 4 I haven't checked the advertisement. A 5 You don't know, then, do you? Q 6 A I don't know whether -- I presume that 7 there was a legitimate notice given. 8 Q And Mr. Scott missed it, did he not? 9 λ Well, he sure didn't --10 Q Well, he missed it. 11 I tell you, Mr. Carr, what had happened, A 12 he was watching for an application by Union Texas and APC 13 filed the application, and they asked for creation of a new 14 pool and he thought that it was going to be the adoption of 15 special pool rules for an existing pool. And the applica-16 tion was for creation of a new pool. 17 It was actually a very well hidden appli-18 cation, and Mr. Scott might have seen it had he -- had it 19 not been so well hidden. 20 Do you know if Mr. Scott had read a Q de-21 scription of the property? 22 A I don't know if the notice even gave the 23 description of the property. 24 Q Do you have any reason to believe it did 25 not?

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1	A I'd have to check it before I could say.
2	Q Thank you.
3	MR. STAMETS: Are there other
4	questions of this witness?
5	He may be excused.
6	Is there any additional testi-
7	mony in this case?
8	MR. LOPEZ: No, Mr. Chairman,
9	but I would like to request the Commission take administra-
10	tive notice of the record in Case Number 8595 and of the re-
11	cord in Case Number 8678 to the extent, and only to the ex-
12	tent that it will demonstrate that at neither hearing was
13	there any ever any request or any evidence presented to
14	justify a retroactive date of June 1st.
15	NR. CARR: Mr. Stamets, we
16	don't object to your taking notice of prior hearings as long
17	as when you take notice of them you take notice of the en-
18	tire transcript of those hearings, not just specific argu-
19	ment.
20	We would request that you take
21	notice of the entire proceeding in each of those cases.
22	MR. LOPEZ: We have no objec-
23	tion to that and would agree with Mr. Carr so long as the
24	Commission is now well advised that Mr. Scott has withdrawn
25	his objection to 80-acre spacing and therefore with respect

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168 ۱ to the transcript of the second hearing withdraws his testi-2 mony with respect to --3 MR. CARR: I think it's highly 4 irregular, Mr. Stamets, to months later start withdrawing 5 parts of testimony. I think the records stand right where 6 they are. Mr. Lopez -- Mr. Lopez has (not understood) from 7 his claim that the pool should be developed on 40, that's 8 apparent from the record and that should be incorporated. 9 MR. LOPEZ: What was that last? 10 That you have now MR. CARR: 11 withdrawn your 40-acre and that's clear from the record and 12 the record should stand. 13 MR. LOPEZ: Well, I have no ob-14 jection so long as the Commission takes notice. 15 MR. STAMETS: We will take note 16 of the records in those two cases, I believe 8595 and 8658. 17 MR. LOPEZ: 8678. 18 MR. STAMETS: 8678, thank you. 19 Are there going to be any 20 closing arguments in this case? 21 MR. LOPEZ: Yes, sir. 22 MR. CARR: Yes, sir. 23 MR. STAMETS: I certainly hope 24 that they are very brief. 25 MR. LOPE2: I wish I could be

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169 1 so accommodating, but I won't. 2 I'll be as quick as I can. 3 STAMETS: MR. Mr. Carr, I 4 believe I'm going to let you go first, since --5 MR. CARR: Well, Mr. Stamets, I 6 was earlier cited by Mr. Lopez as an authority on procedure 7 here stating that the moving party bore the burden of proof 8 and would go first. 9 I would like to again cite 10 myself as an authority and remind the Division that I have 11 assumed the role of moving party at Mr. Lopez' request and 12 suggestion and as such I have the right to close last and 13 I'll close last. 14 MR. STAMETS: Mr. Carr, you are 15 absolutely right. 16 MR. LOPEZ: And I certainly 17 If Mr. Carr had asked me, I'd have been have no objection. 18 glad to go first. 19 STAMETS: MR. Please proceed 20 with all due haste. 21 MR. LOPEZ: By farmout 22 agreement dated December 6, 1982, Wilton Scott farmed out to 23 Robert Edsel the southwest quarter of Section 1, Township 15 24 South, Range 36 East in Lea County. 25 Union Texas Petroleum Corpora-

170 tion is a successor in interest to Edsel of rights under the 1 farmout. 2 3 The farmout mandated a con-4 tinuous drilling program and required the farmoutee (sic) to 5 reassign all acreage not contained within a producing proration or spacing unit if the continuous drilling obligation 6 7 was not satisfied. 8 In July, 1983, the Scott No. 1 well was completed by Enstar Petroleum as a producer in the 9 10 Wolfcamp formation in the northwest guarter of the southwest quarter of Section 1. 11 12 In 1984 APC Operating Partnership completed the Gilliam No. 1 Well as a producer in the 13 Wolfcamp formation, located in the northeast guarter south-14 east guarter of Section 2. 15 16 In April, 1985, APC applied to the Oil Conservation Division in Case No. 8595 for pool 17 creation and special pool rules, including 80-acre spacing, 18 19 for the Wolfcamp formation underlying portions of Sections 1 20 and 2. 21 On July 12th, 1985, the OCD 22 promulgated its Order R-7983, denying pool creation but 23 granting temporary 80-acre spacing. 24 Although Order No. R-7983 was 25 dated July 12, 1985, it was made effective retroactive to

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171 1 June 1st, 1985. A retroactive effective date was neither 2 requested in the application nor was evidence presented at 3 the hearing in support of a retroactive effective date. 4 Scott did not receive notice of 5 Case Number 8595 and did not learn of the matter until after 6 Order Number R-7983 was entered. 7 Under the farmout agreement 8 Scott was entitled to a reassignment of the southest guarter 9 southwest quarter of Section 1 if no well was commenced on 10 that 40 acres or that 40 acres was not assigned to a spacing 11 unit on or before June 15th, 1985. 12 A well was never commenced on 13 the southwest quarter of the southwest quarter of Section 1 14 on or before June 15th, and it was not assigned to an 80-15 acre unit until Form C-102 was filed by Union Texas on Sep-16 tember 11th, 1985. 17 On June 19th, 1985, Scott re-18 quested a reassignment of said southwest quarter of the 19 southwest quarter from Edsel. His request was denied for 20 the reason that the southwest guarter of the southwest guar-21 ter was included in a spacing unit as of June 1 effective 22 date in Order Number R-7983, and thus reassignment was not 23 required. 24 Union Texas has also refused to 25 reassign the southwest quarter of the southwest to Scott.

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172 1 Scott then filed Case Number 2 8678 to vacate Order Number R-7983, claiming deficient 3 notice of the hearing and that 80-acre spacing was improper. 4 A11 interested parties were given written notice of this 5 case. 6 After a hearing the OCD entered 7 Order Numbr R-7983, which retained temporaty 80-acre spacing 8 but which changed the order's effective date to July 12th, 9 because no evidence was presented to support a retroactive 10 date. 11 Union Texas appealed this order 12 de novo, as did Scott. Union Texas requests that Order R-13 7983 be reinstated; Scott has dismissed his appeal and now 14 supports 80-acre spacing but contends that the effective 15 date should remain July 12th, 1985, because the June 1st re-16 troactive effective date of Order Number R-7983 is improper 17 as a matter of law and fact. 18 It is undisputed that the Com-19 mission has the authority to fix the spacing of wells. NM 20 Statute Annotated, Section 70-2-12(B) (10) so provides; how-21 ever, any order or rules fixing the spacing of wells, in-22 cluding a provision for retroactive effect, must be based 23 upon the prevention of waste, the protection of correlative 24 rights, and the preventing of the drilling of unnecessary 25 wells. See NM Statute Annotated, Section 70-2-11; also Con-

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1	tinental <u>Oil Company versus Oil Conservation</u> <u>Commission</u> ,70
2	NM 310, 1962; and <u>Manufacturers National Bank versus Direc-</u>
3	tor of Department of Natural Resources, 362 NW 2d 572
4	(1984).
5	A retroactive provision in the
6	subject spacing order serves none of these purposes.
7	Retroactivity will not present
8	waste, because as the case now stands all the recoverable
9	hydrocarbons under the west half of the southwest guarter of
10	Section 1 have been and will be produced from the Scott No.
11	1 Mall the only wall drilled on the 90-same engine whit
12	wert, the only wert drifted on the so-acte spacing unit,
12	regardless of the effective date of the spacing rules.
12	In short, the ultimate recovery
14	of hydrocarbons from the spacing unit is not affected by the
15	effective date of the spacing order. Again see NM Statute
16	Annotated, Section 70-2-3(A).
17	For the same reason retroactiv-
18	ity will not prevent the drilling of unnecessary wells.
19	There is one well on the unit and no other wells will be
20	drilled.
21	The only question remaining,
22	then, is whether retroactivity will protect correlative
23	rights. If the July 12th, 1985 effective date of the order
24	is retained, Scott will be entitle dto an increased share of
25	production from the Scott No. 1 Well. This is because on

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174 1 June 15th, 1985, the entire working interest in the south-2 west guarter of the southwst guarter of Section 1 reverted 3 to Scott. The rights of all othe working interest owners in 4 that 40-acres was terminated under the terms of the farmout. 5 Union Texas claims that such 6 result ot be improper because the dilution of the interest 7 of other working interest owners in the Scott No. 1 Well 8 would violate correlative rights, and not only is that their 9 position in the case today, as well as in the applications 10 of Union Texas for a hearing de novo and for a nonstandard 11 unit. 12 the Each time Commission 13 creates special pool rules, which increase the size of spac-14 ing and proration units, there is often an adjustment of 15 participation by interest owners in the expanded unit. This 16 dilution of interests is not related to correlative rights. 17 See. for example, Ward versus Corporation Commission 501 P. 18 2d 503 (Oklahoma 1972), wherein the spacing increased from 19 1.60 to 640 acres and Tenneco's interest in the well produc-20 tion increased from zero to 55 percent; also see Descrmeaux 21 versus Inexco Oil Company, 298 So. 2d 897, where a writ was 22 denied in the subject case. 23 Correlative rights are defined 24 the opportunity of an interest owner to produce 35 without 25 waste his proportionate share of hydrocarbons in a pool un-

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175 1 derlying his property. Rule 1, Oil Conservation Division 2 Rules and Regulations; see also Baumgartner versus Gulf Oil 3 Corporation, 168 NW 2d 510 (1969). 4 basis for Union Texas' The 5 argument does not truly concern the disproportionate taking 6 of hydrocarbons from a common source of supply as it claims. 7 Interest owners under the northwest guarter of the southwest 8 quarter will still recover their equitable share of 9 hydrocarbons. 10 Rather the basis is that Union 11 "exas' share of production will be diluted and that it will 12 lose its interest in the southwest quarter of the southwest 13 quarter of Section 1 under the terms of the farmout agree-14 ment. 15 That is not a valid reason for 16 the Commission to make the spacing order retroactive, 17 because it has no direct relationship to correlative rights. 18 It is a matter of solely private contractual rights. 19 The Commission cannot enter an 20 order whose sole purpose is to alter private contractual 21 rights. 22 It has been stated, quote: 23 Each mineral interest owner has 24 the right: 25 To have the basic nature of its Α.

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1	contractual rights with other persons
2	remain undisturbed except insofar as
3	abrogation is absolutely necessary to
4	effect accomplishment of the conserva-
5	tion objective.
6	This is taken from Harris in 11
7	Oklahoma Law Review, 125, 130 (1958) in an article entitled
8	"Modification of Corporation Commission Orders Pertaining to
9	a Common Source of Supply".
10	Also, in <u>Accord</u> , <u>Cabot</u> <u>Carbon</u>
11	Company versus Phillips Petroleum Company, 287 P 20 675 (Ok-
12	lahoma 1955), where it was held that the Corporation Commis-
13	sion can assure that each owner receives a share of the com-
14	mon reservoir produce to which he is entitled by his con-
15	tract or conveyance.
16	In the present case the only
17	effect of whether the spacing order has an effective date of
18	June 1st or July 12th is whether Scott is entitled to an in-
19	creased share of production under the farmout. The only is-
20	sue then is the determination of mineral ownership pursuant
21	to the farmout agreement, and does not relate in any way to
22	the accomplishment of any valid conservation objectives.
23	Next, if the equities do not
24	favor the parties seeking retroactivity an order should not
25	be made retroactive.

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177 1 Union Texas requests the effec-2 tive date of spacing to be made retroactive to June 1st. 3 Union Texas argues that timely 4 application for 80-acre spacing was made by APC in April. 5 1985; that a hearing was held May 8th, 1985; and if the OCD 6 had not been dilatory, an order would have issued before 7 June 15, adn the issue of retroactivity would be moot. 8 The argument continues that the 9 only way for the Commission to remedy the harm caused by the 10 OCD is by entering an order with a retroactive date. 11 Administraative rules cannot be 12 made retroactive if the equities do not favor the party re-13 questing the retroactive relief. See Application of Parmers 14 Irrigation District, 187 Neb -- no, forget that -- 194 NW 2d 15 763 (1972); Tennessee Gas Pipeline Company versus FERC, 606 16 Fed 2d 1094 (1979). The original hearing in Case Number 17 8595 proceeded without constitutionally sufficient notice to 18 Spott. Union Texas Petroleum versus Corporation Commission, 19 651 P 2d 652 (Oklahoma 1981). 20 In fact, APC admits that Union 21 Texas requested APC to bring Case Number 8595 to avoid prob-22 lems Union Texas had with interest owners in the west half 23 of the southwest quarter of Seciton 1 by their own testimony 24 here today. 25 Thus the order in that case is

178 1 void as against Scott. See Louthan v Amoco Production Com-2 pany, 652 P 2d 308, and no order should have been effective 3 against Scott until his right to be heard was respected. 4 In addition to the lack of 5 notice of Case Number 8595, Scott was led to believe that 6 none of the partners to the farmout were going to drill the 7 southwest quarter of the southwest quarter of Section 1 by 8 June 15th, 1985. 9 When June 15th passed Scott 10 exercised his rights under the farmout and requested reas-11 signment of his acreage. 12 Mr.Bahlberg, a working interest 13 owner, did not -- did actually reassign his interest. It 14 was this same Mr. Bahlberg who learned that Order R-7983 was 15 entered July 12th and first made Scott aware of this fact, 16 and requested that his reassignment be returned. 17 Immediately after receiving 18 this information, Scott applied to vacate Order R-7983. He 19 could not take an appeal de novo, not having been a party to 20 the original suit. 21 MR. STAMETS: Mr. Lopez, how 22 many more pages do you have to this? 23 MR. LOPEZ: Three. Four. Five. 24 MR. STAMETS: It seems to me 25 that you're simply repeating most of the testimony that

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179 1 we've heard here today and I can see no reason to go on with 2 a closing statement that you could submit and that we can 3 read at our leisure. 4 MR. LOPEZ: I'm glad to do 5 that, Mr. Stamets, but I want to -- to have this closing 6 statement incorporated into the record. 7 MR. STAMETS: I have no problem 8 having it incorporated into the record and I can assure you 9 that Mr. Kelley and I will both read it --10 MR. LOPEZ: Well --11 MR. STAMETS: -- but I just 12 feel that fifteen minutes is sufficient for closing state-13 ment --14 MR. LOPEZ: Okay. 15 MR. STAMETS: -- in this case 16 and I don't see any need of going on with a recital of what 17 we've been listening to the last five hours. 18 MR. LOPEZ: Well, I don't want 19 to try the patience of the Commission and on the basis of 20 this assurance that this -- this closing statement I have 21 prepared, which I will submit as a brief, that it will be 22 incorporated as part of the record in the case. I will 23 close with the statement that I believe our position is 24 clear and it is well justified and it is hard to (not under-25 stood).

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MR. STAMETS: Thank you, and we

certainly appreciate your brevity. 1 2 REPORTER'S NOTE: At this time Mr. Lopez' oral 3 presentation of his closing statement, or brief, 4 was terminated adn the remainder is incorporated 5 in the record of this hearing in written form. 6 7 MR. STAMETS: Mr. Carr? 8 MR. CARR: Mr. Stamets, I would 9 request permission to file a post-hearing memorandum of 10 authority and would request ten days to do that. 11 If Mr. Lopez is going to file 12 his brief that he was reading, I would like an opportunity 13 to file at the conclusion of the record also a post-hearing 14 memorandum. 15 Again we would MR. STAHETS: 16 appreciate that. 17 MR. CARR: And then I would al-18 so like to give a brief, and I will keep it brief, closing 19 statement. 20 MR. STAMETS: Yes, that's fine, 21 and in addition, I'm sure that we would like to see a recom-22 mended order from both sides in this case. 23 MR. CARR: I think it's import-24 ant that I initially correct one thing that has been mis-25

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1 stated by Mr. Lopez.

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Union Texas Petroleum Corporation is not
an interest owner in the Scott No. 1 Well. They are the
operator through a contract. They operate that well.

They're not in a position to reassign
anything to anybody. They operate this property for other
interest owners.

You have before you today a de novo hear9 ing. It doesn't make any difference that Mr. Scott has
10 backed off of his de novo application. The case is before
11 you de novo, anew, and what you're looking at is whether or
12 not 80-acre spacing is appropriate for this pool.

13 backed off their They intention, 14 apparently, for whatever reasons they may state, to go for-15 ward with 40-acre spacing. They haven't presented a case. 16 The evidence, I submit, before you as was recognized by Mr. 17 Nutter, is -- strongly supports an order spacing this pool 18 on 80-acre spacing and proration units .

I think if we look at the facts in this case we see that APC brought an application seeking 80-acre spacing or proration units. They brought this in April of this year and it came to hearing on May the 8th. It was a simple case.

No one anticipated at the time that it
would be July 12th before an order was entered but that or-

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1 der was entered and it contained an effective date of June 2 1. That effective date means, if it stands, the acreage in 3 the west half of the southwest quarter is dedicated to that 4 well, that those people who paid to drill that well, that 5 those people who took that risk, whether they've been paid 6 back or not, they're the ones who took the risk and put up 7 the money, the ones who shared in production from the well, 8 would be entitled to have the appropriate acreage dedicated 9 to it so their interest wouldn't change and they could go 10 forward sharing in the proceeds (not clearly understood due 11 to outside noise) which they undertook it.

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12 There's no problem with that. 13 "hat's how it should be and yet what we have here is a 14 situation where Mr. Scott comes in and he provides us with a 15 nice history of what's happened and I have no guarrel with 16 what he's recited, but what it really says is he missed the 17 notice of the hearing. He's not -- he had properties here 18 but he doesn't check. He doesn't get the docket. He 19 coesn't read the newspaper to see what's going on and he 20 missed the hearing.

And so what we have is a situation where we have an order that comes out in July dated back to June, and now they want to come before you and take the position that becase we hadn't dedicated 80-acres on the 15th of June, which, Mr. Stamets, is four weeks before the

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183 1 order came out, this acreage should escape. I know Mr. Lopez 2 has been talking about what's fair is fair, but what's fair 3 is fair here, I submit, is that somebody should not reap 4 substantial benefit because of the delay in an order that 5 no one expected; consequences that no one, except, perhaps, 6 Scott understood, and we think that what has happened not 7 only is inconsistent with your duty is to protect correla-8 tive rights, it's inconsistent with the very purpose of 9 those clauses in that farmout agreement. They were to reas-10 sign the acreage that wasn't dedicate to a well and it's 11 presumed that it's the acreage that is the spacing unit 12 which is the acreage that's going to be granted. 13 Then they turn around and they 14 call Mr. Nutter, and Mr. Nutter, fortunately for me today is 15 not deciding cases here any more, but Mr. Nutter wants to 16 come in and make some interesting statements. 17 He wants to tell you that 18 things like spacing cases shouldn't be brought to protect 19 correlative rights. It raises questions in my mind as to 20 how you can go forward with any spacing cases if you don't 21 recognize that correlative rights is the underlying issue in 22 that kind of a situation. 23 He talked about retoractive or-24 ders. They've been here before; we've had them before. 25 He talks about how relatively

184 1 simple cases, like an unopposed 80-acre case generally re-2 sults in a fast order, as it did not here. 3 And so where we stand before 4 you is the operator of a well for other interest owners. We 5 are asking you to enter an order that will enable us to hold 6 the interest constant for those people who drilled the Scott 7 No. 1, who have shared in production while 90 percent of the 8 reserves that can be produced in that have been produced. 9 We think that Mr. Lopez' argu-10 ment that the Oil Commission can't alter private contract 11 rights by order is absurd; every time you enter a spacing 12 case, you do just that. 13 We submit now that if you're to 14 carry out your statutory responsibility, the only choice you 15 have here is to enter an order for 80-acre spacing for this 16 pool, make the effective date June 1, 1985, and if you can-17 not do that, if you find you cannot reach that conclusion, 18 we ask that you create a nonstandard spacing or proration 19 unit to protect correlative rights, the rights of those who 20 put the money up, who took the risk, protect their rights be 21 creating a 40-acre unit which will permit them to go forward 22 and share in the proceeds of their venture and then let Mr. 23 Scott do what he wants with his other 40 acres. 24 He's evidenced throughout an 25 intention to develop that property. I can tell you right

185 1 now that nothing that we've got before you today would pro-2 hibit him from going out and finding 80 acres, there are 80 3 acres undedicated in the undeveloped tract, we think he 4 should be free to do that, and we ask you to enter an order 5 granting 80-acre spacing, making it effective June 1, and if 6 it cannot be made effective June 1, we ask for a nonstandard 7 unit effective the date, the same date as the pool rules, so 8 there is no gap in there that would create further problems 9 and further complicate the litigation that we're in between 10 Nr. Scott and Mr. Edsel in this case. 11 Thank you for your attention. 12 MR. STAMETS: Mr. Gentry, I be-13 lieve you indicated that you would -- wanted to take a posi-14 tion in this case? 15 MR. GENTRY: Yes, sir, shall I 16 come up there? 17 MR. STAMETS: I think you can 18 be heard from right there. 19 MR. GENTRY: This will be very 20 brief. 21 I indicated previously when As 22 1 entered an appearance, I'm Charles Gentry from the law 23 firm of Shank, Irwin, and Conant, in Dallas, Texas, here re-24 presenting the Edsels, Robert and Jim Edsel are the first 25 names that have been used here in the case today and their

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186 1 ownership as working interest owners has been well estab-2 lished. 3 Edsels basic position is in 4 support of the application of Union Texas seeking that the 5 original effective date of the order be reinstated as June 6 1, 1985; or in the alternative, a nonstandard 40-acre 7 spacing unit be ordered comprised of the northwest quarter 8 of the southwest guarter of Section 1. 9 Generally Edsel supports the 10 written application filed by Union Texas except insofar as 11 Paragraph 8 of that application may imply that in the ab-12 sence of the requested relief, Wilton Scott will be entitled 13 to share in proceeds from the well since the date of first 14 production. 15 More specifically, Edsel's pos-16 ition is as follows: 17 First. The Division has 18 authority to spepcify an effective date of such spacing or-19 der earlier than the date the order is issued. Indeed, the 20 conditions at depth, which are characterized and set forth 21 up here on various charts and maps has been there much 22 longer than June 1st, the date it was applied for. It 23 should not be any limitation on the Commission's ability to 24 set the correlative rights straight simply because an order 25 was issued on one date as opposed to another.

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187 1 It seems entirely reasonable in 2 the absence of fraud to give a spacing unit size order a 3 date of effect as early as the date of initial application. 4 In the case of an order which 5 increases the size of a spacing unit on which there is al-6 ready a producing well, as here, correlative rights are more 7 likely to be adversely affected, as has been observed sever-8 al times, and an effective date earlier than the sate of is-9 suance is well within the statutory authority and duty of 10 the Commission to insure the protection of correlative 11 rights. 12 The correlative rights of the 13 Edsels and the others who participated in the expense and 14 risk of drilling the Scott Well No. 1 will be adversely af-15 fected by a date earlier than June 14, 1985. Since the 16 basic decision to increase the spacing unit size to 80 acres 17 was to prevent waste and was in the interest of conserva-18 tion, the Commission's corresponding duty and authority to 19 protect correlative rights can effectively and easily be 20 satisfied by restoring the original effective date of Order 21 F-7983 to June 1, 1985. 22 Alternatively, if for some 23 reason the request to restore teh June 1st effective date 24 cannot or is not granted, the Edsels urge the Commission to 25 grant the nonstandard 40-acre spacing unit sought by Union

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Texas Petroleum Cororation. This is not the better solution but it would appear to achieve the primary objective of protection of correlative rights if it is made effective as of June -- July the 12th. Otherwise, as Mr. Carr has observed, maybe the gap in time would cause further problems between the working interest owners in the Scott Well No. 1 and Mr. Scott.

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Finally, the Edsels want the record to reflect their strong opposition that if the effective date of the 80-acre spacing order is not before June 11 25, 1985, that Mr. Scott will become entitled to share in the proceeds of the well from date of first production.

New Mexico Statute 70-2 -- Section 70-2-18 makes it clear that when an order increasing
the size of the spacing unit applicable to a producing well,
quote, all the interests in the spacing or proration unit
that are dedicated to the affected wells share in the production from the effective date of the order. End quote.

If the Commission does not grant either form of relieve sought and if it's final order allows Mr. Scott to participate in the proceeds of production from date of first production, the Edsels respectfully request that Mr. Scott be required to share in the expenses that other working interest owners bore with respect to Scott Well No. 1. That seems only fair.

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And that's the end of my state-ment. I'd be happy to respond to any questions or to file any post-hearing information that you would like. STAMETS: Thank you, MR. Mr. Gentry. Does anyone else have anything they wish to offer in these cases at this time? These cases will be taken under advisement. (Hearing concluded.)

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2	CERTIFICATE
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4	I, SALLY W. BOYD, C.S.R., DO HEREBY
5	CERTIFY that the foregoing Transcript of Hearing before the
6	Oil Conservation Division (Commission) was reported by me;
7	that the said transcript is a full, true, and correct record
8	of the hearing, prepared by me to the best of my ability.
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13	Solly W. Boyd CSTZ
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