STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT 1 OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING 2 SANTA FE, NEW MEXICO 3 19 February 1986 4 EXAMINER HEARING 5 6 IN THE MATTER OF: 7 Application of Inexco Oil Company CASE 8 for compulsory pooling and an unor-8831 thodox well location, Lea County, 9 New Mexico. 10 11 12 BEFORE: Michael E. Stogner, Examiner 13 14 TRANSCRIPT OF HEARING 15 16 APPEARANCES 17 18 For the Oil Conservation Jeff Taylor Division: Legal Counsel to the Division 19 Oil Conservation Division State Land Office Bldg. 20 Santa Fe, New Mexico 87501 21 For the Applicant: William F. Carr 22 Attorney at Law CAMPBELL & BLACK P. A. 23 P. O. Box 2208 Santa Fe, New Mexico 87501 24 25

INDEX MACK AMES Direct Examination by Mr. Carr Cross Examination by Mr. Stogner JOEL CARLISLE Direct Examination by Mr. Carr EXHIBITS Inexco Exhibit One, Plats Inexco Exhibit Two, Correspondence Inexco Exhibit Three, Letters Inexco Exhibit Four, AFE's Inexco Exhibit Five, Letters Inexco Exhibit Six, Structure Map Inexco Exhibit Seven, Cross Section

3 1 MR. STOGNER: This hearing will 2 3 come to order again. will call next Case Number We 4 8831. 5 6 MR. TAYLOR: The application 7 of Inexco Oil Company for compulsory pooling and an unorthodox well location, Lea County, New Mexico. 8 9 MR. STOGNER: Call for appearances. 10 MR. CARR: May it please 11 the Examiner, my name is William F. Carr with the law firm 12 Campbell & Black P. A. of Santa Fe. We represent Inexco Oil 13 Company and have two witnesses. 14 MR. STOGNER: Are there 15 any 16 other appearances? 17 Will the witnesses please stand to be sworn? 18 19 20 (Witnesses sworn.) 21 22 MACK AMES, 23 being called as a witness and being duly sworn upon his 24 oath, testified as follows, to-wit: 25

4 DIRECT EXAMINATION 1 BY MR. CARR: 2 3 0 Will you state your full name and place of residence? 4 Α Mack Ames, Houston, Texas. 5 Ames, by whom are you employed and 6 Q Mr. 7 in what capacity? Α I'm employed by Inexco Oil Company in the 8 9 capacity of area landman. Have you previously testified before the 10 Q Division and had your credentials accepted and made a matter 11 of record? 12 No, sir, I have not. 13 Α Would you summarize for Mr. Stogner your 14 0 educational background and review your work experience? 15 16 Α I received a business administration de-17 gree from the University of Oklahoma in 1980 and have been 18 employed as a staff landman with Inexco Oil Company for the 19 past five and a half years. 20 Prior to that, and after my graduation, I 21 was employed as an oil and gas lease broker, working in the 22 States of Oklahoma, Arkansas, and Texas. 23 Does your area of responsibility include Q 24 that portion of New Mexico which is involved in this case? 25 Yes, sir, it does. Α

5 Are you familiar with the application 0 1 filed in this case on behalf of Inexco? 2 Yes, I am. Α 3 Are you familiar with the subject area? Q 4 Yes, sir. А 5 We tender Mr. Ames MR. CARR: 6 as an expert witness in petroleum land matters. 7 MR. STOGNER: He's so quali-8 fied. 9 Q Mr. Ames, would you briefly state what 10 Inexco seeks with this application? 11 Yes, sir. We seek to commit the unleased Α 12 mineral interests and the uncommitted working interests 13 in the southeast quarter of the northeast quarter of Section 14 17 South, 27 East, down to the top of the Strawn forma-15 14, tion and we seek to commit those same interests in the 16 17 Strawn formation in the south half of the northeast quarter 18 of Section 14. So you want to pool acreage, being a 40-19 Q 20 acre tract, down to the top of the Strawn, which is the spacing unit, to that depth and then the 80-acre unit below 21 that depth, being the south half of the southeast? 22 South half of the northeast quarter. 23 Α 24 Of the northeast is what you then seek to 0 25 pool in the Strawn formation.

6 That's correct. 1 Α Have you prepared certain exhibits for 2 Q introduction in this case? 3 4 Α Yes, sir, I have. Would you refer to what has been marked 5 0 6 as Inexco Exhibit Number One, identiy this, and first review 7 the plat on the left of this exhibit for Mr. Stogner? 8 Α Yes, sir. This shows the existing producing wells that Inexco now operates in the area, as well 9 as dry holes. In addition to that it shows our anticipated 10 proration unit for the subject well, as well as the location 11 for it and the total depth. 12 13 It also shows working interests of the parties and the unleased mineral interests and as well 14 as 15 the working interests of the surrounding units. 16 Now the unit we're talking about here, as 0 17 shown on this exhibit, is in the Strawn formation and it's 18 the south half of the northeast. 19 Α Yes, sir, south half northeast quarter of 20 Section 14. 21 And the working interest ownership Q is 22 broken out in that -- within that spacing or proration unit. 23 That is correct. Α 24 What interests in that unit have not 0 at 25 this time voluntarily joined in the drilling of this well?

7 There is a 2.0833 percent unleased miner-Α 1 al interest owned by Exxon Company, U.S.A., as well as a 2 6.25 percent working interest as yet uncommitted by Kastman 3 Oil Company. Kastman, that's K-A-S-T-M-A-N. 4 And the primary objective in this pro-Q 5 posed well will be the Strawn formation. 6 That's correct. 7 Α Q What pool will that be in? 8 That will be in the Strawn-Humble City Α 9 Pool. 10 you have indicated on Exhibit One Q Now, 11 the proposed location for the well. 12 Α Yes, sir. 13 What is that proposed location? 0 14 That location is 1800 feet from the north A 15 line of the section and 500 feet from the east line of the 16 section, and that is unorthodox to the field rules. 17 Q And there are special pool rules for this 18 field? 19 sir, they stipulate that the Α Yes, 20 well be drilled within a radius of 150 feet from the censhould 21 ter of a governmental quarter quarter section. 22 How much unorthodox is the proposed loca-23 Q tion? 24 We are 10 feet too far to the 25 Α east and

8 approximately 30 feet too far to the north. 1 By moving to this location do you Q gain 2 structural position? 3 Yes, sir, we believe we do. Α 4 Will Inexco also call a geological 0 wit-5 ness who will present a structure map? 6 Yes, sir, we will. Α 7 Would you now go to the righthand portion 0 8 of Exhibit Number One and identify that and review that for 9 Mr. Stogner? 10 Α Yes, sir. This shows the -- again, a 11 breakdown of the working interest in the subject unit as 12 well as the surrounding, adjacent units. 13 It also shows producing wells now oper-14 and the working interest thereunder. 15 ated by Inexco 0 What percentage of the acreage in the 80-16 acre unit has been voluntarily committed to the proposed 17 well? 18 We have 91-2/3rds percent working inter-A 19 est now committed. 20 21 Q Would you now review for Mr. Stogner the 22 efforts that Inexco has made to obtain the voluntary joinder of all interest owners in this proposed spacing and prora-23 tion unit, and in so doing, would you refer to Exhibit Num-24 25 ber Two, which is contained behind the first tab in the pac-

ket of exhibits? 1 2 Α Yes, sir. Exhibit Number Two shows the letters we've written to Kastman Oil Company and Exxon Oil 3 Company inviting their participation by joinder, farmout, or 4 lease, in the subject unit. 5 We have spoken with each of them by tele-6 7 phone subsequent to mailing the letters and are currently in negotiations with them. 8 0 What is the status of the negotiations 9 with each of these oil companies? 10 Verbally both have offered to 11 Α join the unit, Exxon by joining as to their working interest; Kastman 12 13 by offering to farmout to the unit. 14 We do not as yet have executed agreements with either of the companies. 15 16 0 In your opinion has Inexco Oil Company 17 made a good faith effort to obtain the voluntary joinder of 18 all interest owners in this well? 19 Yes, sir, I believe we have. Α And Inexco has drilled other Strawn wells 20 Q 21 in the area. 22 That's correct. Α 23 Would you now go to what has been marked Q 24 as Inexco Exhibit Number Three, which is behind the second 25 tab in the packet of exhibits, and identify this exhibit,

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10 please? 1 A Yes, sir, these are letters that we wrote 2 to offset operators of adjacent properties advising them 3 that we were going to be drilling the well at a nonstandard 4 indicated by the exhibits, we have received location. As 5 waivers of objection to the unorthodox location from all of 6 those parties. 7 And when was the waiver received from Rio 0 8 Pecos Corporation? 9 It was received yesterday by telecopy. Α 10 And you have given notice to each of the 0 11 offsetting operators required to receive notice by Oil Com-12 mission rules? 13 Yes, sir, we have. Α 14 Would you now go to what has been marked Q 15 as Exhibit Number Five, Inexco's Exhibit Number Five, which 16 is contained in the back pocket of the packet of exhibits, 17 and just identify this, please? 18 Α Yes, sir. These represent the letters 19 20 written to the offset operators, as well as the uncommitted working interests, advising them of the date of the hearing, 21 and these were sent by certified mail, return receipt re-22 quested. 23 And do we have return receipts for each 24 Q of these letters? 25

11 Yes, sir, they are attached. Α 1 Q Now, Mr. Ames, would you go to what has 2 been marked Inexco Exhibit Number Four, the AFE's which are 3 behind the last tab in the packet of exhibits, 4 and review those for Mr. Stogner? 5 6 Α Yes, sir, these represent the executed 7 AFE's of our partners now committed to our operating agreement in the area and, as indicated by each of the copies, 8 these have been signed on behalf of all of our partners with 9 the exception of Amerada Hess Corporation, who has indicated 10 to me verbally that they are in fact going to join the well. 11 12 0 What are the totals on the AFE's? Α The dry hole cost as shown in the AFE 13 is \$686,700, with the total well cost for a completed well 14 15 being \$1,115,100. Q 16 Are these costs in line with what has 17 been charged for other wells in this area? 18 Α Yes, sir, they are. 19 0 Mr. Ames, have you made an estimate of 20 overhead and administrative costs for the well while dril-21 ling and also while producing the well if it is successful? 22 Yes, we have. Α 23 And what are those figures? 0 24 Α We are going to charge \$5000 a month for 25 drilling well rate and \$500 a month for a producing а well

12 rate. 1 2 Q Are these costs in line with what other 3 operators have charged in the area? Yes, sir, they are. 4 А And what has been charged for other 5 Q 6 Inexco-operated wells in the area? 7 Α Yes, sir. Do you recommend that these figures 8 Q be incorporated into any order which results from this hearing? 9 Α I do. 10 Does Inexco seek to be designated opera-11 Q tor of the proposed well? 12 13 Α Yes, sir, we do. Ames, were Exhibits One through Five 14 Q Mr. 15 prepared by you or compiled under your direction and super-16 vision? 17 Α Yes, they were. 18 MR. CARR: Mr. Stogner, at this 19 time we would offer into evidence Inexco Exhibits One 20 through Five. 21 MR. STOGNER: Exhibits One through Five will be admitted into evidence. 22 23 MR. CARR: That concludes my 24 direct examination of Mr. Ames. 25

13 CROSS EXAMINATION 1 BY MR. STOGNER: 2 Q Mr. Ames, what was the overhead charge 3 again? 4 Α \$5000 per month for a drilling well rate 5 and \$500 a month for a producing well rate. 6 7 Are these charges in line with what's 0 normally charged in this area for a well at this depth? 8 Α Yes, sir, they are. 9 Has Inexco in any past hearing that was 0 10 in the last three years have obtained made an overhead 11 charge from this Commission of that amount? 12 No, sir, I don't believe so, but these Α 13 reflect our current rates as indicated to us by our account-14 ing people. 15 Inexco volunteered in any other 16 0 Has groups having overhead charges of this amount, with somebody 17 18 else being the operator of the well? No, sir, not to my knowledge. 19 А Let's go to your Exhibit Number One so 20 0 I can better understand it. 21 22 Who is the operator of the proration unit offsetting to the north of this proposed well? 23 24 Being the north half northeast guarter of Α 25 Section 14?

14 Q Yes. 1 We would be the operator under our oper-Α 2 ating agreement. 3 How about the 80 acres to the direct Q 4 east? 5 Inexco is also the operator of that unit. Α 6 0 Okay. So I can better understand, are 7 the interest owners the same regardless of the 40 acres or 8 an 80-acre unit? 9 А Yes, sir, as to the southeast northeast 10 of 14 and southwest northeast of 14, that's true. 11 Okay. Who haven't you obtained? 0 12 We have not yet obtained executed instru-Α 13 ments from Exxon Company, U.S.A., or Kastman Oil. 14 They are shown as the last two the on 15 breakout. 16 When was Kastman and Exxon first Q 17 ap-18 proached? The letter was written January 21st, Α 19 received by them January 23rd. 20 Has -- have you heard any -- what kind of 0 21 correspondence have you got back from Kastman? 22 Only verbal, Mr. Examiner, they have in-Α 23 dicated to us that they are going to farmout to the unit on 24 terms that Inexco is going to recommend that we accept 25 to

15 our partners. We do not yet have acceptance from our part-1 ners of those terms. 2 3 MR. STOGNER: Okay, I have no further questions of this witness. 4 Are there any other questions 5 of Mr. Ames? 6 7 If not, he may be excused. Mr. Carr. 8 9 CARR: At this time MR. I'd call Joel Carlisle. 10 11 JOEL CARLISLE, 12 13 being called as a witness and being duly sworn upon his 14 oath, testified as follows, to-wit: 15 DIRECT EXAMINATION 16 BY MR. CARR: 17 18 Q Will you state your full name and place 19 or residence? 20 Joel Carlisle, from Houston, Texas. Α 21 Q Mr. Carlisle, by whom are you employed? 22 Α Inexco Oil Company. 23 And in what capacity? 0 24 Α I'm exploration geologist for West Texas 25 and New Mexico.

16 1 Q Have you previously testified before this 2 Division and had your credentials as a geologist accepted 3 and made a matter of record? 4 Yes, I have. Α 5 Are you familiar with the application 0 6 filed in this case on behalf of Inexco? 7 Α Yes. 8 And have you studied the subject area? Q 9 Yes. Α 10 the witness' MR. CARR: Are 11 qualifications acceptable? 12 MR. STOGNER: They are. 13 Q Carlisle, have you prepared certain Mr. 14 exhibits for introduction in this case? 15 Α Yes, I have. 16 0 Would you please refer to what has been 17 for identification as Inexco Exhibit Number marked Six, 18 identify this, and review the information contained thereon? 19 Α Exhibit Six is a structure map on top of 20 the Strawn covering the Humble City Field and the South Hum-21 ble City Field area. 22 The purpose of this map is to show the 23 structural relationships of the wells which we have cur-24 rently completed in the South Humble City Field, and their 25 relationships to the other wells in the immediate vicinity.

17 1 also shows the relationship of It the 2 proposed location, the Lea Farms No. 2, south half of the 3 northest quarter of Section 14, and the outlined unit for 4 that well and it's relationship to the nearest producing 5 well to the east, being the Ashland No. 1. 6 Q Mr. Carlisle, by moving the well to the 7 proposed location, does Inexco gain structural advantage? 8 Yes. Α We would gain structural advantage. 9 We would also, as you will -- I would draw your attention to 10 the blue outline on this map, which infers what I believe to 11 be the limits of the Strawn Reef in this local area. 12 field is a solution gas drive field The 13 and by moving up dip we will drain or protect those reserves 14 in an up dip position that would not be obtained for those 15 mineral owners in 14 if we do not drill a well there. 16 Q How many wells in this area has Inexco 17 actually drilled? 18 We've drilled nine wells to date. Α 19 Q And of those nine wells how many of them 20 have been commercial successes? 21 We have five completions, which equates Α 22 to 50 -- roughly a 55 percent success ratio. We've drilled 23 three dry holes, four dry holes in this area at this point. 24 Q Would you identify those, please? 25 Α The first two were to the south of the

18 1 field. the Inexco No. 1 Pruitt in the northeast quarter of 2 in the northwest guarter of Section 24 was the Inexco 23; 3 1 Doughtery; over in Section 13 north of our Norris No. No. 4 2 Well, we drilled the Norris 3, which was also a dry hole; 5 also north of the York No. 2 in Section 14 we drilled and 6 the Lea Farms No. 1, which was a dry hole in the southwest 7 of our present location. That well missed the reef. 8 Mr. Carlisle, there is a trace on Q Now, 9 this cross section -- or structure map for a subsequent 10 cross section. 11 Α Right. 12 Would you now refer to that cross 0 sec-13 tion, which is marked Inexco Exhibit Number Seven, and re-14 view that for the examiner? 15 All right. А 16 This cross section, marked A-A', A' being Q 17 to the east and A to the west, up dip structurally, the pur-18 pose of this cross section was to show the relationship of 19 what I expect in the Strawn through the porosity interval. 20 If you'll look in the No. 1 Ashland Well, 21 the most recent well that we completed, we show the porosity 22 on the density log and that's through the cross hatched por-23 tion in the Strawn. 24 the up dip well to the west, In the Lea 25 Farms No. 1, we show a very small amount, only a few feet of porosity existing in that well, and it was not effective;
the permeability was too low. The porosity was not suffi cient to make a commercial well.

We believe that that well was on the bare fringes of the reef and that the proposed location will be more centrally located to the little reef mound in the area and therefore expect a well developed porosity within the Strawn section.

9 Q Now, Mr. Carlisle, is it possible that a 10 well at this proposed location could miss the reef and would 11 therefore not be a commercial success?

12 A Yes, it is. As I indicated previously, 13 we have had approximately a 55 percent success ratio to this 14 point in the drilling of this field to the south; however, 15 we have, as already noted, missed the reef in several occa-16 sions, using the same techniques and all that we're using 17 here.

Is I might add that the old field to the north has experienced even greater risk in drilling where there's only been about a 27 percent success ratio in the drilling for the Strawn Reef in that area.

Q Now, Mr. Carlisle, are you prepared to make a recommendation to the examiner as to the risk penalty that should be assessed against any interest owner who does not voluntarily participate in the well?

20 1 Yes. Α 2 And what risk penalty are you recommend-Q 3 ing? 4 We are recommending that we would get the Α 5 maximum under the regulations. 6 Q In your opinion will granting this appli-7 cation be in the best interest of conservation, the preven-8 tion of waste, and the protection of correlative rights? 9 Α Yes, it would. 10 0 Were Exhibits Six and Seven prepared by 11 you? 12 Α They were. 13 CARR: MR. At this time, Mr. 14 Stogner, we offer into evidence Inexco Exhibits Six and 15 Seven. 16 MR. STOGNER: Exhibits Six and 17 Seven will be admitted into evidence. 18 MR. CARR: That concludes my 19 direct examination of Mr. Carlisle. 20 MR. STOGNER: I have no further 21 questions of Mr Carlisle. 22 Is there any other questions of 23 this witness? 24 If not, he may be excused. 25 Anything else further in this

case, Mr. Carr? MR. CARR: No, sir. MR. STOGNER: Does anybody else have anything further in Case Number 8831? If not, this case will be taken under advisement. (Hearing concluded.)

CERTIFICATE I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability. Saccepter. Boyd CSR I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 883/. heard by me on 19 Februar 1986 Examiner **Oil Conservation Division**