STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 1 OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. 2 SANTA FE, NEW MEXICO 3 23 September 1987 4 EXAMINER HEARING 5 6 IN THE MATTER OF: 7 Application of Harvey E. Yates CASE 8 Company for a unit agreement, Lea 9215 County, New Mexico. 9 10 11 12 BEFORE: David R. Catanach, Examiner 13 14 TRANSCRIPT OF HEARING 15 16 17 APPEARANCES 18 19 For the Division: Jeff Taylor 20 Attorney at Law Legal Counsel to the Division 21 State Land Office Bldg. Santa Fe, New Mexico 87501 22 23 For the Applicant: Robert H. Strand 24 Attorney at Law ATWOOD, MALONE, MANN & TURNER 25 P. O. Drawer 700 Roswell, New Mexico 88201

INDEX SHARI DARR Direct Examination by Mr. Strand RANDY HERR Direct Examination by Mr. Strand Cross Examination by Mr. Catanach EXHIBITS HEYCO Exhibit One, Land Plat HEYCO Exhibit Two, Unit Agreement HEYCO Exhibit Three-A, Approval HEYCO Exhibit Four-A, Notice HEYCO Exhibit Four-B, Return Receipts HEYCO Exhibit Five, Structure Map HEYCO Exhibit Six, Isopach HEYCO Exhibit Seven, Cross Section B-B'

3 1 2 MR. CATANACH: Call next Case 3 9215. 4 MR. TAYLOR: The application of 5 Harvey E. Yates Company for a unit agreement, Lea County, 6 New Mexico. 7 MR. CATANACH: Are there ap-8 pearances in this case? 9 STRAND: Mr. Examiner, I'm MR. 10 Robert H. Strand of the law firm of Atwood, Malone, Mann & 11 Turner, in Roswell, appearing for the applicant and I have 12 two witnesses who need to be sworn. 13 MR. CATANACH: Are there any 14 other appearances in this case? 15 Will the witnesses please stand 16 and be sworn in? 17 (Witnesses sworn.) 18 19 SHARI DARR, 20 being called as a witness and being duly swor upon her 21 oath, testified as follows, to-wit: 22 23 DIRECT EXAMINATION 24 BY MR. STRAND: 25 0 Please state your name, place of resi-

4 1 dence, and by whom you're employed? 2 Mу name is Shari Darr and I А live in 3 Roswell, New Mexico, and I'm employed as a landman for 4 Harvey Yates Company. 5 Q Ms. Darr, have you testified before the 6 Division in the past? 7 Α No. 8 0 Would you briefly state for the Examiner, 9 give a brief summary of your education, work experience, and 10 any membership in professional organizations relating to 11 your employment? 12 Α I've been employed by Harvey Yates 13 Company for almost eleven years. During that time I 14 attended the University of Texas and earned my petroleum 15 land management degree. 16 I've been employed as landman а for 17 Harvey Yates Company for the past 3-1/2 years. 18 I'm currently a member of the New Mexico 19 Landman's Association and the Permian Basin Landman's 20 Association. 21 MR. STRAND: Mr. Examiner, is 22 Ms. Darr qualified as a land witness? 23 MR. CATANACH: She is. 24 0 Ms. Darr, have you prepared certain 25 exhibits for presentation at this hearing?

5 1 Yes, I have. Α 2 0 Would you state for the record the 3 purpose of the hearing? 4 Α The purpose of the hearing is for Harvey 5 Ε. Yates Company to seek approval of the Honeydew Unit com-6 prising 720 acres of all state lands in Section 35 and 36 of 7 Township 18 South, Range 35 East, and we further seek to de-8 signate Meridian Oil as operator of the unit. 9 0 I refer you to Exhibit Number One. Will 10 you please describe that exhibit? 11 Α Exhibit Number One is a copy of а land 12 plat which outlines the designated unit outline. 13 Q On that plat is the proposed Honeydew 14 Unit boundary designated by a dashed, darker line? 15 Α Yes, it is. 16 0 Would you state for the record the legal 17 description of the lands to be included within this proposed 18 unit? 19 Α Township 18 South, Range 35 East, Section 20 36, all of it; and in Section 35, the north half of the 21 northeast quarter, in Lea County, New Mexico. 22 0 And the entire unit area is comprised of 23 State of New Mexico leases, is that correct? 24 Yes, that's true. А 25 Q Okay, I refer you to Exhibit Number Two.

6 1 Would you please describe that? 2 Α Exhibit Number Two is the unit agreement 3 itself, which has been prepared by Harvey Yates Company. 4 Ms. Darr, is this a standard form unit 0 5 agreement that has previously been approved by the State 6 Land Office? 7 Α Yes, it is. 8 0 For units that comprise either all state 9 lands or state and fee lands? 10 That's true. А 11 0 I believe you have attached to that as 12 Exhibits, a larger plat of the unit agreement? 13 Α That's true. 14 Q And you also have a tabulation of the 15 ownership of the leases involved. 16 Α Yes, sir. 17 Would you please state for the record, 0 18 the ownership of the various tracts within the unit? 19 А There are four tracts in the entire unit. 20 first tract is owned, Union Oil of California owns The 21 61.904762 percent; Conoco, Inc., owns 28.571429 percent; 22 Hondo Oil and Gas owns 9.523809 percent; adding up to 100 23 percent of that tract. 24 The second tract is owned the same as the 25 first one.

7 The third tract is owned by Spiro, Inc., 1 5 percent; Explorers Petroleum Corporation, 5 percent; Heyco 2 Limited, 2.125723 percent; Cibola Energy, Employees, 3 12.725435 percent; Yates Energy Corporation, 28.053654 per-4 cent; and Harvey E. Yates Company, 47.095188 percent, adding 5 up to 100 percent of that tract. 6 The fourth tract is owned 100 percent by 7 Meridian Oil, Inc. 8 I refer you to Exhibit Number Q Three. 9 Would you please describe that? 10 Exhibit Number Three is preliminary ap-Ά 11 proval received from the State Land Office, dated September 12 14th, 1987. 13 Okay, I refer you to Exhibit Number Four. 0 14 Will you please describe that? 15 А Exhibit Four-A includes copies of the 16 notice of hearing sent to all the working interest owners 17 under the unit. 18 Exhibit Four-B is a copy of the return 19 receipts from the United State Post Office. 20 Ms. Darr, was notice given to all 0 Okay. 21 interest owners in accordance with Division rules and regu-22 lations? 23 Yes, sir, it was. Α 24 Q Now as to commitment to the unit, have 25

8 1 all of the working interest owners committed their leases to 2 this unit? 3 Yes, sir, they have. А 4 So the only formality you have left 0 is 5 approval of the Division and the approval of the State the 6 Land Office. 7 А Yes, sir. 8 Final approval of the State Land Office. 0 9 А Yes, sir. 10 Ms. Darr, has the preparation of this Q 11 unit agreement, the land aspect of it and the geological 12 aspects, been a joint effort of Harvey E. Yates Company and Meridian Oil? 13 14 Α Yes, sir, it has been. 15 And by agreement of Harvey E. Q Yates 16 Company and the other working interest owners, and the 17 agreement of Marathon will -- or sorry, Meridian, will they 18 be designated as operator? 19 А Yes, sir. 20 MR. STRAND: Mr. Examiner, I 21 believe you have a letter in the file from Meridian which 22 indicates they'll accept the position as operator of this 23 unit. I would ask that that be included as part of the 24 record in this case. 25 MR. CATANACH: Okay.

9 1 Darr, do you have anly Q Ms. time 2 limitations on the formation and approval of this unit? 3 Α Yes, sir, we do. Tract No. 3 is due to 4 expire on November 1st, 1987. 5 Q And would you therefor request that the 6 Division enter an order in this matter as quickly as 7 possible? 8 Α Yes, sir, we do. 9 Q Were Exhibits Number One through Four 10 prepared by you or under your supervision? 11 А Yes, sir. 12 Q Or do they represent material from the 13 Applicant's files? 14 А Yes, sir. 15 MR. STRAND: I have nothing 16 further from Ms. Darr at this time. 17 MR. CATANACH: I have no 18 questions of the witness. She may be excused. 19 20 RANDY HERR, 21 22 being called as a witness and being duly sworn upon his 23 oath, testified as follows, to-wit: 24 25

10 1 2 DIRECT EXAMINATION 3 BY MR. STRAND: 4 For the record, would you please state Ο 5 your name, your place of residence, and by whom you're 6 employed? 7 Α My name is Randy Herr. I'm a geologist with Meridian Oil in Midland, Texas. 8 9 Mr. Herr, have you previously testified 0 10 before the Division or the Commission? 11 Yes, I have. А 12 0 And as part of that hearing were your qualifications as a geologist made a matter of record? 13 14 Α Yes. 15 MR. STRAND: Mr. Examiner, is 16 Mr. Herr --17 MR. CATANACH: He is considered 18 qualified. 19 MR. STRAND: Thank you. 20 Q Mr. Herr, are you familiar with the 21 application in Case Number 9215? 22 Α Yes. 23 Q have you prepared certain exhibits And 24 for presentation at this hearing relating to the 25 application?

11 1 А Yes. 2 I refer you to what we've marked as Exhi-0 3 bit Number Five. Will you please describe that? 4 Exhibit Five is the structure map on the А 5 top of the Strawn sand, which is our primary objective in 6 the proposed well and in the proposed unit. 7 The prominant anticlinal feature you see 8 running northwest to southeast is the South Vacuum struc-9 ture. It's primary producing horizon is the Devonian. Our 10 proposed location is there in the northeast/ northeast of 11 Section 35. 12 0 Mr. Herr, again is the proposed unit out-13 lined in a dashed line? 14 Α Yes. 15 I refer you to Exhibit Number Six. Q Will 16 you please describe that? 17 А Exhibit Number Six is a net porosity Iso-18 pach of the Strawn sand. It shows the areal extent of the 19 Strand sand located on the east flank of the South Vacuum 20 Devonian structure. 21 Again our proposed location is in the 22 northeast quarter of Section 35. 23 0 Just one question on that, Mr. Herr. Do 24 you -- in your opinion would that be an optimal location for 25 the well based on the structure as outlined on this plat?

12 1 Α Yes. I refer you to what we've designated as 2 0 Exhibit Number Seven. Will you please describe that? 3 Α Exhibit Number Seven is a structural 4 section that goes through two wells in the proposed 5 cross and in yellow is highlighted the primary objective, unit 6 7 which is the Strawn sand. 0 Mr. Herr, what is the proposed total 8 depth of your initial well to be drilled under the unit 9 agreement? 10 10,800 feet. 11 Α Mr. Herr, based on your geological analy-0 12 sis of the proposed unit area, in your opinion does the area 13 cover at least a substantial portion of the Strawn geologi-14 cal feature that you've previously described? 15 16 Α Yes. 17 0 Further is it your opinion that if oil or 18 gas is discovered paying quantities from this unit area that the area can be developed econmically and efficiently under 19 20 the terms of the proposed unit agreement? Ά Yes, sir. 21 22 0 And is it further your opinion that the terms of the unit agreement would permit the producing area 23 24 to be developed in a manner which would maximize recovery of 25 unitized substances and which would promote conservation,

13 1 prevent waste, and protect correlative rights? 2 Α Yes. 3 Were Exhibits Five through Seven prepared 0 4 by you or under your supervision? 5 Yes. Α 6 MR. STRAND: Mr. Examiner, move 7 admission of Exhibits One through Seven. 8 MR. CATANACH: Exhibits One 9 through Seven will be admitted into evidence. 10 MR. STRAND: I have no further 11 questions of Mr. Herr. 12 CROSS EXAMINATION 13 BY MR. CATANACH: 14 15 Q Mr. Herr, how did you define your unit 16 boundary? Was it according to your structure? 17 Α It was a combination of the structure and 18 the net porosity Isopach. 19 0 And I understand this is for a Strawn 20 test, is that correct? 21 Yes, uh-huh. Α 22 Q How deep did you say? 23 Α 10,800 feet. 24 What -- what data did you use to generate Q 25 your Isopach and your structure map?

14 ١ А Okay, there is a field located a couple to the north of our proposed location. It's called 2 miles 3 the Reeves Strawn Field and that field produces from the 4 Strawn sand and Devonian and a few other horizons, but we 5 used the Reeves Field as our analogy to the Honeydew Unit. 6 0 There's not a lot of well control in the 7 area of your unit. Did you use anything like seismic or --8 Α We used the available sample log control 9 in the area. From the sample logs and from the wireline logs, we feel that the sand will be present on the flank of 10 that South Vacuum Devonian Field. 11 The well control and the sample control 12 13 shows that the top of that feature is, if it has sand pre-14 sent present, it's tight. 15 What is that well located in the south-Q 16 west quarter of Section 36? Do you know? 17 That's an old Pure well drilled to Α the 18 Devonian and was a dry hole, and I believe -- I don't be-19 lieve they tested the Strawn sand in there but there was not 20 indicated any sand on the logs. 21 Q Okay. The unit agreement covers all for-22 mations, is that correct? 23 А I believe so. 24 MR. STRAND: Yes. 25 0 Okay. I think that's all I have on that.

MR. CATANACH: You may be ex-cused. Do you have anything further in this case, Mr. Strand? MR. STRAND: Nothing further, Mr. Examiner. MR. CATANACH: Case Number 9215 will then be taken under advisement. (Hearing concluded.)

16 1 CERTIFICATE 2 3 I, SALLY W. BOYD, C.S.R., DO 4 HEREBY CERTIFY the foregoing Transcript of Hearing before 5 the Oil Conservation Division (Commission) was reported by 6 that the said transcript is a full, true, and correct me; 7 record of the hearing, prepared by me to the best of 8 my ability. 9 10 11 12 Salley W. Boyd 13 14 15 16 I do hereby certify that the foregoing is a complete record of the proceedings in 17 the Examiner hearing of Case No. 925 heard by me on Sept 23, 1987. 18 19 ataxact Examiner Oil Conservation Division 20 21 22 23 24 25
