### STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES I

### OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF COBRA OIL AND GAS CORPORATION FOR A UNIT AGREEMENT, LEA COUNTY, NEW MEXICO

APPLICATION OF COBRA OIL AND GAS CORPORATION FOR AN UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO SE BUWE

) CASE NOS. 11,465

11,466

(Consolidated)

## REPORTER'S TRANSCRIPT OF PROCEEDINGS

### EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

February 8th, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, February 8th, 1996, at the New Mexico Energy, Minerals and Natural Resources

Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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# EXHIBITS

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# APPEARANCES

# FOR THE DIVISION:

RAND L. CARROLL Attorney at Law Legal Counsel to the Division 2040 South Pacheco Santa Fe, New Mexico 87505

# FOR THE APPLICANT:

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Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

\* \* \*

WHEREUPON, the following proceedings were had at 1 2 11:54 a.m.: EXAMINER STOGNER: This hearing will come to 3 I'll call next case, Number 11,465. 4 5 MR. CARROLL: Application of Cobra Oil and Gas Corporation for a unit agreement, Lea County, New Mexico. 6 7 EXAMINER STOGNER: Call for appearances. MR. CARR: May it please the Examiner, my name is 8 9 William F. Carr with the Santa Fe law firm Campbell, Carr 10 and Berge. 11 We represent Cobra Oil and Gas Corporation in this matter, and I have two witnesses. 12 13 Mr. Examiner, we would request at this time that 14 this case be consolidated with the following case, also an 15 Application of Cobra, for an unorthodox location for the 16 one well that will be drilled in the proposed unit. EXAMINER STOGNER: Are there any appearances in 17 18 Case 11,465 or the other one, 11,466? Okay, in that case I'll call Case Number 11,466 19 at this time. 20 MR. CARROLL: Application of Cobra Oil and Gas 21 22 Corporation for an unorthodox oil well location, Lea County, New Mexico. 23 24 EXAMINER STOGNER: Both matters will be 25 consolidated for purposes of the testimony, and will the

witnesses please stand to be sworn? 1 2 (Thereupon, the witnesses were sworn.) MR. CARR: At this time, Mr. Stogner, we would 3 call Mr. Charles House. 4 5 CHARLES HOUSE, the witness herein, after having been first duly sworn upon 6 7 his oath, was examined and testified as follows: DIRECT EXAMINATION 8 BY MR. CARR: 9 10 Q. Would you state your name for the record, please? 11 Α. Charles House. Mr. House, where do you reside? 12 Q. Midland, Texas. 13 Α. By whom are you employed? 14 Q. I'm an independent petroleum landman, currently 15 Α. under contract to Cobra Oil and Gas Corp. 16 Have you previously testified before this 17 0. Division? 18 No, I have not. 19 Α. Could you briefly summarize your educational 20 Q. background and work experience for the Examiner? 21 22 Α. I've been an independent landman for 19 years. I'm a member of the American Association of Petroleum 23 Landman and a certified professional landman by that 24 25 organization.

Are you familiar with the Applications filed in 1 Q. each of these consolidated cases? 2 3 Α. Yes, I am. And are you familiar with the proposed Lewis Unit 4 Q. and the proposed State 3 Com Number 1 well? 5 6 Α. Yes, I am. 7 MR. CARR: Mr. Stogner, we tender Mr. House as an 8 expert witness in petroleum land matters. 9 EXAMINER STOGNER: Mr. House is so qualified. 10 (By Mr. Carr) Could you briefly state what Cobra Q. 11 Oil and Gas Corporation seeks with these Applications? Α. The approval of the Lewis unit and approval of 12 13 the unorthodox location for the State Com Number 1 well --State 3 Com Number 1. 14 And what is the proposed location for the State 3 15 Com Number 1 well? 16 675 feet from the south line and 114 feet from 17 Α. the west line of Section 3, Township 10 South, Range 36 18 19 East, Lea County. Mr. House, have you prepared certain exhibits for 20 Q. presentation in this case? 21 Yes, I have. 22 Α. 23 Could you refer to what has been marked as Cobra Q. Exhibit Number 1, identify this and review it for Mr. 24 Stogner? 25

- 7 1 This is a land plat we prepared primarily to show Α. the acreage involved, the unit outlined in the proposed 2 location. 3 Can you explain the status of the land in each of Q. 4 5 the two tracts being unitized? Both tracts are state lands. Α. 6 7 Do they have the same beneficiary institutions Q. under each of those tracts? 8 Yes, they do. 9 Α. 10 Q. Both of them are the New Mexico School of Mines? Α. That is correct. 11 Now, there are other wells shown on this exhibit 12 Q. 13 offsetting the proposed unit; is that correct? That is correct. 14 Α. Will Cobra call a geological witness to review 15 16 the status of the offsetting production --17 Α. Yes. 18 Q. -- in the area? 19 Can you identify what has been marked as Cobra 20 Exhibit Number 2? 21 Α. That is a state form unit agreement. 22 Q. Does this agreement on Schedule B show the status
  - Q. Does this agreement on Schedule B show the status of the ownership of the acreage and the tracts which have been unitized?
    - A. Yes, it does.

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It shows both the working interest and the Q. 1 2 royalty interest ownership? That's correct. Α. 3 What percentage of the working interest will be 4 Q. voluntarily committed to this unit agreement? 5 One hundred percent. Α. 6 7 And is Cobra to be designated unit operator under Ο. 8 this agreement? Yes, they will be. 9 Α. 10 Has the unit agreement been reviewed with the Q. Commissioner of Public Lands? 11 It has been sent to the Commissioner for 12 Α. approval, but we are currently waiting on that. 13 Will Cobra supply the Commissioner's preliminary 14 ο. approval letter as soon as it is received? 15 16 Α. Yes, we will. 17 What is the primary objective in this unit? Q. The Devonian. 18 Α. 19 And what other formations are actually --Q. horizons are actually being unitized? 20 2.1 All formations. Α. 22 Are you required under any of your agreements 23 with other interest owners in the unit to spud the initial 24 well in the unit --25 Α. Yes --

- Q. -- at a particular time?
- A. Yes, we are. Under one of the agreements we're required to spud by April 30th, 1996.
  - Q. Now, Mr. House, is Exhibit Number 6 a copy of an affidavit confirming that notice of the Application has been provided in accordance with OCD rules?
    - A. Yes, it is.
- Q. And attached to that affidavit are there copies of the notice letters?
  - A. Yes, there are.
- Q. Notice was provided to Santa Fe Energy Resources,

  12 Inc.?
- 13 A. Correct.

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- Q. What is their ownership in the area?
- 15 A. Santa Fe owns 100 percent of the working interest 16 or the operating rights of Section 4.
- 17 Q. And that is also being unitized?
- 18 A. Correct.
- Q. That's the tract toward whom the well's being unitized?
- 21 A. Correct.
- 22 Q. What is the Yates interest in this area?
- A. Yates is an offset operator that, while probably
  not affected by this unit, I guess in overabundance of
  caution we went ahead and notified them of what was going

1 on. And do they operate Section 9, the diagonal 2 Q. offset to the south --3 That is correct. 5 Were Exhibits 1 and 2 prepared by you or under your direction? 6 7 Α. Yes. Also Exhibit Number 6 is the affidavit? 0. Exhibit Number 6 was -- The affidavit was 9 Α. prepared by your law firm, based on the information I 10 11 provided. MR. CARR: Mr. Stogner, at this time we would 12 13 move the admission into evidence of Cobra Exhibits 1, 2 and 14 6. 15 EXAMINER STOGNER: I'm sorry, which ones? 16 MR. CARR: 1, 2 and 6. EXAMINER STOGNER: Exhibits 1, 2 and 6 will be 17 admitted into evidence at this time. 18 MR. CARR: And that concludes my direct 19 examination of Mr. House. 20 EXAMINATION 21 22 BY EXAMINER STOGNER: Mr. House, when did you say was the deadline for 23 0. 24 drilling date? 25 We have April 30th of 1996 under one of our Α.

11 1 agreements, our agreement with Santa Fe. And in Exhibit Number 2, last page, Exhibit C of 2 Q. that particular exhibit, you show about three people in 3 Tract One. Have they all agreed at this point? 4 5 Yes, they have. Α. And Tract Two, Santa Fe has agreed? 6 0. 7 Α. Yes. So you have 100-percent participation in both 8 0. tracts? 9 10 Α. That is correct, yes, sir. And what is the proposed name of this unit? 11 Q. This is the Lewis Unit, L-e-w-i-s. 12 Α. 13 Now, these are two state leases. Are they Q. portions of state leases? 14 Yes, Section 3 is one lease, all of Section 4 is 15 16 one lease. We were taking only 40 acres out of each lease. 17 Q. And have you met with the Land Office and got 18 preliminary approval yet? 19 I have not. We have submitted the agreement and are waiting to hear back. 20 21 MR. CARR: Mr. Stogner, we talked with them

yesterday, were to meet with them yesterday, and then they called and were unable to meet. So we delivered the data to them.

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Mr. Martinez indicated by phone he saw no problem

1 with it and would be supplying a preliminary approval letter. We have not received it yet. We will submit it on 2 receipt. 3 EXAMINER STOGNER: If you would, please. 4 5 MR. CARR: Okay. EXAMINER STOGNER: I don't have any other 6 7 questions of Mr. House. He may be excused. MR. CARR: Mr. Stogner, at this time we would 8 call James Small. 9 10 JAMES SMALL, 11 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 12 13 DIRECT EXAMINATION 14 BY MR. CARR: 15 0. Would you state your full name for the record, 16 please? 17 Α. James Small. 18 Q. Where do you reside? 19 Midland, Texas. Α. 20 By whom are you employed? Q. 21 I'm employed by Small Geoservices and presently Α. 22 am a consultant for Cobra Oil and Gas Corporation. 23 Have you previously testified before this 0. Division? 24 25 Α. No, I haven't.

Could you review your educational background for 1 Q. 2 Mr. Stogner? I have a BS in geology from Washington and Lee 3 University. I've been employed in the oil and gas industry 4 5 for 15 years and presently am consulting for the last five years for Cobra Oil and Gas. 6 7 And you're a consultant in the area of petroleum 8 geology; is that right? 9 Α. Yes, sir. 10 Are you familiar with the Application filed in Q. 11 each of these cases? 12 Α. Yes, sir. 13 And are you familiar with the proposed Lewis Unit and the State 3 Com Number 1 well? 14 15 Yes, sir. Α. MR. CARR: Mr. Stogner, we tender Mr. Small as an 16 expert witness in petroleum geology. 17 EXAMINER STOGNER: Mr. Small is so qualified. 18 (By Mr. Carr) Have you prepared exhibits for 19 20 presentation here today? Yes, I have. 21 Α. Let's go to your structure map, which has been 22 Q. 23 marked Exhibit Number 3, and I would ask you to review the information on this exhibit for the Examiner. 24

This is a structure map on 25-foot contours on

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the top of the Devonian. It's based on the well control, and it's also based on seismic data that Cobra Oil and Gas had purchased from a commercial seismic source.

- Q. Basically what this shows are small Devonian features in the area; is that correct?
- A. Yes, sir, the field to the north is Crossroads, the field to the south in Section 10 is the northern portion of Crossroads South. And our indications are that there are some additional undrilled closures on this productive trend.
- Q. The wells that are indicated in the solid circle show producing wells. The others show what? Dry holes or abandoned wells?
  - A. Yes, sir, dry holes.

- Q. Are they all in the Devonian?
- A. No, sir, the well in Section 4, in the southeast corner, is a San Andres test. It did not penetrate the Devonian.
- Q. The wells in the northern portion of Section 10 are those Devonian wells?
  - A. Yes, sir, they're all Devonian.
- Q. Let's go to the cross-section, your Exhibit

  Number 4. Can you review this for Mr. Stogner, please?
  - A. This cross-section starts, A, to the north, it comes up across a fault and crosses the southern end of the

Crossroads field, the Devonian producing field, and then 1 proceeds south, crosses our proposed location, and then 2 crosses another fault that is downthrown onto the northern 3 end of the South Crossroads field. 4 5 The key well in here, I'd like to bring your 6 attention to. There are producing wells in both the north 7 end and the south end of the cross-section. The key well 8 that I'd like to bring your attention to is the Number 1 9 Hill and Meeker, which is the producing well in the 10 Crossroads South field. And between that well and our 11 location is the Hill and Meeker Number 2, which was a dry hole, which was low to the Number 1 well, and it was wet. 12 And then we propose to drill this undrilled fault 13 14 block just to the northwest of that dry hole. EXAMINER STOGNER: Okay, I'm not finding that 15 16 well. 17 THE WITNESS: Oh, I'm sorry, it's -- The producer well is one in from the end of A'. 18 EXAMINER STOGNER: That's the first producing 19 well from A'? 20 21 THE WITNESS: Yes, sir. EXAMINER STOGNER: It's the one that's marked 22 23 Hill and Meeker? THE WITNESS: Yes, sir. 24 25 The State 10 Well Number 1? EXAMINER STOGNER:

1 THE WITNESS: Yes, sir. EXAMINER STOGNER: Okay. All right, you may 2 continue. 3 4 Q. (By Mr. Carr) And so what you've got in that well is a Devonian producer in a small geological anomaly; 5 is that right? 6 That is correct. It's a small closure on the 7 Devonian that was perforated and is productive. 8 And if we move to the left on the cross-section, 9 Ο. then we come to the undrilled fault block, which is the 10 11 proposed location? 12 Α. That is correct, yes, sir. What is the reservoir drive mechanism in this 13 0. 14 area? 15 This is a water-drive reservoir in both Crossroads and Crossroads South field. 16 You've got a bottom water drive? 17 0. 18 Α. Yes, sir. So the objective here is to drill at the highest 19 Q. structural point in this Devonian anomaly? 20 Yes, sir. Α. 21 And by doing that, you'll avoid leaving attic oil 22 0. 23 behind; is that correct? 24 Α. That is correct. In your opinion, Mr. Small, will this be in fact 25 0.

a one-well unit?

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- A. Yes, sir. If we're successful we plan to produce it on 80 acres, and this one well should effectively drain the whole structure as we envision it.
- Q. Let's go to Exhibit Number 5. Can you identify that, please?
- A. Exhibit Number 5 is a producing well production map in the area. It shows the producing wells out of the formations they produce and the cumulative oil production from those wells.
- Q. In your opinion, is the formation of this unit and the drilling of a well at the proposed unorthodox location to the Devonian necessary to effectively produce the reserves from this geologic anomaly?
  - A. Yes, sir.
- Q. By developing at this unorthodox location, will you be able to avoid the drilling of unnecessary wells?
  - A. Yes, sir.
- Q. In your opinion, will approval of this

  Application otherwise be in the best interest of

  conservation, the prevention of waste and the protection of

  correlative rights?
  - A. It will.
  - Q. Were Exhibits 3 through 5 prepared by you?
- A. Yes, they were.

MR. CARR: Mr. Stogner, at this time we would 1 move the admission into evidence of Cobra Exhibits 3 2 3 through 5. EXAMINER STOGNER: Exhibits 3 through 5 will be 4 admitted into evidence. 5 MR. CARR: And that concludes my direct 6 7 examination of Mr. Small. 8 EXAMINATION BY EXAMINER STOGNER: 9 Mr. Small, what is the well in Section 4, in the 10 Q. 11 southeast quarter, southeast quarter? What is that one, and what happened to it? 12 The well in the southeast of the southeast of 4 13 Α. was a San Andres well. It was drilled to approximately 14 5100 feet and it was tested and it was noncommercial, so it 15 16 was plugged and abandoned. 17 0. Never had any gas. And the field to the south, referring to Exhibit 18 Number 3 now, the field to the south that you referred to 19 20 in Section 10, that's the South Crossroads? 21 Yes, that's the northern portion of the South Α. 22 Crossroads field. There is more of that field one section 23 south.

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Yes, sir, they are Devonian wells.

Are those Devonian wells?

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1	Q. And the same way up in Section What is that,
2	34?
3	A. Yes, sir, that's the south end of Crossroads
4	field. There are two Mississippian producing wells that
5	were off the Devonian structure, and they're colored in
6	pink.
7	Q. Are the Mississippian wells, are they within the
8	unit? Are they below or above the Devonian?
9	A. They're above the Devonian.
10	Q. So that would be included in your unit?
11	A. Yes, sir.
12	Q. And those Mississippian wells are oil wells?
13	A. Yes, sir, they both produced oil and a fair
14	amount of gas, but they've been classified as oil wells.
15	Q. Do you know what the standard spacing of both
16	those two Crossroads fields are?
17	A. They are 40 acres.
18	EXAMINER STOGNER: Any other questions of Mr.
19	Small?
20	MR. CARR: No questions.
21	EXAMINER STOGNER: You may be excused.
22	Anything further, Mr. Carr?
23	MR. CARR: Mr. Stogner, that concludes our
24	presentation in this case.
25	EXAMINER STOGNER: Nobody else has anything

1	Well, I just noticed something here. I need to ask Mr.
2	House a question.
3	In referring to Exhibit Number 2, Mr. House, on
4	the front cover, you show that to be a state fee
5	exploratory unit. Was that a typo?
6	MR. CARR: I can answer that. That is a typo.
7	We were preparing that in our office off a state form.
8	It's a state-staked unit.
9	EXAMINER STOGNER: Okay. Then with that, I will
10	take both cases 11,465 and 11,466 under advisement at this
11	time.
12	And with that, hearing is adjourned.
13	(Thereupon, these proceedings were concluded at
14	12:10 p.m.)
15	* * *
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20	I do hereby certify that the foregoing is a complete reserve of the proceedings in
21	the Examine heading of Case Nos. 11465 and 1446 meard by me on 8 reaction 1996.
22	Make Examiner
23	Oil Conservation Division
24	
25	

## CERTIFICATE OF REPORTER

STATE OF NEW MEXICO )
) ss.
COUNTY OF SANTA FE )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL February 18th, 1996.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998