STATE OF NEW MEXICO 1 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 2 3 OIL CONSERVATION DIVISION 4 5 IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION 6 DIVISION FOR THE PURPOSE OF CONSIDERING: CASE NO. 10,980 7 APPLICATION OF ODYSSEY PARTNERS, 8 9 . i **8** [95] 10 11 12 REPORTER'S TRANSCRIPT OF PROCEEDINGS 13 EXAMINER HEARING BEFORE: DAVID R. CATANACH, Hearing Examiner 14 15 16 May 26, 1994 17 Santa Fe, New Mexico 18 19 20 This matter came on for hearing before the Oil 21 Conservation Division on Thursday, May 26, 1994, at Morgan 22 Hall, State Land Office Building, 310 Old Santa Fe Trail, 23 Santa Fe, New Mexico, before Steven T. Brenner, Certified 24 Court Reporter No. 7 for the State of New Mexico. 25

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4	CASE NO. 10,980			
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1	APPEARANCES
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3	FOR THE DIVISION:
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5	Attorney at Law Legal Counsel to the Division
6	State Land Office Building Santa Fe, New Mexico 87504
7	
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10	Suite 1 - 110 N. Guadalupe P.O. Box 2208 Santa Fo Now Moving 87504-2208
11	Santa Fe, New Mexico 87504-2208 By: WILLIAM F. CARR
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1	WHEREUPON, the following proceedings were had at
2	9:45 a.m.:
3	EXAMINER CATANACH: At this time we'll call case
4	10,980.
5	MR. CARROLL: Application of Odyssey Partners,
6	Ltd., for a unit agreement and an unorthodox oil well
7	location, Lea County, New Mexico.
8	EXAMINER CATANACH: Are there appearances in this
9	case?
10	MR. CARR: May it please the Examiner, my name is
11	William F. Carr with the Santa Fe law firm Campbell, Carr,
12	Berge and Sheridan.
13	I represent Odyssey Partners, Ltd., and I have
14	two witnesses.
15	EXAMINER CATANACH: Are there any other
16	appearances?
17	Will the witnesses please stand to be sworn in?
18	(Thereupon, the witnesses were sworn.)
19	PHILIP R. RICE,
20	the witness herein, after having been first duly sworn upon
21	his oath, was examined and testified as follows:
22	DIRECT EXAMINATION
23	BY MR. CARR:
24	Q. Will you state your name for the record, please?
25	A. My name is Philip R. Rice.

1 Q. Where do you reside? 2 Dallas, Texas. Α. By whom are you employed and in what capacity? 3 Q. I'm an independent landman and currently employed by Odyssey Petroleum. 5 6 0. Have you previously testified before this Division? 7 No, I have not. 8 Α. Would you briefly review for Mr. Catanach your 9 Q. educational background and then summarize your work 10 experience? 11 I was graduated at the University of Oklahoma in 12 Α. petroleum land management. I'm a certified professional 13 14 landman. I have 14 years' experience. Mr. Rice, are you familiar with the Application 15 Q. filed in this case on behalf of Odyssey Partners, Ltd.? 16 17 Α. Yes, I am. And are you familiar with the proposed Marigold 18 19 Unit and the Kinsolving 7 Well Number 2? 20 Α. Yes, I am. Mr. Catanach, at this time we tender 21 MR. CARR: Mr. Rice as an expert witness in petroleum land matters. 22 EXAMINER CATANACH: Mr. Rich is so qualified. 23 (By Mr. Carr) Would you briefly state what 24 Q. Odyssey Partners seeks with this Application? 25

- 6 Odyssey is seeking the approval of the Marigold 1 Α. Unit and approval of an unorthodox well location. 2 Q. And the well we're talking about is the 3 Kinsolving 7 Well Number 2? 4 Α. That is correct. 5 And what is the proposed unorthodox location for 6 0. that well? 7 Α. The approximate location is 100 feet from the 8 9 south line of -- excuse me, from the north line of Section 7 and 2075 feet from the east line. 10 And this is in Township 12 South, Range 38 East? 11 Q. 12 Α. Correct. In fact, you're just 100 feet from the offsetting 13 Q. tract to the north? 14 That is correct. 15 Α. 16 Now, Mr. Rice, there are two 40-acre tracts that Q. 17 are being included in the proposed unit; is that right? That is correct. 18 Α. And so the proposed well, the Kinsolving 7 Number 19 Q. 2, is actually located just 100 feet off the center of the 20
- 22 A. Right.

unit?

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- Q. Have you prepared certain exhibits for presentation here today?
- A. Yes, sir.

1	Q. Let's go to what has been marked Odyssey Exhibit
2	Number 1. Would you identify this and review it for Mr.
3	Catanach?
4	A. The Exhibit Number 1 is a land plat that depicts
5	the 80-acre unit, 40 acres being in Section 6, which is a
6	federal lease Yates Petroleum is the lessee and 40
7	acres in Section 7, which is a fee tract.
8	Q. And the proposed location is also indicated on
9	this exhibit?
10	A. Yes, sir, in the middle of the exhibit, in the
11	middle of the tract.
12	Q. Let's go now to Exhibit Number 2. Will you
13	identify this for the Examiner?
14	A. Exhibit 2 is the unit agreement for the Marigold
15	Unit. Attached to that agreement as Exhibit B is an
16	ownership breakdown.
17	Q. And this ownership breakdown shows both the
18	working and royalty interests in the proposed unit?
19	A. Yes, sir, that is correct.
20	Q. Is this unit agreement on the recommended federal
21	form?
22	A. Yes, sir.
23	Q. Has the unit area been designated by the Minerals
24	Management Service as an area logically suited for
25	development under a unit plan?

We have been in touch with Mr. Lopez down there, 1 Α. and he has given his graces subject to the outcome of this 2 3 hearing. And has he agreed to provide you with a letter 0. giving preliminary approval of the unit area? 5 6 A. Yes, sir, he has. MR. CARR: Mr. Catanach, we were advised 7 yesterday by Mr. Lopez that BLM would approve the unit 8 The letter has been mailed to us, and we will 9 area. 10 provide a copy to the Division as scon as it is received. 11 (By Mr. Carr) Mr. Rice, what percentage of the interest ownership in the unit area has been voluntarily 12 13 committed to this agreement? 14 A. The partners of the agreement, Yates and Odyssey, Yates have executed it in all their capacities, the unit 15 agreement, and with Odyssey's it will be 100 percent. 16 So there are no outstanding working interests 17 0. that haven't been voluntarily been committed to this 18 effort? 19 That is correct. 20 Α. 21 Q. Does Odyssey request to be designated unit 22 operator? 2.3 Α. Yes, sir. 24 Q. And what is the primary objective in this unit?

The test will be a 12,000-foot Devonian.

25

Α.

And what horizons are being unitized in this unit 1 Q. agreement? 2 We are proposing to unitize all formations from 3 Α. the surface to the base of the Devonian formation. 4 How soon does Odyssey plan to drill the initial 5 0. test well, or actually the only well in the unit? 6 The only well will be drilled prior to August 1st 7 8 of this year. In your opinion, will approval of this 9 Q. Application be in the best interests of conservation, the 10 prevention of waste and the protection of correlative 11 rights? 12 Α. Yes, sir. 13 And all interest owners have, in fact, 14 Q. 15 voluntarily committed to the development of the Devonian 16 under this unit plan? 17 Α. That is correct. Is Exhibit Number 3 a copy of an affidavit 18 confirming that notice of this Application has been 19 provided, as required by Oil Conservation Division rules? 20 That is correct, and it has notified all current 21 Α. record holders. 22 Will Odyssey also call a geological witness to 23 Q. review the technical aspects of this Application? 24 Yes, sir, we will. 25 Α.

1	Q. Were Exhibits 1, 2 and 3 prepared by you or
2	compiled under your direction?
3	A. They were.
4	MR. CARR: At this time, Mr. Catanach, I move the
5	admission of Odyssey Partners, Ltd., Exhibits 1 through 3.
6	EXAMINER CATANACH: Exhibits 1 through 3 will be
7	admitted as evidence.
8	MR. CARR: And that concludes my direct
9	examination of Mr. Rice.
10	EXAMINATION
11	BY EXAMINER CATANACH:
12	Q. Mr. Rice, who is Robert B. Byron?
13	A. Robert Byron was an agent of Odyssey's that
14	acquired farmout from Dwight Tipton, who's the current
15	operator of record of Section 7.
16	Subsequent to that, Robert assigned all of his
17	interests to Odyssey.
18	Q. What did you say the name of this well was?
19	A. This will be the Kinsolving 7.
20	Q. Can you spell that for me?
21	A. K-i-n-s-o-l-v-i-n-g.
22	Q. Okay.
23	A. It's my understanding is the current surface
24	owner.
25	Q. Okay, Number 1?

Number 2, 7-2 Well. 1 Α. 7-2 Well. And the surface location is proposed 2 Q. to be 100 feet from the north line, 2075 feet from the east 3 line? 4 5 Yes, sir. Α. I have nothing 6 EXAMINER CATANACH: Okay. 7 further. The witness may be excused. MR. CARR: Mr. Catanach, at this time we call 8 Jack Ahlen. 9 10 JACK AHLEN, the witness herein, after having been first duly sworn upon 11 his oath, was examined and testified as follows: 12 DIRECT EXAMINATION 13 BY MR. CATANACH: 14 15 Q. Will you state your name for the record, please? 16 Α. Jack Ahlen. And where do you reside? 17 Q. 18 Α. Roswell, New Mexico. 19 Q. By whom are you employed and in what capacity? 20 Α. Odyssey Partners, Ltd., in the capacity of consulting geologist. 21 Mr. Ahlen, have you previously testified before 22 this Division? 23 Yes, sir, I have. 24 Α. At the time of that testimony, were your 25

credentials as an expert witness in petroleum geology 1 accepted and made a matter of record? 2 Yes, sir, they were. 3 Are you familiar with the Application filed in 0. this case on behalf of Odyssey Partners, Limited? 5 6 Α. Yes, I am. 7 And are you familiar with the area surrounding 0. 8 the proposed unit and the proposed unorthodox well location? 9 Yes, I am. 10 Α. MR. CARR: Mr. Catanach, are the witness's 11 qualifications acceptable? 12 13 EXAMINER CATANACH: They are. (By Mr. Carr) Mr. Ahlen, have you prepared 14 Q. exhibits for presentation here today? 15 Yes, sir. 16 Α. Could you refer to what has been marked Odyssey 17 Exhibit 4 and identify this and review it for the Examiner? 18 Exhibit Number 4 is a structure map on the top of 19 Α. 20 the Fusselman formation of the Gladiola field. It extends through parts of Township 11 and 12 21 South, 37 and 38 East, runs approximately five miles north-22 south and three miles east-west. 23 It shows the general structural configuration of 24 25 the Gladiola field. It also shows the proposed unorthodox

location, which is marked by the large black arrow. 1 What is the relationship of the Fusselman to the 2 0. Devonian in this area? 3 I consider them to be synonyms. 4 And so basically here what we're looking at is a 5 Q. 6 depiction of the top of the Devonian? 7 Α. Yes, sir. Let's go to Odyssey Exhibit 5. Will you identify 8 Q. this for Mr. Catanach? 9 Odyssey Exhibit Number 5 is two cross-sections, 10 A-A' and B-B'. They run -- Each of them run east-west, 11 immediately to the north of the proposed well and 12 13 immediately south of the proposed well. A-A' is the wells to the north, and B-B' are the wells to the south. 14 The wells are named with the administrative 15 details shown on the caption above each well, and the well 16 name, location, elevation and such are noted on the top of 17 each of those well tags. 18 Shown on the electric logs themselves are the 19 formations which is called the top of the Mississippian 20 lime, the top of the Woodford shale and the top of the 21 Devonian formation. 22 These are structure cross-sections, and they are 23 datumized on the minus-8000-foot-below-sea-level datum. 24 Immediately below each well are shown the 25

perforated interval, the initial potential of each of the wells, the completion date, the plugging date, and the cumulative production for each of those wells from the Devonian, and in one instance there's also some Wolfcamp production.

- Q. This exhibit -- These cross-sections provide a general depiction of the Devonian in the subject area; is that right?
 - A. That is correct.

- Q. Let's go now to Odyssey Exhibit Number 6. Will you identify and then review this exhibit for Mr. Catanach?
- A. Odyssey Exhibit Number 6 is two illustrations as well, illustrations of the 3-D seismic lines, the critical ones that go through the well location. One is line 92 and the other is line 73 of the seismic survey that was run over a portion of the northern part of the Gladiola field.

We are looking at only a part of the record and that part of the section that is critical to the prospect.

We're looking at the time interval 1.35 seconds to 1.65 seconds, which includes the lower part of the Pennsylvanian formation, the Mississippian formation, and the top of the Devonian/Fusselman formation.

If you will note -- Excuse me, the illustration on the left is a north-south seismic line. The illustration on the right is an east-west seismic line.

On the extreme right of each of those 1 illustrations, down near 1.600 seconds, are the letters 2 DAP1. That is the symbol for the top of the Devonian 3 formation. 4 The black cones that you see lined up there, 5 6 essentially is a depiction of the surface of the Devonian 7 formation on these two lines. You'll note that there's -- On the right 9 illustration there's a relatively straight line with a capital letter F at the top of that, and that means fault. 10 The configuration that you see there is essentially showing 11 a small pop-up fault block that causes the Devonian 12 13 formation to be higher at that particular location than immediately adjacent to it. 14 Mr. Ahlen, if we go to the top of this exhibit, 15 there's an arrow at the top of each of the seismic lines, 16 is there not? 17 18 Yes, that is the location of the proposed new Α. well. 19 If we go to the next exhibit, Exhibit Number 7 on 20 Q. the structure map, there also is a trace that shows the 21 location of each of these seismic lines; is that also true? 22 That is correct. 23 Α. All right. Let's stay with Exhibit Number 7, and 24 Q.

I'd ask you to first review the production history map on

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the right-hand side of that exhibit, and then the structure 1 2 map. There are two illustrations on Α. Thank you. 3 Exhibit 7 as well. 4 The right-hand illustration is an administrative 5 map in which it shows the -- It shows well names, it shows 6 7 the locations of wells, it shows temporary or abandonment 8 dates, it also shows cumulative production for the various formations that have produced in this area. 9 Dv. is an abbreviation for Devonian. Wc. is an 10 abbreviation for Wolfcamp. Ms. is an abbreviation for 11 Mississippian. 12 The previous exhibit cross-sections are shown on 13 this map as A-A' and B-B'. The proposed location is also 14 indicated on this map with the double circle. 15 On the left illustration of this exhibit is a 3-D 16 seismic map illustrating the reason for the proposed new 17 well. 18 The closing contour is the subsea datum of 8080, 19 located entirely within the recommended unit area. 20 21 will note that the structural anomaly is divided 22 approximately in half by the common section line between Section 6 and Section 7. 23 We propose that the income derived from 24 25 production be divided essentially 50-50 on the basis of

this -- that half of the volume of the new part of the reservoir is in each section, and therefore appropriately belongs to those individuals owning rights in each of those two 40s in that proportion.

The proposed location is above the datum minus 8020. We expect that this well will be approximately 60 to 70 feet above or structurally higher than wells that have been drilled in the immediate vicinity and that the oil that was trapped in this small structure is still contained within what some people call the attic portion of this trap.

We feel as though a well drilled at that location will adequately drain this particular structure.

- Q. Now, Mr. Ahlen, you've been involved with other efforts to develop the small Devonian pods?
 - A. Yes, sir.

- Q. Do you have an opinion as to what the reservoir drive mechanism may be?
- A. In the Fusselman formation it's primarily water drive.
 - Q. And is the proposed location at the highest possible location on this structure?
 - A. It is very near the highest possible location, within the quality of the data involved.
 - Q. And therefore, a well at this location would

enable Odyssey to produce the oil and not leave attic oil 1 behind? 2 3 Α. Correct. In your opinion, will approval of this 4 5 Application result in the -- and the drilling of this well, result in the recovery of hydrocarbons that otherwise would 6 not be recovered? 7 8 Yes, it is. A. Will the approval of the Application otherwise be 9 Q. in the best interests of conservation and the prevention of 10 waste? 11 Yes, sir. 12 Α. 13 Q. Could you identify what has been marked as Odyssey Exhibit Number 8? 14 15 Α. Exhibit Number 8 is a letter that I mailed to the Bureau of Land Management in reference to the 16 Marigold Unit area, requesting their approval of the unit 17 18 and specifying the details which we've just gone through. And this basically summarizes your geological 19 Q. 20 presentation? Yes, sir, it does. 21 Α. Were Exhibits 4 through 8 either prepared by you 22 Q. or compiled under your direction? 23 Yes, they were. 24 Α.

MR. CARR:

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At this time, Mr. Catanach, we move

the admission of Odyssey Exhibits 4 through 8. 1 2 EXAMINER CATANACH: Exhibits 4 through 8 will be admitted as evidence. 3 MR. CARR: That concludes my direct examination 4 of Mr. Ahlen. 5 6 **EXAMINATION** 7 BY EXAMINER CATANACH: 8 Mr. Ahlen, is that a north-south-running fault in Q. 9 that --10 A. Yes. -- block? 11 Q. 12 Does that have any effect on the -- or influence 13 on the proposed location? Is that a factor in choosing --Well, the well is located sufficiently west of 14 Α. 15 the location so that we don't actually penetrate the fault. Some people feel that if you actually penetrate the fault 16 itself, it might be a little bit more tight there than 17 otherwise. 18 Basically, you're just trying to get at the 19 0. 20 highest position on the structure? Yes, sir. You'll note that this -- All of the 21 wells in this immediate vicinity have been plugged out in 22 the Devonian formation, and there is no production 23 offsetting this particular well at the present time from 24 the Devonian Fusselman formation. 25

So this would be additional oil that would not be recovered any other way.

- Q. Is this structure map based solely on the 3-D seismic, or did that have other factors utilized, well control, well logs?
- A. Well, well logs were used to establish the basis for the 3-D survey. In other words, the 3-D survey is standardized based on the subsurface data that you see in the wells immediately adjacent.

The 3-D survey itself was conducted over approximately four and a half miles in the northern part of the Gladiola field. And of course I am presenting only two of those lines. In a 3-D survey you run significantly more seismic lines than I have shown here. You essentially run them on a spacing of about 110 feet between lines. So you attempt to get a 3-D picture of the structure.

So this structure is based on significantly more seismic lines than I have presented here at this hearing, and we have selected only the ones that illustrate the critical part of the structure. There were some lines that had -- were no help whatsoever to present this structure.

- Q. Are you pretty confident that the 3-D seismic tells you where the highest point on that structure is?
 - A. Yes, sir.

Q. Have you utilized it in a Devonian situation

before?

- A. In other areas of southeastern New Mexico it has been used successfully, yes, sir.
- Q. Do you know if there's much drift, drilling that deep in this area, wellbore drift?
- A. Oh, yes, if you're not careful you will drift significantly in some areas.

We will limit the drift on this particular well, such that we are within a very small area of risk, or area of error.

- Q. Is there any estimate of what kind of reserves you guys are looking at to recover from this well?
- A. Yes, on the letter that -- On Exhibit 8 that I have written to the Bureau of Land Management, in the last paragraph I suggest that there might be as much as 650,000 barrels of oil remaining to be recovered.
- Q. This is essentially in a part of the pool that's already been depleted, wells have been plugged out; is that correct?
 - A. Yes.
- Q. Which part of the Gladiola pool is still active, is --
- A. Exhibit Number 4, the extreme southern part of the field, the highest part of the structure in the extreme southern part of the field, where the original discovery

1	wells were drilled back in the Fifties.
2	EXAMINER CATANACH: Okay. I have nothing of the
3	witness.
4	MR. CARR: That concludes our presentation in
5	this case, Mr. Examiner.
6	EXAMINER CATANACH: There being nothing further,
7	Case 10,980 will be taken under advisement.
8	(Thereupon, these proceedings were concluded at
9	10:13 a.m.)
10	* * *
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13	the foregoing is
14	I do hereby certify that the foregoing is a complete record of the proceedings in a complete record of Case No.
15	the Examiner nearly and 1994.
16	1) with atarat, Examine.
17	Oil Conservation Division
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1	CERTIFICATE OF REPORTER
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3	STATE OF NEW MEXICO)) ss.
4	COUNTY OF SANTA FE)
5	
6	I, Steven T. Brenner, Certified Court Reporter
7	and Notary Public, HEREBY CERTIFY that the foregoing
8	transcript of proceedings before the Oil Conservation
9	Division was reported by me; that I transcribed my notes;
10	and that the foregoing is a true and accurate record of the
11	proceedings.
12	I FURTHER CERTIFY that I am not a relative or
13	employee of any of the parties or attorneys involved in
14	this matter and that I have no personal interest in the
15	final disposition of this matter.
16	WITNESS MY HAND AND SEAL May 30, 1994.
17	Mille Miller
18	STEVEN T. BRENNER
19	CCR No. 7
0 2	
21	My commission expires: October 14, 1994
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