

NEW MEXICO OIL CONSERVATION DIVISION

Examiner Hearing
Santa Fe, New Mexico
December 16, 1999 -- 8:15 A.M.

Name	Representing	Location
Ferry A. Leant	Trilogy Operating, Inc.	Midland, TX
George Ulmo	TRIKOgy Operating	Midland, TX
Wari Tufan	Cross Timbers O. & L Co	Ft. Worth, TX
Keith McKamey	Davis Pet.	Roswell, NM
Bill Owen	Davis Pet.	Roswell, NM
Gary Lang	Pogo Producing Co	Midland, TX
Kellerin	Kellerin & Kellerin	Santa Fe
William L. Gasser		
William L. Gasser	Gasper, Gasser, Boye & Gordon	Santa Fe
Don Gasser	Pogo Producing Company	MIDLAND, TX
Bill Hardie	Pogo Producing Co.	Midland, TX
DALE DOUGLAS	AMURINGTON	MIDLAND, TX
Bill Baker	"	"
James Bruce	-	SF

STATE OF NEW MEXICO
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
 OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY)
 THE OIL CONSERVATION DIVISION FOR THE)
 PURPOSE OF CONSIDERING:) CASE NO. 12,305
)
 APPLICATION OF TRILOGY OPERATING, INC.,)
 FOR COMPULSORY POOLING, LEA COUNTY,)
 NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

December 16th, 1999

Santa Fe, New Mexico

OIL CONSERVATION DIV.
00 JAN -6 PM 9:48

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, December 16th, 1999, 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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December 16th, 1999
Examiner Hearing
CASE NO. 12,305

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A P P E A R A N C E S

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 Santa Fe, New Mexico 87504-2265
 By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 8:15 a.m.:

3
4 EXAMINER CATANACH: Call the hearing to order
5 this morning for Docket Number 37-99. I'm going to call
6 the continuances and dismissals first.

7 (Off the record)

8 EXAMINER CATANACH: And we'll call first case,
9 12,305.

10 MR. CARROLL: Application of Trilogy Operating,
11 Inc., for compulsory pooling, Lea County, New Mexico.

12 EXAMINER CATANACH: Call for appearances.

13 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
14 the Santa Fe law firm of Kellahin and Kellahin, appearing
15 on behalf of the Applicant, and I have two witnesses to be
16 sworn.

17 EXAMINER CATANACH: Any other appearances in this
18 case?

19 Will the witnesses please stand to be sworn in?

20 (Thereupon, the witnesses were sworn.)

21 MR. KELLAHIN: For the record, Mr. Examiner,
22 Trilogy's exhibits are in an exhibit binder, and for the
23 record we'll mark that as Exhibit 1, and then each of the
24 tabs within Exhibit 1 have a name associated with it, and
25 we'll refer to the tab by the name indicated.

1 JERRY A. WEANT,
2 the witness herein, after having been first duly sworn upon
3 his oath, was examined and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. KELLAHIN:

6 Q. For the record, sir, would you please state your
7 name and occupation?

8 A. My name is Jerry Weant. I'm president of Trilogy
9 Operating, Inc., and I also serve as the landman for
10 Trilogy Operating.

11 Q. Mr. Weant, on prior occasions have you testified
12 before the Division Examiners concerning compulsory pooling
13 applications in New Mexico?

14 A. Yes, I have.

15 Q. And pursuant to your employment, have you made an
16 effort to consolidate the various owners in this 40-acre
17 spacing unit for the proposed well?

18 A. Yes, we have.

19 Q. And are you the individual responsible for
20 accomplishing those tasks?

21 A. Yes.

22 MR. KELLAHIN: We tender Mr. Weant as an expert
23 landman.

24 EXAMINER CATANACH: Mr. Weant is so qualified.

25 MR. KELLAHIN: Mr. Weant, let's turn to Exhibit

1 1, the exhibit booklet. Turn to the "Notification" tab,
2 and if you'll turn beyond the certificate let's look at the
3 list of parties that were originally identified to be
4 subject to a pooling order. It's the third page behind the
5 tab.

6 A. Okay.

7 Q. Do you see that marked as Exhibit "A"?

8 A. Yes.

9 Q. Is this a list that you have prepared?

10 A. Yes.

11 Q. To the best of your knowledge, does this
12 represent an accurate list of the names and addresses of
13 the interest owners that would share in production from
14 this spacing unit at the time the Application was filed?

15 A. Yes.

16 Q. Let's turn to the "Land" tab and have you
17 identify for the Examiner the proposed 40-acre spacing
18 unit.

19 A. Okay. The first page is a plat, the acreage
20 under which Trilogy Operating Company, Trilogy Operating,
21 Inc., owns a working interest, is Section 1. If you will
22 look, the proposed location has been highlighted with a red
23 arrow in the southwest quarter of the northeast quarter of
24 Section 1 of Township 20 South, Range 38 East, Lea County,
25 New Mexico.

1 Q. This well is an attempt to drill from the surface
2 to the base of the Drinkard formation?

3 A. That is correct.

4 Q. All right. If you'll look behind the tab, we
5 again see the same Exhibit "A" list of interest owners.
6 Let's take a moment and have you update the Examiner as to
7 what parties you have either obtained joinder from or now
8 have leases.

9 A. Okay. On the list we, as of yesterday, received
10 an oil and gas lease from Shari Candice Campbell, which
11 it's designated out in the column to the side.

12 Q. All right, that interest can be deleted, then,
13 from the pooling order?

14 A. Yes.

15 Q. All right, please continue.

16 A. And down below there is a Robert N. Stafford and
17 John Stafford, trustees of the Carmen J. Stafford Trust B,
18 which they have also submitted an oil and gas lease to us.

19 Q. In addition to the parties listed on Exhibit "A",
20 have you reached a voluntary agreement with any other
21 interest owner?

22 A. Yes, we have.

23 Q. And who is that interest owner?

24 A. The heirs and devisees of Dorothy Jean LeMoine,
25 which is presumably the Parkland Christian Church in

1 Tacoma, Washington, and J. Cleo Thompson and James Cleo
2 Thompson, Jr.'s, interest.

3 Q. You have not yet received the written
4 confirmation of the commitment of those interests?

5 A. That is correct.

6 Q. So they need to stay subject to a pooling order
7 until you have the documentation?

8 A. That is correct.

9 Q. In addition to the parties listed here, are there
10 other interest owners who have either signed an operating
11 agreement or executed leases with you?

12 A. Yes.

13 Q. And what company or individuals are those?

14 A. That is Collins and Ware, Inc., of Midland,
15 Texas.

16 Q. Collins and Ware has executed an operating
17 agreement to participate in the well?

18 A. That is correct.

19 Q. Let's turn, then, behind Exhibit "A" and have you
20 identify for us the next tabulation of information. What
21 are you compiling here?

22 A. This is a summary of the efforts made on behalf
23 of Trilogy to contact and obtain either an oil and gas
24 lease or a joinder from these various parties in the
25 Dreessen Number 1 well.

1 Q. Following this tabulation of information, you
2 have all the supporting documentation that shows your
3 correspondence and contacts with these individuals?

4 A. That is correct.

5 Q. All right, let's start with your tabulation,
6 then. It commences with the heirs of John W. Waldrep.

7 A. Okay.

8 Q. You've indicated that you've not been able to
9 locate those heirs?

10 A. That is correct.

11 Q. Summarize for the Examiner what efforts that you
12 have made to identify their names and locations.

13 A. We have contacted various family members of Mr.
14 Waldrep, who leased their personal mineral interest to us.
15 We've inquired to them as to the status or the whereabouts
16 of Mr. Waldrep, and none of his family members had any idea
17 of where to contact him. We have run the county records in
18 Lea County, we have searched the Internet, we've searched
19 phone books, a last known address, and we have also
20 searched a database of phone numbers and addresses for the
21 United States.

22 Q. Does that level of effort to locate the address
23 and heirs of Waldrep also apply to those interest owners
24 that are shown on Exhibit A with addresses unknown?

25 A. That is correct.

1 Q. You've gone to the same effort to try to find
2 those people and have not been able to do so?

3 A. That is correct.

4 Q. All right. Campbell is leased?

5 A. That is correct.

6 Q. The next summary on the tabulation shows the
7 information on the heirs of Ballerstedt?

8 A. Yes.

9 Q. As a matter of public record, all that is shown
10 at this point is an interest in Ballerstedt?

11 A. The interest is shown to be owned by an A.J.
12 Ballerstedt, that is correct.

13 Q. All right. And you've made subsequent efforts to
14 locate potential heirs and obtain possible oil and gas
15 leases from those individuals?

16 A. That is correct.

17 Q. And you're continuing to pursue that effort?

18 A. Yes.

19 Q. All right, how about the Mary Hall interest?

20 A. Mary Littleton and Lurlene Hall are two sisters.
21 Once again, we were able to secure an oil and gas lease
22 from a third sister. In contacting her for information on
23 these two sisters, we were advised that she had not had
24 contact with them in over 20 years and had no idea of their
25 current whereabouts.

1 Q. All right, sir. If you'll turn to the next page,
2 let's talk about the heirs of Dorothy Jean Lemoine.

3 A. Okay, this interest, Ms. Lemoine is deceased as
4 represented on the information. We have been advised and
5 have been furnished information that that interest has now
6 passed to the Parkland Christian Church in Tacoma,
7 Washington. We have negotiated, and they have agreed to
8 execute an oil and gas lease. In fact, we have been
9 advised that it is in the mail as we speak.

10 Q. Okay, and then the Stafford Trust is under lease
11 now?

12 A. That is currently under lease.

13 Q. And the Beakon Oil and Gas interest, what's the
14 status of that effort?

15 A. Mr. Beakon -- Mr. Grover Beakley owned the
16 interest when we first started pursuing this acreage. We
17 were advised it was conveyed to a Beacon Oil and Gas, Inc.
18 We have negotiated, and he has accepted the terms of our
19 oil and gas lease. However, he wanted to use his
20 particular lease form, which would restrict production only
21 as to the formation from which we obtain it. It would not
22 allow us to maintain the rights uphole, behind pipe.

23 And we've discussed on numerous occasions with
24 Mr. Beakley, we've submitted our oil and gas lease, he's
25 submitted his to us, and we've advised him we cannot accept

1 it.

2 We've advised him what his options are, that he
3 could participate in the well, and he indicated he wanted
4 to lease his acreage. However, we have been unable to this
5 date to reach a satisfactory agreement as to an actual
6 lease form.

7 Q. All right. So at this point you would desire
8 that the Beakon Oil and Gas, Inc., interest be subject to a
9 pooling order?

10 A. Yes.

11 Q. All right. And then J. Cleo Thompson interest,
12 you've indicated that verbally you have a commitment for
13 them to participate in the well?

14 A. That is correct.

15 Q. All right. So we need to keep that interest
16 subject to an order until you receive written confirmation
17 of commitment of the interest?

18 A. That is correct.

19 Q. All right, if you'll turn to the tab that says
20 "O/A", I assume that refers to the operating agreement?

21 A. Yes, it does.

22 Q. Describe for us why you've included this in the
23 package.

24 A. This is an operating agreement which has been
25 executed both by Trilogy Operating, Inc., as operator, and

1 Collins and Ware as a nonoperator. This sets out the terms
2 under which we propose to operate the drilling of the
3 Dreessen Number 1 well.

4 Q. Collins and Ware has executed this and agreed to
5 the terms?

6 A. That is correct.

7 Q. Within the operating agreement, you propose
8 certain overhead rates on a monthly basis for a drilling
9 well and a producing well. I believe they're indicated in
10 the COPAS accounting attachment to the operating agreement.

11 A. That is correct.

12 Q. What has Collins and Ware and Trilogy agreed to
13 for overhead rates?

14 A. The drilling overhead rate would be \$4500, and
15 the producing rate will be \$450.

16 Q. Do you recommend to the Examiner that those same
17 rates be applied to any interest that is subject to this
18 compulsory pooling order?

19 A. Yes, I do.

20 Q. Turn, then, to the tab that shows "Engineering".
21 What have you included behind this tab, Mr. Weant?

22 A. This is an AFE that was prepared by Michael G.
23 Mooney, who is a partner in Trilogy Operating, Inc., and is
24 our vice president of engineering.

25 Q. This is an estimated cost for the drilling and

1 completion of this oil well?

2 A. That is correct.

3 Q. All right. Are these the proposed overhead rates
4 that you seek to have the Examiner adopt as part of this
5 pooling order?

6 A. Yes.

7 Q. To the best of your knowledge, information and
8 belief, Mr. Weant, have you made a good-faith, diligent
9 effort to obtain voluntary agreement from all the
10 appropriate interest owners for the drilling of this well?

11 A. Yes, we have.

12 Q. At this point in time, are you of the opinion
13 that it's necessary to have the Division issue a compulsory
14 pooling order in this case as to those uncommitted interest
15 owners?

16 A. Yes.

17 MR. KELLAHIN: Mr. Examiner, that concludes my
18 examination of Mr. Weant.

19 We move the introduction of the exhibits that he
20 has discussed within Exhibit 1. They are starting with the
21 notification information, going through the engineering
22 tabulation data.

23 EXAMINER CATANACH: Those exhibits that Mr. Weant
24 testified to, "Notification", "Land", "O/A" and
25 "Engineering", will be admitted as evidence.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Weant, what percentage of this proration unit is currently voluntarily committed?

A. I believe it's approximately 92 percent.

Q. Of that 92 percent, what does interest does Trilogy have?

A. We own 90.

Q. And Collins and Ware owns some interest in this unit?

A. Yes, sir.

Q. Is that included in the 90, or is that separate?

A. No, sir, that's -- What we have done is, we have entered into -- Trilogy Operating, Inc., owns predominantly the entire east half of the section, Collins and Ware owns the west half, and we have entered into a one-section working interest unit for this. So they have pooled the west half with our east-half interest, so we would jointly contractually own the northeast quarter.

Q. Mr. Weant, are you satisfied that you've made a good effort to try and find these unlocatable interest owners?

A. Yes, sir.

Q. Is that pretty much what you would do in any case that you would try and find some interest owners? Is that

1 the procedure that you would go through generally?

2 A. Yes, sir. And as I said, we checked the county
3 records and followed the family trees, contacted all family
4 heirs that we could come into contact with, made a written
5 request of those family members as to any addresses for
6 these people, and have been unsuccessful.

7 Q. The interest of the Lemoine, you cited that as
8 presumably belonging to Parkland Christian Church. Is that
9 transfer not of record somewhere?

10 A. It is not of record in Lea County, New Mexico.
11 They have just recently probated the will in Washington,
12 and they will be conducting their probate in New Mexico.

13 Q. But it's your belief that that interest did
14 transfer to Parkland Christian Church?

15 A. Yes, sir.

16 Q. Has Trilogy drilled a well to this depth in this
17 area recently?

18 A. Yes, sir, Trilogy Operating, Inc., was formerly
19 Stevens and Tull, Inc., and Stevens and Tull drilled
20 numerous wells to this exact formation in this area.

21 Q. So the well costs and the overhead rates are what
22 you would consider to be in line with what you've
23 encountered in the past?

24 A. Yes, sir.

25 Q. When did you start negotiating with these

1 interest owners, Mr. Weant?

2 A. Original contacts were made with all of these
3 members, except for Mr. Thompson, back in 1997. And due to
4 the oil slump in late 1998, we withdrew some of our
5 efforts, and we renewed these efforts back in August and
6 September of this year.

7 Q. And you have formally proposed drilling a well to
8 these interest owners?

9 A. We have verbally proposed -- or we have informed
10 the people that we were able to contact. As I said in
11 here, the Waldrep, Littleton and Hall heirs, there's been
12 no contact with any of those people. The Candice Campbell,
13 the Lemoine interest, the Stafford interest and the J. Cleo
14 Thompson interest have all either executed a lease or have
15 verbally told us their lease was executed in the mail.

16 The Beakon interest, as I said, as I testified
17 to, was advised of his options. He has indicated he wanted
18 to lease. We have simply been unable to negotiate a
19 compromise oil and gas lease form that is satisfactory to
20 both parties.

21 Q. These parties are aware that you are proposing to
22 drill a well; is that correct?

23 A. Yes, sir, we have advised every one of them that
24 we intend to drill a well, and that we had intended to
25 drill a well, actually, before this time.

1 EXAMINER CATANACH: I have nothing further. This
2 witness may be excused.

3 MR. KELLAHIN: George?

4 THE WITNESS: Thank you.

5 MR. KELLAHIN: Mr. Examiner, if you'll turn to
6 the Exhibit tab that says "Geology", we'll commence with
7 Mr. Ulmo's testimony at that point in the exhibit book.

8 GEORGE J. ULMO,
9 the witness herein, after having been first duly sworn upon
10 his oath, was examined and testified as follows:

11 DIRECT EXAMINATION

12 BY MR. KELLAHIN:

13 Q. For the record, sir, would you please state your
14 name and occupation?

15 A. George Ulmo, and I'm a consulting geologist in
16 Midland. I do work for Stevens and Tull and Trilogy
17 Operating.

18 Q. Mr. Ulmo, on prior occasions have you qualified
19 as a geologic expert before the Division in matters
20 concerning compulsory pooling applications?

21 A. Yes, I have.

22 Q. As part of your consulting duties, have you made
23 a study of this proposed well location?

24 A. Yes, I have.

25 Q. Were you able to reach a conclusion or opinion

1 with regards to the appropriate risk-factor penalty to
2 recommend to the Examiner in this case?

3 A. Yes, I have.

4 MR. KELLAHIN: We tender Mr. Ulmo as an expert
5 geologist.

6 EXAMINER CATANACH: He is so qualified.

7 Q. (By Mr. Kellahin) Do you have an opinion as to
8 the appropriateness of applying the maximum 200-percent
9 risk factor penalty in this case?

10 A. Yes.

11 Q. And what is that opinion?

12 A. I think it should apply.

13 Q. Let's turn to your exhibit information, and
14 describe the reasons why you have that opinion. If you'll
15 look at the production map, identify for us the proposed
16 location.

17 A. The proposed location is in Section 1, and it's
18 highlighted in red in -- I guess it would be the southwest
19 quarter of the northeast quarter of the section.

20 Q. In the legend on the lower left corner there's a
21 list of producing formations?

22 A. Yes.

23 Q. Are all those potential targets for a well at
24 this location?

25 A. They are potential since they do produce

1 somewhere in the area. But some of them are not really
2 commercial targets.

3 Q. Let's identify for the Examiner those potential
4 targets that have the greatest opportunity.

5 A. Okay.

6 Q. Pick one that you want to start with, and that's
7 where we'll begin.

8 A. Okay, the Drinkard would be the most prolific of
9 those formations.

10 Q. All right, when we look at the Drinkard
11 production in relation to the proposed location, where do
12 we find that production?

13 A. We find a lot of production down in Section 12 to
14 the south, and 11. There's about 14 wells which have been
15 completed in the Drinkard, and 11 of those were commercial
16 wells, and three were noncommercial.

17 Q. Describe for us in the Drinkard formation why
18 this proposed location represents the maximum risk in that
19 formation.

20 A. Well, our location is a mile from those wells,
21 and as you go north from those wells there area couple of
22 dry holes in the north part of Section 12.

23 Additionally, east of Section 1 there are two
24 wells which produce from the Drinkard, in the west half of
25 Section 6. One of those wells was pretty good; that was in

1 Unit L. It made 226 million cubic feet and 200,000 barrels
2 of oil. That we would consider to be an attractive -- a
3 good well.

4 The well north of that, in Unit E, made 45
5 million cubic feet of gas and 90,000 barrels. That would
6 also be a satisfactory type of completion.

7 Just immediately west of those two wells in
8 Section 1, there are two wells which attempted -- Well, one
9 well attempted completion in the Drinkard and was not
10 commercial and was plugged. That would be the well in Unit
11 I. And the well north of it tried a drill stem test in the
12 Drinkard, which recovered only some slightly gas-cut mud.
13 And it was plugged and later re-entered and completed in
14 the Blinebry.

15 Q. So separating your proposed location from the
16 Drinkard producers in Section 6 are two wells that were
17 unsuccessful in that interval?

18 A. That's correct.

19 Q. What is another interval that's a potential
20 target for you, apart from the Drinkard?

21 A. The Tubb and the Blinebry.

22 Q. Let's talk about those.

23 A. Okay. In this area, there's only -- well, four
24 wells have been completed in the Tubb. Three were
25 noncommercial, and one was a good completion, and it was in

1 Section 11, in unit F. It made 1.3 BCF of gas and 24,000
2 barrels of oil. That would be a reasonable type of Tubb
3 well.

4 Now, the Tubb porosity does not seem to exist
5 everywhere out here. It's just sort of random. And that's
6 the only well that was commercially completed in the Tubb.

7 Q. Do you have a geologic opinion that explains the
8 absence of wells in a substantial portion of Section 1 and
9 certainly as we move to the north, the absence of wells?

10 A. Yes, if one were to map strictly with subsurface
11 geology, Section 1 would appear to be in a low area. The
12 wells in Section 6 are slightly higher than -- well, the
13 Abo and -- you know, the Abo formation, and you would tend
14 to map a low in Section 1. And in fact, that was the way
15 Collins and Ware had it mapped and the way Stevens and Tull
16 had it mapped several years ago.

17 Q. What accounts for your change of opinion that
18 there is a possible opportunity to drill a well at this
19 location?

20 A. We have acquired a seismic line which runs north-
21 south through Section 1, up into Section 36.

22 Q. That seismic line is shown on this exhibit, isn't
23 it?

24 A. Yes, it is. There is shot point maps -- I mean,
25 shot-point -- little shot points are drawn on the map

1 there.

2 Q. Were you able to tie that seismic line to any of
3 the logs of wells in any of the intervals?

4 A. Yes, in Section 12, we feel the line come close
5 enough to those wells where can identify where the Tubb and
6 the San Andres and all the formations are.

7 And several miles to the north, we made a
8 synthetic seismogram of some deeper wells and actually tied
9 into the seismic data up there, up in the Nadine field, and
10 carried that correlation around to all the seismic that we
11 had.

12 Q. Within Section 1, there is nothing to tie the
13 seismic data to?

14 A. No, not in Section 1.

15 Q. Let's turn to your mapping of the various
16 structures. If you'll turn to the next exhibit, it's
17 marked "Structure Map (Blinebry)"?

18 A. Right.

19 Q. Describe for us what you're concluding here.

20 A. We believe that there's a high, structural high,
21 in Section 1, which could be slightly high to the dry holes
22 in the east half of that section and which would be flat to
23 the production down to the south in Section 13, which does
24 have some Blinebry production.

25 Q. Again, the interpretation of a Blinebry

1 structural high here is based solely on the seismic data?

2 A. Well, at the Blinebry we didn't -- We could not
3 map the Blinebry seismically. We mapped the Tubb, and then
4 we mimicked the Tubb structure up to the Blinebry, using
5 approximately constant isopach thicknesses.

6 Q. All right. So the Blinebry structure is an
7 inference based upon the Tubb data?

8 A. Yes, that's correct.

9 Q. Let's turn then to the structure map on the top
10 of the Tubb. That's the next display.

11 A. Okay.

12 Q. What are you concluding here?

13 A. Here I have a -- This is my most firm structural
14 map that I can map out here, because -- combining the well
15 control with the seismic data. And it looks like the
16 central part of Section 1 could be 10 or 20 feet high to
17 those dry holes in the east part of that section and would
18 be maybe up to 50 feet high to the producing wells in the
19 west part of Section 6 at the Tubb interval.

20 And the subsurface points for those wells would
21 support that conclusion with the dry holes being slightly
22 high to the wells which produced.

23 Q. All right, let's turn to the final structure map.
24 It says "Structure Map - Top of the Wichita Albany Shale".

25 A. Okay.

1 Q. Relate that to a formation for us.

2 A. Okay, this Wichita Albany shale is right below
3 the Drinkard zone, within -- probably within 50 feet of the
4 base of the Drinkard porosity. So it pretty closely mimics
5 the Drinkard structure.

6 Q. What are you concluding here?

7 A. Well, my -- I've got a high drawn in to try to
8 mimic that Tubb structural high. But the well control sort
9 of mixes up the picture a little bit where the dry holes
10 are actually low to those producing wells at the Abo or the
11 Wichita Albany.

12 And I'm assuming that the structure will come
13 back up again -- I'm hoping that it will come back up again
14 into Section 1, and we'll be high to those dry holes and
15 flat to those producing wells.

16 Q. Let's turn to the next display and fold out the
17 seismic profile which identifies the line that you have
18 referred to in the other displays. Help us orient
19 ourselves as to where we are on this seismic line.

20 A. Okay, at the top of the line there's red --
21 written in red is Section 1. It shows the area of the
22 seismic line which covers Section 1, and the proposed
23 location is shown as a red line going down, downward.

24 Q. As we move to the left, we're moving to the south
25 on the line?

1 A. That's correct. And near the south end of that
2 line there is an oil well shown as 1-A. That would be a
3 well on the map which is in Section 12, in Unit F. That's
4 the nearest velocity control I would have to make my
5 interpretation.

6 Q. Let's talk about that item in terms of your
7 opinion as to the geologic risk associated with analyzing
8 this type of seismic information.

9 A. Okay. The velocity control is quite sparse, and
10 the only tie we have in the area is right to the immediate
11 south and then several miles to the north. And the other
12 seismic lines in the area tie different wells around in the
13 vicinity.

14 But we don't have any sort of seismic going east
15 to west through Section 1 into Section 6 or Section 2 that
16 would verify the velocity and gradient, so we're assuming a
17 lot based on just a few velocity points. And we've done
18 our best to make a regional velocity map, but it's not 3-D
19 seismic; it's just one seismic line. And we're just making
20 a lot of assumptions for velocity in the east-west
21 direction.

22 Q. What is the vertical height of the structural
23 component that you're attempting to identify using this
24 analysis? How much structure are we dealing with here?

25 A. In a north-south direction it looks like at the

1 Tubb level we have a little bit of separation from the
2 production in the Drinkard to the south of maybe 30 or --
3 30 feet or so, and it's shown as a small syncline there.
4 And as we go off to the north from Section 1, it appears
5 that structure drops off about 100 feet.

6 So it looks like we're on the edge of this
7 platform or this structural trend, which is part of this
8 big Warren platform area.

9 Q. If your velocity data is off by 30 feet, plus or
10 minus, then the structure would disappear?

11 A. Yeah, that would pretty much kill us.

12 Q. And that's possible within the range of the
13 quality of the data, right?

14 A. Yeah, yes, it is. And I'd like to point out that
15 there's a -- In Section 1 the dry hole that is a Zia Energy
16 well in Unit H at the Abo is virtually flat to a dry hole
17 in Unit D of Section 6. That's within one foot at the Abo.

18 So if our velocity were off by not very much, we
19 could easily be low to those wells at the Drinkard, rather
20 than being high. So that is the risk. We don't really
21 understand the velocity thoroughly in that area.

22 Q. Let's turn to the structure map, and I don't
23 think it's necessary for you to -- I mean, the cross-
24 section. It's not necessary to unfold it. If you'll just
25 turn to that portion that shows the outline of the cross-

1 section.

2 A. Okay.

3 Q. If the Examiner wants to study the cross-section
4 later, describe for us what your method was in preparing
5 this exhibit.

6 A. Okay, it shows wells to the south that were good
7 Drinkard-producing wells and went through the proposed
8 location.

9 And then I tied all the wells just east of our
10 prospect, trying to go downstructure, towards the right end
11 of the cross-section. And all the wells were hung on a
12 structural datum of minus 3000 feet. And I showed all the
13 drill stem tests and perforations and production tests that
14 were done on all the wells.

15 Q. Based upon your entire geologic analysis of the
16 available data, are you able to conclude that an
17 appropriate risk factor penalty in this case is the maximum
18 200 percent?

19 A. I am. The well in Section 6 on the cross-
20 section, which would be well number 6, was completed in the
21 Drinkard in 1949, around October. And in 1950, about four
22 months later, well number 4 in the cross-section attempted
23 a completion in the Drinkard, and they were not able to
24 make a commercial completion.

25 And the structural difference in those two wells

1 is just a few tens of feet, not very much. Not enough to
2 really account for the poor success in that well.

3 So I don't thoroughly understand it, but
4 hopefully a little bit of structural improvement will make
5 our location better.

6 But those two dry holes do inject a lot of risk
7 to the prospect.

8 MR. KELLAHIN: Mr. Examiner, that concludes my
9 examination of Mr. Ulmo.

10 We move the introduction of his geologic exhibits
11 contained in Exhibit 1.

12 EXAMINER CATANACH: The geologic exhibits
13 contained in Exhibit 1 will be admitted as evidence.

14 EXAMINATION

15 BY EXAMINER CATANACH:

16 Q. Mr. Ulmo, without unfolding this map, that number
17 4 well you've got on that cross-section that you said they
18 were unable to make a Drinkard completion --

19 A. Yes.

20 Q. -- can you elaborate on that? An attempt was
21 made?

22 A. Let me unfold mine, and I'll --

23 Q. Okay.

24 A. Okay, they perforated four intervals. The first
25 interval they perforated -- I can tell you the depths if

1 you want, but it --

2 Q. No, that's not necessary.

3 A. Okay, they acidized with 750 gallons, made 1 1/2
4 barrels of oil per hour for eight hours. They re-acidized
5 it with acid and kerosene, and they swabbed two barrels of
6 oil per hour for 14 hours.

7 Then they re-acidized it again with 6000 gallons,
8 and again with 6000 gallons, swabbed acid water, a slight
9 show of oil for eight hours. And then they ran a packer
10 and swabbed 15 barrels of oil for eight hours and then two
11 barrels of oil for eight -- and eight barrels of water for
12 16 hours.

13 Then they perforated below that. They must
14 have -- I don't know how they isolated it, but they
15 perforated below that and -- Let's see. They squeezed some
16 perfs and -- Anyway, they squeezed a bunch of perfs and
17 they came back up and perforated above the old zone,
18 acidized it, swabbed four barrels of water per hour for 24
19 hours, squeezed that off, and they came back down and
20 reperforated close to the first zone, and they acidized it
21 and then plugged the well.

22 So they really tried their best to hit everything
23 they could in that zone. And that well, structurally, at
24 the top of the porosity, is probably within 10 feet of so
25 of the well that's producing from the same formation.

1 And that other well that was productive -- Let's
2 see, they perforated that one. They didn't have nearly the
3 trouble getting production. Perforated, swabbed 30 percent
4 oil, 70 percent water. And then it acidized with 500
5 gallons, and it flowed 200 barrels of oil in 18 hours.
6 Then they re-acidized it, and it potentialized flowing 360
7 barrels a day, and it's made a lot of -- you know, a
8 quarter of a BCF and 200,000 barrels of oil.

9 So they didn't do anything special to that well
10 to make it so good; it just happened to be a lot better
11 than the other one.

12 Q. That number 5 well on the cross-section, they
13 made a kind of a similar attempt to complete that one?

14 A. Well, that one was drilled in 1955, and there was
15 a drill stem test which tested the top 10 feet of the
16 Drinkard porosity, and it recovered 328 feet of gas-cut mud
17 with shut-in pressures of 255 pounds, which indicates a
18 fairly tight reservoir, and then it was plugged.

19 And then later it was re-entered in 1969,
20 completed in the Blinebry, in the top 150 feet of the
21 Blinebry and frac'd, made about a half million a day gas,
22 and it was not a commercial Blinebry producer. But there
23 is a show in the Blinebry, so we feel there is some
24 potential there.

25 Q. Okay. Is this well part of the -- Would it be

1 the Drinkard pool that we're talking about here, do you
2 know?

3 A. Well, that's our main objective, is the Drinkard.
4 But we want to pool all the reservoirs, because you never
5 really know what you're going to find.

6 Q. The bulk of the Drinkard production in this area
7 is where, to the southwest?

8 A. Yes, the most -- the nearest good production is a
9 mile south in Section 12, and I don't know how much the
10 wells south of there produce from the Drinkard but there's
11 probably some in Section 13 too, I'm sure the surrounding
12 sections.

13 But the nearest production as you go south begins
14 in Section 12 and 11, and -- Well, there's a couple of
15 producers in 2. There's one in the southeast corner of
16 Section 2, which was a good Drinkard well. And also --
17 There's two wells in the southeast quarter of Section 2.
18 Then there's a dry hole north of them.

19 And it seems to be structurally sensitive: When
20 you get offstructure you lose it real quick. So that's our
21 biggest -- In the Drinkard that's our biggest risk factor,
22 is the structural position, which we don't really -- We
23 think the seismic is telling us, but we don't have a direct
24 tie to the wells east of us.

25 EXAMINER CATANACH: Okay, I have nothing further,

1 Mr. Kellahin. Is there anything further in this case?

2 MR. KELLAHIN: No, sir.

3 EXAMINER CATANACH: There being nothing further,
4 Case 12,305 will be taken under advisement.

5 (Thereupon, these proceedings were concluded at
6 8:56 a.m.)

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15 I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 12305
heard by me on December 16 1969.

16
17 David R. Catanch, Examiner
18 Off Conservation Division
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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 December 19th, 1999.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002