

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

2 December, 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of Mitchell Energy Cor- CASE
poration for compulsory pooling, non- 9272
standard proration unit, and an unor-
thodox well location, Lea County,
New Mexico.

BEFORE: Michael R. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

LARRY CUNNINGHAM

Direct Examination by Mr. Kellahin 5

Cross Examination by Mr. Stogner 20

BRYAN PARKS

Direct Examination by Mr. Kellahin 21

DAN TUFFLY

Direct Examination by Mr. Kellahin 31

Cross Examination by Mr. Stogner 36

E X H I B I T S

1		
2		
3		
4		
5		
6		
7	Mitchell Exhibit One, Map	6
8	Mitchell Exhibit Two, List	10
9	Mitchell Exhibit Three, Summary	14
10	Mitchell Exhibit Four through	
11	Forty, Correspondence	16
12	Mitchell Exhibit Forty-One, Document	17
13	Mitchell Exhibit Forty-Two, Operating	
14	Agreement	18
15	Mitchell Exhibit Forty-Three, Structure Map	26
16	Mitchell Exhibit Forty-Four, Structure Map	26
17	Mitchell Exhibit Forty-Five, Type Log	30
18	Mitchell Exhibit Forty-Six, Cost Estimate	32
19	Mitchell Exhibit Forty-Seven, Cost Estimate	32
20	Mitchell Exhibit Forty-Eight, Certificate	36

21
22
23
24
25

1
2
3
4
5
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9
10
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MR. STOGNER: Call next Case
Number 9272.

MR. TAYLOR: The application of
Mitchell Energy Corporation for compulsory pooling,
nonstandard proration unit, and an unorthodox well location,
Lea County, New Mexico.

MR. STOGNER: Call for
appearances.

MR. KELLAHIN: Mr. Examiner, I
am Tom Kellahin of the Santa Fe law firm of Kellahin,
Kellahin & Aubrey.

I'm appearing on behalf of the
applicant, and I have three witnesses to be sworn.

MR. STOGNER: ARE there any
other appearances in this matter?

Will the witnesses please stand
and be sworn?

(Witnesses sworn.)

LARRY CUNNINGHAM,
being called as a witness and being duly sworn upon his
oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Cunningham, for the record would you please state your name and occupation?

A My name is Larry Cunningham. I'm employed with Mitchell Energy Corporation.

Q Mr. Cunningham, would you summarize your educational experience as a petroleum landman?

A I have a BBA in finance from North Texas State University and --

Q In what year was that?

A '78.

Q Do you hold any specific degrees or certifications as a petroleum landman?

A No.

Q Would you summarize for the Examiner what has been your employment experience as a petroleum landman?

A I have served approximately two years with Texaco as a landman and the past approximately eight years with Mitchell Energy Corporation as a landman.

Q For Mitchell Energy Corporation with regards to this particular application, what were you requested by your company to do?

A This prospect was brought by our Geology

1 Department and we were instructed to put together a volun-
2 tary working interest unit comprised of the Lots 1, 2, 3,
3 and 4 in the south half and north half of Section 3 of 15
4 South, 35 East.

5 Q Would you describe for the Examiner what
6 period of time you have personally been involved in lease
7 acquisition in Section Number 3?

8 A Approximately 3-1/2 to 4 years.

9 Q In the last 3-1/2 to 4 years what has
10 been the purpose of trying to acquire leases in Section 3?

11 A The purpose was to possibly drill a
12 Devonian test well.

13 Q When we look at Exhibit Number One, there
14 is Section 3 identified outlined in yellow and it's got a
15 cross hatched yellow area?

16 A Yes.

17 Q Is that the section that you refer to as
18 Section 3?

19 A Yes, sir.

20 Q What is the significance, Mr. Cunningham,
21 of the yellow shaded area in Section 34?

22 A That's a Federal lease which we acquired
23 a couple of years ago, which just happened to be within our
24 prospect area.

25 Q All right. When we look within Section

1 3, your geologist had identified for you one or more
2 formations for which he was requesting you to obtain leases
3 or attempt to form voluntarily agreed upon spacing and
4 proration units?

5 A Yes,

6 Q To the best of your knowledge, Mr.
7 Cunningham, would you identify for us what the potential
8 spacing units are that might affect this application?

9 A For a gas well below the Wolfcamp
10 formation it would be the north half of Section 3, which
11 would be comprised of Lots 1, 2, 3, and 4 in the south half
12 north half of Section 3; an 82.8 acre --

13 Q Whoops, slow down for me, we've got an
14 odd size section, don't we?

15 A Yes.

16 Q All right. On the north half of the
17 section, Lots 1, 2, 3, and 4 contain more or less than 40
18 acres?

19 A More than 40 acres.

20 Q All right, Lot Number 1 is in the north-
21 east of the northeast?

22 A Yes.

23 Q Let's start with that and give me the ac-
24 reage in that tract.

25 A I cannot do that right now. I do not

1 know it offhand.

2 Q All right, but it is more than --

3 A More than 40 acres.

4 Q -- 40 acres. When we get to Tract 2,
5 that is also a tract that is more than 40 acres?

6 A Yes.

7 Q All right. Your proposed spacing unit
8 for gas production below the top of the Wolfcamp would be
9 the north half of the section?

10 A Yes, sir.

11 Q Which thereby includes Lots 1, 2, 3, and
12 4.

13 A Yes.

14 Q Okay. If you have a formation that is
15 spaced upon 80 acres, what would be the acreage dedicated to
16 that?

17 A It would be Lots 3 and 4, which would be
18 the north half of the northeast quarter.

19 Q Okay. If that is done, can you identify
20 for the Examiner approximately how many acres are involved
21 in that spacing unit.

22 A It would be 82.8.

23 Q And if we use a deep gas spacing unit how
24 many acres are involved in the north half of the Section?

25 A It would be 324.7.

1 Q And finally, the third one is a standard
2 statewide oil well spacing and what tract would you dedicate
3 to that?

4 A It would be Lot 3.

5 Q And that will be the northeast of the
6 northwest?

7 A Yes.

8 Q And if that occurs how many acres are in-
9 volved in that tract?

10 A 41.3.

11 Q All right. When we move from 40 acres to
12 80 acres, in other words from the northeast of the northwest
13 to the north half of the northwest, from 40 to an 80-acre
14 spacing, do the individuals and the percentages of partici-
15 pation change?

16 A No, they do not.

17 Q So you have common interest, then, is
18 Tracts 3 and 4?

19 A Yes, that's right.

20 Q If you get a deep gas test and we go to a
21 north half dedication, do we have percentages or individuals
22 that change?

23 A Yes.

24 Q All right. Let me direct your attention
25 now to Exhibit Number Two.

1 Have you caused to be set forth on this
2 exhibit, Mr. Cunningham, the various individuals or
3 companies and their corresponding percentage interest, or
4 decimal interest, in each of the three possible spacing
5 units?

6 A Yes, I have.

7 Q Let's use this as a guide for discussion,
8 Mr. Cunningham, and have you tell us when you began your
9 last efforts to pick up the remaining uncommitted interest
10 for any of these three proposed spacing units.

11 When did that occur?

12 A Approximately on October 2nd of 1987.

13 Q In October of '87, approximately what
14 percentage did Mitchell Energy Corporation have voluntarily
15 committed to it, either by lease, farmout, or operating
16 agreement?

17 A At that point we had approximately 68
18 percent.

19 Q And approximately what percentage do you
20 now have as of today?

21 A Approximately it would be right at about
22 94 percent.

23 Q Does this list at the date the
24 application was filed represent all of the interest owners
25 that were not yet committed in some fashion to the well?

1 A Yes, it does.

2 Q Let's go through the list.

3 What's the current status of ARCO's in-
4 terest?

5 A At this point we've had several conversa-
6 tions with ARCO and they have indicated to us verbally that
7 they will agree ot a farmout.

8 Q You do not have --

9 A We do not have a contract as of this
10 date.

11 Q -- commitments in writing. Would you ap-
12 proximate for us how many contacts either in correspondence
13 or in conversations with ARCO that you have had?

14 A We have three written contacts and I'd
15 say probably three more telephone contacts.

16 Q Let's turn now to Douglas Cone's inter-
17 est. What are your efforts or have been your efforts to get
18 Mr. Cone's interest committed to the well?

19 A Of course over the past three and a half
20 years we've had -- asked Mr. Cone to lease to us, and since
21 this October 2nd date we have corresponded with him approxi-
22 mately three times.

23 Q Mr. Cone's interest is a mineral inter-
24 est?

25 A Yes, it is a mineral interest.

1 Q Okay, and what is the status of his par-
2 ticipation? What has he told you?

3 A At this point he has not responded to our
4 proposal.

5 Q When we go to Mr. Clifford Cone's mineral
6 interest, describe for the Examiner in a summary way what
7 have been your efforts?

8 A Well, at this point we have received an
9 executed signatory page from an operating agreement and Mr.
10 Clifford Cone has asked to participate in the drilling of
11 this well, and we would ask at this time that he be
12 dismissed from this application.

13 Q All right, sir. Let's turn now to Mr.
14 Kenneth Cone. He is also a mineral interest owner?

15 A Yes.

16 Q Describe for the Examiner what your
17 contacts and efforts have been with Mr. Kenneth Cone.

18 A Basically the same as with Douglas Cone
19 in that over the past years we have asked him for leases and
20 since this October date we have corresponded with him
21 approximately three times and have not been able to
22 communicate with him verbally.

23 Q Let's turn now to Mr. Ronald Byers, B-Y-
24 E-R-S?

25 A Yes.

1 Q Describe for the Examiner your efforts to
2 get Mr. Byers' interest committed to the well.

3 A Mr. Byers we had under lease until a
4 point -- until his lease expired, which was approximately
5 the first part of October. Beginning October, I believe,
6 18th or 19th, we started corresponding with Mr. Byers and
7 asking him to either participate or give us another lease,
8 and as of this date we have received no response to any of
9 these inquiries.

10 Q Okay. Describe the status of the Kanab
11 interest, Kanob Operating Company, Limited?

12 A Yes, they have a leasehold interest and
13 as of this point they have committed to a farmout agreement
14 and we would ask the Examiner at this time to dismiss them
15 from the application.

16 Q In addition there is the Estate of
17 William Thomas Reed, care of James Reed McCrory. Have you
18 been in contact with Mr. McCrory?

19 A Yes, we have and the trust has committed
20 to a farmout agreement and we would ask that they be also
21 dismissed from the application.

22 Q Has Mr. James Reed McCrory also committed
23 his own individual interest to the well?

24 A Yes, he has. He will participate and we
25 ask that he be dismissed from the application also.

1 Q All right. Let me have you turn your at-
2 tention now, Mr. Cunningham, to identifying Exhibit Number
3 Three for us. What is that?

4 A It's a basic summary of our order of how
5 we propose this well for participation of this well to the
6 various leasehold interest owners and the mineral interest
7 owners.

8 Q Okay.

9 A From our, you know, last efforts to ob-
10 tain participation.

11 Q What is the soonest you will have an ex-
12 piring lease that will terminate in any of the combinations
13 of proposed spacing units?

14 A That would be January 3rd of '88.

15 Q Do you believe that any further time will
16 be useful to you in obtaining unanimous agreement of all the
17 remaining interest owners to participation in the well?

18 A We do not.

19 Q In the correspondence to the remaining
20 parties to be pooled, have you provided them with a copy of
21 a current AFE for the well?

22 A Yes, we've provided an AFE with our first
23 proposal letter, October 2nd of '87.

24 Q At this point, Mr. Cunningham, are you
25 aware of or have you received from any of these parties to

1 be pooled, any objection to having Mitchell Energy Corpora-
2 tion be the operator of the well?

3 A To my knowledge, no, we have not.

4 Q Have any of those parties or individuals
5 objected to the well location?

6 A No, sir.

7 Q Have any of them objected to the proposed
8 spacing units and the way they are oriented?

9 A No, sir.

10 Q Have any of those parties objected to the
11 AFE?

12 A No, sir.

13 Q Let me direct your attention now, Mr.
14 Cunningham, to the package of exhibits identified and num-
15 bered as Exhibits Four through Forty. Do those exhibits,
16 when taken together, represent true and accurate copies of
17 your written correspondence and communications to the various
18 parties to be pooled?

19 A Yes, they do.

20 Q Would you take a moment and find a copy
21 of a letter that represents the form that you used to make
22 your initial written contact with any of those parties about
23 their participation in the well?

24 A Okay.

25 Q Do you have one?

1 A Exhibit Number Thirty-four would be ap-
2 appropriate.

3 Q All right, sir, let me find my copy.
4 This is a letter sent on October 2nd, 1987?

5 A Yes.

6 Q And this represents the written effort
7 initially made to Mr. Kenneth Cone?

8 A Yes, it does.

9 Q And does this also correspond to the sim-
10 ilar type letters sent to all the other interest owners that
11 had not yet been committed?

12 A Yes, it does.

13 Q And is the AFE attached to that exhibit
14 the AFE that was proposed to those individuals?

15 A Yes, it was.

16 Q Included in that letter did you offer
17 them any other terms other than the participation in the
18 well?

19 A Yes, we offered them the opportunity if
20 they would elect to provide us with an oil and gas lease.

21 Q Let's turn now, sir, to Exhibit Number
22 Forty. Do you have that?

23 A Yes.

24 Q Would you identify for us the three pages
25 that are stapled together and identified as Exhibit Forty?

1 A Yes. This was a letter sent to Mr.
2 Ronald Byers. The letter was sent certified return receipt
3 and this is copies of the certified return receipts.

4 Q This represents at least your last effort
5 on October 31st to obtain Mr. Byers, Mr. Kenneth Cone, and
6 Mr. -- both Mr. Kenneth Cone are on the last two?

7 A Yes, that's right.

8 Q To obtain their participation?

9 A That's right.

10 Q All right. Let's turn now to Exhibit
11 Forty-one, Mr. Cunningham, and would you identify that exhi-
12 bit for us?

13 A Yes. This is page out of the Ernst and
14 Winney Survey from which overhead rates are commonly ob-
15 tained.

16 Q Do you have a recommendation to the Exa-
17 miner as to what overhead charges you're requesting be
18 placed in the pooling order for a drilling well rate and a
19 producing well rate?

20 A Yes. On the drilling well rate we'd ask
21 the \$4600 and on the producing rate it will be \$460.

22 Q All right. Find that for me on the Ernst
23 and Winney Report.

24 A If you'll look over in the 1986 column
25 under Wells Drilled from 10,000 to 15,000 feet --

1 Q Okay.

2 A -- you'll find \$4583, the average.

3 Q All right.

4 A And we rounded that to \$4500.

5 Q Okay.

6 A And under the producing well rate, under
7 '86 the average \$459, we rounded that to \$460.

8 Q Okay.

9 A And we did use the 1986 rates.

10 Q All right. Let's turn now, sir, to
11 identifying the operating agreement that's marked as Exhibit
12 Number Forty-two. Have you circulated that operating
13 agreement among interest owners for this well?

14 A Yes, it was provided to them with our
15 first proposal letter.

16 Q And have you incorporated in the COPAS
17 attachment to the operating agreement the proposed operating
18 overhead charges that you have just described?

19 A Yes, we did.

20 Q Have you had working interest owners
21 commit themselves by executing the operating agreement?

22 A Yes.

23 Q All right. Have you had anyone object to
24 the terms or conditions of the operating agreement?

25 A No, we have not.

1 Q With the exception of the location map,
2 Exhibit One, are all other exhibits, Exhibits Two through
3 Forty, represent documents from Mitchell Energy Corporation
4 files, lease files for this this area, which are under your
5 control and supervision?

6 A Yes.

7 Q And are all of those copies true and
8 accurate to the best of your knowledge and belief?

9 A To the best of my knowledge, yes.

10 Q And does the copy of the operating
11 agreement, as identified as Exhibit Forty-two supplied to
12 the Examiner, a true and correct copy?

13 A Yes, it does.

14 Q Forty-one is a copy from the Ernst and
15 Winney report on drilling well costs and overhead rates?

16 A Yes.

17 Q And that's where you took that?

18 A Yes.

19 MR. KELLAHIN: That concludes
20 my examination of Mr. Cunningham at this point, Mr. Stogner.

21 We would move the introduction
22 of Exhibits One through Forty-Two.

23 MR. STOGNER: Exhibits One
24 through Forty-two will be admitted into evidence at this
25 time.

CROSS EXAMINATION

1
2
3 BY MR. STOGNER:

4 Q Mr. Cunningham, could you explain to me
5 ARCO's interest in each one of the proration units? That's
6 the only numbers that I see changed in Exhibit Number Two.

7 A Okay. ARCO owns a mineral interest in
8 the northwest quarter of Section 3 only. They do not own
9 any minerals or any leasehold in the northeast quarter of
10 Section 3.

11 Q And you're proposing to drill 14,700
12 foot, at least that's what you proposed to -- to them.

13 A Yes, sir.

14 Q And then all the initial letters that you
15 sent out were essentially like the one that you sent to ARCO
16 talking about the formations in Lots 1, 2, 3, 4 on the south
17 half of the map.

18 A Yes, sir. The only difference between
19 the letters would be the difference of whether they were
20 mineral interest owners or leasehold owners.

21 Q Okay.

22 MR. STOGNER: I don't have any
23 questions of Mr. Cunningham at this time. I might later on
24 as we go through it.

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BRUCE PARKS,

being called as a witness and being duly sworn upon his
oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Parks, would you please state your
name?

A Bryan Parks.

Q Mr. Parks, by whom are you employed and
in what capacity?

A I work for Mitchell Energy as a Senior
Exploration Geologist.

Q Would you summarize for the Examiner your
educational?

A I graduated in 1980 with a Bachelor of
Science degree in geology from Texas A & M University.

Q Subsequent to graduation would you describe
for the Examiner what has been your employment as a
petroleum geologist?

A I've been employed for approximately
seven years as an exploration geologist for Mitchell Energy.

Q Within that period of time have you become
familiar with what is identified on Exhibit One as the

1 East Morton Area of Lea County, New Mexico?

2 A Yes, sir.

3 Q In what ways have you obtained and ana-
4 lyzed geologic information about the East Morton Area?

5 A I've done extensive mapping on several
6 horizons throughout the area. This -- this area is located
7 in the Tatum Basin, commonly referred to as the Tatum Basin
8 and I've worked extensively for approximately two years map-
9 ping the Devonian and Wolfcamp horizons in the basin.

10 Q Did you participate on behalf of your
11 company, along with other personnel, in picking this parti-
12 cular well location?

13 A Yes, sir.

14 Q Let me direct your attention to Exhibit
15 Number One, and have you take a moment and identify for us
16 the information that's on that display.

17 A Yes. What I try to do with this display
18 is basically show you where we sit in a more or less region-
19 al picture and to show you the various Devonian tests that
20 have been drilled in the area around the acreage in ques-
21 tion.

22 The colored production I'll outline for
23 you now. The green dots represent Devonian tests that are
24 productive in the Devonian horizon.

25 The blue dots rerrepresent Devonian tests

1 that have been nonproductive in the horizon and you can see,
2 the only production on the map is from Caudill Field, which
3 is on the east side of your map. The rest of the production
4 throughout the area is -- or the rest of the Devonian tests
5 is not good production.

6 Q When we look at the section that's the
7 subject of this application, within that section there is a
8 blue dot in the northeast quarter in Lot Number 1.

9 A Yes, sir.

10 Q Would you identify for us that well?

11 A Yes, sir, that is the Penrose No. 1 Fair-
12 wether, drilled in 1953, and it penetrated approximately 100
13 feet into the Devonian.

14 Q What were the results of that effort?

15 A They drill stem tested the Devonian as
16 well as several other horizons up and down the well. The
17 Devonian yielded only water, approximately 13,500 feet of
18 water, sulphur water and a water blanket.

19 Q When we look at the other blue dotted
20 wells on the display, what do those represent?

21 A All the other blue dotted wells represent
22 wells that also penetrated the Devonian section which were
23 nonproductive in the Devonian.

24 Q Starting with the deepest formation to
25 which you intend to drill the well, would you describe in a

1 summary way what is your opinion with regards to the risk
2 factor penalty that you would recommend the Examiner place
3 in the pooling order?

4 A Yes. I feel like that the proposed loca-
5 tion is a high risk Devonian location and it's based on sev-
6 eral factors.

7 As I've already pointed out, it's approx-
8 imately 5 miles from the nearest Devonian production but
9 there are several other factors involved in risk in the De-
10 vonian, three to be exact.

11 I feel like the first risk involved in a
12 Devonian test such as this is the structure itself and the
13 structure I will get into in a little bit, but it is seis-
14 mically defined and, of course, there are limitations with
15 the seismic interpreted structure and certain risks involved
16 inherently in a seismically interpreted structure.

17 The second risk is the porosity develop-
18 ment within that structure. You have to have porosity
19 development to find Devonian production.

20 Although we are offsetting a well that
21 had good Devonian porosity in it, we have historical evi-
22 dence to the fact that you don't necessarily -- you cannot
23 necessarily expect to find Devonian porosity developed at
24 the drill site. We drilled a well a couple of years ago to
25 the north approximately 15 miles with John L. Cox in which

1 we had a similar set-up, and well off the feature, tested
2 good reservoir rock. We drilled the crest of the structure
3 and it was nonporous underlying the Devonian.

4 The third factor involved in the risk is
5 just the hydrocarbons themselves trapped within the struc-
6 ture.

7 I would refer now to the well in Section
8 7 that penetrated the Devonian and the well in Section 11
9 that penetrated the Devonian.

10 Based on the seismic that we have, both
11 of those wells did penetrate a Devonian structure. In par-
12 ticular the well in 7 penetrated a Devonian structure appro-
13 ximately the same size as the one we are planning to drill.
14 And both of those wells were wet in the Devonian.

15 So we feel like there is quite a bit of
16 risk involved in a deep Devonian test.

17 Q In terms of the risk factor penalty
18 percentage the Examiner is authorized under the statute to
19 assess, do you have an opinion as to whether or not the
20 Devonian prospect for this well represents the maximum 200
21 percent risk factor or something less?

22 A We feel like the risk, I feel like the
23 risk factor should be the maximum based on the risk involved
24 in this particular area.

25 Q Before we get into the structure maps, do

1 you have an opinion as to the risk involved in any other
2 formations?

3 A I feel like all the other potential for-
4 mations involved are going to be very high risk formations.

5 Q Do you have a geologic opinion as to
6 whether those other formations represent a risk in excess of
7 the 200 percent maximum penalty factor allowable?

8 A Yes, I feel like they would.

9 Q The primary objective for this well is a
10 Devonian test?

11 A Yes, sir.

12 Q Let's go to your Devonian structure map,
13 which I believe is identified as Exhibit Number Forty-three,
14 and have you identify that for us.

15 A Okay. This is a Devonian structure --
16 structure on the top of the Devonian carbonate. It is on a
17 one inch equal 2000 foot scale, having a 100 foot contour
18 interval, and the proposed location is identified in the
19 flourescent dot.

20 Q Is this an exhibit that you have prepared
21 based upon your opinions and conclusions with regards to the
22 Devonian structure?

23 A Yes, sir.

24 Q Would you take a moment and describe your
25 conclusions and interpretations of the structure as indi-

1 cated on this display?

2 A Yes. Based on the work we've done and
3 most of it is the seismic interpretation, obviously, because
4 we do not have any well control on top of the structure, but
5 we feel like we have defined a Devonian structure with ap-
6 proximately 200 feet of vertical relief, approximately 1/2
7 mile wide, and approximately 3/4 to one mile in length, run-
8 ning north to south in Section 34 and Section 3.

9 Q Within that area will you identify for us
10 the Devonian penetration in the northeast quarter?

11 A Yes. The only Devonian penetration on
12 that particular map is located in the northeast/northeast of
13 Section 3, the dry hole.

14 Q The other wells indicated by the colors,
15 mustard color, orange, what are those?

16 A Those wells are all producing from the
17 East Morton Wolfcamp Field and all those wells penetrated
18 only the Wolfcamp section.

19 Q Okay. So ultimately the identification
20 of the Devonian structure is inherently based upon the in-
21 terpretation of the seismic information available?

22 A Yes, sir.

23 Q Does the additional fact of the seismic
24 information, along with the one Devonian penetration in the
25 northeast quarter give you sufficient comfort to reduce the

1 risk factor penalty below the maximum 200 percent?

2 A No, sir, we feel like with all the other
3 inherent risks in the Devonian, the porosity risk and the
4 lack, possibly, of hydrocarbon accumulation within the
5 structure, plus the inherent risk of the geophysics them-
6 selves and the interpretation, that we still should --
7 should be allowed a maximum penalty.

8 Q Let me direct your attention now to the
9 Wolfcamp potential in the well and have you identify for us
10 Exhibit Number 44.

11 A Okay, this is a structure map on the top
12 of the -- it's labeled top of the PermoPenn. I should make
13 an explanation there.

14 I -- I typically call the Wolfcamp --
15 what's called the East Morton Field is a -- is called East
16 Morton Wolfcamp Field. I typically refer to it as the Per-
17 moPennsylvanian because the boundary between the Wolfcamp
18 and the Pennsylvanian is very hazy out there and nobody
19 really knows what it is and it's right there at that inter-
20 face that the map was drawn on.

21 So I refer to it as the top of the struc-
22 ture on top of the PermoPennsylvanian.

23 Q Of the six Wolfcamp wells identified in
24 orange on this display, are there any of those wells still
25 producing?

1 A Yes. The well in Section 33, the south-
2 ern portion of Section 33, and the well in the northeast
3 corner of Section 4, are both producing, as well as the well
4 in the southeast of the southwest of Section 34.

5 So three current Wolfcamp producers.

6 Q Do you have a geologic opinion about the
7 maximum risk factor penalty involved in the Wolfcamp portion
8 of this well?

9 A Yes, sir, we -- I feel like that the
10 Wolfcamp is a very high risk objective in this area and
11 should be considered only a secondary objective and high
12 risk.

13 Q With established Wolfcamp production in
14 the area, what are the reasons that you believe that the
15 maximum penalty is justified?

16 A The map that you see at the PermoPenn, in
17 the immediate area of the field has fourteen Wolfcamp pene-
18 trations to it. Only two of those fourteen penetrations are
19 commercial producers.

20 In addition, at the proposed location we
21 have -- we are surrounded by five Wolfcamp penetrations and
22 really in all directions we're completely surrounded. None
23 of those penetrations resulted in commercial production.
24 There were three dry holes and two, what we thought noncom-
25 mercial producers out of those five penetrations. So we're

1 surrounded by noncommercial and dry hole wells.

2 Q Let me turn your attention now to the
3 type log that's identified as Exhibit Number Forty-five.
4 Would you identify this exhibit for us?

5 A Yes, sir. This is the Devonian well that
6 was the nearest Devonian well to the prospect, the well in
7 Section 3 in the northeast northeast quarter. It runs from
8 the top of the PermoPennsylvanian down to the TD of the
9 well in the Devonian.

10 It outlines all the drill stem tests on
11 the righthand side of the well that were performed in the
12 well and all the production that was attempted on the left-
13 hand side within that well.

14 Q Was commercial production ever estab-
15 lished in the well in any of these perforations?

16 A No, sir.

17 Q Were Exhibits Forty-three and Forty-four
18 and the type log, Forty-Five, compiled under your direction
19 and supervision?

20 A Yes, sir.

21 Q And do the geologic opinions expressed on
22 Exhibits Forty-three and Forty-four represent your opinions?

23 A Yes, sir.

24 MR. KELLAHIN: We move the in-
25 troduction of Exhibits Forty-three, Forty-four, and Forty-

1 five.

2 MR. STOGNER: Exhibits Forty-
3 three, Forty-four, and Forty-five will be admitted into evi-
4 dence at this time.

5 MR. KELLAHIN: That concludes
6 my examination of Mr. Parks.

7 MR. STOGNER: I have no ques-
8 tions. Are there any questions of this witness?

9 He may be excused.

10

11 DAN TUFFLY,
12 being called as a witness and being duly sworn upon his
13 oath, testified as follows, to-wit:

14

15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17 Q All right, sir, would you please state
18 your name and occupation?

19 A Dan Tuffly. I'm a District Production
20 Engineer for Mitchell Energy Corporation.

21 Q Mr. Tuffly, for our benefit would you
22 spell your last name?

23 A T-U-F-F-L-Y.

24 Q Mr. Tuffly, would you identify for us
25 what degrees that you hold as an engineer?

1 A I received a degree in petroleum -- a
2 Bachelor of Science in petroleum engineering from Texas A &
3 M University in 1976.

4 Q Subsequent to obtaining that degree, Mr.
5 Tuffly, would you summarize for us your employment
6 experience as a professional petroleum engineer?

7 A After graduation I worked for Chevron Oil
8 Company for four years and at different times worked as a
9 drilling, production, and reservoir engineer.

10 Subsequent to that I worked for a
11 consulting firm known as Dabney Engineering Corporation as a
12 drilling and completion engineer.

13 And for the last six years I have worked
14 for Mitchell Energy Corporation as a production engineer.

15 Q Would you describe the specific
16 involvement you had in the preparation of the AFE that is
17 marked as Exhibit Forty-six and Forty-seven for this case?

18 A Exhibit Forty-six is a dry hole cost
19 estimate for the subject well to 14,700 feet. I did not
20 perform or make this cost estimate or supervise it and I
21 have become familiar with how that cost estimate was
22 obtained since that time.

23 Forty-seven represents a completion cost
24 estimate for this well. This cost estimate was done not by
25 myself but under my supervision.

1 Q The specific function you perform for
2 Mitchell Energy Corporation is to supervise and control and
3 evaluate the completion costs on a well?

4 A Yes, sir, plus the completion and
5 production of the well from then on.

6 Q With regards to the drilling costs, have
7 you made yourself aware of and been informed by Mitchell
8 Energy Corporation employees of the basis for those esti-
9 mated costs?

10 A Yes, sir, I have.

11 Q And taken together have you been able to
12 form an opinion as to whether or not the proposed AFE costs
13 for this well are fair and reasonable?

14 A I believe they are.

15 Q Let me have you summarize what the total
16 drilling and completion costs are for this well?

17 A Dry hole cost of \$670,000 plus our com-
18 pletion cost of \$515,000 results in a total cost of
19 \$1,185,000.

20 Q Does Mitchell Energy Corporation partici-
21 pate in and operate other similar type wells in this area?

22 A No Devonian wells in this area.

23 Q With regards to Wolfcamp wells, do you
24 operate or participate in such wells?

25 A We operate some, a Strawn well, approxi-

1 mately five miles south of this well, which was drilled ap-
2 proximately two years ago, and two additional Strawn wells
3 several miles south of that.

4 Q To the best of your knowledge, Mr.
5 Tuffly, do the individual costs that are itemized on the AFE
6 on Exhibit Forty-six and Forty-seven represent current and
7 accurate estimates of competitive prices for each of these
8 items?

9 A Yes, sir, they do. We, for the major
10 items such as the footage cost, we contacted three drilling
11 contractors in the area and obtained their estimate price to
12 drill that.

13 We talked with the mud company to get
14 estimated mud costs, and with cementing company for cost on
15 that.

16 The additional costs on the AFE are -- we
17 compared those three wells I spoke of previously to the
18 south and got costs which we think would be comparable to
19 this one.

20 Q Would you summarize for the Examiner what
21 the drilling and completion and stimulation program is for
22 this well?

23 A As far as while drilling a well, we
24 drilled about 400 feet, set 13-3/8ths inch casing; from
25 there drilled to 6000, set 8-5/8ths inch casing; and from

1 there drilled to a TD at 14,700 feet and set 5-1/2 inch
2 casing.

3 We will upon review of the logs, DST
4 information, we will perforate the interval we think is
5 productive in the Devonian and will most likely stimulate it
6 with acid.

7 Q If the effort to obtain production in the
8 Devonian is unsuccessful, what do you propose then to do
9 with the well?

10 A We would look for other possible produc-
11 tive horizons in the well.

12 Q The well is proposed as a single comple-
13 tion as opposed to a dual completion with any other zone?

14 A Yes, sir, absolutely a single completion
15 only.

16 MR. KELLAHIN: That concludes
17 my examination of Mr. Tuffly.

18 We'd move the introduction of
19 Exhibits Forty-six and Forty-seven.

20 MR. STOGNER: Forty-six and
21 Forty-seven will be admitted into evidence.

22 Do you plan to cover Exhibit
23 Number Forty-eight?

24 MR. KELLAHIN: Yes, sir, I
25 will.

1 MR. STOGNER: Okay, I'm sorry.

2
3 CROSS EXAMINATION

4 BY MR. STOGNER:

5 Q Let me make sure I understood you right,
6 this doesn't include a dual completion?

7 MR. KELLAHIN: It does not.

8 A No, sir, it does not.

9 Q Okay, do you plan to dual complete if you
10 do hit Wolfcamp?

11 A No, sir, with the 5-1/2 inch casing we
12 would not be able to do that.

13 Q Okay.

14 MR. STOGNER: I have no further
15 questions of Mr. Tuffly. He may be excused.

16 Mr. Kellahin.

17 MR. KELLAHIN: Mr. Examiner,
18 Exhibit Forty-eight is my certificate of mailing, an affi-
19 davit showing the mailing of notice to all the individuals
20 listed on the tabulation, along with copies of the return
21 receipt cards showing that prior to 20 days to the hearing
22 we mailed by certified mail return receipt notices of hear-
23 ing.

24 We would move the introduction
25 of that exhibit at this time.

1 MR. STOGNER: Exhibit Number
2 Forty-eight will be admitted into evidence.

3 MR. KELLAHIN: That concludes
4 our presentation at this time, Mr. Examiner.

5 MR. TAYLOR: Mr. Kellahin, on
6 your notice the nonstandard proration unit is because of
7 non-standard section, right?

8 MR. KELLAHIN: For 40-acre and
9 for 80-acre spacing we have lot sizes that --

10 MR. TAYLOR: Right, it's be-
11 cause of the --

12 MR. KELLAHIN: -- exceed that,
13 and that was the only reason.

14 MR. TAYLOR: It's because of
15 the survey of the lots.

16 MR. KELLAHIN: The unorthodox
17 location is simply in the remote possibility that a deep gas
18 completion is made and a north half dedication is allocated
19 to the well. That surface location is standard to the north
20 line but it is too close to the west boundary. Instead of
21 being 1980 from the west line I believe it is 1830 from the
22 west line, and it's for that reason, then, that we seek ap-
23 proval of the unorthodox location.

24 MR. TAYLOR: But you -- your --
25 the applicant is the operator who controls that interest

1 than the (inaudible to the reporter).

2 MR. KELLAHIN: That's true.

3 MR. TAYLOR: Thank you.

4 MR. STOGNER: Is there anything
5 further in Case Number 9272, Mr. Kellahin?

6 MR. KELLAHIN: No, sir.

7 MR. STOGNER: If not, this case
8 will be taken under advisement.

9

10 (Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY
CERTIFY that 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.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 9272
heard by me on 2 December 19 87

Michael E. Dwyer, Examiner
Oil Conservation Division