

OFFSETTING OPERATORS

Marathon Oil Company
Post Office Box 552
Midland, Texas 79702
Atten: Mr. Steve Daniels

Hondo Oil & Gas Company
Post Office Box 2208
Roswell, New Mexico 88202

Amoco Production Company
Post Office Box 68
Hobbs, New Mexico 88240

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

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Marathon Oil Company
Atten: Steve Daniels
P.O. Box 552
Midland, TX 79702

4. Article Number
P-484 032 737

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

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3. Article Addressed to:
Hondo Oil & Gas Company
Post Office Box 2208
Roswell, NM 88202

4. Article Number
P-484 032 736

Type of Service:
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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

3. Article Addressed to:
Amoco Production Company
Post Office Box 68
Hobbs, NM 88240

4. Article Number
P-484 032 735

Type of Service:
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☒ Certified ☐ COD
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DOMESTIC RETURN RECEIPT

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

March 14, 1989

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE NEW MEX CO 87501
(505) 827-5800

Mr. Ernest L. Padilla
Padilla & Snyder
Attorneys at Law
Post Office Box 2523
Santa Fe, New Mexico

Re: CASE NO. 9618
ORDER NO. R-8890

Applicant:

Bill Fenn, Inc.

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Division order recently entered in the subject case.

Sincerely,

Florene Davidson

FLORENE DAVIDSON
OC Staff Specialist

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD

Other Thomas Kellahin

Roaring Springs Fed #1

Applicant	Opposition: To Marathon
Attorney: Ernie Padilla	Attorney: Jinkellaher
Witness(es): (1) Jack Morgan ^{US Res. Inc.}	Witness(es): (1)
(2) Jim Brannigan	(2)
(3)	(3)

Open - 2 off-set Hondo-Marathon - 1990
1990 agree to 40% penalty based on dist to leave line.
1990

US Res. Inc. in structure

Jack Morgan ES Pet Eng. O.H. PE in Texas
32 years exp. 9 yrs US Res. Inc. also dual compl.
agrees to 40% penalty having waiting
Hondo-Marathon

Jim Brannigan consult local

REMARKS:	ORDER ISSUED:
	CONTINUED TO:
	DISMISSED:
	ORDER FINALIZED:
	ORDER NO.:
	CASE NO.:

1 STATE OF NEW MEXICO
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3 OIL CONSERVATION DIVISION
4 STATE LAND OFFICE BUILDING
5 SANTA FE, NEW MEXICO

6 1 March 1989

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Bill Fenn, Inc. for an CASE
10 unorthodox gas well location and dual 9618
11 completion, Eddy County, New Mexico.

12 BEFORE: Victor T. Lyon, Examiner

13 TRANSCRIPT OF HEARING

14 A P P E A R A N C E S

15 For the Division: Robert G. Stovall
16 Attorney at Law
17 Legal Counsel to the Division
18 State Land Office Bldg.
19 Santa Fe, New Mexico

20 For Bill Fenn, Inc.: Ernest L. Padilla
21 Attorney at Law
22 PADILLA & SNYDER
P. O. Box 2523
Santa Fe, New Mexico 87504

23 For Marathon Oil Company: W. Thomas Kellahin
24 Attorney at Law
25 KELLAHIN, KELLAHIN & AUBREY
P. O. Box 2265
Santa Fe, New Mexico 87504

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1 MR. LYON: Call next Case Num-
2 ber 9618.

3 MR. STOVALL: Application of
4 Bill Fenn, Inc., for an unorthodox gas well location and
5 dual completion, Eddy County, New Mexico.

6 MR. PADILLA: Mr. Examiner, my
7 name is Ernest L. Padilla for the applicant. I have two
8 witnesses to be sworn.

9 MR. KELLAHIN: Mr. Examiner,
10 I'd like to enter my appearance on behalf of Marathon Oil
11 Company. My name is Tom Kellahin. I'm an attorney with
12 the Santa Fe law firm of Kellahin, Kellahin & Aubrey.

13 MR. PADILLA: Mr. Examiner, I
14 have two witnesses to be sworn.

15
16 (Witnesses sworn.)

17
18 MR. PADILLA: Mr. Examiner,
19 first let me make a slight or a short opening statement.

20 In this case we had two major
21 offset operators, Marathon and Hondo Oil and Gas.

22 We sent the notice to Amoco
23 Production Company, as well as Marathon and Hondo Oil and
24 Gas. We did that out of precaution.

25 We sent the notice to Amoco

1 out of precaution but the operator of the property owned by
2 Amoco is Marathon.

3 Prior to this hearing we have
4 reached an agreement with Marathon and Hondo to allow a 40
5 percent penalty based strictly on the distance from the
6 well location to the lease line. We have a -- we will in-
7 troduce Exhibits relating to that agreement.

8 We would -- therefore our ap-
9 plication is subject to that 40 percent penalty based
10 strictly on the distance to lease line.

11 My clients do not necessarily
12 believe that that is the sole method of determining penal-
13 ties but in the interest of proceeding with drilling the
14 well and getting on with the drilling program which they
15 have commitments to do that, we need to -- or simply wanted
16 to tell you that we didn't want to collaterally attack the
17 40 percent penalty that we have reached agreement on with
18 Marathon and Hondo.

19 There may be other methods of
20 determining penalty which may be appropriate but for pur-
21 poses of this hearing we'd like to restrict ourselves to
22 the distance to lease line, and it computes exactly to 40
23 percent the way we have determined this as 90 divided by
24 1650.

25 With that I'll proceed with my
first witness, Mr. Lyon.

1 MR. LYON: Proceed.

2
3 JACK A. MORGAN,
4 being called as a witness and being duly sworn upon his
5 oath, testified as follows, to-wit:
6

7 DIRECT EXAMINATION

8 BY MR. PADILLA:

9 Q Mr. Morgan, have you -- for the record
10 would you please state your full name, please?

11 A Jack, initial A., Morgan.

12 Q Where do you reside, Mr. Morgan?

13 A I reside in Dallas, Texas.

14 Q For whom do you work?

15 A I work for U. S. Resources,
16 Incorporated.

17 Q What connection does U. S. Resources
18 have with the applicant, Bill Fenn, Inc.?

19 A This -- the well, this well that we've
20 applied for the permit for, the Roaring Springs Federal No.
21 1, is a joint venture between Bill Fenn and U. S. Re-
22 sources, Inc.

23 Q Mr. Morgan, have you previously testi-
24 fied before the Oil Conservation Division and had your cre-
25 dentials accepted as a matter of record?

1 A No, sir, I have not.

2 Q Can you tell us where you received your
3 degree, please?

4 A Yes, sir, from the University of
5 Oklahoma.

6 Q In what?

7 A In petroleum engineering.

8 Q And what has been your experience since
9 that time in the oil and gas industry?

10 A I've spent around 32 years with Sun Oil
11 Company in all phases of engineering and all phases of man-
12 agement and production and drilling operations, regulatory
13 affairs.

14 I've spent right at nine years now with
15 U. S. Resources, Inc. in all phases of management and en-
16 gineering, regulatory affairs, production and drilling
17 operations.

18 Q Mr. Morgan, can you briefly tell us what
19 the nature of the application is today?

20 A Yes, sir, it's for an unorthodox loca-
21 tion in Eddy County, New Mexico. It's -- the regular loca-
22 tion, this is in the Indian Basin area, Indian Basin Morrow
23 Pool and Indian Basin Upper Penn Gas Pool, the regular
24 location would be 1650/1650 from the two lines, whereas
25 we're asking for 1650 from the north line and 990 from the

1 west line, which is an unorthodox location, and also a dual
2 completion for the Upper Pennsylvanian and the lower -- and
3 the Morrow.

4 Q And have you made a study of how you're
5 going to complete this well?

6 A Yes, we have, as a dual completion, a
7 two string, two tubing string dual completion.

8 MR. PADILLA: Mr. Examiner, we
9 tender Mr. Morgan as an expert petroleum engineer.

10 MR. LYON: Mr. Morgan, are you
11 a registered professional engineer?

12 A I am in Texas but not in New Mexico, Mr.
13 Examiner.

14 MR. LYON: Mr. Morgan is con-
15 sidered qualified.

16 Q Mr. Morgan, let's go on to what we have
17 marked as Exhibit Number One and have you identify that for
18 the Examiner and tell us what that contains.

19 A Yes. Our Exhibit Number One is a letter
20 to all offset operators on the page number two, which show
21 that there are three of them, Marathon Oil Company, Hondo
22 Oil & Gas Company, and Amoco Production Company.

23 This is a notice of our application for
24 the unorthodox location for this Roaring Springs Federal
25 No. 1 Well in Eddy County, New Mexico.

1 Q As a result of that notice, Mr. Morgan,
2 have you received any communications from any of the offset
3 operators?

4 A Yes, sir, we have. Exhibit Number Two
5 is a letter from Marathon Oil Company in which we agreed,
6 or they agreed with us that they would let us drill the
7 well at 1650 feet from the north line, 990 feet from the
8 west line of Section 14, Township 21 South, Range 23 East,
9 Eddy County, New Mexico, if we provide for a 40 percent
10 penalty to be imposed on the allowable for this well.

11 Q Are you in agreement with that 40 per-
12 cent?

13 A In this special case, we are. As you
14 mentioned earlier, we realize that there are other methods
15 for determining allowables for wells and they would also
16 include the two Indian Basin formations, the Upper Penn and
17 the Morrow; however, we have a time constraint on this well
18 and in order to meet those time constraints we already have
19 a rig, we have investors lined up, we wanted to do this
20 right away, and in order to do this we just -- this -- this
21 40 percent penalty is within the limits of our economic
22 parameters and we have agreed with Marathon to do this to
23 preclude a protest so we could go ahead and get on with the
24 well.

25 Q Let's go on to what we've marked as

1 Exhibit Number Three, Mr. Morgan, and have you tell the
2 Examiner what that is.

3 A It is a letter that was sent to Hondo
4 Oil & Gas Company, which is another one of the offset oper-
5 ators, advising them that we have reached a 40 percent pen-
6 alty, production penalty on the allowable for this well at
7 the unorthodox location, and asked them, if they concurred,
8 to sign and send it back, which they have.

9 Q Okay. Let's go on now to Exhibit Number
10 Four and have you tell us what that is.

11 A Exhibit Number Four is a completion
12 guide for the dual completion of this well. It encompasses
13 setting 9-5/8ths inch casing through the fresh water zone
14 with cementing back to the surface.

15 It includes a 7-inch casing string to be
16 set below the Indian Basin Morrow Gas Pool. It encompasses
17 two strings of 2-3/8ths tubing with two packers to isolate
18 the two zones from each other and from the surface. It
19 shows the perforations -- it shows basically perforations
20 from both the Indian Basin Upper Pennsylvanian Gas Pool,
21 which is underlined in red; it shows the flow pattern. It
22 would come up through the short string to the surface.

23 It shows the Indian Basin Morrow Gas
24 Pool, underlined in blue. It shows the perforations with a
25 blue arrow, showing it would come up through the long

1 string. And it also shows the packers that would isolate
2 the two zones and also isolate it from the -- from the sur-
3 face.

4 These two flow streams will be brought
5 to the surface . They will be produced into separate faci-
6 lities to -- so that we can keep straight the -- which
7 volumes come from which pools and then would be metered or
8 put in separate facilities until such time as they're sold.

9 Q Mr. Morgan, would -- is this method of
10 completing the well in the best interest of conservation of
11 oil and gas?

12 A Yes, sir, it is. We're looking at the
13 possibility of both an Upper Pennsylvanian Gas Pool well
14 here and also an Indian Basin Morrow Gas Pool. Rather than
15 drill two separate wells for this, we have adopted a method
16 of the dual completion. If this dual completion is
17 approved by the Commission, by the Conservation Division,
18 we will save around \$500,000 and yet be able to recover the
19 same amount of oil and gas from the two zones.

20 Q Mr. Morgan, do you have anything further
21 concerning this exhibit?

22 A No, sir, the exhibit pretty well speaks
23 for itself unless there are any questions about it.

24 MR. PADILLA: Mr. Examiner, we
25 pass the witness at this point.

1 MR. LYON: Do you have any
2 other witnesses?

3 MR. PADILLA: I do, a geolo-
4 gist.

5 MR. LYON: Yes, and these
6 other exhibits in your --

7 MR. PADILLA: He will testify
8 as to those. Those are the main exhibits.

9
10 CROSS EXAMINATION

11 BY MR. LYON:

12 Q Mr. Morgan, I notice on your Exhibit
13 Four that you have a note that no allowance is made for
14 blast joints. Is it your plan to use blast joints?

15 A Yes, sir. This -- this was an AFE that
16 was -- was provided to us by Otis. Of course they want the
17 job of providing materials. What they mean here is there
18 was no monetary allowance made for it. Yes, sir, we will
19 include blast joints opposite the perforations, especially
20 opposite the Upper Pennsylvanian Pool where -- where we
21 have strings of tubing going up through, we will, of course
22 not need a blast joint at the bottom because the end of the
23 tubing string will be above the perforations for the Morrow
24 Gas Pool.

25 MR. LYON: I have no further

1 questions.

2 MR. PADILLA: At this time
3 we'll call Mr. Jim Brannigan.

4
5 J. P. BRANNIGAN,
6 being called as a witness and being duly sworn upon his
7 oath, testified as follows, to-wit:

8
9 DIRECT EXAMINATION

10 BY MR. PADILLA:

11 Q State your full name, please, and where
12 you reside.

13 A James Patrick Brannigan, Roswell, New
14 Mexico.

15 MR. LYON: How do you spell
16 that?

17 A B-R-A-N-N-I-G-A-N.

18 MR. LYON: Always a surprise.

19 Q Mr. Brannigan, what do you do for a
20 living?

21 A I'm a petroleum geologist.

22 Q And are you a consultant for Bill Fenn,
23 Inc.?

24 A I'm consultant for Bill Fenn, Inc., and
25 U. S. Resources.

1 Q Mr. Brannigan, have you previously tes-
2 tified before the Oil Conservation Division as a petroleum
3 geologist?

4 A Yes, I have.

5 Q And have your credentials been accepted
6 as a matter of record?

7 A Yes, they have.

8 Q Did you make a study of the Indian Basin
9 Pool insofar as the Cisco and the Morrow formations are
10 concerned and the drill -- this prospect under application
11 today?

12 A Yes, I did. This is my prospect that
13 we're getting ready to drill.

14 MR. PADILLA: Mr. Examiner, we
15 tender Mr. Brannigan as an expert petroleum geologist.

16 MR. LYON: Mr. Brannigan is so
17 qualified.

18 Q Mr. Brannigan, let's turn to what we
19 have marked as Exhibit Number Five and have you identify
20 that for the Examiner, please.

21 A Exhibit Number Five is the Indian Basin
22 Upper Penn unorthodox locations. Out of the 61 wells that
23 either are or have produced in the Indian Basin, 25, or 41
24 percent, were drilled on unorthodox locations and 13 of
25 those 25 were drilled on non-topographic or geological

1 reasons, or 21 percent were drilled for geological reasons.
2 They were unorthodox.

3 Q What's the general basis for saying that
4 they were drilled for geologic reasons?

5 A Well, the generally to get the best
6 reservoir in the Cisco we try to be as far up dip and get
7 into the porosities in the Cisco, the (unclear) in the pro-
8 ration unit.

9 Q Is this an indication that the reservoir
10 may not be homogeneous?

11 A That is correct.

12 Q It's homogeneous or non-homogeneous?

13 A It's not homogeneous, no. There's
14 different -- there's different porosities within the Cisco.

15 Q And how about the Morrow formation?

16 A The Morrow formation is three or four
17 different channel sands that run through the Morrow in this
18 particular area, so they cover -- they tend to come with
19 regional dips northwest to southeast; they're running
20 southeast dip at the time.

21 Q Mr. Brannigan, would you briefly go
22 through the offset operators. Well, first of all, let me
23 ask, are you familiar with who the offset operators are to
24 the proposed proration unit?

25 A Yes, I am. All the -- every -- every

1 section surrounding Section 14, except for Section 13, is
2 operated by -- by Marathon. Section 13 is operated by Bill
3 Fenn, owned by Bill Fenn, so except for -- except for 13,
4 Marathon is the operator of record.

5 Q Okay. Do you have anything further con-
6 cerning this exhibit, Mr. Brannigan?

7 A No, I don't.

8 Q Let's go on now to the next exhibit,
9 which would be Exhibit Number Six, and have you tell us
10 what that is.

11 A Exhibit Number Six is a structure map
12 contoured on the top of the Cisco Reef. We have Cisco and
13 Morrow production along with Cisco and Morrow combination
14 wells, dual completions, in the general area of the Roaring
15 Springs.

16 Q Mr. Brannigan, I notice the structure
17 line that you have running through Section 14 transects the
18 dry hole that you have that was previously drilled in the
19 -- in Section 14. Can you tell us how your well, your pro-
20 posed well location and that structure line relate to each
21 other?

22 A Well, we feel with the drilling of the
23 No. 1 Roaring Springs that we should be approximately 50
24 feet up dip from the well in the southwest quarter of Sec-
25 tion 14 that has produced 5.3 BCF out of the Cisco and 5.7

1 out of the Morrow.

2 So we should be structurally up dip from
3 that well.

4 Q What does dip have to do with regard to
5 where you place your location?

6 A Well, in this case, especially in the
7 Cisco formation, we feel that we need to be as up dip as we
8 can to -- in our location, because we feel the majority of
9 the -- of the production is going to be flowing up dip into
10 our bore hole.

11 Q Are -- do you feel you're going to drain
12 -- what's the drainage pattern going to be for the well?

13 A The drainage pattern will be to the west
14 out of Section -- out of -- from Section 14 it will be to
15 the west. We feel the majority is -- we feel it's in the
16 best interest of the State of New Mexico to drill a 990
17 location because it will be draining -- we'll be completely
18 draining Section 14 with our -- with our location, where if
19 we were a standard location we may not be able to drain
20 some of our acreage on the west, west side of Section 14.

21 Q Do you feel that there exists reserves
22 in Section 14 even though there's been another well drilled
23 and produced in that section?

24 A Yes, I do; a couple reasons. The Indian
25 Basin Upper Penn Field has made to date approximately 1.2-

1 trillion cubic feet of gas with a per well average of 18.3
2 to 18.4 BCF per well.

3 The well in Section 14 was -- only pro-
4 duced 5.3 BCF out of that well, and we feel that just if
5 you took a field average, you'd still have significant re-
6 serves left in Section 14.

7 Another reason I think there's some --
8 there's some gas left in Section 14 both in the Morrow and
9 Cisco, the is the last -- the last bottom hole pressure
10 taken in the well in Section 14, a dry hole in Unit K, had
11 a bottom hole pressure of 1,903 pounds. So there was sig-
12 nificant pressure in that well when they plugged it, and
13 we're finding out now within the last year or two that more
14 and more operators in the Indian Basin are putting compres-
15 sors on their wellheads and getting -- getting commercial
16 gas reserves again.

17 Q Let me ask you now, you said something
18 relative to drainage, the drainage pattern was to the west.

19 A I feel that because -- because it will
20 be going up dip towards the west.

21 Q Does that mean that you'll be draining
22 the eastern part of the section better because of your --

23 A Yes.

24 Q -- well location?

25 A Yes, that's right. That's correct. The

1 east half of Section 20.

2 Q In other words, what you're saying is
3 that the flow is going to be from east to west.

4 A Correct.

5 Q Do you have anything further concerning
6 this structure map, Mr. Brannigan?

7 A No, I sure don't.

8 Q Let's go on to Exhibit Number Seven and
9 tell us what that is.

10 A Exhibit Number Seven is a Morrow poro-
11 sity isopach map contoured on a 10 foot interval (unclear)
12 giving an 8 percent when possible cross plot porosity cut-
13 off; if not, whatever log we have available.

14 What this -- what this map shows, this
15 is the 36 feet in the well in Section 14, is the 36 feet of
16 pay that they had in that well that produced a 5.7 BCF out
17 of the Morrow, and as you can see, the majority of the --
18 of the porosity extends in Section -- in Section 14; very
19 little in Section 15.

20 Again, we're drilling (unclear). We
21 anticipate getting around 22 to 25 feet of porosity and
22 being up dip in the Morrow.

23 Q Anything further concerning the isopach?

24 A No.

25 Q Now, this is an isopach for the Morrow

1 formation, correct?

2 A Yes, it is.

3 Q Do you have an isopach for the Cisco?

4 A No, I don't. I don't have an isopach for
5 the Cisco because a lot of the operators out there, what
6 they did is they just drill into the very top of the Cisco
7 to get the first porosity and go ahead and produce out of
8 it. So most of the wells, not most of the wells, but a
9 large enough percentage of the wells did not penetrate the
10 complete Cisco Reef, so I'd be -- I didn't have the com-
11 plete well information to do what I would consider a good
12 -- a good map with using the well control.

13 Q Okay. Let's go on to Exhibit Number
14 Eight and tell us what that is.

15 A Exhibit Number Eight is a stratigraphic
16 cross section going through showing our proposed location
17 in Section 14 with some offset wells. The datum is the top
18 of the Cisco Reef.

19 Q Does this cross section show the dip
20 that you were talking about?

21 A No, it doesn't. It's a stratigraphic
22 cross section instead of a structural cross section.

23 Q Okay. Would you start explaining what
24 this cross section contains and proceed from left to right,
25 if you would, please.

1 A Okay. Actually, it's a general look,
2 looking at all the wells. What it is, is the datum is hung
3 on the top of the Cisco formation or the top of the Cisco
4 Reef. If you'll notice on a few of the logs, especially
5 the well in Section 14, there was approximately 5, 4 or 5
6 drill stem tests taken and that's just kind of indicative
7 of the Cisco in that area, that there isn't -- it isn't a
8 homogeneous reservoir. You can have a gas/water, gas/water
9 reservoir out there so it's important to go ahead and drill
10 stem test the individual zones.

11 But what it is showing you is it's
12 showing you the continuity, some continuity as far as the
13 reef itself, the datum on top of the reef.

14 It's also showing that the well in Sec-
15 tion -- Section 11 is a classic well of why I don't have a
16 Cisco isopach map.

17 Q You're talking about, what, the third
18 well on the cross section?

19 A Yes, the second from the right, and that
20 well there does not have -- did not penetrate all of the --
21 all of the Cisco Reef.

22 Q What does this cross section show in re-
23 lation to your proposed well?

24 A It shows the proposed location should be
25 between two producing wells; actually should be almost a

1 5-spot or 4-1/2-spot, a producing mode. We should be right
2 -- we should encounter a real thick Cisco Reef interval and
3 also be to the northwest of the -- of the well in the south
4 half of Section 14, which would put us on regional dip with
5 the Morrow formation as far as deposition.

6 Q Mr. Brannigan, in your opinion is this
7 the best place to drill this well?

8 A I think it's the best place to drill the
9 well to adequately drain all the gas reserves out of Sec-
10 tion 14.

11 Q Anything further on the cross section,
12 Mr. Brannigan?

13 A No, sir.

14 Q Let's go on to Exhibit Number Nine and
15 have you tell the Examiner what that is.

16 A Exhibit Number Nine is a production map
17 in the Indian Basin area around the Roaring Springs loca-
18 tion, showing Cisco production and also Morrow production,
19 and where available, water and oil production, also.

20 Q Does this map tell us more about the
21 production figures that you've talked about earlier in
22 terms of the averages and that sort of thing?

23 A Yes, it does, but it's not -- you
24 wouldn't -- this is just part of the field. It's not --
25 it's not the entire field but, yes, it does. You can see

1 that some of the wells directly to the west of us have
2 produced 23, 26, 22 BCF and they're fantastic Cisco wells.

3 Q Do you anticipate to have that kind of
4 production from your well?

5 A We're hoping that we can drain what's
6 left in Section 14 and get upwards to maybe 13 BCF out of
7 the Cisco and another 6 or 7-billion out of the Morrow.
8 It's unusual for -- in southeast New Mexico the majority of
9 the Morrow fields are on 320-acre spacing and this, the
10 Morrow -- Indian Basin Morrow Field is on 640, so we feel
11 that there is -- in the Morrow formation there is signifi-
12 cant amounts of gas left in the reservoir.

13 Q You're not proposing to change the pool
14 rules at this time, are you?

15 A Absolutely not.

16 Q What else do you have on this exhibit?

17 A That's -- that's basically it.

18 Q Okay. Let's go on to Exhibits Ten And
19 Eleven and tell the Examiner what those are.

20 A Okay. Exhibit Ten and Eleven, Exhibit
21 Ten is the Morrow production out of the Ralph Lowe Well.
22 Ralph Lowe drilled this well in Section 14 of 21, 23 back
23 in 1963 and it -- the well was shut in and never produced
24 until 1966 when Marathon became the operator of the well
25 and sometime within that period Marathon -- that 3-year

1 period, Marathon took over operations from Ralph Lowe. But
2 what this shows is that the decline -- the history of both
3 the Morrow and Cisco formation decline curves and what it
4 does show is that with compressors, with a compressor put
5 at the surface, this well could probably still be econo-
6 mical; that there is gas reserves left in Section 14.

7 Q What does that -- okay. Now, in terms
8 of what relevance this has to the -- to the proposed loca-
9 tion, can you tell the Examiner what that is?

10 A Well, I -- that there is significant
11 amounts of gas left in Section 14 and probably the south
12 half of Section 14 hasn't been drained and the north half
13 of 14 is probably -- we're probably looking at somewhere
14 close to virgin bottom hole pressures.

15 Q Now in terms of the unorthodox location,
16 and potential for existing reserves, are you -- is it your
17 testimony that this -- that your proposed location is going
18 to recover or more efficiently drain Section 14?

19 A Yes, absolutely. I feel that our loca-
20 tion 1650 from the north line and 990 from the west line is
21 probably the best location to drain the remaining gas and
22 condensate in Section 14.

23 Q And this would be subject to the 40 per-
24 cent penalty?

25 A Yes. Yes.

1 Q Mr. Brannigan, do you -- is it your
2 opinion that approval of this application would be in the
3 best interest of conservation of oil and gas?

4 A Yes, I do.

5 Q How about with regard to impairment of
6 correlative rights, are correlative rights protected
7 through the penalty in this case?

8 A Yes, they are.

9 MR. PADILLA: Mr. Examiner, we
10 offer Exhibits One through Eleven and tender this witness
11 for cross examination.

12 MR. LYON: Is there objection?
13 Exhibits One through Eleven
14 will be admitted.

15
16 CROSS EXAMINATION

17 BY MR. LYON:

18 Q Mr. Brannigan, what is the status of the
19 Lowe Well, the existing well on the proration unit?

20 A It was inactive and is now plugged and
21 abandoned.

22 Q Is it now?

23 A Yes, it is. I believe it was plugged in
24 1988. It was inactive up until about 1985, '85 is the last
25 date of production, but 1988 is when it was plugged, to the

1 best of my knowledge.

2 Q This may be a little random. I'll just
3 take the exhibits as I can -- yeah. You've identified at
4 the top of Exhibit -- your cross -- Eight --

5 A Yes, sir.

6 Q -- what the top line, the top of the
7 Cisco. Can you identify for me the other correlations that
8 you've made?

9 A Okay. The other correlations that I've
10 made, the bottom, the bottom line is the top of the Morrow
11 formation. The other lines that are in there really are
12 just -- are just correlative intervals through the field
13 that I just went ahead and just -- just marked up. Now
14 they may be -- they may be formation tops but for the pur-
15 poses of this cross section it was just to show strati-
16 graphic correlation through the whole area.

17 Q Correlation markers.

18 A That's right.

19 Q Okay, so they don't have any particular
20 significance.

21 A No, except for possibly the bottom one,
22 which is the top of the Morrow formation.

23 What I also find out here is that -- oh,
24 sorry.

25 Q Okay. That Lowe Well, I presume, was --

1 went to water?

2 A We can't show any production figures
3 from the State of New Mexico that the well actually did
4 water out. I think what happened is it just got down, the
5 pressure got so low that they went ahead and just -- they
6 just shut the well in and finally plugged it, and we're --
7 what we're finding -- what we're finding lately, within the
8 last year or two, Marathon in the meantime just lately have
9 just completed a well in the southwest quarter of Section
10 22. BHP has drilled a well in the southwest southwest
11 quarter of 36 of the same township and range, and a com-
12 pany, Musselman, Owen & King, has just drilled an unortho-
13 dox location also in Section 1 of 22, 23, so we're seeing a
14 lot of infield drilling in the Indian Basin. Nobody's
15 asking for the proration unit to be changed, but we're --
16 there is significant amounts of gas left and it doesn't ap-
17 pear that -- that one bore hole is actually draining 640
18 acres.

19 Q And the -- the spots that you've shown
20 on Exhibit Five are unorthodox locations.

21 A Yes, they are. Those are all the wells
22 that were drilled inside of the 1650 location, within the
23 -- within the Indian Basin Upper Penn Pool.

24 MR. LYON: I believe that's
25 all the questions I have.

1 Mr. Padilla?

2 MR. PADILLA: We have nothing
3 further, Mr. Examiner, and we do request in the interest of
4 -- if it's possible, to have an expeditious order in this
5 case because of rig commitments and the commitments that
6 our clients have with regard to drilling this well and we,
7 as I indicated before, we went ahead and agreed to the 40
8 percent penalty based on the recent policy of the Oil Con-
9 servation Division of basing penalties on distance to lease
10 line.

11 So in order to prevent any
12 further delays in drilling the well.

13 MR. LYON: I understand, and
14 we'll try to get you an order out promptly.

15 MR. PADILLA: In fact, Mr.
16 Examiner, we would like to have some kind of verbal notice
17 or something as soon as possible so that we can proceed
18 with the commencement of the drilling on this well.

19 MR. LYON: Well, I can't pre-
20 judge the Director's action on it.

21 MR. PADILLA: I understand
22 that.

23 MR. LYON: But we'll let you
24 know as soon as possible.

25 Mr. Brannigan may be excused

1 and we'll take this case under advisement.

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(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. 9618.
heard by me on March 1 1989.
W. Boyd, Examiner
Oil Conservation Division