

NEW MEXICO OIL CONSERVATION DIVISION

STATE LAND OFFICE BUILDING

STATE OF NEW MEXICO

CASE NO. 10832

IN THE MATTER OF:

The Application of Robert L. Bayless
for an Unorthodox Gas Well Location,
Rio Arriba County, New Mexico.

BEFORE:

MICHAEL E. STOGNER

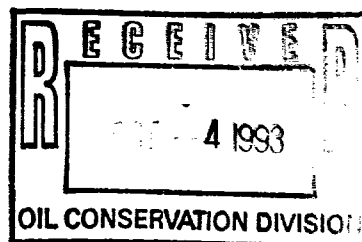
Hearing Examiner

State Land Office Building

Thursday, September 23, 1993

REPORTED BY:

CARLA DIANE RODRIGUEZ
Certified Court Reporter
for the State of New Mexico



ORIGINAL

A P P E A R A N C E S

FOR THE NEW MEXICO OIL CONSERVATION DIVISION:

ROBERT G. STOVALL, ESQ.

General Counsel
State Land Office Building
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

FOR THE APPLICANT:

TANSEY, ROSEBROUGH, GERDING & STROTHER, P.C.

Post Office Box 1020
Farmington, New Mexico 87401-1020
BY: **B. TOMMY ROBERTS, ESQ.**

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1 EXAMINER STOGNER: Call next case, No.
2 10832.

3 MR. STOVALL: Application of Robert L.
4 Bayless for an unorthodox gas well location, Rio
5 Arriba County, New Mexico.

6 EXAMINER STOGNER: Call for
7 appearances.

8 MR. ROBERTS: Mr. Examiner, my name is
9 Tommy Roberts. I'm an attorney practicing with
10 the Tansey Law Firm in Farmington, New Mexico.
11 I'm appearing on behalf of the Applicant, Robert
12 L Bayless.

13 I have one witness to be sworn.

14 EXAMINER STOGNER: Are there any other
15 appearances? Will the witness please stand to be
16 sworn at this time.

17 **WILLIAM HOPPE**

18 Having been first duly sworn upon his oath, was
19 examined and testified as follows:

20 EXAMINATION

21 BY MR. ROBERTS:

22 Q. Would you state your name and your
23 place of residence for the record, please.

24 A. My name is William Hoppe, and I live in
25 Farmington, New Mexico.

1 Q. By whom are you employed?

2 A. I'm employed by Robert L. Bayless.

3 Q. In what capacity?

4 A. As a petroleum geologist.

5 Q. How long have you been employed in that
6 capacity?

7 A. For four and a half years.

8 Q. Have you testified before the Oil
9 Conservation Division on any prior occasions?

10 A. No, I have not.

11 Q. Would you briefly describe your
12 post-high school educational background?

13 A. I have a B.A. in geology from
14 Vanderbilt University in 1973, M.S. in geology
15 from Rutgers University in 1975.

16 Q. Do you have other work experience in
17 the oil and gas industry?

18 A. I've worked as a petroleum geologist in
19 Farmington, New Mexico since 1977, for El Paso,
20 Meridian and for Bayless.

21 Q. What kinds of responsibilities did you
22 have in those capacities with Meridian and with
23 Bayless?

24 A. My responsibilities include development
25 and exploration geology. I like to develop

1 drilling prospects and acreage acquisitions; also
2 well site responsibilities.

3 Q. Do you have any professional
4 certifications, registrations, or affiliations?

5 A. I belong to the Four Corners Geological
6 Society, New Mexico Geological Society, American
7 Association of Petroleum Geologists, and Rocky
8 Mountain Association of Geologists.

9 Q. Have you published any papers or
10 articles related to the field of petroleum
11 geology?

12 A. I published several papers on oil and
13 gas fields in the San Juan Basin for the Four
14 Corners Geological Society, and a paper on the
15 northeast part of the San Juan Basin for the New
16 Mexico Geological Society.

17 Q. Briefly describe the subject matter of
18 those papers.

19 A. Primarily, Chacra formation, Dakota,
20 and the Ojo-Alamo, Pictured Cliffs, and Fruitland
21 Coal.

22 Q. Are you familiar with the application
23 in this case?

24 A. Yes, I am.

25 Q. Have you prepared a set of exhibits to

1 be submitted in conjunction with your testimony?

2 A. Yes, I have.

3 MR. ROBERTS: Mr. Examiner, I would
4 tender Mr. Hoppe as an expert in the field of
5 petroleum geology.

6 EXAMINER STOGNER: Mr. Hoppe is so
7 qualified.

8 Q. Mr. Hoppe, would you please describe
9 the purpose of the application.

10 A. The purpose of this application is to
11 seek an order from the Division to approve an
12 unorthodox gas well location, for the Blue Mesa
13 No. 1, Ballard-Pictured Cliffs pool, located at
14 2100 feet from the south line, 490 feet from the
15 east line, Section 11, Township 24 North, Range 7
16 West, Rio Arriba County, New Mexico.

17 Q. I want you to refer to what has been
18 marked as Applicant's Exhibit No. 1. Identify
19 the information on that exhibit that's pertinent
20 to this application.

21 A. Exhibit 1 is a Pictured Cliffs lease
22 ownership plat of the area surrounding the
23 southeast of Section 11. The location of the
24 Blue Mesa No. 1, 2100 feet from the south line,
25 490 feet from the east line, is indicated by the

1 blue dot in the northeast/southeast, Section 11.

2 The rose color is the federal lease,
3 owned and operated by members of the McElvain
4 family. The brown color's the federal lease
5 owned and operated by Bayless. The yellow color
6 is the federal lease owned and operated by
7 Merrion. The green color is the federal lease
8 owned and operated by Yates.

9 Q. Now turn to what's been marked as
10 Exhibit No. 2, and identify that exhibit.

11 A. Exhibit No. 2 is an isopach map with a
12 Pictured Cliffs sandstone. Data from this map
13 was obtained from wire line logs of surrounding
14 wells. This map illustrates the location of the
15 Blue Mesa No. 1, as indicated by a red dot. It
16 also indicates the location of the southeast
17 spacing unit, outlined in yellow, and the windows
18 for orthodox gas well locations, which are the
19 four boxes inside the spacing unit.

20 This map, based on wire line data,
21 illustrates a limited aerial extent of the
22 Pictured Cliffs sandstone bar, and illustrates
23 the necessity of an unorthodox location. The
24 standard location would be located in
25 nonreservoir rock. The offset just northwest of

1 the Blue Mesa No. 1 is the main geological
2 control point.

3 Also on the isopach is a trace of the
4 north/south cross-section, which is Exhibit 3.
5 The cross-section has closely spaced control and
6 goes from nonreservoir rock to reservoir, to
7 nonreservoir rock.

8 Q. You have identified the well to the
9 northwest of the proposed location as being the
10 control point. What is the name of that well and
11 who operates it?

12 A. That well is operated by Robert L.
13 Bayless. It is a Gallup completion. The name of
14 the well is the Dashko No. 1.

15 Q. And, I take it, it's not completed in
16 any other zone?

17 A. It was attempted completion, I believe,
18 in the Dakota, and plugged back to the Gallup.

19 Q. Are there other working interest owners
20 in that particular well?

21 A. Yes.

22 Q. Do you know who they are?

23 A. I believe it's Merrion Oil & Gas.

24 Q. Okay. Now turn to what's been marked
25 by you as Exhibit No. 3, and identify that

1 exhibit.

2 A. Exhibit No. 3 is a north/south
3 cross-section. The trace of the cross-section's
4 seen on the isopach map, Exhibit No. 2. The left
5 side of the cross-section is the southernmost
6 well located in nonreservoir rock.

7 The middle well, closest to offset of
8 the Blue Mesa location, has Pictured Cliffs pay,
9 which is outlined diagrammatically in yellow.

10 The northernmost well on the right, is
11 also a nonreservoir rock. Spontaneous potential
12 and resistivity curves of the wire line logs were
13 used to delineate the pay sandstone; thus, the
14 cross-section illustrates the narrow extent of
15 the bar.

16 Q. Now turn to what you've marked as
17 Exhibit No. 4, and identify that exhibit.

18 A. Exhibit No. 4 is a copy of the letter
19 sent to McElvain and the Estate of F. B. Miller,
20 notifying them of the hearing conducted today and
21 thus complying with the rules of the Commission
22 regarding notice of hearing.

23 These are the lessee of records of
24 operating rights in the Pictured Cliffs, in the
25 spacing units adjacent to the Blue Mesa spacing

1 unit. All four McElvains are listed at the same
2 address. The letter was sent certified, return
3 receipt requested. The second page of this
4 exhibit is a copy of the receipts.

5 Q. Have you had any subsequent
6 correspondence with the addressees of this
7 notification letter?

8 A. Yes. We have a letter signed by
9 McElvain, indicating no objection to the Blue
10 Mesa location.

11 Q. Why was notice given to these
12 individuals?

13 A. In accordance with the rules of the
14 Division, actual notice must be given to any
15 owner of an undeveloped lease which adjoins a
16 spacing unit on one or more of the two sides,
17 with the single corner closest to the well.

18 Q. So, in your opinion, have the notice
19 requirements of the Division been satisfied?

20 A. Yes.

21 Q. Would you briefly summarize why, in the
22 opinion of the Applicant, this application should
23 be granted?

24 A. This application should be granted
25 since standard spacing units are not located in

1 an area that are geologically preferable.

2 Q. In your opinion, will the granting of
3 this application be in the best interests of
4 conservation, and result in the prevention of
5 waste and the protection of correlative rights?

6 A. Yes.

7 Q. Were Exhibits No. 1 through 4 prepared
8 by you or at your direction or under your
9 supervision?

10 A. Yes.

11 MR. ROBERTS: We would move the
12 admission of Applicant's Exhibits No. 1 through
13 4.

14 EXAMINER STOGNER: Exhibits 1 through 4
15 will be admitted into evidence at this time.

16 MR. ROBERTS: I have no other questions
17 of witness.

18 EXAMINATION

19 BY EXAMINER STOGNER:

20 Q. In referring to your Exhibit No. 2,
21 what kind of a deposit are we looking at? Is
22 this a channel deposit? What creates these sand
23 stringers that you're showing?

24 A. This is marine strand line. It's
25 essentially a beach deposit at the ocean front.

1 Q. Exhibit No. 2 is somewhat limited in
2 scope, but you have shown some other structures
3 that obviously you have reviewed and taken a look
4 at the logs and verified.

5 Does this same extent, in particular
6 the one that you're trying to show today, does it
7 extend quite a bit further out from the scope of
8 this map?

9 A. No, it does not. The well located in
10 the northeast of 13, has limited sandstone
11 potential. That's the No. 1 well.

12 Q. Now, your other Pictured Cliffs well,
13 down in the southern part of this proration unit,
14 was that dry and abandoned or did it have any
15 production?

16 A. Which well are you referring to?

17 Q. The No. 1, or were they both Pictured
18 Cliffs completions or tests?

19 A. In the southeast quarter of the
20 section?

21 Q. South half of the southeast quarter,
22 yeah.

23 A. The well that's a diamond shape is a
24 Gallup well and the one to the left of that is a
25 Dakota well. They were not tested in the

1 Pictured Cliffs.

2 Q. But you've reviewed the logs which have
3 penetrated the Pictured Cliffs, is that correct?

4 A. That's correct, and one of those logs
5 is on the cross-section.

6 Q. Is six foot adequate for a commercial
7 well out here, or have you seen some that have
8 less than six foot of pay?

9 A. Yes, sir, it is adequate.

10 Q. What are some of the more thinner zones
11 that you've seen wells that have been commercial?

12 A. This map is a high grading, to some
13 degree, of the pay, and so I would say we need to
14 have somewhere between, a minimum of four feet on
15 this map.

16 Q. Are these under special pool rules or
17 general statewide rules, this pool?

18 A. I believe they're under normal state
19 rules.

20 Q. Do you know what the normal offset
21 would be required for a well in this proration
22 unit?

23 A. Offset from the edge of the spacing
24 unit?

25 Q. Yes?

1 A. I believe it's 790 and 1850, 790 from
2 the line there.

3 EXAMINER STOGNER: Are there any other
4 questions of this witness?

5 Mr. Roberts, do you have anything
6 further?

7 MR. ROBERTS: Nothing further.

8 EXAMINER STOGNER: Anybody else have
9 anything further in Case No. 10832?

10 In that case, Case No. 10832 will be
11 taken under advisement.

12 (And the proceedings concluded.)

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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 10832,
heard by me on 23 Sep. 1993.



Examiner
Oil Conservation Division


1 CERTIFICATE OF REPORTER

2
3 STATE OF NEW MEXICO)
4) ss.
5 COUNTY OF SANTA FE)

6 I, Carla Diane Rodriguez, Certified
7 Court Reporter and Notary Public, HEREBY CERTIFY
8 that the foregoing transcript of proceedings
9 before the Oil Conservation Division was reported
10 by me; that I caused my notes to be transcribed
11 under my personal supervision; and that the
12 foregoing is a true and accurate record of the
13 proceedings.

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

19 WITNESS MY HAND AND SEAL September 30,
20 1993.

21
22
23 
24 CARLA DIANE RODRIGUEZ, RPR
25 CCR No. 4

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date OCTOBER 7, 1993 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Janet Richardson	Gates Petroleum Corporation	ARTESIA, NM
Brent May	"	"
Chip Fly	"	"
Gene Davis	Santa Fe Energy	Midland, Tx.
BOB SEILER	" " "	" "
Ernest & Carol	Home Ranch Alan & Carol	Artesia
Harry Brooks	H. E. YATES Co.	Roswell
Charles D. Smith	Santa Fe Energy	Midland, TX.
Mickey Young	H. E. Yates Co.	Roswell, NM
William F. San	Gamphel, San, Tong & Seiden	Santa Fe
Theresa Sloan	Gates Petroleum	Artesia, NM
Shari Darr	Haven & Yates Co.	Roswell, NM
Randy Offerberger	SANTA FE Energy	Midland, TX
W. D. Kellahin	Kellahin & Kellahin	Santa Fe

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date OCTOBER 7, 1993 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Jim Dore	TEXACO	DENVER
Allen Spelman	Texaco	Denver
ERIC BAUER	MERIDIAN	FARMINGTON
Craig F. K.	MARATHON	MIDLAND, TX
Don R. McClung	Mitchell Energy Corp.	Midland, Tx.
Carl Richard	Mitchell	The Woodlands, Tx.
DAVE ALDERKS	MITCHELL ENERGY	MIDLAND TX
Mark Stephenson	" "	The Woodlands, Tx.
K. H. Mabey	Phillips	Odessa Tx
M. Jirclate	Phillips	Odessa, Tx
John Zet	Meridian	Farmington
PAUL BOTSINSKI	"	"
Tommy Rabath	Tansey Law Firm	"
Alan Emmendorfer	Grant & P	Farmington
James Bruce	Hinkle Law Firm	Santa Fe
Randall Cato	Enron Oil & GAS	Midland, Tx

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. 10833

APPLICATION OF GIANT EXPLORATION & PRODUCTION COMPANY

REPORTER'S TRANSCRIPT OF PROCEEDINGSEXAMINER HEARING

BEFORE: David R. Catanach, Hearing Examiner

October 7, 1993

Santa Fe, New Mexico

This matter came on for hearing before the
Oil Conservation Division on October 7, 1993, at
Morgan Hall, State Land Office Building, 310 Old Santa
Fe Trail, Santa Fe, New Mexico, before Deborah O'Bine,
RPR, Certified Court Reporter No. 63, for the State of
New Mexico.

ORIGINAL

I N D E X

October 7, 1993
 Examiner Hearing
 CASE NO. 10833

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GIANT'S WITNESSES:

ALAN P. EMMENDORFER

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CHARLES ORIN FOSTER

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A P P E A R A N C E S

FOR THE DIVISION: ROBERT G. STOVALL, ESQ.
General Counsel
Oil Conservation Commission
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

FOR THE APPLICANT: TANSEY, ROSEBROUGH, GERDING
& STROTHER, P.C.
P.O. Box 1020
Farmington, New Mexico 87499-1020
BY: TOMMY B. ROBERTS, ESQ.

FOR SPEEREX LIMITED CAMPBELL, CARR, BERGE &
PARTNERSHIP and SHERIDAN, P.A.
AMOCO PRODUCTION P.O. Box 2208
COMPANY: Santa Fe, New Mexico 87504
BY: WILLIAM F. CARR, ESQ.

FOR MERIDIAN OIL KELLAHIN AND KELLAHIN
INC.: 117 N. Guadalupe
Santa Fe, New Mexico
BY: W. THOMAS KELLAHIN, ESQ.

1 EXAMINER CATANACH: At this time we'll call
2 Case 10833.

3 MR. STOVALL: Application of Giant
4 Exploration & Production Company for an unorthodox
5 infill coal gas well location, San Juan County, New
6 Mexico.

7 EXAMINER CATANACH: Are there appearances
8 in this case?

9 MR. ROBERTS: Mr. Examiner, my name is
10 Tommy Roberts. I'm an attorney with the Tansey law
11 firm in Farmington, New Mexico, appearing on behalf of
12 the applicant. We have two witnesses to be sworn.

13 EXAMINER CATANACH: Additional
14 appearances?

15 MR. CARR: May it please the Examiner, my
16 name is William F. Carr of the Santa Fe firm,
17 Campbell, Carr, Berge & Sheridan. I'm entering an
18 appearance on behalf of Speerex Limited Partnership.
19 I may call one witness on behalf of Speerex.

20 I would also like to enter my appearance on
21 behalf of Amoco Production Company. I will have a
22 statement from Amoco.

23 EXAMINER CATANACH: Additional
24 appearances?

25 MR. KELLAHIN: Mr. Examiner, I'm Tom

1 Kellahin of the Santa Fe law firm of Kellahin and
2 Kellahin appearing on behalf of Meridian Oil Inc. I
3 have no witnesses.

4 EXAMINER CATANACH: Can we get all the
5 witnesses to stand and be sworn in at this time?

6 (Witnesses sworn.)

7 MR. ROBERTS: Mr. Examiner, I call Alan
8 Emmendorfer.

9 ALAN P. EMMENDORFER,
10 the witness herein, after having been first duly sworn
11 upon his oath, was examined and testified as follows:

12 EXAMINATION

13 BY MR. ROBERTS:

14 Q. Would you state your name and your place of
15 residence for the record, please.

16 A. My name is Alan P. Emmendorfer. I live in
17 Farmington, New Mexico.

18 Q. By whom are you employed?

19 A. Giant Exploration & Production Company.

20 Q. In what capacity?

21 A. Petroleum geologist.

22 Q. How long have you been employed in that
23 capacity?

24 A. For approximately three and a half years
25 with Giant.

1 Q. Can you briefly describe your job
2 responsibilities?

3 A. I am responsible for all petroleum geology
4 related activities for the Four Corners area, which
5 includes geological mapping, recommending locations
6 for wildcat and development wells.

7 Q. Have you had other development in the oil
8 and gas industry as a petroleum geologist?

9 A. Yes, I have. I've worked for five years
10 for El Paso Exploration Company in Farmington as a
11 development geologist for the San Juan Basin and for
12 five and a half years for Mesa Grande Resources in
13 Tulsa, Oklahoma, as a geologist for the Four Corners
14 region.

15 Q. Have you testified on any prior occasion
16 before the Oil Conservation Division?

17 A. Yes, I have.

18 Q. In what capacity?

19 A. As a petroleum geologist.

20 Q. Were your qualifications as an expert as a
21 petroleum geologist made a matter of record at that
22 time and accepted by the Division?

23 A. Yes, they were.

24 Q. Are you familiar with the application in
25 this case?

1 A. Yes, I am.

2 Q. Have you prepared exhibits to be submitted
3 today in conjunction with your testimony?

4 A. Yes, I have.

5 MR. ROBERTS: Mr. Examiner, I would tender
6 Mr. Emmendorfer as an expert in the field of petroleum
7 geology.

8 EXAMINER CATANACH: Mr. Emmendorfer is so
9 qualified Robert Roberts.

10 Q. (BY MR. ROBERTS) Mr. Emmendorfer would you
11 briefly describe the purpose of this application?

12 A. Giant Exploration & Production Company is
13 seeking the authority for an infill coal gas location
14 within the Basin-Fruitland Coal formation. The well
15 in question is located 1850 feet from the south line,
16 790 feet from the east line of Section 29, Township 25
17 North, Range 12 West, San Juan County, New Mexico.

18 With this application, we are seeking an
19 exception to the requirements of Rule No. 4 of the
20 Special Rules and Regulations of the Basin-Fruitland
21 Coal Pool as outlined in Division Order No. R-8768.

22 In addition, this well would be considered
23 an unorthodox gas well location, and we're seeking
24 approval for this location.

25 Q. I'd like for you to refer to what you have

1 marked as Applicant's Exhibit No. 1. Identify that
2 exhibit and explain its relevance to this
3 application.

4 A. Exhibit No. 1 is a location plat for the
5 Frank Foster No. 2 Well. It contains two Sections, 29
6 and 32, of Township 25 North, 12 West. In it, in
7 Section 32, the proposed location of the Frank Foster
8 No. 2 was originally staked at a legal location of 790
9 from the north, 790 from the east of Section 32 and to
10 be dedicated in an east half coal well location.

11 In actuality, it was found out later that
12 the Frank Foster No. 2 was actually drilled in Section
13 29, specifically at 1850 feet from the south line, 790
14 feet from the east line in the southeast corner of
15 Section 29.

16 Additionally, there is another coal well
17 drilled at 790 from the north, 790 from the east,
18 which represents a legal location for an east half
19 dedicated coal well. That well is known as the Bisti
20 Coal 29 #1.

21 Q. Who operates the Bisti Coal 29 #1 well
22 located in the northeast quarter of Section 29?

23 A. Giant Exploration & Production Company.

24 Q. Is there not also a Fruitland coal well
25 located in the southwest quarter of Section 29 which

1 is not depicted on Exhibit No. 1?

2 A. Yes, there is. Giant operates the Bisti
3 Coal 29 #2 located at a legal location in the
4 southwest quarter of Section 29.

5 Q. What is the current status of that well?

6 A. Of the one in 29?

7 Q. In the southwest quarter of Section 29?

8 A. It is currently producing into the
9 pipeline, I believe.

10 Q. Mr. Emmendorfer, how did the Frank Foster
11 No. 2 well come to be located in the southeast quarter
12 of Section 29?

13 A. Originally, the Frank Foster No. 2 was
14 staked by a surveying company in what was at the time
15 thought to be 790 from the north, 790 from the east of
16 Section 32. The well was -- the actual surveyor's
17 location plat stated this, and it was incorporated
18 within our APD filed with the BLM. Approval was then
19 granted to drill at that location.

20 The well was surveyed initially in June of
21 1990, and it was not until the well -- then the well
22 was drilled in September of 1992. It wasn't until the
23 latter part of January of 1993 that anyone noticed
24 that the well was not where it was supposed to be. In
25 particular, a surveyor, an archeologist, and

1 representatives for Speerex were conducting a
2 right-of-way survey to connect two of their wells
3 located in Section 33 to bring their pipeline up and
4 connect it to our gathering system located at Frank
5 Foster No. 2.

6 At that time it was noticed by comparison
7 on the maps that perhaps the well wasn't located in
8 Section 32, and the surveyor that did the original
9 staking did another survey on February 1 and noticed
10 that it was located in southeast quarter of Section
11 29. He then called me and told me that there was a
12 problem with the location of the well.

13 We had another surveying company go out to
14 verify the actual location of the Frank Foster No. 2
15 and found it to be at its present location.

16 So it was drilled to where it was staked,
17 but the surveyor was wrong in where he staked the
18 well.

19 Q. What was the status of the Frank Foster No.
20 2 well when the survey error was discovered and
21 communicated to you?

22 A. The Frank Foster No. 2 had already been
23 drilled in September of '92, and in November we had
24 frac'd the well and were in the process of cleaning up
25 the wellbore and flowing the well, trying to get it to

1 produce, which is standard procedure for us. We put a
2 compressor on the well and get the well cleaned up,
3 test it to be able to see if it's of commercial
4 production capacity before we build our pipeline to
5 the well.

6 We were in the process of blowing the well
7 with the aid of a compressor. The well was shut in
8 for the weekend, and after we found out that the well
9 was in the wrong location, we then took the compressor
10 and moved it to another site, have shut the well in
11 ever since.

12 Q. So the current status of the well is that
13 is it shut in waiting on the completion operations to
14 be authorized?

15 A. Yes.

16 Q. When you learned of the survey error, and
17 you testified that was in late January or early
18 February, did you notify anybody of the problem at
19 that time?

20 A. Yes. After we had an independent survey
21 done to verify the location of the well, Giant then
22 called representatives at Speerex and told them of the
23 problem, which they were already aware of because they
24 are the ones that pointed it out to us. So, yes, they
25 were notified at that time.

1 Q. How much money has Giant spent in drilling
2 and completing the Frank Foster No. 2 well?

3 A. Approximately \$62,000 to date.

4 Q. I direct your attention to your Exhibit No.
5 1 and particularly the Bisti Coal 29 #1, which is
6 located in the northeast quarter of Section 29. When
7 was the drilling of the Bisti Coal 29 #1 well
8 commenced?

9 A. It was spudded in October of 1992.

10 Q. When was it completed?

11 A. In December of '92 is when we did our frac
12 job on the well.

13 Q. What is its current status?

14 A. It's currently producing into the pipeline
15 and selling gas.

16 Q. Is there sufficient production history
17 available from this well to enable you to calculate
18 reserves or drainage radiuses?

19 A. Not at this time. We've only got a couple
20 months' production, and that's not enough to get a
21 good decline curve analysis of the well.

22 Q. For purposes of summary and hopefully to
23 clarify the record here, I'd like for you to summarize
24 sequentially the activities that Giant has conducted
25 on the Bisti Coal 29 #1 well and the Frank Foster No.

1 2 well.

2 A. Okay. Frank Foster No. 2 well was
3 originally staked in November -- excuse me -- in June
4 of 1990. It was drilled in September of 1992 and
5 completed in November of -- frac'd -- the completion
6 attempt was initiated in November of 1992.

7 The Bisti Coal 29 #1 well was drilled in
8 October of 1992. Completion was initiated in December
9 of 1992.

10 At the end of January of 1993 was when we
11 were made aware of the error in the placement of the
12 Frank Foster No. 2.

13 Q. So it's accurate to say that the Bisti Coal
14 29 #1 well was drilled and completed prior to the
15 discovery of the survey error?

16 A. Yes, it was.

17 Q. Are you familiar with the ownership of the
18 leasehold operating rights within the east half of
19 Section 29?

20 A. Yes, I am.

21 Q. Does Giant have leasehold ownership
22 interest in the northeast quarter of Section 29?

23 A. Yes, we do.

24 Q. Does it have leasehold ownership interest
25 in the southeast quarter of Section 29?

1 A. No, we do not.

2 Q. Is there an operating agreement in place
3 applicable to operations within the east half of
4 Section 29?

5 A. Yes, there is.

6 Q. Who are the parties to that operating
7 agreement?

8 A. Giant and Speerex.

9 Q. And who is designated as the operator under
10 the terms that have agreement?

11 A. Giant Exploration & Production Company.

12 Q. To your knowledge, is there any restriction
13 on subsequent operations in the contract area?

14 A. No, not to my knowledge.

15 Q. Based on these factual circumstances, you
16 have asked for authority to drill the Frank Foster No.
17 2 as the second well within an existing spacing unit,
18 the second well in the east half of Section 29. Are
19 there other options that were available to you other
20 than seeking authority for an infill well?

21 A. Yes. We could have spaced it on 160 acres
22 as an unorthodox proration unit, but we did not think
23 that that was viable. We could attempt to complete it
24 at a different zone, but we don't believe that any
25 other zones are prospective within the well. And the

1 other option was to plug the well and take an economic
2 loss on the well. The other one, why we're here
3 today, is to try to get permission for an infill drill
4 location.

5 Q. Did the Frank Foster No. 2 well penetrate
6 any other zone that's capable of production in that
7 general area? Did it penetrate the Pictured Cliffs
8 formation?

9 A. Yes. It TD'd within the basal Pictured
10 Cliffs formation, but the Pictured Cliffs is
11 water-bearing in this portion of the basin, and the
12 nearest production from the Pictured Cliffs is
13 approximately six miles to the north.

14 Q. Why, in your opinion, was it not feasible
15 to seek an exception to the Special Rules for the pool
16 and ask for 160-acre spacing for this particular half
17 section?

18 A. I guess one of the main reasons would be
19 that Giant does not have any leasehold in the
20 southeast of Section 29. The other thing would be
21 that it would --

22 Q. Would it also not result in a downspacing?
23 We've got existing 320-acre spacing, and would it not
24 also result in a downspacing to 160 acres?

25 A. Yes, it would.

1 Q. What do the Special Rules and Regulations
2 for the Basin-Fruitland Coal Gas Pool provide in terms
3 of standard well locations?

4 A. It provides for the standard 320-acre
5 spacing, a well drilled in the northeast corner of the
6 section or a well drilled in the southwest corner of
7 the section.

8 Q. So why is the actual location for the Frank
9 Foster No. 2 well nonstandard?

10 A. Because it's in the southeast quarter, and
11 there are no rules governing a location within the
12 southeast quarter of a section.

13 Q. Mr. Emmendorfer, let's talk about the
14 geologic justification for the production of two wells
15 from a single spacing unit in the Fruitland Coal in
16 this area. Refer to what you have marked as
17 Applicant's Exhibit No. 2 and identify that exhibit.

18 A. Exhibit No. 2 is identified as the
19 Fruitland Formation Coal Depositional Model.

20 Figure 1 is a much published series of
21 cross-sections depicting the depositional nature of
22 the relationship between the Pictured Cliff sandstone
23 and the Fruitland formation. Although when you drill
24 a well, the Fruitland formation overlies the Pictured
25 Cliff formation, when these units were deposited, they

1 were being deposited at the same time in a horizontal
2 nature. The Pictured Cliff sandstone was deposited as
3 a beach sandstone with the ocean being to the
4 northeast, and to the southwest was land, and
5 immediately behind the Pictured Cliff shoreline were
6 swamps that eventually led to the formation of coal in
7 the Fruitland formation.

8 This model, this generalized depositional
9 model for the Basin was first published by Mr.
10 Fassett, and in it he shows that as the Pictured Cliff
11 shoreline was deposited landward or to the southwest,
12 swamp occurred forming coal.

13 As the Pictured Cliff sea regressed to the
14 northeast through geological time, there were times
15 when the shoreline stabilized for long periods of
16 time; so there was large -- a large amount of sand
17 piled up in one location. Behind that were large coal
18 swamps.

19 And it also shows that as the sandstone
20 deposited at the beach with the ocean regressing to
21 the northeast, its stratigraphic rises within the
22 Pictured Cliff formation occurred. This means that in
23 one portion of the Basin, the sandstone was deposited
24 at one level, and to the northeast through the
25 stratigraphic rises, that it was actually deposited at

1 a higher stratigraphic level.

2 Q. Mr. Emmendorfer, why, in your opinion, is
3 the Chenier Plain model a valid theoretical model to
4 be applied to the Frank Foster No. 2 area?

5 A. Although the basic depositional model for
6 the San Juan Basin-Fruitland formation is shown in
7 Figure 1, there are instances where -- or there are
8 variations within this model. One of the variations,
9 and I've listed them below the generalized
10 depositional model, is that there were in some areas
11 of the Basin, there were piles of sand in beach dunes
12 or bars and preserved levies of abandoned channels
13 that were higher than the coal swamp and did not
14 preserve coal or were not deposited at these
15 locations. And in any particular area of the Basin,
16 there are different models as to how the Pictured
17 Cliff shoreline and the Fruitland Coal swamp was
18 deposited.

19 Figure 2 is a model of the Chenier Plain of
20 southwest Louisiana. And I believe that my particular
21 area of the Frank Foster 2, this model fits the
22 deposition of the coals at that time.

23 The top diagram is a plan view. Showing in
24 the stippled pattern is the beach deposits that are
25 being deposited in an oceanward or southwesterly

1 direction. Some heavy dark lines are known as beach
2 ridges, and these stick up higher than other portions
3 of that plain.

4 The cross-section below the plan view shows
5 these beach ridges, and they're labeled as B, C, E and
6 G on the cross-section. Within the Fruitland
7 formation, there typically is more than one coal
8 present. The basal coal and the bottom coal was
9 formed directly behind the shoreline, and it's the
10 first coal that was deposited.

11 As the sea retreated, another coal was
12 deposited behind the shoreline in one area to the
13 northeast, but if you go to the southwest, that
14 becomes a second or subsequent coal being deposited.
15 So you can have stacking of coals that are separate
16 from one another.

17 Q. Now turn to what you've marked as Exhibit
18 No. 3, Giant Exploration & Production Company's
19 Exhibit No. 3, and identify that exhibit.

20 A. Exhibit No. 3 is a cross-section of the two
21 wells within the east half of Section 29, 25 North, 12
22 West. Specifically, on the right-hand side is Bisti
23 Coal 29 #1, and on the left the Frank Foster Well No.
24 2.

25 What I've done is correlated the wells and

1 hung them on the datum of the top of the Fruitland
2 formation. Then I've correlated particular events
3 from the two wells based on this correlation.

4 I'd like to first, Mr. Examiner, draw your
5 attention to the Top of the Pictured Cliff formation.
6 What I'm depicting here is that in the Frank Foster
7 No. 2 well, the Pictured Cliff sandstone occurs at a
8 stratigraphic interval lower than the well, the Bisti
9 Coal 29 #1 well. In effect, we had the stratigraphic
10 rise that occurs to the northeast throughout the San
11 Juan Basin.

12 What this would serve to do is during the
13 deposition of the Pictured Cliff sandstone at the
14 beach is within the 29 No. 1 well, the coal swamp was
15 forming behind it, which was responsible for the coal,
16 the lowest coal which I've labeled as the Lower Coal
17 highlighted in orange within the Frank Foster No. 2.

18 As the shoreline moved farther to the
19 northeast, another coal swamp developed behind the
20 shoreline, and it deposited the Middle Coal, which is
21 labeled or highlighted in blue. This makes it the
22 basal coal within the 29 No. 1 well and thins to the
23 south to a very thin coal, the Frank Foster No. 2.

24 And, again, at a later geological time, the
25 Upper Coal, which is highlighted in green, was

1 deposited.

2 Q. Mr. Emmendorfer, would you point out the
3 zones or the intervals of perforations in each of
4 these wellbores?

5 A. Yes. In the Bisti Coal 29 #1, the well was
6 perforated in the Upper Coal, which is highlighted in
7 green. These perforations are marked on the
8 cross-section as little circles, and this occurs at an
9 approximate elevation of 1100 feet or a depth of 1100
10 feet within the well.

11 The Frank Foster No. 2 well, the Lower Coal
12 highlighted in yellow, was completed, and it is shown
13 by the perforations marked by the little circles that
14 are at an approximate depth of 1130 feet in the Frank
15 Foster No. 2.

16 Q. The cross-section indicates that the Upper
17 Coal is continuous across the area of the
18 cross-section. Why would you have not perforated the
19 Frank Foster No. 2 well in what you've identified as
20 the Upper Coal?

21 A. The Upper Coal, the Frank Foster No. 2,
22 although from the colored area looked to be thicker
23 than in the Bisti Coal 29 #1, it's actually a package
24 of three very thin coals that occur with shale
25 partings or shale beds in between. And we just feel

1 that there is not enough gas within those thin coal
2 streaks to warrant putting perforations in that Upper
3 Coal.

4 Q. The cross-section also indicates that the
5 Middle Coal can be found in the wellbore of the Bisti
6 Coal 29 #1 well. Why was that well not perforated at
7 the interval where the Middle Coal is identified?

8 A. What we have found in drilling some
9 approximately 90 coal wells in the surrounding area is
10 that if that lower, the basal coal is sitting directly
11 on top of a wet Pictured Cliff sandstone section like
12 it is in the 29 No. 1, that by completing in that
13 zone, fracs will extend down into the Pictured Cliff
14 formation and create an avenue for high water volumes
15 to be produced with gas. So, typically, we have
16 avoided that Lower Coal in those circumstances to aid
17 in the production of the other zones.

18 In the Frank Foster No. 2, we perforated it
19 to the Lower Coal because there was, we felt,
20 sufficient separation from that coal from the lower
21 Pictured Cliff sandstone, which is water in it We're
22 hoping that water-free or minimal water production
23 will occur out of that coal because of that.

24 Q. Is it your opinion then that there are
25 separate and distinct coals found in the wellbores of

1 each of these wells?

2 A. Yes, it is.

3 Q. If someone were looking at your geology
4 with a critical eye, would it be possible that they
5 might argue that what we have here is a matter of
6 correlation, and that it might be possible to argue
7 that the Lower Coal, what you've marked as the Lower
8 Coal and what you've marked as the Middle Coal are one
9 and the same coal?

10 A. Yes. There are different ways of
11 correlating these two wells. One would be to
12 correlate the Top of the Pictured Cliffs as flat in
13 there, and that would then appear to make the Middle
14 Coal of the Bisti Coal 29 #1 the same as the Lower
15 Coal, the Frank Foster No. 2. To really do that, you
16 would need to have benefit of a bed that occurs about
17 another 100 feet below the total depth of both of
18 these wells called the Huerfanito bentonite.

19 And that would aid in determining what the
20 Pictured Cliff sandstone, how it was deposited and in
21 what kind of stratigraphic rises.

22 I've done that over the regional area of
23 where our coal wells are located and have located
24 these benches. Unfortunately, in and around the
25 Section 29, there are very few wells that go deep

1 enough to have the Huerfanito bentonite available for
2 correlation purposes, and so I've used the Top of the
3 Fruitland to aid in my correlations.

4 Q. On Exhibit 3 there is shut-in casing
5 pressure data for each well. Does that shut-in casing
6 pressure information in any way support your opinion
7 that there are distinct and separate coals found in
8 the wellbores of these two wells?

9 A. Yes, it does. The Bisti Coal 29 No. 1, the
10 shut-in casing pressure is 90 psi, and it's from the
11 Upper Coal highlighted in green.

12 The Lower Coal in the Frank Foster No. 2
13 has a shut-in casing pressure of 230 psi. Even though
14 I don't think anybody would argue that those two coals
15 are actually-- are definitely separate coals, because
16 of the differences in shut-in casing pressures, it
17 tells us that these distinct coals are not in vertical
18 communication with each other from natural fractures.

19 Q. I'd like to have you turn to what we have
20 marked as Exhibit No. 4. Would you identify that
21 exhibit, please.

22 A. Exhibit No. 4 is subsurface mapping of the
23 Fruitland Coal formation based on my correlation of
24 the cross-section of Exhibit No. 3. It contains one
25 structure map to three isopach maps.

1 Figure 1 is a structure map at the Top of
2 the Fruitland formation, showing that the formation
3 dips at approximately 100 feet per mile on average to
4 the south.

5 Figure 2 is an isopach of the Lower
6 Fruitland Coal, which is highlighted in orange on the
7 cross-section. The cross-section, again, extends from
8 Bisti Coal 29 #1, highlighted by the red gas well
9 symbol, to the Frank Foster No. 2, highlighted by the
10 orange location symbol.

11 The Lower Coal, as I've stated previously,
12 I believe was deposited in a Chenier Plain
13 environment. What this has done is created a band of
14 northwest-southeast trending coals. There is 17 feet
15 mapped for the Frank Foster No. 2. The Bisti Coal 29
16 #1 has 0 feet of the Lower Coal, which is consistent
17 with my cross-section.

18 To the northeast of the Bisti Coal 29 #1,
19 this is all either Pictured Cliff sandstone beach or
20 the Pictured Cliff ocean at the time of the deposition
21 of this Lower Coal.

22 Behind the Frank Foster No. 2, there's a
23 series of wells, Bisti Coal 29 #2, and the Willow
24 Flats No. 1 in Section 33 that has 0 feet at this
25 Lower Coal.

1 Behind that is the Bisti Coal 30 #1 -- 31
2 No. 1, excuse me, the Frank Foster No. 1, and in the
3 Andy Williams No. 1, there is another trend of this
4 Lower Coal.

5 So what this shows is that the Chenier
6 Plain environment occurred at the deposition of this
7 Lower Fruitland Coal and that a beach ridge was
8 located at the spot where the Bisti Coal 29 #2 well
9 and the Willow Flats No. 1 well was drilled,
10 separating these lower coals.

11 Figure 3 is an isopach map of the Middle
12 Fruitland Coal, which is highlighted in blue on the
13 cross-section. And I'd like to mention again that the
14 subsequent higher coals, as the coal swamp was forming
15 farther away from the shoreline, that there's a lot of
16 irregularities in these swamps, and their depositional
17 patterns are usually not as well defined. But it
18 shows that the Bisti Coal 29 #1 had 16 feet of this
19 Middle Coal, and the Frank Foster No. 2 well had two
20 feet.

21 Figure 4 is the third isopach. It is of
22 the Upper Fruitland Coal as outlined in green in the
23 cross-section of Exhibit No. 3. And this shows,
24 again, the presence of a coal with varying thicknesses
25 existing, at 15 feet thick of the Bisti Coal 29 #1 and

1 at 8 feet of the Frank Foster No. 2. This coal ranges
2 in thickness of in excess of 21 feet down to 2 feet in
3 thickness.

4 Q. You testified that you found 17 feet of the
5 Lower Coal in the Frank Foster No. 2 well, and that
6 it's also your opinion that there is a nonexistence of
7 the Lower Coal, what you've identified as a Lower Coal
8 in the Bisti Coal 29 #1 well?

9 A. Yes.

10 Q. However, the isopach map of the Lower
11 Fruitland Coal, which is Figure 2 in Exhibit 4, would
12 indicate that the Lower Coal exists with some
13 considerable thickness in the northeast quarter?

14 A. Yes.

15 Q. Of section 29?

16 A. Yes, that is correct.

17 Q. Is it your opinion that a second well must
18 be drilled in the southeast quarter of Section 29 in
19 order to recover the reserves associated with this
20 Lower Coal?

21 A. Yes, it is.

22 Q. If such a well is not drilled, will these
23 reserves be lost?

24 A. They would not be produced by the working
25 interest owners in Section 29, east half of 29, yes.

1 Q. Does the information and data you have
2 studied thus far indicate to you that 160-acre spacing
3 is appropriate for this area of your study?

4 A. Sorry. Could you repeat that?

5 Q. Does this information and data you have
6 studied, does it support a position that 160-acre
7 spacing is appropriate for this area as opposed to
8 infill drilling?

9 A. No, it is not, because if you were to drill
10 the Frank Foster No. 2 at a 160-acre location, it
11 would probably drain reserves from the northeast of
12 Section 29, and the working interest owners in the
13 northeast of 29 would not benefit from those reserves.

14 Q. So, in your opinion, what would the impact
15 be of a denial of this application on the ownership
16 rights of those parties in the east half of Section
17 29?

18 A. They would not benefit from the sale of gas
19 from that coal zone.

20 Q. Do you have an opinion as to the impact of
21 the granting of this application on the correlative
22 rights of offsetting interest owners? And by
23 offsetting, I would define that as offsetting the east
24 half of Section 28?

25 A. If the drainage radius of the Frank Foster

1 No. 2 was larger that it would extend into another
2 section, then yes, the correlative rights of the other
3 working interest owners would be violated. However,
4 Giant has a well staked in the southwest of Section
5 28, the Bisti Coal 28 No. 2, as shown by a circle or a
6 location. And so gas from that Lower Coal zone will
7 be recovered from the southwest of Section 28 by that
8 well.

9 Q. In your opinion, will the granting of this
10 application be in the interest of conservation and
11 result in the prevention of waste and the protection
12 of correlative rights?

13 A. Yes.

14 Q. Were Exhibits 1 through 4 prepared by you
15 or at your direction or under your supervision?

16 A. Yes, they were.

17 MR. ROBERTS: Mr. Examiner, I'd move the
18 admission of Exhibits 1 through 4.

19 EXAMINER CATANACH: Exhibits 1 through 4
20 will be admitted as evidence.

21 MR. STOVALL: Mr. Examiner, before we turn
22 it over to cross-examination, it seems to me we have
23 kind of a unique situation here. First off, I'd like
24 to have counsel for each of the other parties express
25 what the position -- because as I understand it from

1 some informal discussions, the Speerex interest and
2 the Meridian interests are different in how they
3 approach this application; is that correct, their
4 concerns?

5 MR. CARR: I think Speerex has additional
6 concerns to those of Meridian. I think both companies
7 are in agreement -- Mr. Kellahin can speak to this --
8 that infill drilling ought to be approved only if
9 supported by the technical data required to justify an
10 infill well.

11 Speerex is also concerned as the owner of
12 the tract on which the well is located and also
13 believing that there is no agreement in place that
14 combines those tracts, that the development of this
15 acreage go forward in such a way that its rights as
16 the owner of the Fruitland Coal rights in the
17 southeast of 29 not be violated. And that is that it
18 be afforded all data and opportunity to join if it
19 should decide to do that, and, furthermore, that it
20 not -- if it elects not to go forward, be responsible
21 for any of the costs associated with plugging and
22 abandoning this well.

23 MR. STOVALL: Mr. Kellahin?

24 MR. KELLAHIN: Mr. Stovall, if I'm correct
25 in reading the prehearing statement, there is to be no

1 engineering presentation by Giant in this case.
2 Meridian's concern is the granting of this application
3 establishes a precedent for how you go about obtaining
4 infill drilling in the coal.

5 This examiner and most of us present spent
6 days developing a protocol and a methodology for
7 justifying infill drilling. And we had the Coal Bed
8 Methane Committee, and there was an extensive
9 presentation before this examiner back in February of
10 '91. And our concern is that methodology for which
11 we all spent considerable time and effort has not been
12 undertaken by this applicant, and, therefore, there is
13 no appropriate basis for granting an infill
14 application even under these circumstances.

15 MR. STOVALL: Before we start
16 cross-examination on this, because I think you could
17 spend a lot of time asking Mr. Emmendorfer a lot of
18 questions, and I'm not sure they would help us in a
19 decision in this case, I think Mr. Speer's concerns, I
20 think we need to address those in terms of the
21 relationship within the context of the spacing unit
22 and the sharing of costs and is -- how he gets his
23 share of the gas that's in place in that spacing
24 unit. That certainly is unique to this situation
25 because he's got a well that he didn't know he had

1 until after he found it, so to speak.

2 I think my inclination would be to advise
3 the Examiner and the Division that if they were to
4 permit any production from this well, it would not be
5 on the basis that it is a justified infill well from a
6 technology standpoint, but rather it would be on the
7 basis that there was a mistake made, and there is some
8 economic waste, as has been discussed, to be
9 prevented, and is there a way to prevent that economic
10 waste without establishing a precedent for the area.

11 And I certainly am inclined to agree that
12 Giant -- am I correct, Mr. Roberts, Giant didn't
13 approach this idea that they were going to start an
14 infill program here, and this was going to be their
15 test well for an infill program; is that right.

16 MR. ROBERTS: That's correct.

17 MR. STOVALL: That was not their intent
18 when they drilled the well?

19 MR. ROBERTS: Giant is trying to make the
20 best out of a bad situation and to prevent economic
21 waste but feels that it has some geologic
22 justification for the drilling and the production of
23 the second well in that spacing unit.

24 MR. STOVALL: Not for the drilling but for
25 the production?

1 MR. ROBERTS: For the production.

2 MR. STOVALL: What I'm going to suggest is
3 in the interest of brevity, I think we can say that
4 it's probably appropriate to enter a finding that says
5 this ain't how you go about infill drilling. Can we
6 focus the concerns on how -- can we recover some costs
7 from this well or narrow it to this specific area, or
8 do you feel that you need to go into broader issues,
9 Tom, particularly?

10 MR. KELLAHIN: Well, perhaps we can clarify
11 it in the discussion. Not only do I believe that
12 Giant does not have the engineering data to justify
13 infill drilling, the geologic basis for Mr.
14 Emmendorfer's position is, I think, flawed based upon
15 the study work done by the Methane Coal Gas
16 Committee.

17 And if you're going to grant the exception
18 based upon the geologic difference between the Basal
19 Coal and the Upper Coal, I think that's an error. If
20 you want to grant extraordinary relief to salvage a
21 mistake and make the best due, that's up to you.

22 MR. STOVALL: Tom and Bill and Tommy, could
23 we take about two minutes off the record? I think we
24 can expedite this thing. I've got an idea that I want
25 to run by you, and I want to do it off the record.

1 (A discussion was held off the record.)

2 EXAMINER CATANACH: We'll go into
3 cross-examination.

4 MR. STOVALL: Mr. Examiner, before cross
5 starts, I'm going to recommend, based upon our
6 discussion and based upon the nature of this case,
7 really the only issue here is whether a case has been
8 made to justify infill drilling, and would recommend
9 that we limit cross-examination to the issue of infill
10 drilling and the technical justification for that
11 infill drilling.

12 EXAMINER CATANACH: I would agree with
13 that, Mr. Stovall. Can we limit it to that,
14 gentlemen, to that question?

15 MR. CARR: We'll try to.

16 EXAMINER CATANACH: Okay. Mr. Carr?

17 EXAMINATION

18 BY MR. CARR:

19 Q. Mr. Emmendorfer, if I'm correct, there have
20 been three Fruitland Coal wells drilled in Section 29
21 by Giant; is that correct?

22 A. Yes.

23 Q. And two of those wells are at standard
24 locations, and then the third well, the Frank Foster
25 No. 2, was drilled actually as a result of a mistake?

1 A. Yes, that's correct.

2 Q. As to the Frank Foster No. 2, after you
3 drill the well, I believe you testified you frac'd the
4 well?

5 A. Yes.

6 Q. And you tested it?

7 A. We were in the process of testing it.

8 Q. How long were you actually working on that
9 well to determine whether or not it could be a
10 commercial producer?

11 A. Well, from November through end of January.

12 Q. Were you able to obtain sufficient
13 information to evaluate that well to in fact determine
14 if it was necessary to produce the reserves under this
15 section?

16 A. I'm sorry. Could you repeat that?

17 Q. Were you able to formulate a position or
18 based on your data on the well, do you know whether or
19 not the Frank Foster well is necessary to produce the
20 reserves under this section?

21 A. From geological correlations, I think it's
22 necessary to produce the gas within the east half of
23 29 located in that Basal Coal.

24 Q. There is a well at a standard location in
25 the southwest of 29; is that not right?

1 A. Correct.

2 Q. Do you have a log on that well?

3 A. Yes, we do.

4 Q. Is that well, also does it have the lower
5 sand presence in that well?

6 A. No, it does not.

7 Q. So the only place the lower sand is present
8 is at the Foster No. 2?

9 A. Within the wellbores itself, yes.

10 Q. You have, I think Mr. Roberts said if
11 someone was looking at your geology with a critical
12 eye, they might conclude that you could break these
13 sands out in a different fashion. My question is, are
14 you aware of any distinction between different sand
15 bodies that are made in the rules governing the
16 Fruitland Coal field? The rules actually apply to the
17 Fruitland Coal; they don't apply to one sand body as
18 opposed to another?

19 MR. STOVALL: Mr. Carr, I think you're
20 using the term "sand body," and that's probably
21 confusing the geologist since this is a coal string.

22 Q. (BY MR. CARR) I'm sorry, coal string or
23 coal seam. You've broken this into three coal seams?

24 A. Yes.

25 Q. The rules apply to all of them together.

1 They don't make a distinction between various coal
2 seams; isn't that correct?

3 A. I believe that's correct.

4 Q. When you completed the Bisti 29 #1, how
5 long did you have to produce that well before you were
6 actually able to determine or evaluate the well,
7 determine what its real potential was?

8 A. I don't recall. What we've done is, after
9 we frac'd the well, we usually clean it up for a time,
10 and then we shut it in, waiting on availability of
11 compressors. Then we use that to help blow the well
12 and try to get it capable of production. I don't have
13 those records in front of me.

14 Q. If you were to try and make the same kind
15 of determination concerning the Frank Foster No. 2, do
16 you need additional time on the well, additional
17 production?

18 A. From now you mean?

19 Q. Yes.

20 A. Yes, I think we would.

21 Q. You stopped working on the well in March;
22 is that correct?

23 A. No. We stopped right about the end of
24 January when we were notified that the well was -- we
25 had shut it in for the weekend, and then the next week

1 we found out the well was in the wrong location. So
2 at that time we took the compressor off to use on
3 another well, and we shut it in permanently.

4 Q. You've done no testing since that date?

5 A. No, sir.

6 Q. You have not produced the well since that
7 date?

8 A. No, sir.

9 Q. Has Giant been able to make the
10 determination whether or not the existing wells -- and
11 I'm talking about the Bisti Coal 29 #1, and I believe
12 it's the No. 2 in the southwest quarter -- are those
13 commercial wells?

14 A. They're currently selling gas.

15 Q. Have you been able to reach any conclusion
16 as to whether or not either of them will ever pay out?

17 A. I'm not aware that that we've made that
18 decision yet.

19 Q. So you don't know?

20 A. I don't know.

21 Q. You're not intending to present any
22 engineering testimony in support of the application;
23 is that correct?

24 A. That's correct.

25 MR. CARR: I think, Mr. Catanach, I will

1 stop my cross at this point. I'd like to have an
2 opportunity to go through about six pages of notes
3 while Mr. Kellahin proceeds, and I might have an
4 additional question or two, but to honor the directive
5 of Mr. Stovall, I think I need to do that at this
6 point in time.

7 MR. STOVALL: It's the directive of the
8 examiner on my advice.

9 MR. CARR: The directive of Examiner
10 Catanach, your directive on Mr. Stovall's advice.

11 EXAMINER CATANACH: Okay, Mr. Kellahin.

12 EXAMINATION

13 BY MR. KELLAHIN:

14 Q. Mr. Emmendorfer, did you participate as a
15 technical expert with regards to any of the committee
16 work that was involved in the preparation of or
17 presentation of information to the Division for the
18 development of the current rules for the
19 Basin-Fruitland Coal Gas Pool?

20 A. No, I did not.

21 Q. With regard to this particular area of the
22 coal gas pool, do you know if you're in area 1, 2, or
23 3 under the criteria developed by the Coal Bed Methane
24 Committee when it made its presentation to this
25 examiner back in February, I believe it was, February

1 21st of 1991?

2 A. No, I do not.

3 Q. Are you familiar with the methodology used
4 by the Coal Bed Methane Committee when it made its
5 presentation concerning recommendations for spacing in
6 the coal gas pool?

7 A. No, I'm not.

8 Q. Let me show you this volume. Have you ever
9 seen this volume?

10 A. No, I have not.

11 MR. KELLAHIN: I've shown the witness, Mr.
12 Examiner, a copy of the presentation and exhibits for
13 the San Juan Basin Coal Bed Methane Basin study. It
14 was one of the exhibits presented to you as the
15 hearing examiner back on February 21, 1991, in Case
16 9420 and the reopening of Order R-8768.

17 Q. Was there any interference work done by
18 Giant or any of its technical people to compare the
19 effects of any of the existing coal gas wells, one to
20 the other, in this area?

21 A. Interference tests, no.

22 Q. No interference tests?

23 A. No.

24 Q. The production from the first well for
25 which we do have some production history, the one in

1 the northeast of 29, that's the one for which there is
2 some production history now?

3 A. Yes.

4 Q. How long has that well been producing?

5 A. Probably about three months.

6 Q. Do you know whether or not your technical
7 people have tried to generate any kind of isotherm
8 with regards to the productivity of that well?

9 A. I'm not aware of any.

10 Q. Does that well appear to have any kind of
11 inclining or declining pressure relationship in its
12 early performance?

13 A. I don't remember what the decline curve
14 looks like.

15 MR. KELLAHIN: No further questions, Mr.
16 Examiner.

17 EXAMINATION

18 BY MR. STOVALL:

19 Q. I guess, Mr. Emmendorfer, just looking at
20 this thing, you have no idea what the drainage of this
21 well is at that point or the producing ability for the
22 Frank Foster No. 2?

23 A. No, not yet.

24 Q. And your geologic interpretation, I'll
25 repeat this one more time, it actually is completed in

1 a different pool stringer than the -- what is it,
2 Bisti -- is it Bisti Coal; is that right?

3 A. Yes.

4 Q. 29-1 -- is, by your own admission, subject
5 to interpretation?

6 A. Not of the two -- of the wells that are
7 perforated. The blue coal, which is the Middle Coal,
8 and the orange coal, which is the Lower Coal, is
9 subject to different interpretations.

10 Q. Okay. So in fact that coal could be
11 interpreted as being continuous between the wells?

12 A. If somebody could correlate it a different
13 way, yes.

14 Q. And you didn't undertake any -- given the
15 circumstances of how this well got drilled, there was
16 no undertaking of any sort of study based upon
17 existing wells as to whether or not an infill well
18 should be drilled or whether infill drilling was
19 appropriate in this area? This was a response to an
20 error rather than a plan; is that correct?

21 A. That's correct.

22 Q. What about Section 32, are you going to
23 drill the Frank Foster 2-A or whatever?

24 A. I don't know what Giant's ultimate plans
25 for Section 32 are.

1 MR. STOVALL: I don't think I have any
2 other questions.

3 EXAMINER CATANACH: I just have one or two.

4 EXAMINATION

5 BY EXAMINER CATANACH:

6 Q. Do you have any estimates on the drainage
7 area the 29-1 well will have?

8 A. No, I don't have any idea.

9 Q. How about the well in the southwest
10 quarter, the 29-2, do you have any information on
11 that?

12 A. Not yet. We just have a couple months'
13 production data. It's not really enough to draw any
14 conclusions yet.

15 EXAMINER CATANACH: Mr. Carr, anything
16 further?

17 MR. CARR: I just want to be sure that I
18 asked this earlier.

19 FURTHER EXAMINATION

20 BY MR. CARR:

21 Q. It is your opinion, it is Giant's opinion
22 that they are the operator of all three wells in
23 Section 29; is that right?

24 A. I'm probably not the best one to answer
25 that. I'm not familiar with all the details of the

1 operating agreement. I would like to defer that to
2 the next witness.

3 MR. CARR: Okay. That's all. Thank you.

4 EXAMINER CATANACH: The witness may be
5 excused.

6 MR. ROBERTS: Mr. Examiner, call Charles
7 Foster.

8 CHARLES ORIN FOSTER,
9 the witness herein, after having been first duly sworn
10 upon his oath, was examined and testified as follows:

11 EXAMINATION

12 BY MR. ROBERTS:

13 Q. Would you state your name and your place of
14 residence for the record.

15 A. My name is Charles Orin Foster. I live in
16 Durango, Colorado.

17 Q. By whom are you employed?

18 A. I'm employed by Giant Exploration &
19 Production Company.

20 Q. In what capacity?

21 A. I'm land manager.

22 Q. How long have you been so employed?

23 A. I've been employed for ten years this
24 January in that position.

25 Q. Are you familiar with the application in

1 this case?

2 A. Yes, I am.

3 Q. Have you testified before the Oil
4 Conservation Division or Commission on any prior
5 occasion?

6 A. Yes, I have.

7 Q. In what capacity?

8 A. The same capacity.

9 Q. Landman?

10 A. As landman.

11 Q. Were your qualifications as an expert in
12 the field of petroleum land work accepted and made a
13 matter of record at that time?

14 A. Yes, they were.

15 MR. ROBERTS: I tender Mr. Foster as an
16 expert in the field of petroleum land work.

17 EXAMINER CATANACH: Mr. Stovall?

18 MR. STOVALL: I have no problems with that.

19 EXAMINER CATANACH: Mr. Foster is
20 qualified.

21 Q. (BY MR. ROBERTS) Mr. Foster, refer to what
22 you have marked as Applicant's Exhibit No. 5 and
23 identify that exhibit.

24 A. Exhibit No. 5 details the surrounding
25 acreage ownership around the Frank Foster No. 2 well.

1 The acreage in question that we're talking about here
2 is shaded in gray in the east half of Section 29 of
3 Township 25 North, Range 12 West.

4 Q. Would you just briefly summarize the
5 ownership of the surrounding lands, the type of
6 mineral ownership that we have there?

7 A. I'm sorry, I don't follow your question.
8 The type of mineral ownership is by oil and gas lease.

9 Q. The federal, state or fee?

10 A. I'm sorry, yes. Section 32 is State of New
11 Mexico minerals there. The balance of the lands
12 around or depicted on the plat there are federal
13 minerals with the west half of Section 30 and the west
14 half of Section 31 being unleased federal minerals.

15 Q. At the bottom of Exhibit No. 5, the listing
16 of lease by serial number, working interest owner, and
17 working interest percentage, is that a complete
18 summary of the working interest ownership of the
19 acreage surrounding the east half of Section 29?

20 A. Yes, it is, to the best of our knowledge.

21 Q. Let me have you turn to what you've marked
22 as Applicant's Exhibit No. 6 and would you identify
23 that exhibit, please.

24 A. The Exhibit No. 6 are copies of letters
25 sent out for notice purposes of this hearing. They

1 were sent out to the surrounding owners out there, and
2 they were also sent certified, return receipt
3 requested. One of the letters actually contains a
4 waiver of any objection, also. That's the first one
5 on top. The rest are all copied below with their
6 return receipt cards indicated on there.

7 Q. The letter that constitutes the top two
8 pages of this exhibit is dated October 1st, and it's
9 addressed to several individuals or a single
10 individual apparently representing several companies.
11 What was the basis for your notification of these
12 individuals and these companies?

13 A. These companies all needed to be notified
14 pursuant to the rules. However, we missed one. And
15 this is a family-owned oil company with each of the
16 individual family members having therein small
17 corporations.

18 The fellow that it's addressed to, Paul
19 Urban, is the land manager for all of the Beren family
20 companies in Denver, and he acted as their agent on
21 the waiver of the objection on this.

22 Q. Were all of the remaining letters of
23 notification mailed within the time periods prescribed
24 by the rules and regulations adopted by this Oil
25 Conservation Division?

1 A. Yes, they were.

2 Q. Are you familiar with the Special Rules
3 applicable to the Basin-Fruitland Coal Gas Pool with
4 respect to notification?

5 A. Yes, I am.

6 Q. In your opinion, have those rules, as well
7 as the rules of this Division, been satisfied with
8 respect to the giving of notice?

9 A. Yes, they have.

10 Q. Were Exhibits 5 and 6 prepared by you or at
11 your direction or under your supervision?

12 A. Yes, they were.

13 MR. ROBERTS: Mr. Examiner, I'd move the
14 admission of Applicant's Exhibits 5 and 6. I have no
15 other questions of this witness.

16 EXAMINER CATANACH: Exhibits 5 and 6 will
17 be admitted as evidence.

18 Mr. Cross, Mr. Carr?

19 EXAMINATION

20 BY MR. CARR:

21 Q. If I look at Exhibit No. 5, this exhibit
22 provides a breakdown of the ownership interest in the
23 east half of Section 29; correct?

24 A. Correct.

25 Q. If we look at this, it shows that under 220

1 acres, Speerex has 100 percent of the working
2 interest?

3 A. That's correct.

4 Q. So, in fact, Speerex is the majority
5 interest owner in the wells, whether or not drilled on
6 that acreage, isn't that right, if in fact that
7 acreage is all together and the wells are committed to
8 it?

9 A. Yes, that's correct.

10 MR. CARR: That's all I have.

11 EXAMINER CATANACH: Mr. Kellahin?

12 MR. KELLAHIN: No, thank you.

13 EXAMINER CATANACH: Mr. Stovall?

14 MR. STOVALL: I can't think of anything.

15 EXAMINER CATANACH: The witness may be
16 excused. Is there anything further, Mr. Roberts?

17 MR. ROBERTS: Mr. Examiner, I have nothing
18 more in this case.

19 EXAMINER CATANACH: Would you like to give
20 brief closing statements, counsel?

21 MR. STOVALL: I guess, Mr. Carr we swore
22 Mr. Speer -- let me go back again and ask you, there's
23 some questions which were raised in opening in
24 discussion about the operating agreement and the
25 authority to drill under the operating agreement and

1 the operatorship. Those are issues. Giant has not
2 put those in issue except to mention them.

3 MR. CARR: And if I understood the
4 conversation we had, the Division would consider those
5 things that were not appropriate for it to decide. Is
6 that a fair statement?

7 MR. STOVALL: A fair estimate is if the
8 well is not authorized, I think it's clear that you're
9 not authorized to drill an unauthorized well under an
10 operating agreement. If we approve the well, then I
11 think the question of interpretation of the operating
12 agreement is not one within the scope of the
13 Division's authority. That is a contractual
14 relationship between Giant and Mr. Speer.

15 MR. CARR: And if it should be determined
16 that the acreage is not combined, there would need to
17 be a pooling hearing, and at that time other issues
18 would be germane?

19 MR. STOVALL: Yes.

20 MR. CARR: That are not appropriate today?

21 MR. STOVALL: Yes.

22 MR. CARR: And we could pursue those at
23 that time?

24 MR. STOVALL: That would be -- yeah.

25 MR. CARR: Questions concerning

1 responsibility for plugging might be more
2 appropriately raised at that time than here today?

3 MR. STOVALL: I think that's right. I
4 think you, again, have to look at the operating
5 agreement and see either at that time or under the
6 contractual argument which might better take place in
7 a district court if it couldn't be resolved between
8 the parties. This is definitely not the forum for
9 those -- for any operating agreement issues.

10 MR. CARR: I would like to make a very
11 brief statement for Speerex and then also read a brief
12 statement from Amoco.

13 Speerex is the majority interest owner in
14 the east half of Section 29. We appreciate the fact
15 that the well was drilled as a result of an error, but
16 our concern is that while the situation is corrected,
17 that we are not looked to to underwrite the efforts
18 either directly through a cash payment or indirectly
19 through production which we believe is ours and which
20 is to be produced under operating agreements and
21 existing contracts. And that is the reason we've been
22 here today, and that is our concern.

23 We believe if, in fact, the application is
24 to be granted, if an infill well is to be approved, if
25 an unorthodox location is to be approved, that

1 decision must be made based on technical evidence on
2 this well and consistent with the rules that were
3 developed for the production of the Fruitland coal gas
4 in the standards announced by Order No. R-8768 and
5 68A. So that's the position of Speerex.

6 With your permission, I would also like to
7 read a brief statement from Amoco. Amoco's statement
8 is that, due to the potentially precedent-setting
9 nature of this case, and as an operator in the
10 Basin-Fruitland Coal Gas Pool, Amoco may potentially
11 be affected by the outcome of this hearing. Amoco
12 participated on the Fruitland Coal Bed Methane
13 Committee and assisted in the evaluation and
14 recommendation of Special Pool Rules for the
15 Basin-Fruitland Coal Gas Pool in Order No. 8768-A.

16 We support the committee's studies and
17 findings in Order No. R-8768-A which provide the
18 applicable methodology and reservoir parameters which
19 are necessary to properly evaluate the drainage
20 characteristics in coal seam reservoirs.

21 We encourage the New Mexico Oil
22 Conservation Division to require that these methods be
23 utilized to evaluate and justify the need for infill
24 drilling in this case and any future application of
25 this nature.

1 EXAMINER CATANACH: Mr. Kellahin, do you
2 have a statement?

3 MR. KELLAHIN: Mr. Examiner, Meridian Oil
4 Inc., participated extensively in the development of
5 the rules, regulations, methodology, and the proposed
6 guidelines by which this issue should be presented to
7 the Division. The applicant has failed to satisfy the
8 burden of proof with regards to applying for and
9 obtaining relief for an infill well.

10 The testimony is based entirely on the
11 geologic concept of the presence and absence of the
12 Lower Coal member as mapped by Mr. Emmendorfer. He is
13 in area 2 of the study area for the pool. If you'll
14 look to the exhibits contained that I've described
15 during the cross-examination, there is no criteria
16 made for infill drilling based upon the presence and
17 absence of that coal member cutting through a
18 section.

19 The study for infill drilling is based upon
20 a far more comprehensive and complex study of a very
21 intricate reservoir. It involved substantial amounts
22 of effort in reservoir engineering. And to
23 distinguish spacing based upon the presence or absence
24 of a single coal member is not the predicate by which
25 the industry nor the Division was to establish relief

1 in this type of case.

2 We see you have no other choice but to deny
3 the application.

4 EXAMINER CATANACH: Thank you, Mr.
5 Kellahin. Mr. Roberts?

6 MR. ROBERTS: Mr. Examiner, the applicant's
7 position is that the geologic evidence submitted here
8 today is supportive of a finding that there are coal
9 reserves that will not be produced from this existing
10 spacing and proration unit unless there is a well
11 drilled in the southeast quarter of Section 29.

12 We think that that evidence is
13 uncontroverted here today, and we believe that the
14 granting of the application on that basis would be
15 supported by the evidence that has been submitted. We
16 believe that the granting of the application would be
17 in the best interests of conservation, would be in the
18 prevention of waste and would prevent waste in that it
19 would allow reserves to be recovered that will not
20 otherwise be recovered. We appreciate your
21 consideration.

22 EXAMINER CATANACH: Thank you, Mr.
23 Roberts.

24 Is there anything else in this case? There
25 being nothing further, Case 10833 will be taken under

1 advisement.
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CERTIFICATE OF REPORTER

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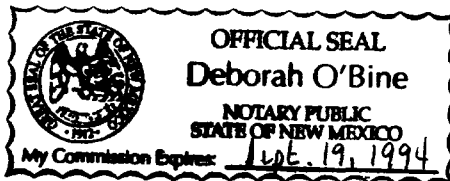
I, Deborah O'Bine, Certified Shorthand Reporter and Notary Public, HEREBY CERTIFY that I caused my notes to be transcribed under my personal supervision, and that the foregoing transcript is a true and accurate record of the proceedings of said hearing.

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, October 16, 1993.

Deborah O'Bine

DEBORAH O'BINE
CCR No. 63



I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7033, heard by me on October 7, 1993.

David R. Catanzano, Examiner
Oil Conservation Division