

1 STATE OF NEW MEXICO
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3 OIL CONSERVATION DIVISION
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7 EXAMINER HEARING
8

9 IN THE MATTER OF:

10 Applications of Amoco Cases 10070,
11 Production Company for 10071, 10072,
12 nonstandard gas proration 10073, and
13 units, unorthodox coal gas 10074
14 well locations, and
15 directional drilling, San
16 Juan County, New Mexico

17 TRANSCRIPT OF PROCEEDINGS
18

19 BEFORE: MICHAEL E. STOGNER, EXAMINER
20

21 STATE LAND OFFICE BUILDING
22 SANTA FE, NEW MEXICO
23 September 5, 1990
24

25 **ORIGINAL**

A P P E A R A N C E S

1

2

3 FOR THE DIVISION: ROBERT G. STOVALL
4 Attorney at Law
5 Legal Counsel to the Divison
6 State Land Office Building
7 Santa Fe, New Mexico

8 FOR THE APPLICANT: CAMPBELL & BLACK, P.A.
9 Attorneys at Law
10 Post Office Box 2208
11 Santa Fe, New Mexico 87504
12 BY: WILLIAM F. CARR, ESQ.

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I N D E X

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1 HEARING EXAMINER: This hearing will come
2 to order. At the request of the applicant, I'm going
3 to call all cases 10,070 through 10,074.

4 MR. STOVALL: Cases 10,070 through 10,074
5 are each styled Application of Amoco Production
6 Company for a nonstandard gas proration unit, San Juan
7 County, New Mexico.

8 HEARING EXAMINER: Call for appearances in
9 these cases?

10 MR. CARR: May it please the Examiner, my
11 name is William F. Carr with the law firm of Campbell
12 and Black, P.A., of Santa Fe. We represent Amoco
13 Production Company, and I have two witnesses.

14 HEARING EXAMINER: Are there any other
15 appearances? Will the witnesses please stand and be
16 sworn?

17 (Witnesses sworn.)

18 MR. CARR: May it please the Examiner,
19 before we begin, I would like to dismiss the portion
20 of cases 10,072, 73, and 74 in which Amoco seeks an
21 unorthodox coal gas well location. Amoco is now
22 proposing to drill each of the wells to a standard
23 bottom hole location.

24 HEARING EXAMINER: 10,072, Mr. Carr, is an
25 unorthodox coal gas well location. I assume that the

1 location on that one, the surface will be moved to a
2 standard location?

3 MR. CARR: Surface and bottom hole on that
4 one are standard.

5 HEARING EXAMINER: And they should be one
6 and the same?

7 MR. CARR: Yes, sir.

8 HEARING EXAMINER: And 73 and 74 were both
9 directional drilling.

10 MR. CARR: And the directional drilling
11 part of the case will remain. They will be
12 directionally drilled, however, to standard bottom
13 hole locations.

14 HEARING EXAMINER: Thank you, Mr. Carr.

15 MR. CARR: My first witness is Michael
16 Cuba.

17 HEARING EXAMINER: Mr. Carr.

18 MICHAEL CUBA,
19 the witness herein, after having been first duly sworn
20 upon his oath, was examined and testified as follows:

21 DIRECT EXAMINATION

22 BY MR. CARR:

23 Q. Would you state your full name for the
24 record?

25 A. It's Michael Edward Cuba.

1 Q. Mr. Cuba, where do you reside?

2 A. In Nederland, Colorado.

3 Q. By whom are you employed and in what
4 capacity?

5 A. I'm a staff landman for Amoco Production
6 Company.

7 Q. Have you previously testified before the
8 Oil Conservation Division?

9 A. I have.

10 Q. At that time, were your credentials as a
11 petroleum landman accepted and made a matter of
12 record?

13 A. They were.

14 Q. Are you familiar with the application filed
15 by Amoco in each of the consolidated cases?

16 A. Yes.

17 Q. Are you familiar with the subject area?

18 A. Yes.

19 MR. CARR: Are the witnesses qualifications
20 acceptable?

21 HEARING EXAMINER: They are.

22 Q. (BY MR. CARR) Mr. Cuba, would you briefly
23 state what Amoco seeks in each of these cases?

24 A. Amoco seeks approval of five nonstandard
25 proration units for the drilling and production of

1 Fruitland coal wells, with such wells to be at legal
2 locations as to the Fruitland coal interval. As
3 indicated previously, two of the wells are intended to
4 be directionally drilled, but they will be in the
5 legal window at penetration of the Fruitland coal.

6 Q. Could you identify what has been marked as
7 Amoco Exhibit No. 1 and then review that exhibit for
8 the Examiner.

9 A. Yes. Exhibit No. 1 consists of five pages,
10 two pages of which are identical, being page 3 and
11 page 5. Each of these pages identifies a specific
12 well name in the upper left, and they also identify
13 the proposed nonstandard proration unit to be
14 associated with that well.

15 The exhibits go on to indicate the location
16 of existing or proposed Fruitland coal wells
17 offsetting the proposed nonstandard proration unit,
18 and they also identify the parties in those offsetting
19 locations who might have an interest in a Fruitland
20 coal formation.

21 They go further to identify the working
22 interest owners in these specific wells for which
23 these nonstandard proration units are being proposed.

24 Q. Mr. Cuba, are these nonstandard units
25 necessary because of variations in the USGS survey?

1 A. This is correct.

2 Q. Are these Fruitland wells being proposed on
3 proration units, nonstandard spacing or proration
4 units that are currently established and dedicated to
5 either Mesaverde or Dakota wells?

6 A. They are.

7 Q. Could you just identify what has been
8 marked for Mr. Stogner as Exhibit No. 2?

9 A. Exhibit No. 2 are copies of previous orders
10 by this Commission establishing nonstandard proration
11 units as to the Mesaverde coincident with the
12 proration units now being requested for the Fruitland.

13 Q. Mr. Cuba, will approval of the requested
14 nonstandard proration units permit Amoco to develop
15 the Fruitland with the same units that are currently
16 established and being produced in these other
17 formations?

18 A. Yes.

19 Q. Will Amoco also call an engineering witness
20 to testify concerning the locations of the wells on
21 these units and Amoco's plans for directional
22 drilling?

23 A. Yes, we will.

24 Q. Were Exhibits 1 and 2 either prepared by
25 you or compiled under your direction?

1 A. They were.

2 MR. CARR: At this time, Mr. Stogner, we
3 would move the admission of Amoco's Exhibit 1 and 2.

4 HEARING EXAMINER: Exhibits 1 and 2 will be
5 admitted into evidence.

6 MR. CARR: That concludes my Direct
7 Examination of Mr. Cuba.

8 CROSS-EXAMINATION
9 BY HEARING EXAMINER:

10 Q. Mr. Cuba, your Exhibit No. 1 shows the
11 existing or proposed Fruitland coal gas wells in this
12 general area?

13 A. Yes, from a PI data source. They've not
14 been independently confirmed.

15 Q. And your Exhibit No. 2 refers to previous
16 Blanco-Mesaverde and Basin Dakota wells?

17 A. I believe, sir, these are all Mesaverde,
18 but it's my understanding that the Dakota is spaced
19 coincidentally.

20 Q. So there are some Blanco-Mesaverde and
21 Basin Dakota's in the area?

22 A. Yes, sir, I believe so.

23 Q. These orders on Exhibit 2, do they refer
24 both to the Basin Dakota or just the Blanco-Mesaverde?

25 A. These, I believe, are Mesaverde orders only

1 that you have been provided.

2 Q. Do you know if there was one single Basin
3 Dakota order, or are they also cut up?

4 A. I do not know.

5 MR. CARR: Mr. Stogner, if you desire, we
6 can provide that information to you after the hearing,
7 those order numbers.

8 HEARING EXAMINER: If you would provide
9 that to me over the phone, I would appreciate it for
10 reference only, Mr. Carr.

11 MR. CARR: That would be fine.

12 HEARING EXAMINER: Mr. Carr, I suppose you
13 have the notifications to the offsets which you also
14 show?

15 MR. CARR: That will be handled by our next
16 witness, Mr. Stogner.

17 HEARING EXAMINER: In that case, I don't
18 have any other questions of Mr. Cuba.

19 Are there any other questions of this
20 witness? He may be excused, Mr. Carr.

21 MR. CARR: At this time we call Mr.
22 Hawkins.

23 JAMES WILLIAM HAWKINS,
24 the witness herein, after having been first duly sworn
25 upon his oath, was examined and testified as follows:

1 DIRECT EXAMINATION

2 BY MR. CARR:

3 Q. Will you state your full name for the
4 record, please.

5 A. James William Hawkins.

6 Q. Mr. Hawkins, where do you reside?

7 A. In Golden, Colorado.

8 Q. By whom are you employed and in what
9 capacity?

10 A. Petroleum engineer with Amoco Production
11 Company.

12 Q. Have you previously testified before this
13 Division?

14 A. Yes, I have.

15 Q. At that time were your credentials as an
16 expert witness in petroleum engineering accepted and
17 made a matter of record?

18 A. Yes, they were.

19 Q. Are you familiar with the application filed
20 by Amoco in each of these cases?

21 A. Yes, I am.

22 Q. Are you familiar with the subject area?

23 A. Yes.

24 MR. CARR: Are the witness's qualifications
25 acceptable?

1 HEARING EXAMINER: Mr. Hawkins is so
2 qualified.

3 Q. (BY MR. CARR) Mr. Hawkins, are you
4 familiar with the rules that govern the development of
5 the Basin Fruitland Coal Gas Pool?

6 A. Yes, I am.

7 Q. Could you summarize the spacing
8 requirements for the Fruitland coal gas wells?

9 A. Fruitland coal wells are spaced, one well
10 per 320 acres, to be located in the northeast or
11 southwest quarter section at a distance of 790 feet
12 from the boundary of the spacing unit and no closer
13 than 130 feet to the interior quarter section line
14 within the spacing unit.

15 Q. Mr. Hawkins, are each of the wells that are
16 the subject of these hearings to be bottomed at
17 standard locations in the Fruitland formation?

18 A. Yes, they are.

19 Q. In Case 10,072, which is the case for the
20 Barrett Gas Com "A," that will be a straight hole?

21 A. Yes, it will be.

22 Q. And the bottom hole location for that well
23 is at a standard location?

24 A. Yes, it is.

25 Q. Let's go now to what has been marked as

1 Amoco Exhibit No. 3. I'd ask you first to just
2 identify this and then review Amoco's plans for
3 directional drilling with Mr. Stogner.

4 A. Exhibit No. 3 shows a description of a
5 directional drilling plan for both the Dawson Gas Com
6 #1 well and the Riddle Gas Com #1 well. Associated
7 with those directional drilling plans is a plat
8 showing the drilling window and the surface location
9 associated with the proration unit that the well will
10 be drilled into.

11 The first page talks about the Dawson Gas
12 Com #1. It shows a well surface location at 1,210
13 feet from the south line, 660 feet from the west
14 line. That's of Section 31, Township 31 North, Range
15 8 West.

16 In order to bottom hole this well or
17 penetrate the Fruitland coal within the legal window,
18 we will need to directionally drill it to a target 50
19 feet inside that window, which is 1,210 feet from the
20 south line and 840 feet from the west line at a true
21 vertical depth of about 2,895 feet.

22 This will require a kickoff at 587 feet
23 with a rate of angle build of about 1 degree per
24 hundred feet. Maximum inclination of 5 degrees, and
25 we will continue drilling the well to a final true

1 vertical depth of 3,150. All of the Fruitland coal
2 will be penetrated within the legal window for the
3 spacing unit.

4 The third page provides the directional
5 drilling program for the Riddle Gas Com #1 well.
6 Again, the surface location for this this well is 2120
7 feet from the south line, 890 feet from the west line
8 of Section 30, Township 31 North, Range 9 West.

9 This well will need to be drilled to the
10 south in order to penetrate the Fruitland coal within
11 the legal window. The target is 1,769 feet from the
12 south line, 890 feet from the west line, at a true
13 vertical depth of 3,098 feet. This will require that
14 the well be kicked off at 431 feet, at a 1 degree per
15 100 foot rate of angle build, with a maximum
16 inclination of 9 degrees.

17 We will continue drilling the well to a
18 true vertical depth of 3,408 feet in order to
19 penetrate the entire Fruitland coal section within the
20 legal window.

21 Q. The last page of that exhibit is, again,
22 just a plat showing the surface and bottom hole
23 location for this well?

24 A. That's correct.

25 Q. Would it be satisfactory to Amoco for the

1 order resulting from this hearing to authorize
2 completion of the wells that are being directionally
3 drilled within a target area with a 50-foot radius
4 around the proposed bottom hole location?

5 A. Yes, it would. That would keep us within
6 the legal window for anywhere within that 50-foot
7 radius.

8 Q. Mr. Hawkins, why can these wells not be
9 drilled at standard surface locations?

10 A. Primarily due to the steep terrain and
11 topographic features in the area. The Riddle C well
12 was very steep and unable to locate a suitable surface
13 location there. We've moved the well some 200 feet or
14 so out in order to find a suitable location and will
15 drill it back into the legal window.

16 The Dawson Gas Com #1 well has both an
17 archeological site and a steep canyon side there
18 within the legal window. We've had to move the well
19 to the north in order to find a suitable surface
20 location and will drill it directionally back into the
21 legal window.

22 One thing you should note is that the
23 drilling windows in these odd surveyed sections are
24 very skinny, and therefore it is very limited as to
25 the surface that's available to try to find a suitable

1 location to drill the well.

2 Q. Mr. Hawkins, will Amoco run a directional
3 survey on each of these directionally drilled wells as
4 required by OCD Rule 111?

5 A. Yes, we will.

6 Q. Has notice of these applications been given
7 to each offsetting operator as required by OCD rules?

8 A. Yes, it has.

9 Q. Would you identify Exhibit No. 4 for Mr.
10 Stogner?

11 A. Exhibit No. 4 is a listing of all the
12 working interest owners within the area that was
13 presented on the Exhibit No. 1, each of the spacing
14 units surrounding the nonstandard unit. We mailed out
15 a copy of the application to each of the parties on
16 this list and have the green cards certified return
17 receipt back to us.

18 There were two owners who did not return
19 their cards, nor did we receive a return of the
20 mailing. That was Lance Reemtsma and John B. Pierce.
21 Both of those parties appear to be working interest
22 owners in the Archuleta Gas Com B #1 well, which is a
23 standard location well to be drilled.

24 Q. Have all offsetting operators been
25 notified?

1 A. Yes, they have.

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

6 A. Yes, it will.

7 Q. Were Exhibits 3 and 4 prepared by you?

8 A. Or under my supervision, yes, they were.

9 MR. CARR: At this time, Mr. Stogner, we
10 would move the admission of Amoco Exhibits 3 and 4.

11 HEARING EXAMINER: Exhibits 3 and 4 will be
12 admitted into evidence.

13 MR. CARR: I have nothing further on Direct
14 of this witness.

15 CROSS EXAMINATION

16 BY HEARING EXAMINER:

17 Q. Mr. Hawkins, the Dawson Gas Com #1, you
18 don't have a surface location yet; is that correct?

19 A. Yes, we do.

20 Q. Oh, you do? That's the 1,210 from the
21 south line and 660 from the west?

22 A. Yes, that's correct, shown on the plat and
23 also on the first page of Exhibit No. 3.

24 Q. So that has been determined. Your proposed
25 target location, you want an order that will give you

1 a 50-foot radius of 1,210 feet from the south line and
2 840 feet from the west line?

3 A. Yes, sir. And that is the top of the
4 Fruitland coal, which is our target. We will have to
5 continue drilling the well for 250 feet, roughly, to
6 penetrate the entire Fruitland coal section.

7 Q. How about the Riddle Gas Com #1, is that an
8 approved surface location?

9 A. It's an unorthodox surface, but it is
10 approved.

11 Q. By the BLM, that's what I meant?

12 A. That's correct.

13 Q. There again, the bottom hole location
14 within a 50-foot radius of that; is that correct?

15 A. That's correct.

16 Q. Have you got a location -- you don't have a
17 location for your Barrett #1?

18 A. Yes, sir, we do. That well has already
19 been drilled. It's drilled in a legal location. I
20 didn't really understand why it was noticed up here as
21 an unorthodox location under the docket. It wasn't in
22 our original request. It wasn't in our application.

23 Q. Is it 1,810 foot from the south line, 925
24 foot from the west line?

25 A. Let me check.

1 That is correct, of Section 19, 31 North, 9
2 West.

3 Q. How far from the east proration unit is
4 this well or the east side of the proration unit?

5 A. Approximately 800 feet.

6 Q. 800?

7 A. Yes.

8 Q. Have you got a C-102 on that well?

9 A. I do have a C-102 on this well. I think
10 it's going to have to be revised. I checked today
11 with our surveying office in Farmington to determine
12 whether or not that well was truly in a legal location
13 or not. I was informed that the western proration
14 line actually moves outward to the west by eight to
15 ten feet, roughly in the middle of the section and
16 then comes back toward the east. Therefore, 925 feet
17 from that western line gives us about 800 feet from
18 the eastern boundary.

19 Q. This C-102 that was on file showed it to be
20 531.98 feet -- I don't know how accurate that is --
21 from the eastern side, but that is inaccurate, I'm
22 understanding you to say today?

23 A. Well, I don't have that information. That
24 does appear to be incorrect, yes.

25 Q. Do you know how wide that western portion

1 of Section 19 is, the west half equivalent?

2 A. About 300 -- excuse me -- at the southern
3 boundary, that lot is 396.6 feet, it appears. At
4 about the midpoint of the section, it's roughly 10
5 feet wider than that.

6 Q. Which would make it about 405 feet?

7 A. Approximately. And then it moves back even
8 skinnier at the far northern edge to about 361.6 feet,
9 it looks like. So it does get a little bit wider in
10 the middle, and it allows our well to be a full 790
11 feet from each boundary of that spacing unit.

12 Q. Probably it was an error; the C-102 file
13 was in error if that's what it shows?

14 A. I think that's correct. We'd be glad to
15 file an amended C-102 that properly shows that spacing
16 unit.

17 HEARING EXAMINER: If you will also provide
18 me a copy of that, Mr. Carr, so I can put it in the
19 initial case file showing what the correct dimensions
20 are and that that is indeed a standard location.

21 MR. CARR: We'll be glad to do that. When
22 we saw that advertisement and noted that it was
23 advertised at the unorthodox location, we had field
24 people go recheck that. They have confirmed today
25 that it is standard, and we'll get a revised C-102

1 that's got the accurate measurements on it for you.

2 HEARING EXAMINER: If you'd like, I have a
3 copy of the application to drill and the C-102 that
4 was on file with us that shows that information.

5 MR. CARR: Okay.

6 HEARING EXAMINER: I have no other
7 questions of this witness. Are there any other
8 questions of Mr. Hawkins? If not, he may be excused.

9 Mr. Carr?

10 MR. CARR: I have nothing further in this
11 case, Mr. Stogner.

12 HEARING EXAMINER: Does anybody else have
13 anything further in any of these five cases? If not,
14 then case 10,070 through 10,074 will be taken under
15 advisement, and if you'll provide me that additional
16 information we talked about Mr. Carr, I'd appreciate
17 it.

18 MR. CARR: I will.

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I do hereby certify that the foregoing is
a true and correct copy of the proceedings in
the hearing of Case No. 10070 through
heard by me on 5 Sept. 1990 10074
Michael E. Stogner, Examiner
Oil Conservation Division

1 CERTIFICATE OF REPORTER

2

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

5

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


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

17 WITNESS MY HAND AND SEAL September 14,
18 1989.

19

20

21


DEBORAH O'BINE
CSR No. 127

22 My commission expires: August 10, 1990

23

24

25

ARCHULETA GAS COM. /B/ #1

■ Proposed Non-standard Proaction Unit
T30N, R8W, NMPM

Sec. 19: Lots 1,2,8,9, E $\frac{1}{2}$ W $\frac{1}{2}$ (aka W $\frac{1}{2}$)

Sec. 30: Lots 2,6, E $\frac{1}{2}$ NW $\frac{1}{2}$ (aka NW $\frac{1}{2}$)

San Juan County, New Mexico

(Comprising 342.54 acres, more or less)

● Existing or proposed Fruitland
Coal Wells

Other Parties Within Area
(Not listed on plat):

Texaco, Meridian

Working Interest Owners in Well:

Amoco, Conoco, Union Oil, David Pierce,
John Pierce, Susan Nelson, Lance
Reemtsma, Dirk Reemtsma, Alma Anderson,
Mary Forehand, Evelyn Christian,
Lorine Driskell

13,373,222.50 FT. N
35° 45' 36" N

13,373,222.50 FT. N
35° 45' 36" N

El Paso, Amoco,
Conoco

El Paso, Amoco,
Conoco

El Paso, Amoco,
Conoco, Union
Texas

El Paso, Amoco,
Conoco

Amoco
Conoco

Amoco, Conoco

El Paso,
Amoco,
Conoco

Amoco,
Conoco

El Paso, Amoco,
Conoco

El Paso, Amoco,
Conoco

Union Texas

El Paso, Union Oil

992,409.61 FT. E
107° 44' 23" E

1,007,590.39 FT. E
107° 41' 19" E

29N-9W

29N-8W

13,352,164.25 FT. N
35° 45' 36" N

13,352,164.25 FT. N
35° 45' 36" N

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

AMOCO EXHIBIT NO. 1 (p.1)

CASE NO. 10070 - 10074

1007

13,341,935.38 FT. N
35° 43' 58" N

13,341,935.38 FT. N
35° 43' 58" N

○ UNNAMED FRUITLAND COAL WELL

■ ■ ■ Proposed Non-standard Proration Unit
T29N, R8W, NMPM
Sec. 19: Lots 1-4, E $\frac{1}{2}$ W $\frac{1}{2}$ (aka W $\frac{1}{2}$)
Sec. 30: Lots 1,2, E $\frac{1}{2}$ NW $\frac{1}{4}$ (aka NW $\frac{1}{4}$)
San Juan County, New Mexico

(Comprising 347.60 acres, more or less)

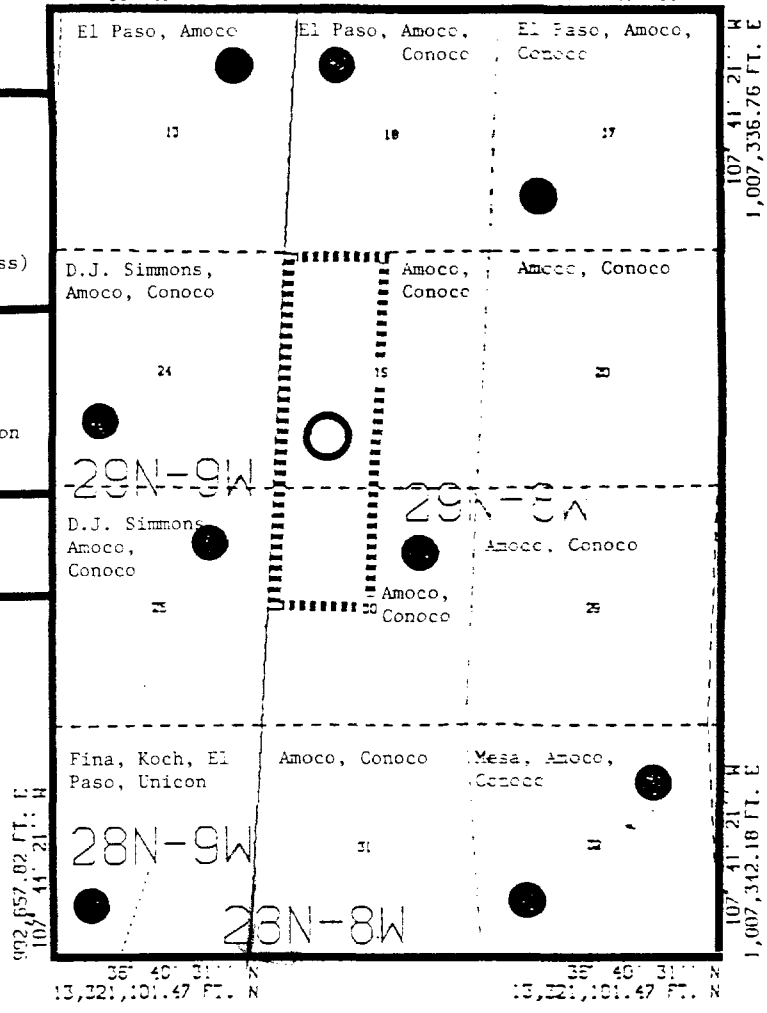
Other Parties Within Area
(Not listed on plat):

Union Texas, Meridian, Unit, Donald
Tirrietta, R.E. Beamon, III, P. Beamon
Lundell

Working Interest Owners in Well:

Amoco, Conoco

● Existing or Proposed Fruitland Coal Well



BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

Amoco EXHIBIT NO. 1 (p. 2)

CASE NO. 10070 - 10074

① BARRETT GAS COM /A/ #1

■ Proposed Non-standard Proration Unit
T31N, R9W, NMPM

Sec. 19: Lots 7-10, 15-18 (aka W½)
Sec. 30: Lots 6-9 (aka NW¼)
San Juan County, New Mexico

(Comprising 309.09 acres, more or less)

Working Interest Owners in Well:

Amoco, Conoco, James Raymond, Corrine
Miller Gay Trust, Maydell Miller Mast Trust,
T.H. McElvain

② RIDDLE GAS COM /C/ #1

■ Proposed Non-standard Proration Unit
T31N, R9W, NMPM

Sec. 30: Lots 14-17 (aka SW¼)
Sec. 31: Lots 7-10, 15-18 (aka W½)
San Juan County, New Mexico

(Comprising 299.10 acres, more or less)

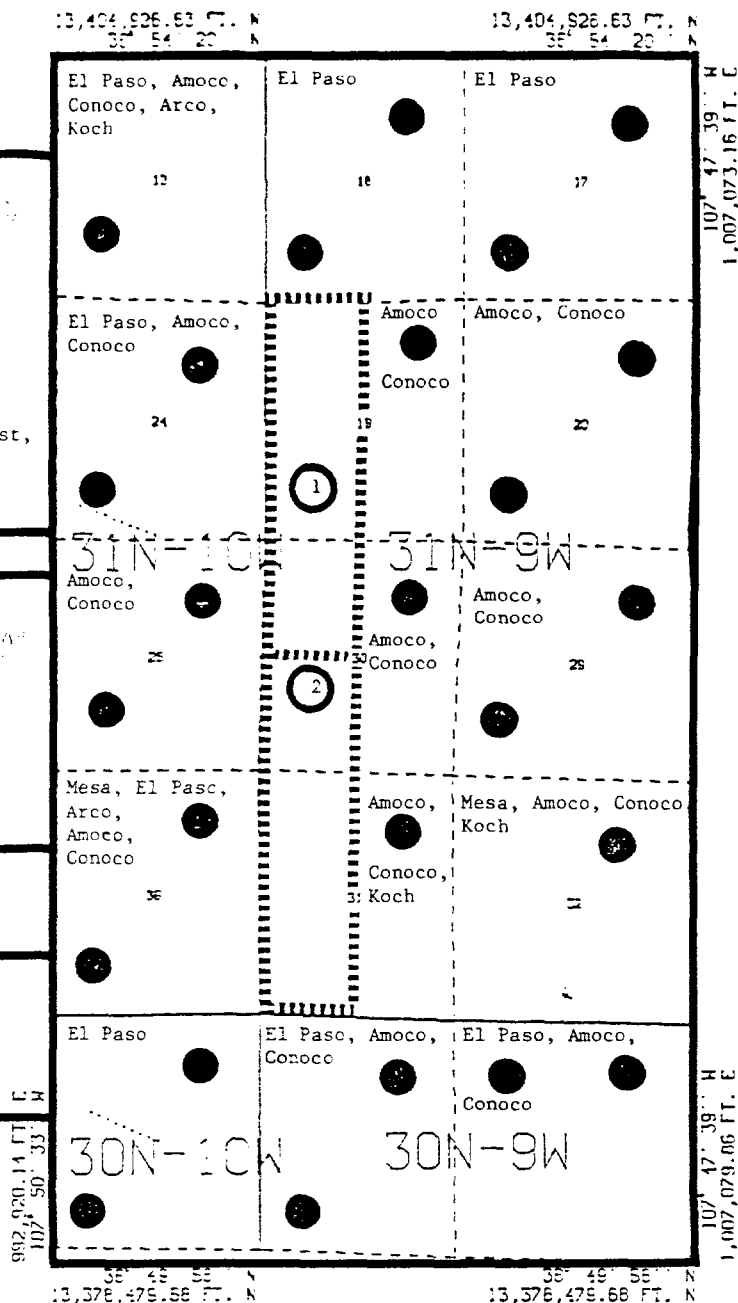
Working Interest Owners in Well:

Amoco, Conoco, El Paso, Koch

● Existing or Proposed Fruitland
Coal Wells

Other Parties Within Area
(not listed on plat):

Unicon Production Company, Union Texas,
Lucile Quigley Trust, Total Minatome Corp.

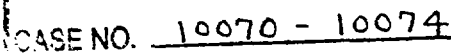


BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

AMOCO EXHIBIT NO. 1 (p. 3)

CASE NO. 10070 - 10074

Amoco, Conoco, Southern Union



13,404,826.63 FT. N
35° 54' 20" N

13,404,826.63 FT. N
35° 54' 20" N

107° 47' 39" W
1,007,073.16 FT. E

① BARRETT GAS COM /A/ #1

Proposed Non-standard Proration Unit
T31N, R9W, NMPM
Sec. 19: Lots 7-10, 15-18 (aka W₂)
Sec. 30: Lots 6-9 (aka NW₄)
San Juan County, New Mexico

(Comprising 309.09 acres, more or less)

Working Interest Owners in Well:

Amoco, Conoco, James Raymond, Corrine
Miller Gay Trust, Maydell Miller Mast Trust,
T.H. McElvain

② RIDDLE GAS COM /C/ #1

Proposed Non-standard Proration Unit
T31N, R9W, NMPM
Sec. 30: Lots 14-17 (aka SW₄)
Sec. 31: Lots 7-10, 15-18 (aka W₂)
San Juan County, New Mexico

(Comprising 299.10 acres, more or less)

Working Interest Owners in Well:

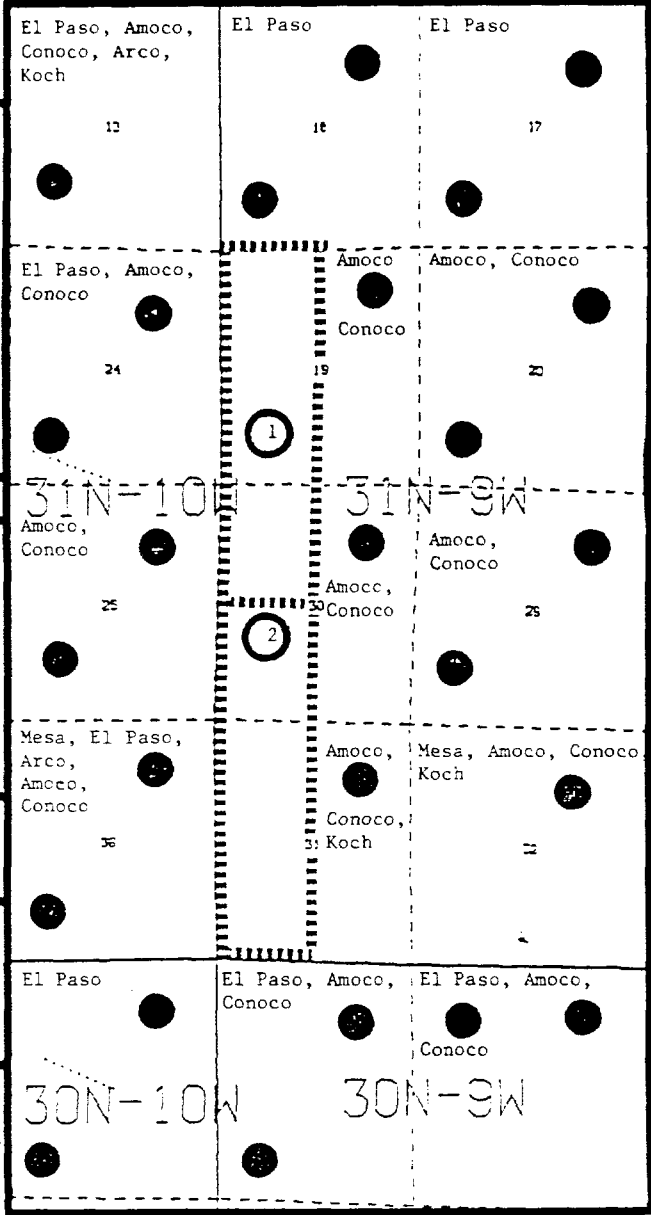
Amoco, Conoco, El Paso, Koch

Existing or Proposed Fruitland
Coal Wells

Other Parties Within Area
(not listed on plat):

Unicon Production Company, Union Texas,
Lucile Quigley Trust, Total Minatome Corp.

992,920.14 FT. E
107° 50' 33" W



107° 47' 39" W
1,007,079.06 FT. E

35° 45' 55" N
13,378,475.68 FT. N

35° 45' 55" N
13,378,475.68 FT. N

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

AMOCO EXHIBIT NO. 1 (p. 5)

CASE NO. 10070 - 10074