

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

6 9 November 1988

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of ARCO Oil and Gas Comp- CASE
10 any to reinstate Division Order No. 9512
11 R-4984, simultaneous dedication and
12 an unorthodox gas well location, Lea
13 County, New Mexico.

14 BEFORE: David R. Catanach, Examiner

15
16
17 TRANSCRIPT OF HEARING

18
19 A P P E A R A N C E S

20 For the Division: Robert G. Stovall
21 Attorney at Law
22 Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico

23 For the Applicant: William F. Carr
24 Attorney at Law
CAMPBELL and BLACK, P. A.
25 P. O. Box 2208
Santa Fe, New Mexico 87501

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I N D E X

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CINDY ELLIS

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E X H I B I T S

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ARCO Exhibit Four, Notice 14

1 MR. CATANACH: Let's call Case
2 9512 at this time.

3 MR. STOVALL: Application of
4 ARCO Oil and Gas Company to reinstate Division Order No.
5 R-4984, simultaneous dedication, and an unorthodox gas well
6 location, Lea County, New Mexico.

7 MR. CATANACH: Are there ap-
8 pearances in this case?

9 MR. CARR: May it please the
10 Examiner, my name is William F. Carr, with the law firm
11 Campbell & Black, P. A., of Santa Fe. We represent ARCO
12 Oil and Gas Company and I have one witness.

13 MR. CATANACH: Will the wit-
14 ness please stand to be sworn?

15
16 (Witness sworn.)

17
18 MR. CARR: Initially, Mr.
19 Catanach, I'd like to point out that the application calls
20 for reinstatement of Order R-4984.

21 This order was entered in 1975
22 and consolidated two prior orders approving 320-acre
23 spacing or proration units in Section 14. It also approved
24 simultaneous dedication of the acreage to the two wells in
25 this section and approved the wells' unorthodox locations.

1 Since that time two additional
2 Jalmat wells have been drilled and the first one was drill-
3 led and simultaneously dedicated with the others and ap-
4 proved by a letter from Mr. Ramey dated June 18, 1976.

5 In April of this year ARCO
6 obtained NSP 1535, which approved a 160-acre spacing or
7 proration unit in the northeast quarter of this section.
8 It was an undeveloped tract and ARCO was able to go for-
9 ward and develop this under Section 103 of the NGPA.

10 In August of this year ARCO
11 filed an administrative application seeking to re-establish
12 the 640-acre unit and simultaneously dedicate the four
13 Jalmat wells on this standard spacing or proration unit.

14 When the Commission reviewed
15 the application they concluded that by changing the spacing
16 unit the most recently drilled well would be at a nonstand-
17 ard location and since that would have to come on for
18 hearing, they decided to open the entire matter, bring the
19 entire procedure before you so that all of these prior
20 orders could be consolidated and one order entered which
21 addresses the development questions in the Jalmat Gas Pool
22 in Section 14, and so that's why we're here before you to-
23 day.

24 Mrs. Ellis is an engineer and
25 we're going to review the status of this spacing unit, take

1 a look at the formation, and then we'll ask that one order
2 be entered which will let us develop this standard unit
3 with four wells simultaneously dedicated on that well -- on
4 that unit.

5

6

CINDY ELLIS,

7

8

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

9

10

DIRECT EXAMINATION

11

BY MR. CARR:

12

Q

Mrs. Ellis, for the record, would you

13

state your full name, please?

14

A

Cindy Ellis.

15

Q

And where do you reside?

16

A

In Midland, Texas.

17

Q

By whom are you employed?

18

A

ARCO Oil & Gas.

19

Q

And in what capacity are you employed?

20

A

I'm employed as a petroleum engineer.

21

Q

Have you previously testified before the

22

Oil Conservation Division?

23

A

No, I have not.

24

Q

Would you briefly summarize your educa-

25

tional background and then review your work experience for

1 Mr. Catanach?

2 A I received a Bachelor's degree in
3 chemical engineering from Louisiana Tech University and
4 went to work for ARCO. I've been working for ARCO for
5 approximately 9 years as a petroleum engineer and the last
6 4-1/2 years I've worked exclusively on an area in southeast
7 Lea County.

8 Q Are you familiar with the Jalmat Gas
9 Pool?

10 A Yes, I am.

11 Q And the Eumont Gas Pool -- or Oil Pool?

12 A Yes.

13 Q Are you familiar with the application,
14 the administrative application that was filed which result-
15 ed in today's hearing?

16 A Yes, I am.

17 Q Did you obtain waivers from the offset-
18 ting operators to that administrative application?

19 A I obtained waivers from all offset oper-
20 ators with the exception of Doyle Hartman.

21 Q Did you receive any communication in
22 response to your request for a waiver from Mr. Hartman?

23 A No, I did not.

24 Q Have you made a study of the subject
25 area?

1 A Yes, I have.

2 MR. CARR: We would tender
3 Mrs. Ellis as an expert witness in the field of petroleum
4 engineering.

5 MR. CATANACH: She is so qual-
6 ified.

7 Q Will you briefly state what ARCO seeks
8 with this application?

9 A We seek to establish a standard 640-acre
10 proration unit with the simultaneous dedication of four
11 wells.

12 Q And from what pool are these four wells
13 produced?

14 A The Jalmat Gas.

15 Q And are there special pool rules in ef-
16 fect for that pool?

17 A Yes, there are.

18 Q Would you review the general development
19 requirements as set forth in those special rules for the
20 Jalmat Pool?

21 A The spacing requirement is -- the
22 standard spacing is 640 acres; however, a 160-acre tract is
23 assigned an allowable factor of one. The spacing -- the
24 locations for a 160-acre proration unit, the standard
25 location is 660 feet from the lease line, and for a non-

1 standard -- or rather for a 640-acre proration unit with
2 simultaneous dedications the spacing -- the offset is 990
3 feet from the lease line.

4 Q So when you applied to create the
5 640-acre unit, the new well, the No. 31 Well was at a 660
6 location instead of a 990 location.

7 A That's correct.

8 Q And you are familiar with the Jalmat
9 Pool?

10 A Yes.

11 Q Are there other 640-acre units, spacing
12 or proration units, in this pool?

13 A A few, yes.

14 Q Are all of those simultaneously dedi-
15 cated to more than one well?

16 A To my knowledge all of the standard 640-
17 acre proration units do have simultaneous dedication.

18 Q And this is a prorated gas pool?

19 A Yes, it is.

20 Q Would you refer to what has been marked
21 as Exhibit Number One, identify that exhibit and review it
22 for Mr. Catanach?

23 A This is a 9-section plat of the area.
24 The Section 14 is in the center with the 160 acres, the
25 northeast quarter, outlined. Our new well, No. 31, is in

1 Unit letter A of that section. We are offset to the east
2 by Marathon's McDonald State lease, which falls into the
3 Eumont Pool, and we are offset to the northeast by our own
4 ARCO State 157-D lease. To the north of our McDonald State
5 lease is Sun's State A-AC2 lease.

6 Q And what is the spacing unit for the Sun
7 A-AC2 lease?

8 A It is a 640-acre standard proration unit
9 with simultaneous dedication of five Jalmat gas wells.

10 Q Would you note the location of Doyle
11 Hartman's lease?

12 A Doyle Hartman's lease is located in the
13 northeast quarter of Section 22.

14 Q That's to the south and west of the sub-
15 ject section?

16 A That's correct.

17 Q And you have waivers from all the other
18 offsetting operators?

19 A That's correct.

20 Q Would you now refer to ARCO Exhibit Num-
21 ber Two and identify that, please?

22 A Exhibit Two is the Form C-102 which is
23 the -- shows the wells footage locations and the existing
24 acreage dedication in the Section 14.

25 Q Okay, there are six wells shown on this

1 plat. Which wells are currently capable of producing from
2 the Jalmat?

3 A The current Jalmat producers are the
4 Nos. 11, 27, 28 and 31.

5 Q And what is the status of the well
6 that's 330 out of the northeast corner of the section?

7 A That is a plugged and abandoned Arrow-
8 head Grayburg producer which was operated by Marathon.

9 Q And the well in the northwest of the
10 southwest, what is the status of that well?

11 A That's the ARCO McDonald State No. 1,
12 which has been plugged and abandoned.

13 Q In your opinion is it possible for the
14 Jalmat reserves under this section to be produced by any of
15 the individual wells on this unit?

16 A No.

17 Q Without the four wells on the unit with
18 reserves to be left in place and not produced?

19 A Yes, I believe so.

20 Q Would you now refer to what has been
21 marked as ARCO Exhibit Number Three, identify that, and
22 review it for the Examiner?

23 A This is a cross section which runs
24 across the subject --

25 Q Just a second.

1 A It runs generally from the south to the
2 north and then to the east. The top of the Yates is shaded
3 in yellow and the different porosity developments within
4 the Yates and Seven Rivers are colored in red, orange and
5 blue.

6 Q Now what is the primary producing inter-
7 val in this area?

8 A In the Jalmat the primary producing in-
9 tervals are the Yates and the Seven Rivers.

10 Q And there is an index map on this exhi-
11 bit?

12 A Yes, there is.

13 Q The righthand portion of the cross sec-
14 tion extends to the east?

15 A That's correct.

16 Q And what does this tell you about the
17 presence of the Yates and Seven Rivers formation under the
18 acreage to the east?

19 A The cross section depicts that the Yates
20 and Seven Rivers formations pinch out to the east and they
21 are not -- the porosity is not developed.

22 Q In your opinion could a well at this
23 location be draining reserves that could be commercial
24 production on any of the tracts east of the -- of Section
25 14?

1 A I do not believe so.

2 Q The subject well is not indicated on
3 this cross section, the -- the No. 31, the one that's in an
4 unorthodox location. That well is not shown on this cross
5 section.

6 A That's correct.

7 Q And why is that?

8 A The cross section was prepared in anti-
9 cipation of drilling the well.

10 Q And whereabouts on this cross section
11 would the No. 31 Well be located?

12 A The well trace would be between the Sun
13 Well No. 62 and No. 73.

14 Q Have you reviewed a log on that well?

15 A Yes, I have.

16 Q Are its characteristics similar to the
17 wells on either side of it as depicted on this cross
18 section?

19 A Very much so.

20 Q Would you just briefly summarize for Mr.
21 Catanach the -- the events that resulted in this hearing
22 today?

23 A As was stated in the opening statement,
24 there were a number of administrative orders pertaining to
25 this proration unit in Section 14, and when I made applica-

1 tion for administrative approval of the 640-acre proration
2 unit, the Commission requested that we come to hearing,
3 also on the unorthodox locations, just to -- to clean the
4 file up, essentially.

5 Q Why are ARCO -- is ARCO seeking a
6 640-acre unit?

7 A The No. 31 is currently restricted by
8 its allowable based upon 160-acre allowable factor.

9 Q And approximately what would that allow-
10 able be?

11 A Approximately 200 MCF per day, and we
12 feel like we would be drained by the offsetting Sun Well
13 No. 73 if we were restricted.

14 Q And -- and what is the allowable that
15 that well enjoys?

16 A It is part of the simultaneous -- it is
17 simultaneously dedicated to the 640-acre proration unit,
18 which is approximately 800 MCF per day.

19 Q In your opinion is there a chance that
20 there could be drainage that you could not offset with
21 counter drainage by virtue of the different allowables on
22 either side of this common boundary?

23 A Yes.

24 Q And would you just state again why is
25 the well at an unorthodox location?

1 A When it was originally drilled on the
2 160-acre proration unit, it was an orthodox location and
3 when it goes into the 640-acre unit, it becomes unorthodox.

4 Q You have stated before that you've re-
5 ceived a waiver as to the simultaneous dedication in the
6 640-acre unit from all the offset operators from -- except
7 Mr. Hartman. Have you given notice of the unorthodox
8 location to Sun and to Marathon?

9 A Yes, we have.

10 Q And are copies of those letters contain-
11 ed in what has been marked ARCO Exhibit Number Three?

12 A Exhibit Number Four, yes.

13 Q Exhibit Number Four?

14 A Yes.

15 Q Were Exhibits Numbers One through Four
16 prepared by you or compiled under your direction and super-
17 vision?

18 A Yes, they were.

19 MR. CARR: At this time, Mr.
20 Catanach, we'd move the admission of ARCO Exhibits One
21 through Four.

22 MR. CATANACH: Exhibits One
23 through Four will be admitted into evidence.

24

25

1 Q Mrs. Ellis, in your opinion will
2 granting this application be in the best interest of con-
3 servation, the prevention of waste, and the protection of
4 correlative rights?

5 A Yes.

6 MR. CARR: That concludes my
7 direct examination of this witness.

8

9

CROSS EXAMINATION

10 BY MR. CATANACH:

11 Q Mrs. Ellis, let's just go through this
12 one more time.

13 Order No. R-4984 approved what?

14 A It approved the -- a 640-acre proration
15 unit with the simultaneous dedication of Wells Nos. 11 and
16 27, which were at unorthodox locations.

17 Q Did it also approve these unorthodox
18 locations?

19 A Yes, it did.

20 Q What came after that as far as you know?

21 A We drilled the Well No. 28 and that was
22 approved by a letter from Mr. Joe Ramey in --

23 MR. CARR: On June 18, 1976,
24 is the date on that letter.

25 Q To the inclusion of that well.

1 Q Was that also -- was that an unorthodox
2 location?

3 A No, that is orthodox.

4 Q So that was just -- that just approved
5 the addition of that well to the --

6 A That's correct.

7 Q And then what?

8 A And then in April of 1988 by Order NSP
9 1535 we created a 160-acre proration unit, nonstandard pro-
10 ration unit, in the northeast quarter of Section 14 for the
11 drilling of the well No. 31. We contracted the other
12 multi-well unit as NSP 1536 for 480 acres for the other
13 three wells.

14 Q Mrs. Ellis, why was that 160-acre formed
15 at that time?

16 A It was formed to comply with require-
17 ments for NGPA Section 103 gas pricing.

18 Q Then after the NSP 1535 came out, you
19 drilled the No. 31 Well.

20 A That's correct.

21 Q And that was standard for that 160-acre
22 unit so there is no approval for that.

23 A That's right.

24 Q I see, I think. If I understand cor-
25 rectly, you're reforming the -- you wish to reform the

1 640-acre unit and simultaneously dedicate the No. 11, 27,
2 28 and 31 Wells.

3 A That's correct.

4 MR. CATANACH: That's all I
5 have.

6 The witness may be excused.
7 Is there anything further in
8 this case?

9 MR. CARR: Nothing further,
10 Mr. Catanach.

11 MR. CATANACH: It will be
12 taken under advisement.

13

14 (Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C. S. R. DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9512, heard by me on November 9, 19 83.

David R. Cotnam, Examiner
Oil Conservation Division

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

6 26 October 1988

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of ARCO Oil and Gas Comp- CASE
10 any to reinstate Division Order No. 9512
11 R-4984, simultaneous dedication and
12 an unorthodox gas well location, Lea
13 County, New Mexico.

14 BEFORE: Michael E. Stogner, Examiner

15
16
17 TRANSCRIPT OF HEARING

18
19 A P P E A R A N C E S

20 For the Division:

21
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23 For the Applicant:



1 MR. STOGNER: I'll call next
2 Case Number 9512, which is the application of ARCO Oil &
3 Gas Company to reinstate Division Order No. R-4984, simul-
4 taneous dedication and an unorthodox gas well location, Lea
5 County, New Mexico.

6 At the applicant's request
7 this case will be continued to the Examiner's Hearing
8 scheduled for November 9th, 1988.

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10 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C. S. R. DO HEREBY
CERTIFY that the foregoing Transcript of Hearing before the
Oil Conservation Division (Commission) was reported by me;
that the said transcript is a full, true and correct record
of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a correct record of the proceedings in
the Examiner hearing of Case No. 9512,
heard by me on 26 October 1988.

Michael J. [Signature], Examiner
Oil Conservation Division