

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

7 January 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of ARCO Oil & Gas Company CASE
for an unorthodox oil well location 9061
and simultaneous dedication, Rio
Arriba County, New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Commission: Jeff Taylor
Legal Counsel for the Division
Oil Conservation Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For ARCO Oil & Gas: William F. Carr
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I N D E X

RODGER DERRICK TRIMBLE

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MR. STOGNER: The hearing will
come to order.

We'll call next Case Number
9061.

MR. TAYLOR: Application of
ARCO Oil & Gas Company for an unorthodox oil well location
and simultaneous dedication, Rio Arriba County, New Mexico.

MR. STOGNER: Call for appear-
ances.

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

MR. STOGNER: Are there any
other appearances?

Will the witness please stand
and be sworn at this time?

(Witness sworn.)

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

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DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place of residence?

A Rodger Derrick Trimble. I reside in Midland, Texas.

Q Mr. Trimble, by whom are you employed?

A ARCO Oil & Gas Company.

Q And in what capacity?

A As a reservoir engineer.

Q Have you previously testified before this Division and had your credentials as a reservoir engineer accepted and made a matter of record?

A Yes, I have.

Q Are you familiar with the application filed by ARCO in this case?

A Yes.

Q Are you familiar with the subject area and the proposed well?

A Yes.

MR. CARR: Are the witness' qualifications acceptable?

MR. STOGNER: They are.

Q Mr. Trimble, would you briefly state what

1 ARCO seeks with this application?

2 A ARCO Oil & Gas is seeking an exception to
3 Rule 4 of the West Lindrith Gallup-Dakota Oil Pool Rules,
4 which state that a well shall be located no nearer than 660
5 feet to the nearest well drilling to or capable of producing
6 from the same pool.

7 Our proposed well, the Chacon Federal
8 102, which would be a Dakota producer, would be located 275
9 feet from ARCO's Chacon Federal No. 101 Well, which is a
10 Gallup producer.

11 Q Does ARCO also propose to simultaneously
12 dedicate all wells on the proration unit?

13 A Yes, we do.

14 Q Would you refer to what has been marked
15 for identification as ARCO Exhibit Number One, identify
16 this, and review the information contained thereon?

17 A Exhibit Number One is a land map which
18 depicts most of ARCO's acreage in the area of interest in
19 the West Lindrith Gallup-Dakota Pool in Township 24 North,
20 Range 3 West in Rio Arriba County.

21 You can see by the shading that ARCO has
22 acreage in Sections 17, 18, 19, 20, 29, and 30. The section
23 of particular interest is Section 19.

24 You can see in the northeast of the
25 northeast of Section 19 we have depicted by an orange circle

1 the Chacon Federal 102, which is our proposed Dakota well,
2 which is located approximately 275 feet southwest of the
3 Chacon Federal 101, which is designated here as a Gallup
4 producer.

5 The other well in this spacing unit is
6 located approximately 1260 feet southwest of our proposed
7 Chacon Federal 102 and that is the Chacon Federal No. 8,
8 which is Dakota producer.

9 Q Would you identify for the examiner the
10 spacing unit you're talking about?

11 A The spacing unit is essentially the north
12 half of Section 19 and comprises approximately 192 acres.

13 Q And was that nonstandard spacing unit
14 previously approved by the Division?

15 A Yes.

16 Q And was that irregular unit caused as a
17 result survey variations?

18 A Correct, yes.

19 Q Now, in that spacing unit there are pre-
20 sently two wells.

21 A That's correct.

22 Q The 101 is producing from what interval?

23 A The Gallup formation.

24 Q And the Chacon Federal No. 8 is from what
25 interval?

1 A The Dakota formation.

2 Q Under the pool rules those are treated,
3 however, as one pool, is that not correct?

4 A That is correct.

5 Q Okay. Does this plat also show the off-
6 setting owners?

7 A It does, those being Apache to the north-
8 west and the west and Meridian to the west -- excuse me, to
9 the east and to the southeast.

10 Q Now the proposed well is unorthodox be-
11 cause of its proximity to the 101?

12 A That's correct.

13 Q Why could you not deepen the Chacon Fed-
14 eral 101 and take it down to the Dakota interval?

15 A We had considered this option but had de-
16 cided that it would not be economically or operationally
17 feasible due to the 5-1/2 inch production casing which is in
18 the well at present.

19 If we were to deepen the well to the Da-
20 kota formation we could not produce the well in an efficient
21 manner since our tubing could not be placed down near the
22 Dakota perforations due to the limited clearance.

23 We also feel that in deepening the well
24 we could severely damage the Dakota -- excuse me, the exist-
25 ing Gallup perforations, which could result in a loss of the

1 current Gallup production.

2 Q ARCO is seeking authority to simultane-
3 ously dedicate all wells on this proration unit?

4 A Yes.

5 Q Are there other proration units in this
6 area where wells are simultaneously dedicated?

7 A Yes, if we look directly to the north in
8 ARCO's acreage in Section 18, we see that we have simulta-
9 neous dedication of two wells in two spacing units.

10 Q And are these also nonstandard spacing
11 units due to the survey variations?

12 A Yes.

13 Q Would you now refer to what has been mar-
14 ked as ARCO Exhibit Number Two and identify this, please?

15 A Exhibit Number Two consists of two pages
16 and is a copy of the well completion report filed with the
17 BLM. It is the completion report for the Chacon Federal
18 101.

19 The essential information of interest in
20 this completion report is that the total depth of the Chacon
21 Federal 101 is 6,609 feet with the top perforation in the
22 Gallup being located 6216 feet and the deepest perforation
23 at 6426 feet. Essentially we're demonstrating that this
24 well penetrated no lower than the Gallup formation.

25 Q Would you go to Exhibit Number Three and

1 identify this, please?

2 A Exhibit Number Three, also composed of
3 two pages, is essentially, the first page, the header sheet
4 for the dual induction log for the Chacon Federal 101; the
5 second page is a copy of the dual induction log the Gallup
6 formatin. The perforations in the Gallup are depicted on
7 this copy of the log section, the deepest --

8 Q All right.

9 A -- again being 6426 feet.

10 Q Would you now go to Exhibit Number Four?

11 A Exhibit Number Four, comprised three
12 pages, is, the first page, the dual induction log for the
13 Chacon Federal No. 8, located approximately like I stated
14 earlier, 1260 to the southwest of our proposed Chacon Feder-
15 al 102.

16 The second page of this exhibit portrays
17 the dual induction log across the Gallup formation, the top
18 indicated at 6,212 feet. No perforations are depicted since
19 there never was a completion made in the Gallup formation.

20 The third and final page portrays the
21 dual induction log across the Dakota formation and the per-
22 forations are designated there. You see that they occur
23 over a range of approximately 7200 to 7300 feet.

24 Q All right, Mr. Trimble, would you now
25 identify what has been marked for identification as ARCO Ex-

1 Exhibit Number Five?

2 A Exhibit Number Five is a listing of the
3 estimated formation tops and estimated pay intervals for the
4 Chacon Federal 102. These were estimated by our geologist
5 who works this area.

6 Again the primary information of interest
7 is that the Gallup top is estimated to -- would be estimated
8 to occur in this well at a depth of 6,190 feet with the top
9 of the Dakota A occurring at 7,215 feet.

10 You can see here that the formations are
11 distinctly different in that they are separated by approxi-
12 mately 1025 feet.

13 Q Even though they're classified as one
14 pool by the Division?

15 A That's correct.

16 Q Would you now go to Exhibit Number Six,
17 identify this, and review it for the examiner?

18 A Exhibit Number Six is a structure map for
19 the Gallup formation. The contour intervals portraying the
20 top of the Gallup formation expressed in terms of subsea
21 depth.

22 You can see that in the area of the Cha-
23 con Federal 102, our proposed Dakota well, and the existing
24 Chacon Federal 101, the Gallup well, that the Gallup forma-
25 tion has a subsea top of approximately 675 feet, positive

1 675 feet.

2 Q Would you now go to Exhibit Number Seven?

3 A Exhibit Number Seven is structure map,
4 this time for the top of the Dakota formation. The primary
5 interest here is again the proximity of the proposed Chacon
6 Federal 102 and the existing Chacon Federal 101. The Dakota
7 formation top occurs at a subsea depth of negative 260 feet,
8 the tops again being separated by approximately 1000 feet.

9 Q Now, Mr. Trimble, on this exhibit there
10 appears to be a trace for a cross section. Does that have
11 any bearing on the application pending before the Commission
12 or the Division in this case?

13 A No, it does not.

14 Q Now what conclusion can you draw from the
15 log sections and the structure maps that you've just re-
16 viewed?

17 A The main conclusion we can draw is that
18 the Gallup and Dakota formations are distinctly different
19 despite the fact that they are treated as a common pool, and
20 that in drilling the Chacon Federal 102 in close proximity
21 to the Chacon Federal 101 will not result in inefficient
22 operations in that the production from the two wells will be
23 coming from distinctly different formations.

24 Q Although the 102 is in close proximity to
25 the 101, is it more than 600 feet from the Chacon Federal

1 No. 8?

2 A Yes, it is.

3 Q All right, and those will be the two
4 wells producing from the Dakota?

5 A That's correct.

6 Q In your opinion is an additional Dakota
7 completion on this spacing unit necessary to effectively
8 drain the reserves under that spacing unit in the Dakota
9 formation?

10 A Yes, it is. A reservoir study which I've
11 conducted indicates that the area will not be adequately
12 drained by the single Dakota well which is the Chacon Fed-
13 eral No. 8 and that this well will leave significant volumes
14 of recoverable hydrocarbon reserves at ultimate recovery.

15 So we have concluded that the drilling
16 the Chacon Federal 102 would be necessary to economically
17 recover the available reserves that would otherwise remain
18 undrained.

19 Q Will other savings be affected by drill-
20 ing at the proposed location?

21 A Yes. Due to the proximity of the Chacon
22 Federal 101, we will be able to use common, existing surface
23 facilities and it will result in a savings to ARCO of ap-
24 proximately \$25,000.

25 Q Has notice of this application been pro-

1 vided to Meridian and Apache?

2 A Yes, Exhibits Number Eight and Number
3 Nine depict the letters which have been sent to both Apache
4 and Meridian and we have received waivers from both com-
5 panies.

6 Q In your opinion will granting this appli-
7 cation be in the best interest of conservation, the preven-
8 tion of waste, and the protection of correlative rights?

9 A Yes.

10 Q Were Exhibits One through Nine prepared
11 by you or compiled under direction and supervision?

12 A Yes.

13 MR. CARR: At this time we
14 would offer into evidence ARCO Oil & Gas Company Exhibits
15 One through Nine.

16 MR. STOGNER: Exhibits One
17 through Nine will be admitted into evidence.

18 MR. CARR: That concludes my
19 direct examination of Mr. Trimble.

20

21 CROSS EXAMINATION

22 BY MR. STOGNER:

23 Q Mr. Trimble, Well No. 8 down there to the
24 southwest of your proposed well, that is producing from the
25 Dakota Pool -- I mean Dakota formation, correct?

1 A Yes.

2 Q What pool is dedicated to that well?

3 A The Gallup-Dakota Pool.

4 | Q The West Lindrith Gallup-Dakota Pool?

5 A That's correct.

6 Q And is that presently producing?

7 A Yes, it is.

8 Q And the Well No. 101 is in the Gallup --

9 A That's correct.

10 Q -- formation of the same pool, right?

11 A Yes.

12 Q Have these two wells ever been
13 simultaneously dedicated?

14 A Yes.

15 Q They have. Do you know what order?

16 MR. CARR: We'll be happy to
17 provide you with the order number on that and also the
18 creation of the nonstandard spacing unit that you'd like.

19 MR. STOGNER: If you would,
20 please, I would appreciate it.

21 I have no further questions of
22 this witness at this time.

23 Are there any other questions
24 of Mr. Trimble?

25 MR. CARR: Nothing further.

1 MR. STOGNER: If not, he may be
2 excused.

3 Anything further in Case Number
4 9061?

5 MR. CARR: Nothing further.

6 MR. STOGNER: The case will be
7 taken under advisement.

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9 (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 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 this portion 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. 9061, heard by me on July 19, 1987.

Michael H. Boyer, Examiner
Oil Conservation Division