

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

13 February 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Anadarko Production	CASE
Company for an unorthodox gas well	8479
location, Eddy County, New Mexico.	

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation	Jeff Taylor
Division:	Attorney at Law
	Legal Counsel to the Division
	State Land Office Bldg.
	Santa Fe, New Mexico 87501

For the Applicant:	W. Thomas Kellahin
	Attorney at Law
	KELLAHIN & KELLAHIN
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I N D E X

RICHARD A. ERICKSON

Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Stogner	11

E X H I B I T S

Anadarko Exhibit One, Structure Map	4
Anadarko Exhibit Two, Isopach	6
Anadarko Exhibit Three, Cross Section	7

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3 MR. STOGNER: We'll call now
4 Case Number 8479.

5 MR. TAYLOR: The application of
6 Anadarko Production Company for an unorthodox gas well loca-
7 tion, Eddy County, New Mexico.

8 MR. KELLAHIN: If the Examiner
9 please, I'm Tom Kellahin of Santa Fe, New Mexico, appearing
10 on behalf of the applicant, and I have one witness to be
11 sworn.

12 MR. STOGNER: Are there any
13 other appearances in this matter?

14 Will the witness please stand
15 and be sworn?

16 (Witness sworn.)

17 RICHARD A. ERICKSON,
18 being called as a witness and being duly sworn upon his
19 oath, testified as follows, to-wit:

20 DIRECT EXAMINATION

21 BY MR. KELLAHIN:

22 Q Mr. Erickson, for the record would you
23 please state your name and occupation?

24 A My name is Richard Erickson and I'm Staff
25 Geological Engineer with Anadarko Production Company in Mid-

1 land, Texas.

2 Q Mr. Erickson, have you previously testi-
3 fied before the Oil Conservation Division of New Mexico as a
4 geological engineer?

5 A Yes.

6 Q And pursuant to your employment have you
7 made a study of the geologic characteristics surrounding
8 this application?

9 A Yes.

10 MR. KELLAHIN: We tender Mr.
11 Erickson as an expert geological engineer.

12 MR. STOGNER: He is so quali-
fied.

13 Q Mr. Erickson, let me show you what has
14 been marked as Applicant Exhibit Number One and have you,
15 first of all, identify that exhibit.

16 A This is the structure map, the top of the
17 Morrow Clastics.

18 Q Would you locate for us on the exhibit
19 the proration unit that Anadarko seeks to drill this well
on?

20 A The proration unit that Anadarko seeks is
21 the south half of Section 22, Township 21 South, Range 27
22 East.

23 Q Would you identify for the Examiner what
24 the unorthodox location is that you seek with this applica-
25 tion?

1
2 A The unorthodox location is indicated by
3 the red dot and arrow.

4 Q Let me direct your attention to the sec-
5 tion immediately to the west of Section 21. Would you iden-
6 tify for us any other unorthodox well locations in that sec-
7 tion that have been approved for any other operator?

8 A Cities Service has a well, the Government
9 "AD" No. 3, in the northeast quarter of Section 21, and that
10 was Order No. R-7679.

11 Q What is the distance that well is from
12 the common section line between your section and their sec-
13 tion?

14 A 660 feet.

15 MR. KELLAHIN: Mr. Examiner, we
16 show you for your informatin a copy of Division Order R-7679
17 entered in that case on the adjoining well.

18 Q What is the spacing and proration unit
19 assigned by Cities Service to their well in Section 21?

20 A 320 acres. It's the north half of Sec-
21 tion 21.

22 Q In Section 22, your section, Mr. Erick-
23 son, is the north half of your section dedicated to a produ-
24 cing Morrow well?

25 A Yes, it is.

 Q Would you identify that well for us?

 A That's the Bass State 22 Com No. 1 in the
northwest quarter of the section.

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Q Would you now explain what conclusions you reach from this exhibit in terms of your location?

A Okay. We feel from this, this location will be approximately 100 feet high to the presently plugged and abandoned well on the lease we hold, and about 40 feet, or so, low to the Cities Service "AD" No. 3.

Q In your opinion, Mr. Erickson, is this the optimum location in the south half of Section 22 from which to test for production in the Morrow Clastics?

A Yes, we believe so.

Q Why could you not move this, in your opinion, to a standard location farther to the east?

A We don't wish to go down dip. The porosity, we believe, becomes poorer that direction. Also, there are two wells that have been tested water wet in that direction.

Q All right, sir, let's turn to Exhibit Number Two, which is the Isopach, and have you identify and describe that.

A Exhibit Number Two is the Isopach of the Lower Morrow with a field porosity greater than 8 percent.

Q Would you describe for us the significance of the proposed well location in terms of the Ispach?

A Okay. The well location will have approximately 50 net feet of pay versus 32 in the well that's plugged on our lease, and 67 in the Cities Service well.

It's a channel sand sequence. We antici-

1
2 pate excellent porosity in the area.

3 Q You've identified on that exhibit the two
4 wells that are wet in the interval to be tested?

5 A Yes. In section 23 are two wells colored
6 in blue. One was an Amoco well and one was a Read and
7 Stevens well. They were both production tested and DST'ed
8 in the Lower Morrow, which is the pay in the area, and they
9 both were water wet producing up to several hundred barrels
of water.

10 Q All right, sir, let's turn to the cross
11 section now, Mr. Erickson.

12 All right, sir, would you identify and
13 describe for us the wells contained on that exhibit?

14 A Yeah. This is a basically west/east
15 cross section. It begins at the Cities Service Elizondo "A"
16 Federal 2-Y in Section 21, Township 21 South, Range 27 East
on the left.

17 The next well, second from the left, is
18 the Cities Service Government "AD" Com No. 3, the recently
19 drilled well.

20 The next well is the Texas International
21 Petroleum Corporation Sun State No. 1 in Section 22, Town-
22 ship 21, 27. That's the well presently on the lease we have
and is now abandoned.

23 The next well is the Amoco State "IR" No.
24 1 in Section 23, Township 21 South, Range 27 East. That was
25 a well that was tested in the Lower Morrow and the Upper

1
2 Morrow and found to be water productive.

3 The last well is the Read and Stevens
4 Hisson State Com No. 1, and it was also tested in the Lower
5 Morrow and found to wet.

6 Q Would you describe for us the geology be-
7 tween the Cities Service well in Section 21, across through
8 your location in Section 22?

9 A Okay. The Cities Service well will be
10 higher on the structure, indicating this. The structure
11 dips to the southeast and through the Texas International
12 Petroleum location. Our location will be, like I said,
13 about 40 feet low to the Cities Service well.

14 Q Are you able to correlate the Morrow
15 sands between your proposed location and the Cities Service
16 Well?

17 A Yes. Some of the sands do correlate very
18 well. There are some others that do not.

19 Q What is the experience of the operators
20 in the area with regards to the original bottom hole pres-
21 sures in this portion of the Morrow?

22 A The original bottom hole pressure, the
23 shut-in wellhead pressure which I have record of, is approx-
24 imately 3600 pounds.

25 Q And how does that compare to what Cities
Service tested in their well?

A Cities Service's shut-in wellhead pres-
sure after completion was 2690 pounds.

1 Q With regards to your acreage in the south
2 half of Section 22, what conclusion can you draw from a com-
3 parison of the pressure information and the correlation of
4 the Morrow formation across this area?

5 A We believe that the decrease in pressure
6 does indicate some -- some depletion in the area.

7 Q And unless your proposed location is
8 granted, do you have an opinion as to whether or not your
9 share of the gas from this zone will be produced by others?

10 A We feel that Cities would probably pro-
11 duce our share out of the immediate area.

12 Q Were Exhibits One, Two, and Three pre-
13 pared by you?

14 A Yes.

15 Q In your opinion will approval of this ap-
16 plication, Mr. Erickson, prevent waste, protect correlative
17 rights, and be in the best interest of conservation?

18 A Yes.

19 MR. KELLAHIN: We move the in-
20 troduction of Exhibits One, Two, and Three.

21 MR. STOGNER: Exhibits One,
22 Two, and Three will be admitted into evidence.

23 Q Mr. Erickson, when do you propose to com-
24 mence the drilling of this well?

25 A We need to commence before April 1st,
1985.

Q Why is there a need to commence before

1
2 April 1st of '85?

3 A Our State lease expires at that time.

4 Q All right, sir. Thank you.

5
6 CROSS EXAMINATION

7 BY MR. STOGNER:

8 Q I'd like to refer back to Exhibit One.

9 Is the Burton Flat Morrow a prorated gas pool or a nonpro-
rated gas pool?

10 A I believe it's nonprorated, I think.

11 MR. KELLAHIN: Burton Flats
12 Morrow is a prorated gas pool, Mr. Stogner.

13 A Okay.

14 Q Obviously the well offsetting you to the
northwest is an unorthodox location by Order No. R-6979.

15 Is the Amoco well in Section 23, offset-
16 ting to the northeast, is that an unorthodox location?

17 A I am not sure on that one. I believe it
18 is an orthodox location. It is an Atoka producer.

19 Q Oh, it's an Atoka. Okay.

20 Do you know if there's very many unortho-
dox locations within the Burton Flat Morrow Pool?

21 A There are -- I don't believe there are
22 very many unorthodox locations. There are a number of wells
23 that are completed closer than these two wells would be com-
24 pleted.

25 MR. STOGNER: I have no further

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questions of this witness.

Are there any other questions?

If not, he may be excused.

Is there anything further in

Case Number 8479?

MR. KELLAHIN: No, sir.

MR. STOGNER: If not, this case
will be taken under advisement.

(Hearing concluded.)

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 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. 8479
heard by me on 13 February 1985.
Michael E. Hogue, Examiner
Oil Conservation Division