

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 15 March 1989

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 In the matter of cases called on this
10 date and continued or dismissed with-
11 out testimony presented.

CASES
9610
9619
9624
9626
9627
9628
9629
9630
9631

12 *Transcript in*
13 *Case 9610*

14 BEFORE: Michael E. Stogner, Examiner

15
16 TRANSCRIPT OF HEARING

17
18 A P P E A R A N C E S

19
20 For the Division:

21 Robert G. Stovall
22 Attorney at Law
23 Legal Counsel to the Division
24 State Land Office Bldg.
25 Santa Fe, New Mexico

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
7 29 March 1989

8 EXAMINER HEARING

9 IN THE MATTER OF:

10 Application of Yates Petroleum Corp- CASE
11 oration for an unorthodox gas well 9628
12 location, Eddy County, New Mexico.

13
14 BEFORE: David R. Catanach, Examiner

15
16 TRANSCRIPT OF HEARING

17
18 A P P E A R A N C E S

19 For the Division:

20 For Yates Petroleum
21 Corporation:

22 Chad Dickerson
23 Attorney at Law
24 DICKERSON, FISK & VANDIVER
25 Seventh & Mahone/Suite E
Artesia, New Mexico 88210

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

I N D E X

THERESA PADILLA

Direct Examination by Mr. Dickerson	3
Cross Examination by Mr. Catanach	11

E X H I B I T S

Yates Exhibit One, Land plat	4
Yates Exhibit Two, Isolith and Structural Map	6
Yates Exhibit Three, Cross Section	8
Yates Exhibit Four, Compilation	10

1 MR. CATANACH: At this time
2 we'll call Case 9628. Application of Yates Petroleum
3 Corporation for an unorthodox gas well location, Eddy
4 County, New Mexico.

5 MR. DICKERSON: Mr. Examiner,
6 I'm Chad Dickerson of Artesia, New Mexico on behalf of the
7 applicant and I have one witness, Ms. Padilla, who your
8 record will show was previously sworn and qualified, in the
9 preceding case.

10 MR. CATANACH: Let the record
11 show that.

12 Any other appearances in this
13 case?

14 You may proceed, Mr Dickerson.

15
16 THERESA PADILLA,
17 being called as a witness previously sworn and remaining
18 under oath, testified as follows, to-wit:

19
20 DIRECT EXAMINATION

21 BY MR. DICKERSON:

22 Q Ms. Padilla, will you state the purpose
23 of Yates' application in Case 9628?

24 A In Case 9628 Yates Petroleum is seeking
25 approval for an unorthodox gas well location in Eddy

1 County, New Mexico. This is the re-entry of a plugged and
2 abandoned Carper Drilling Company Marathon State Well No.
3 1. It is located at an unorthodox gas well location of 660
4 feet from the north and the east lines of Unit A in Sec-
5 tion 33, Township 17 South, Range 24 East.

6 Q Okay, let me direct your attention to
7 the land plat, which we have submitted to Mr. Catanach as
8 Exhibit Number One.

9 A Uh-huh.

10 Q Tell him from that plat what it shows.

11 A The red spot on the map in Section 33 is
12 where the well would be, (unclear) 1020 feet into the top
13 of the Pennsylvanian Lower Canyon formation. At that time
14 it had 40 acres dedicated to it because it would be antici-
15 pating oil in that formation.

16 Q So it was designed to be a test of the
17 Canyon formation and a 40-acre oil well was anticipated.

18 Q Was it dry and abandoned at that time at
19 that oil well location?

20 A Yes, it was.

21 Q What are Yates current plans for re-en-
22 tering the well? You have actually, in fact, already ac-
23 complished the re-entry, have you not?

24 A That is correct.

25 Q And what does Yates anticipate doing by

1 that re-entry?

2 A By the re-entry we wanted to test the
3 Upper Wolfcamp formation at a depth of 4886 to 4965 feet.

4 We also wanted to deepen the well to
5 test the intermediate formations down to the Morrow,
6 looking for Basal Penn sands. In this particular area to
7 the northwest the Beard Wells are very productive from the
8 basal Penn sands and we anticipate gas production.

9 Q Your anticipated gas productive zones
10 have been tested and you'll talk about them a little bit
11 more in a minute, --

12 A Yes.

13 Q -- will you not?

14 A Uh-huh.

15 MR. DICKERSON: Mr. Catanach,
16 I might tell you for your information that by administra-
17 tive order MSL-2637 the Wolfcamp completion, being up the
18 hole for the old total depth in the abandoned Carper Drill-
19 ing Company No. 1 Well, has been approved administratively.
20 The application, therefor, in this hearing currently ex-
21 tends only for the lower formations in the interval tested
22 by reason of Yates deepening by approximately 1000 feet of
23 this old wellbore.

24 Q One further question on Exhibit Number
25 One, Ms. Padilla, this acreage is totally surrounded to the

1 north and east in which direction the location is unortho-
2 dox for 320-acre spacing by Yates Petroleum Corporation
3 acreage, is it not?

4 A Yes.

5 Q All right. Direct your attention to
6 Exhibit Number Two. Identify this, tell us by whom it was
7 prepared and for what purpose and what use you have made of
8 it.

9 A The second exhibit is a combined sand
10 isolith and structural map. The map was prepared by our
11 geologist, Ray Beck.

12 The dashed lines that you see on the
13 structural map show the top of the Chester Limestone.
14 You'll see a trend of a dip, a regional dip of approximate-
15 ly 250 feet per mile to the southeast. The contour
16 interval there is 500 feet.

17 As far as the isolith, the contour in-
18 terval there is 10 feet and these are isoliths showing the
19 various thicknesses of the basal Penn sands in the area.

20 If you'll note in the northeast quarter
21 of this exhibit, the Beard wells, the Hagstrom in Section
22 8, the McCaw in Section 18, and the Hanlett in Section 17,
23 of Town 17 South, Range 24 East, are gas productive from
24 the basal Penn sands, so we have run a trace line cross
25 section A-A' trending from the northwest to the southeast,

1 which is our next exhibit, showing the thicknesses of these
2 sands.

3 Q Let me ask you, looking at Exhibit Num-
4 ber Two, if rather than re-entering this existing wellbore,
5 what does Exhibit Number Two show with respect to the rela-
6 tive advantage of the existing wellbore as compared to the
7 location of a standard location for a north half spacing
8 unit?

9 A Okay, the location of the Marathon AGI
10 No. 1 is that we anticipate approximately 33 feet of basal
11 Penn sands at its present location, unorthodox location.
12 If we go ahead to the -- to spot a well in a standard
13 location, we would not anticipate that many feet of pay,
14 potential pay, of the basal Penn sand.

15 Q Your isolith shows the thickness of the
16 sand decreasing as you would move this location toward a
17 standard location --

18 A Standard location.

19 Q -- for the north half.

20 A That's correct, and the other aspect to
21 look at is that it would cost approximately \$200,000 more
22 to drill a well from surface to TD, about 8100 feet, versus
23 just re-entering and deepening this well approximately 1000
24 feet.

25 Q All right, turn to your cross section,

1 Exhibit Number Three, and tell us about the wells shown on
2 it.

3 A Okay, if you'd refer back to your Exhi-
4 bit Number Two, this Exhibit Number Three is a stratigraphic
5 ic cross section A-A'. It is hung on top of the Lower
6 Canyon formation and it shows pertinent correlations be-
7 tween several wells here.

8 You'll notice the Chester Limestone,
9 which the structural map is mapped upon on Exhibit Two.
10 The wells that are included in this cross section are the
11 Beard Hagstrom No. 1 in Section 8 of 17 South, 24 East; the
12 Beard McCaw No. 1 in Section 18 of 17 South, 24 East; the
13 Hanlett No. 1 in Section 17 of 17, 24; the proposed deepen-
14 ing of Marathon AGI State No. 1 in Section 33, 17, 24; and
15 the Yates Petroleum Richard Knob AEX No. 1 in Section 34 of
16 17, 24.

17 Now as you notice, the basal Penn sands
18 are from a lower Canyon formation down through the Morrow
19 Clastics and if you'll note, that the Morrow Clastics seem
20 to pinch out toward the northwest and the Atoka actually
21 sits on top of the eroded Chester Limestone.

22 The Morrow Clastics seems to thicken as
23 you go to the southeast.

24 Okay, the other thing that I was going
25 to mention, you'll also note that on the lefthand -- left

1 portion of the logs the yellow sections will tell you the
2 sand count and how we arrived at our isolith map on Exhi-
3 bit Two, and the three Beard wells are producing from the
4 basal Penn sand in the Atoka. We anticipate, as we men-
5 tioned in Exhibit Two, approximately 33 feet in the Mara-
6 thon well.

7 Q So this exhibit was prepared prior to
8 the actual re-entry of the well.

9 A That is correct.

10 Q And by showing a cross section between
11 the existing wells with your proposed re-entry in between,
12 you merely anticipated finding the same gas shows or gas
13 production which are in these other wells in the existing
14 wellbore.

15 A That is correct.

16 Q Now you testified that the re-entry has
17 actually been accomplished at the current time. Do you
18 know the general results of what the basal Penn sands that
19 you've mentioned --

20 A Yes.

21 Q -- reflect?

22 A Yes. The well had TD'd at 7970 feet, so
23 we had drilled an additional 950 feet. The top of the
24 Pennsylvanian was spotted at 6107 feet with the top of the
25 Morrow formation at 7690 feet. The zone in the Morrow for-

1 mation, the interval 7770 to 7780, has been perforated and
2 has tested this past Friday at 2-1/2-million cubic feet of
3 gas per day.

4 MR. DICKERSON: It's my un-
5 derstanding, Mr. Catanach, that those logs have not yet
6 been filed but they will be shortly in the normal course of
7 business with the OCD.

8 Q Ms. Padilla, refer to the compilation of
9 material that we have collectively submitted as Yates Ex-
10 hibit Number Four and summarize for us what you've shown by
11 that material.

12 A Exhibit Number Four consists of three
13 sheets. The cover sheet will show you the economics of the
14 Marathon re-entry. Attached to this are two AFE's, the
15 first one showing the cost of drilling at a standard loca-
16 tion, with the cost being \$483,975.

17 The third sheet will show the re-entry
18 of the Monsanto, deepening it approximately 1000 feet to
19 the Morrow, with the cost to drill and complete of approxi-
20 mately \$283,400.

21 If you take the difference of it, you're
22 talking \$200,575 difference, and we feel by -- and re-
23 entering the Marathon well versus spotting another location
24 and drilling from surface to TD, that we would be prevent-
25 ing economic waste.

1 Q Now, again, this exhibit was prepared
2 prior to the actual re-entry of the well so that actual
3 cost figures move very slightly from what you have shown.

4 A That is correct.

5 Q Does -- in your opinion as an engineer,
6 does the anticipated cost savings of approximately \$200,000
7 taken together with the geologic advantage obtained by re-
8 entering the existing wellbore in and of itself prevent the
9 economic waste which would be caused by drilling that well
10 from top to bottom at a standard location in the north half
11 of Section 33?

12 A Yes, I do.

13 Q And the approval of this application
14 would therefore prevent that waste, in your opinion?

15 A That is correct.

16 MR. DICKERSON: Mr. Catanach,
17 I'd move admission of Yates Exhibits One, Two, Three and
18 Four and I have no further questions.

19 MR. CATANACH: Exhibits One
20 through Four will be admitted as evidence.

21
22 CROSS EXAMINATION

23 BY MR. CATANACH:

24 Q Ms. Padilla, you said the well has been
25 tested in the Morrow.

1 A That is correct. It was perforated on
2 Friday and tested at 2-1/2-million cubic feet of gas a day.

3 Q And when you say basal Penn sand, you
4 are including the Morrow in that.

5 A Yes, I am. The basal Penn sands start
6 with the lower -- the top of the lower Canyon formation
7 through the Morrow Clastics.

8 Q Were any other formations tested? You
9 said that you tested --

10 A I have not been in the office since Fri-
11 day but they have several shows and I don't know the tops
12 above the Morrow, so I would anticipate Atoka potential;
13 they had several gas shown on the mud log.

14 Q Do you know anything about the Wolfcamp?

15 A To the best of my knowledge they well
16 also be testing it but I do not know anything definite on
17 that.

18 Would you like me to get back to you on
19 that?

20 Q No, that's all right. Is your well in
21 Section 33 the only production -- well, is that a step out
22 from the production up in 8 and 17 and 18? There's nothing
23 in between those two?

24 A No, sir, as far as our trace line cross
25 section, though, there is in the third zone, wells to the

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. DICKERSON: No, sir.

MR. CATANACH: If not, it will
be taken under advisement.

(Hearing concluded.)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

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. 9628, heard by me on March 29 1955.
David R. Cotnam, Examiner
Oil Conservation Division