

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

12 July 1989

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Energy Corpor- CASE
ation for an unorthodox gas well 9695
location and a non-standard gas pro-
ration unit, Chaves County, New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

For Yates Energy
Corporation:

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I N D E X

SHARON R. HAMILTON

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CURTIS A. ANDERSON

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1 MR. STOGNER: I'll call next
2 Case 9695, which is the application of Yates Energy Cor-
3 poration for an unorthodox gas well location, and a non-
4 standard gas proration unit in Chaves County, New Mexico.

5 At this time I'll call for
6 appearances.

7 MR. CARROLL: Mr. Examiner, my
8 name is Ernest L. Carroll of the law firm of Losee, Carson,
9 Haas & Carroll of Artesia, New Mexico.

10 I have two witnesses today.

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

13 Will the witnesses please
14 stand?

15
16 (Witnesses sworn.)

17
18 MR. STOGNER; Mr. Carroll?

19 MR. CARROLL: We call our
20 first witness, Sharon Hamilton.

21
22 SHARON HAMILTON,
23 being called as a witness and being duly sworn upon her
24 oath, testified as follows, to-wit:
25

DIRECT EXAMINATION

BY MR. CARROLL:

Q Ms. Hamilton, would you please state your full name and by whom you're employed for the record?

A Sharon R. Hamilton, Yates Energy Corporation.

Q Ms. Hamilton, have you previously testified before this Commission hearing?

A Yes, sir.

Q In the capacity as a petroleum landman?

A Yes, I have.

Q And have your credentials been accepted by the Commission?

A Yes, they were.

MR. CARROLL: Mr. Examiner, I present this witness as an expert petroleum landman.

MR. STOGNER; Ms. Hamilton is so qualified.

Q Ms. Hamilton, are you familiar with the application that has been filed in this particular proceeding by Yates Energy?

A Yes, I am.

Q And what is that application for?

A An unorthodox gas well location and a nonstandard proration unit.

1 Q All right, would you please summarize
2 that application for the commissioner?

3 A Our proposed location for the Seymour
4 State Com No. 2 Well, 1300 feet from the west line, 660
5 feet from the south line, Section 18, 9 South, 27 East, for
6 a proposed Montoya formation test at 6250 feet.

7 Q All right. Ms. Hamilton, have you pre-
8 pared an exhibit land plat for today's hearing?

9 A Yes, I have.

10 Q I ask you to turn then to Yates Energy
11 Exhibit Number One and please explain that exhibit to the
12 examiner.

13 A It shows the location of our proposed
14 well in Section 18 of 9, 27, for a proration of the west
15 half of said Section 18.

16 Q Is that 19 or 18?

17 A Section 18.

18 Q Section 18, all right, and the proposed
19 location, is it marked in red on this --

20 A Yes, it is.

21 Q -- exhibit. All right. Would you
22 please set out the offset operators to this particular pro-
23 posed well?

24 A Elk Oil Company is located to the south.
25 Fred Pool Drilling Company to the west; Yates Petroleum

1 Corporation to the north and east; Plains Radio Broadcast-
2 ing Company to the north; and Louisiana Land & Exploration
3 to the north, also.

4 Q All right. Ms. Hamilton, previous to
5 this hearing notice was given to all these offset opera-
6 tors of this -- of this application and of the hearing, is
7 that correct?

8 A Yes, sir, they've all been notified.

9 MR. CARROLL: Mr. Examiner, we
10 have filed an affidavit pursuant to Rule 1207 previously
11 showing -- the affidavit of myself and showing the copies
12 of the letter and return receipts.

13 Q Has Yates Energy also obtained waivers
14 from all five of these offset operators?

15 A Yes, they have.

16 MR. CARROLL; Mr. Examiner, at
17 this time I would like to present the -- for filing, copies
18 of the original waivers from all five of the offset opera-
19 tors.

20 MR. STOGNER: Thank you, Mr.
21 Carroll.

22 Before we continue, Inexco is
23 Louisiana Land and Exploration? Is that one --

24 A Yes.

25 MR. STOGNER: -- and the same?

1 MR. CARROLL: Yes, sir,
2 Inexco, let's see, it is -- Inexco is a wholly owned sub-
3 sidiary of Louisiana Land and Exploration Company.

4 MR. STOGNER: Okay, so
5 Inexco's name shows up on the plat and Louisiana Land and
6 Exploration covers it.

7 MR. CARROLL: That's correct.

8 MR. STOGNER: Thank you, Mr.
9 Carroll, you may proceed.

10 MR. CARROLL: Mr. Examiner, I
11 have no further testimony from this witness and would
12 tender her to you.

13 MR. STOGNER: Okay, let's
14 see, you wish to offer Exhibit Number One at this time?

15 MR. CARROLL: Yes, I would
16 offer Exhibit Number One at this time.

17 MR. STOGNER: Exhibit Number
18 One will be admitted into evidence at this time and we'll
19 also admit the waivers which you have made a part of the
20 record.

21

22 CROSS EXAMINATION

23 BY MR. STOGNER:

24 Q Now, Mr. -- that looks like a J. J.
25 Grynberg's name appears on the north portion of Section 18.

1 Where does he fall in that, Ms. Hamilton?

2 A He's to be a part of our well under com-
3 munitization.

4 Q Okay, so he is communitized.

5 A Yes, sir.

6 Q Or will be. Now looking to the south,
7 there appears to be several names. Is that a Byrum in the
8 northwest quarter of the northeast quarter of 19?

9 A Yes, sir, I believe that well is oper-
10 ated by Elk Oil Company.

11 Q Okay. Now that Elk Oil Company well, is
12 that a 320-acre spacing unit in which that belongs to?

13 A I'm not certain of that.

14 MR. CARROLL: Mr. Examiner,
15 just for the record, that is a laydown in the top half of
16 that section.

17 Elk Oil has worked with Yates
18 Petroleum -- Yates Energy, excuse me, and in fact, there is
19 an agreement. We had not proposed to present it to the
20 commission as an exhibit but Yates Energy has entered into
21 an agreement with Elk Oil that if they wish to drill a well
22 at an unorthodox location to take advantage, that we will
23 also grant a waiver to Elk Oil, and that is part of the
24 behind the scenes negotiation with -- with Elk Oil and
25 Yates Energy.

1 MR. STOGNER: Let me make sure
2 I have this right. They will not oppose your unorthodox
3 location and you agree not to oppose them if they drill one
4 in the north half, is that correct?

5 MR. CARROLL: That's correct,
6 Mr. Examiner. In fact, waivers to that effect have already
7 been signed and presented to Elk Oil.

8 Q Could you tell me what the status of
9 each of these state leases are in Sections 18, 19 and 24,
10 Ms. Hamilton? Is this all one lease?

11 A I'm -- I'm not sure of that, sir.

12 Q Was the State Land Office involved in
13 such an agreement, Ms. Hamilton, between Elk and your com-
14 pany?

15 A No, sir.

16 MR. CARROLL: Mr. Examiner, if
17 I might ask one question.

18

19 REDIRECT EXAMINATION

20 BY MR. CARROLL:

21 Q There is a producing well in the west
22 half of Section 18 at the present time, is there not?

23 A Yes, there is.

24 Q And what is the name of that well?

25 A The Seymour State Com No. 1.

1 Q That's located to the north of the pro-
2 posed location, is it not?

3 A Yes, sir, in the northwest of the -- in
4 the southwest of the northwest of 18.

5 Q That well is presently producing holding
6 that particular lease, is that correct?

7 A Yes, it is.

8 Q And that well is not producing from the
9 proposed objective of the State -- the Seymour No. 2, is
10 that correct?

11 A That's correct.

12 Q Do you recall what objectives that No. 1
13 Well is producing from?

14 A I believe it's producing from the Abo
15 formation.

16 MR. STOGNER: Mr. Carroll,
17 will your next witness have more information on this parti-
18 cular well?

19 MR. CARROLL: Yes, Mr. -- our
20 next witness will be a geologist which will explain -- pre-
21 sent additional exhibits and explain this particular well.

22 MR. STOGNER: Does he have
23 knowledge in the Seymour State Com Well No. 1 and what its
24 present completion is?

25 MR. CARROLL: I believe he

1 does.

2 MR. STOGNER: Okay, at this
3 time I have no other questions of Ms. Hamilton.

4 Thank you, Mr. Carroll.

5 MR. CARROLL: Thank you. Curt
6 Anderson, please.

7
8 CURTIS A. ANDERSON,
9 being called as witness and being duly sworn upon his oath,
10 testified as follows, to-wit:

11

12 DIRECT EXAMINATION

13 BY MR. CARROLL:

14 Q Would you please state your name and by
15 whom you are employed for the record?

16 A My name is Curtis Anderson and I'm em-
17 ployed as a geologist with Yates Energy Corporation.

18 Q Mr. Anderson, have you previously testi-
19 fied before the Oil Conservation Division?

20 A Yes, I have.

21 Q And have your credentials been previous-
22 ly accepted by this commission as an expert witness?

23 A Yes.

24 MR. CARROLL: Mr. Examiner, I
25 would tender Mr. Anderson as an expert witness.

1 MR. STOGNER: Mr. Anderson is
2 so qualified.

3 Q Mr. Anderson, you have prepared certain
4 exhibits, have you not, for presentation to the examiner
5 today?

6 A Yes.

7 Q All right, starting with Exhibit Number
8 Two, would you please explain to the Examiner just exactly
9 what this exhibit purports to portray?

10 A Okay. Exhibit Number Two is a structure
11 map drawn on top of the Montoya formation and the Montoya
12 formation is the primary objective at the proposed
13 location.

14 On this map, which is a scale of 1-to-
15 2000. The proposed proration unit is outlined in stipple.
16 The gas wells that are colored brown are wells that are
17 producing from the Montoya formation.

18 The brown colored area near the south or
19 the lower center of the map is an area where the Montoya
20 formation is absent and the blue color on the map is the
21 approximate area of the Montoya reservoir that carries the
22 natural gas.

23 This area is characterized by PrePenn-
24 sylvanian structuring resulting in sharp structural knobs.
25 At the end of Mississippian time these knobs were eroded

1 exposing a central core of PreCambrian. At the central
2 core, of course, there was an apex of the structure. All
3 of the Montoya and Mississippian structure were removed.
4 This central core of PreCambrian rock now is encircled by a
5 rapidly outward thickening interval of Montoya rock.

6 This Montoya dolomite carries the nat-
7 ural gas and forms a doughnut shaped reservoir around the
8 Paleo structure, after which the Pennsylvanian formation
9 was deposited on top, and providing the trap.

10 The purpose of this map, of course, is
11 to show the structure. Our proposed location in the south-
12 west quarter of Section 18 is up dip from the Yates Energy
13 Seymour State Com No. 1, located in the northwest quarter
14 of Section 18, and it should be well within the productive
15 limits of the Montoya formation.

16 This location is also on strike with
17 several producing and offset wells; the well in the
18 southwest quarter of Section 13 of 9 South, 26 East, which
19 gas produced 1.2 BCF, and it's also on strike with two Elk
20 Oil Company wells located in the northeast quarter and the
21 southwest quarter of Section 19 of 9 South, 27 East.

22 Q Mr. Anderson, just to clarify for the
23 record, there are certain notations on -- with respect to
24 certain of these wells, abbreviations. One is N-D-E.
25 Would you explain to Mr. Stogner what that stands for?

1 A It's just that that borehole was not
2 drilled deep enough to penetrate the objective formation.

3 Q All right, and then there is the abbrevi-
4 ation "NP".

5 A In that the well was drilled deep enough
6 but the Montoya formation was not present.

7 Q All right, now your Exhibit Number Two
8 does depict the other producing well that is located on the
9 west half of Section 18, does it not?

10 A Yes, sir.

11 Q Could you tell the examiner a little
12 more about that well, what the objective -- original objec-
13 tive was, where it's producing now, the history that you --
14 you recall from it, and I may -- would that -- would it be
15 helpful to go to your cross section to explain that well?

16 A Yes, it would.

17 Q On this Exhibit Two you do have a line
18 marked showing the location of the cross section which
19 you've prepared, do you not, and it's marked A-A'?

20 A Yes.

21 Q All right, and then your cross section
22 is Exhibit Number Three, is it not?

23 A Yes, it is.

24 Q Well, then, if you will please explain
25 this exhibit for the Examiner and in particular dwell upon

1 the producing well, the Seymour No. 1 that's located in
2 this half section.

3 A Sure. Structural cross section A-A',
4 Montoya interval, from left to right goes from south to
5 north. We'll begin on the right end, which will be the
6 north.

7 The end well is the Yates Petroleum
8 Corporation Whitworth RU State No. 1, located in the north-
9 east quarter of Section 12 of 9, 26.

10 It's representative of a -- of a well
11 that is well off structure and you can see there that the
12 pink color includes a thick section of Mississippian forma-
13 tion and the blue color, a thick section of Montoya forma-
14 tion.

15 As you move up dip and on the flanks of
16 the structure, to the subject well, which is the Yates
17 Energy Corporation Seymour State Com No. 1, which is
18 located again in the northwest quarter of Section 18 of 9,
19 27, you can see that the Mississippian rocks have been
20 eroded away and we have Pennsylvanian -- Pennsylvanian
21 rocks directly overlying the (unclear) from bottom up.

22 Three completion attempts were made in
23 the Montoya formation, all of which resulted in either
24 formation water or formation water plus noncommercial quan-
25 tities of gas, and this is primarily because it was off

1 structure too far.

2 Subsequently the well was perforated and
3 completed in the Pennsylvanian formation and dually com-
4 pleted from the Abo formation, and that's the current pro-
5 duction from that well. It's dually completed from the
6 Pennsylvanian and the Abo.

7 MR. STOGNER: Let's stop on
8 that for a second. Is there any plans on abandoning the
9 Pennsylvanian zone in this particular well in the near
10 future?

11 A Yes, sir, the Pennsylvanian zone is --
12 is nearly depleted and the plans there are to, upon com-
13 pletion of this next well, to abandon the Pennsylvanian and
14 just produce from the Abo in the Seymour State No. 1.

15 MR. STOGNER: In fact, in May
16 of 1989 was there a C-103, that's a sundry notice report,
17 on this particular well, stating such a plan?

18 A That's correct. We had -- we had plan-
19 ned on abandoning the Pennsylvanian because of its noncom-
20 mercial rates or right at the noncommercial breakover point
21 and attempting a completion in the Wolfcamp formation.

22 MR. STOGNER: I'll take admin-
23 istrative notice of the well file that we have on record on
24 the Seymour No. 1. I appreciate you clearing that up for
25 me, --

1 A Yes, sir.

2 MR. STOGNER: -- Mr. Anderson,
3 you may continue.

4 A Moving from right to left again on the
5 cross section, we move considerably up dip and on structure
6 to the proposed location and then left of the proposed
7 location we have the Fred Pool Eastham State No. 2, which
8 is on strike, structural strike to the proposed location.
9 You can see that well was perforated in the upper 50 feet
10 of the Montoya formation and has produced 1.2 BCF.

11 And then the final well on the south end
12 of the cross section is the Elk Oil Runyan State No. 1,
13 which is located in the northwest quarter of Section 24,
14 and you can see we're on to the exposed PreCambrian core of
15 the structure at which there's -- there's no Montoya forma-
16 tion present.

17 The purpose of this particular exhibit
18 was to further identify and describe the particular geolo-
19 gic structure that we're dealing with.

20 Q All right, Mr. Anderson, you've prepared
21 another exhibit which we have marked as Exhibit Four. Would
22 you please describe that exhibit for the examiner?

23 A Exhibit Number Four is -- is an isopach
24 map of net clean dolomite within the Montoya formation and
25 this is to demonstrate the rapid thickening away from the

1 central core where the Montoya is absent.

2 Q All right, and your last exhibit, Exhi-
3 bit Number Five, would you please explain what this exhibit
4 is and its significance?

5 A Exhibit Number Five is just a geological
6 write-up explaining the geology that we're dealing with at
7 this location.

8 Q Is this what you've just previously
9 testified to, the same -- same information is contained?

10 A Only probably better stated.

11 Q All right. Now, Mr. Anderson, with re-
12 spect to the proposed location, based upon your experience
13 as a petroleum geologist and your review of this area, is
14 this proposed location the best location to drill a well
15 within this -- the west half of Section 18?

16 A Absolutely. It's imperative, and you
17 can see that it's very -- I'm trying to search for a word,
18 it's -- I hate to use risky, but it's difficult to predict
19 where the actual edge of this structure is, where you'll
20 maintain a thickness of Montoya and not produce and we are
21 here, of course, moving up structure. We see that down in
22 the north half of Section 19 that -- that the Montoya is --
23 is absent and we should be optimally located to drain the
24 -- the west half of Section 18.

25 Also within this field, in particular

1 the well located in the southwest -- southeast quarter of
2 Section 24, the producer located in the northwest quarter
3 of Section 30, the northeast quarter of Section 26, all are
4 unorthodox locations for 320-acre proration units. Of
5 course, further defining the -- the nature of the particu-
6 lar geology that we're dealing with and the critical part
7 of where to locate the wells.

8 Q Mr. Anderson, then, in your expert
9 opinion, were the Commission to grant this, do you feel
10 that the granting of such an application by Yates Energy
11 would be in the interest of conservation, present waste,
12 and protect correlative rights?

13 A Yes.

14 MR. CARROLL: Mr. Examiner, I
15 would tender the witness to you. I have no further ques-
16 tions.

17 And I would also move admis-
18 sion of Exhibits Two through Five.

19 MR. STOGNER: Exhibits Two
20 through Five will be admitted into evidence at this time.

21 I have no further questions of
22 Mr. Anderson.

23 Are there any questions of
24 this witness?

25 If not, he may be excused.

1 Mr. Carroll, do you have any-
2 thing further in this case?

3 MR. CARROLL: No, sir, I do
4 not.

5 MR. STOGNER: Does anybody
6 else have anything further in Case Number 9695?

7 This case will be taken under
8 advisement.

9
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 complete record of the proceedings in
the Examiner hearing of Case No. 9695,
heard by me on 12 July 19 89.

Michael E. Rogers, Examiner
Oil Conservation Division

8/2/89