

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

6 11 July 1984

7 EXAMINER HEARING

8 IN THE MATTER OF

9 Application of Petrus Operating Company, Inc. for an unorthodox
10 oil well location and non-standard proration unit, Lea County, New Mexico.

CASE
8242

11
12 BEFORE: Richard L. Stamets, Examiner

13
14 TRANSCRIPT OF HEARING

15
16 A P P E A R A N C E S

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18
19 For the Oil Conservation
20 Division:

21
22 For the Applicant:

W. Thomas Kellahin
Attorney at Law
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I N D E X

DON D. MATSON

Direct Examination by Mr. Kellahin 3

E X H I B I T S

Petrus Exhibit One, Contour Map 3

Petrus Exhibit Two, Map 9

Petrus Exhibit Three, Cross Section 10

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3 MR. STAMETS: Now we'll go back
4 and call Case 8242.

5 MR. PEARCE: That case is on
6 the application of Petrus Operating Company for an unortho-
7 dox gas well -- oil well location, I'm sorry, and a non-
8 standard proration unit, Lea County, New Mexico.

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

13 MR. PEARCE: Are there other
14 appearances in this matter?

15 (Witness sworn.)

16 DON D. MATSON,
17 being called as a witness and being duly sworn upon his
18 oath, testified as follows, to-wit:

19 DIRECT EXAMINATION

20 BY MR. KELLAHIN:

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

23 A My name is Don D. Matson, M-A-T-S-O-N,
24 and I'm a geological and geophysical consultant on a con-
25 tract with Petrus Operating Company, Midland, Texas.

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2 Q Mr. Matson, have you previously testified
3 before the Oil Conservation Division as a geologist?

4 A Yes, I have.

5 Q And pursuant to your employment by Petrus
6 Operating Company have you made a study of the facts sur-
7 rounding this application?

8 A Yes, sir.

9 MR. KELLAHIN: Mr. Examiner, we
10 tender Mr. Matson as an expert petroleum geologist.

11 MR. STAMETS: He is considered
12 qualified.

13 Q Mr. Matson, let me direct your attention
14 to what we've marked as Exhibit Number One, and have you
15 first of all identify for us what the subject pool is.

16 A It's the Bagley Siluro-Devonian Field.

17 Q All right, sir, and what is the current
18 spacing and well location rules with regards to the Bagley
19 Siluro-Devonian Pool, Mr. Matson?

20 A The rules, as I understand them, are such
21 that wells to be drilled on 80-acre proration units be de-
22 signated the east half or west half of any governmental
23 quarter section; the wells to be located either in the
24 northwest or the southeast quarter of the governmental quar-
25 ter section.

26 Q All right, what was the 40-acre tracts,
27 the northeast and southwest?

28 A Northwest and southeast.

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Q All right. In looking at Exhibit Number One, Mr. Matson, would you identify for us what is indicated by the three 40-acre tracts outlined in yellow?

A The three 40-acre tracts outlined in yellow represent Petrus Operating Company leasehold interest in Section 34. This is one base lease that was purchased at a State sale in January of 1984.

Q All right, sir, would you identify which of the three 40-acre tracts is the subject of this hearing?

A The northeast of the southeast of Section 34.

Q So that 40-acre tract has a well symbol located in it?

A Yes, it has a circle shaded in red.

Q All right, sir, and that is the location for the well to be drilled upon obtaining approval of this application.

A That's correct.

Q Would you describe for us what is the status of the well in the southeast southeast quarter of Section 34?

Mr. Matson, would you direct your attention to Section 34, to the southeast southeast, there is an indication of a well at that location.

Would you describe for us the status of that well?

A According to the well records, the well

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2 was shut in in 1971 and has been in a temporary abandonment
3 status ever since.

4 The last order that I could find on it
5 was -- was issued, I believe, in 1975 and expired in 1976.

6 The condition of the hole, as I under-
7 stand it, is that it is still cased. The tubing and pumping
8 -- pump has been removed. I'm not sure what surface equip-
9 ment has survived.

10 Q All right, sir. Is the 40-acre tract
11 consisting of the northeast quarter of the southeast quar-
12 ter, the Petrus Operating Company tract, is that available
13 for dedication as a non-standard spacing and proration unit
14 for this pool?

15 A Would you repeat that?

16 Q Yes, sir. Is the 40-acre tract avail-
17 able, the subject matter of the application, is that 40-acre
18 tract available for dedication to your well?

19 A Yes.

20 Q It's not currently dedicated to any other
21 well?

22 A No.

23 Q All right. Mr. Matson, let me have you
24 identify for us what you have depicted on your Exhibit Num-
25 ber One and what the significance is of the different color
coded wells.

A Well, in the legend you'll notice there
are three triangles, one designated active producers, shut-

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2 in producers, and salt water disposal wells, so color coded,
3 represent those wells which are in that status.

4 There's been one correction since this
5 map has been prepared and that would be the well in the
6 northeast of the south -- I mean, excuse me, in the north-
7 east of the northwest of Section 2, 12 South, 33 East, shown
8 with the number five and showing to be an abandoned well.

9 That well has been recompleted as a
10 Devonian producer by Sun Oil Company recently.

11 Q Has it -- when was it recently completed,
12 Mr. Matson?

13 A December of 1983.

14 Q And has that well been potentialed for
15 production?

16 A Yes, it has.

17 Q And what type of production information
18 has been obtained?

19 A As I recall it was a potential for 130
20 barrels of oil per day plus 1300 barrels of water.

21 Q All right, sir, what is the significance
22 of the other color codes for wells?

23 A Well, the other indication that we have
24 on here, the red arrows, which are wells that have been
25 drilled off pattern as described by field rules, set loca-
tions.

 Q All right, Mr. Matson, in studying this
area have you determined how many wells are located on 40-

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acre proration units as opposed to a standard 80-acre proration unit?

A Well, there were thirty-one wells drilled to the Devonian in the Bagley Siluro-Devonian Field, seven of which were drilled off pattern, which represents some 23 percent of our total wells drilled.

Q All right, when you say off pattern, what do you mean by off pattern?

A Well, they were drilled at locations that were other than those so designated by the field rules.

Q All right, they were at a location that was not in the northwest quarter quarter or the southeast quarter quarter.

A That is correct.

Q What would be the allowable for a 40-acre non-standard proration unit in the pool?

A I believe it's 320 barrels a day.

Q In your opinion will the proposed well by Petrus Operating Company be able to produce in excess of that allowable?

A I hardly think so.

Q Are wells drilled on patterns closer than the 80-acre spacing pattern capable of producing reserves that weren't being produced by the original wells?

A Would you ask that again?

Q Yes, sir. The pool was originally developed on 80-acre spacing was it not?

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A Correct.

Q All right, and I can see by the exhibit that there is some of these units that have had a second well drilled on the proration unit.

A Correct.

Q In your opinion are those second wells reocvering oil reserves from this pool that would not have been recovered from the original wells?

A I think so. I think the Sun well demonstrates that very well, the well that I referred to earlier, the well in Section 2.

Q All right, sir. Let's go to Exhibit Number Two, then, Mr. Matson, and have you identify that for us.

A Exhibit Two is cumulative production map, the Siluro-Devonian on wells surrounding the subject proposed drill site.

Q All right, sir, let me direct your attention to Section 35 to the east offset to the location. It's a well symbol and it indicates the No. 3 and then a dash BTC?

A Correct.

Q Who operates that well?

A Amerada Hess.

Q And what is the current status of that well?

A It is an active producer, producing ap-

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2 proximately 30 barrels of oil per day plus 300 barrels of
3 water.

4 Q In your opinion, Mr. Matson, or do you
5 have an opinion as to whether or not the 40-acre tract be-
6 longing to Petrus Operating Company is being subject to
7 drainage by the Amerada Hess Well?

8 A Oh, I would think so.

9 Q And in order to protect your correlative
10 rights do you have an opinion as to whether or not you need
11 to drill a well on your 40-acre tract?

12 A I believe it's worth an economic venture,
13 yes.

14 Q All right, sir. Let's turn to the cross
15 section, Mr. Matson, and have you identify that for us.

16 A The cross section is described as cross
17 section C-C'. It is roughly an east/west log section going
18 from the well in the northwest of the northwest of Section
19 3, 12, 33, through wells in the southern half of Section 34
20 of 11 South, 33 East, to the Gulf -- I mean, excuse me, to
21 the Amerada No. 3 BTC, located in the northwest of the
22 southwest of Section 35, 11, 33.

23 The log section has been prepared to de-
24 monstrate the structural position that we anticipate at our
25 proposed drill site.

The various drill stem tests and perfora-
tions and production tests that were conducted in the wells
are covered by the cross section.

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2 Q And where in the cross section does the
3 proposed Petrus well fall?

4 A It's designated on the cross section as
5 Drillsite Tract No. 1. It falls between the Amerada No. 3
6 BTC and the Amerada No. 1 BTM Wells, southwest of the BTC
7 Well.

8 Q All right, and you propose to drill to a
9 total depth to penetrate the Devonian formation and attempt
10 a completion that correlates to the producing interval in
11 the offsetting Amerada Hess Well?

12 A That's correct.

13 Q Were Exhibits One, Two and Three prepared
14 by you or compiled under your direction and supervision, Mr.
15 Matson?

16 A They were prepared by me, yes, sir.

17 Q And in your opinion will approval of this
18 application be in the best interests of conservation, the
19 prevention of waste, and the protection of correlative
20 rights?

21 A Yes.

22 MR. KELLAHIN: That concludes
23 our examination of Mr. Matson.

24 We move the introduction of Ex-
25 hibits One, Two and Three.

MR. STAMETS: The exhibits will
be admitted.

Are there any questions of this

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witness? He may be excused.

Is there anything further in
this case?

MR. KELLAHIN: No, sir.

MR. STAMETS: The case will be
taken under advisement.

(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 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's hearing of Case No. 8242 heard by me on 7-16 1984.
Richard L. [Signature] Examiner
Oil Conservation Division