

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

30 March 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of the Petroleum Corporation of Delaware for simultaneous dedication and to amend Division Administrative Order No. NSP-1290, Eddy County, New Mexico. CASE 9342

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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MR. STOGNER: Call next Case
Number 9342.

MR. ROYBAL: Application of
the Petroleum Corporation of Delaware for simultaneous
dedication and to amend Division Administrative Order No.
NSP-1290, Eddy County, New Mexico.

MR. STOGNER: Call for
appearances.

MR. BRUCE: Mr. Examiner, my
name is James Bruce from the Hinkle Law Firm in Santa Fe,
representing the applicant.

I have two witnesses to be
sworn.

MR. STOGNER: Are there any
othe appearances in this matter?

Will the witnesses please stand
and be sworn?

(Witnesses sworn.)

MR. STOGNER: Mr. Bruce?

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MARK C. POPPENDECK,

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

DIRECT EXAMINATION

BY MR. BRUCE:

Q Would you please state your name and city of residence?

A Yes. My name is Mark Poppendeck and I live in Dallas, Texas.

Q And what is your occupation and who is your employer?

A Okay, I'm an exploration geologist for Presidio Oil Company, of which Petroleum Corporation of Delaware is a wholly owned subsidiary.

Q Have you previously testified before the OCD as a geologist?

A I have not.

Q Would you please briefly describe your education and your work experience?

A Yes. I have a Bachelor's and Master's degree from the State University of New York at Buffalo in Buffalo, New York, in geology.

I have nine years of work experience which includes employment with Phillips Petroleum, Petro

1 Lewis Corporation, Kaiser Energy, and Presidio Oil.

2 I've also testified before the Kansas,
3 Oklahoma, and Louisiana Commissions.

4 Q And are you familiar with the geological
5 matters related to Case Number 9342?

6 A Yes, I am.

7 MR. BRUCE: Mr. Examiner, is
8 the witness considered acceptable?

9 MR. STOGNER: Mr. Poppendeck is
10 so qualified.

11 Q Would you please briefly state what Pet-
12 roleum Corporation of Delaware seeks in its application?

13 A Petroleum Corporation of Delaware is the
14 operator of the Superior Federal Well No. 6, located in the
15 southwest quarter of Section 6, 20 South, 29 East, in Eddy
16 County, with the south of the section dedicated to the well.

17 The well is dually completed in both the
18 East Burton Flat Morrow and East Burton Flat Strawn Gas
19 Pools, and is the subject of Administrative Order No. NSP-
20 1290, which approved a nonstandard gas spacing and proration
21 unit of 299.84 acres as to the Morrow Pool.

22 Petroleum Corporation seeks to amend NSP-
23 1290 to include the Strawn Pool.

24 Petroleum Corporation also seeks permis-
25 sion to drill a Superior Federal Well No. 7 at an orthodox

1 location in the southeast quarter of Section 6 and simultan-
2 ously dedicate production from both pools to the two wells.

3 Q Will you please refer to Exhibit Number
4 One and describe its contents for the Examiner?

5 A Yes. The Exhibit Number One is a land
6 plat showing the No. 6 Well in the southeast of the south-
7 west quarter of Section 6; the proposed No. 7 Well, which is
8 the red dot at approximately the center of the southeast
9 quarter of Section 6, Petroleum Corporation's acreage which
10 is colored in yellow, and the offset operators.

11 Q Is Section 6 a nonstandard section?

12 A Yes, it is. The western edge of Section
13 6 is comprised of lots less than 40 acres in size, which ne-
14 cessitated NSP-1290. We ask that NSP-1290 be amended to in-
15 clude both the Morrow and Strawn Pools.

16 Q Were offset operators notified of this
17 application by certified mail?

18 A Yes, they were and copies of the notice
19 letter and certified return receipts are submitted as Exhi-
20 bit Number Two.

21 Q Would you please now move on to Exhibit
22 Number Three and discuss its contents?

23 A Okay. Exhibit Number Three is a Strawn
24 structure map. It shows the Strawn as dipping to the
25 southeast at approximately 100 to 150 feet per mile.

1 Q Okay, please move on to Exhibit Four.

2 A Okay. Exhibits Number Four and Number
3 Five are Upper and Lower Strawn porosity, net porosity Iso-
4 pach maps.

5 Number Four is the Upper, Upper Strawn.
6 Number Five is the Lower Strawn, and these represent the sum
7 total of the porous reservoir in the Upper and Lower Strawn
8 respectively.

9 Q Okay. With respect to Exhibit Number
10 Four, the Upper Strawn, you show the proposed No. 7 Well at
11 zero feet porosity. Could you comment on that?

12 A It's a conservatively drawn map.

13 Q And you do believe there is some poro-
14 sity.

15 A Yes, I do. Exhibit Number Six is a cross
16 section and the porous zone that we are drilling for is in
17 the -- okay, I'll start over.

18 The cross section goes from west to east,
19 from the No. 6 Well to the No. -- Superior No. 4 Well to the
20 Superior No. 3 Well.

21 The left, left-most well is the No. 6 and
22 in that -- in that log you'll see a porous zone colored in
23 red, and that's the -- that is the reservoir that we are
24 drilling to, (unclear) we expect in the No. 7.

25 Q Would you please now move on to Exhibit

1 Mexico considers to be the Atoka.

2 Q Did you talk to Mr. Paul Kautz before you
3 came up here today?

4 A No, sir, I did not.

5 Q I'm not going to try to second out guess
6 between you and and Mr. Paul Kautz today without you talking
7 with him. I would suggest you do that and get back with me
8 on this so we can know what we're both talking about. I
9 don't know if we're talking about one Atoka and one Morrow
10 application or not, so if you would subsequent to this
11 hearing today give me a description on each one of your
12 exhibits so we can supplement it, and describe to me what
13 we're looking at so we can all know we're looking at the
14 same thing, because the way it's advertised today, that you
15 want one in the Burton Flats Strawn and simultaneous
16 dedication in the Burton Flat Morrow.

17 So I can't very well approve in the
18 Morrow if we're talking about Atoka.

19 MR. STOGNER: Mr. Bruce, what
20 is your next witness going to be talking about today?

21 MR. BRUCE: Well, basically
22 production and --

23 MR. STOGNER: Who's the expert
24 out there on the well completion?

25 MR. BRUCE: Our next witness.

1 MR. STOGNER: All right, I'll
2 hold off on those.

3 Q All right, let's look at the Exhibit
4 Number Six, now. Now, this is the Strawn, I presume.

5 A Right.

6 Q As we call the Burton Flats Strawn, and
7 if I look at Exhibit Number Four, now that shows to be some
8 little sand lenses in there, is that correct?

9 A That is correct.

10 Q All right, so when I look at the two lit-
11 tle red marks between your wells to the right, they do not
12 necessarily correspond with each other since they're in two
13 different lenses, is that correct?

14 A That is correct.

15 Q And what you're trying to do with this
16 well is to intercept that part of this particular sand lens
17 that you're producing from in the Well No. 6.

18 A That is correct.

19 Q In your opinion is this well needed to
20 efficiently and economically drain that portion of a
21 proration unit that wouldn't otherwise be drained by Well
22 No. 6?

23 A Yes, sir.

24 Q Exhibit Number Two, is this your only
25 notification to the offsets?

1 A These are copies of the returned certi-
2 fied -- certified mailings that we -- that we did.

3 Q Okay. Do you think that's adequate, what
4 you covered in there, to notify the offsets of what you're
5 actually doing?

6 A Yes, sir.

7 Q What pool are you talking about when you
8 notify them?

9 A We notified them about the East Burton
10 Flat Strawn Pool.

11 Q What does your notification say? Are you
12 aware of how many pool names carry the Burton Flat name?

13 A No, sir, I'm not.

14 Q Well, for the record, one, two, three,
15 four, five, six, six of them and then the general area.

16 Since we're going to have to wait for the
17 nomenclature exhibits, why don't you send out re-notifica-
18 tion of these people and make it a little more clear what
19 you're asking for with this?

20 A I have a -- I have the -- the copy that
21 was attached.

22 Q You mean there was more than just this
23 cover letter? What was the copy attached, then? Maybe I'm
24 jumping ahead.

25 MR. BRUCE: Mr. Stogner, I be-

1 believe the application for hearing filed with the Division
2 was attached to the letter. We can verify that or, if
3 necessary, we'll re-notify.

4 MR. STOGNER: If that be the
5 case, if you would verify that for me, I would appreciate
6 it, and that should be sufficient, and I would take that.

7 MR. BRUCE: Okay.

8 MR. STOGNER: All right, I have
9 no further questions of this witness.

10 Are there any other questions
11 of Mr. Poppendeck at this time?

12 He may be excused.

13 Mr. Bruce?

14
15 LARRY SHANNON,
16 being called as a witness and being duly sworn upon his
17 oath, testified as follows, to-wit:

18
19 DIRECT EXAMINATION

20 BY MR. BRUCE:

21 Q Mr. Shannon, would you please state your
22 full name and city of residence?

23 A Larry Shannon, Dallas, Texas.

24 Q And what is your occupation and who are
25 you employed by?

1 A I'm a manager with Presidio Oil Company.
2 It's a wholly owned subsidiary of Petroleum Corporation of
3 Delaware.

4 Q Have you previously testified before the
5 OCD as an engineer?

6 A Yes, I have.

7 Q And are you familiar with matters related
8 to Case 9342?

9 A Yes, I am.

10 MR. BRUCE: Mr. Examiner, is
11 the witness' credentials acceptable?

12 MR. STOGNER: Mr. Shannon is so
13 qualified.

14 Q Mr. Shannon, would you please describe
15 the history of the Superior Federal No. 6 Well, and I refer
16 you to Exhibit Nine?

17 A Right. The No. 6 Well was drilled and
18 completed in early 1982 and production began in June of
19 1982.

20 The well is dually completed in both the
21 Strawn and the Morrow formations.

22 It has produced 1,157,471,000 cubic feet
23 of gas and 8,319 barrels of condensate from the Morrow
24 formation and it has produced 257,340,000 cubic feet of gas
25 and 834 barrels of condensate from the Strawn formation.

1 It is currently producing at a rate of
2 about 500 MCF a day from the Morrow zone and a rate of 67
3 MCF a day from the Strawn zone.

4 Q Why does Petroleum Corporation seek to
5 drill the No. 7 Well?

6 A The No. 6 Well is inefficient in comple-
7 tion in the Strawn formation. That's because of the casing
8 annulus type completion where the Morrow zone is being pro-
9 duced from the -- through the tubing and is the primary com-
10 pletion.

11 If you refer to Exhibit Number Six, the
12 cross section, you can see that there is a good Strawn poro-
13 sity on the log but the production figures do not match the
14 porosity on the log as we define it.

15 Therefor, we wish to drill the No. 7 Well
16 with its primary aim as the Strawn formation. We believe
17 that by completing in the Strawn we will recover additional
18 reserves which could not be recovered by the No. 6 Well, and
19 I say this because we will be recovering them through a tub-
20 ing completion that is primary, not a casing annulus type
21 completion.

22 Thus our overall economics are enhanced
23 and we also note that we hope to test shallower formations
24 during our drilling of this well, such as the Bone Springs.

25 Q Will you move on to Exhibit Number Ten

1 and describe that briefly?

2 A Exhibit Number Ten is an AFE for the No.
3 7 location. The estimated costs were 100 percent for drill-
4 ling and completion is \$681,900.

5 Q In your opinion will the granting of this
6 application be in the interest of conservation and the pre-
7 vention of waste, and result in the recovery of additional
8 reserves?

9 A Yes.

10 Q Were Exhibits Nine and Ten prepared by
11 you or under your direction?

12 A Yes, they were.

13 MR. BRUCE: I move the admis-
14 sion of Exhibits Nine and Ten, Mr. Examiner.

15 MR. STOGNER: Exhibits Nine and
16 Ten will be admitted into evidence.

17

18 CROSS EXAMINATION

19 BY MR. STOGNER:

20 Q Mr. Shannon, how do you propose to com-
21 plete this No. 7 Well?

22 A We propose to complete it as a Strawn
23 Well, unless we find serendipity or other shallower zones
24 that we might then want to dually complete it in the Strawn
25 and Bone Springs, et al.

1 Our primary mission is not -- is not the
2 Morrow. We think the Morrow could probably be depleted in
3 the No. 6 Well, but we want to drill extra depth in case we
4 lose a wellbore. It just gives us -- for a little bit of
5 extra cost it just gives us an added advantage that we'd
6 like to have.

7 Q Okay, I'm still a little bit confused
8 here, or even more confused.

9 Now, if you do find something in the Mor-
10 row do you propose to dual complete in the Strawn and the
11 Morrow?

12 A No, no, not -- in the -- in the Strawn
13 and shallower zone, if we find something, but not in the
14 Morrow. Our primary objective is not the Morrow, but we'd
15 like to have that opportunity if we're forced into it. We
16 would just dually complete -- we would singly complete the
17 well is our game plan right now in the Strawn unless we find
18 something that we've not seen in our No. 6 Well, but we
19 think we've seen but we haven't really tested it, but we
20 agree that we'd like to in the Morrow sands, that's what I'm
21 -- had reference to, Mr. Examiner.

22 And we haven't given you any evidence on
23 that because we really don't have enough information yet
24 (inaudible).

25 Q But in your application you -- you stated

1 that you propose to test the Morrow and now you're telling
2 me you don't propose to test the Morrow, is that correct?

3 A Well, we may eventually test it but it's
4 not our primary objective.

5 Q And your application doesn't even state
6 the Strawn formation.

7 A It does not?

8 MR. STOGNER: Mr. Bruce, help
9 me out here. I'm looking at the -- your application signed
10 by Mr. Conrad Coffield, dated February 26, 1988.

11 MR. BRUCE: Mr. Examiner, we
12 may have to amend it and send it out.

13 Q If you go down and test the Strawn and it
14 tests positive, do you still propose to simultaneously
15 dedicate or produce both of them at the same time, both
16 Wells No. 6 and No. 7 in the Strawn formation?

17 A In the Strawn formation, no. We will
18 discontinue the Strawn in the No. 6 Well and produce it in
19 the No. 7.

20 Or I guess we could do both. I -- I
21 don't -- it's only making 67 MCF a day from the Strawn at
22 the present time and --

23 MR. STOGNER: Sally, let's go
24 off the record for a little bit.

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(Thereupon a discussion was had off the record.)

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MR. STOGNER: Mr. Bruce, I'll let you ask some subsequent questions here after I get through.

7

8

Q Let's turn our attention now to the completion of the Well No. 6.

9

10

How is that presently completed, Mr. Shannon?

11

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A That is completed with the Morrow zone producing through the tubing. We have a packer above the Morrow completion and the Strawn is produced in the tubing-casing annulus.

15

16

Q Do you have authorization to complete this well like you did?

17

18

A Yes, sir, I'm sure we did. This -- we've done that a long time ago.

19

20

Q Do you have that order?

21

MR. BRUCE: I don't have it with me, no.

22

23

24

A Not with me, but I know -- I know we -- I know we have the order because I know we -- I've been involved in several conversations in Artesia on that.

25

MR. STOGNER: Could you subse-

1 quent -- could you send it to me, if you would, please?

2 A Certainly.

3 Q Now you said that the -- this well is --
4 this present completion in the Strawn is inefficient.

5 A Yes, and we don't think we'll recover the
6 reserves that we believe is there in an efficient --

7 Q Is it inefficient inasmuch as it's making
8 100 percent gas and it's not able to flow up properly, up
9 the annulus, or are you starting to make some liquids?

10 A We think there must be some liquids down
11 there. We haven't found any but we think that's probably
12 part of the problem.

13 We have a difficult time trying to
14 acidize and stimulate down with that type of a completion
15 and we'd just like to complete it in a more efficient
16 manner.

17 MR. STOGNER: Mr. Bruce, I
18 believe you had some questions at this point?

19

20 REDIRECT EXAMINATION

21 BY MR. BRUCE:

22 Q Mr. Shannon, would you go over again the
23 purpose of drilling the Well No. 7 in more detail?

24 A Right. Our basic plan is to drill for
25 the Strawn -- for the Morrow -- for the Strawn formation.

1 A There's that possibility.

2 Q Although you don't intend to produce the
3 No. 6 and No. 7 Wells in the Strawn, there is always that
4 potential.

5 A There could be.

6 Q And there is the need to dedicate or to
7 have an approved nonstandard proration unit for both the
8 Strawn and Morrow formations.

9 A That's right.

10

11 RE CROSS EXAMINATION

12 BY MR. STOGNER:

13 Q If your No. 7 Well is to be dually com-
14 pleted whether it be Morrow - Strawn, Strawn - Bone Springs,
15 is your well going to be sufficiently cased where you can
16 run a dual string of tubing?

17 A Yes, we plan to use a larger string of
18 casing rather than the 4-1/2 that we currently have in our
19 No. 6 Well.

20 MR. STOGNER: In that case, I
21 have no further questions of this witness.

22 Are there any other questions
23 of Mr. Shannon?

24 He may be excused.

25 Mr. Bruce, do you have anything

1 further in this case?

2 MR. BRUCE: No, sir. We'll
3 take care of mailing out re-notification to the offset par-
4 ties.

5 MR. STOGNER: And I believe it
6 would be sufficient to also continue this case to April 21st
7 for the record only. I'm -- yeah, April 21st, that's the --

8 MR. BRUCE: 27th.

9 MR. STOGNER: I'm sorry, April
10 27th. Yeah, I'm sorry, to the April 27th docket. I don't
11 think it will be necessary to present any further evidence;
12 however, it's a procedure in case there is any opposition
13 that may come at that time.

14 At that time, if there is no
15 opposition, we will take the case under advisement.

16 Also, if you would supplement
17 the record today with a copy of the dual completion order on
18 your Well No. 6.

19 Thank you, very much.

20

21 (Hearing concluded.)

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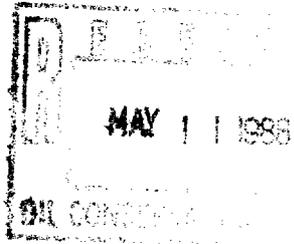
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C E R T I F I C A T E

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 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 hearing of Case No. 9342 heard by me on 30 March 1988.
Michael E. Rogers, Examiner
Oil Conservation Division



DATE: 1988-05-11 11:11 AM FILED: 1988-05-11 11:11 AM NATIONAL ARCHIVES

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

6 27 April 1988

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of the Petroleum Cor- CASE
10 poration of Delaware for simul- 9342
11 taneous dedication and to amend
12 Division Administrative Order No.
13 NSP-1290, Eddy County, New Mexico.

14 BEFORE: Michael E. Stogner, Examiner

15 TRANSCRIPT OF HEARING

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

17 For the Division: Charles E. Roybal
18 Attorney at Law
19 Legal Counsel to the Division
20 State Land Office Bldg.
Santa Fe, New Mexico 87501

21 For the Applicant: James G. Bruce
22 Attorney at Law
23 HINKLE LAW FIRM
24 P. O. Box 2068
25 Santa Fe, New Mexico 87504

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2

MR. STOGNER: Call next Case

3

Number 9342.

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MR. ROYBAL: Case 9342.

5

Application of Petroleum Corporation of Delaware for simul-

6

taneous dedication and to amend Division Administrative Or-

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der No. NSP-1290, Eddy County, New Mexico.

8

MR. STOGNER: Are there any ap-

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pearances in this case?

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Anything further, testimony,

11

comments?

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Case Number 9342 will be taken

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under advisement.

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(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 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. 9342,
heard by me on 27 April 1988.

Robert E. Rogers, Examiner
Oil Conservation Division