

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 25 May 1988

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Standard Oil Product- CASE
10 ion Company for an unorthodox oil 9386
11 well location and directional drill-
12 ing, Lea County, New Mexico.

13 BEFORE: Michael E. Stogner, Examiner

14 TRANSCRIPT OF HEARING

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

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

21 For the Applicant: Scott Hall
22 Attorney at Law
23 CAMPBELL & BLACK
24 Post Office Box 2208
25 Santa Fe, New Mexico 87501

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MR. STOGNER: We'll call next
Case 9386.

MR. ROYBAL: Case 9386. Ap-
plication of Standard Oil Production Company for an unortho-
dox well location and directional drilling, Lea County, New
Mexico.

MR. STOGNER: Call for appear-
ances.

MR. HALL: Mr. Examiner, Scott
Hall from the Campbell & Black law firm of Santa Fe on be-
half of the applicant and I have three witnesses this morn-
ing.

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

Will all three witnesses please
stand and be sworn at this time?

(Witnesses sworn.)

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

DIRECT EXAMINATION

1
2 BY MR. HALL:

3 Q For the record, please state your name.

4 A James D. Sikes.

5 Q Mr. Sikes, by whom are you employed and
6 in what capacity?

7 A Standard Oil Production Company and I'm
8 employed as a landman.

9 Q Have you previously testified before the
10 Division and had your credentials accepted?

11 A No, I have not.

12 Q Why don't you give the examiner a brief
13 summary of your educational background and work experience?

14 A Okay. I went to the University of
15 Oklahoma and received a Bachelor of Business Administration
16 in petroleum land management in 1982.

17 Before coming with Standard I worked with
18 Tri-Ex Energy in Oklahoma City as a lease broker. I joined
19 Standard Oil in 1982 and have worked for them in the
20 capacity of landman since then.

21 Q And is your area of responsibility
22 primarily the Permian Basin?

23 A Primarily Lea County.

24 Q All right. Are you familiar with the
25 subject well and subject application in this case?

1 A I am.

2 MR. HALL: Are the witness'
3 qualifications acceptable?

4 MR. STOGNER: Mr. Sikes is so
5 qualified.

6 Q Mr. Sikes, if you would, won't you
7 briefly recite what Standard seeks with this application?

8 A We are seeking to drill a well in the
9 north half of the northeast of Section 36, Township 16 South,
10 37 East, at an unorthodox location of 1060 feet from the
11 east line, 1300 feet for the north line to reach a target
12 at 1180 feet from the east line and 1090 feet from the north
13 line, and propose that we can stay within 150 feet of that
14 target.

15 Q All right, what do you understand to be
16 the effective pool rules for this location?

17 A Pursuant to a well that we are currently
18 in the process of completing in the northwest quarter of
19 Section 36, we are now within a mile of Shipp Strawn Pool.
20 Those pool rules call for drilling a well within 150 feet of
21 a center of a quarter quarter section.

22 Q What is the location of that well you
23 just spoke of?

24 A It's 1060 from the east line and 1300
25 from the north line, which would put it almost on the bound-

1 ary line between the two quarter quarters.

2 Q Just about due west of this location?

3 A Yes.

4 Q And do you believe that that well is
5 going to be productive in the Shipp Strawn?

6 A Yes.

7 Q All right. Mr. Sikes, have you (unclear
8 portion of the tape) Exhibit One. Do you need a copy?

9 A Exhibit One shows a compilation of an
10 isopach map, a land map (unclear) for the subject well.

11 Q Is the location reflected on Exhibit
12 One?

13 A It is. It is indicated by, I believe, a
14 red circle, and the little X would indicate the bottom hole
15 location.

16 Q All right, let's look at Exhibit Two, if
17 you would. Would you identify those, please?

18 A These are Oil Conservation Division Forms
19 C-101 and C-102 prepared for the subject well.

20 Q All right, have they been filed with the
21 Division as yet?

22 A They have not. We are waiting for appro-
23 val in this case -- matter --

24 Q All right.

25 A -- to file these. You will note on the

1 Form C-102 we have surveyed our location; however, we have
2 not indicated the proration unit pending the outcome of this
3 hearing.

4 Q Okay. Let's look at Exhibit Three, and
5 I'll ask you is Exhibit Three a copy of the letters to all
6 offsetting operators and unleased mineral interest owners
7 that you've directed your counsel to send out in connection
8 with this case?

9 A It is.

10 Q All right. Would you briefly explain to
11 the Examiner what is Standard's acreage position with re-
12 spect to this well and how the offsetting interest owners
13 are affected by the location?

14 A Certainly. As you can see on the land
15 plat portion of the Exhibit One in front of you, the acreage
16 in Section 36 that is indicated in shaded solid yellow is
17 our lease, State BB-0155. That lease would have the same
18 ownership, being the State of New Mexico as the royalty
19 owner and common ownership of Standard Oil Production Com-
20 pany as working interest owner.

21 To the north we're offset by various par-
22 ties as shaded in hatched yellow there, it also indicates
23 that Standard Oil has an interest in those tracts to the
24 north.

25 Q All right, Mr. Sikes, if I understand it,

1 your unorthodox location is not a further encroachment to
2 those interest owners on the north, is that correct?

3 A On the contrary. We're going south from
4 the northern location and any encroachment would be on our
5 own lease.

6 Q All right, your lease to the south?

7 A Correct.

8 Q Mr. Sikes, has Standard attempted to ob-
9 tain waivers from the offsetting interest owners?

10 A Yes, we have.

11 Q And are those reflected in Exhibit Three?

12 A Yes. We've sent waivers out to all of
13 the offset parties to the north and we've received waivers
14 back, signed waivers from William B. Owen, Charles Gilles-
15 pie, Jr., First Security Oil and Gas Corp., FESCO, Inc.,
16 First Century Oil, Inc., Read & Stevens, Inc., and Charles
17 B. Reed.

18 Q Let me ask you quickly, with respect to
19 the waiver you received from Mr. Owen, do you know whether
20 or not he was sent a certified notice of this application

21 A He was not; however, pursuant to the
22 waiver, we have no reason to believe he'll be in any opposi-
23 tion.

24 Q Have you had verbal telephonic contact
25 with Mr. Owen?

1 A Yes, we have.

2 Q And he was aware of the application?

3 A Yes.

4 Q And even though he provided you with a
5 waiver, that's correct?

6 A Yes.

7 Q All right. Let's look at the final page,
8 final two pages of Exhibit Three. What -- what does that
9 show?

10 A This shows a breakdown of the working in-
11 terest owners in Section 25, in the south half of Section 25
12 to be exact. It is broken down by the southeast quarter of
13 25 and the southwest quarter of 25.

14 Q All right, do you have anything further
15 to add?

16 A No, I don't.

17 Q Mr. Sikes, in your opinion, do you be-
18 lieve that granting Standard's application will be in the
19 best interest of conservation, the protection of correlative
20 rights and prevention of waste?

21 A I do.

22 Q Did you participate or direct the prepar-
23 ation of Exhibits One through Three?

24 A I have.

25 MR. HALL: At this time we'd

1 move the admission of Exhibits One through Three and that
2 completes our direct of this witness.

3 MR. STOGNER: Exhibits One
4 through Three will be admitted into evidence at this time.

5

6 CROSS EXAMINATION

7 BY MR. STOGNER:

8 Q Please tell me, when did you send the
9 notices out?

10 A They were sent out by our attorneys,
11 Campbell & Black, I believe on May the 4th?

12 MR. HALL: May the 3rd.

13 A I stand corrected, May the 3rd.

14 Q And please forgive me, what was the deal
15 about the Owens? He wasn't notified but he sent a waiver,
16 is that correct?

17 A To further explain what happened, we had
18 a leasehold ownership breakdown for the subject tracks and
19 we showed a Westminster Bank as being an unleased owner.

20 We sent notice to them and subsequently
21 discovered that they had executed a lease to William B.
22 Owen. We therefor attempted to contact him immediately. It
23 was actually on the 19th day before the hearing that we con-
24 tacted him and explained the situation to him and he at that
25 time posed no opposition and said he would gladly sign a

1 waiver, which he has.

2 Q Which he has, and is it included in here?

3 A It is.

4 Q It is. Okay.

5 MR. STOGNER: I have no further
6 questions of this witness. Will we be referring back to Ex-
7 hibit Number One, Mr. Hall?

8 MR. HALL: I doubt it.

9 MR. STOGNER: Oh, we won't?

10 A Yes, probably.

11 MR. STOGNER: We will?

12 A Probably.

13 MR. STOGNER: I would think we
14 would.

15 MR. HALL: Oh, Exhibit One, I'm
16 sorry. You're holding up Exhibit Three.

17 MR. STOGNER: Thank you, Mr.
18 Hall.

19

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KATHERINE SHANKS,

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

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DIRECT EXAMINATION

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BY MR. HALL:

Q For the record would you please state your name.

A Katherine Shanks.

Q Ms. Shanks, where do you live and by whom are you employed?

A Houston, Texas, Standard Oil Production Company.

Q And what do you do for Standard?

A I'm a geologist.

Q Have you previously testified before the Division and had your credentials accepted as a record?

A Yes, I have.

MR. HALL: Are the witness' credentials accepted?

MR. STOGNER: And how was your last name? What was your last name again?

A Shanks.

MR. STOGNER: Shanks. Ms. Shanks is so qualified.

Please continue.

Q Ms. Shanks, did you participate in the creation of Exhibit One?

A Yes, I did.

1 Q All right, why don't you refer to that
2 and explain to the examiner what it's intended to show?

3 A One portion of Exhibit One contains an
4 isopach map of the Lower Strawn limestone. The proposed
5 prospect is shown by an increase in the isopach thickness.
6 There's a direct correlation between isopach thickness and
7 porosity development within a Strawn mound.

8 The map was constructed from available
9 well control and our own seismic which was shot over three
10 of the four legal locations in that quarter section.

11 Q For the areas shown on the isopach por-
12 tion what is the primary producing interval in that area?

13 A The Lower Strawn limestone.

14 Q All right. Ms. Shanks, how important is
15 isopach thickness in locating the well?

16 A Again it's very important because there
17 is a direct correlation between isopach thickness and the
18 development of a porous facies in the Lower Strawn lime-
19 stone.

20 The increased thickness defines the pro-
21 posed -- the prospect and we've positioned the well to pene-
22 trate the thickest portion of a proposed mound in that loca-
23 tion.

24 Q All right. Would you elaborate as to how
25 you picked this particular location and why you believe that

1 a successful well may not necessarily be drilled at a stand-
2 ard location?

3 A The unorthodox location was proposed in
4 order to penetrate the thickest portion of the isopach sec-
5 tion, which again is relating to the development of porous
6 facies.

7 The well cannot be drilled at a standard
8 location because there is evidence from our mapping and
9 seismic that the mound either does not exist in a standard
10 location or is very thin.

11 Q Is there any general trending in the
12 area?

13 A Porosity development tends to be very
14 much facies related with very sharp boundaries. The gross
15 Strawn limestone thickness increases from the south to the
16 north in that particular sample.

17 Q All right, let's refer to the cross sec-
18 tion portion of Exhibit One. Could you explain what that's
19 intended to show?

20 A This is a northwest/southeast strati-
21 graphic cross section across the proposed location. It
22 shows the increase in thickness of the Strawn limestone as
23 it relates to the development of a porous facies shown here
24 in blue.

25 Porous facies tend to be again very dis-

1 crete bodies with very sharp edges.

2 Q All right. Do you have anything further
3 to add in connection with your testimony?

4 A No, I do not.

5 Q All right. Ms. Shanks, do you believe
6 that Standard's application will be in the best interest of
7 conservation, the prevention of waste, and the protection of
8 correlative rights?

9 A Yes, I do.

10 Q All right.

11 MR. HALL: That concludes our
12 direct of this witness.

13

14 CROSS EXAMINATION

15 BY MR. STOGNER:

16 Q Ms. Shanks, the Tierra Well No. 1, the
17 Gillespie --

18 A Yes.

19 Q -- which is shown on your lefthand side
20 of your stratigraphic cross section, do you know if that was
21 tested in the -- your blue portion of your cross section?

22 A Yes, it was.

23 Q And what kind of porosity did it show?

24 A The porosity is poorly developed, usually
25 less than 4 to 6 percent, as per that porosity log. They

1 were not able to establish economic production from that
2 zone due to the poorly developed porosity in the well.

3 Q It would be the same as your other well,
4 the Garrett State, Anderson No. 1 Garrett State Well.

5 A The Garrett State did not have that
6 porosity in the Strawn. That well was drilled down to the
7 Devonian and tested the Devonian and was subsequently a dry
8 hole.

9 There is some indication of porosity on
10 this old neutron log.

11 Q When was that well drilled, the Garrett?

12 A I don't have an exact date but I would
13 assume late 1960.

14 Q Okay.

15 MR. STOGNER: I have no
16 further questions of this witness.

17 Are there any other questions
18 of Ms. Shanks?

19 MR. HALL: No, sir.

20 MR. STOGNER: If not, she may
21 be excused.

22 Mr. Hall?

23

24

25

1 STEPHEN GURLEY,
2 being called as a witness and being duly sworn upon his
3 oath, testified as follows, to-wit:

4

5

DIRECT EXAMINATION

6

BY MR. HALL:

7

Q For the record please state your name.

8

A My name is Stephen Gurley. I live in

9

Sugarland, Texas.

10

Q Mr. Gurley, who do you work for?

11

A Standard Oil Production Company.

12

Q What do you do for Standard?

13

A I'm a reservoir engineer.

14

Q Have you previously testified before the

15

Division and had your credentials accepted?

16

A Yes, sir, I have.

17

MR. HALL: Mr. Examiner, are

18

the witness' credentials still acceptable?

19

A Mr. Gurley is so qualified.

20

Q Mr. Gurley, did you also participate in

21

the creation of Exhibit One?

22

A Yes, sir, I did.

23

Q All right why don't we refer to that and,

24

if you would, explain to the Examiner what that's intended

25

to show?

1 A I'll be referring mainly to the isopach
2 map concerning the met porosity, which is highlighted in
3 green. This indicates that our proposed bottom hole loca-
4 tion is in the thickest part of the mound which -- we anti-
5 cipate encountering around 60 feet of pay. If you look at
6 the other legal locations that are available we have anti-
7 cipated that we'll encounter either no porosity or consider-
8 ably less porosity.

9 So we would like to have the well drilled
10 in the unorthodox location in order to encounter the thick-
11 est part of the pay.

12 Q All right. Is it your recommendation
13 that a production restriction be imposed against this well?

14 A No, sir. We feel that since we are
15 trying to take advantage of the structural high and the
16 thickness that -- and we're going away from the lease lines,
17 that there should be no penalty imposed.

18 Q All right. If you would explain, why
19 have you positioned the surface location of this well where
20 it is shown on your forms?

21 A If we drilled three of the wells in the
22 immediate area and all three of these wells have drifted
23 north/northwest, we positioned the surface location to take
24 advantage of the natural drift in the area or to lower the
25 well cost.

1 Q Do you have anything further to add in
2 connection with your testimony?

3 A No, sir.

4 Q Mr. Gurley, in your opinion do you be-
5 lieve that granting Standard's application will be in the
6 best interest of conservation, the prevention of waste, and
7 protection of correlative rights?

8 A Yes, sir.

9 MR. HALL: Nothing further in
10 this case.

11

12 CROSS EXAMINATION

13 BY MR. STOGNER:

14 Q Now, Mr. Gurley, insofar as actually put-
15 ting a downhole motor or such as that, that's not what
16 you're proposing. You're just proposing that you keep tabs
17 on your actual wellbore and let it follow the natural
18 north/northwest --

19 A Yes, sir, all three other wells, there's
20 two wells to the west -- three wells just immediately to the
21 west, they've all drifted pretty much the same direction,
22 north/northwest.

23 Q Okay, why don't you go into a little more
24 detail, this drift that you're talking about. Does it start
25 from the surface down or do you go underneath the interme-

1 diate and then it starts --

2 A No, it usually starts around below 8000
3 feet. The drift starts around 8000 feet.

4 Q And what kind of drift do we see out
5 there?

6 A This will be as high as 4 degrees. Nor-
7 mally it doesn't get above 5 degrees but I guess the thing
8 about it, it all goes in -- seems to go in one direction, so
9 it does accumulate over a distance.

10 Q How often do you usually run your single
11 shot when you're actually drilling?

12 A Oh, they've been running about, depending
13 on the depth, easily 250 feet to 500 feet.

14 Q After the well is drilled are you propos-
15 ing to run a multishot?

16 A Yes, we'd like to. We need to find out
17 where bottom hole location is for our own good.

18 Q So in this particular case you'll probab-
19 ly be running a multishot all the way back to the surface?

20 A Probably so, yes.

21 Q What size of hole do you usually run out
22 there?

23 A Oh, 8-7/8ths. They usually set it so
24 they can run 5-1/2 inch casing.

25 Q Do you see any difference in the size of

1 the hole, what kind of drift you get?

2 A No, not really.

3 Q If you see that you're going to be off of
4 your target for one reason or the other, are you proposing
5 then to artificially build angle or whatever you have to do
6 to get it back within that 150-foot circle?

7 A Yes, sir.

8 MR. GURLEY: I have no further
9 questions of Mr. Gurley.

10 Are there any other questions
11 of him?

12 MR. HALL: No, sir.

13 MR. STOGNER: He may be ex-
14 cused.

15 Is there anything further in
16 this case?

17 MR. HALL: No.

18 MR. STOGNER: If not, it will
19 be taken under advisement.

20

21 (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. 9386
heard by me on 25 May 1988.

Michael B. Stewart, Examiner
Oil Conservation Division