

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 24 May 1989

8 EXAMINER HEARING

9 IN THE MATTER OF:

10 Application of Charles B. Gillespie, CASE
11 Jr. for an unorthodox oil well loca- 9677
12 tion, Lea County, New Mexico.

13 BEFORE: David R. Catanach, Examiner

14
15 TRANSCRIPT OF HEARING

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

18 For the Division:

19 For Charles B. Gillespie, James Bruce
20 Jr.: Attorney at Law
21 HINKLE LAW FIRM
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I N D E X

WILLIAM ROBERT CROW

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1 MR. CATANACH: At this time
2 we'll call Case 9677. Application of Charles B. Gillespie,
3 Jr. for an unorthodox oil well location, Lea County, New
4 Mexico.

5 Are there appearances in this
6 case?

7 MR. BRUCE: Mr. Examiner, my
8 name is James Bruce from the Hinkle firm in Albuquerque,
9 representing the applicant.

10 I have one witness to be
11 sworn.

12 MR. CATANACH: Any other ap-
13 pearances?

14 Will the witness please stand
15 and be sworn in?

16
17 (Witness sworn.)
18

19 WILLIAM ROBERT CROW,
20 being called as a witness and being duly sworn upon his
21 oath, testified as follows, to-wit:
22

23 DIRECT EXAMINATION

24 BY MR. BRUCE:

25 Q Mr. Crow, will you please state your

1 full name and city of residence?

2 A William Robert Crow. I reside in
3 Midland, Texas.

4 Q And what is your occupation and who are
5 you employed by?

6 A I'm a geologist employed by Charles B.
7 Gillespie, Junior.

8 Q And have you previously testified before
9 the OCD as a geologist?

10 A Yes, I have.

11 Q And are you familiar with the geological
12 matters related to this case?

13 A Yes, I am.

14 MR. BRUCE: Mr. Examiner, are
15 the witness' credentials acceptable?

16 MR. CATANACH: They are, if I
17 can get the witness to spell his last name for me.

18 A C-R-O-W.

19 Q Briefly, Mr. Crow, what does Charles
20 Gillespie seek in this case?

21 A Mr. Gillespie seeks approval for an un-
22 orthodox oil well location 510 from the north line and 990
23 from the west line of Section 11, Township 17 South, Range
24 37 East, in the Undesignated Humble City Strawn Pool or the
25 Undesignated Shipp Strawn Pool, with the west half of the

1 northwest quarter of Section 11 to be dedicated to the
2 well.

3 Q Will you please refer to Exhibits A and
4 B and describe their contents?

5 A Exhibit A is a list of the offset oper-
6 ators that were notified.

7 Exhibit B is a land plat showing leases
8 of the offset operators, the proposed location and the pro-
9 posed 80-acre standup unit, with the second page being a
10 blown up 1-to-1000 inch scale listing offset operators.

11 Q Looking at the second page of Exhibit B,
12 your well is only unorthodox in the east/west direction, is
13 that correct?

14 A That's correct.

15 Q And because of that you are only unor-
16 thodox towards your own lease, is that correct?

17 A That's correct.

18 Q Would you please now refer to Exhibit C
19 and describe it?

20 A Exhibit C is a structure map contoured
21 on top of the Lower Strawn Lime. The wells that are color-
22 ed in blue represent Strawn Lime producers and the wells
23 colored in red represent dry holes drilled in the Strawn.
24 Contour interval is 100 feet and the significance of the
25 map shows the abrupt steepness of these algal mounds that

1 we're dealing with here. (Incomplete) orientation of the
2 north/south cross section will be shown.

3 Q Thank you. Would you please move on to
4 Exhibit D and describe its contents?

5 A Exhibit D is an isopach map of the Lower
6 Strawn Lime. Contour interval was 50 feet and it shows the
7 way we believe the mound is oriented that we're looking at
8 and the location.

9 Q And all of the mounds that you show on
10 there are quite limited in areal extent, are they not?

11 A Yes. This map shows that they're all
12 close to being the same size, very small.

13 Q Now would you please refer to the cross
14 section previously described and please describe its con-
15 tents?

16 A The cross section is a north/south
17 structural cross section. It shows the top of the Lower
18 Strawn Lime, the base of the lime, which is a clastic zone,
19 referred to sometimes as Strawn, some times as Atoka. I'm
20 not going to argue that. And then the Atoka Shale. It's a
21 north/south structural cross section and the purpose is to
22 show the small limit of the size of these mounds and how
23 quickly and steep sided they are. The scale on this cross
24 section horizontally is 1 inch equals 150 feet and the two
25 wells on the northern left edge of the cross section are

1 less than 500 feet apart and there's a change of 80 feet of
2 structure; one well was dry, the other one flowed 449 bar-
3 rels.

4 And as you go south it shows our pro-
5 posed mound that we see defined by seismic, the proposed
6 location, and it goes down to show a very thin, low well
7 separating our proposed mound from Humble City, and the
8 purpose is really just to show how small and steep sided
9 they are.

10 Q Thank you. Could you recap why does Mr.
11 Gillespie seek to drill at this unorthodox location?

12 A Well, that location is to stay directly
13 on a seismic shot point and to reduce our risk.

14 Q And do you request that this application
15 be approved without a penalty?

16 A Yes, I do, for three reasons. One is
17 there's been no objections from offset operators. We're
18 only unorthodox toward ourselves to the east and porosity
19 that we see based on seismic lies wholly on our own lease.

20 Q And is Exhibit F a copy of the notice
21 letter and copies of the return receipts which were sent to
22 the offset operators?

23 A Yes, it is.

24 MR. BRUCE: I would also point
25 out, Mr. Examiner, that it contains waivers signed by

1 Conoco, Chevron and BP Exploration.

2 Q Mr. Crow, are there other unorthodox
3 Strawn oil wells in this area?

4 A Yes, there are. Since the reopening of
5 the Humble City Field and the discovery of the Shipp Field,
6 there's been 10 unorthodox locations in the Humble City
7 Field and 23 unorthodox locations in the Shipp Field.

8 Q And in your opinion is the granting of
9 this application in the interest of conservation, the pre-
10 vention of waste and the protection of correlative rights?

11 A Yes.

12 Q And were Exhibits A through E prepared
13 by you or under your direction -- excuse me, Exhibits A
14 through F?

15 A Yes, they were.

16 MR. BRUCE: Mr. Examiner, I
17 move the admission of Exhibits A through F.

18 MR. CATANACH: Exhibits A
19 through F will be admitted as evidence.

20 MR. BRUCE: I have no further
21 questions at this time.

22

23 CROSS EXAMINATION

24 BY MR. CATANACH:

25 Q Mr. Crow, your isopach, is that entirely

1 based on seismic?

2 A Yes, sir. We have a northwest/southeast
3 seismic line that goes through the Pennzoil producing well
4 in the southwest quarter of Section 2, directly through the
5 proposed location, on south through Humble City Field, and
6 then we have an east/west line that runs 550 feet off the
7 north section line and based upon those lines, that's the
8 way we see the mound. It's not positive that there's poro-
9 sity in the whole mound, but that's the extent of the mound
10 we see.

11 Q The well that directly, or -- or offsets
12 you to the southeast, was that drilled by Gillespie?

13 A Yes, it was.

14 Q And what -- what was the problem with
15 that well? Just didn't encounter the porosity?

16 A It was tight. It was thinner than we
17 expected. It did thicken up from the well to the south,
18 which indicates to us that we were getting close, but 3 or
19 4 or 500 feet makes all the difference in the world, and we
20 just weren't in the right spot.

21 Q Has Gillespie drilled other wells in
22 this area based on seismic or was it successful to drill
23 other wells based on seismic?

24 A Yes, we have. The last well we drilled
25

1 was a re-entry and a deviation of the original Shipp No. 1
2 Well we drilled, and it was based solely on seismic, and
3 it's the well that's located in the northwest of the north-
4 east quarter of Section 11 and that well was dry originally
5 and we went in and sidetracked it and moved the well 440
6 feet based on a seismic line and the well flowed 670 bar-
7 rels flowed 670 barrels of oil a day.

8 Q And that was in the northeast quarter of
9 the northwest, or I'm sorry, the northwest of the northeast
10 quarter of Section 11?

11 A Yes, just --

12 Q That's the well just over to the --

13 A Yes.

14 Q And it's your opinion that that's not --
15 that mound that you're producing from is not the same as
16 the one you're targetting in this well?

17 A No, because the previous well we just
18 discussed that we drilled directly between them, and you
19 can see on, based on seismic, we feel like we can see the
20 separation between the two mounds.

21 Q You're only about 150 feet east of a
22 standard location. Does it make a whole lot of difference
23 to you that it needs to be there?

24 A Yes, sir, because anything west, based
25 on north/south seismic lines, that's -- that's the only

1 north/south line we have for the prospect and we want
2 directly on it. The Pennzoil well just north of us was a
3 deviated sidetracked hole and they just moved theirs 400
4 feet and it made the difference between a dry hole and 446
5 feet -- I mean flowing 446 barrels of oil, and then our
6 sidetracked hole was moved 440 feet, so we believe that
7 150, 200, there's really now way to know how steep sided
8 they are but we believe you need to stay directly on your
9 seismic line. Anything away from that greatly increases
10 your risk.

11 The way you have your mound mapped on
12 your exhibit indicates that you are moving -- by -- by
13 being unorthodox you're moving away from the center of the
14 mound.

15 A Well, as I said, we see indications
16 based on a seismic line running northeast/southwest through
17 the northeast quarter of 10 that we have, of possible mound
18 there, so we're interpreting that the mound is all one
19 mound, but there is no indication of porosity in the west
20 part of that and the best porosity we see is on that
21 north/south seismic line where we propose the location.

22 Q So there is no -- there is no producing
23 well in the east of the northwest quarter, is that right?

24 A That is correct. No producing well.

25 MR. CATANACH: I have no fur-

1 ther questions of this witness. He may be excused.

2 MR. BRUCE: I have nothing
3 further in this case.

4 MR. CATANACH: Being nothing
5 further, Case 9677 will be taken under advisement.

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7 (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. 9677,
heard by me on May 24 19 48.
David H. Catant, Examiner
Oil Conservation Division