

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 7 December 1988

8 EXAMINER HEARING

9 IN THE MATTER OF:

10 Application of Charles B. Gillespie, CASE  
11 Jr. for directional drilling and an 9555  
12 unorthodox subsurface location, Lea  
13 County, New Mexico.

14 BEFORE: David R. Catanach, Examiner

15 TRANSCRIPT OF HEARING

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

17 For the Division: Robert G. Stovall  
18 Attorney at Law  
19 Legal Counsel to the Division  
20 State Land Office Bldg.  
Santa Fe, New Mexico

21 For Charles B. Gillespie, James Bruce  
22 Jr.: Attorney at Law  
23 HINKLE LAW FIRM  
24 500 Marquette, N. W.  
Suite 740  
Albuquerque, New Mexico  
87102-2121

25

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

## I N D E X

## WILLIAM ROBERT CROW

Direct Examination by Mr. Bruce 4

Cross Examination by Mr. Catanach 7

## DAVID WENDALL HASTINGS

Direct Examination by Mr. Bruce 10

Cross Examination by Mr. Catanach 13

## E X H I B I T S

Gillespie Exhibit A, List 5

Gillespie Exhibit B, Land Plat 5

Gillespie Exhibit C, Structural Map 6

Gillespie Exhibit D, Isopach 6

Gillespie Exhibit E, Document 11

Gillespie Exhibit F, Wellbore Diagram 12

Gillespie Exhibit G, Wellbore Diagram 12

Gillespie Exhibit H, List 6

1 MR. CATANACH: Call next Case  
2 9555.

3 MR. STOVALL: Application of  
4 Charles B. Gillespie, Jr., for directional drilling and an  
5 unorthodox subsurface location, Lea County, New Mexico.

6 MR. CATANACH: Are there ap-  
7 pearances in this case?

8 MR. BRUCE; Mr. Examiner, my  
9 name is Jim Bruce from the Hinkle Law Firm, representing  
10 the applicant. I have two witnesses to be sworn.

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

13 Will the witnesses please  
14 stand and be sworn in?

15

16 (Witnesses sworn.)

17

18 MR. BRUCE: Mr. Examiner, in  
19 this case the applicant seeks to re-enter its Shipp Well  
20 No. 1, which is located in Section 11, 17 South, 37 East,  
21 and then proposes to plug back to the depth of approxi-  
22 mately 8500 feet and directionally drill to an unorthodox  
23 location 990 feet from the north line and 2310 feet from  
24 the east line of Section 11.

25

As will be shown, the unit for

1 the well is the west half of the northeast quarter.

2

3

WILLIAM ROBERT CROW,

4

being called as a witness and being duly sworn upon his

5

oath, testified as follows, to-wit:

6

7

DIRECT EXAMINATION

8

BY MR. BRUCE:

9

Q Mr. Crow, would you please state your

10

full name and city of residence?

11

A William Robert Crow. I reside in Mid-

12

land, Texas.

13

Q And what is your occupation and who are

14

you employed by?

15

A I'm an exploration geologist. I'm em-

16

ployed by Charles Gillespie, Jr.

17

Q And have you previously testified before

18

the OCD as a geologist?

19

A No, I have not.

20

Q Will you please briefly state your edu-

21

cational and work background?

22

A I have a BS degree in geology from Texas

23

Tech University; graduated in 1981.

24

I went to work for Getty Oil Company and

25

worked for them from '81 till '84. At that time I went to

1 work for Cavalcade Oil Corporation of Lubbock. I worked  
2 for them from '84 to '86, at which time I went to work for  
3 Charles Gillespie and I've worked there since then till  
4 present.

5 Q And does your area of responsibility in-  
6 clude southeast New Mexico?

7 A Yes, that's my main area of interest.

8 Q And are you familiar with the geology  
9 involved in this case?

10 A Yes, I am.

11 MR. BRUCE: Mr. Examiner, are  
12 the witness' credentials acceptable?

13 MR. CATANACH: They are.

14 Q Mr. Crow, looking at Exhibits A and B,  
15 would you please briefly describe them for the examiner?

16 A Exhibit A is a list of the offset oper-  
17 ators to the proration unit and Exhibit B is a land plat  
18 showing the area and the leases of the offset operators.

19 Q And does it outline the west half north-  
20 east quarter proration unit?

21 A It outlines the proration unit and also  
22 shows in yellow the proposed bottom hole or subsurface  
23 location.

24 Q And have you been in contact with the  
25 offset operators?

1           A           Yes, I have. I've been in verbal con-  
2 tact over the phone with all offset operators and they have  
3 verified they have been notified and none of them have  
4 showed any opposition.

5           Q           Referring to Exhibits C and D, would you  
6 please briefly describe their contents for the examiner?

7           A           Exhibit C is a structure map contoured  
8 on top of the Lower Strawn Lime, which is the objective in  
9 this area.

10                       The wells colored in blue are previous  
11 Strawn producers and the closest Strawn producers in the  
12 Humble City Field South of us have all been plugged.

13                       Exhibit D is an isopach map of Section  
14 11 of the Strawn, Lower Strawn Lime, and it shows our in-  
15 terpretation of where we believe the original wellbore is  
16 on the north flank of an existing seismic defined anomaly,  
17 and we'd like to deviate to the south to get to the center  
18 of it.

19           Q           And do you believe the Shipp No. 1 Well  
20 originally was located on the north flank of the porosity  
21 in this area?

22           A           Yes, I do, deviated to the north a  
23 little bit on us, and we believe the best location would  
24 come back to the south.

25           Q           And referring to Exhibit H, is that a

1 copy of the notice letter that you sent to all offset  
2 operators?

3 A Yes, it is.

4 Q And are waivers from Amerind, Bill  
5 Seltzer and Chevron attached to that Exhibit H?

6 A Yes, they are.

7 Q Were Exhibits A through D and H prepared  
8 by you or under your direction?

9 A Yes, they were.

10 Q And in your opinion is the granting of  
11 this application in the interest of conservation and the  
12 prevention of waste?

13 A I believe it is.

14 MR. BRUCE: Mr. Examiner, I  
15 move the admission of Exhibits A, B, C, D and H.

16 MR. CATANACH: Exhibits A, B,  
17 C, D and H will be admitted as evidence.

18 MR. BRUCE: I have no further  
19 questions at this time.

20

21 CROSS EXAMINATION

22 BY MR. CATANACH:

23 Q Mr. Crew, who originally drilled the  
24 well?

25 A The re-entry well? We did, Charles

1 Gillespie, Jr., as operator.

2 Q And that was drilled when? When was it  
3 drilled?

4 A Early 1987. I believe it was February  
5 or March. I'd have to look back to see what spud date of  
6 that well was, actual spud date.

7 Q Did your company obtain approval for an  
8 unorthodox location when the well was drilled?

9 A No, sir. That well was at that time  
10 drilled as a wildcat.

11 Q To what depth?

12 A It was going to go to the Mississippian.

13 Q And to what depth did the well pene-  
14 trate? penetrate?

15 A 11, 880 feet.

16 Q And the Strawn formation was tested in  
17 that well or -- or --

18 A No, sir, it was not. There was no poro-  
19 sity in there so we did not test it.

20 Q No porosity.

21 A We ran one drill stem test in the lower  
22 clastic section but not the objective Strawn Lime.

23 Q The offset operator to the west is -- is  
24 who?

25 A Is ourselves.

1 Q Okay, Gillespie owns the northwest  
2 quarter of Section 11?

3 A Yes, sir, and the northeast quarter of  
4 10.

5 Q And the northeast quarter of 10. So in  
6 effect, you would be crowding yourselves.

7 A Yes, sir.

8 Q What does your isopach map, the data on  
9 your isopach map, what was based on? How did you -- what  
10 data did you utilize to construct the map?

11 A All those figures were taken off elec-  
12 tric logs from all those wells down in there, and that's  
13 the interval from the top of the Lower Strawn Lime to the  
14 base where the clastics begin.

15 Q Okay, no seismic data was used?

16 A Seismic data is not used to create an  
17 isopach map but seismic data is the primary tool used out  
18 here to interpret these mounds, and that's what we have  
19 selected this unorthodox bottom hole location on.

20 MR. CATANACH: No. further  
21 questions. The witness may be excused.

22 Mr. Bruce?

23 MR. BRUCE: We'll call David  
24 Wendall Hastings.

25

1                   DAVID WENDALL HASTINGS,  
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. BRUCE:

7

                  Q           Will you please state your full name  
8 and city of residence?

9

                  A           David Wendall Hastings. I live in Mid-  
10 land, Texas.

11

                  Q           And who are you employed by and in what  
12 capacity?

13

                  A           I'm presently employed by Charles B.  
14 Gillespie, Jr. I'm a Production Manager.

15

                  Q           And have you previously testified before  
16 the OCD?

17

                  A           No, I have not.

18

                  Q           Would you please briefly describe your  
19 educational and employment background?

20

                  A           I have a Bachelor of Science degree from  
21 the University of Texas, Permian Basin in geology and I've  
22 worked for Mr. Gillespie since 1981.

23

                  Q           And do your areas of responsibility in-  
24 clude?

25

                  A           I handle all the drilling and production

1 activities (not clearly understood.)

2 Q And are you familiar with the drilling  
3 and production activities related to this particular well?

4 A Yes, I am.

5 MR. BRUCE: Mr. Examiner, is  
6 the witness -- are the witness' credentials acceptable?

7 MR. CATANACH: They are.

8 Q Mr. Hastings, referring to Exhibit E,  
9 would you describe the proposed operations that the appli-  
10 cant is requesting to do for this well?

11 A Okay. Exhibit E is a re-entry proce-  
12 dure. The well is temporarily abandoned with plugs set as  
13 described under Article No. 3.

14 First of all we'd move in a rig and set  
15 up a blowout preventer.

16 We would pick up a nonmagnetic drill  
17 collar with the bottom hole assembly, drill out the cement  
18 plugs down to a depth of approximately 8500.

19 At that point we would drop a magnetic  
20 multishot survey tool and acquire a survey of the current  
21 bottom hole location.

22 We would also run a gyro survey while we  
23 were out of the hole from the cased point, which is at  
24 4498.

25 Depending on the survey data we would

1 select a sidetrack plugback depth and we would set a 300  
2 foot cement plug. After allowing the plug to set up we  
3 would go back in the hole with our drilling assembly,  
4 sidetrack bit, mud motor, bent sub and nonmagnetic drill  
5 collar and drill, orient the direction of the tool, with a  
6 surface readout survey.

7 And we would drill approximately 60 to  
8 70 feet with this assembly.

9 After orienting the wellbore to the  
10 direction and angle that we want to achieve, we would trip  
11 back in the hole with the angle building assembly and ac-  
12 quire the average angle that we wish to hit the desired  
13 target, 70 foot, roughly 75 foot radius area.

14 Once that angle is achieved then we'd  
15 trip back in the hole with a (unclear) hole assembly to  
16 hold that desired angle and to hit the target area. Once  
17 we TD the well we would run a multishot survey to acquire  
18 the bottom hole location as required by the Oil Conservat-  
19 ion Division.

20 Q And referring to Exhibits F and G, would  
21 you just briefly describe their contents?

22 A Exhibit F is the present wellbore diag-  
23 ram under present conditions. The cement plugs are listed  
24 on the diagram. The casing as listed is also shown.

25 Q And Exhibit G?

1           A           Exhibit G, of course, is our sidetrack  
2 wellbore diagram showing the current wellbore and casing  
3 with the proposed wellbore which is exaggerated. This  
4 diagram is exaggerated (not clear) showing the sidetrack  
5 depths and the proposed casing program.

6           Q           And is the TD of 11,800 the true verti-  
7 cal depth?

8           A           True vertical depth.

9           Q           Were Exhibits E, F and G prepared by  
10 you?

11          A           Yes, they were.

12          Q           And in your opinion will the granting of  
13 this application be in the interest of conservation and the  
14 prevention of waste?

15          A           Yes, it will.

16                               MR. BRUCE:   Mr. Examiner, I  
17 move the admission of Exhibits E, F and G.

18                               MR. CATANACH:   Exhibits E, F  
19 and G will be admitted as evidence.

20

21

CROSS EXAMINATION

22

BY MR. CATANACH:

23

24           Q           Mr. Hastings, do you know what depth the  
Mississippian is in this well? Was it not penetrated?

25

A           I believe it penetrated right at the top

1 of the Mississippian originally.

2 Q Prior testimony indicated that the well  
3 was drilled as a Mississippian test. Do you know why the  
4 well was not drilled through the Mississippian?

5 A I think according to the geologic evi-  
6 dence we did not receive any good shows or anything in the  
7 Mississippian and we didn't feel like we needed to drill  
8 the thing on any deeper.

9 Q Mr. Hastings, have you run a directional  
10 survey on the well as of yet?

11 A No. No, we have not.

12 Q If I understood some testimony previous-  
13 ly, they said the well to the north --

14 A That's correct. Based on four prior  
15 wells, or four subsequent wells, actually, that we drilled  
16 since this in the area, and from those wells we feel like  
17 that at 8500 feet we're approximately 100 feet north of the  
18 surface location. At total depth we're approximately 250  
19 feet north of the surface location.

20 Q So if I understand the proposal, you're  
21 going to be going approximately 700 feet due south for the  
22 (not clearly heard.)

23 A Correct, approximately 6-to-700 feet.

24 Q And you do plan to run a survey to de-  
25 termine where you -- where the wellbore is at this present

1 time.

2 A That's correct.

3 Q And then kick off and sidetrack.

4 MR. CATANACH: I have no  
5 further questions of the witness. He may be excused.

6 MR. BRUCE: Nothing further in  
7 the case, Mr. Examiner.

8 MR. CATANACH: Being nothing  
9 further in this case, Case 9555 will be taken under ad-  
10 visement.

11

12 (Hearing concluded.)

13

14

15

16

17

18

19

20

21

22

23

24

25

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

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. 9555 heard by me on December 7 1988

David R. Criban, Examiner  
Oil Conservation Division