

NOTE 6668: DELTA DRILLING COMPANY FOR
POOL CREATION AND SPECIAL POOL RULES,
EDDY COUNTY, NEW MEXICO

to
Jan 10
D.C.
Official Seal

to
Jan 10
D.C.
Official Seal

CASE NO.

6668

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,
ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Bldg.
Santa Fe, New Mexico
19 September 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Delta Drilling Company) CASE
for pool creation and special pool) 6668
rules, Eddy County, New Mexico.)

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

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For the Applicant:

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I N D E X

EDWARD W. HOOPER

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MR. NUTTER: We'll call next Case 6668.

MR. PADILLA: Application of Delta Drilling Company for pool creation and special pool rules, Eddy County, New Mexico.

MR. COFFIELD: Conrad Coffield with the Hinkle law firm in Midland, Texas, appearing on behalf of the applicant, and I have one witness.

(Witness sworn.)

EDWARD W. HOOPER
being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. COFFIELD:

Q Mr. Hooper, would you please state your name, address, occupation, and employer?

A Edward W. Hooper, Midland, Texas. I'm Exploration Manager for Delta Drilling Company in the West Texas Division.

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

A Yes, I have.

Q And were your qualifications made a

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1 matter of record and accepted by the Division?

2 A They were.

3 Q Are you familiar with the application of

4 Delta Drilling Company in this case?

5 A I am.

6 Q And are you also familiar with the property

7 as well as the well location involved?

8 A I am.

9 MR. COFFIELD: Mr. Examiner, is the wit-

10 ness considered qualified?

11 MR. NUTTER: Yes, he is.

12 Q (Mr. Coffield continuing.) Mr. Hooper,

13 what is it that Delta seeks by this application?

14 A Creation of a new Bone Springs oil pool

15 for its South Culibre Bluff Well No. 3, which is located in

16 the southwest quarter of the northeast quarter of Section

17 23, Township 23 South, Range 28 East, and special rules in-

18 cluding 80-acre oil well spacing.

19 Q Please refer to what we've marked as Ex-

20 hibit One and explain what this exhibit represents.

21 A Exhibit One is a well location and owner-

22 ship plat, showing the subject well, the designated 80-acre

23 tract, and also the blocks of acreage that Delta operates

24 jointly with Amoco Production Company.

25 Q Okay. Let's go on then to Exhibit Two

1 and Three at the same time and explain both of those exhibits,
2 if you will, please.

3 A Okay. Exhibit Two is a Bone Spring struc-
4 ture map prepared to show the lack of structural closure in
5 the area of interest on the easterly dip; to show that Bone
6 Spring accumulation in this area is primarily a function of
7 stratigraphic entrapment.

8 The Exhibit Three is a cross section
9 utilizing several of the wells that Delta has drilled, in-
10 cluding the subject South Culibre Bluff Unit No. 3 Well,
11 showing the open hole Bone Spring Section that is currently
12 producing oil and gas at the present time.

13 To show the open hole section is shaded
14 in red on the No. 3 South Culibre Bluff Unit. That is the
15 section that is -- Bone Spring section that is producing in
16 that well.

17 MR. NUTTER: What is the total open hole
18 interval in that well?

19 A It's 1700 -- it's from 6244 to 8000 feet.
20 It's 1730 -- no, 1756 feet. 1756 is the open hole.

21 MR. NUTTER: Why is there so much open
22 hole interval in that well?

23 A We could not identify exactly what is
24 contributing the oil. There's a lot of unknowns in this
25 particular well. There is one zone of porosity about 125

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1 feet below the top of the Bone Spring lime that we feel is
2 contributing oil, but production logs indicated two or three
3 other zones that were contributing oil into the borehole
4 that we could not identify on any of the porosity logs.
5 So that's why we sought to open hole complete this well.

6 MR. NUTTER: Did you know you had Bone
7 Spring production here before you drilled the well?

8 A We suspected it from the blowout well
9 that's just immediately -- 300 feet immediately east of
10 this well.

11 MR. NUTTER: That's what I was going to
12 ask you next. This is on the same 40 as the blowout, isn't
13 it?

14 A Correct.

15 MR. NUTTER: And that well encountered
16 a lot of porosity, et cetera, in the Bone Springs.

17 A Well, we could not identify it as such.
18 The analysis, chemical analysis, of the crude indicated that
19 it was Permian and probably Bone Spring oil.

20 MR. NUTTER: But you weren't --

21 A We were not sure when we drilled this
22 well exactly where it was.

23 MR. NUTTER: I see.

24 A We just suspected that it was Bone Springs.

25 MR. NUTTER: Well, were drill stem tests

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1 made up and down throughout this ---

2 A. There was ---

3 MR. NUTTER: --- open hole interval?

4 A. There was one drill stem test conducted
5 in the No. 3 Well from 6330 to 6440, and all we recovered on
6 that was 4000 feet of water, which turned out to be filtrate
7 water. It was deeply invaded. And that's the zone that's
8 shaded on the electric log right below the casing shoe at
9 6244 in the No. 3 Well.

10 MR. NUTTER: Oh, that purple shading in
11 there?

12 A. Correct.

13 MR. NUTTER: It just seems unusual that
14 you have 1756 feet of open hole in a well. I wonder why
15 the casing is set so high and the well drilled so deep.

16 A. Well, the engineers wanted to open hole
17 complete this because, as I previously said, they weren't
18 sure where the oil was coming from.

19 MR. NUTTER: Now the blowout in the adjacent
20 well was from the Atoka formation, wasn't it?

21 A. Correct, an Atoka sand.

22 MR. NUTTER: And this well didn't penetrate
23 anywhere near that formation, did it?

24 A. No, this well was bottomed at 8000 feet
25 in the Bone Spring.

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1 MR. NUTTER: It's not a plug backed up,
2 then.
3 A No.
4 MR. NUTTER: Okay, go ahead.
5 A That is the total depth.
6 Q Let's go to Exhibit Four, then, Mr.
7 Hooper. Would you explain what this exhibit is?
8 A Exhibit Four is a field -- Bone Spring
9 Field location map showing the current location of oil and
10 gas fields that are producing from the Bone Spring sequence.
11 And of these fields that are shown here, where there is a design-
12 nation that was given initially, spacing designation, seven
13 of these wells is so notated on there, either 80 acres or
14 160-acre spacing was granted to these fields initially.
15 It also shows by a black arrow the location
16 of the South Culibre Bluff area in relationship to the pro-
17 ducing Bone Spring area.
18 Q Have you compared the characteristics of
19 the South Culibre Bluff Unit Well No. 3 with these other
20 Bone Springs wells in the other pools where 80-acre spacing
21 was established?
22 A Correct, and nearly, I'd say, 95 to 98
23 percent of the other fields the entrapment of oil or gas is
24 primarily stratigraphic. In our case, even though there is
25 a lot we do not know about the Bone Spring in the South

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1 Culibre Bluff area, the characteristics of the oil, we have
2 a high energy oil. It's a gas saturated oil at bottom hole
3 conditions. Also, the productivity leads us to believe that
4 this well will drain a larger area, and our production to
5 date, we have produced 3,512 barrels of oil. That was
6 through September the 18th. The current production in that
7 well is now -- it is pumping 65 to 85 barrels of oil per
8 day plus 100 to 130 Mcf gas per day.

9 Q Well, generally do you believe the char-
10 acteristics of these other Bone Springs pools which have
11 been granted 80 acres spacing compare favorably with the
12 characteristics of the subject well?

13 A I do.

14 Q And is it your opinion, then, Mr. Hooper,
15 from well data now available, that this South Culibre Bluff
16 Unit No. 3 Well will adequately drain 80 acres?

17 A I do.

18 Q Accordingly then, I trust, you are recom-
19 mending that 80-acre spacing be allocated to this pool?

20 A I am.

21 Q Do you have any recommendation to make as
22 to well location requirements or other requirements which
23 the Division might establish for the pool which you seek to
24 have established?

25 A Yes. We are currently drilling the No. 4

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1 South Culibre Bluff Unit in the northeast northeast of 23.
2 That's located on those maps that you have. So that 80-acre
3 spacing, we could put it on an alternate basis on those
4 stand-up 80s.

5 MR. NUTTER: That well is a northeast
6 diagonal offset to the subject well?

7 A Correct, and we should be coring the
8 Upper Bone Spring limestone in that well today.

9 Q So you'd recommend the diagonal offset
10 pattern?

11 A Yes.

12 Q What recommendation do you have, if any,
13 as to the name for this Bone Springs Pool?

14 A I would name it the South Culibre Bluff
15 Bone Spring Pool.

16 Q Mr. Hooper, where these Exhibits One
17 through Four prepared by you or under your supervision?

18 A They were.

19 Q And in your opinion will the approval of
20 this application be in the interest of conservation and
21 otherwise prevent waste and protect correlative rights?

22 A I think it will.

23 MR. COFFIELD: Mr Examiner, I move the
24 admission of Exhibits One through Four.

25 MR NUTTER: Delta Exhibits One through

1 Four will be admitted in evidence.

3 CROSS EXAMINATION

4 BY MR. NUTTER:

5 Q Mr. Hooper, has any calculation been made
6 from the logs of the well as to the permeability or have
7 any productivity tests in the Bone Spring -- productivity
8 index tests, or anything, been conducted on the well to
9 establish what kind of permeability you've got?

10 A No, Mr. Commissioner, the only thing we--
11 where we do have porosity indications the porosity range is
12 from 8 to 12 percent and some preliminary calculations
13 using a water saturation 30 percent computation, we're esti-
14 mating approximately 60,000 barrels of oil, recoverable oil,
15 on an 80-acre spacing.

16 Q But you haven't made any determinations
17 as to the permeability of the formation, whether it will
18 drain that 80 acres or not.

19 A No, other than the fact that the high
20 energy crude and the productivity of the well that we have
21 now. The only other thing I might offer in evidence would
22 be the fact that after producing 1993 barrels of oil we took
23 a 72-hour pressure buildup test on August -- from August
24 the 9th through the 12th and extrapolated that pressure out
25 to 2997.

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1 The pressure determination from the drill
2 stem test back in February extrapolated out to 2984, so
3 there was little or no pressure decline. We realize that's
4 only approximately 3 percent of a, say, 60,000 barrel recovery,
5 but it was encouraging to us that there was no decline in
6 the bottom hole pressure.

7 Q Now let me get this right. Your drill
8 stem test pressure extrapolated to 2984.

9 A Correct.

10 Q And after producing how many barrels, 19 --

11 A 1993 stock tank barrels of oil, we extra-
12 polated the static pressure to 2997.

13 Q After 72-hour buildup.

14 A 72-hour buildup, correct.

15 Q Now are you suggesting, Mr. Hooper, that
16 the rules for this pool would provide for alternative loca-
17 tions insofar as the diagonal spacing is concerned or are
18 you just proposing 80-acre spacing with the option to drill
19 the well in either end of the 80?

20 A Well, I don't know what the lease deter-
21 mination would -- what problems we would run into there. I
22 would like some flexibility to perhaps drill it on either
23 end of the 80.

24 MR. NUTTER: Are there any further ques-
25 tions of Mr. Hooper? He may be excused.

1 Do you have anything further, Mr. Coffield?

2 MR. COFFIELD: No, sir.

3 MR. NUTTER: Does anyone have anything
4 they wish to offer in Case Number 6668?

5 We'll take the case under advisement.

6

7 (Hearing concluded.)

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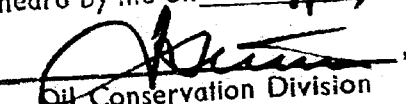
REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a court reporter, DO HEREBY CERTIFY that the foregoing and attached 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 from my notes taken at the time of the hearing.

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Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6668 heard by me on 9/19 1979.

 Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6668
Order No. R-6139-A

IN THE MATTER OF CASE 6668 BEING
REOPENED PURSUANT TO THE PROVISIONS
OF ORDER NO. R-6139, WHICH ORDER
ESTABLISHED SPECIAL RULES AND REGULA-
TIONS FOR THE SOUTH CULEBRA BLUFF-
BONE SPRING POOL, EDDY COUNTY, NEW
MEXICO, INCLUDING A PROVISION FOR
80-ACRE PRORATION UNITS.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 10, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 17th day of December, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-6139, dated October 12, 1979, temporary special rules and regulations were promulgated for the South Culebra Bluff-Bone Spring Pool, Eddy County, New Mexico, establishing temporary 80-acre spacing units.
- (3) That pursuant to the provisions of Order No. R-6139, this case was reopened to allow the operators in the subject pool to appear and show cause why the South Culebra Bluff-Bone Spring Pool should not be developed on 40-acre spacing units.
- (4) That the evidence presently available is insufficient to clearly establish that one well in the South Culebra Bluff-

-2-

Case No. 6660
Order No. R-6139-A

Bone Spring Pool can efficiently and economically drain and develop 80 acres.

(5) That the operators in the South Culebra Bluff-Bone Spring Pool should continue to conduct tests and gather data for the purpose of establishing the most efficient and economic spacing pattern for said pool.

(6) That such evidence should be submitted to the Director of the Oil Conservation Division on or before July 1, 1982.

(7) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-6139 should be continued in full force and effect until further order of the Division.

IT IS THEREFORE ORDERED:

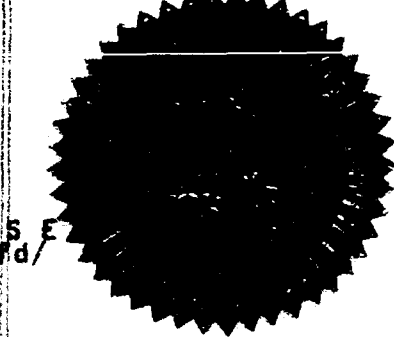
(1) That the Special Rules and Regulations governing the South Culebra Bluff-Bone Spring Pool, Eddy County, New Mexico, promulgated by Order No. R-6139, are hereby continued in full force and effect until further order of the Division.

(2) That the operators in said pool shall continue to conduct tests and gather data to establish the most efficient and economic spacing pattern for the pool and submit such data to the Director of the Oil Conservation Division on or before July 1, 1982.

(3) That upon failure to submit such data or the submittal of insufficient or inconclusive data this matter shall again be set for hearing before the Division.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
Joe D. Ramey
JOE D. RAMEY
Director

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
10 December 1980

EXAMINER HEARING

IN THE MATTER OF:

Case 6668 being reopened pursuant to
the provisions of Order No. R-6139.

CASE
6668

and

Application of Delta Drilling Company
for pool extension, Eddy County, New
Mexico.

CASE
7092

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

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DON L. CROZIER

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2 MR. STAMETS: We'll call next Case 6668.

3 MR. PADILLA: In the matter of Case 6668
4 being reopened pursuant to the provisions of Order No. R-6139,
5 which order promulgated temporary special rules and regula-
6 tions for the South Culebra Bluff-Bone Spring Pool in Eddy
7 County, New Mexico, including a provision for 80-acre spacing
8 units.

9 MR. COFFIELD: Conrad Coffield with the
10 Hinkle Law Firm of Midland, Texas, appearing on behalf of
11 Delta Drilling Company, an operator in this particular area.

12 And if the Examiner please, I would point
13 out the fact that the next case on the docket is a case in
14 which Delta Drilling Company is the applicant, relating to
15 pool extension in the very same area, and much of the testimony
16 and exhibits would be identical. We would therefor respect-
17 fully request the two cases be consolidated for hearing.

18 MR. STAMETS: If there is no objection,
19 we will call Case 7092 and consolidate them for purposes of
20 testimony.

21 MR. PADILLA: Application of Delta
22 Drilling Company for pool extension, Eddy County, New Mexico.

23 MR. COFFIELD: I have two witnesses to
24 be sworn.

25 (Witnesses sworn.)

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

DIRECT EXAMINATION

BY MR. COFFIELD:

Q. Mr. Cope, for the record would you please state your name, address, occupation, and employer?

A. My name is Whit Cope. I reside in Midland, Texas. I am a geologist with Delta Drilling Company.

Q. Have you previously testified before the Division as a geologist?

A. No, I have not.

Q. Would you give the Examiner a brief resume of your educational background and work experience as a geologist?

A. I have a BS degree in geology from the University of Texas at Austin. I received that degree in December of '77. I've worked for two years, from December of '77 to December of '79 for CORE Laboratories as a hydrocarbon well logger; have been with Delta as a geologist since December, '79.

Q. Mr. Cope, are you familiar with the ap-

1
2 plication in Case No. 7092 and the matters with which we are
3 concerned in the Case 6668?

4 A. Yes, I am.

5 Q. And have you familiarized yourself with
6 the properties involved in these particular cases?

7 A. Yes, I have.

8 MR. COFFIELD: Do you have any other
9 questions of Mr. Kope?

10 MR. STAMETS: No. The witness is con-
11 sidered qualified.

12 Q. Mr. Cope, would you please state what it
13 is that is covered here in these two cases and what it is
14 particularly, of course, that the applicant seeks in connection
15 with Case 7092?

16 A. In Case 6668 Delta seeks retention of
17 the 80-acre spacing in our -- in the South Culebra Bluff-
18 Bone Spring Pool in Eddy County, New Mexico.

19 In Case 7092 we seek extension of the
20 South Culebra Bluff-Bone Spring Pool to include all of Sections
21 2, 11, 13, 14, 23, 24, in Township 23 South, Range 28 East,
22 of Eddy County, New Mexico.

23 Q. Okay, Mr. Cope, please refer now to what
24 we've marked as Exhibit One and describe what it is that ex-
25 hibit shows, represents?

1
2 A. Exhibit One is a land plat, showing well
3 locations and lease blocks which Delta operates jointly with
4 Amoco Production Company.

5 The yellow cross hatching indicates the
6 sections that Delta wishes included in the extension of the
7 Bone Spring-South Culebra Bluff Pool.

8 That's pretty much it.

9 Q. All right, let's go then to next Exhibit
10 Two and explain that exhibit.

11 A. Exhibit Two is a structure map on top of
12 the uppermost producing zone in the Bone Springs interval.
13 We have designated this upper producing zone, D zone, or
14 Delta zone, but that's strictly inhouse. It's not an industry-
15 wide designation.

16 The yellow line connecting the wells is
17 the cross section line for my next exhibit.

18 The primary objective of this exhibit is
19 to show that there is no structural closure in the area in
20 the Bone Springs.

21 Q. Is there any particular feature on that
22 exhibit that would lead you -- lead one to that immediate
23 conclusion?

24 A. It has a -- the structure is pretty much
25 a general dip to the east without -- a few slight structural

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noses but no -- no closure.

3

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Q Okay, let's go now to Exhibit Three and describe that exhibit.

5

6

A Exhibit Three is a north/south cross section following the line shown on Exhibit Two.

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The structure map of the previous exhibit, was mapped on the zone that we have colored in yellow, right beneath the marker First Bone Spring Lime.

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All the other beds marked across these logs are -- are to show reservoir continuity across the acreage in question.

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The red or orange coloring in certain flares indicates perforations in the individual wells. The shows, the producing intervals, are very scattered throughout the whole Bone Springs interval, with the D zone being the uppermost producing zone.

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Q Now, Mr. Cope, from this data and the projections that you have made as a consequence of looking at the well control here in the area, is it your expert opinion, then, that the sections that are included within the application relative to Case Number 7092 indeed should logically be included within the South Culebra Bluff-Bone Spring Pool?

25

A

Yes, in my opinion they should be.

1
2 Q Is there anything further that you want
3 to add to your testimony on this subject?

4 A I believe that's it.

5 Q Okay. Were these Exhibits One through
6 Three prepared by you or under your supervision?

7 A Yes, they were.

8 Q In your opinion will the approval of
9 this application relative to 7092, specifically, and the con-
10 tinuance -- continuation of the special pool rules in Case
11 6668, prevent the drilling of unnecessary wells and otherwise
12 prevent waste and protect correlative rights?

13 A Yes, I do.

14 MR. COFFIELD: Mr. Examiner, I move the
15 admission of Exhibits One, Two, Three.

16 MR. STAMETS: These exhibits will be
17 admitted.

18
19 CROSS EXAMINATION

20 BY MR. STAMETS:

21 Q Turning to Exhibit Number Three, it would
22 appear as though there are only two wells producing out of
23 the Bone Springs, is that correct?

24 A Yes, sir.

25 MR. STAMETS: Yeah, that's right, two.

1

2

A. One, two, three, yes, sir.

3

4

Q. Okay, and reading from top to bottom on Exhibit Number Two, then, that's the third well and the --

5

6

A. I beg your pardon, second well from the top.

7

8

Q. From the top. Well, the red blocks on my Exhibit Number Three are in the third well from the left.

9

10

A. Yes. Well, the second one from the left is open hole production out of that.

11

12

Q. I see, so --

13

14

A. Or it had been previously. We are now in the process of casing that off and will selectively treat zones similar to those that are shown on the Number one.

15

16

Q. Okay, so the second well is an open hole producer.

17

18

19

20

A. Yes. The Number one, these are -- it's not indicated on this, but these are proposed perforations for that well, which is depleting in the Lower Atoka. That -- that is where we intend to come up-hole and --

21

22

23

24

25

Q. Okay, so that --

A. The only ones --

Q. -- third well, then, is not producing --

A. Not presently.

Q. -- but you do intend to recomplete.

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A. The second and fifth wells are producing.
Or have produced from the Bone Springs interval.

Q. The fifth well, now that's the South
Culebra Bluff No. 3.

A. Yes, sir, that is the discovery well, too.

Q. Okay, and that's open hole?

A. Yes, sir.

Q. Producer. All right, and then the sixth
well, you show some red markings on that.

A. Okay, that is not -- that is shown to
be producing. It's not a Delta well, but it is, from the
indications we've gotten, is producing from the Bone Springs.

Q. Okay.

A. It's a recent recompletion in that in-
terval.

Q. In your analysis, do you see continuity
of production in this area, or is what we're seeing here iso-
lated stringers of Bone Spring production being picked up by
these wells?

A. I believe that the continuity is best
shown in our designated D sand. It is producing or is shown
potential in the Amoco Federal 11-3, South Culebra -3, but
admittedly, the production in the Bone Springs is fairly
scattered throughout the whole interval.

1
2 Q Now, do you see anything on the logs
3 which would indicate to you that these zones could be produc-
4 tive in the Amoco "GO" Gas Com No. 1, that's in Section 2?

5 A Yes, sir. It is the -- the D zone is
6 comparable to that in the Amoco Federal 11-3 and the South
7 Culebra Bluff No. 3.

8 And we also believe it has potential in
9 the Queen B, although it is not presently perforated.

10 Q And the basic thrust of your testimony
11 then is to show that the formations are continuous across the
12 area and geologically could be considered the single unit.

13 A Yes, sir.

14 Q Okay.

15 MR. STAMETS: Any other questions of
16 this witness? He may be excused.

17

18 DON L. CROZIER

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

21

22 DIRECT EXAMINATION

23 BY MR. COFFIELD:

24 Q Mr. Crozier, for the record, would you
25 please state your name, address, occupation and employer?

1
2 A Okay. My name is Don L. Crozier. I
3 reside out of Tyler, Texas. I work as Coordinator of Reservoir
4 Engineering in the Corporate Engineering and Research Group
5 of Delta Drilling.

6 Q Have you previously testified before the
7 Division as a petroleum engineer?

8 A No, sir, I have not.

9 Q Then for the record would you give a
10 brief resume of your educational background and work experience
11 as a petroleum engineer?

12 A I received a Bachelor of Science degree
13 in petroleum engineering out of the University of Tulsa in
14 1962, and then obtained a Master's degree in petroleum en-
15 gineering in 1972.

16 I've got eighteen years of experience,
17 eight years with Amerada Hess in production and reservoir
18 work; three years in reservoir engineering with Energy Re-
19 serves, or formerly Clinton Oil; and three years with Koch
20 Exploration; one year as projects engineer with American
21 Petrofina; one year as District Engineer, East Texas District
22 for Ensearch; and two years on reservoir duty with Delta
23 Drilling.

24 Q Mr. Crozier, have you familiarized your-
25 self with the application of Delta in Case 7092 and also the

1
2 matters relating to Case 6668?

3 A. Yes, sir, I have.

4 Q. And have you made a study of the proper-
5 ties involved and the location --

6 A. Yes, sir, I have.

7 Q. -- with which we're concerned?

8 A. Yes, sir.

9 MR. COFFIELD: Any questions of the wit-
10 ness?

11 MR. STAMETS: The witness is considered
12 qualified.

13 Q. Mr. Crozier, would you refer to what
14 we've marked as Exhibit Four and describe that?

15 A. Okay. Exhibit Four is a tabulation
16 showing the status of development drilling thus far in the
17 Bone Springs. It reflects the productivity we've obtained
18 from the Bone Springs wells to date. It shows testing through-
19 out a number of zones, giving the perforated interval and the
20 rates that we've gained, our latest production test data.

21 Q. Okay, let's go on now to our Exhibit
22 Five.

23 A. Okay.

24 Q. And describe that exhibit, please.

25 A. Okay. Exhibit Five indicates a contin-

1 uous relatively thin sand with --

2
3 Q Excuse me, Mr. Crozier. First of all
4 for the record this is a map.

5 A Okay, this is a -- this is actually a
6 copy of a structure map that was previously introduced,
7 showing the area in question that we're proposing to extend
8 the field to, and showing the various wells in the area.

9 Okay, there is a thickness with a foot
10 sign shown beside the majority of the wells, based on work
11 accomplished under me by our log analyst, in which we have
12 shown the thickness for the first Bone Springs interval to
13 show it pretty well continuous over this overall area.

14 Q Now let's go on to Exhibit Number Six
15 and describe that and indicate what that represents.

16 A Okay. Exhibit Six is a pressure build-
17 up data that we have obtained in the field to date. The
18 first build-up was a pressure build-up taken in the South
19 Culebra Bluff Unit No. 3, a 72-hour build-up in which extra-
20 polated pressure of 2997 was obtained. This was after appro-
21 ximately 1993 barrels had been produced from the Bone Springs

22 The second build-up was very, very re-
23 cently obtained, 11-1980, and again, an extrapolated static
24 build-up was obtained in this well, and it showed a pressure
25 of 2765. Both of these two wells at approximately the same

1
2 datum.

3 Now, this, after a cum production from
4 the No. 3 of 26,000 barrels, shows a pressure drop of 232 psi,
5 and to us appears to indicate a communication of the Bone
6 Springs across between Well No. 3 and Well No. 4, both in
7 the northeast quarter. They're both presently on 80's,
8 standup 80's in the northeast quarter.

9 The two wells are approximately 2000
10 feet apart. If you were to take and just make a radius
11 around the No. 3 Well of 2000 foot, it would give you a
12 drainage area -- or excuse me, just an area of 280 acres.

13 That's all.

14 Q Then let's go to Exhibit Seven and de-
15 scribe that, please.

16 A Exhibit Seven is a production performance
17 graph for this South Culebra Bluff Unit Well No. 3. It shows
18 a relatively moderate to flat decline with a present rate of
19 around 50 barrels of oil per day. It tends to show a pro-
20 ducing capacity, the permeability of the Bone Springs, to
21 actually drain an 80-acre area.

22 Q Have you been in contact or in consul-
23 tation with any of the other operators in this general area
24 relative to Bone Springs spacing, the 80-acre question?

25 A Yes, sir. I contacted Amoco engineers

1 out of Houston and asked what spacing they would desire in
2 the area. They said they would like 80-acre spacing and felt
3 like 80-acre spacing would effectively drain the Bone Spring.
4

5 Q Okay, do you have anything further to
6 add to your testimony, Mr. Crozier?

7 A Just one minute.

8 Q All right.

9 A The maps that you have seen show a number
10 of proposed locations for Bone Springs. These are strictly
11 Delta proposed locations, and Delta expects, as previously
12 mentioned, to take advantage as Strawn and other zones deplete,
13 to come up hole and to perforate the Bone Springs and produce
14 in it; to fill in the area.

15 Q Were Exhibits Four through Seven prepared
16 by you or under your supervision?

17 A Yes, sir, they were.

18 Q In your opinion will the approval of
19 Delta's application and Delta's position in connection with --
20 particularly with Case 6668, prevent the drilling of unnec-
21 cessary wells and otherwise prevent waste and protect corre-
22 lative rights?

23 A Yes, sir.

24 MR. COFFIELD: We move the admission of
25 Exhibits Four through Seven.

1
2 MR. STAMETS: These exhibits will be
3 admitted.

4
5 CROSS EXAMINATION

6 BY MR. STAMETS:

7 Q Mr. Crozier, what type of well costs
8 are we looking at drilling these Bone Springs wells?

9 A Well costs in this area -- do you mind
10 if I verify our cost to be sure we're --

11 Q You bet.

12 A I'm thinking -- okay, the testing pro-
13 cedures we have undergone to try to determine if various
14 Bone Springs intervals will produce. it's been costing
15 \$500,000 per well. I think gradually, as we do not test some
16 intervals, find them to be non-commercial, it will be reduced
17 down to \$350,000, to \$400,000, in this bracket.

18 Q What type of reserves do you feel you
19 are -- producable reserves do you feel that you're developing
20 with these wells?

21 A Okay. I can only speak of SCB -- or
22 South Culebra Bluff No. 3, primarily, as far as history is
23 concerned. It has a cum of 25,365 barrels as of 11-1-80.
24 Extrapolating reserves, using the performance graph shown,
25 would yield 104,000 additional, or an ultimate of 129,000

1
2 barrels, approximately.

3 Q Does that well appear to be better than
4 the rest of them, an average well, or can you tell at this
5 point?

6 A I feel like it is better than -- than
7 the others. Now, in the status of development drilling that's
8 provided Exhibit Four, for example, the South Culebra Bluff
9 No. 4, operated by Delta, has shown an initial rate of 108
10 barrels. It's only been on a short time and I noticed on a
11 drilling report it was showing at 60 barrels per day, in this
12 line presently.

13 Q In your opinion is this pool still under-
14 going development at this time?

15 A Definitely, sir.

16 Q And do you feel that there is considerable
17 knowledge to be gained in the next couple of years through
18 drilling and production?

19 A Yes, sir, I do.

20 Q Would Delta have any problem with con-
21 tinued application of these pool rules for a year or two,
22 some periodic reporting reservoir data to show that this is
23 continued efficient and economic development of the reservoir?

24 A I think Delta would not object.

25 Q I think we can do this without a hearing,

1
2 as well.

3 A. That would be good. I think, you know,
4 with a period of two years versus one year, we will have
5 gained enough actual drilling, as well as history, to help.
6 Now one year, by the time you do your drilling and you get
7 insignificant production history, but over a two-year period
8 we'd gain quite a good bit in this particular area.

9 Q. Okay. What's the drive mechanism for
10 this reservoir?

11 A. It's depletion drive solution gas, we
12 feel. Now, generally the Bone Springs has a solution GOR of
13 approximately 800 cubic feet per barrel and as shown, for
14 example, on the South Culebra Bluff No. 4, it shows 1843, or
15 pretty -- pretty high GOR, or rather an increase over solu-
16 tion.

17 Q. All right.

18 MR. STAMETS: Any questions of this
19 witness? He may be excused.

20 Anything further in this case? These
21 cases, I guess.

22 We will take them under advisement, then

23
24 (Hearing concluded.)
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 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 C.S.R.

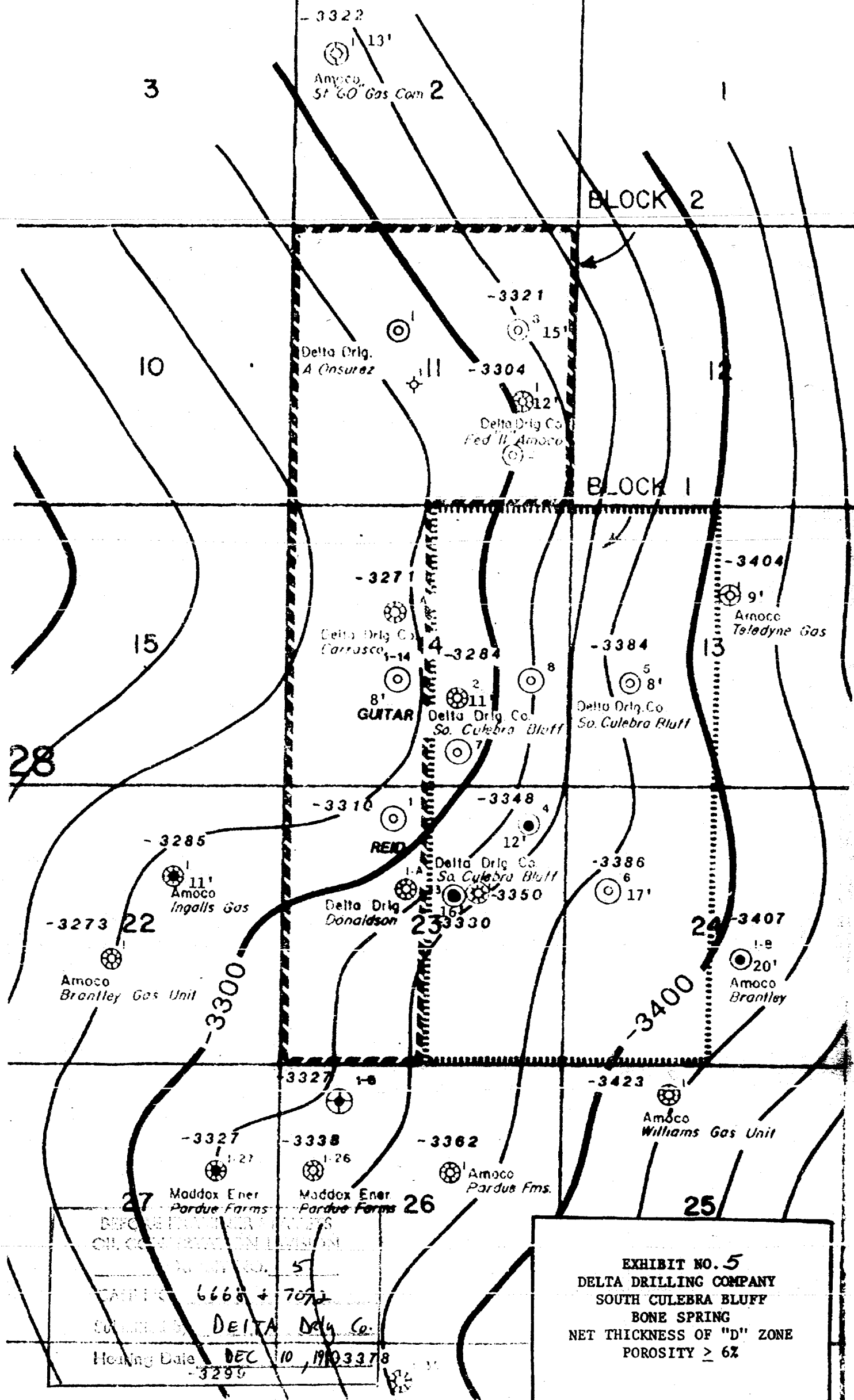
I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6668 heard by me on 12-10 1980.
Richard L. Slamm Examiner
Oil Conservation Division

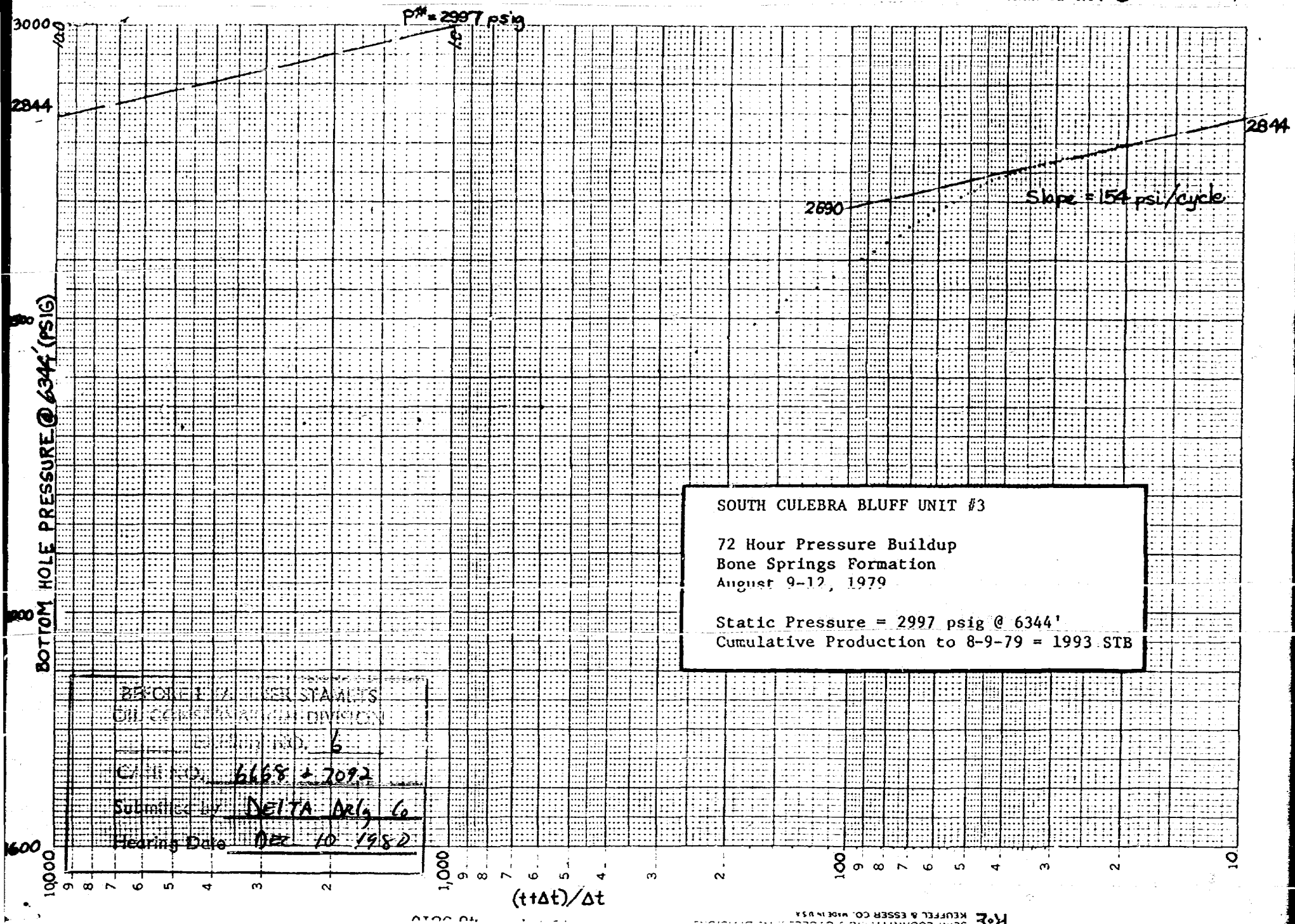
STATUS
 OIL & GAS
 C. 4
 6668 + 7092
 Submerged by DELTA Oily Co.
 Hearing Date Dec 10 1980

STATUS OF DEVELOPMENT DRILLING EFFECTIVE OCTOBER 1980
 SOUTH CULEBRA BLUFF-BONE SPRING FIELD
 TOWNSHIP 23 SOUTH, RANGE 28 EAST
 EDDY COUNTY, NEW MEXICO

Operator	Lease	Well Number	Location	Status	Interval Perforated or Open Hole Section, feet	Cumulative Oil Produced Effective Sept. 1, 1980 barrels	Latest Producing Rate		
							Oil, BPD	Water, BPD	GOR, CFPB
Amoco	Brantley	1-B	SE/4 Section 24	Shut-in	6336-6742	1,264	17	8	NA
	Ingalls	1	NE/4 Section 22	Pumping	9600-9732	3,256	5	0	NA
Delta	Amoco Federal	3	NE/4 Section 11	Preparing to run liner and test Bone Spring	-	-	-	-	-
	South Culebra Bluff	3	NE/4 Section 23	Pumping	6345-8000 O.H.	22,498	50	-	1391
	South Culebra Bluff	4	NE/4 Section 23	Testing Bone Spring	6362-6396	1,012	108	Load Water	1843
	South Culebra Bluff	6	NW/4 Section 24	Testing Bone Spring	8820-8842	-	-	-	-
Maddox Energy	Pardue Farms	1-B	NW/4 Section 26	Testing Bone Spring	6406-6676	-	20	1	1600
	Pardue Farms (Formerly produced from Morrow)	27-1	NE/4 Section 27	Preparing to Frac Bone Spring	6274-6588	-	-	-	-

NA - Not Available
 O.H. - Open Hole Completion





SCR No. 4

Hit P. RUN ON 11-19-80

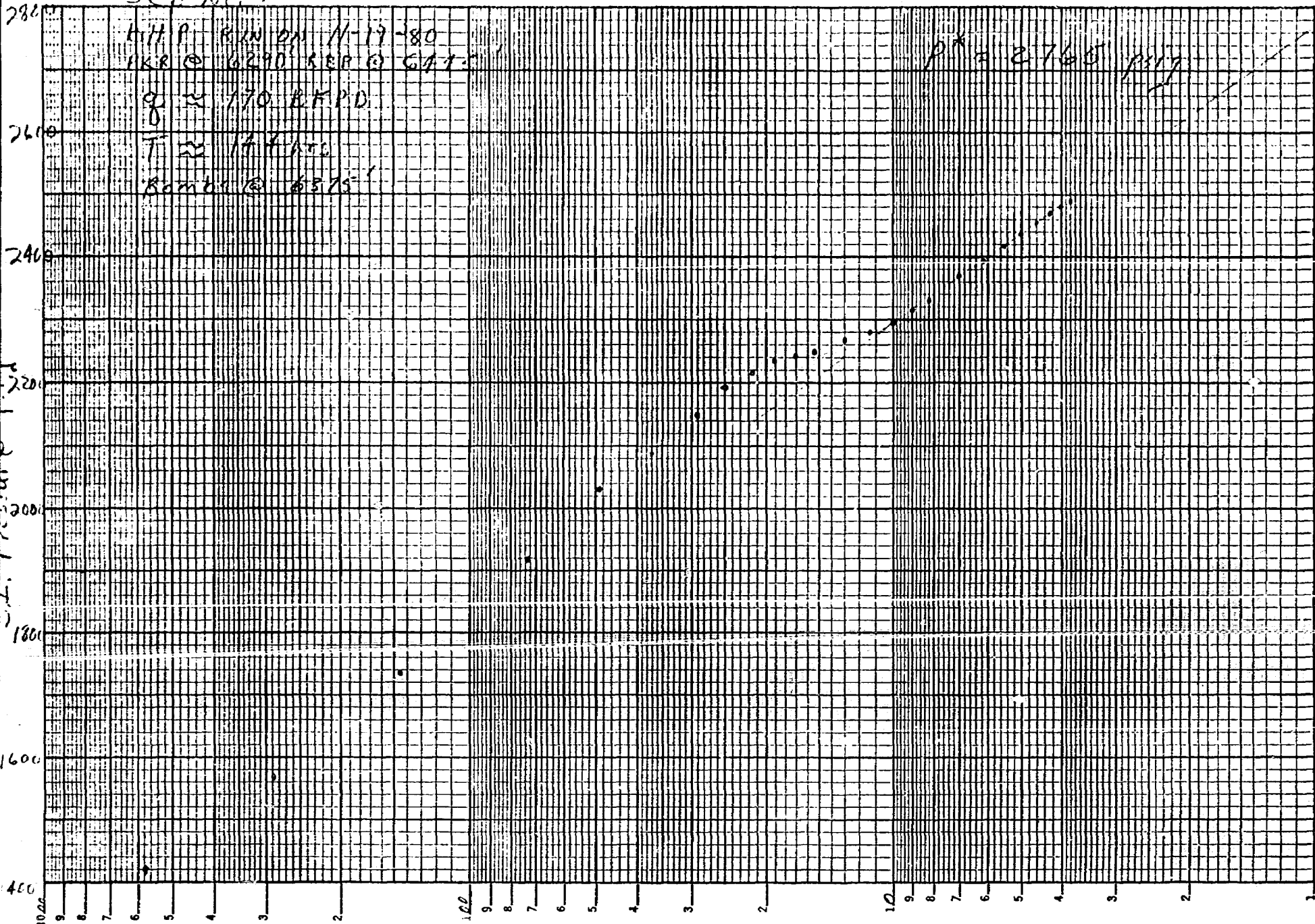
1KR @ 6290 SER @ 6415

$Q \approx 170$ RFPD

$T \approx 174$ Hz

Rom @ 6375

$P^* = 2765$ Hz



$T + \Delta t$

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$T = 144$

K&E SEMI-LOGARITHMIC 46 5493
3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
25 November 1980

EXAMINER HEARING

IN THE MATTER OF:

Case 6668 being reopened pursuant to
the provisions of Order No. R-6139.

CASE
6668

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

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MR. NUTTER: We'll call next Case Number 6668.

MR. PADILLA: In the matter of Case 6668 being reopened pursuant to the provisions of Order Number R-6139, which order promulgated temporary special rules and regulations for the South Culebre Bluff-Bone Springs Pool in Eddy County, New Mexico, including a provision for 80-acre spacing units.

Mr. Examiner, the applicant has requested this case be continued to December 10th.

MR. NUTTER: Case Number 6668 will be continued to the Examiner Hearing scheduled to be held at this same place at 9:00 o'clock a. m. December 10th, 1980.

(Hearing concluded.)

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 C.S.R.

I do hereby certify that the foregoing is a complete and correct transcript of the proceedings in the hearing held on 11/25/80, No. 6668.

[Signature], Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
25 November 1980

EXAMINER HEARING

IN THE MATTER OF:

Case 6668 being reopened pursuant to
the provisions of Order No. R-6139.

CASE
6668

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

1
2 MR. NUTTER: We'll call next Case Number
3 6668.

4 MR. PADILLA: In the matter of Case 6668
5 being reopened pursuant to the provisions of Order Number
6 R-6139, which order promulgated temporary special rules and
7 regulations for the South Culebre Bluff-Bone Springs Pool
8 in Eddy County, New Mexico, including a provision for 80-acre
9 spacing units.
10

11 Mr. Examiner the applicant has requested
12 this case be continued to December 10th.

13 MR. NUTTER: Case Number 6668 will be
14 continued to the Examiner Hearing scheduled to be held at
15 this same place at 9:00 o'clock a. m. December 10th, 1980.
16

17
18 (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 C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the hearing of Case No. 6668, held on 11/25, 1980.
[Signature], Examiner
Oil Conservation Division



BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

December 19, 1980

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mr. Conrad E. Coffield
Hinkle, Cox, Eaton, Coffield
& Hensley
Attorneys at Law
P. O. Box 3580
Midland, Texas 79702

Re: CASE NO. 6668
ORDER NO. R-6139-A

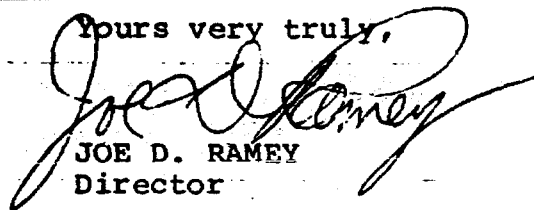
Applicant:

OCD (Delta Drilling Company)

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Division order recently entered in the subject case.

Yours very truly,


JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD _____
Artesia OCD x
Aztec OCD x

Other _____

- CASE 7103: Application of E. L. Latham, Jr. for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Pennsylvanian formations underlying the N/2 of Section 7, Township 22 South, Range 26 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7104: Application of Conoco Inc. for the amendment of Orders Nos. R-4633 and WFX-462, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Division Orders Nos. R-4633 and WFX-462, which authorized the injection of water into applicant's Maljamar Mitchell Waterflood Project in Section 5, Township 17 South, Range 32 East. The amendments sought would include carbon dioxide in the injection authorization for said project.
- CASE 7105: Application of C and E Operators, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde formation underlying the N/2 of Section 9, Township 30 North, Range 11 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7106: Application of C and E Operators, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde formation underlying the S/2 of Section 8, Township 30 North, Range 11 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7107: Application of C and E Operators, Inc. for compulsory pooling and a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde formation underlying a 158.54-acre non-standard gas proration unit comprising the SW/4 of Section 9, Township 30 North, Range 11 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7090: (Continued from November 25, 1980, Examiner Hearing)
Application of Dorchester Exploration, Inc. for directional drilling and an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter the old Union Hill Well No. 1, the surface location of which is 2310 feet from the North and West lines of Section 27, Township 12 South, Range 28 East, and to directionally drill in an indeterminate direction from a kick-off point at 7300 feet, bottoming said well at an approximate depth of 8100 feet in the Mississippian formation less than 330 feet away from the surface location. The N/2 of said Section 27 would be dedicated to the well.
- CASE 6668: (Continued from November 25, 1980, Examiner Hearing)
In the matter of Case 6668 being reopened pursuant to the provisions of Order No. R-6139 which order promulgated temporary special rules and regulations for the South Culebra Bluff-Bone Spring Pool in Eddy County, New Mexico, including a provision for 80-acre spacing units. Operators in said pool may appear and show cause why the pool should not be developed on 40-acre spacing units.
- CASE 7092: (Continued from November 25, 1980, Examiner Hearing)
Application of Delta Drilling Company for pool extension, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the extension of the South Culebra Bluff-Bone Spring Pool to include all of Sections 2, 11, 13, 14, 23, and 24, Township 23 South, Range 28 East.
- CASE 7056: (Continued and Readvertised)
Application of Getty Oil Company for the extension of vertical limits of the Jalmat Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Langlie-Mattix Pool and the downward extension of the vertical limits of the Jalmat Pool to a depth of 3740 feet, subsurface, under the NW/4 SW/4 of Section 3, Township 24 South, Range 36 East.

- CASE 7089:** Application of Summit Energy, Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Blinberry formation through its Gulf Bunin Well No. 2 located in Unit C of Section 13, Township 21 South, Range 37 East.
- CASE 7090:** Application of Dorchester Exploration, Inc. for directional drilling and an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter the old Union Hill Well No. 1, the surface location of which is 2310 feet from the North and West lines of Section 27, Township 12 South, Range 28 East, and to directionally drill in an indeterminate direction from a kick-off point at 7300 feet, bottoming said well at an approximate depth of 8100 feet in the Mississippian formation less than 330 feet away from the surface location. The W/2 of said Section 27 would be dedicated to the well.
- CASE 7091:** Application of Layton Enterprises, Inc. for a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the N/2 NW/4 of Section 14, Township 9 South, Range 34 East, Vada-Pennsylvanian Pool, to be dedicated to an old well to be re-entered 660 feet from the North line and 1830 feet from the West line of said Section 14.
- CASE 7051:** (Continued from October 15, 1980, Examiner Hearing)
Application of Petro Lewis Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinberry and Drinkard production in the wellbore of its L. G. Warlick "B" Well No. 2 located in Unit G of Section 19, Township 21 South, Range 37 East.
- CASE 6940:** (Continued from October 1, 1980, Examiner Hearing)
Application of Adobe Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down through the Wolfcamp formation underlying the NW/4 SE/4 for oil and the SE/4 for gas, Section 23, Township 20 South, Range 38 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 6996:** (Continued from October 1, 1980, Examiner Hearing) (To be continued to December 10, 1980, Examiner Hearing)
Application of John E. Schalk for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Blanco Mesaverde Pool underlying the NE/4 of Section 8, Township 25 North, Range 3 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 6668:** (Continued and Readvertised)
In the matter of Case 6668 being reopened pursuant to the provisions of Order No. R-6139 which order promulgated temporary special rules and regulations for the South Culebra Bluff-Bone Spring Pool in Eddy County, New Mexico, including a provision for 80-acre spacing units. Operators in said pool may appear and show cause why the pool should not be developed on 40-acre spacing units.
- CASE 7092:** Application of Delta Drilling Company for pool extension, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the extension of the South Culebra Bluff-Bone Spring Pool to include all of Sections 2, 11, 13, 14, 23, and 24, Township 23 South, Range 28 East.
- CASE 7093:** Application of Mesa Petroleum Company and Yates Petroleum Corporation for designation of a tight formation, Torrance, Guadalupe, DeBaca, Lincoln, and Chaves Counties, New Mexico. Pursuant to Section 107 of the Natural Gas Policy Act of 1978 and 18 CFR Section 271.701-705, applicants, in the above-styled cause, seek the designation as a tight formation of the Abo formation underlying the following described lands in the above-named counties:
all of Townships 1 North thru 4 North, Ranges 14 East thru 27 East; all of Townships 5 North thru 7 North, Ranges 14 East thru 26 East; all of Townships 1 South thru 5 South, Ranges 14 East thru 27 East; all of Township 6 South, Ranges 14 thru 28 East; W/2 only of Township 7 South, Ranges 14 East thru 17 East; all of Townships 7 South and 8 South, Ranges 18 East thru 28 East; all of Townships 9 South and 10 South, Ranges 18 East thru 27 East; all of Township 11 South, Ranges 18 East thru 25 East; all of Township 12 South, Ranges 18 East thru 24 East; all of Township 13 South, Ranges 18 East thru 23 East; and all of Township 14 South, Ranges 18 East thru 22 East; also all of Township 9 1/2 South, Range 24 East.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
29 October 1980

EXAMINER HEARING

IN THE MATTER OF:

Case 6668 being reopened pursuant) CASE
to the Provisions of Order No.) 6668
R-6139.)

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

W. Perry Pearces, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

MR. NUTTER: Call next Case Number 6668.

MR. PEARCE: In the matter of Case 6668
being reopened pursuant to the provisions of Order R-6139.

MR. NUTTER: Due to the error in the
legal notice for this case, the case will have to be continued
and Case Number 6668 will be continued to the Examiner
Hearing scheduled for November 25th, 1980, at 9:00 o'clock
a. m. at this same place.

The case will be readvertised.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREPY 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 C.S.R.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 199-B

Santa Fe, N.M. 87501

Phone (505) 455-7409

I do hereby certify that the foregoing is a complete and true transcript of the proceedings in the hearing of Case No. 6668 heard by me on 10/29 1980.

[Signature], Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
29 October 1980

EXAMINER HEARING

IN THE MATTER OF:

Case 6668 being reopened pursuant) CASE
to the Provisions of Order No.) 6668
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BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

W. Perry Pearces, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

MR. NUTTER: Call next Case Number 6668.

MR. PEARCE: In the matter of Case 6668
being reopened pursuant to the provisions of Order R-6139.

MR. NUTTER: Due to the error in the
legal notice for this case, the case will have to be continued
and Case Number 6668 will be continued to the Examiner
Hearing scheduled for November 25th, 1980, at 9:00 o'clock
a. m. at this same place.

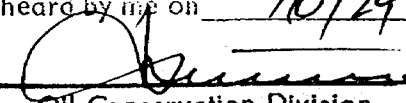
The case will be readvertised.

(Hearing concluded.)

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, C.S.R.
Rt. Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

I do hereby certify that the foregoing is a complete record of the proceeding in the Examiner hearing of Case No. 6668 heard by me on 10/29 1980.
 Examiner
Oil Conservation Division

Florence -

Delta Dry Co.

wants case No.

6668 (Order No.

R-6139) to be

reopened on

Oct 29

John

- CASE 7065:** Application of El Paso Natural Gas Company for twelve non-standard proration units, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the establishment of eight non-standard proration units for Pictured Cliffs wells to be drilled in the W/2 of partial Sections 6, 7, 18, 19, 30 and 31 of Township 30 North, Range 4 West, and four non-standard proration units for Pictured Cliffs wells in partial Sections 7, 8, and 9 of Township 28 North, Range 4 West.
- CASE 7066:** Application of Conoco Inc. for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Britt "B" Well No. 27 located in Unit G of Section 15, Township 20 South, Range 37 East, to produce oil from the Weir-Drinkard or an undesignated Blinebry pool and an undesignated Abo pool.
- CASE 7067:** Application of Conoco Inc. for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Dagger Draw Com. Well No. 4 located in Unit J of Section 25, Township 19 South, Range 24 East, to produce oil from the North Dagger Draw-Upper Penn Pool and gas from an undesignated Morrow pool.
- CASE 7068:** Application of Conoco Inc. for a dual completion and an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Penny Federal Com. Well No. 2 at an unorthodox location 1650 feet from the North line and 1980 feet from the East line of Section 23, Township 20 South, Range 24 East, to produce oil from the South Dagger Draw-Upper Penn Pool and gas from an undesignated Morrow pool.
- CASE 7069:** Application of Anadarko Production Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be drilled 660 feet from the South and East lines of Section 4, Township 19 South, Range 25 East, the S/2 of said Section 4 to be dedicated to the well.
- CASE 7070:** Application of Tesoro Petroleum Corporation for a pilot caustic flood project, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a one-acre pilot caustic flood project in the Hospah Field by the injection of caustic fluid into the Seven Lakes Sand of the Upper Hospah Field at an approximate depth of 300-500 feet through four injection wells in Unit K of Section 1, Township 17 North, Range 9 West.
- CASE 7071:** Application of Lake-View Union for an unorthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a 640-acre proration unit comprising all of Section 17, Township 20 South, Range 36 East, North Osado-Morrow Pool, to its Amerada Federal Well No. 2 located in Unit F and its Amerada Federal Well No. 3, to be drilled at an unorthodox location 1650 feet from the South line and 660 feet from the East line of said Section 17.
- CASE 6668:** (Reopened and Readvertised)
- In the matter of Case 6668 being reopened pursuant to the provisions of Order No. R-6139 which order promulgated temporary special rules and regulations for the South Culebra Bluff-Bone Spring Pool in Eddy County, New Mexico, including a provision for 80-acre spacing units. Operators in said pool may appear and show cause why the pool should not be developed on 40-acre spacing units.
- CASE 7005:** (Continued from September 17, 1980, Examiner Hearing)
- Application of Sol West III for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for his Turkey Track-Morrow Sand Well No. 1 in Unit I of Section 26, Township 18 South, Range 28 East.
- CASE 7072:** Application of Enserch Exploration, Inc. for pool creation and special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian oil pool for its Enserch Amoco State Well No. 1 located in Unit L of Section 16, Township 4 South, Range 33 East, and the promulgation of special pool rules therefor, including a provision for 80-acre spacing.
- CASE 7073:** Application of Enserch Exploration, Inc. for pool creation, temporary special pool rules, and assignment of a discovery allowable, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Fusselman oil pool for its J. G. O'Brien Well No. 1 located 1980 feet from the North line and 660 feet from the West line of Section 31, Township 7 South, Range 20 East, with special rules therefor, including provisions for 80-acre spacing, a limiting gas-oil ratio of 3000 to one and special well location requirements providing for the drilling of wells within 150 feet of the center of a quarter-quarter section. Applicant further seeks approval of a 74.24-acre proration and spacing unit and a discovery allowable for said J. G. O'Brien Well No. 1.

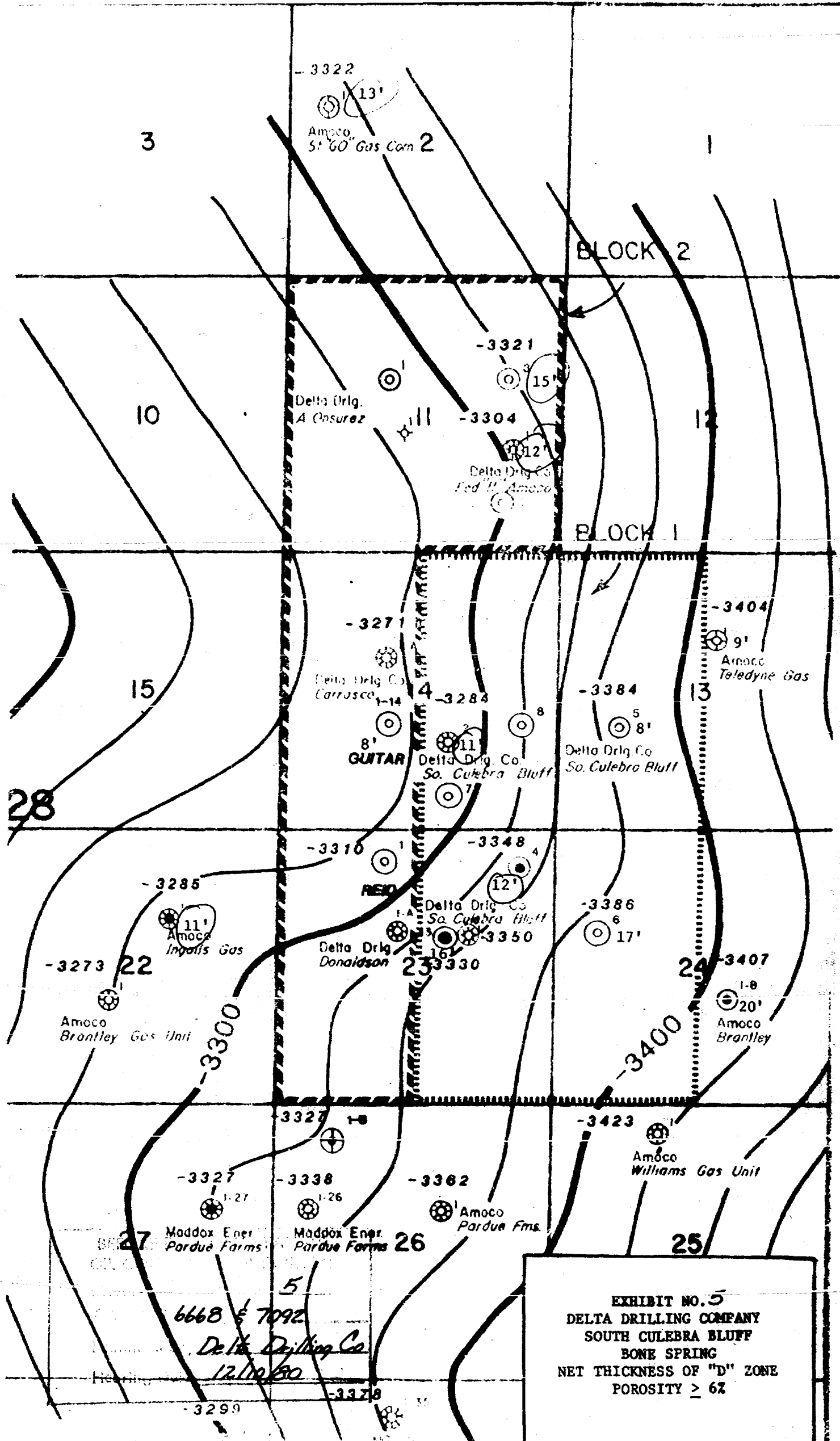


EXHIBIT NO. 5
 DELTA DRILLING COMPANY
 SOUTH CULEBRA BLUFF
 BONE SPRING
 NET THICKNESS OF "D" ZONE
 POROSITY \geq 62

LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.
JAMES H. BOZARTH
DOUGLAS L. LUMSFORD
PAUL M. BOHANNON

ERNEST R. FINNEY, JR.
J. DOUGLAS FOSTER
K. DOUGLAS PERRIN
O. RAY ALLEN
JACQUELINE W. ALLEN
T. CALDER EZZELL, JR.
WILLIAM S. BURFORD
JOHN S. NELSON
RICHARD E. OLSON
PHILLIP T. BREWER

LAW OFFICES
HINKLE, COX, EATON, COFFIELD & HENSLEY
1000 FIRST NATIONAL BANK TOWER
POST OFFICE BOX 3520
MIDLAND, TEXAS 79702
(915) 683-4691

September 15, 1980

RECEIVED
SEP 17 1980
SAN ANTONIO DIVISION
CLARENCE E. HINKLE
ROBERT A. COFFIELD
W. E. BONDURANT, JR. (915) 683-4691
ROSWELL, NEW MEXICO
800 HINKLE BUILDING
(800) 622-6610
AMARILLO, TEXAS OFFICE
1701 AMERICAN NATIONAL BANK BUILDING
(806) 372-5568
ONLY ATTS. EATON, COFFIELD, MARTIN, BOZARTH,
BOHANNON, FINNEY, FOSTER, ALLEN, ALLEN,
BURFORD, BREWER & STONE
LICENSED IN TEXAS

Mr. Dan Nutter
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: South Culebra Bluff - Bone
Springs Pool -- Reopening of
Case No. 6668 relative to 80
Acre Spacing

Dear Dan:

This will confirm our telephone conversation today wherein I requested that the above referenced case be reopened in accordance with requirements of Order R-6139. An Application covering that request is enclosed herewith in triplicate. It is my understanding that this matter will be set on the October 29 docket. If anything in addition to the enclosed copies of the Application to reopen this case are necessary in order to place this case on the docket for October 29, please call.

Thank you.

Very truly yours,

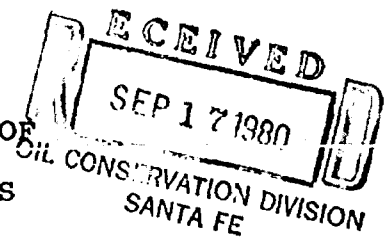
HINKLE, COX, EATON,
COFFIELD & HENSLEY

Conrad E. Coffield

CEC:rh
Enclosures

xc: Mr. Don Crozier
Delta Drilling Company
P. O. Box 2012
Tyler, Texas 75710
xc: Mr. Forrest Spry
Delta Drilling Company
P. O. Box 3467
Midland, Texas 79702

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO



APPLICATION OF DELTA DRILLING)
COMPANY FOR CONTINUED APPLICATION)
OF SPECIAL POOL RULES, EDDY)
COUNTY, NEW MEXICO)

APPLICATION

Delta Drilling Company hereby makes application for the reopening of Case No. 6668 relating to special pool rules in connection with certain Eddy County, New Mexico lands as follows:

1. Applicant seeks the reopening of Case No. 6668 relating to the South Culebra Bluff-Bone Spring Pool, which Pool was created by Order No. R-6139, dated October 12, 1979, issued in connection with said Case No. 6668.

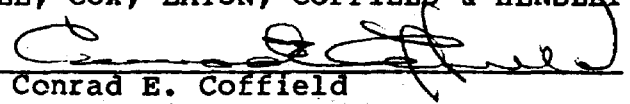
2. Pursuant to Orders of the Oil Conservation Division as contained in said Order R-6139, it was provided that said case is to be reopened at an Examiner's hearing in October, 1980 at which time the Operators in the subject Pool may appear and show cause why South Culebra Bluff-Bone Spring Pool should not be developed on 40 acre spacing units.

3. Applicant proposes that the provisions of the special pool rules created pursuant to Order R-6139 be continued and that the South Culebra Bluff-Bone Spring Pool continue to be developed on 80 acre spacing units.

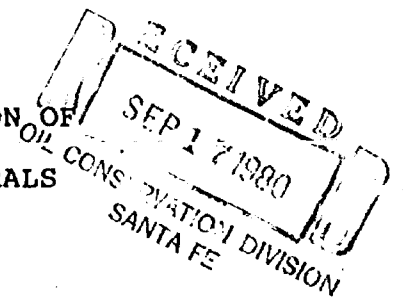
4. Matters urged by Applicant herein are in the interest of conservation, prevention of waste and protection of correlative rights.

5. Applicant requests that this matter be heard at the October 29, 1980 Examiner's hearing.

HINKLE, COX, EATON, COFFIELD & HENSLEY

By: 
Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for Delta Drilling
Company

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO



APPLICATION OF DELTA DRILLING)
COMPANY FOR CONTINUED APPLICATION)
OF SPECIAL POOL RULES, EDDY)
COUNTY, NEW MEXICO)

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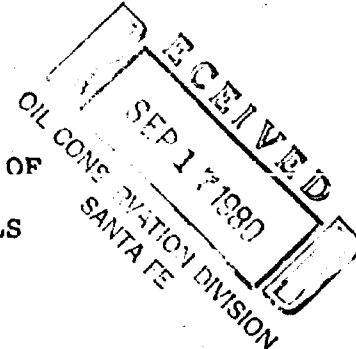
1. Applicant seeks the reopening of Case No. 6668 relating to the South Culebra Bluff-Bone Spring Pool, which Pool was created by Order No. R-6139, dated October 12, 1979, issued in connection with said Case No. 6668.
2. Pursuant to Orders of the Oil Conservation Division as contained in said Order R-6139, it was provided that said case is to be reopened at an Examiner's hearing in October, 1980 at which time the Operators in the subject Pool may appear and show cause why South Culebra Bluff-Bone Spring Pool should not be developed on 40 acre spacing units.
3. Applicant proposes that the provisions of the special pool rules created pursuant to Order R-6139 be continued and that the South Culebra Bluff-Bone Spring Pool continue to be developed on 80 acre spacing units.
4. Matters urged by Applicant herein are in the interest of conservation, prevention of waste and protection of correlative rights.
5. Applicant requests that this matter be heard at the October 29, 1980 Examiner's hearing.

HINKLE, COX, EATON, COFFIELD & HENSLEY

By: 

Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for Delta Drilling
Company

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO



APPLICATION OF DELTA DRILLING)
COMPANY FOR CONTINUED APPLICATION)
OF SPECIAL POOL RULES, EDDY)
COUNTY, NEW MEXICO)

APPLICATION

Delta Drilling Company hereby makes application for the reopening of Case No. 6668 relating to special pool rules in connection with certain Eddy County, New Mexico lands as follows:

1. Applicant seeks the reopening of Case No. 6668 relating to the South Culebra Bluff-Bone Spring Pool, which Pool was created by Order No. R-6139, dated October 12, 1979, issued in connection with said Case No. 6668.

2. Pursuant to Orders of the Oil Conservation Division as contained in said Order R-6139, it was provided that said case is to be reopened at an Examiner's hearing in October, 1980 at which time the Operators in the subject Pool may appear and show cause why South Culebra Bluff-Bone Spring Pool should not be developed on 40 acre spacing units.

3. Applicant proposes that the provisions of the special pool rules created pursuant to Order R-6139 be continued and that the South Culebra Bluff-Bone Spring Pool continue to be developed on 80 acre spacing units.

4. Matters urged by Applicant herein are in the interest of conservation, prevention of waste and protection of correlative rights.

5. Applicant requests that this matter be heard at the October 29, 1980 Examiner's hearing.

HINKLE, COX, EATON, COFFIELD & HENSLEY

By: 

Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for Delta Drilling
Company

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6668
Order No. R-6139

APPLICATION OF DELTA DRILLING
COMPANY FOR POOL CREATION AND
SPECIAL POOL RULES, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 19, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 12th day of October, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Delta Drilling Company, seeks the creation of a new oil pool for Bone Spring production for its South Culebra Bluff Unit Well No. 3, located in Unit G of Section 23, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, and the promulgation of special rules and regulations therefor, including a provision for 80-acre spacing and proration units.
- (3) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the South Culebra Bluff-Bone Spring Pool.

-2-

Case No. 6668
Order No. R-6139

(4) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(5) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(6) That this case should be reopened at an examiner hearing in October, 1980, at which time the operators in the subject pool should be prepared to appear and show cause why the South Culebra Bluff-Bone Spring Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new oil pool for Bone Spring production is hereby created and designated as the South Culebra Bluff-Bone Spring Pool, with vertical limits comprising the Bone Spring formation and horizontal limits comprising the following-described area in Eddy County, New Mexico:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM
Section 23: NE/4

(2) That temporary Special Rules and Regulations for the South Culebra Bluff-Bone Spring Pool, Eddy County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
SOUTH CULEBRA BLUFF-BONE SPRING POOL

RULE 1. Each well completed or recompleted in the South Culebra Bluff-Bone Spring Pool or in the Bone Spring formation within one mile thereof, and not nearer to or within the limits of another designated Bone Spring oil pool, shall be spaced, drilled, operated, and produced in accordance with the special rules and regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section.

RULE 3. The Director of the Division may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit

Case No. 6668
Order No. R-6139

comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Division Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of either governmental quarter-quarter section or lot dedicated to the well.

RULE 5. The Division Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be subject to an 80-acre depth bracket allowable of 222 barrels of oil per day. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the South Culebra Bluff-Bone Spring Pool or in the Bone Spring formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well on or before November 1, 1979.

(2) That, pursuant to Paragraph A. of Section 70-2-18, NMSA 1978, contained in Chapter 271, Laws of 1969, existing wells in the South Culebra Bluff-Bone Spring Pool shall have

-4-

Case No. 6668
Order No. R-6139

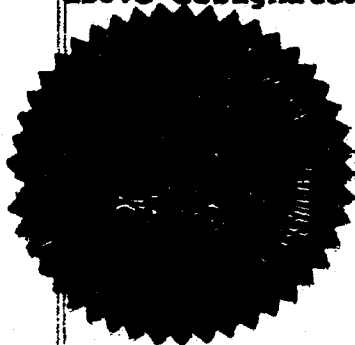
dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing or pro-rata units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the South Culebra Bluff-Bone Spring Pool or in the Bone Spring formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing in October, 1980, at which time the operators in the subject pool may appear and show cause why the South Culebra Bluff-Bone Spring Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



S E A L

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

fd/

CASE 6668: Application of Delta Drilling Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Bone Spring production for its SCB Unit Well No. 3 in Unit G of Section 23, Township 23 South, Range 28 East, and special rules therefor, including 80-acre spacing.

CASE 6669: Application of Mesa Petroleum Company for the amendment of Order No. R-6078, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-6078 to cover the Wolfcamp and Pennsylvanian formations in the compulsory pooling of the E/2 of Section 10, Township 16 South, Range 27 East, rather than the Morrow formation only.

CASE 6644: (Continued from September 5, 1979, Examiner Hearing)

Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbores of its State K Com Well No. 12 located in Unit E of Section 16, Township 30 North, Range 9 West, and its Florence Well No. 60R in Unit L of Section 1, Township 29 North, Range 9 West.

CASE 6670: Application of BTA Oil Producers for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Devonian gas pool for its 7811 JV-P Rojo Well No. 1 located in Unit D of Section 27, Township 25 South, Range 33 East, and special rules therefor, including 640-acre gas well spacing.

CASE 6671: Application of Chapman and Schneider for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Seven Rivers Reef formation in the open-hole interval from 3422 feet to 3504 feet in its I. B. Ogg "A" Well No. 3 located in Unit E of Section 35, Township 24 South, Range 36 East, Jalmat Pool.

CASE 6672: Application of Coquina Oil Corporation for an exception to Rule 303C, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the Division's Rule 303C to permit its Vivian Well No. 1 located in Unit F of Section 30, Township 22 South, Range 38 East, in which Drinkard and Granite Wash production is commingled in the wellbore, to produce in excess of the 50-barrel limit imposed by said rule.

CASE 6673: Application of Conoco Inc. for a non-standard proration unit, unorthodox well locations, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 440-acre non-standard gas proration unit comprising the SW/4 and S/2 NW/4 of Section 17 and the N/2 NE/4, SE/4 NE/4, and N/2 SE/4 of Section 18, all in Township 21 South, Range 36 East, Eumont Pool, to be simultaneously dedicated to the following wells at unorthodox locations: Meyer A-1 Wells Nos. 11 in Unit K of Section 17 and 6 and 14 in Units B and J of Section 18.

CASE 6580: (Continued from August 22, 1979, Examiner Hearing)

Application of Continental Oil Company for a carbon dioxide injection project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to initiate a pilot carbon dioxide injection project in the Grayburg-San Andres formation in Units H and I of Section 20, Township 17 South, Range 32 East, Maljamar Pool, for tertiary recovery purposes.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Bldg.
Santa Fe, New Mexico
19 September 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Delta Drilling Company) CASE
for pool creation and special pool) 6668
rules, Eddy County, New Mexico.)

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant:

Conrad Coffield, Esq.
HINKLE, COX, EATON, COFFIELD &
HENSLEY
P. O. Box 3580
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I N D E X

EDWARD W. HOOPER

Direct Examination by Mr. Coffield 3

Cross Examination by Mr. Nutter 11

E X H I B I T S

Applicant Exhibit One, Plat 4

Applicant Exhibit Two, Structure Map 4

Applicant Exhibit Three, Cross Section 5

Applicant Exhibit Four, Map 8

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SALLY V. ALTON BOYD
CERTIFIED & NOTARIZED REPORTER
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1 MR. NUTTER: We'll call next Case 6668.
2 MR. PADILLA: Application of Delta Drilling
3 Company for pool creation and special pool rules, Eddy
4 County, New Mexico.
5 MR. COFFIELD: Conrad Coffield with the
6 Hinkle law firm in Midland, Texas, appearing on behalf of
7 the applicant, and I have one witness.
8
9 (Witness sworn.)
10
11 EDWARD W. HOOPER
12 being called as a witness and having been duly sworn upon
13 his oath, testified as follows, to-wit:
14
15 DIRECT EXAMINATION
16 BY MR. COFFIELD:
17 Q Mr. Hooper, would you please state your
18 name, address, occupation, and employer?
19 A Edward W. Hooper, Midland, Texas. I'm
20 Exploration Manager for Delta Drilling Company in the West
21 Texas Division.
22 Q Have you previously testified before the
23 Division as a geologist?
24 A Yes, I have.
25 Q And were your qualifications made a

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1 matter of record and accepted by the Division?

2 A. They were.

3 Q. Are you familiar with the application of
4 Delta Drilling Company in this case?

5 A. I am.

6 Q. And are you also familiar with the property
7 as well as the well location involved?

8 A. I am.

9 MR. COFFIELD: Mr. Examiner, is the wit-
10 ness considered qualified?

11 MR. NUTTER: Yes, he is.

12 Q. (Mr. Coffield continuing.) Mr. Hooper,
13 what is it that Delta seeks by this application?

14 A. Creation of a new Bone Springs oil pool
15 for its South Culibre Bluff Well No. 3, which is located in
16 the southwest quarter of the northeast quarter of Section
17 23, Township 23 South, Range 28 East, and special rules in-
18 cluding 80-acre oil well spacing.

19 Q. Please refer to what we've marked as Ex-
20 hibit One and explain what this exhibit represents.

21 A. Exhibit One is a well location and owner-
22 ship plat, showing the subject well, the designated 80-acre
23 tract, and also the blocks of acreage that Delta operates
24 jointly with Amoco Production Company.

25 Q. Okay. Let's go on then to Exhibit Two

1 and Three at the same time and explain both of those exhibits
2 if you will, please.

3 A Okay. Exhibit Two is a Bone Spring struc-
4 ture map prepared to show the lack of structural closure in
5 the area of interest on the easterly dip; to show that Bone
6 Spring accumulation in this area is primarily a function of
7 stratigraphic entrapment.

8 The Exhibit Three is a cross section
9 utilizing several of the wells that Delta has drilled, in-
10 cluding the subject South Culibre Bluff Unit No. 3 Well,
11 showing the open hole Bone Spring Section that is currently
12 producing oil and gas at the present time.

13 To show the open hole section is shaded
14 in red on the No. 3 South Culibre Bluff Unit. That is the
15 section that is -- Bone Spring section that is producing in
16 that well.

17 MR. NUTTER: What is the total open hole
18 interval in that well?

19 A It's 1700 -- it's from 6244 to 8000 feet.
20 It's 1730 -- no, 1756 feet. 1756 is the open hole.

21 MR. NUTTER: Why is there so much open
22 hole interval in that well?

23 A We could not identify exactly what is
24 contributing the oil. There's a lot of unknowns in this
25 particular well. There is one zone of porosity about 125

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1 feet below the top of the Bone Spring lime that we feel is
2 contributing oil, but production logs indicated two or three
3 other zones that were contributing oil into the borehole
4 that we could not identify on any of the porosity logs.
5 So that's why we sought to open hole complete this well.

6 MR. NUTTER: Did you know you had Bone
7 Spring production here before you drilled the well?

8 A. We suspected it from the blowout well
9 that's just immediately -- 300 feet immediately east of
10 this well.

11 MR. NUTTER: That's what I was going to
12 ask you next. This is on the same 40 as the blowout, isn't
13 it?

14 A. Correct.

15 MR. NUTTER: And that well encountered
16 a lot of porosity, et cetera, in the Bone Springs.

17 A. Well, we could not identify it as such.
18 The analysis, chemical analysis, of the crude indicated that
19 it was Permian and probably Bone Spring oil.

20 MR. NUTTER: But you weren't --

21 A. We were not sure when we drilled this
22 well exactly where it was.

23 MR. NUTTER: I see.

24 A. We just suspected that it was Bone Springs.

25 MR. NUTTER: Well, were drill stem tests

1 made up and down throughout this --

2 A. There was --

3 MR. NUTTER: -- open hole interval?

4 A. There was one drill stem test conducted
5 in the No. 3 Well from 6330 to 6440, and all we recovered on
6 that was 4000 feet of water, which turned out to be filtrate
7 water. It was deeply invaded. And that's the zone that's
8 shaded on the electric log right below the casing shoe at
9 6244 in the No. 3 Well.

10 MR. NUTTER: Oh, that purple shading in
11 there?

12 A. Correct.

13 MR. NUTTER: It just seems unusual that
14 you have 1756 feet of open hole in a well. I wonder why
15 the casing is set so high and the well drilled so deep.

16 A. Well, the engineers wanted to open hole
17 complete this because, as I previously said, they weren't
18 sure where the oil was coming from.

19 MR. NUTTER: Now the blowout in the adjacent
20 well was from the Atoka formation, wasn't it?

21 A. Correct, an Atoka sand.

22 MR. NUTTER: And this well didn't penetrate
23 anywhere near that formation, did it?

24 A. No, this well was bottomed at 8000 feet
25 in the Bone Spring.

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1 MR. NUTTER: It's not a plug backed up,
2 then.

3 A. No.

4 MR. NUTTER: Okay, go ahead.

5 A. That is the total depth.

6 Q. Let's go to Exhibit Four, then, Mr.
7 Hooper. Would you explain what this exhibit is?

8 A. Exhibit Four is a field -- Bone Spring
9 Field location map showing the current location of oil and
10 gas fields that are producing from the Bone Spring sequence.
11 And of these fields that are shown here, where there is a desig-
12 nation that was given initially, spacing designation, seven
13 of these wells is so notated on there, either 80 acres or
14 160-acre spacing was granted to these fields initially.

15 It also shows by a black arrow the location
16 of the South Culibre Bluff area in relationship to the pro-
17 ducing Bone Spring area.

18 Q. Have you compared the characteristics of
19 the South Culibre Bluff Unit Well No. 3 with these other
20 Bone Springs wells in the other pools where 80-acre spacing
21 was established?

22 A. Correct, and nearly, I'd say, 95 to 98
23 percent of the other fields the entrapment of oil or gas is
24 primarily stratigraphic. In our case, even though there is
25 a lot we do not know about the Bone Spring in the South

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1 Culibre Bluff area, the characteristics of the oil, we have
2 a high energy oil. It's a gas saturated oil at bottom hole
3 conditions. Also, the productivity leads us to believe that
4 this well will drain a larger area, and our production to
5 date, we have produced 3,512 barrels of oil. That was
6 through September the 18th. The current production in that
7 well is now -- it is pumping 65 to 85 barrels of oil per
8 day plus 100 to 130 Mcf gas per day.

9 Q Well, generally do you believe the char-
10 acteristics of these other Bone Springs pools which have
11 been granted 80 acres spacing compare favorably with the
12 characteristics of the subject well?

13 A I do.

14 Q And is it your opinion, then, Mr. Hooper,
15 from well data now available, that this South Culibre Bluff
16 Unit No. 3 Well will adequately drain 80 acres?

17 A I do.

18 Q Accordingly then, I trust, you are recom-
19 mending that 80-acre spacing be allocated to this pool?

20 A I am.

21 Q Do you have any recommendation to make as
22 to well location requirements or other requirements which
23 the Division might establish for the pool which you seek to
24 have established?

25 A Yes. We are currently drilling the No. 4

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1 South Culibre Bluff Unit in the northeast northeast of 23.
2 That's located on those maps that you have. So that 80-acre
3 spacing, we could put it on an alternate basis on those
4 stand-up 80s.

5 MR. NUTTER: That well is a northeast
6 diagonal offset to the subject well?

7 A. Correct, and we should be coring the
8 Upper Bone Spring limestone in that well today.

9 Q. So you'd recommend the diagonal offset
10 pattern?

11 A. Yes.

12 Q. What recommendation do you have, if any,
13 as to the name for this Bone Springs Pool?

14 A. I would name it the South Culibre Bluff
15 Bone Spring Pool.

16 Q. Mr. Hooper, where these Exhibits One
17 through Four prepared by you or under your supervision?

18 A. They were.

19 Q. And in your opinion will the approval of
20 this application be in the interest of conservation and
21 otherwise prevent waste and protect correlative rights?

22 A. I think it will.

23 MR. COFFIELD: Mr. Examiner, I move the
24 admission of Exhibits One through Four.

25 MR. NUTTER: Delta Exhibits One through

1 Four will be admitted in evidence.

3 CROSS EXAMINATION

4 BY MR. NUTTER:

5 Q Mr. Hooper, has any calculation been made
6 from the logs of the well as to the permeability or have
7 any productivity tests in the Bone Spring -- productivity
8 index tests, or anything, been conducted on the well to
9 establish what kind of permeability you've got?

10 A No, Mr. Commissioner, the only thing we--
11 where we do have porosity indications the porosity range is
12 from 8 to 12 percent and some preliminary calculations
13 using a water saturation 30 percent computation, we're esti-
14 mating approximately 60,000 barrels of oil, recoverable oil,
15 on an 80-acre spacing.

16 Q But you haven't made any determinations
17 as to the permeability of the formation, whether it will
18 drain that 80 acres or not.

19 A No, other than the fact that the high
20 energy crude and the productivity of the well that we have
21 now. The only other thing I might offer in evidence would
22 be the fact that after producing 1993 barrels of oil we took
23 a 72-hour pressure buildup test on August -- from August
24 the 9th through the 12th and extrapolated that pressure out
25 to 2997.

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1 The pressure determination from the drill
2 stem test back in February extrapolated out to 2984, so
3 there was little or no pressure decline. We realize that's
4 only approximately 3 percent of a, say, 60,000 barrel recovery,
5 but it was encouraging to us that there was no decline in
6 the bottom hole pressure.

7 Q Now let me get this right. Your drill
8 stem test pressure extrapolated to 2984.

9 A Correct.

10 Q And after producing how many barrels, 19 --

11 A 1993 stock tank barrels of oil, we extra-
12 polated the static pressure to 2997.

13 Q After 72-hour buildup.

14 A 72-hour buildup, correct.

15 Q Now are you suggesting, Mr. Hooper, that
16 the rules for this pool would provide for alternative loca-
17 tions insofar as the diagonal spacing is concerned or are
18 you just proposing 80-acre spacing with the option to drill
19 the well in either end of the 80?

20 A Well, I don't know what the lease deter-
21 mination would -- what problems we would run into there. I
22 would like some flexibility to perhaps drill it on either
23 end of the 80.

24 MR. NUTTER: Are there any further ques-
25 tions of Mr. Hooper? He may be excused.

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Do you have anything further, Mr. Coffield?

MR. COFFIELD: No, sir.

MR. NUTTER: Does anyone have anything
they wish to offer in Case Number 6668?

We'll take the case under advisement.

(Hearing concluded.)

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REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a court reporter, DO HEREBY
CERTIFY that the foregoing attached 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 from my notes taken at the time of the hearing.

SALLY WILTON BOYD
CERTIFIED SHorthand Reporter
3030 Plaza Blanca (908) 471-2462
Santa Fe, New Mexico 87501

Sally W. Boyd C.S.R.
Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 66-8
heard by me on 9/19 1979.
[Signature], Examiner
Oil Conservation Division



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
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October 15, 1979

Mr. Conrad E. Coffield
Hinkle, Cox, Eaton, Coffield
& Hensley
Attorneys at Law
P. O. Box 3580
Midland, Texas 79702

Re: CASE NO. 6668
ORDER NO. R-6139

Applicant:

Delta Drilling Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD _____ x
Artesia OCD _____ x
Aztec OCD _____

Other

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JACQUELINE W. ALLEN
T. CALDER EZZELL, JR.
WILLIAM S. BURFORD
JOHN S. NELSON
RICHARD E. OLSON

August 27, 1979

OIL CONSERVATION DIVISION
SANTA FE

Mr. Dan Nutter
Chief Engineer
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Delta Drilling Company
Application for Pool Creation
and Special Pool Rules, Eddy
County, New Mexico

Dear Dan:

Per our recent telephone conversation, transmitted herewith you will find triplicate executed copies of an Application for Delta Drilling Company for pool creation in W $\frac{1}{2}$ NE $\frac{1}{4}$ Section 23, Township 23 South, Range 28 East, N.M.P.M., Eddy County, New Mexico and special rules therefor including 80 acre oil well spacing.

My client would appreciate having this matter set on the docket for the September 19, 1979 date.

I trust that the enclosed copies of the Application are all that is needed in order for this to be set for the September 19 hearing. However, if anything is needed in addition, please let me know.

Very truly yours,

HINKLE, COX, EATON,
COFFIELD & HENSLEY


Conrad E. Coffield

CEC:rh
Enclosures

xc: Mr. Dale Keadle
Delta Drilling Company

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO

APPLICATION OF DELTA DRILLING)
COMPANY FOR POOL CREATION AND)
SPECIAL POOL RULES, EDDY COUNTY,)
NEW MEXICO)

APPLICATION

Delta Drilling Company hereby makes application for pool creation and special pool rules in connection with certain Eddy County, New Mexico lands as follows:

1. Applicant seeks the creation of a new Bone Springs oil pool for its South Culebra Bluff Unit Well No. 3 located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 23, Township 23 South, Range 28 East, N.M.P.M., Eddy County, New Mexico and special rules therefor including 80-acre oil well spacing.

2. Said proposed new Bone Springs pool was discovered by the South Culebra Bluff Unit Well No. 3, located in SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 23, Township 23 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, which was completed March 13, 1979, with first production on June 19, 1979, in the Bone Springs formation.

3. The horizontal limits of the new pool should consist of the following described area:

Township 23 South, Range 28 East, N.M.P.M.

Section 23: W $\frac{1}{4}$ NE $\frac{1}{4}$

4. Matters urged by Applicant herein are in the interest of conservation, prevention of waste and protection of correlative rights.

5. Applicant requests that this matter be heard at the September 19, 1979 Examiner's hearing.

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: 

Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for Delta Drilling Company

RECEIVED
AUG 9 1979
OIL CONSERVATION DIVISION
STATE OF NEW MEXICO
Case 6668

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO

APPLICATION OF DELTA DRILLING)
COMPANY FOR POOL CREATION AND)
SPECIAL POOL RULES, EDDY COUNTY,)
NEW MEXICO)

Case 6668

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3. The horizontal limits of the new pool should consist of the following described area:

Township 23 South, Range 28 East, N.M.P.M.

Section 23: W $\frac{1}{2}$ NE $\frac{1}{4}$

4. Matters urged by Applicant herein are in the interest of conservation, prevention of waste and protection of correlative rights.

5. Applicant requests that this matter be heard at the September 19, 1979 Examiner's hearing.

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Attorneys for Delta Drilling Company

BEFORE THE OIL CONSERVATION DIVISION OF
THE DEPARTMENT OF ENERGY AND MINERALS
STATE OF NEW MEXICO

APPLICATION OF DELTA DRILLING)
COMPANY FOR POOL CREATION AND)
SPECIAL POOL RULES, EDDY COUNTY,)
NEW MEXICO)

Case 6668

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2. Said proposed new Bone Springs pool was discovered by the South Culebra Bluff Unit Well No. 3, located in SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 23, Township 23 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, which was completed March 13, 1979, with first production on June 19, 1979, in the Bone Springs formation.
3. The horizontal limits of the new pool should consist of the following described area:
Township 23 South, Range 28 East, N.M.P.M.
Section 23: W $\frac{1}{2}$ NE $\frac{1}{4}$
4. Matters urged by Applicant herein are in the interest of conservation, prevention of waste and protection of correlative rights.
5. Applicant requests that this matter be heard at the September 19, 1979 Examiner's hearing.

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: 

Conrad E. Coffield
Post Office Box 3580
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Attorneys for Delta Drilling Company

Application of Delta Drilling Co
for pool creation and special
pool rules, Eddy County,
New Mexico.

Applicant, in the above-styled cause
seeks the creation of a new oil
pool for Bone Spring production
for its SCB Unit Well No 3 in Unit G of
Section 23, Township 23 South, Range 28
East, and special rules therefor, in-
cluding 80-acre spacing.

Dace Kiedel 8/10/79

Conrad Caffield will file written
application.

ROUGH

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6668

Order No. R-6139

APPLICATION OF DELTA DRILLING
COMPANY FOR POOL CREATION AND
SPECIAL POOL RULES, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 19
19 79, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of October, 1979, the
Division Director, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required
by law, the Division has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant, Delta Drilling Company, seeks the
~~promulgation of special rules and regulations for the South Culebra~~
~~Bluff Bone Spring Pool, Eddy County, New Mexico, including a~~
~~provision for 80-acre spacing and proration units for its SCB~~
~~Unit Well No. 3 in Unit G of Section 23, Township 23 South, Range~~
~~28 East.~~

Creation of a new oil pool for Bone Spring
production for its South Culebra Bluff Unit
Well No. 3, located in Unit G of Section 23,
Township 23 South, Range 28 East, NMPM, Eddy
County, New Mexico, and the promulgation of
special rules and regulations therefor, in-
cluding a provision for 80-acre spacing and
proration units.

(3) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the South Culebra Bluff-Bone Spring Pool.

(4) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(5) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(6) That this case should be reopened at an examiner hearing in October, 1980, at which time the operators in the subject pool should be prepared to appear and show cause why the South Culebra Bluff-Bone Spring Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(2) That temporary Special Rules and Regulations for the South Culebra Bluff-Bone Spring Pool, Eddy County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS

FOR THE

SOUTH CULEBRA BLUFF-BONE SPRING POOL

RULE 1. Each well completed or recompleted in the South Culebra Bluff Bone Spring Pool or in the Bone Spring formation within one mile thereof, and not nearer to or within the limits of another designated Bone Spring oil pool, shall be spaced, drilled, operated, and produced in accordance with the special rules and regulations hereinafter set forth.

(1) That a new oil pool for Bone Spring production is hereby created and designated as the South Culebra Bluff-Bone Spring Pool, with vertical limits comprising the Bone Spring formation and horizontal limits comprising the following-described area in Eddy County, New Mexico:
TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM
Section 25: NE 1/4

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section.

RULE 3. The ^{Director of the Division} ~~Secretary~~ Director of the Division may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The ~~Secretary~~ Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the ~~Secretary~~ Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of either ~~the NE/4 or the SW/4 of a~~ governmental quarter-quarter section or lot *dedicated to the well.*

RULE 5. The ^{Division} Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The ~~Secretary~~ Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be ~~assigned~~ ^{subject to} an 80-acre ~~proportional factor of 3.33 for~~ ^{depth bracket allowable} ~~allowable purposes.~~ ^{of 222 barrels of oil per day.} The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the South Culebra Bluff-Bone Spring Pool or in the Bone Spring formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well on or before November 1, 1979.

(2) That, pursuant to Paragraph A. of Section ~~65-3-14.5,~~ ⁷⁰⁻²⁻¹⁸ NMSA ~~1953,~~ ¹⁹⁷⁸ contained in Chapter 271, Laws of 1969, existing wells in the South Culbebra Bluff-Bone Spring Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section ~~65-3-14.5,~~ ⁷⁰⁻²⁻¹⁸ existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the South Culebra Bluff-Bone Spring Pool or in the Bone Spring formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing in October, 1980, at which time the operators in the subject pool may appear and show cause why the South Culebra Bluff-Bone Spring Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

ROUGH

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6668

Order No. R-6139-A

IN THE MATTER OF CASE 6668 BEING
REOPENED PURSUANT TO THE PROVISIONS OF
ORDER NO. R-6139, WHICH ORDER
ESTABLISHED SPECIAL RULES AND REGULATIONS
FOR THE SOUTH CULEBRA BLUFF-BONE SPRINGS
GAS POOL, EDDY COUNTY, NEW MEXICO,
INCLUDING A PROVISION FOR 80-ACRE
PRORATION UNITS.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on
19 80, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

NOW, on this day of December, 19 80, the Division
Director, having considered the testimony, the record, and the
recommendations of the Examiner, and being fully advised in the
premises,

FINDS:

(1) That due public notice having been given as required by
law, the Division has jurisdiction of this cause and the subject
matter thereof.

(2) That by Order No. R-6139, dated October 12
19 79, temporary special rules and regulations were promulgated
for the South Culebra Bluff-Bone Spring Gas Pool, Eddy
County, New Mexico, establishing temporary 80-acre spacing
units.

(3) That pursuant to the provisions of Order No. R-6139
this case was reopened to allow the operators in the subject pool
to appear and show cause why the South Culebra Bluff-Bone Spring
Gas Pool should not be developed on 40-acre spacing units.
presently available is insufficient to clarify

(4) That the evidence establishes that one well in the
South Culebra Bluff-Bone Spring Gas Pool can efficiently and economically
drain and develop 80 acres.