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I N D E X

GREGG BONAGURIO

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MR. CATANACH: This hearing will come to order.

We'll call next Case 3896.

MR. TAYLOR: The application of Kirby Exploration Company of Texas for an unorthodox oil well location and simultaneous dedication, Sandoval County, New Mexico.

MR. CATANACH: Are there appearances in this case?

MR. HALL: Mr. Examiner, I'm Scott Hall from the law firm Campbell & Black, Santa Fe, on behalf of the applicant, Kirby Exploration.

We have one witness this morning.

MR. CATANACH: Are there other appearances in this case?

Will the witness please stand and be sworn in?

(Witness sworn.)

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

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DIRECT EXAMINATION

BY MR. HALL:

Q Please state your name and place of residence.

A My name is Gregg Bonagurio and I reside in Houston, Texas.

Q All right, by whom are you employed and in what capacity?

A I'm employed by Kirby Exploration Company of Texas and employed in the capacity of a reservoir engineer.

Q Mr. Bonagurio, have you ever testified before the Oil Conservation Division before?

A No, not this one, no, I haven't.

Q Have you testified before any other regulatory boards?

A Yes, I have. I've testified before the Texas Railroad Commission.

Q All right. If you would for the Examiner, please, why don't you give a brief summary of your educational and work experience?

A All right. I graduated with a BS in petroleum engineering from the University of Missouri at Rolla in 1978, and about eight years of oil and gas experience,

1 Standard Oil of Indiana, Standard Oil of Ohio, and more re-
2 cently Kirby Exploration Company of Texas.

3 Q All right, and that's in the capacity of
4 an engineer?

5 A Correct.

6 Q All right. Are you familiar with the ap-
7 plication filed by Kirby in this case?

8 A Yes, I am.

9 Q And are you also familiar with the sub-
10 ject area and the proposed well?

11 A Yes, I am.

12 MR. HALL: At this time, Mr.
13 Examiner, we'd offer Mr. Bonagurio as a qualified witness.

14 MR. CATANACH: Mr. Bonagurio is
15 considered qualified.

16 Q Mr. Bonagurio, would you please briefly
17 state what Kirby seeks with this application?

18 A We seek an exception to State rule Number
19 Four, Order Number R-4822-A for the Southwest Media-Entrada
20 Pool, Sandoval County, New Mexico.

21 Q All right, and what does that rule pro-
22 vide?

23 A Basically that rule provides that each
24 well shall be located no nearer than 660 feet to the outer
25 boundary of the proration unit, nor nearer than 330 feet to

1 any governmental quarter quarter section line, nor nearer
2 than 1320 feet to the nearest well drilling or capable of
3 producing from the same pool.

4 Q All right, is Kirby seeking a change in
5 the pool rules?

6 A No, we're not. Currently the pool rules
7 or proration rules are based on 160-acre spacing. We would
8 like to leave them that way because if we changed them it
9 would change the equitable allowable for each well and we
10 don't want to do that at this time.

11 Q All right, would it also affect the equi-
12 ties in the acreage ownership in the well?

13 A Correct.

14 Q Okay. At this time I'd like you to refer
15 to what's been marked as Exhibit One and explain what this
16 exhibit is intended to show.

17 A This exhibit is intended to show, first
18 of all, all the wells that were drilled in the Media-Entrada
19 Southwest Field in Section 22, Township 19 North, Range 3
20 West.

21 In addition you'll notice outlined in
22 heavy black line the northwest quarter of Section 22, which
23 would be a 160-acre proration unit.

24 Also you'll notice the proposed location
25 for our well 1313 from the west line and 1327 from the north

1 line of Section 22.

2 In addition, I've so indicated in dashed
3 lines an area in which one could drill a well and be in full
4 compliance with Rule Number Four-A as it's stated now.

5 Q So the area within the boxes in the
6 northwest quarter there are standard location areas.

7 A Correct.

8 Q All right, and to make sure I heard you
9 correctly, is the proposed location 1313 from the west line?

10 A 1313 from the west line and 1327 from the
11 north line of Section 22.

12 Q Okay. How much closer to the outer bound-
13 dary of the spacing unit is the proposed well location?

14 A In fact it's further from the outer bound-
15 dary than a standard location.

16 Q Okay, and there are other wells within
17 this proration unit, is that correct?

18 A Correct.

19 Q And what's the status of those wells?

20 A Currently there's two wells that have
21 penetrated the Entrada sandstone in this -- in this prora-
22 tion unit, Boling Federal 8-22 and Boling Federal 6-22.

23 Boling Federal 8-22 is a temporarily
24 abandoned well and has been such status since April of '85.
25 It watered out, went to 100 percent water.

1 The Boling Federal 6-22 is currently pro-
2 ducing at an uneconomic limit to hold our acreage position
3 at approximately 6 barrels of oil a day and about 3200 bar-
4 rels of water a day.

5 Q All right, do you know of the plans for
6 that Boling Federal Well?

7 A Yes. If we have approval on our proposed
8 location, we will -- and drill the well and make a producer,
9 we will shut in the Boling Federal 6-22 as a non-economic
10 producer, and basically would like to hold that well for a
11 possible salt water disposal into the aquifer.

12 Q Okay. Mr. Bonagurio, are there any wells
13 in the subject area operated by anyone other than Kirby Ex-
14 ploration?

15 A No, there is not.

16 Q Okay. At this time I'd like you to refer
17 to Exhibit Two and please explain to the examiner what this
18 exhibit is intended to show.

19 A Exhibit Number Two basically shows all
20 the owners -- all the ownership leased acreage, I should
21 say, in Sections 16, 15, 21, and 22.

22 Q All right, what is the status of develop-
23 ment in this area?

24 A Status of development in this area is
25 there has been, I guess there's been three wells that have

1 produced -- or four wells that have produced and penetrated
2 in the north half of Section 22, 320 acres, the Entrada
3 sandstone, all 100 percent owned by Kirby at this time.

4 Q All right, and in case I forgot to ask
5 you, is the objective for this well the Media-Entrada, also?

6 A Correct.

7 Q Basically why is this unorthodox location
8 being sought?

9 A Well, basically this unorthodox location
10 is being sought because if we were to move to the -- to the
11 east and would drill in either one of those little squares
12 that I've outlined in the northwest quarter of this section
13 --

14 Q And you're referring to Exhibit One?

15 A Exhibit One, excuse me, yes, Exhibit One.
16 We would be in fear of running into any kind of drainage
17 situation by the -- by the Boling Federal 8-22, which pro-
18 duced about 90,000 barrels of oil and the Boling Federal 6-
19 22, which produced 350,000 barrels of oil to date.

20 We feel that a location in that area
21 would be unproductive because it's already been drained.

22 If we would move to the west we'd basic-
23 ally lose net acre feet of pay, considerable net acre feet
24 of pay if we moved to the west in those locations.

25 So the proposed location is on a, if you

1 would, call it a structural high and also has the best net
2 pay situation in this northwest quarter.

3 Q All right. Have you consulted with geol-
4 ogists in determining the proper location for this well --

5 A Yes.

6 Q -- vis-a-vis the --

7 Yes, I have.

8 Q -- structure?

9 A Correct.

10 Q Okay, what volume of oil do you expect to
11 recover from the well at the proposed location?

12 A Well, we -- we expect to produce anywhere
13 from 100 to 200,000 barrels of oil, cumulative, from the
14 well.

15 Q All right, and is that oil that might
16 otherwise go unrecovered?

17 A Yes, it is.

18 Q What is the status of the offsetting own-
19 ership?

20 A Well, the offsetting ownership, we have
21 -- the offsetting ownership, I guess I should refer to --

22 Q Exhibit Two?

23 A -- Exhibit Two. You can see that Kirby
24 owns 100 percent of the acreage in the northwest quarter.

25 To the southwest, in the southwest quar-

1 ter of Section 22 Diamond Oil Company owns or has leased
2 that acreage, and there have been no wells drilled there to
3 date.

4 In Section 21 you can see a Partnership
5 Properties, Winston L. Thornton and Union Texas Petroleum
6 Corporation, owns all or has leased all the acreage in the
7 east half of that section. No wells have been drilled
8 there, and without going through and reading all the owner-
9 ship in Section 16 and 15, I'll just abbreviate it by say-
10 ing that in Section 15, or 16, there's been no wells drilled
11 there, also, and in Section 15 Champlin Petroleum Partner-
12 ship Company, also there's been no wells drilled there, and
13 Kirby Exploration has the rest of the acreage in the south-
14 east quarter of Section 15 and the east half of Section 22.

15 Q Now, with the exception of Kirby Explora-
16 tion, of course, have you sought waivers from all the off-
17 setting owners?

18 A Yes, we have.

19 Q And have those been obtained?

20 A Yes, they have.

21 Q Are copies of those waivers contained in
22 Exhibit Three?

23 A Yes, they are.

24 Q Mr. Bonagurio, in your opinion will the
25 granting of this application be in the interest of conserva-

1 tion?

2 A Yes, it will.

3 MR. HALL: At this time we'd
4 move the admission of Exhibits One through Three, and, Mr.
5 Examiner, we'd also request that an expedited order be is-
6 sued in this case in view of the fact that the well is al-
7 ready down.

8 In fact we would not be opposed
9 to a ruling from the bench.

10

11

CROSS EXAMINATION

12

BY MR. CATANACH:

13

Q Mr. Bonagurio, has anyone from your com-
14 pany prepared any geologic evidence for the hearing, such as
15 a structure map, or some other type of thing?

16

A Yes. I've been involved in that prepara-
17 tion.

18

Q What exactly do you have? Do you have a
19 structure map or Isopach map or --

20

A Sure, I do. We didn't bring adequate
21 copies. I think we need five, or whatever, for the hearing,
22 but I can leave this with you all if you really need it.

23

At this time I'd like to come up and ex-
24 plain it to you.

25

This is a structure map and Isopach map

1 of the Entrada Sandstone.

2 As you can see, here's our proposed loca-
3 tion 1313 from the west and 1327 from the north. Here's the
4 status of all the wells in Section 22 and in more detail, I
5 guess, this northwest quarter.

6 You can see that what I've shown is,
7 first of all, the heavy dark line is the structure map, so
8 in fact we're moving down structure from known producers,
9 which makes it a little risky, but what's going on out here,
10 we've got a hydrodynamic situation which has tilted the
11 oil/water contact to the southwest, I guess.

12 The flow, the Entrada Sandstone outcrops
13 in the mountains somewhere, I've been told, and you have a
14 strong hydrodynamic push from the mountains that tilts the
15 oil/water contact, and we've see this by, you know, just
16 looking at the logs, and subsequently we have a dashed line
17 here giving a net feet of pay that we would encounter based
18 on some data and project; based on the tilt fo the oil/water
19 contact.

20 So you can see if I would move it to a
21 standard location I would be off this high of 50+ feet in a
22 circle. In addition, if I moved to the east I'd be running
23 into problems. First of all, it would be less than 1320
24 from these wells, and also, too, I'd be running into pos-
25 sible drainage problems and I'd be moving off my high, as I

1 mentioned.

2 So if I moved to the west I'd be running
3 into the same problems, in effect that I'd be moving off my
4 50-foot high and it would be a little riskier if you don't
5 get the tilt that we think we're going to get.

6 You know, that's -- you know, we've seen
7 the tilt through here from well control but, you know, it
8 could tend to flatten, and without any extra control out
9 here we really don't know. So subsequently it's a fairly
10 risky location and we would like to, you know, drill it
11 right here because we feel its got the optimum chance of en-
12 countering the most net oil.

13 I can leave this with you, if you'd like,
14 I've got plenty of copies at the office, and I would -- I
15 could get you extras, also.

16 Q This one copy should probably be enough
17 --

18 A Okay.

19 Q -- if you can leave it.

20 A No problem.

21 MR. TAYLOR: And I guess we
22 have to --

23 MR. HALL: For purposes of the
24 record why don't we designate this as Exhibit Four.

25 A Okay.

1 MR. HALL: And we would offer
2 to supplement the record with additional copies.

3 MR. CATANACH: And Exhibit Four
4 will be admitted into evidence.

5 If you can provide us with one
6 more copy, we'd appreciate it.

7 MR. HALL: All right, and if I
8 haven't already, we would move the admission of Exhibits One
9 through Three.

10 MR. CATANACH: Exhibits One
11 through Three will be admitted into evidence.

12 Q Mr. Bonagurio, what is the status of the
13 well in the northeast quarter?

14 A The well that we're seeking exception
15 for?

16 Q No, the --

17 MR. HALL: Is it the Boling
18 well?

19 A The well we're seeking exception for is
20 Boling Federal 9-922, is what we're going to name the well.
21 I don't think we mentioned that.

22 Q Up the northeast quarter of the northwest
23 quarter, labeled Number 5?

24 A Oh, okay, the status of that well is cur-
25 rently a TA'ed Gallup injector.

1 The well was -- in 1975 was completed as
2 a -- or I should say recompleted as an injector. It, when
3 it was drilled, it was drilled to the Entrada Sandstone but
4 found it to be wet and never -- I can't say never -- I think
5 it made 408 barrels of oil out of the Entrada Sandstone, so
6 they immediately recompleted as an injector in the Gallup
7 formation.

8 But it's TA'ed at this time because we
9 really don't have any need for it right now.

10 Q As I understand it, you want to simul-
11 taneously dedicate the 6-22 well, the 8-22 well, and the
12 proposed 9-22, is that correct?

13 A Dedicate it as what? I'm sorry.

14 Q To simultaneously dedicate the proration
15 unit to the three wells.

16 A Correct. Correct.

17 Q But the 6-22 is going to be (not clearly
18 understood).

19 A Well, it will be temporarily abandoned
20 when -- if and when we make a well on the Boling Federal 9-
21 22 location.

22 So basically all the proration will go
23 just to the 9-22.

24 MR. CATANACH: Mr. Hall, I
25 think we can have an order for you within two or three days.

1 Would that be adequate?

2 MR. HALL: Yes, I believe so;
3 appreciate that.

4 MR. CATANACH: I have no fur-
5 ther questions of this witness.

6 Are there any other questions?

7 If not, he may be excused.

8 Is there anything further in
9 Case 8896?

10 If not, it will be taken under
11 advisement.

12

13 (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 the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8876 heard by me on May 14, 1980.

David R. Cotnam, Examiner
Oil Conservation Division